

## STRADELLA-IP-28-HB-S

~30° spot beam. Variant made from PMMA.

### TECHNICAL SPECIFICATIONS:

Dimensions	100.0 x 100.0 mm
Height	9.5 mm
Fastening	pin, screw
Ingress protection classes	IP67
ROHS compliant	yes ⓘ

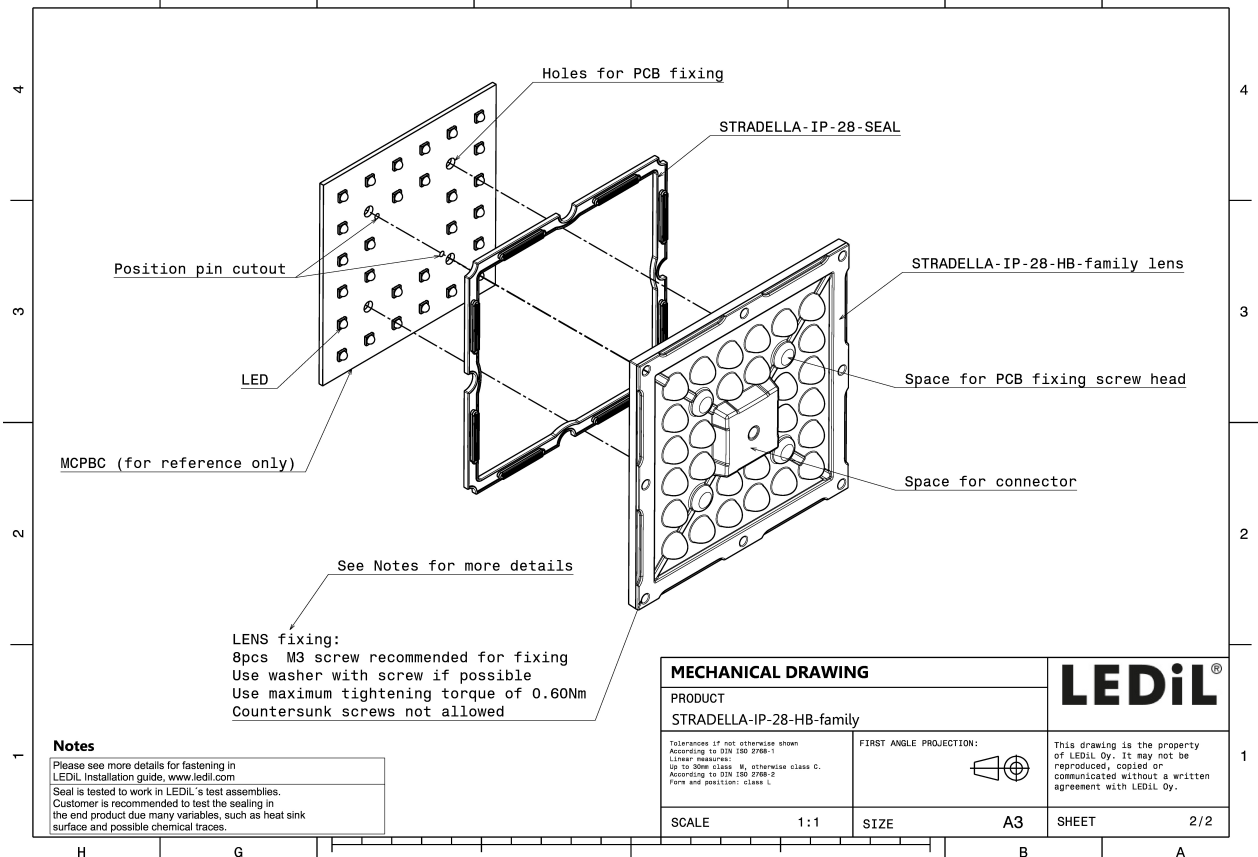
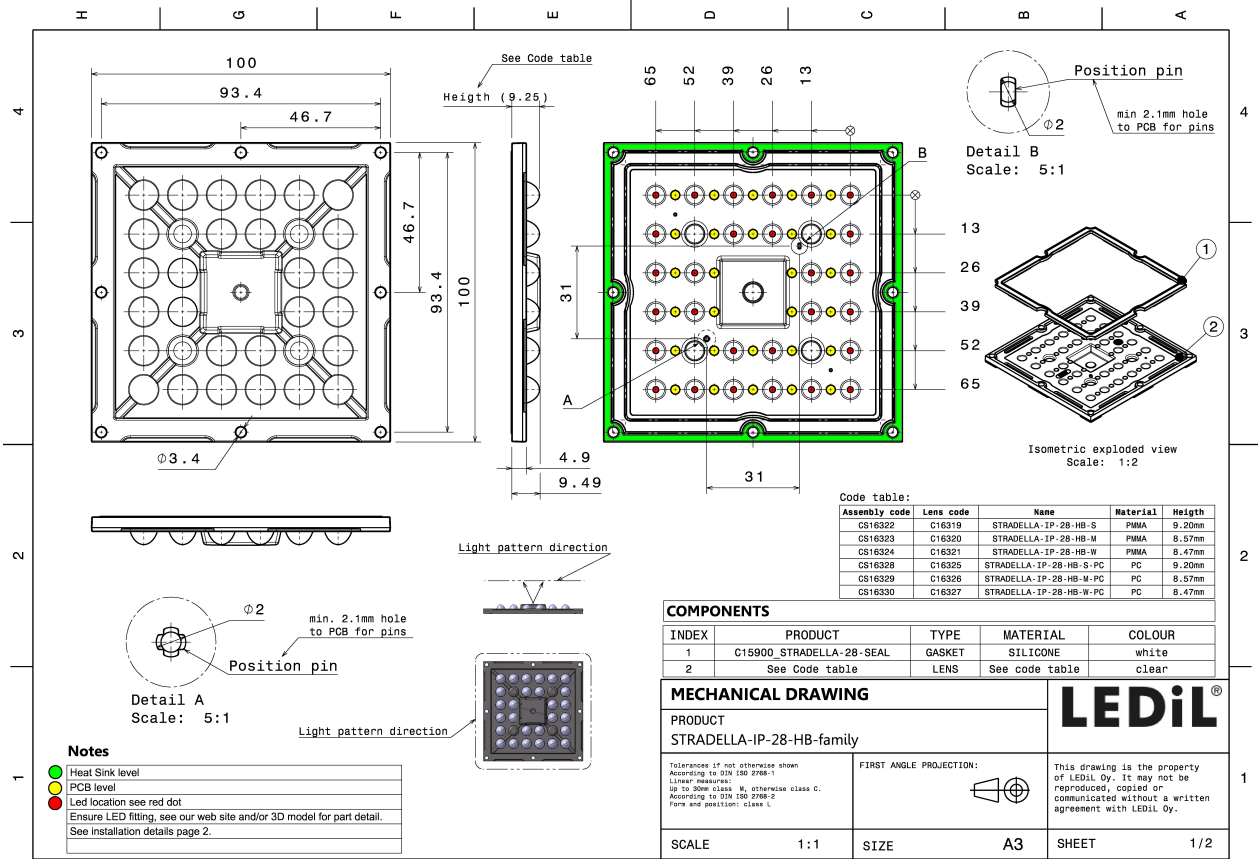
### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
STRADELLA-IP-28-HB-S	Multi-lens	PMMA	clear	
STRADELLA-28-SEAL	Seal	Silicone	white	

