

## STRADELLA-16-HB-M

~60° medium beam for industrial applications

### SPECIFICATION:

Dimensions	49.5 x 49.5 mm
Height	6.8 mm
Fastening	pin, screw
ROHS compliant	yes ⓘ

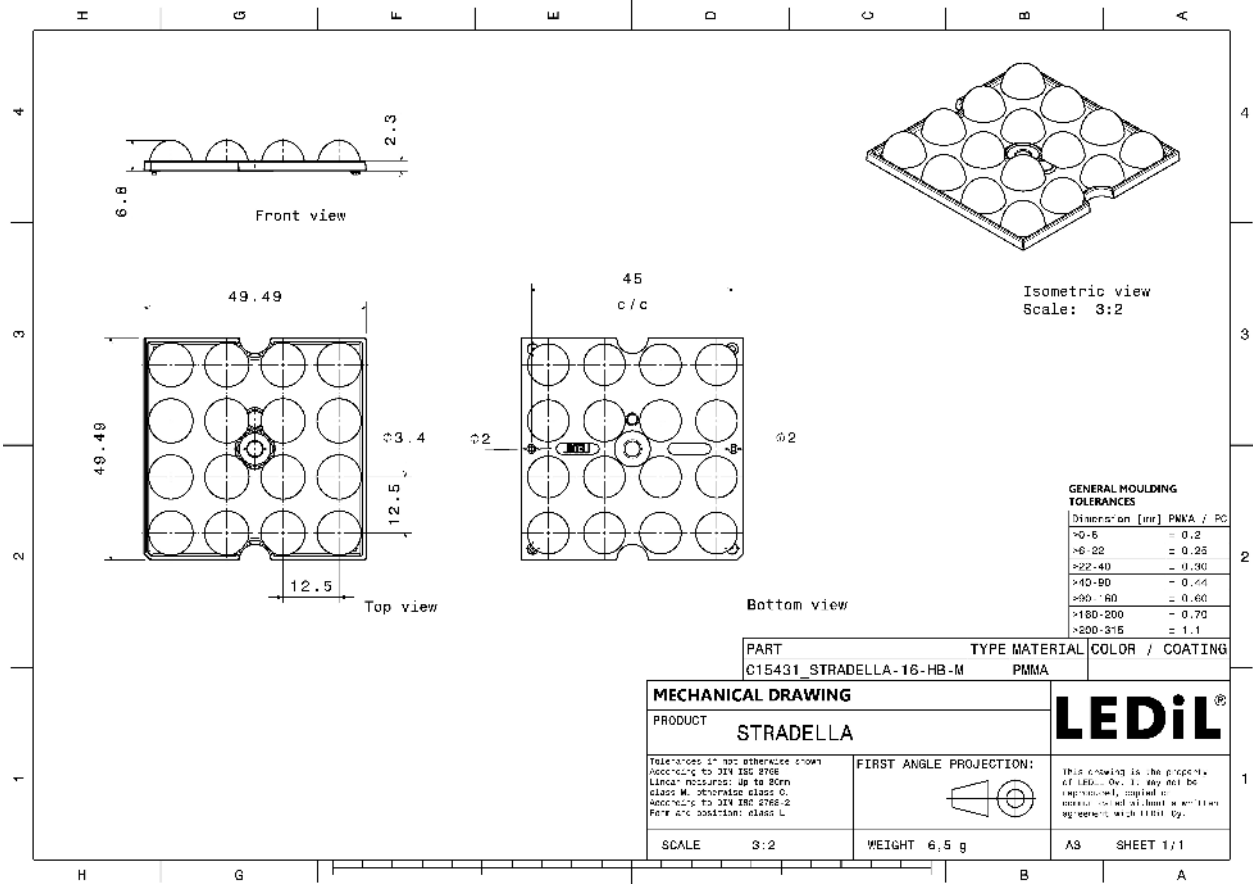
### MATERIALS:

Component	Type	Material	Colour	Finish
STRADELLA-16-HB-M	Multi-lens	PMMA	clear	




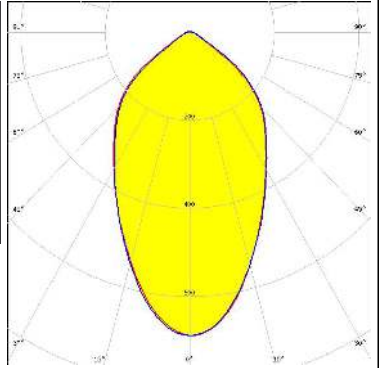

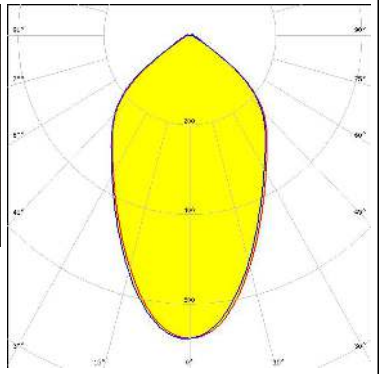
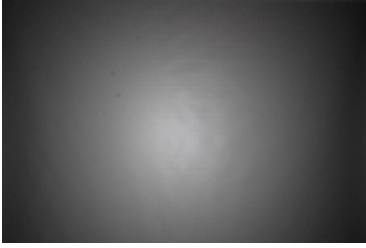
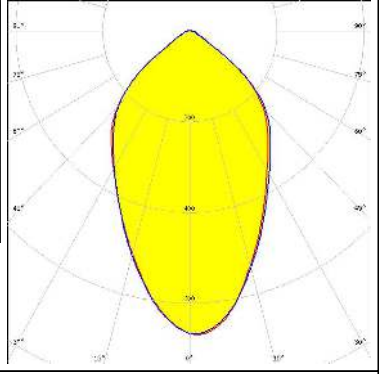

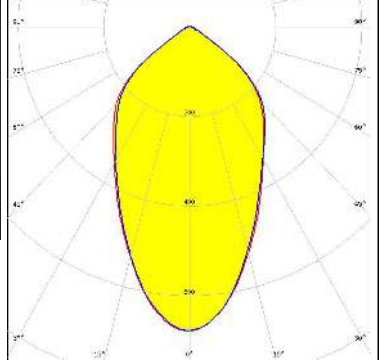
### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C15431_STRADELLA-16-HB-M » Box size: 480 x 280 x 300 mm	800	160	160	6.0


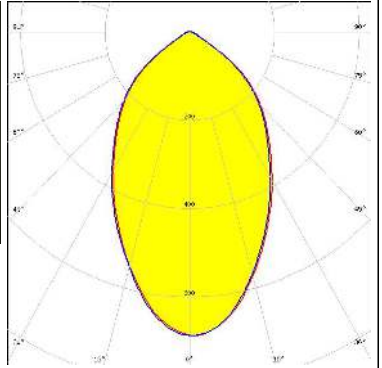

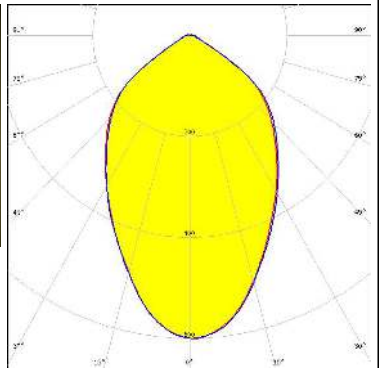
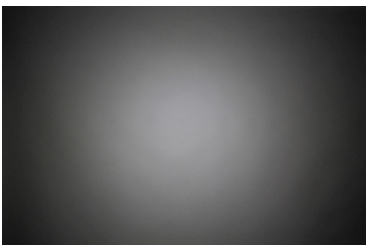
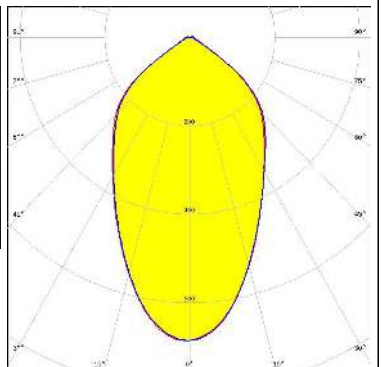
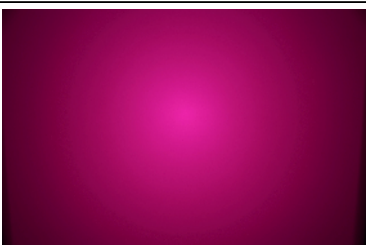
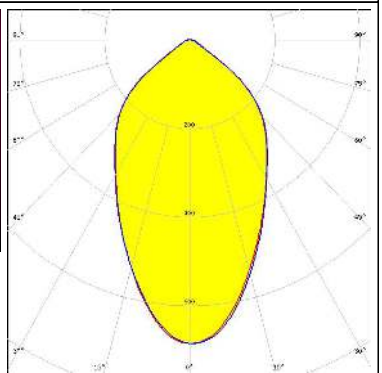


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)


