

ANGELA-XW

White version with ~70° wide beam

SPECIFICATION:

Dimensions	Ø 119.5 mm
Height	74.3 mm
Fastening	socket
ROHS compliant	yes ⓘ

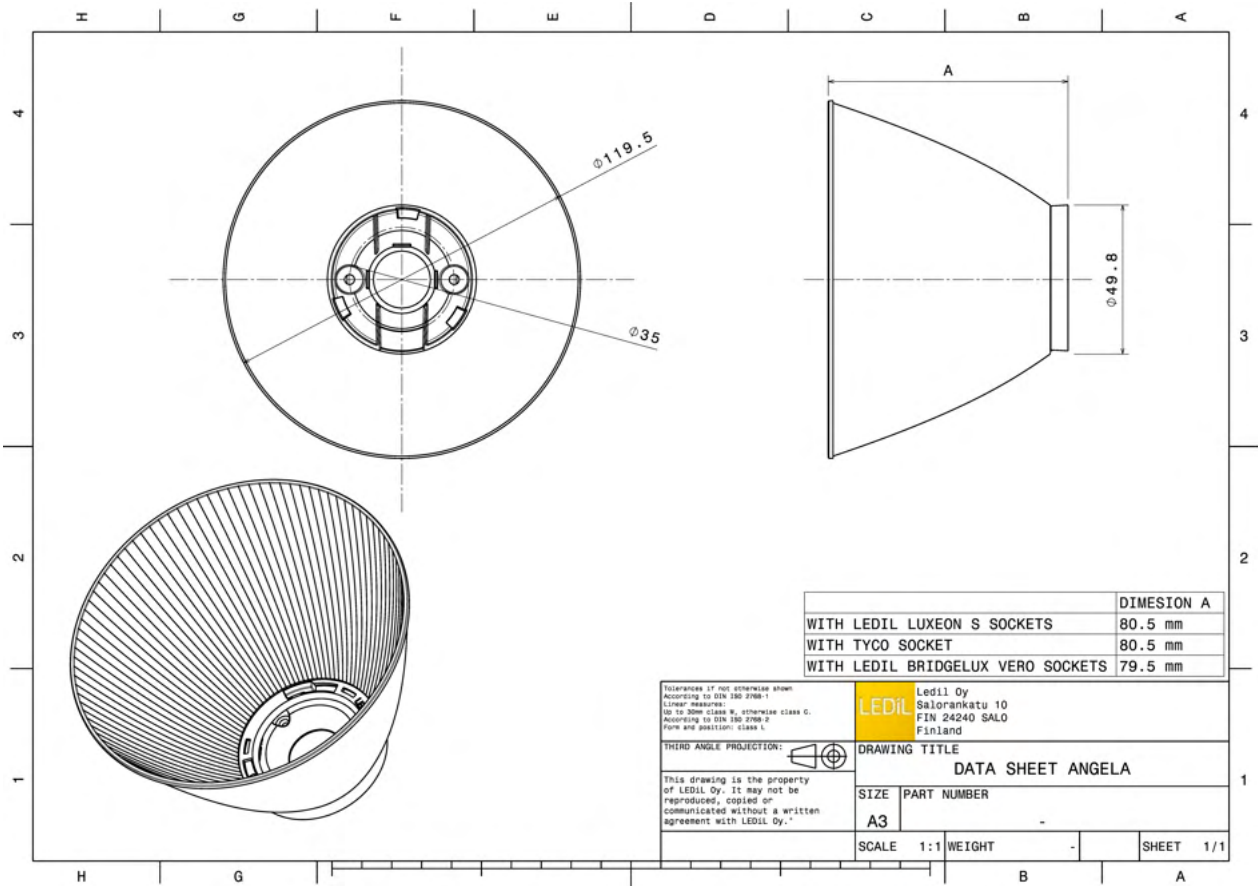
MATERIALS:

Component	Type	Material	Colour	Finish	Coating
ANGELA-XW	Reflector	HRPC	white		




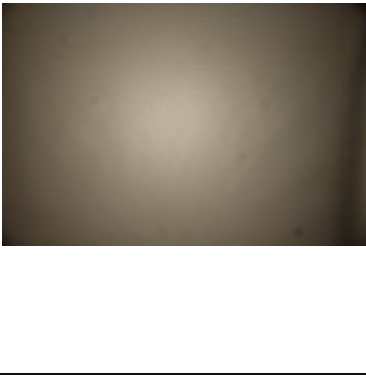
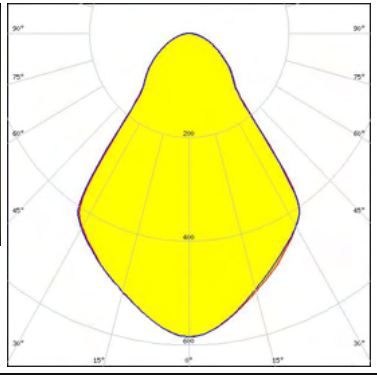

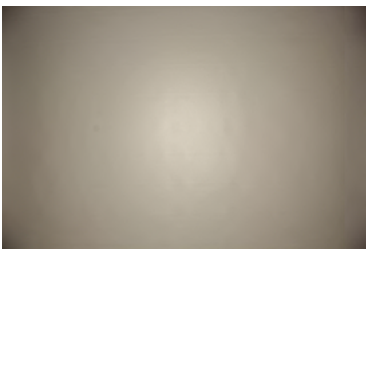
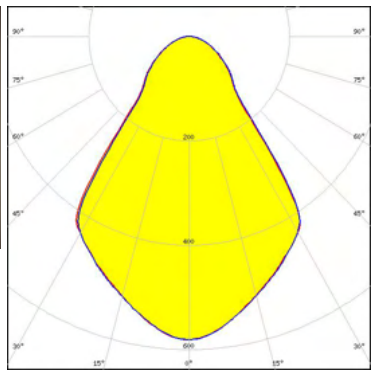

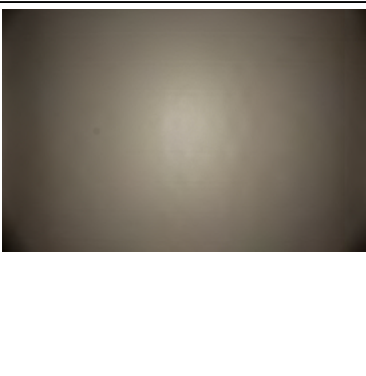
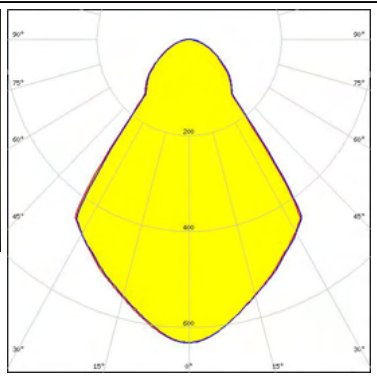

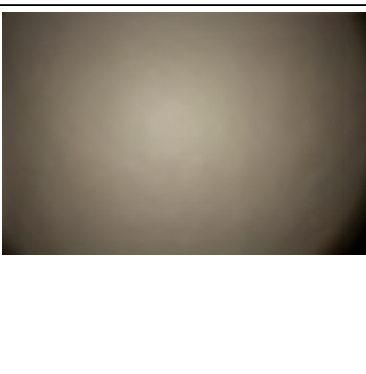
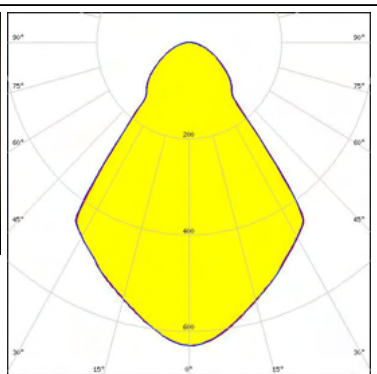
ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F13840_ANGELA-XW » Box size: 480 x 280 x 300 mm	160	80	40	8.1



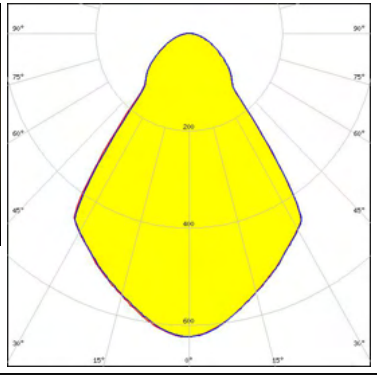

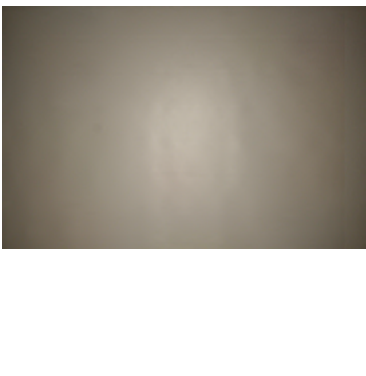
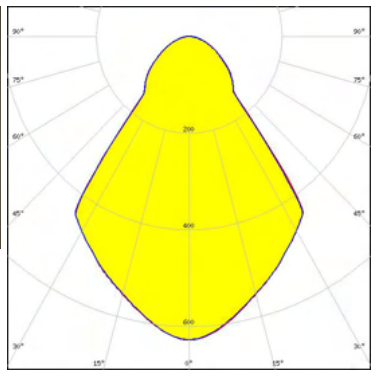

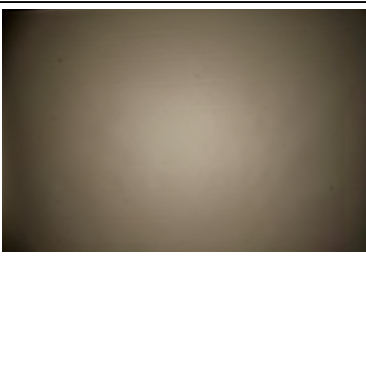
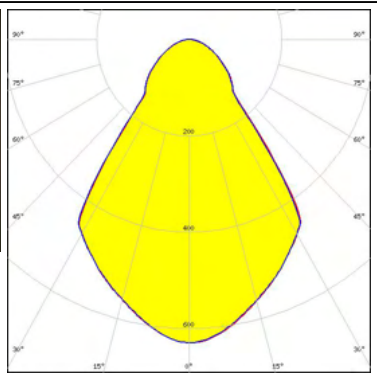

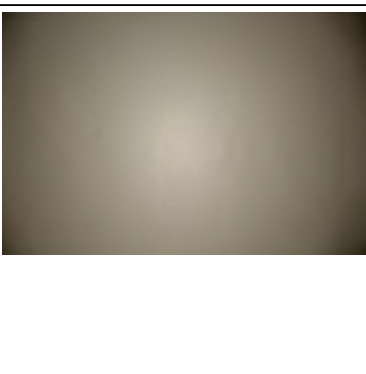
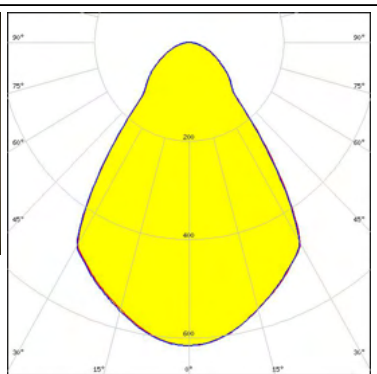


See also our general installation guide: www.ledil.com/installation_guide



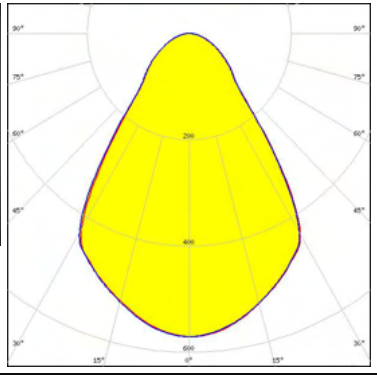

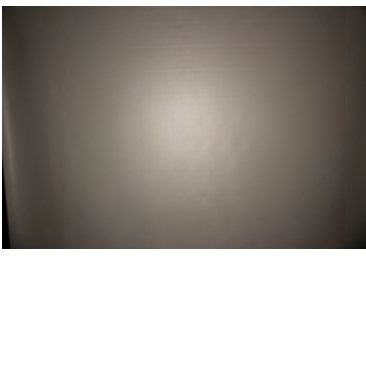
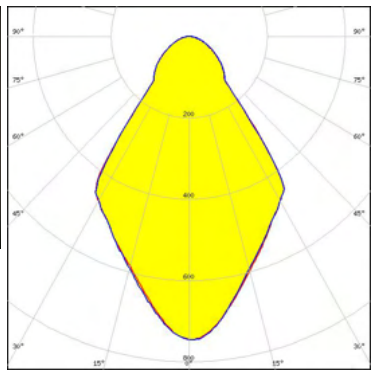

