

## BROOKE-G2-S

~20° spot beam compatible with LEDiL HEKLA.

### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 45.0 mm
Height	18.9 mm
Fastening	socket
ROHS compliant	yes ⓘ

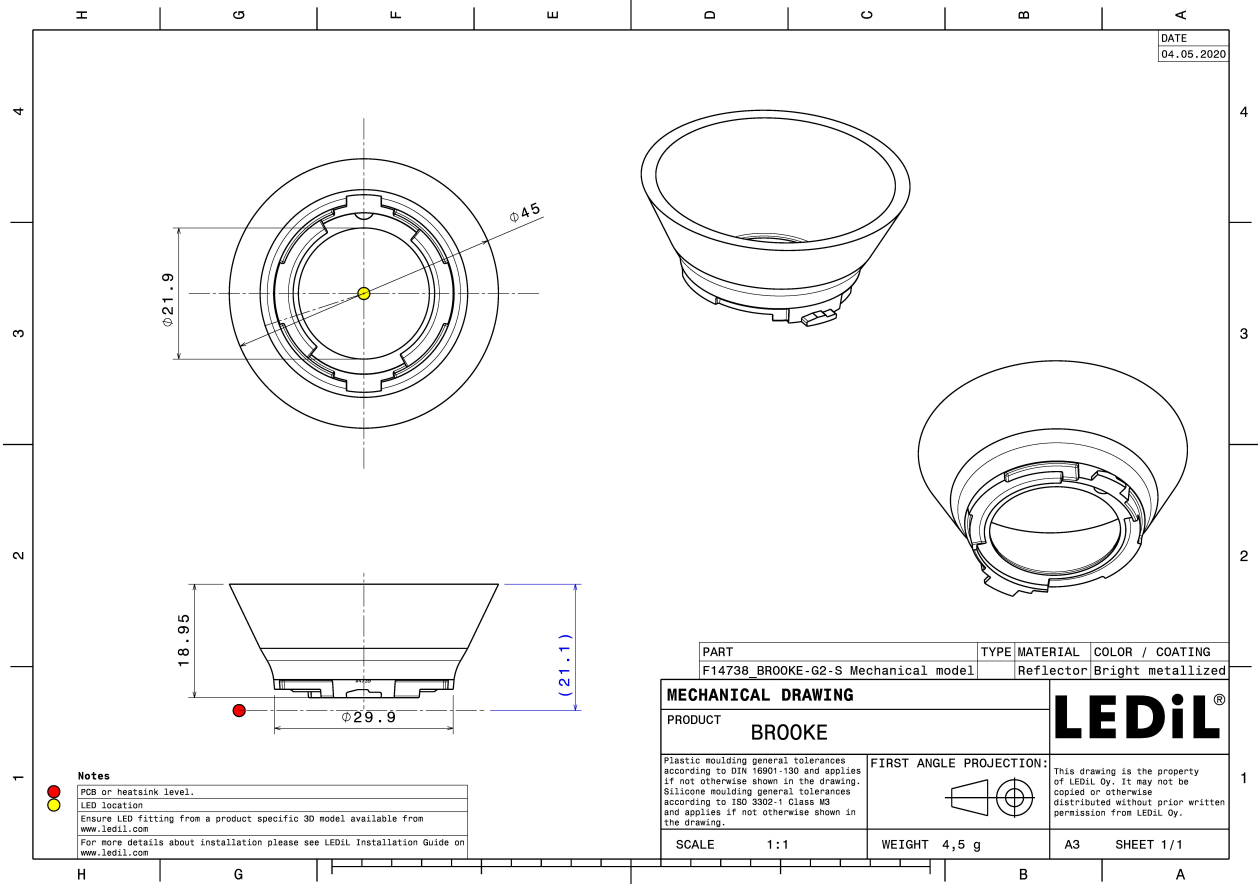
### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish	Coating
BROOKE-G2-S	Reflector	PC	metal		HMDS



### ORDERING INFORMATION:


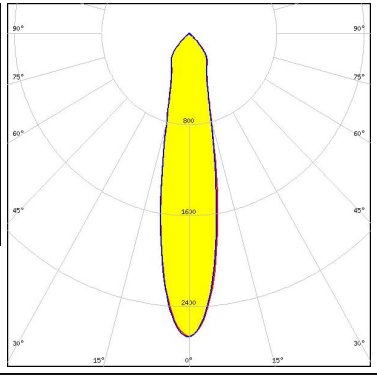

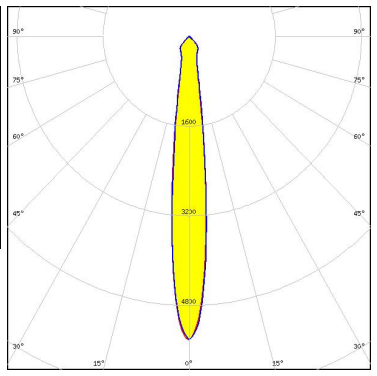

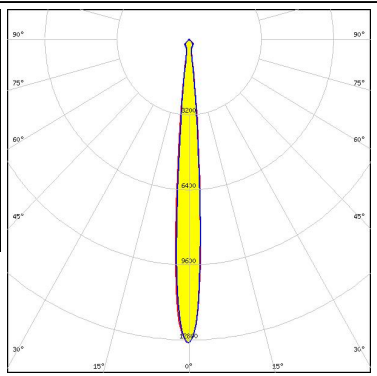

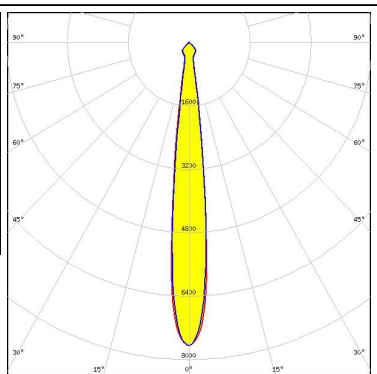
Component	Qty in box	MOQ	MPQ	Box weight (kg)
F14738_BROOKE-G2-S » Box size: 480 x 280 x 300 mm	720	45	45	4.8




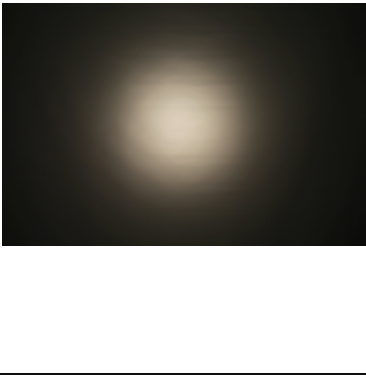
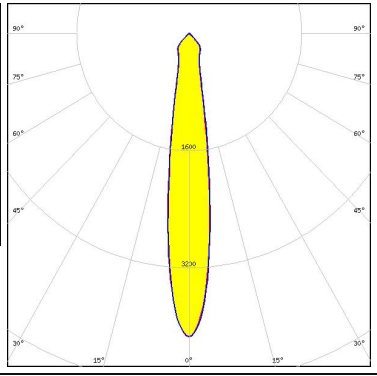


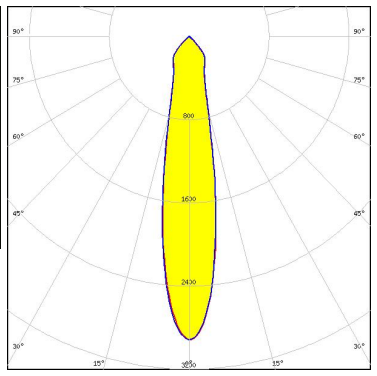


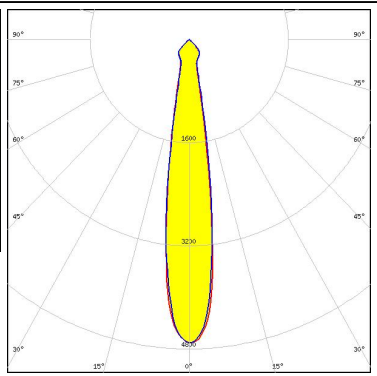


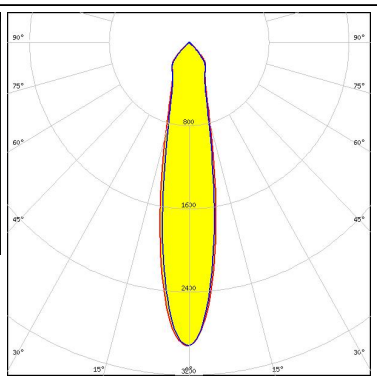
See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)



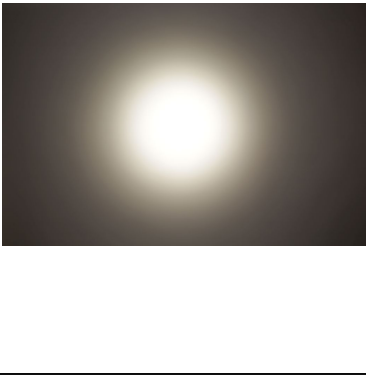
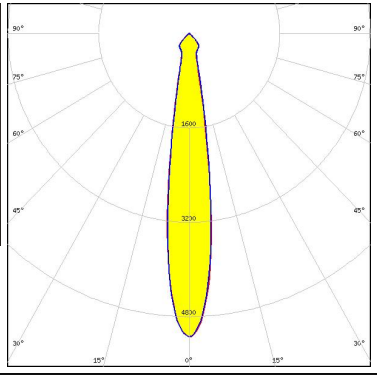

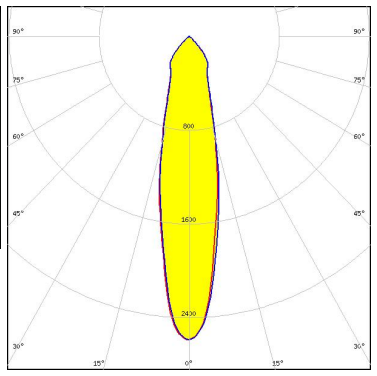

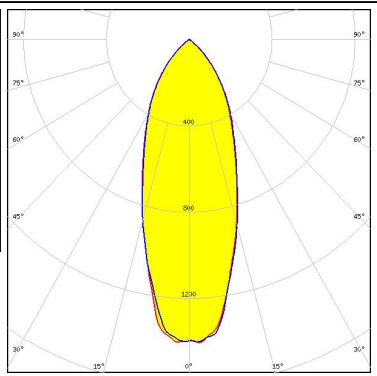

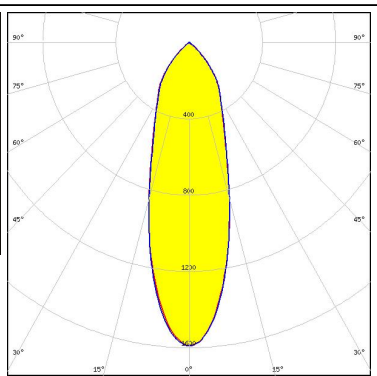
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V10 Gen7</p> <p>FWHM / FWTM 22.0° / 74.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 2.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>F15255_HEKLA-SOCKET-C</p> <p>C14658_BARBARA-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED V4 HD</p> <p>FWHM / FWTM 13.0° / 32.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 5.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>F15253_HEKLA-SOCKET-A</p> <p>C14658_BARBARA-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED V4 HD</p> <p>FWHM / FWTM 8.8° / 16.5°</p> <p>Efficiency 94 %</p> <p>Peak intensity 12.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>F15253_HEKLA-SOCKET-A</p>		
<p>bridgelux.</p> <p>LED V6 HD</p> <p>FWHM / FWTM 12.0° / 23.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 7.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>F15255_HEKLA-SOCKET-C</p>		


