

HB-2X2-WWW

~100° wide beam

TECHNICAL SPECIFICATIONS:

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

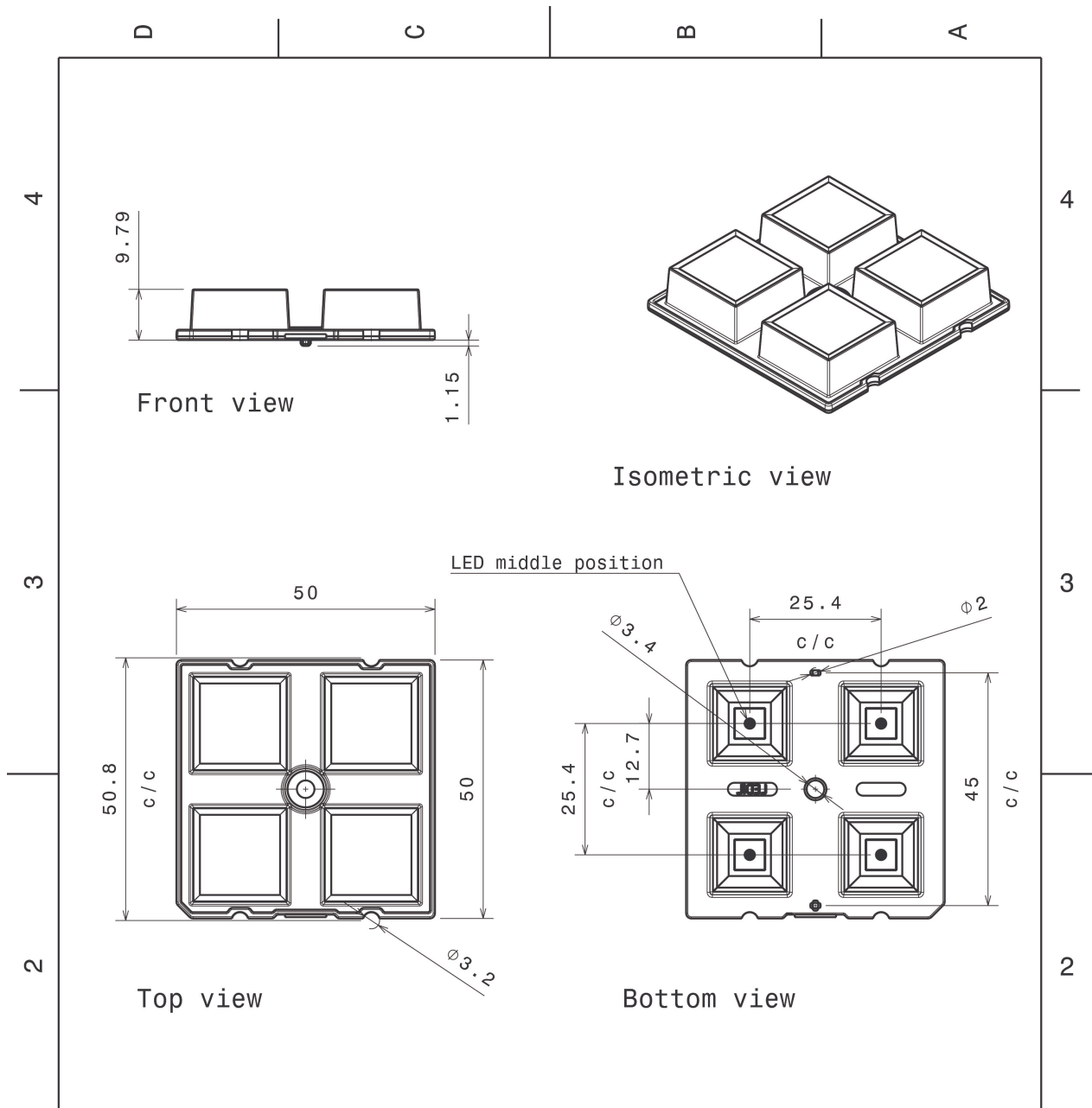
MATERIAL SPECIFICATIONS:


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



ORDERING INFORMATION:



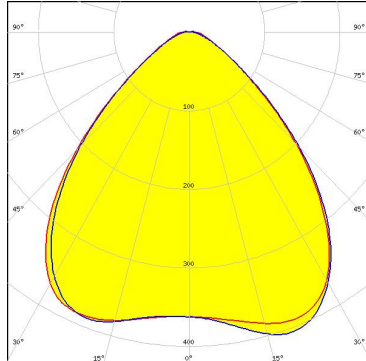


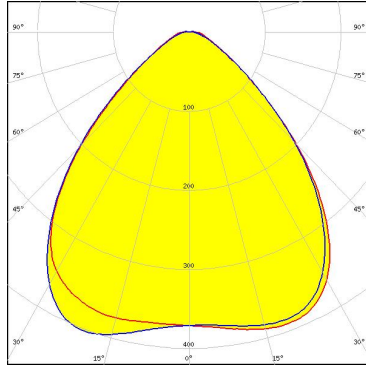

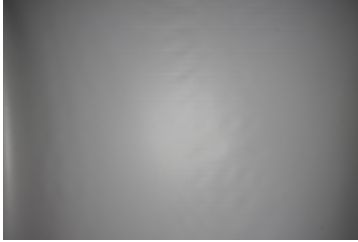
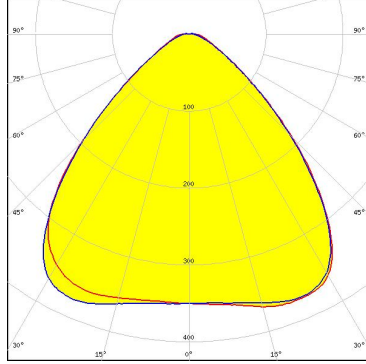

