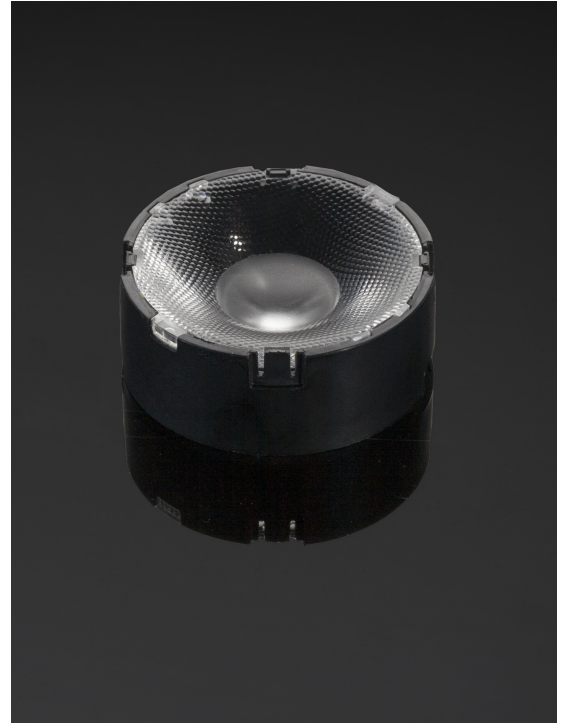


## WINNIE-M-C

~35° spot beam with holder C compatible with  
LEDiL HEKLA

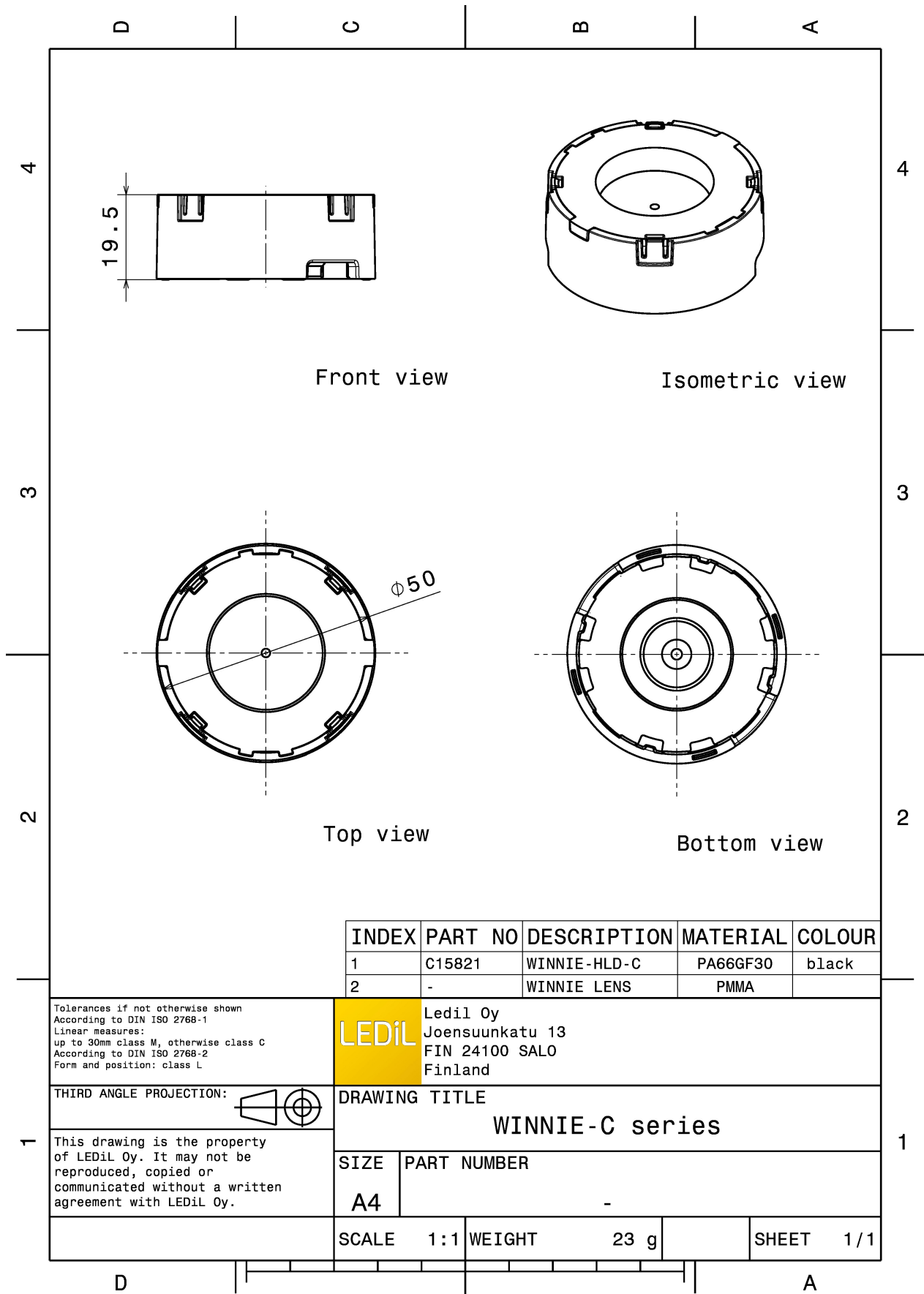
### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 50.0 mm
Height	19.5 mm
Fastening	tape
Colour	black
Box size	
Box weight	0 kg
Quantity in Box	364 pcs
ROHS compliant	yes ⓘ


