

## CARMEN-50-RS-C

~12° spot beam. Assembly with holder C compatible with LEDiL HEKLA.

### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 50.0 mm
Height	25.5 mm
Fastening	socket
ROHS compliant	yes ⓘ

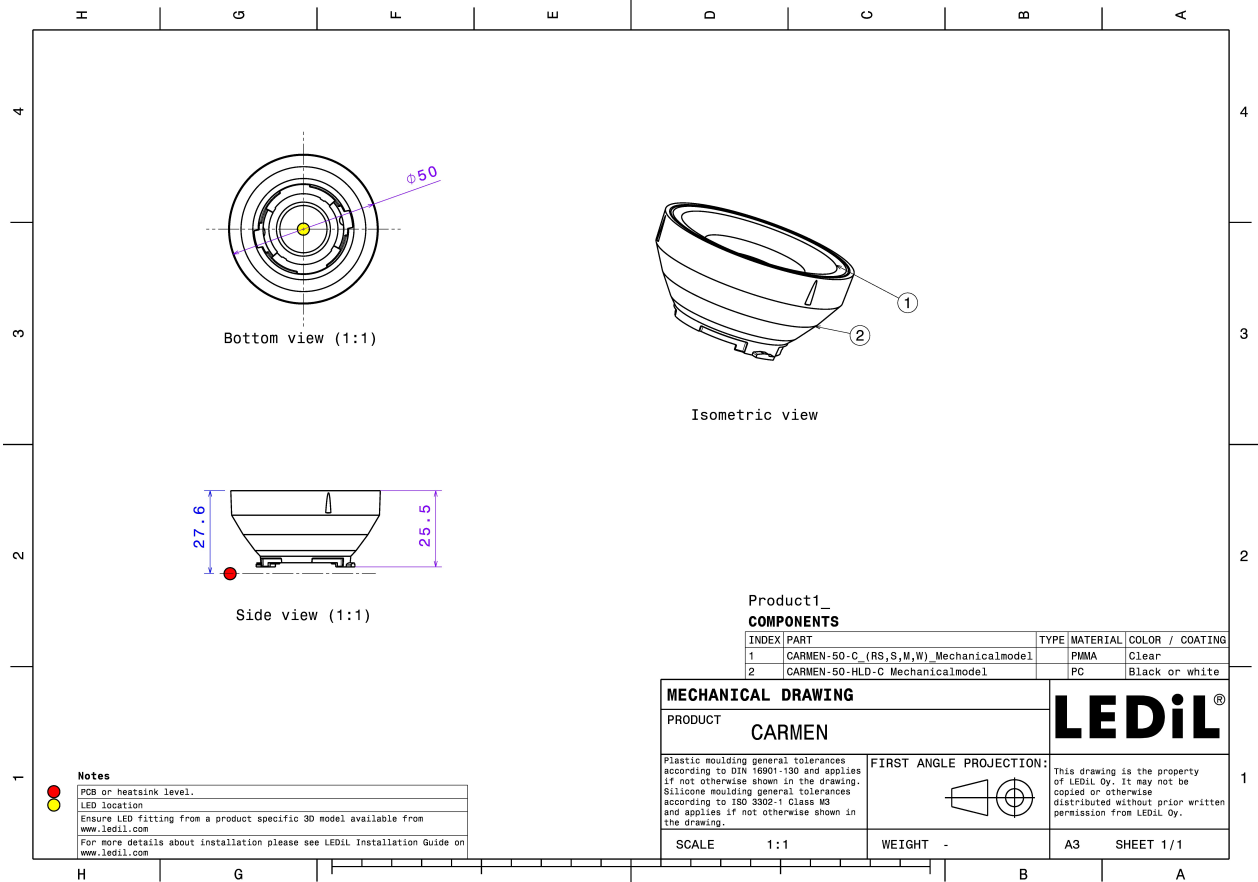
### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
CARMEN-50-RS	Single lens	PMMA	clear	
CARMEN-50-HLD-C	Holder	PC	black	

