

## HB-IP-2X6-WWW

~100° wide beam

### SPECIFICATION:

Dimensions	71.4 x 173.0 mm
Height	11.4 mm
Fastening	screw
Ingress protection classes	IP67
ROHS compliant	yes ⓘ

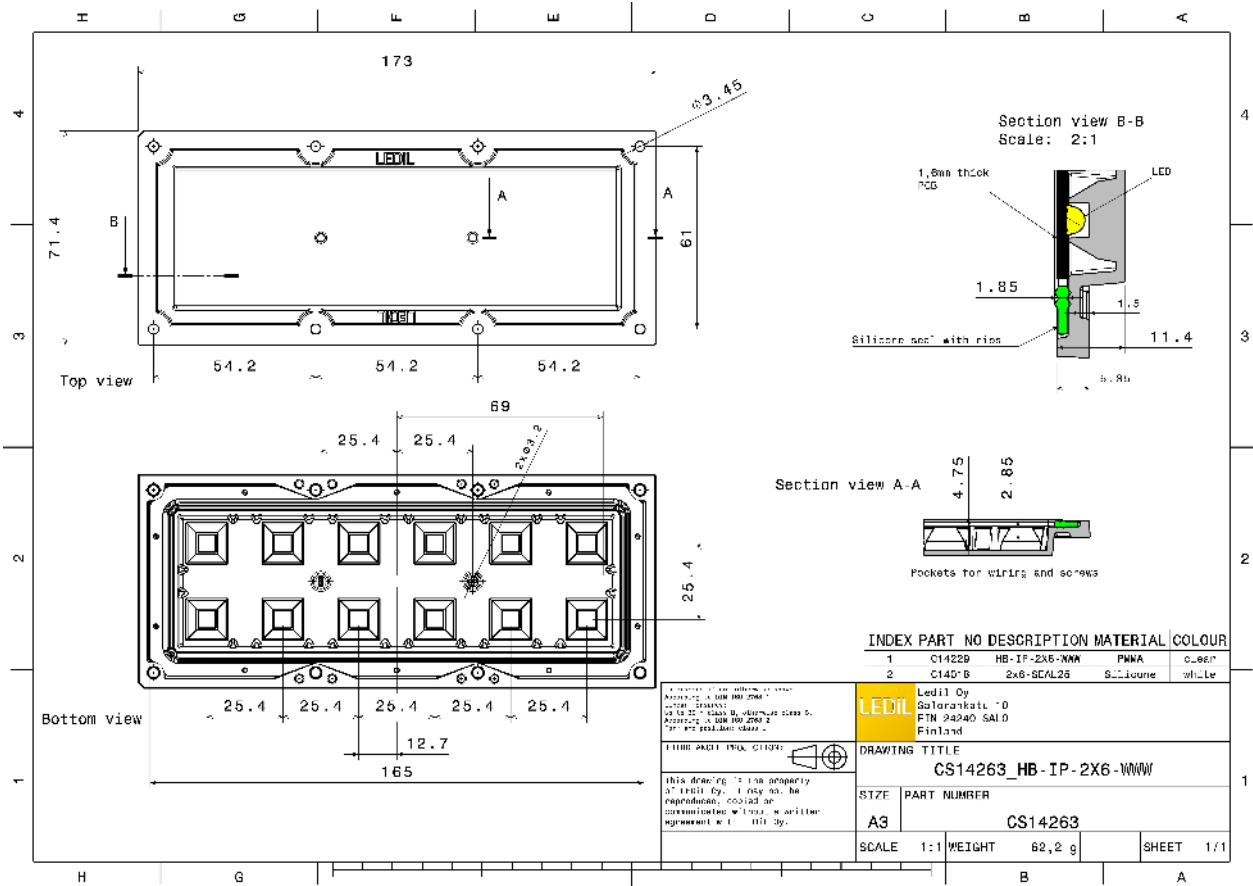
### MATERIALS:

Component	Type	Material	Colour	Finish
HB-IP-2X6-WWW	Multi-lens	PMMA	clear	
2X6-SEAL25	Seal	Silicone	white	





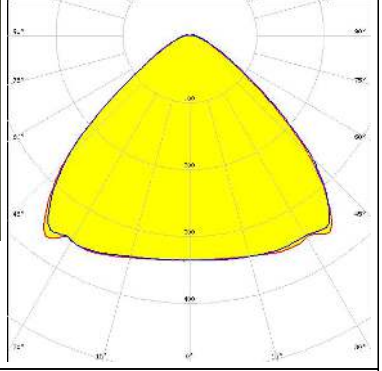

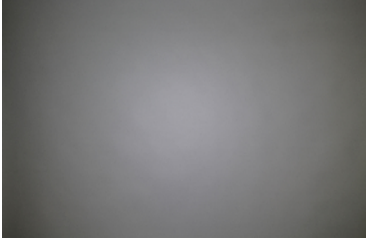
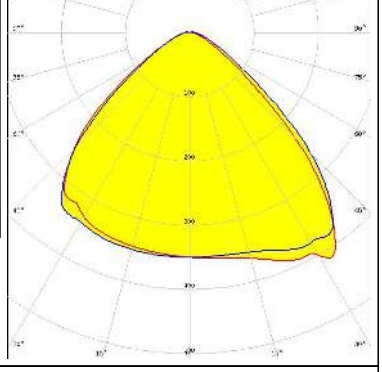


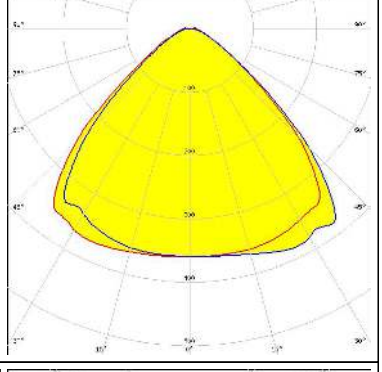

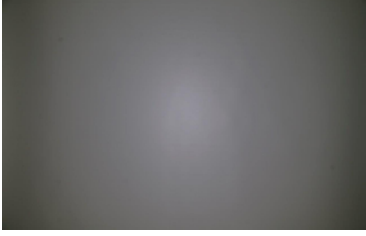
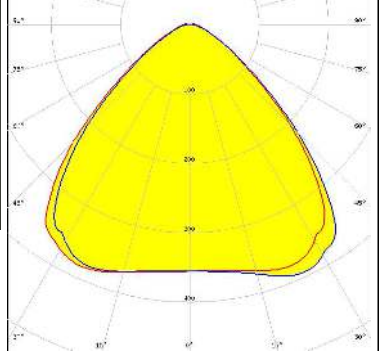
### ORDERING INFORMATION:

Component	Type	Qty in box	MOQ	MPQ	Box weight (kg)
CS14263_HB-IP-2X6-WWW » Box size: 476 x 273 x 247 mm	Multi-lens	120	40	40	8.3

