

## CARMEN-50-S-C

~24° spot beam. Assembly with holder C compatible with LEDiL HEKLA.

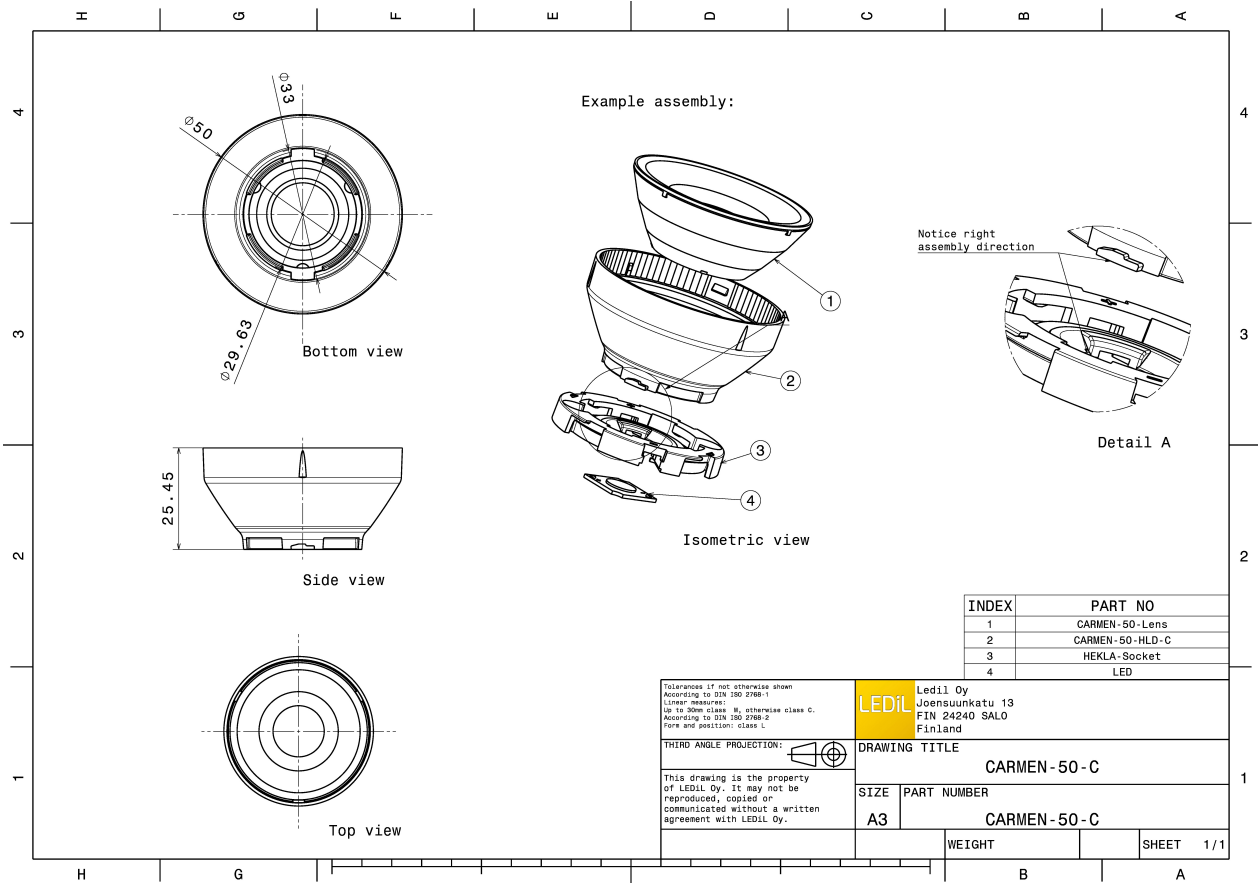
### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 50.0 mm
Height	25.5 mm
Fastening	socket
Colour	black
Box size	476 x 273 x 292 mm
Box weight	6.9 kg
Quantity in Box	308 pcs
ROHS compliant	yes ⓘ


