

HB-2X2-WW

~65° wide beam optimized for CREE XP-L and XM-L

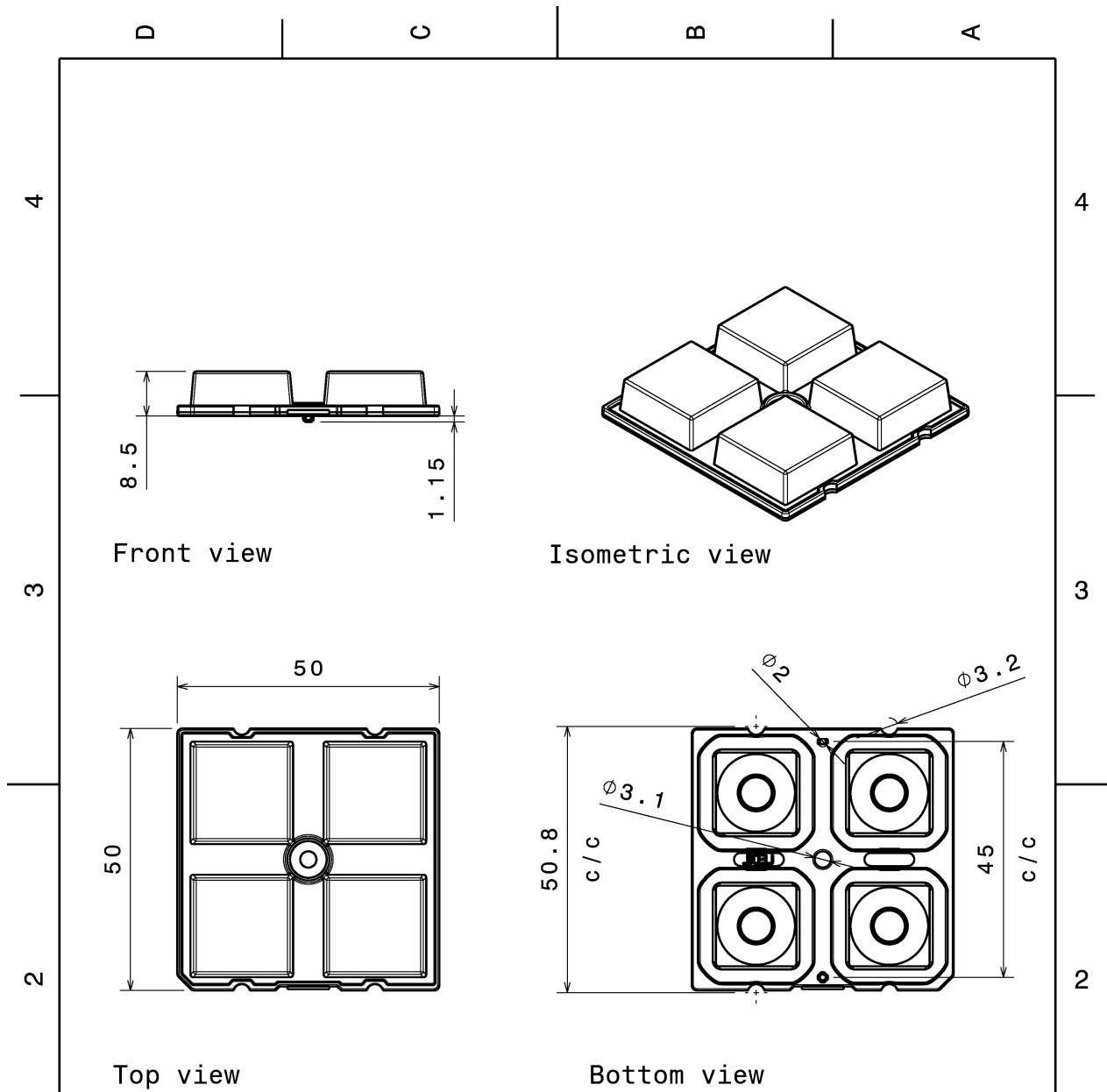
TECHNICAL SPECIFICATIONS:

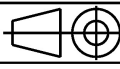
Dimensions	50.0 mm
Height	8.5 mm
Fastening	pin, screw
Colour	clear
Box size	480 x 280 x 300 mm
Box weight	9.2 kg
Quantity in Box	800 pcs
ROHS compliant	yes ⓘ



