

## STRADELLA-IP-28-HB-M

~65° wide beam. Variant made from PMMA.

### SPECIFICATION:

Dimensions	100.0 x 100.0 mm
Height	9.5 mm
Fastening	pin, screw
Ingress protection classes	IP66, IP67
ROHS compliant	yes ⓘ

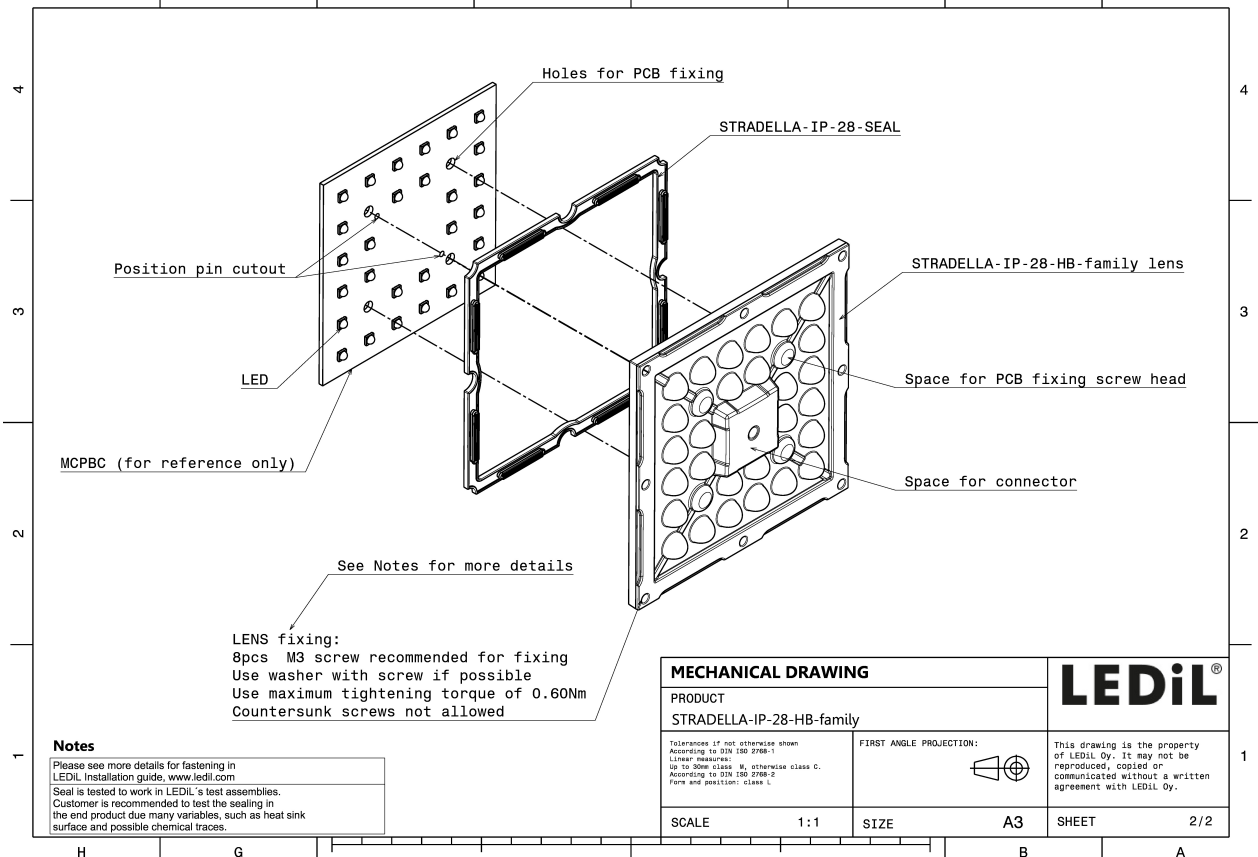
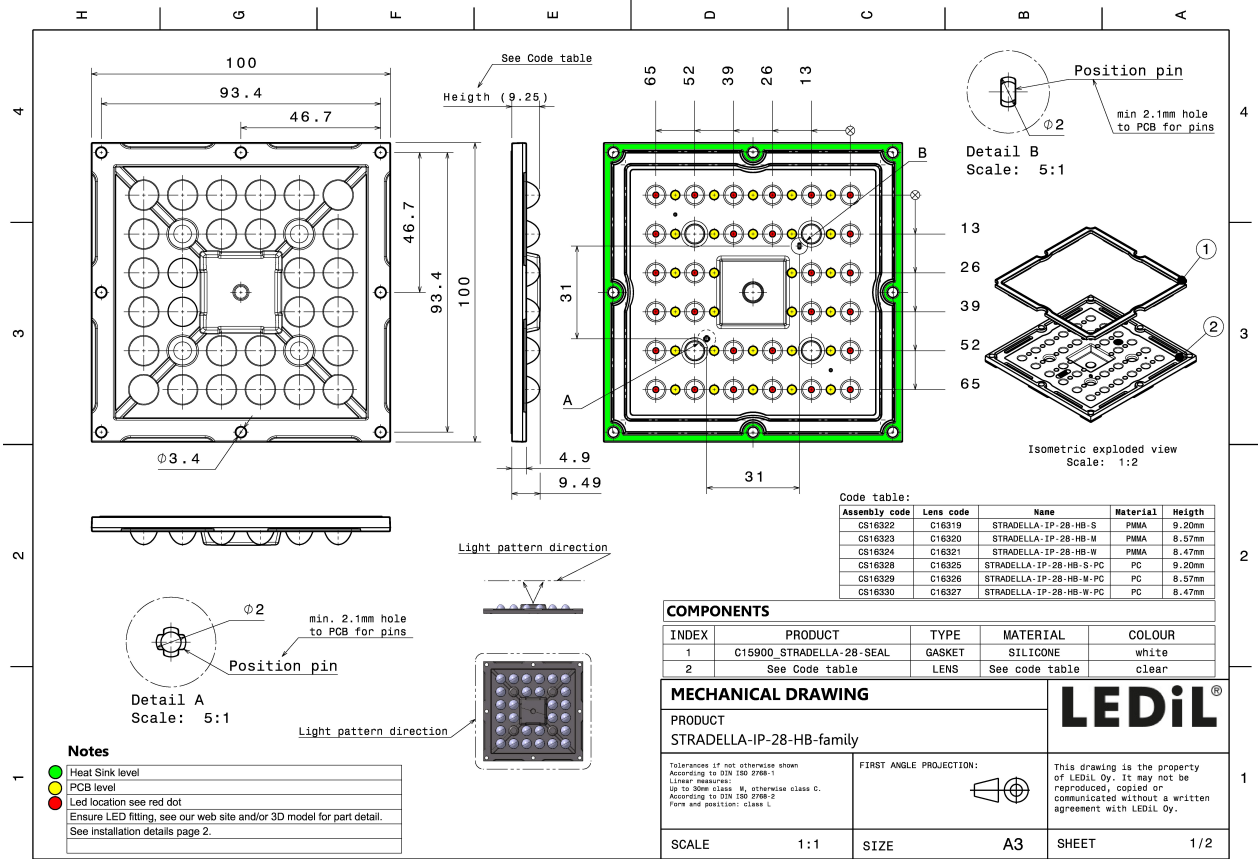
### MATERIALS:

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





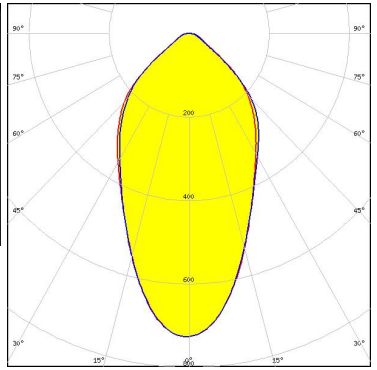


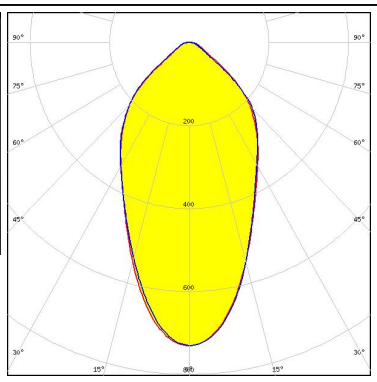

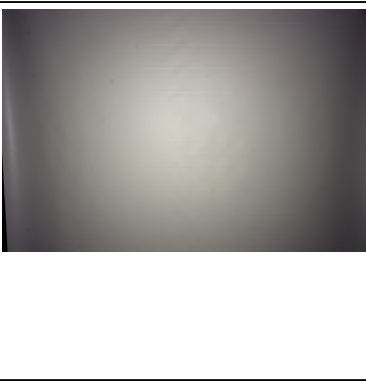
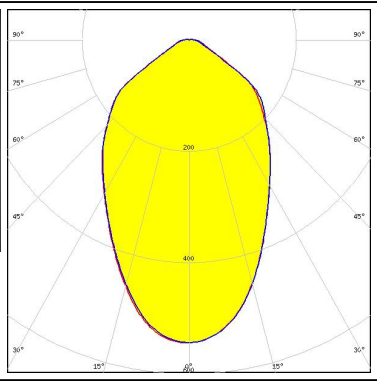


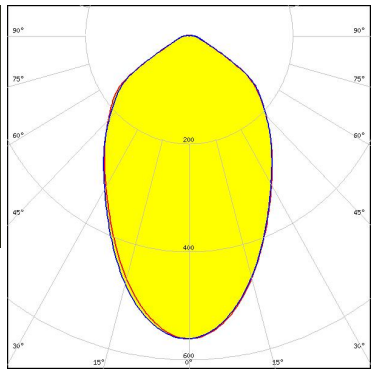
### ORDERING INFORMATION:

Component	Type	Qty in box	MOQ	MPQ	Box weight (kg)
CS16323_STRADELLA-IP-28-HB-M » Box size: 476 x 273 x 247 mm	Multi-lens	156	78	78	5.8