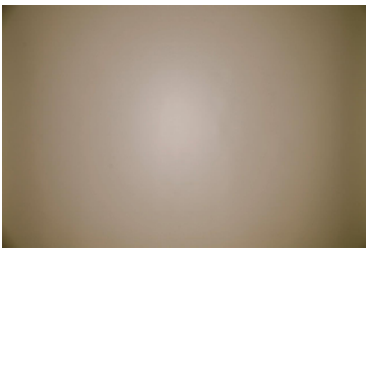
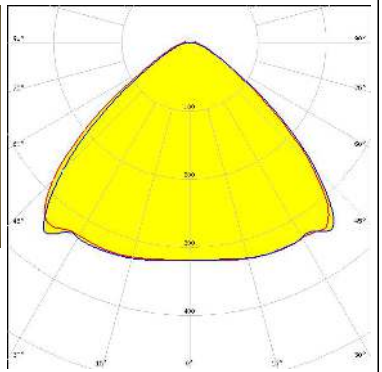

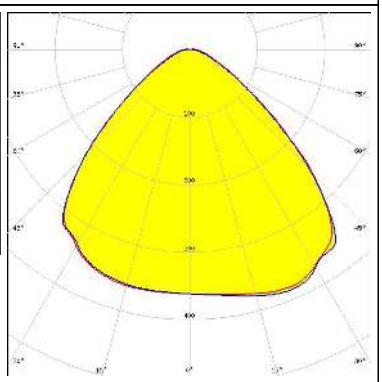
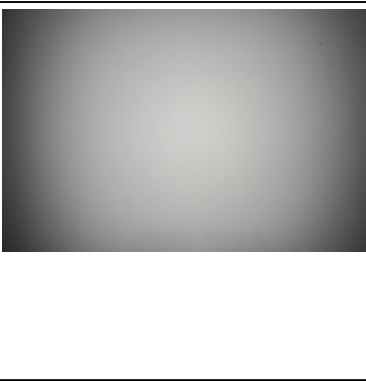
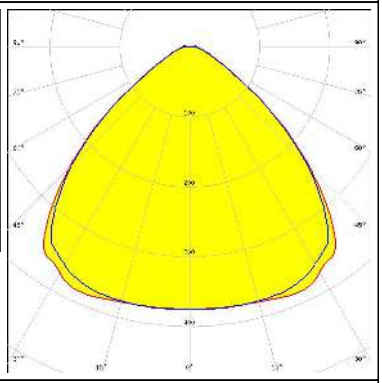

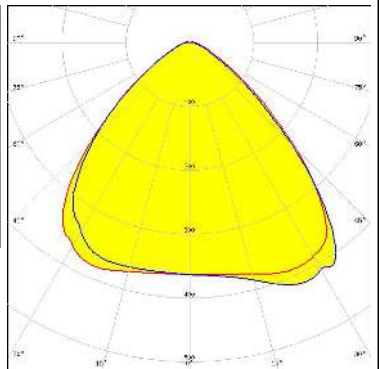


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

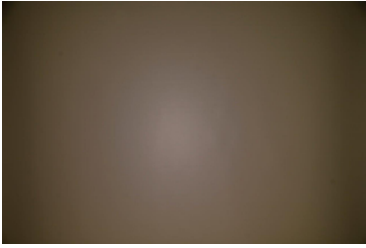
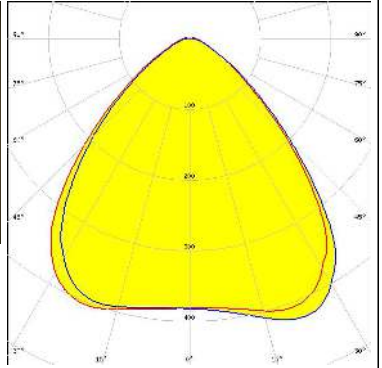

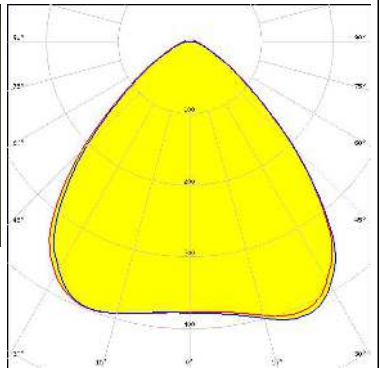
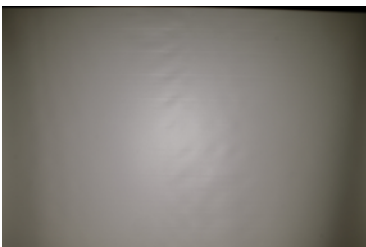
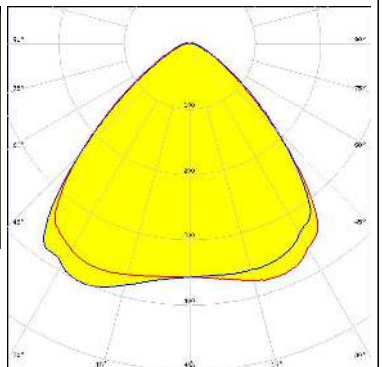
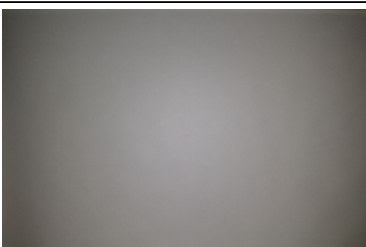
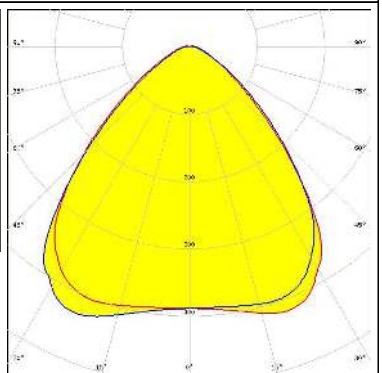
### OPTICAL RESULTS (MEASURED):

<p></p> <p>LED QUICK FLUX 2x6 LED XG xxx G7+</p> <p>FWHM / FWTM 100.0° / 133.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p></p> <p>LED QUICK FLUX 2x6 LED XT xxx G5</p> <p>FWHM / FWTM 96.0° / 128.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p></p> <p>LED XM-L2</p> <p>FWHM / FWTM 97.0° / 132.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p></p> <p>LED XP-G2</p> <p>FWHM / FWTM 95.0° / 132.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

### OPTICAL RESULTS (MEASURED):


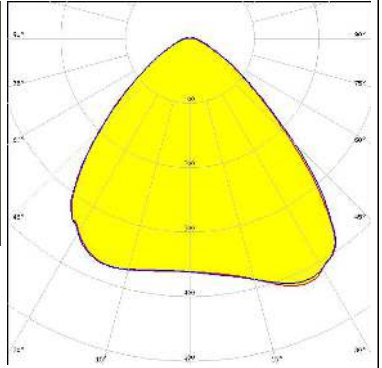
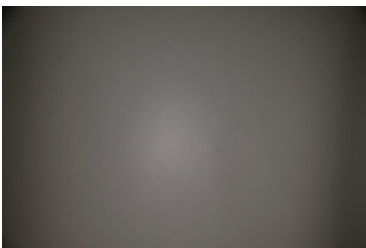
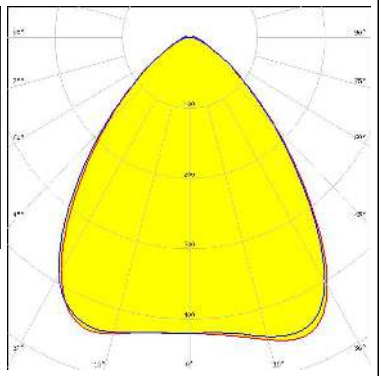