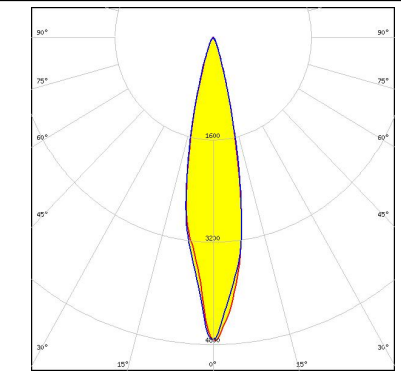
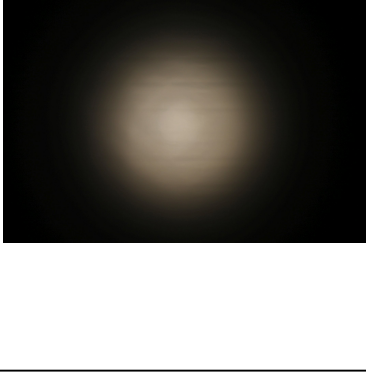
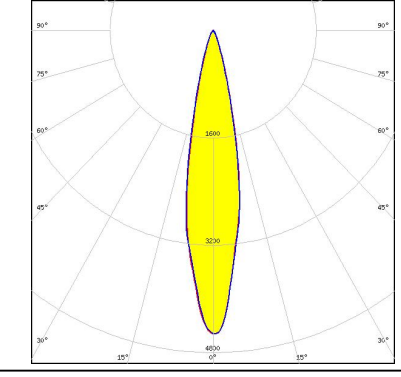
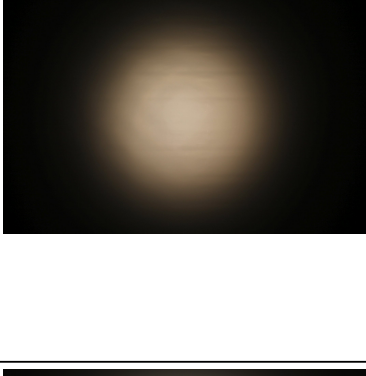
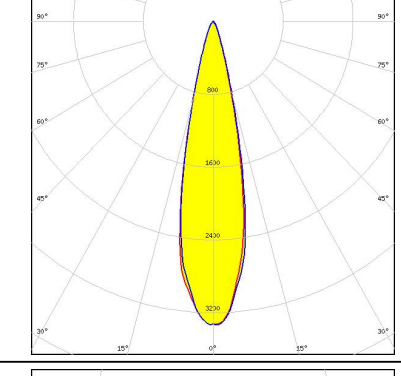

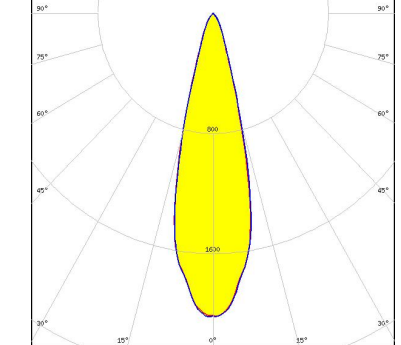


### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour
CARMEN-50-S	Single lens	PMMA	clear
CARMEN-50-HLD-C	Holder	PC	



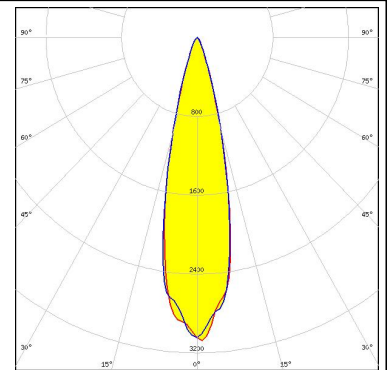
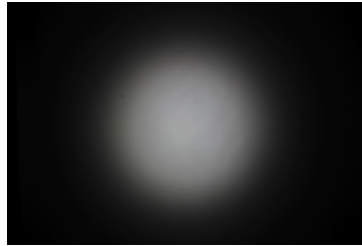
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V4 HD            FWHM 21.0°            Efficiency 79 %            Peak intensity 4.700 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15253_HEKLA-SOCKET-A</p>		
<p>bridgelux.</p> <p>LED V6 HD            FWHM 20.0°            Efficiency 73 %            Peak intensity 4.500 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15255_HEKLA-SOCKET-C</p>		
<p>bridgelux.</p> <p>LED V9 HD            FWHM 23.0°            Efficiency 65 %            Peak intensity 3.300 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15859_HEKLA-SOCKET-I</p>		
<p>bridgelux.</p> <p>LED VERO13            FWHM 27.0°            Efficiency 53 %            Peak intensity 2.027 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C16142_HEKLA-SOCKET-K</p>		

