

## MIRELLA-50-W-PF

~40° wide beam

### SPECIFICATION:

Dimensions	Ø 49.9 mm
Height	24 mm
Fastening	socket
ROHS compliant	yes ⓘ

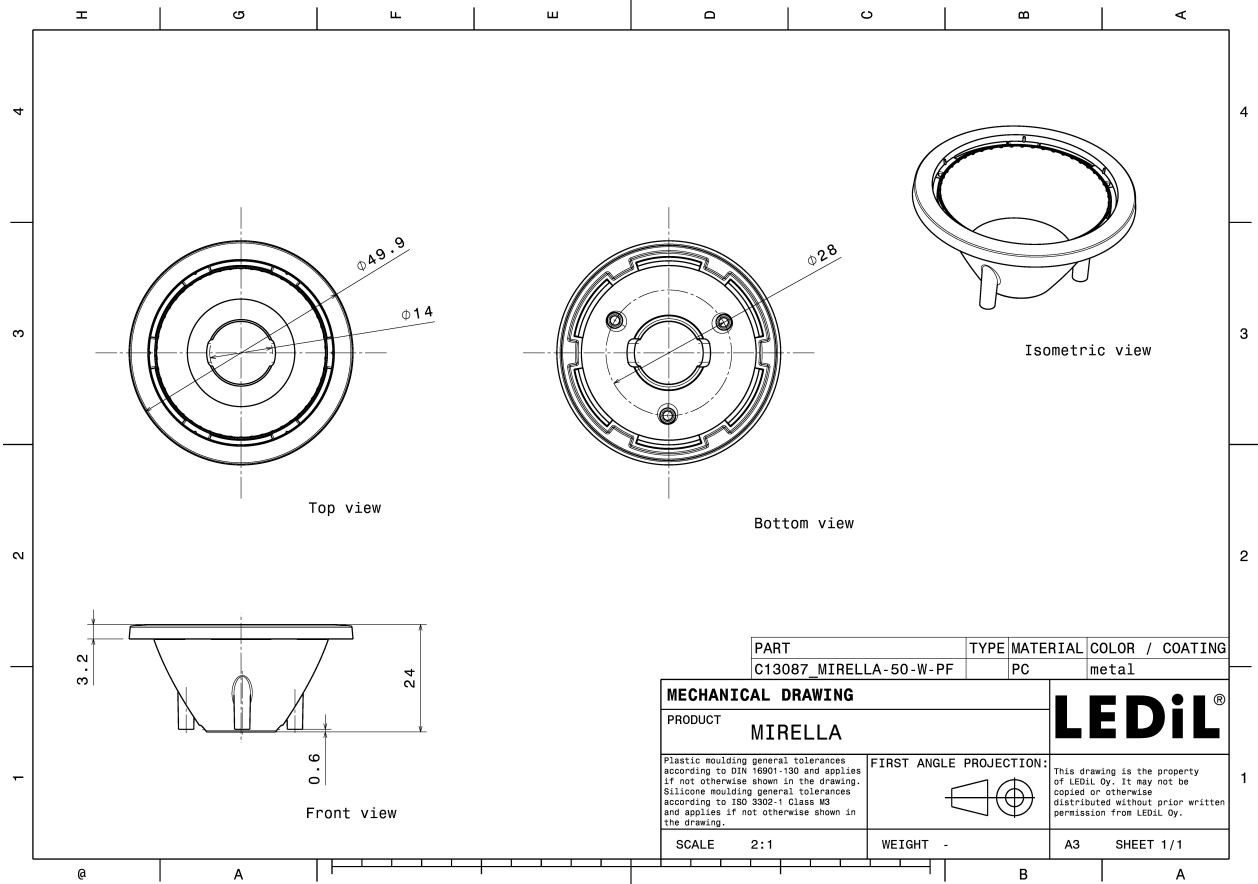
### MATERIALS:

Component	Type	Material	Colour	Finish	Coating
MIRELLA-50-W-PF	Reflector	PC	metal		lacquer

### ORDERING INFORMATION:


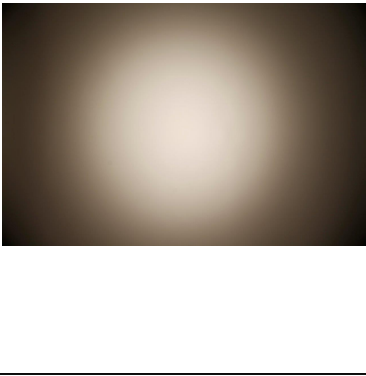
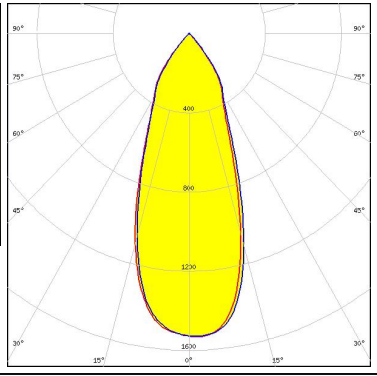


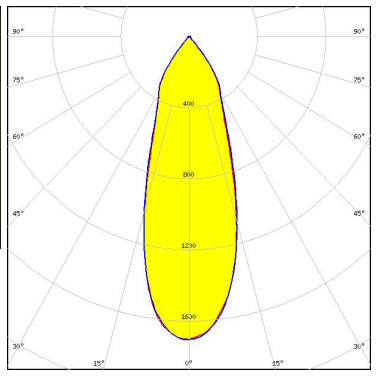


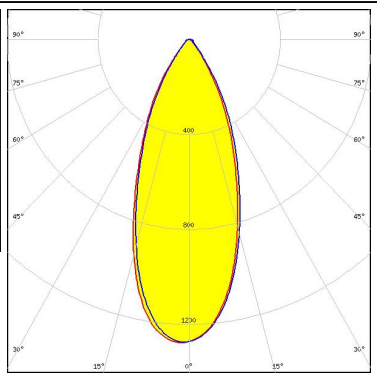

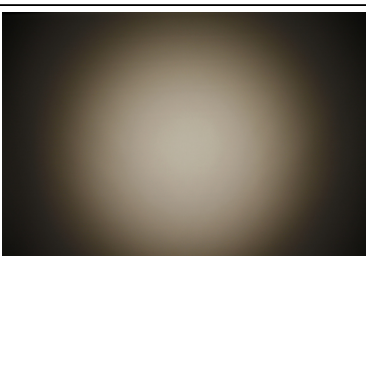
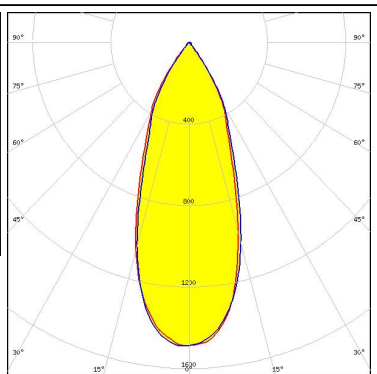
Component	Qty in box	MOQ	MPQ	Box weight (kg)
C13087_MIRELLA-50-W-PF » Box size: 480 x 280 x 300 mm	336	112	28	2.8




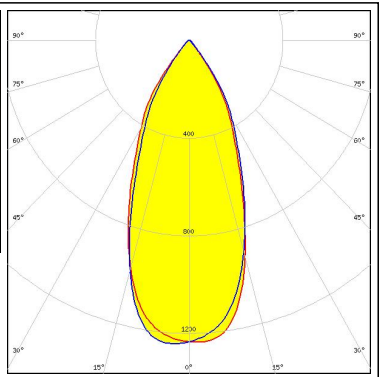

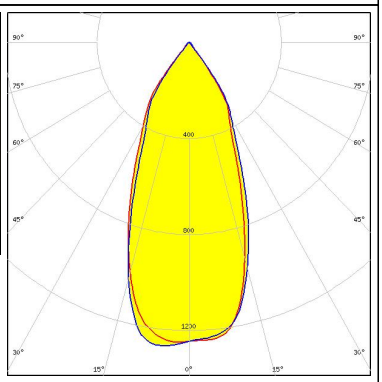




See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### OPTICAL RESULTS (MEASURED):



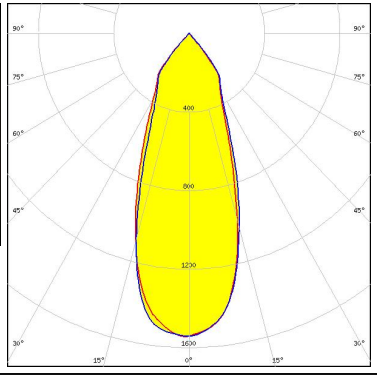

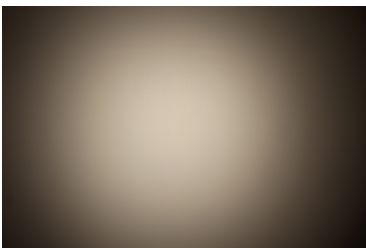


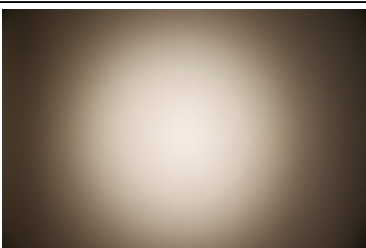
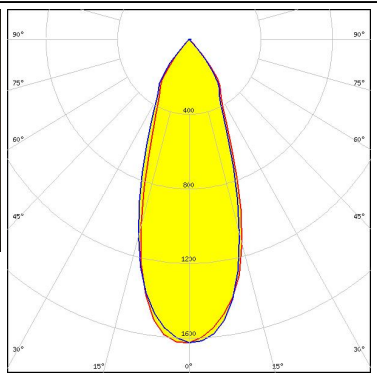

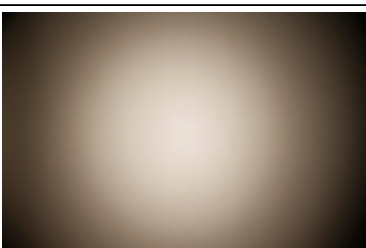
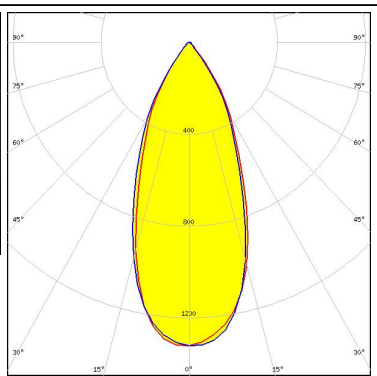
<p></p> <p>LED V10 Gen6            FWHM / FWTM 39.0° / 79.0°            Efficiency 86 %            Peak intensity 1.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C14115_PF-SOCKET-CXA15-18</p>		
<p></p> <p>LED V10 Gen7            FWHM / FWTM 35.0° / 76.0°            Efficiency 84 %            Peak intensity 1.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13709_PF-SOCKET-VERO13-18</p>		
<p></p> <p>LED V10 Gen7            FWHM / FWTM 40.0° / 75.0°            Efficiency 77 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13709_PF-SOCKET-VERO13-18            C12479_MIRELLA-DL</p>		
<p></p> <p>LED V10 Gen7            FWHM / FWTM 39.0° / 73.0°            Efficiency 79 %            Peak intensity 1.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13709_PF-SOCKET-VERO13-18            C13333_MIRELLA-CL</p>		

#### OPTICAL RESULTS (MEASURED):


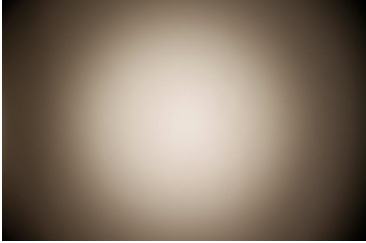
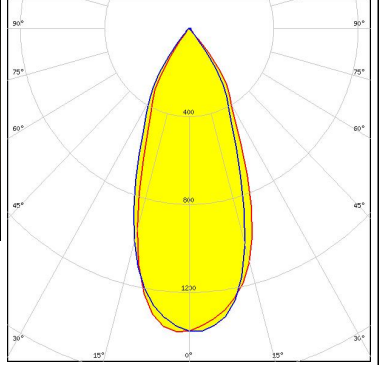

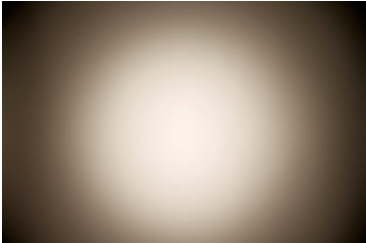
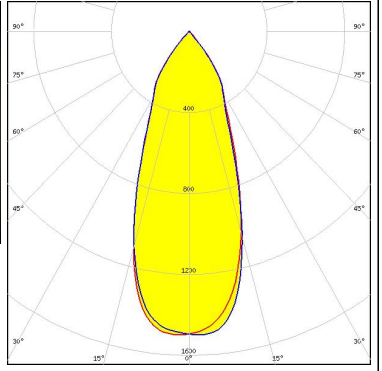

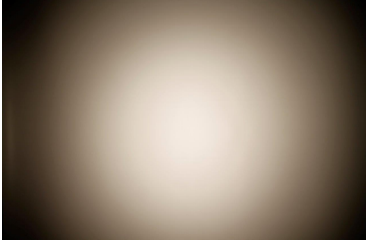
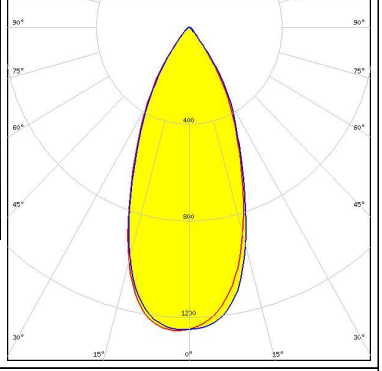