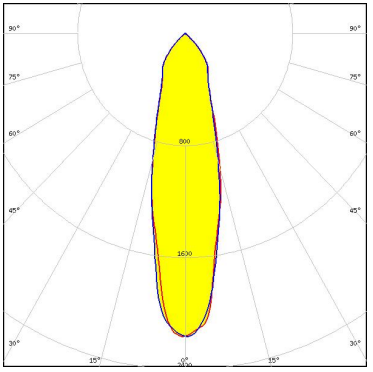
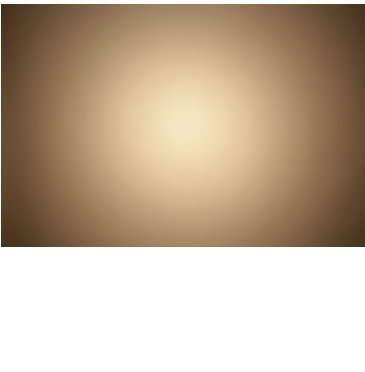
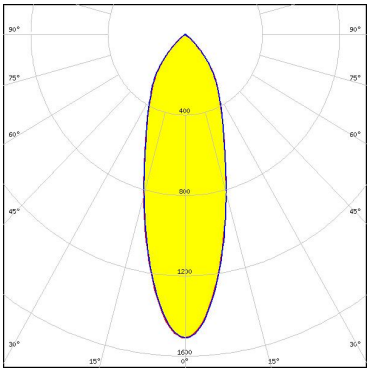

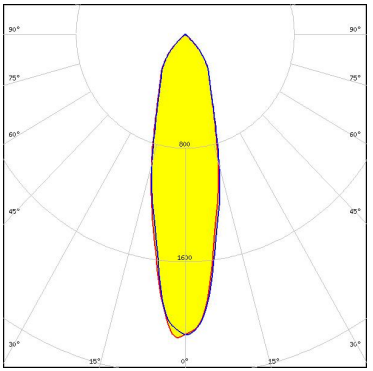

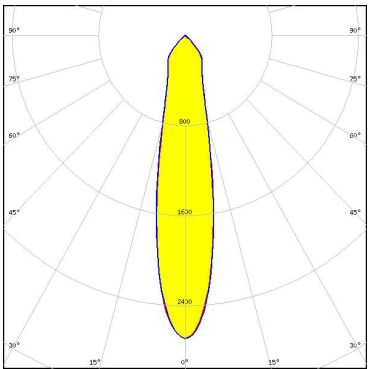
#### PHOTOMETRIC DATA (MEASURED):

<p></p> <p>LED V6 HD            FWHM / FWTM 16.0° / 41.0°            Efficiency 89 %            Peak intensity 4.1 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            F15255_HEKLA-SOCKET-C            C14658_BARBARA-RZ-LENS</p>		
<p></p> <p>LED V9 HD            FWHM / FWTM 21.0° / 65.0°            Efficiency 87 %            Peak intensity 2.9 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            F15859_HEKLA-SOCKET-I            C14658_BARBARA-RZ-LENS</p>		
<p></p> <p>LED V9 HD            FWHM / FWTM 17.0° / 33.0°            Efficiency 94 %            Peak intensity 4.7 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            F15859_HEKLA-SOCKET-I</p>		
<p></p> <p>LED VERO10            FWHM / FWTM 21.0° / 70.0°            Efficiency 92 %            Peak intensity 2.9 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            F15616_HEKLA-SOCKET-F            C14658_BARBARA-RZ-LENS</p>		

#### PHOTOMETRIC DATA (MEASURED):


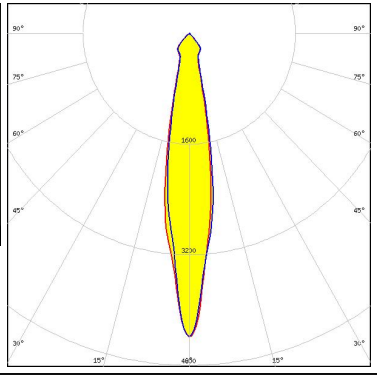
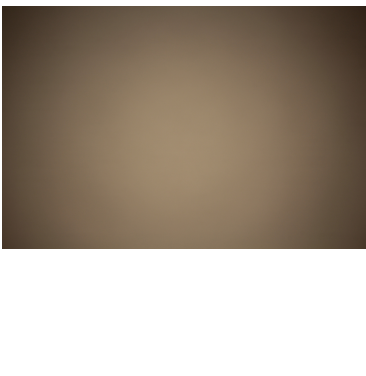
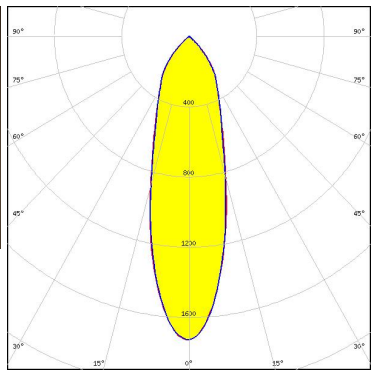


<p>bridgelux.</p> <p>LED VERO10</p> <p>FWHM / FWTM 16.0° / 33.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 5.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15616_HEKLA-SOCKET-F</p>		
<p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM / FWTM 23.0° / 76.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 2.6 cd/m</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 / FWTM 38.0° / 87.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.4 cd/m</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 13mm (21W)</p> <p>FWHM / FWTM 32.0° / 85.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 1.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components: C16142_HEKLA-SOCKET-K C14658_BARBARA-RZ-LENS Bender Wirth: 491 Typ L8</p>		

#### PHOTOMETRIC DATA (MEASURED):



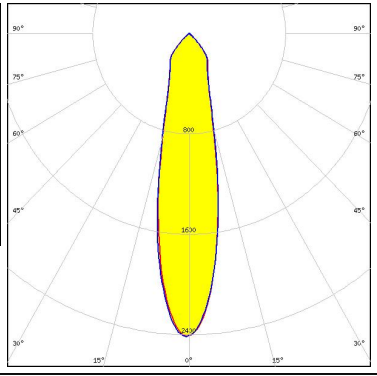

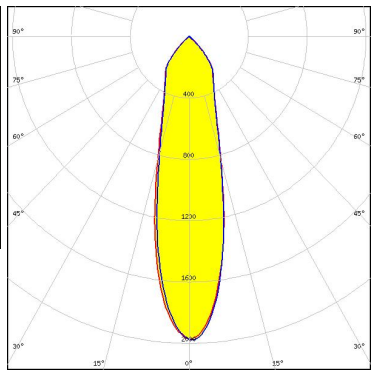

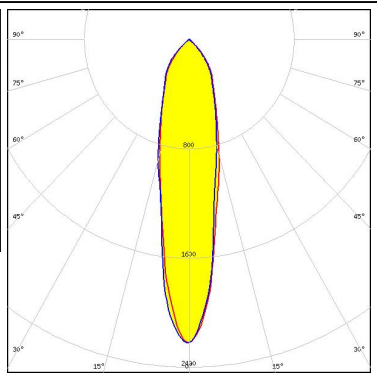

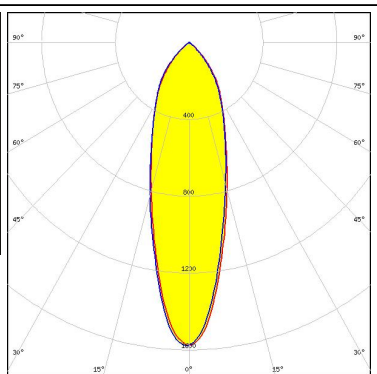
<p><b>bridgelux.</b></p> <p>LED Vesta DTW 13mm (21W)            FWHM / FWTM 27.0° / 80.0°            Efficiency 90 %            Peak intensity 2.2 cd/lm            LEDs/each optic 1            Light colour Tunable White</p> <p>Required components:            C16142_HEKLA-SOCKET-K            Bender Wirth: 491 Typ L8</p>		
<p><b>bridgelux.</b></p> <p>LED Vesta DTW 15mm (33W)            FWHM / FWTM 33.0° / 85.0°            Efficiency 84 %            Peak intensity 1.5 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C16142_HEKLA-SOCKET-K            C14658_BARBARA-RZ-LENS            Bender Wirth: 491 Typ L8</p>		
<p><b>bridgelux.</b></p> <p>LED Vesta DTW 15mm (33W)            FWHM / FWTM 27.0° / 79.0°            Efficiency 91 %            Peak intensity 2.1 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C16142_HEKLA-SOCKET-K            Bender Wirth: 491 Typ L8</p>		
<p><b>bridgelux.</b></p> <p>LED Vesta DTW 9mm (4W/6W/12W)            FWHM / FWTM 22.0° / 72.0°            Efficiency 87 %            Peak intensity 2.7 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C16142_HEKLA-SOCKET-K            C14658_BARBARA-RZ-LENS            Bender Wirth: 490 Typ L8</p>		



#### PHOTOMETRIC DATA (MEASURED):

<p><b>bridgelux.</b></p> <p>LED Vesta DTW 9mm (4W/6W/12W)</p> <p>FWHM / FWTM 18.0° / 38.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 4.4 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><b>bridgelux.</b></p> <p>LED Vesta TW 13mm (25W) CSP</p> <p>FWHM / FWTM 30.0° / 82.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 1.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K C14658_BARBARA-RZ-LENS Bender Wirth: 492 Typ L8</p>		
<p><b>bridgelux.</b></p> <p>LED Vesta TW 6mm DP</p> <p>FWHM / FWTM 17.0° / 49.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 3.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K C14658_BARBARA-RZ-LENS Bender Wirth: 504 Typ L8</p>		
<p><b>bridgelux.</b></p> <p>LED Vesta TW 6mm DP</p> <p>FWHM / FWTM 13.0° / 26.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 6.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K Bender Wirth: 504 Typ L8</p>		