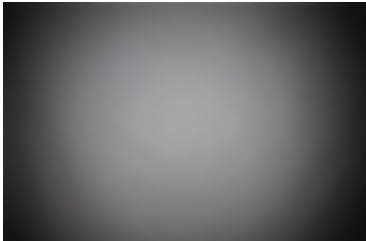
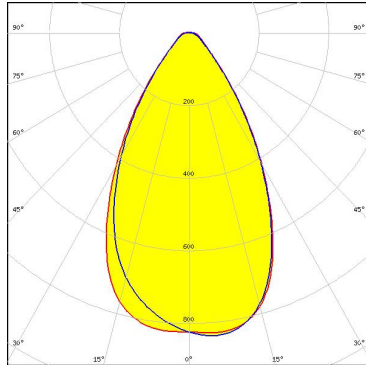
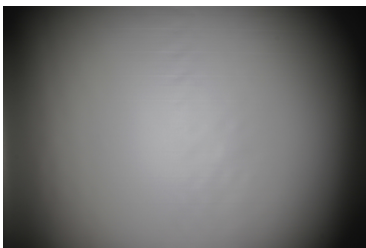
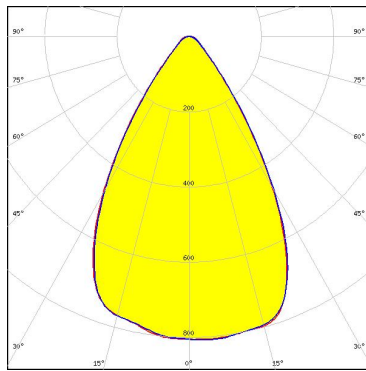

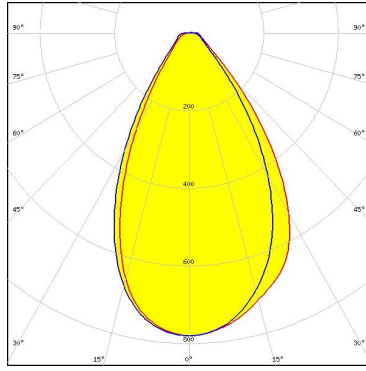
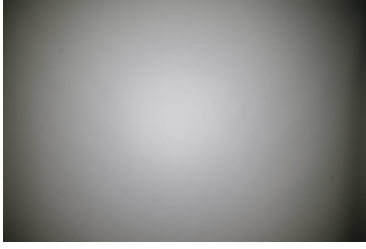
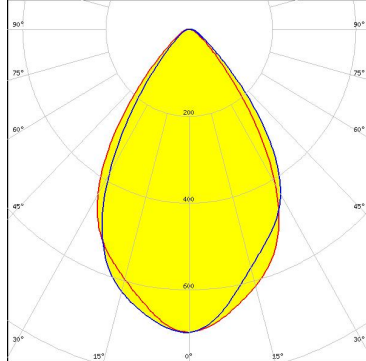
MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour
HB-2X2-WW	Lens array	PMMA	clear



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	C14606	HB-2X2-WW	PMMA	
<p>Tolerances if not otherwise shown According to DIN ISO 2768-1 Linear measures: up to 30mm class M, otherwise class C According to DIN ISO 2768-2 Form and position: class L</p>		<p>LEDiL Ledit Oy Salorankatu 10 FIN 24240 SALO Finland</p>		
<p>THIRD ANGLE PROJECTION: </p>		<p>DRAWING TITLE C14606_HB-2X2-WW</p>		
<p>This drawing is the property of LEDiL Oy. It may not be reproduced, copied or communicated without a written agreement with LEDiL Oy.</p>		<p>SIZE PART NUMBER A4 C14606</p>		
<p>SCALE 1:1</p>		<p>WEIGHT 10,53 g</p>		<p>SHEET 1/1</p>

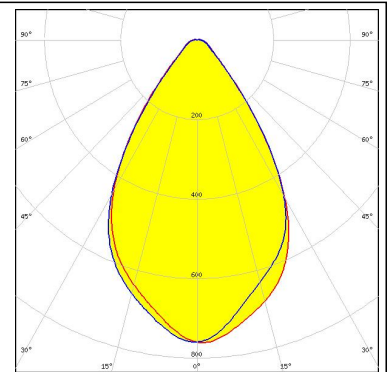
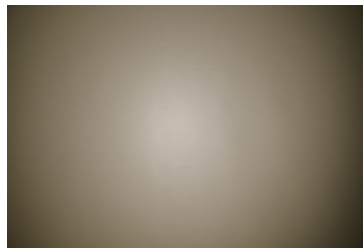
PHOTOMETRIC DATA (MEASURED):

<p>bridgelux</p> <p>LED SMD 5050</p> <p>FWHM 59.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.840 cd/lm</p> <p>Required components:</p>		
<p>CREE ⇄</p> <p>LED XD16</p> <p>FWHM 63.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.800 cd/lm</p> <p>Required components:</p>		
<p>CREE ⇄</p> <p>LED XD16 2x2 cluster</p> <p>FWHM 61.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.780 cd/lm</p> <p>Required components:</p>		
<p>CREE ⇄</p> <p>LED XHP35 HD</p> <p>FWHM 67.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 0.700 cd/lm</p> <p>Required components:</p>		