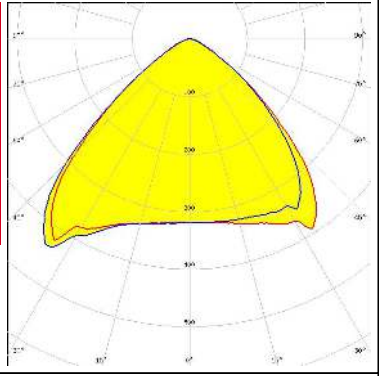
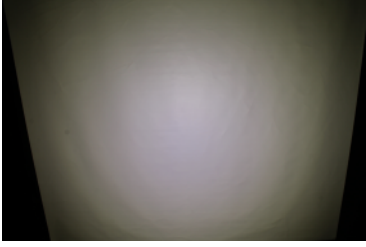
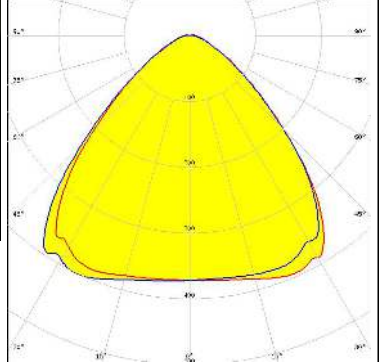
<p><b>CREE</b> ⇄ <b>LED</b></p> <p>LED            XP-L HD            FWHM / FWTM    103.0° / 138.0°            Efficiency        92 %            Peak intensity    0.4 cd/m            LEDs/each optic    1            Light colour      White            Required components:</p>		
<p><b>CREE</b> ⇄ <b>LED</b></p> <p>LED            XP-L2            FWHM / FWTM    96.0° / 134.0°            Efficiency        94 %            Peak intensity    0.4 cd/m            LEDs/each optic    1            Light colour      White            Required components:</p>		
<p><b>CREE</b> ⇄ <b>LED</b></p> <p>LED            XT-E            FWHM / FWTM    98.0° / 130.0°            Efficiency        94 %            Peak intensity    0.4 cd/m            LEDs/each optic    1            Light colour      White            Required components:</p>		
<p><b>CREE</b> ⇄ <b>LED</b></p> <p>LED            XT-E HE            FWHM / FWTM    95.0° / 129.0°            Efficiency        94 %            Peak intensity    0.4 cd/m            LEDs/each optic    1            Light colour      White            Required components:</p>		

#### OPTICAL RESULTS (MEASURED):


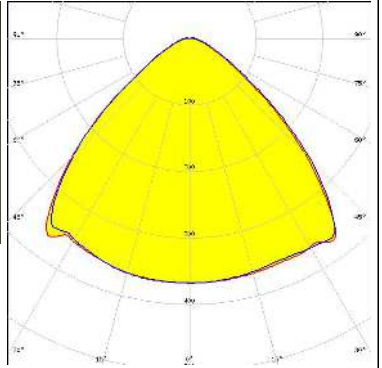
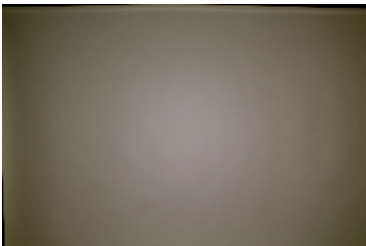
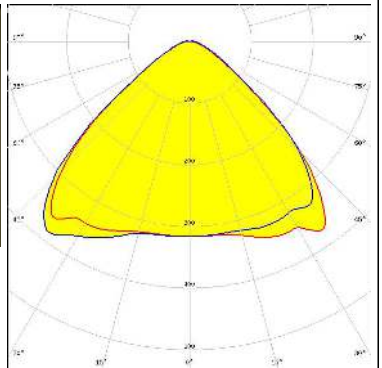

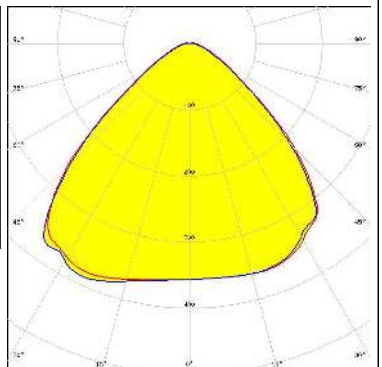

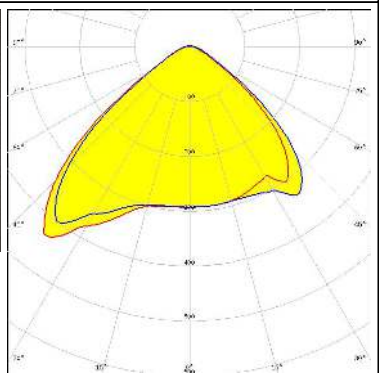
<p><b>LUMILEDS</b></p> <p>LED LUXEON T</p> <p>FWHM / FWTM 91.0° / 129.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON TX</p> <p>FWHM / FWTM 95.0° / 133.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON V</p> <p>FWHM / FWTM 94.0° / 130.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON V2</p> <p>FWHM / FWTM 91.0° / 129.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		




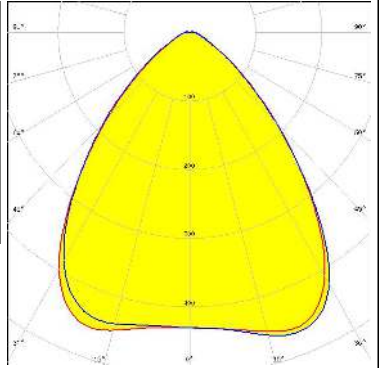
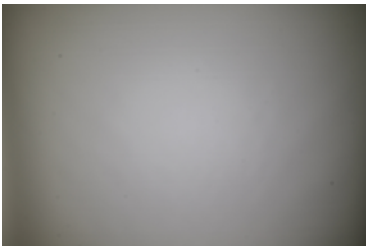
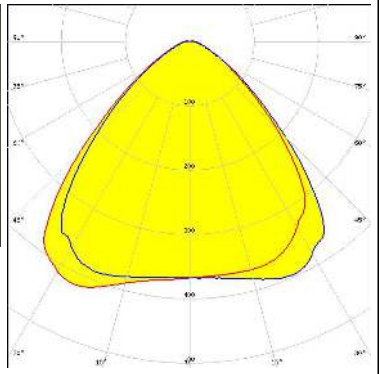

