

## WINNIE-O

~60° + 20° oval beam. Holder with 35 mm screw hole distance according to Zhaga standard. Compatible with Bender+Wirth 4xx Typ L5 connector.

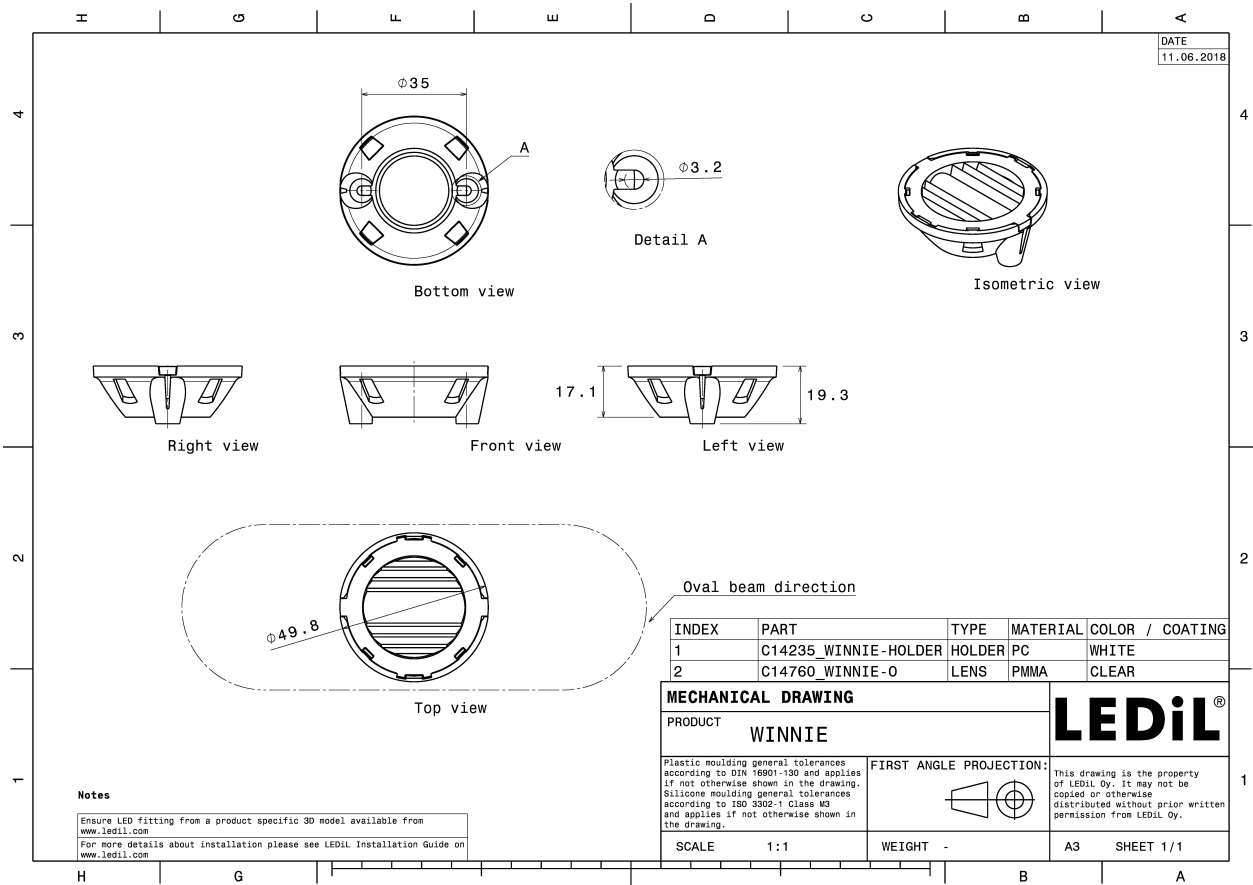
### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 49.8 mm
Height	19.3 mm
Fastening	screw
Colour	white
Box size	
Box weight	0 kg
Quantity in Box	364 pcs
ROHS compliant	yes ⓘ