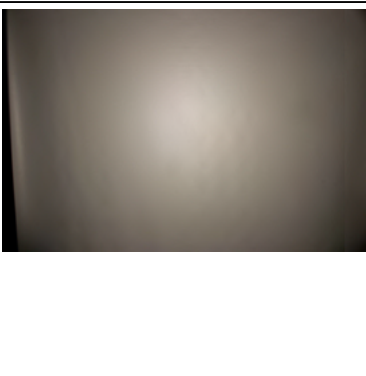
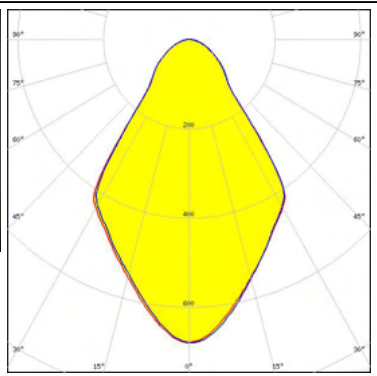

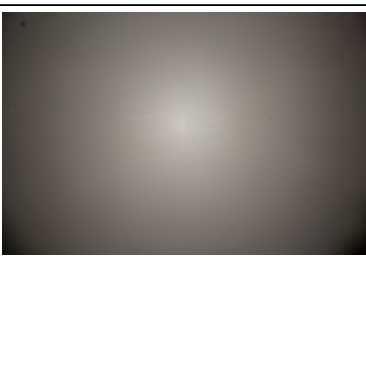
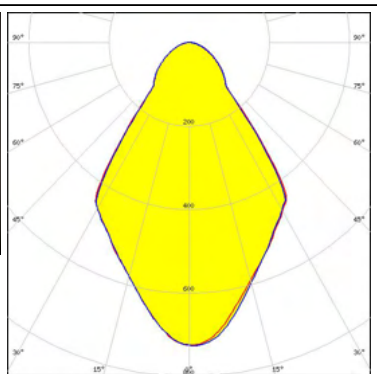
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED V10 Gen7 FWHM / FWTM 72.0° / 126.0° Efficiency 87 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 434 Typ L1</p>		
<p></p> <p>LED V13 Gen7 FWHM / FWTM 72.0° / 126.0° Efficiency 87 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p></p> <p>LED V13 Gen7 FWHM / FWTM 72.0° / 124.0° Efficiency 92 % Peak intensity 0.6 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 Vero SE 13 FWHM / FWTM 73.0° / 125.0° Efficiency 93 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		


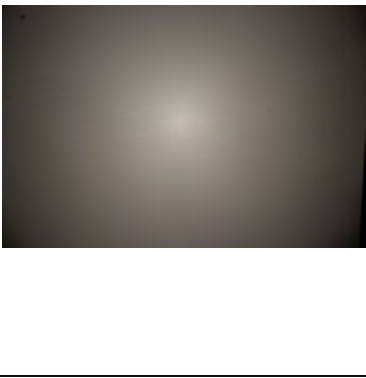
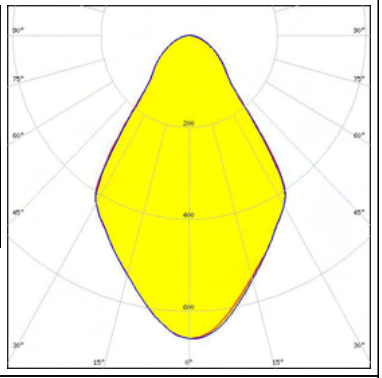


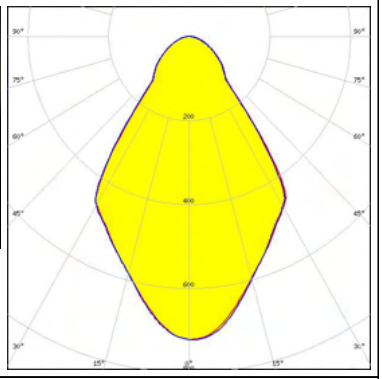

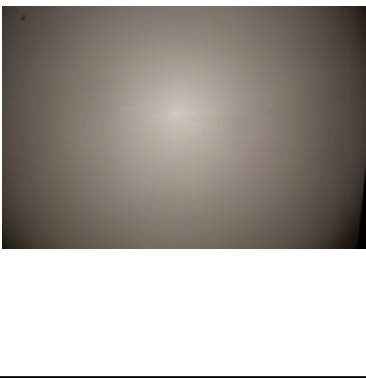
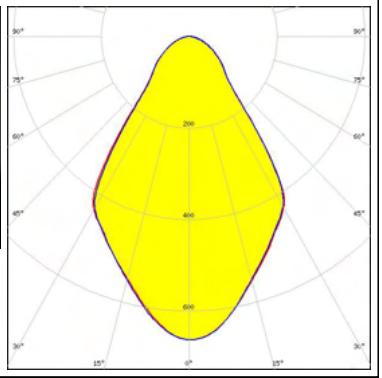
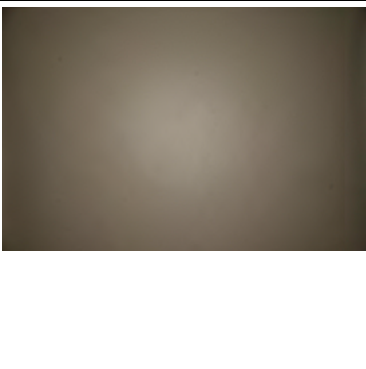
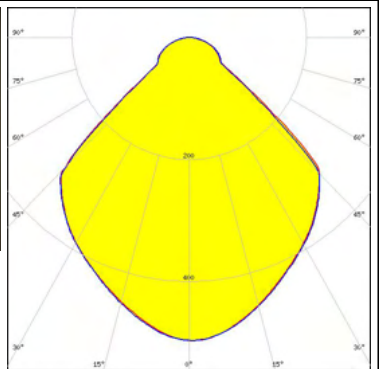
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED Vero SE 18</p> <p>FWHM / FWTM 73.0° / 125.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		
<p></p> <p>LED VERO13</p> <p>FWHM / FWTM 73.0° / 125.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18</p>		
<p></p> <p>LED VERO18</p> <p>FWHM / FWTM 72.0° / 124.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18</p>		
<p></p> <p>LED VERO29</p> <p>FWHM / FWTM 72.0° / 125.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29</p>		

OPTICAL RESULTS (MEASURED):

<p></p> <p>LED VERO29 FWHM / FWTM 72.0° / 127.0° Efficiency 88 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS</p>		
<p></p> <p>LED Vesta TW 15mm DP FWHM / FWTM 70.0° / 117.0° Efficiency 94 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 482 Typ L2</p>		
<p></p> <p>LED Vesta TW 15mm DP FWHM / FWTM 70.0° / 119.0° Efficiency 88 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour Tunable 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 70.0° / 118.0° Efficiency 93 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C13584_CLAMP-VERO29 Bender Wirth: 483 Typ L3</p>		

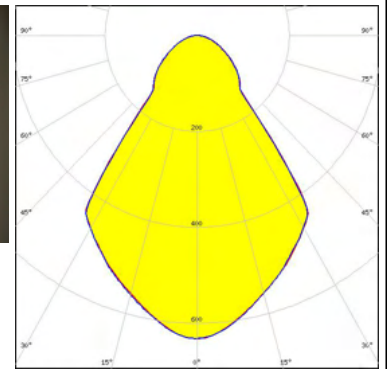
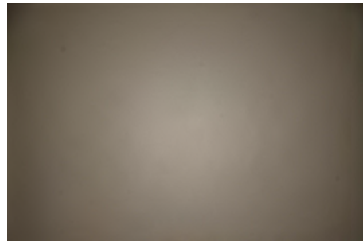
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED Vesta TW 18mm (31W) DP</p> <p>FWHM / FWTM 70.0° / 119.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 0.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components:</p> <ul style="list-style-type: none"> C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 483 Typ L3 		
<p></p> <p>LED Vesta TW 22mm DP</p> <p>FWHM / FWTM 69.0° / 117.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components:</p> <ul style="list-style-type: none"> C13584_CLAMP-VERO29 Bender Wirth: 494 Typ L3 		
<p></p> <p>LED Vesta TW 22mm DP</p> <p>FWHM / FWTM 69.0° / 119.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 0.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components:</p> <ul style="list-style-type: none"> C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 494 Typ L3 		
<p>CITIZEN</p> <p>LED CLL02x/CLU02x (LES10)</p> <p>FWHM / FWTM 72.0° / 124.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <ul style="list-style-type: none"> C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1 		

OPTICAL RESULTS (MEASURED):

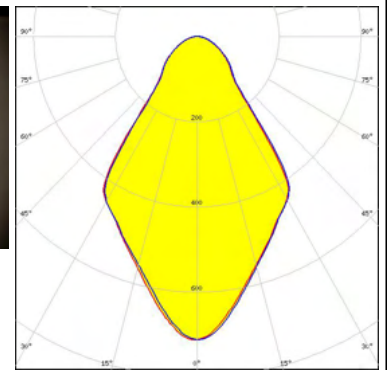
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 433 Typ L1



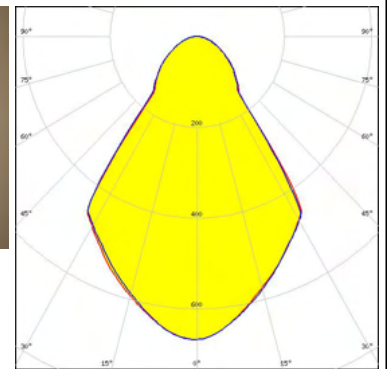
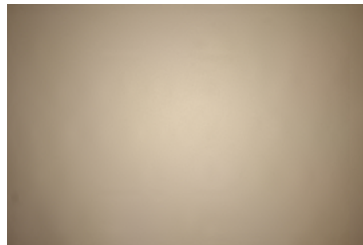
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 69.0° / 117.0°
 Efficiency 90 %
 Peak intensity 0.7 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C16791_CLAMP-Z45-A
 F13671_ANGE-RZ-LENS
 TE Connectivity: 2325807-3



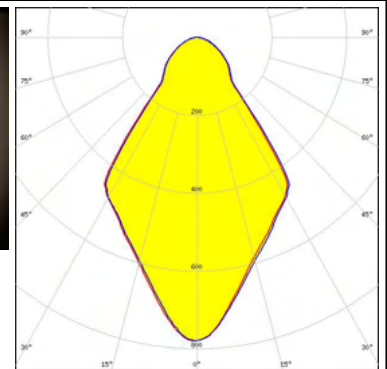
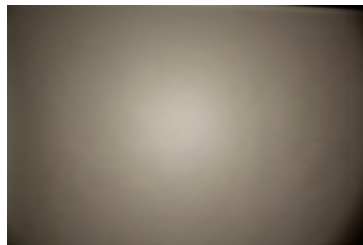
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 70.0° / 121.0°
 Efficiency 93 %
 Peak intensity 0.7 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



CITIZEN

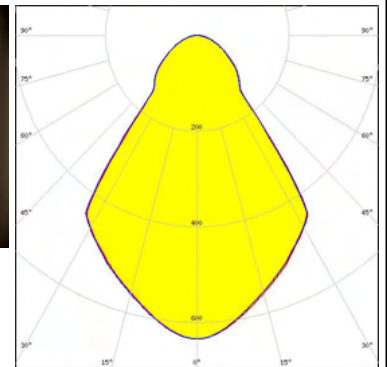
LED CLL03x/CLU03x
 FWHM / FWTM 69.0° / 115.0°
 Efficiency 94 %
 Peak intensity 0.8 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C16791_CLAMP-Z45-A
 TE Connectivity: 2325807-3



OPTICAL RESULTS (MEASURED):

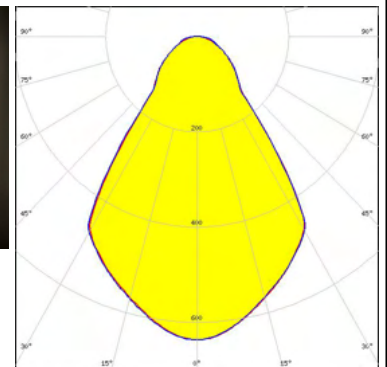
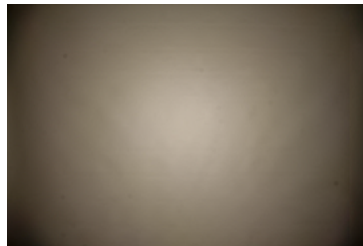
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 71.0° / 124.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