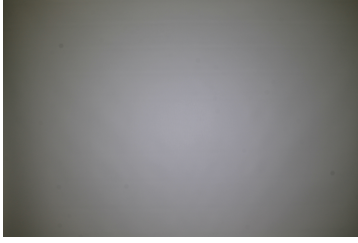
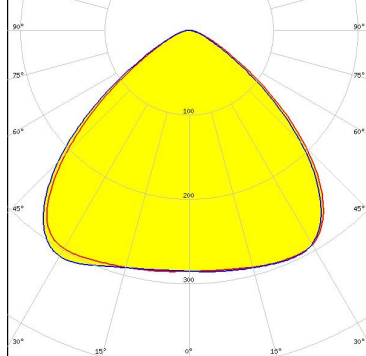
Component	Qty in box	MOQ	MPQ	Box weight (kg)
C14724_HB-2X2-WWW » Box size: 480 x 280 x 300 mm	800	160	160	11.7



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	C14724	HB-2x2-WWW	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 C14724_HB-2x2-WWW</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 PART NUMBER A4 C14724</p>		
<p>SCALE 1:1</p>		<p>WEIGHT 13,66 g</p>		<p>SHEET 1/1</p>

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

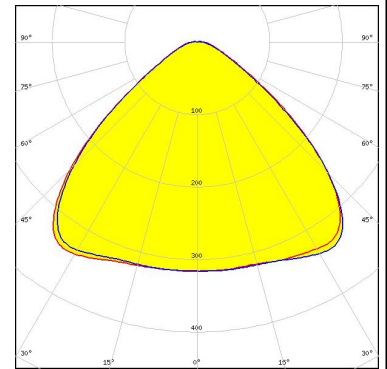
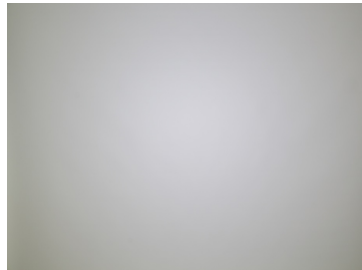
PHOTOMETRIC DATA (MEASURED):

<p> bridgelux</p> <p>LED Bridgelux SMD 5050 FWHM 94.0° Efficiency 94 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p> CREE</p> <p>LED XD16 FWHM 92.0° Efficiency 94 % Peak intensity 0.4 cd/lm LEDs/each optic 4 Light colour White Required components:</p>		
<p> CREE</p> <p>LED XD16 FWHM 93.0° Efficiency 91 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p> CREE</p> <p>LED XHP35 HD FWHM 101.0° Efficiency 79 % Peak intensity 0.3 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

PHOTOMETRIC DATA (MEASURED):

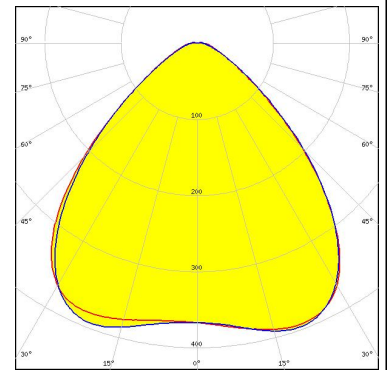
CREE

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



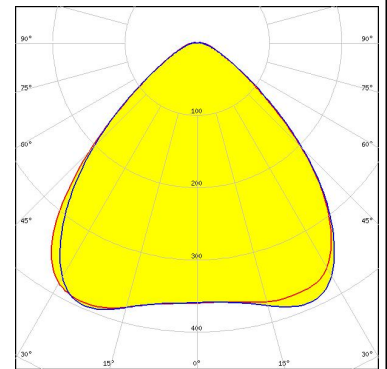
LUMILEDS

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



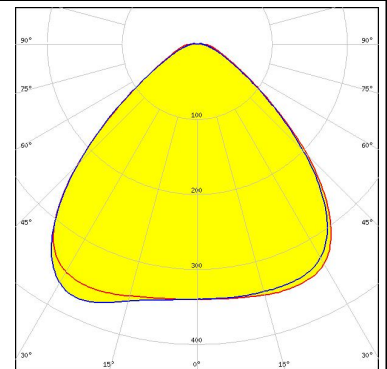
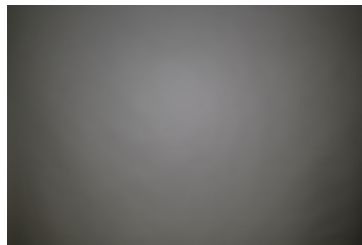
LUMILEDS

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



LUMILEDS

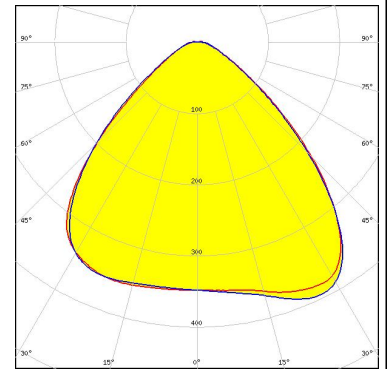
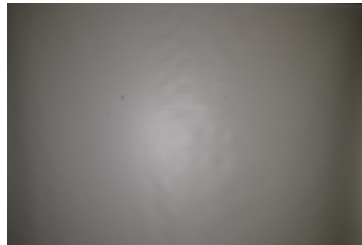
LED LUXEON V
 FWHM 96.0°
 Efficiency 93 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (MEASURED):

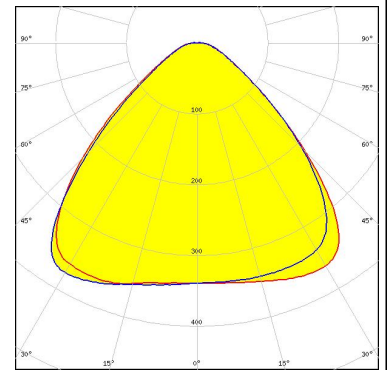
LUMILEDS

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



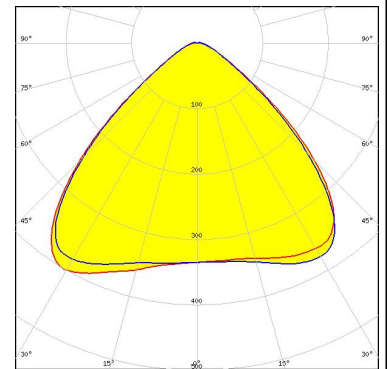
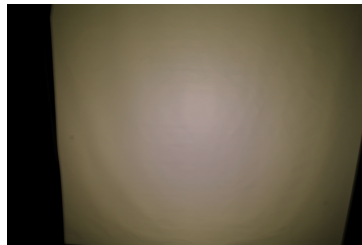
LUMINUS