<p>bridgelux.</p> <p>LED V6 Gen6</p> <p>FWHM / FWTM 44.0° / 78.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13761_PF-SOCKET-CXA15</p> <p>C12479_MIRELLA-DL</p>		
<p>bridgelux.</p> <p>LED V6 Gen6</p> <p>FWHM / FWTM 44.0° / 77.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13761_PF-SOCKET-CXA15</p> <p>C13333_MIRELLA-CL</p>		
<p>bridgelux.</p> <p>LED V6 Gen6</p> <p>FWHM / FWTM 27.0° / 76.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 2.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13709_PF-SOCKET-VERO13-18</p> <p>Bender Wirth: 460 Typ L1</p>		
<p>bridgelux.</p> <p>LED V6 Gen6</p> <p>FWHM / FWTM 31.0° / 72.0°</p> <p>Efficiency 74 %</p> <p>Peak intensity 2.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13709_PF-SOCKET-VERO13-18</p> <p>C12479_MIRELLA-DL</p> <p>Bender Wirth: 460 Typ L1</p>		





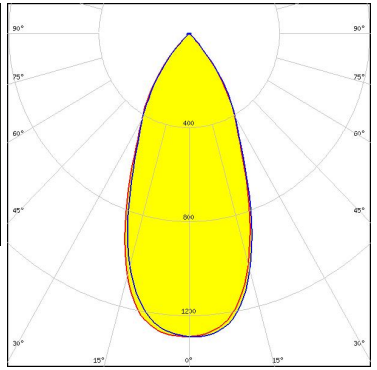


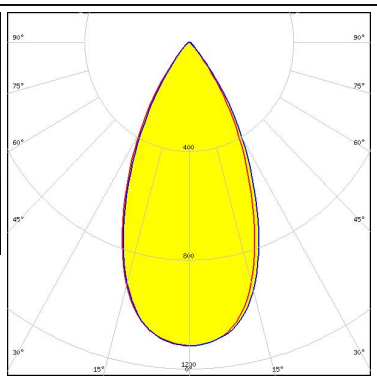


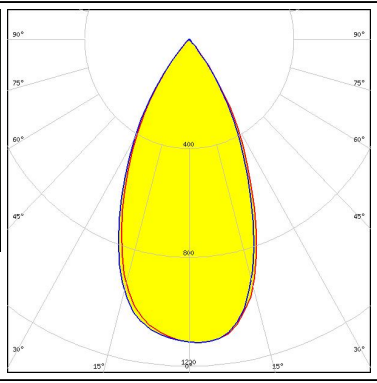


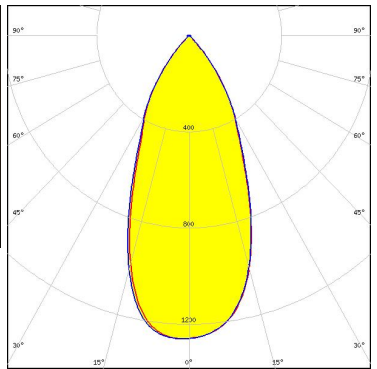
#### OPTICAL RESULTS (MEASURED):

<p></p> <p>LED V6 Gen6            FWHM / FWTM 39.0° / 81.0°            Efficiency 87 %            Peak intensity 1.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13761_PF-SOCKET-CXA15</p>		
<p></p> <p>LED V8 Gen6            FWHM / FWTM 36.0° / 74.0°            Efficiency 73 %            Peak intensity 1.8 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13709_PF-SOCKET-VERO13-18            C12479_MIRELLA-DL            Bender Wirth: 460 Typ L1</p>		
<p></p> <p>LED V8 Gen6            FWHM / FWTM 38.0° / 79.0°            Efficiency 87 %            Peak intensity 1.6 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13761_PF-SOCKET-CXA15</p>		
<p></p> <p>LED V8 Gen6            FWHM / FWTM 43.0° / 76.0°            Efficiency 82 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13761_PF-SOCKET-CXA15            C12479_MIRELLA-DL</p>		


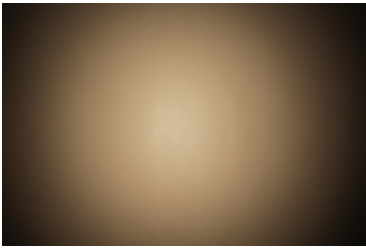
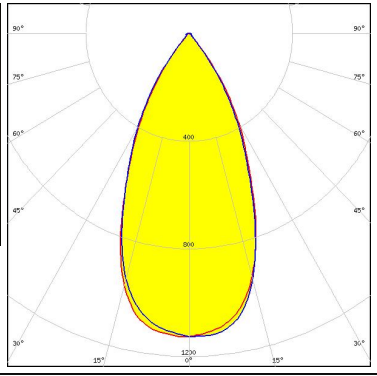

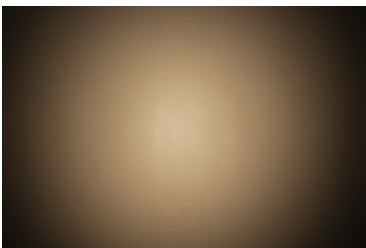
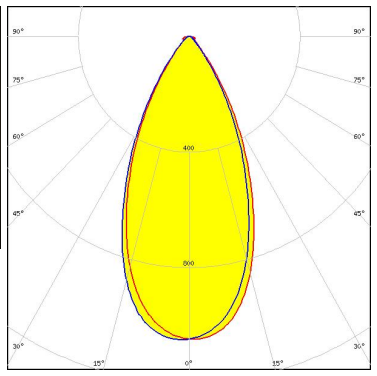
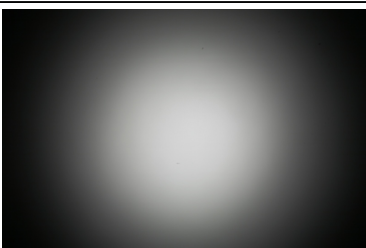
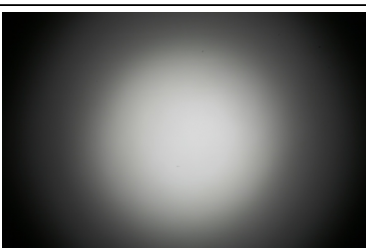
#### OPTICAL RESULTS (MEASURED):

<p></p> <p>LED V8 Gen6            FWHM / FWTM 42.0° / 76.0°            Efficiency 82 %            Peak intensity 1.4 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13761_PF-SOCKET-CXA15            C13333_MIRELLA-CL</p>		
<p></p> <p>LED VERO10            FWHM / FWTM 40.0° / 79.0°            Efficiency 85 %            Peak intensity 1.5 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13708_PF-SOCKET-VERO10</p>		
<p></p> <p>LED VERO10            FWHM / FWTM 44.0° / 76.0°            Efficiency 80 %            Peak intensity 1.3 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13708_PF-SOCKET-VERO10            C12479_MIRELLA-DL</p>		
<p></p> <p>LED VERO10            FWHM / FWTM 44.0° / 76.0°            Efficiency 80 %            Peak intensity 1.3 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13708_PF-SOCKET-VERO10            C13333_MIRELLA-CL</p>		

#### OPTICAL RESULTS (MEASURED):

<p></p> <p>LED VERO13            FWHM / FWTM 46.0° / 82.0°            Efficiency 90 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13709_PF-SOCKET-VERO13-18</p>		
<p></p> <p>LED VERO13            FWHM / FWTM 50.0° / 79.0°            Efficiency 82 %            Peak intensity 1.1 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13709_PF-SOCKET-VERO13-18            C12479_MIRELLA-DL</p>		
<p></p> <p>LED VERO13            FWHM / FWTM 51.0° / 79.0°            Efficiency 77 %            Peak intensity 1.1 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13709_PF-SOCKET-VERO13-18            C13333_MIRELLA-CL</p>		
<p></p> <p>LED Xenio Point 13mm            FWHM / FWTM 45.0° / 81.0°            Efficiency 85 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13709_PF-SOCKET-VERO13-18</p>		

#### OPTICAL RESULTS (MEASURED):

<p></p> <p>LED Xenio Point 13mm            FWHM / FWTM 49.0° / 78.0°            Efficiency 81 %            Peak intensity 1.1 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13709_PF-SOCKET-VERO13-18            C13333_MIRELLA-CL</p>		
<p></p> <p>LED Xenio Point 13mm            FWHM / FWTM 48.0° / 80.0°            Efficiency 78 %            Peak intensity 1.1 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13709_PF-SOCKET-VERO13-18            C12479_MIRELLA-DL</p>		
<h3>CITIZEN</h3> <p>LED CLL01x            FWHM / FWTM 44.0° / 76.0°            Efficiency 86 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13083_PF-SOCKET            C12479_MIRELLA-DL</p>		
<h3>CITIZEN</h3> <p>LED CLL01x            FWHM / FWTM 42.0° / 76.0°            Efficiency 86 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13083_PF-SOCKET            C13333_MIRELLA-CL</p>		

#### OPTICAL RESULTS (MEASURED):

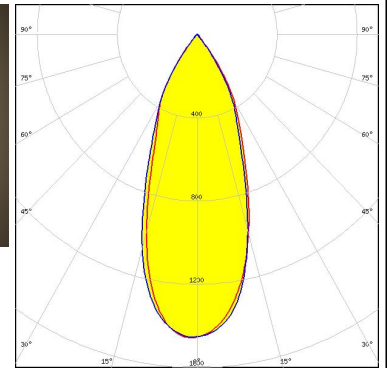
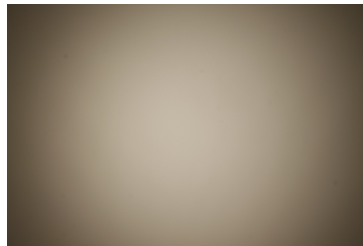
#### CITIZEN

LED CLL01x  
 FWHM / FWTM 36.0° / 80.0°  
 Efficiency 90 %  
 Peak intensity 1.8 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET



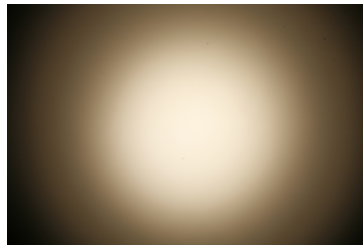
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 39.0° / 73.0°  
 Efficiency 78 %  
 Peak intensity 1.5 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C13333\_MIRELLA-CL  
 Bender Wirth: 434 Typ L1



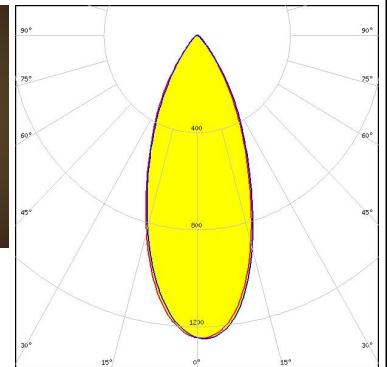
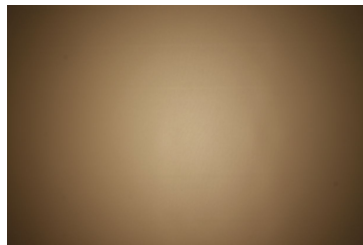
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 41.0° / 80.0°  
 Efficiency 90 %  
 Peak intensity 1.8 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET



#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 41.0° / 76.0°  
 Efficiency 76 %  
 Peak intensity 1.3 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C12479\_MIRELLA-DL  
 Bender Wirth: 434 Typ L1

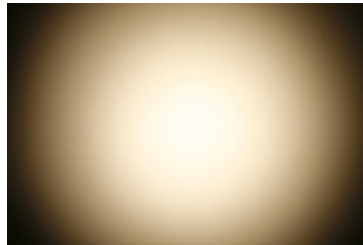




#### OPTICAL RESULTS (MEASURED):

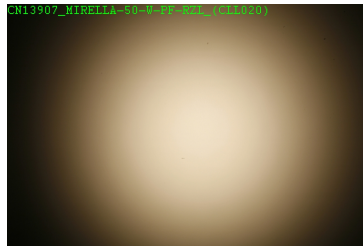
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 46.0° / 77.0°  
 Efficiency 86 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET  
 C12479\_MIRELLA-DL



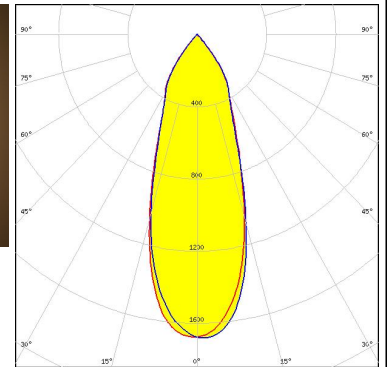
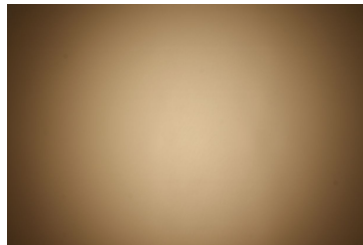
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 46.0° / 80.0°  
 Efficiency %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL



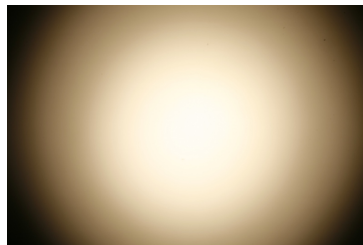
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 36.0° / 77.0°  
 Efficiency 84 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 434 Typ L1



#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 46.0° / 78.0°  
 Efficiency 86 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET  
 C13333\_MIRELLA-CL

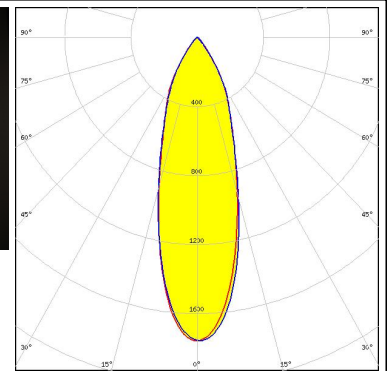
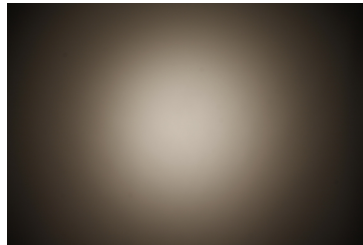