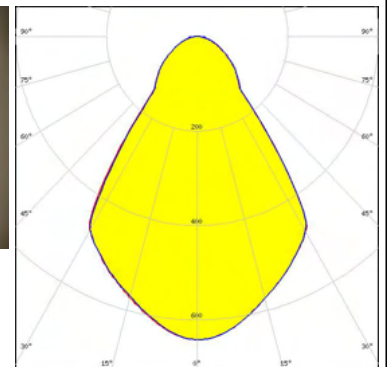
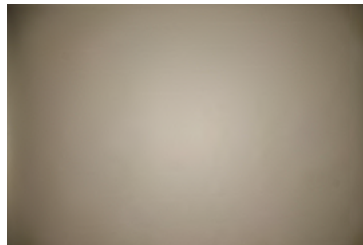
CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 70.0° / 123.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



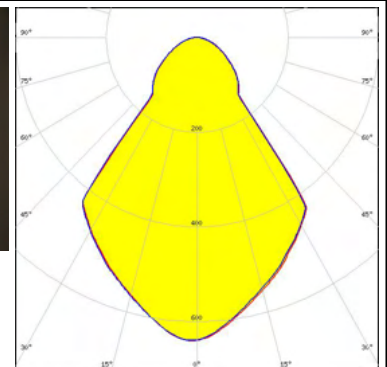
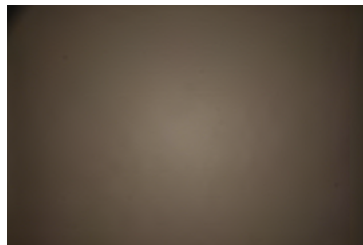
CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 70.0° / 123.0°
 Efficiency 93 %
 Peak intensity 0.6 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 73.0° / 124.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



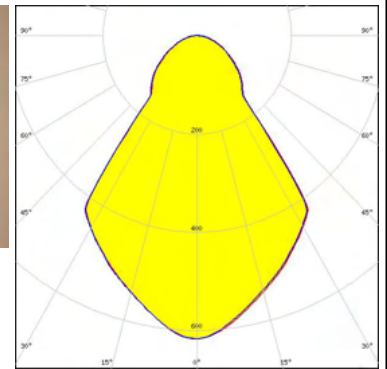
OPTICAL RESULTS (MEASURED):

CITIZEN

LED CLU720/721/723
 FWHM / FWTM 72.0° / 129.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



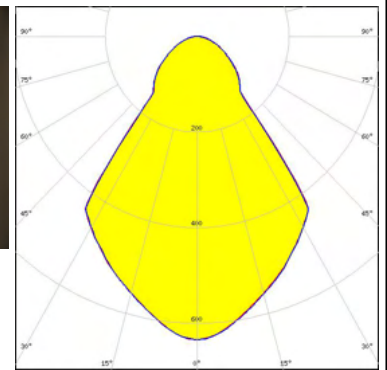
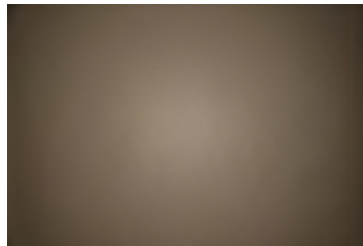
CITIZEN

LED CLU720/721/723
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

C13658_CLAMP-VERO13-18

Bender Wirth: 433 Typ L1

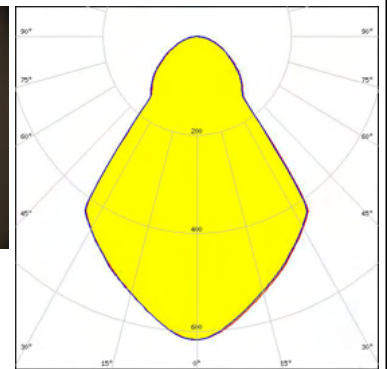
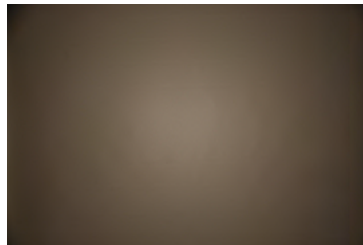


CITIZEN

LED CLU720/721/723
 FWHM / FWTM 70.0° / 127.0°
 Efficiency 94 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

IDEAL: 50-2103CT + 50-2100AN

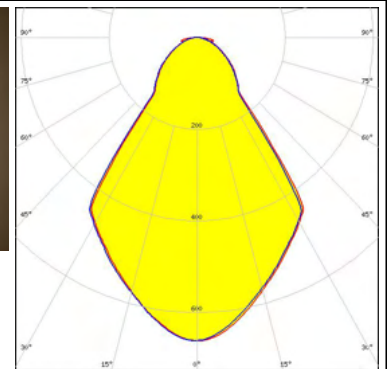
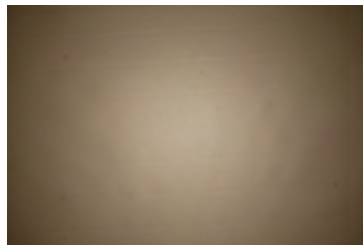


CITIZEN

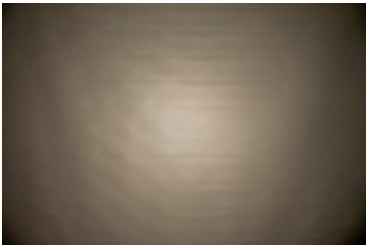
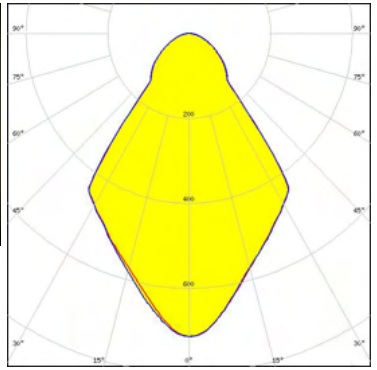
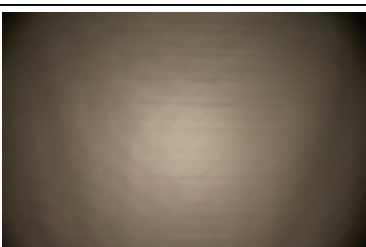
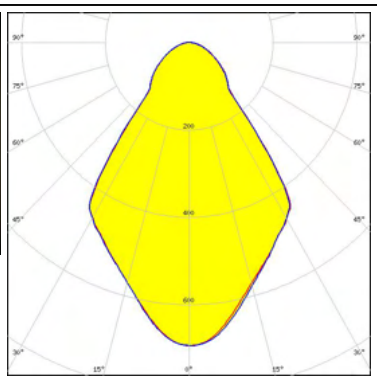
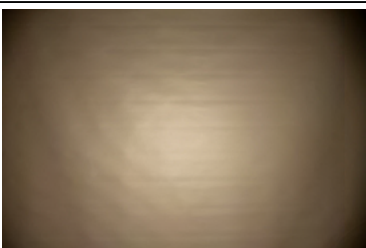
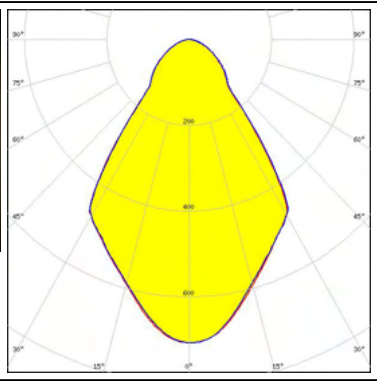
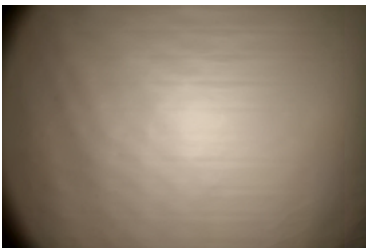
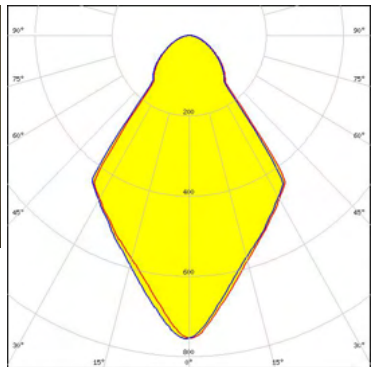
LED CLU730/731/733
 FWHM / FWTM 71.0° / 122.0°
 Efficiency 93 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:


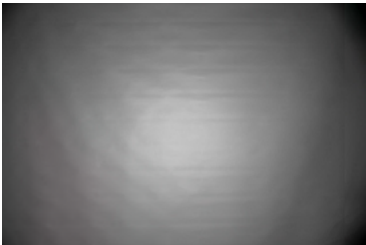
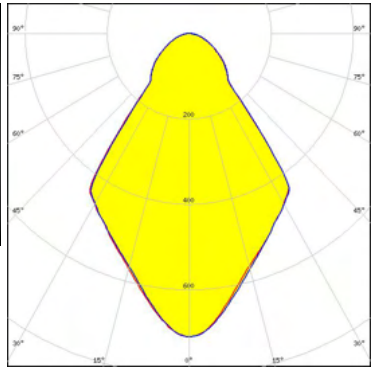

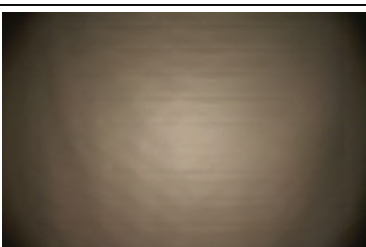
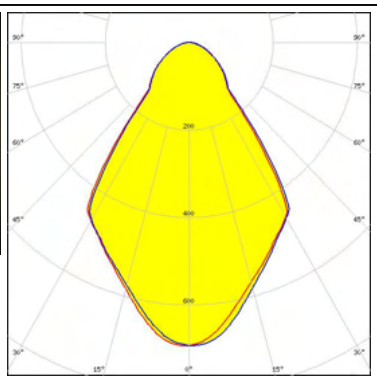

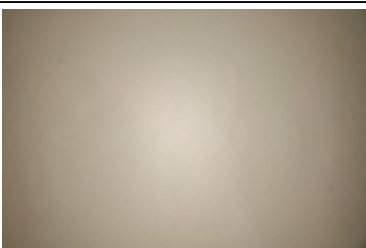
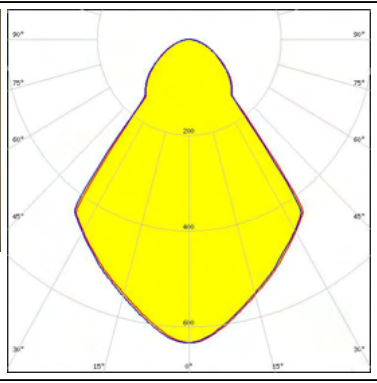


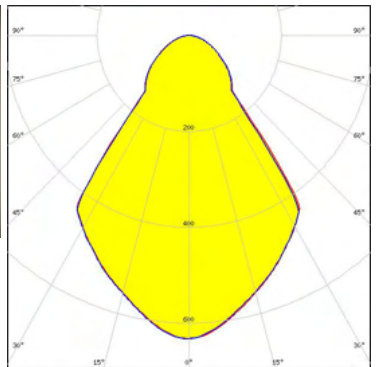
IDEAL: 50-2204-CT + 50-2100AN



OPTICAL RESULTS (MEASURED):

<p>CREE ⇄ LED</p> <p>LED CMA1840 FWHM / FWTM 72.0° / 120.0° Efficiency 95 % Peak intensity 0.7 cd/m LEDs/each optic 1 Light colour White Required components: C14123_CLAMP-CXA15-18</p>		
<p>CREE ⇄ LED</p> <p>LED CMA2550 FWHM / FWTM 71.0° / 121.0° Efficiency 94 % Peak intensity 0.7 cd/m LEDs/each optic 1 Light colour White Required components: C14036_CLAMP_CXA25-30</p>		
<p>CREE ⇄ LED</p> <p>LED CMA3090 FWHM / FWTM 70.0° / 119.0° Efficiency 94 % Peak intensity 0.7 cd/m LEDs/each optic 1 Light colour White Required components: C14036_CLAMP_CXA25-30</p>		
<p>CREE ⇄ LED</p> <p>LED CMT14xx FWHM / FWTM 71.0° / 116.0° Efficiency 93 % Peak intensity 0.8 cd/m LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>		

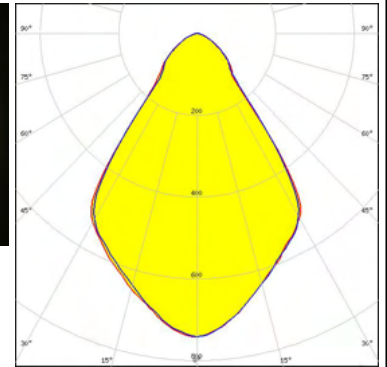
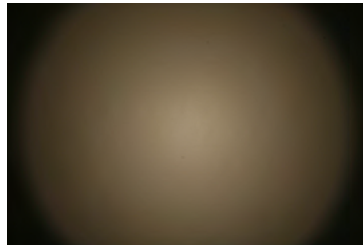
OPTICAL RESULTS (MEASURED):

