

## STELLA-FRESNEL

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

### TECHNICAL SPECIFICATIONS:

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

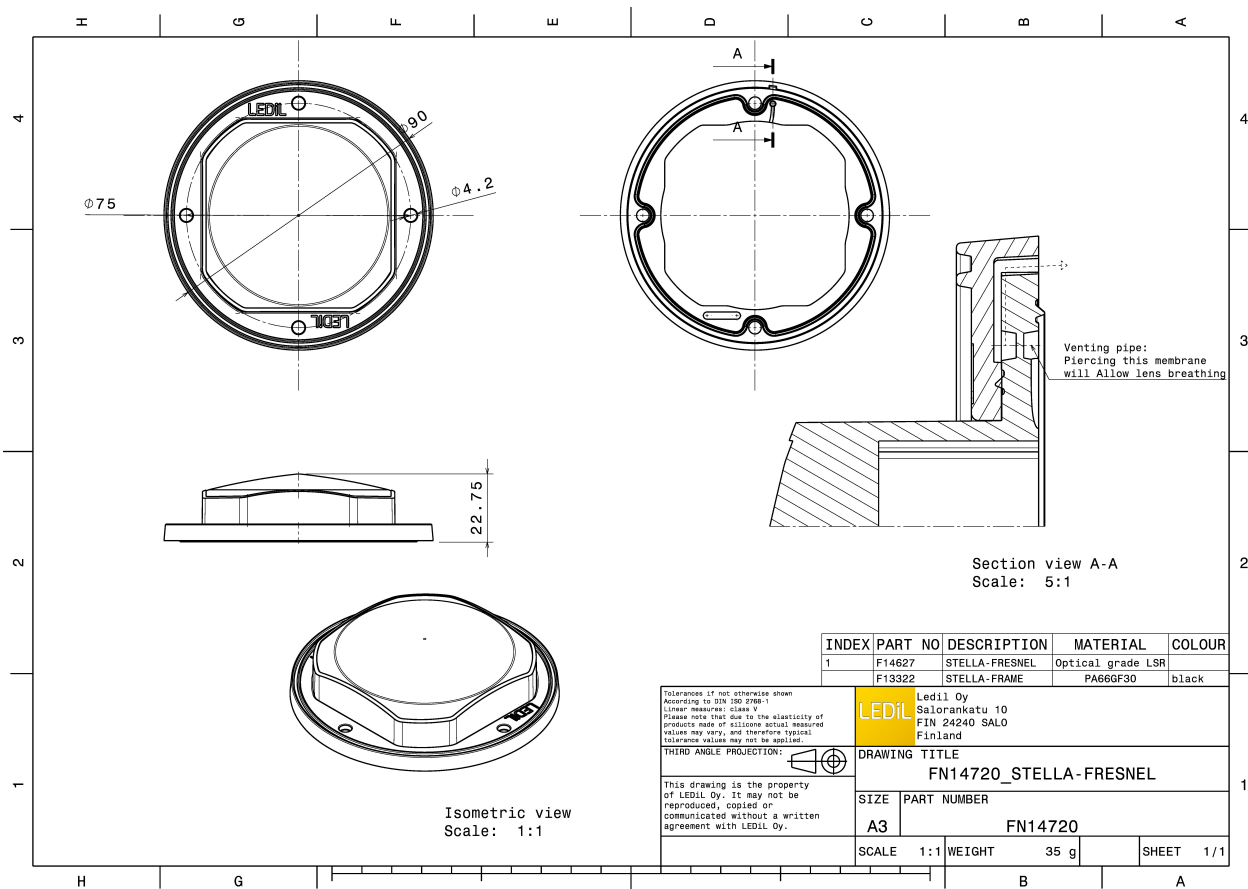


### MATERIAL SPECIFICATIONS:

| Component      | Type        | Material | Colour | Finish |
|----------------|-------------|----------|--------|--------|
| 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 | 80         | 80  | 10  | 4.0             |
| » Box size: 480 x 280 x 300 mm |             |            |     |     |                 |

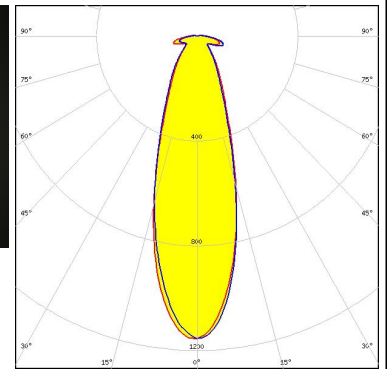
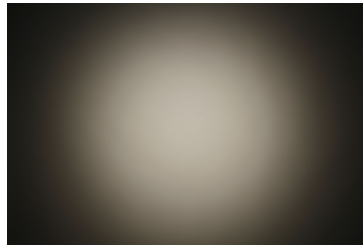


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

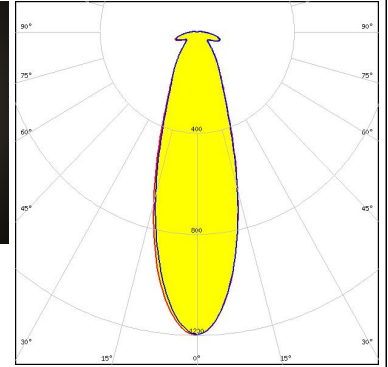
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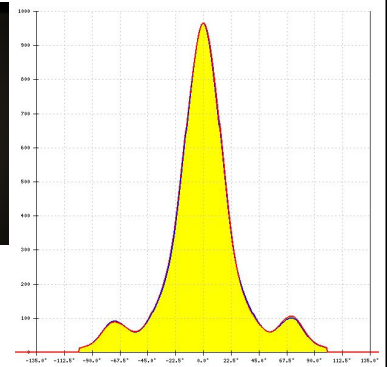
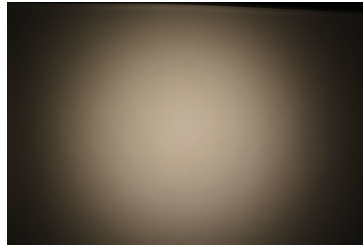
LED V18 Gen7  
FWHM / FWTM 32.0° / 77.0°  
Efficiency 84 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2350