#### OPTICAL RESULTS (MEASURED):

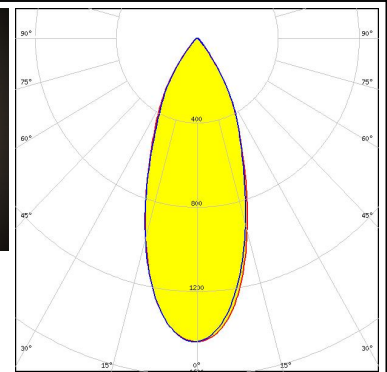
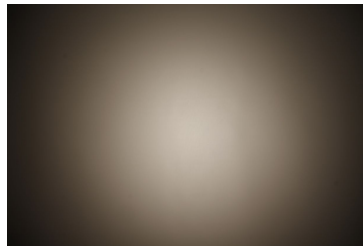
#### CITIZEN

LED CLU700/701/702/703  
 FWHM / FWTM 31.0° / 70.0°  
 Efficiency 77 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C12479\_MIRELLA-DL  
 Bender Wirth: 434 Typ L1



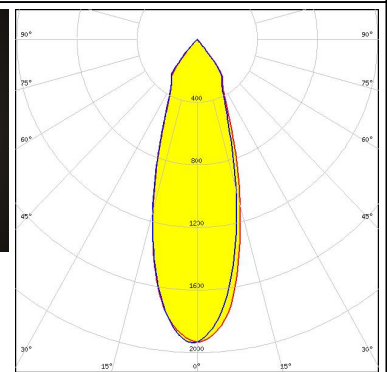
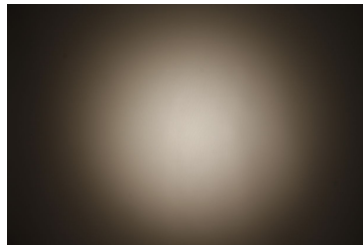
#### CITIZEN

LED CLU700/701/702/703  
 FWHM / FWTM 39.0° / 75.0°  
 Efficiency 82 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET  
 C12479\_MIRELLA-DL



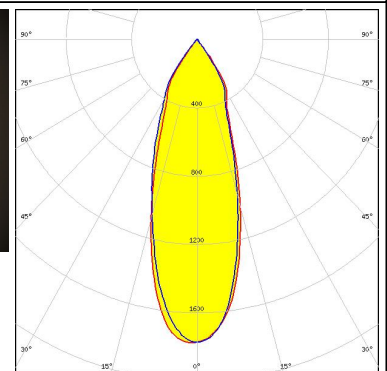
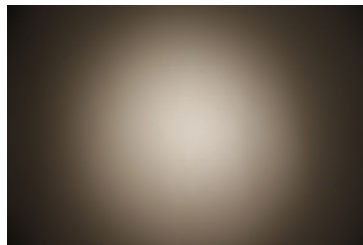
#### CITIZEN

LED CLU700/701/702/703  
 FWHM / FWTM 33.0° / 78.0°  
 Efficiency 88 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET



#### CITIZEN

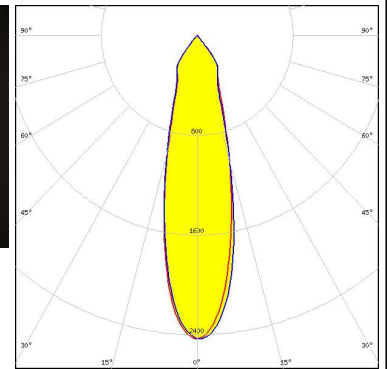
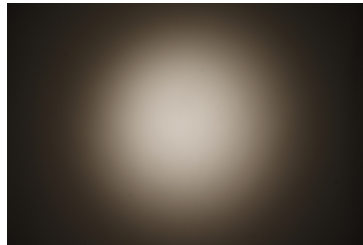
LED CLU700/701/702/703  
 FWHM / FWTM 34.0° / 72.0°  
 Efficiency 81 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET  
 C13333\_MIRELLA-CL



#### OPTICAL RESULTS (MEASURED):

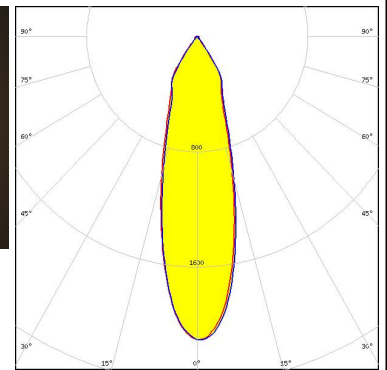
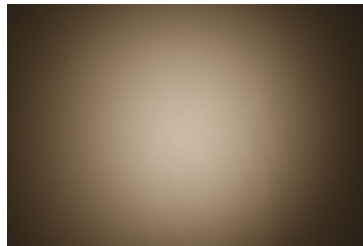
#### CITIZEN

LED CLU700/701/702/703  
 FWHM / FWTM 26.0° / 73.0°  
 Efficiency 83 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 434 Typ L1



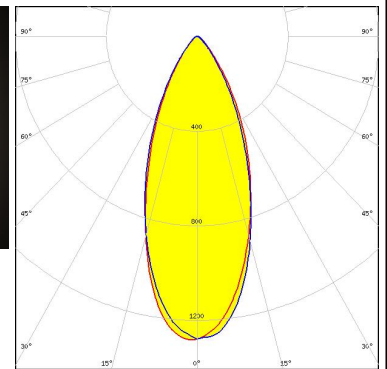
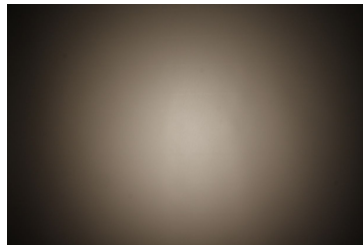
#### CITIZEN

LED CLU700/701/702/703  
 FWHM / FWTM 29.0° / 69.0°  
 Efficiency 80 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C13333\_MIRELLA-CL  
 Bender Wirth: 434 Typ L1



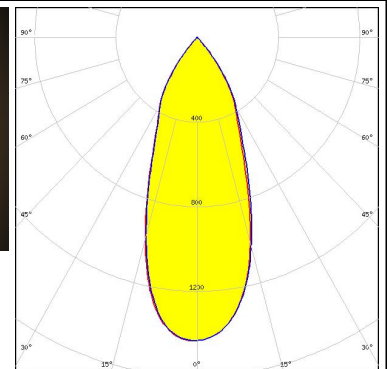
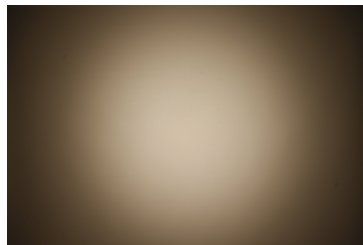
#### CITIZEN

LED CLU700/701/702/703  
 FWHM / FWTM 42.0° / 78.0°  
 Efficiency 81 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL



#### CITIZEN

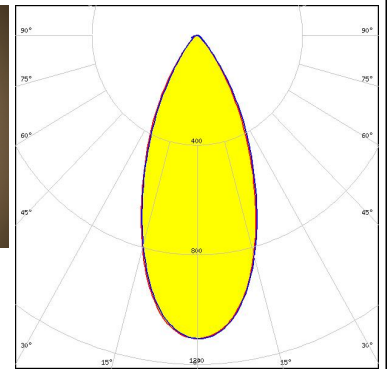
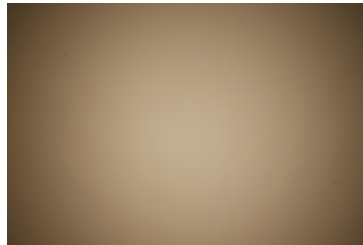
LED CLU720/721/723  
 FWHM / FWTM 40.0° / 78.0°  
 Efficiency 81 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 433 Typ L1



#### OPTICAL RESULTS (MEASURED):

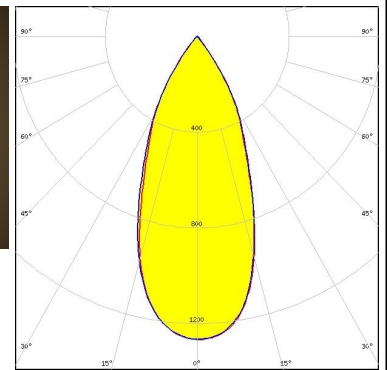
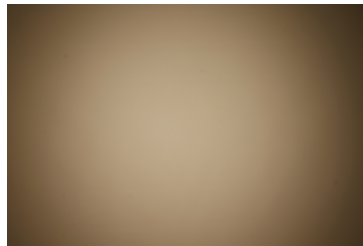
#### CITIZEN

LED CLU720/721/723  
 FWHM / FWTM 44.0° / 78.0°  
 Efficiency 74 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C12479\_MIRELLA-DL  
 Bender Wirth: 433 Typ L1



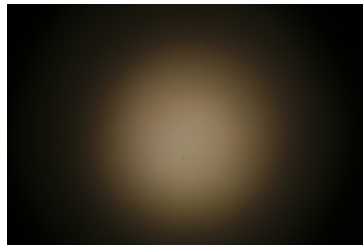
#### CITIZEN

LED CLU720/721/723  
 FWHM / FWTM 43.0° / 74.0°  
 Efficiency 76 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C13333\_MIRELLA-CL  
 Bender Wirth: 433 Typ L1



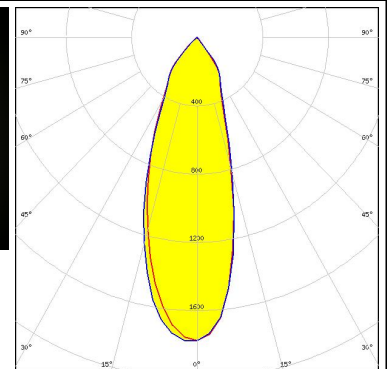
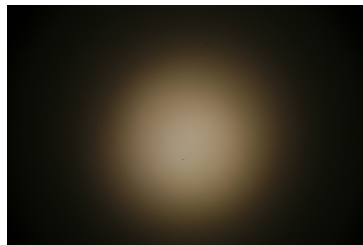
#### CREE LEDs

LED CXA/B 13xx  
 FWHM / FWTM 42.0° / 76.0°  
 Efficiency 81 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13761\_PF-SOCKET-CXA15  
 C13333\_MIRELLA-CL

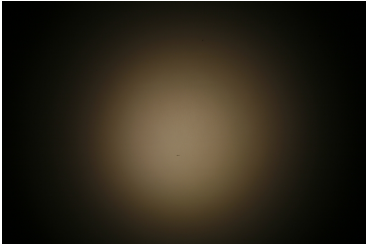
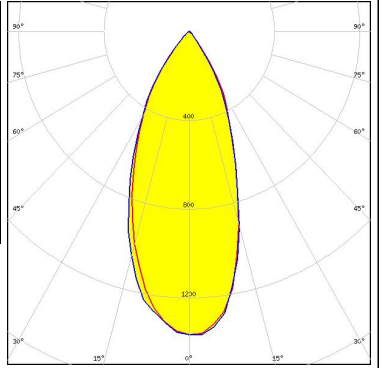

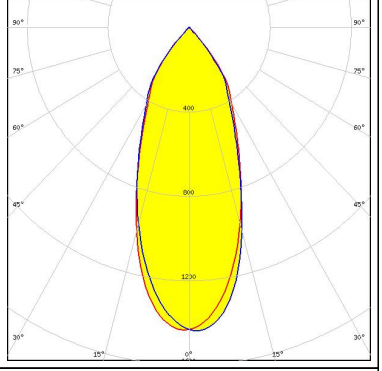
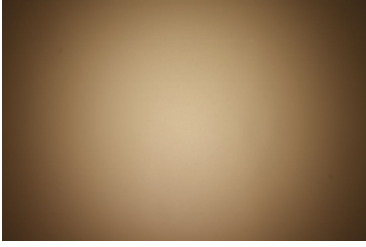
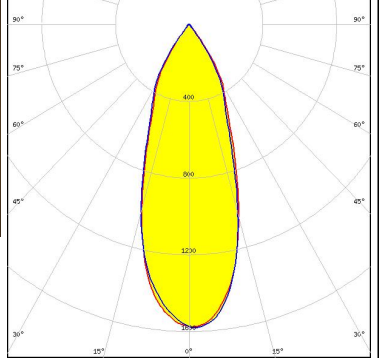


#### CREE LEDs

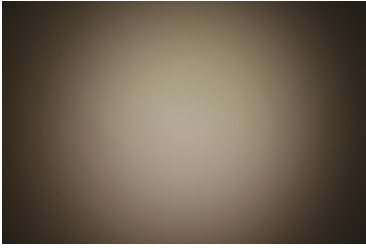
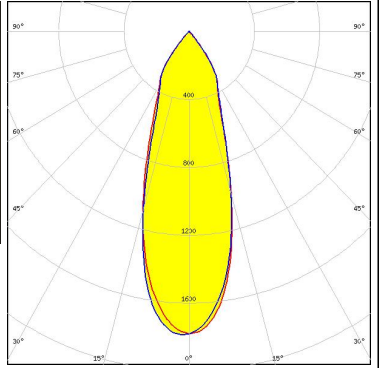

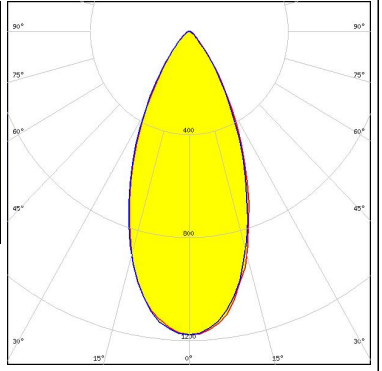

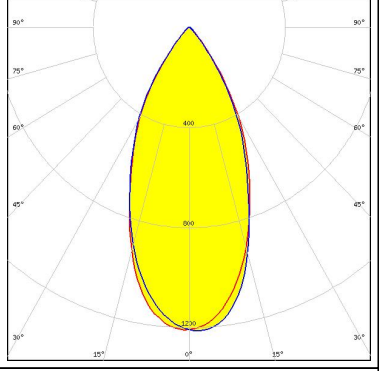
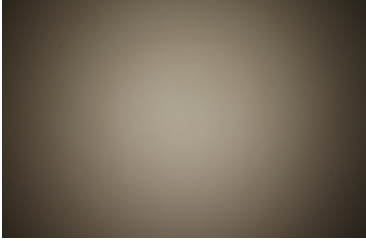
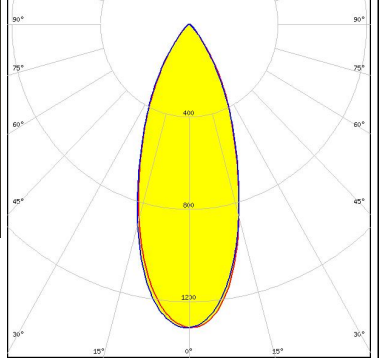
LED CXA/B 13xx  
 FWHM / FWTM 37.0° / 80.0°  
 Efficiency 86 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13761\_PF-SOCKET-CXA15



