

## STELLA-FRESNEL

~25° beam for warehouse and outdoor lighting.  
Compatible with up to 30 mm LES size COBs.  
Variant with black frame.

### SPECIFICATION:

Dimensions	Ø 90.0 mm
Height	23 mm
Fastening	screw
Ingress protection classes	IP67
ROHS compliant	yes ⓘ

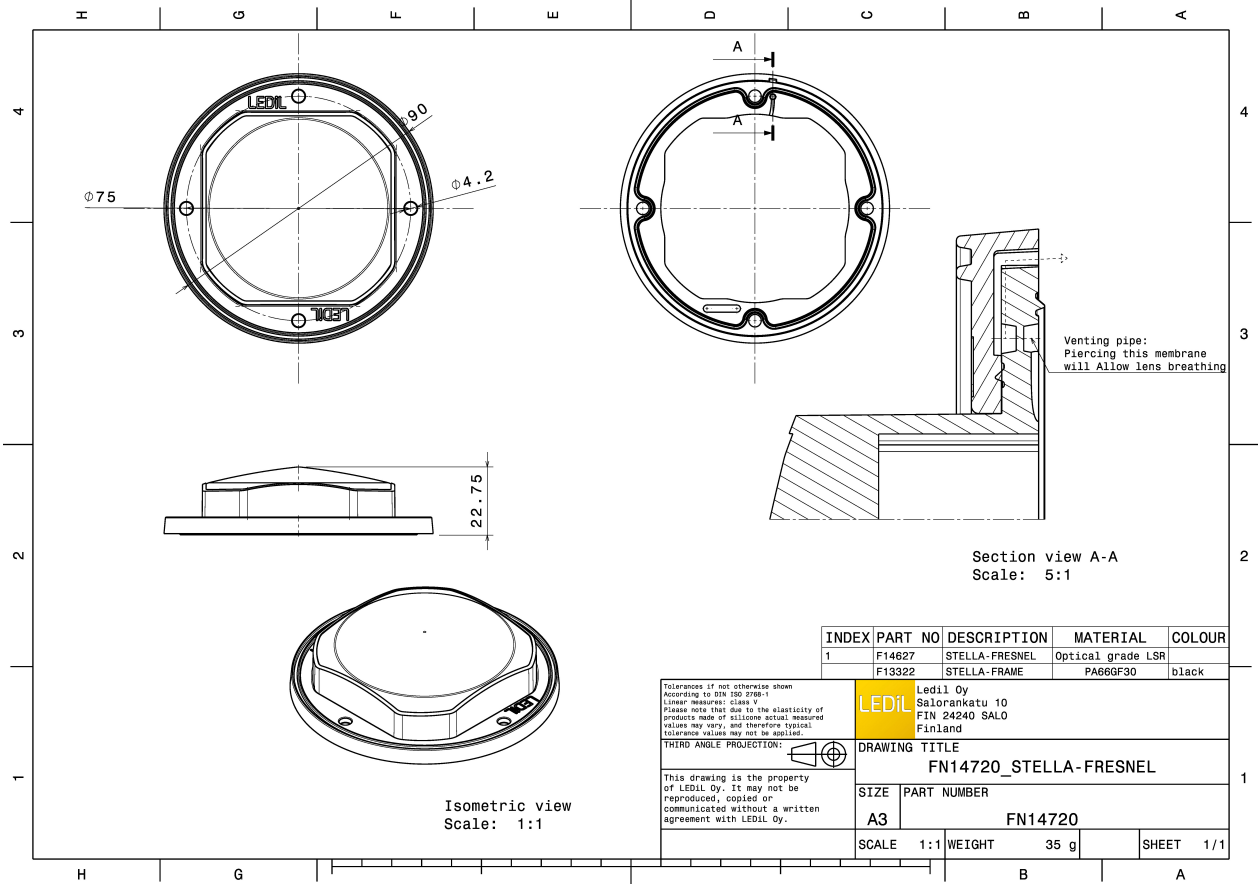


### MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
STELLA-FRESNEL	Single lens	Silicone	clear		
STELLA-FRAME	Holder	PA66	black		

### ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FN14720_STELLA-FRESNEL	Single lens	135	135	15	6.1
» Box size: 480 x 280 x 300 mm					

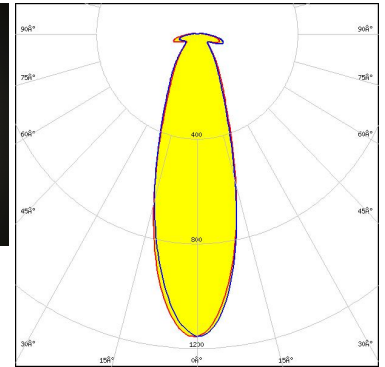
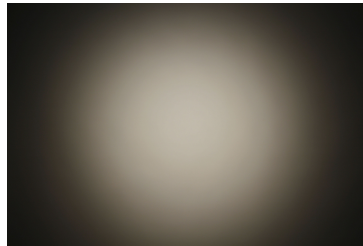


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### OPTICAL RESULTS (MEASURED):

bridgelux

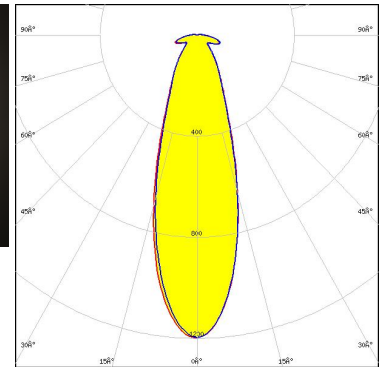
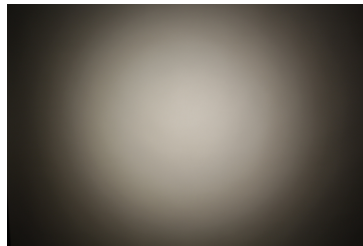
LED V18 Gen7  
 FWHM / FWTM 32.0° / 77.0°  
 Efficiency 84 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 BJB: 47.319.2350



Light distribution files

bridgelux

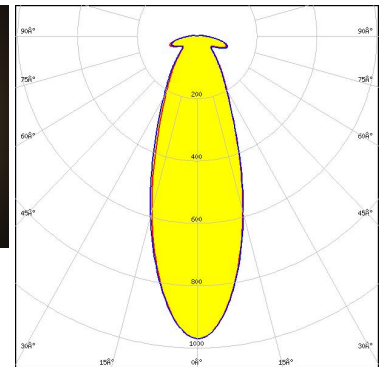
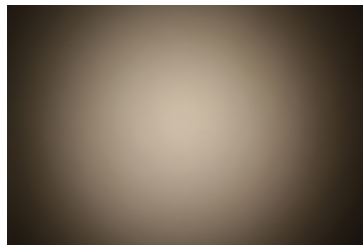
LED V18 Gen7  
 FWHM / FWTM 32.0° / 77.0°  
 Efficiency 85 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 Bender Wirth: 439 Typ L3



Light distribution files

bridgelux

LED V22 Gen7  
 FWHM / FWTM 36.0° / 118.0°  
 Efficiency 84 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 Bender Wirth: 431 Typ Z1

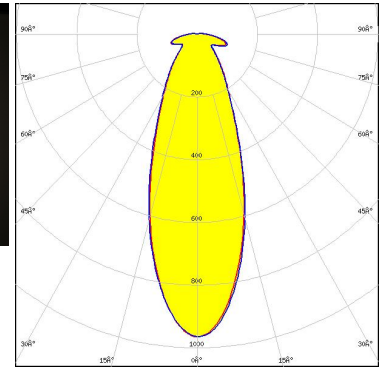
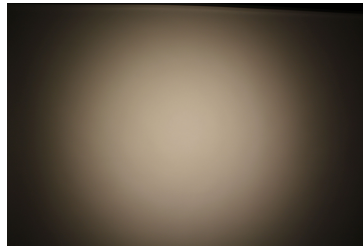