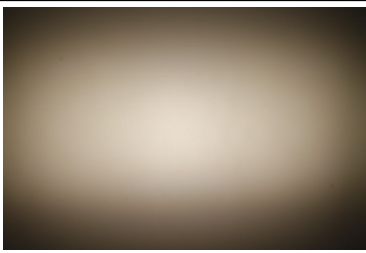
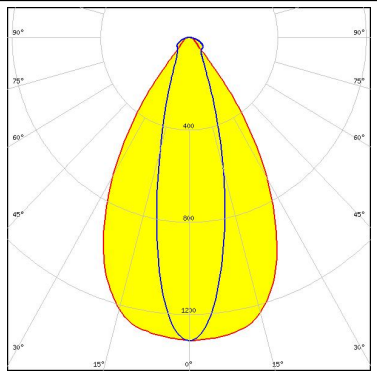

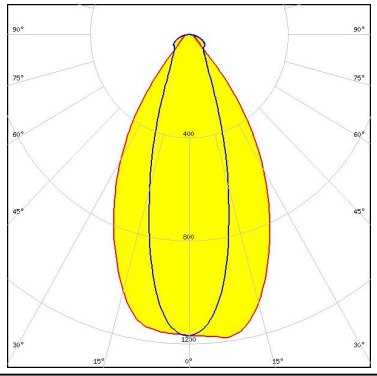
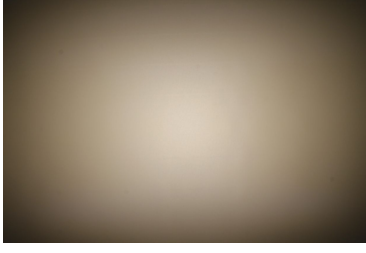
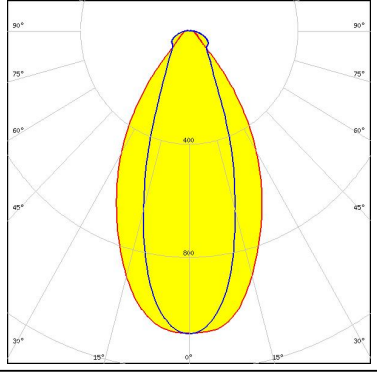
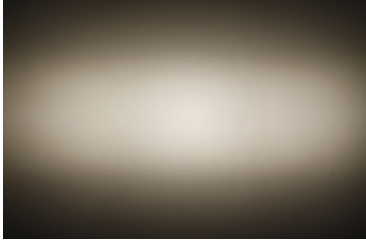
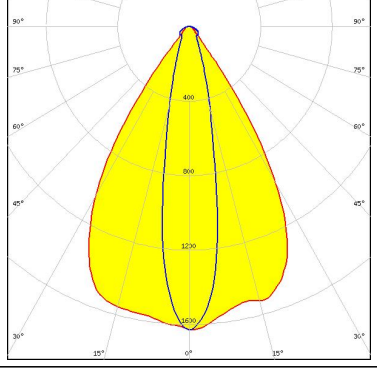


### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour
WINNIE-O	Single lens	PMMA	clear
WINNIE-HOLDER	Holder	PC	white



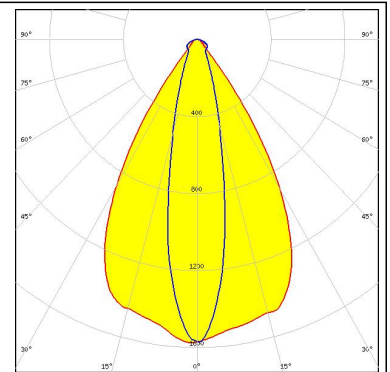
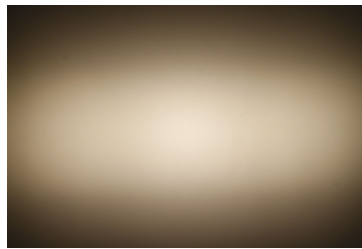
### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V13 Gen6 FWHM 62.0 + 27.0° Efficiency 88 % Peak intensity 1.300 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>bridgelux.</p> <p>LED V15 Gen6 FWHM 59.0 + 31.0° Efficiency 89 % Peak intensity 1.200 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>bridgelux.</p> <p>LED V18 Gen6 FWHM 57.0 + 35.0° Efficiency 89 % Peak intensity 1.100 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>bridgelux.</p> <p>LED V8 Gen6 FWHM 65.0 + 21.0° Efficiency 89 % Peak intensity 1.600 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