#### OPTICAL RESULTS (MEASURED):


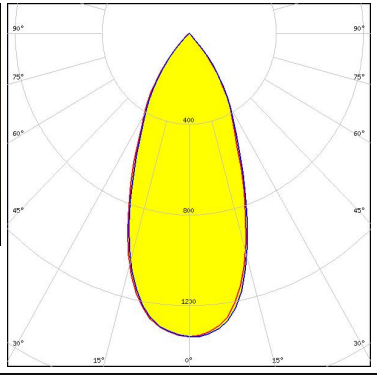
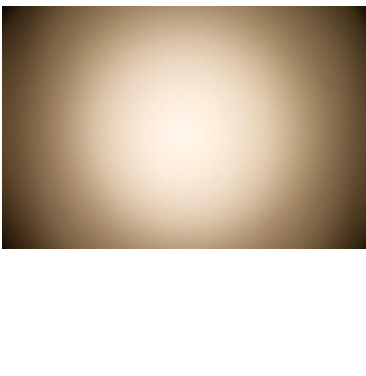
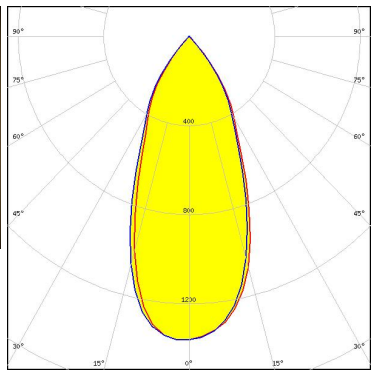

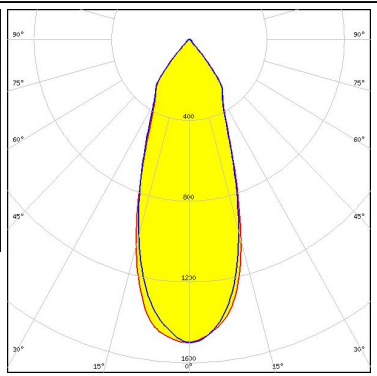
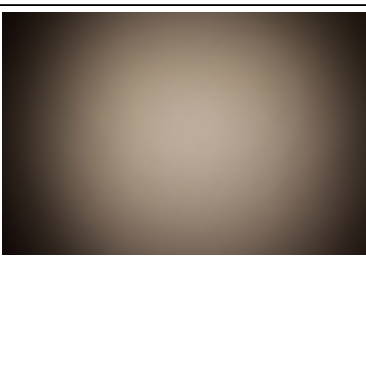
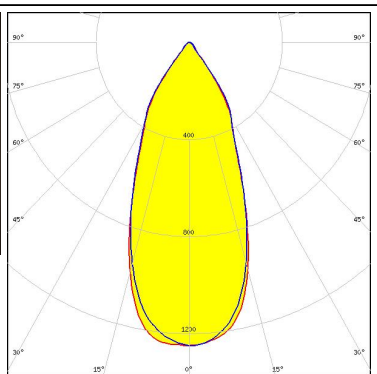
<p><b>CREE</b> LEDs</p> <p>LED CXA/B 13xx            FWHM / FWTM 43.0° / 76.0°            Efficiency 81 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13761_PF-SOCKET-CXA15            C12479_MIRELLA-DL</p>		
<p><b>CREE</b> LEDs</p> <p>LED CXA/B 15xx            FWHM / FWTM 46.0° / 79.0°            Efficiency 85 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13761_PF-SOCKET-CXA15            C13333_MIRELLA-CL</p>		
<p><b>CREE</b> LEDs</p> <p>LED CXA/B 15xx            FWHM / FWTM 41.0° / 82.0°            Efficiency 90 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13761_PF-SOCKET-CXA15</p>		
<p><b>CREE</b> LEDs</p> <p>LED CXA/B 15xx            FWHM / FWTM 37.0° / 72.0°            Efficiency 79 %            Peak intensity 1.6 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13709_PF-SOCKET-VERO13-18            C13333_MIRELLA-CL            Bender Wirth: 441 Typ L1</p>		

#### OPTICAL RESULTS (MEASURED):

<p><b>CREE</b> LEDs</p> <p>LED CXA/B 15xx            FWHM / FWTM 34.0° / 75.0°            Efficiency 82 %            Peak intensity 1.8 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13709_PF-SOCKET-VERO13-18            Bender Wirth: 441 Typ L1</p>		
<p><b>CREE</b> LEDs</p> <p>LED CXA/B 15xx            FWHM / FWTM 47.0° / 81.0°            Efficiency 81 %            Peak intensity 1.2 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13761_PF-SOCKET-CXA15            C13723_MIRELLA-RZL</p>		
<p><b>CREE</b> LEDs</p> <p>LED CXA/B 15xx            FWHM / FWTM 47.0° / 79.0°            Efficiency 85 %            Peak intensity 1.2 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13761_PF-SOCKET-CXA15            C12479_MIRELLA-DL</p>		
<p><b>CREE</b> LEDs</p> <p>LED CXA/B 15xx            FWHM / FWTM 39.0° / 75.0°            Efficiency 75 %            Peak intensity 1.3 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13709_PF-SOCKET-VERO13-18            C12479_MIRELLA-DL            Bender Wirth: 441 Typ L1</p>		


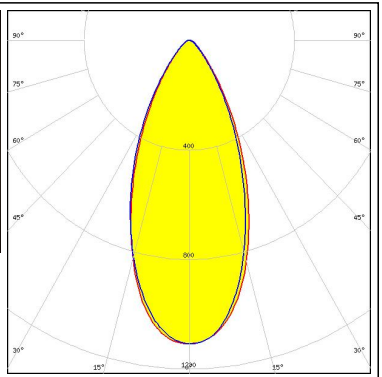

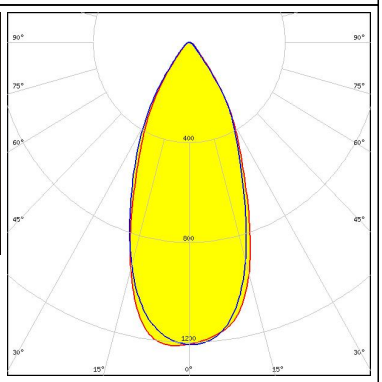

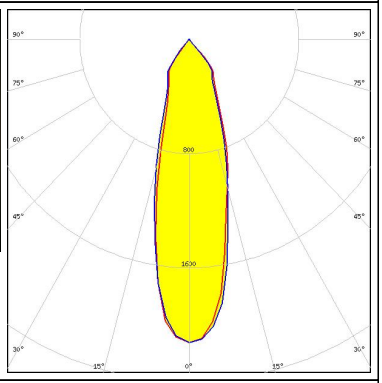

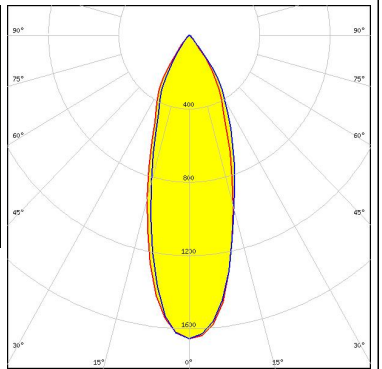


#### OPTICAL RESULTS (MEASURED):

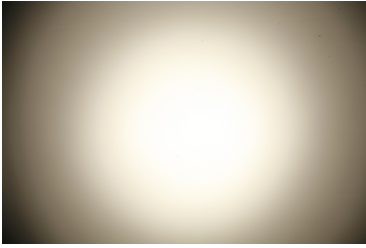
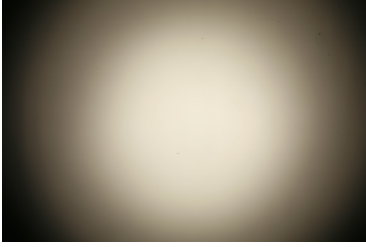
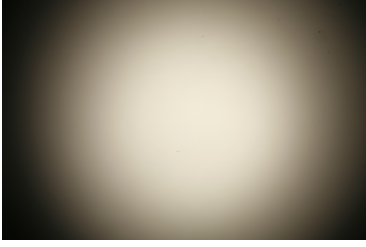
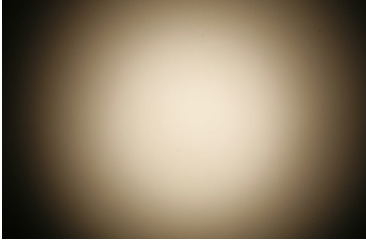
<p><b>CREE</b> LEDs</p> <p>LED CXA/B 1816 &amp; CXA/B 1820 &amp; CXA 1850            FWHM / FWTM 45.0° / 81.0°            Efficiency 84 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C14115_PF-SOCKET-CXA15-18</p>		
<p><b>CREE</b> LEDs</p> <p>LED CXA/B 1816 &amp; CXA/B 1820 &amp; CXA 1850            FWHM / FWTM 43.0° / 81.0°            Efficiency 87 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:            IDEAL: 50-2101CR + 50-2100MR</p>		
<p><b>CREE</b> LEDs</p> <p>LED MHD-E/G            FWHM / FWTM 38.0° / 82.0°            Efficiency 89 %            Peak intensity 1.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13083_PF-SOCKET</p>		
<p><b>CREE</b> LEDs</p> <p>LED MHD-E/G            FWHM / FWTM 44.0° / 77.0°            Efficiency 84 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13083_PF-SOCKET            C13333_MIRELLA-CL</p>		




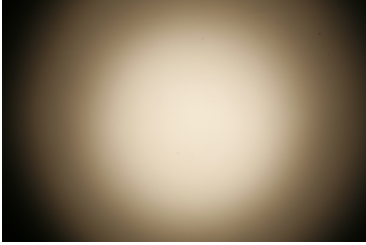
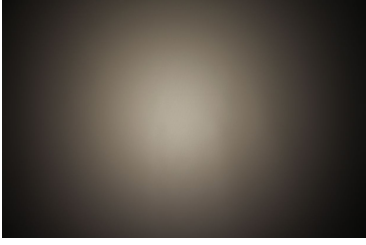
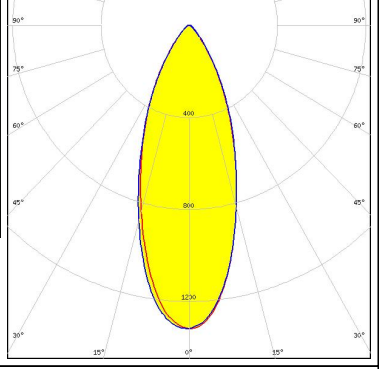
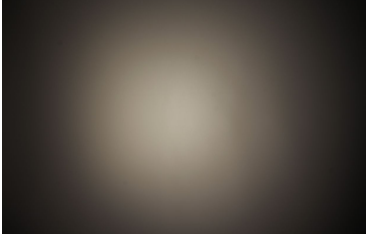
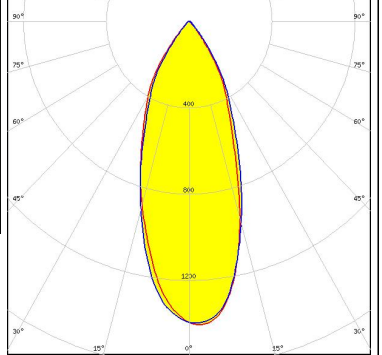
#### OPTICAL RESULTS (MEASURED):

<p><b>CREE</b> LEDs</p> <p>LED MHD-E/G            FWHM / FWTM 45.0° / 83.0°            Efficiency 82 %            Peak intensity 1.1 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13083_PF-SOCKET            C13723_MIRELLA-RZL</p>		
<p><b>CREE</b> LEDs</p> <p>LED MHD-E/G            FWHM / FWTM 45.0° / 78.0°            Efficiency 84 %            Peak intensity 1.2 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13083_PF-SOCKET            C12479_MIRELLA-DL</p>		
<p><b>CREE</b> LEDs</p> <p>LED MK-R            FWHM / FWTM 30.0° / 77.0°            Efficiency 85 %            Peak intensity 2.1 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13083_PF-SOCKET</p>		
<p><b>CREE</b> LEDs</p> <p>LED MK-R            FWHM / FWTM 34.0° / 73.0°            Efficiency 80 %            Peak intensity 1.7 cd/m            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13083_PF-SOCKET            C12479_MIRELLA-DL</p>		


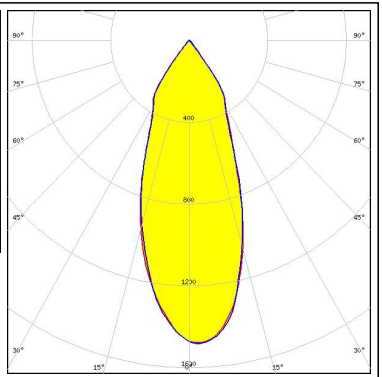

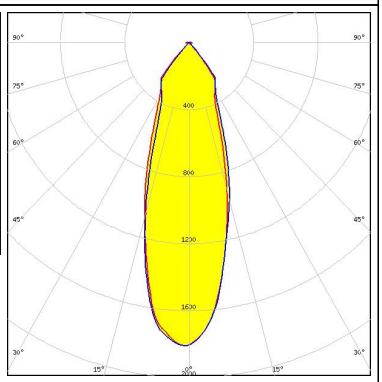
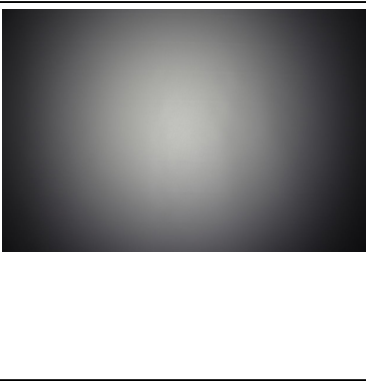
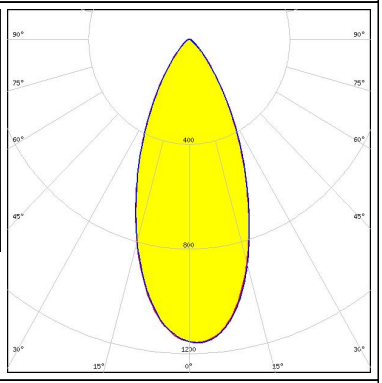