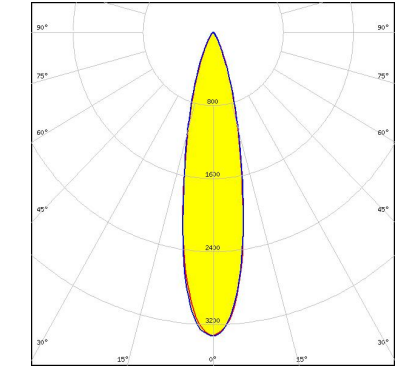

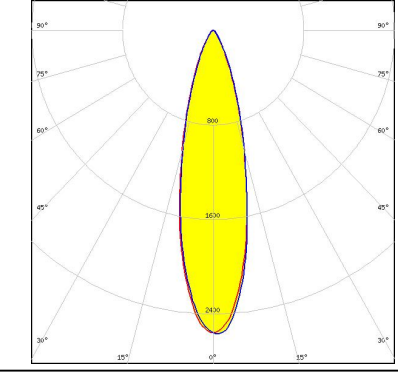
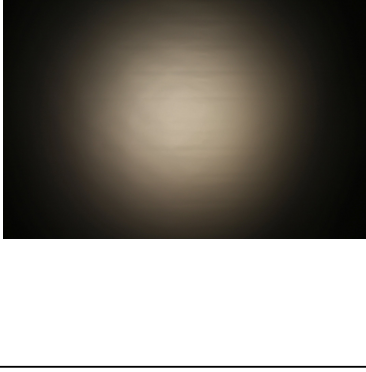
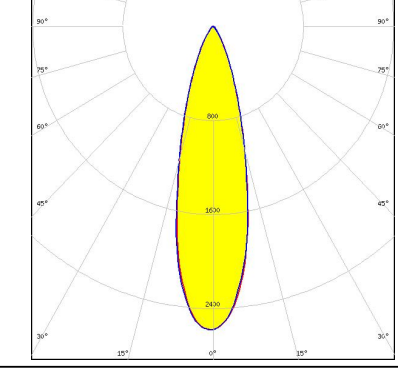
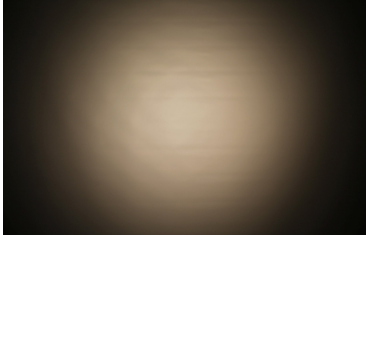
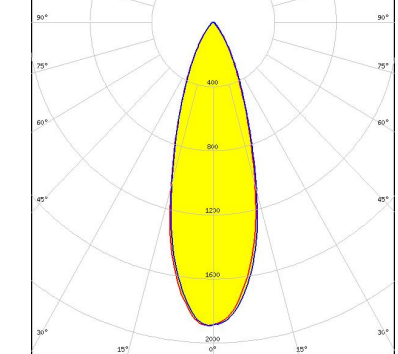


### MATERIAL SPECIFICATIONS:


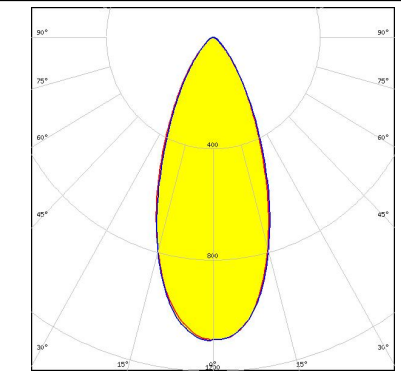
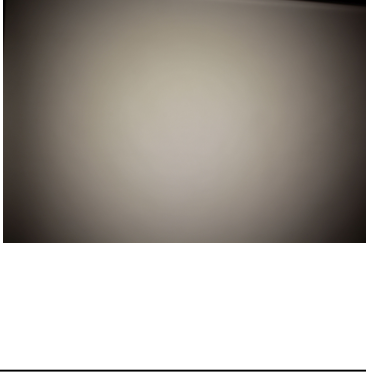
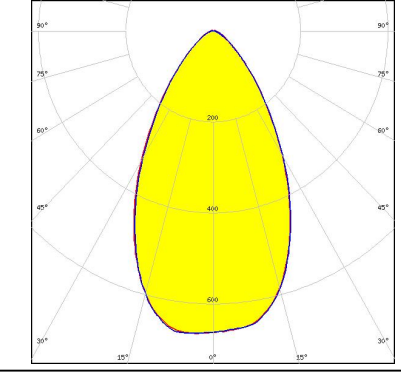
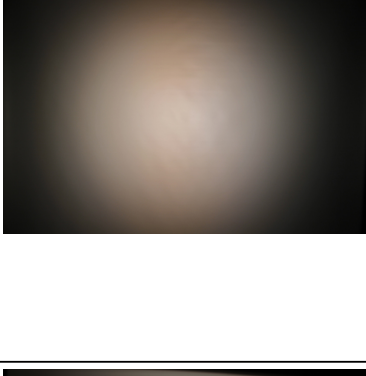
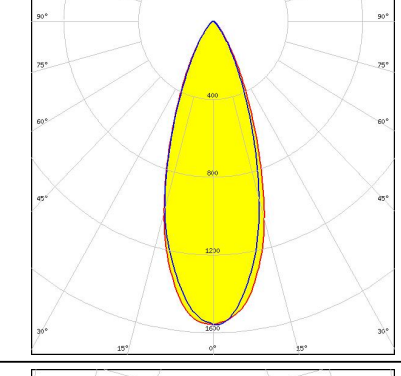
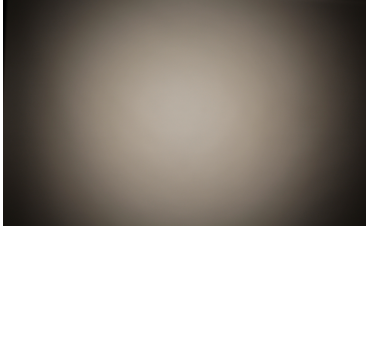
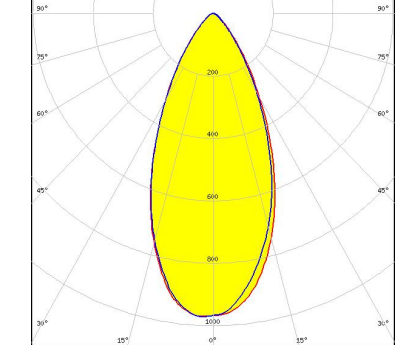
Component	Type	Material	Colour
WINNIE-M	Single lens	PMMA	clear
WINNIE-HLD-C	Holder	PC	black