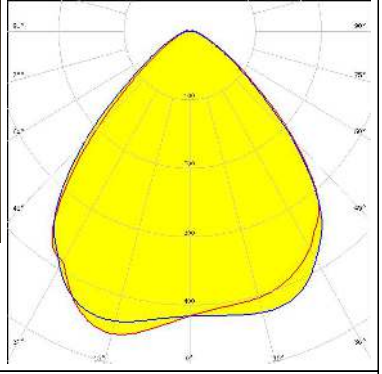

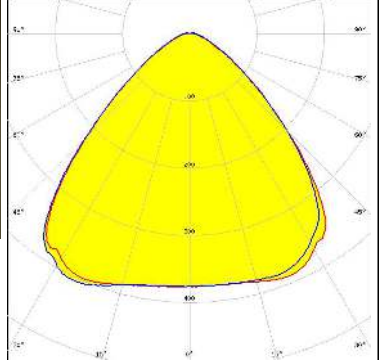
### OPTICAL RESULTS (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON XR-TX (L2T0-xxxx012M0000)</p> <p>FWHM / FWTM 97.0° / 135.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON Z ES</p> <p>FWHM / FWTM 85.0° / 124.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>LUMINUS</b></p> <p>LED SST-10-B130</p> <p>FWHM / FWTM 96.0° / 124.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Deep Red</p> <p>Required components:</p>		
<p><b>MST</b> <i>Your solutions</i></p> <p>LED RecLED 146x45mm 2900lm 730 2x6 IP G1</p> <p>FWHM / FWTM 91.5° / 129.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

### OPTICAL RESULTS (MEASURED):


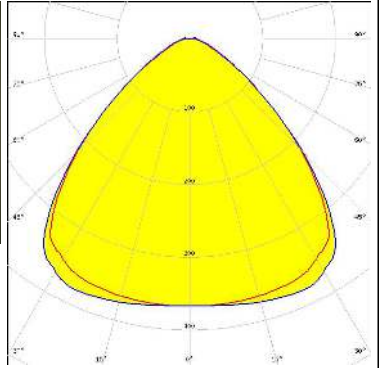
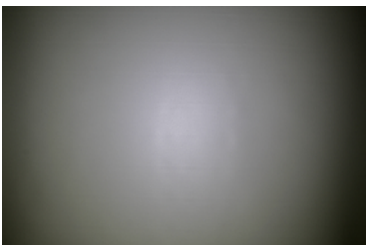
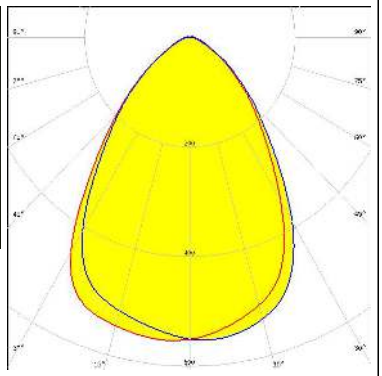

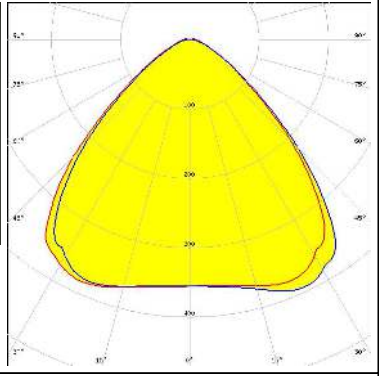

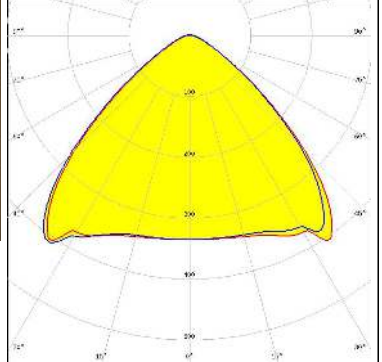
<p><b>NICHIA</b></p> <p>LED NVSW219D            FWHM / FWTM 98.0° / 132.0°            Efficiency 93 %            Peak intensity 0.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>NICHIA</b></p> <p>LED NVSW319B            FWHM / FWTM 103.0° / 136.0°            Efficiency 94 %            Peak intensity 0.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>NICHIA</b></p> <p>LED NVSW3x9A            FWHM / FWTM 97.0° / 133.0°            Efficiency 93 %            Peak intensity 0.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>NICHIA</b></p> <p>LED NVSW519A            FWHM / FWTM 100.0° / 126.0°            Efficiency 95 %            Peak intensity 0.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		

### OPTICAL RESULTS (MEASURED):

<p><b>NICHIA</b></p> <p>LED NVSxxE21A            FWHM / FWTM 84.0° / 120.0°            Efficiency 94 %            Peak intensity 0.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>NICHIA</b></p> <p>LED NVSxx19B/NVSxx19C            FWHM / FWTM 90.0° / 129.0°            Efficiency 94 %            Peak intensity 0.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED Duris S8            FWHM / FWTM 90.0° / 124.0°            Efficiency 94 %            Peak intensity 0.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED OSLON Square CSSRM2/CSSRM3            FWHM / FWTM 97.0° / 135.0°            Efficiency 94 %            Peak intensity 0.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		



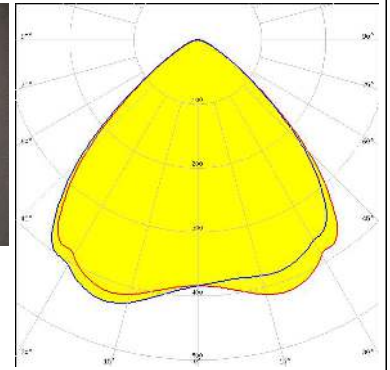
### OPTICAL RESULTS (MEASURED):

<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSLON Square PC</p> <p>FWHM / FWTM 95.0° / 130.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSLON SSL 80</p> <p>FWHM / FWTM 76.0° / 123.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>PHILIPS</b></p> <p>LED Fortimo FastFlex LED 2x6 DP G4</p> <p>FWHM / FWTM 95.0° / 132.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>PHILIPS</b></p> <p>LED Fortimo FastFlex LED 2x6 DP G5</p> <p>FWHM / FWTM 96.0° / 125.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

### OPTICAL RESULTS (MEASURED):

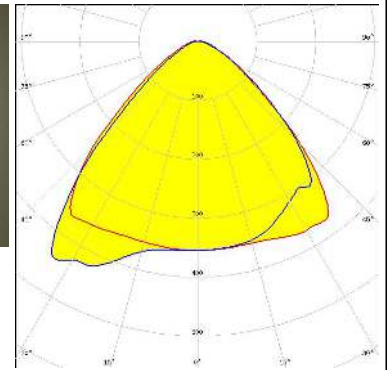
#### PHILIPS

LED Fortimo FastFlex LED 2x6 DP HE  
 FWHM / FWTM 93.0° / 122.0°  
 Efficiency 97 %  
 Peak intensity 0.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



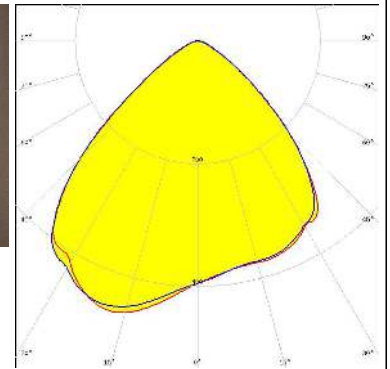
#### SAMSUNG

LED HiLOM RH12 (LH351C)  
 FWHM / FWTM 94.0° / 130.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



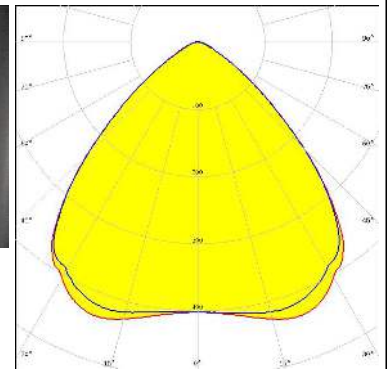
#### SAMSUNG

LED HiLOM RM12 ZP (LH502C)  
 FWHM / FWTM 92.0° / 122.0°  
 Efficiency 96 %  
 Peak intensity 0.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:


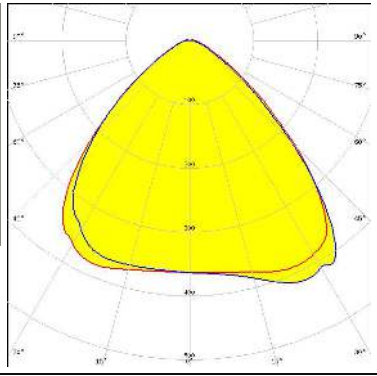

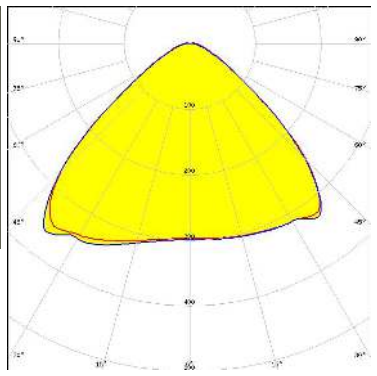
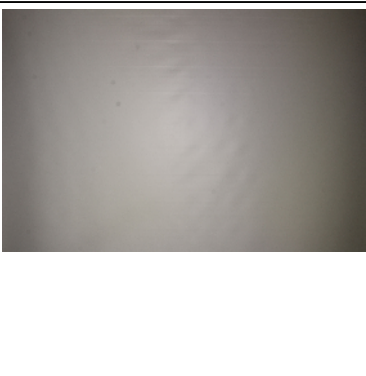
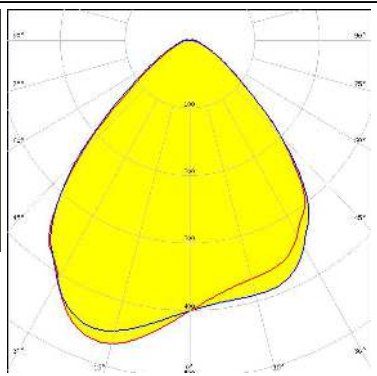
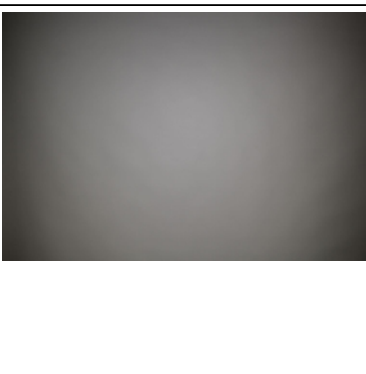
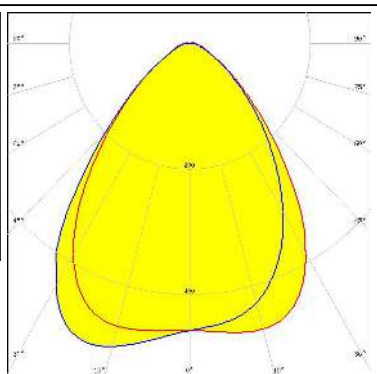


#### SCIOLUX


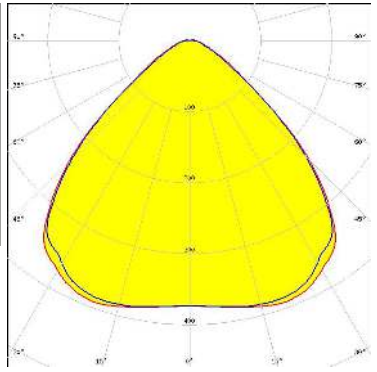
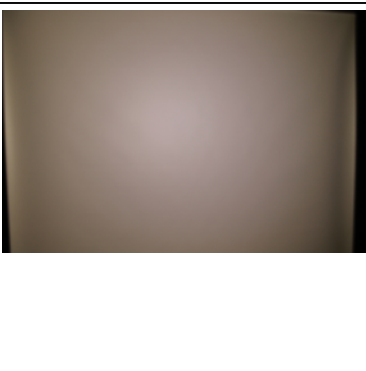
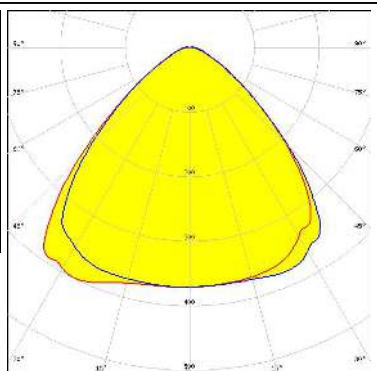

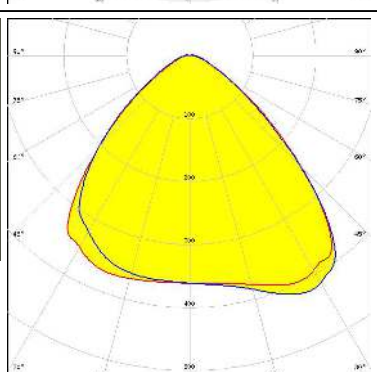
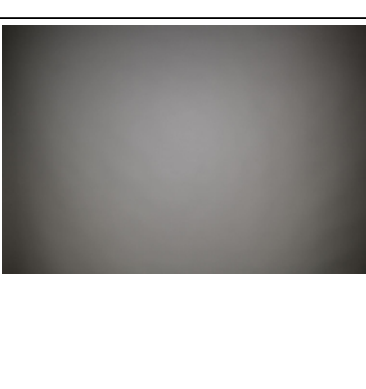
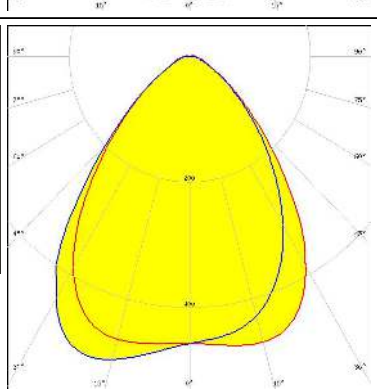
LED BALAM-VP-5250-750-36  
 FWHM / FWTM 91.0° / 122.0°  
 Efficiency 96 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (MEASURED):