### ORDERING INFORMATION:


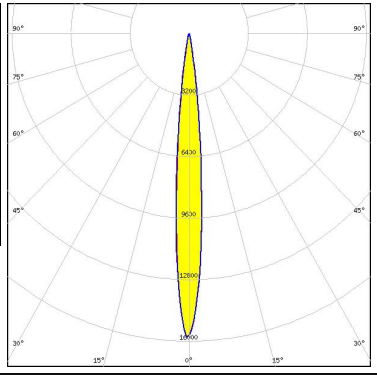

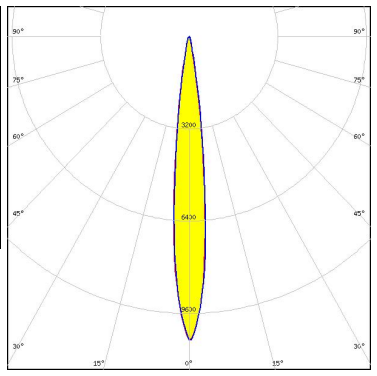

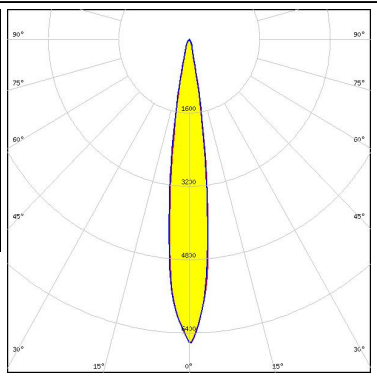

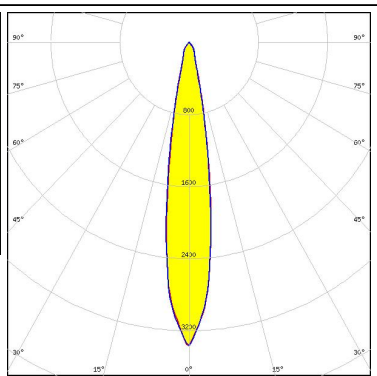
Component		Qty in box	MOQ	MPQ	Box weight (kg)
CP16106_CARMEN-50-RS-C	Single lens	308	112	28	7.2
» Box size: 476 x 273 x 292 mm					





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

#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V4 HD</p> <p>FWHM / FWTM 10.0° / 19.0°</p> <p>Efficiency 71 %</p> <p>Peak intensity 16 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15253_HEKLA-SOCKET-A</p>		
<p>bridgelux.</p> <p>LED V6 HD</p> <p>FWHM / FWTM 12.0° / 22.0°</p> <p>Efficiency 68 %</p> <p>Peak intensity 10.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		
<p>bridgelux.</p> <p>LED V9 HD</p> <p>FWHM / FWTM 15.0° / 26.0°</p> <p>Efficiency 64 %</p> <p>Peak intensity 6.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15859_HEKLA-SOCKET-I</p>		
<p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM / FWTM 17.0° / 33.0°</p> <p>Efficiency 51 %</p> <p>Peak intensity 3.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K</p>		

#### PHOTOMETRIC DATA (MEASURED):

**bridgelux.**

LED Vesta TW 6mm DP  
 FWHM / FWTM 11.0° / 21.0°  
 Efficiency 59 %  
 Peak intensity 9.9 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 504 Typ L8



**bridgelux.**

LED Vesta TW 9mm (9W) DP  
 FWHM / FWTM 15.0° / 28.0°  
 Efficiency 54 %  
 Peak intensity 5.1 cd/lm  
 LEDs/each optic 1  
 Light colour White

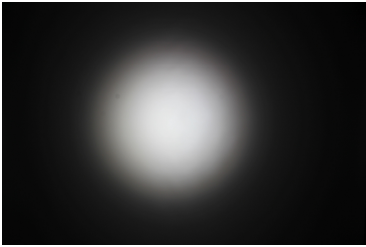
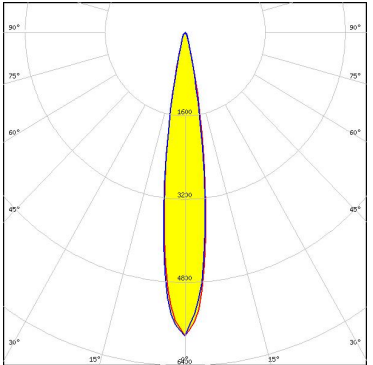
Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 489 Typ L8




**CITIZEN**

LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 16.0° / 29.0°  
 Efficiency 63 %  
 Peak intensity 5.6 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:  
 F15255\_HEKLA-SOCKET-C

**CITIZEN**

LED CLU700/701/702  
 FWHM / FWTM 11.0° / 21.0°  
 Efficiency 67 %  
 Peak intensity 11.8 cd/lm  
 LEDs/each optic 1  
 Light colour White

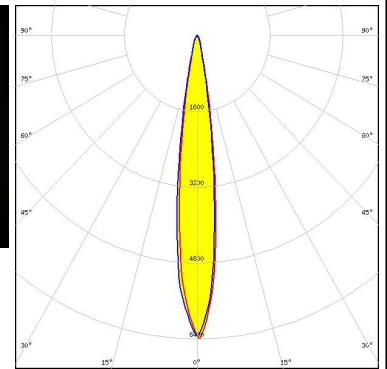
Required components:  
 F15255\_HEKLA-SOCKET-C




#### PHOTOMETRIC DATA (MEASURED):

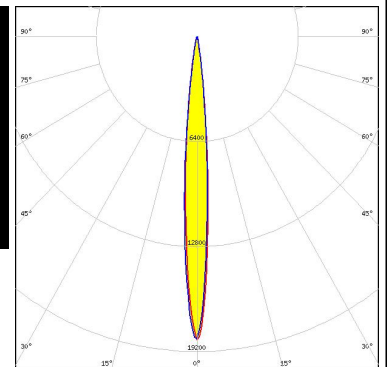
#### CITIZEN

LED CLU710/711  
 FWHM / FWTM 14.0° / 27.0°  
 Efficiency 62 %  
 Peak intensity 6.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