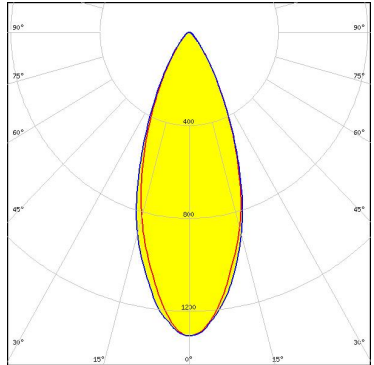
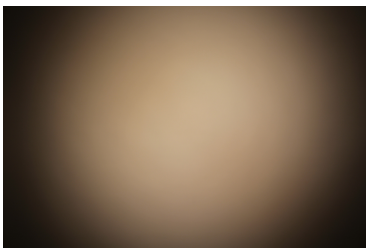
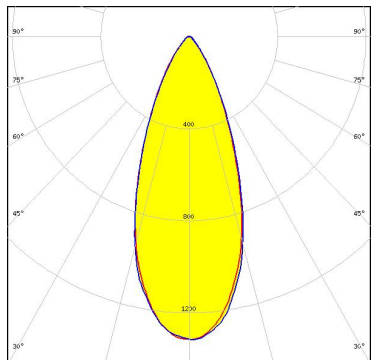

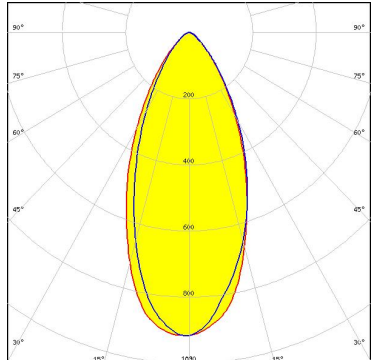
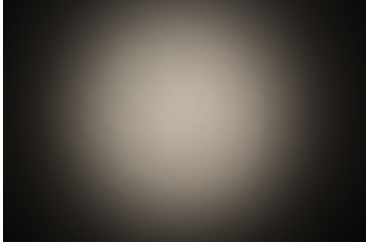
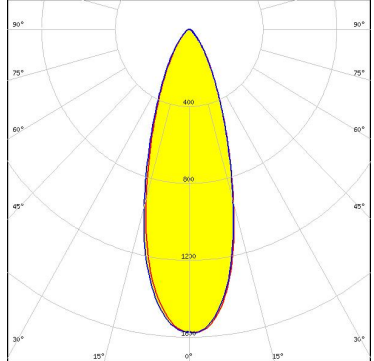
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V4 HD            FWHM 23.0°            Efficiency 83 %            Peak intensity 3.300 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15253_HEKLA-SOCKET-A</p>		
<p>bridgelux.</p> <p>LED V6 Gen6            FWHM 26.0°            Efficiency 80 %            Peak intensity 2.600 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15253_HEKLA-SOCKET-A</p>		
<p>bridgelux.</p> <p>LED V6 HD            FWHM 27.0°            Efficiency 83 %            Peak intensity 2.600 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15255_HEKLA-SOCKET-C</p>		
<p>bridgelux.</p> <p>LED V9 HD            FWHM 33.0°            Efficiency 82 %            Peak intensity 1.900 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15859_HEKLA-SOCKET-I</p>		

#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM 43.0°</p> <p>Efficiency 75 %</p> <p>Peak intensity 1.100 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K</p>		
<p>bridgelux.</p> <p>LED VERO18</p> <p>FWHM 59.0°</p> <p>Efficiency 73 %</p> <p>Peak intensity 0.670 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K</p>		
<p>bridgelux.</p> <p>LED Vesta DTW 9mm (4W/6W/12W)</p> <p>FWHM 37.0°</p> <p>Efficiency 79 %</p> <p>Peak intensity 1.600 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K Bender Wirth: 490 Typ L8</p>		
<p>bridgelux.</p> <p>LED Vesta TW 13mm (25W) CSP</p> <p>FWHM 47.0°</p> <p>Efficiency 75 %</p> <p>Peak intensity 0.970 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K Bender Wirth: 492 Typ L8</p>		