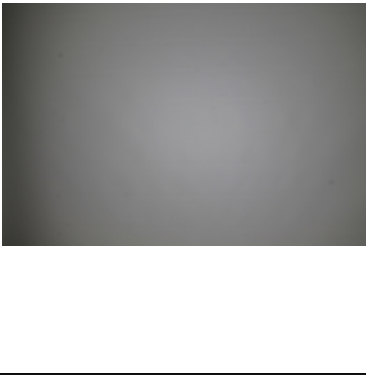
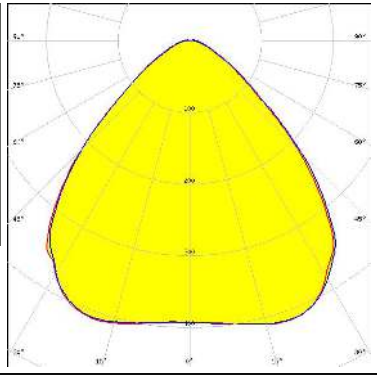
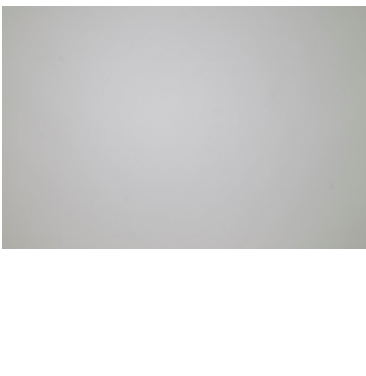
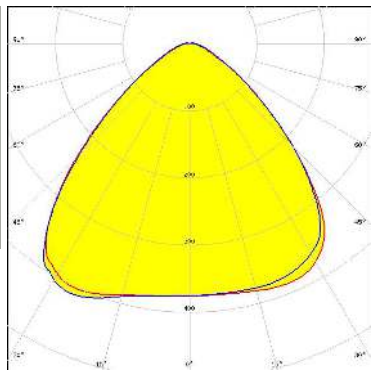

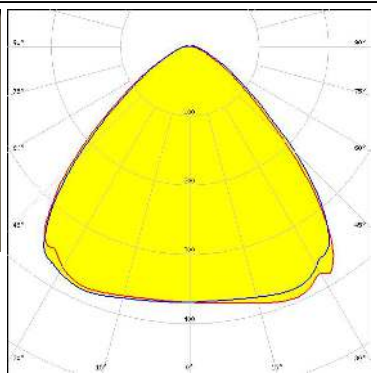
<p><b>SCIOLUX</b></p> <p>LED XLE-S22C4XTEHE (XT-E HE)</p> <p>FWHM / FWTM 95.0° / 129.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>SCIOLUX</b></p> <p>LED XLE-S26XHP35 (XHP35 HD)</p> <p>FWHM / FWTM 104.0° / 139.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>SEOL SEMICONDUCTOR</b></p> <p>LED 2x6 5050 module - SMJD-3625012F-XX</p> <p>FWHM / FWTM 88.0° / 125.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>SEOL SEMICONDUCTOR</b></p> <p>LED SMJQ-D36W12Mx</p> <p>FWHM / FWTM 79.0° / 123.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

#### OPTICAL RESULTS (MEASURED):

<p>SEIOUL SEMICONDUCTOR</p> <p>LED SMJQ-D36W12Px</p> <p>FWHM / FWTM 96.0° / 131.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>SEIOUL SEMICONDUCTOR</p> <p>LED Z5M1/Z5M2</p> <p>FWHM / FWTM 97.0° / 135.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>SEIOUL SEMICONDUCTOR</p> <p>LED Z5M3</p> <p>FWHM / FWTM 93.0° / 128.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>SEIOUL SEMICONDUCTOR</p> <p>LED Z8Y22</p> <p>FWHM / FWTM 79.0° / 123.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

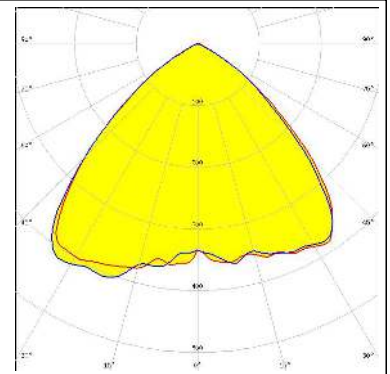
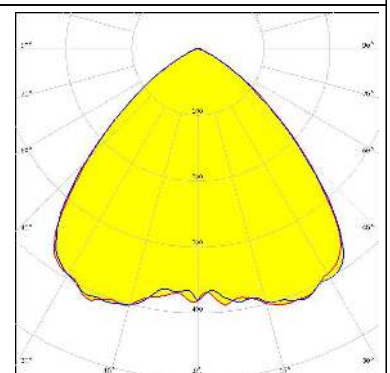
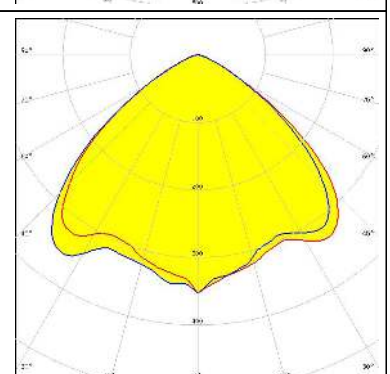
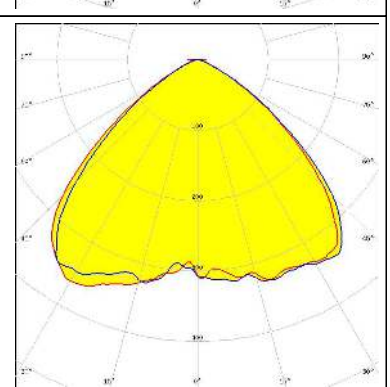


### OPTICAL RESULTS (MEASURED):

<p><b>OSRAM</b> OSRAM SEMICONDUCTOR</p> <p>LED Z8Y22P FWHM / FWTM 92.0° / 128.0° Efficiency 94 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p><b>TOSHIBA</b> Leading Innovation &gt;&gt;&gt;</p> <p>LED TL1L4 FWHM / FWTM 95.0° / 131.0° Efficiency 94 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p><b>TRIDONIC</b></p> <p>LED RLE 2x6 3000lm HP EXC2 OTD FWHM / FWTM 94.0° / 130.0° Efficiency 94 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		



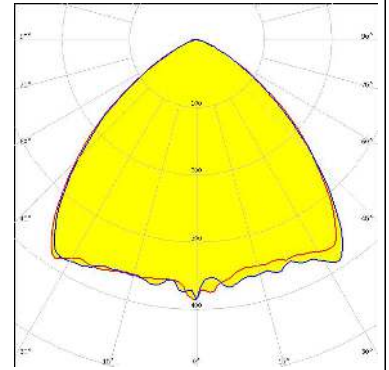
### OPTICAL RESULTS (SIMULATED):

<p><b>CREE</b> LED</p> <p>LED J Series 5050 Round LES</p> <p>FWHM / FWTM 98.0° / 130.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>CREE</b> LED</p> <p>LED J Series 5050B 6V K Class</p> <p>FWHM / FWTM 94.0° / 123.0°</p> <p>Efficiency 96 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>CREE</b> LED</p> <p>LED MHB-A/B</p> <p>FWHM / FWTM 106.0° / 131.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>CREE</b> LED</p> <p>LED XHP35 HD</p> <p>FWHM / FWTM 101.0° / 129.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

### OPTICAL RESULTS (SIMULATED):

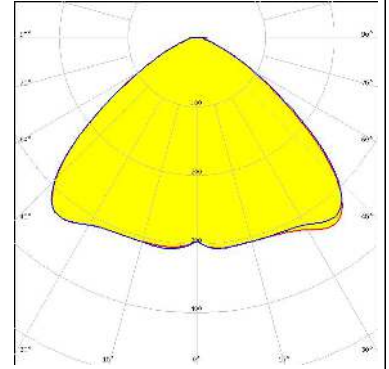
#### CREE LED

LED XP-E  
 FWHM / FWTM 99.0° / 129.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