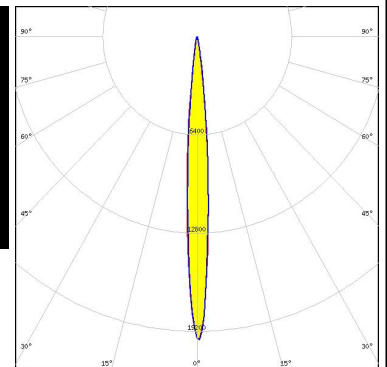
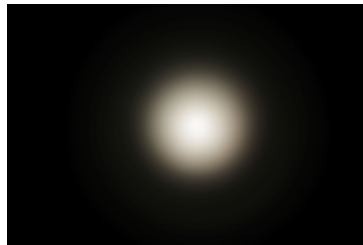
#### CITIZEN

LED CLU7A2 (LES 4.2mm)  
 FWHM / FWTM 9.0° / 18.0°  
 Efficiency 72 %  
 Peak intensity 18.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



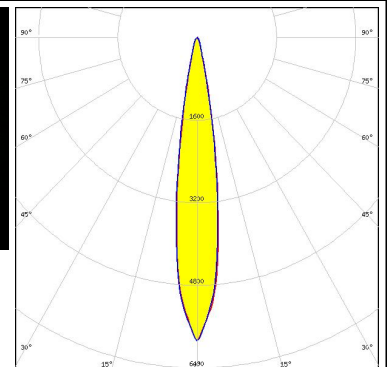
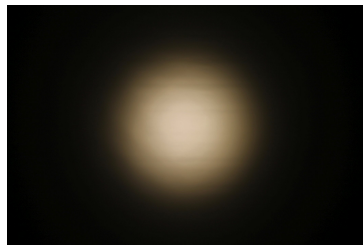
#### CITIZEN

LED CLU7B2  
 FWHM / FWTM 8.0° / 17.0°  
 Efficiency 71 %  
 Peak intensity 20 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### CREE

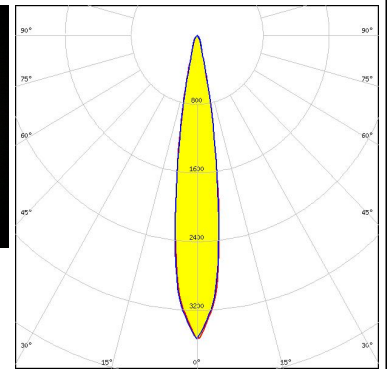
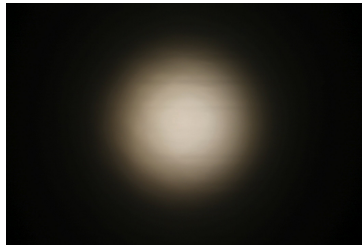
LED CMA1516  
 FWHM / FWTM 16.0° / 29.0°  
 Efficiency 65 %  
 Peak intensity 5.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15256\_HEKLA-SOCKET-D



#### PHOTOMETRIC DATA (MEASURED):

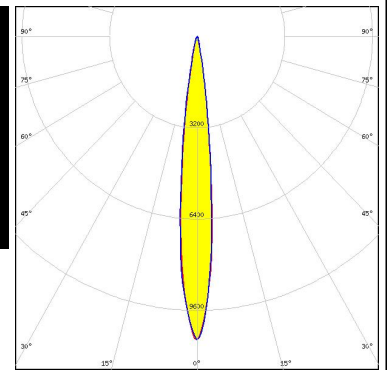
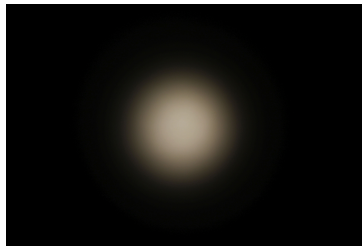
#### CREE

LED CMT14xx  
 FWHM / FWTM 16.0° / 30.0°  
 Efficiency 42 %  
 Peak intensity 3.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



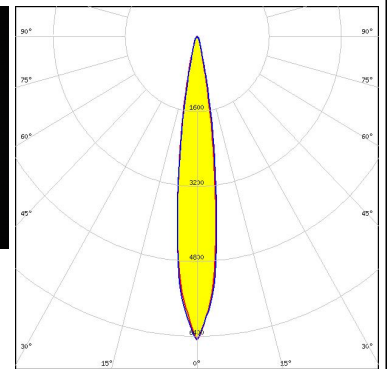
#### CREE

LED CXA/B 13xx  
 FWHM / FWTM 12.0° / 23.0°  
 Efficiency 68 %  
 Peak intensity 10.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15956\_HEKLA-SOCKET-J