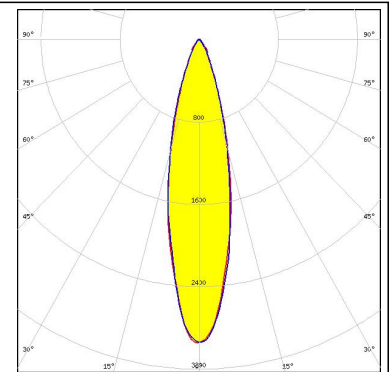
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux</p> <p>LED Vesta TW 9mm (12W) CSP</p> <p>FWHM 40.0°</p> <p>Efficiency 75 %</p> <p>Peak intensity 1.300 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K</p>		
<p><b>CITIZEN</b></p> <p>LED CLC020 Series (Dim-To-Warm)</p> <p>FWHM 41.0°</p> <p>Efficiency 76 %</p> <p>Peak intensity 1.300 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K</p>		
<p><b>CITIZEN</b></p> <p>LED CLC030 Series (Dim-To-Warm)</p> <p>FWHM 47.0°</p> <p>Efficiency 73 %</p> <p>Peak intensity 0.920 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K</p>		
<p><b>CITIZEN</b></p> <p>LED CLL02x/CLU02x (LES10)</p> <p>FWHM 34.0°</p> <p>Efficiency 77 %</p> <p>Peak intensity 1.600 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):

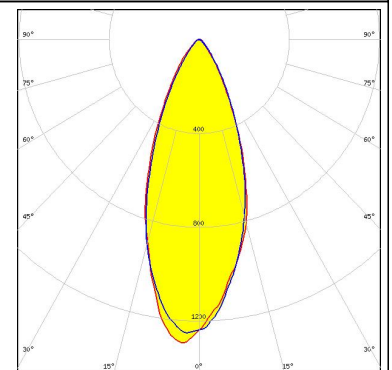
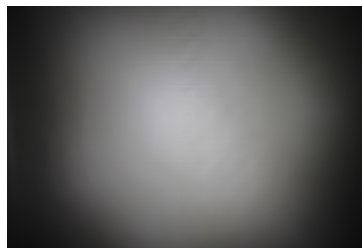
#### CITIZEN

LED CLU7A2 (LES 4.2mm)  
 FWHM 25.0°  
 Efficiency 82 %  
 Peak intensity 2.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



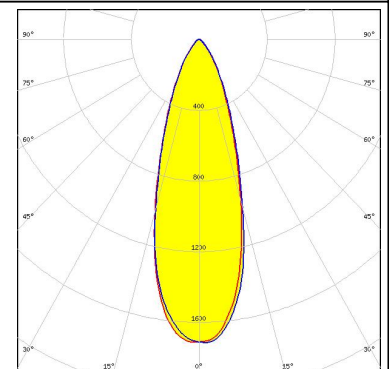
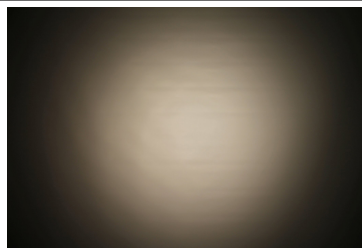
#### CITIZEN

LED LCN-C01B (Tunable White)  
 FWHM 40.0°  
 Efficiency 75 %  
 Peak intensity 1.300 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 481 Typ L8



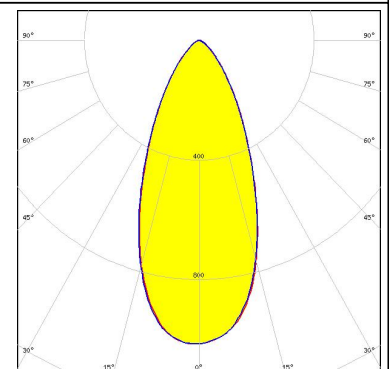
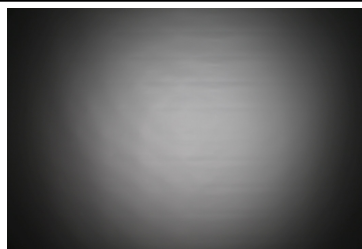
#### CREE

LED CMT14xx  
 FWHM 33.0°  
 Efficiency 81 %  
 Peak intensity 1.700 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### CREE

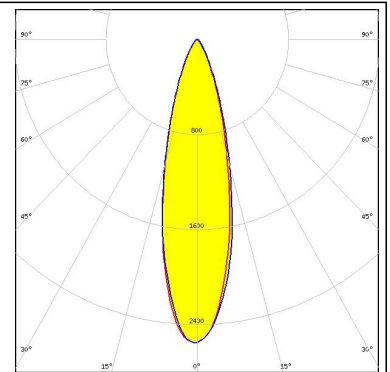
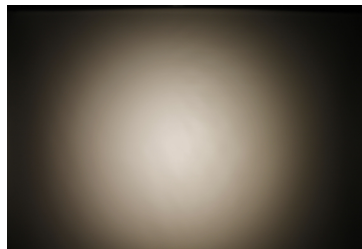
LED CMT19xx  
 FWHM 45.0 + °  
 Efficiency 77 %  
 Peak intensity 1.018 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



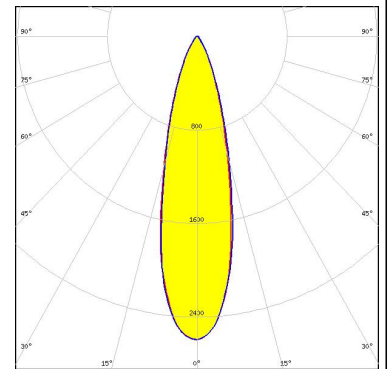
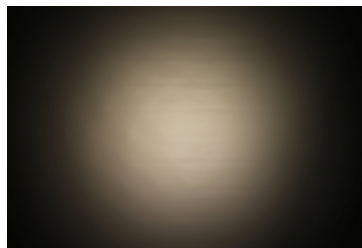
#### PHOTOMETRIC DATA (MEASURED):