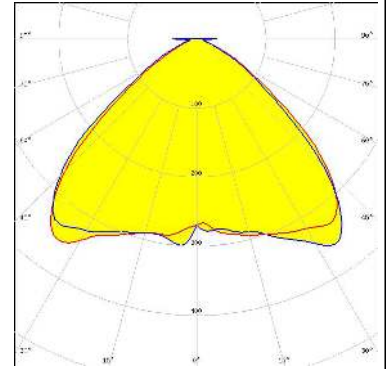
#### CREE LED

LED XP-G2 HE  
 FWHM / FWTM 108.0° / 140.0°  
 Efficiency 93 %  
 Peak intensity 0.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



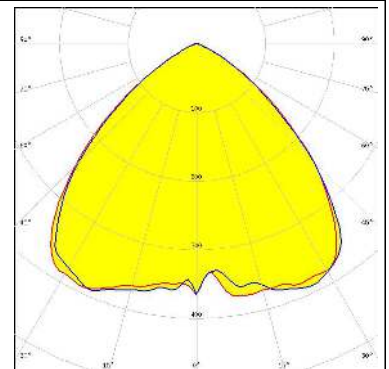
#### CREE LED

LED XP-G3  
 FWHM / FWTM 95.0° / 145.0°  
 Efficiency 91 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

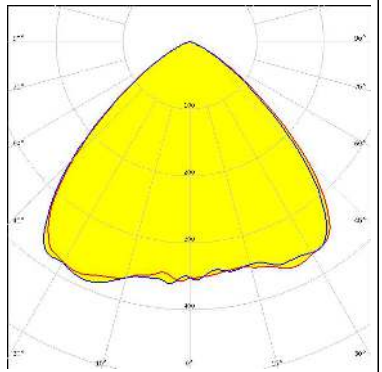
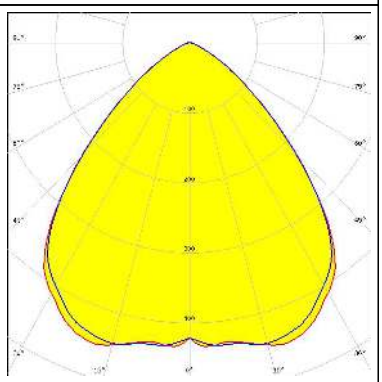
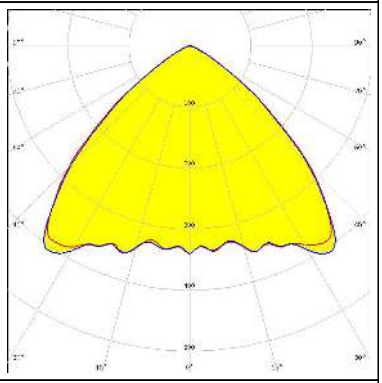
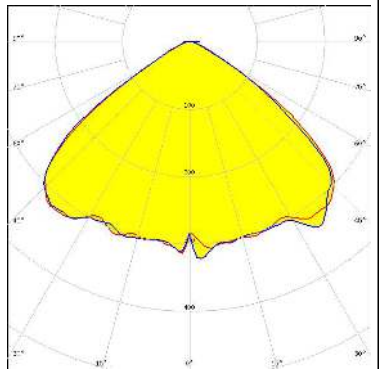


#### LUMILEDS

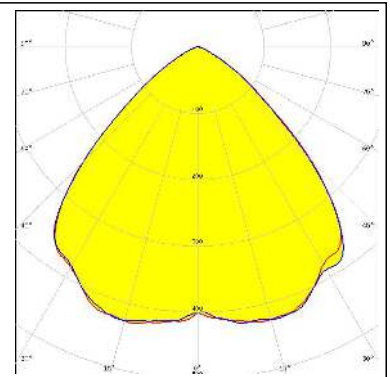
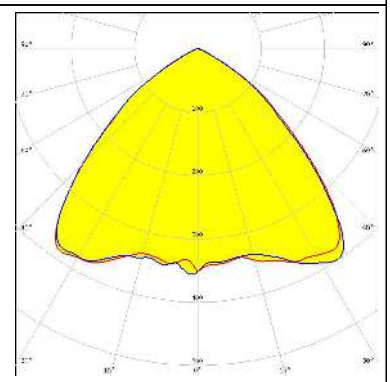
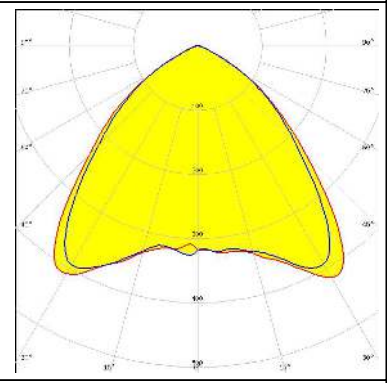
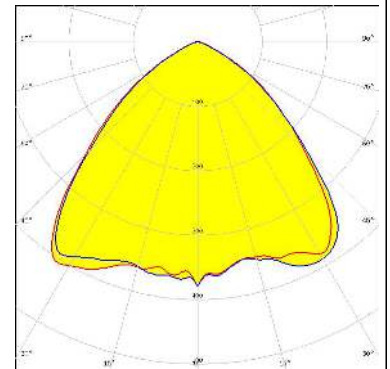
LED LUXEON 5050 Round LES  
 FWHM / FWTM 92.0° / 125.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### OPTICAL RESULTS (SIMULATED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON 5050 Round LES</p> <p>FWHM / FWTM 98.0° / 130.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>Protective plate, glass</p>	
<p><b>LUMILEDS</b></p> <p>LED LUXEON 5050 Square LES</p> <p>FWHM / FWTM 90.0° / 122.0°</p> <p>Efficiency 96 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>NICHIA</b></p> <p>LED NV4WB35AM</p> <p>FWHM / FWTM 98.0° / 123.0°</p> <p>Efficiency 96 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>NICHIA</b></p> <p>LED NVSW219F</p> <p>FWHM / FWTM 110.0° / 132.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

### OPTICAL RESULTS (SIMULATED):

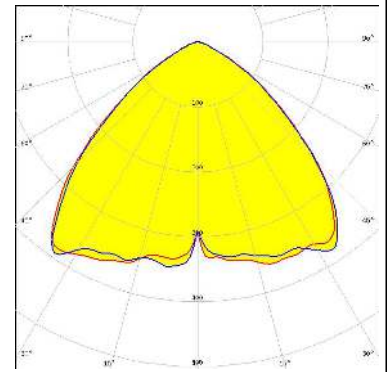
<p><b>NICHIA</b></p> <p>LED NVSxE21A            FWHM / FWTM 94.0° / 122.0°            Efficiency 95 %            Peak intensity 0.4 cd/lm            LEDs/each optic 4            Light colour White            Required components:</p>	
<p><b>OSRAM</b></p> <p>LED PrevaLED Brick HP IP 2x6            FWHM / FWTM 98.0° / 124.0°            Efficiency 96 %            Peak intensity 0.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED OSCONIQ P 3030            FWHM / FWTM 94.0° / 126.0°            Efficiency 96 %            Peak intensity 0.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED OSCONIQ P 3737 (2W version)            FWHM / FWTM 95.0° / 127.0°            Efficiency 94 %            Peak intensity 0.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	