Light distribution files

#### OPTICAL RESULTS (MEASURED):



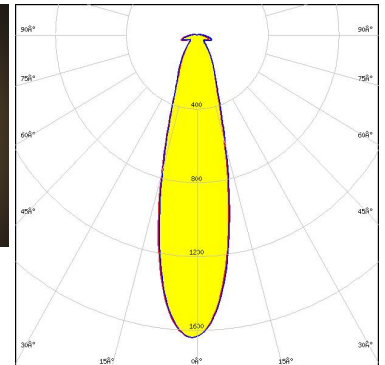
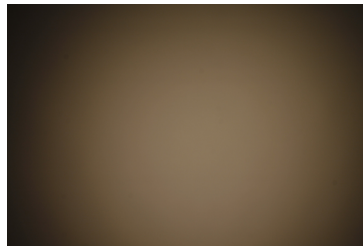
**LED** V22 Gen7  
**FWHM / FWTM** 37.0° / 118.0°  
**Efficiency** 86 %  
**Peak intensity** 1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 TE Connectivity: 2213480-1



Light distribution files



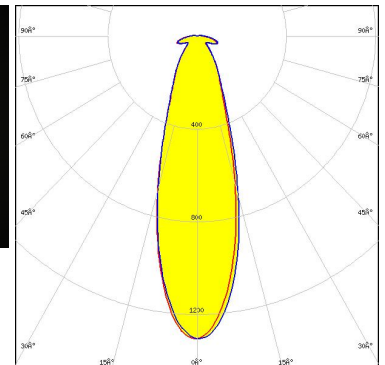
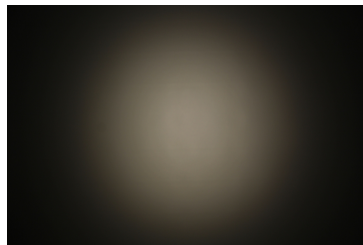
**LED** Vero SE 13  
**FWHM / FWTM** 27.0° / 63.0°  
**Efficiency** 85 %  
**Peak intensity** 1.6 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



**LED** Vero SE 18  
**FWHM / FWTM** 31.0° / 73.0°  
**Efficiency** 86 %  
**Peak intensity** 1.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**

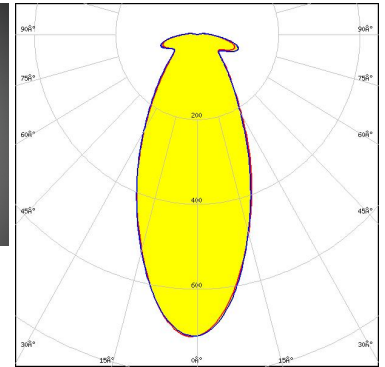
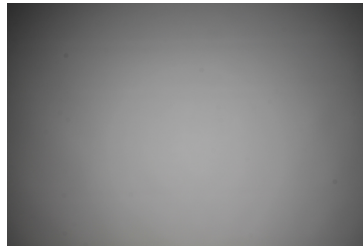


Light distribution files

#### OPTICAL RESULTS (MEASURED):



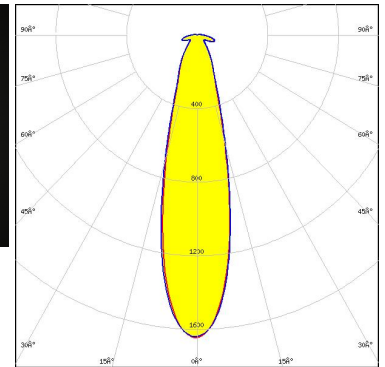
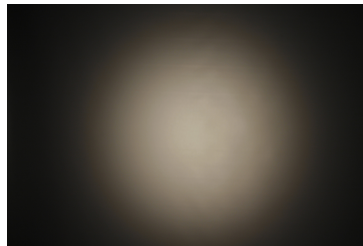
LED Vero SE 29  
 FWHM / FWTM 46.0° / 161.0°  
 Efficiency 87 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



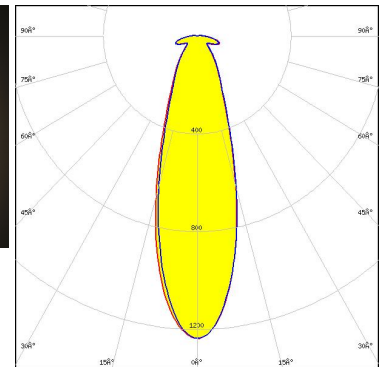
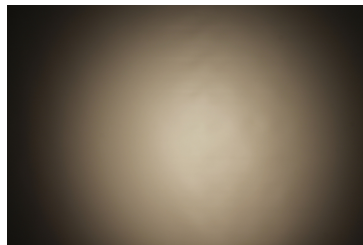
LED VERO13  
 FWHM / FWTM 26.0° / 62.0°  
 Efficiency 84 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED VERO18  
 FWHM / FWTM 31.0° / 75.0°  
 Efficiency 85 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

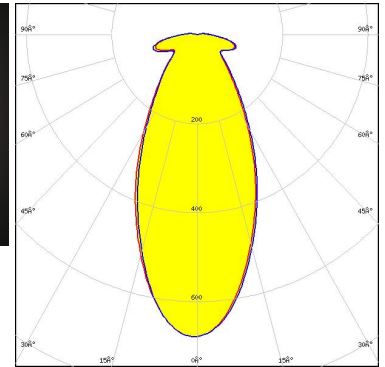
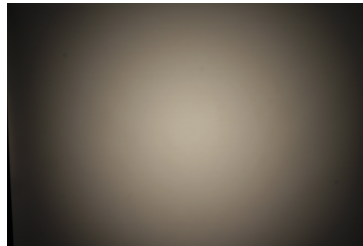


Light distribution files

#### OPTICAL RESULTS (MEASURED):



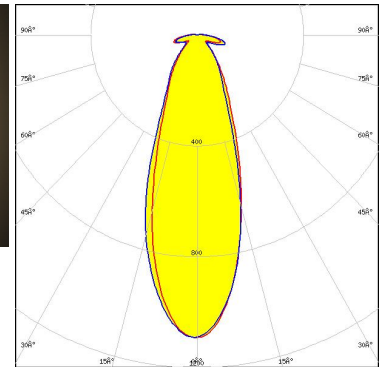
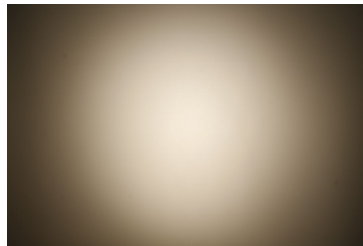
LED VERO29  
 FWHM / FWTM 48.0° / 165.0°  
 Efficiency 87 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### CITIZEN

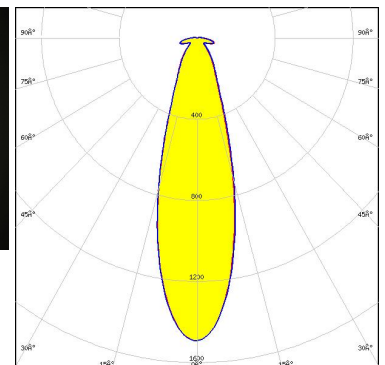
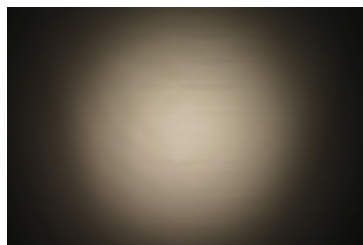
LED CLL04x/CLU04x  
 FWHM / FWTM 36.0° / 99.0°  
 Efficiency 86 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED CMA2550  
 FWHM / FWTM 30.0° / 67.0°  
 Efficiency 86 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

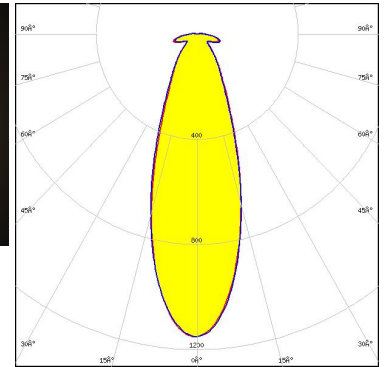
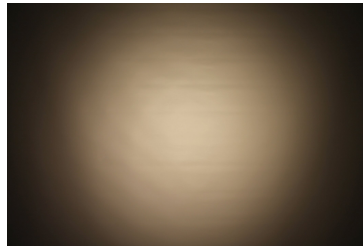