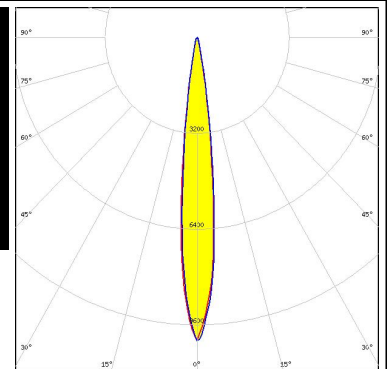
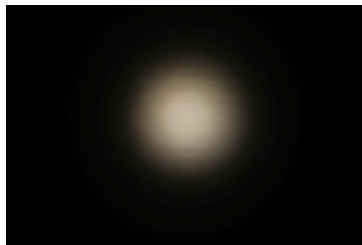
#### CREE

LED CXA/B 15xx  
 FWHM / FWTM 15.0° / 28.0°  
 Efficiency 65 %  
 Peak intensity 6.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15256\_HEKLA-SOCKET-D


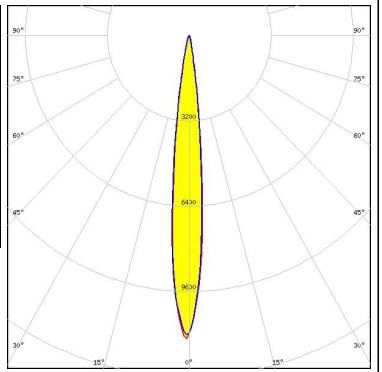
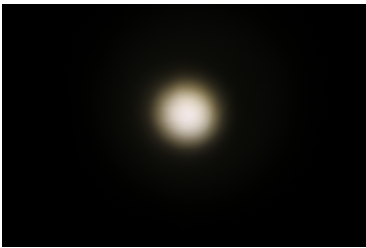
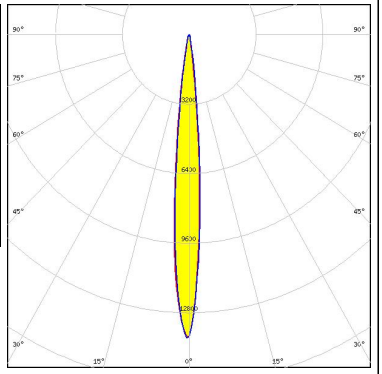

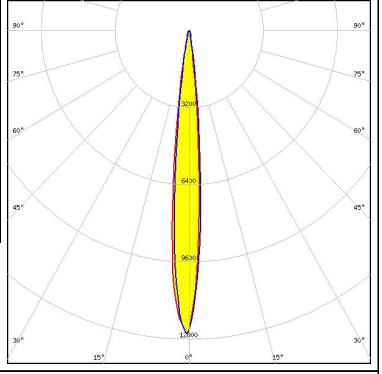

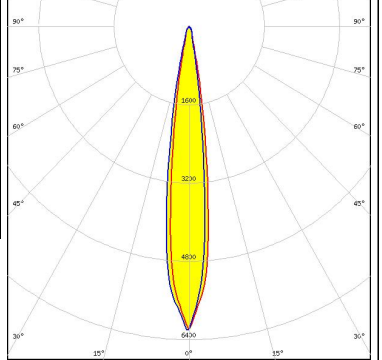


#### LUMILEDS


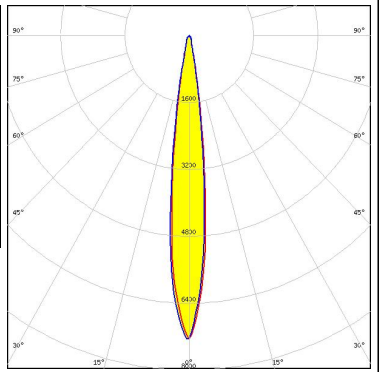
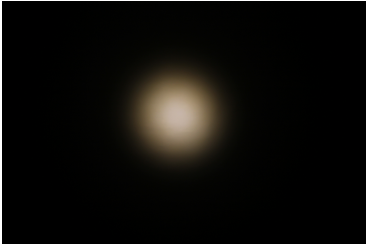
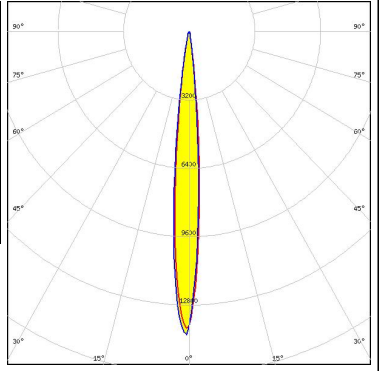

