

MIRELLA-50-W-PF

~40° wide beam

SPECIFICATION:

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

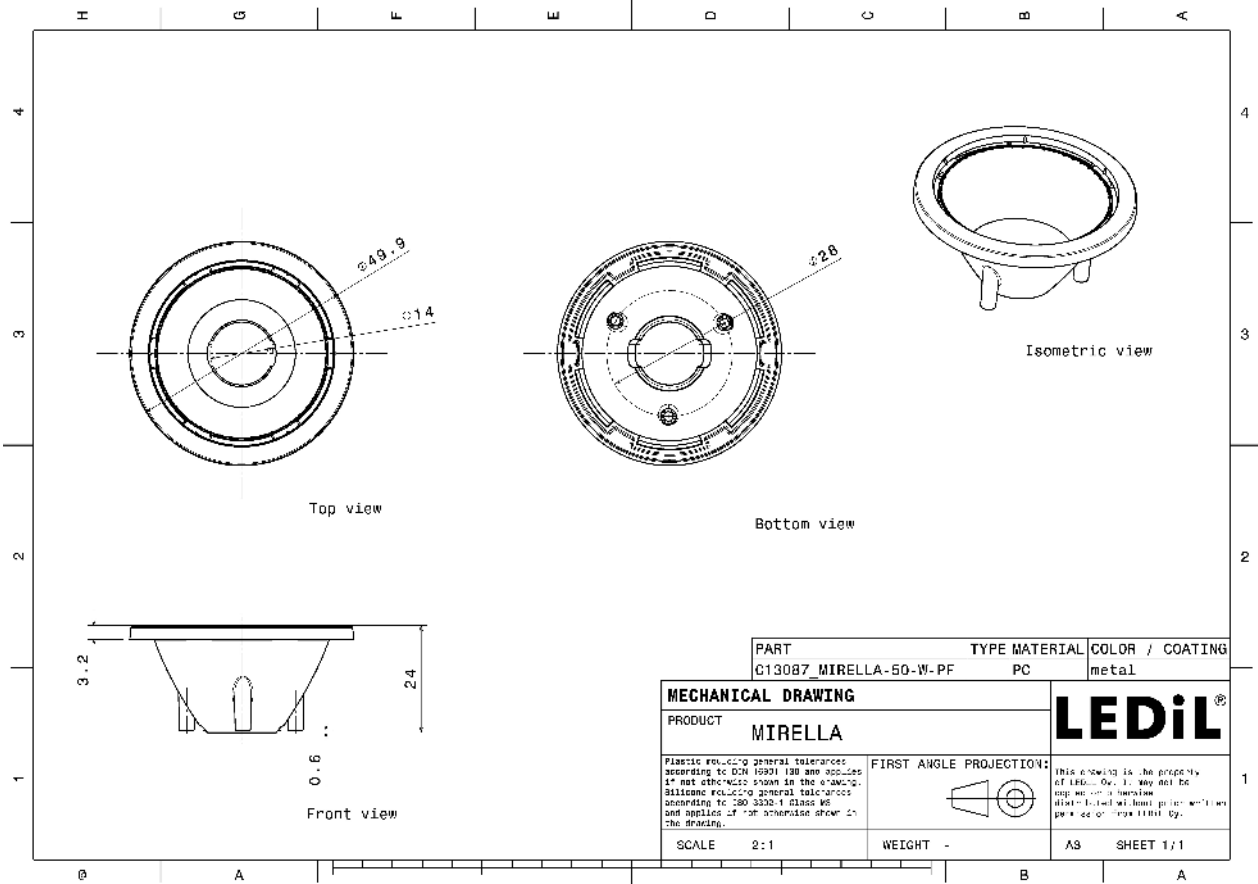
MATERIALS:

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

ORDERING INFORMATION:


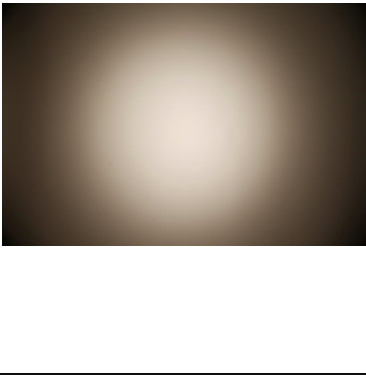
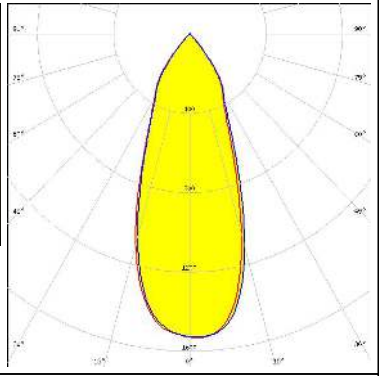


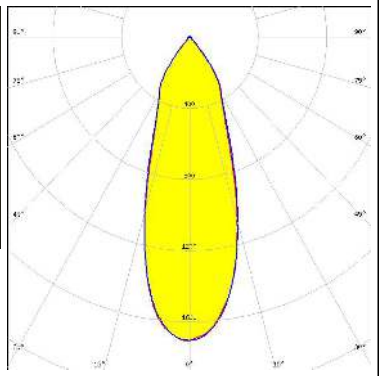


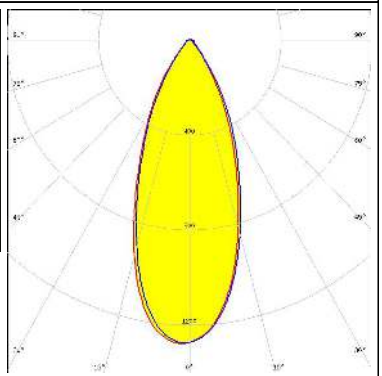

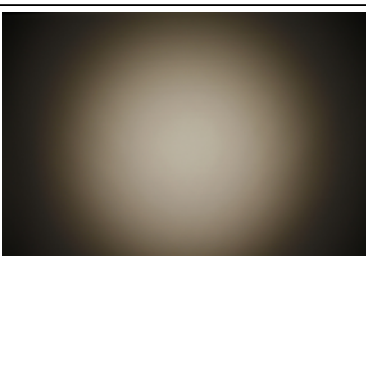
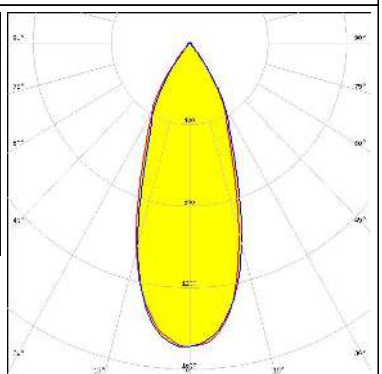
Component	Qty in box	MOQ	MPQ	Box weight (kg)
C13087_MIRELLA-50-W-PF » Box size: 480 x 280 x 300 mm	336	112	28	2.8




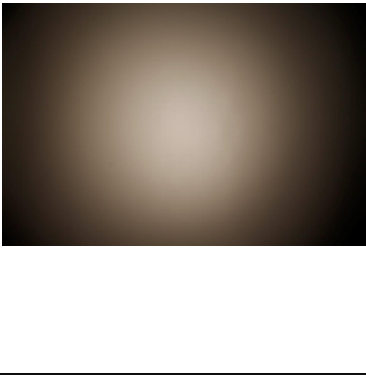
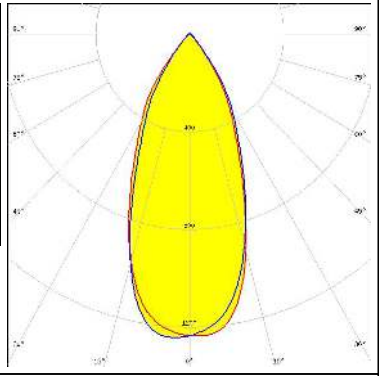

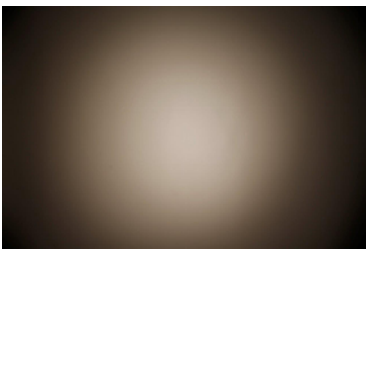
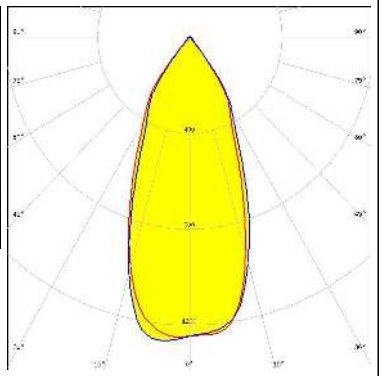






See also our general installation guide: www.ledil.com/installation_guide


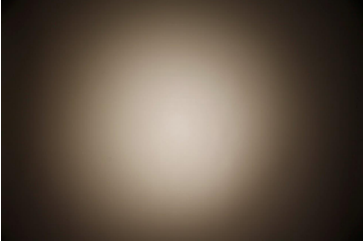
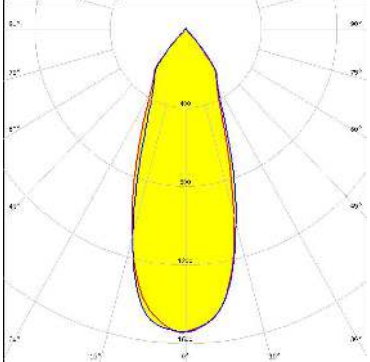




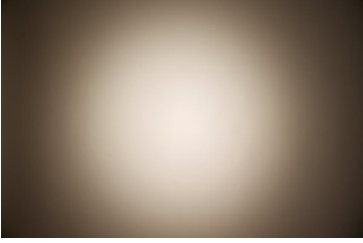
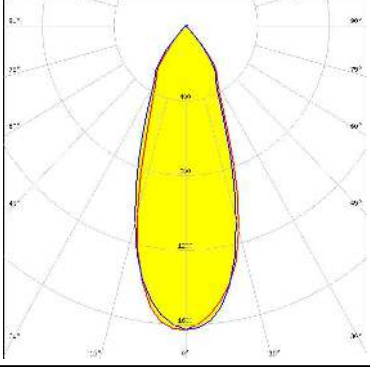

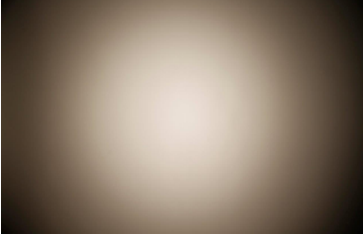
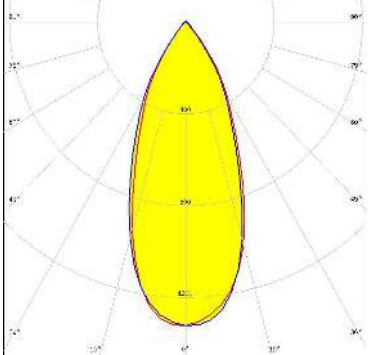
OPTICAL RESULTS (MEASURED):

<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>		


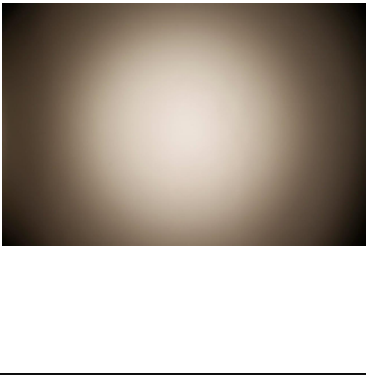
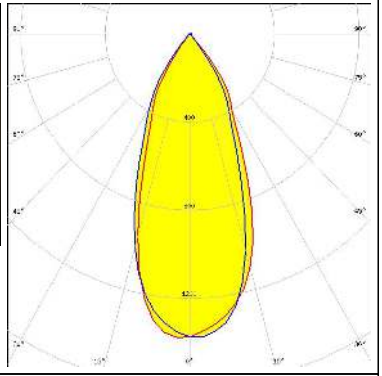