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



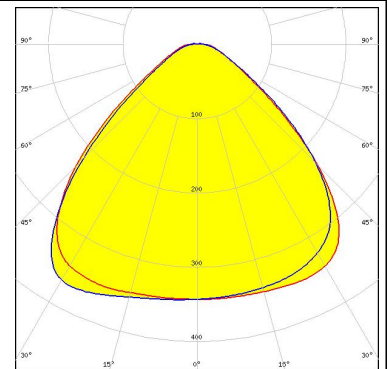
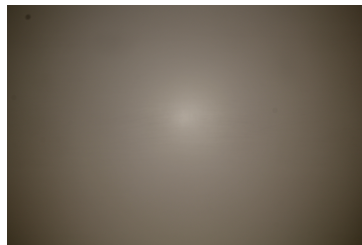
MST *Your solutions*

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


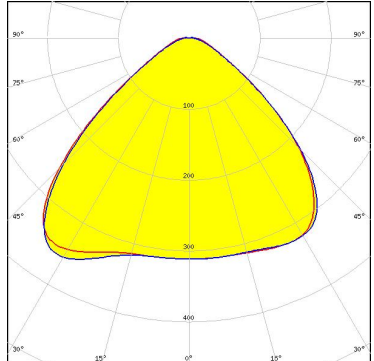

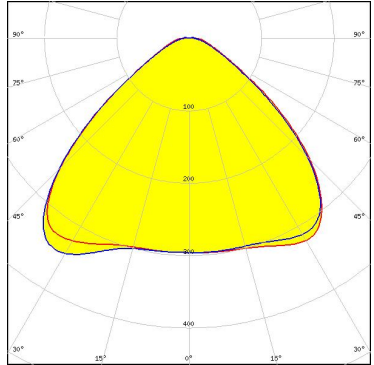

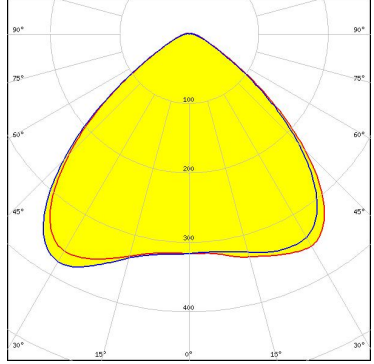

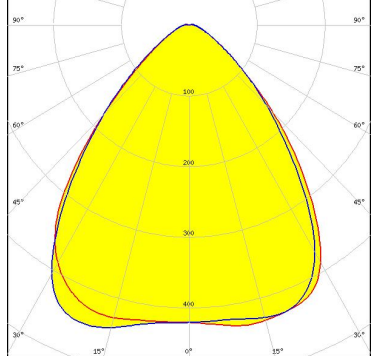


NICHIA

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



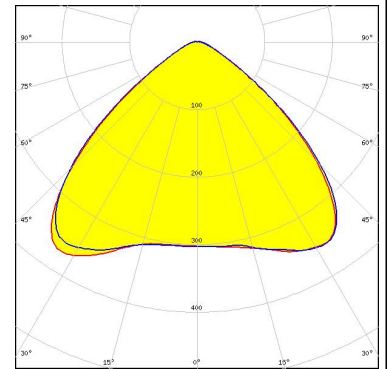
PHOTOMETRIC DATA (MEASURED):

<p>NICHIA</p> <p>LED NVSW219F FWHM 102.0° Efficiency 93 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NVSW319B FWHM 104.0° Efficiency 92 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NVSW3x9A FWHM 101.0° Efficiency 93 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NVSxE21A FWHM 85.0° Efficiency 92 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

PHOTOMETRIC DATA (MEASURED):

OSRAM

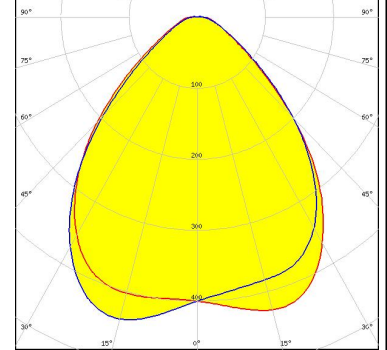
LED PrevalLED Brick HP 2x8
 FWHM 104.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

Opto Semiconductors

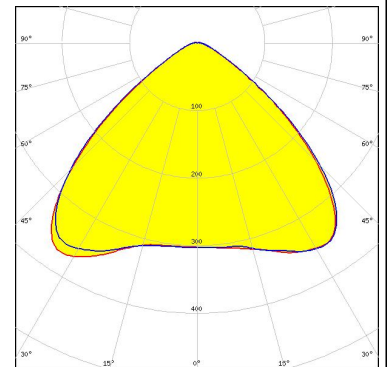
LED Duris S8
 FWHM 87.0°
 Efficiency 93 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

Opto Semiconductors

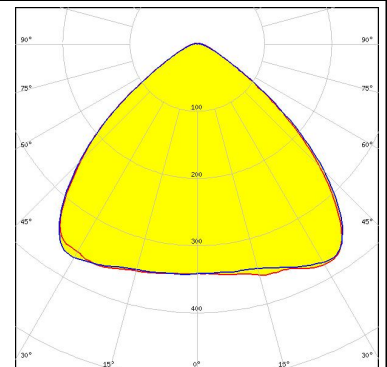
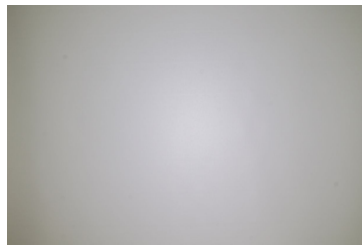
LED OSLOM Square CSSRM2/CSSRM3
 FWHM 104.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

Opto Semiconductors

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

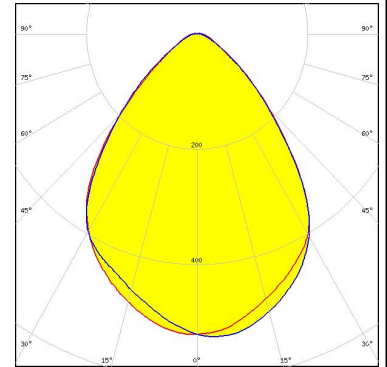


PHOTOMETRIC DATA (MEASURED):

