

ANGELETTE-WAS

Asymmetric wall-washer beam

SPECIFICATION:

Dimensions	Ø 97.2 mm
Height	84.1 mm
Fastening	socket
ROHS compliant	yes ⓘ

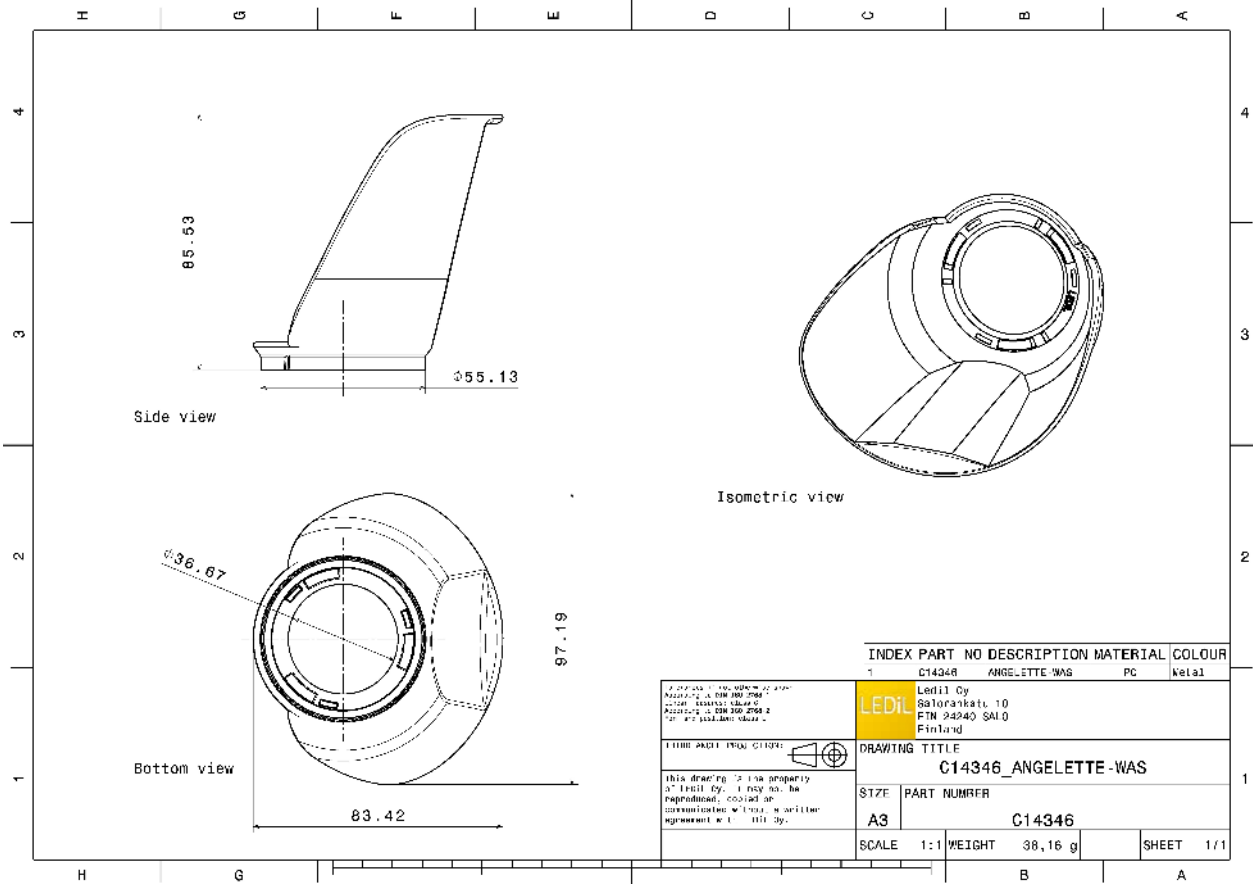
MATERIALS:

Component	Type	Material	Colour	Finish	Coating
ANGELETTE-WAS	Reflector	PC	metal		lacquer

ORDERING INFORMATION:


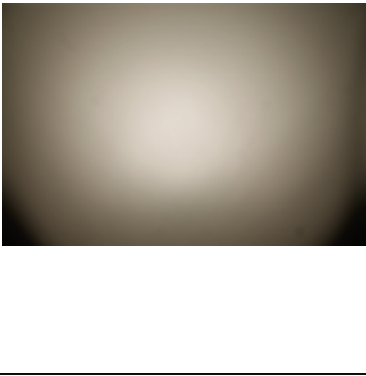
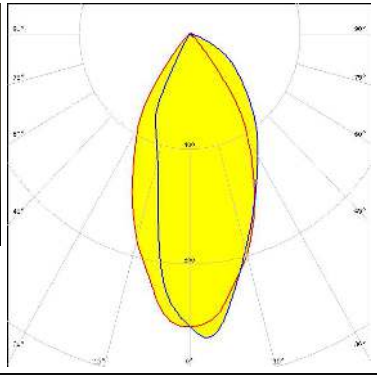

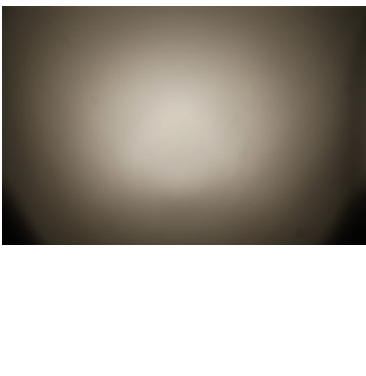
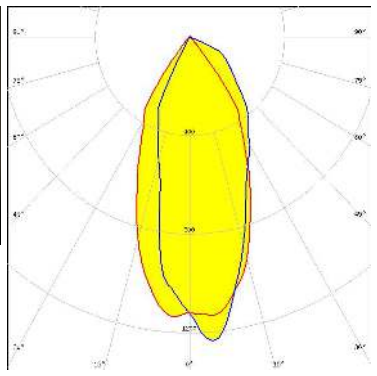


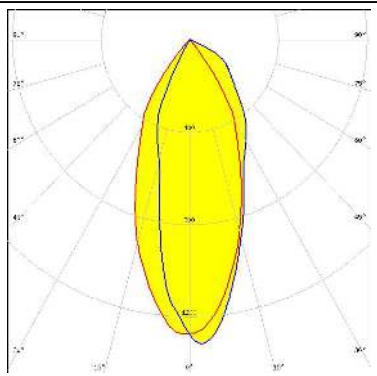

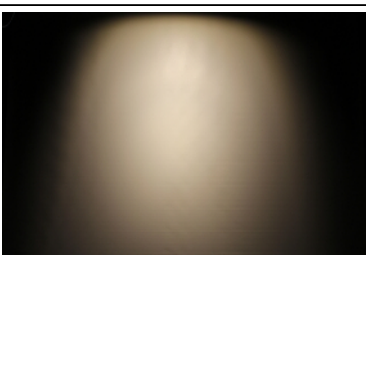
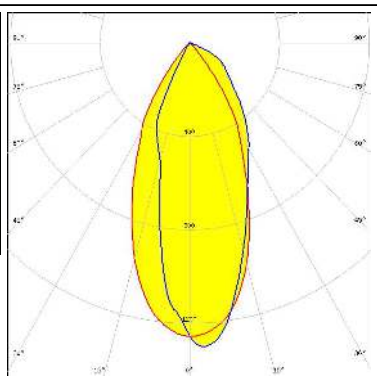
Component	Qty in box	MOQ	MPQ	Box weight (kg)
C14346_ANGELETTE-WAS » Box size: 480 x 280 x 300 mm	90			5.4




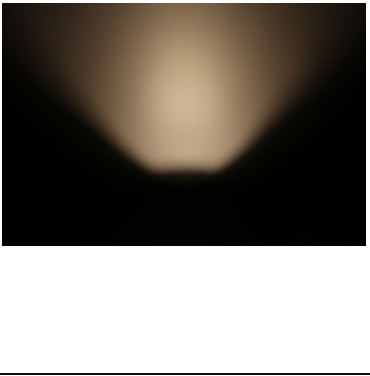
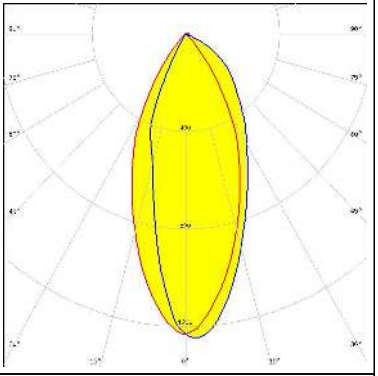

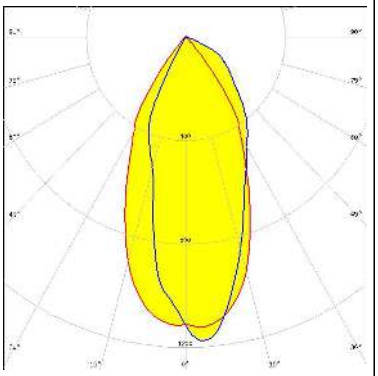

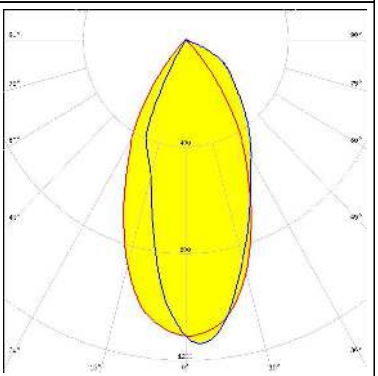

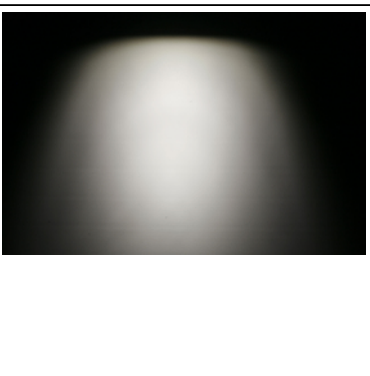
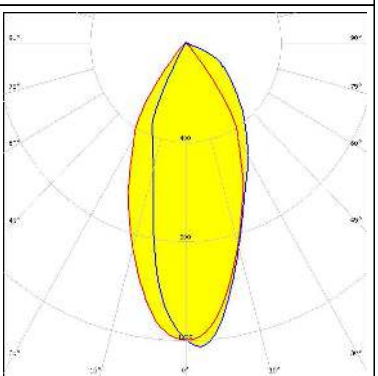