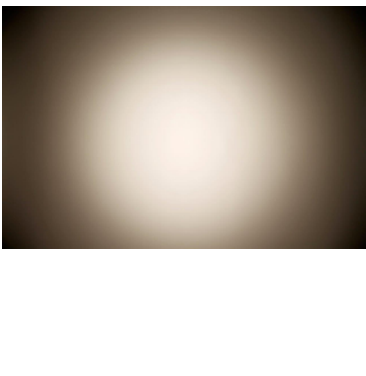
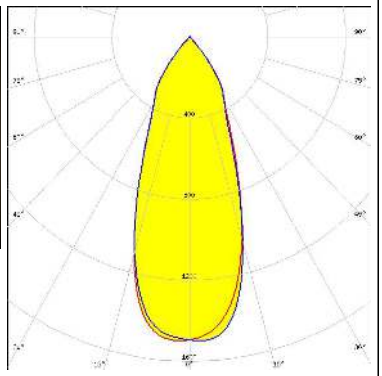


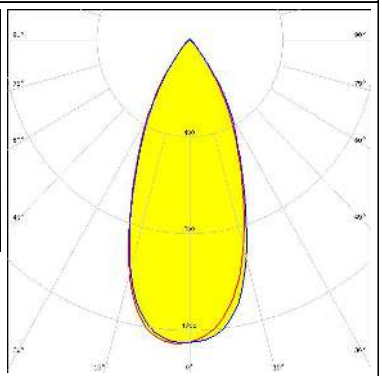

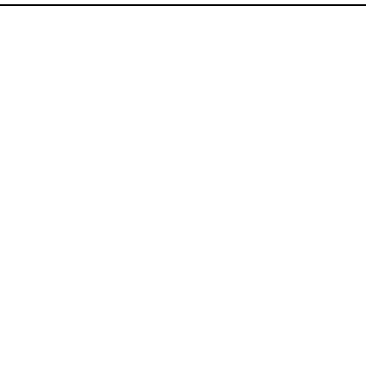
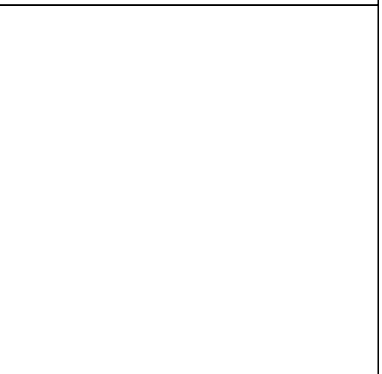
OPTICAL RESULTS (MEASURED):

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


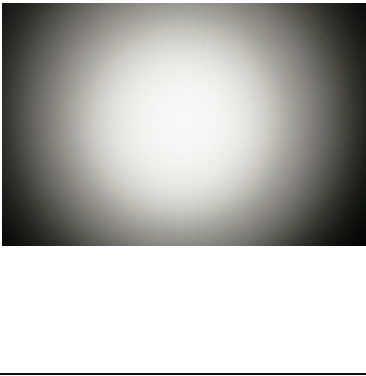
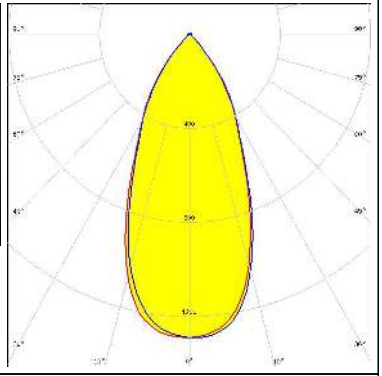


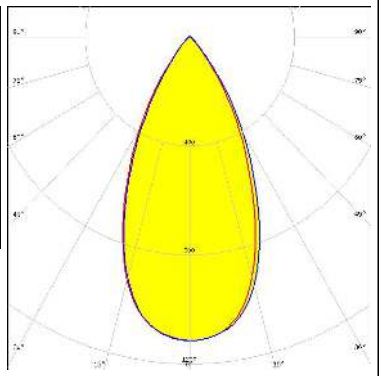


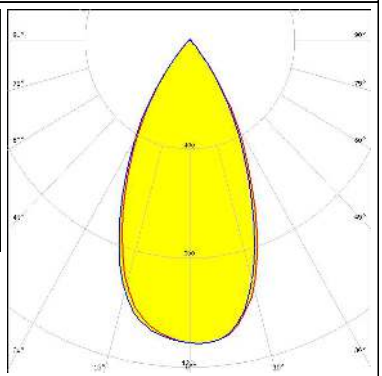


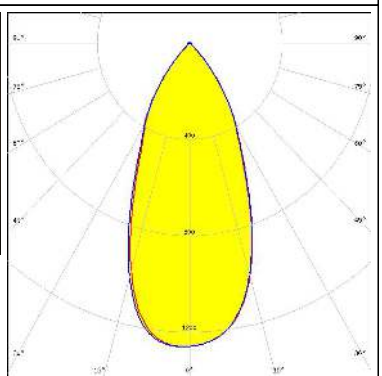
OPTICAL RESULTS (MEASURED):

<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>		



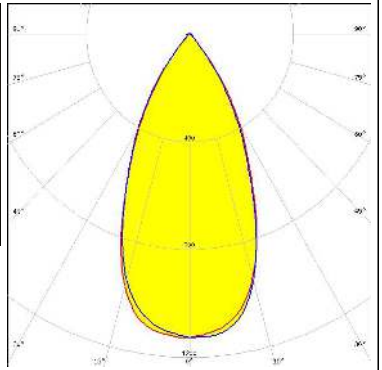

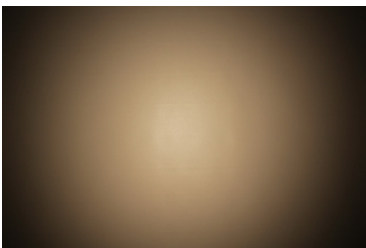
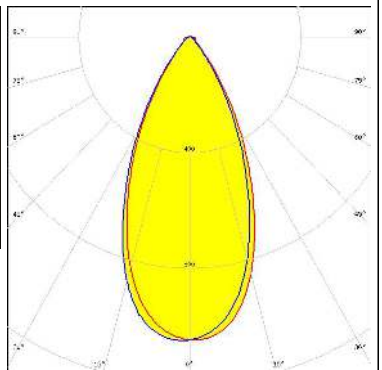
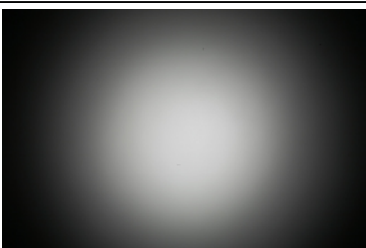
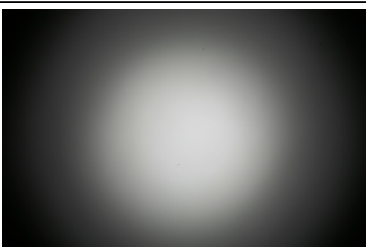
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED V8 Gen6 FWHM / FWTM 42.0° / 76.0° Efficiency 82 % Peak intensity 1.4 cd/lm 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/lm 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/lm 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/lm 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/m 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/m 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/m 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/m 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>		
<p>CITIZEN</p> <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>		
<p>CITIZEN</p> <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):

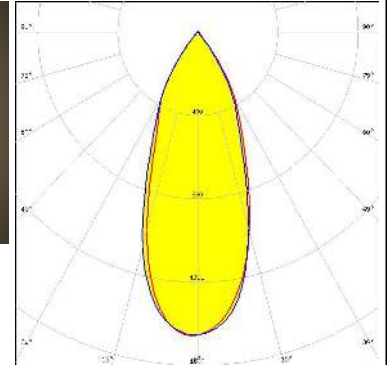
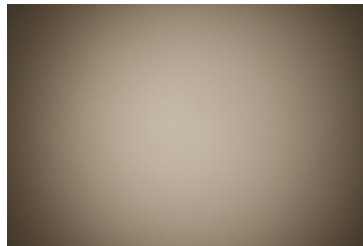
CITIZEN

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



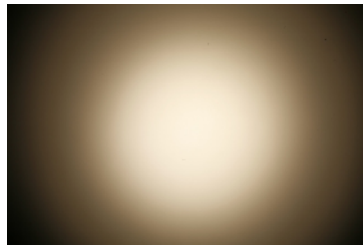
CITIZEN

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



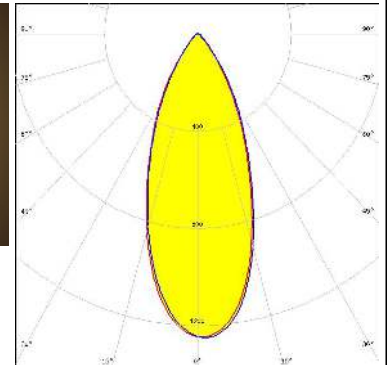
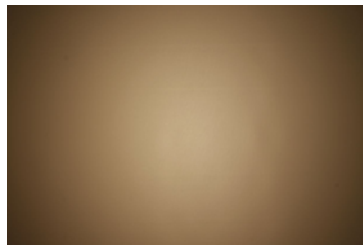
CITIZEN

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

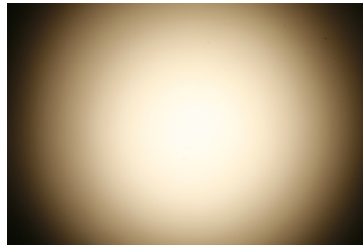
LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 41.0° / 76.0°
 Efficiency 76 %
 Peak intensity 1.3 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13709_PF-SOCKET-VERO13-18
 C12479_MIRELLA-DL
 Bender Wirth: 434 Typ L1



OPTICAL RESULTS (MEASURED):

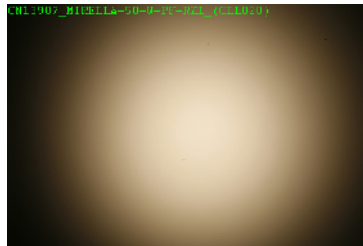
CITIZEN

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



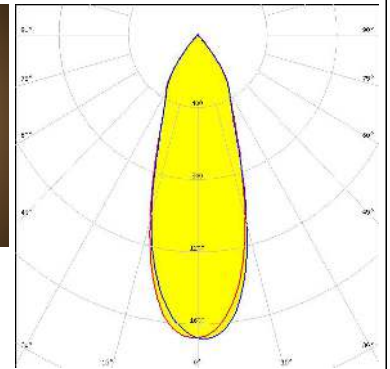
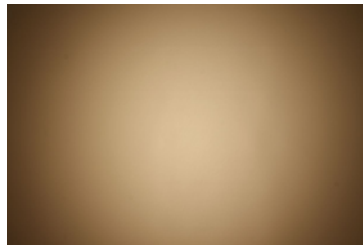
CITIZEN

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



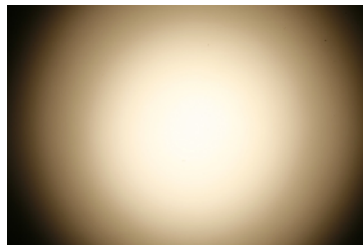
CITIZEN

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

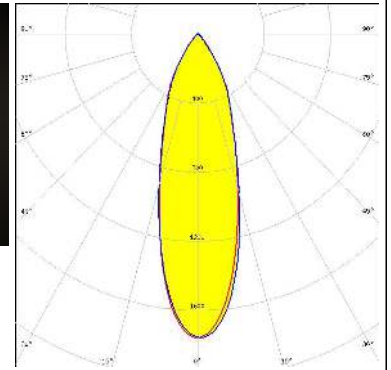
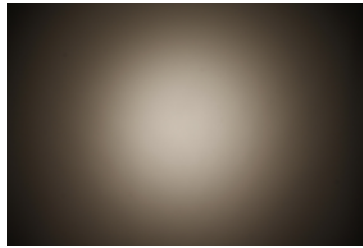
LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 46.0° / 78.0°
 Efficiency 86 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13083_PF-SOCKET
 C13333_MIRELLA-CL



