

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 ⓘ

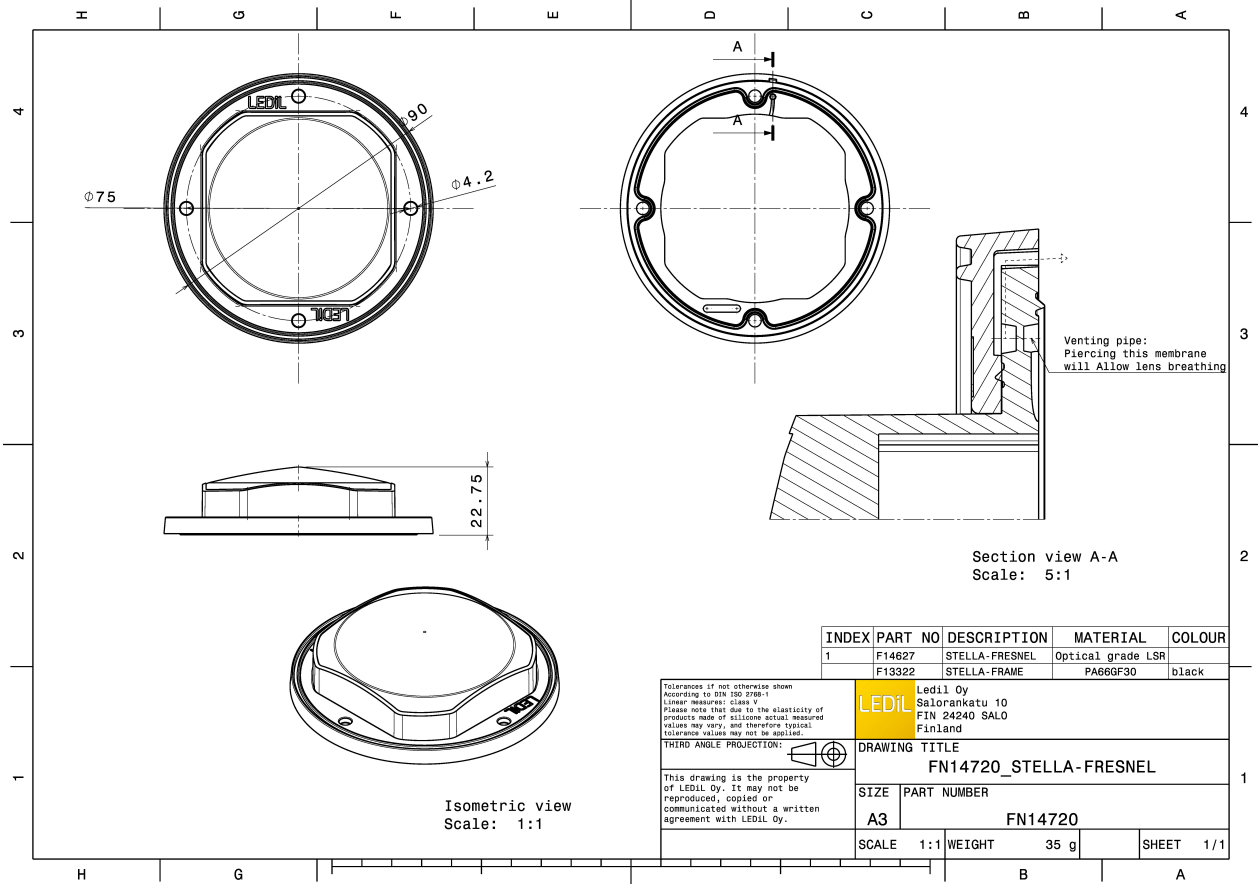


MATERIALS:

Component	Type	Material	Colour	Finish	Length
STELLA-FRESNEL	Single lens	Silicone	clear		85.0
STELLA-FRAME	Holder	PA66	black		90.0

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FN14720_STELLA-FRESNEL	Single lens	80	80	10	4.0
» Box size: 480 x 280 x 300 mm					

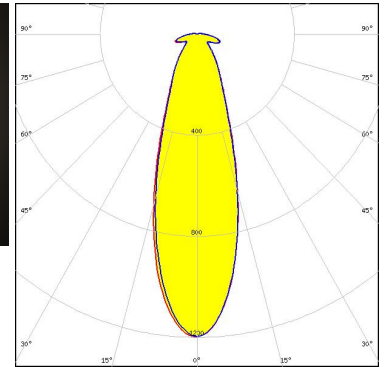


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

bridgelux

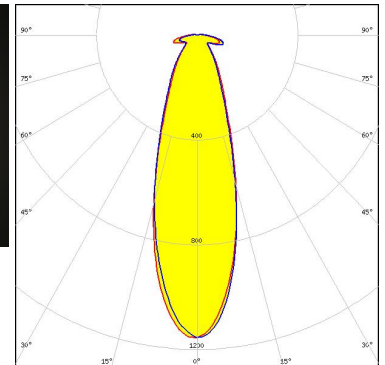
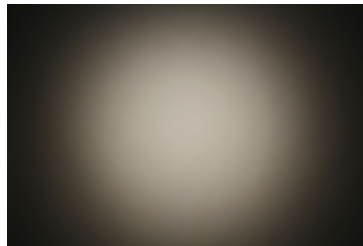
LED V18 Gen7
 FWHM / FWTM 32.0° / 77.0°
 Efficiency 85 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 439 Typ L3



Light distribution files

bridgelux

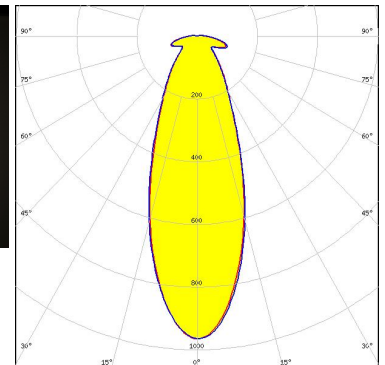
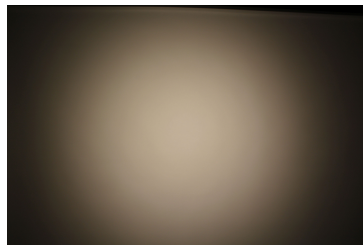
LED V18 Gen7
 FWHM / FWTM 32.0° / 77.0°
 Efficiency 84 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 BJB: 47.319.2350