Light distribution files

#### OPTICAL RESULTS (MEASURED):



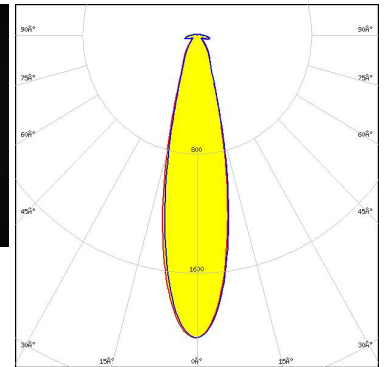
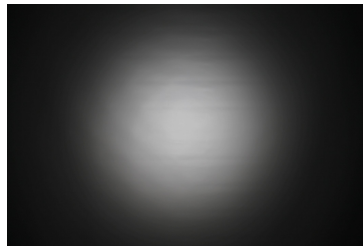
LED CMA3090  
 FWHM / FWTM 35.0° / 79.0°  
 Efficiency 88 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



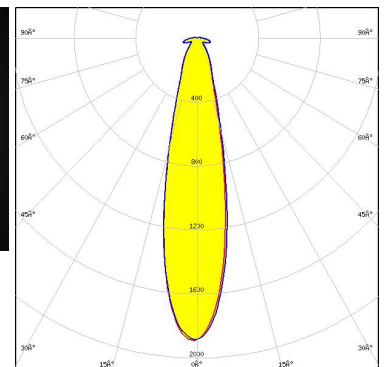
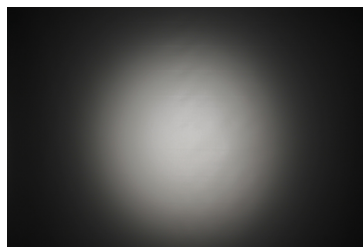
LED CMT19xx  
 FWHM / FWTM 25.0° / 54.0°  
 Efficiency 87 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 Bender Wirth: 477 Typ Z1



Light distribution files



LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM / FWTM 24.0° / 57.0°  
 Efficiency 84 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

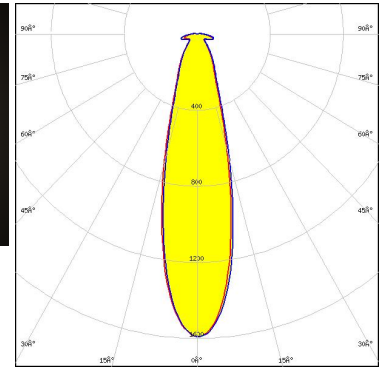
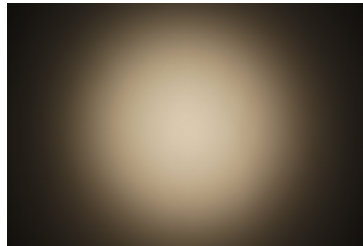


Light distribution files

#### OPTICAL RESULTS (MEASURED):



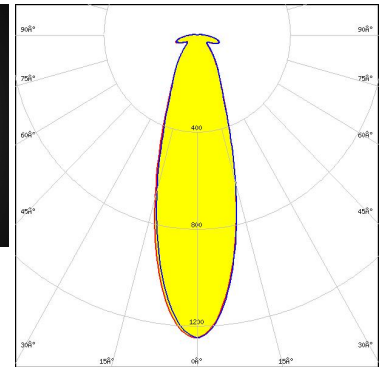
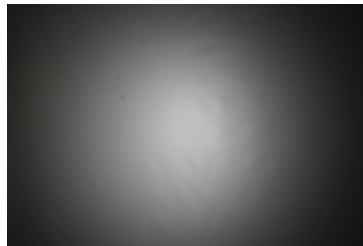
LED CXA/B 1830  
 FWHM / FWTM 26.0° / 64.0°  
 Efficiency 85 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C14305\_STELLA-CLAMP-CXA15-18



Light distribution files



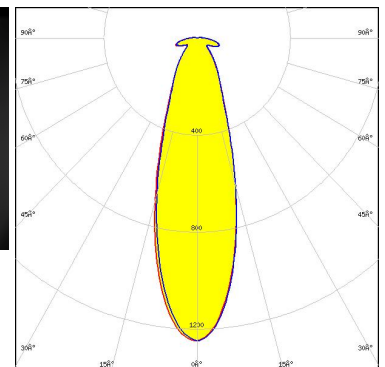
LED CXA/B 25xx  
 FWHM / FWTM 33.0° / 120.0°  
 Efficiency 84 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED CXA/B 25xx  
 FWHM / FWTM 31.0° / 75.0°  
 Efficiency 86 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



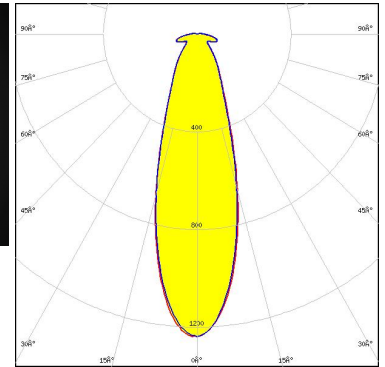
Light distribution files



#### OPTICAL RESULTS (MEASURED):



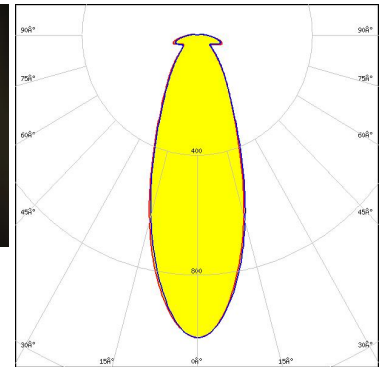
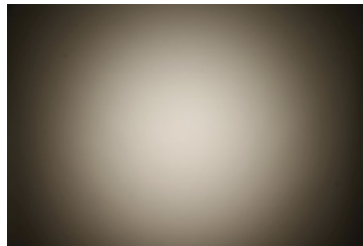
LED CXA/B 25xx  
 FWHM / FWTM 32.0° / 76.0°  
 Efficiency 85 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 Bender Wirth: 439 Typ L3



Light distribution files



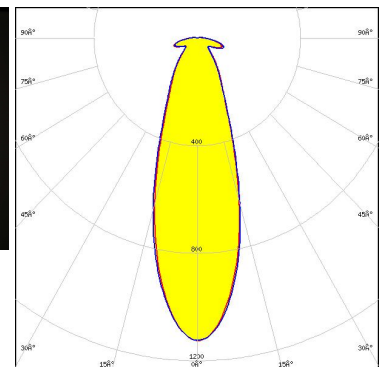
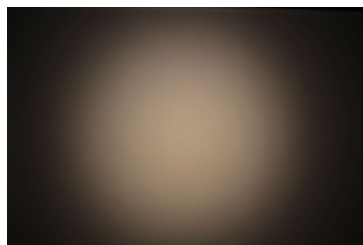
LED CXA/B 30xx  
 FWHM / FWTM 37.0° / 87.0°  
 Efficiency 88 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 BJB: 47.319.2151



Light distribution files



LED LUXEON CoB 1211  
 FWHM / FWTM 33.0° / 79.0°  
 Efficiency 85 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 Bender Wirth: 431 Typ L3


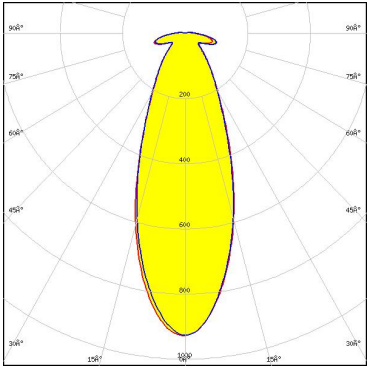


Light distribution files

#### OPTICAL RESULTS (MEASURED):

**LUMILEDS**

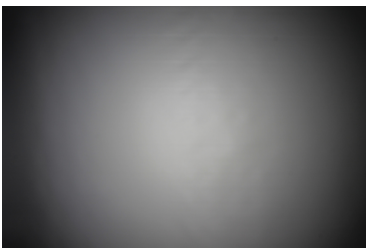
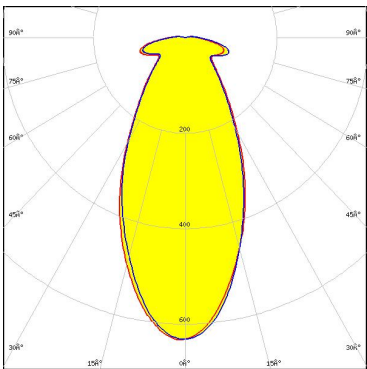
LED	LUXEON CoB 1213/1216/1812
FWHM / FWTM	39.0° / 139.0°
Efficiency	86 %
Peak intensity	0.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files