OPTICAL RESULTS (MEASURED):

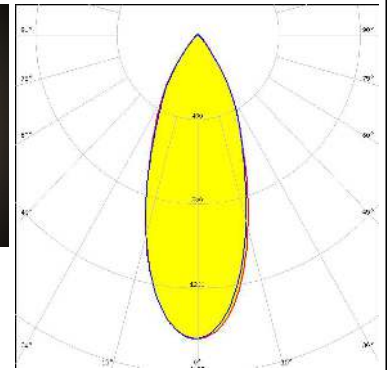
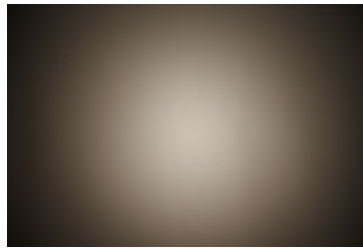
CITIZEN

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



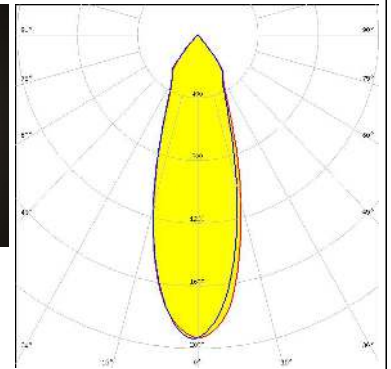
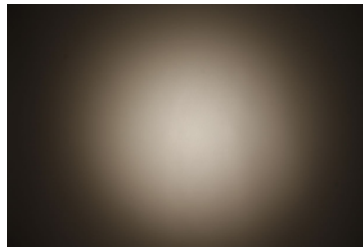
CITIZEN

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



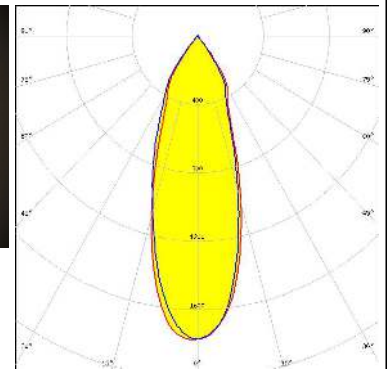
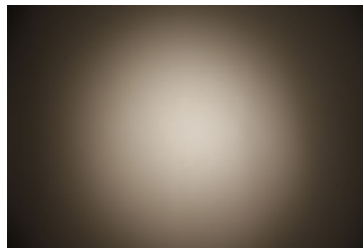
CITIZEN

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

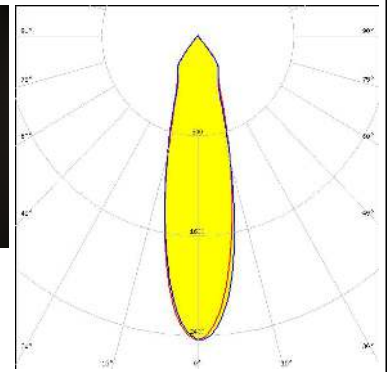
LED CLU700/701/702/703
 FWHM / FWTM 34.0° / 72.0°
 Efficiency 81 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13083_PF-SOCKET
 C13333_MIRELLA-CL



OPTICAL RESULTS (MEASURED):

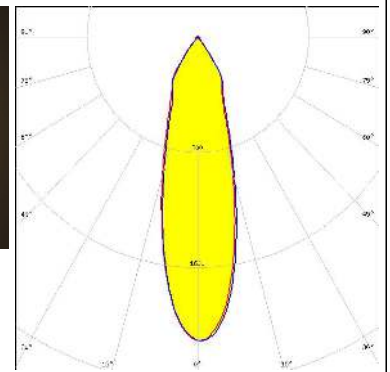
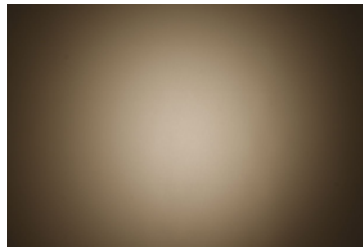
CITIZEN

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



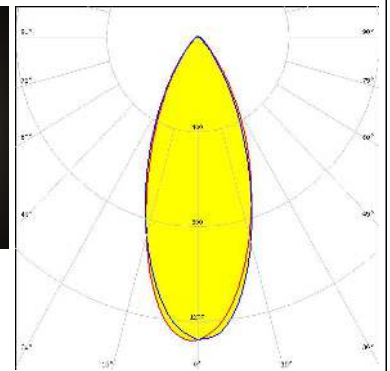
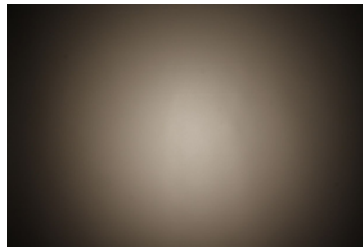
CITIZEN

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



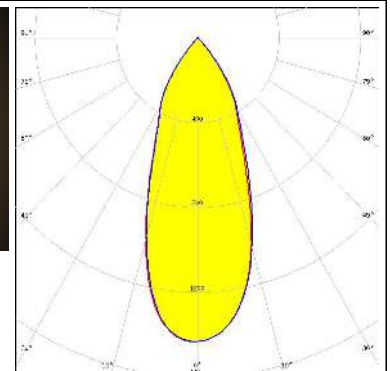
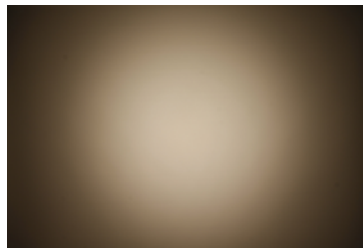
CITIZEN

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

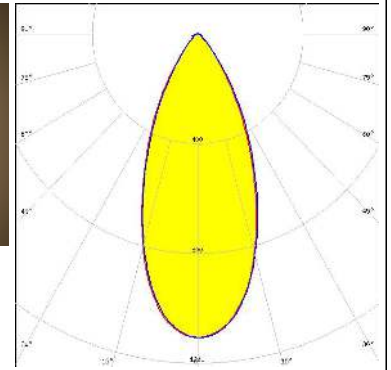
LED CLU720/721/723
 FWHM / FWTM 40.0° / 78.0°
 Efficiency 81 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13709_PF-SOCKET-VERO13-18
 Bender Wirth: 433 Typ L1



OPTICAL RESULTS (MEASURED):

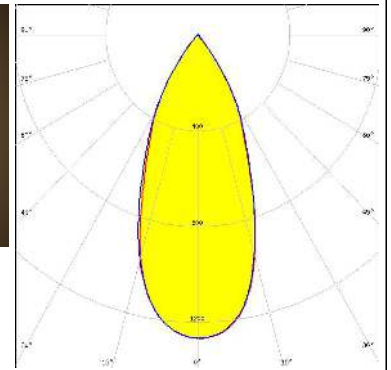
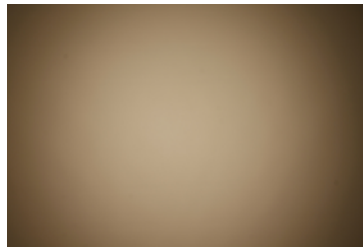
CITIZEN

LED CLU720/721/723
 FWHM / FWTM 44.0° / 78.0°
 Efficiency 74 %
 Peak intensity 1.1 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13709_PF-SOCKET-VERO13-18
 C12479_MIRELLA-DL
 Bender Wirth: 433 Typ L1

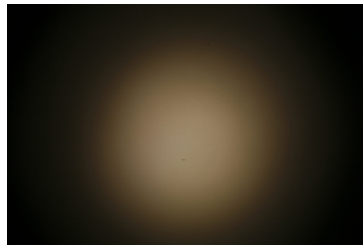


CITIZEN

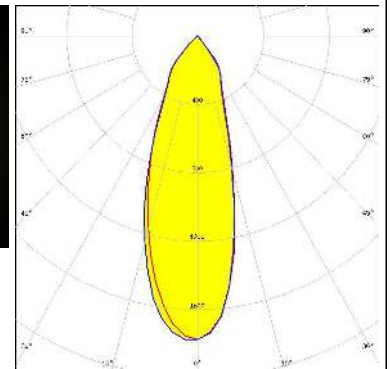
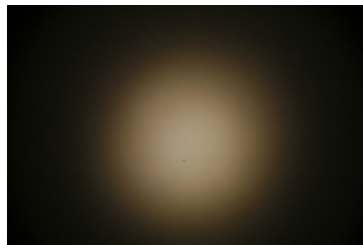
LED CLU720/721/723
 FWHM / FWTM 43.0° / 74.0°
 Efficiency 76 %
 Peak intensity 1.3 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13709_PF-SOCKET-VERO13-18
 C13333_MIRELLA-CL
 Bender Wirth: 433 Typ L1




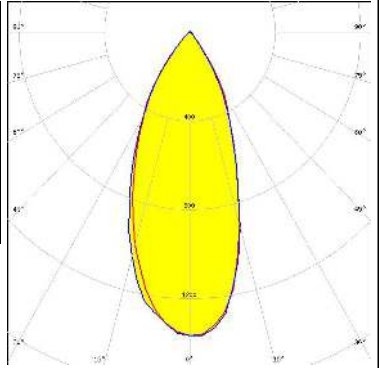
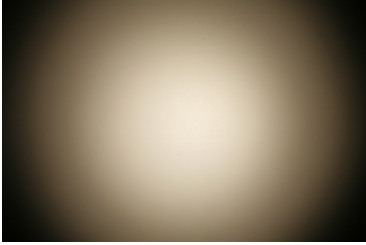
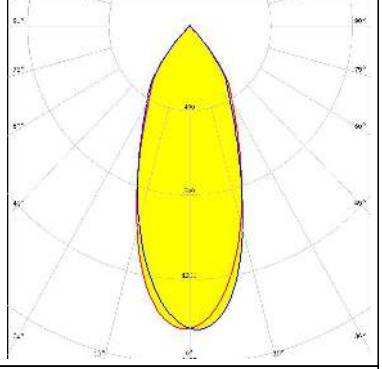
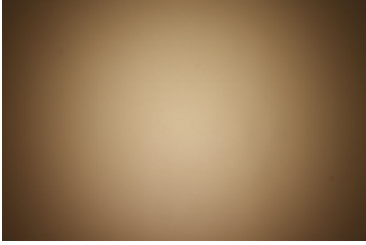
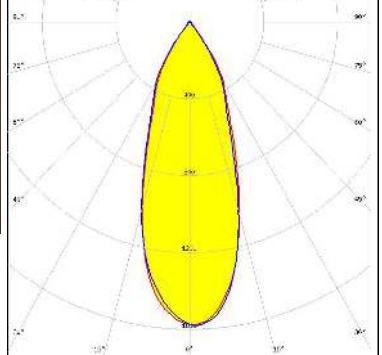
LED CXA/B 13xx
 FWHM / FWTM 42.0° / 76.0°
 Efficiency 81 %
 Peak intensity 1.5 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13761_PF-SOCKET-CXA15
 C13333_MIRELLA-CL



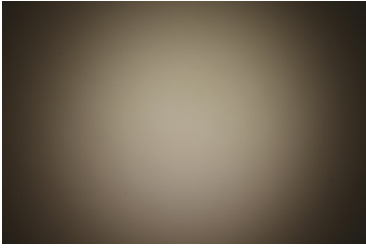
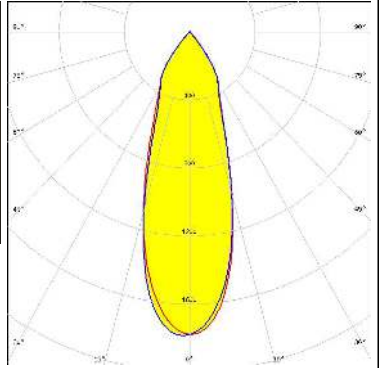
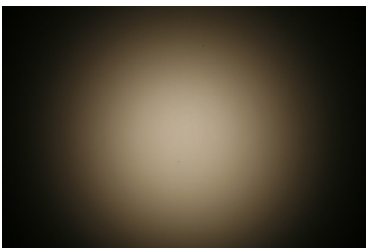
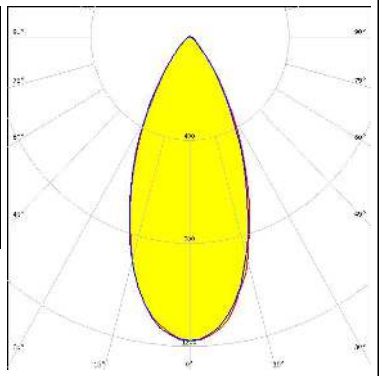