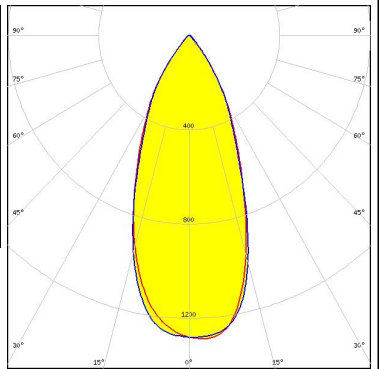
#### OPTICAL RESULTS (MEASURED):

<p><b>CREE</b> LEDs</p> <p>LED MT-G            FWHM / FWTM 48.0° / 87.0°            Efficiency 90 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13083_PF-SOCKET</p>	
<p><b>CREE</b> LEDs</p> <p>LED MT-G            FWHM / FWTM 52.0° / 83.0°            Efficiency 86 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13083_PF-SOCKET            C13333_MIRELLA-CL</p>	
<p><b>CREE</b> LEDs</p> <p>LED MT-G            FWHM / FWTM 52.0° / 84.0°            Efficiency 86 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13083_PF-SOCKET            C12479_MIRELLA-DL</p>	
<p><b>CREE</b> LEDs</p> <p>LED MT-G2            FWHM / FWTM 51.0° / 82.0°            Efficiency 87 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13083_PF-SOCKET            C12479_MIRELLA-DL</p>	

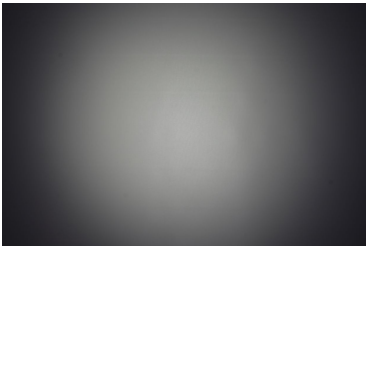
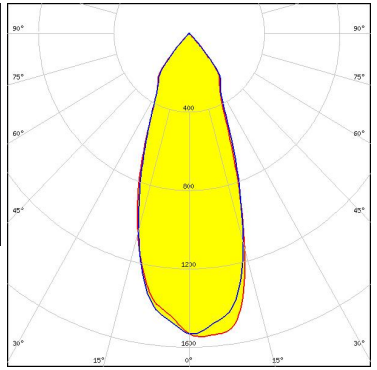
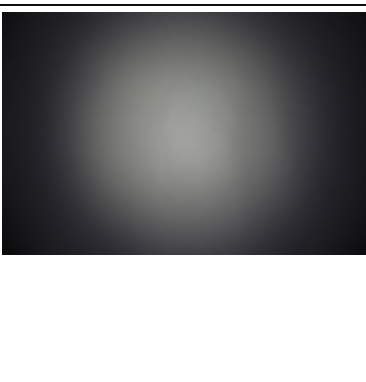
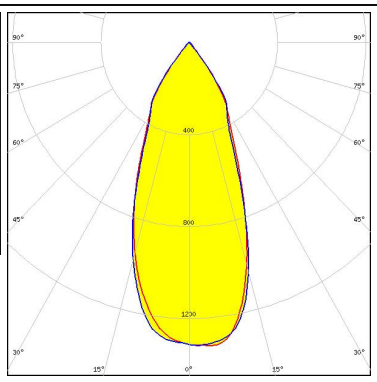

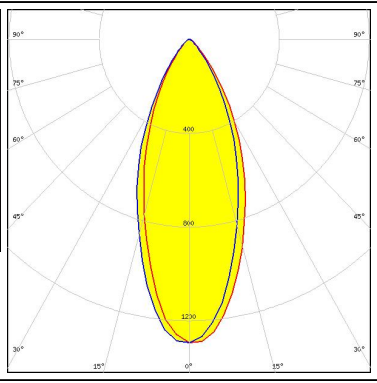
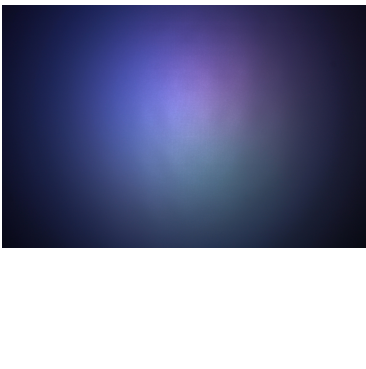

#### OPTICAL RESULTS (MEASURED):

<p><b>CREE</b> LEDs</p> <p>LED MT-G2            FWHM / FWTM 46.0° / 86.0°            Efficiency 91 %            Peak intensity 0.8 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13083_PF-SOCKET</p>		
<p><b>CREE</b> LEDs</p> <p>LED MT-G2            FWHM / FWTM 50.0° / 81.0°            Efficiency 87 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13083_PF-SOCKET            C13333_MIRELLA-CL</p>		
<p><b>CREE</b> LEDs</p> <p>LED XHP50            FWHM / FWTM 38.0° / 77.0°            Efficiency 80 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13083_PF-SOCKET            C13723_MIRELLA-RZL</p>		
<p><b>CREE</b> LEDs</p> <p>LED XHP50            FWHM / FWTM 39.0° / 76.0°            Efficiency 82 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13083_PF-SOCKET            C12479_MIRELLA-DL</p>		

#### OPTICAL RESULTS (MEASURED):

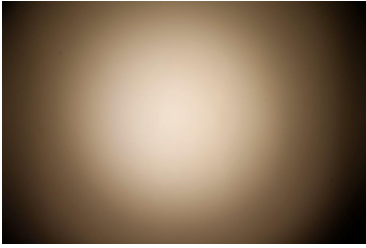
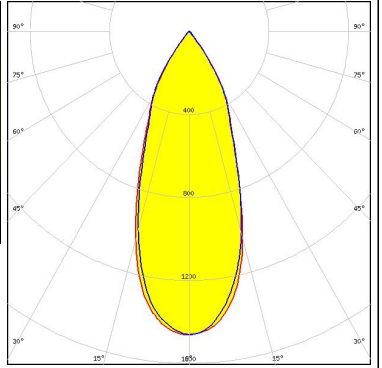
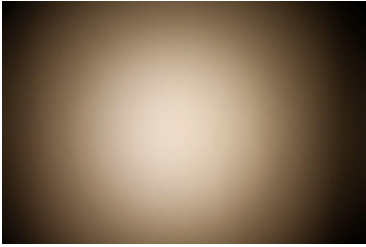
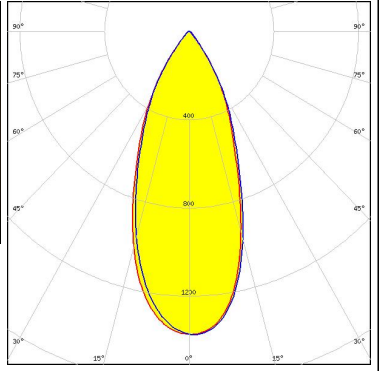
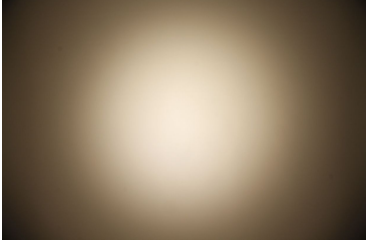
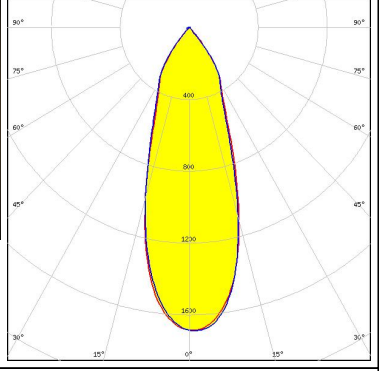
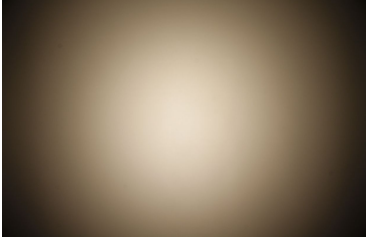
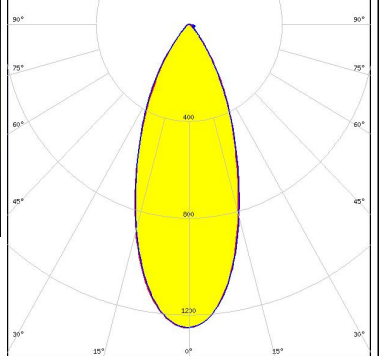
<p><b>CREE</b> LEDs</p> <p>LED XHP50            FWHM / FWTM 39.0° / 76.0°            Efficiency 81 %            Peak intensity 1.5 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13083_PF-SOCKET            C13333_MIRELLA-CL</p>		
<p><b>CREE</b> LEDs</p> <p>LED XHP50            FWHM / FWTM 33.0° / 80.0°            Efficiency 87 %            Peak intensity 1.8 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13083_PF-SOCKET</p>		
<p><b>CREE</b> LEDs</p> <p>LED XHP70            FWHM / FWTM 44.0° / 80.0°            Efficiency 79 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13083_PF-SOCKET            C13723_MIRELLA-RZL</p>		
<p><b>CREE</b> LEDs</p> <p>LED XHP70            FWHM / FWTM 43.0° / 77.0°            Efficiency 81 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13083_PF-SOCKET            C12479_MIRELLA-DL</p>		

#### OPTICAL RESULTS (MEASURED):

<p><b>CREE</b> LEDs</p> <p>LED XHP70            FWHM / FWTM 39.0° / 82.0°            Efficiency 86 %            Peak intensity 1.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13083_PF-SOCKET</p>		
<p><b>CREE</b> LEDs</p> <p>LED XHP70            FWHM / FWTM 42.0° / 77.0°            Efficiency 81 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13083_PF-SOCKET            C13333_MIRELLA-CL</p>		
<p><b>CREE</b> LEDs</p> <p>LED XM-L RGBW (XMLCTW)            FWHM / FWTM 41.0° / 80.0°            Efficiency 80 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13083_PF-SOCKET            C13723_MIRELLA-RZL</p>		
<p><b>CREE</b> LEDs</p> <p>LED XQ-E HI            FWHM / FWTM 42.0° / 82.0°            Efficiency 87 %            Peak intensity 1.4 cd/lm            LEDs/each optic 4            Light colour RGBW            Required components:            C13083_PF-SOCKET            C13723_MIRELLA-RZL</p>		


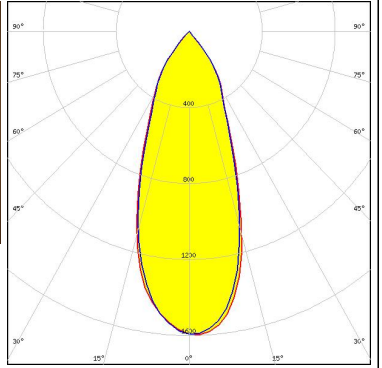
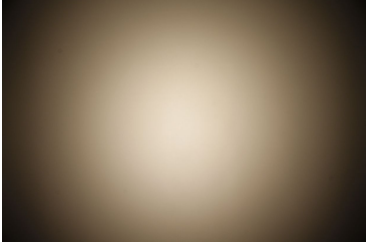
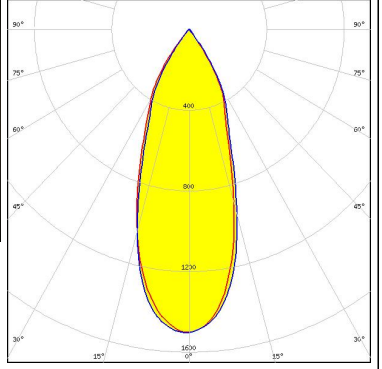
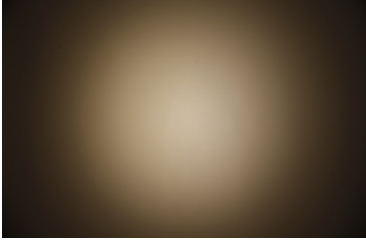
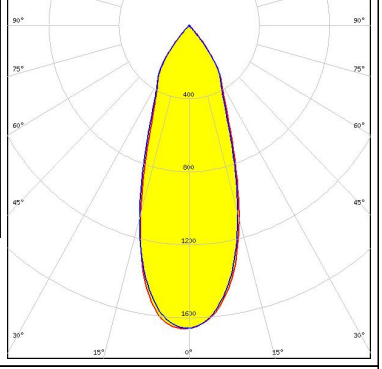
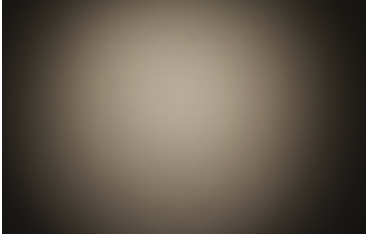



#### OPTICAL RESULTS (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202/1203</p> <p>FWHM / FWTM 39.0° / 74.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity 1.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13333_MIRELLA-CL IDEAL: 50-2100NC +50-2100MR</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202/1203</p> <p>FWHM / FWTM 41.0° / 75.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12479_MIRELLA-DL IDEAL: 50-2100NC +50-2100MR</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202/1203</p> <p>FWHM / FWTM 35.0° / 76.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 438 Typ L1</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202/1203</p> <p>FWHM / FWTM 40.0° / 75.0°</p> <p>Efficiency 75 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 C12479_MIRELLA-DL Bender Wirth: 438 Typ L1</p>		