**LUMILEDS**

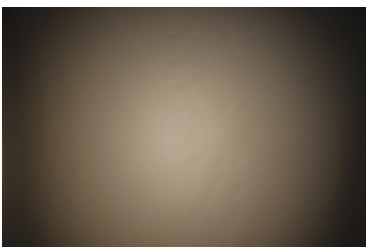
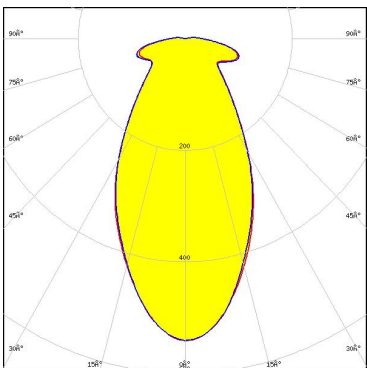
LED	LUXEON CoB 1321
FWHM / FWTM	50.0° / 165.0°
Efficiency	85 %
Peak intensity	0.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files

**LUMILEDS**

LED	LUXEON CoB 1825
FWHM / FWTM	56.0° / 169.0°
Efficiency	84 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

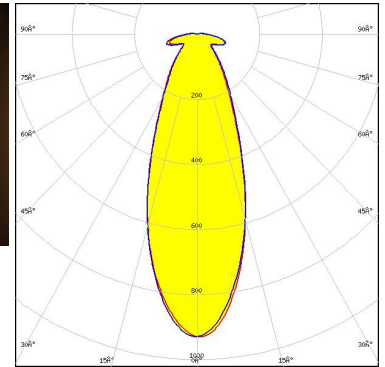
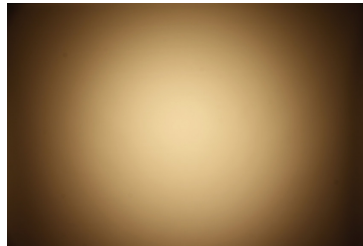



Light distribution files

#### OPTICAL RESULTS (MEASURED):



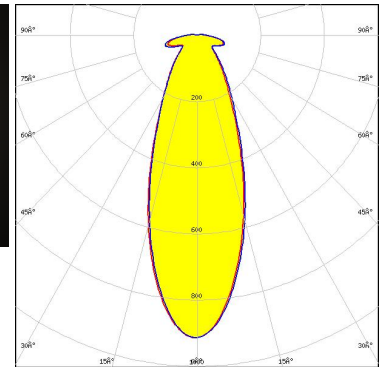
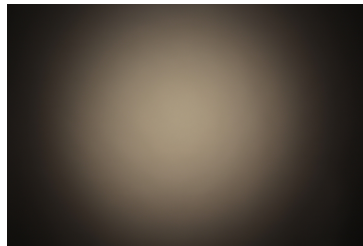
LED CxM-22 (28x28)  
 FWHM / FWTM 38.0° / 136.0°  
 Efficiency 86 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 Bender Wirth: 431 Typ L3



Light distribution files



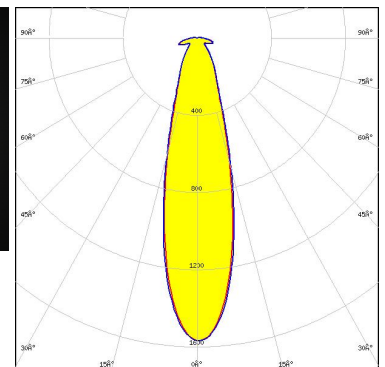
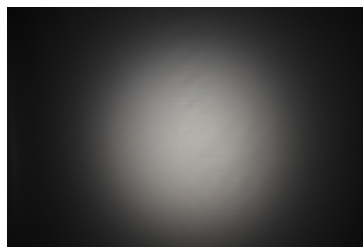
LED COB H-Type  
 FWHM / FWTM 38.0° / 120.0°  
 Efficiency 85 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED COB J-Type  
 FWHM / FWTM 26.0° / 65.0°  
 Efficiency 85 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

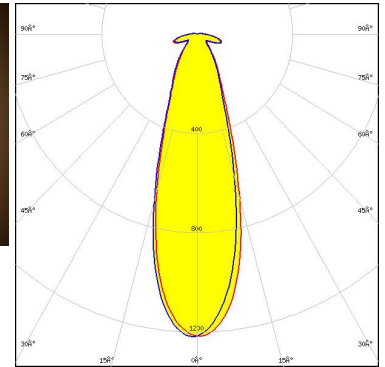
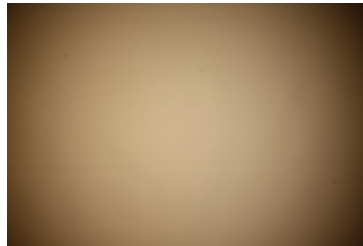


Light distribution files

#### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

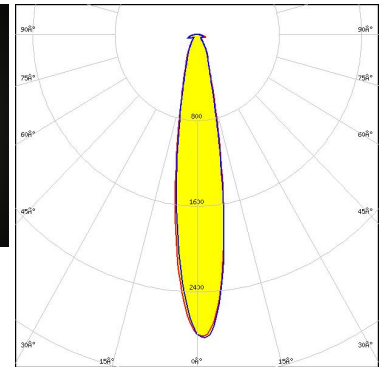
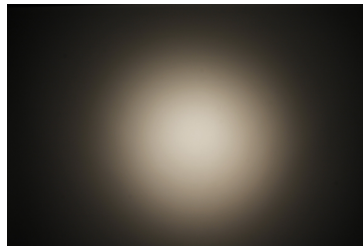
LED Soleriq S19  
 FWHM / FWTM 32.1° / 72.5°  
 Efficiency 84 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

**PHILIPS**

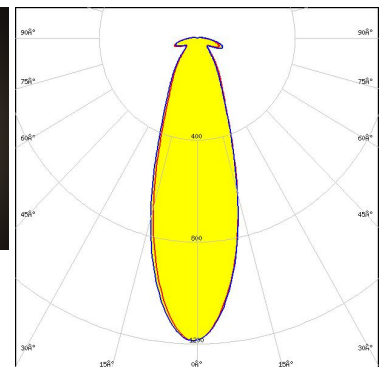
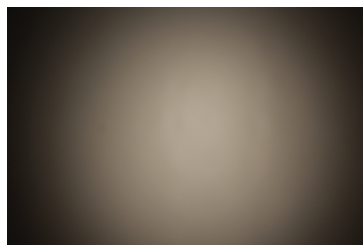
LED Fortimo SLM L06 CoB  
 FWHM / FWTM 18.0° / 44.0°  
 Efficiency 86 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

**PHILIPS**

LED Fortimo SLM L19 + SLM holder (PI)  
 FWHM / FWTM 33.0° / 78.0°  
 Efficiency 87 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

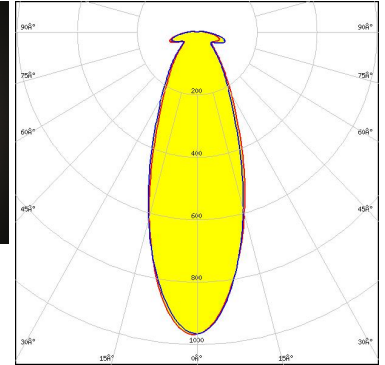


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### PHILIPS

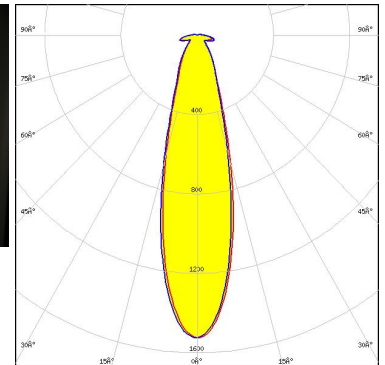
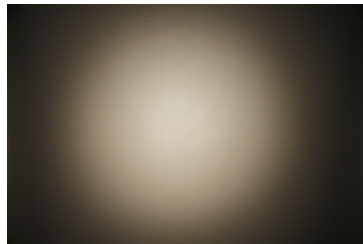
LED Fortimo SLM L23 CoB  
 FWHM / FWTM 38.0° / 87.0°  
 Efficiency 87 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