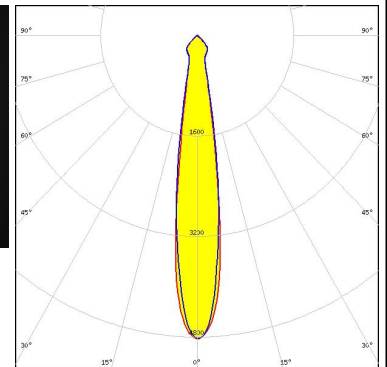
#### PHOTOMETRIC DATA (MEASURED):

<p></p> <p>LED Vesta TW 9mm (12W) CSP            FWHM / FWTM 23.0° / 76.0°            Efficiency 85 %            Peak intensity 2.4 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C16142_HEKLA-SOCKET-K            C14658_BARBARA-RZ-LENS            Bender Wirth: 489 Typ L8</p>		
<p><b>CITIZEN</b></p> <p>LED CLC020 Series (Dim-To-Warm)            FWHM / FWTM 26.0° / 81.0°            Efficiency 84 %            Peak intensity 2 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C16142_HEKLA-SOCKET-K            C14658_BARBARA-RZ-LENS            Bender Wirth: 487 Typ L8</p>		
<p><b>CITIZEN</b></p> <p>LED CLC030 Series (Dim-To-Warm)            FWHM / FWTM 23.0° / 78.0°            Efficiency 89 %            Peak intensity 2.2 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C16142_HEKLA-SOCKET-K</p>		
<p><b>CITIZEN</b></p> <p>LED CLC030 Series (Dim-To-Warm)            FWHM / FWTM 30.0° / 84.0°            Efficiency %            Peak intensity 1.6 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C16142_HEKLA-SOCKET-K            C14658_BARBARA-RZ-LENS            Bender Wirth: 436 Typ L8</p>		

#### PHOTOMETRIC DATA (MEASURED):

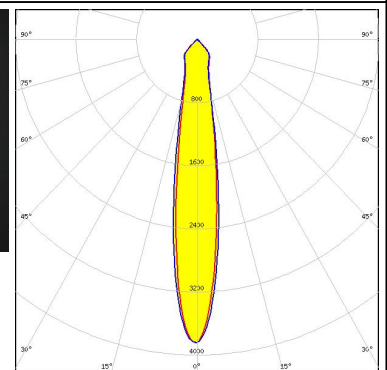
### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 16.0° / 33.0°  
 Efficiency 94 %  
 Peak intensity 4.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



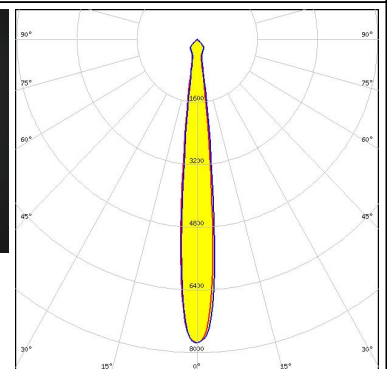
### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 16.0° / 33.0°  
 Efficiency 94 %  
 Peak intensity 4.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



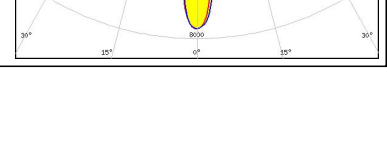
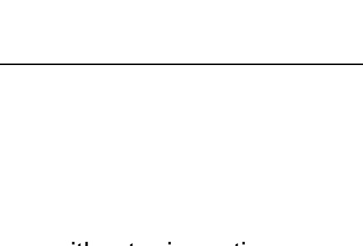
### CITIZEN

LED CLU700/701/702  
 FWHM / FWTM 17.0° / 47.0°  
 Efficiency 90 %  
 Peak intensity 3.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C  
 C14658\_BARBARA-RZ-LENS



### CITIZEN

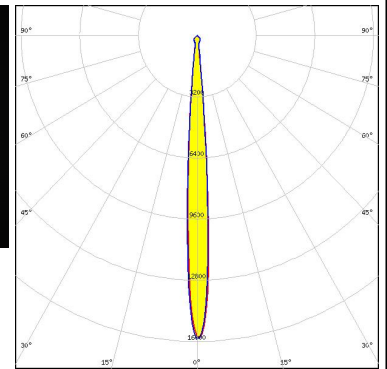
LED CLU700/701/702  
 FWHM / FWTM 12.0° / 22.0°  
 Efficiency 94 %  
 Peak intensity 7.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### PHOTOMETRIC DATA (MEASURED):

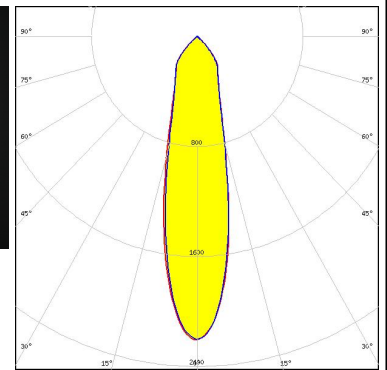
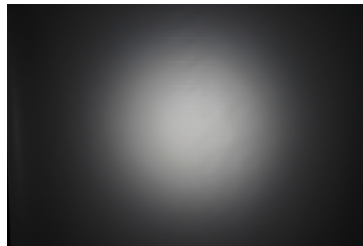
#### CITIZEN

LED CLU7A2 (LES 4.2mm)  
 FWHM / FWTM 8.0° / 15.0°  
 Efficiency 94 %  
 Peak intensity 15.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



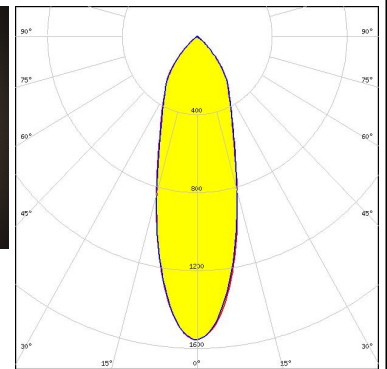
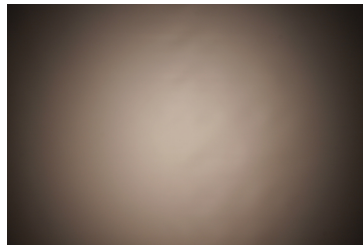
#### CITIZEN

LED LCN-C01B (Tunable White)  
 FWHM / FWTM 25.0° / 79.0°  
 Efficiency 86 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 C14658\_BARBARA-RZ-LENS  
 Bender Wirth: 481 Typ L8



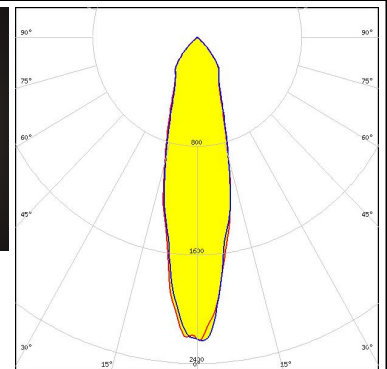
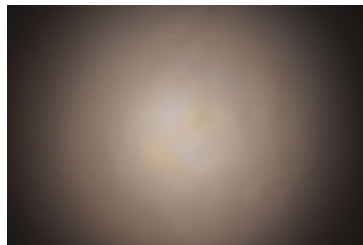
#### CITIZEN

LED LCN-C02B (Tunable White)  
 FWHM / FWTM 32.0° / 85.0°  
 Efficiency 84 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 C14658\_BARBARA-RZ-LENS  
 Bender Wirth: 481 Typ L8



#### CITIZEN

LED LCN-C02B (Tunable White)  
 FWHM / FWTM 27.0° / 79.0°  
 Efficiency 89 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K

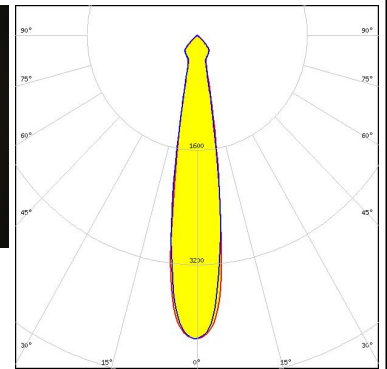
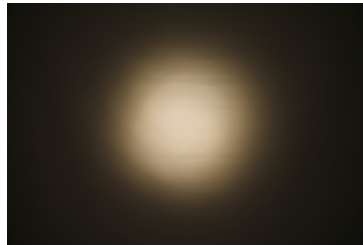




#### PHOTOMETRIC DATA (MEASURED):

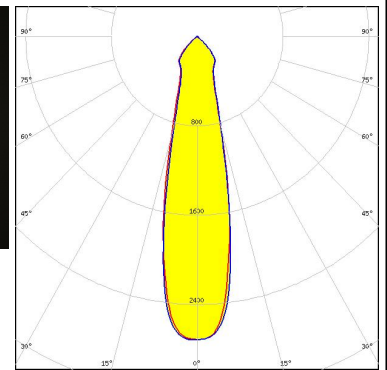
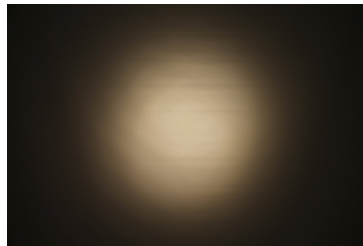
##### CREE LED

LED CMA1516  
 FWHM / FWTM 18.0° / 36.0°  
 Efficiency 94 %  
 Peak intensity 4.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15256\_HEKLA-SOCKET-D



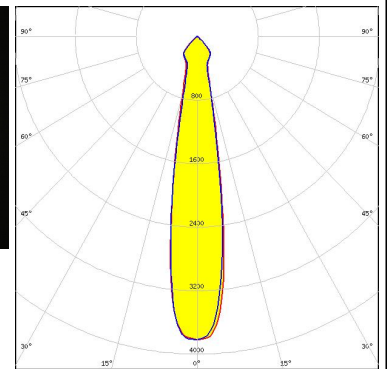
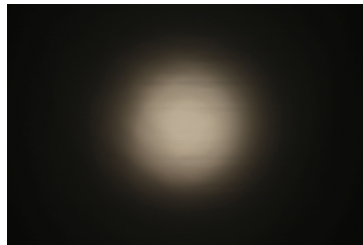
##### CREE LED