#### OPTICAL RESULTS (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202/1203</p> <p>FWHM / FWTM 39.0° / 79.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C14037_PF-NSX-SOCKET</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202/1203</p> <p>FWHM / FWTM 37.0° / 72.0°</p> <p>Efficiency 77 %</p> <p>Peak intensity 1.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 C13333_MIRELLA-CL Bender Wirth: 438 Typ L1</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202/1203</p> <p>FWHM / FWTM 37.0° / 78.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 1.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2100NC +50-2100MR</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202s</p> <p>FWHM / FWTM 41.0° / 78.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13761_PF-SOCKET-CXA15 C13333_MIRELLA-CL</p>		

#### OPTICAL RESULTS (MEASURED):

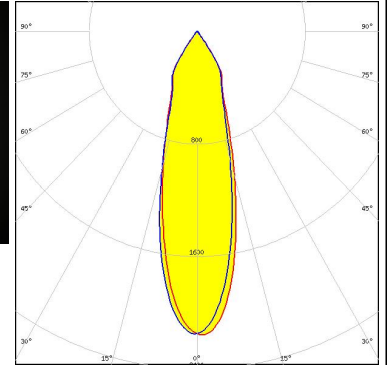
##### LUMILEDS

LED LUXEON CoB 1202s  
 FWHM / FWTM 35.0° / 82.0°  
 Efficiency 88 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13761\_PF-SOCKET-CXA15



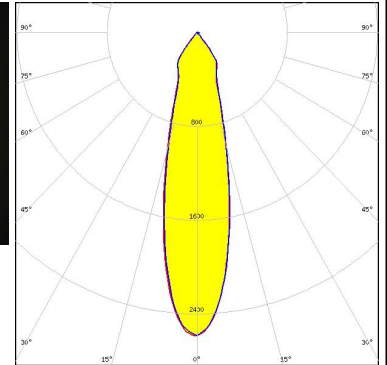
##### LUMILEDS

LED LUXEON CoB 1202s  
 FWHM / FWTM 28.0° / 69.0°  
 Efficiency 81 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C13333\_MIRELLA-CL  
 Bender Wirth: 452 Typ L1



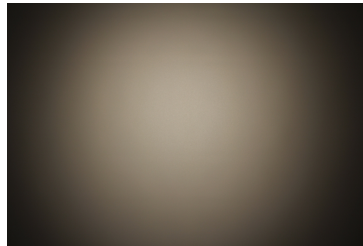
##### LUMILEDS

LED LUXEON CoB 1202s  
 FWHM / FWTM 25.0° / 72.0°  
 Efficiency 85 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 452 Typ L1



##### LUMILEDS

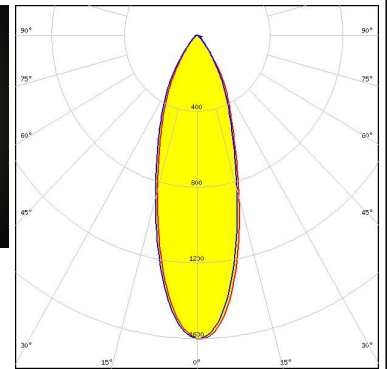
LED LUXEON CoB 1202s  
 FWHM / FWTM 40.0° / 78.0°  
 Efficiency 82 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13761\_PF-SOCKET-CXA15  
 C12479\_MIRELLA-DL



#### OPTICAL RESULTS (MEASURED):

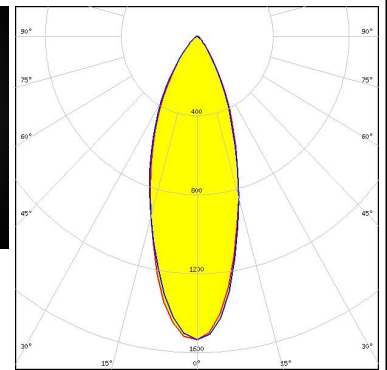
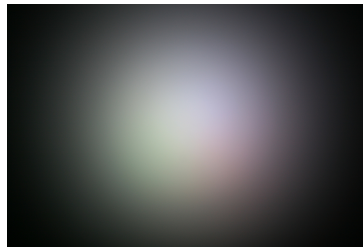
##### LUMILEDS

LED LUXEON CoB 1202s  
 FWHM / FWTM 32.0° / 71.0°  
 Efficiency 77 %  
 Peak intensity 1.6 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C12479\_MIRELLA-DL  
 Bender Wirth: 452 Typ L1



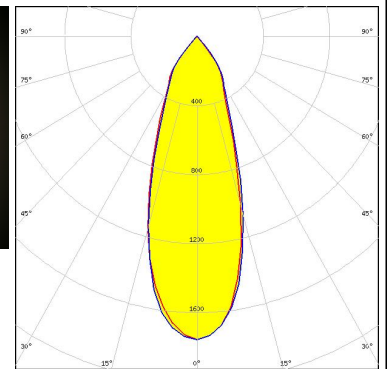
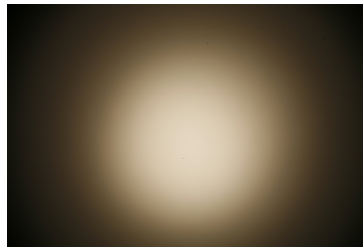
##### LUMILEDS

LED LUXEON Z  
 FWHM / FWTM 36.0° / 75.0°  
 Efficiency 79 %  
 Peak intensity 1.5 cd/m  
 LEDs/each optic 4  
 Light colour RGBW  
 Required components:  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL



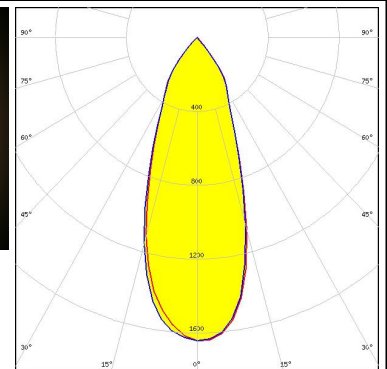
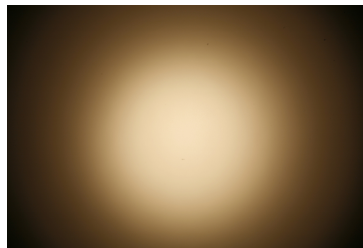
##### LUMINUS

LED CxM-6 (12x13)  
 FWHM / FWTM 36.0° / 79.0°  
 Efficiency 85 %  
 Peak intensity 1.8 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET

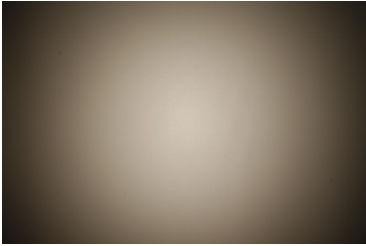
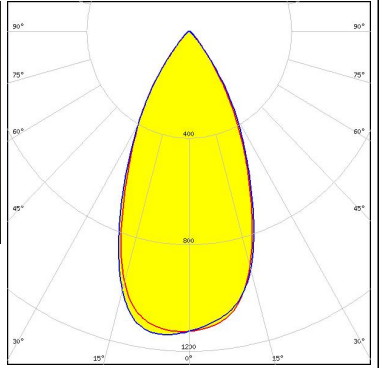
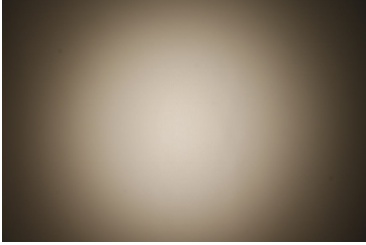
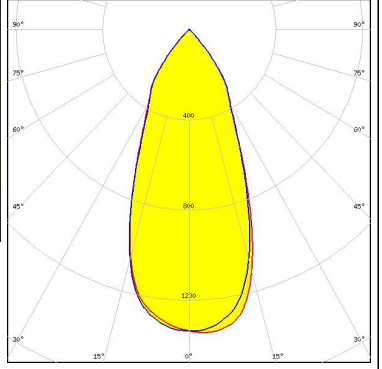
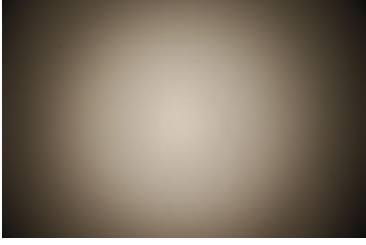
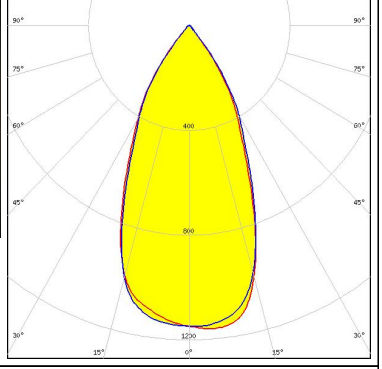
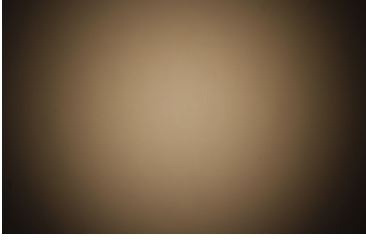
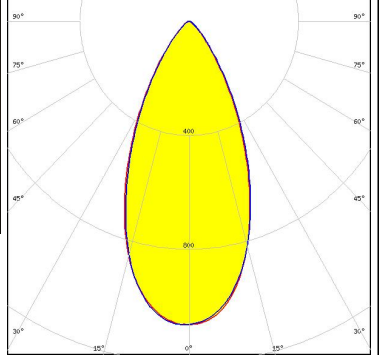


##### LUMINUS

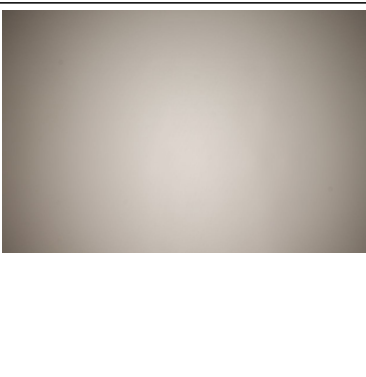
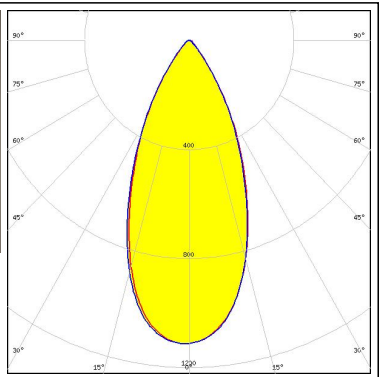

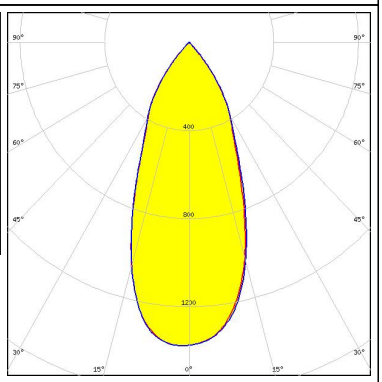

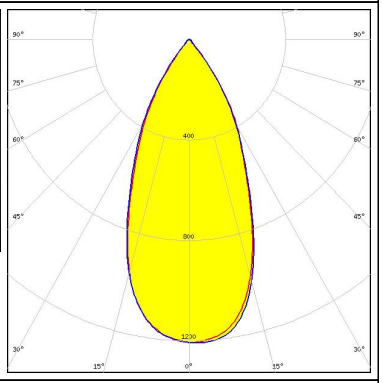

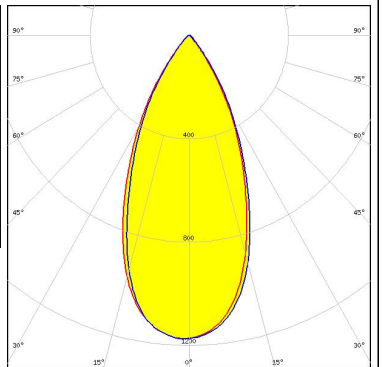
LED CXM-7 (13x13)  
 FWHM / FWTM 38.0° / 79.0°  
 Efficiency 86 %  
 Peak intensity 1.6 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET



#### OPTICAL RESULTS (MEASURED):

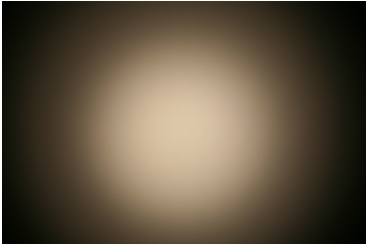
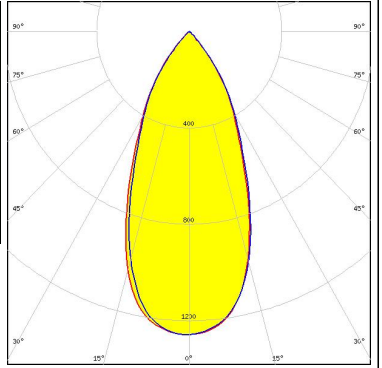

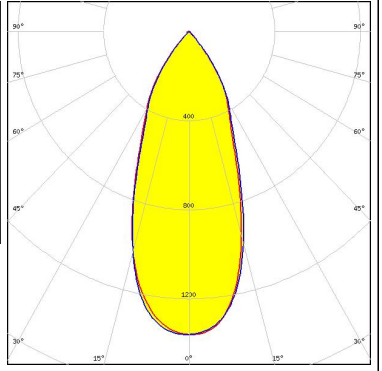
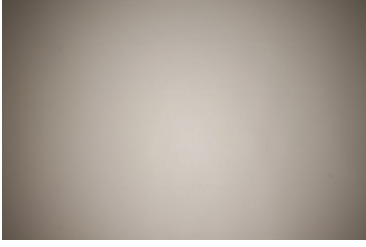
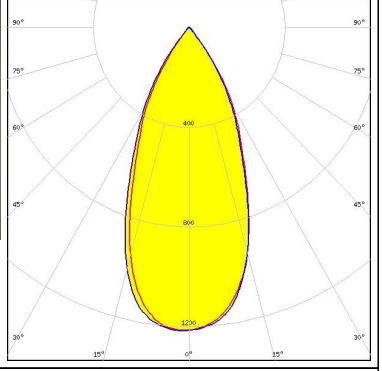
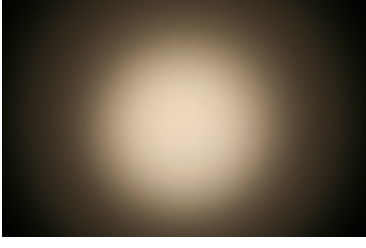
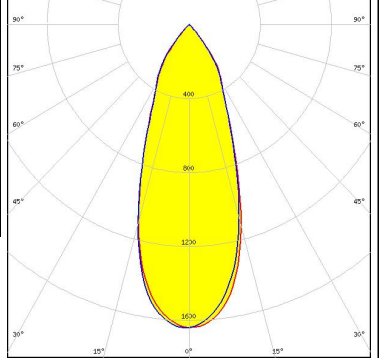
<p><b>LUMINUS</b></p> <p>LED CxM-9 (13.5x13.5)</p> <p>FWHM / FWTM 49.0° / 79.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13083_PF-SOCKET C12479_MIRELLA-DL</p>		
<p><b>LUMINUS</b></p> <p>LED CxM-9 (13.5x13.5)</p> <p>FWHM / FWTM 44.0° / 82.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13083_PF-SOCKET</p>		
<p><b>LUMINUS</b></p> <p>LED CxM-9 (13.5x13.5)</p> <p>FWHM / FWTM 48.0° / 78.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13083_PF-SOCKET C13333_MIRELLA-CL</p>		
<p><b>LUMINUS</b></p> <p>LED CxM-9 (13.5x13.5)</p> <p>FWHM / FWTM 48.0° / 83.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL</p>		