OSRAM

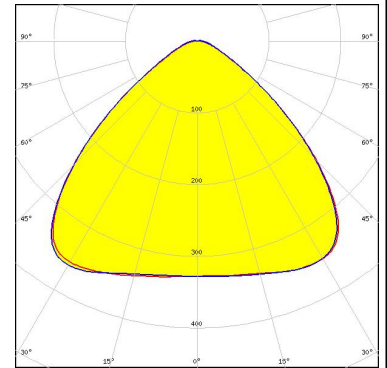
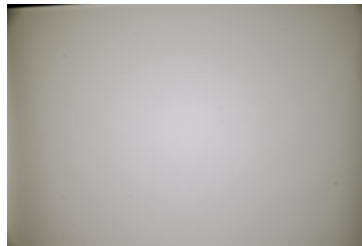
Opto Semiconductors

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



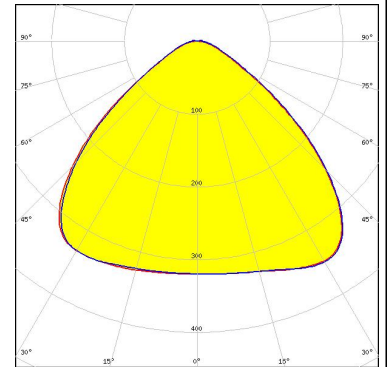
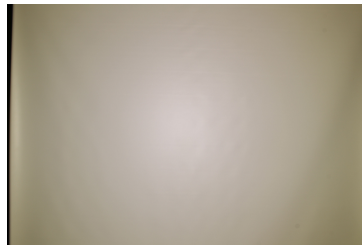
PHILIPS

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



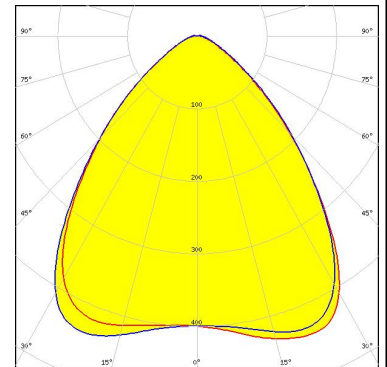
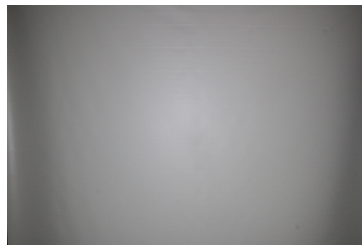
PHILIPS

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



SAMSUNG

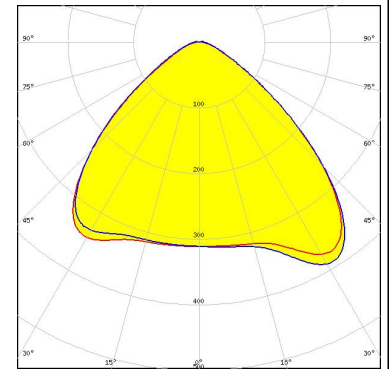
LED HiLOM RC12 Z (LH181B)
 FWHM 86.0°
 Efficiency 96 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (MEASURED):

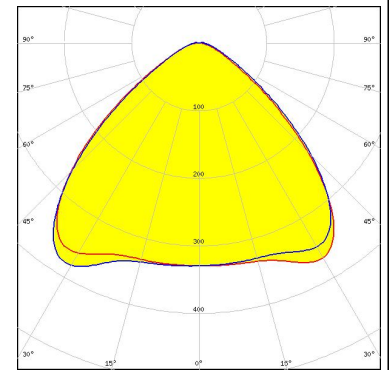
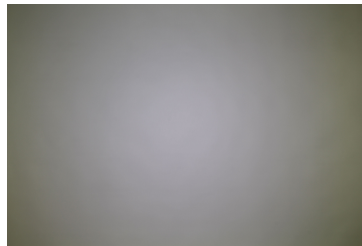
SAMSUNG

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



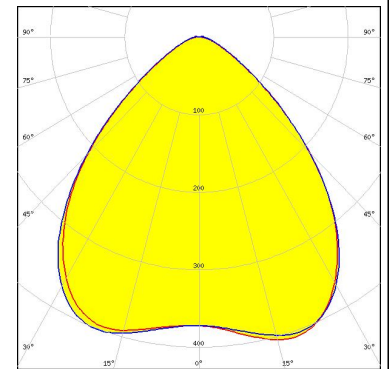
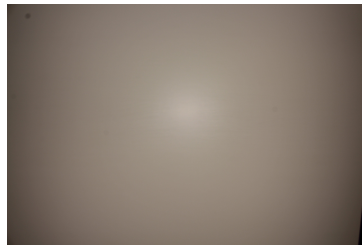
SAMSUNG

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



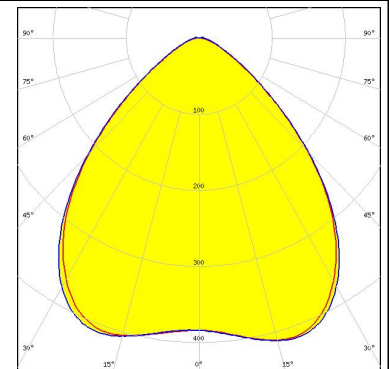
SAMSUNG

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



SAMSUNG

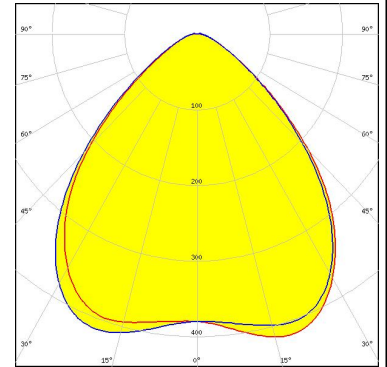
LED HiLOM RM16 Z (LH502C)
 FWHM 91.0°
 Efficiency 95 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (MEASURED):