PHOTOMETRIC DATA (MEASURED):

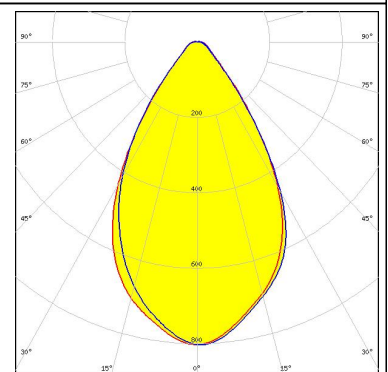
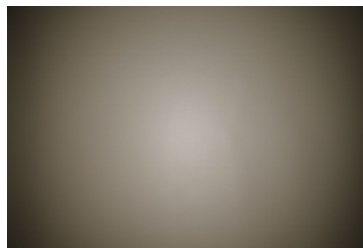
CREE 

LED XM-L
 FWHM 66.0°
 Efficiency 93 %
 Peak intensity 0.760 cd/lm
 Required components:



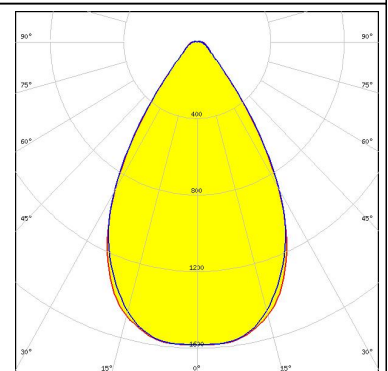
CREE 

LED XM-L2
 FWHM 62.0°
 Efficiency 92 %
 Peak intensity 0.803 cd/lm
 Required components:



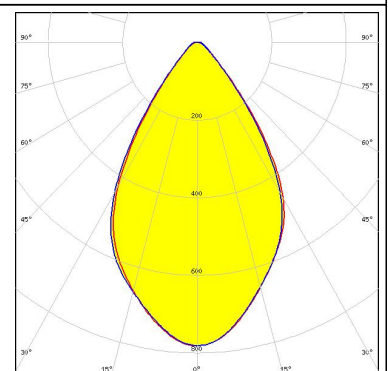
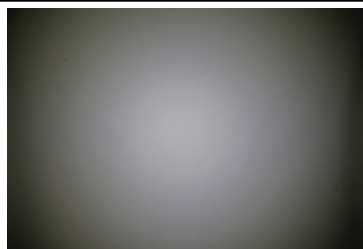
CREE 

LED XP-G2
 FWHM 63.0°
 Efficiency 91 %
 Peak intensity 0.830 cd/lm
 Required components:



CREE 

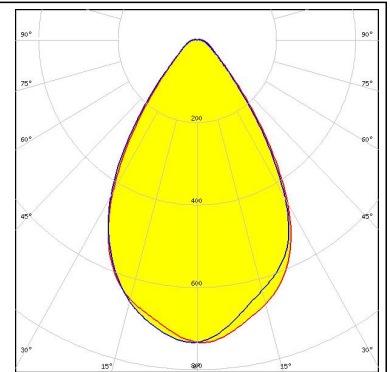
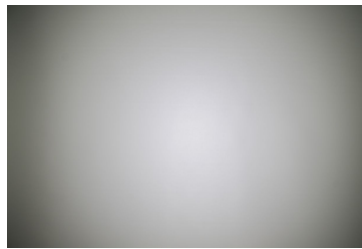
LED XP-G3
 FWHM 64.0°
 Efficiency 86 %
 Peak intensity 0.780 cd/lm
 Required components:



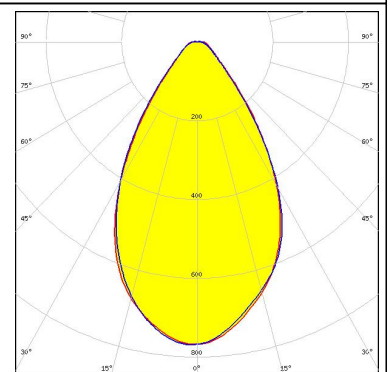
PHOTOMETRIC DATA (MEASURED):



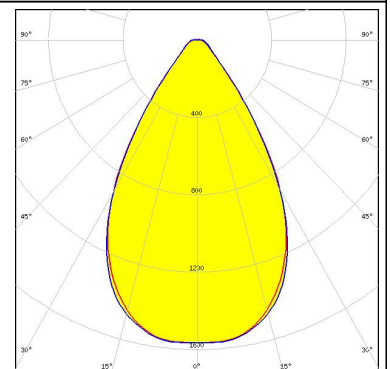
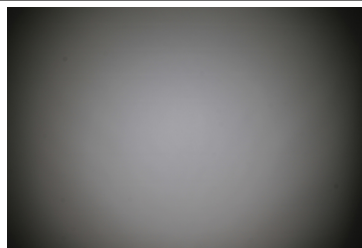
LED XP-L
FWHM 66.0°
Efficiency 93 %
Peak intensity 0.735 cd/lm
Required components:



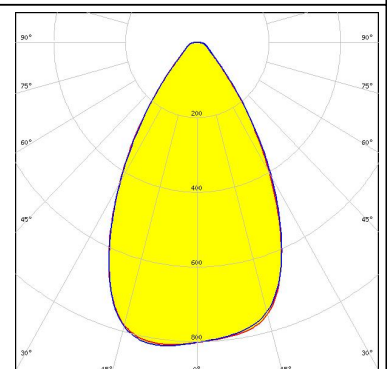
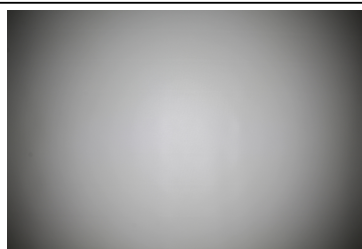
LED XP-L2
FWHM 62.0°
Efficiency 93 %
Peak intensity 0.770 cd/lm
Required components:




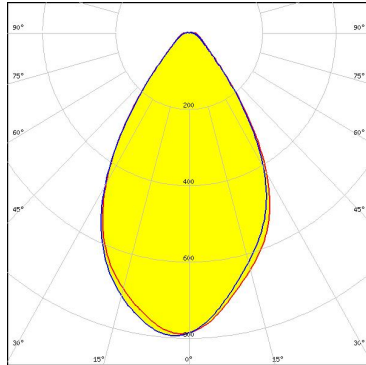
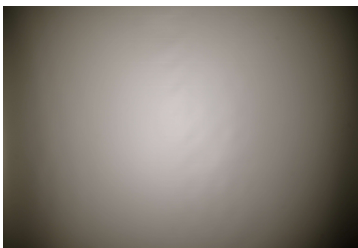
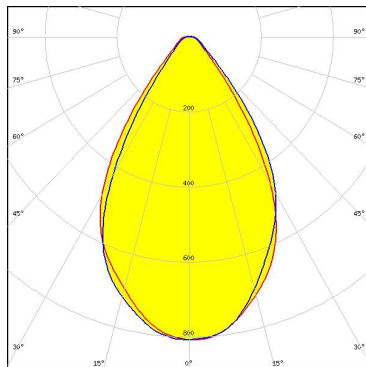

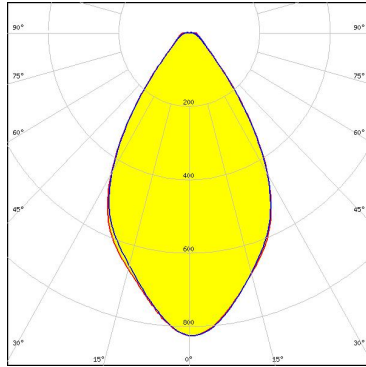
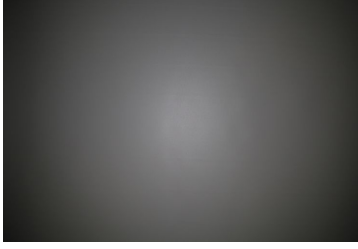
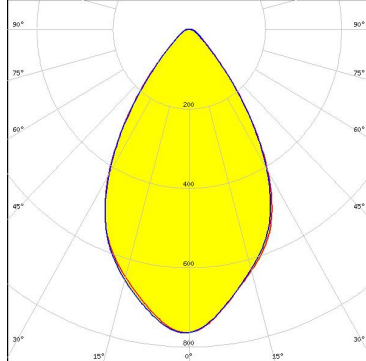
LED H35C1 (LEMWA33)
FWHM 63.0°
Efficiency 92 %
Peak intensity 0.820 cd/lm
Required components:



LED LUXEON 5050
FWHM 61.0°
Efficiency 94 %
Peak intensity 0.820 cd/lm
Required components:



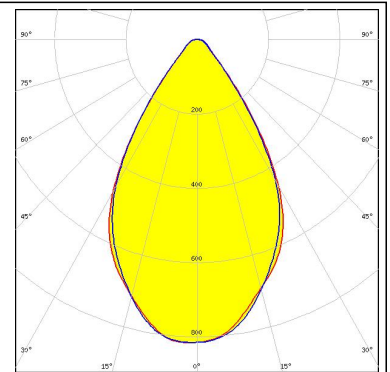
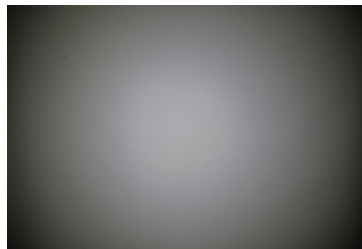
PHOTOMETRIC DATA (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON V FWHM 63.0° Efficiency 93 % Peak intensity 0.800 cd/lm Required components:</p>		
<p>NICHIA</p> <p>LED NVSW219D FWHM 64.0° Efficiency 94 % Peak intensity 0.810 cd/lm Required components:</p>		
<p>NICHIA</p> <p>LED NVSW3x9A FWHM 62.0° Efficiency 93 % Peak intensity 0.830 cd/lm Required components:</p>		
<p>NICHIA</p> <p>LED NWSx229A FWHM 63.0° Efficiency 85 % Peak intensity 0.770 cd/lm Required components:</p>		