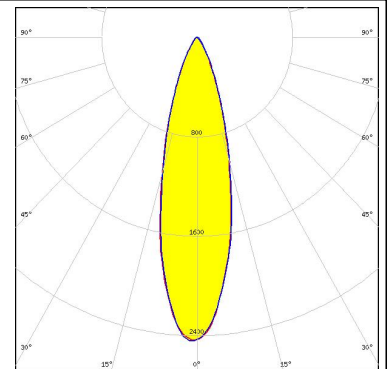
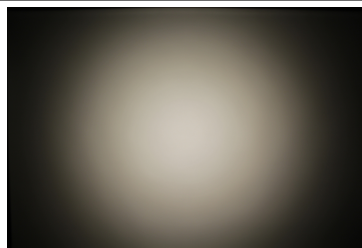
LED CXA/B 13xx  
 FWHM 27.0°  
 Efficiency 81 %  
 Peak intensity 2.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15956\_HEKLA-SOCKET-J



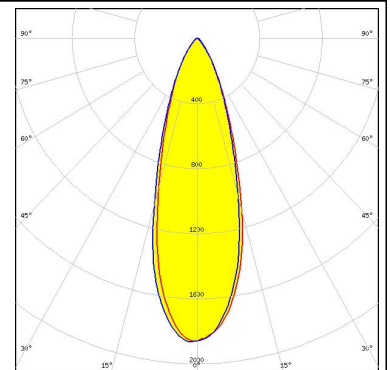
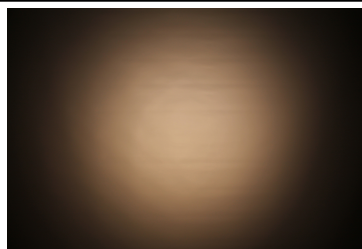
LED LUXEON CoB 1202HD  
 FWHM 27.0°  
 Efficiency 83 %  
 Peak intensity 2.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G




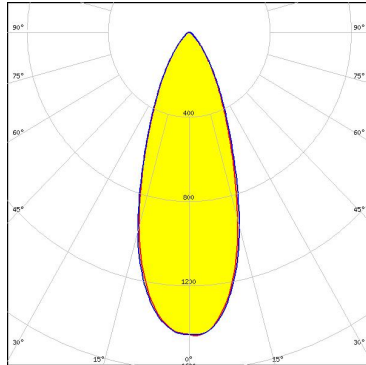
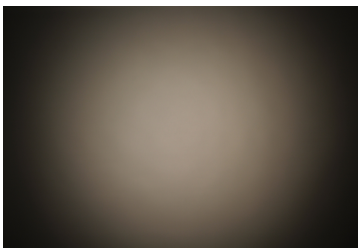
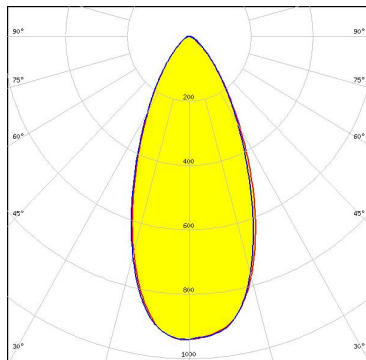

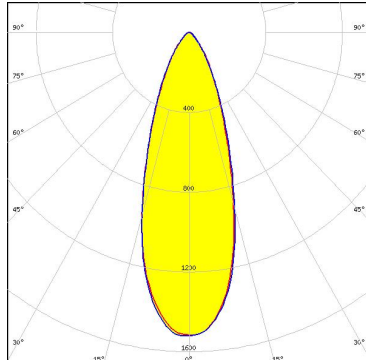
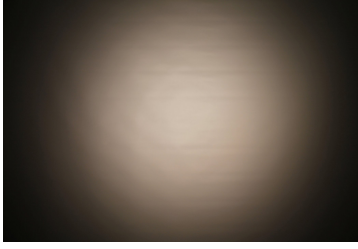
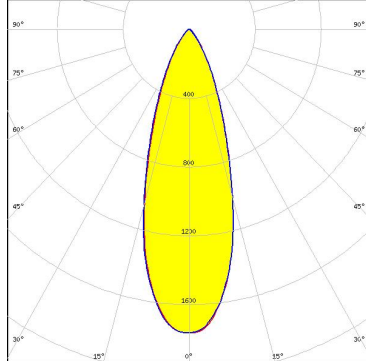
LED LUXEON CoB 1202s  
 FWHM 27.0°  
 Efficiency 81 %  
 Peak intensity 2.400 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G



LED LUXEON CoB 1204HD  
 FWHM 32.0°  
 Efficiency 83 %  
 Peak intensity 1.870 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15858\_HEKLA-SOCKET-H