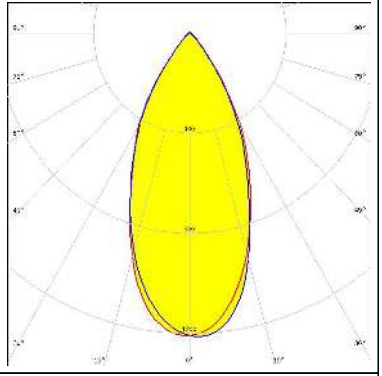
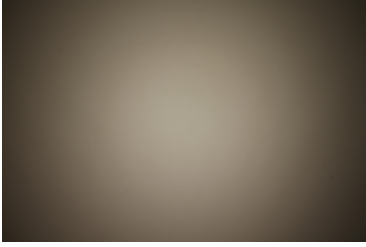
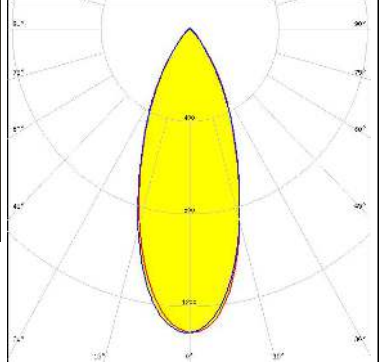
LED CXA/B 13xx
 FWHM / FWTM 37.0° / 80.0°
 Efficiency 86 %
 Peak intensity 1.8 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13761_PF-SOCKET-CXA15



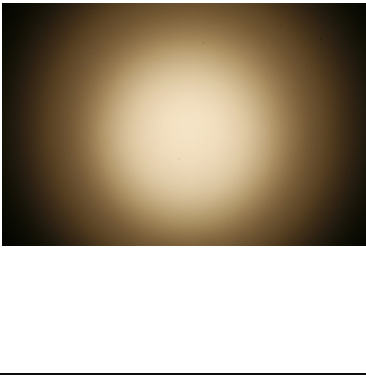
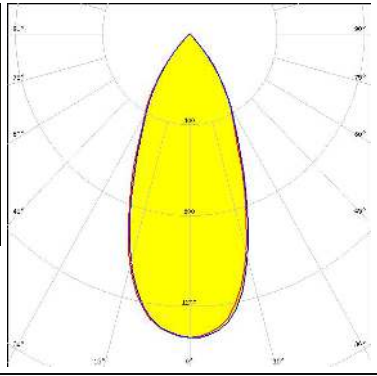
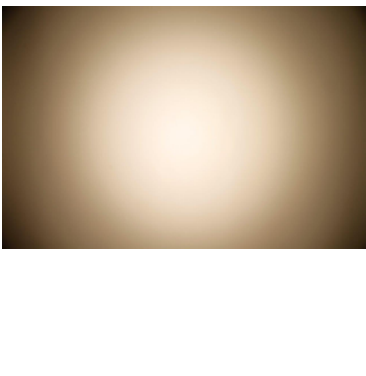
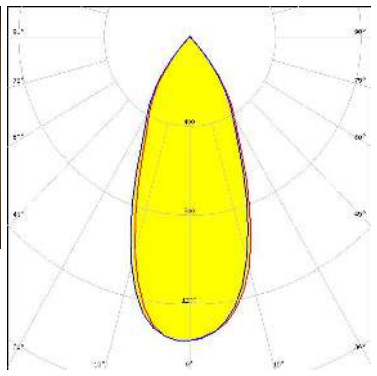

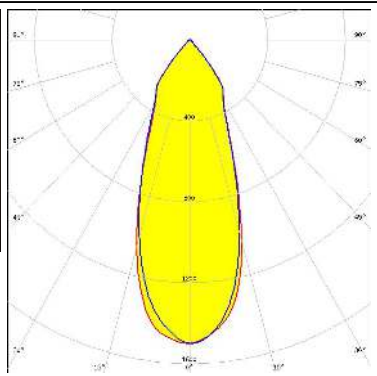
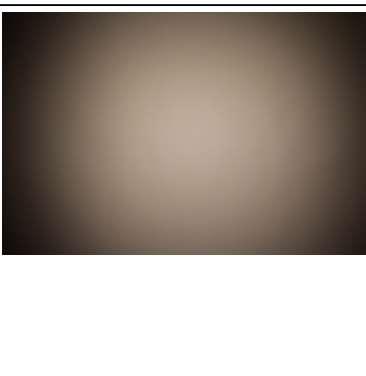
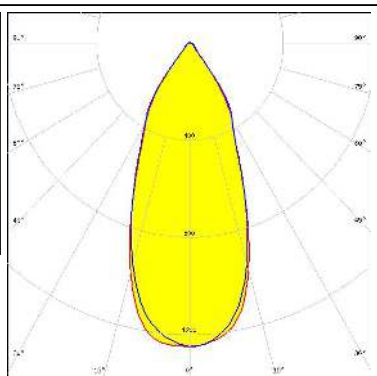
OPTICAL RESULTS (MEASURED):

<p>CREE 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>CREE 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>CREE 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>CREE 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>		

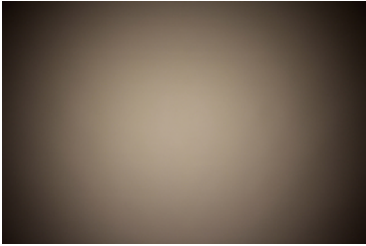
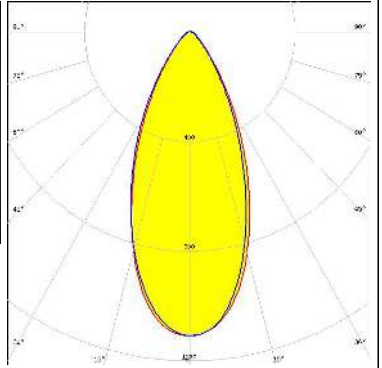
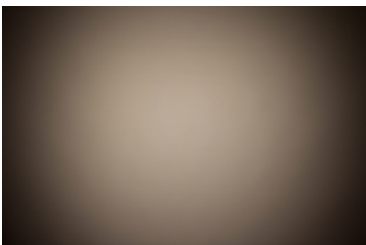
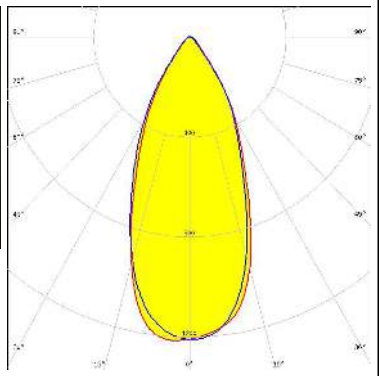
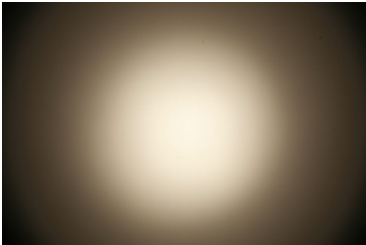
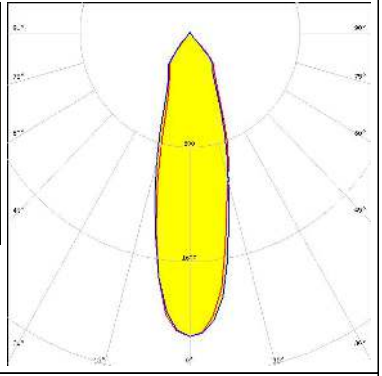
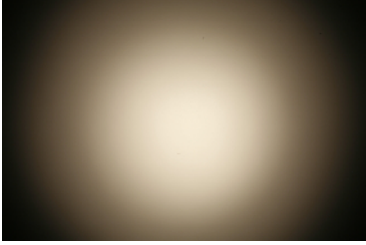
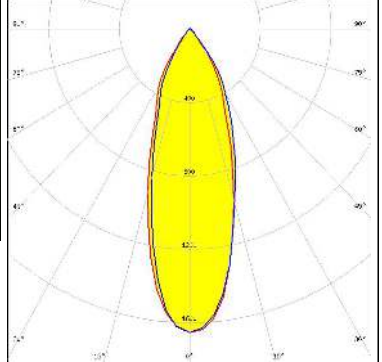
OPTICAL RESULTS (MEASURED):

<p>CREE 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>CREE 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>CREE 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>CREE 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>		

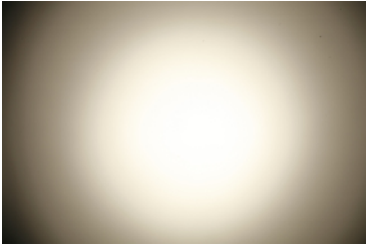
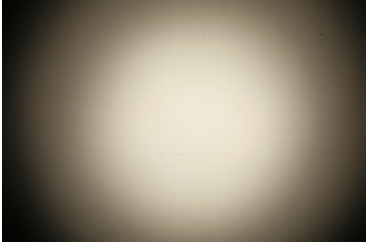
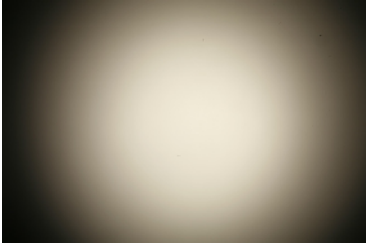
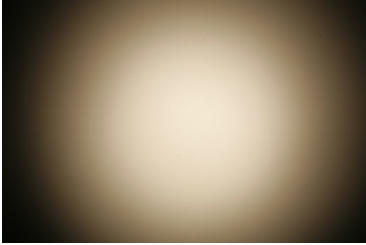
OPTICAL RESULTS (MEASURED):

<p>CREE LEDs</p> <p>LED CXA/B 1816 & CXA/B 1820 & 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>CREE LEDs</p> <p>LED CXA/B 1816 & CXA/B 1820 & 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>CREE 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>CREE 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>		


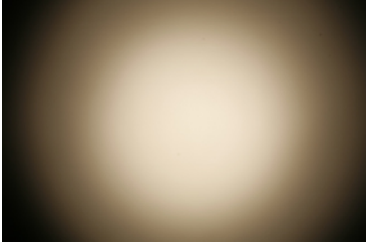
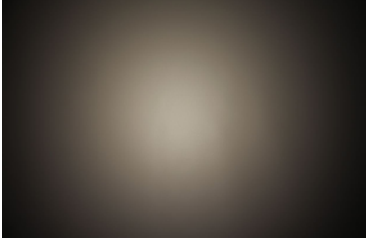
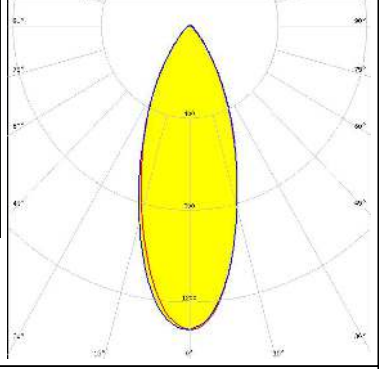
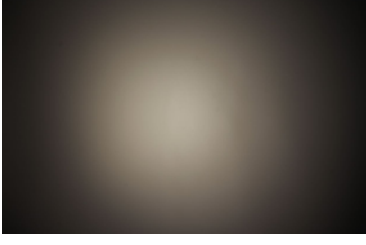
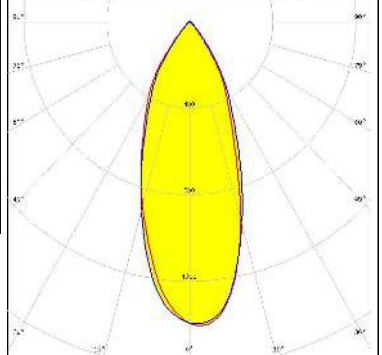
OPTICAL RESULTS (MEASURED):