Light distribution files

bridgelux

LED 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

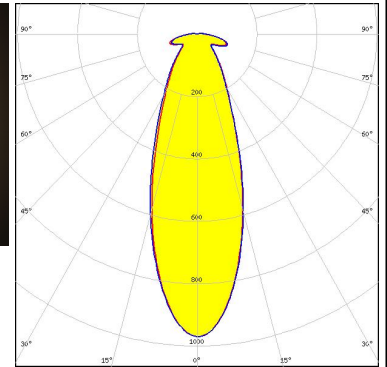
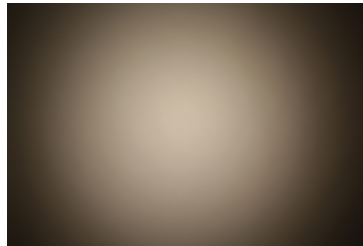


Light distribution files

OPTICAL RESULTS (MEASURED):



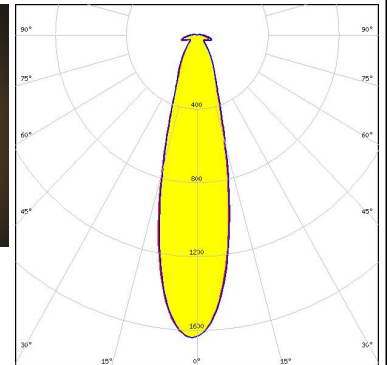
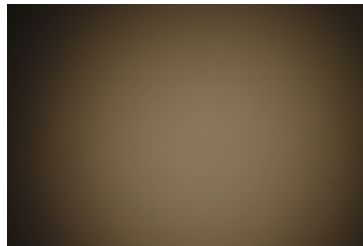
LED V22 Gen7
FWHM / FWTM 36.0° / 118.0°
Efficiency 84 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 Bender Wirth: 431 Typ Z1



Light distribution files



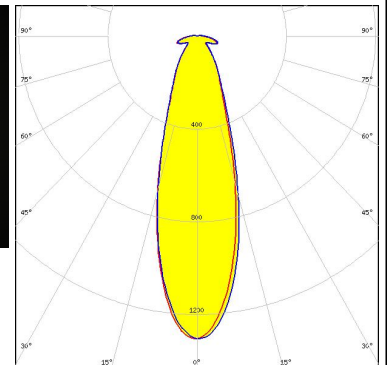
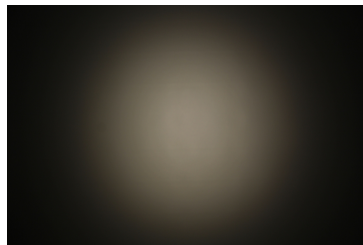
LED Vero SE 13
FWHM / FWTM 27.0° / 63.0°
Efficiency 85 %
Peak intensity 1.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



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:

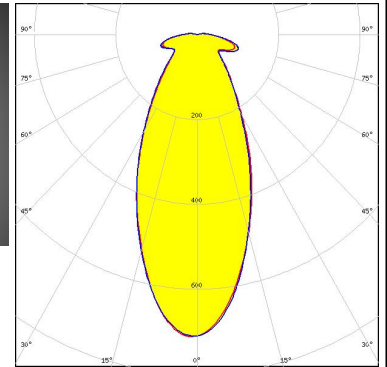
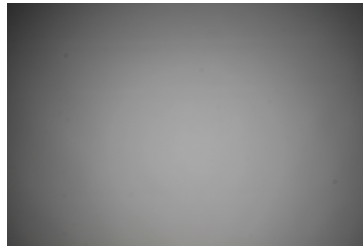


Light distribution files

OPTICAL RESULTS (MEASURED):



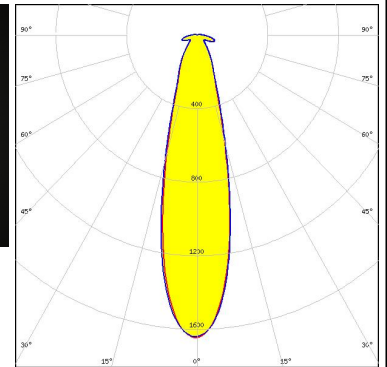
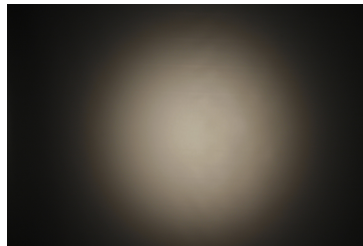
LED Vero SE 29
FWHM / FWTM 46.0° / 161.0°
Efficiency 87 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



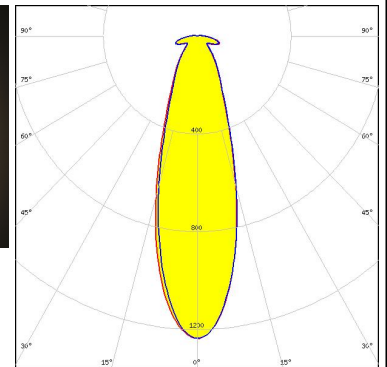
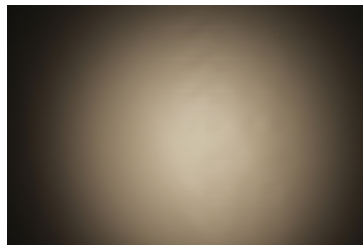
LED VERO13
FWHM / FWTM 26.0° / 62.0°
Efficiency 84 %
Peak intensity 1.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



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:

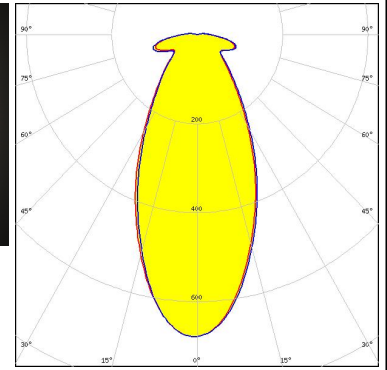


Light distribution files

OPTICAL RESULTS (MEASURED):



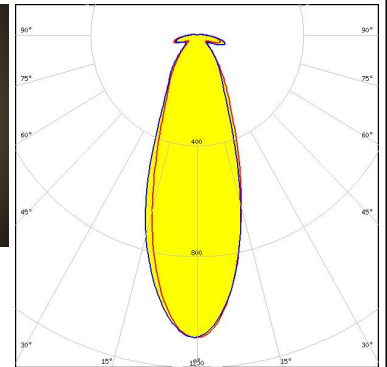
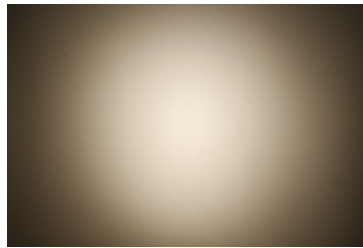
LED VERO29
FWHM / FWTM 48.0° / 165.0°
Efficiency 87 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

CITIZEN

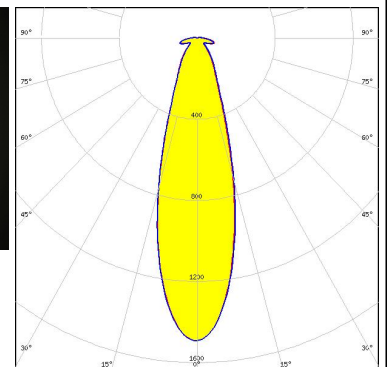
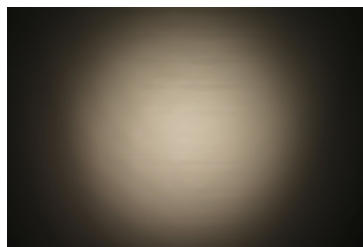
LED CLL04x/CLU04x
FWHM / FWTM 36.0° / 99.0°
Efficiency 86 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



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:

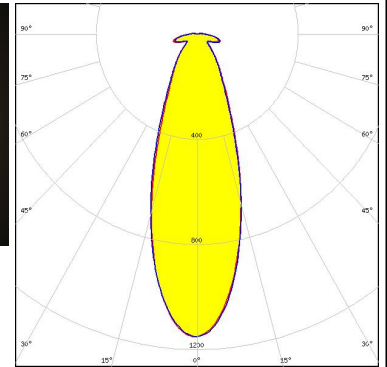


Light distribution files

OPTICAL RESULTS (MEASURED):



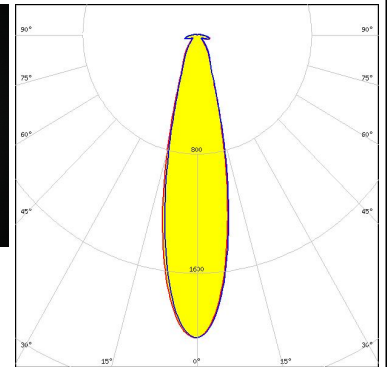
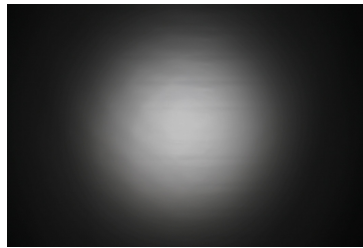
LED CMA3090
 FWHM / FWTM 35.0° / 79.0°
 Efficiency 88 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



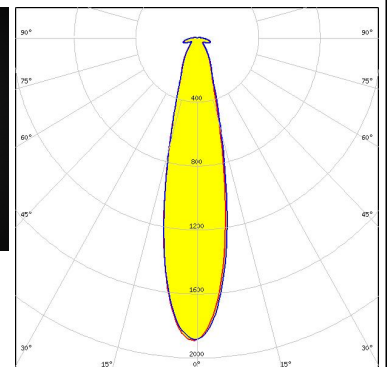
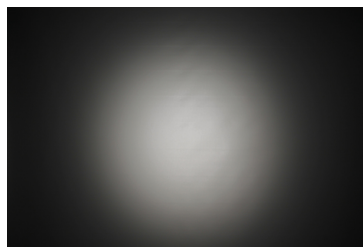
LED CMT19xx
 FWHM / FWTM 25.0° / 54.0°
 Efficiency 87 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 477 Typ Z1



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:

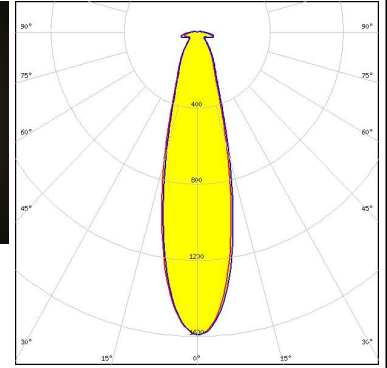


Light distribution files

OPTICAL RESULTS (MEASURED):



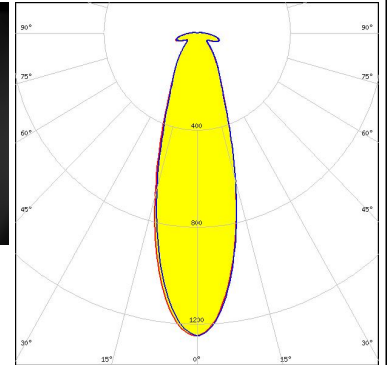
LED CXA/B 1830
 FWHM / FWTM 26.0° / 64.0°
 Efficiency 85 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C14305_STELLA-CLAMP-CXA15-18



