

## ANGELA-XW

White version with ~70° wide beam

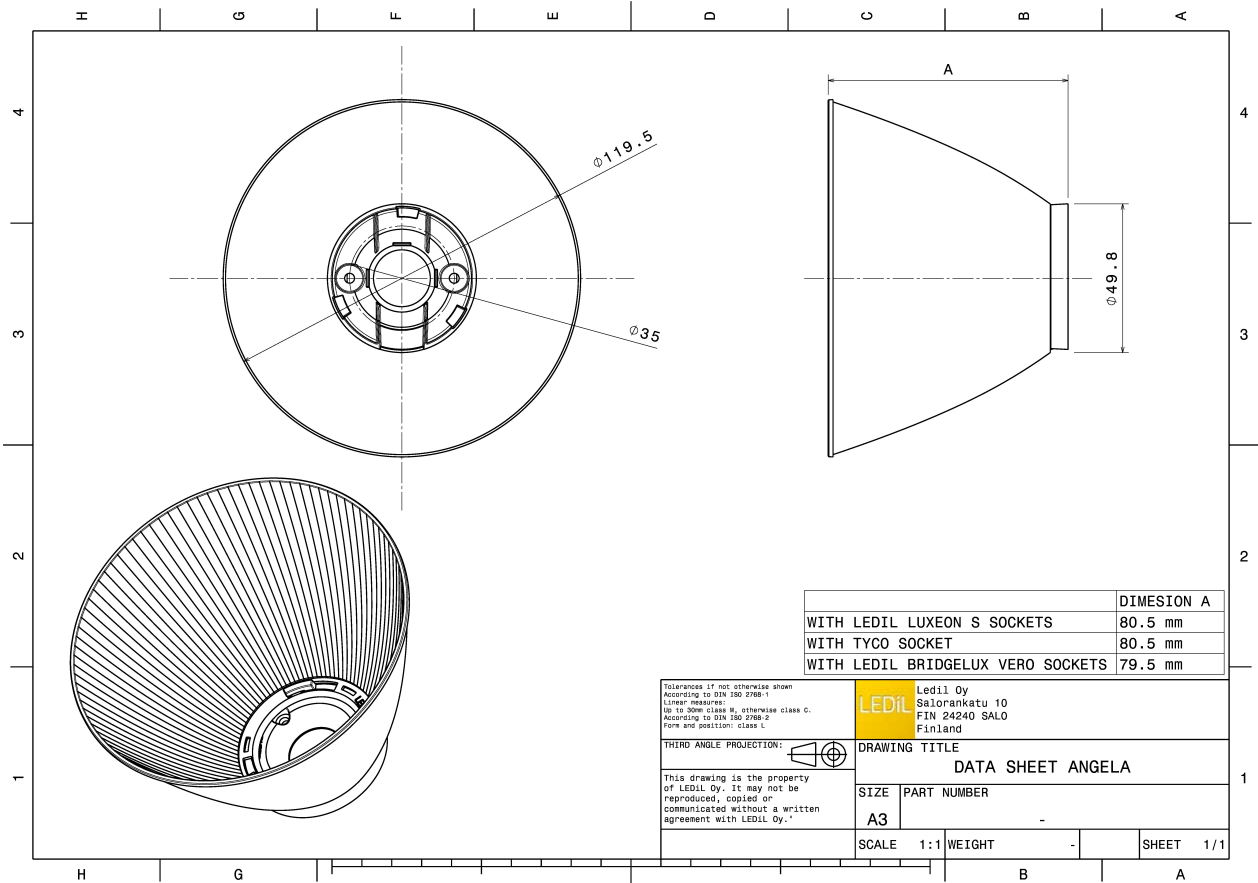
### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 119.5 mm
Height	74.3 mm
Fastening	socket
Colour	white
Box size	480 x 280 x 300 mm
Box weight	8.1 kg
Quantity in Box	180 pcs
ROHS compliant	yes ⓘ