<p>CREE  LED</p> <p>LED CMT19xx FWHM / FWTM 72.0° / 120.0° Efficiency 94 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 477 Typ L1</p>		
<p>CREE  LED</p> <p>LED CMT28xx FWHM / FWTM 70.0° / 120.0° Efficiency 94 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 Bender Wirth: 471 Typ L3</p>		
<p>CREE  LED</p> <p>LED CXA/B 15xx FWHM / FWTM 73.0° / 124.0° Efficiency 93 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 441 Typ L1</p>		
<p>CREE  LED</p> <p>LED CXA/B 1816 & CXA/B 1820 & CXA 1850 FWHM / FWTM 72.0° / 124.0° Efficiency 92 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 437 Typ L1</p>		

OPTICAL RESULTS (MEASURED):

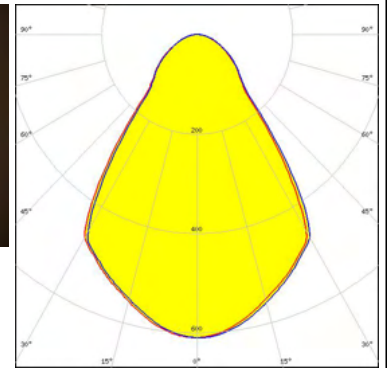
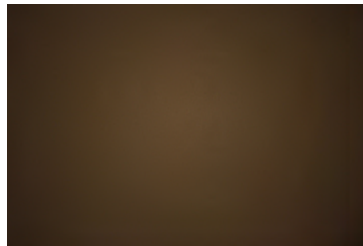
CREE LED

LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 72.0° / 112.0°
 Efficiency 94 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14123_CLAMP-CXA15-18



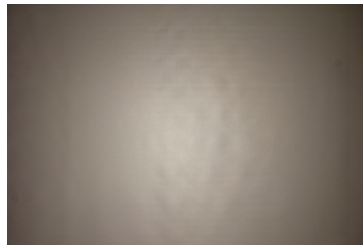
CREE LED

LED CXA/B 3590
 FWHM / FWTM 72.0° / 126.0°
 Efficiency 94 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2303CR + 50-2300AN



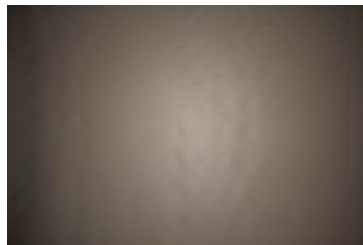
EVERLIGHT

LED CHI3030 19W
 FWHM / FWTM 71.0° / 130.0°
 Efficiency 91 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 468 Typ L3

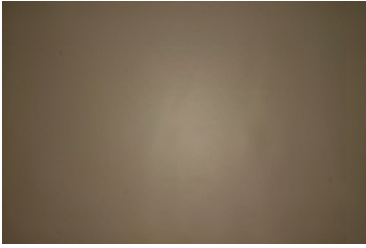
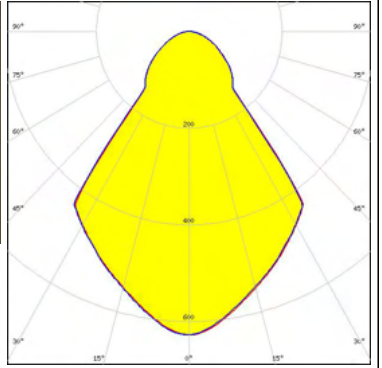
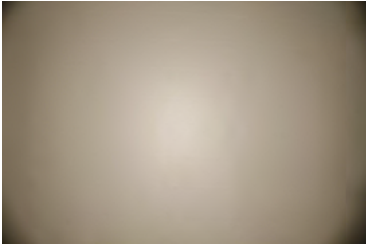
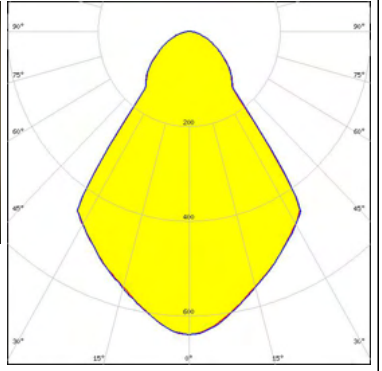
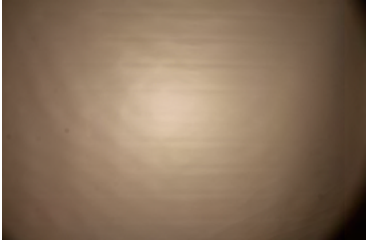
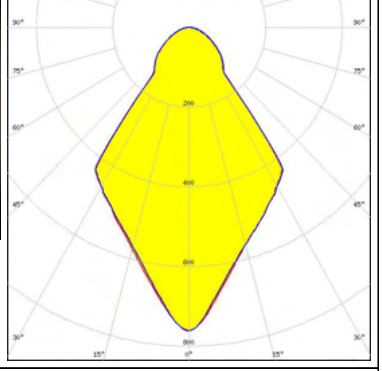
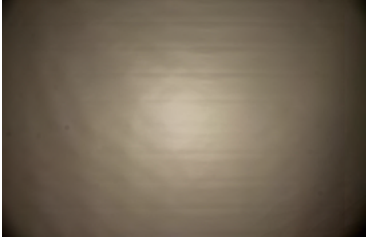
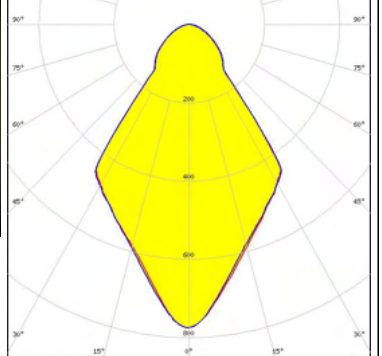


EVERLIGHT


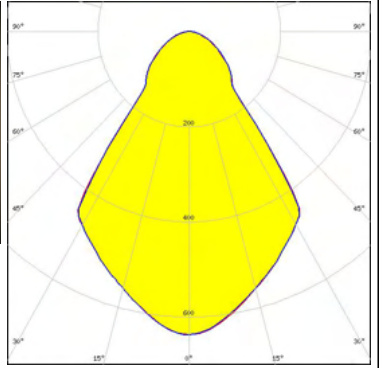
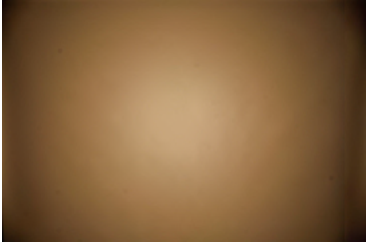
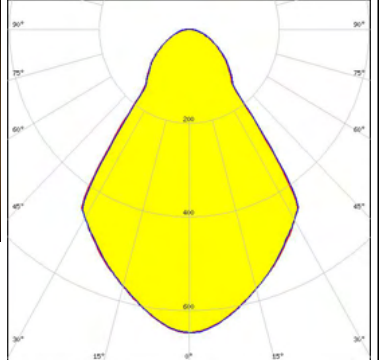
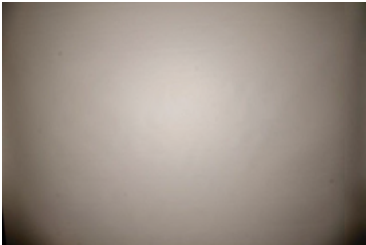
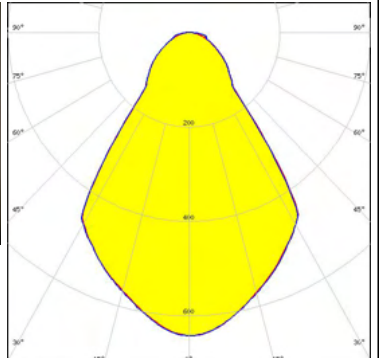
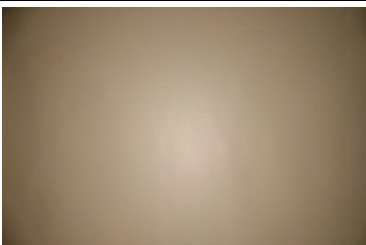
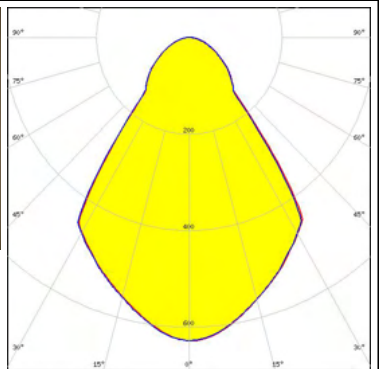
LED CHI3030 29W
 FWHM / FWTM 71.0° / 128.0°
 Efficiency 90 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 468 Typ L3



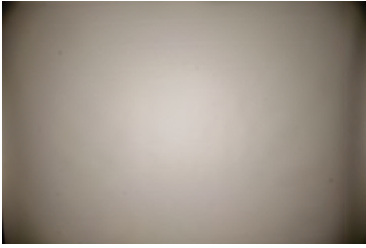
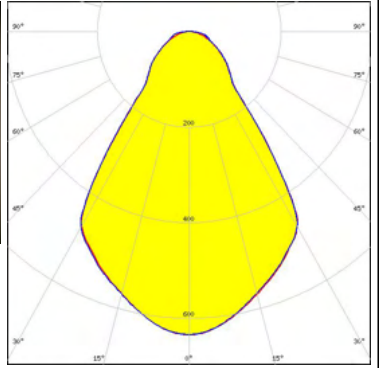

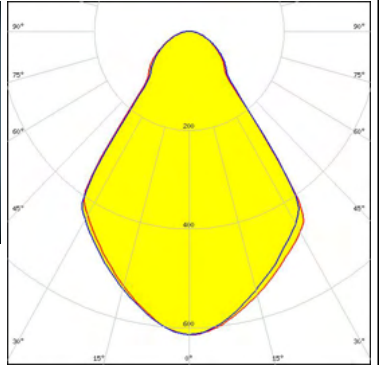

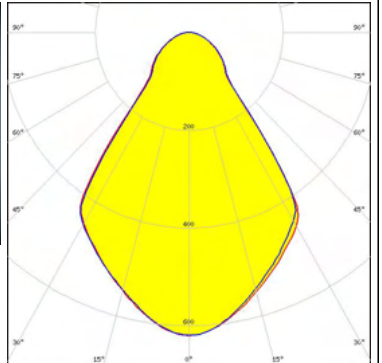
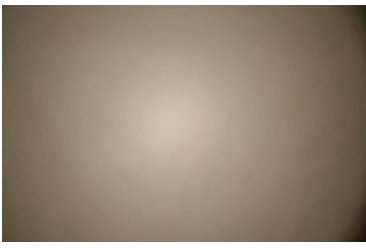
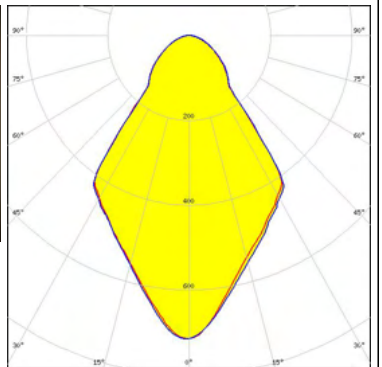
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1202/1203</p> <p>FWHM / FWTM 73.0° / 125.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.6 cd/lm</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>LUMILEDS</p> <p>LED LUXEON CoB 1204/1205</p> <p>FWHM / FWTM 72.0° / 124.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1204HD</p> <p>FWHM / FWTM 71.0° / 116.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.8 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 70.0° / 114.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.8 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>		