Light distribution files



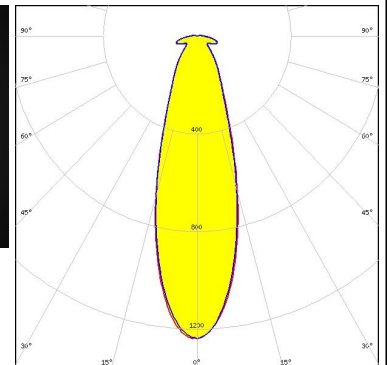
LED CXA/B 25xx
 FWHM / FWTM 31.0° / 75.0°
 Efficiency 86 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



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

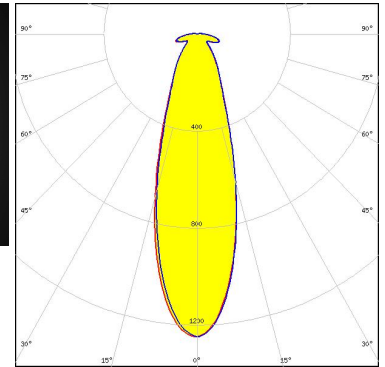
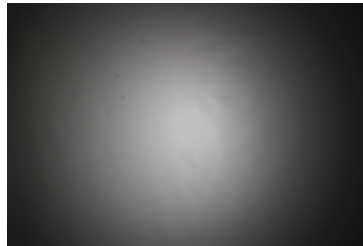


Light distribution files

OPTICAL RESULTS (MEASURED):



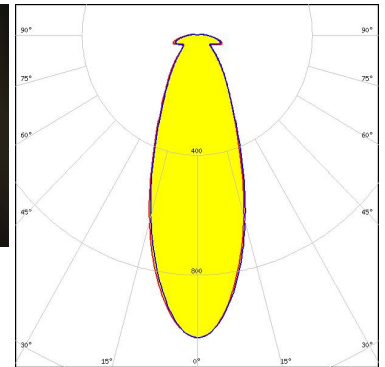
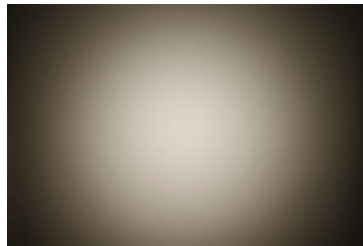
LED CXA/B 25xx
 FWHM / FWTM 33.0° / 120.0°
 Efficiency 84 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



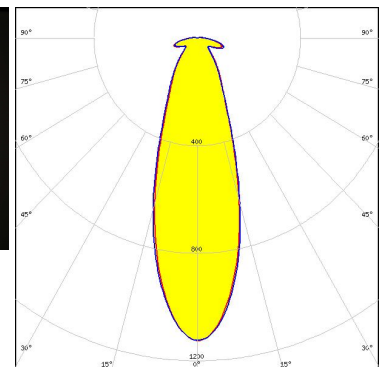
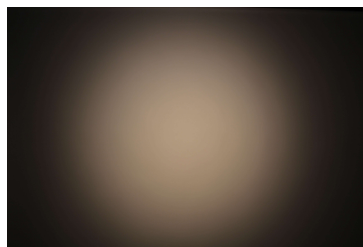
LED CXA/B 30xx
 FWHM / FWTM 37.0° / 87.0°
 Efficiency 88 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 BJB: 47.319.2151



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

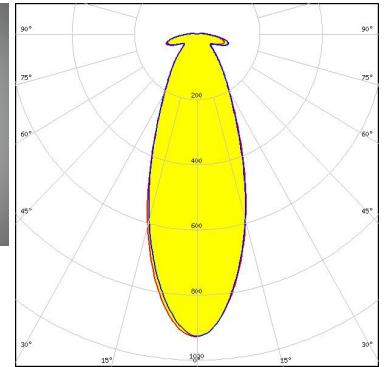


Light distribution files

OPTICAL RESULTS (MEASURED):



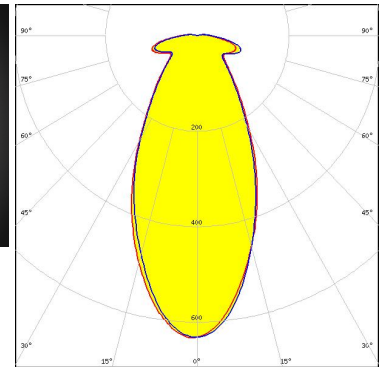
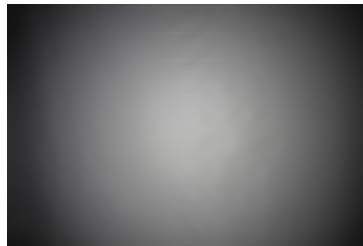
LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM 39.0° / 139.0°
 Efficiency 86 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



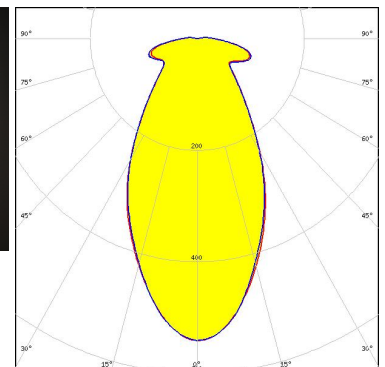
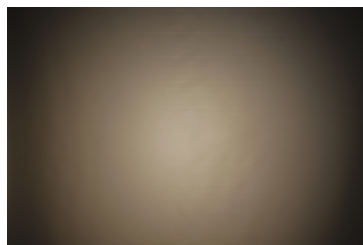
LED LUXEON CoB 1321
 FWHM / FWTM 50.0° / 165.0°
 Efficiency 85 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



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:

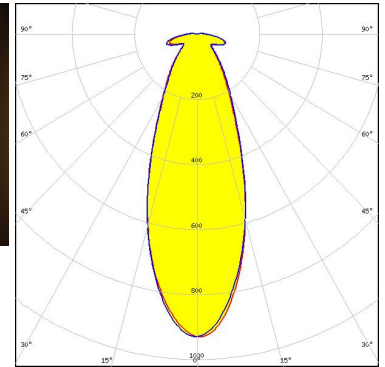
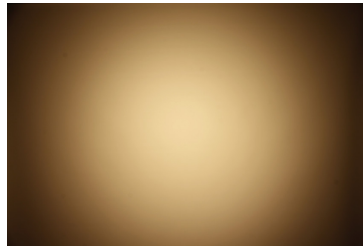