#### PHOTOMETRIC DATA (MEASURED):

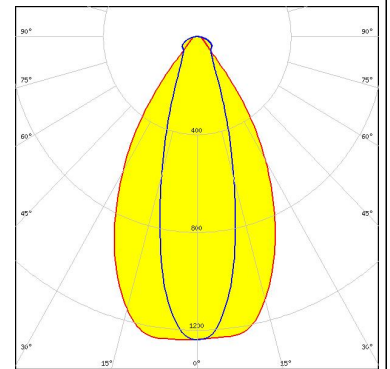
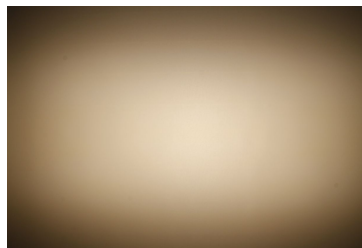
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM 63.0 + 22.0°  
 Efficiency 90 %  
 Peak intensity 1.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 434 Typ L5



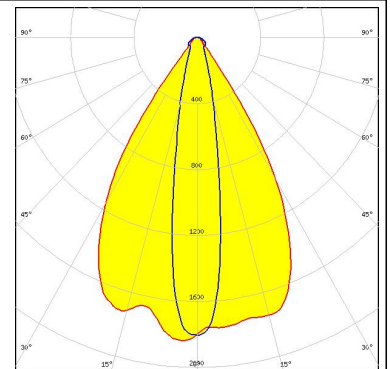
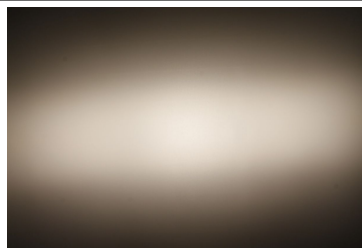
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 59.0 + 29.0°  
 Efficiency 90 %  
 Peak intensity 1.200 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 433 Typ L5



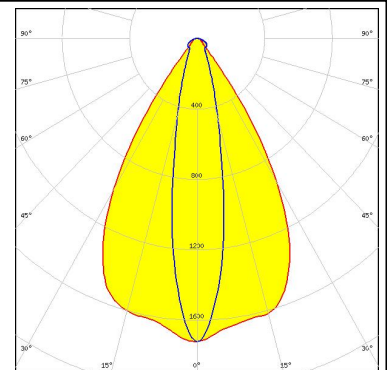
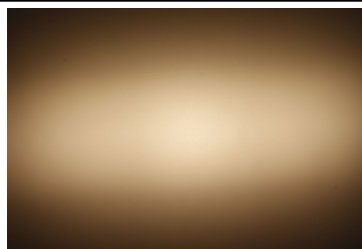
#### CITIZEN

LED CLU700/701  
 FWHM 64.0 + 18.0°  
 Efficiency 91 %  
 Peak intensity 1.800 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### CITIZEN

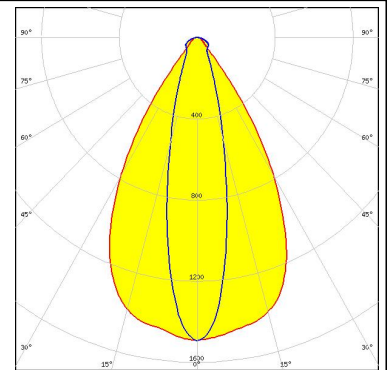
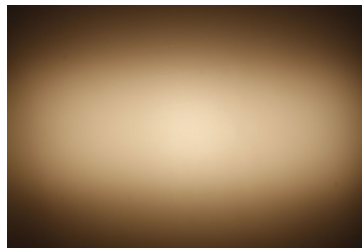
LED CLU710/711  
 FWHM 63.0 + 20.0°  
 Efficiency 91 %  
 Peak intensity 1.700 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 470 Typ L5



#### PHOTOMETRIC DATA (MEASURED):

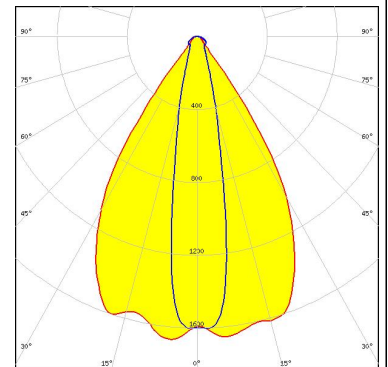
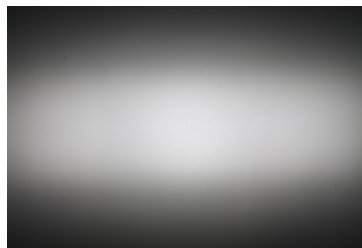
#### CITIZEN