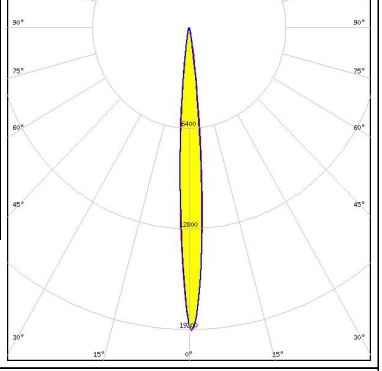

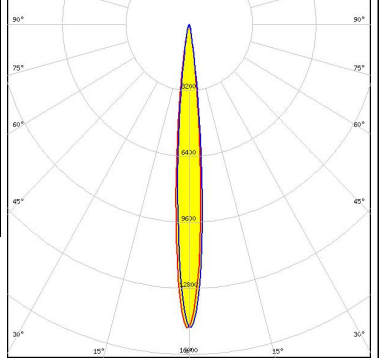
LED LUXEON CoB 1202HD  
 FWHM / FWTM 12.0° / 23.0°  
 Efficiency 68 %  
 Peak intensity 10.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G



#### PHOTOMETRIC DATA (MEASURED):


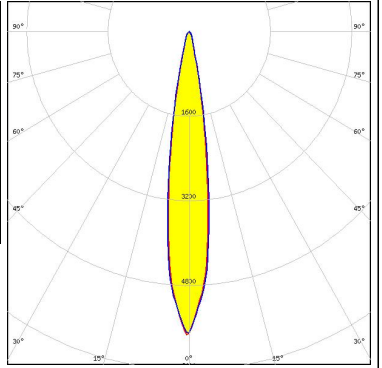

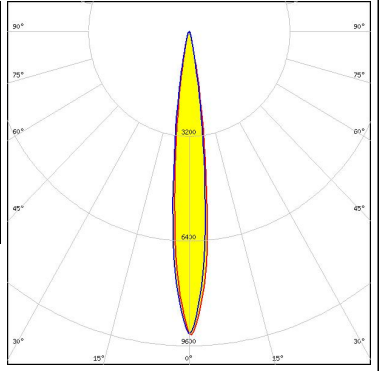

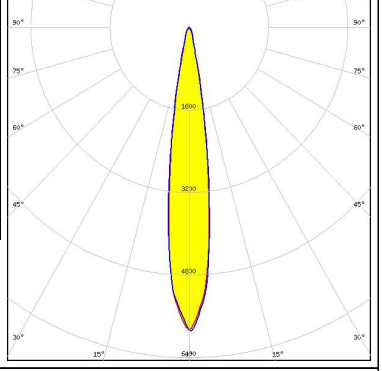

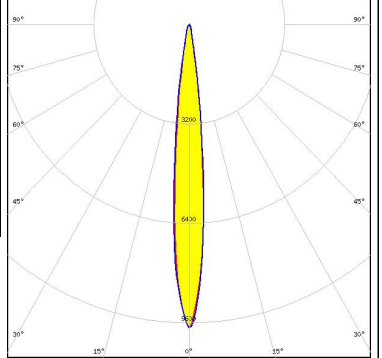
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202s</p> <p>FWHM / FWTM 12.0° / 22.0°</p> <p>Efficiency 69 %</p> <p>Peak intensity 11.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15848_HEKLA-SOCKET-G</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S01H4</p> <p>FWHM / FWTM 10.0° / 19.0°</p> <p>Efficiency 64 %</p> <p>Peak intensity 14 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 634c Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S01H6 / HD S02H6</p> <p>FWHM / FWTM 10.0° / 19.0°</p> <p>Efficiency 64 %</p> <p>Peak intensity 12.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 634c Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S04H9</p> <p>FWHM / FWTM 14.0° / 26.0°</p> <p>Efficiency 60 %</p> <p>Peak intensity 6.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 634c Hekla</p>		

#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB M02 / M03 (Gen2)</p> <p>FWHM / FWTM 13.0° / 25.0°</p> <p>Efficiency 60 %</p> <p>Peak intensity 7.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 641a Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB S01 (Gen2)</p> <p>FWHM / FWTM 10.0° / 19.0°</p> <p>Efficiency 65 %</p> <p>Peak intensity 14.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 634c Hekla</p>		
<p><b>LUMINUS</b></p> <p>LED CXM-3</p> <p>FWHM / FWTM 9.0° / 17.0°</p> <p>Efficiency 72 %</p> <p>Peak intensity 19.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		
<p><b>LUMINUS</b></p> <p>LED CXM-4</p> <p>FWHM / FWTM 10.0° / 19.0°</p> <p>Efficiency 68 %</p> <p>Peak intensity 14.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		