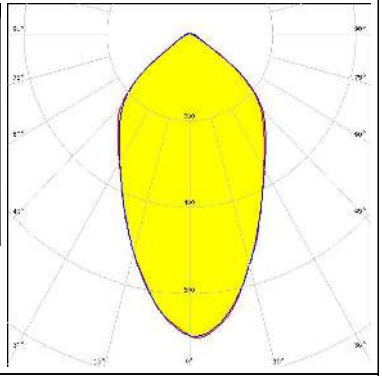

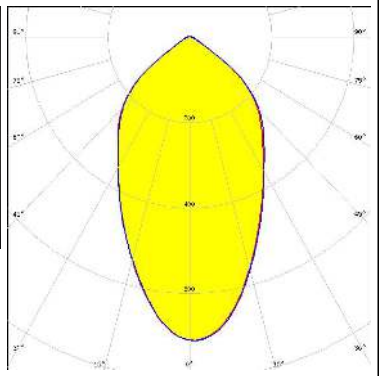
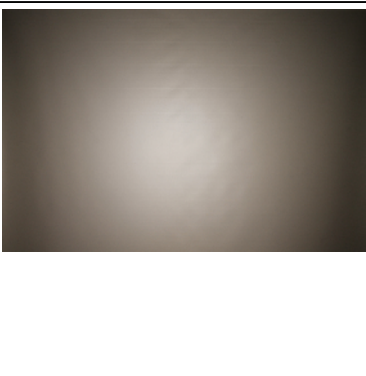
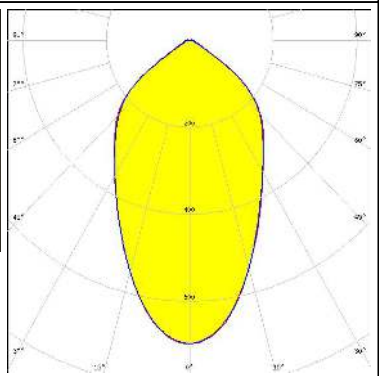

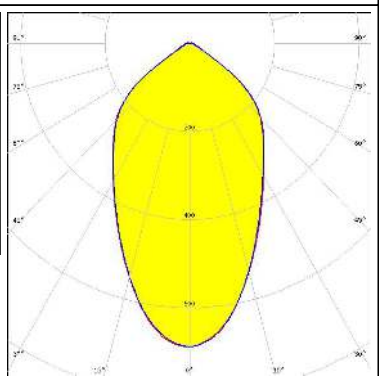
#### OPTICAL RESULTS (MEASURED):

<p><b>CREE</b> LED</p> <p>LED J Series 3030            FWHM / FWTM 63.0° / 116.0°            Efficiency 96 %            Peak intensity 0.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>ELECTRIO</b></p> <p>LED EHP-223.5x50-1604-xx-70-LS30-06-NTC            FWHM / FWTM 64.0° / 115.0°            Efficiency 96 %            Peak intensity 0.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>NICHIA</b></p> <p>LED NFSx757D            FWHM / FWTM 65.0° / 114.0°            Efficiency 94 %            Peak intensity 0.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>NICHIA</b></p> <p>LED NFSx757G            FWHM / FWTM 61.0° / 115.0°            Efficiency 93 %            Peak intensity 0.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		

#### OPTICAL RESULTS (MEASURED):

<p><b>NICHIA</b></p> <p>LED NVSW219D            FWHM / FWTM 65.0° / 116.0°            Efficiency 94 %            Peak intensity 0.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>NICHIA</b></p> <p>LED NVSW319B            FWHM / FWTM 72.0° / 121.0°            Efficiency 94 %            Peak intensity 0.6 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>OSRAM</b></p> <p>LED PrevaLED Brick MP 4x16            FWHM / FWTM 63.0° / 116.0°            Efficiency 94 %            Peak intensity 0.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED Duris S5 (2 chip)            FWHM / FWTM 63.0° / 115.0°            Efficiency 94 %            Peak intensity 0.7 cd/lm            LEDs/each optic 1            Light colour Purple            Required components:</p>		

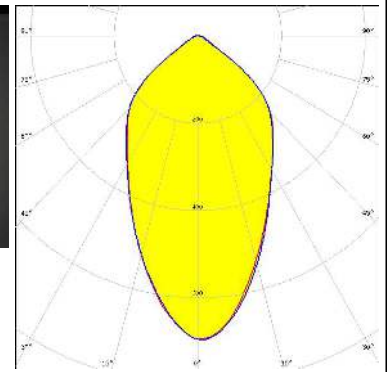
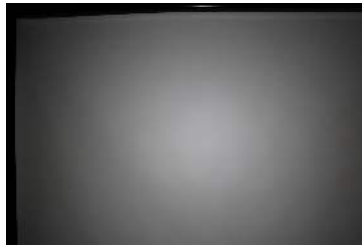
#### OPTICAL RESULTS (MEASURED):

<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Duris S5 (Single chip)</p> <p>FWHM / FWTM 59.0° / 114.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.7 cd/m</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 OSCONIQ S 3030 (QSLR31)</p> <p>FWHM / FWTM 60.0° / 114.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.7 cd/m</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 4x16 DHE G4</p> <p>FWHM / FWTM 61.0° / 115.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>SAMSUNG</b></p> <p>LED HiLOM RM64 (LM301B)</p> <p>FWHM / FWTM 62.0° / 116.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

#### OPTICAL RESULTS (MEASURED):

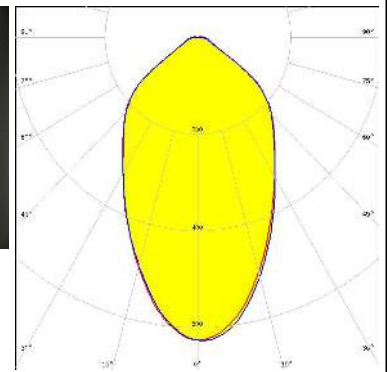
#### SAMSUNG

LED LM231 A/B  
 FWHM / FWTM 60.0° / 114.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