Light distribution files

OPTICAL RESULTS (MEASURED):



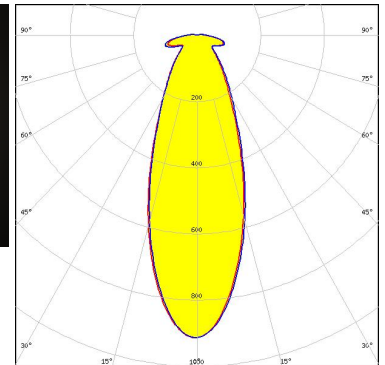
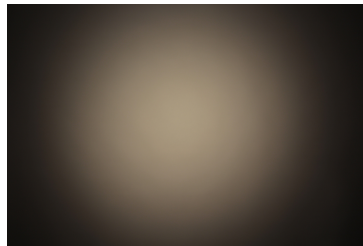
LED CxM-22 (28x28)
FWHM / FWTM 38.0° / 136.0°
Efficiency 86 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 Bender Wirth: 431 Typ L3



Light distribution files



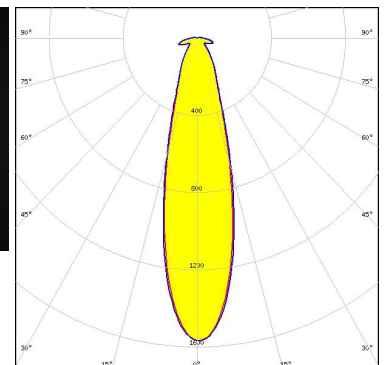
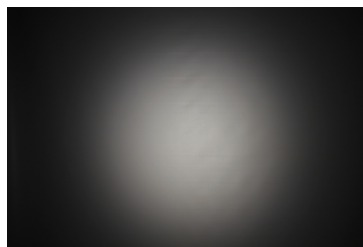
LED COB H-Type
FWHM / FWTM 38.0° / 120.0°
Efficiency 85 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



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:

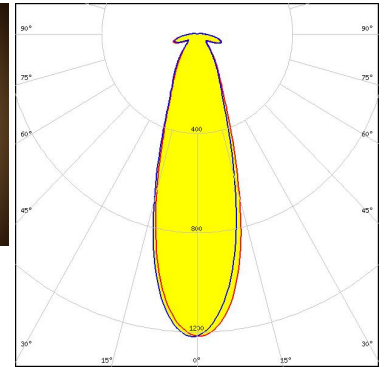
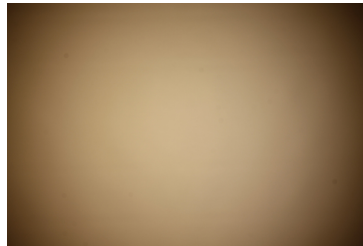


Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

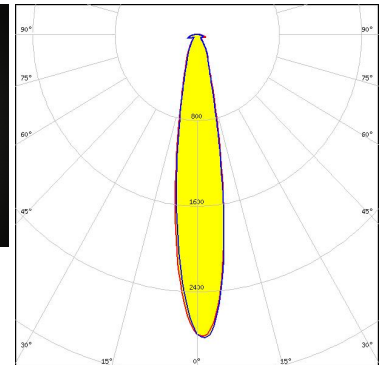
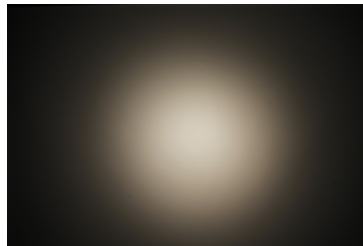
LED Soleriq S19
 FWHM / FWTM 32.1° / 72.5°
 Efficiency 84 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

PHILIPS

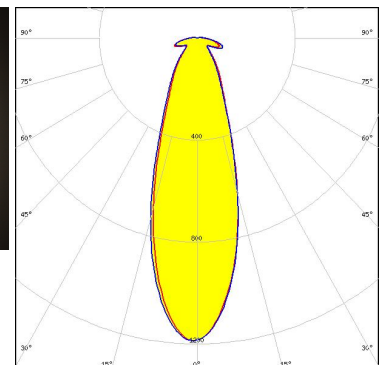
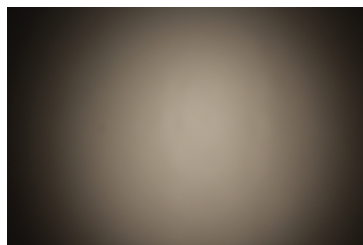
LED Fortimo SLM L06 CoB
 FWHM / FWTM 18.0° / 44.0°
 Efficiency 86 %
 Peak intensity 2.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



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:

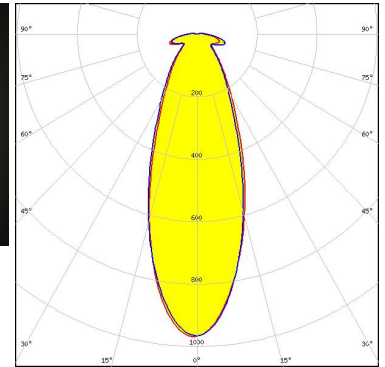


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

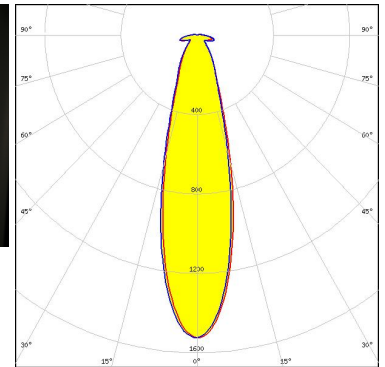
LED Fortimo SLM L23 CoB
 FWHM / FWTM 38.0° / 87.0°
 Efficiency 87 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