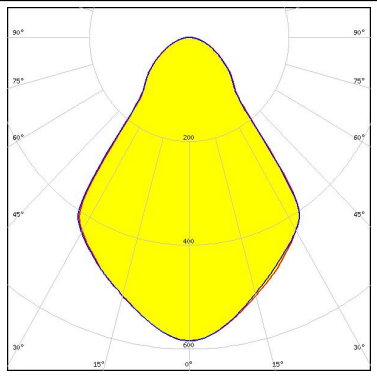
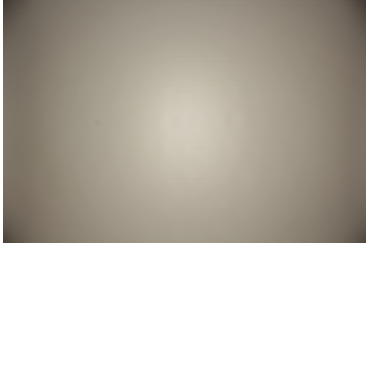
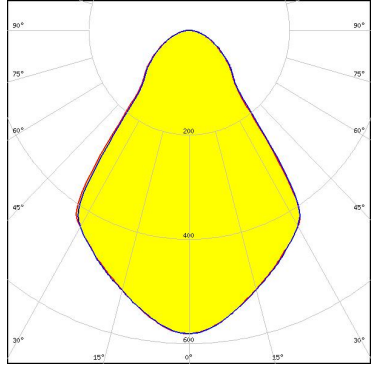
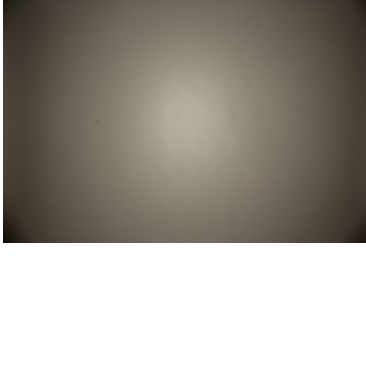
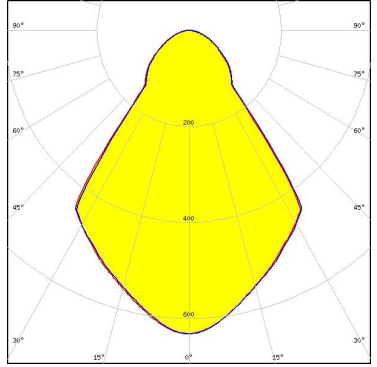

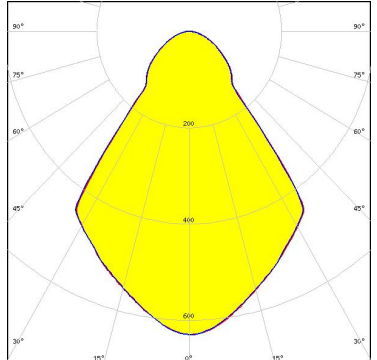


### MATERIAL SPECIFICATIONS:

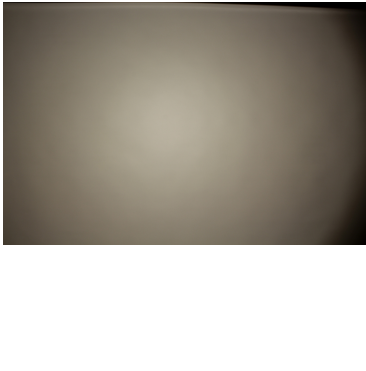
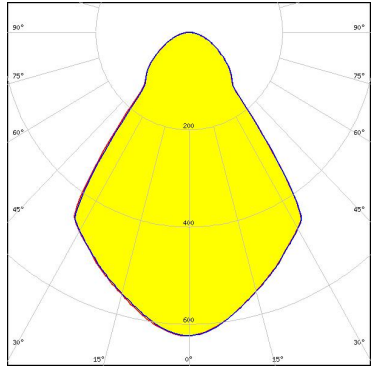
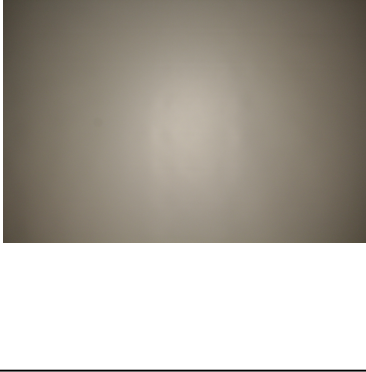
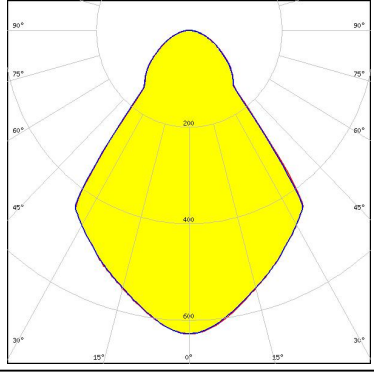
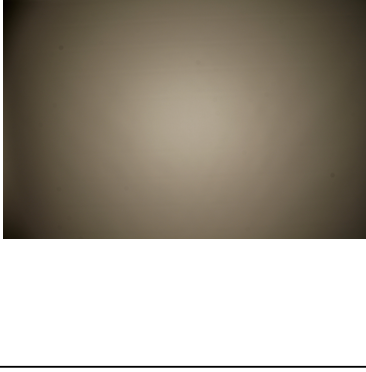
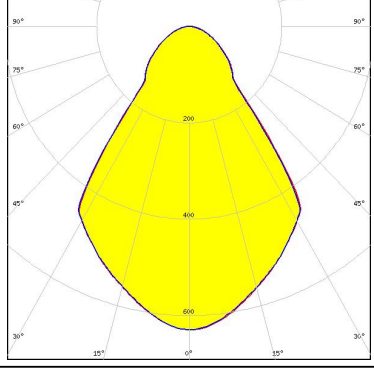