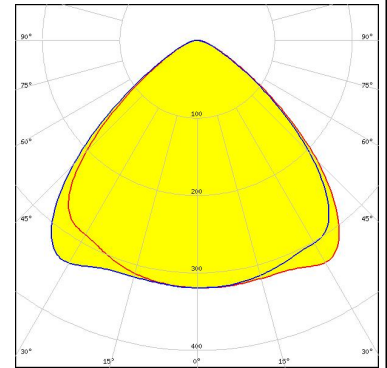
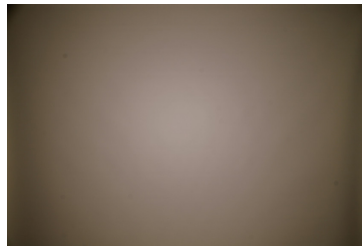
SAMSUNG

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



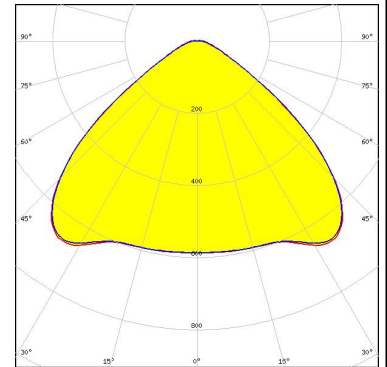
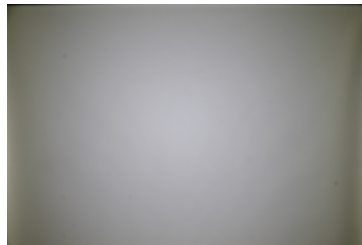
SAMSUNG

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



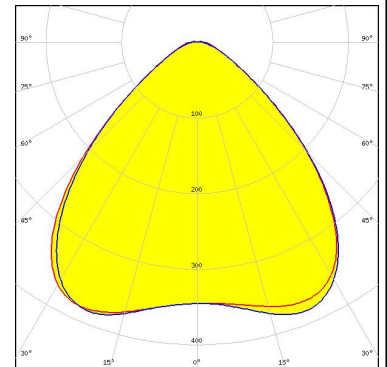
SAMSUNG

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


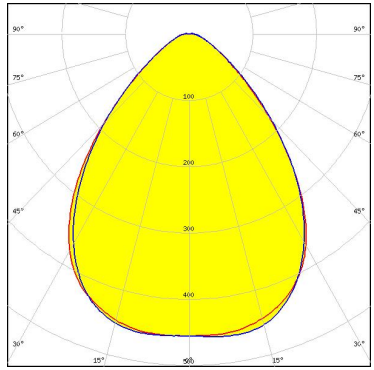
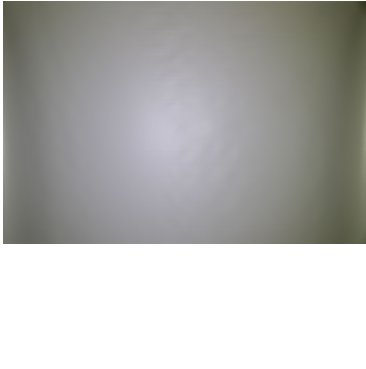
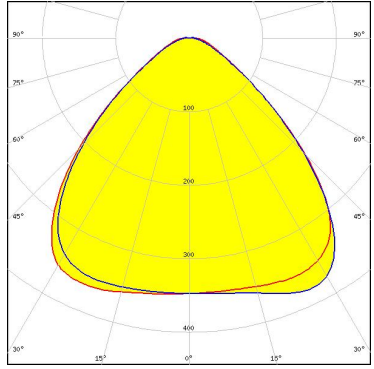

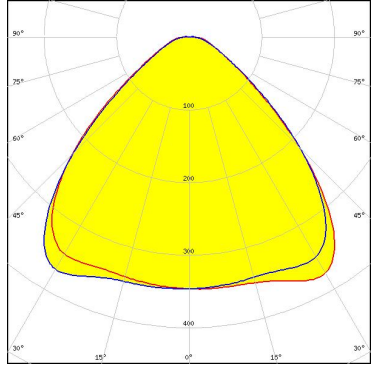
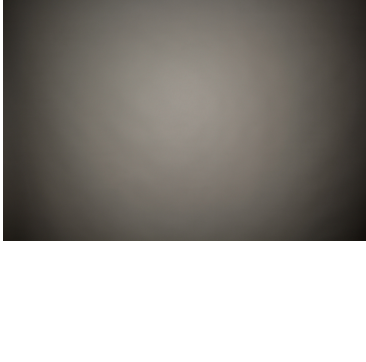
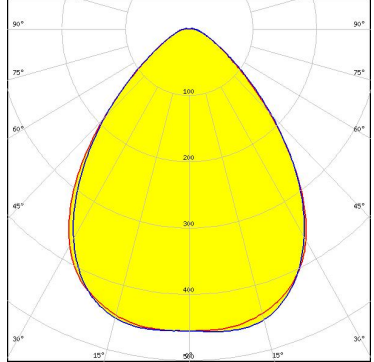


SAMSUNG


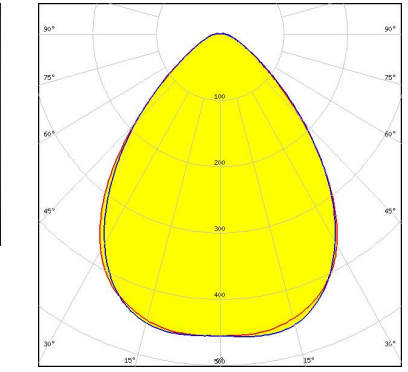
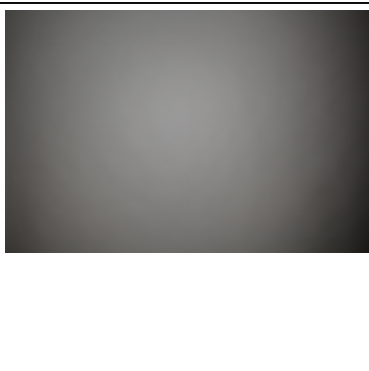
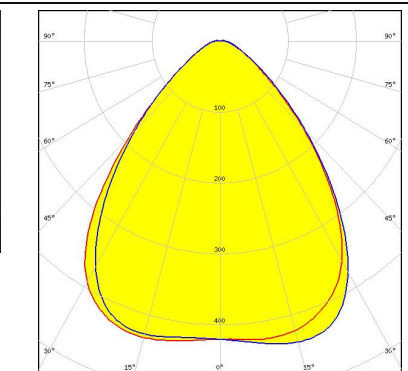