### ORDERING INFORMATION:



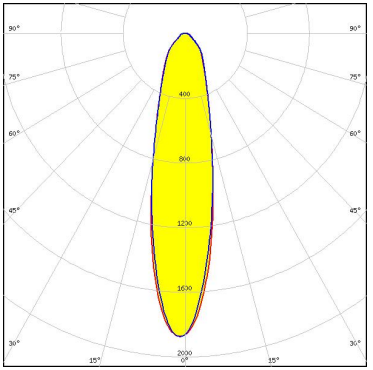


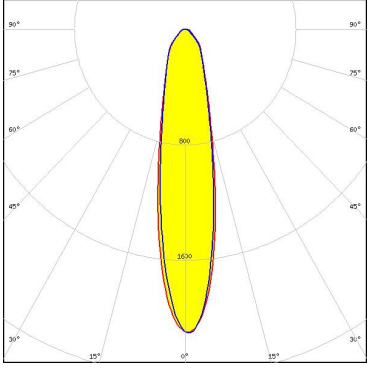

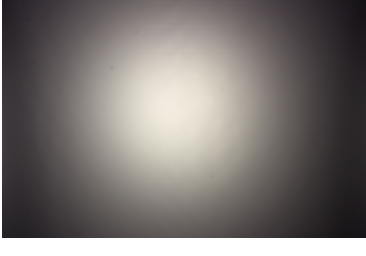
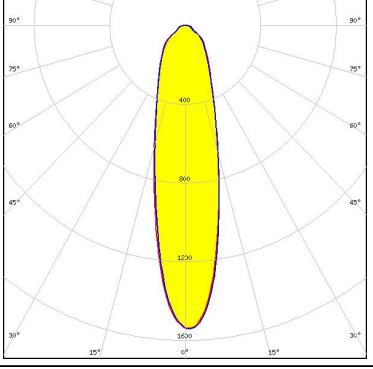