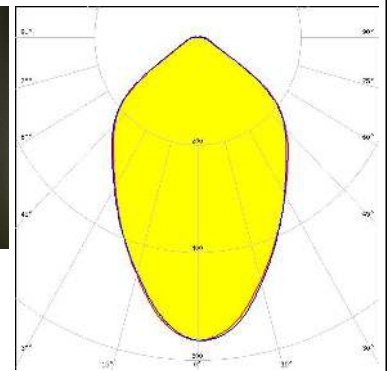
#### SCIOLUX

LED XLE-S44XTEHE (XT-E HE)  
 FWHM / FWTM 63.0° / 120.0°  
 Efficiency 94 %  
 Peak intensity 0.6 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:

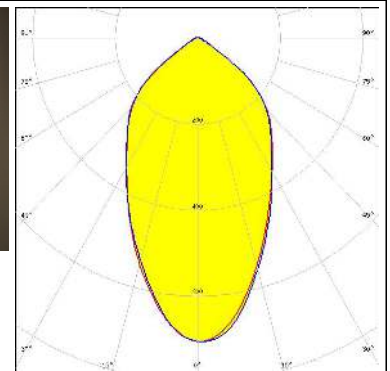
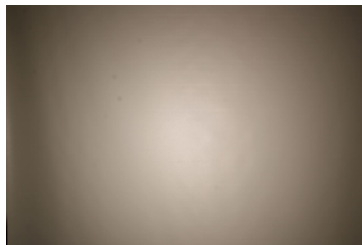


#### SCIOLUX


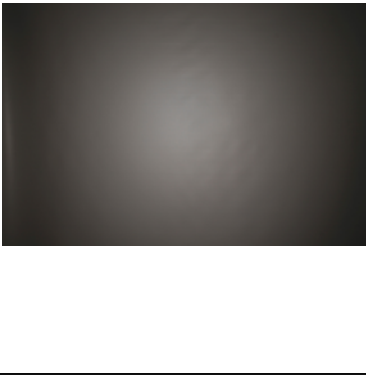
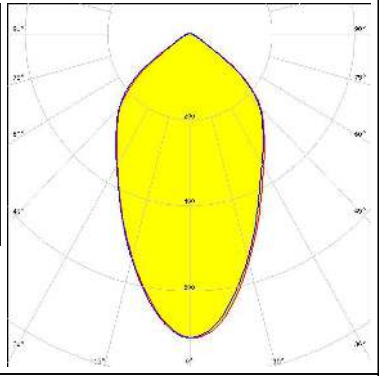


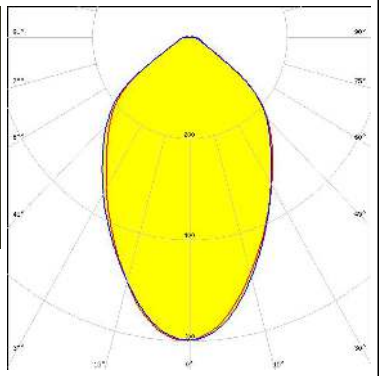

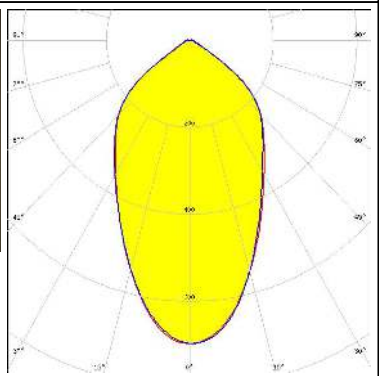

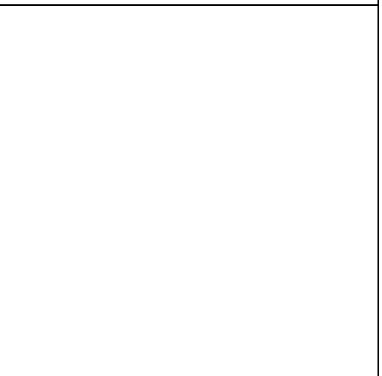
LED XLE-S48XPG3 (XP-G3)  
 FWHM / FWTM 74.0° / 122.0°  
 Efficiency 94 %  
 Peak intensity 0.6 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:




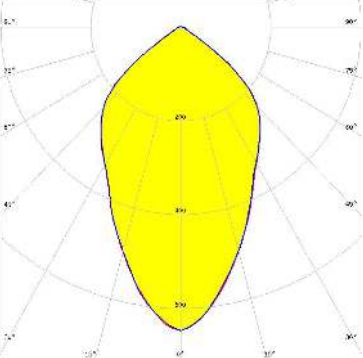

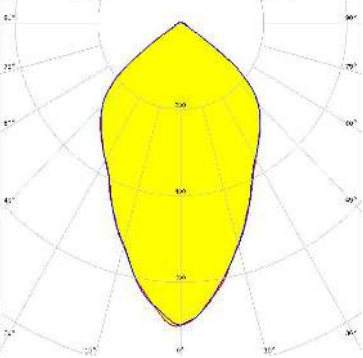

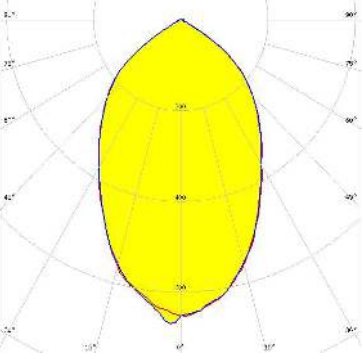

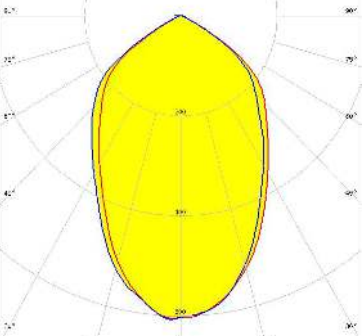
LED SEOUL 3030  
 FWHM / FWTM 60.0° / 114.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (MEASURED):

<p> <b>SEOUL SEMICONDUCTOR</b></p> <p>LED                    SEOUL DC 3030</p> <p>FWHM / FWTM        61.0° / 117.0°</p> <p>Efficiency            94 %</p> <p>Peak intensity        0.7 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                    Z5M3</p> <p>FWHM / FWTM        70.0° / 120.0°</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>TRIDONIC</b></p> <p>LED                    RLE 4x16 4000lm MP ADV2 OTD</p> <p>FWHM / FWTM        61.0° / 116.0°</p> <p>Efficiency            94 %</p> <p>Peak intensity        0.7 cd/lm</p> <p>LEDs/each optic     1</p> <p>Light colour         White</p> <p>Required components:</p>		
<p><b>TRIDONIC</b></p> <p>LED                    RLE 4x8 2000lm MP ADV2 OTD</p> <p>FWHM / FWTM        61.0° / 116.0°</p> <p>Efficiency            94 %</p> <p>Peak intensity        0.7 cd/lm</p> <p>LEDs/each optic     1</p> <p>Light colour         White</p> <p>Required components:</p>		

#### OPTICAL RESULTS (SIMULATED):

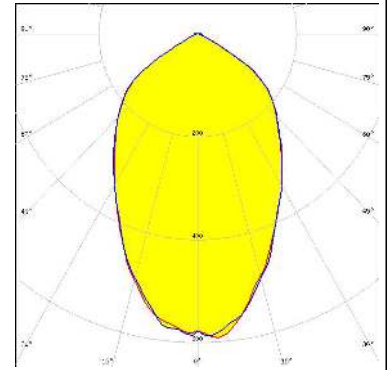
<p> LED CSP 2727 (BXCP)</p> <p>FWHM / FWTM 64.0° / 112.0 + 114.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p style="background-color: #ADD8E6; padding: 2px; display: inline-block;">Protective plate, glass</p>	
<p> LED CSP 2727 (BXCP)</p> <p>FWHM / FWTM 64.0° / 112.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 0.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p> LED J Series 5050 Round LES</p> <p>FWHM / FWTM 69.0° / 117.0°</p> <p>Efficiency 96 %</p> <p>Peak intensity 0.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p> LED XP-G2</p> <p>FWHM / FWTM 71.0° / 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>	



#### OPTICAL RESULTS (SIMULATED):

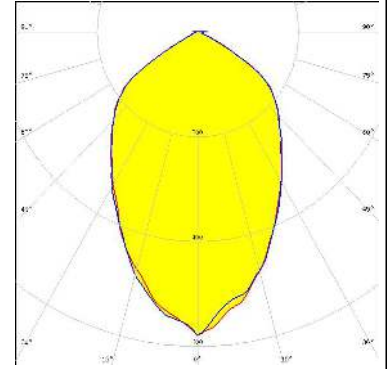
##### CREE LED

LED XP-G2 HE  
 FWHM / FWTM 70.0° / 122.0°  
 Efficiency 94 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



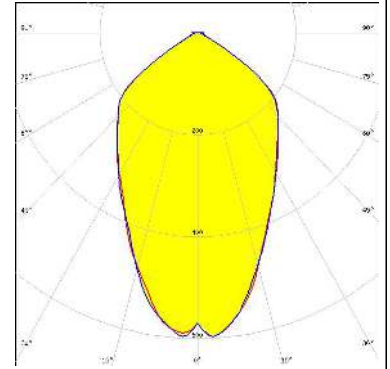
##### CREE LED

LED XP-G3  
 FWHM / FWTM 71.0° / 123.0°  
 Efficiency 94 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



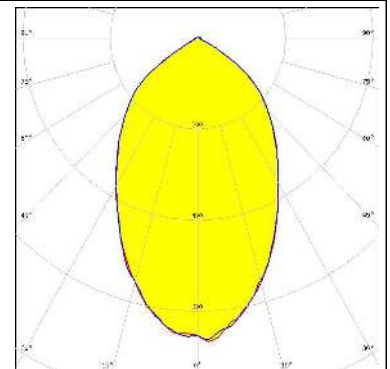
##### CREE LED

LED XT-E  
 FWHM / FWTM 66.0° / 122.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### LUMILEDS