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

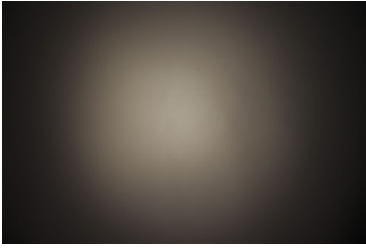
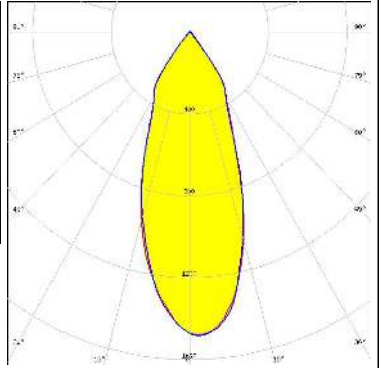
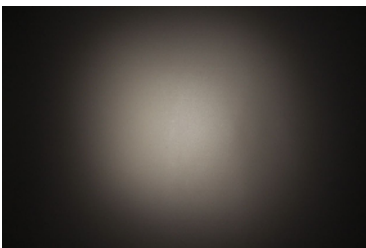
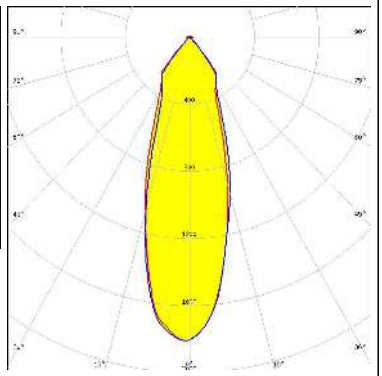
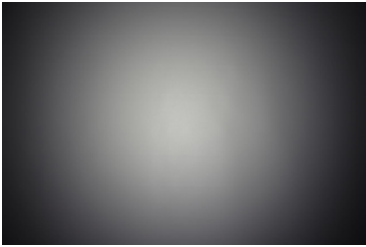
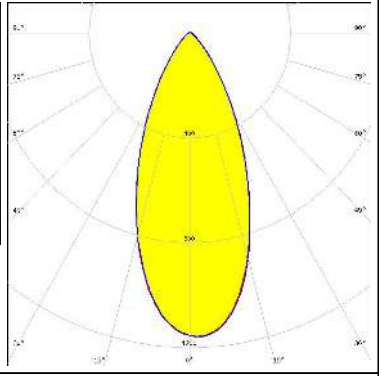
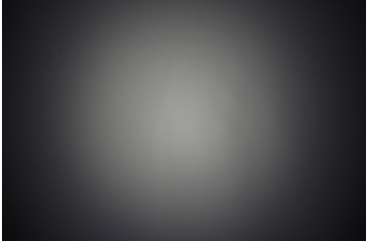
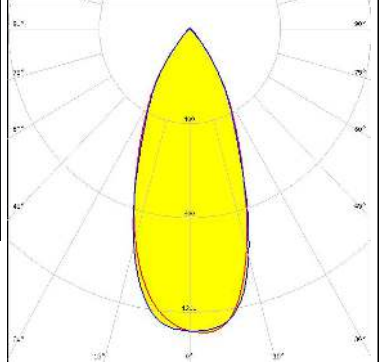
OPTICAL RESULTS (MEASURED):

<p>CREE 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>CREE 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>CREE 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>CREE 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>	

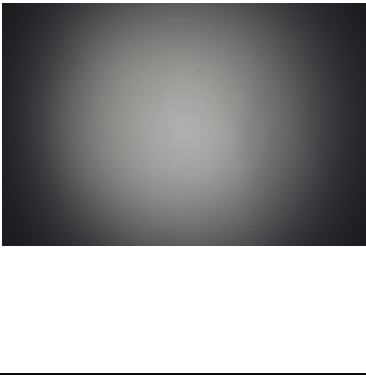
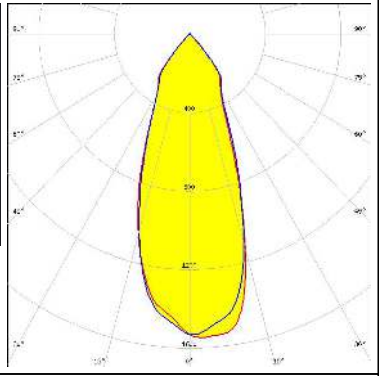
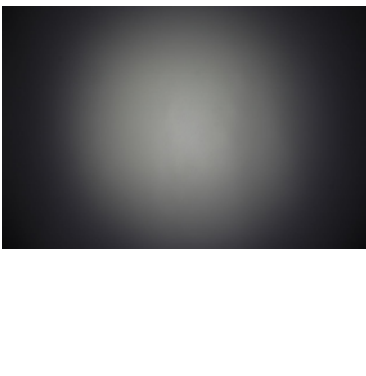
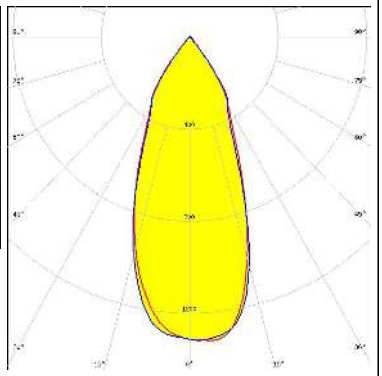

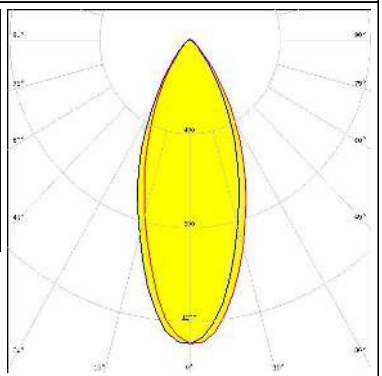
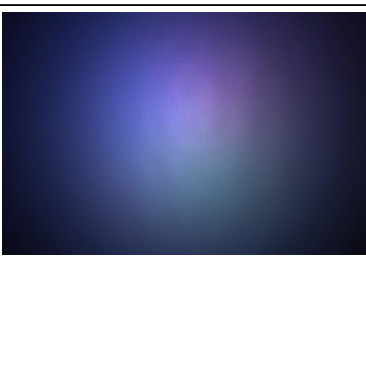
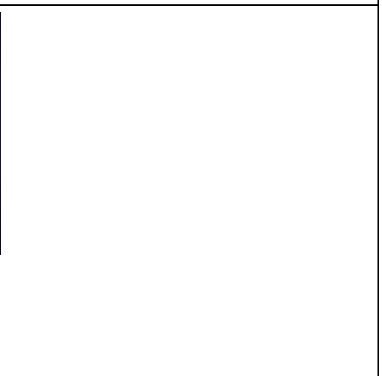
OPTICAL RESULTS (MEASURED):

<p>CREE 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>CREE 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>CREE 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>CREE 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>		

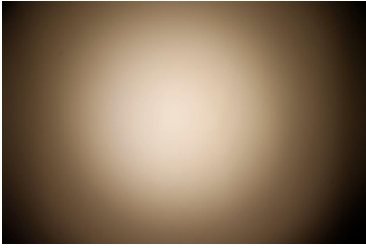
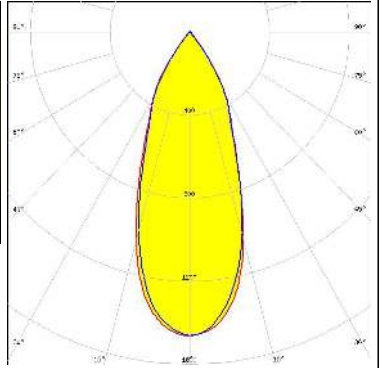
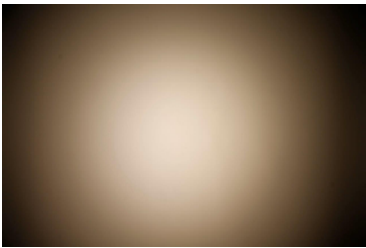
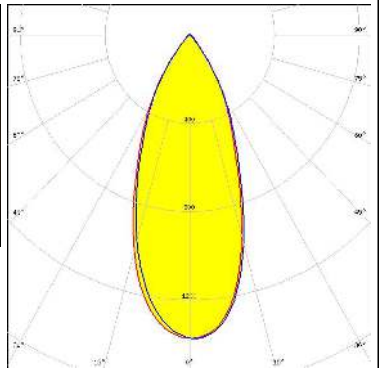
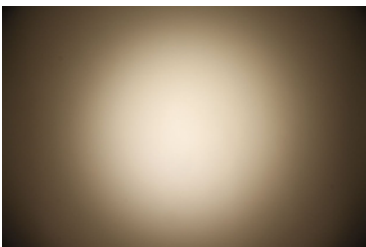
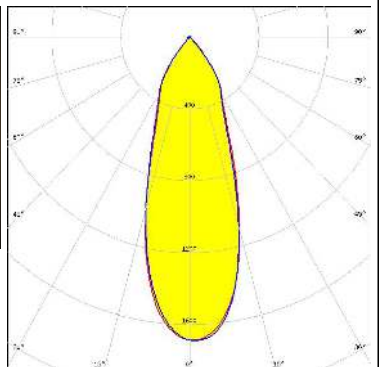
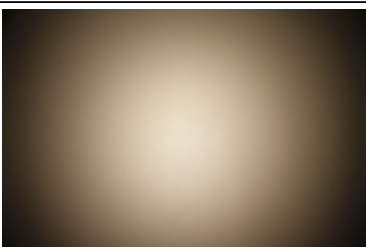
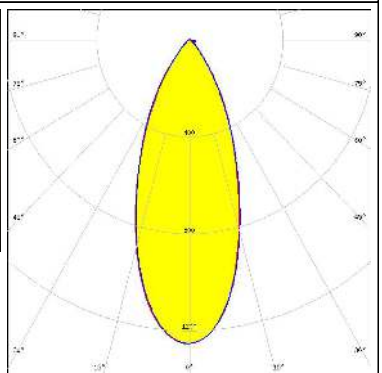
OPTICAL RESULTS (MEASURED):

<p>CREE 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>CREE 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>CREE 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>CREE 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>		

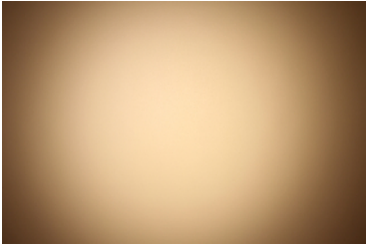
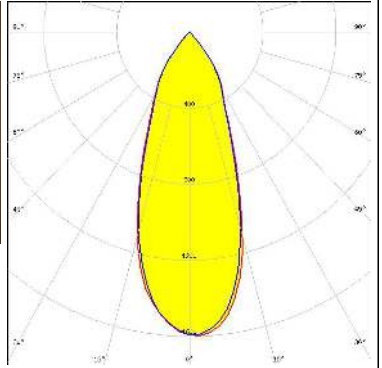
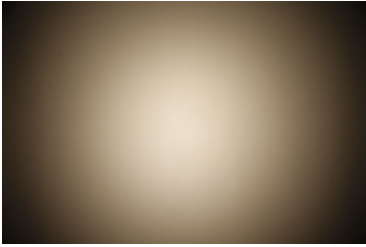
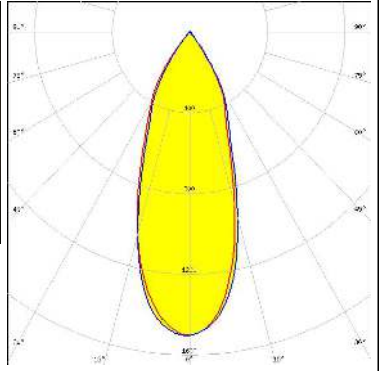
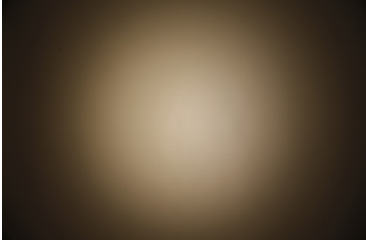
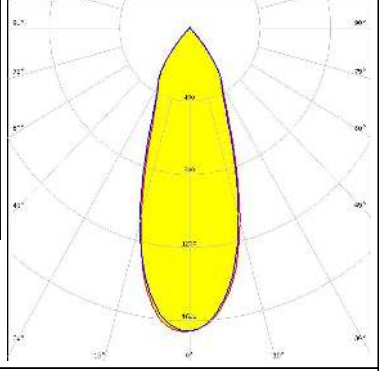
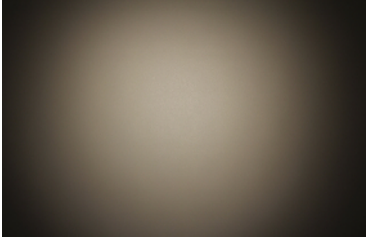