#### PHOTOMETRIC DATA (MEASURED):

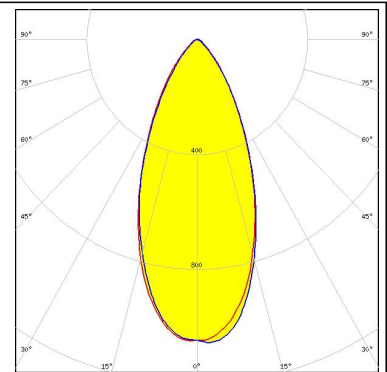
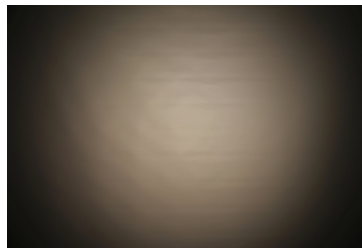
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1205HD            FWHM 38.0°            Efficiency 81 %            Peak intensity 1.400 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15858_HEKLA-SOCKET-H</p>		
<p><b>LUMINUS</b></p> <p>LED CxM-14 (19x19)            FWHM 47.0°            Efficiency 75 %            Peak intensity 0.940 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15859_HEKLA-SOCKET-I</p>		
<p><b>LUMINUS</b></p> <p>LED CxM-9 (13.5x13.5)            FWHM 35.0°            Efficiency 78 %            Peak intensity 1.500 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15255_HEKLA-SOCKET-C</p>		
<p><b>PHILIPS</b></p> <p>LED Fortimo SLM L09 CoB            FWHM 34.0°            Efficiency 82 %            Peak intensity 1.770 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15858_HEKLA-SOCKET-H</p>		



#### PHOTOMETRIC DATA (MEASURED):

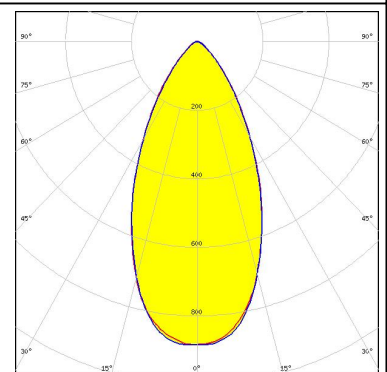
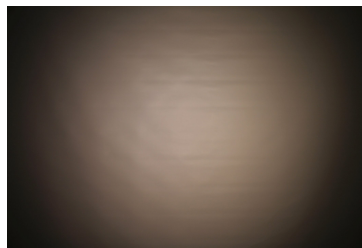
### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM 45.0°  
 Efficiency 77 %  
 Peak intensity 1.100 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 432 Typ L8



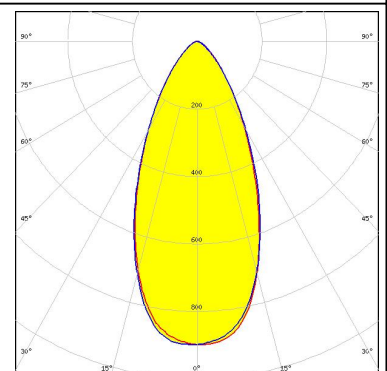
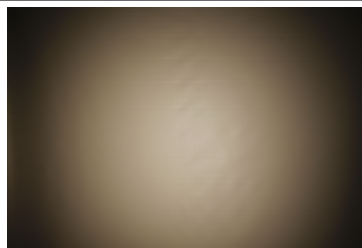
### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM 50.0°  
 Efficiency 76 %  
 Peak intensity 0.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 499 Typ L8



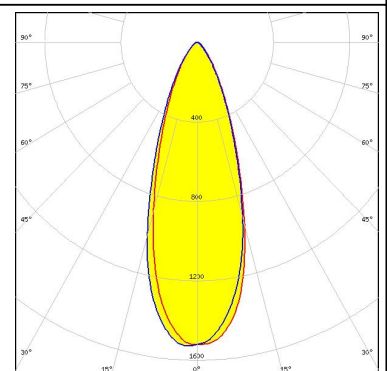
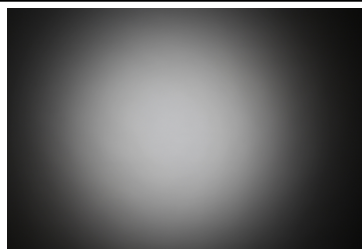
### SAMSUNG

LED COB D Series LES 14.5 mm  
 FWHM 48.0°  
 Efficiency 75 %  
 Peak intensity 0.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



### SAMSUNG

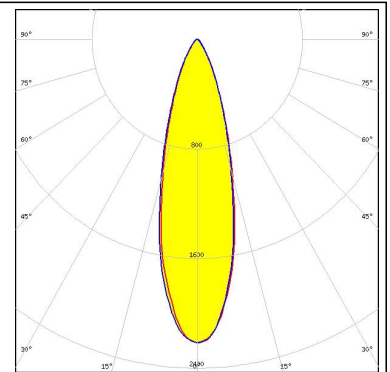
LED COB D Series LES 9.8 mm  
 FWHM 35.0°  
 Efficiency 79 %  
 Peak intensity 1.500 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### PHOTOMETRIC DATA (MEASURED):

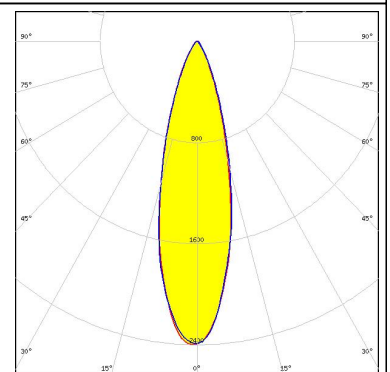
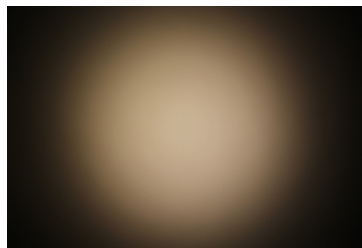
#### SAMSUNG