LED CMA1825  
 FWHM / FWTM 24.0° / 76.0°  
 Efficiency 94 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15254\_HEKLA-SOCKET-B



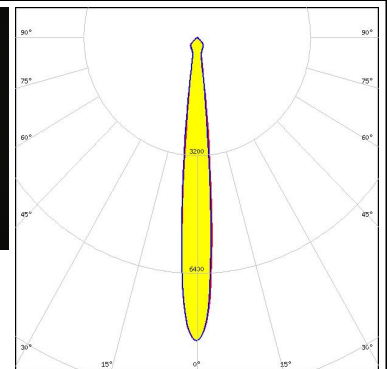
##### CREE LED

LED CMT14xx  
 FWHM / FWTM 19.0° / 41.0°  
 Efficiency 95 %  
 Peak intensity 3.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C


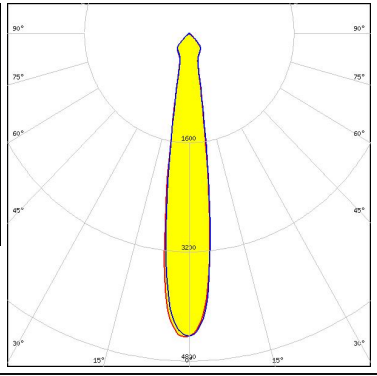

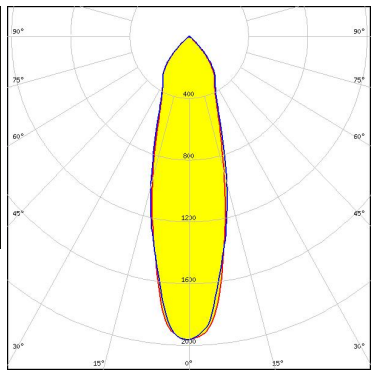
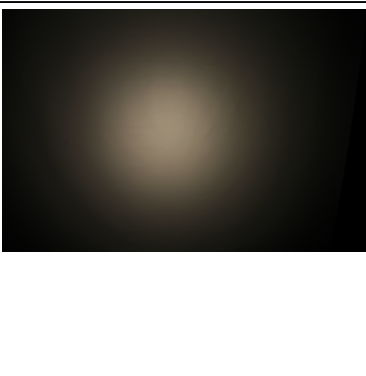
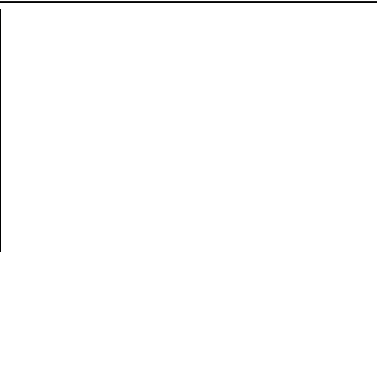

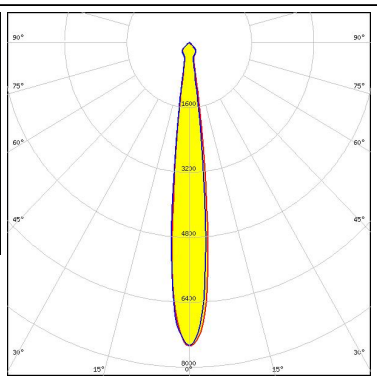


##### CREE LED


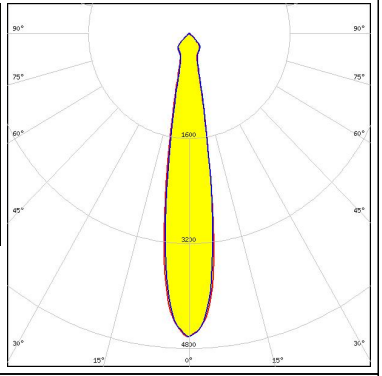
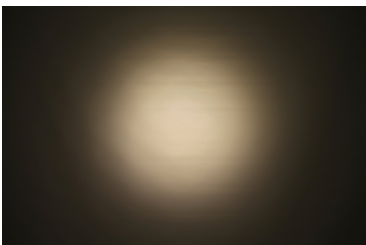
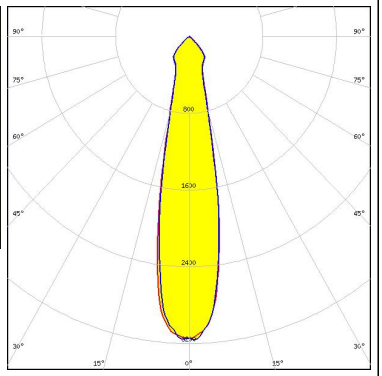
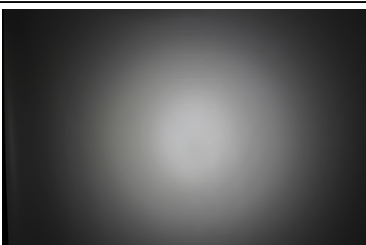
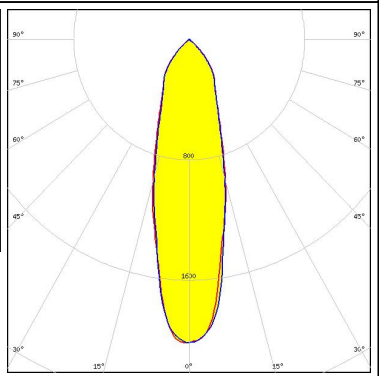
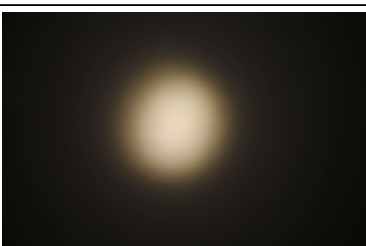
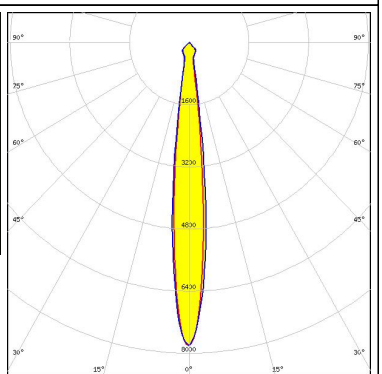
LED CXA/B 13xx  
 FWHM / FWTM 11.0° / 22.0°  
 Efficiency 94 %  
 Peak intensity 8.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15956\_HEKLA-SOCKET-J



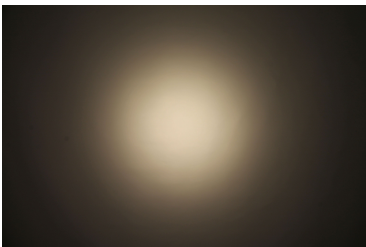
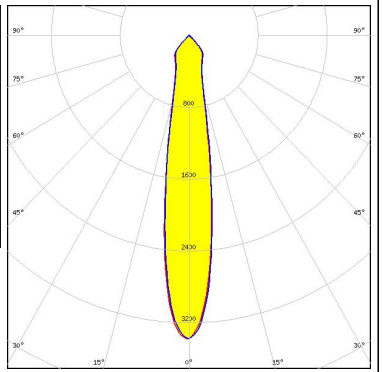

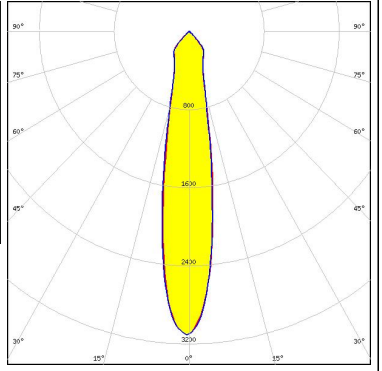

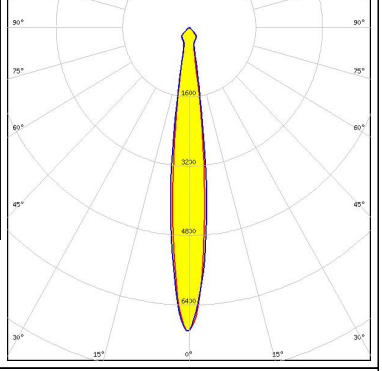

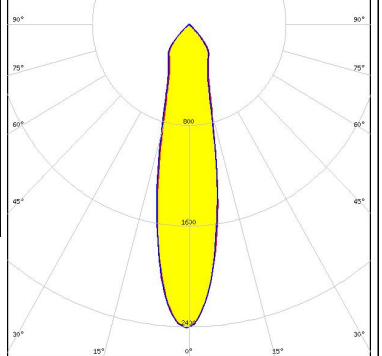
#### PHOTOMETRIC DATA (MEASURED):

<p><b>CREE</b> LED</p> <p>LED CXA/B 15xx            FWHM / FWTM 16.0° / 36.0°            Efficiency 94 %            Peak intensity 4.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15256_HEKLA-SOCKET-D</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB L08 (Gen2)            FWHM / FWTM 29.0° / 83.0°            Efficiency 92 %            Peak intensity 2 cd/lm            LEDs/each optic 1            Light colour White            Required components:            Bender Wirth: 637a Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB L08 (Gen2)            FWHM / FWTM 35.0° / 87.0°            Efficiency 84 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C14658_BARBARA-RZ-LENS            Bender Wirth: 637a Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202HD            FWHM / FWTM 13.0° / 23.0°            Efficiency 95 %            Peak intensity 7.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15848_HEKLA-SOCKET-G</p>		