OPTICAL RESULTS (MEASURED):

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


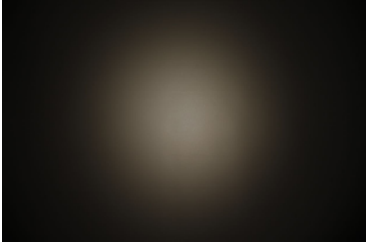
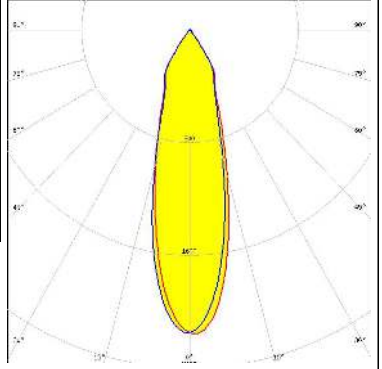
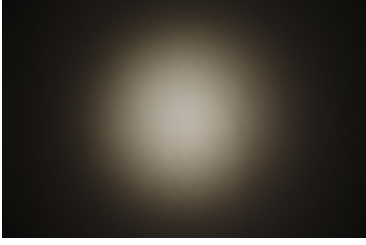
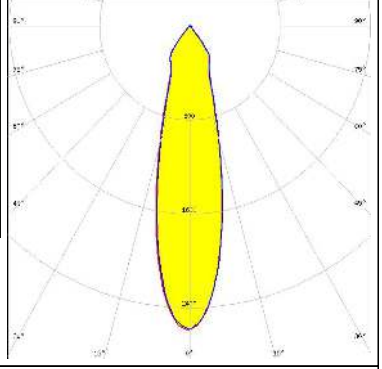
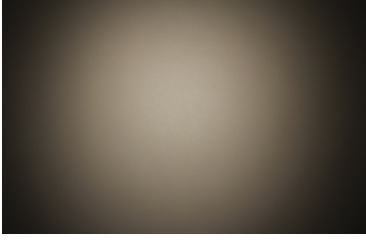
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</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>LUMILEDS</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>LUMILEDS</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>LUMILEDS</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>		

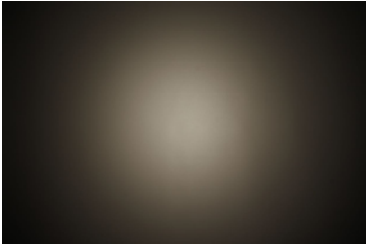
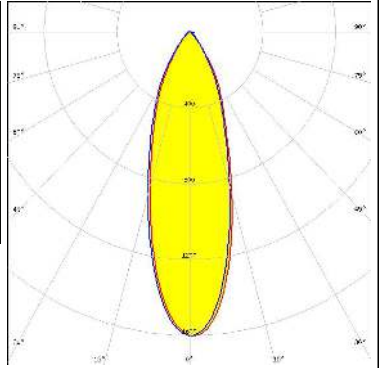
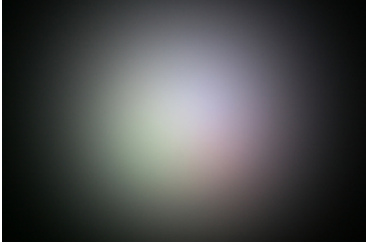
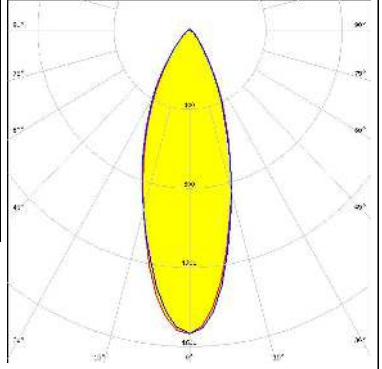
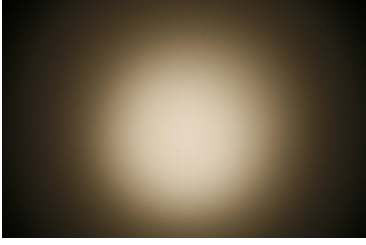
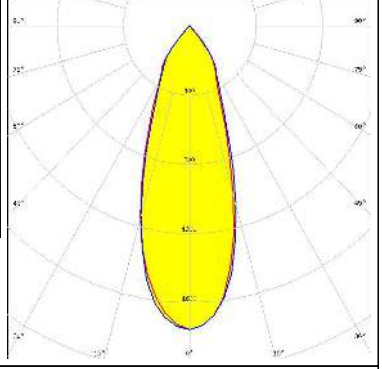

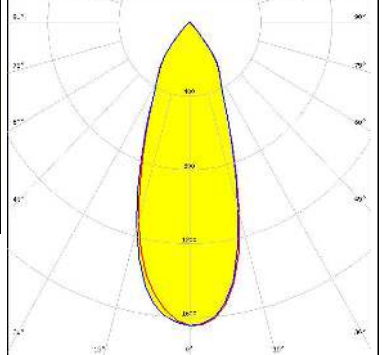
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</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>LUMILEDS</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>LUMILEDS</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>LUMILEDS</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>		

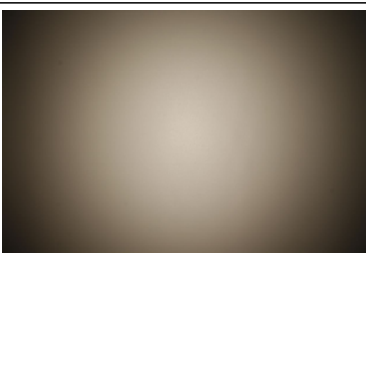
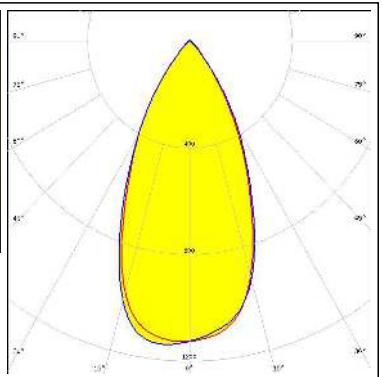
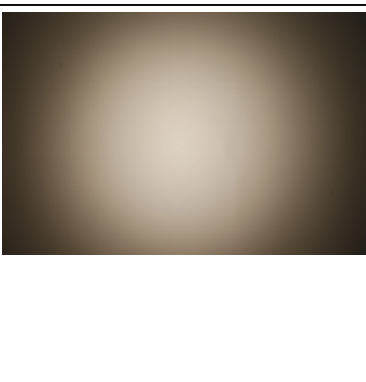
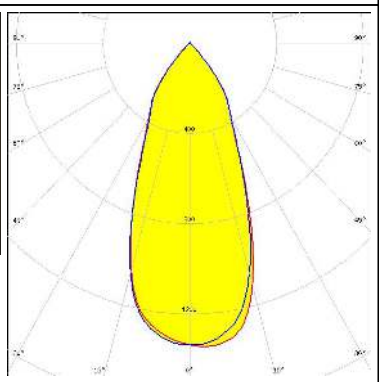
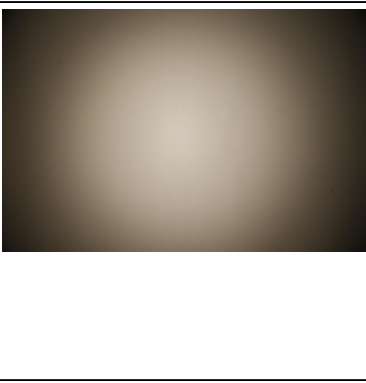
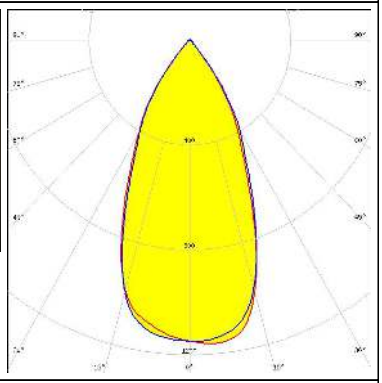

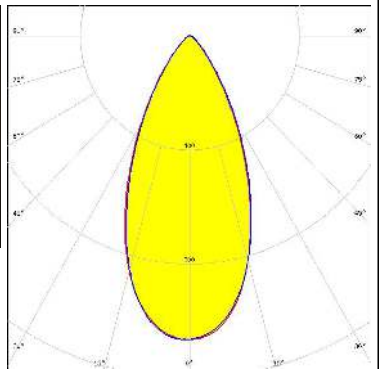
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1202s</p> <p>FWHM / FWTM 35.0° / 82.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13761_PF-SOCKET-CXA15</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1202s</p> <p>FWHM / FWTM 28.0° / 69.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 2.2 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: 452 Typ L1</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1202s</p> <p>FWHM / FWTM 25.0° / 72.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 2.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 452 Typ L1</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1202s</p> <p>FWHM / FWTM 40.0° / 78.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.5 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13761_PF-SOCKET-CXA15 C12479_MIRELLA-DL</p>		

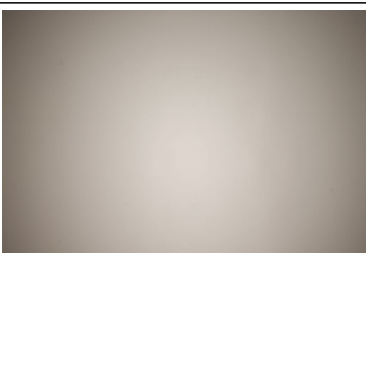
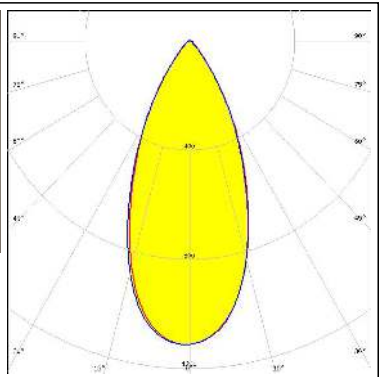