See also our general installation guide: www.ledil.com/installation_guide



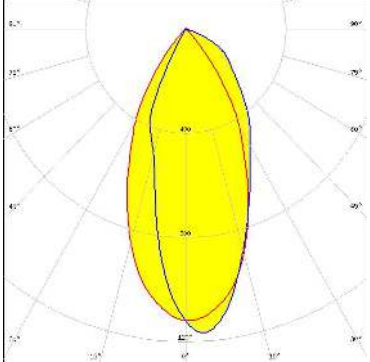


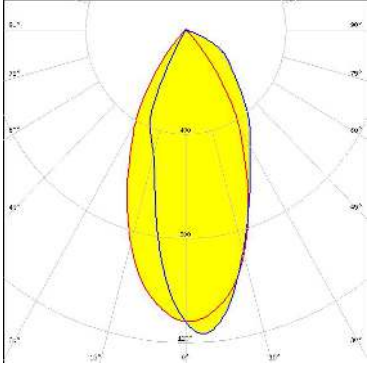


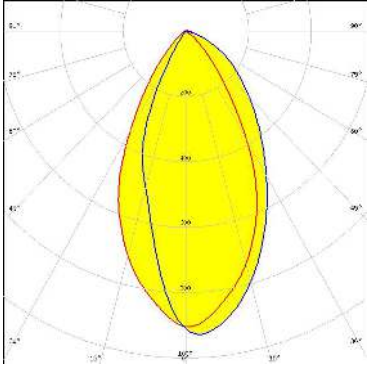


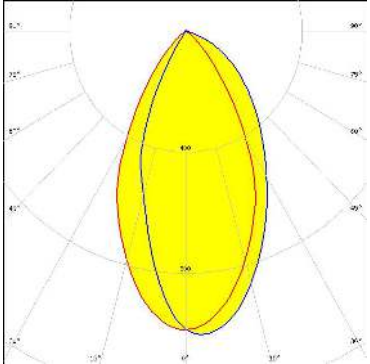
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED V10 Gen7 FWHM / FWTM Asymmetric Efficiency 86 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 434 Typ L1</p>		
<p></p> <p>LED V10 Gen7 FWHM / FWTM Asymmetric Efficiency 90 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>		
<p></p> <p>LED V13 Gen7 FWHM / FWTM Asymmetric Efficiency 91 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p></p> <p>LED V15 Gen6 FWHM / FWTM Asymmetric Efficiency 93 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 456 Typ L2</p>		


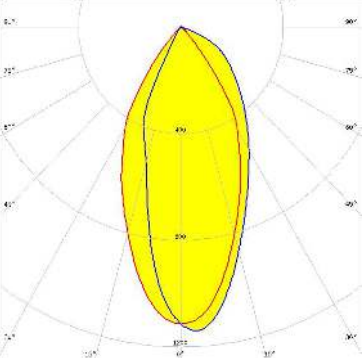

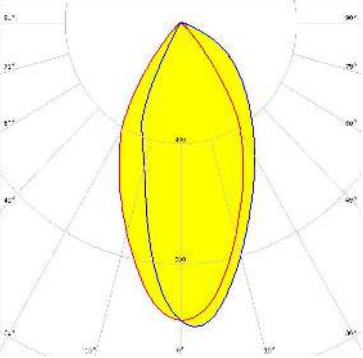

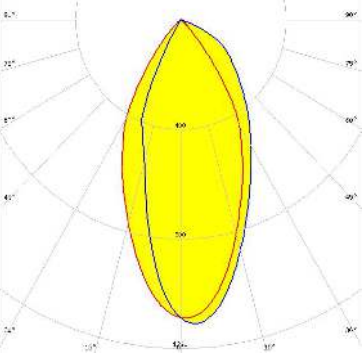

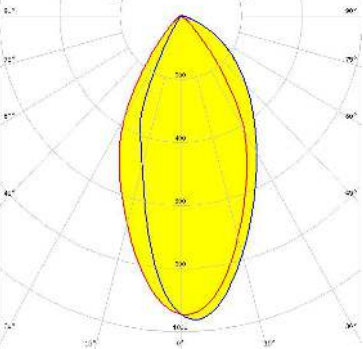
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED V22 Gen6 FWHM / FWTM Asymmetric Efficiency 88 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2204-CT + 50-2100AN</p>		
<p></p> <p>LED Vero SE 13 FWHM / FWTM Asymmetric Efficiency 91 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components: C16402_CLAMP-VEROSE-13-18</p>		
<p></p> <p>LED Vero SE 18 FWHM / FWTM Asymmetric Efficiency 91 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components: C16402_CLAMP-VEROSE-13-18</p>		
<p></p> <p>LED VERO13 FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18</p>		


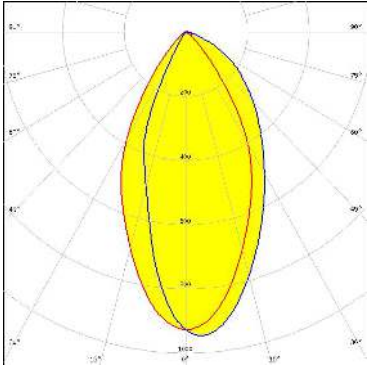

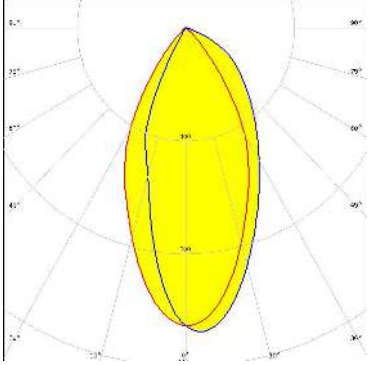
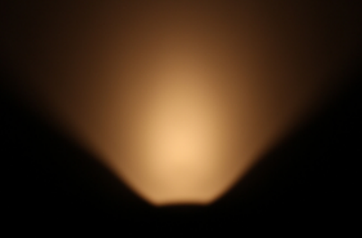
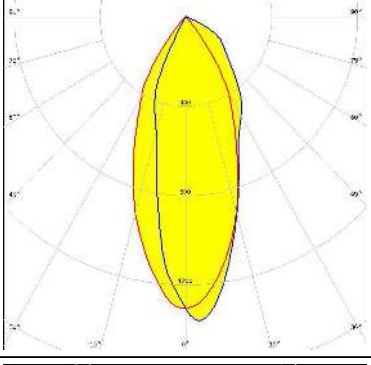
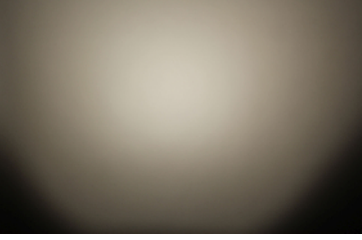
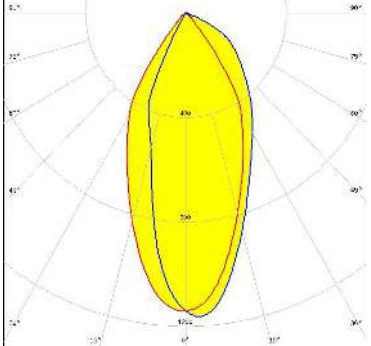
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED VERO18 FWHM / FWTM Asymmetric Efficiency 90 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18</p>		
<p></p> <p>LED VERO18 FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18</p>		
<p></p> <p>LED VERO29 FWHM / FWTM Asymmetric Efficiency 85 % Peak intensity 0.9 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS</p>		
<p></p> <p>LED VERO29 FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29</p>		

OPTICAL RESULTS (MEASURED):

<p></p> <p>LED Vesta TW 15mm DP FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 482 Typ L2</p>	
<p></p> <p>LED Vesta TW 15mm DP FWHM / FWTM Asymmetric Efficiency 88 % Peak intensity 1 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 482 Typ L2</p>	
<p></p> <p>LED Vesta TW 18mm (31W) DP FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C13584_CLAMP-VERO29 Bender Wirth: 483 Typ L3</p>	
<p></p> <p>LED Vesta TW 18mm (31W) DP FWHM / FWTM Asymmetric Efficiency 86 % Peak intensity 1 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 483 Typ L3</p>	

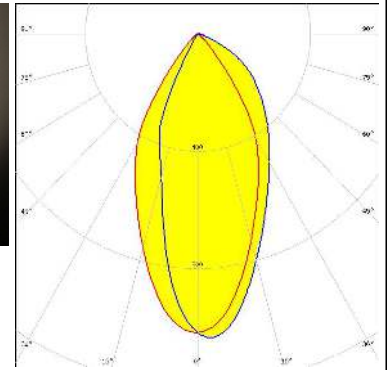
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED Vesta TW 22mm DP FWHM / FWTM Asymmetric Efficiency 87 % Peak intensity 0.9 cd/lm LEDs/each optic 1 Light colour Tunable White</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 494 Typ L3</p>	
<p></p> <p>LED Vesta TW 22mm DP FWHM / FWTM Asymmetric Efficiency 91 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour Tunable White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 494 Typ L3</p>	
<p>CITIZEN</p> <p>LED CLL03x/CLU03x FWHM / FWTM Asymmetric Efficiency 91 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>	 
<p>CITIZEN</p> <p>LED CLL03x/CLU03x FWHM / FWTM Asymmetric Efficiency 93 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C16791_CLAMP-Z45-A TE Connectivity: 2325807-3</p>	 