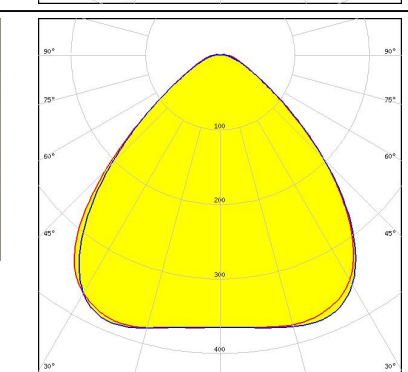


LED LH508A
 FWHM 95.0°
 Efficiency 93 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (MEASURED):

<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED 2x2 Y22 module - SMJQ-D48W16AA-XX FWHM 83.0° Efficiency 93 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED Z5M3 FWHM 96.0° Efficiency 93 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED Z5M4 FWHM 95.0° Efficiency 92 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED Z8Y19 FWHM 83.0° Efficiency 93 % Peak intensity 0.5 cd/lm LEDs/each optic 4 Light colour White Required components:</p>		

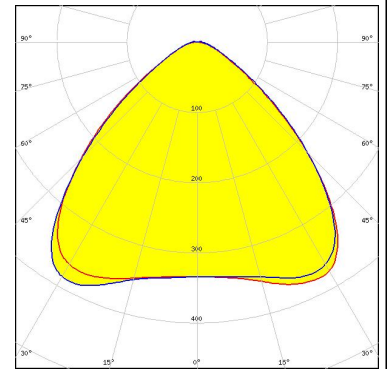
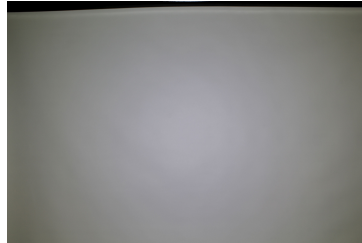
PHOTOMETRIC DATA (MEASURED):

<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED Z8Y19 FWHM 83.0° Efficiency 93 % Peak intensity 0.5 cd/lm LEDs/each optic 4 Light colour White Required components:</p>		
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22 FWHM 85.0° Efficiency 94 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22P FWHM 93.0° Efficiency 94 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>TRIDONIC</p>		
<p>LED RLE 2x4 2000lm HP EXC2 OTD FWHM 99.0° Efficiency 94 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

PHOTOMETRIC DATA (MEASURED):

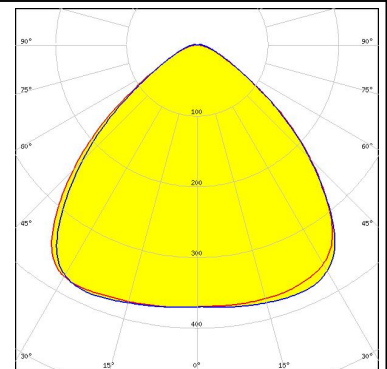
TRIDONIC

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



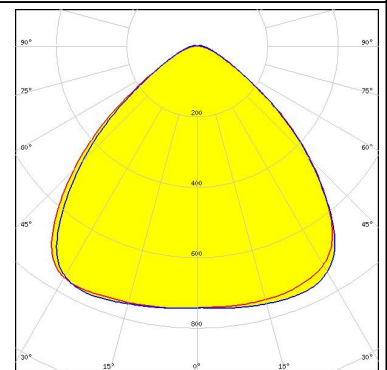
TRIDONIC

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



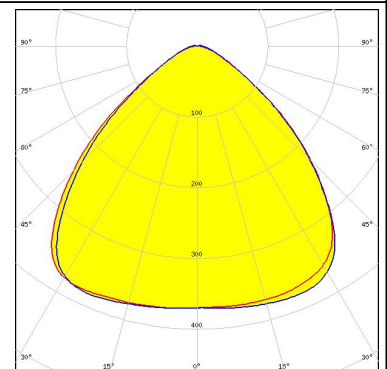
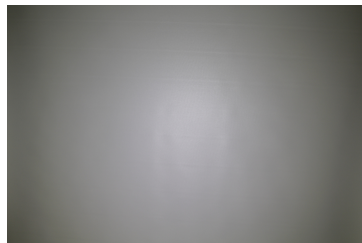
TRIDONIC

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



TRIDONIC

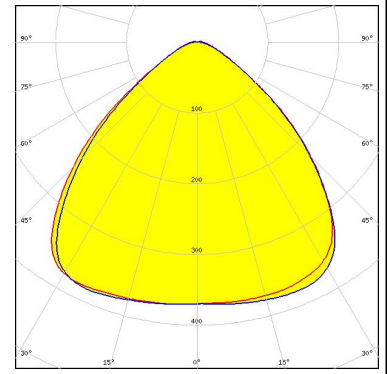
LED RLE G1 49x223mm 4000lm xxx EXC OTD
 FWHM 98.0°
 Efficiency 93 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (MEASURED):

TRIDONIC

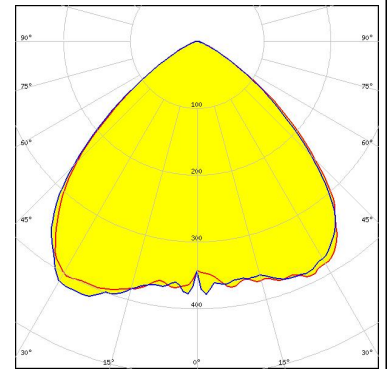
LED RLE G1 49x245mm 4000lm xxx EXC OTD
FWHM 98.0°
Efficiency 93 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



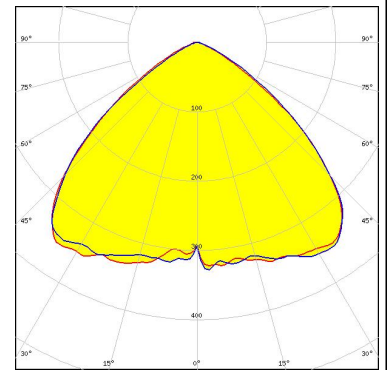
PHOTOMETRIC DATA (SIMULATED):