#### PHOTOMETRIC DATA (MEASURED):


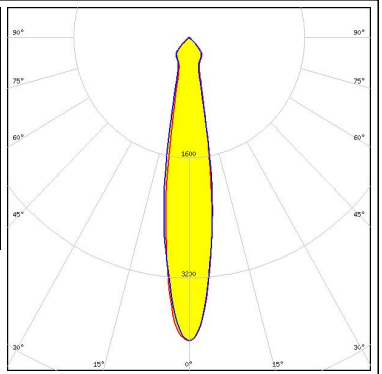

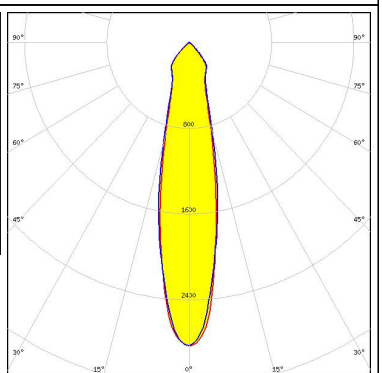

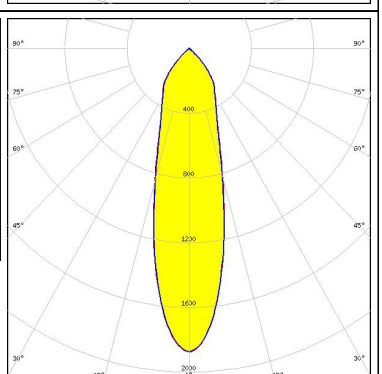

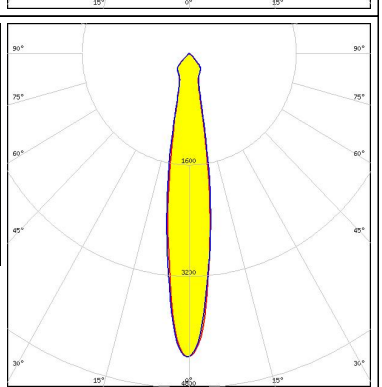
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1204HD</p> <p>FWHM / FWTM 18.0° / 35.0°</p> <p>Efficiency 96 %</p> <p>Peak intensity 4.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15858_HEKLA-SOCKET-H</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1205HD</p> <p>FWHM / FWTM 22.0° / 58.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3.2 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 1208</p> <p>FWHM / FWTM 29.0° / 82.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 632a Hekla XL</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S01H4</p> <p>FWHM / FWTM 13.0° / 23.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 7.8 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):


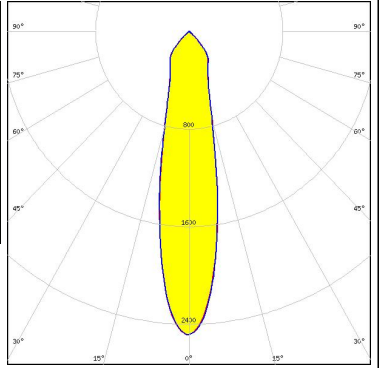

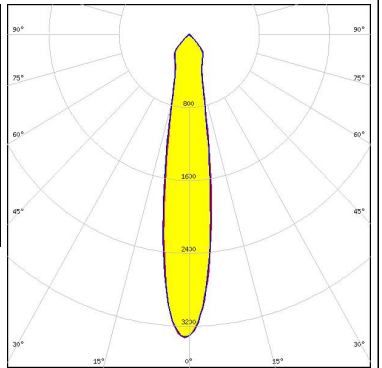

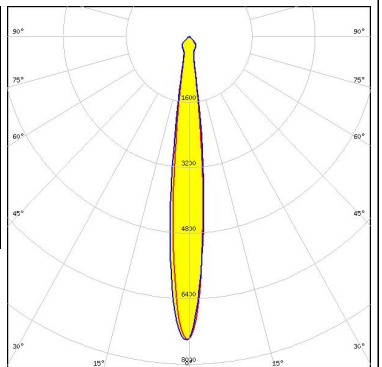
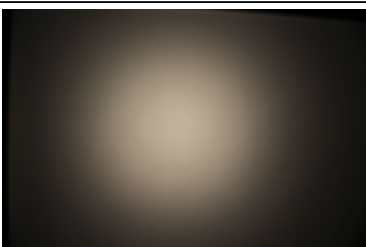
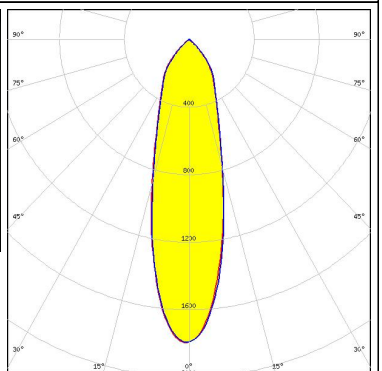
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S01H4</p> <p>FWHM / FWTM 18.0° / 54.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 3.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C14658_BARBARA-RZ-LENS Bender Wirth: 634c Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S01H6 / HD S02H6</p> <p>FWHM / FWTM 20.0° / 60.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 3.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C14658_BARBARA-RZ-LENS Bender Wirth: 634c Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S01H6 / HD S02H6</p> <p>FWHM / FWTM 14.0° / 25.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 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 23.0° / 78.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 2.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C14658_BARBARA-RZ-LENS Bender Wirth: 634c Hekla</p>		




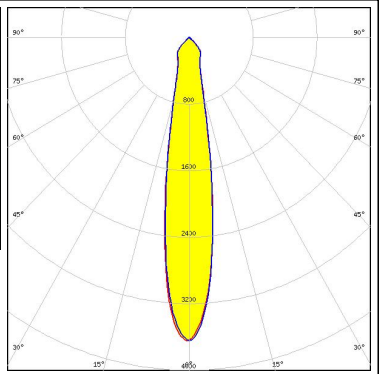

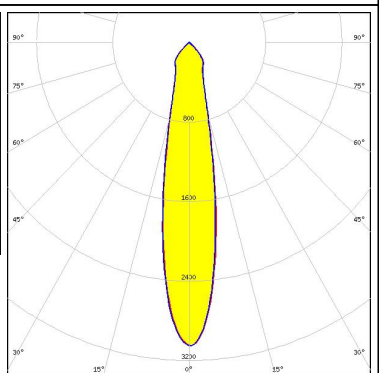

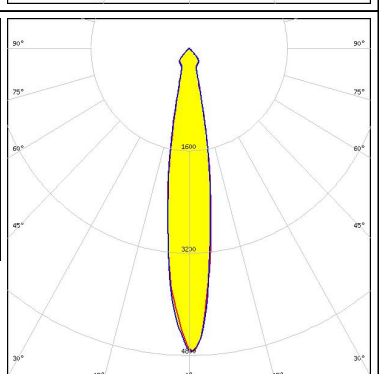

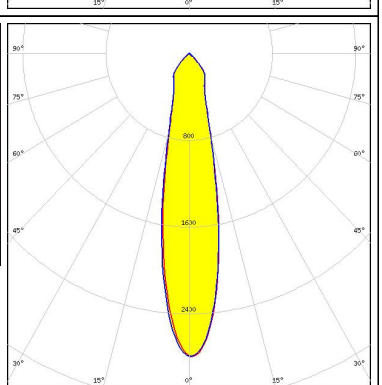
#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S04H9</p> <p>FWHM / FWTM 18.0° / 40.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 4 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 L04 / L05 (Gen2)</p> <p>FWHM / FWTM 23.0° / 75.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 2.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 637a Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB L04 / L05 (Gen2)</p> <p>FWHM / FWTM 28.0° / 83.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 1.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C14658_BARBARA-RZ-LENS Bender Wirth: 637a Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB M02 / M03 (Gen2)</p> <p>FWHM / FWTM 17.0° / 38.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 4.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 641a Hekla</p>		


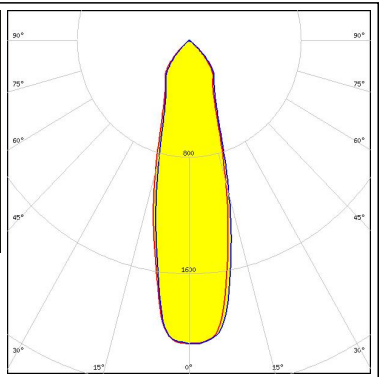

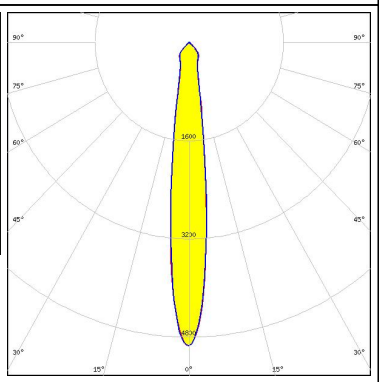

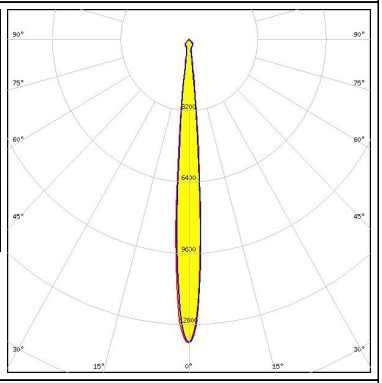

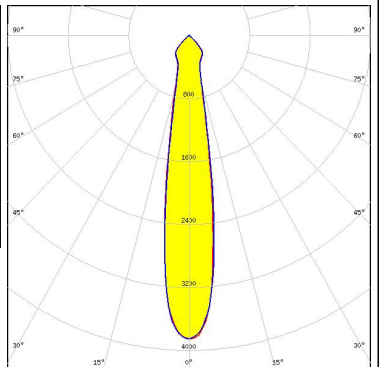
#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB M02 / M03 (Gen2)</p> <p>FWHM / FWTM 23.0° / 77.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 2.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C14658_BARBARA-RZ-LENS Bender Wirth: 641a Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB S01 (Gen2)</p> <p>FWHM / FWTM 19.0° / 56.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 3.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C14658_BARBARA-RZ-LENS Bender Wirth: 634c Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB S01 (Gen2)</p> <p>FWHM / FWTM 12.0° / 24.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 7.4 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 CDM-14 (Dim-To-Warm)</p> <p>FWHM / FWTM 28.0° / 81.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K C14658_BARBARA-RZ-LENS Bender Wirth: 491 Typ L8</p>		