SAMSUNG

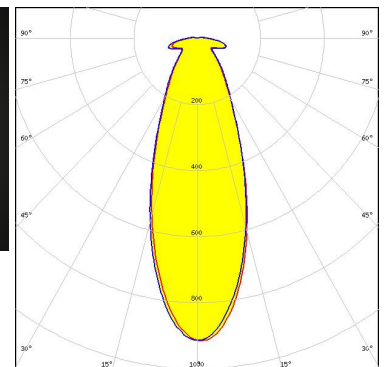
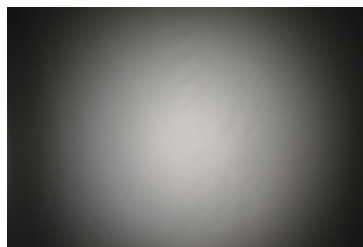
LED LC016D / LC019D / LC026D / LC033D
 FWHM / FWTM 27.0° / 65.0°
 Efficiency 83 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

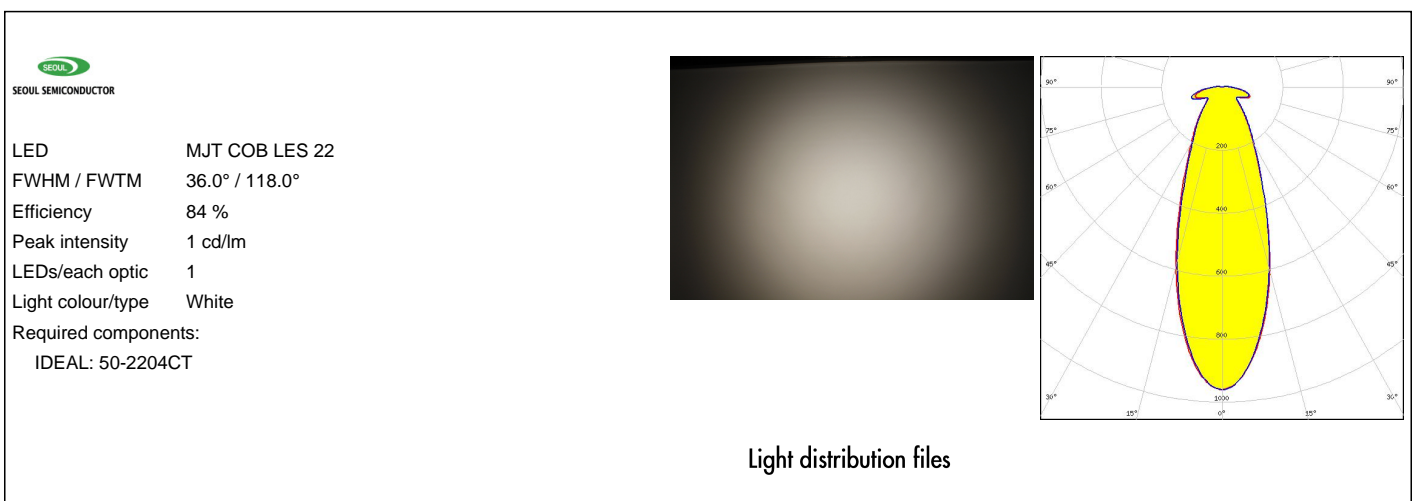
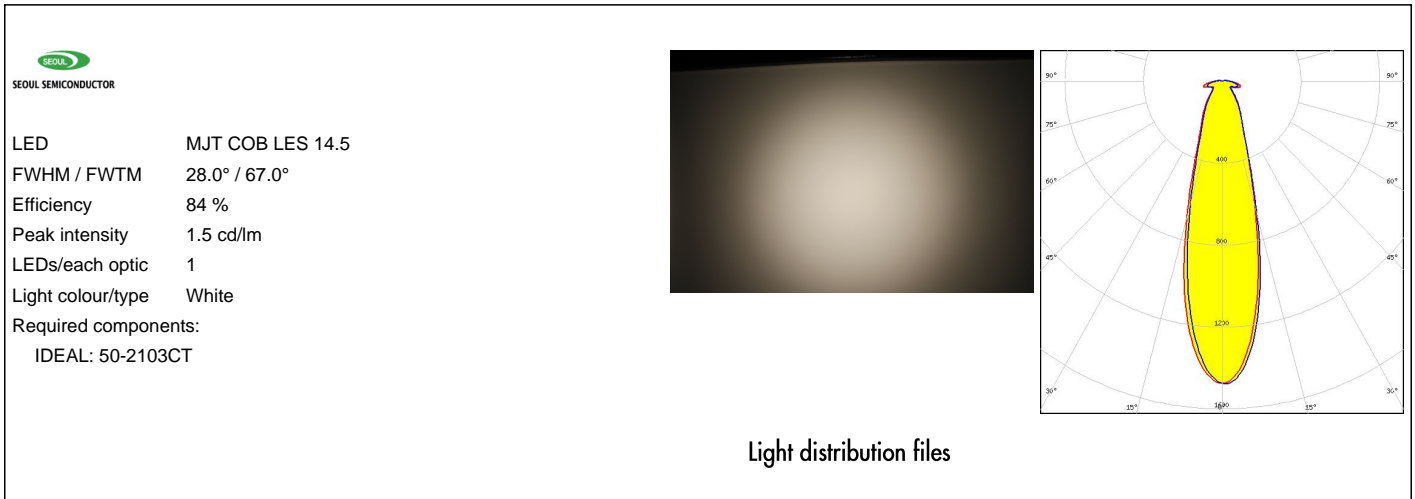
SAMSUNG

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):