## OPTICAL RESULTS (SIMULATED):

### OSRAM

Opto Semiconductors

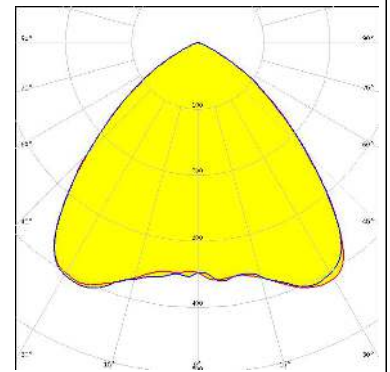
LED OSCONIQ P 3737 (3W version)  
FWHM / FWTM 98.0° / 127.0°  
Efficiency 94 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



### OSRAM

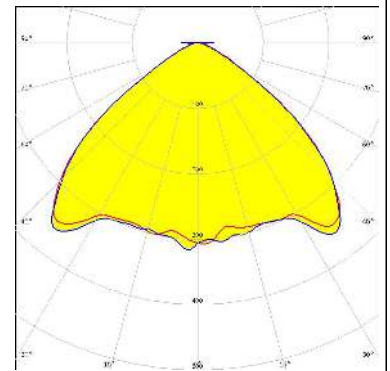
Opto Semiconductors

LED OSCONIQ P 3737 Flat  
FWHM / FWTM 94.0° / 126.0°  
Efficiency 96 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



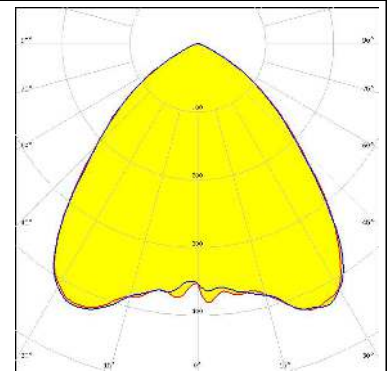
### PHILIPS

LED Fortimo FastFlex LED 2x6 DPX G4  
FWHM / FWTM 105.0° / 92.0°  
Efficiency 94 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



### SAMSUNG

LED LH181B  
FWHM / FWTM 90.0° / 124.0°  
Efficiency 96 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

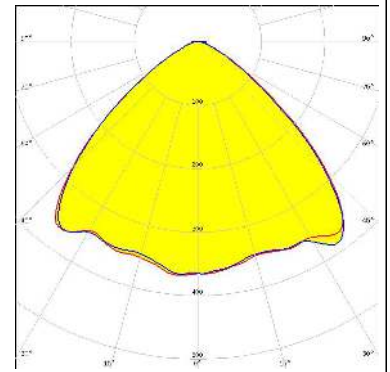




### OPTICAL RESULTS (SIMULATED):

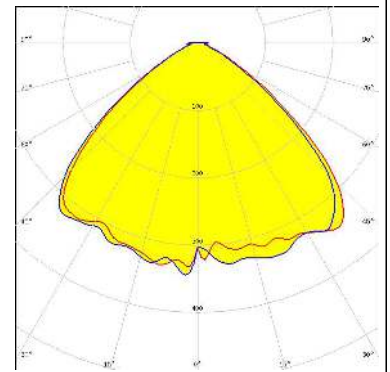
#### SAMSUNG

LED LH351B  
 FWHM / FWTM 100.0° / 130.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



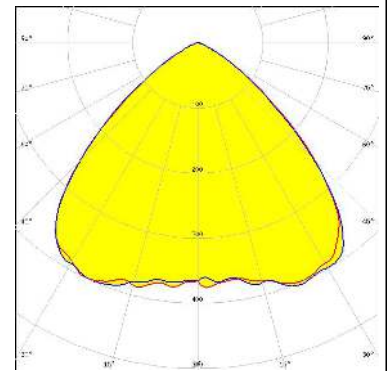
#### SAMSUNG

LED LH351D  
 FWHM / FWTM 107.0° / 145.0°  
 Efficiency 92 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



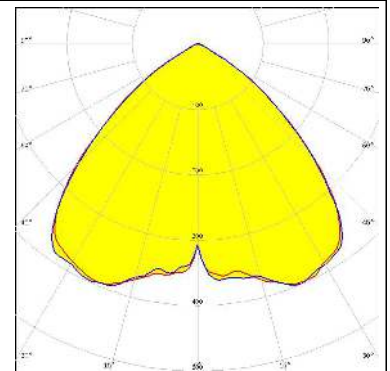
#### SAMSUNG

LED LH502C  
 FWHM / FWTM 96.0° / 124.0°  
 Efficiency 96 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

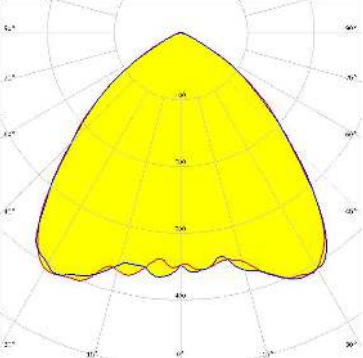
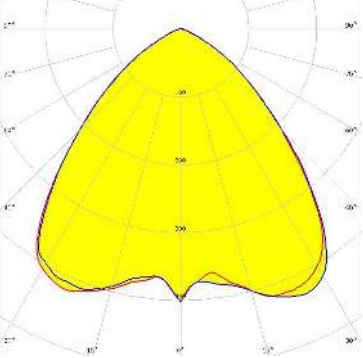
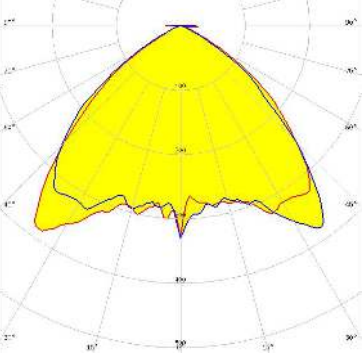
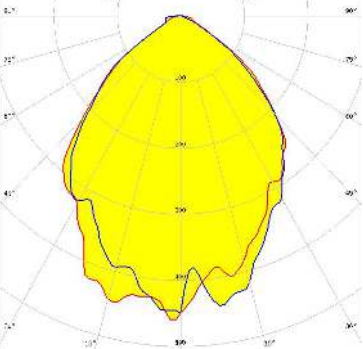


#### SAMSUNG

LED LH502D  
 FWHM / FWTM 98.0° / 120.0°  
 Efficiency 96 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### OPTICAL RESULTS (SIMULATED):

<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED: Z5M4</p> <p>FWHM / FWTM: 94.0° / 125.0°</p> <p>Efficiency: 96 %</p> <p>Peak intensity: 0.4 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED: Z8Y22T</p> <p>FWHM / FWTM: 93.0° / 131.0°</p> <p>Efficiency: 94 %</p> <p>Peak intensity: 0.5 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p><b>TOSHIBA</b> Leading Innovation &gt;&gt;&gt;</p> <p>LED: TL1L2</p> <p>FWHM / FWTM: 100.0° / 125.0°</p> <p>Efficiency: 91 %</p> <p>Peak intensity: 0.4 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p><b>TOSHIBA</b> Leading Innovation &gt;&gt;&gt;</p> <p>LED: TL1L3</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 84 %</p> <p>Peak intensity: 0.5 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	

### 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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P.R.CHINA

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