LED LC010C  
 FWHM 28.0°  
 Efficiency 79 %  
 Peak intensity 2.200 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G



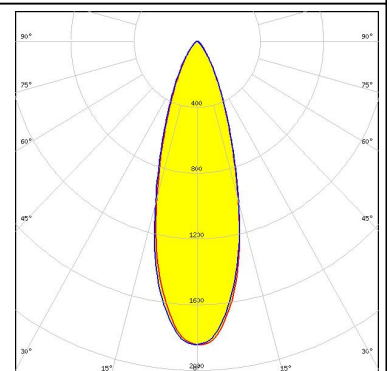
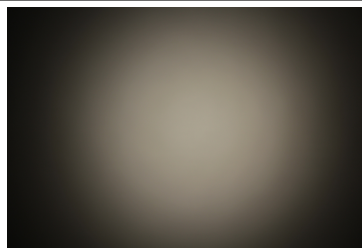
#### SAMSUNG

LED LC010C G2  
 FWHM 28.0°  
 Efficiency 80 %  
 Peak intensity 2.400 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



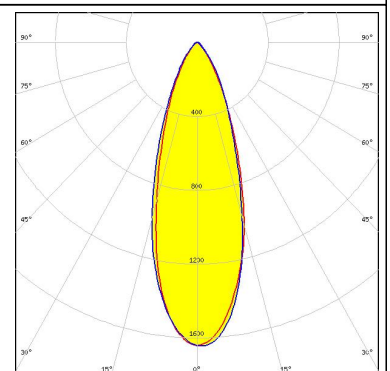
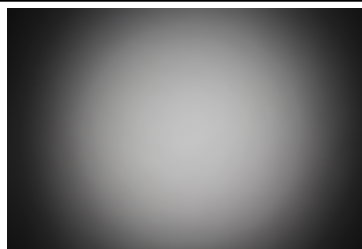
#### SAMSUNG

LED LC020C  
 FWHM 32.0°  
 Efficiency 80 %  
 Peak intensity 1.800 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### SAMSUNG

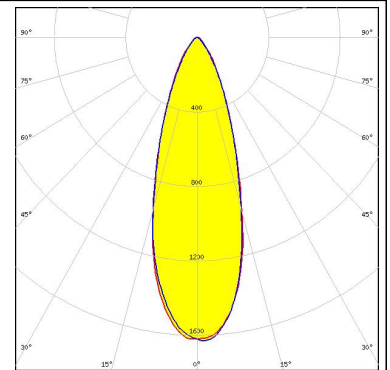
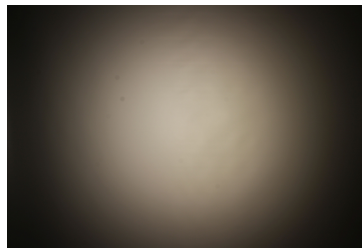
LED LC020C G2  
 FWHM 34.0°  
 Efficiency 79 %  
 Peak intensity 1.650 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



### PHOTOMETRIC DATA (MEASURED):

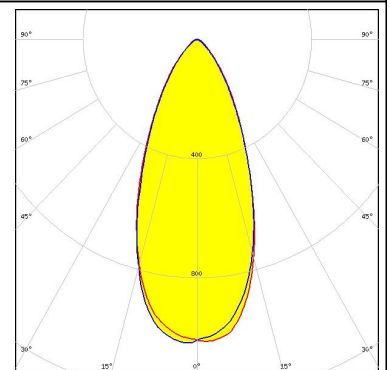
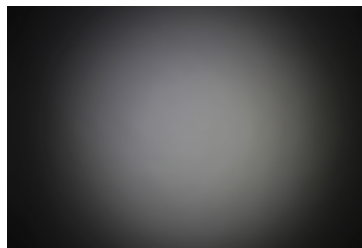
#### TRIDONIC

LED SLE G7 LES09  
FWHM 34.0°  
Efficiency 78 %  
Peak intensity 1.600 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15255\_HEKLA-SOCKET-C



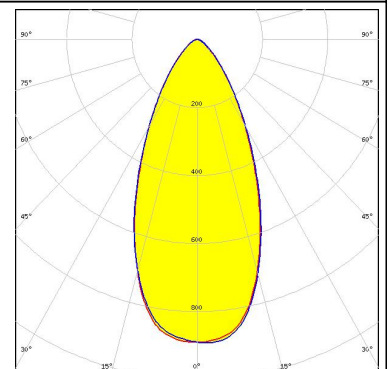
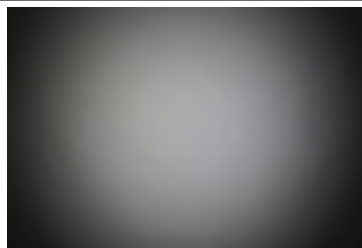
#### TRIDONIC

LED SLE G7 LES13  
FWHM 45.0°  
Efficiency 75 %  
Peak intensity 1.000 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15859\_HEKLA-SOCKET-I



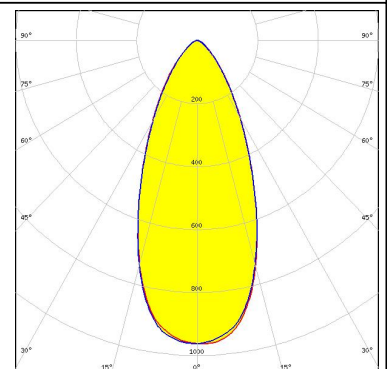
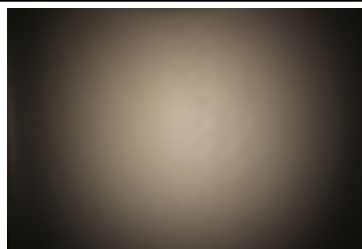
#### TRIDONIC