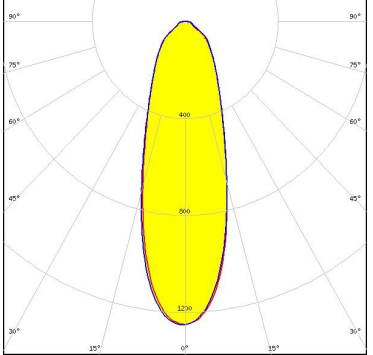
Component		Qty in box	MOQ	MPQ	Box weight (kg)
CS16322_STRADELLA-IP-28-HB-S	Multi-lens	156	78	78	5.9
» Box size: 476 x 273 x 247 mm					





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

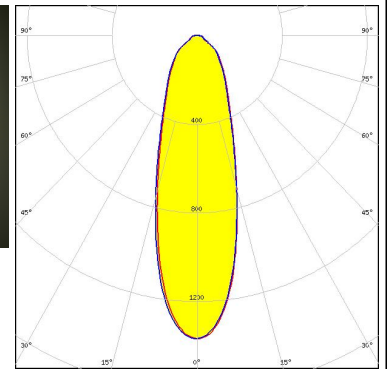
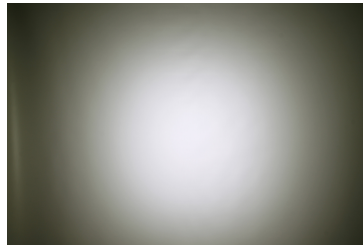
#### PHOTOMETRIC DATA (MEASURED):

 <b>LED</b> HiQLED STR28 CR JE2835 4x7 xxx <b>FWHM / FWTM</b> 24.0° / 75.0° <b>Efficiency</b> 91 % <b>Peak intensity</b> 1.9 cd/m <b>LEDs/each optic</b> 1 <b>Light colour</b> White <b>Required components:</b>		
 <b>LED</b> HiQLED STR28 CR JĐš3030 4x7 xxx <b>FWHM / FWTM</b> 22.0° / 69.0° <b>Efficiency</b> 90 % <b>Peak intensity</b> 2.1 cd/m <b>LEDs/each optic</b> 1 <b>Light colour</b> White <b>Required components:</b>		
 <b>LED</b> QUICK FLUX STR28 XD2x14 xxx G8 <b>FWHM / FWTM</b> 26.0° / 88.0° <b>Efficiency</b> 91 % <b>Peak intensity</b> 1.6 cd/m <b>LEDs/each optic</b> 1 <b>Light colour</b> White <b>Required components:</b>		
 <b>LED</b> QUICK FLUX STR28 XP2x14 xxx G7 <b>FWHM / FWTM</b> 33.0° / 99.0° <b>Efficiency</b> 92 % <b>Peak intensity</b> 1.3 cd/m <b>LEDs/each optic</b> 1 <b>Light colour</b> White <b>Required components:</b>		

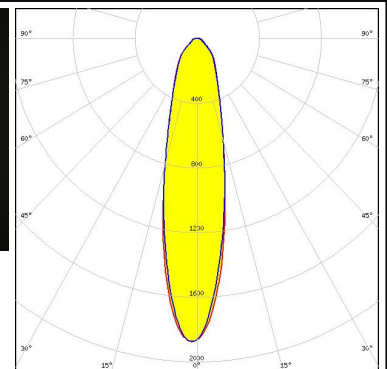
#### PHOTOMETRIC DATA (MEASURED):