PHOTOMETRIC DATA (MEASURED):

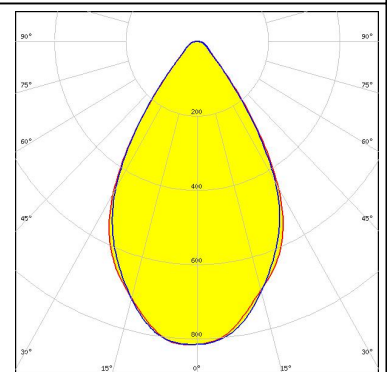
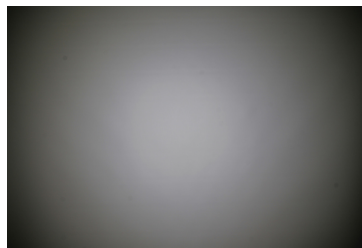
OSRAM

LED PrevaLED Brick DC 2x8
FWHM 64.0°
Efficiency 92 %
Peak intensity 0.820 cd/lm
Required components:



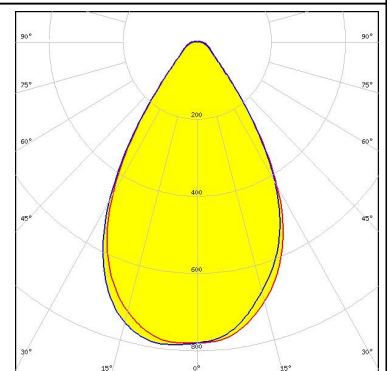
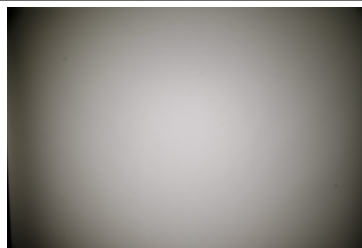
OSRAM
Opto Semiconductors

LED Oslon Square Gen3
FWHM 64.0°
Efficiency 92 %
Peak intensity 0.820 cd/lm
Required components:



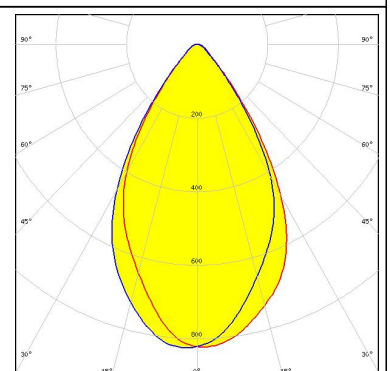
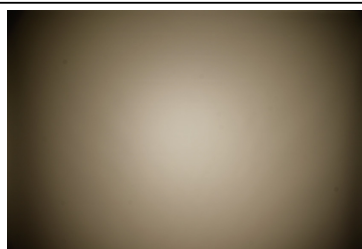
PHILIPS

LED Fortimo FastFlex LED board 2x8 DA G4
FWHM 64.0°
Efficiency 93 %
Peak intensity 0.790 cd/lm
Required components:



SAMSUNG

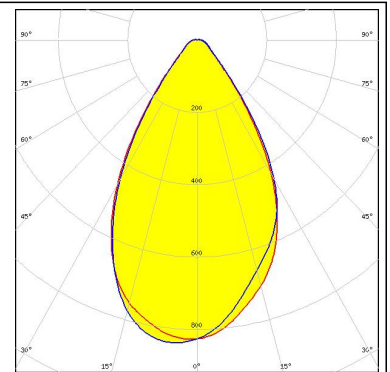
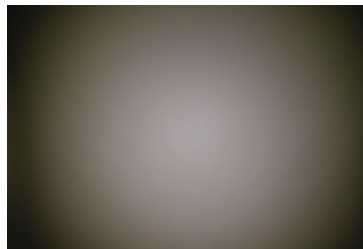
LED LH351B
FWHM 62.0°
Efficiency 86 %
Peak intensity 0.830 cd/lm
Required components:



PHOTOMETRIC DATA (MEASURED):