OPTICAL RESULTS (MEASURED):

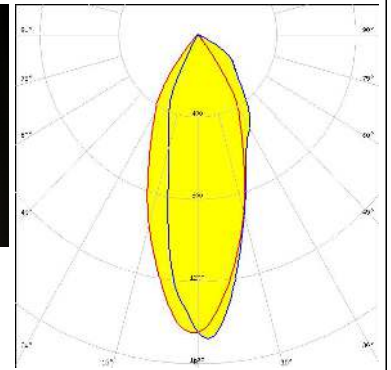
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM Asymmetric
 Efficiency 89 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16791_CLAMP-Z45-A
 F13671_ANGE-RZ-LENS
 TE Connectivity: 2325807-3



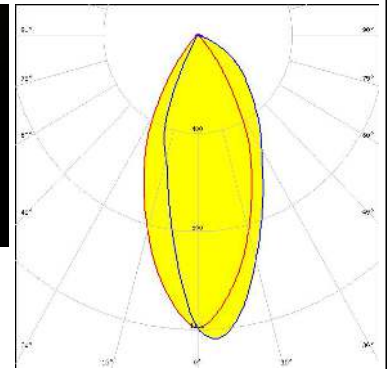
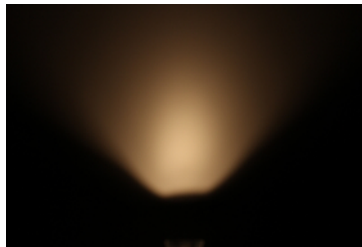
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM Asymmetric
 Efficiency 92 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



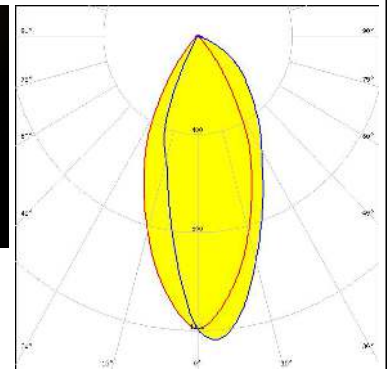
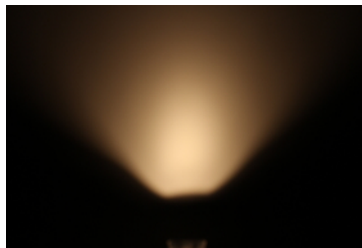
CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM Asymmetric
 Efficiency 88 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



CITIZEN

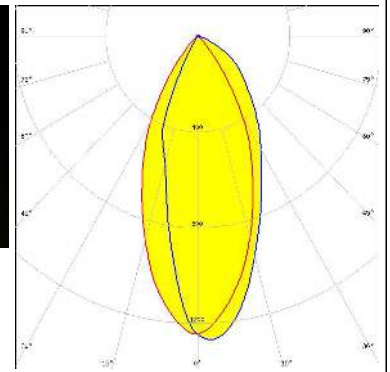
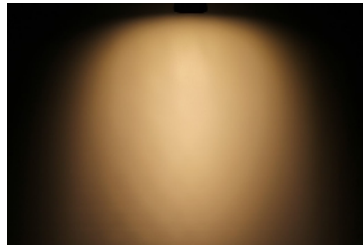
LED CLL04x/CLU04x
 FWHM / FWTM Asymmetric
 Efficiency 88 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



OPTICAL RESULTS (MEASURED):

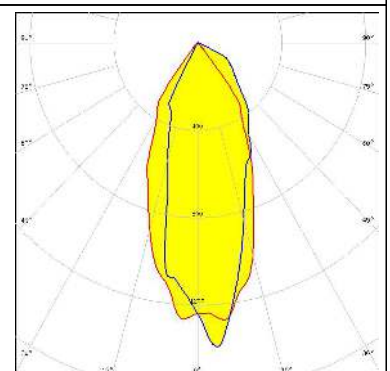
CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM Asymmetric
 Efficiency 91 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 431 Typ L3



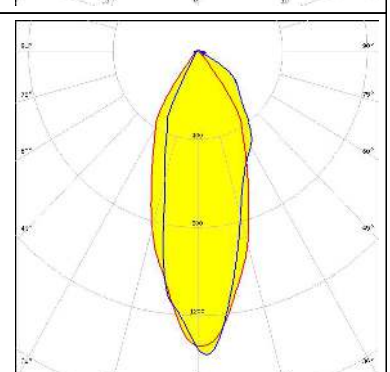
CITIZEN

LED CLU700/701/702/703
 FWHM / FWTM Asymmetric
 Efficiency 92 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



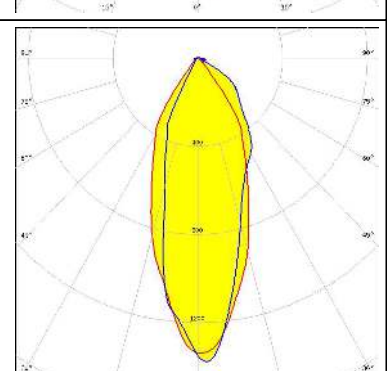
CITIZEN

LED CLU720/721/723
 FWHM / FWTM Asymmetric
 Efficiency 92 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



CITIZEN

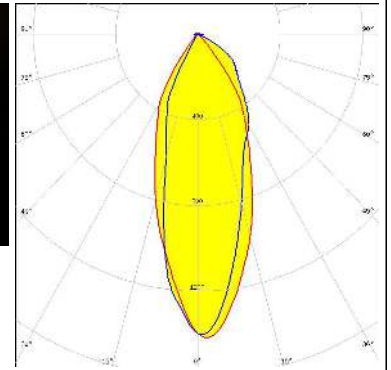
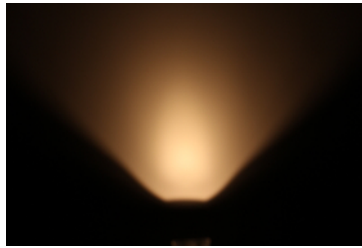
LED CLU720/721/723
 FWHM / FWTM Asymmetric
 Efficiency 93 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



OPTICAL RESULTS (MEASURED):

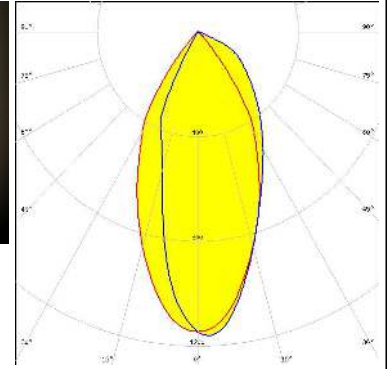
CITIZEN

LED CLU730/731/733
 FWHM / FWTM Asymmetric
 Efficiency 88 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



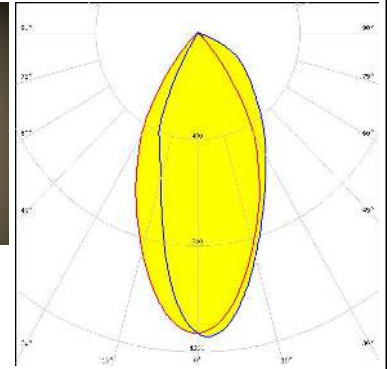
CREE LED

LED CMA1840
 FWHM / FWTM Asymmetric
 Efficiency 93 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14123_CLAMP-CXA15-18



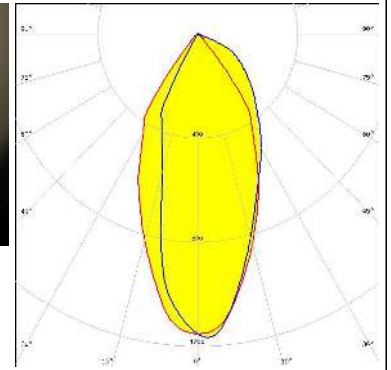
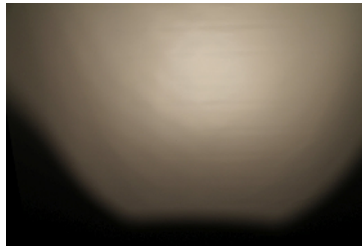
CREE LED

LED CMA2550
 FWHM / FWTM Asymmetric
 Efficiency 93 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30