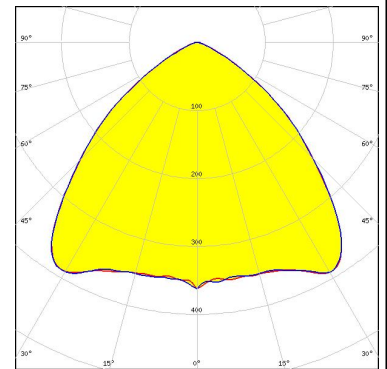
LED J Series 5050 Round LES
 FWHM 98.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



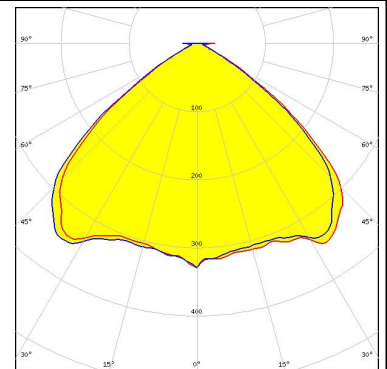
LED XHP35 HI
 FWHM 99.0°
 Efficiency 93 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



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



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

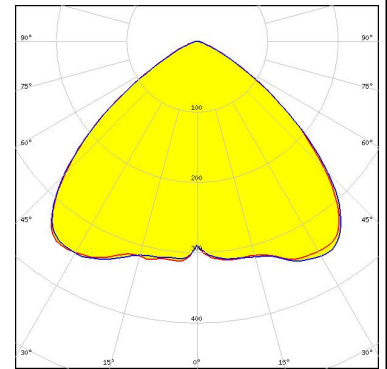


PHOTOMETRIC DATA (SIMULATED):

CREE

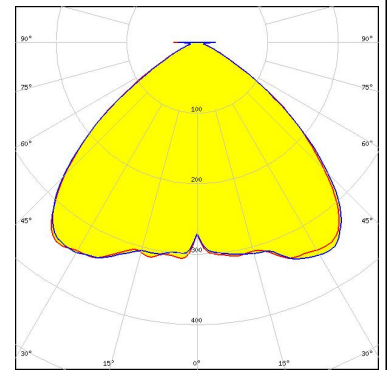
LED XP-G3
 FWHM 96.0°
 Efficiency 91 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

Protective plate, glass



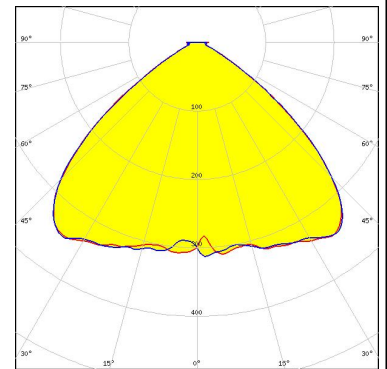
CREE

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



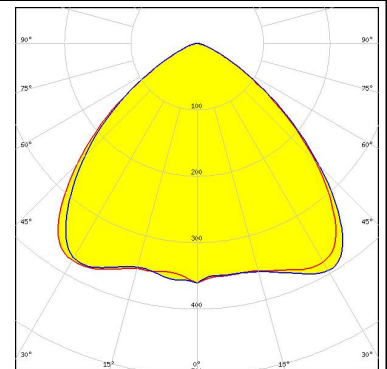
CREE

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



LUMILEDS

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



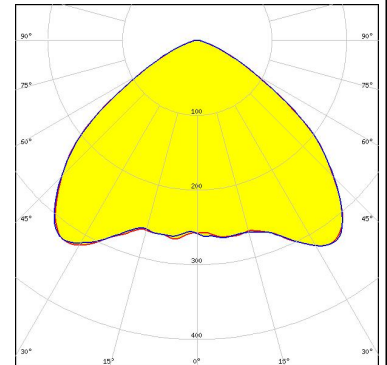
PHOTOMETRIC DATA (SIMULATED):

LUMILEDS

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

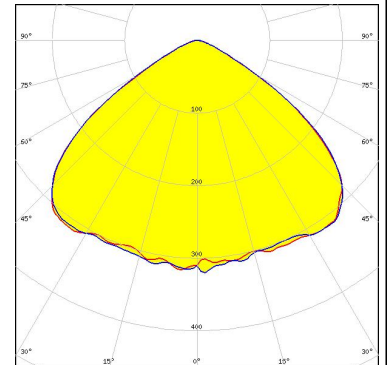
LUMILEDS

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



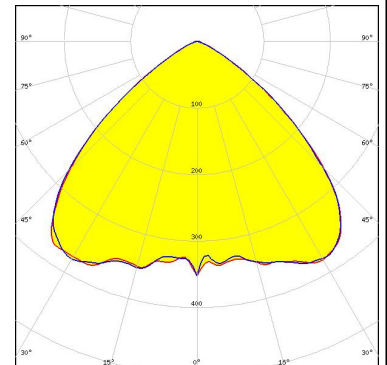
LUMILEDS

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

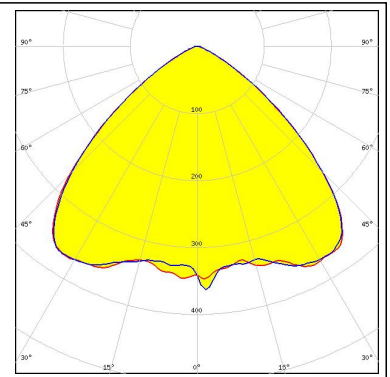
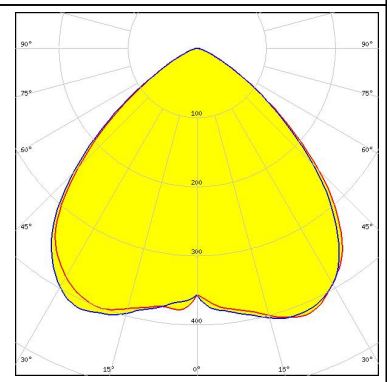
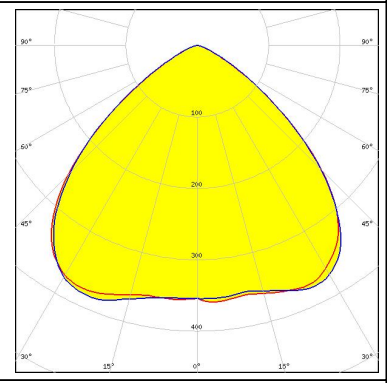
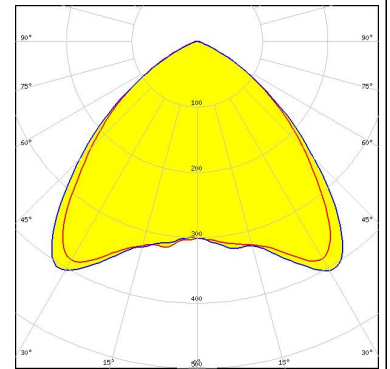