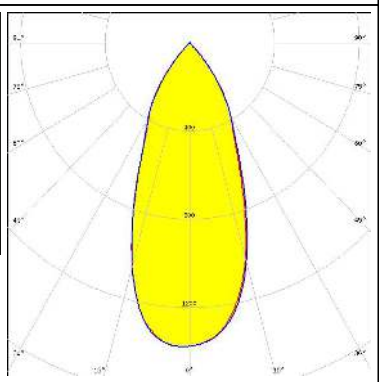
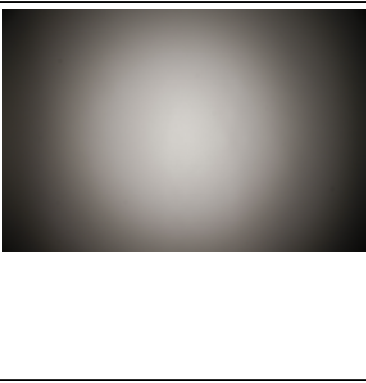
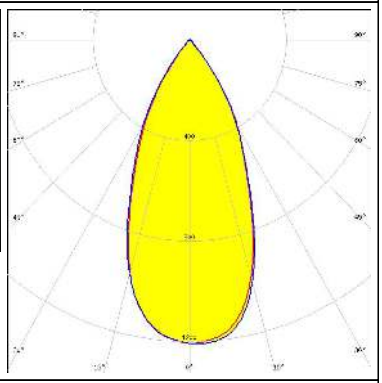
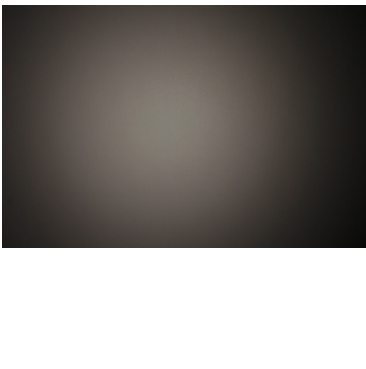
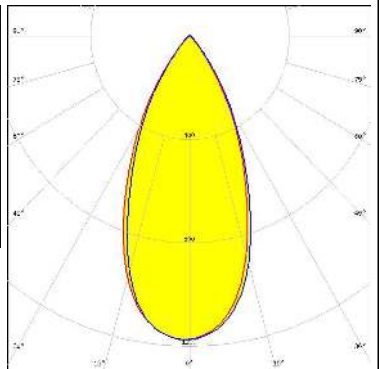
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1202s</p> <p>FWHM / FWTM 32.0° / 71.0°</p> <p>Efficiency 77 %</p> <p>Peak intensity 1.6 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: 452 Typ L1</p>		
<p>LUMILEDS</p> <p>LED LUXEON Z</p> <p>FWHM / FWTM 36.0° / 75.0°</p> <p>Efficiency 79 %</p> <p>Peak intensity 1.5 cd/m</p> <p>LEDs/each optic 4</p> <p>Light colour RGBW</p> <p>Required components:</p> <p>C13083_PF-SOCKET</p> <p>C13723_MIRELLA-RZL</p>		
<p>LUMINUS</p> <p>LED CxM-6 (12x13)</p> <p>FWHM / FWTM 36.0° / 79.0°</p> <p>Efficiency 85 %</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>C13083_PF-SOCKET</p>		
<p>LUMINUS</p> <p>LED CXM-7 (13x13)</p> <p>FWHM / FWTM 38.0° / 79.0°</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:</p> <p>C13083_PF-SOCKET</p>		

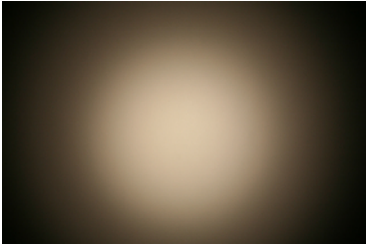
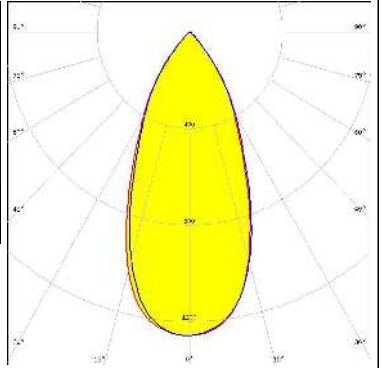

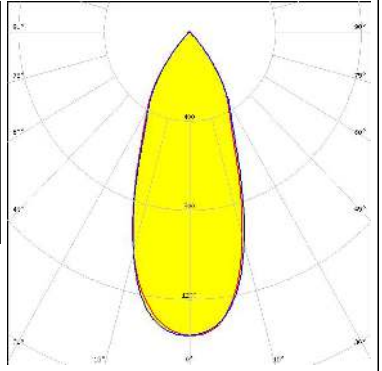
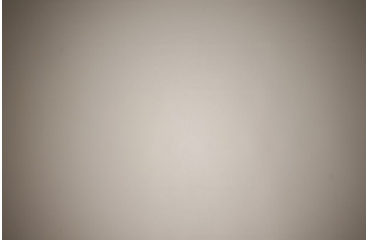
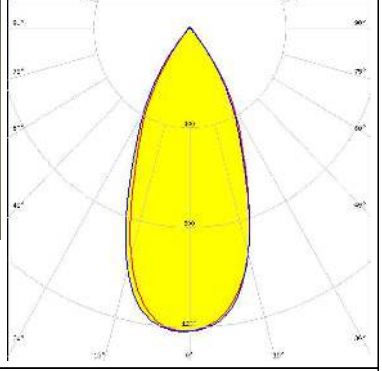

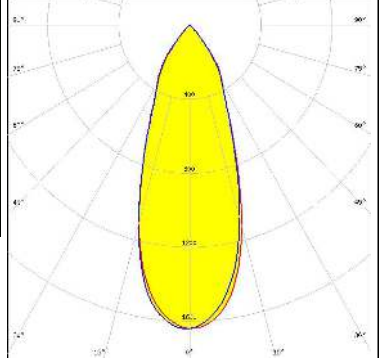
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</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>LUMINUS</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>LUMINUS</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>LUMINUS</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>		

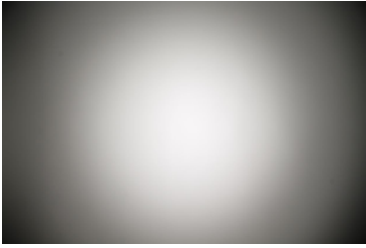
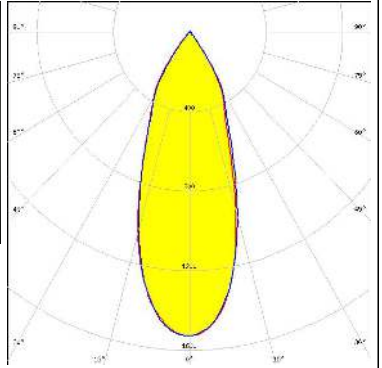
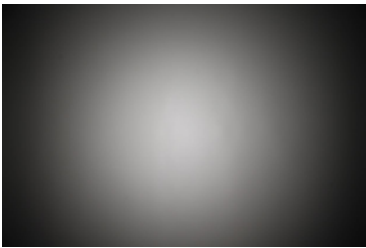
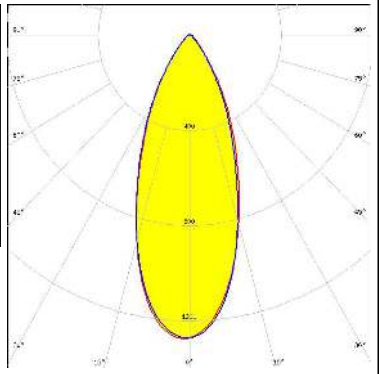
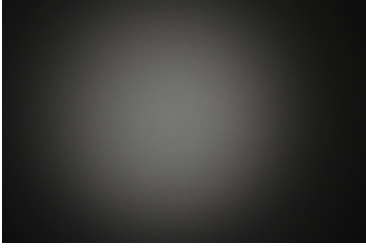
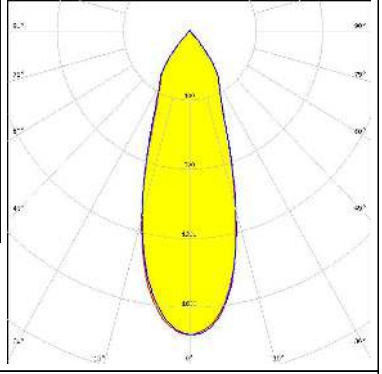
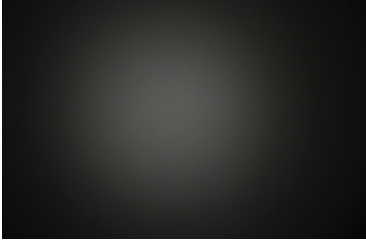
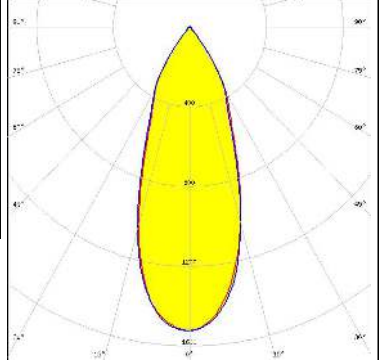
OPTICAL RESULTS (MEASURED):

<p>NICHIA</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/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>NICHIA</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/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>NICHIA</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/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>		
<p>NICHIA</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/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C12479_MIRELLA-DL</p> <p>IDEAL: 50-2100NC +50-2100MR</p>		

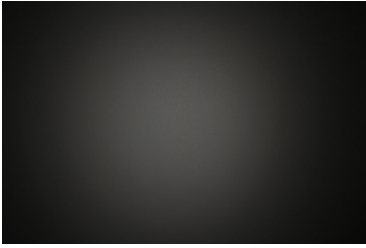
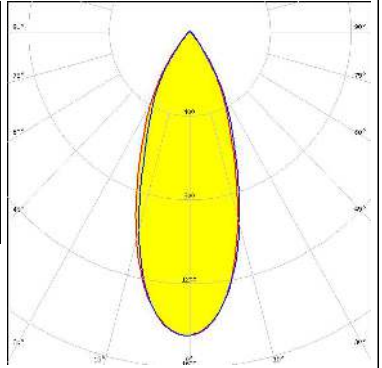
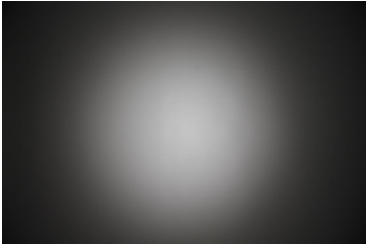
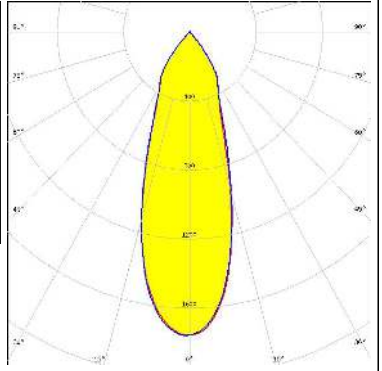
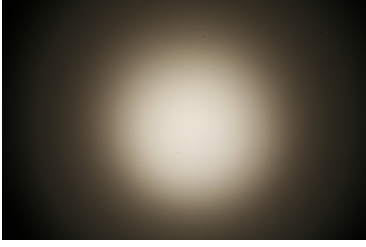
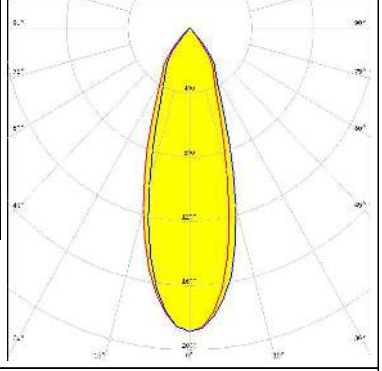
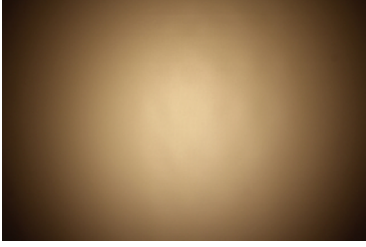

OPTICAL RESULTS (MEASURED):

<p>NICHIA</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>NICHIA</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>NICHIA</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>NICHIA</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>		

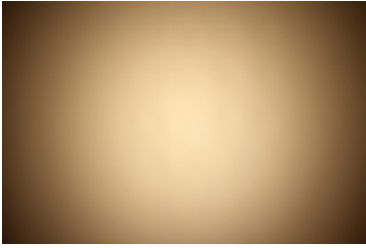



OPTICAL RESULTS (MEASURED):

<p>NICHIA</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>NICHIA</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>NICHIA</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>NICHIA</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>		