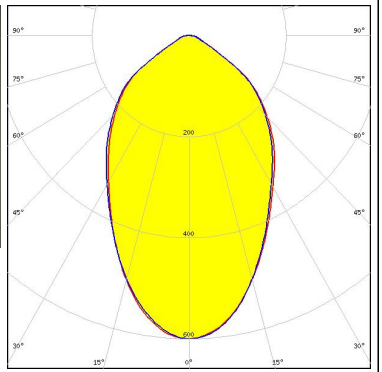

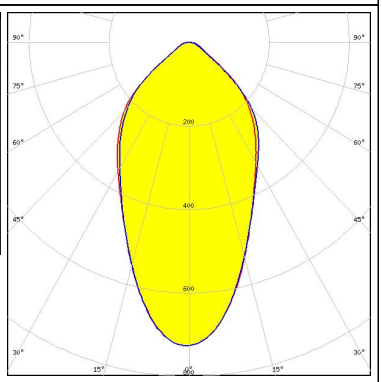

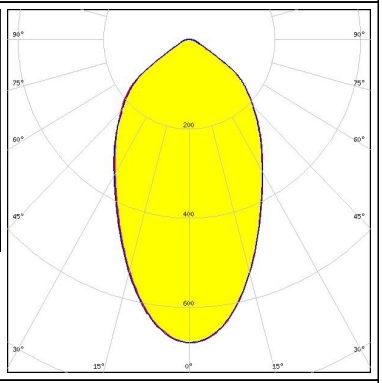

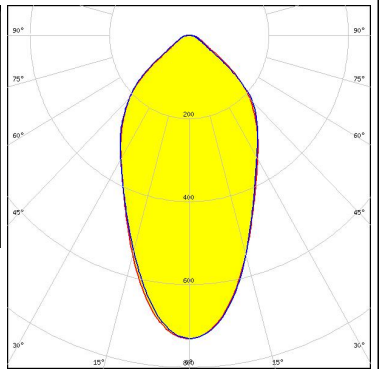


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### OPTICAL RESULTS (MEASURED):

<p></p> <p>LED                    HiQLED STR28 CR JE2835 4x7 xxx</p> <p>FWHM / FWTM        56.0° / 113.0°</p> <p>Efficiency             92 %</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></p> <p>LED                    HiQLED STR28 CR JK3030 4x7 xxx</p> <p>FWHM / FWTM        55.0° / 112.0°</p> <p>Efficiency             92 %</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></p> <p>LED                    QUICK FLUX STR28 XD2x14 xxx G8</p> <p>FWHM / FWTM        71.0° / 126.0°</p> <p>Efficiency             92 %</p> <p>Peak intensity        0.5 cd/m</p> <p>LEDs/each optic     1</p> <p>Light colour          White</p> <p>Required components:</p>		
<p></p> <p>LED                    QUICK FLUX STR28 XP2x14 xxx G7</p> <p>FWHM / FWTM        71.0° / 127.0°</p> <p>Efficiency             94 %</p> <p>Peak intensity        0.6 cd/m</p> <p>LEDs/each optic     1</p> <p>Light colour          White</p> <p>Required components:</p>		

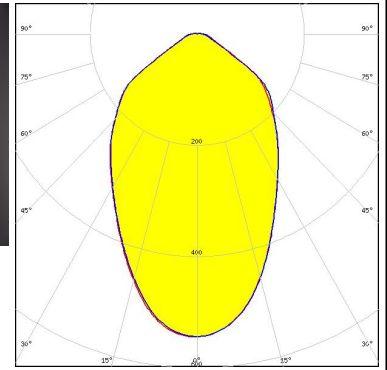
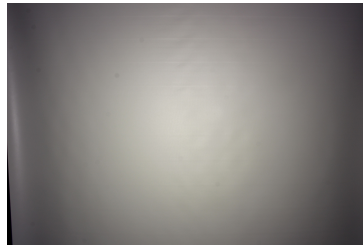
#### OPTICAL RESULTS (MEASURED):

<p><b>COMET</b> ELECTRONICS</p> <p>LED QUICK FLUX STR28 XT2x14 xxx G5            FWHM / FWTM 70.0° / 126.0°            Efficiency 94 %            Peak intensity 0.6 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>CREE</b> LEDs</p> <p>LED J Series 2835            FWHM / FWTM 56.0° / 113.0°            Efficiency 92 %            Peak intensity 0.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>CREE</b> LEDs</p> <p>LED J Series 3030            FWHM / FWTM 61.0° / 119.0°            Efficiency 95 %            Peak intensity 0.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>CREE</b> LEDs</p> <p>LED J Series 3030            FWHM / FWTM 55.0° / 112.0°            Efficiency 92 %            Peak intensity 0.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		