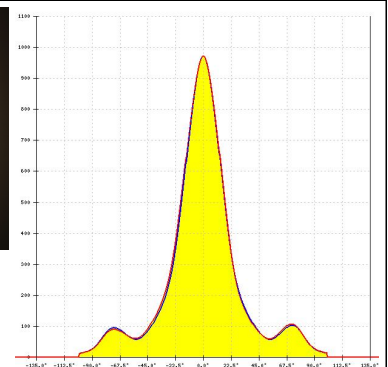
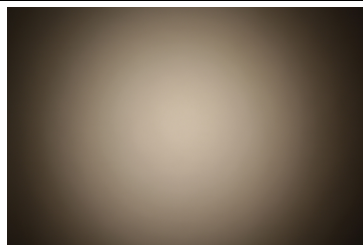
LED V18 Gen7  
FWHM / FWTM 32.0° / 77.0°  
Efficiency 85 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
Bender Wirth: 439 Typ L3



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



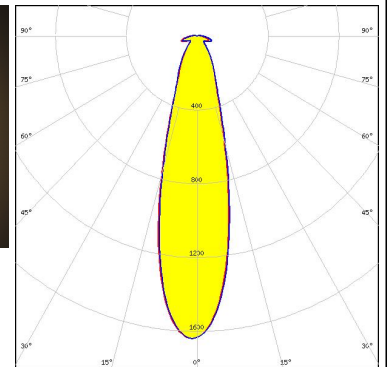
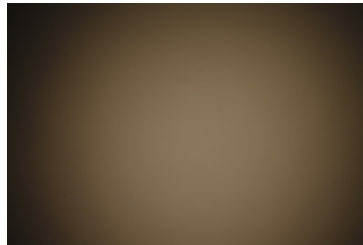
LED V22 Gen7  
FWHM / FWTM 36.0° / 118.0°  
Efficiency 84 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
Bender Wirth: 431 Typ Z1



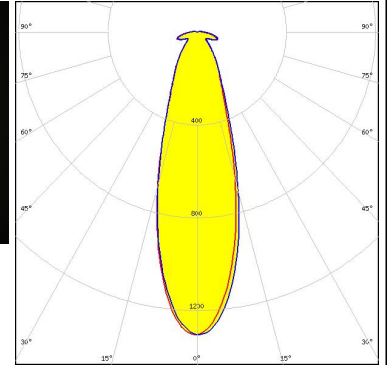
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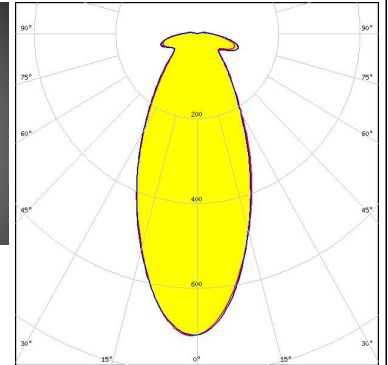
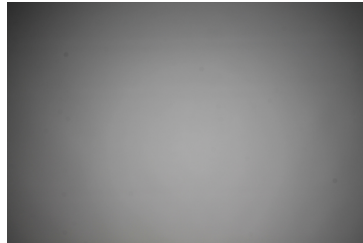
LED Vero SE 13  
FWHM / FWTM 27.0° / 63.0°  
Efficiency 85 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



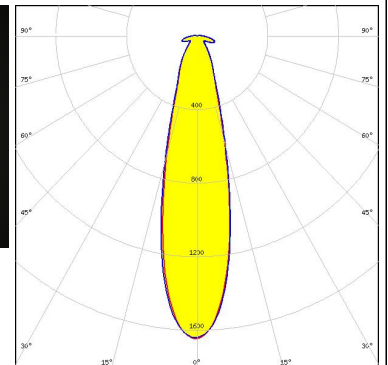
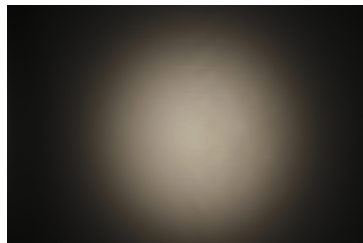
LED Vero SE 18  
FWHM / FWTM 31.0° / 73.0°  
Efficiency 86 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



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



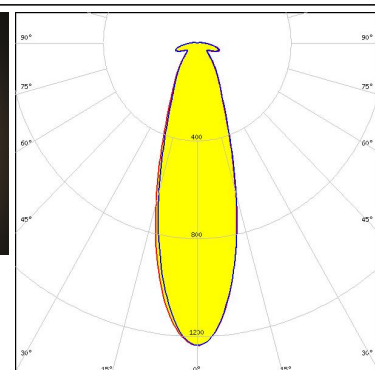
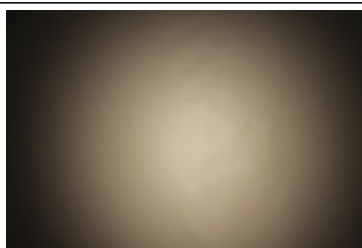
LED VERO13  
FWHM / FWTM 26.0° / 62.0°  
Efficiency 84 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



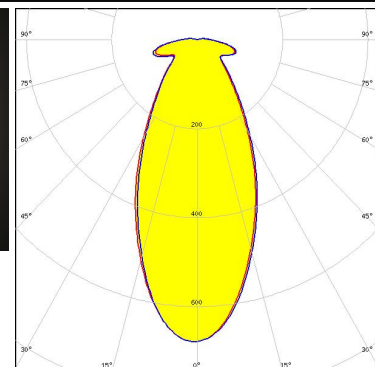
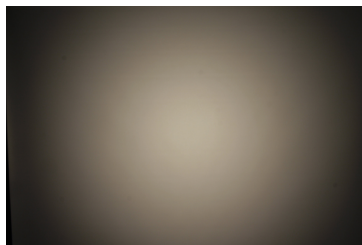
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LED VERO18  
FWHM / FWTM 31.0° / 75.0°  
Efficiency 85 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