#### PHOTOMETRIC DATA (MEASURED):


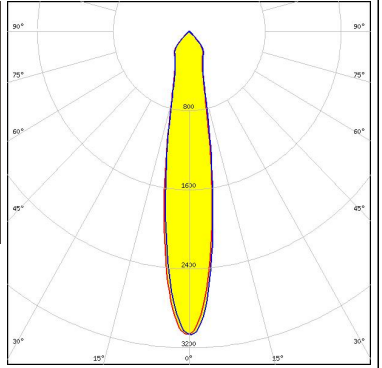

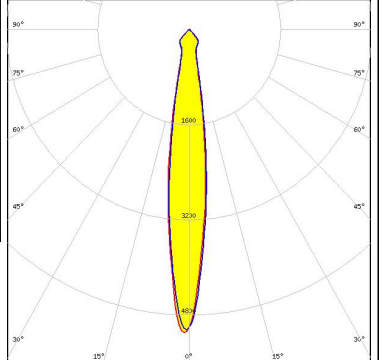
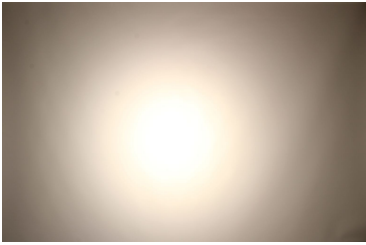
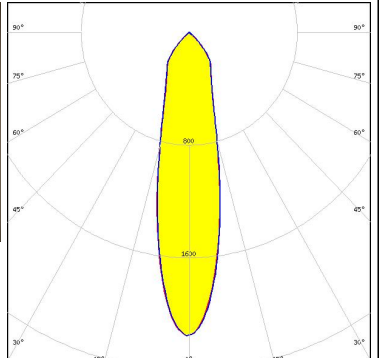
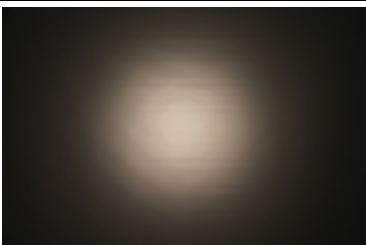
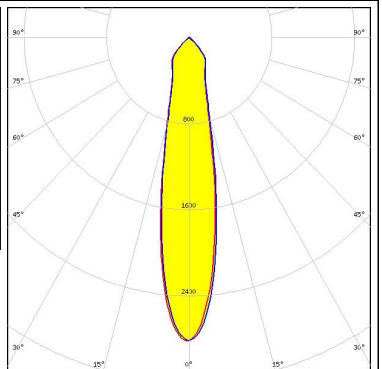
<p><b>LUMINUS</b></p> <p>LED CDM-6 (Dim-To-Warm)</p> <p>FWHM / FWTM 18.0° / 45.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 3.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:            C16142_HEKLA-SOCKET-K            C14658_BARBARA-RZ-LENS            Bender Wirth: 490 Typ L8</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-9 (Dim-To-Warm)</p> <p>FWHM / FWTM 21.0° / 56.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 3.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:            C16142_HEKLA-SOCKET-K            C14658_BARBARA-RZ-LENS            Bender Wirth: 490 Typ L8</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-9 (Dim-To-Warm)</p> <p>FWHM / FWTM 17.0° / 35.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 4.8 cd/m</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><b>LUMINUS</b></p> <p>LED CTM-9 (Tunable White)</p> <p>FWHM / FWTM 22.0° / 65.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 2.8 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:            C16142_HEKLA-SOCKET-K            C14658_BARBARA-RZ-LENS            Bender Wirth: 495 Typ L8</p>		

#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMINUS</b></p> <p>LED CxM-14 (19x19)</p> <p>FWHM / FWTM 29.0° / 83.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15859_HEKLA-SOCKET-I</p>		
<p><b>LUMINUS</b></p> <p>LED CXM-4</p> <p>FWHM / FWTM 14.0° / 35.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 4.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C C14658_BARBARA-RZ-LENS</p>		
<p><b>LUMINUS</b></p> <p>LED CXM-4</p> <p>FWHM / FWTM 9.0° / 16.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 13.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		
<p><b>LUMINUS</b></p> <p>LED CxM-9 (13.5x13.5)</p> <p>FWHM / FWTM 18.0° / 44.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		



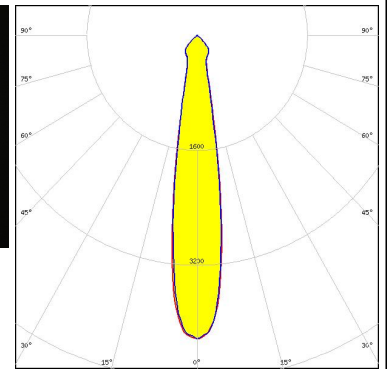
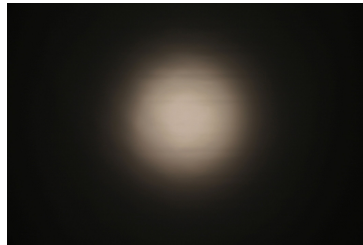
#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED NJCWL024Z-V1MT: COB L-Type Tunable White</p> <p>FWHM / FWTM 18.0° / 57.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 3.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <ul style="list-style-type: none"> <li>C16142_HEKLA-SOCKET-K</li> <li>C14658_BARBARA-RZ-LENS</li> </ul> <p>Bender Wirth: 497 Typ L8</p>		
<p><b>NICHIA</b></p> <p>LED NJCWL024Z-V1MT: COB L-Type Tunable White</p> <p>FWHM / FWTM 15.0° / 31.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 5.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <ul style="list-style-type: none"> <li>C16142_HEKLA-SOCKET-K</li> </ul> <p>Bender Wirth: 497 Typ L8</p>		
<p><b>NICHIA</b></p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM / FWTM 25.0° / 79.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 2.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <ul style="list-style-type: none"> <li>C16142_HEKLA-SOCKET-K</li> <li>C14658_BARBARA-RZ-LENS</li> </ul> <p>Bender Wirth: 498 Typ L2</p>		
<p><b>PHILIPS</b></p> <p>LED Fortimo SLM L09 CoB</p> <p>FWHM / FWTM 21.0° / 70.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 2.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <ul style="list-style-type: none"> <li>F15858_HEKLA-SOCKET-H</li> <li>C14658_BARBARA-RZ-LENS</li> </ul>		

#### PHOTOMETRIC DATA (MEASURED):

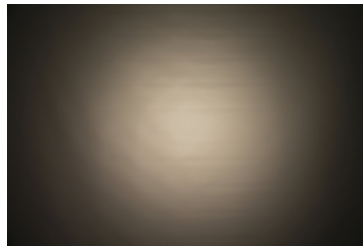
### PHILIPS

LED Fortimo SLM L09 CoB  
 FWHM / FWTM 18.0° / 38.0°  
 Efficiency 94 %  
 Peak intensity 4.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15858\_HEKLA-SOCKET-H



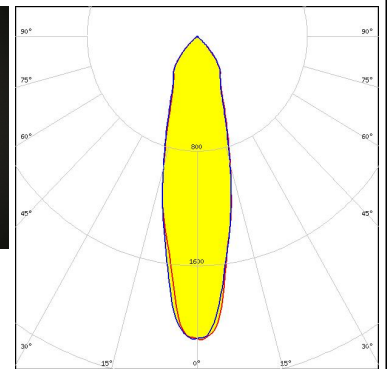
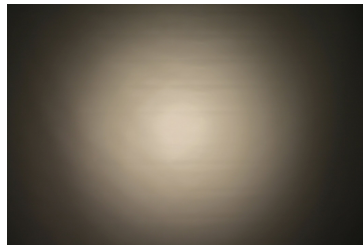
### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM / FWTM 32.0° / 85.0°  
 Efficiency 85 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 C14658\_BARBARA-RZ-LENS  
 Bender Wirth: 432 Typ L8



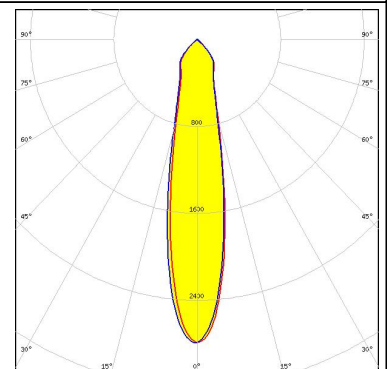
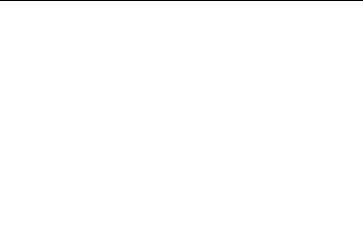
### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM / FWTM 27.0° / 80.0°  
 Efficiency 89 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 432 Typ L8



### SAMSUNG

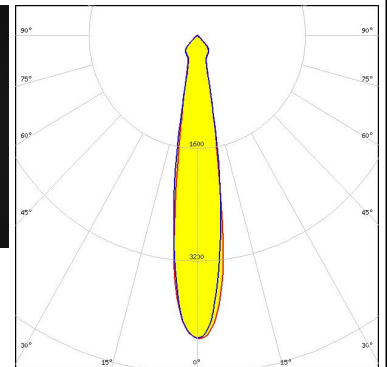
LED LC003D / LC006D / LC009D / LC013D  
 FWHM / FWTM 22.0° / 70.0°  
 Efficiency 90 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C  
 C14658\_BARBARA-RZ-LENS



#### PHOTOMETRIC DATA (MEASURED):

### SAMSUNG

LED LC003D / LC006D / LC009D / LC013D  
 FWHM / FWTM 18.0° / 37.0°  
 Efficiency 94 %  
 Peak intensity 4.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C

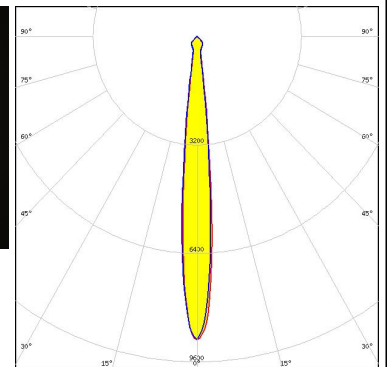


### SAMSUNG

LED LC003D / LC006D / LC009D / LC013D  
 FWHM / FWTM 18.0° / 37.0°  
 Efficiency 94 %  
 Peak intensity 4.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C

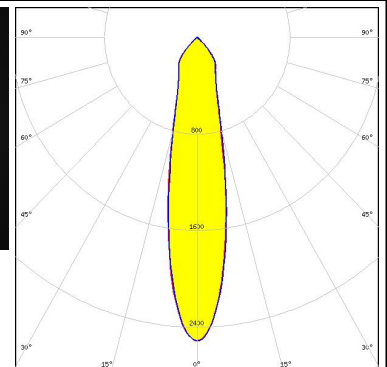
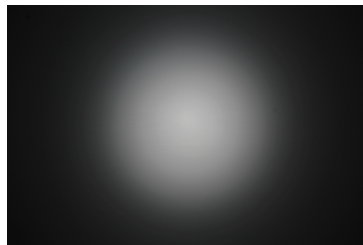
### SAMSUNG

LED LC010C G2  
 FWHM / FWTM 11.0° / 20.0°  
 Efficiency 93 %  
 Peak intensity 9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



### SAMSUNG

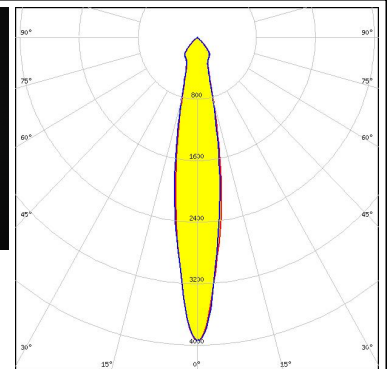
LED LC010T (Tunable White)  
 FWHM / FWTM 23.0° / 75.0°  
 Efficiency 86 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 C14658\_BARBARA-RZ-LENS  
 Bender Wirth: 501 Typ L8