#### OPTICAL RESULTS (MEASURED):

<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 46.0° / 78.0°</p> <p>Efficiency 75 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:            C13709_PF-SOCKET-VERO13-18            C12479_MIRELLA-DL            Bender Wirth: 438 Typ L1</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 43.0° / 80.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:            IDEAL: 50-2100NC +50-2100MR</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 47.0° / 77.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:            C13333_MIRELLA-CL            IDEAL: 50-2100NC +50-2100MR</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 46.0° / 77.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:            C12479_MIRELLA-DL            IDEAL: 50-2100NC +50-2100MR</p>		

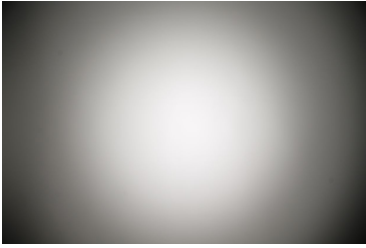
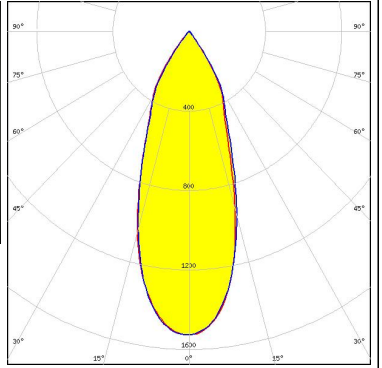
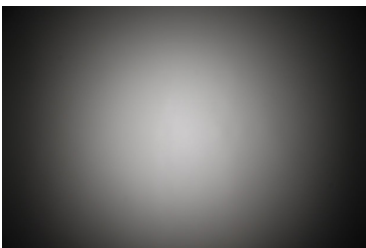
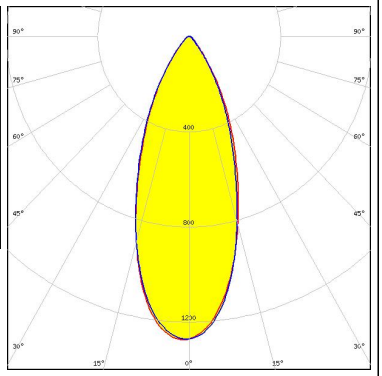

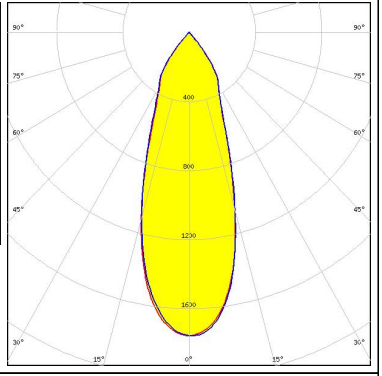
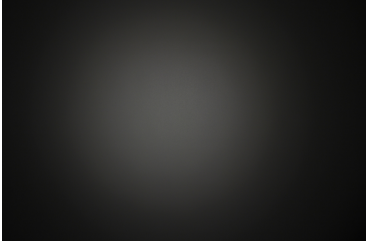
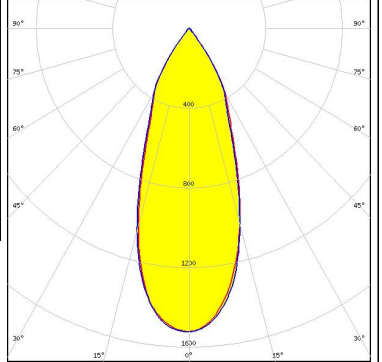


#### OPTICAL RESULTS (MEASURED):

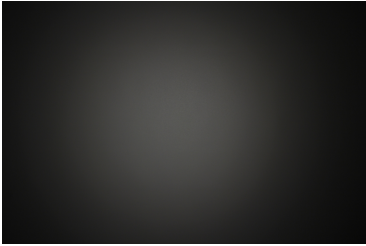
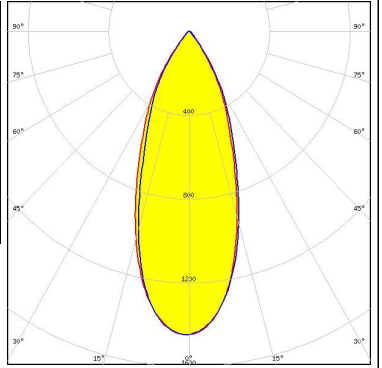
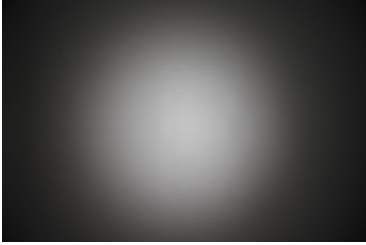
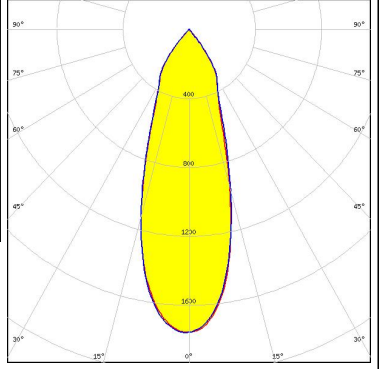

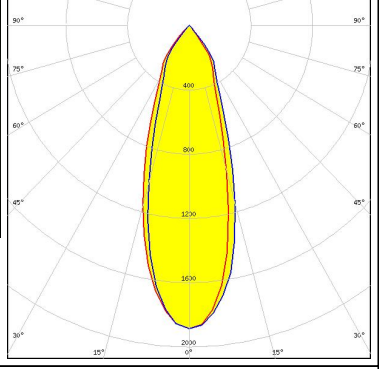
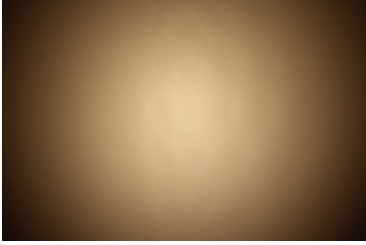

<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 46.0° / 82.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 1.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C14037_PF-NSX-SOCKET</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 41.0° / 79.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.4 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 438 Typ L1</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 45.0° / 75.0°</p> <p>Efficiency 77 %</p> <p>Peak intensity 1.2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 C13333_MIRELLA-CL Bender Wirth: 438 Typ L1</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM 38.0° / 78.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C14037_PF-NSX-SOCKET</p>		




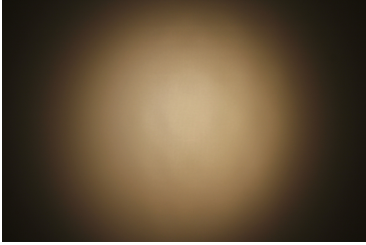
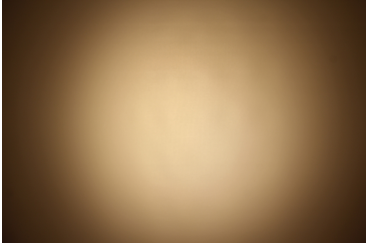
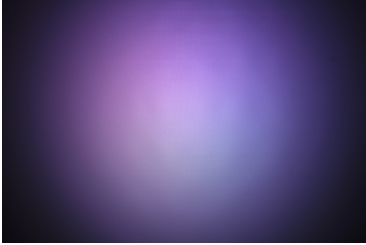
#### OPTICAL RESULTS (MEASURED):

<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM 37.0° / 73.0°</p> <p>Efficiency 79 %</p> <p>Peak intensity 1.5 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13709_PF-SOCKET-VERO13-18</p> <p>C13333_MIRELLA-CL</p> <p>Bender Wirth: 438 Typ L1</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM 40.0° / 75.0°</p> <p>Efficiency 76 %</p> <p>Peak intensity 1.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13709_PF-SOCKET-VERO13-18</p> <p>C12479_MIRELLA-DL</p> <p>Bender Wirth: 438 Typ L1</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM 35.0° / 77.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 1.8 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>IDEAL: 50-2100NC +50-2100MR</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM 38.0° / 73.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.5 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13333_MIRELLA-CL</p> <p>IDEAL: 50-2100NC +50-2100MR</p>		


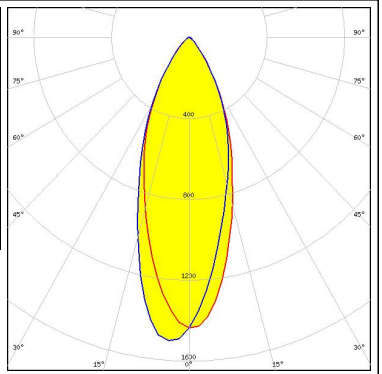

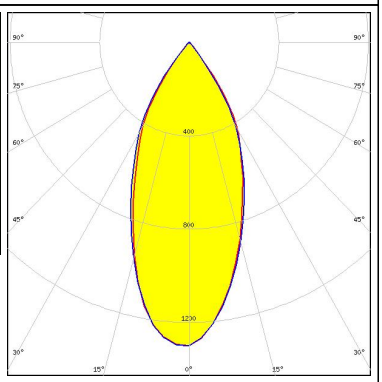

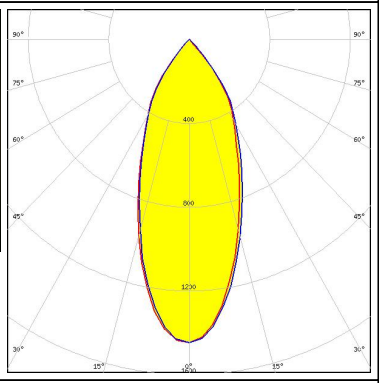

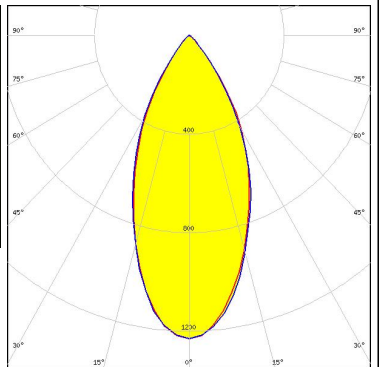
#### OPTICAL RESULTS (MEASURED):

<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM 39.0° / 73.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12479_MIRELLA-DL IDEAL: 50-2100NC +50-2100MR</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM 34.0° / 76.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 1.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 438 Typ L1</p>		
<p><b>NICHIA</b></p> <p>LED NSCxL036A</p> <p>FWHM / FWTM 34.0° / 76.0°</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: C14037_PF-NSX-SOCKET</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Duris S10</p> <p>FWHM / FWTM 45.0° / 82.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL</p>		

#### OPTICAL RESULTS (MEASURED):

<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Duris S10 FWHM / FWTM 45.0° / 81.0° Efficiency 79 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13083_PF-SOCKET C12479_MIRELLA-DL</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Duris S10 FWHM / FWTM 38.0° / 82.0° Efficiency 87 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13083_PF-SOCKET</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Duris S10 FWHM / FWTM 43.0° Efficiency % LEDs/each optic 1 Light colour White</p> <p>Required components: C13083_PF-SOCKET C13333_MIRELLA-CL</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSTAR Stage (S2WP) FWHM / FWTM 36.0° / 78.0° Efficiency 83 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL</p>	

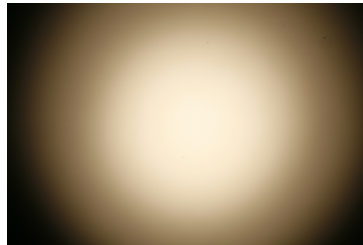
#### OPTICAL RESULTS (MEASURED):

<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Ostar-SMT RGB</p> <p>FWHM / FWTM 37.0° / 77.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.5 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL</p>		
<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED ZC4/6</p> <p>FWHM / FWTM 46.0° / 78.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity 1.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13083_PF-SOCKET C13333_MIRELLA-CL</p>		
<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED ZC4/6</p> <p>FWHM / FWTM 42.0° / 82.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.4 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13083_PF-SOCKET</p>		
<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED ZC4/6</p> <p>FWHM / FWTM 48.0° / 80.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13083_PF-SOCKET C12479_MIRELLA-DL</p>		

#### OPTICAL RESULTS (MEASURED):

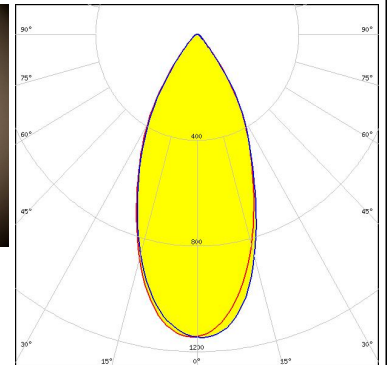
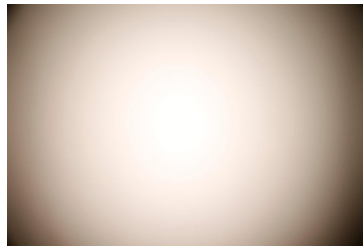
### SHARP