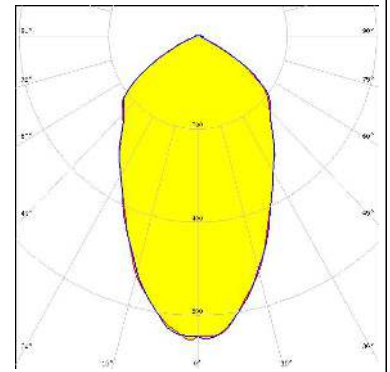
LED LUXEON 5050 Square LES  
 FWHM / FWTM 68.0° / 118.0°  
 Efficiency 96 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (SIMULATED):

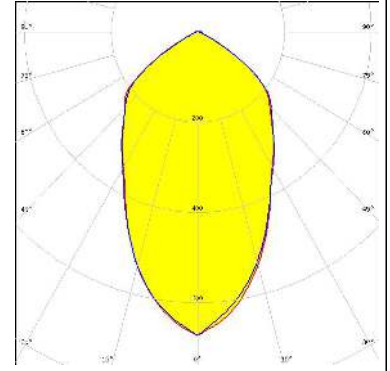
##### LUMILEDS

LED LUXEON CZ  
 FWHM / FWTM 64.0° / 124.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



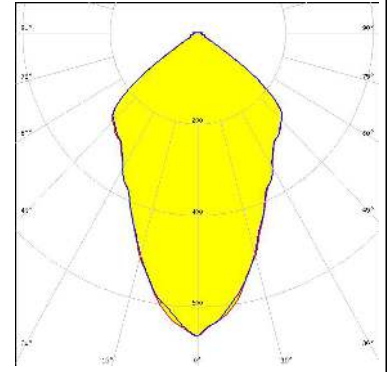
##### LUMILEDS

LED LUXEON CZ  
 FWHM / FWTM 62.0° / 122.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour RGBW  
 Required components:



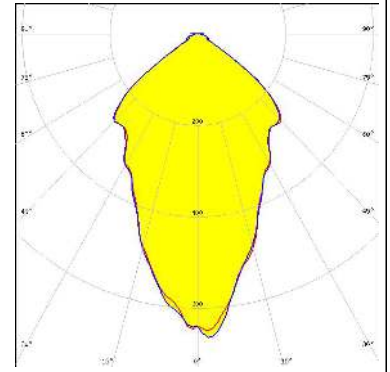
##### LUMILEDS

LED LUXEON HL1Z  
 FWHM / FWTM 62.0° / 114.0°  
 Efficiency 95 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

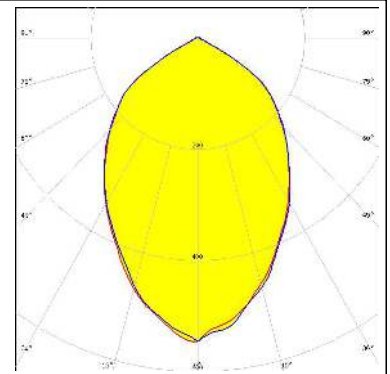
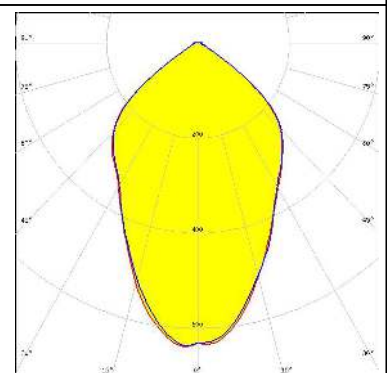
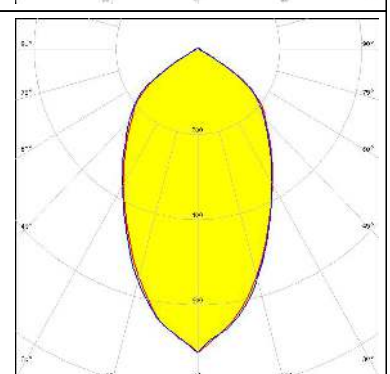
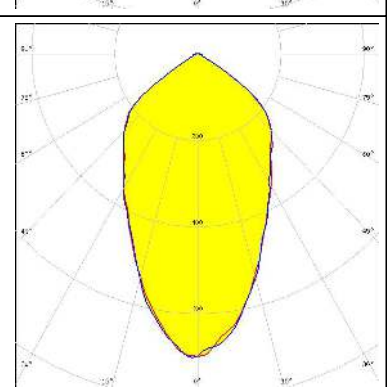


##### NICHIA

LED NFSWE11A  
 FWHM / FWTM 61.0 + 58.0° / 114.0°  
 Efficiency 92 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (SIMULATED):