NICHIA

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



PHOTOMETRIC DATA (SIMULATED):

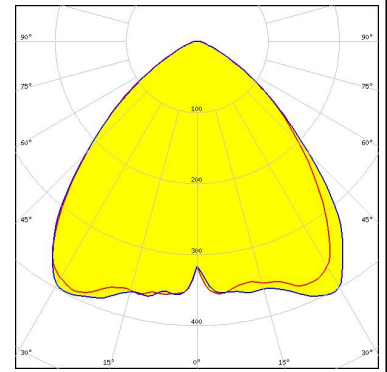
<p>NICHIA</p> <p>LED NVSxx19B/NVSxx19C FWHM 100.0° Efficiency 95 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED Duris S8 FWHM 92.0° Efficiency 94 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED Duris S8 FWHM 100.0° Efficiency 91 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p> <p style="background-color: #ADD8E6; padding: 2px;">Protective plate, glass</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSCONIQ P 3030 FWHM 96.0° Efficiency 96 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	

PHOTOMETRIC DATA (SIMULATED):

OSRAM

Opto Semiconductors

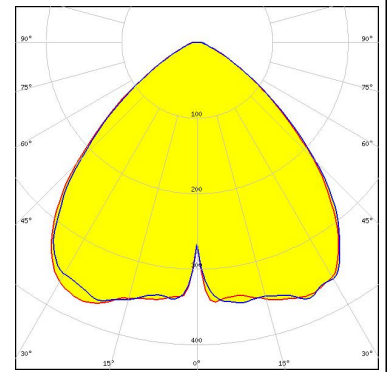
LED OSCONIQ P 3737 (2W version)
 FWHM 90.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

Opto Semiconductors

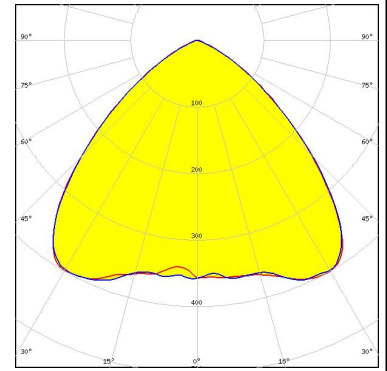
LED OSCONIQ P 3737 (3W version)
 FWHM 93.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

Opto Semiconductors

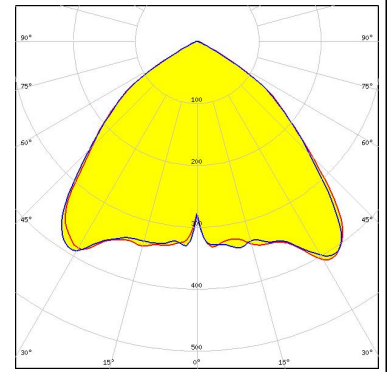
LED OSCONIQ P 3737 Flat
 FWHM 96.0°
 Efficiency 96 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

Opto Semiconductors

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

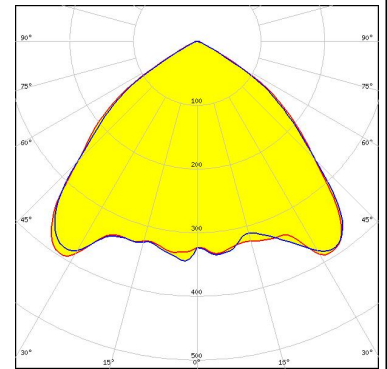


PHOTOMETRIC DATA (SIMULATED):

OSRAM

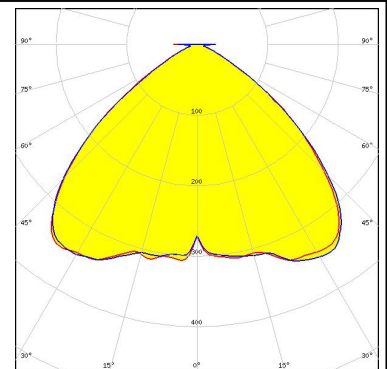
Opto Semiconductors

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



PHILIPS

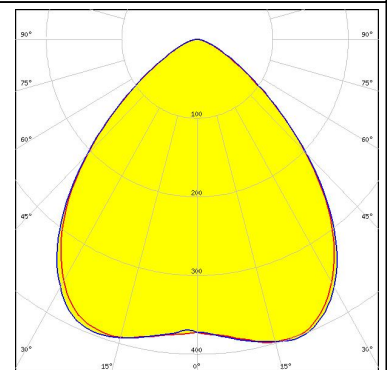
LED Fortimo FastFlex LED 2x8 DAX G4
 FWHM 98.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



SAMSUNG

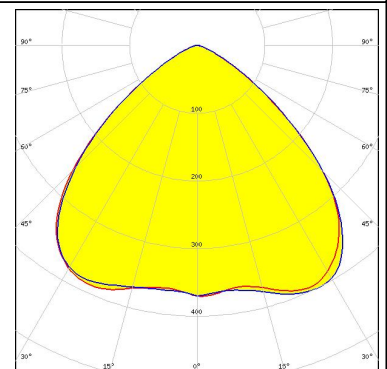
LED HiLOM RM16 Z (LH502C)
 FWHM 90.0°
 Efficiency 88 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

Protective plate, glass



SEOUL SEMICONDUCTOR

LED SEOUL DC 5050 6V
 FWHM 94.0°
 Efficiency 94 %
 Peak intensity 0.4 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:

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