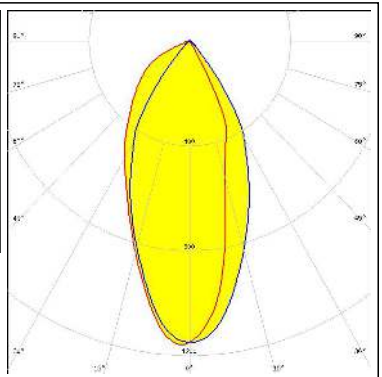

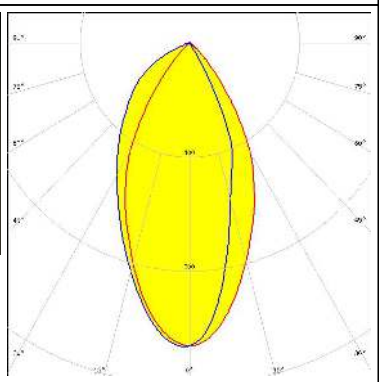
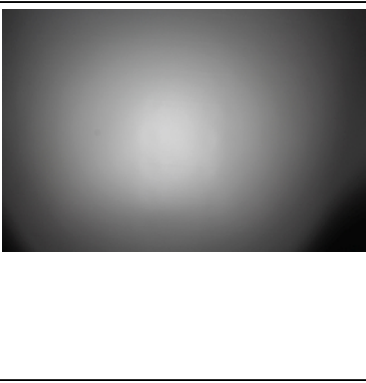
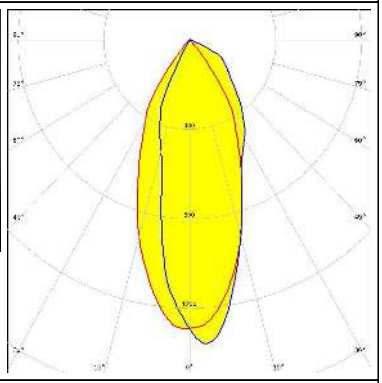
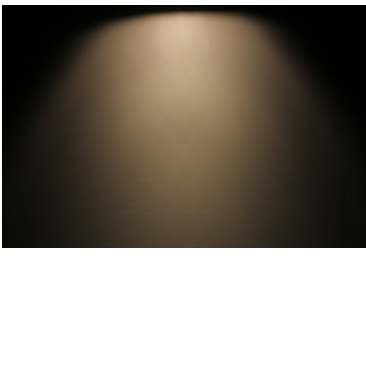
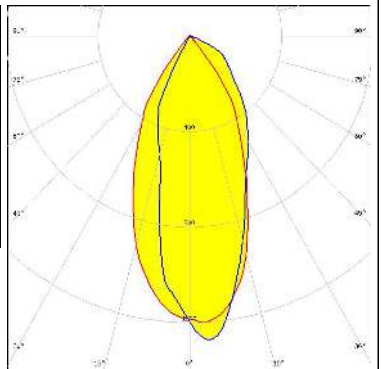


CREE LED

LED CMT14xx
 FWHM / FWTM Asymmetric
 Efficiency 93 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



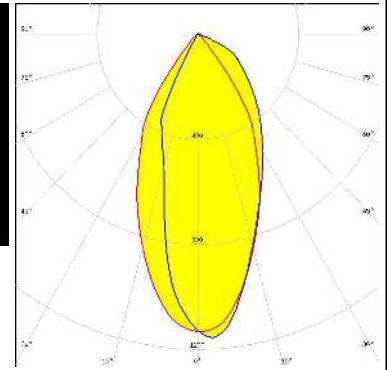
OPTICAL RESULTS (MEASURED):

<p>CREE → LED</p> <p>LED CMT19xx FWHM / FWTM Asymmetric Efficiency 93 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 477 Typ L1</p>		
<p>CREE → LED</p> <p>LED CMT28xx FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 471 Typ L3</p>		
<p>CREE → LED</p> <p>LED CXA/B 1816 & CXA/B 1820 & CXA 1850 FWHM / FWTM Asymmetric Efficiency 91 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>CREE → LED</p> <p>LED CXA/B 1816 & CXA/B 1820 & CXA 1850 FWHM / FWTM Asymmetric Efficiency 91 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 437 Typ L1</p>		

OPTICAL RESULTS (MEASURED):

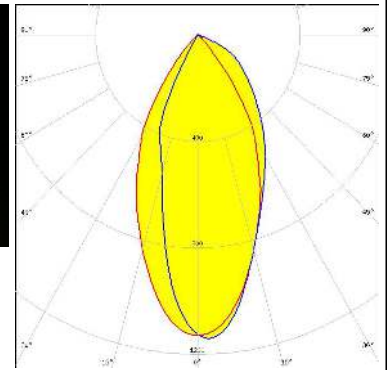
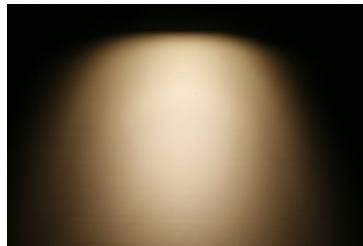
CREE LED

LED CXA/B 1830
 FWHM / FWTM Asymmetric
 Efficiency 92 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14123_CLAMP-CXA15-18



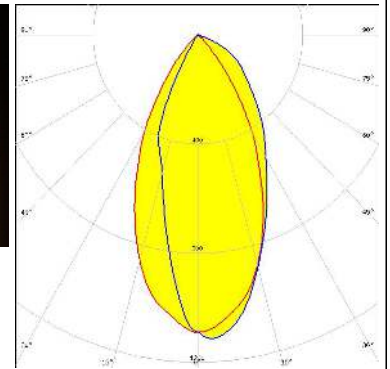
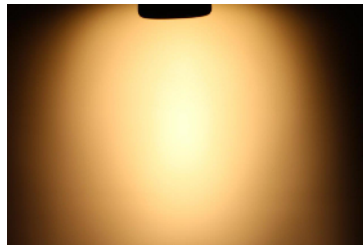
CREE LED

LED CXA/B 25xx
 FWHM / FWTM Asymmetric
 Efficiency 92 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



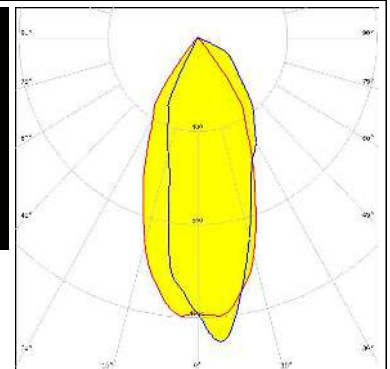
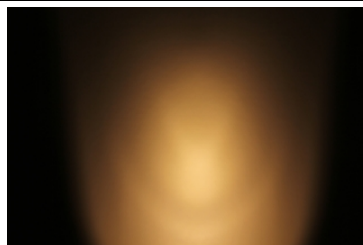
CREE LED

LED CXA/B 30xx
 FWHM / FWTM Asymmetric
 Efficiency 91 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30

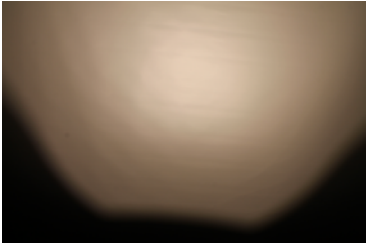
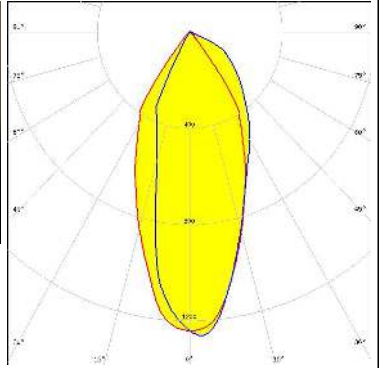
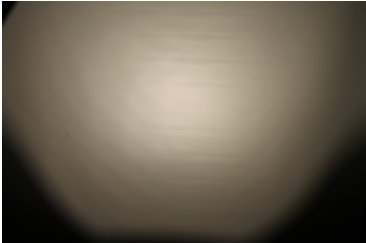
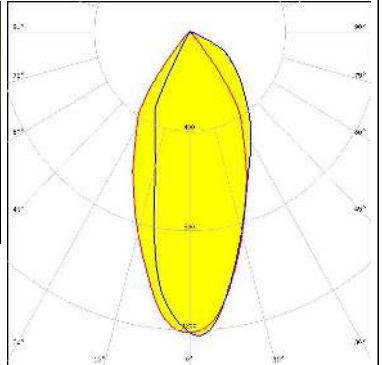
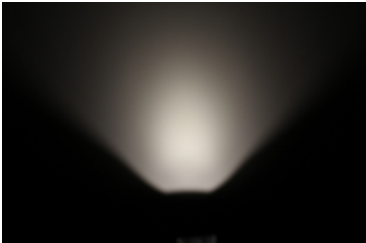
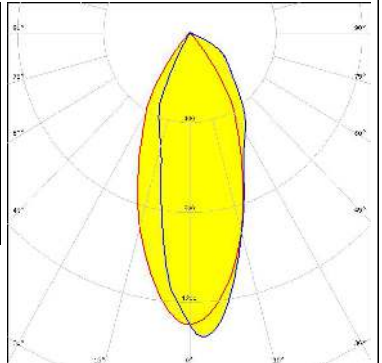
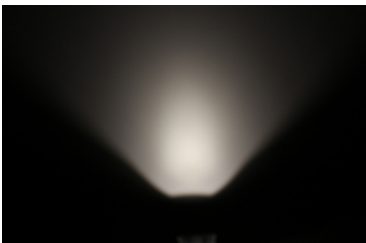
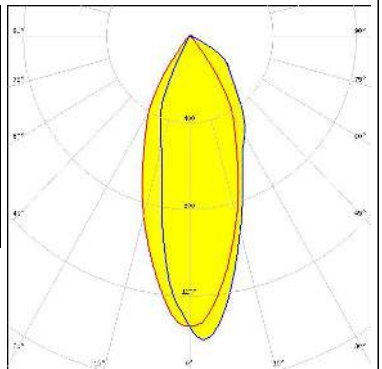