#### PHOTOMETRIC DATA (MEASURED):

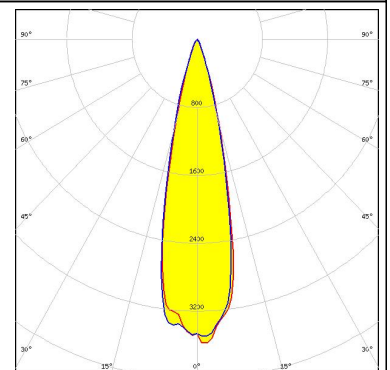
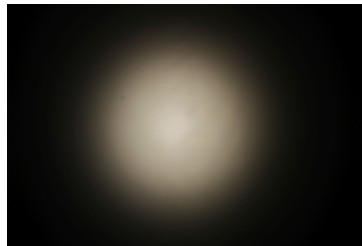
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM 24.0°  
 Efficiency 66 %  
 Peak intensity 3.100 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



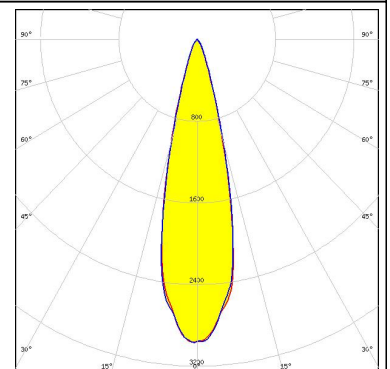
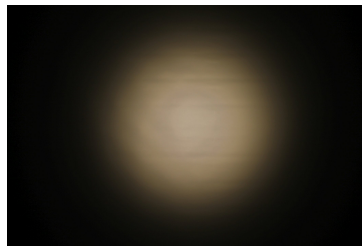
#### CITIZEN

LED CLU700/701  
 FWHM 19.0°  
 Efficiency 73 %  
 Peak intensity 5.300 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



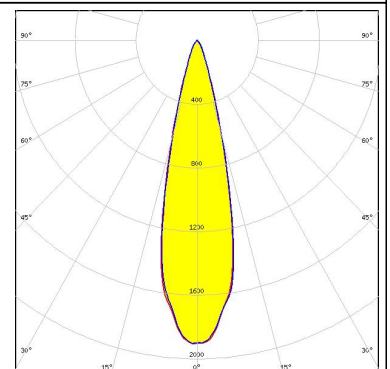
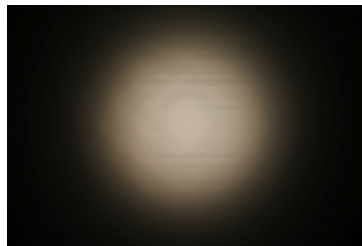
#### CREE

LED CMA1516  
 FWHM 25.0°  
 Efficiency 68 %  
 Peak intensity 3.000 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15256\_HEKLA-SOCKET-D



#### CREE

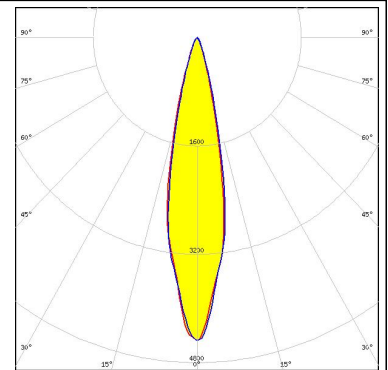
LED CMT14xx  
 FWHM 25.0°  
 Efficiency 44 %  
 Peak intensity 1.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



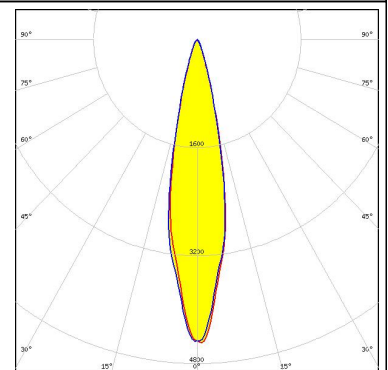
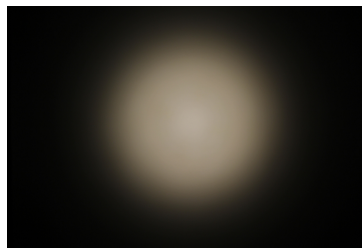
#### PHOTOMETRIC DATA (MEASURED):