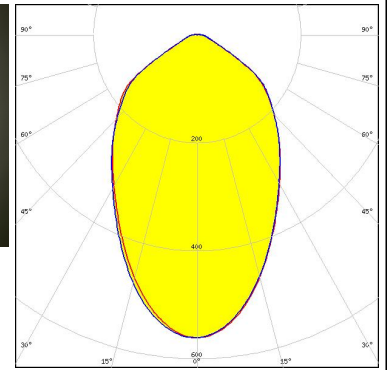
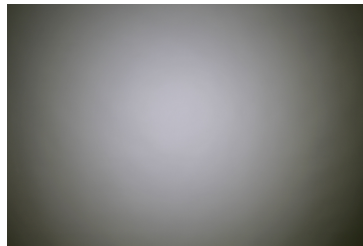
#### OPTICAL RESULTS (MEASURED):



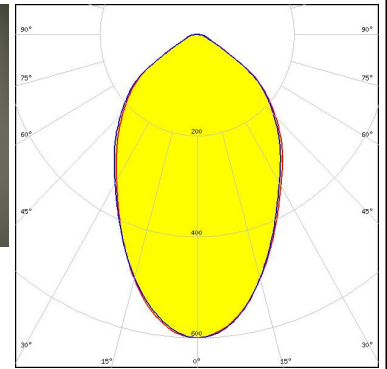
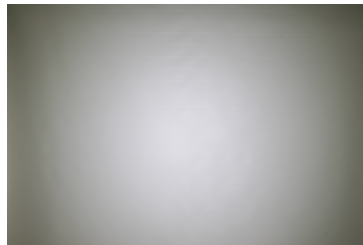
LED XD16  
 FWHM / FWTM 71.0° / 126.0°  
 Efficiency 92 %  
 Peak intensity 0.5 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



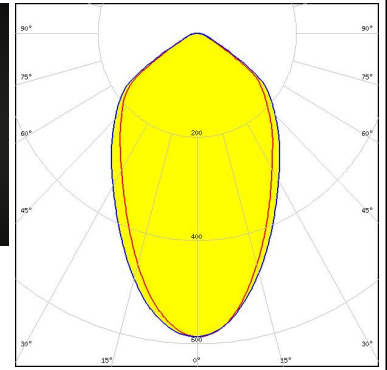
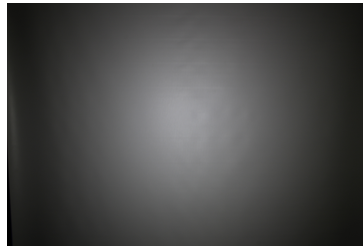
LED XP-G3  
 FWHM / FWTM 71.0° / 127.0°  
 Efficiency 94 %  
 Peak intensity 0.6 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED XT-E  
 FWHM / FWTM 70.0° / 126.0°  
 Efficiency 94 %  
 Peak intensity 0.6 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



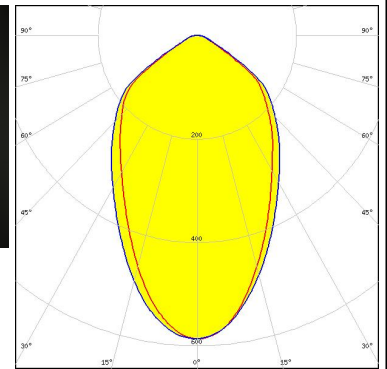
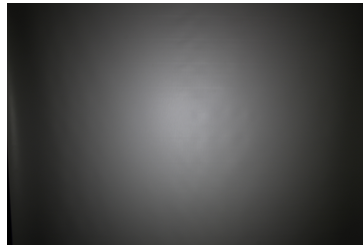
LED NF2W585AR  
 FWHM / FWTM 68.0° / 126.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



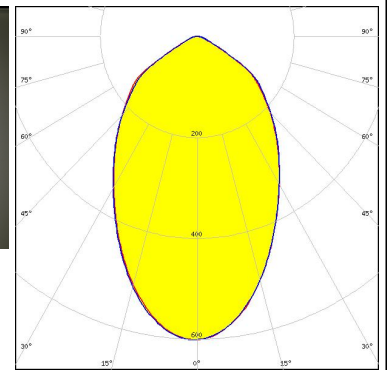
#### OPTICAL RESULTS (MEASURED):



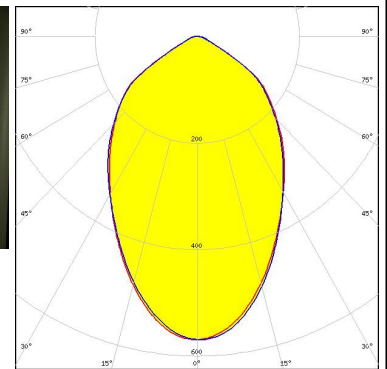
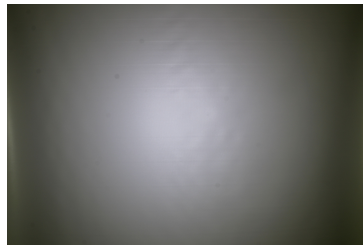
LED NF2W585AR  
 FWHM / FWTM 67.0° / 125.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