LUMILEDS


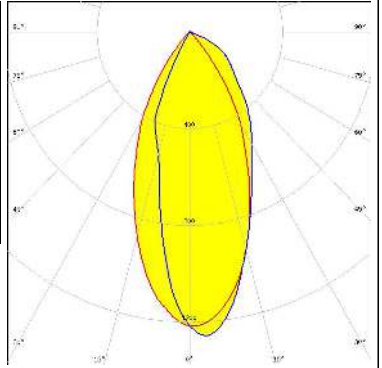
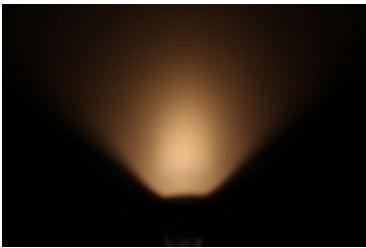
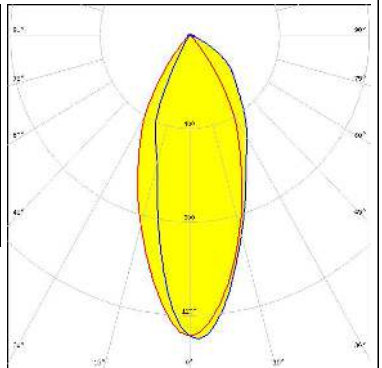
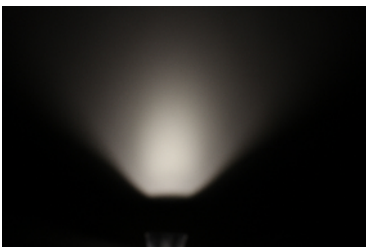
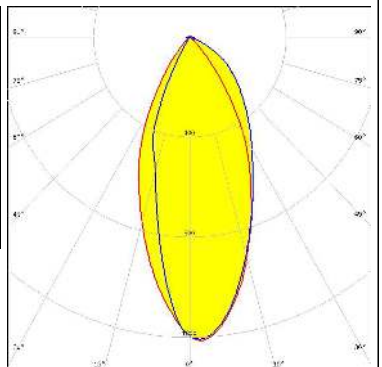
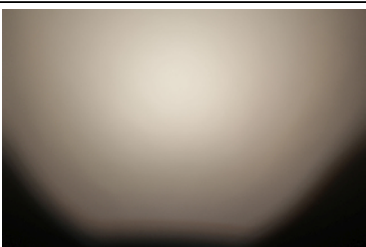
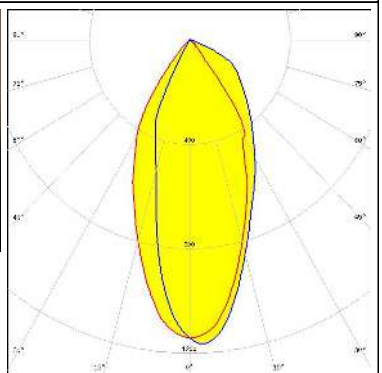
LED LUXEON CoB 1202/1203
 FWHM / FWTM Asymmetric
 Efficiency 92 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 438 Typ L1




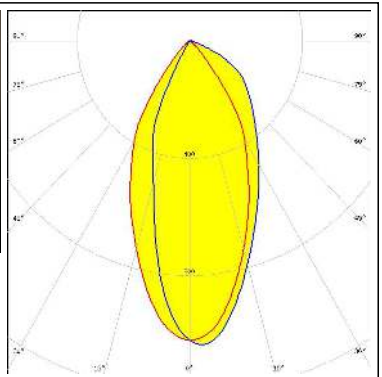

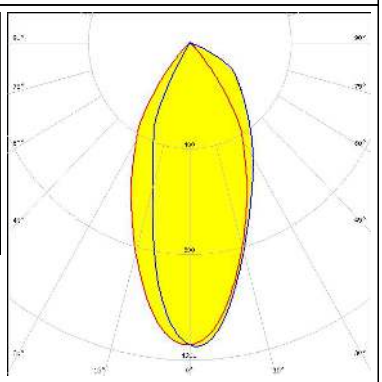
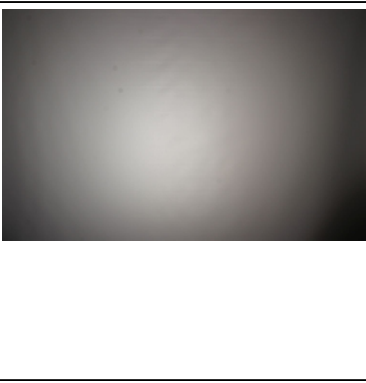
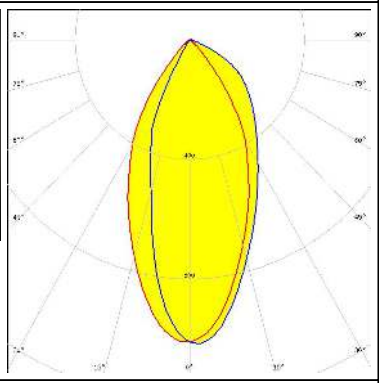

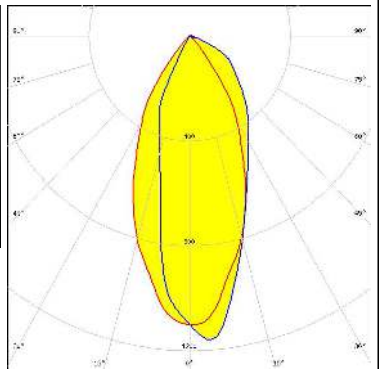
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1204HD</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1205HD</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1208</p> <p>FWHM / FWTM Asymmetric</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: TE Connectivity: 2213130-2</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1208</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2100SH + 50-2100AN</p>		


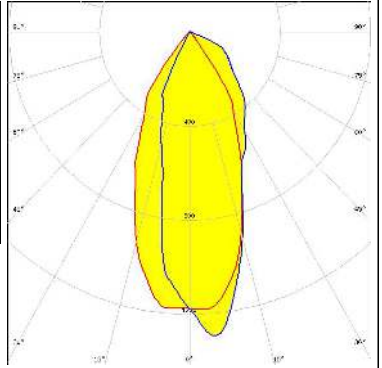
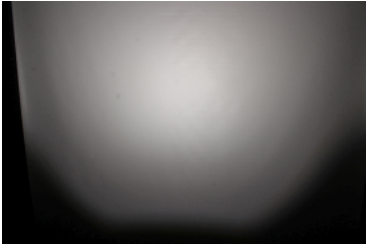
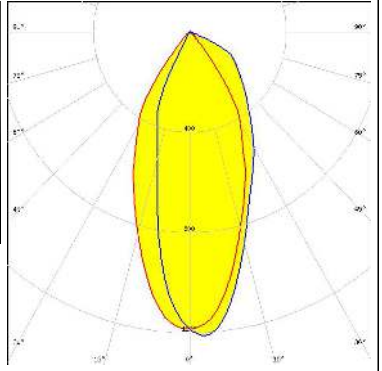

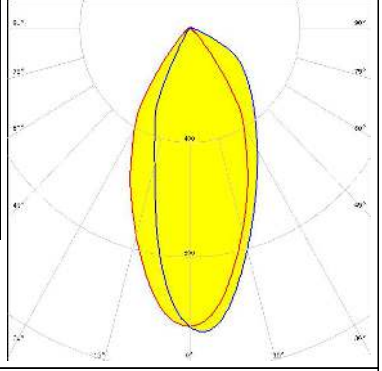

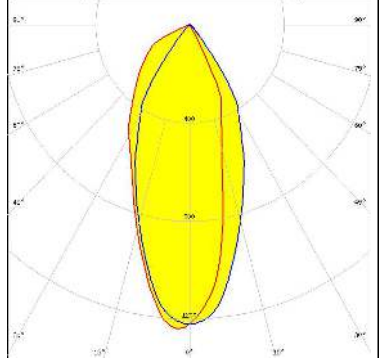
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1211</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 431 Typ L3</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1211</p> <p>FWHM / FWTM Asymmetric</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: IDEAL: 50-2204-CT + 50-2100AN</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1216/1812</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2204CT + 50-2100LN</p>		
<p>LUMINUS</p> <p>LED CDM-14 (Dim-To-Warm)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 491 Typ L2</p>		

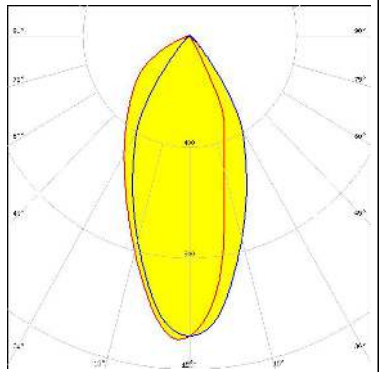

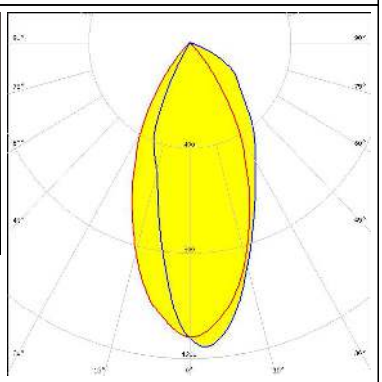
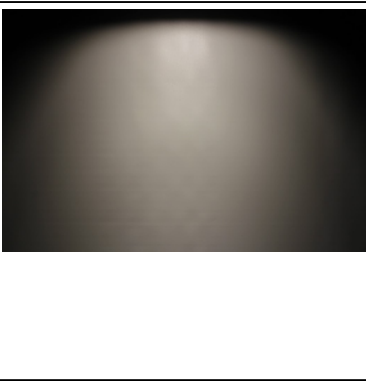
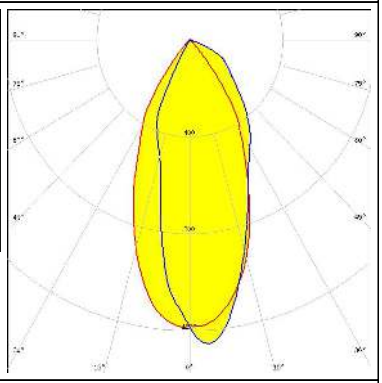
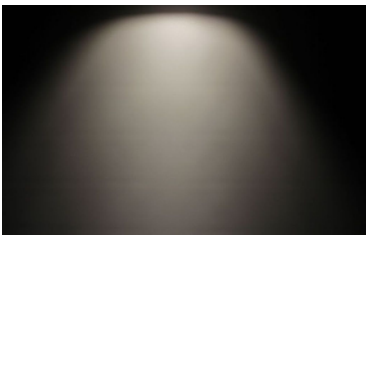
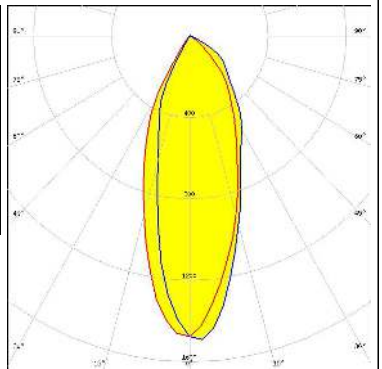
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CDM-14 (Dim-To-Warm)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 87 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13658_CLAMP-VERO13-18</p> <p>F13671_ANGE-RZ-LENS</p> <p>Bender Wirth: 491 Typ L2</p>		
<p>LUMINUS</p> <p>LED CDM-18 (Dim-To-Warm)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13658_CLAMP-VERO13-18</p> <p>Bender Wirth: 491 Typ L2</p>		
<p>LUMINUS</p> <p>LED CDM-18 (Dim-To-Warm)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 87 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13658_CLAMP-VERO13-18</p> <p>F13671_ANGE-RZ-LENS</p> <p>Bender Wirth: 491 Typ L2</p>		
<p>LUMINUS</p> <p>LED CDM-9 (Dim-To-Warm)</p> <p>FWHM / FWTM Asymmetric</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:</p> <p>C13658_CLAMP-VERO13-18</p> <p>F13671_ANGE-RZ-LENS</p> <p>Bender Wirth: 490 Typ L1</p>		

OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CDM-9 (Dim-To-Warm)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 90 %</p> <p>Peak intensity 1.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 490 Typ L1</p>		
<p>LUMINUS</p> <p>LED CTM-14 (Tunable White)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 442 Typ L3</p>		
<p>LUMINUS</p> <p>LED CTM-14 (Tunable White)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 87 %</p> <p>Peak intensity 1.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 442 Typ L3</p>		
<p>LUMINUS</p> <p>LED CTM-14 RGBW</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour RGBW</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 500 Typ L3-1</p>		

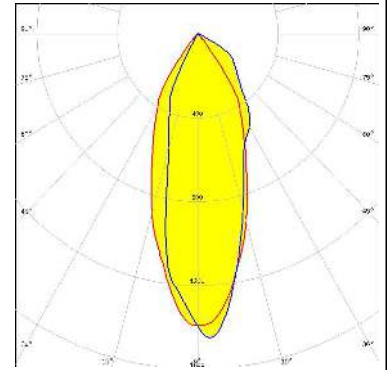
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CTM-14 RGBW</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 87 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour RGBW</p> <p>Required components:</p> <p>C13584_CLAMP-VERO29</p> <p>F13671_ANGE-RZ-LENS</p> <p>Bender Wirth: 500 Typ L3-1</p>		
<p>LUMINUS</p> <p>LED CTM-22 (Tunable White)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 90 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13584_CLAMP-VERO29</p> <p>Bender Wirth: 494 Typ L3</p>		
<p>NICHIA</p> <p>LED COB J-Type</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13658_CLAMP-VERO13-18</p> <p>Bender Wirth: 463 Typ L2</p>		
<p>NICHIA</p> <p>LED COB J-Type</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>IDEAL: 50-2103NC + 50-2100AN</p>		

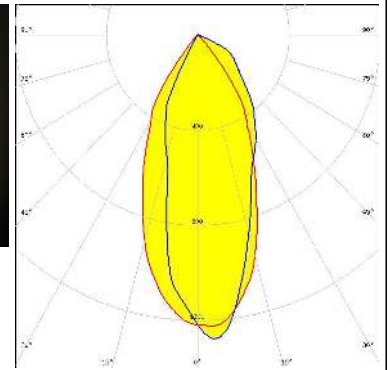
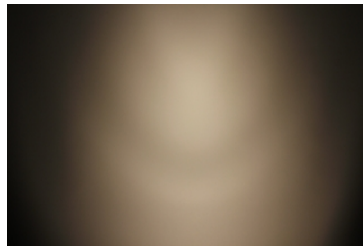
OPTICAL RESULTS (MEASURED):



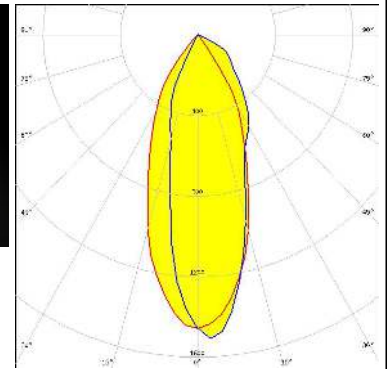
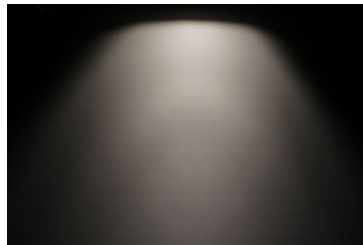
LED COB L-Type (LES 11)
 FWHM / FWTM Asymmetric
 Efficiency 90 %
 Peak intensity 1.5 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2100NC + 50-2100AN



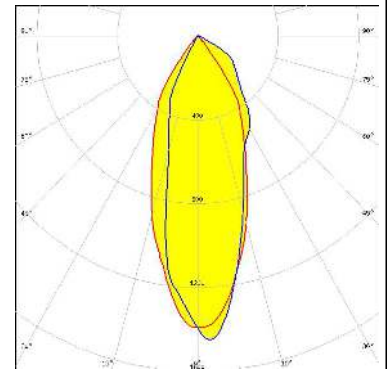
LED COB L-Type (LES 11)
 FWHM / FWTM Asymmetric
 Efficiency 91 %
 Peak intensity 1.3 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 438 Typ L1



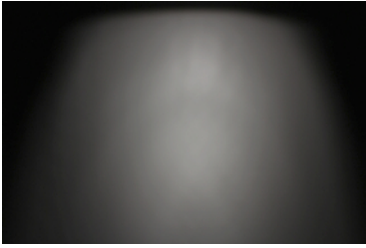
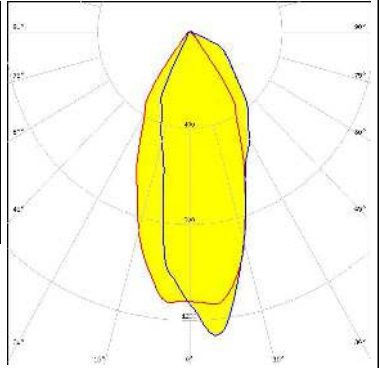

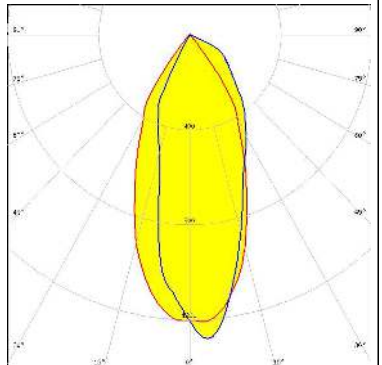

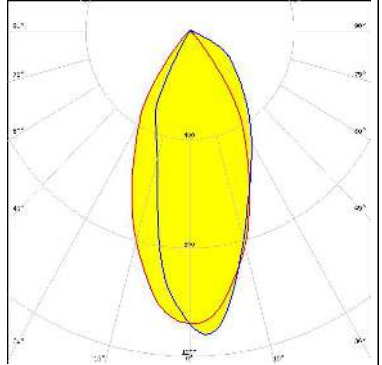

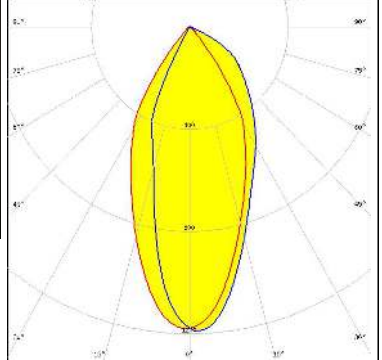
LED COB L-Type (LES 11)
 FWHM / FWTM Asymmetric
 Efficiency 93 %
 Peak intensity 1.5 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



LED COB L-Type (LES 11)
 FWHM / FWTM Asymmetric
 Efficiency 91 %
 Peak intensity 1.4 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2100NC + 50-2100AN



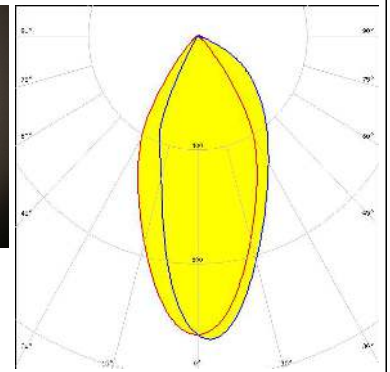
OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 438 Typ L1</p>		
<p>NICHIA</p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 498 Typ L2</p>		
<p>NICHIA</p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 498 Typ L2</p>		
<p>OSRAM</p> <p>LED PrevaLED Core G7 L15 H1</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16685_CLAMP-PRV-A</p>		

OPTICAL RESULTS (MEASURED):

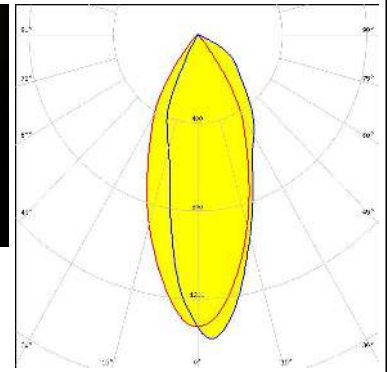
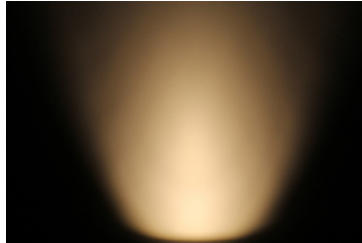
OSRAM

LED PrevaLED Core G7 L15 H1
 FWHM / FWTM Asymmetric
 Efficiency 89 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16685_CLAMP-PRV-A
 F13671_ANGE-RZ-LENS