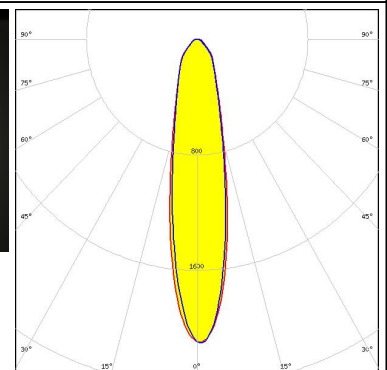
**LED** QUICK FLUX STR28 XT2x14 xxx G5  
**FWHM / FWTM** 32.0° / 95.0°  
**Efficiency** 93 %  
**Peak intensity** 1.4 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**



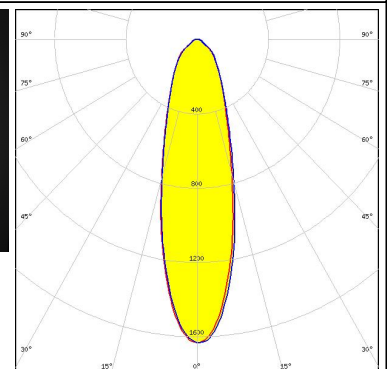
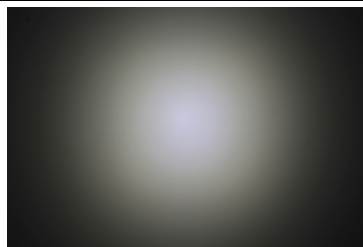
**LED** J Series 2835  
**FWHM / FWTM** 24.0° / 75.0°  
**Efficiency** 91 %  
**Peak intensity** 1.9 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**



**LED** J Series 3030  
**FWHM / FWTM** 22.0° / 69.0°  
**Efficiency** 90 %  
**Peak intensity** 2.1 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**



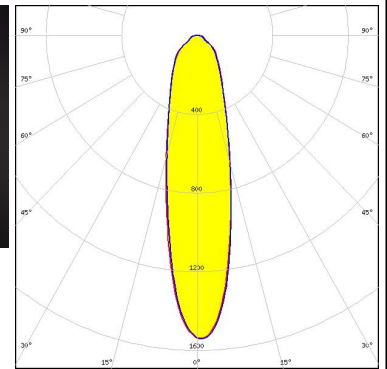
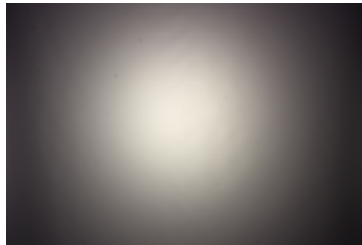
**LED** J Series 3030  
**FWHM / FWTM** 28.0° / 83.0°  
**Efficiency** 93 %  
**Peak intensity** 1.6 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**



#### PHOTOMETRIC DATA (MEASURED):

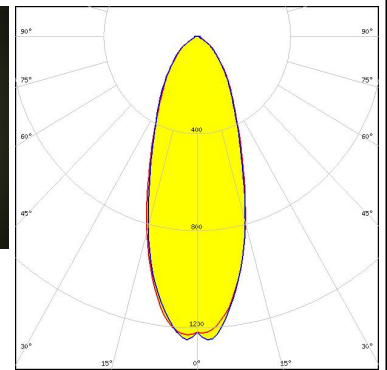
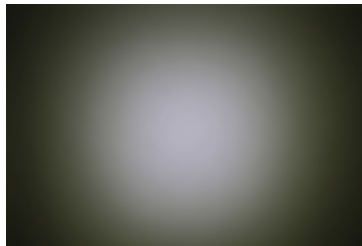
#### CREE

LED XD16  
 FWHM / FWTM 26.0° / 88.0°  
 Efficiency 91 %  
 Peak intensity 1.6 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



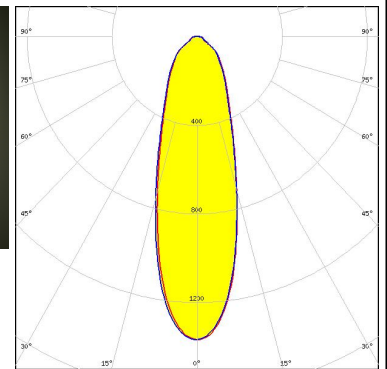
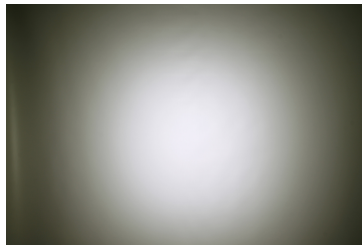
#### CREE

LED XP-G3  
 FWHM / FWTM 33.0° / 99.0°  
 Efficiency 92 %  
 Peak intensity 1.3 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