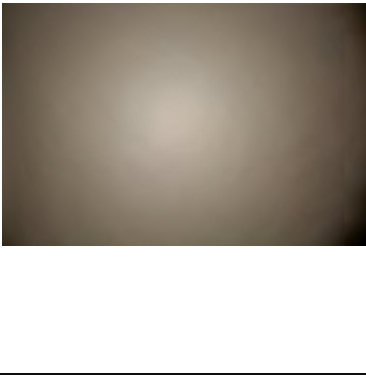
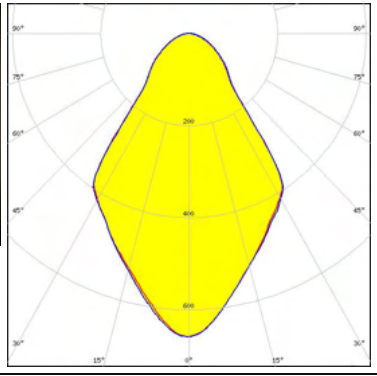
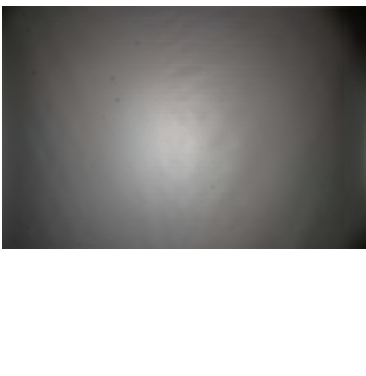
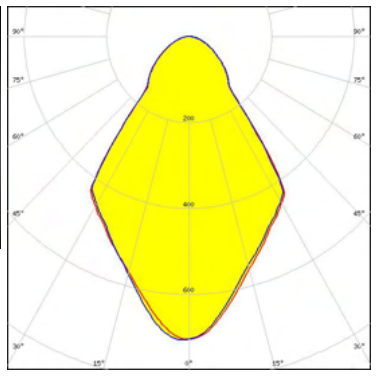
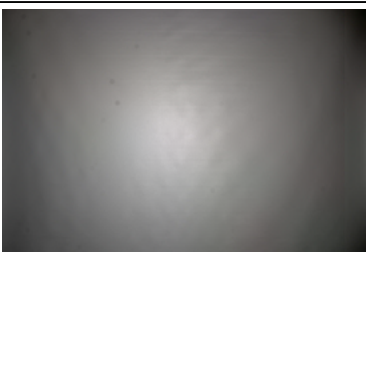
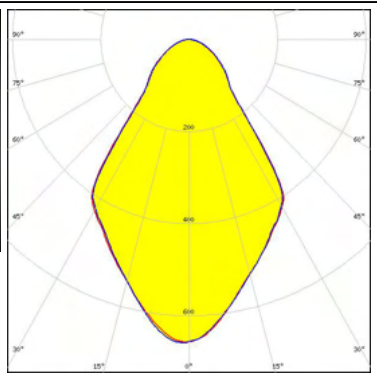
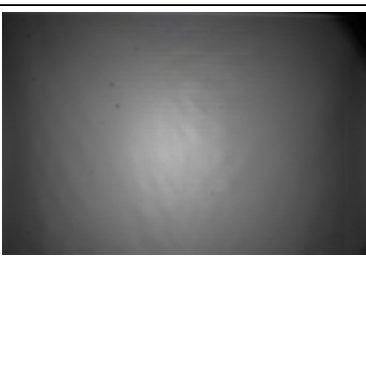
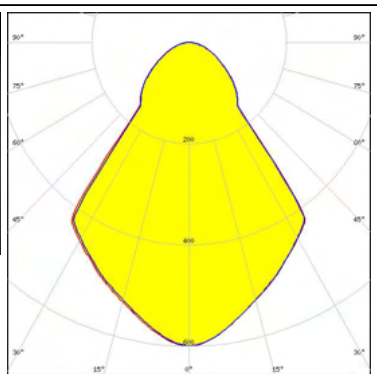
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1208</p> <p>FWHM / FWTM 71.0° / 124.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1208</p> <p>FWHM / FWTM 71.0° / 123.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2100SH + 50-2100AN</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1211</p> <p>FWHM / FWTM 71.0° / 123.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.6 cd/m</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 1211</p> <p>FWHM / FWTM 72.0° / 124.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 431 Typ L3</p>		

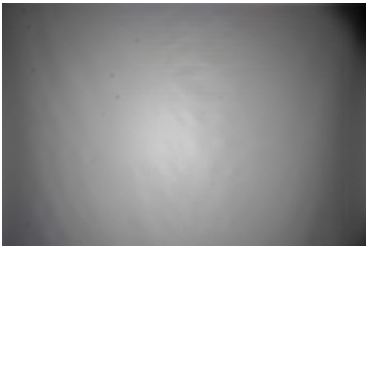
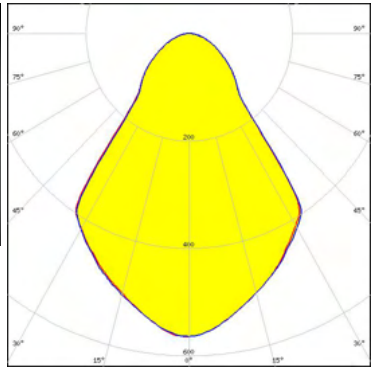
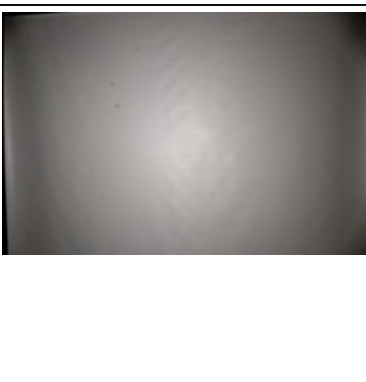
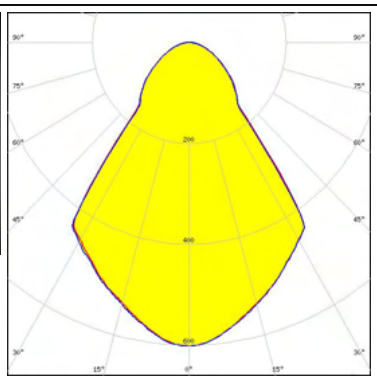

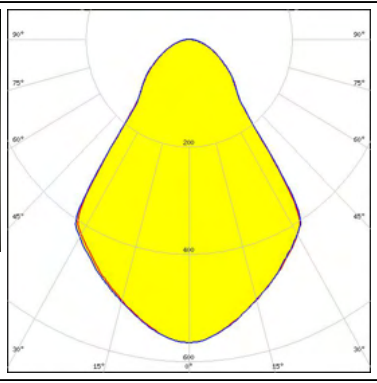

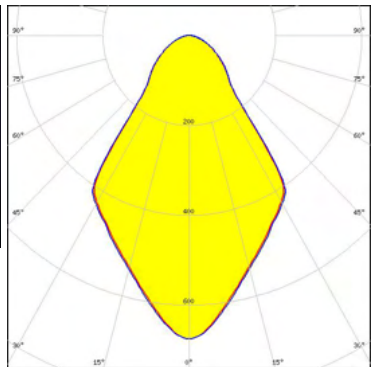
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1216/1812</p> <p>FWHM / FWTM 70.0° / 124.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.6 cd/m</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 K12</p> <p>FWHM / FWTM 72.0° / 123.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 0.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS TE Connectivity: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>LUMILEDS</p> <p>LED LUXEON K16</p> <p>FWHM / FWTM 72.0° / 122.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 0.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS TE Connectivity: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>LUMINUS</p> <p>LED CDM-14 (Dim-To-Warm)</p> <p>FWHM / FWTM 71.0° / 120.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.7 cd/m</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>		

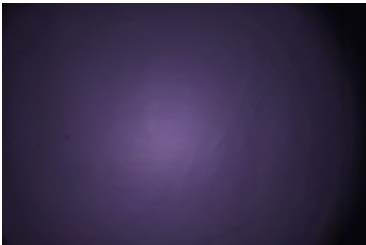
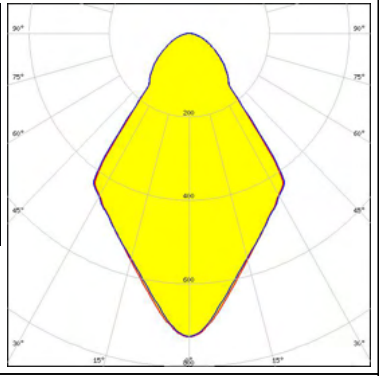
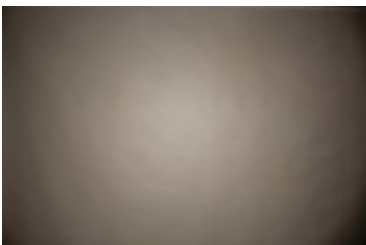
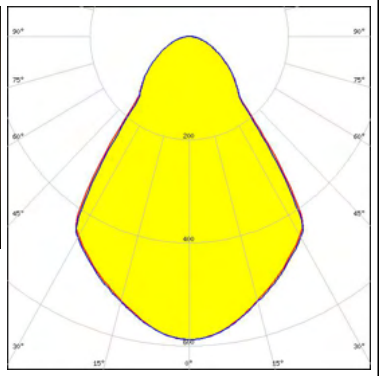
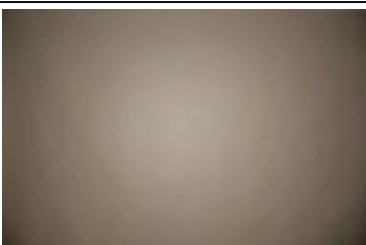
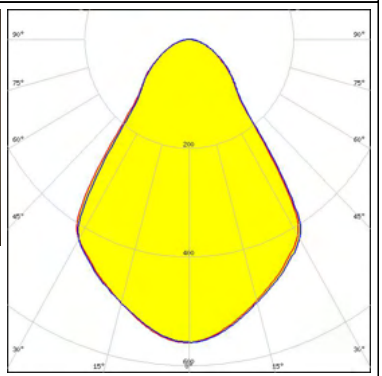
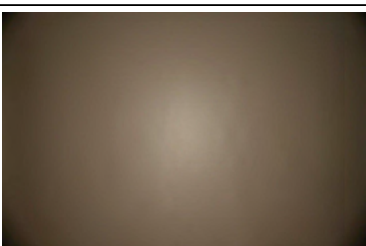
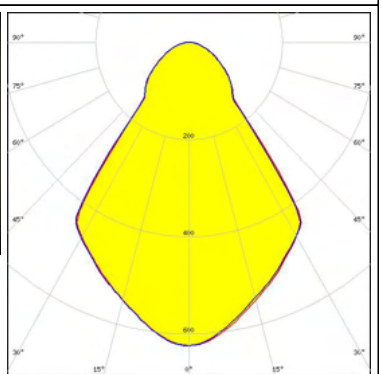
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CDM-14 (Dim-To-Warm)</p> <p>FWHM / FWTM 71.0° / 121.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 0.7 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 70.0° / 120.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.7 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 70.0° / 121.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 0.7 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 73.0° / 127.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.6 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: 490 Typ L1</p>		


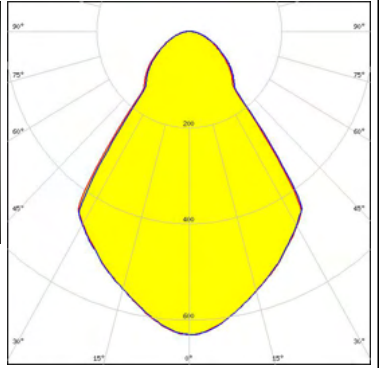
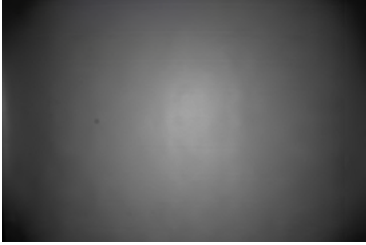
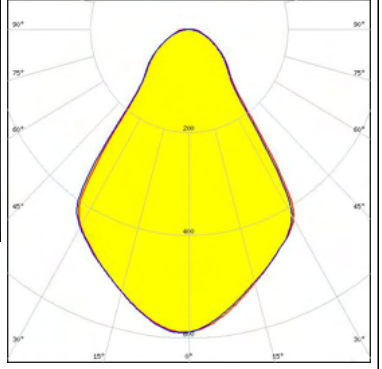
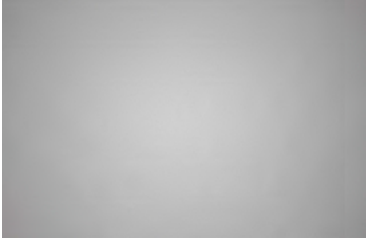
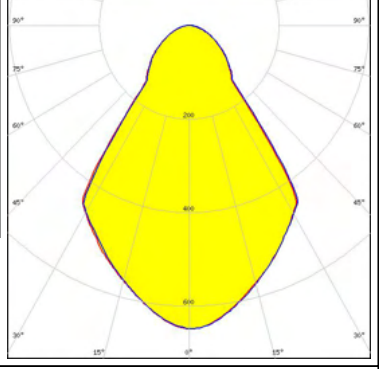

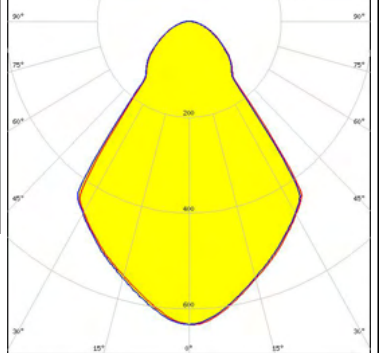
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CDM-9 (Dim-To-Warm)</p> <p>FWHM / FWTM 73.0° / 127.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 0.6 cd/lm</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: 490 Typ L1</p>		
<p>LUMINUS</p> <p>LED CTM-14 (Tunable White)</p> <p>FWHM / FWTM 73.0° / 127.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.6 cd/lm</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 72.0° / 127.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 0.6 cd/lm</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 70.0° / 119.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 0.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour RGBW</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 500 Typ L3-1</p>		