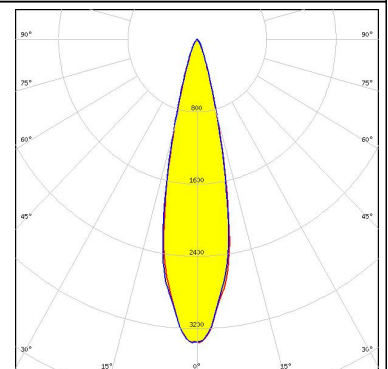
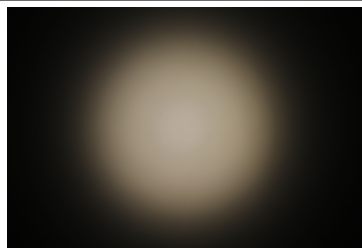
LED CXA/B 13xx  
 FWHM 22.0°  
 Efficiency 77 %  
 Peak intensity 4.500 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15956\_HEKLA-SOCKET-J



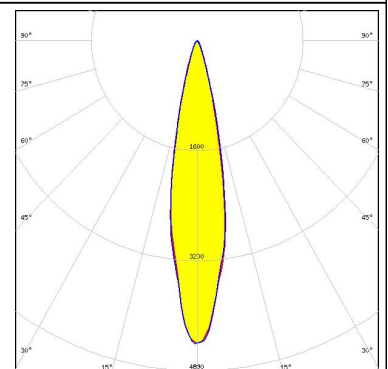
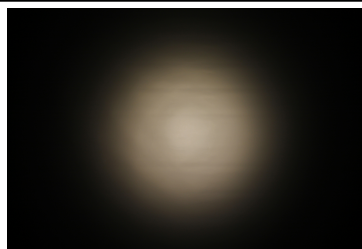
LED CXA/B 13xx  
 FWHM 21.0°  
 Efficiency 76 %  
 Peak intensity 4.500 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15956\_HEKLA-SOCKET-J




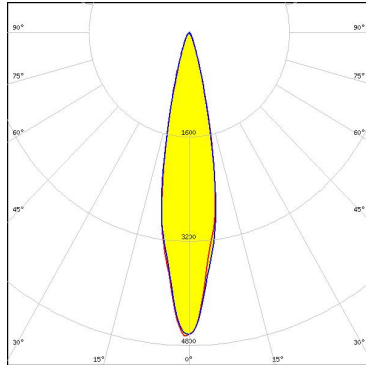

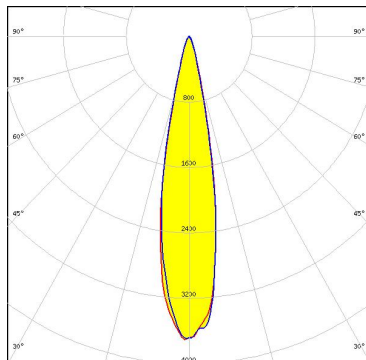

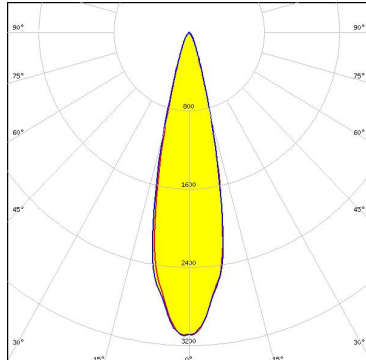

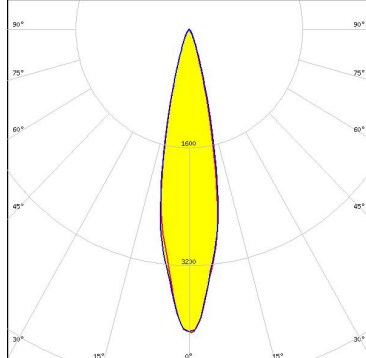
LED CXA/B 15xx  
 FWHM 24.0°  
 Efficiency 69 %  
 Peak intensity 3.400 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15256\_HEKLA-SOCKET-D




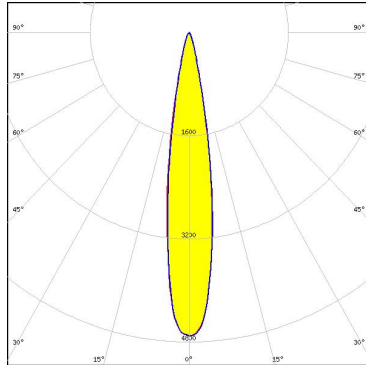
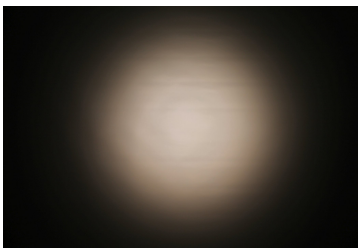
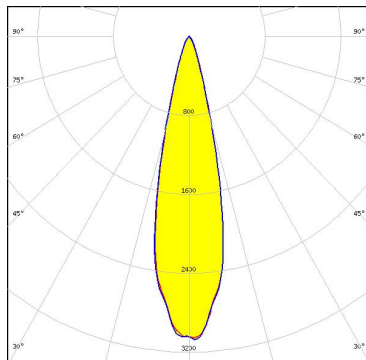