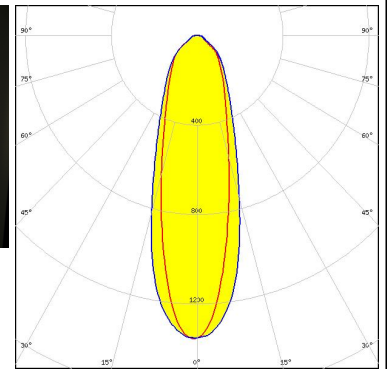
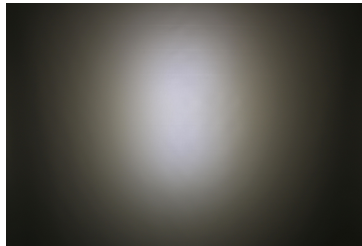
#### CREE

LED XT-E  
 FWHM / FWTM 32.0° / 95.0°  
 Efficiency 93 %  
 Peak intensity 1.4 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### NICHIA

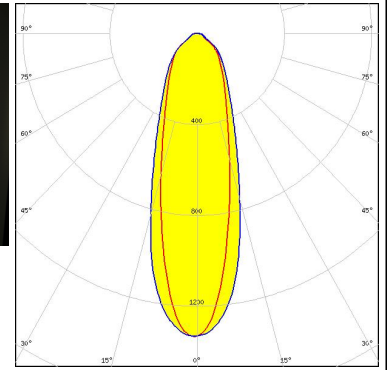
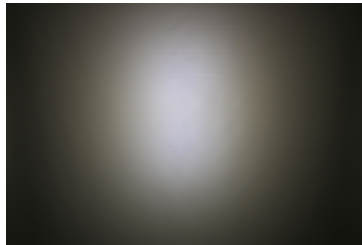
LED NF2W585AR  
 FWHM / FWTM 31.0° / 96.0°  
 Efficiency 91 %  
 Peak intensity 1.4 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



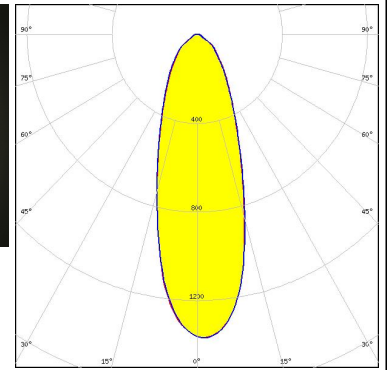
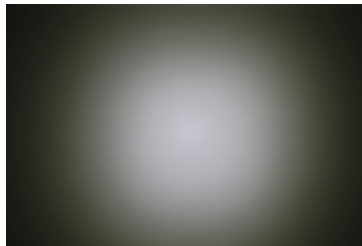
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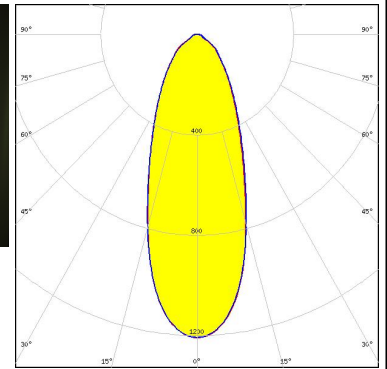
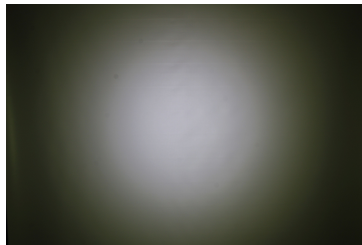
LED NF2W585AR  
 FWHM / FWTM 31.0° / 97.0°  
 Efficiency 91 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



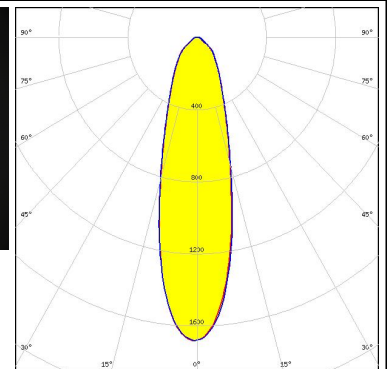
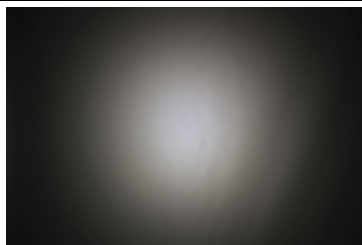
LED NVSW219F  
 FWHM / FWTM 34.0° / 90.0°  
 Efficiency 94 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED NVSW319B  
 FWHM / FWTM 39.0° / 97.0°  
 Efficiency 94 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED OSCONIQ S 3030  
 FWHM / FWTM 28.0° / 81.0°  
 Efficiency 93 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