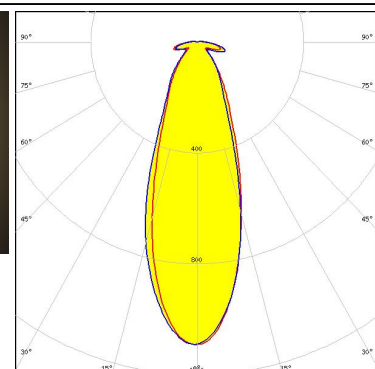
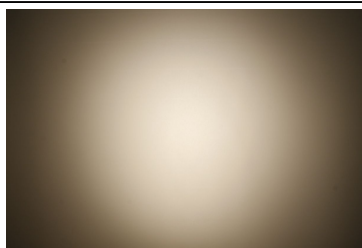


LED VERO29  
FWHM / FWTM 48.0° / 165.0°  
Efficiency 87 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

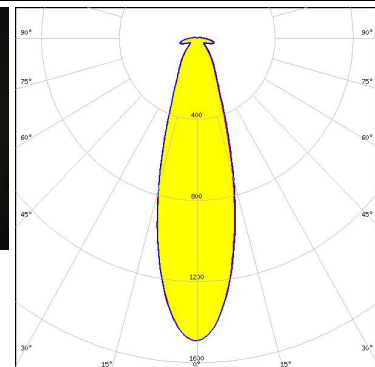
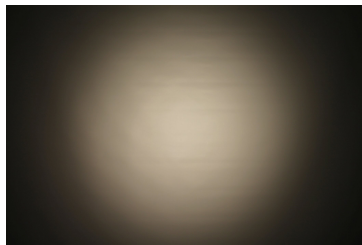


#### CITIZEN

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



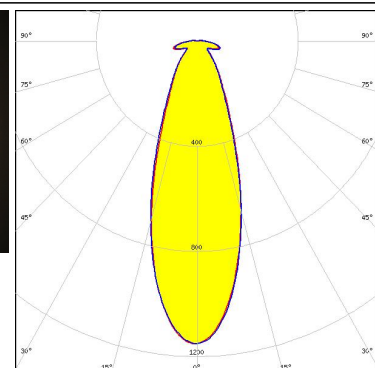
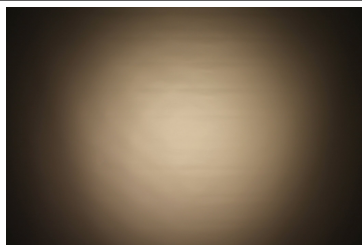
LED CMA2550  
FWHM / FWTM 30.0° / 67.0°  
Efficiency 86 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



#### PHOTOMETRIC DATA (MEASURED):

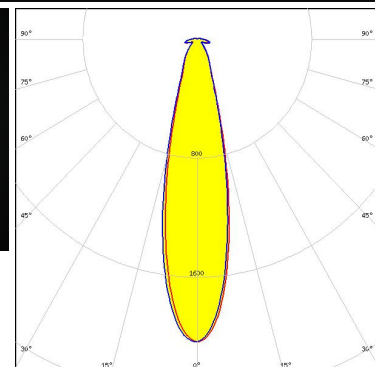
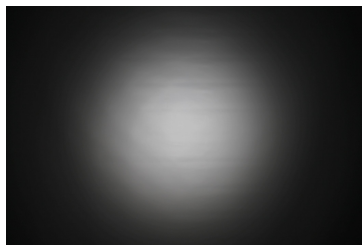
##### CREE LED

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



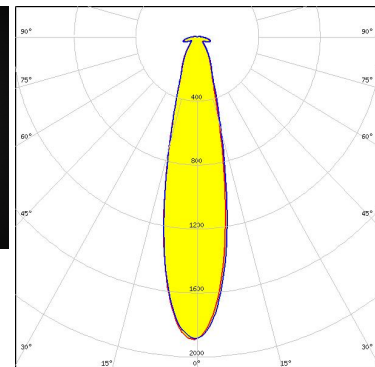
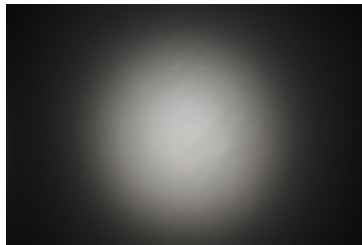
##### CREE LED

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



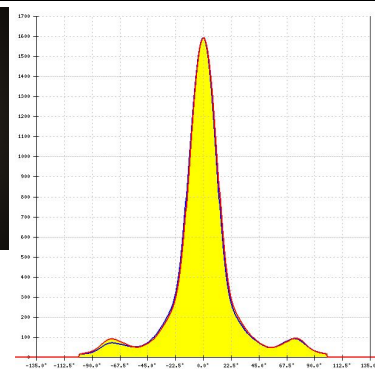
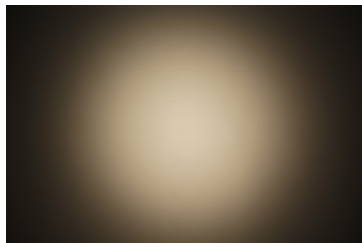
##### CREE LED

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 White  
Required components:



##### CREE LED

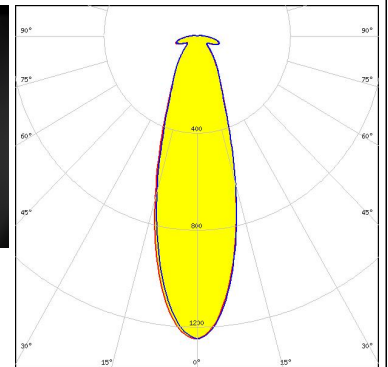
LED CXA/B 1830  
FWHM / FWTM 26.0° / 64.0°  
Efficiency 85 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C14305\_STELLA-CLAMP-CXA15-18