LED CLU720/721  
 FWHM 61.0 + 23.0°  
 Efficiency 90 %  
 Peak intensity 1.500 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 433 Typ L5



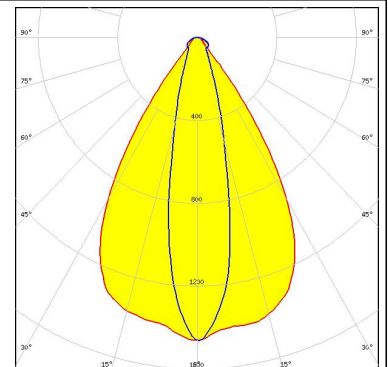
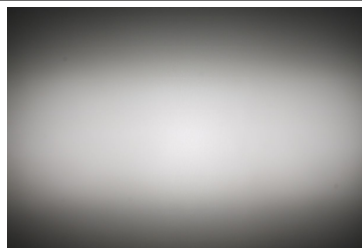
#### CREE

LED CXA/B 13xx  
 FWHM 66.0 + 20.0°  
 Efficiency 90 %  
 Peak intensity 1.700 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



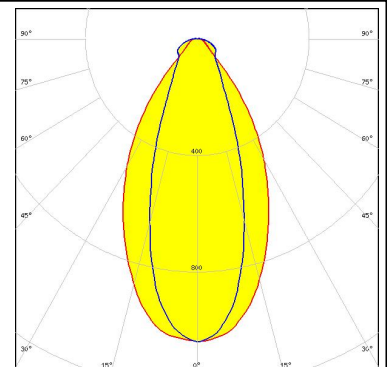
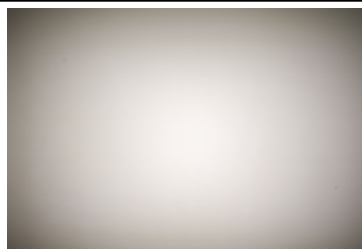
#### CREE

LED CXA/B 15xx  
 FWHM 65.0 + 23.0°  
 Efficiency 89 %  
 Peak intensity 1.500 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

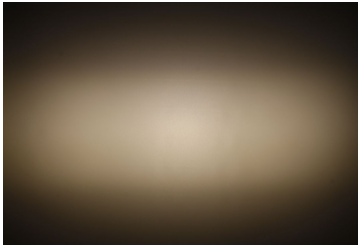
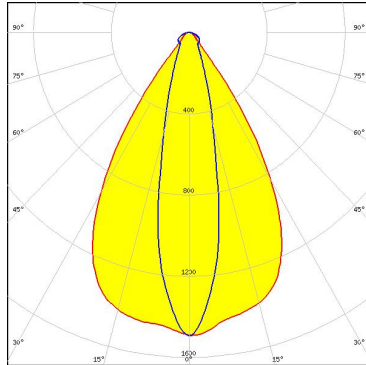
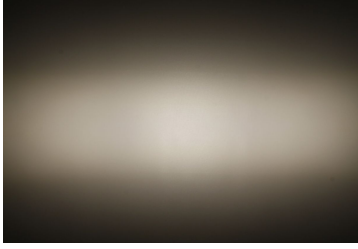
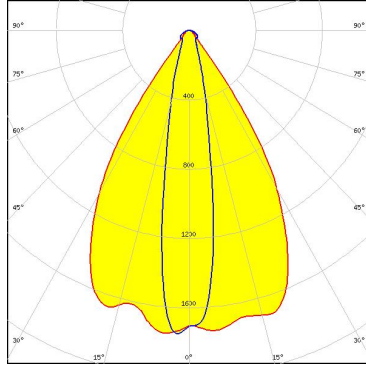
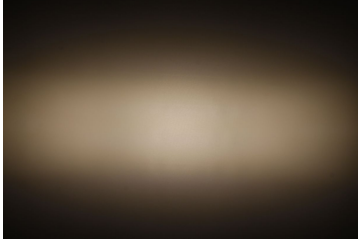
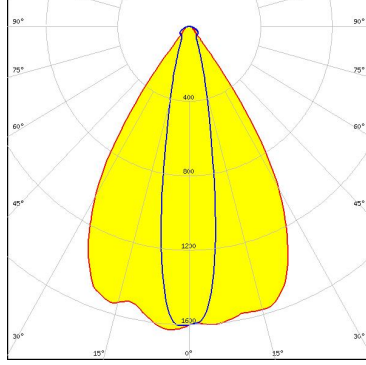