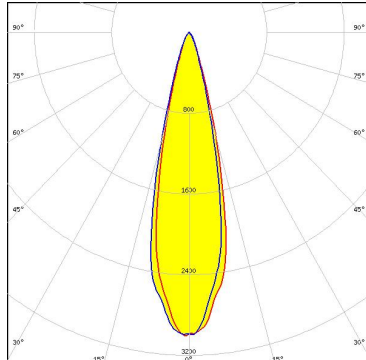

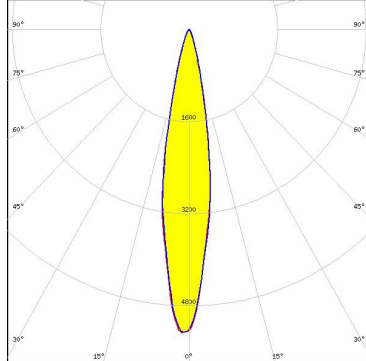
LED LUXEON CoB 1202HD  
 FWHM 21.0°  
 Efficiency 73 %  
 Peak intensity 4.400 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G



#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202s            FWHM 21.0°            Efficiency 75 %            Peak intensity 4.700 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15848_HEKLA-SOCKET-G</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-9 (Dim-To-Warm)            FWHM 21.0°            Efficiency 57 %            Peak intensity 3.700 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C16142_HEKLA-SOCKET-K            Bender Wirth: 490 Typ L8</p>		
<p><b>LUMINUS</b></p> <p>LED CxM-9 (13.5x13.5)            FWHM 24.0°            Efficiency 67 %            Peak intensity 3.100 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15255_HEKLA-SOCKET-C</p>		
<p><b>NICHIA</b></p> <p>LED COB S-Type (LES 7)            FWHM 22.0°            Efficiency 73 %            Peak intensity 4.100 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15848_HEKLA-SOCKET-G</p>		

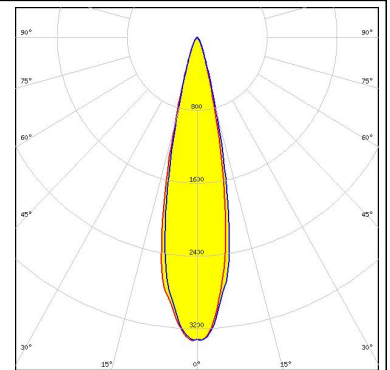
#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED NJCWL024Z-V1MT: COB L-Type Tunable White</p> <p>FWHM 17.0°</p> <p>Efficiency 56 %</p> <p>Peak intensity 4.700 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K Bender Wirth: 497 Typ L8</p>		
<p><b>PHILIPS</b></p> <p>LED Fortimo SLM L09 CoB</p> <p>FWHM 24.0°</p> <p>Efficiency 65 %</p> <p>Peak intensity 3.100 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15858_HEKLA-SOCKET-H</p>		
<p><b>SAMSUNG</b></p> <p>LED COB D Series LES 9.8 mm</p> <p>FWHM 25.0°</p> <p>Efficiency 67 %</p> <p>Peak intensity 3.000 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		
<p><b>SAMSUNG</b></p> <p>LED LC010C G2</p> <p>FWHM 19.0°</p> <p>Efficiency 74 %</p> <p>Peak intensity 5.300 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		

#### PHOTOMETRIC DATA (MEASURED):

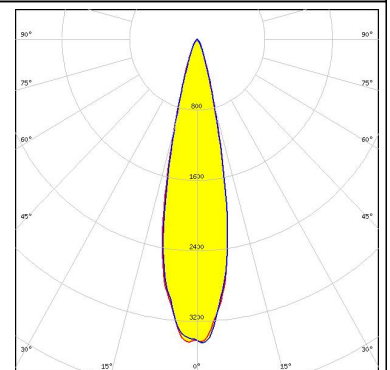
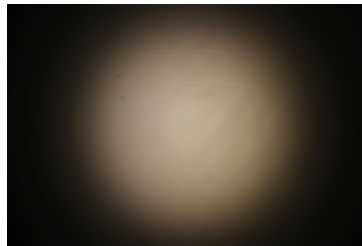
#### SAMSUNG