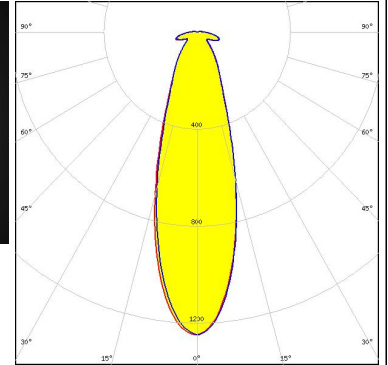
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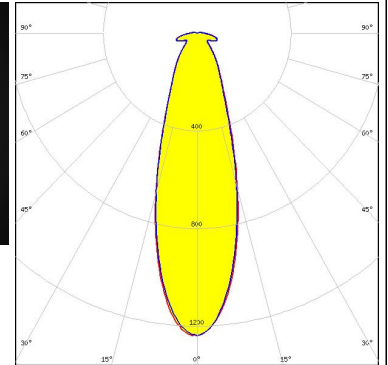
LED CXA/B 25xx  
FWHM / FWTM 31.0° / 75.0°  
Efficiency 86 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



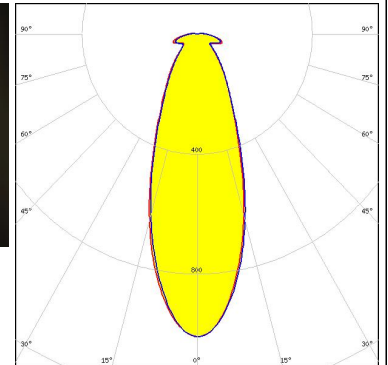
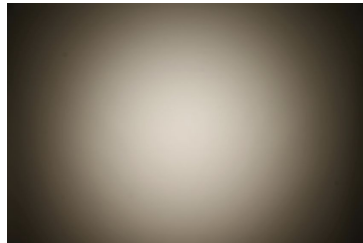
LED CXA/B 25xx  
FWHM / FWTM 33.0° / 120.0°  
Efficiency 84 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



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



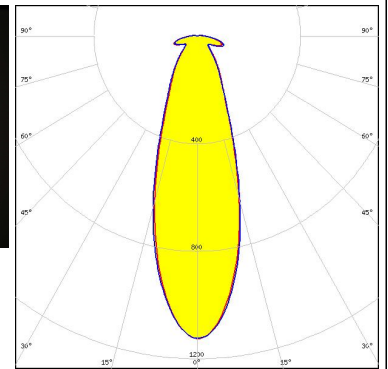
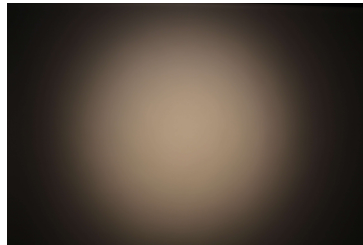
LED CXA/B 30xx  
FWHM / FWTM 37.0° / 87.0°  
Efficiency 88 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2151



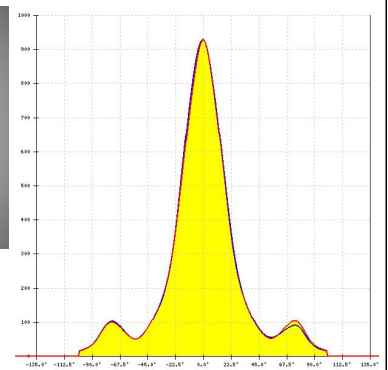
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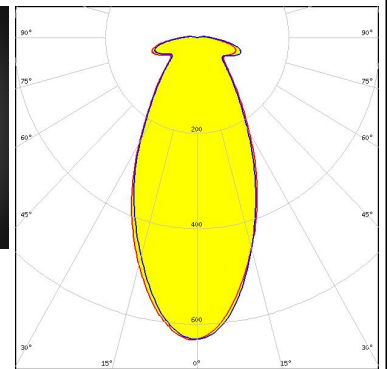
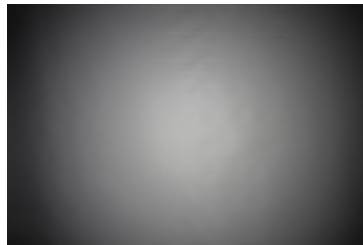
LED LUXEON CoB 1211  
 FWHM / FWTM 33.0° / 79.0°  
 Efficiency 85 %  
 Peak intensity 1.1 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 431 Typ L3



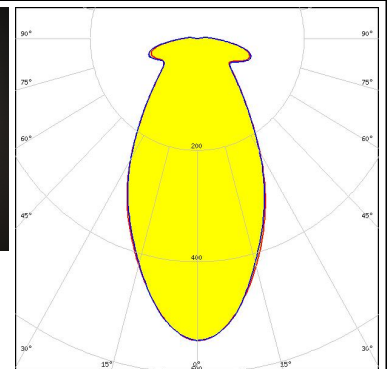
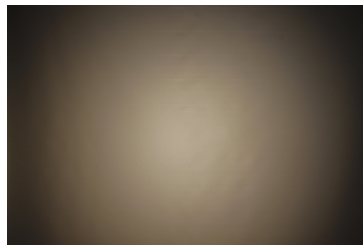
LED LUXEON CoB 1216/1812  
 FWHM / FWTM 39.0° / 139.0°  
 Efficiency 86 %  
 Peak intensity 0.9 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