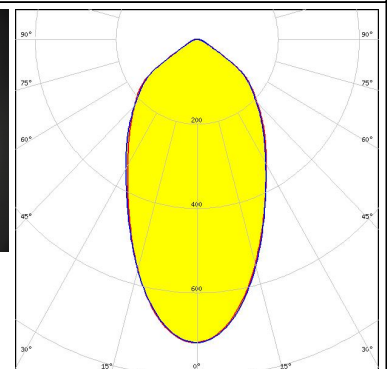
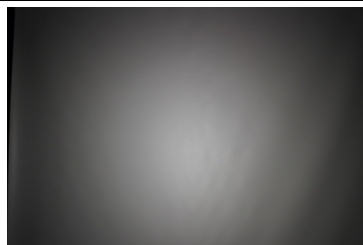
LED NVSW219F  
 FWHM / FWTM 69.0° / 125.0°  
 Efficiency 94 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED NVSW319B  
 FWHM / FWTM 74.0° / 126.0°  
 Efficiency 94 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED OSCONIQ S 3030 (QSLR31)  
 FWHM / FWTM 57.0° / 118.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

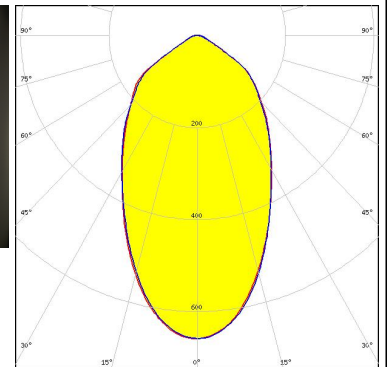
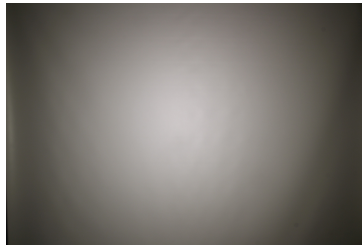


#### OPTICAL RESULTS (MEASURED):

#### OSRAM

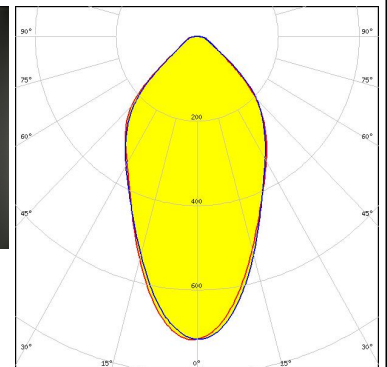
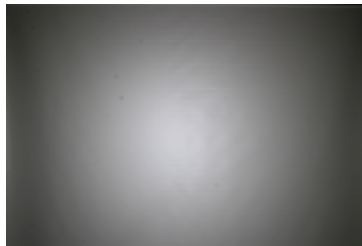
Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3  
 FWHM / FWTM 62.0° / 122.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



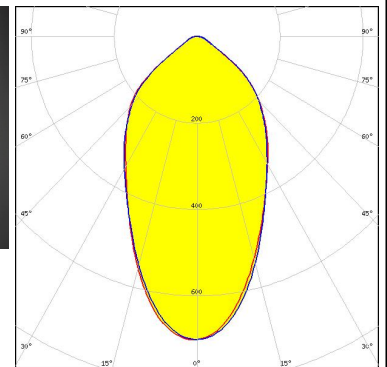
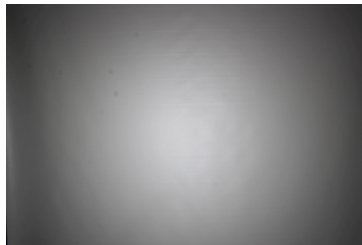
#### SAMSUNG

LED HiLOM SC28 (LH181B)  
 FWHM / FWTM 57.0° / 111.0°  
 Efficiency 91 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



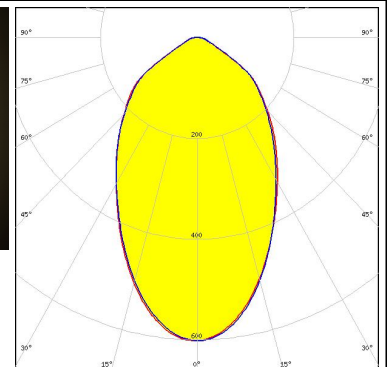
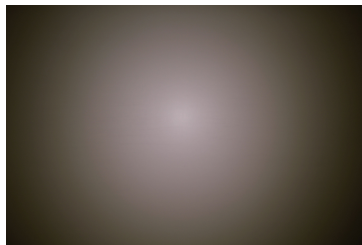
#### SAMSUNG

LED HiLOM SM28 (LM301B)  
 FWHM / FWTM 58.0° / 115.0°  
 Efficiency 93 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