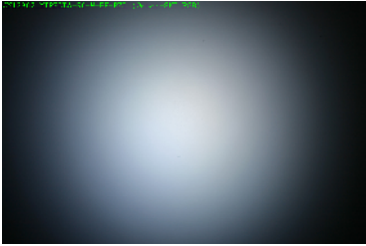
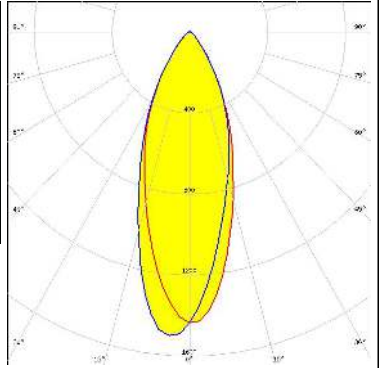
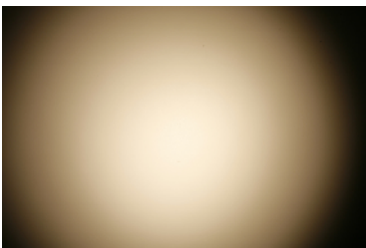
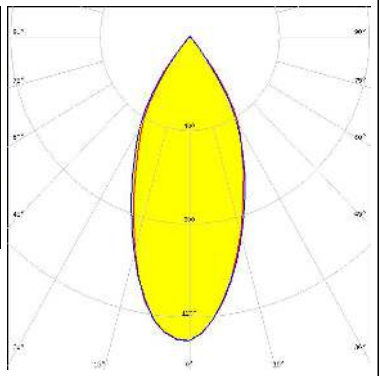

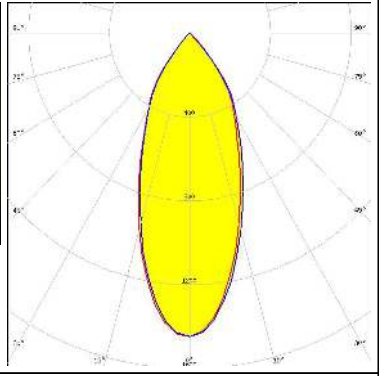
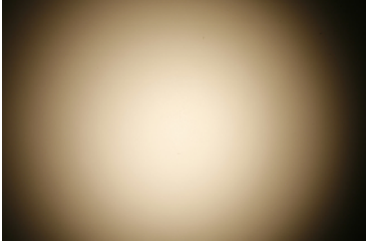
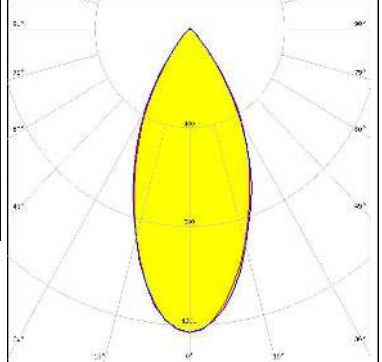
OPTICAL RESULTS (MEASURED):

<p>NICHIA</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>NICHIA</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>NICHIA</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>OSRAM 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>OSRAM 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>OSRAM 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>OSRAM 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>OSRAM 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>	

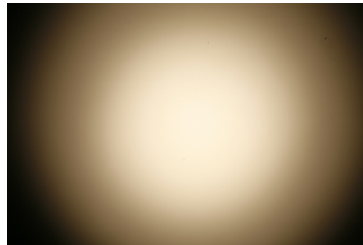
OPTICAL RESULTS (MEASURED):

<p>OSRAM 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/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL</p>		
<p>SEOUL SEMICONDUCTOR</p> <p>LED ZC4/6</p> <p>FWHM / FWTM 46.0° / 78.0°</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 C13333_MIRELLA-CL</p>		
<p>SEOUL SEMICONDUCTOR</p> <p>LED ZC4/6</p> <p>FWHM / FWTM 42.0° / 82.0°</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: C13083_PF-SOCKET</p>		
<p>SEOUL SEMICONDUCTOR</p> <p>LED ZC4/6</p> <p>FWHM / FWTM 48.0° / 80.0°</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: C13083_PF-SOCKET C12479_MIRELLA-DL</p>		

OPTICAL RESULTS (MEASURED):

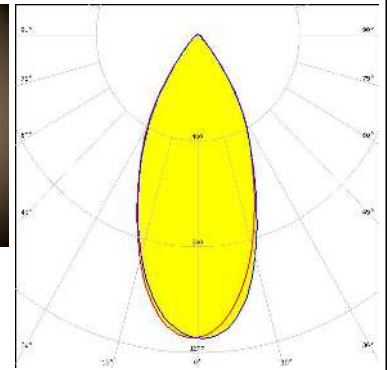
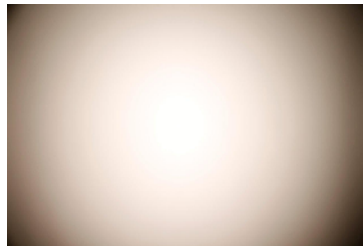
SHARP

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



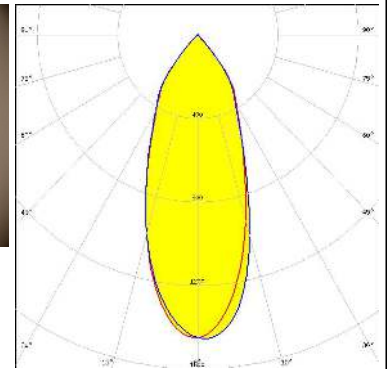
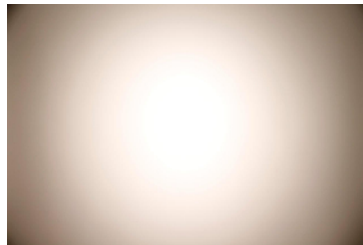
SHARP

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



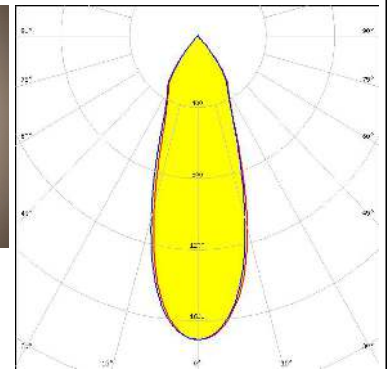
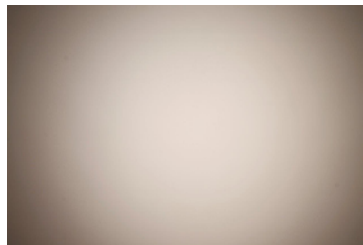
SHARP

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

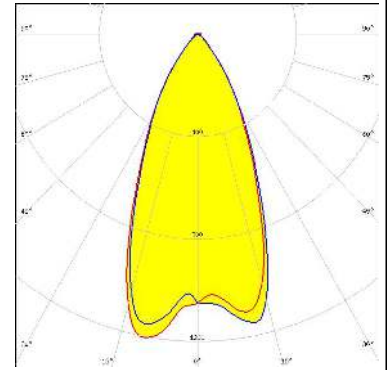


OPTICAL RESULTS (SIMULATED):



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

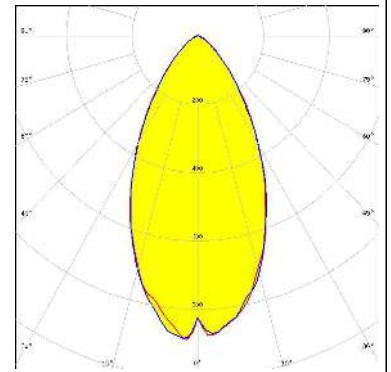
LED LUXEON CoB Compact
FWHM / FWTM 41.0° / 78.0°
Efficiency 82 %
Peak intensity 1.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13761_PF-SOCKET-CXA15
C13333_MIRELLA-CL

LUMILEDS

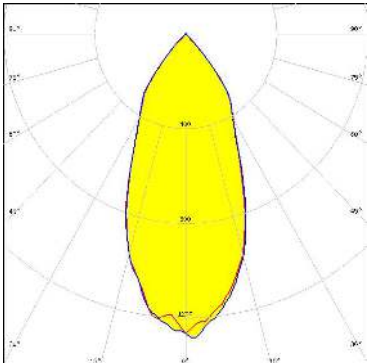
LED LUXEON CoB Compact
FWHM / FWTM 35.0° / 82.0°
Efficiency 88 %
Peak intensity 1.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13761_PF-SOCKET-CXA15

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>LUMILEDS</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>LUMINUS</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>LUMINUS</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>LUMINUS</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):



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



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

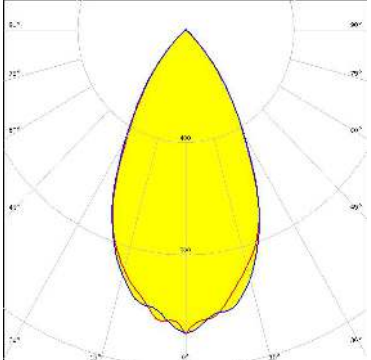
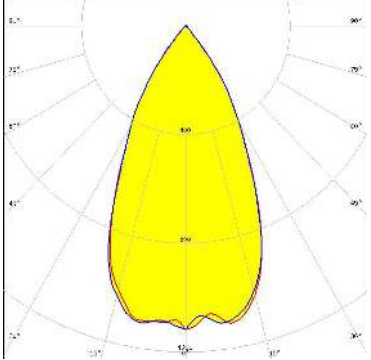
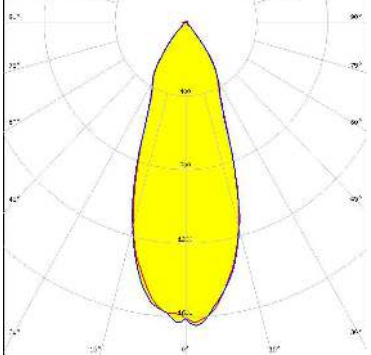


LED COB S-Type (LES 7)
FWHM / FWTM 28.0° / 69.0°
Efficiency 81 %
Peak intensity 2.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13709_PF-SOCKET-VERO13-18
C13333_MIRELLA-CL
Bender Wirth: 452 Typ L1



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>NICHIA</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:</p> <p>C13709_PF-SOCKET-VERO13-18</p> <p>C12479_MIRELLA-DL</p> <p>Bender Wirth: 452 Typ L1</p>	
<p>OSRAM 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:</p> <p>C13709_PF-SOCKET-VERO13-18</p> <p>Bender Wirth: 433 Typ L1</p>	
<p>OSRAM 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:</p> <p>C13083_PF-SOCKET</p> <p>C13333_MIRELLA-CL</p>	
<p>OSRAM 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:</p> <p>C13709_PF-SOCKET-VERO13-18</p>	

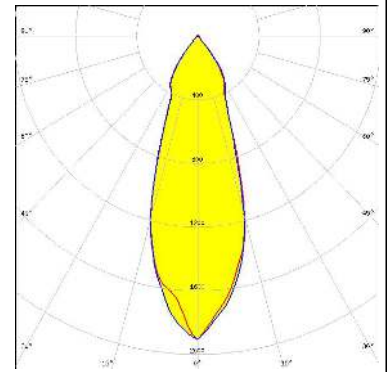
OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED: Soleriq S9</p> <p>FWHM / FWTM: 46.0° / 82.0°</p> <p>Efficiency: 91 %</p> <p>Peak intensity: 1.4 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components: C13083_PF-SOCKET</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED: Soleriq S9</p> <p>FWHM / FWTM: 50.0° / 80.0°</p> <p>Efficiency: 85 %</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 C13723_MIRELLA-RZL</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED: Soleriq S9</p> <p>FWHM / FWTM: 51.0° / 80.0°</p> <p>Efficiency: 85 %</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 C12479_MIRELLA-DL</p>	
<p>SAMSUNG</p> <p>LED: LC010C</p> <p>FWHM / FWTM: 32.0° / 74.0°</p> <p>Efficiency: 87 %</p> <p>Peak intensity: 2.2 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 479 Typ L1</p>	

OPTICAL RESULTS (SIMULATED):

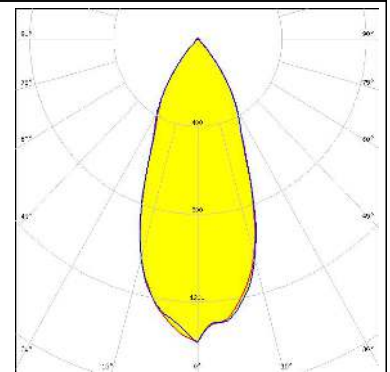
SAMSUNG

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):

 SEOUL 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.

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