LED Mini Zenigata (GW6BM)  
 FWHM / FWTM 46.0° / 78.0°  
 Efficiency 81 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET  
 C13333\_MIRELLA-CL



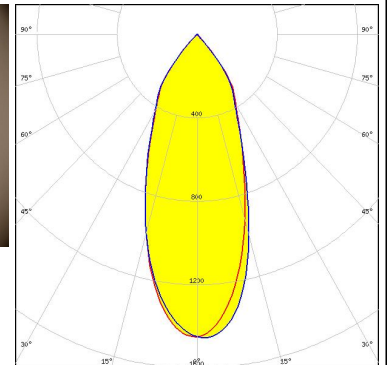
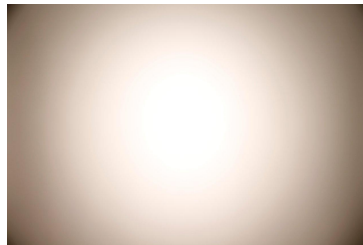
### SHARP

LED Mini Zenigata (GW6BM)  
 FWHM / FWTM 45.0° / 80.0°  
 Efficiency 81 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET  
 C12479\_MIRELLA-DL



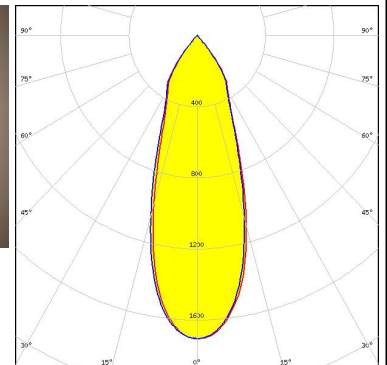
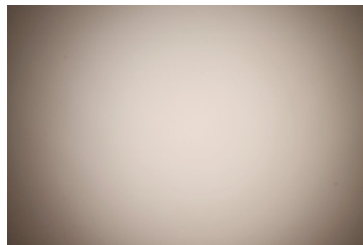
### SHARP

LED Mini Zenigata (GW6BM)  
 FWHM / FWTM 38.0° / 81.0°  
 Efficiency 88 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET



### XICATO

LED XTM - 9mm LES  
 FWHM / FWTM 35.0° / 76.0°  
 Efficiency 83 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14636\_XTM-PF-ADAPTER



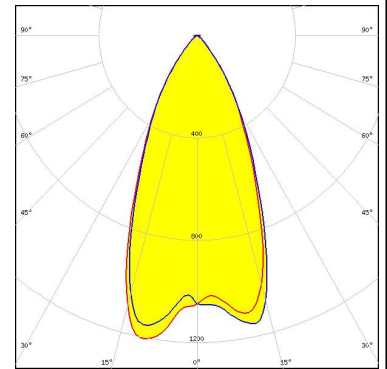


#### OPTICAL RESULTS (SIMULATED):



LED XM-L RGBW (XMLDCL HD)  
 FWHM / FWTM 47.0° / 80.0°  
 Efficiency 85 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour RGBW  
 Required components:  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL

Protective plate, glass



LED LUXEON CoB Compact  
 FWHM / FWTM 32.0° / 71.0°  
 Efficiency 77 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C12479\_MIRELLA-DL  
 Bender Wirth: 452 Typ L1



LED LUXEON CoB Compact  
 FWHM / FWTM 40.0° / 78.0°  
 Efficiency 82 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13761\_PF-SOCKET-CXA15  
 C12479\_MIRELLA-DL



LED LUXEON CoB Compact  
 FWHM / FWTM 37.0° / 72.0°  
 Efficiency 77 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C13333\_MIRELLA-CL  
 Bender Wirth: 452 Typ L1

#### OPTICAL RESULTS (SIMULATED):

##### LUMILEDS

LED LUXEON CoB Compact  
FWHM / FWTM 25.0° / 72.0°  
Efficiency 85 %  
Peak intensity 2.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 452 Typ L1

##### LUMILEDS

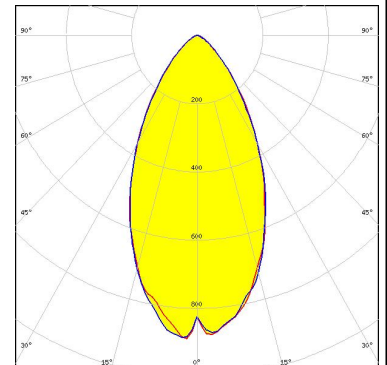
LED LUXEON CoB Compact  
FWHM / FWTM 41.0° / 78.0°  
Efficiency 82 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13761\_PF-SOCKET-CXA15  
C13333\_MIRELLA-CL

##### LUMILEDS

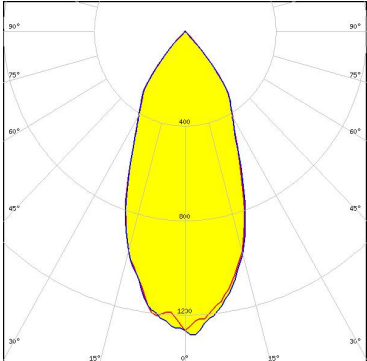
LED LUXEON CoB Compact  
FWHM / FWTM 35.0° / 82.0°  
Efficiency 88 %  
Peak intensity 1.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13761\_PF-SOCKET-CXA15

##### LUMILEDS

LED LUXEON K4  
FWHM / FWTM 54.0° / 98.0°  
Efficiency 83 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13761\_PF-SOCKET-CXA15  
C12479\_MIRELLA-DL



#### OPTICAL RESULTS (SIMULATED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON K4            FWHM / FWTM 46.0° / 84.0°            Efficiency 88 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13761_PF-SOCKET-CXA15</p>	
<p><b>LUMINUS</b></p> <p>LED CxM-14 (19x19)            FWHM / FWTM 51.0° / 81.0°            Efficiency 70 %            Peak intensity 0.9 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13709_PF-SOCKET-VERO13-18            C12479_MIRELLA-DL            Bender Wirth: 433 Typ L1</p>	
<p><b>LUMINUS</b></p> <p>LED CxM-14 (19x19)            FWHM / FWTM 49.0° / 72.0°            Efficiency 75 %            Peak intensity 1 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13709_PF-SOCKET-VERO13-18            Bender Wirth: 433 Typ L1</p>	
<p><b>LUMINUS</b></p> <p>LED CxM-9 (13.5x13.5)            FWHM / FWTM 41.0° / 76.0°            Efficiency 76 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13709_PF-SOCKET-VERO13-18            C12479_MIRELLA-DL            Bender Wirth: 434 Typ L1</p>	

#### OPTICAL RESULTS (SIMULATED):

##### LUMINUS

LED CxM-9 (13.5x13.5)  
FWHM / FWTM 39.0° / 73.0°  
Efficiency 78 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

C13709\_PF-SOCKET-VERO13-18  
C13333\_MIRELLA-CL  
Bender Wirth: 434 Typ L1

##### LUMINUS

LED CxM-9 (13.5x13.5)  
FWHM / FWTM 36.0° / 77.0°  
Efficiency 84 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 434 Typ L1

##### NICHIA

LED COB S-Type (LES 7)  
FWHM / FWTM 28.0° / 69.0°  
Efficiency 81 %  
Peak intensity 2.2 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

C13709\_PF-SOCKET-VERO13-18  
C13333\_MIRELLA-CL  
Bender Wirth: 452 Typ L1

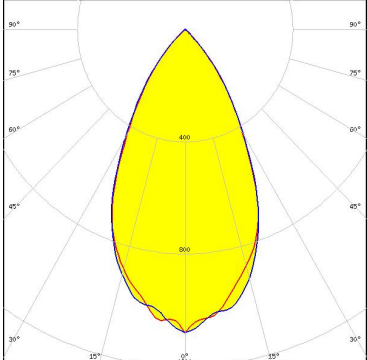
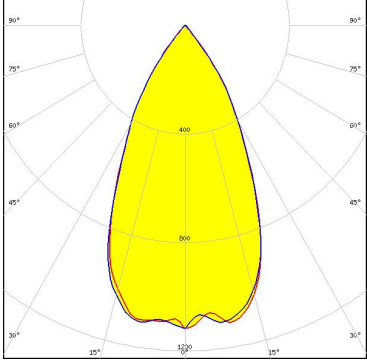
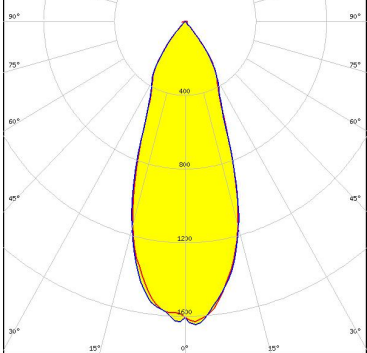
##### NICHIA

LED COB S-Type (LES 7)  
FWHM / FWTM 25.0° / 72.0°  
Efficiency 85 %  
Peak intensity 2.6 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 452 Typ L1

#### OPTICAL RESULTS (SIMULATED):

<p><b>NICHIA</b></p> <p>LED COB S-Type (LES 7)</p> <p>FWHM / FWTM 32.0° / 71.0°</p> <p>Efficiency 77 %</p> <p>Peak intensity 1.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 C12479_MIRELLA-DL Bender Wirth: 452 Typ L1</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S15</p> <p>FWHM / FWTM 56.0° / 86.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 433 Typ L1</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S9</p> <p>FWHM / FWTM 52.0° / 79.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13083_PF-SOCKET C13333_MIRELLA-CL</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S9</p> <p>FWHM / FWTM 38.0° / 77.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18</p>	

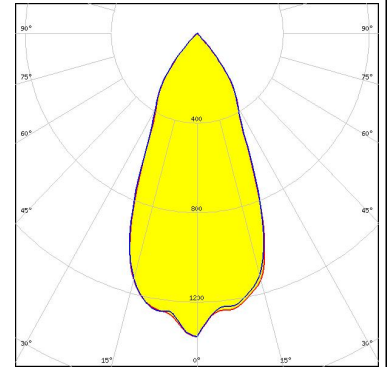


#### OPTICAL RESULTS (SIMULATED):

#### OSRAM

Opto Semiconductors

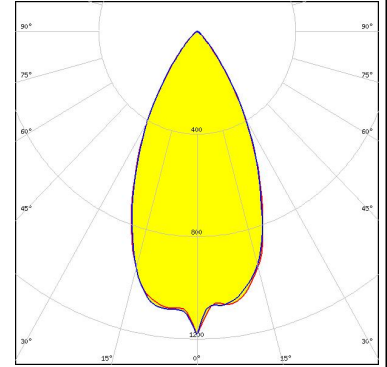
LED Soleriq S9  
 FWHM / FWTM 46.0° / 82.0°  
 Efficiency 91 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET



#### OSRAM

Opto Semiconductors

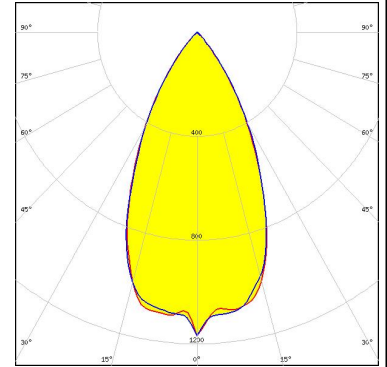
LED Soleriq S9  
 FWHM / FWTM 50.0° / 80.0°  
 Efficiency 85 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL



#### OSRAM

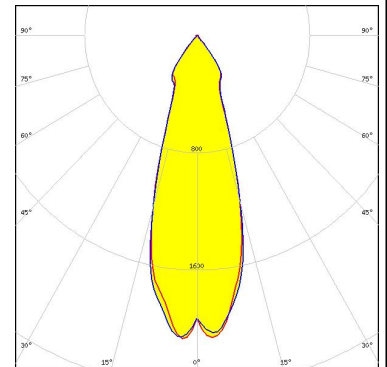
Opto Semiconductors

LED Soleriq S9  
 FWHM / FWTM 51.0° / 80.0°  
 Efficiency 85 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET  
 C12479\_MIRELLA-DL



#### SAMSUNG

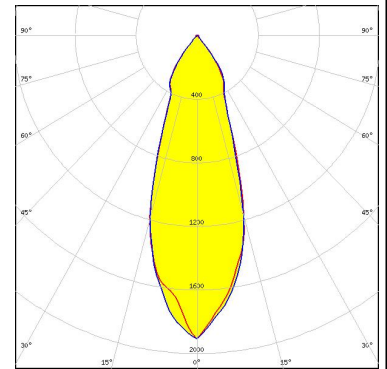
LED LC010C  
 FWHM / FWTM 32.0° / 74.0°  
 Efficiency 87 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 479 Typ L1



#### OPTICAL RESULTS (SIMULATED):

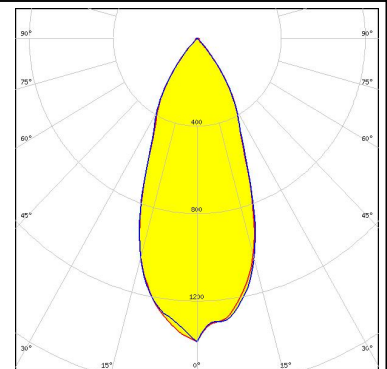
#### SAMSUNG

LED LC020C  
 FWHM / FWTM 35.0° / 75.0°  
 Efficiency 86 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 479 Typ L1



#### SAMSUNG

LED LC040C  
 FWHM / FWTM 42.0° / 79.0°  
 Efficiency 84 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 480 Typ L1



SEOUL SEMICONDUCTOR


LED ZC4/6  
 FWHM / FWTM 36.0° / 77.0°  
 Efficiency 84 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 434 Typ L1



SEOUL SEMICONDUCTOR

LED ZC4/6  
 FWHM / FWTM 41.0° / 76.0°  
 Efficiency 76 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C12479\_MIRELLA-DL  
 Bender Wirth: 434 Typ L1

## OPTICAL RESULTS (SIMULATED):

 SEOL SEMICONDUCTOR	
LED	ZC4/6
FWHM / FWTM	39.0° / 73.0°
Efficiency	78 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
C13709_PF-SOCKET-VERO13-18	
C13333_MIRELLA-CL	
Bender Wirth: 434 Typ L1	

#### 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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