LED LC020C G2  
 FWHM 23.0°  
 Efficiency 65 %  
 Peak intensity 3.300 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



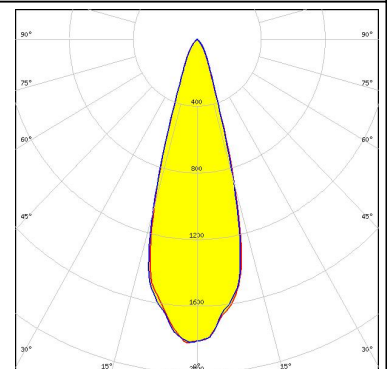
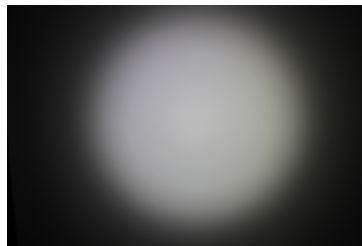
#### TRIDONIC

LED SLE G7 LES09  
 FWHM 23.0°  
 Efficiency 69 %  
 Peak intensity 3.500 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



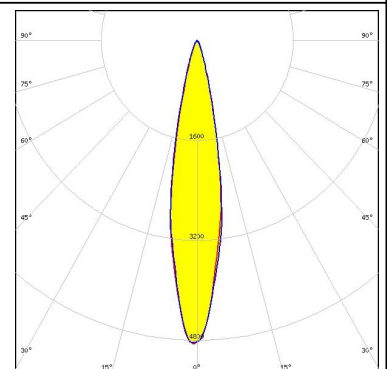
#### TRIDONIC

LED SLE G7 LES13  
 FWHM 31.0°  
 Efficiency 58 %  
 Peak intensity 1.800 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



#### XICATO

LED XOB 6 mm  
 FWHM 19.0°  
 Efficiency 73 %  
 Peak intensity 4.870 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C

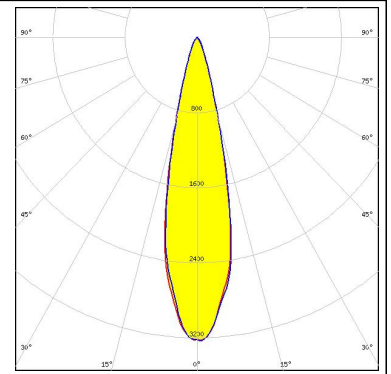




## PHOTOMETRIC DATA (MEASURED):

### XICATO

LED XOB 9.8 mm  
FWHM 24.0°  
Efficiency 67 %  
Peak intensity 3.232 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15255\_HEKLA-SOCKET-C



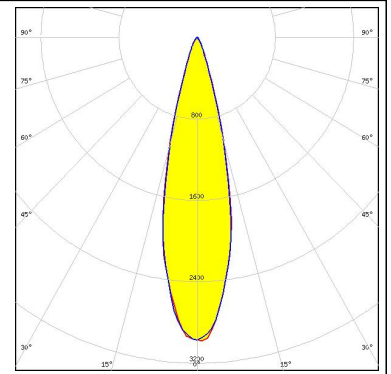
#### PHOTOMETRIC DATA (SIMULATED):

<p>bridgelux.</p> <p>LED V6 Gen6            FWHM 21.0°            Efficiency 71 %            Peak intensity 4.400 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15253_HEKLA-SOCKET-A</p>	
<p>bridgelux.</p> <p>LED VERO10            FWHM 24.0°            Efficiency 64 %            Peak intensity 3.180 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15616_HEKLA-SOCKET-F</p>	
<p>bridgelux.</p> <p>LED VERO13            FWHM 27.0°            Efficiency 66 %            Peak intensity 2.500 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C16142_HEKLA-SOCKET-K</p>	
<p><b>TRIDONIC</b></p> <p>LED SLE G5 LES11            FWHM 24.0°            Efficiency 63 %            Peak intensity 3.000 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15255_HEKLA-SOCKET-C</p>	

#### PHOTOMETRIC DATA (SIMULATED):

#### XICATO

LED XTM - 9mm LES  
FWHM 25.0°  
Efficiency 67 %  
Peak intensity 3.000 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C15743\_XTM-ADAPTER-50-B



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