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



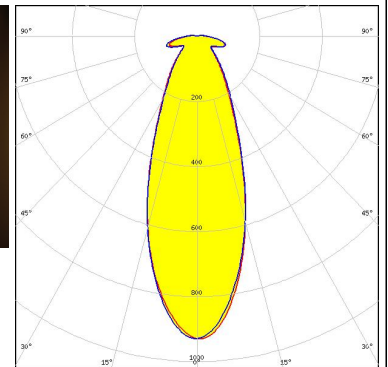
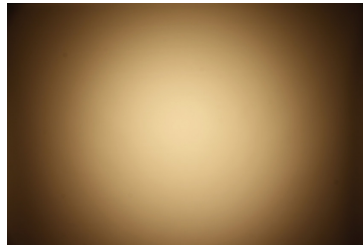
LED LUXEON CoB 1825  
 FWHM / FWTM 56.0° / 169.0°  
 Efficiency 84 %  
 Peak intensity 0.5 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



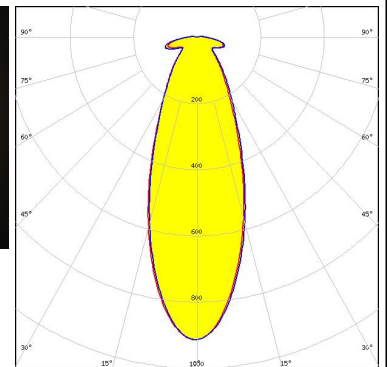
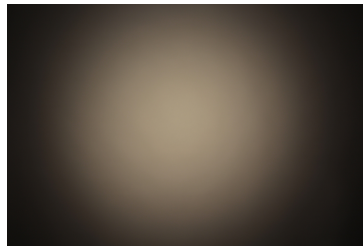
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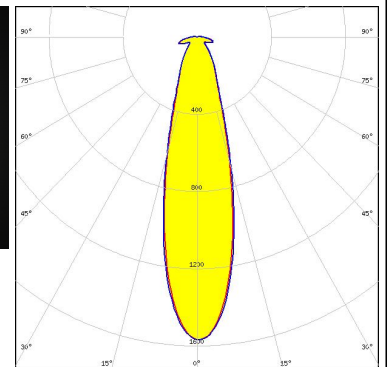
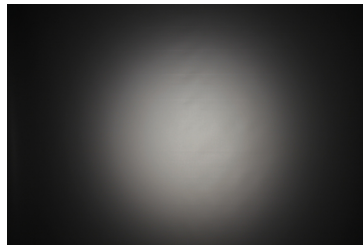
LED CxM-22 (28x28)  
 FWHM / FWTM 38.0° / 136.0°  
 Efficiency 86 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 431 Typ L3



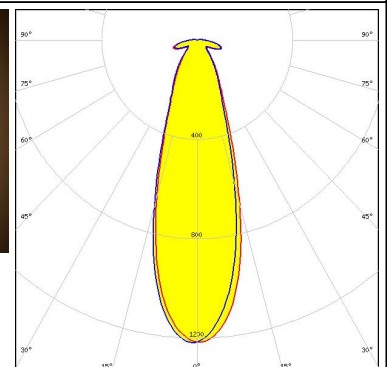
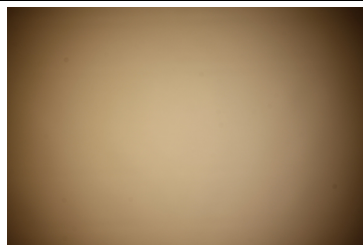
LED COB H-Type  
 FWHM / FWTM 38.0° / 120.0°  
 Efficiency 85 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



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



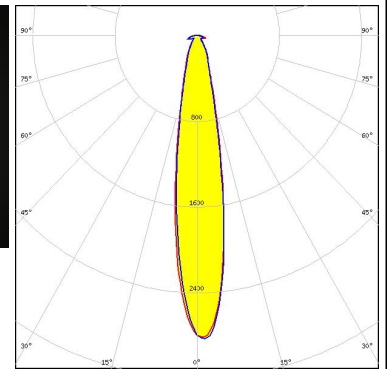
LED Soleriq S19  
 FWHM / FWTM 32.1° / 72.5°  
 Efficiency 84 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### PHOTOMETRIC DATA (MEASURED):

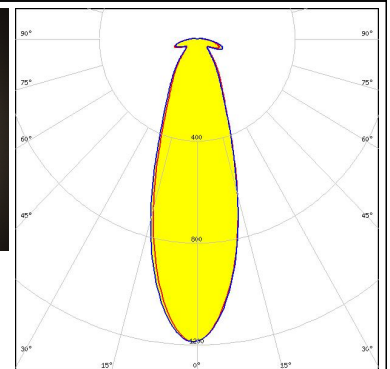
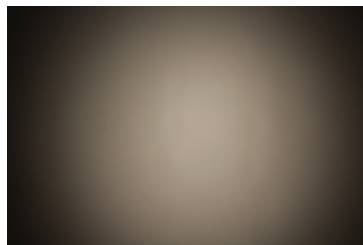
#### PHILIPS

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 White  
 Required components:



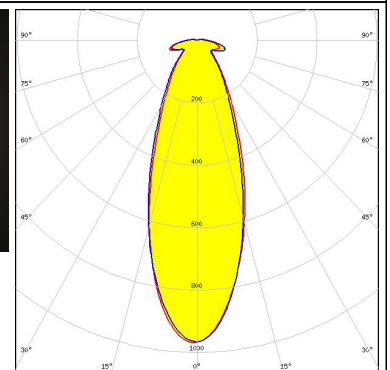
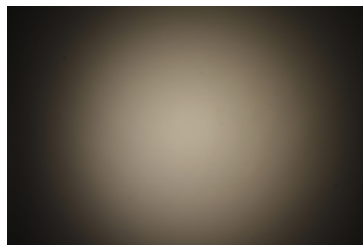
#### PHILIPS

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 White  
 Required components:



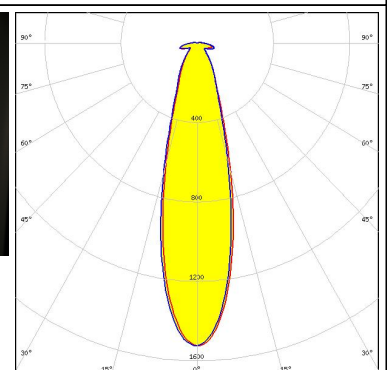
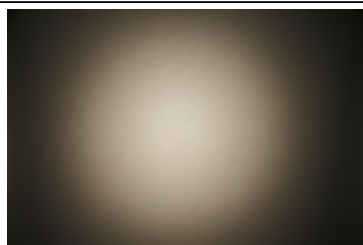
#### PHILIPS

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



#### SAMSUNG

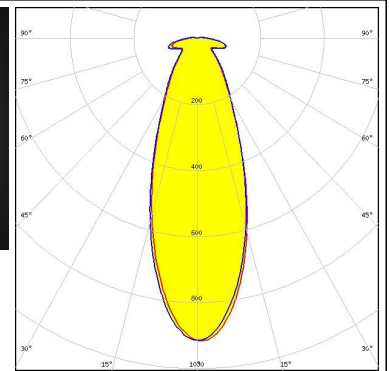
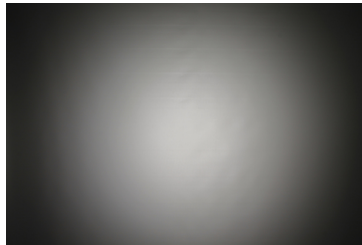
LED LC016D / LC019D / LC026D / LC033D  
 FWHM / FWTM 27.0° / 65.0°  
 Efficiency 83 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



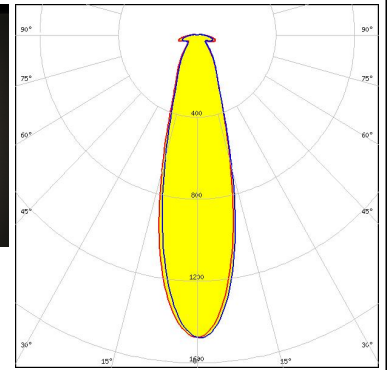
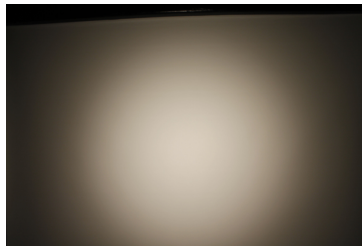
#### PHOTOMETRIC DATA (MEASURED):

#### SAMSUNG

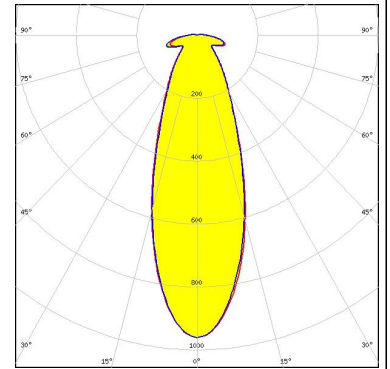
LED LC040D / LC060D / LC080D  
 FWHM / FWTM 37.0° / 119.0°  
 Efficiency 84 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



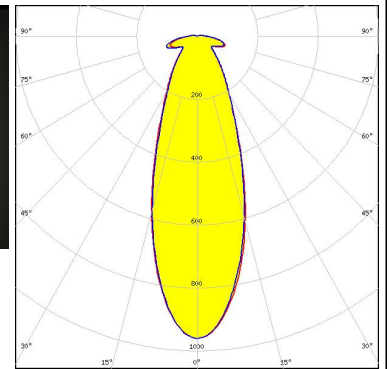
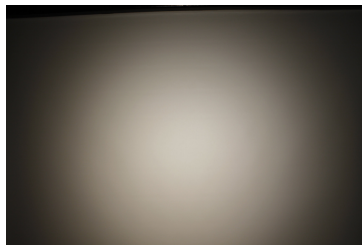
SEOUL SEMICONDUCTOR  
 LED MJT COB LES 14.5  
 FWHM / FWTM 28.0° / 67.0°  
 Efficiency 84 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2103CT



SEOUL SEMICONDUCTOR  
 LED MJT COB LES 22  
 FWHM / FWTM 36.0° / 118.0°  
 Efficiency 84 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204CT



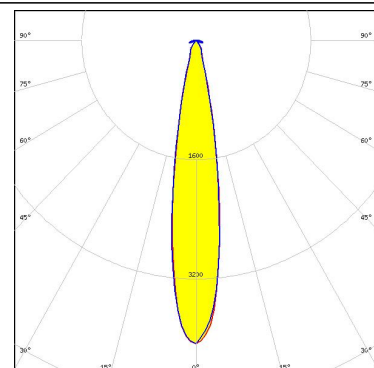
SEOUL SEMICONDUCTOR  
 LED MJT COB LES 22  
 FWHM / FWTM 36.0° / 118.0°  
 Efficiency 84 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204CT



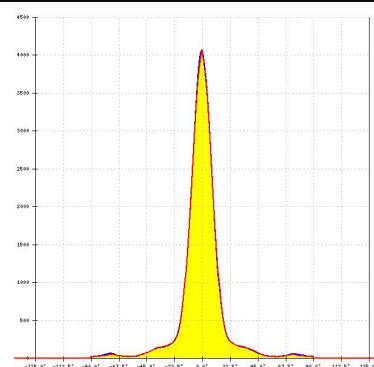
#### PHOTOMETRIC DATA (SIMULATED):



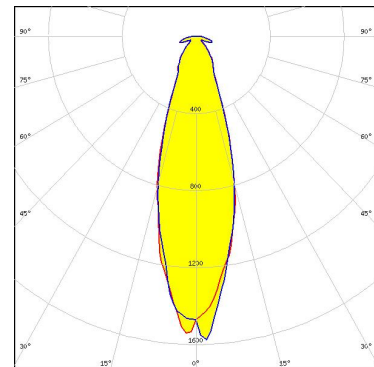
LED V10 Gen7  
FWHM / FWTM 18.0° / 35.0°  
Efficiency 85 %  
Peak intensity 4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
Bender Wirth: 486 Typ L1