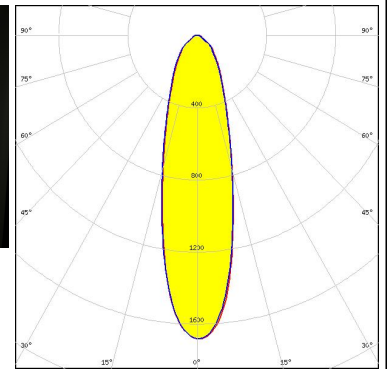
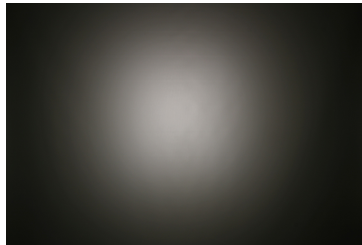


#### PHOTOMETRIC DATA (MEASURED):

#### OSRAM

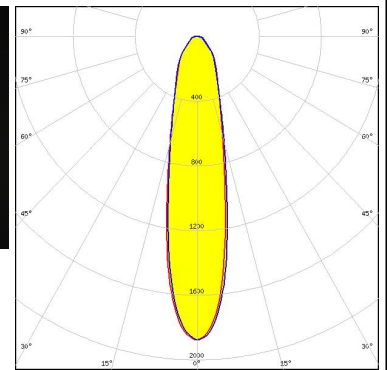
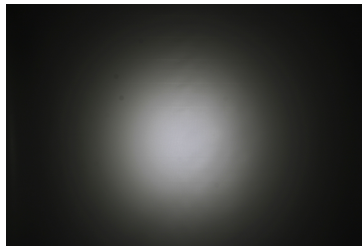
Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3  
 FWHM / FWTM 28.0° / 80.0°  
 Efficiency 93 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



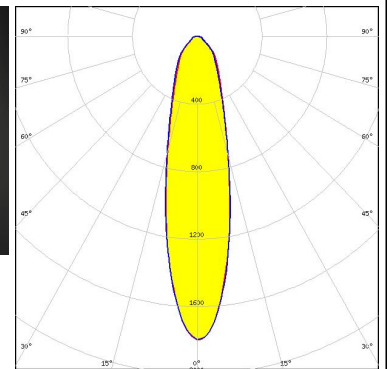
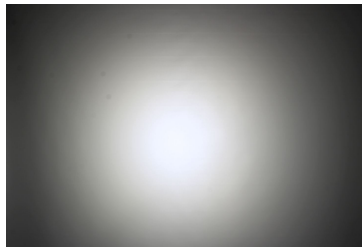
#### SAMSUNG

LED HiLOM SC28 (LH181B)  
 FWHM / FWTM 23.0° / 74.0°  
 Efficiency 89 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



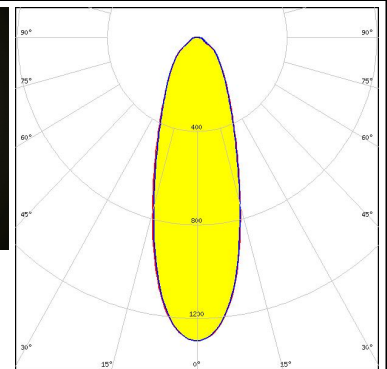
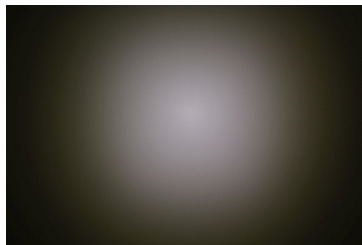
#### SAMSUNG

LED HiLOM SM28 (LM301B)  
 FWHM / FWTM 25.0° / 78.0°  
 Efficiency 91 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