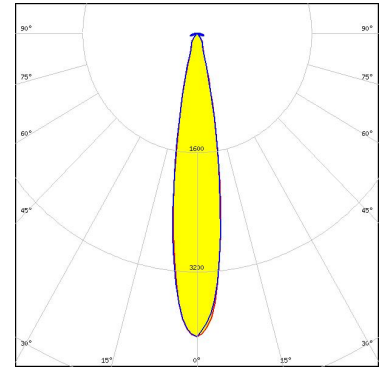


OPTICAL RESULTS (SIMULATED):

bridgelux

LED V10 Gen7
 FWHM / FWTM 18.0° / 35.0°
 Efficiency 85 %
 Peak intensity 4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

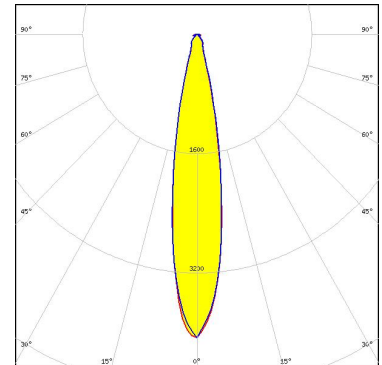
Bender Wirth: 486 Typ L1



Light distribution files

bridgelux

LED V13 Gen7
 FWHM / FWTM 20.0° / 90.0°
 Efficiency 86 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

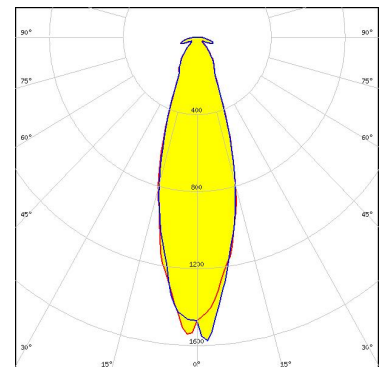


Light distribution files

bridgelux

LED V22 Gen7
 FWHM / FWTM 30.0° / 70.0°
 Efficiency 84 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

IDEAL: 50-2204CT

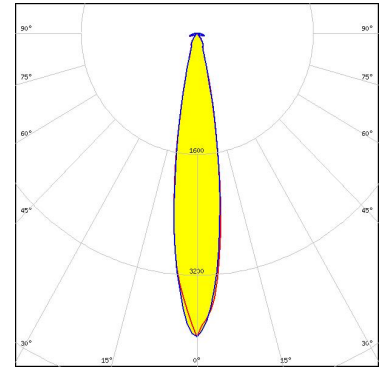


Light distribution files

OPTICAL RESULTS (SIMULATED):

CITIZEN

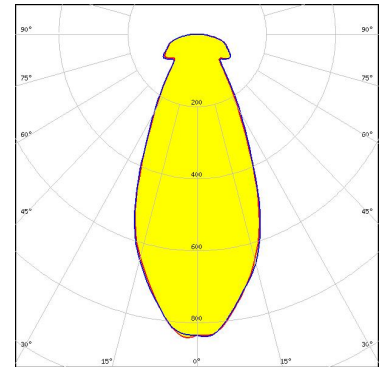
LED	CLL02x/CLU02x (LES10)
FWHM / FWTM	17.0° / 35.0°
Efficiency	86 %
Peak intensity	4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CITIZEN

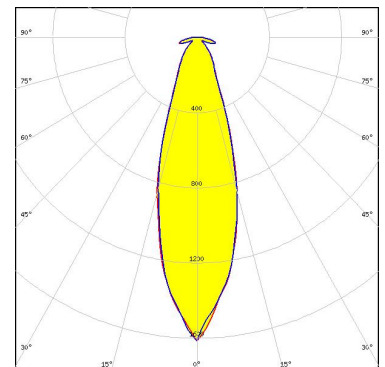
LED	CLL05x/CLU05x
FWHM / FWTM	46.0° / 144.0°
Efficiency	91 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files



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:	

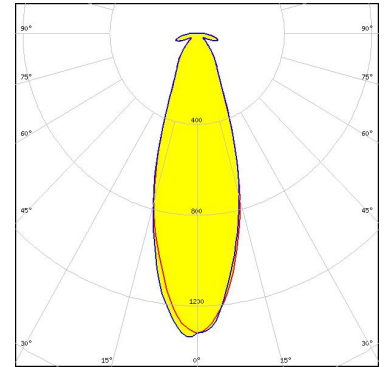


Light distribution files

OPTICAL RESULTS (SIMULATED):



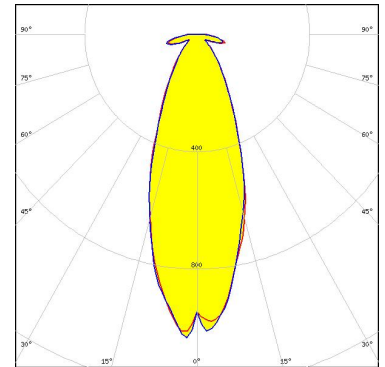
LED CMB3090
 FWHM / FWTM 34.0° / 74.0°
 Efficiency 85 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



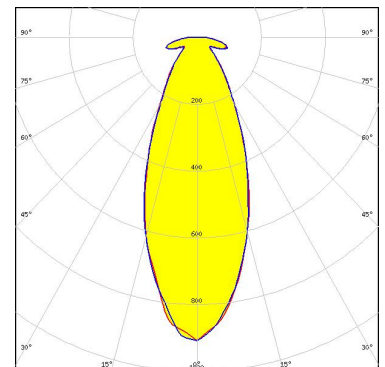
LED CXA/B 3590
 FWHM / FWTM 37.0° / 80.0°
 Efficiency 83 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED 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

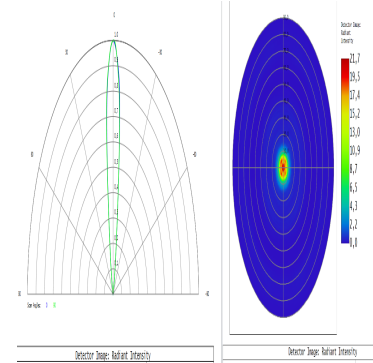
OPTICAL RESULTS (SIMULATED):