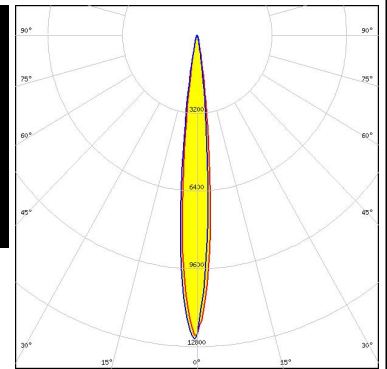
#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMINUS</b></p> <p>LED CxM-9 (13.5x13.5)            FWHM / FWTM 15.0° / 29.0°            Efficiency 63 %            Peak intensity 5.8 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 / FWTM 13.0° / 24.0°            Efficiency 67 %            Peak intensity 9.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15848_HEKLA-SOCKET-G</p>		
<p><b>PHILIPS</b></p> <p>LED Fortimo SLM L09 CoB            FWHM / FWTM 15.0° / 28.0°            Efficiency 64 %            Peak intensity 6 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15858_HEKLA-SOCKET-H</p>		
<p><b>SAMSUNG</b></p> <p>LED LC010C            FWHM / FWTM 11.0° / 22.0°            Efficiency 64 %            Peak intensity 9.8 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15848_HEKLA-SOCKET-G</p>		

#### PHOTOMETRIC DATA (MEASURED):

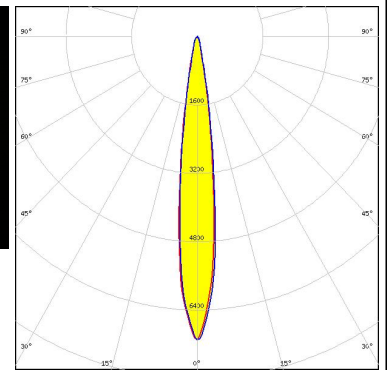
### SAMSUNG

LED LC010C G2  
 FWHM / FWTM 11.0° / 21.0°  
 Efficiency 67 %  
 Peak intensity 12.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



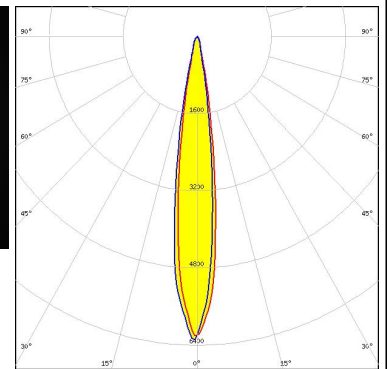
### SAMSUNG

LED LC020C  
 FWHM / FWTM 13.0° / 26.0°  
 Efficiency 64 %  
 Peak intensity 7.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G



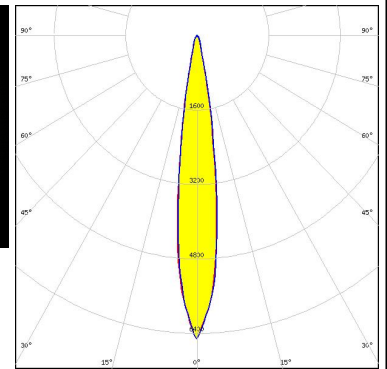
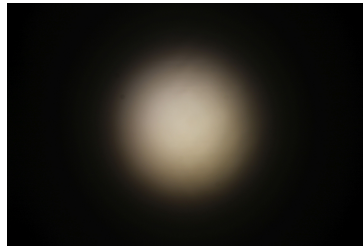
### SAMSUNG

LED LC020C G2  
 FWHM / FWTM 15.0° / 27.0°  
 Efficiency 63 %  
 Peak intensity 6.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



### TRIDONIC

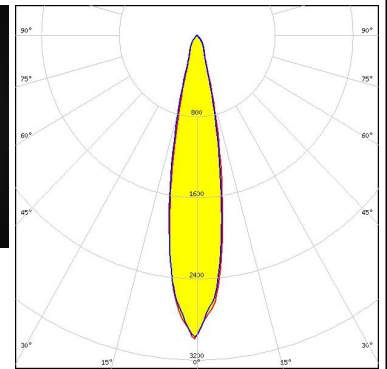
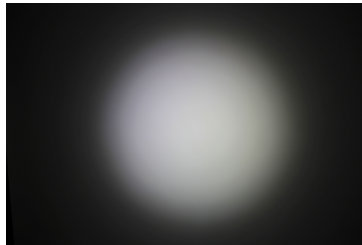
LED SLE G7 LES09  
 FWHM / FWTM 15.0° / 27.0°  
 Efficiency 66 %  
 Peak intensity 6.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### PHOTOMETRIC DATA (MEASURED):

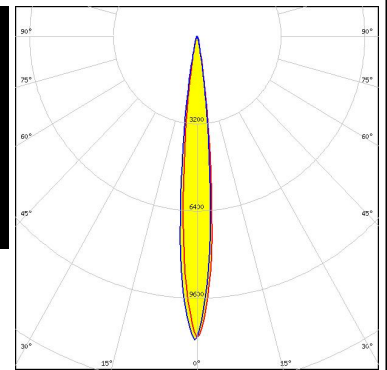
#### TRIDONIC

LED SLE G7 LES13  
 FWHM / FWTM 20.0° / 37.0°  
 Efficiency 56 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15858\_HEKLA-SOCKET-H