### SAMSUNG

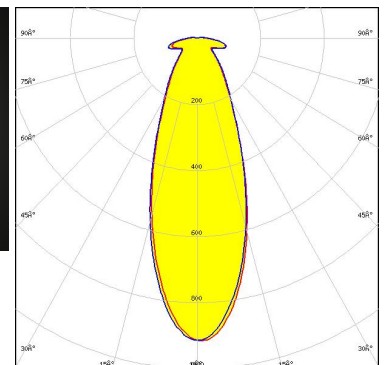
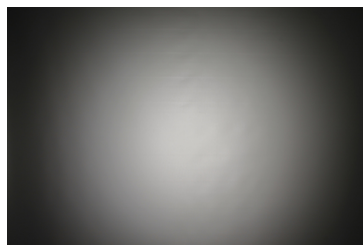
LED LC016D / LC019D / LC026D / LC033D  
 FWHM / FWTM 27.0° / 65.0°  
 Efficiency 83 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

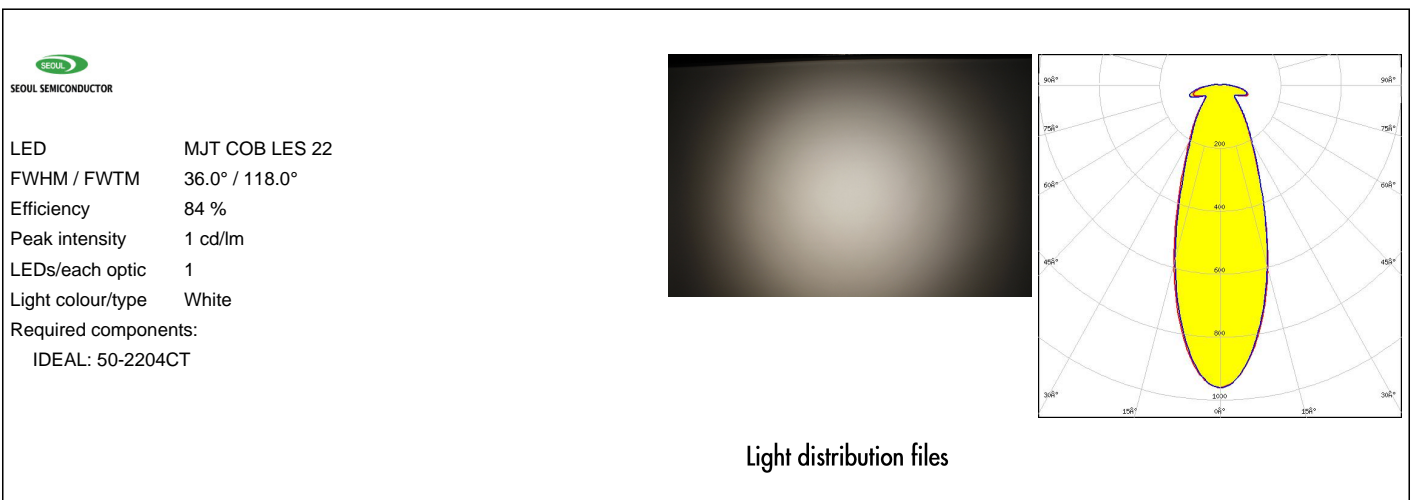
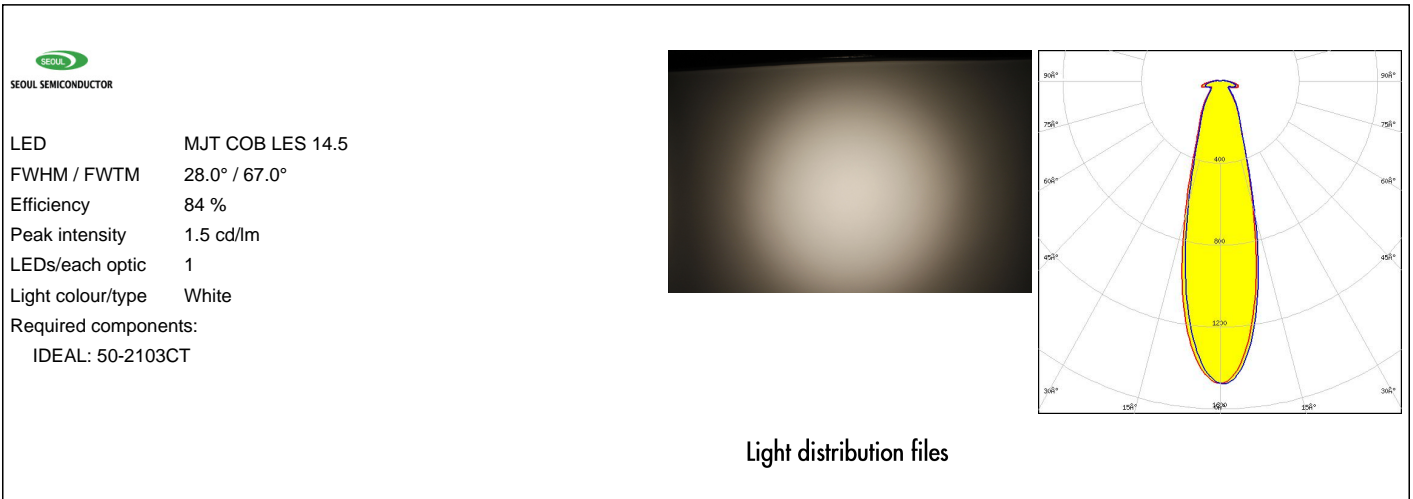
### SAMSUNG

LED LC040D / LC060D / LC080D  
 FWHM / FWTM 37.0° / 119.0°  
 Efficiency 84 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