#### PHOTOMETRIC DATA (MEASURED):

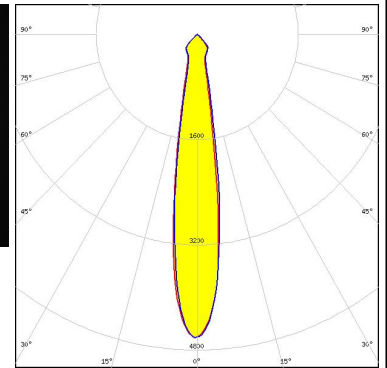
### SAMSUNG

LED LC010T (Tunable White)  
 FWHM / FWTM 18.0° / 43.0°  
 Efficiency 91 %  
 Peak intensity 3.9 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 501 Typ L8



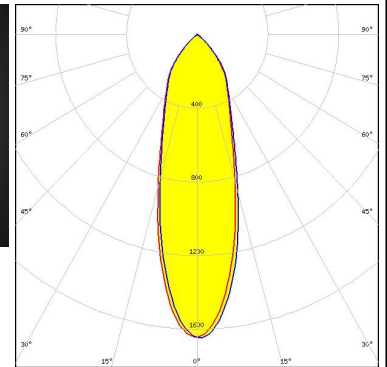
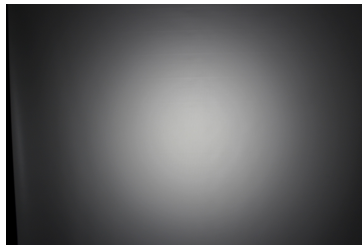
### SAMSUNG

LED LC020C G2  
 FWHM / FWTM 17.0° / 35.0°  
 Efficiency 94 %  
 Peak intensity 4.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



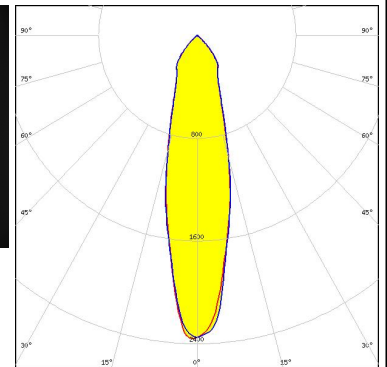
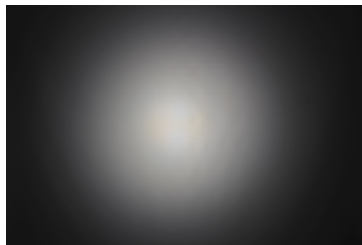
### SAMSUNG

LED LC020T (Tunable white)  
 FWHM / FWTM 31.0° / 84.0°  
 Efficiency 85 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 C14658\_BARBARA-RZ-LENS  
 Bender Wirth: 501 Typ L8


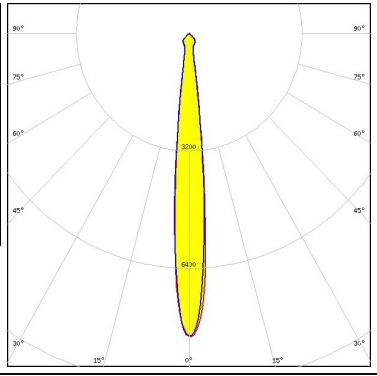

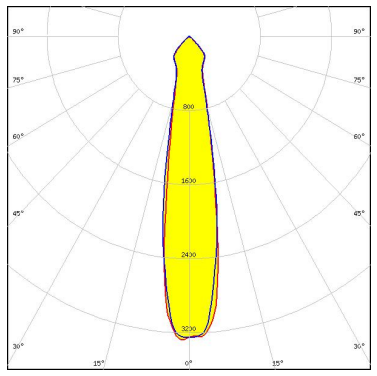

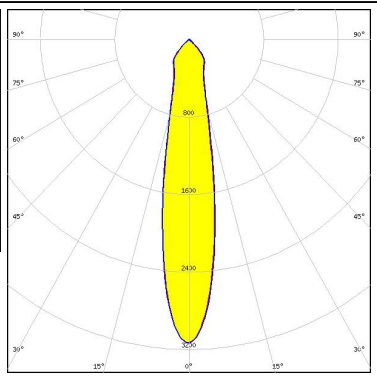

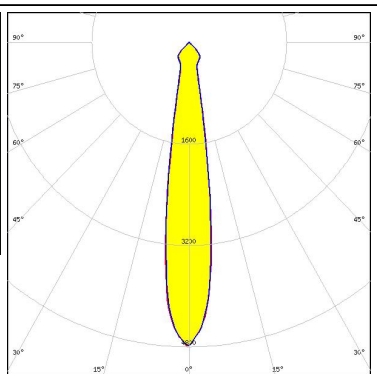


### SAMSUNG

LED LC020T (Tunable white)  
 FWHM / FWTM 26.0° / 78.0°  
 Efficiency 90 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 501 Typ L8



#### PHOTOMETRIC DATA (MEASURED):

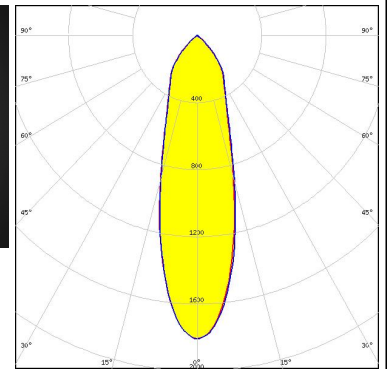
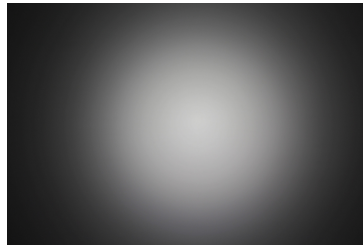
<p><b>SEOL</b> SEOL SEMICONDUCTOR</p> <p>LED MJT COB LES 6</p> <p>FWHM / FWTM 11.0° / 22.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 8.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		
<p><b>SEOL</b> SEOL SEMICONDUCTOR</p> <p>LED MJT COB LES 9.8</p> <p>FWHM / FWTM 20.0° / 58.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 3.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		
<p><b>TRIDONIC</b></p> <p>LED SLE G7 LES09</p> <p>FWHM / FWTM 20.0° / 63.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 3.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C C14658_BARBARA-RZ-LENS</p>		
<p><b>TRIDONIC</b></p> <p>LED SLE G7 LES09</p> <p>FWHM / FWTM 17.0° / 34.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 4.8 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		



#### PHOTOMETRIC DATA (MEASURED):

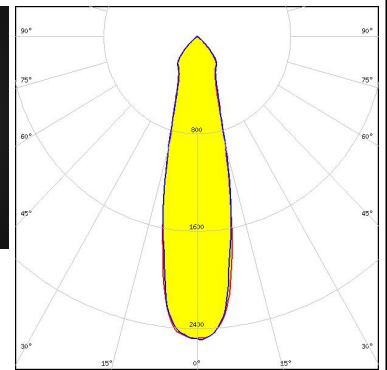
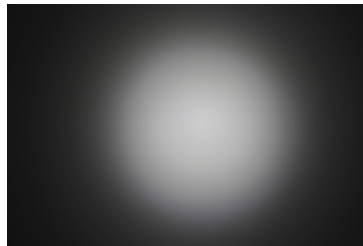
#### TRIDONIC

LED SLE G7 LES13  
 FWHM / FWTM 29.0° / 83.0°  
 Efficiency 87 %  
 Peak intensity 1.8 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I  
 C14658\_BARBARA-RZ-LENS



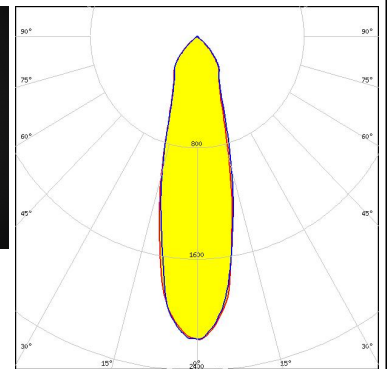
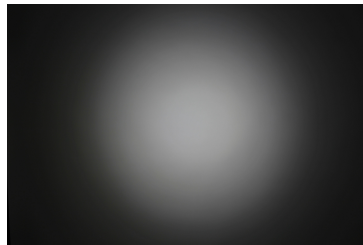
#### TRIDONIC

LED SLE G7 LES13  
 FWHM / FWTM 26.0° / 78.0°  
 Efficiency 94 %  
 Peak intensity 2.5 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



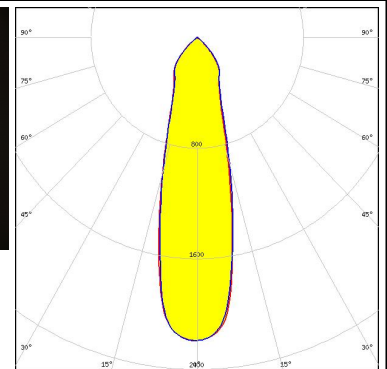
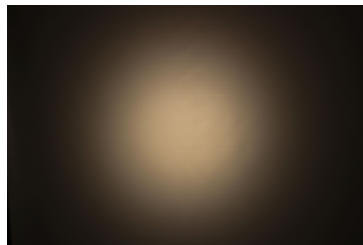
#### TRIDONIC

LED SLE G7 LES15  
 FWHM / FWTM 28.0° / 81.0°  
 Efficiency 94 %  
 Peak intensity 2.2 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



#### XICATO

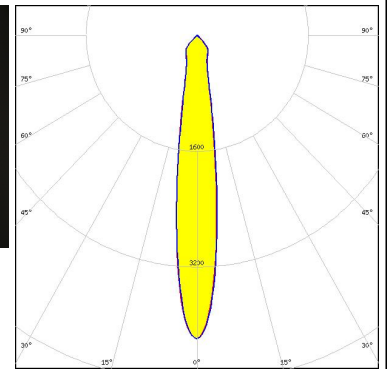
LED XOB 14.5 mm  
 FWHM / FWTM 27.0° / 82.0°  
 Efficiency 94 %  
 Peak intensity 2.2 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