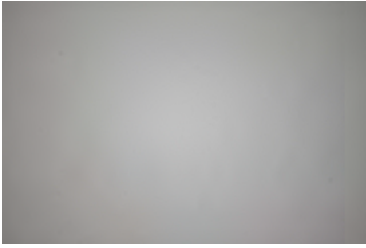
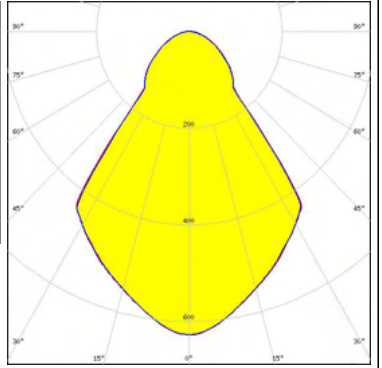
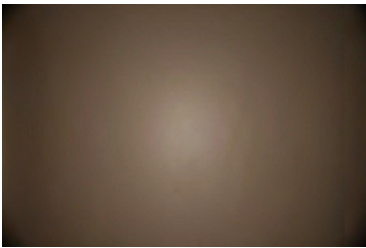
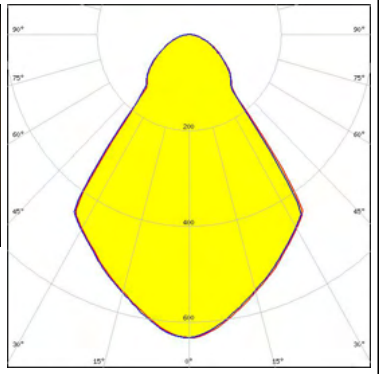
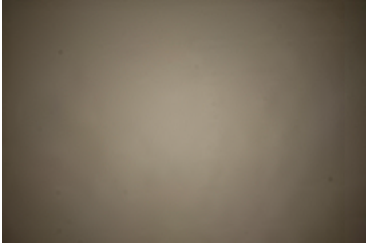
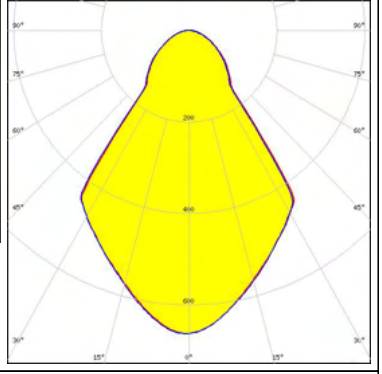

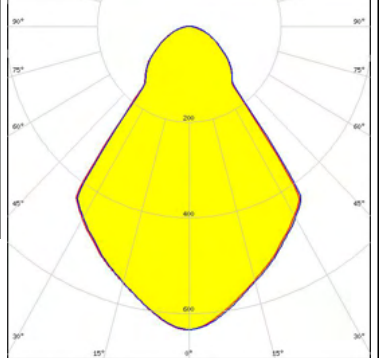
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CTM-14 RGBW FWHM / FWTM 71.0° / 118.0° Efficiency 92 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour RGBW Required components: C13584_CLAMP-VERO29 Bender Wirth: 500 Typ L3-1</p>		
<p>LUMINUS</p> <p>LED CTM-22 (Tunable White) FWHM / FWTM 73.0° / 127.0° Efficiency 91 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 Bender Wirth: 494 Typ L3</p>		
<p>LUMINUS</p> <p>LED CTM-22 (Tunable White) FWHM / FWTM 72.0° / 127.0° Efficiency 86 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 494 Typ L3</p>		
<p>LUMINUS</p> <p>LED CxM-14 (19x19) FWHM / FWTM 72.0° / 125.0° Efficiency 93 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		


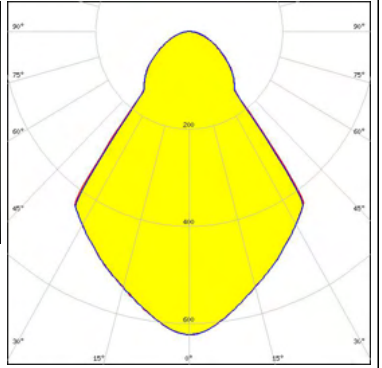
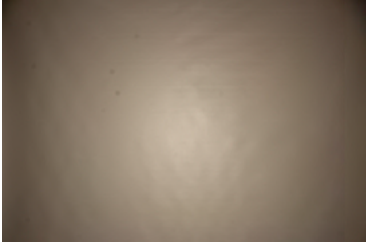
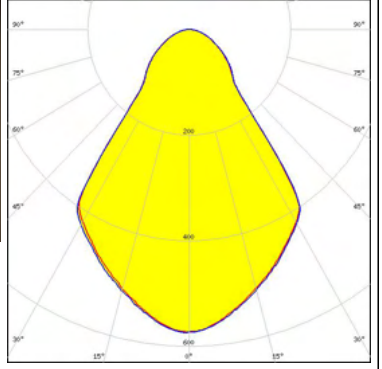
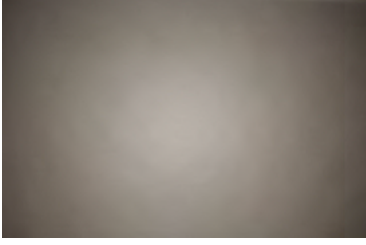
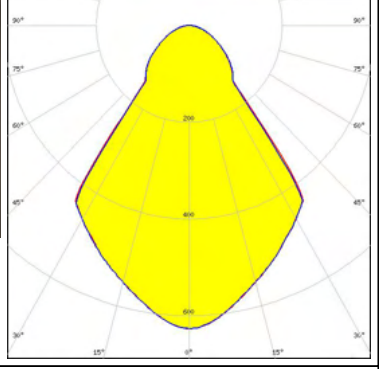
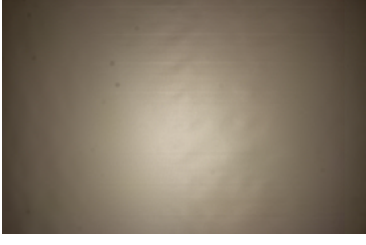
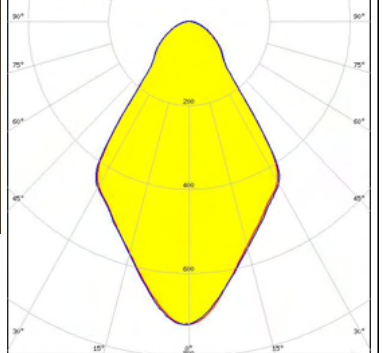
OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED COB J-Type FWHM / FWTM 72.0° / 125.0° Efficiency 93 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 463 Typ L2</p>		
<p>NICHIA</p> <p>LED COB J-Type FWHM / FWTM 71.0° / 124.0° Efficiency 87 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: F13671_ANGE-RZ-LENS IDEAL: 50-2103NC + 50-2100AN</p>		
<p>NICHIA</p> <p>LED COB J-Type FWHM / FWTM 71.0° / 122.0° Efficiency 91 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2103NC + 50-2100AN</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 11) FWHM / FWTM 72.0° / 124.0° Efficiency 92 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		

OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 73.0° / 125.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.6 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 COB L-Type (LES 11)</p> <p>FWHM / FWTM 73.0° / 125.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Molex: 180580-0005</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 71.0° / 122.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2100NC + 50-2100AN</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM 72.0° / 124.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.6 cd/m</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>		

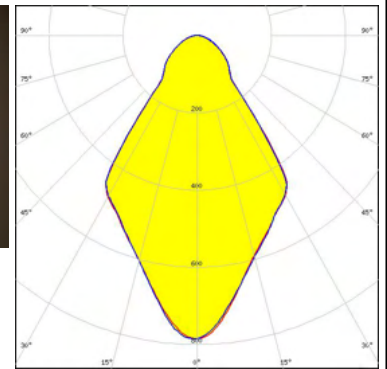
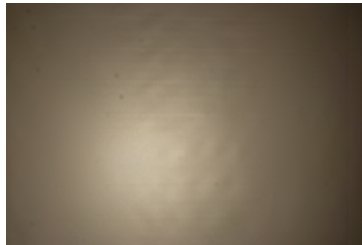
OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM 73.0° / 126.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.6 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 72.0° / 125.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 0.6 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>NICHIA</p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM / FWTM 73.0° / 125.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.6 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>OSRAM</p> <p>LED PrevaLED Core G7 L15 H1</p> <p>FWHM / FWTM 69.0° / 116.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 0.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16685_CLAMP-PRV-A F13671_ANGE-RZ-LENS</p>		

OPTICAL RESULTS (MEASURED):

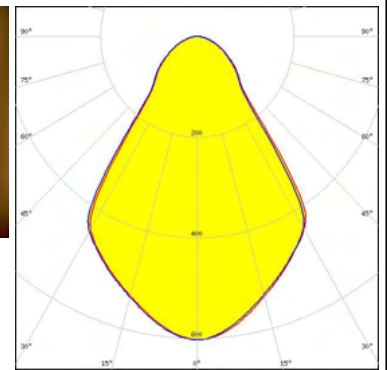
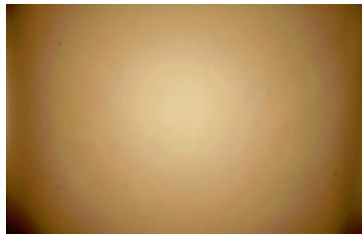
OSRAM

LED PrevaLED Core G7 L15 H1
 FWHM / FWTM 69.0° / 114.0°
 Efficiency 94 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16685_CLAMP-PRV-A



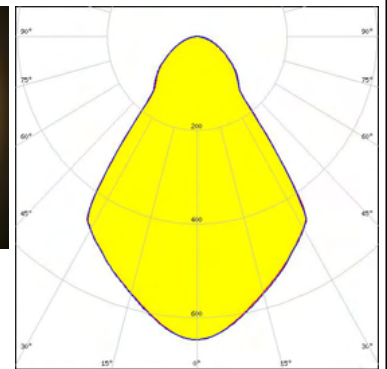
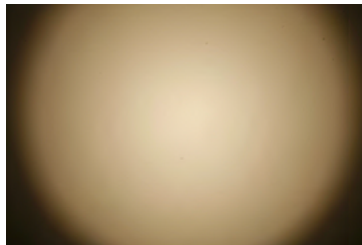
OSRAM

LED PrevaLED Core Z4 LES19
 FWHM / FWTM 71.0° / 124.0°
 Efficiency 88 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



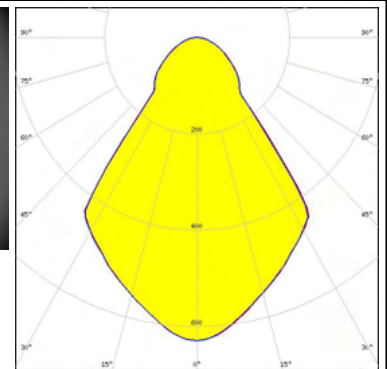
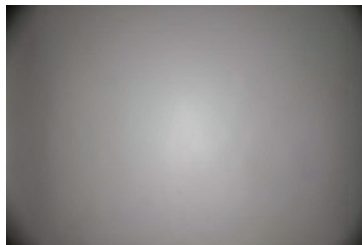
OSRAM

LED PrevaLED Core Z4 LES19
 FWHM / FWTM 71.0° / 123.0°
 Efficiency 93 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1