SEOUL SEMICONDUCTOR

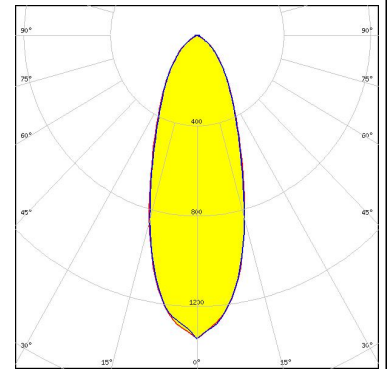
LED Z5M3  
 FWHM / FWTM 34.0° / 94.0°  
 Efficiency 93 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



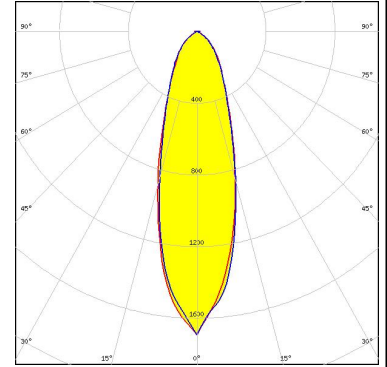
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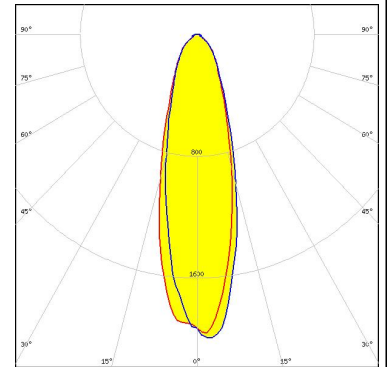
LED XP-G2 HE  
 FWHM / FWTM 37.0° / 90.0°  
 Efficiency 92 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



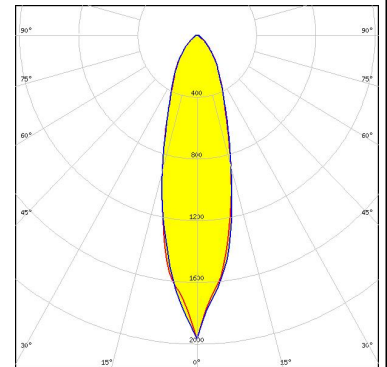
LED XP-L HI  
 FWHM / FWTM 30.0° / 82.0°  
 Efficiency 90 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LUXEON 3030 2D (Round LES)  
 FWHM / FWTM 27.0° / 74.0°  
 Efficiency 92 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED NF2x757G  
 FWHM / FWTM 28.0° / 76.0°  
 Efficiency 93 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:





#### PHOTOMETRIC DATA (SIMULATED):

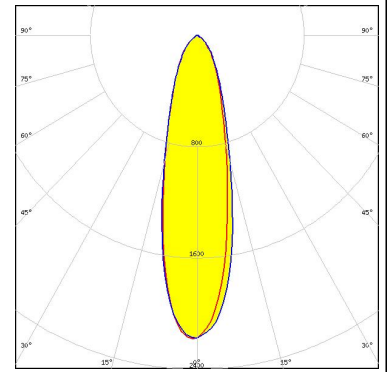
<p><b>NICHIA</b></p> <p>LED: NVSxE21A            FWHM / FWTM: 25.0° / 73.0°            Efficiency: 92 %            Peak intensity: 2.1 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NVSxx19B/NVSxx19C            FWHM / FWTM: 34.0° / 86.0°            Efficiency: 93 %            Peak intensity: 1.5 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: 25.0° / 73.0°            Efficiency: 93 %            Peak intensity: 2.1 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: 22.0° / 60.0°            Efficiency: 94 %            Peak intensity: 2.8 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

#### PHOTOMETRIC DATA (SIMULATED):

#### OSRAM

Opto Semiconductors

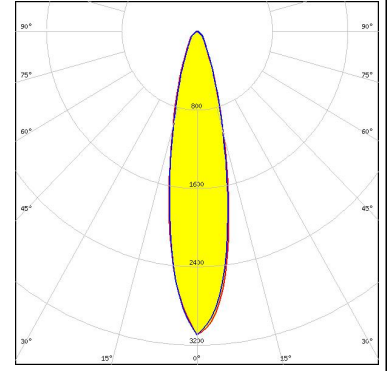
LED OSCONIQ P 3737 (2W version)  
 FWHM / FWTM 27.0° / 69.0°  
 Efficiency 93 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OSRAM