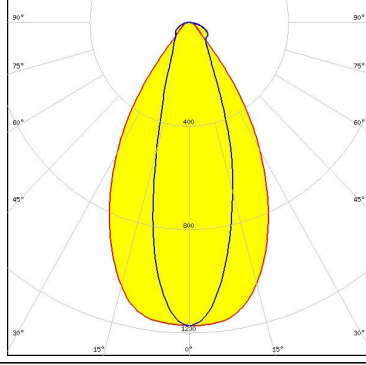


#### CREE


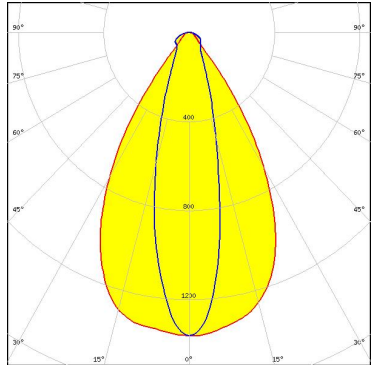
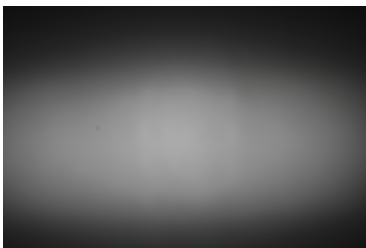
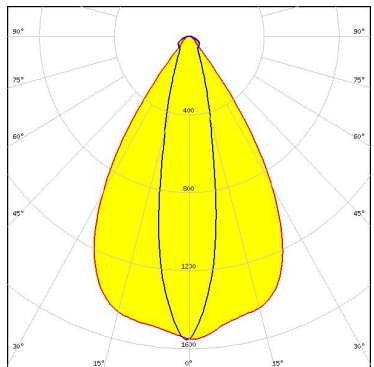

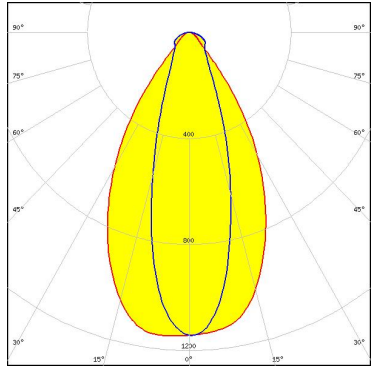

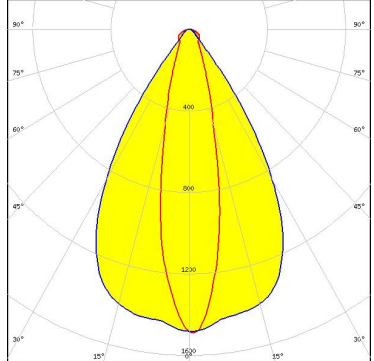
LED CXA/B 25xx  
 FWHM 57.0 + 37.0°  
 Efficiency 89 %  
 Peak intensity 1.000 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:




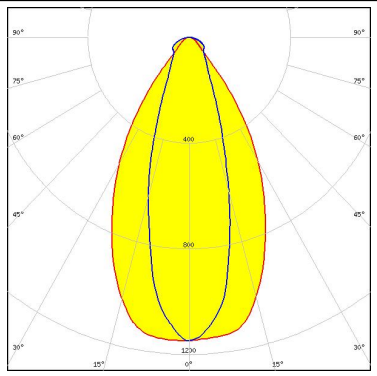

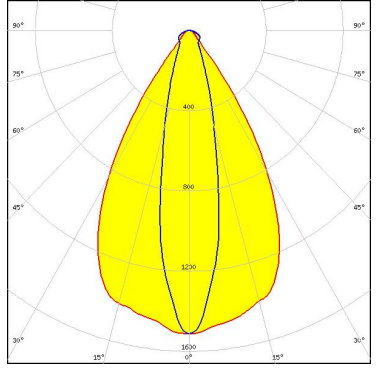
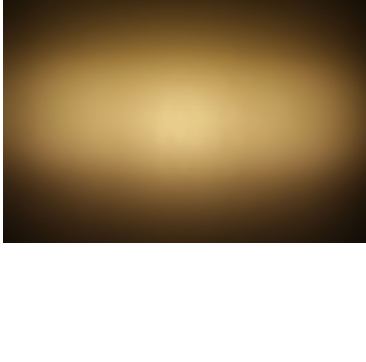
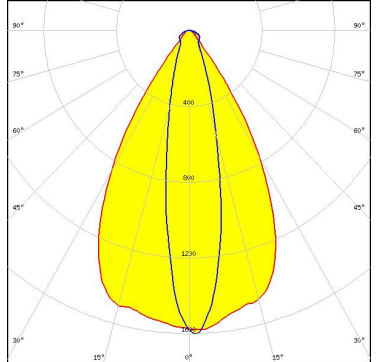
#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202/1203</p> <p>FWHM 64.0 + 23.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.500 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202s</p> <p>FWHM 65.0 + 19.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 1800.000 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB Compact</p> <p>FWHM 65.0 + 20.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.600 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>NICHIA</b></p> <p>LED COB J-Type</p> <p>FWHM 59.0 + 31.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.200 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)            FWHM 62.0 + 25.0°            Efficiency 89 %            Peak intensity 1.400 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)            FWHM 64.0 + 22.0°            Efficiency 90 %            Peak intensity 1.600 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>SAMSUNG</b></p> <p>LED COB D Series LES 14.5 mm            FWHM 59.0 + 31.0°            Efficiency 85 %            Peak intensity 1.150 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>SAMSUNG</b></p> <p>LED COB D Series LES 9.8 mm            FWHM 63.0 + 23.0°            Efficiency 87 %            Peak intensity 1.500 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		

#### PHOTOMETRIC DATA (MEASURED):

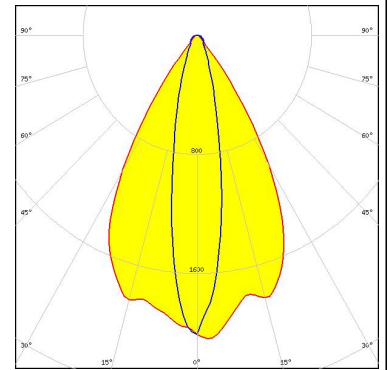
<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED MJT COB LES 14.5            FWHM 58.0 + 32.0°            Efficiency 86 %            Peak intensity 1.100 cd/lm            LEDs/each optic 1            Light colour White            Required components:            Bender Wirth: 433 Typ L5</p>		
<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED MJT COB LES 9.8            FWHM 62.0 + 23.0°            Efficiency 89 %            Peak intensity 1.500 cd/lm            LEDs/each optic 1            Light colour White            Required components:            Bender Wirth: 434 Typ L5</p>		
<p><b>TRIDONIC</b></p> <p>LED SLE G5 LES11            FWHM 61.0 + 21.0°            Efficiency 89 %            Peak intensity 1.600 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		



#### PHOTOMETRIC DATA (SIMULATED):



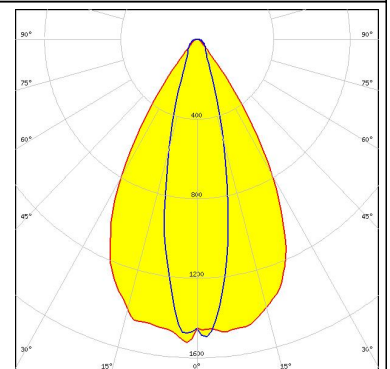
**LED** VERO10  
**FWHM** 60.0 + 20.0°  
**Efficiency** 100 %  
**Peak intensity** 2.050 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**



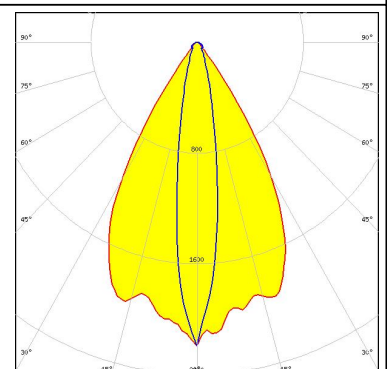
**LED** LUXEON M/MX  
**FWHM** 20.0 + 64.0°  
**Efficiency** 92 %  
**Peak intensity** 1.894 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**