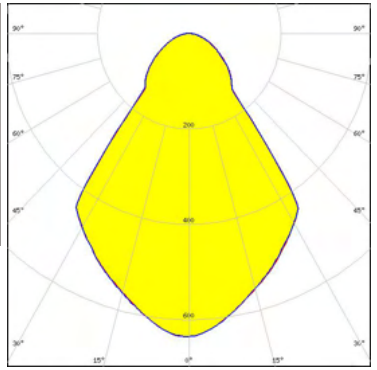

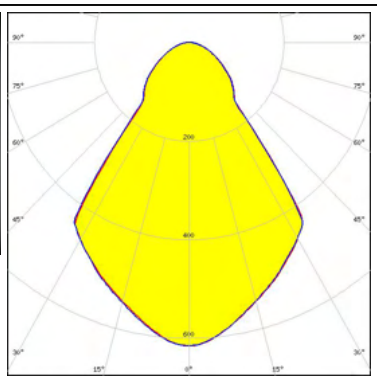

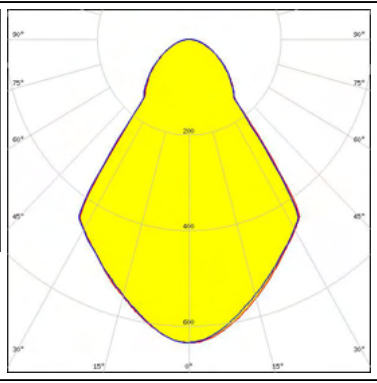
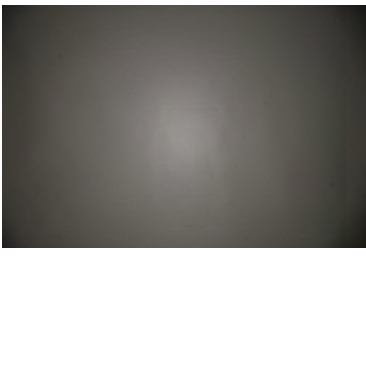
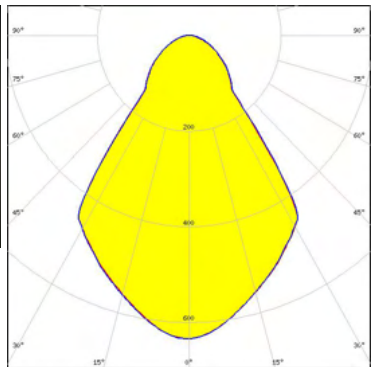


OSRAM

Opto Semiconductors
 LED Soleriq S13
 FWHM / FWTM 72.0° / 125.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



OPTICAL RESULTS (MEASURED):

<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13</p> <p>FWHM / FWTM 72.0° / 124.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 437 Typ L1</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13 19x19</p> <p>FWHM / FWTM 72.0° / 126.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.6 cd/m</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 S13 19x19</p> <p>FWHM / FWTM 71.0° / 124.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.6 cd/m</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 S19</p> <p>FWHM / FWTM 71.0° / 123.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.6 cd/m</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):

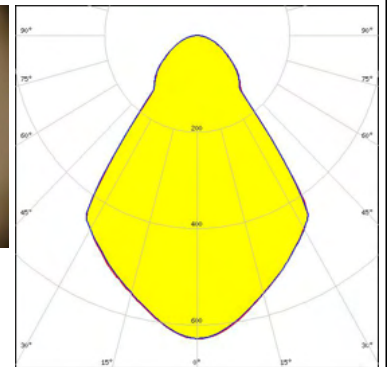
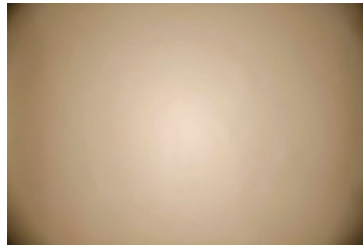
OSRAM

Opto Semiconductors

LED Soleriq S19
 FWHM / FWTM 72.0° / 125.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/m
 LEDs/each optic 1
 Light colour White

Required components:

TE Connectivity: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1



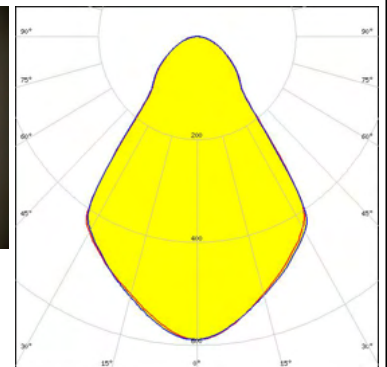
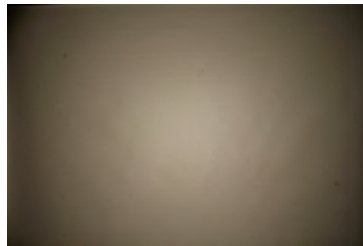
PHILIPS

LED Fortimo SLM 1208 L15 G6 Standard
 FWHM / FWTM 72.0° / 125.0°
 Efficiency 87 %
 Peak intensity 0.6 cd/m
 LEDs/each optic 1
 Light colour White

Required components:

F13671_ANGE-RZ-LENS

TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

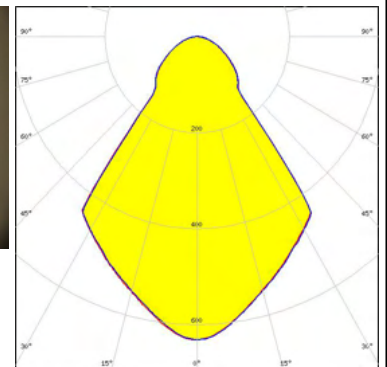
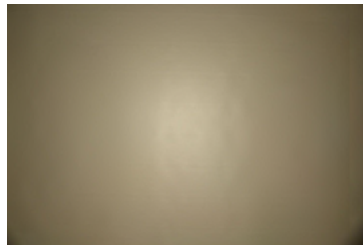


PHILIPS

LED Fortimo SLM L09 + SLM holder
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/m
 LEDs/each optic 1
 Light colour White

Required components:

TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

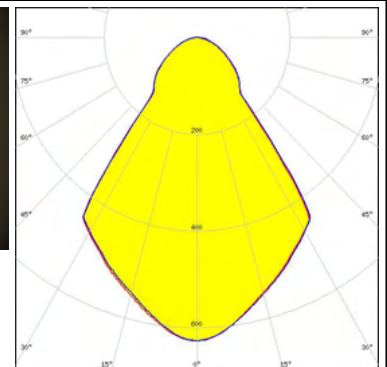
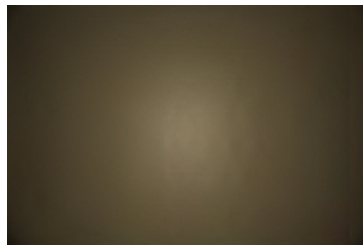


PHILIPS

LED Fortimo SLM L13 + SLM holder
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/m
 LEDs/each optic 1
 Light colour White

Required components:

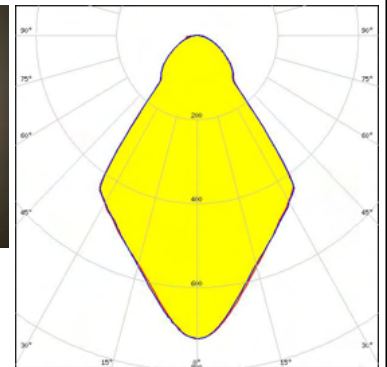
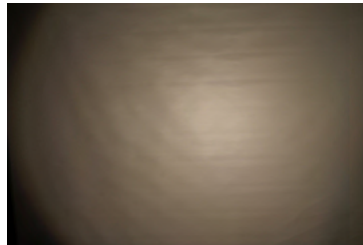
TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



OPTICAL RESULTS (MEASURED):

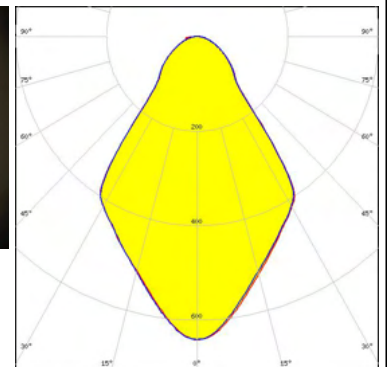
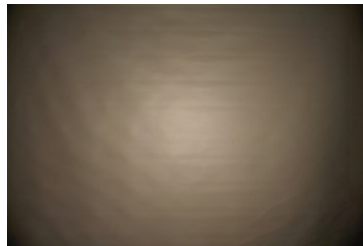
PHILIPS

LED Fortimo SLM L13 CoB
 FWHM / FWTM 71.0° / 118.0°
 Efficiency 93 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



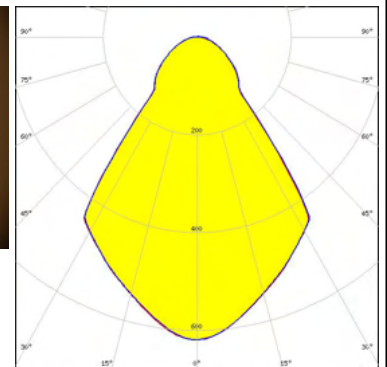
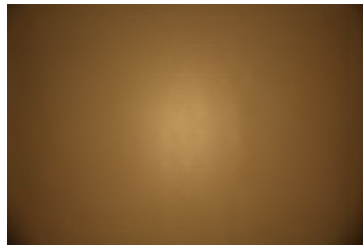
PHILIPS

LED Fortimo SLM L13 CoB
 FWHM / FWTM 71.0° / 120.0°
 Efficiency 85 %
 Peak intensity 0.6 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



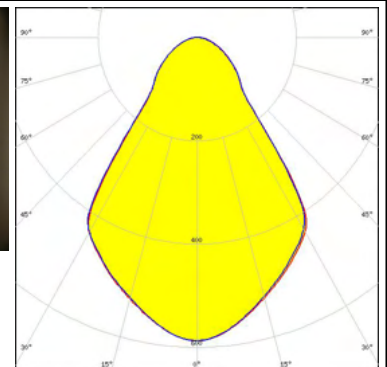
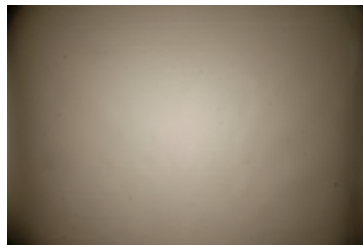
PHILIPS

LED Fortimo SLM L15 + SLM holder
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 90 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



PHILIPS

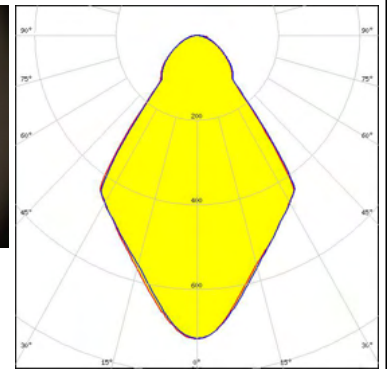
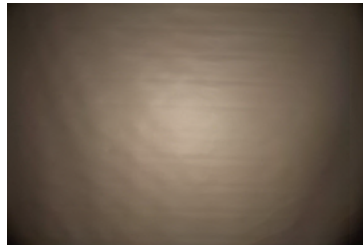
LED Fortimo SLM L15 + SLM holder
 FWHM / FWTM 72.0° / 125.0°
 Efficiency 87 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



OPTICAL RESULTS (MEASURED):

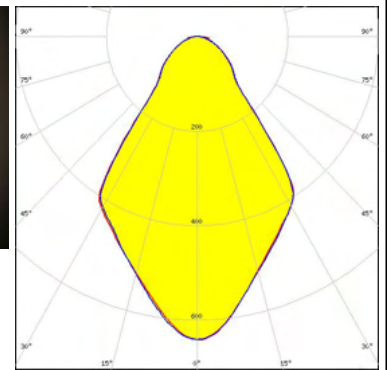
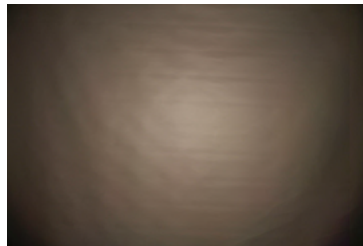
PHILIPS

LED Fortimo SLM L15 CoB
 FWHM / FWTM 71.0° / 118.0°
 Efficiency 92 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



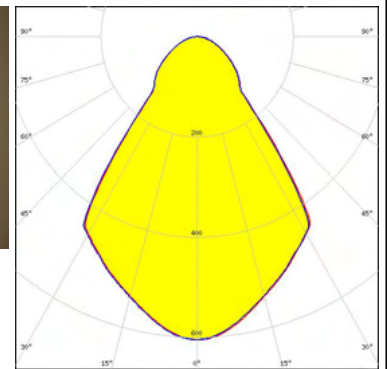
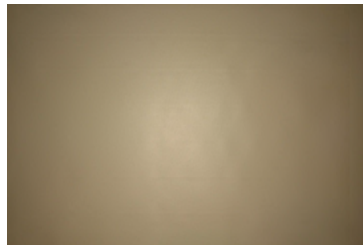
PHILIPS

LED Fortimo SLM L15 CoB
 FWHM / FWTM 70.0° / 119.0°
 Efficiency 85 %
 Peak intensity 0.6 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



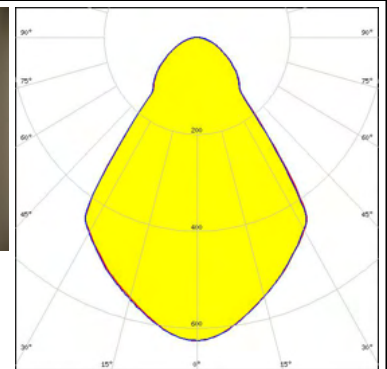
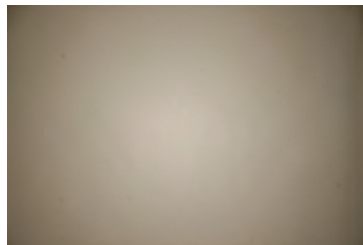
PHILIPS