SEOUL SEMICONDUCTOR

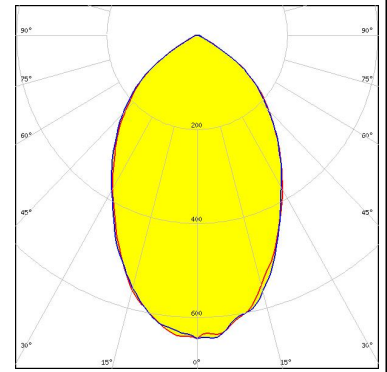
LED Z5M3  
 FWHM / FWTM 67.0° / 125.0°  
 Efficiency 94 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



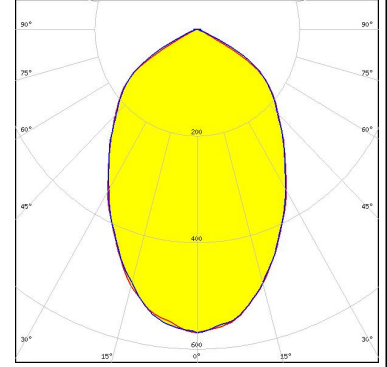
#### OPTICAL RESULTS (SIMULATED):



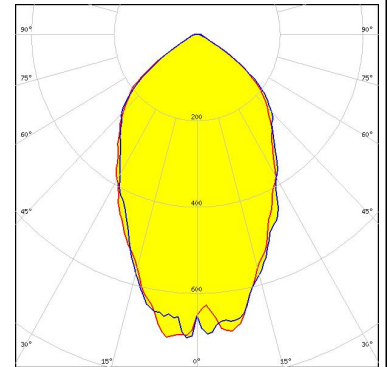
LED J Series 5050 Round LES  
 FWHM / FWTM 70.0° / 120.0°  
 Efficiency 95 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



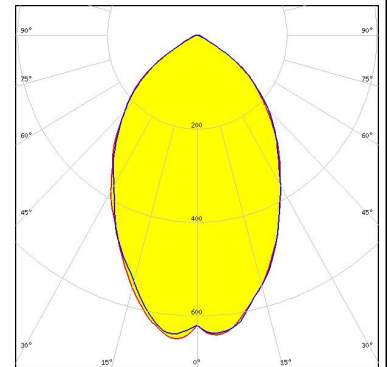
LED XP-G2 HE  
 FWHM / FWTM 74.0° / 126.0°  
 Efficiency 95 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LUXEON 3030 2D (Round LES)  
 FWHM / FWTM 58.0° / 118.0°  
 Efficiency 92 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LUXEON 5050 Round LES  
 FWHM / FWTM 69.0° / 120.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

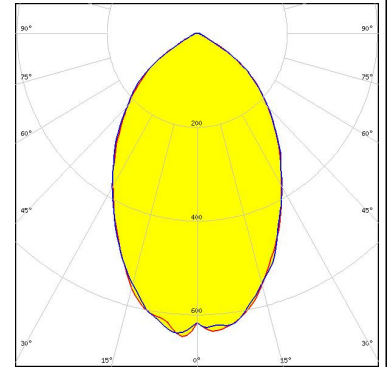




#### OPTICAL RESULTS (SIMULATED):

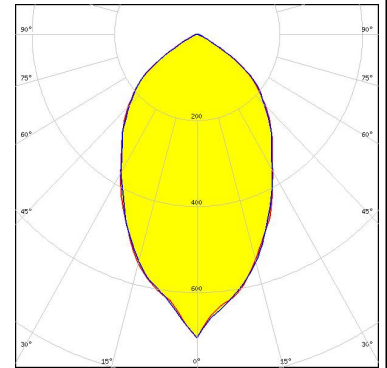
##### LUMILEDS

LED LUXEON 5050 Square LES  
 FWHM / FWTM 70.0° / 120.0°  
 Efficiency 95 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



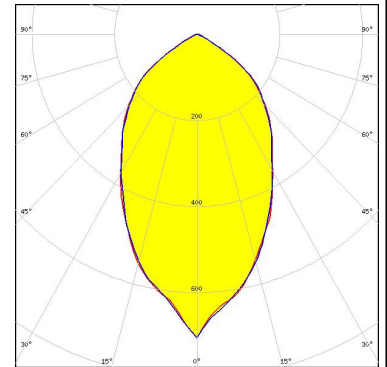
##### NICHIA

LED NF2x757G  
 FWHM / FWTM 63.0° / 119.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



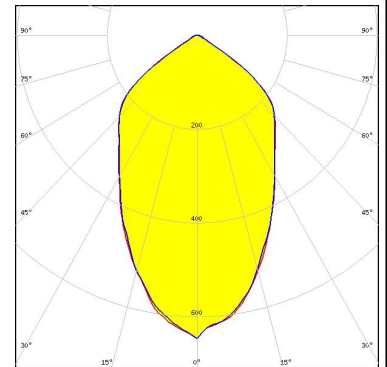
##### NICHIA

LED NF2x757G  
 FWHM / FWTM 63.0° / 119.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### NICHIA