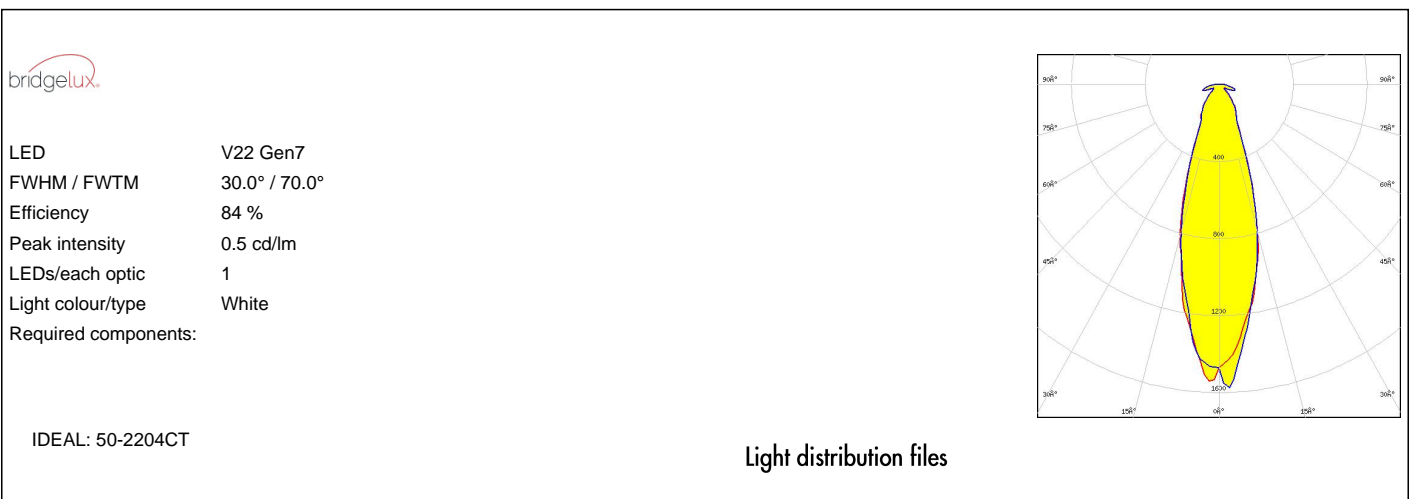
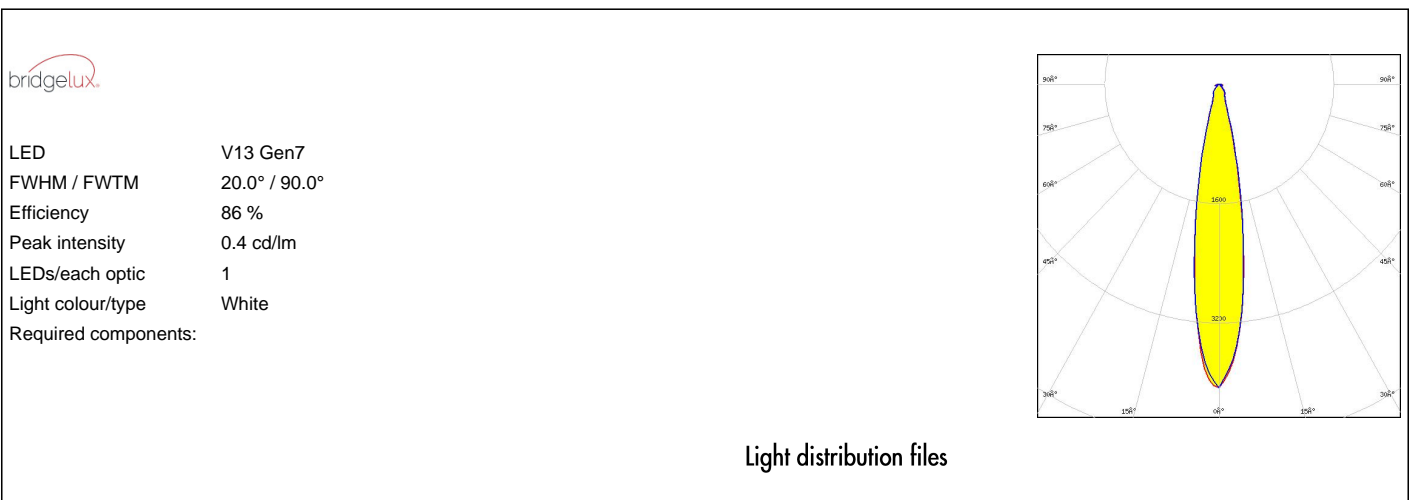
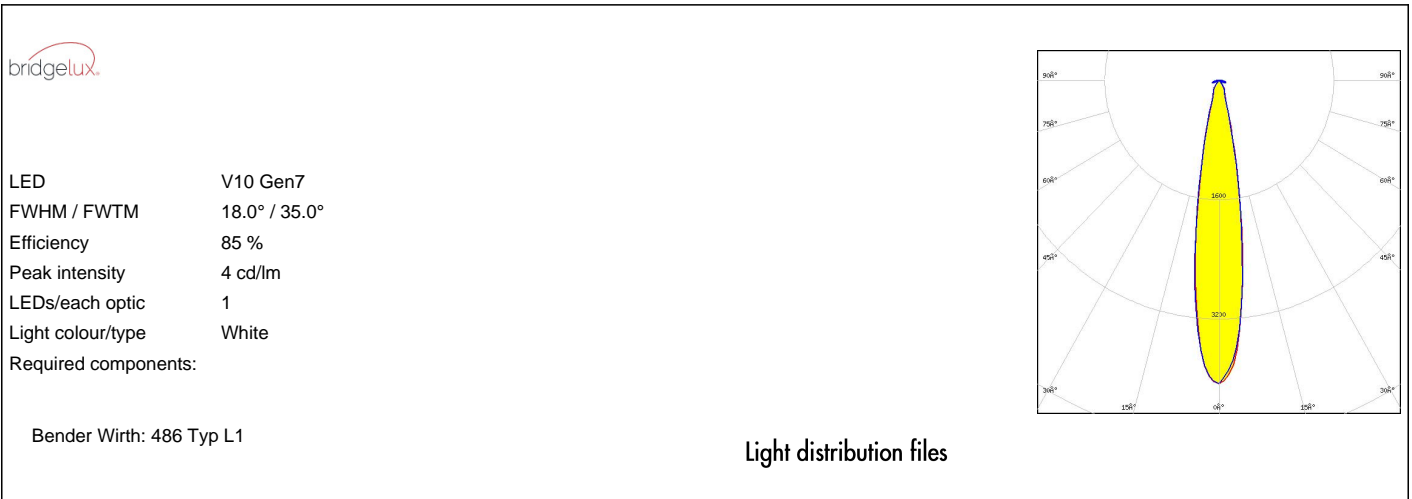


Light distribution files

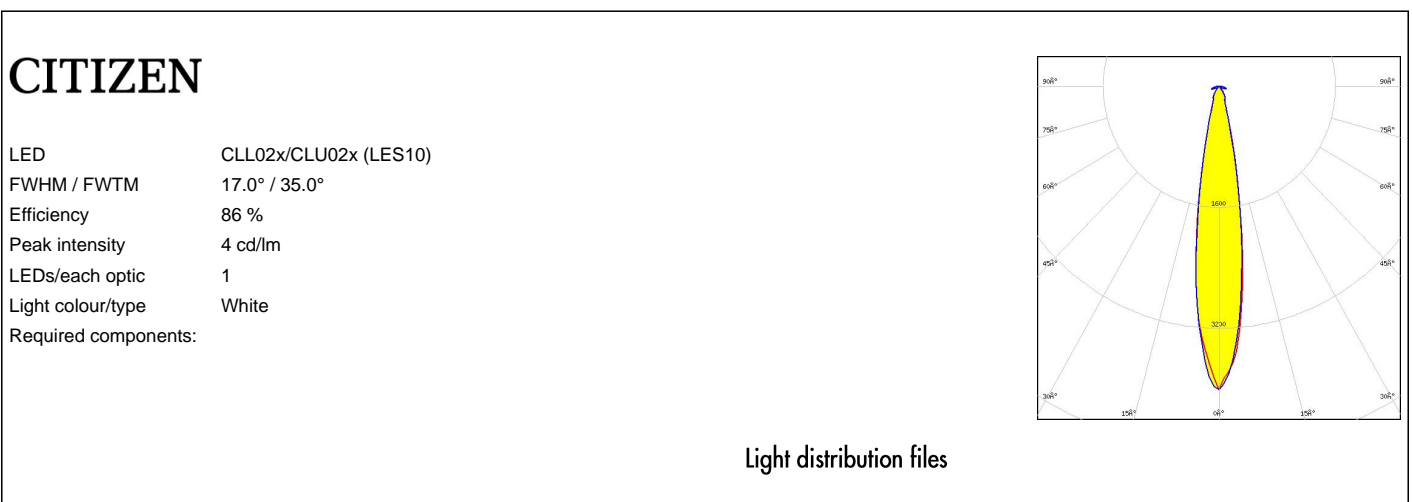
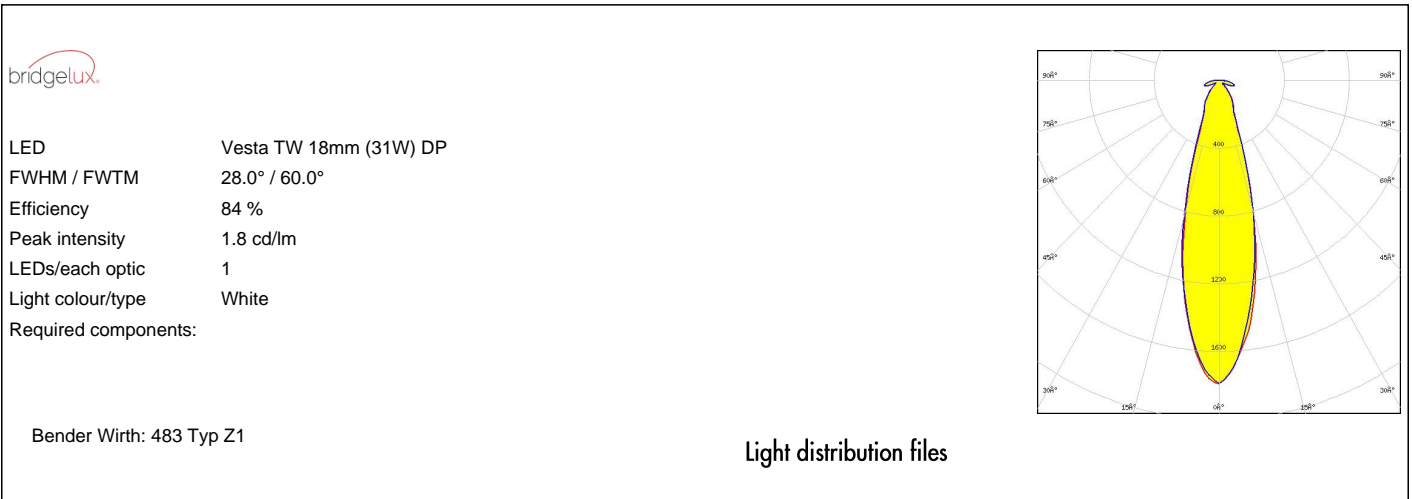
#### OPTICAL RESULTS (MEASURED):