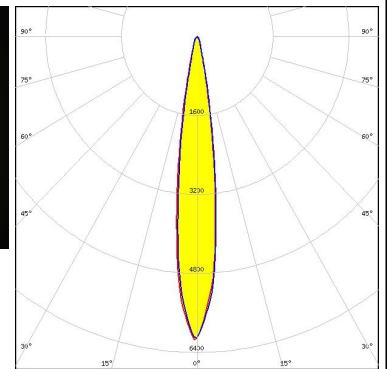
#### XICATO

LED XOB 6 mm  
 FWHM / FWTM 11.0° / 21.0°  
 Efficiency 66 %  
 Peak intensity 11.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



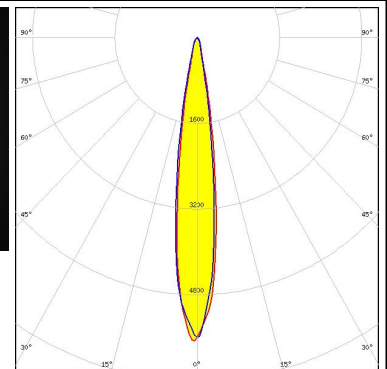
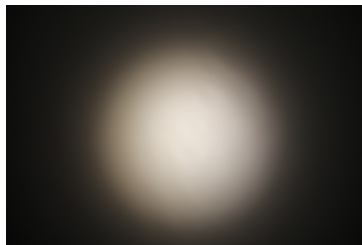
#### XICATO

LED XOB 9.8 mm  
 FWHM / FWTM 15.0° / 28.0°  
 Efficiency 63 %  
 Peak intensity 6.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C


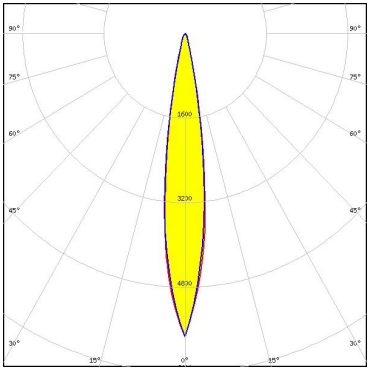

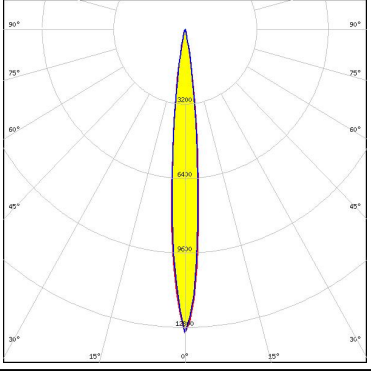

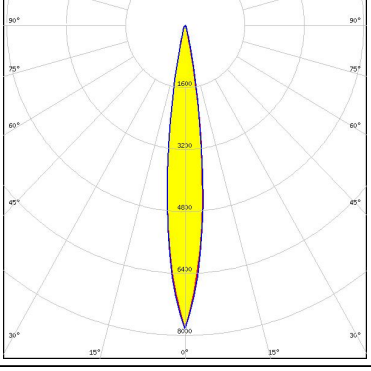

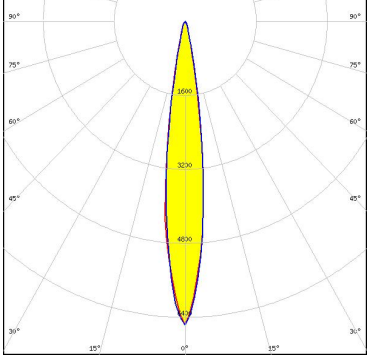


#### XICATO

LED XTM - 9mm LES  
 FWHM / FWTM 15.0° / 28.0°  
 Efficiency 60 %  
 Peak intensity 5.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C15743\_XTM-ADAPTER-50-B



#### PHOTOMETRIC DATA (SIMULATED):

<p></p> <p>LED V10 Gen7            FWHM / FWTM 16.0° / 30.0°            Efficiency 60 %            Peak intensity 5.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15255_HEKLA-SOCKET-C</p>	
<p></p> <p>LED V6 Gen6            FWHM / FWTM 10.0° / 21.0°            Efficiency 66 %            Peak intensity 13 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15253_HEKLA-SOCKET-A</p>	
<p></p> <p>LED V8 Gen7            FWHM / FWTM 14.0° / 26.0°            Efficiency 63 %            Peak intensity 7.8 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15253_HEKLA-SOCKET-A</p>	
<p></p> <p>LED VERO10            FWHM / FWTM 15.0° / 27.0°            Efficiency 61 %            Peak intensity 6.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15616_HEKLA-SOCKET-F</p>	