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

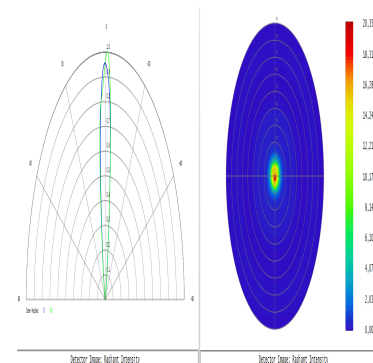


LITEON

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 ± 10 %

Light distribution files

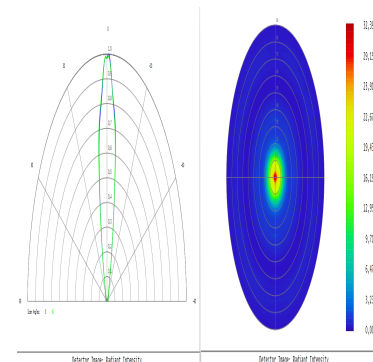


LITEON

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 ± 10 %

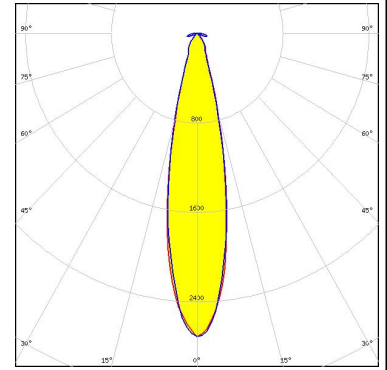
Light distribution files



OPTICAL RESULTS (SIMULATED):



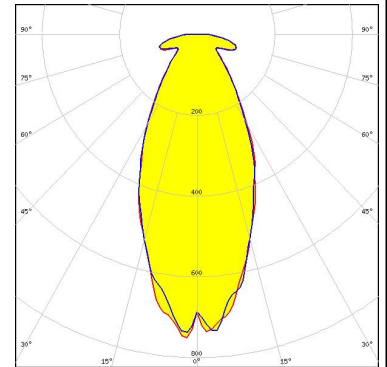
LED LUXEON CoB 1208
 FWHM / FWTM 23.0° / 43.0°
 Efficiency 82 %
 Peak intensity 2.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



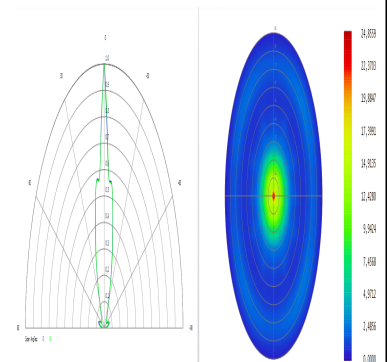
LED CXM-32
 FWHM / FWTM 47.0° / 98.0°
 Efficiency 85 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files




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



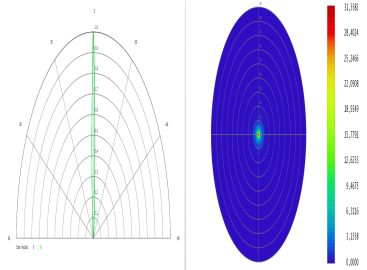
The UVC LED result tolerance is $\pm 10\%$

Light distribution files

OPTICAL RESULTS (SIMULATED):




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



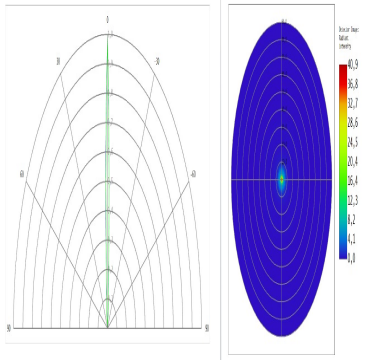
Detector Type: Radial Intensity		Detector Type: Radial Intensity	
Z=0mm	Z=0mm	Z=0mm	Z=0mm
Detector 1: WGS Surface 1	Detector 1: WGS Surface 1	Detector 1: WGS Surface 1	Detector 1: WGS Surface 1
Size: 10.0mm	Size: 10.0mm	Size: 10.0mm	Size: 10.0mm
Max Intensity: 1.188E+04 Wcd/Sr/m²	Max Intensity: 1.188E+04 Wcd/Sr/m²	Max Intensity: 1.188E+04 Wcd/Sr/m²	Max Intensity: 1.188E+04 Wcd/Sr/m²
Configuration 1 of 1	Configuration 1 of 1	Configuration 1 of 1	Configuration 1 of 1

The UVC LED result tolerance is ±10 %


Light distribution files



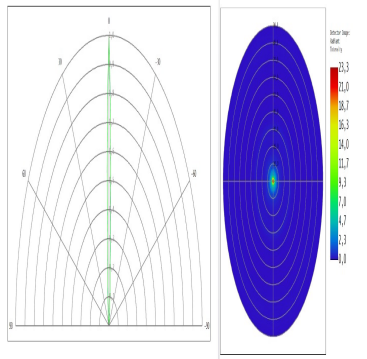
LED CUN66A1B
FWHM / FWTM 4.1° / 12.0°
Efficiency 85 %
LEDs/each optic 1
Light colour/type UV-A
Required components:



Light distribution files




LED CUN66B1B
FWHM / FWTM 4.3° / 13.0°
Efficiency 83 %
LEDs/each optic 1
Light colour/type UV-A
Required components:



Light distribution files

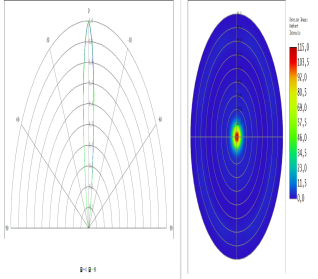
OPTICAL RESULTS (SIMULATED):



SEUL SEMICONDUCTOR

LED	WICOP DY9560-27
FWHM / FWTM	15.0° / 26.0°
Efficiency	63 %
LEDs/each optic	24
Light colour/type	UV-C

Required components:



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

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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