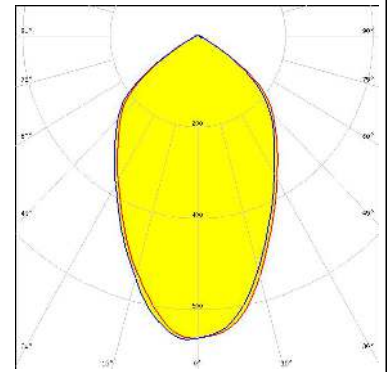
<p><b>NICHIA</b></p> <p>LED NVSW519A            FWHM / FWTM 77.0° / 124.0°            Efficiency 93 %            Peak intensity 0.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED NVSxE21A            FWHM / FWTM 69.0° / 117.0°            Efficiency 94 %            Peak intensity 0.6 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED Duris E5            FWHM / FWTM 62.0° / 119.0°            Efficiency 94 %            Peak intensity 0.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED OSCONIQ C 2424            FWHM / FWTM 61.0° / 116.0°            Efficiency 95 %            Peak intensity 0.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

#### OSRAM

Opto Semiconductors

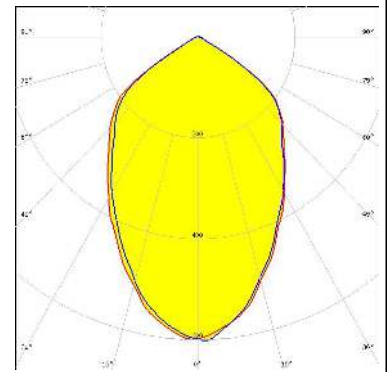
LED OSCONIQ P 3030  
 FWHM / FWTM 52.0° / 118.0°  
 Efficiency 96 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OSRAM

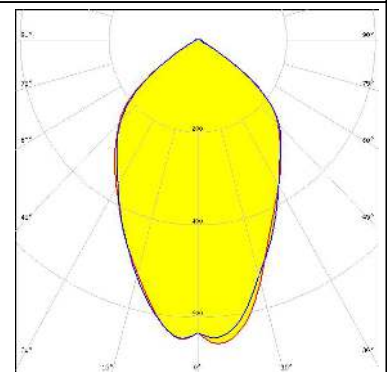
Opto Semiconductors

LED OSLOM Square CSSRM2/CSSRM3  
 FWHM / FWTM 73.0° / 120.0°  
 Efficiency 94 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour Red  
 Required components:



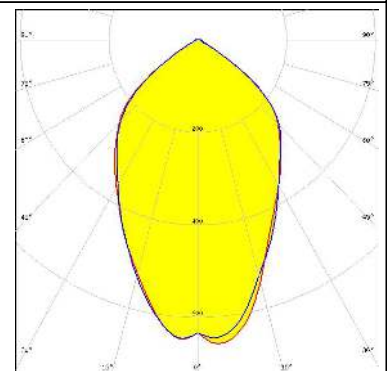
#### SAMSUNG

LED LH181B  
 FWHM / FWTM 60.0° / 117.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### SAMSUNG

LED LH181B  
 FWHM / FWTM 67.0° / 118.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

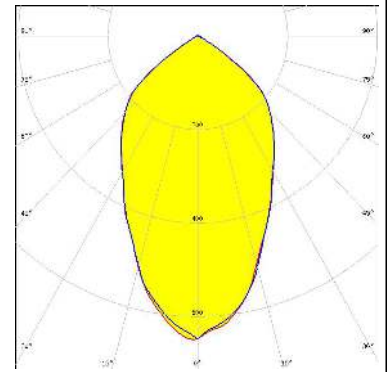


#### OPTICAL RESULTS (SIMULATED):

#### SAMSUNG

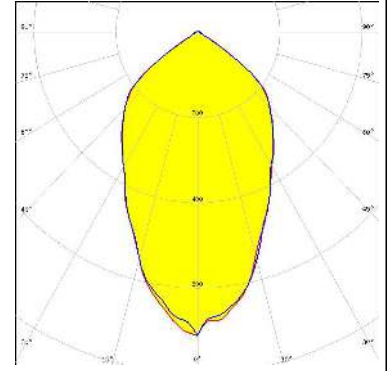
LED LH231B  
 FWHM / FWTM 62.0° / 114.0°  
 Efficiency 87 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



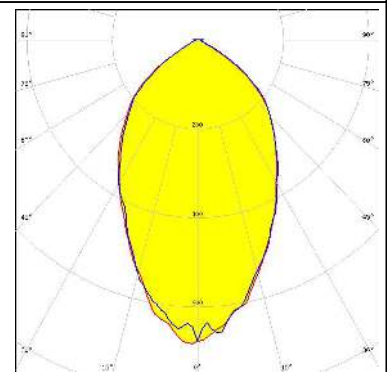
#### SAMSUNG

LED LH231B  
 FWHM / FWTM 62.0° / 114.0°  
 Efficiency 95 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



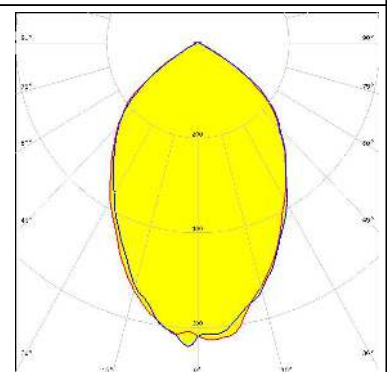
#### SAMSUNG

LED LH351B  
 FWHM / FWTM 66.0° / 119.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### SAMSUNG