#### PHOTOMETRIC DATA (SIMULATED):

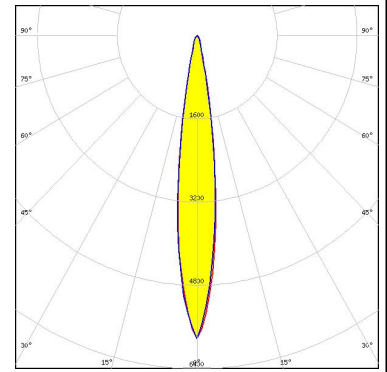
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202/1203</p> <p>FWHM / FWTM 14.0° / 28.0°</p> <p>Efficiency 61 %</p> <p>Peak intensity 6.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15858_HEKLA-SOCKET-H</p>	
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1204HD</p> <p>FWHM / FWTM 16.0° / 28.0°</p> <p>Efficiency 61 %</p> <p>Peak intensity 6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15858_HEKLA-SOCKET-H</p>	
<p><b>LUMINUS</b></p> <p>LED CxM-6 (13.5x13.5)</p> <p>FWHM / FWTM 12.0° / 23.0°</p> <p>Efficiency 65 %</p> <p>Peak intensity 10.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>	
<p><b>NICHIA</b></p> <p>LED COB S-Type (LES 6)</p> <p>FWHM / FWTM 13.0° / 25.0°</p> <p>Efficiency 63 %</p> <p>Peak intensity 8.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15848_HEKLA-SOCKET-G</p>	

#### PHOTOMETRIC DATA (SIMULATED):

#### OSRAM

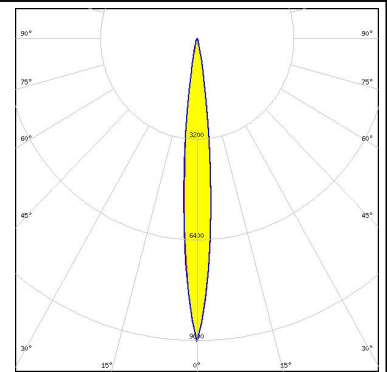
Opto Semiconductors

LED Soleriq S9  
 FWHM / FWTM 15.0° / 28.0°  
 Efficiency 59 %  
 Peak intensity 5.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



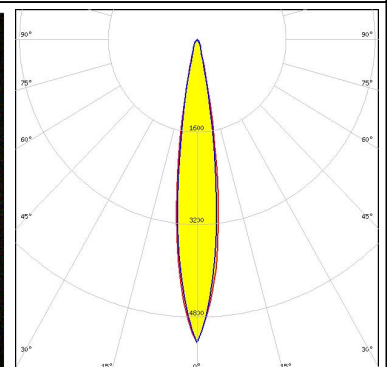
#### PHILIPS

LED Fortimo SLM L06 CoB  
 FWHM / FWTM 10.0° / 22.0°  
 Efficiency 53 %  
 Peak intensity 9.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15858\_HEKLA-SOCKET-H



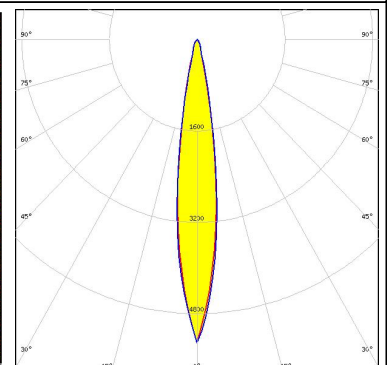
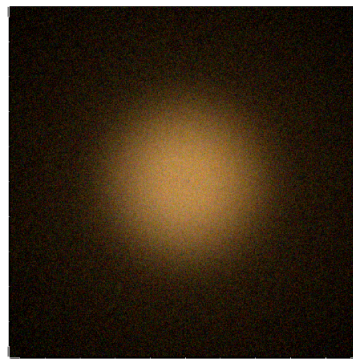
#### SAMSUNG

LED LC003D / LC006D / LC009D / LC013D  
 FWHM / FWTM 16.0° / 30.0°  
 Efficiency 58 %  
 Peak intensity 5.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F17435\_HEKLA-G2-C



#### SAMSUNG

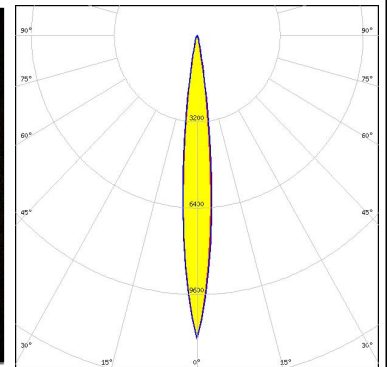
LED LC003D / LC006D / LC009D / LC013D  
 FWHM / FWTM 16.0° / 30.0°  
 Efficiency 58 %  
 Peak intensity 5.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F17435\_HEKLA-G2-C



#### PHOTOMETRIC DATA (SIMULATED):

### SAMSUNG

LED LC010C  
FWHM / FWTM 12.0° / 22.0°  
Efficiency 64 %  
Peak intensity 11.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F17435\_HEKLA-G2-C



### SAMSUNG

LED LH231B  
FWHM / FWTM 15.0° / 28.0°  
Efficiency 58 %  
Peak intensity 6 cd/lm  
LEDs/each optic 7  
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.

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