LED Fortimo SLM L19 + SLM holder
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 89 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



SAMSUNG

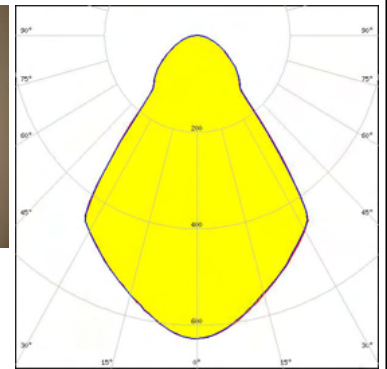
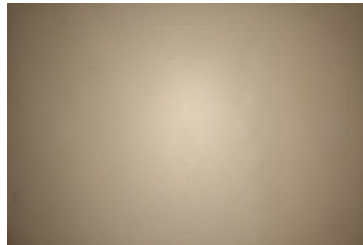
LED LC026B / 033B / 040B
 FWHM / FWTM 72.0° / 125.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 450 Typ L2



OPTICAL RESULTS (MEASURED):

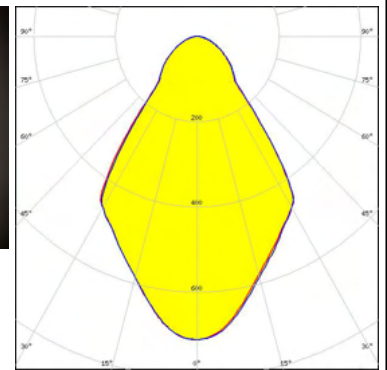
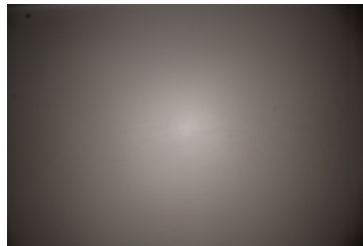
SAMSUNG

LED LC026B / 033B / 040B
 FWHM / FWTM 72.0° / 125.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



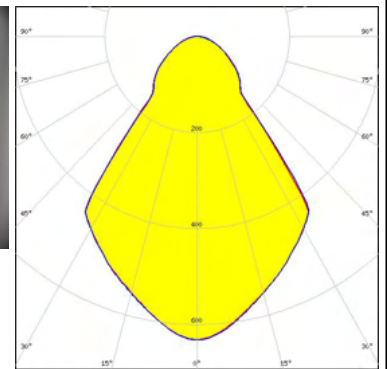
SAMSUNG

LED LC035T (Tunable white)
 FWHM / FWTM 70.0° / 119.0°
 Efficiency 93 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour Tunable White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 502 Typ L3



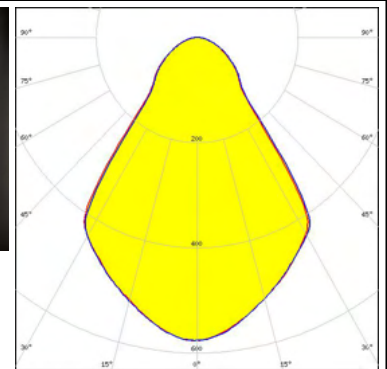
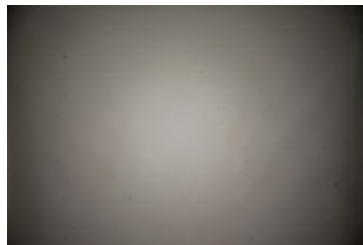
SAMSUNG

LED LC040C
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1

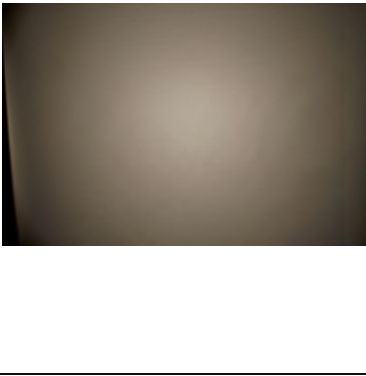
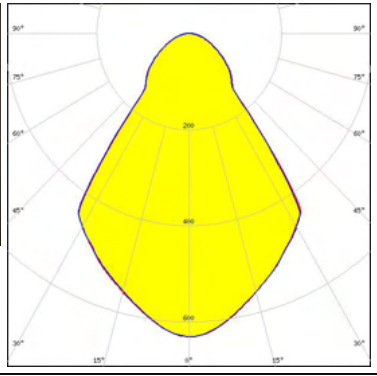
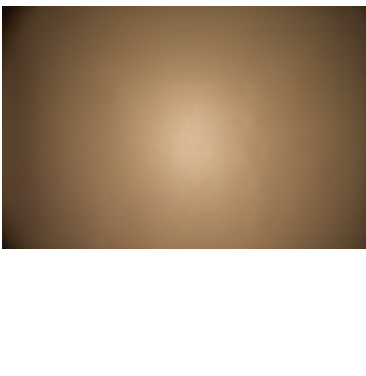
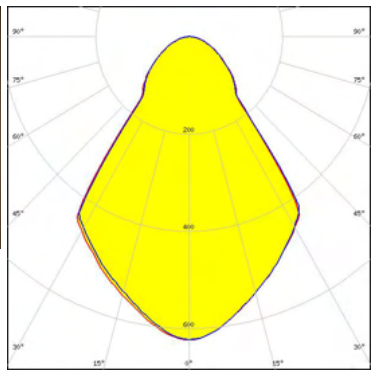
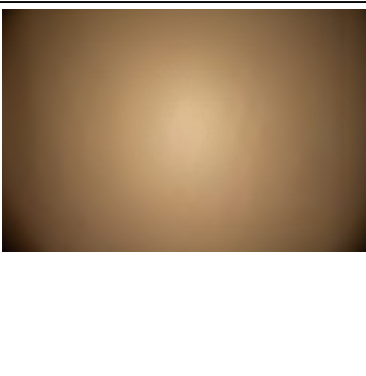
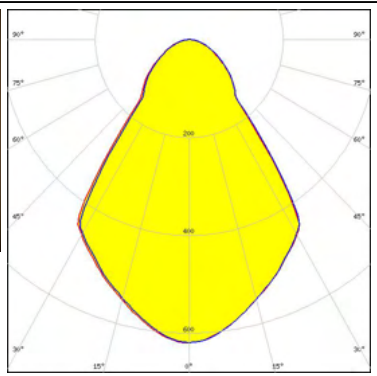
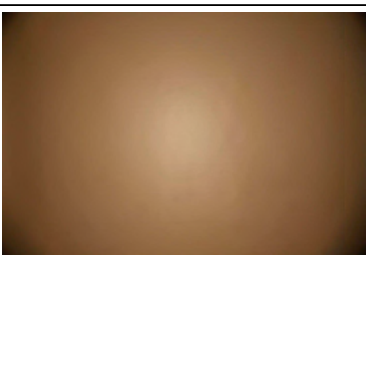
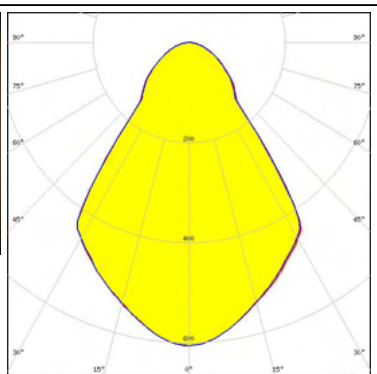


SEOUL SEMICONDUCTOR


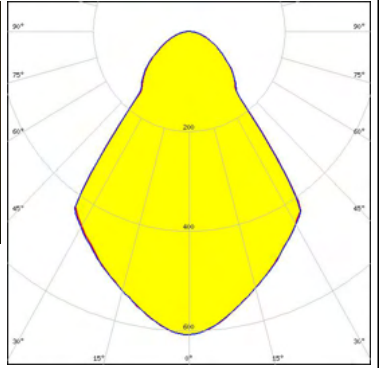

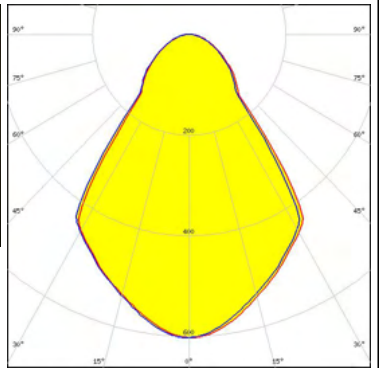
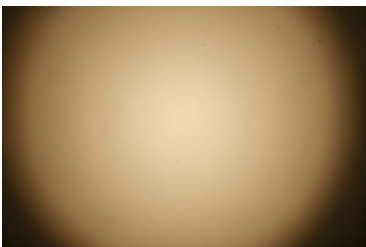
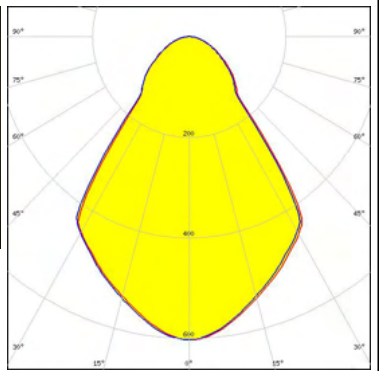
LED AC Zhaga COB
 FWHM / FWTM 72.0° / 126.0°
 Efficiency 87 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 Optosource: SEHSMJD-A




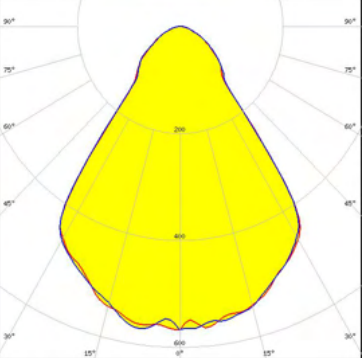

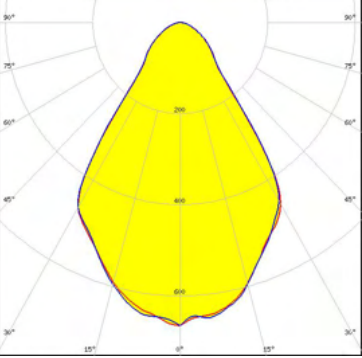

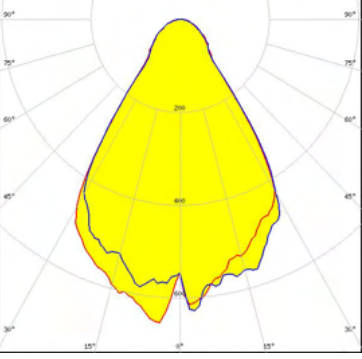

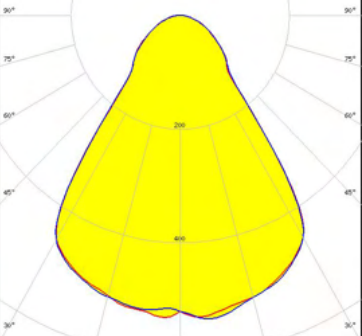
OPTICAL RESULTS (MEASURED):

<p>SEMI SEOUL SEMICONDUCTOR</p> <p>LED MJT COB LES 14.5 FWHM / FWTM 72.0° / 124.0° Efficiency 92 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-461 FWHM / FWTM 72.0° / 125.0° Efficiency 92 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-462 FWHM / FWTM 72.0° / 125.0° Efficiency 92 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-464 FWHM / FWTM 73.0° / 127.0° Efficiency 92 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

OPTICAL RESULTS (MEASURED):

<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-484 FWHM / FWTM 73.0° / 127.0° Efficiency 92 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-485 FWHM / FWTM 73.0° / 127.0° Efficiency 92 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-486 FWHM / FWTM 73.0° / 127.0° Efficiency 92 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

OPTICAL RESULTS (SIMULATED):

<p></p> <p>LED V10 Gen7 FWHM / FWTM 72.0° / 120.0° Efficiency 86 % Peak intensity 0.6 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 69.0° / 114.0° Efficiency 86 % Peak intensity 0.7 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 66.0° / 110.0° Efficiency 80 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2204-CT + 50-2100AN</p>	
<p></p> <p>LED CXA/B 1830 FWHM / FWTM 73.0° / 129.0° Efficiency 88 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>	

OPTICAL RESULTS (SIMULATED):



LED CxM-14 (19x19)
FWHM / FWTM 72.0° / 124.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 433 Typ L1



LED CxM-9 (13.5x13.5)
FWHM / FWTM 72.0° / 124.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 434 Typ L1



LED ZC12/18
FWHM / FWTM 72.0° / 124.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 433 Typ L1



LED ZC4/6
FWHM / FWTM 72.0° / 124.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 434 Typ L1

GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.

MATERIALS:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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