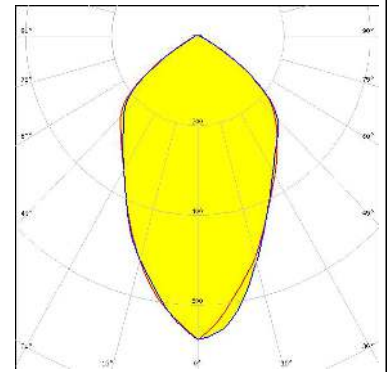
LED LH351C  
 FWHM / FWTM 79.0° / 119.0°  
 Efficiency 94 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (SIMULATED):

#### SAMSUNG

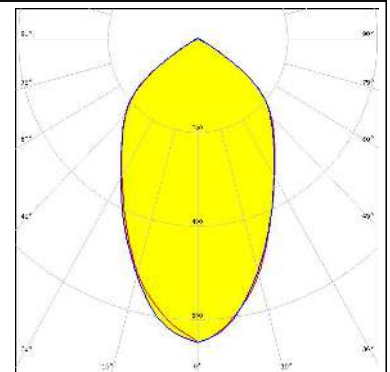
LED LM101B  
 FWHM / FWTM 63.0° / 119.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### SAMSUNG

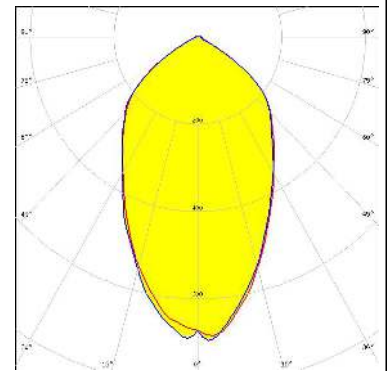
LED LM301B  
 FWHM / FWTM 63.0° / 116.0°  
 Efficiency 89 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



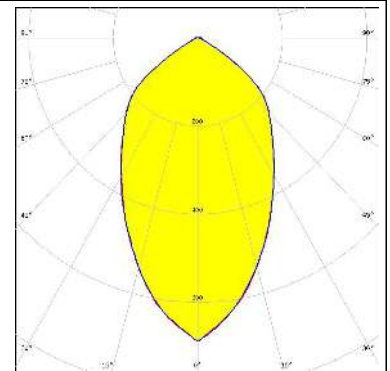
#### SAMSUNG

LED LM301B  
 FWHM / FWTM 62.0° / 120.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:


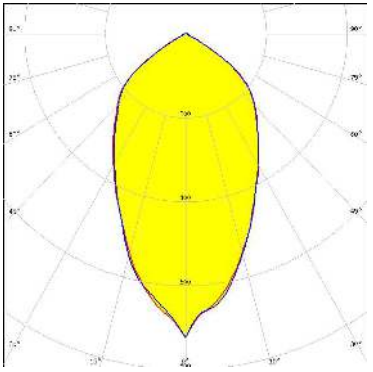

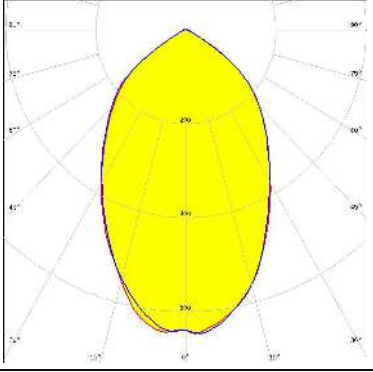

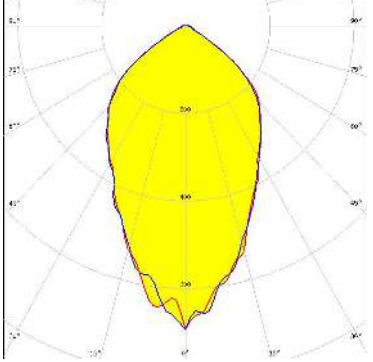


#### SAMSUNG

LED LM302D  
 FWHM / FWTM 64.0° / 118.0°  
 Efficiency 96 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (SIMULATED):

<p> SEOUL SEMICONDUCTOR</p> <p>LED: SEOUL DC 3030C</p> <p>FWHM / FWTM: 60.0° / 119.0°</p> <p>Efficiency: 96 %</p> <p>Peak intensity: 0.7 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p> SEOUL SEMICONDUCTOR</p> <p>LED: SEOUL DC 5050 6V</p> <p>FWHM / FWTM: 67.0° / 119.0°</p> <p>Efficiency: 94 %</p> <p>Peak intensity: 0.7 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p> SEOUL SEMICONDUCTOR</p> <p>LED: Z8Y22T</p> <p>FWHM / FWTM: 66.0° / 119.0°</p> <p>Efficiency: 94 %</p> <p>Peak intensity: 0.7 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:

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