### OPTICAL RESULTS (SIMULATED):



#### OPTICAL RESULTS (SIMULATED):

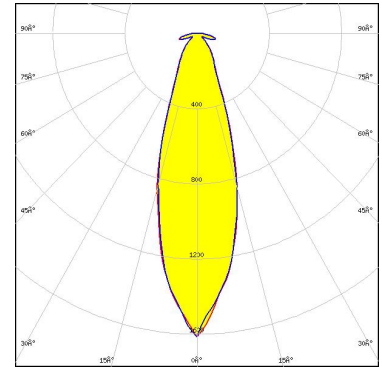




#### OPTICAL RESULTS (SIMULATED):



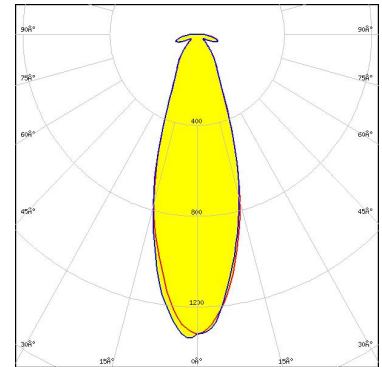
LED CMA3090  
 FWHM / FWTM 31.0° / 69.0°  
 Efficiency %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



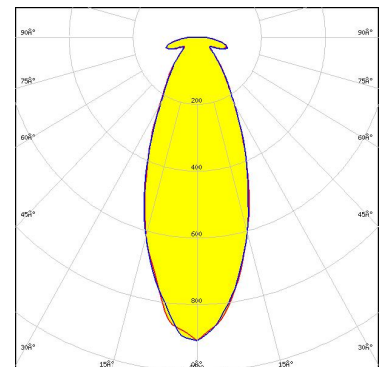
LED CMB3090  
 FWHM / FWTM 34.0° / 74.0°  
 Efficiency 85 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED CXA/B 3590  
 FWHM / FWTM 42.0° / 153.0°  
 Efficiency 85 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

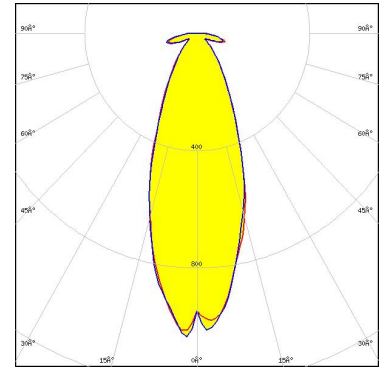


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



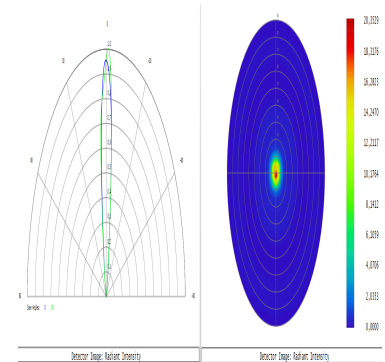
LED CXA/B 3590  
 FWHM / FWTM 37.0° / 80.0°  
 Efficiency 83 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LTPL-G35UV275GR-E  
 FWHM / FWTM 14.0° / 25.0°  
 Efficiency 60 %  
 LEDs/each optic 3  
 Light colour/type UV-C  
 Required components:

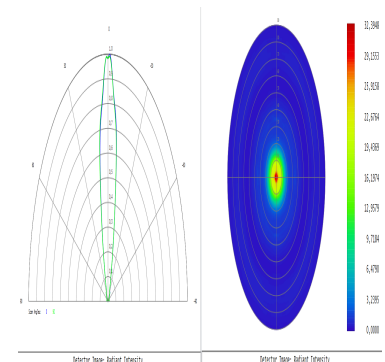


The UVC LED result tolerance is  $\pm 10\%$

Light distribution files



LED LTPL-G35UV275GR-E  
 FWHM / FWTM 23.0° / 40.0°  
 Efficiency 59 %  
 LEDs/each optic 13  
 Light colour/type UV-C  
 Required components:



The UVC LED result tolerance is  $\pm 10\%$

Light distribution files

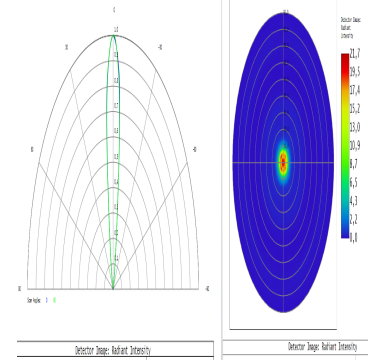
### OPTICAL RESULTS (SIMULATED):

**LITEON**

LED: LTPL-G35UV275GR-E  
 FWHM / FWTM: 16.0° / 26.0°  
 Efficiency: 61 %  
 LEDs/each optic: 4  
 Light colour/type: UV-C  
 Required components:

The UVC LED result tolerance is ±10 %

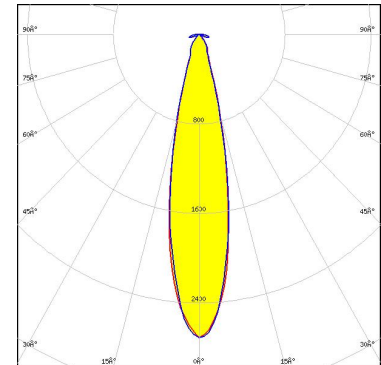
Light distribution files



**LUMILEDS**

LED: LUXEON CoB 1208  
 FWHM / FWTM: 23.0° / 43.0°  
 Efficiency: 82 %  
 Peak intensity: 2.8 cd/lm  
 LEDs/each optic: 1  
 Light colour/type: White  
 Required components:

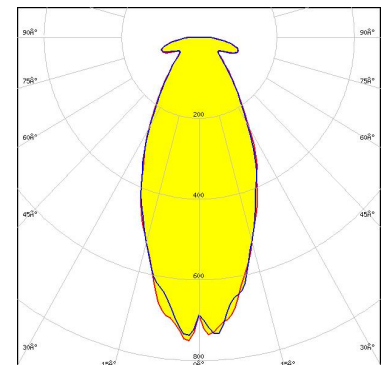
Light distribution files




**LUMINUS**

LED: CXM-32  
 FWHM / FWTM: 47.0° / 98.0°  
 Efficiency: 85 %  
 Peak intensity: 0.8 cd/lm  
 LEDs/each optic: 1  
 Light colour/type: White  
 Required components:

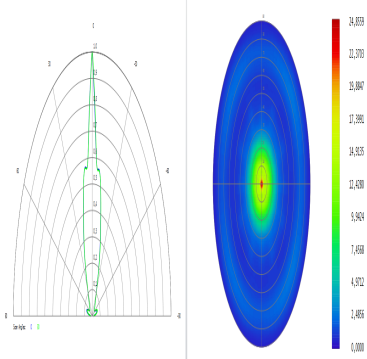
Light distribution files



### OPTICAL RESULTS (SIMULATED):




LED: XFM-5050 3 Die  
 FWHM / FWTM: 26.0° / 62.0°  
 Efficiency: 66 %  
 LEDs/each optic: 21  
 Light colour/type: UV-C  
 Required components:

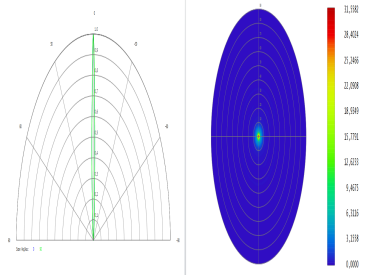


The UVC LED result tolerance is  $\pm 10$  %

Light distribution files




LED: NCSU334A  
 FWHM / FWTM: 4.0° / 12.0°  
 Efficiency: 64 %  
 LEDs/each optic: 1  
 Light colour/type: UV-C  
 Required components:

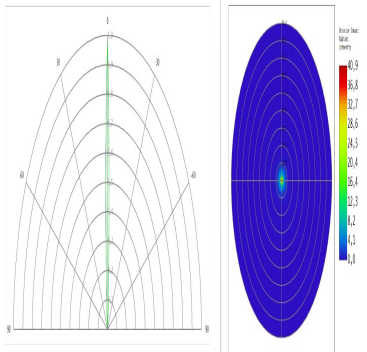


The UVC LED result tolerance is  $\pm 10$  %

Light distribution files

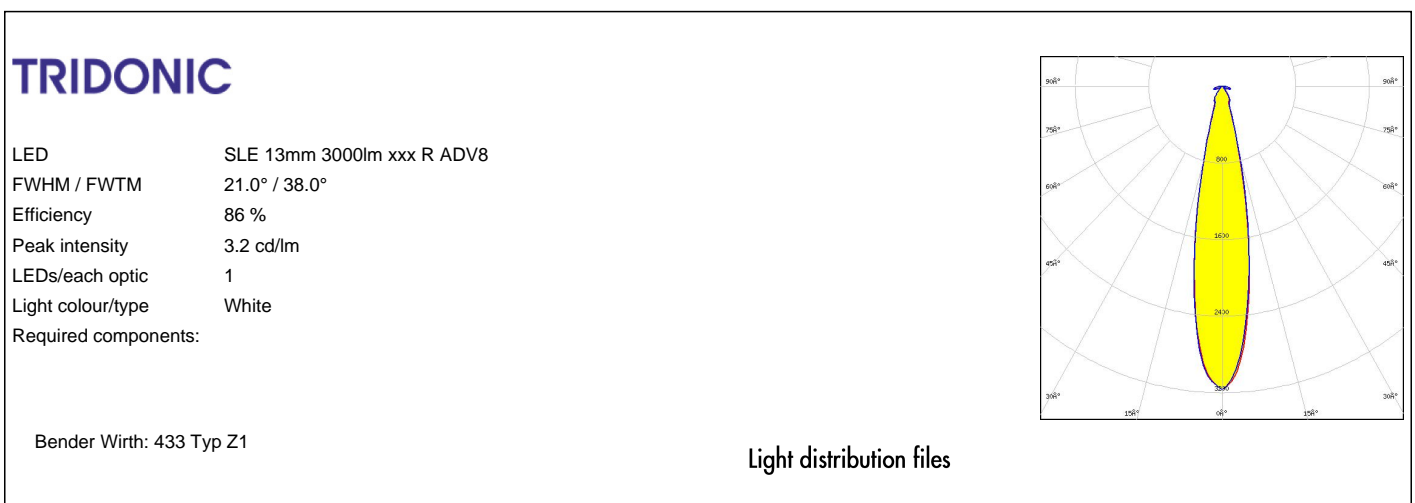
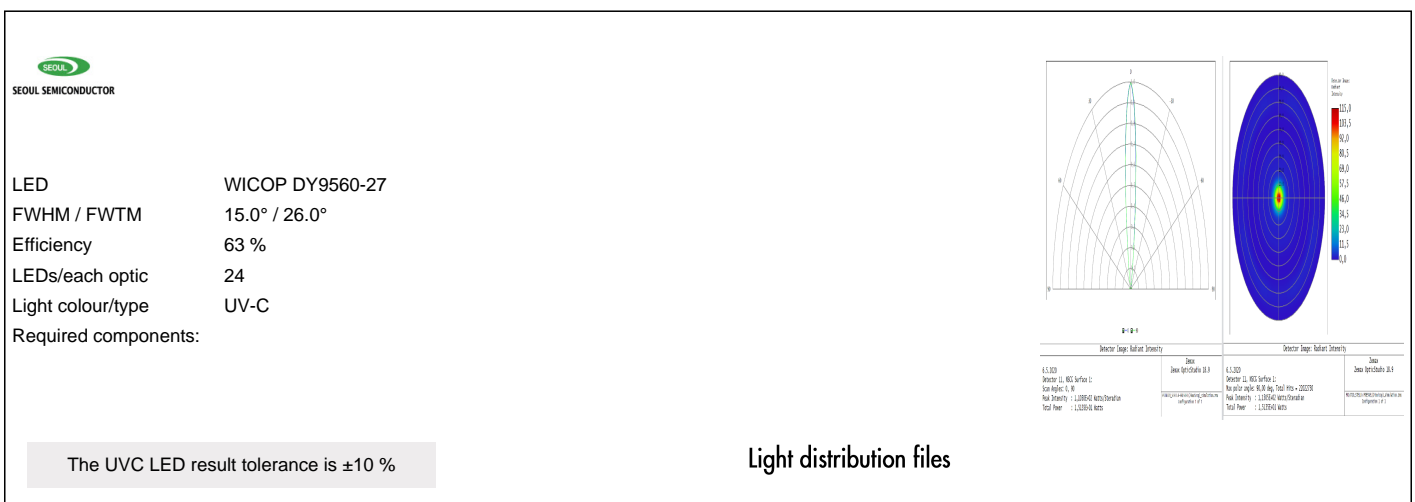
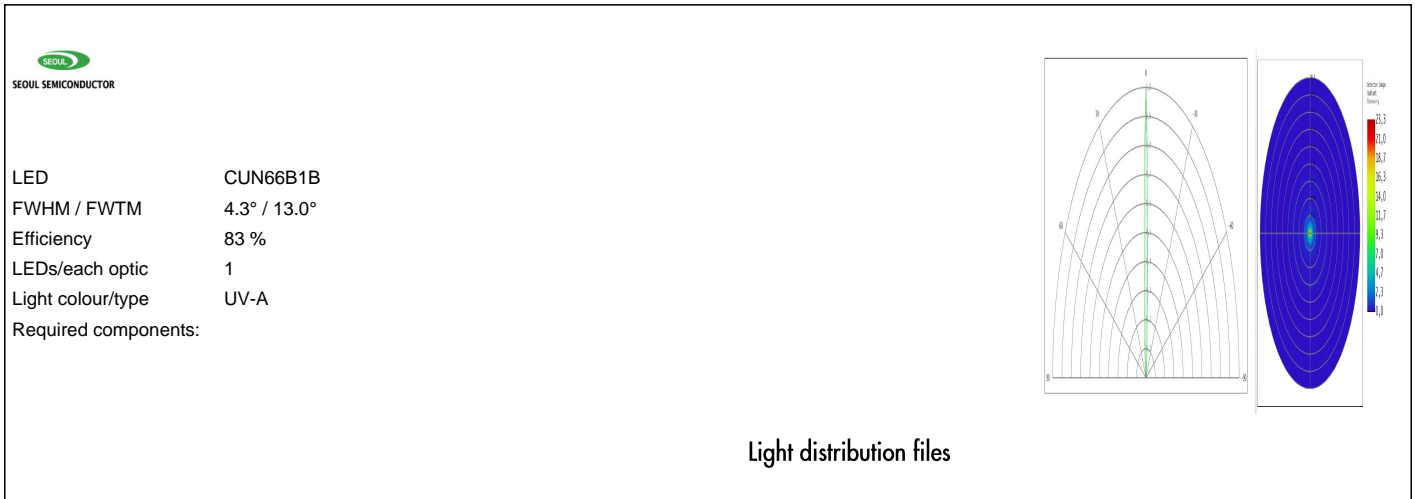


LED: CUN66A1B  
 FWHM / FWTM: 4.1° / 12.0°  
 Efficiency: 85 %  
 LEDs/each optic: 1  
 Light colour/type: UV-A  
 Required components:



Light distribution files

### OPTICAL RESULTS (SIMULATED):



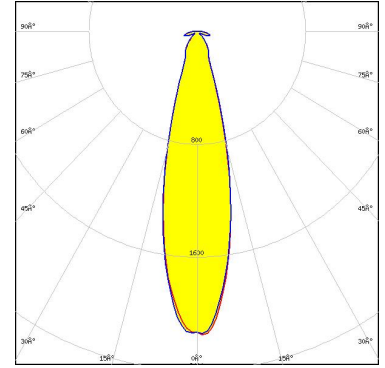
#### OPTICAL RESULTS (SIMULATED):

### TRIDONIC

LED	SLE 17mm 5000lm xxx R ADV8
FWHM / FWTM	26.0° / 49.0°
Efficiency	86 %
Peak intensity	2.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Bender Wirth: 431 Typ Z1

Light distribution files



#### 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.

Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.

#### 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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