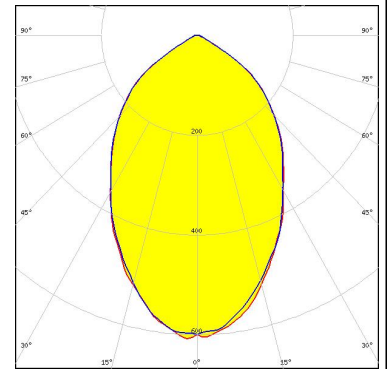
LED NVSxE21A  
 FWHM / FWTM 65.0° / 118.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



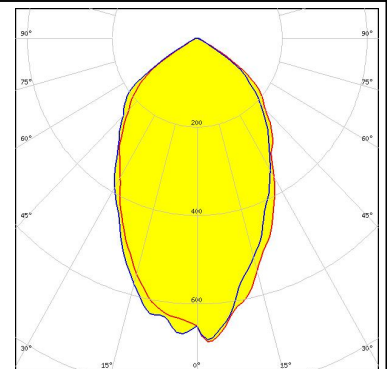
#### OPTICAL RESULTS (SIMULATED):



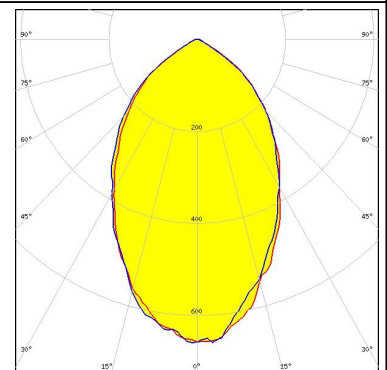
LED NVSxx19B/NVSxx19C  
 FWHM / FWTM 73.0° / 122.0°  
 Efficiency 95 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



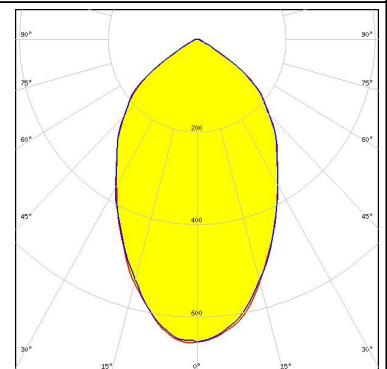
LED Duris S5 (2 chip)  
 FWHM / FWTM 64.0° / 119.0°  
 Efficiency 94 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED Duris S8  
 FWHM / FWTM 67.0° / 118.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED OSCONIQ C 2424  
 FWHM / FWTM 68.0° / 118.0°  
 Efficiency 95 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

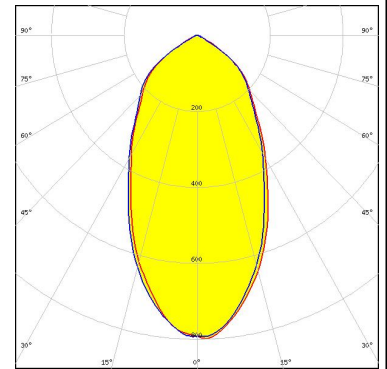


#### OPTICAL RESULTS (SIMULATED):

#### OSRAM

Opto Semiconductors

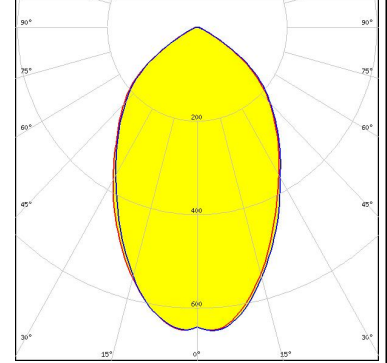
LED OSCONIQ P 3030  
 FWHM / FWTM 56.0° / 119.0°  
 Efficiency 96 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OSRAM

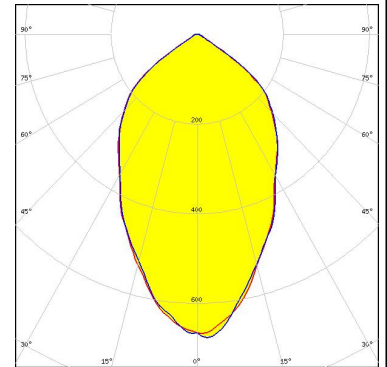
Opto Semiconductors

LED OSCONIQ P 3737 (2W version)  
 FWHM / FWTM 68.0° / 121.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



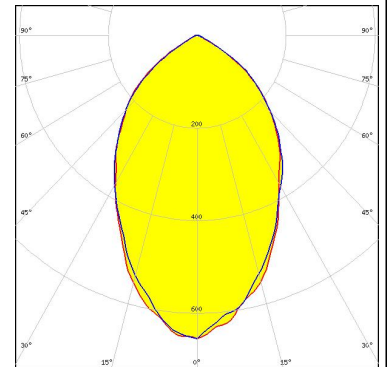
#### SAMSUNG

LED LH181B  
 FWHM / FWTM 65.0° / 117.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### SAMSUNG