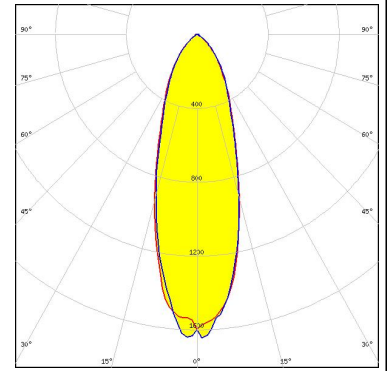
Opto Semiconductors

LED OSLON SSL 80  
 FWHM / FWTM 23.0° / 51.0°  
 Efficiency 93 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



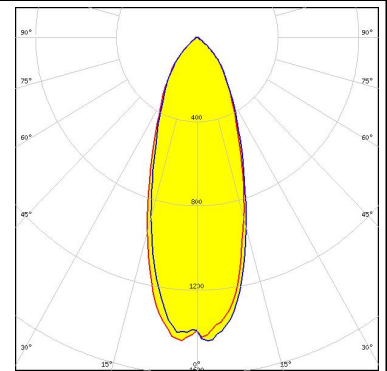
#### SAMSUNG

LED LH351B  
 FWHM / FWTM 33.0° / 82.0°  
 Efficiency 94 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### SAMSUNG

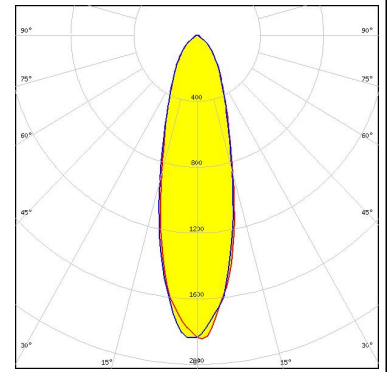
LED LH351C  
 FWHM / FWTM 37.0° / 87.0°  
 Efficiency 94 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



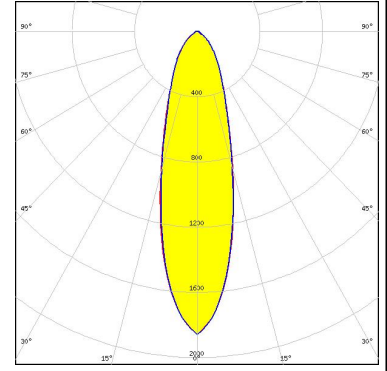
#### PHOTOMETRIC DATA (SIMULATED):

### SAMSUNG

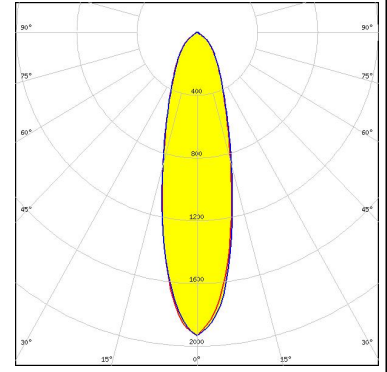
LED LM301B  
 FWHM / FWTM 29.0° / 78.0°  
 Efficiency 93 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



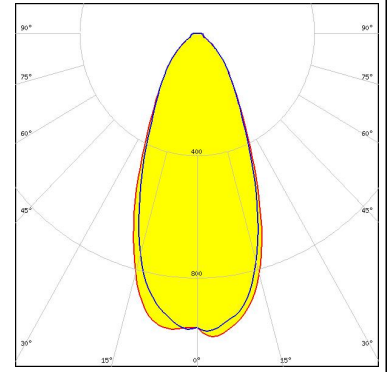
**SEOUL SEMICONDUCTOR**  
 LED SEOUL 3030  
 FWHM / FWTM 28.0° / 78.0°  
 Efficiency 93 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



**SEOUL SEMICONDUCTOR**  
 LED SEOUL DC 3030C  
 FWHM / FWTM 28.0° / 77.0°  
 Efficiency 93 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



**SEOUL SEMICONDUCTOR**  
 LED SEOUL DC 5050 6V  
 FWHM / FWTM 46.0° / 98.0°  
 Efficiency 89 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### PHOTOMETRIC DATA (SIMULATED):

<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED Z5M1/Z5M2</p> <p>FWHM / FWTM 30.0° / 79.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.8 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 Z8Y19</p> <p>FWHM / FWTM 24.0° / 84.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.7 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 Z8Y22</p> <p>FWHM / FWTM 29.0° / 88.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.5 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 32.0° / 83.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.6 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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

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#### LEDiL Oy

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# 405 , Block B  
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