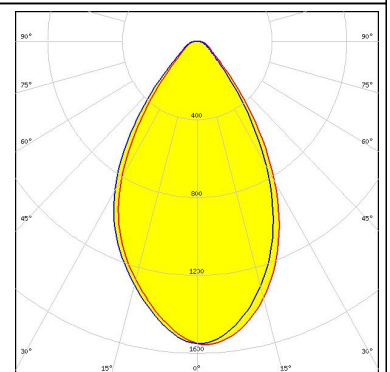
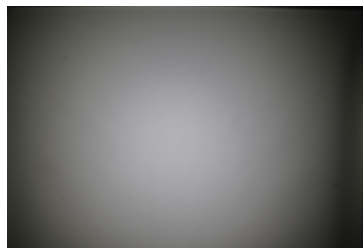
SAMSUNG

LED LH351C
FWHM 62.0°
Efficiency 93 %
Peak intensity 0.840 cd/lm
Required components:



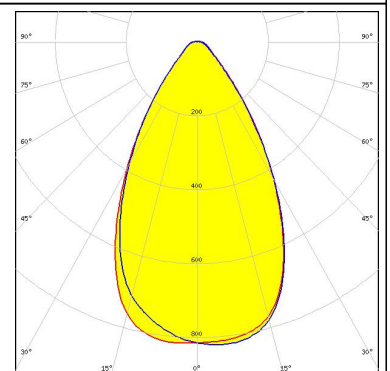
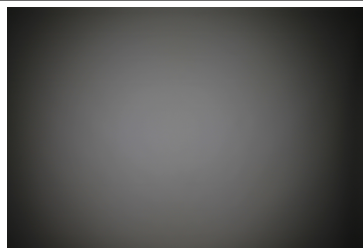
SAMSUNG

LED LH351D
FWHM 62.0°
Efficiency 91 %
Peak intensity 0.780 cd/lm
Required components:



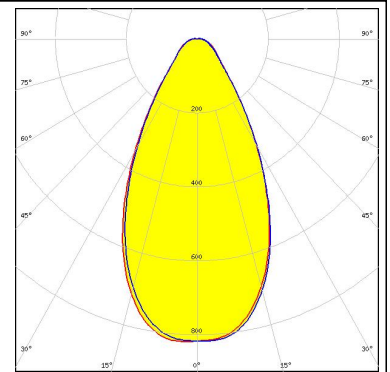
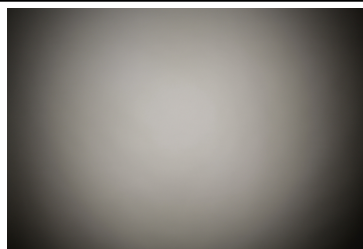
SAMSUNG

LED LH508A
FWHM 60.0°
Efficiency 93 %
Peak intensity 0.820 cd/lm
Required components:



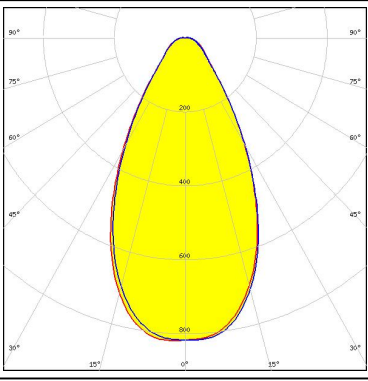


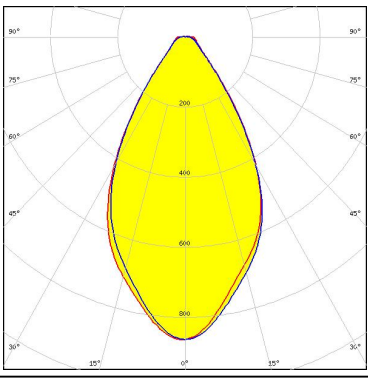
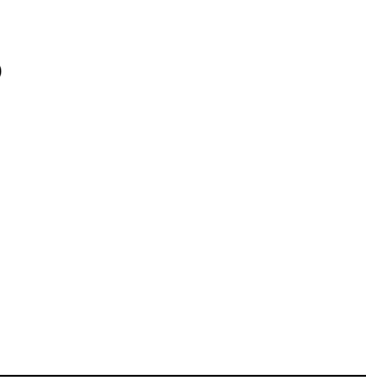
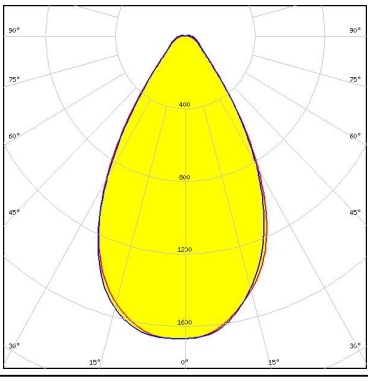
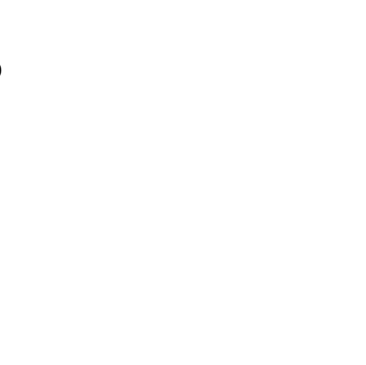
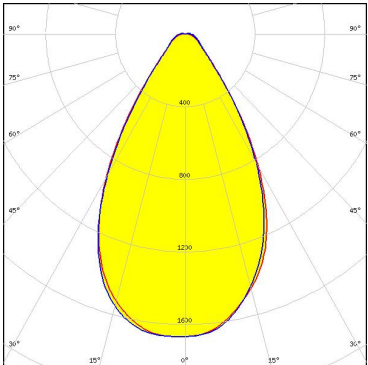