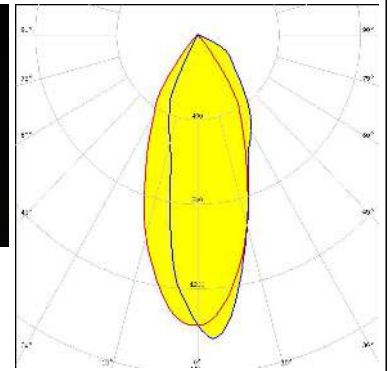
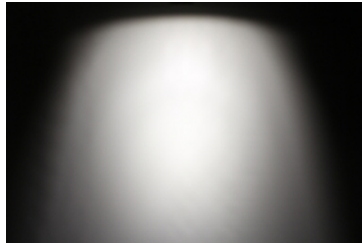
OSRAM

LED PrevaLED Core Z4 LES19
 FWHM / FWTM Asymmetric
 Efficiency 91 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



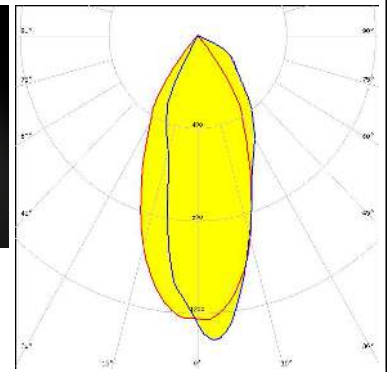
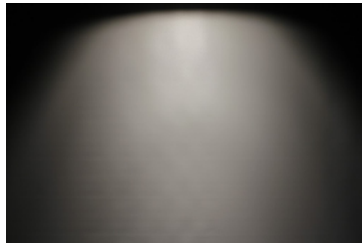
OSRAM

Opto Semiconductors
 LED Soleriq S13
 FWHM / FWTM Asymmetric
 Efficiency 93 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1

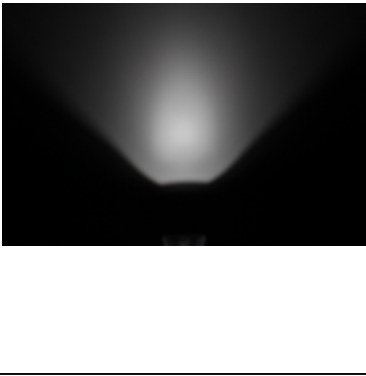
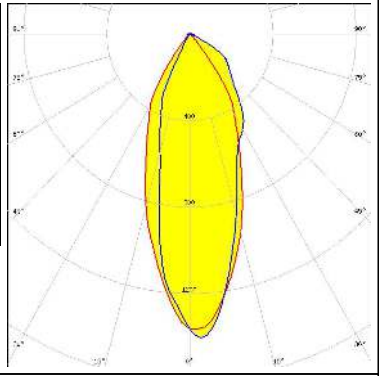
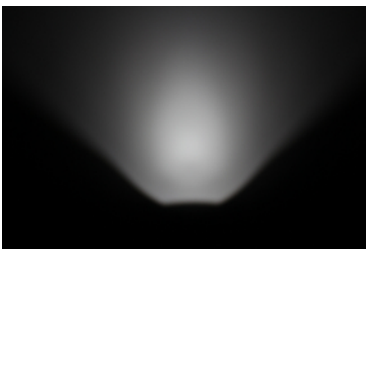
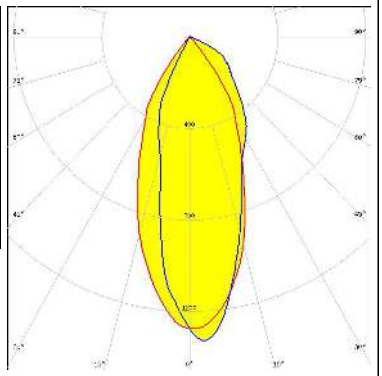

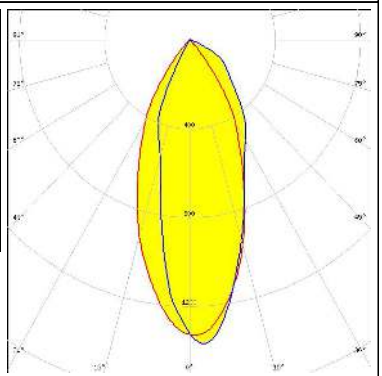
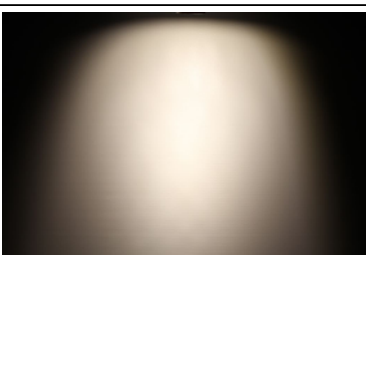
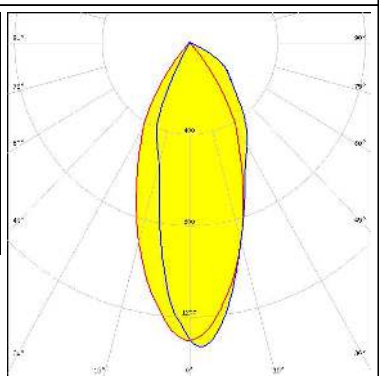


OSRAM

Opto Semiconductors
 LED Soleriq S13
 FWHM / FWTM Asymmetric
 Efficiency 91 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 437 Typ L1



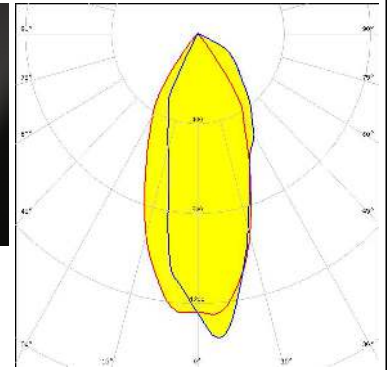
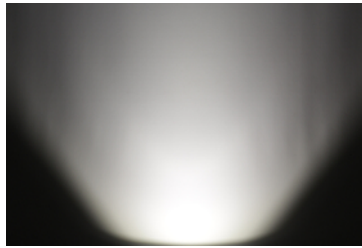
OPTICAL RESULTS (MEASURED):

<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13 19x19</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2103CT + 50-2100AN</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13 19x19</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S19</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE Connectivity: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S19</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 462 Typ L3</p>		

OPTICAL RESULTS (MEASURED):

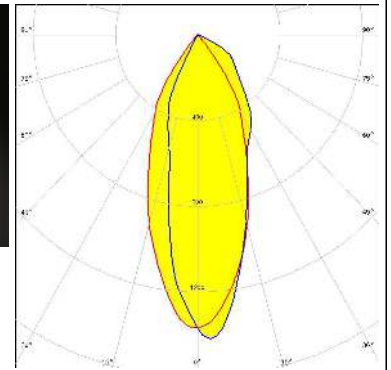
PHILIPS

LED Fortimo SLM L09 + SLM holder
 FWHM / FWTM Asymmetric
 Efficiency 91 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



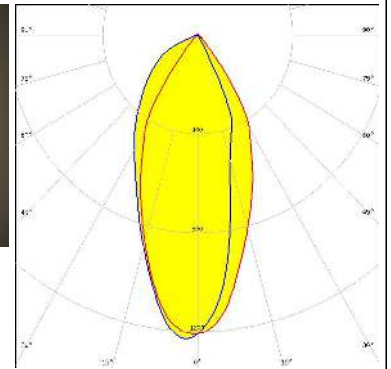
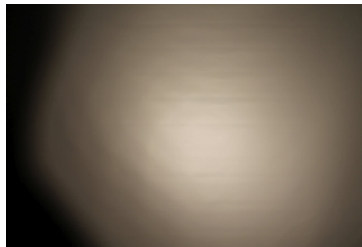
PHILIPS

LED Fortimo SLM L13 + SLM holder
 FWHM / FWTM Asymmetric
 Efficiency 91 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



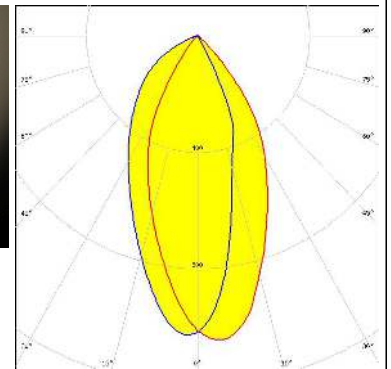
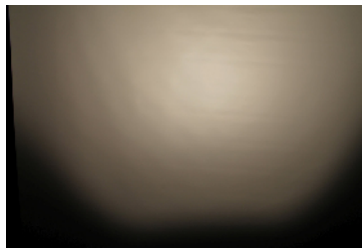
PHILIPS

LED Fortimo SLM L13 CoB
 FWHM / FWTM Asymmetric
 Efficiency 92 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



PHILIPS

LED Fortimo SLM L13 CoB
 FWHM / FWTM Asymmetric
 Efficiency 85 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



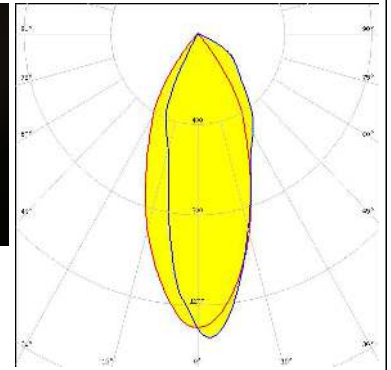
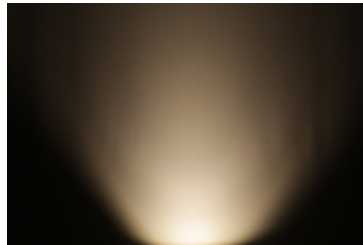
OPTICAL RESULTS (MEASURED):