LED SLE G7 LES15  
FWHM 48.0°  
Efficiency 75 %  
Peak intensity 0.890 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15859\_HEKLA-SOCKET-I



#### XICATO

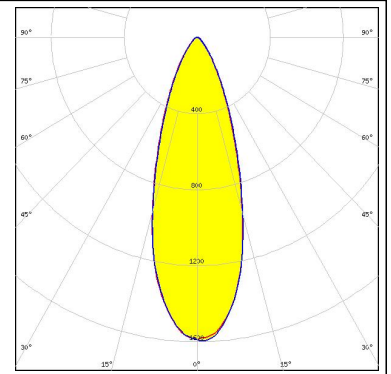
LED XOB 14.5 mm  
FWHM 45.0°  
Efficiency 75 %  
Peak intensity 0.963 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15859\_HEKLA-SOCKET-I




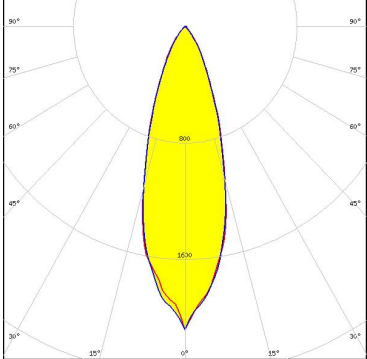
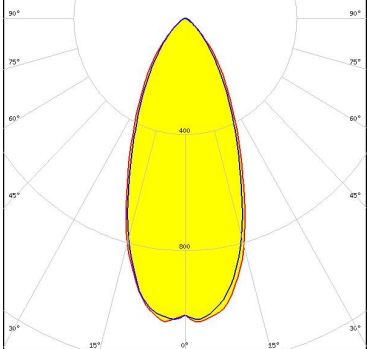

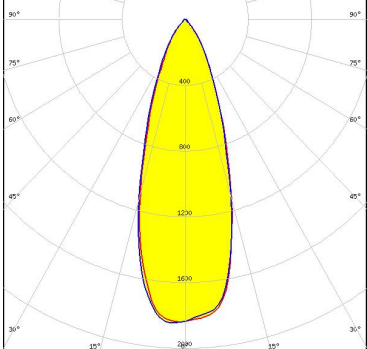

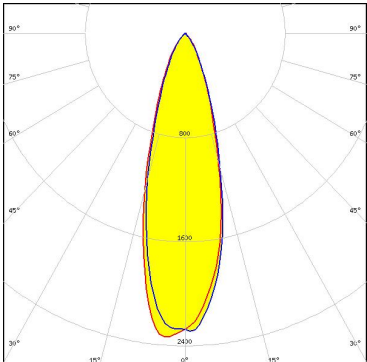
## PHOTOMETRIC DATA (MEASURED):

### XICATO


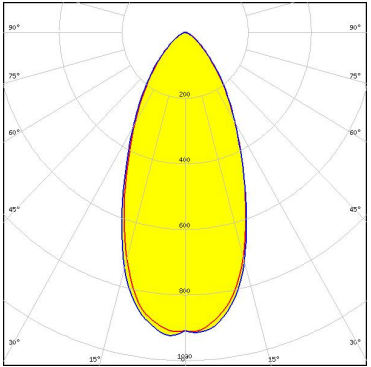

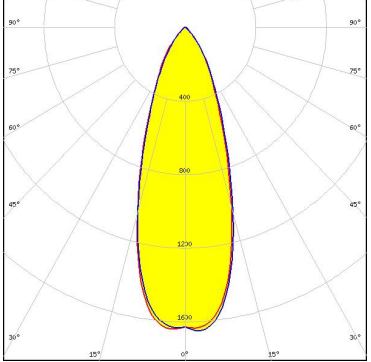
LED XOB 9.8 mm  
FWHM 35.0°  
Efficiency 78 %  
Peak intensity 1.596 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15255\_HEKLA-SOCKET-C



#### PHOTOMETRIC DATA (SIMULATED):

<p> <b>bridgelux</b></p> <p>LED VERO10            FWHM 32.0°            Efficiency 83 %            Peak intensity 2.085 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15616_HEKLA-SOCKET-F</p>	
<p><b>CITIZEN</b></p> <p>LED CLL03x/CLU03x            FWHM 45.0°            Efficiency 77 %            Peak intensity 1.055 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15859_HEKLA-SOCKET-I</p>	
<p> <b>CREE</b></p> <p>LED CXA/B 15xx            FWHM 24.0°            Efficiency 84 %            Peak intensity 1.900 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15256_HEKLA-SOCKET-D</p>	
<p> <b>CREE</b></p> <p>LED CXA/B 15xx            FWHM 30.0°            Efficiency 83 %            Peak intensity 2.372 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15256_HEKLA-SOCKET-D</p>	

### PHOTOMETRIC DATA (SIMULATED):

 SEOUL SEMICONDUCTOR	LED MJT COB LES 14.5 FWHM 48.0° Efficiency 78 % Peak intensity 0.926 cd/lm LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I	
 SEOUL SEMICONDUCTOR	LED MJT COB LES 9.8 FWHM 36.0° Efficiency 82 % Peak intensity 1.667 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C	

### 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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