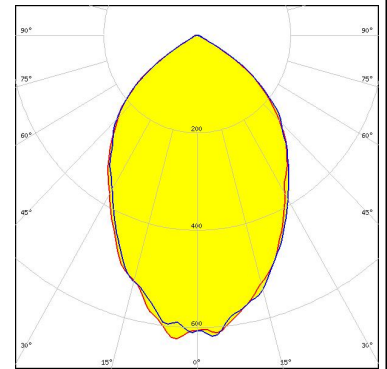
LED LH351B  
 FWHM / FWTM 71.0° / 119.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (SIMULATED):

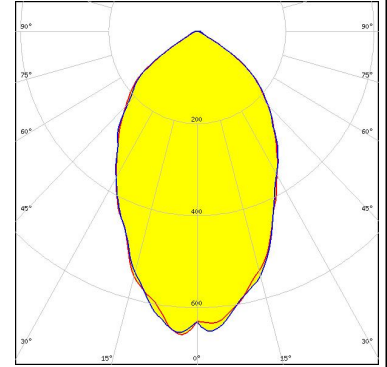
#### SAMSUNG

LED LH351C  
 FWHM / FWTM 75.0° / 119.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



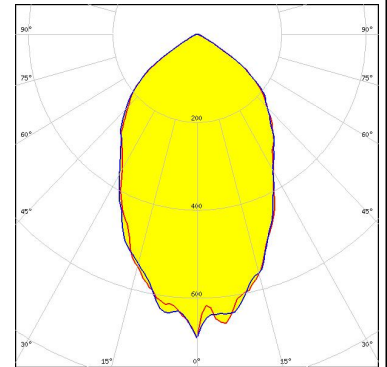
#### SAMSUNG

LED LM28xB Series  
 FWHM / FWTM 66.0° / 119.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



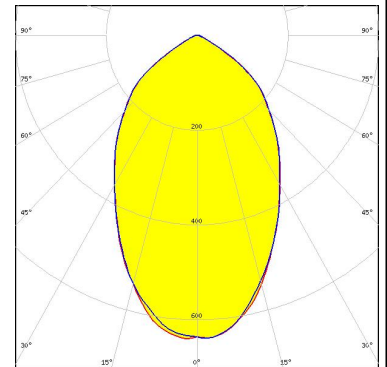
#### SAMSUNG

LED LM301B  
 FWHM / FWTM 63.0° / 118.0°  
 Efficiency 94 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



SEOUL SEMICONDUCTOR


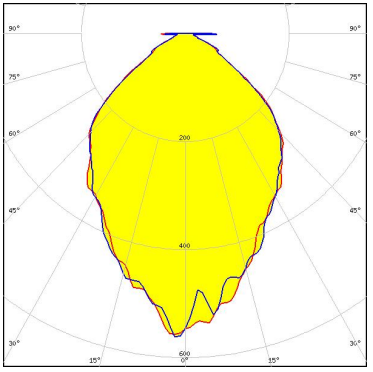

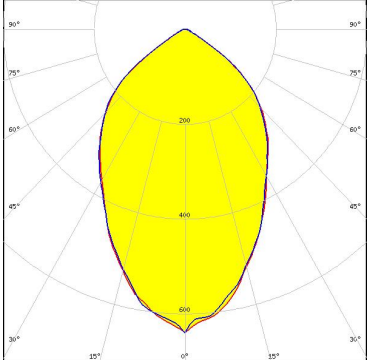
LED SEOUL 3030  
 FWHM / FWTM 69.0° / 120.0°  
 Efficiency 95 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (SIMULATED):

<p><b>SEOL</b> SEOL SEMICONDUCTOR</p> <p>LED: SEOUL DC 3030            FWHM / FWTM: 68.0° / 120.0°            Efficiency: 96 %            Peak intensity: 0.6 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>SEOL</b> SEOL SEMICONDUCTOR</p> <p>LED: SEOUL DC 5050 6V            FWHM / FWTM: 69.0° / 120.0°            Efficiency: 94 %            Peak intensity: 0.7 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>SEOL</b> SEOL SEMICONDUCTOR</p> <p>LED: Z5M1/Z5M2            FWHM / FWTM: 70.0° / 122.0°            Efficiency: 94 %            Peak intensity: 0.6 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>SEOL</b> SEOL SEMICONDUCTOR</p> <p>LED: Z8Y19            FWHM / FWTM: 65.0° / 117.0°            Efficiency: 94 %            Peak intensity: 0.7 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

<p> SEOL SEMICONDUCTOR</p> <p>LED: Z8Y22</p> <p>FWHM / FWTM: 76.0° / 130.0°</p> <p>Efficiency: 92 %</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> SEOL SEMICONDUCTOR</p> <p>LED: Z8Y22T</p> <p>FWHM / FWTM: 69.0° / 118.0°</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>	

#### 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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#### LEDiL Oy

Joensuunkatu 13  
FI-24240 SALO  
Finland

#### LEDiL Inc.

228 West Page Street  
Suite D  
Sycamore IL 60178  
USA

#### Ledil Optics Technology (Shenzhen) Co., Ltd.

# 405 , Block B  
Casic Motor Building  
Shenzhen 518057  
P.R.CHINA

#### Local sales and technical support

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