**LED** Soleriq S9  
**FWHM** 61.0 + 24.0°  
**Efficiency** 88 %  
**Peak intensity** 1.600 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**



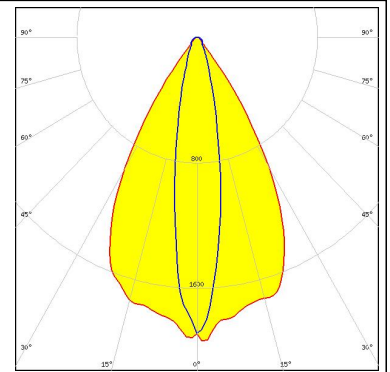
**LED** LC010C  
**FWHM** 56.0 + 16.0°  
**Efficiency** 92 %  
**Peak intensity** 2.200 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 Bender Wirth: 479 Typ L5



#### PHOTOMETRIC DATA (SIMULATED):

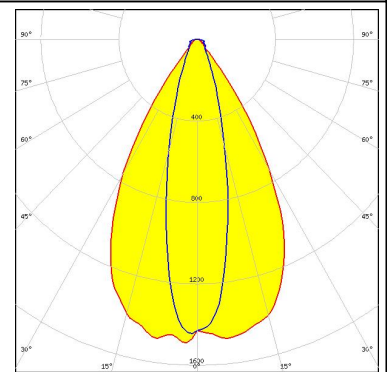
#### SAMSUNG

LED LC020C  
 FWHM 60.0 + 18.0°  
 Efficiency 89 %  
 Peak intensity 1.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 479 Typ L5



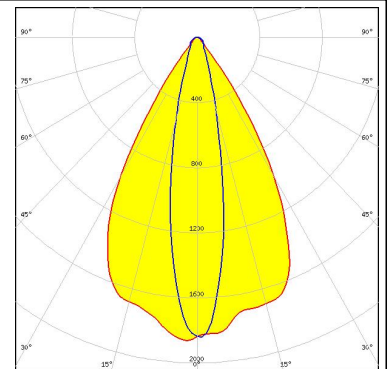
#### SAMSUNG

LED LC040C  
 FWHM 60.0 + 24.0°  
 Efficiency 87 %  
 Peak intensity 1.500 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 479 Typ L5



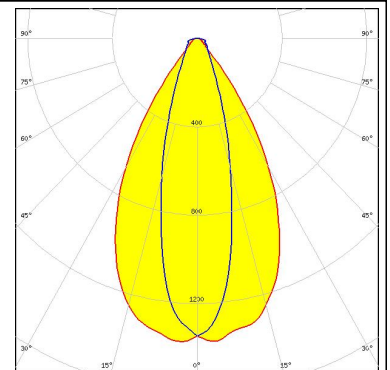
#### TRIDONIC

LED SLE G6 LES10  
 FWHM 20.0 + 60.0°  
 Efficiency 93 %  
 Peak intensity 1.910 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 434 Typ L5



#### TRIDONIC

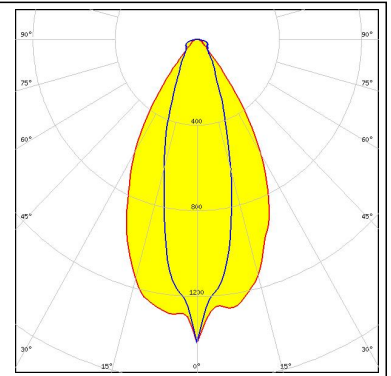
LED SLE G6 LES15  
 FWHM 59.0 + 28.0°  
 Efficiency 89 %  
 Peak intensity 1.400 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 433 Typ L5



**PHOTOMETRIC DATA (SIMULATED):**

**TRIDONIC**

LED SLE G6 LES17  
FWHM 55.0 + 27.0°  
Efficiency 92 %  
Peak intensity 1.420 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
Bender Wirth: 433 Typ L5



### 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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#### LEDiL Oy

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Suite D  
Sycamore IL 60178  
USA

#### Local sales and technical support

[www.ledil.com/  
where\\_to\\_buy](http://www.ledil.com/where_to_buy)

#### Shipping locations

Salo, Finland  
Hong Kong, China

#### Distribution Partners

[www.ledil.com/  
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