#### PHOTOMETRIC DATA (MEASURED):

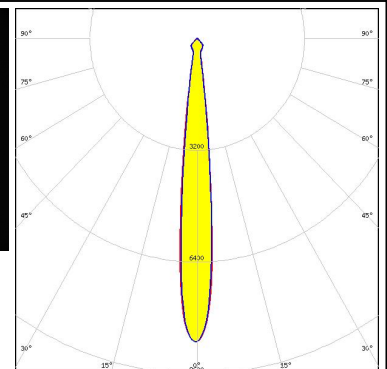
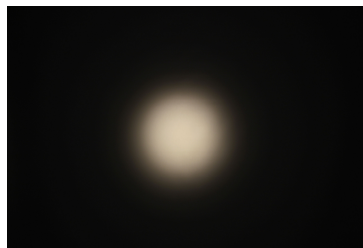
#### XICATO

LED XOB 6 mm  
 FWHM / FWTM 15.0° / 41.0°  
 Efficiency 88 %  
 Peak intensity 4.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C  
 C14658\_BARBARA-RZ-LENS



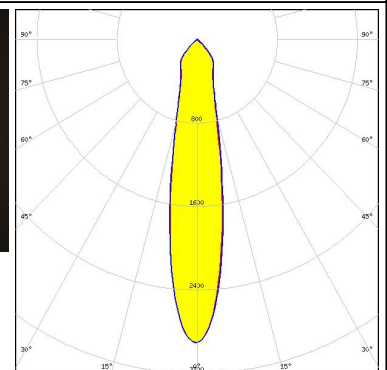
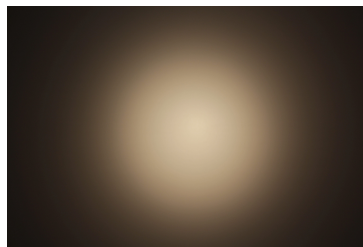
#### XICATO

LED XOB 6 mm  
 FWHM / FWTM 11.0° / 21.0°  
 Efficiency 94 %  
 Peak intensity 8.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



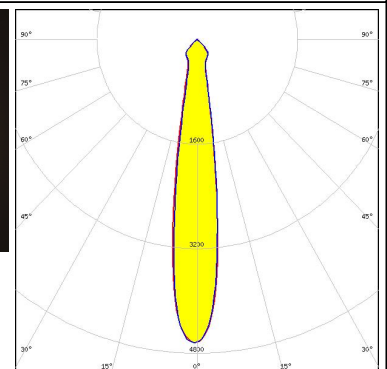
#### XICATO

LED XOB 9.8 mm  
 FWHM / FWTM 21.0° / 69.0°  
 Efficiency 90 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C  
 C14658\_BARBARA-RZ-LENS



#### XICATO

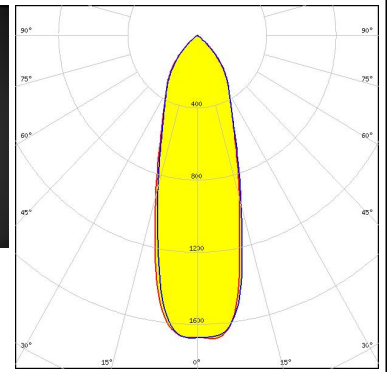
LED XOB 9.8 mm  
 FWHM / FWTM 16.0° / 35.0°  
 Efficiency 94 %  
 Peak intensity 4.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### PHOTOMETRIC DATA (MEASURED):

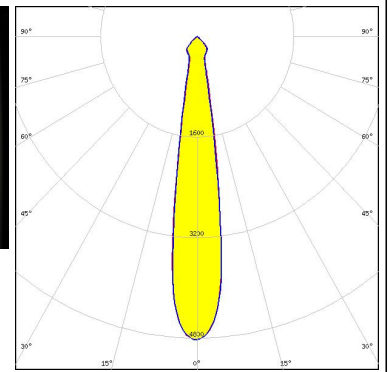
### XICATO

LED XTM - 19mm LES  
FWHM / FWTM 33.0° / 86.0°  
Efficiency 92 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C15743\_XTM-ADAPTER-50-B






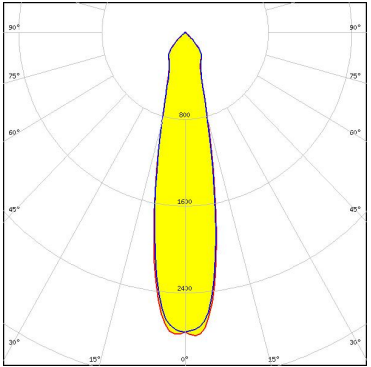

### XICATO

LED XTM - 9mm LES  
FWHM / FWTM 17.0° / 33.0°  
Efficiency 94 %  
Peak intensity 4.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C15743\_XTM-ADAPTER-50-B





#### PHOTOMETRIC DATA (SIMULATED):

		
LED	V10 Gen6	
FWHM / FWTM	15.0°	
Efficiency	0 %	
LEDs/each optic	1	
Light colour	White	
Required components:		
F14988_HEKLA-SOCKET-E		
		
LED	V10 Gen6	
FWHM / FWTM	15.0° / 32.0°	
Efficiency	%	
LEDs/each optic	1	
Light colour	White	
Required components:		
F14988_HEKLA-SOCKET-E		
		
LED	V13 Gen6	
FWHM / FWTM	24.0° / 70.0°	
Efficiency	92 %	
Peak intensity	2.8 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
F14988_HEKLA-SOCKET-E		
		
LED	V8 Gen6	
FWHM / FWTM	15.0°	
Efficiency	0 %	
LEDs/each optic	1	
Light colour	White	
Required components:		
F15253_HEKLA-SOCKET-A		

#### PHOTOMETRIC DATA (SIMULATED):

bridgelux.

LED	V8 Gen6
FWHM / FWTM	15.0° / 32.0°
Efficiency	0 %
LEDs/each optic	1
Light colour	White
Required components:	
F15253_HEKLA-SOCKET-A	

bridgelux.



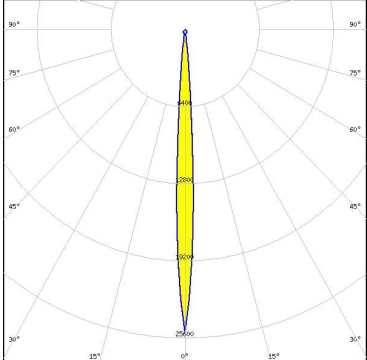

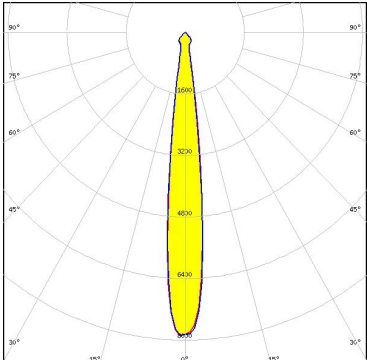

LED	Vesta TW 9mm (9W) DP
FWHM / FWTM	18.0° / 45.0°
Efficiency	87 %
Peak intensity	3.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
C16142_HEKLA-SOCKET-K	
C14658_BARBARA-RZ-LENS	
Bender Wirth: 489 Typ L8	

<b>CITIZEN</b>	
LED	CLL03x/CLU03x
FWHM / FWTM	31.0° / 83.0°
Efficiency	93 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
F15859_HEKLA-SOCKET-I	

**CREE** ⇄ **LED**

LED	CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM / FWTM	22.0°
Efficiency	0 %
LEDs/each optic	1
Light colour	White
Required components:	
F15254_HEKLA-SOCKET-B	

#### PHOTOMETRIC DATA (SIMULATED):

		
LED	CXA/B 1816 & CXA/B 1820 & CXA 1850	
FWHM / FWTM	22.0°	
Efficiency	%	
LEDs/each optic	1	
Light colour	White	
Required components:	F15254_HEKLA-SOCKET-B	
		
LED	CXM-3	
FWHM / FWTM	6.0° / 12.0°	
Efficiency	93 %	
Peak intensity	25.2 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:	C16142_HEKLA-SOCKET-K Bender Wirth: 434 Typ L8	
		
LED	CxM-6 (13.5x13.5)	
FWHM / FWTM	12.0° / 24.0°	
Efficiency	93 %	
Peak intensity	7.9 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:	F17435_HEKLA-G2-C	
		
LED	COB L-Type (LES 11)	
FWHM / FWTM	20.0° / 51.0°	
Efficiency	93 %	
Peak intensity	3.3 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:	F15858_HEKLA-SOCKET-H	

#### PHOTOMETRIC DATA (SIMULATED):

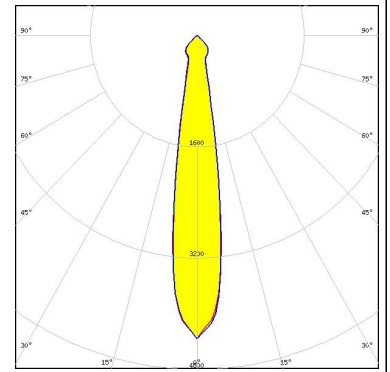
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM 16.0° / 30.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 5.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15858_HEKLA-SOCKET-H</p>	
<p><b>NICHIA</b></p> <p>LED COB T-Type</p> <p>FWHM / FWTM 12.0° / 21.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15848_HEKLA-SOCKET-G</p>	
<p><b>NICHIA</b></p> <p>LED NFSWE11A</p> <p>FWHM / FWTM 14.0° / 28.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 5.7 cd/lm</p> <p>LEDs/each optic 30</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S13 19x19</p> <p>FWHM / FWTM 23.9° / 70.4°</p> <p>Efficiency 93 %</p> <p>Peak intensity 2.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15859_HEKLA-SOCKET-I</p>	

#### PHOTOMETRIC DATA (SIMULATED):

#### OSRAM

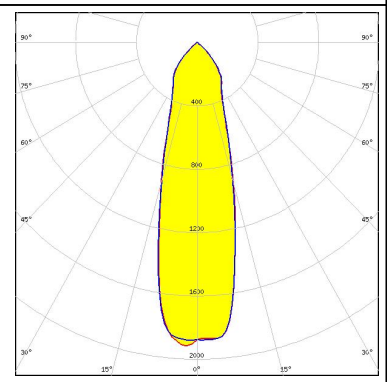
Opto Semiconductors

LED Soleriq S9  
FWHM / FWTM 17.4° / 36.5°  
Efficiency 93 %  
Peak intensity 4.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15255\_HEKLA-SOCKET-C



#### SAMSUNG

LED LC016D / LC019D / LC026D / LC033D  
FWHM / FWTM 29.0° / 82.1°  
Efficiency 88 %  
Peak intensity 1.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15859\_HEKLA-SOCKET-I



### 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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