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

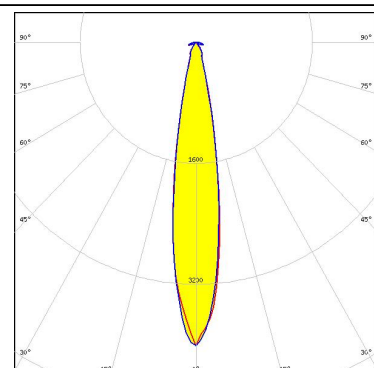


LED V22 Gen7  
FWHM / FWTM 30.0° / 70.0°  
Efficiency 84 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
IDEAL: 50-2204CT



## CITIZEN

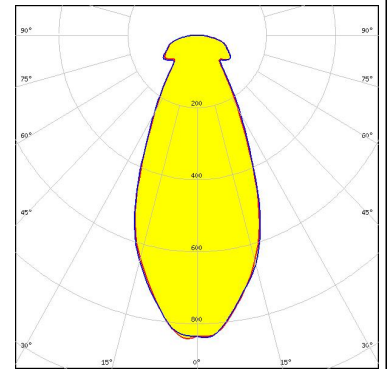
LED CLL02x/CLU02x (LES10)  
FWHM / FWTM 17.0° / 35.0°  
Efficiency 86 %  
Peak intensity 4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



#### PHOTOMETRIC DATA (SIMULATED):

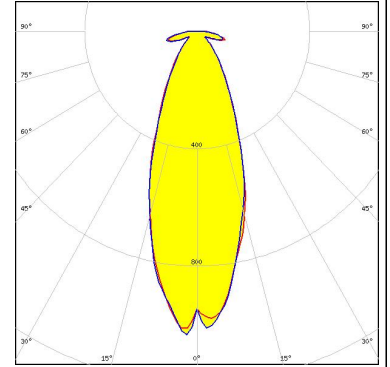
#### CITIZEN

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



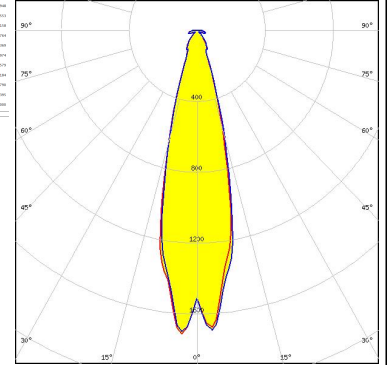
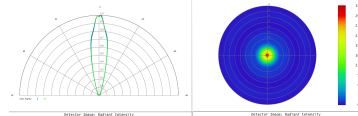
#### CREE LED

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



#### LITEON

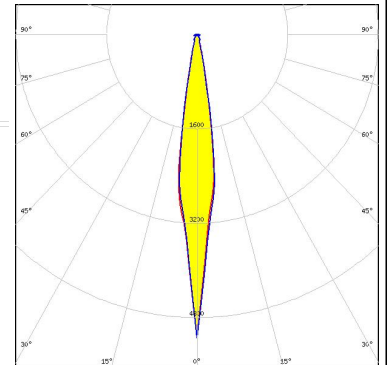
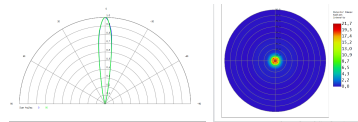
|                      |                   |
|----------------------|-------------------|
| LED                  | LTPL-G35UV275GR-E |
| FWHM / FWTM          | 23.0° / 40.0°     |
| Efficiency           | 59 %              |
| LEDs/each optic      | 13                |
| Light colour         | UV-C 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



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

#### LITEON

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



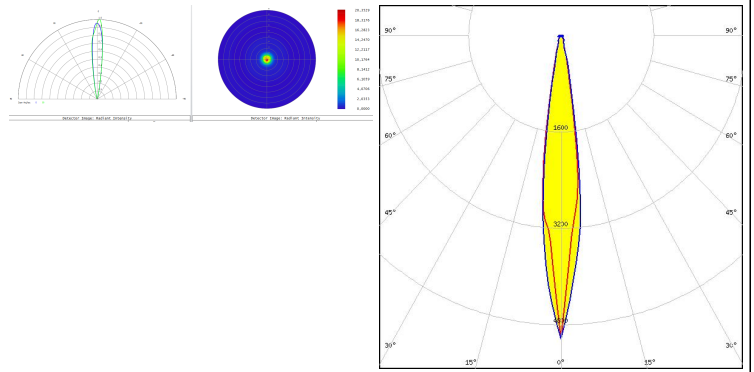
The UVC LED result tolerance is  $\pm 10$  %

#### PHOTOMETRIC DATA (SIMULATED):

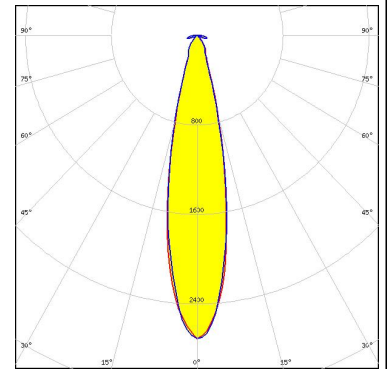


LED LTPL-G35UV275GR-E  
FWHM / FWTM 14.0° / 25.0°  
Efficiency 60 %  
LEDs/each optic 3  
Light colour UV-C  
Required components:

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

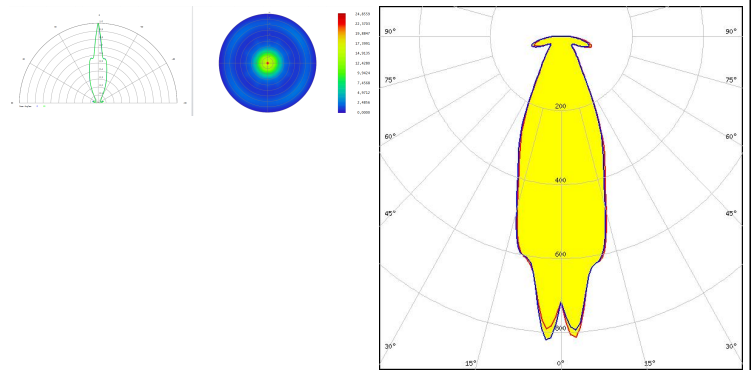


LED LUXEON CoB 1208  
FWHM / FWTM 23.0° / 43.0°  
Efficiency 82 %  
Peak intensity 2.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



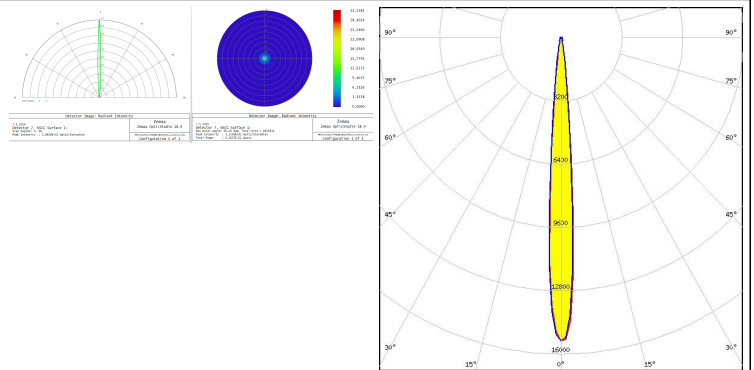
LED XFM-5050 3 Die  
FWHM / FWTM 26.0° / 62.0°  
Efficiency 66 %  
LEDs/each optic 21  
Light colour UV-C  
Required components:

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

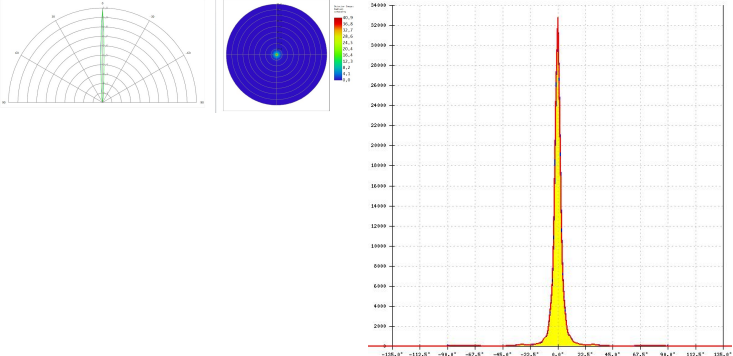
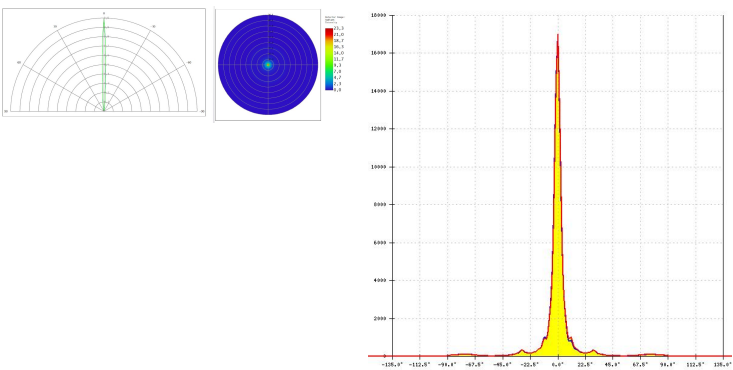
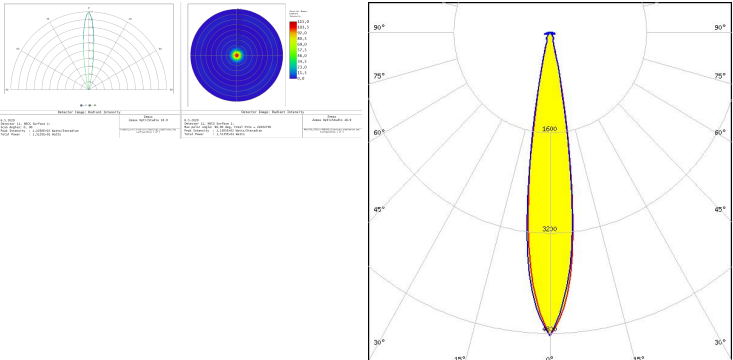


LED NCSU334A  
FWHM / FWTM 4.0° / 12.0°  
Efficiency 64 %  
LEDs/each optic 1  
Light colour UV-C  
Required components:

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



#### PHOTOMETRIC DATA (SIMULATED):

|                                                                                                                                                                                                                                          |                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <p>SEOL SEMICONDUCTOR</p> <p>LED CUN66A1B</p> <p>FWHM / FWTM 4.1° / 12.0°</p> <p>Efficiency 85 %</p> <p>LEDs/each optic 1</p> <p>Light colour UV-A</p> <p>Required components:</p>                                                       |    |
| <p>SEOL SEMICONDUCTOR</p> <p>LED CUN66B1B</p> <p>FWHM / FWTM 4.3° / 13.0°</p> <p>Efficiency 83 %</p> <p>LEDs/each optic 1</p> <p>Light colour UV-A</p> <p>Required components:</p>                                                       |   |
| <p>SEOL SEMICONDUCTOR</p> <p>LED WICOP DY9560-27</p> <p>FWHM / FWTM 15.0° / 26.0°</p> <p>Efficiency 63 %</p> <p>LEDs/each optic 24</p> <p>Light colour UV-C</p> <p>Required components:</p> <p>The UVC LED result tolerance is ±10 %</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.

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:

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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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