SEOUL SEMICONDUCTOR

LED SMJQ-D48W16AA-XX
FWHM 55.0°
Efficiency 92 %
Peak intensity 0.820 cd/lm
Required components:



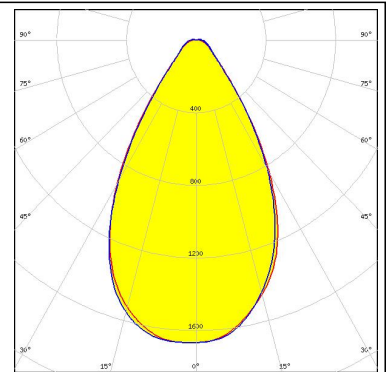
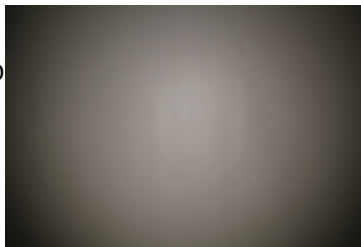
PHOTOMETRIC DATA (MEASURED):

<p> SEOUL SEMICONDUCTOR</p> <p>LED Z8Y19 2x2 cluster FWHM 55.0° Efficiency 92 % Peak intensity 0.820 cd/lm Required components:</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22P FWHM 59.0° Efficiency 92 % Peak intensity 0.860 cd/lm Required components:</p>		
<p>TRIDONIC</p> <p>LED RLE G1 49x121mm 2000lm xxx EXC OTD FWHM 61.0° Efficiency 94 % Peak intensity 0.830 cd/lm Required components:</p>		
<p>TRIDONIC</p> <p>LED RLE G1 49x133mm 2000lm xxx EXC OTD FWHM 61.0° Efficiency 94 % Peak intensity 0.830 cd/lm Required components:</p>		

PHOTOMETRIC DATA (MEASURED):

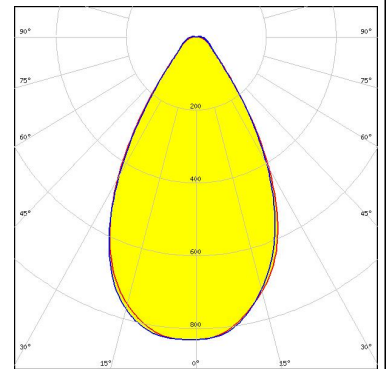
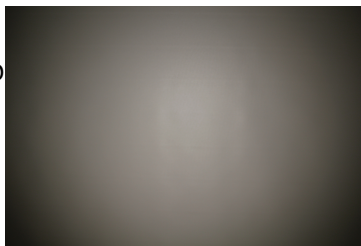
TRIDONIC

LED RLE G1 49x223mm 4000lm xxx EXC OTD
FWHM 61.0°
Efficiency 94 %
Peak intensity 0.830 cd/lm
Required components:



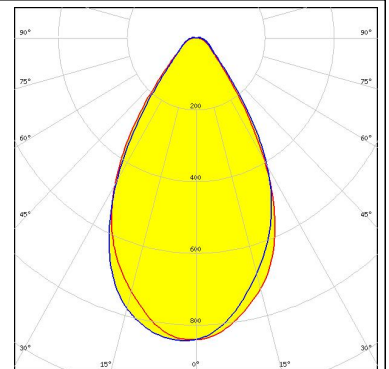
TRIDONIC

LED RLE G1 49x245mm 4000lm xxx EXC OTD
FWHM 61.0°
Efficiency 94 %
Peak intensity 0.830 cd/lm
Required components:



TRIDONIC

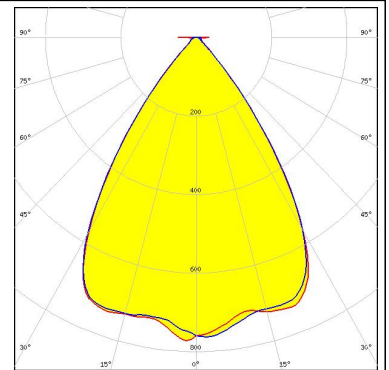
LED RLE G2 HP 2x8 4000lm
FWHM 61.0°
Efficiency 94 %
Peak intensity 0.850 cd/lm
Required components:



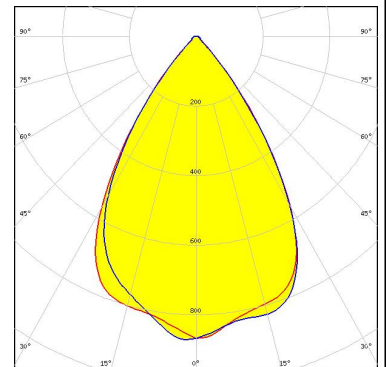
PHOTOMETRIC DATA (SIMULATED):



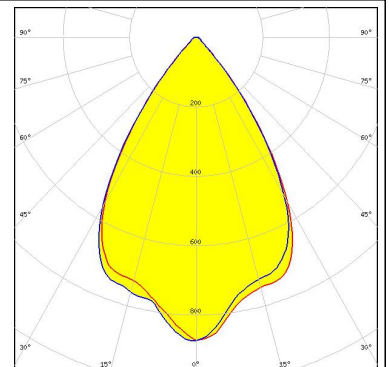
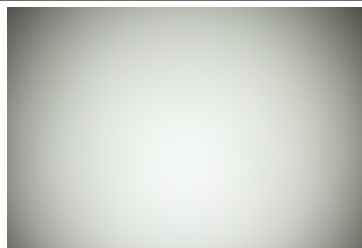
LED XT-E
 FWHM 69.0°
 Efficiency 94 %
 Peak intensity 0.780 cd/lm
 Required components:



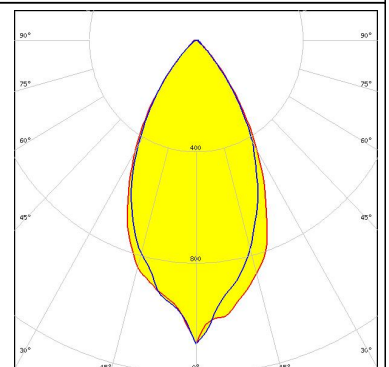
LED LUXEON 3535L
 FWHM 66.0°
 Efficiency 94 %
 Peak intensity 0.870 cd/lm
 Required components:



LED LUXEON MZ
 FWHM 66.0°
 Efficiency 94 %
 Peak intensity 0.880 cd/lm
 Required components:



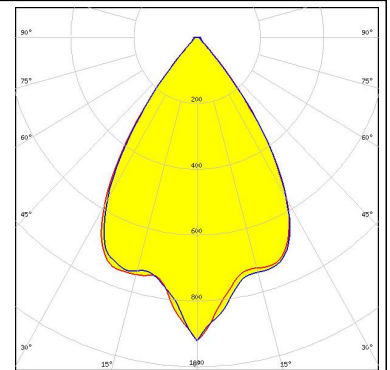
LED Duris S8
 FWHM 52.0°
 Efficiency 91 %
 Peak intensity 1.100 cd/lm
 Required components:



PHOTOMETRIC DATA (SIMULATED):

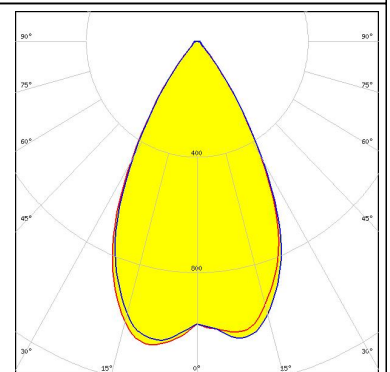
OSRAM
Opto Semiconductors

LED OSCONIQ P 3737 (3W version)
FWHM 66.0°
Efficiency 94 %
Peak intensity 0.920 cd/lm
Required components:



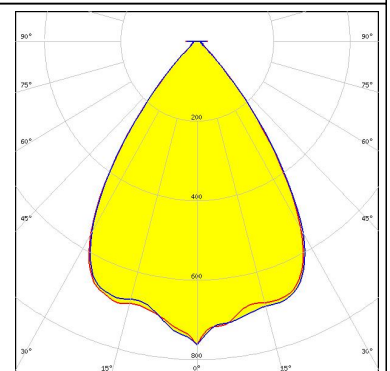
OSRAM
Opto Semiconductors

LED Oslon SSL 80
FWHM 55.6°
Efficiency 94 %
Peak intensity 1.100 cd/lm
Required components:



PHILIPS

LED Fortimo FastFlex LED board 2x8 DAX G4
FWHM 71.0°
Efficiency 94 %
Peak intensity 0.760 cd/lm
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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