PHILIPS

LED Fortimo SLM L15 + SLM holder
 FWHM / FWTM Asymmetric
 Efficiency 90 %
 Peak intensity 1.4 cd/m
 LEDs/each optic 1
 Light colour White

Required components:

TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

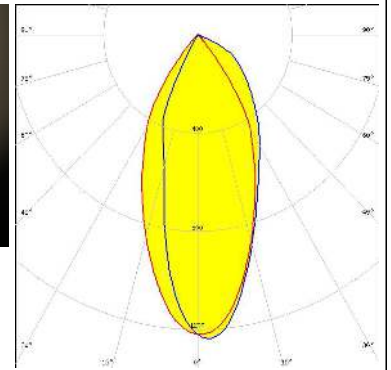
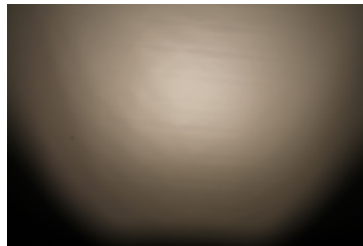


PHILIPS

LED Fortimo SLM L15 CoB
 FWHM / FWTM Asymmetric
 Efficiency 92 %
 Peak intensity 1.3 cd/m
 LEDs/each optic 1
 Light colour White

Required components:

TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



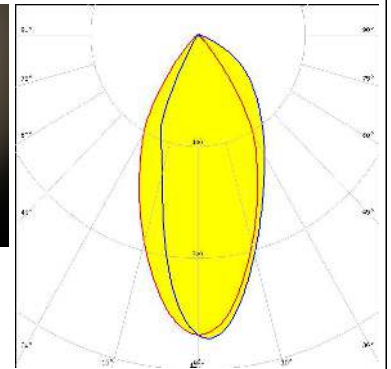
PHILIPS

LED Fortimo SLM L15 CoB
 FWHM / FWTM Asymmetric
 Efficiency 87 %
 Peak intensity 1.1 cd/m
 LEDs/each optic 1
 Light colour White

Required components:

F13671_ANGE-RZ-LENS

TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1

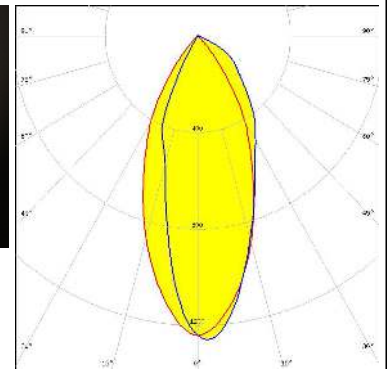
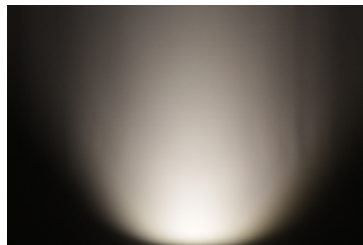


PHILIPS

LED Fortimo SLM L19 + SLM holder
 FWHM / FWTM Asymmetric
 Efficiency 88 %
 Peak intensity 1.3 cd/m
 LEDs/each optic 1
 Light colour White

Required components:

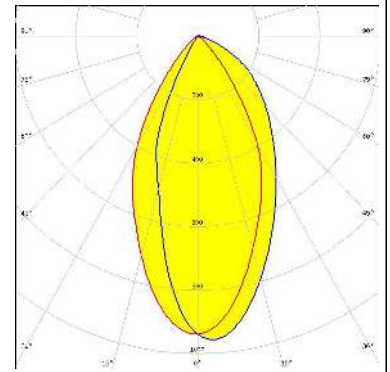
TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



OPTICAL RESULTS (MEASURED):

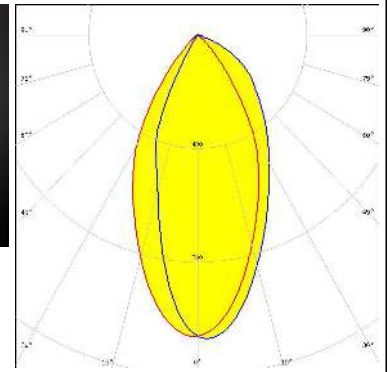
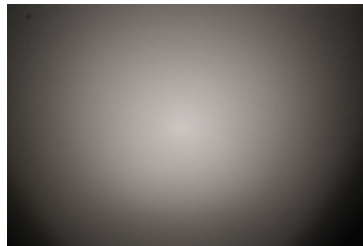
SAMSUNG

LED LC035T (Tunable white)
 FWHM / FWTM Asymmetric
 Efficiency 87 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour Tunable White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 502 Typ L3



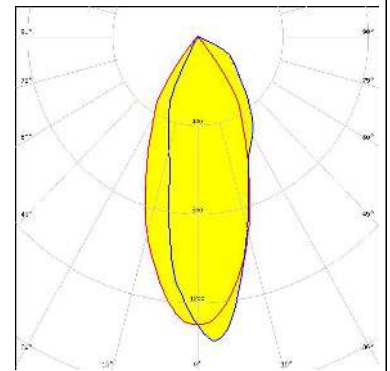
SAMSUNG

LED LC035T (Tunable white)
 FWHM / FWTM Asymmetric
 Efficiency 92 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour Tunable White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 502 Typ L3

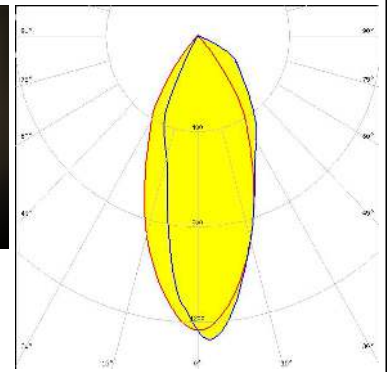


SAMSUNG

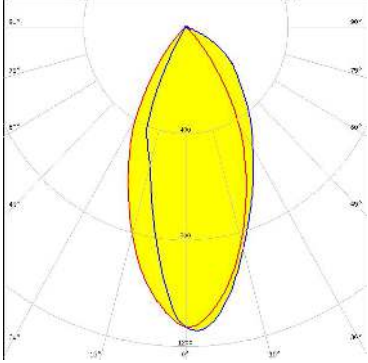
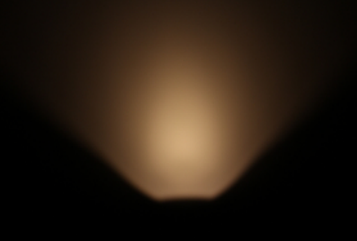
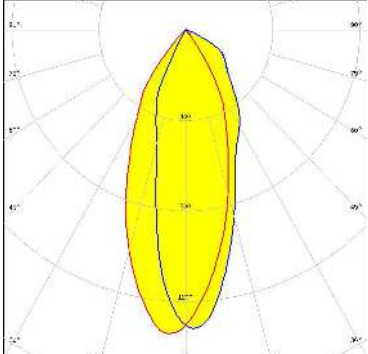
LED LC040C
 FWHM / FWTM Asymmetric
 Efficiency 91 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1




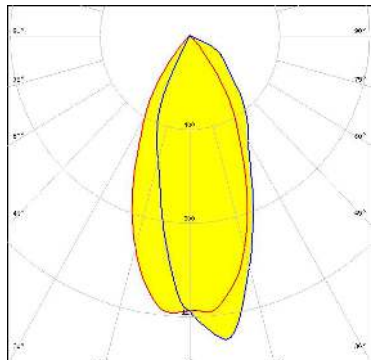

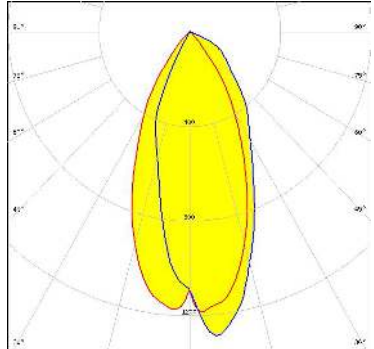

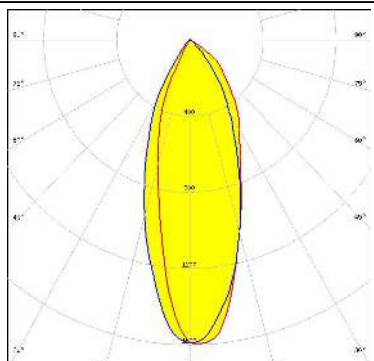

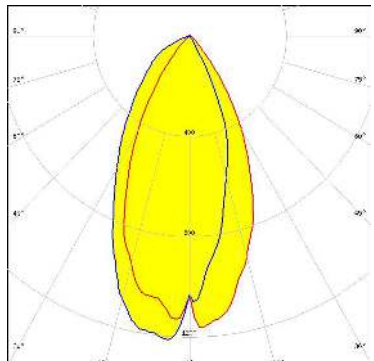
LED MJT COB LES 14.5
 FWHM / FWTM Asymmetric
 Efficiency 91 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1





OPTICAL RESULTS (MEASURED):

<p>SEOL SEMICONDUCTOR</p> <p>LED MJT COB LES 22</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 431 Typ L3</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-484</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

OPTICAL RESULTS (SIMULATED):

<p></p> <p>LED V10 Gen7 FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 486 Typ L1</p>	
<p></p> <p>LED V13 Gen7 FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 477 Typ L1</p>	
<p></p> <p>LED V13 Gen7 FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2103CT + 50-2100AN</p>	
<p></p> <p>LED V22 Gen7 FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 Bender Wirth: 431 Typ L3</p>	

OPTICAL RESULTS (SIMULATED):

<p></p> <p>LED COB D-Type FWHM / FWTM Asymmetric Efficiency 84 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: 2213580-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>	
<p></p> <p>LED COB D-Type FWHM / FWTM Asymmetric Efficiency 90 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: 2213580-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>	

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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