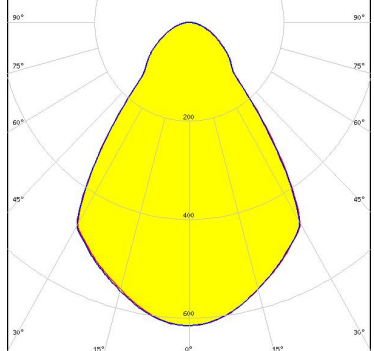
Component	Type	Material	Colour	Coating
ANGELA-XW	Reflector	HRPC	white	



#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V10 Gen7            FWHM 72.0°            Efficiency 87 %            Peak intensity 0.600 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>bridgelux.</p> <p>LED V13 Gen7            FWHM 72.0°            Efficiency 87 %            Peak intensity 0.580 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            F13671_ANGE-RZ-LENS            TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>bridgelux.</p> <p>LED V13 Gen7            FWHM 72.0°            Efficiency 92 %            Peak intensity 0.630 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>bridgelux.</p> <p>LED Vero SE 13            FWHM 73.0°            Efficiency 93 %            Peak intensity 0.600 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C16402_CLAMP-VEROSE-13-18</p>		

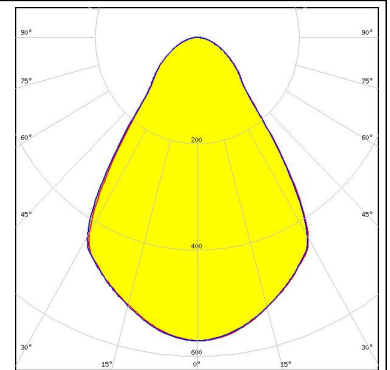
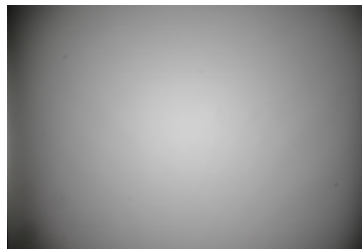
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED            Vero SE 18</p> <p>FWHM        73.0°</p> <p>Efficiency    93 %</p> <p>Peak intensity 0.620 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour    White</p> <p>Required components:</p> <p>    C16402_CLAMP-VEROSE-13-18</p>		
<p>bridgelux.</p> <p>LED            VERO13</p> <p>FWHM        73.0°</p> <p>Efficiency    93 %</p> <p>Peak intensity 0.630 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>bridgelux.</p> <p>LED            VERO18</p> <p>FWHM        72.0°</p> <p>Efficiency    93 %</p> <p>Peak intensity 0.630 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>bridgelux.</p> <p>LED            VERO29</p> <p>FWHM        72.0°</p> <p>Efficiency    94 %</p> <p>Peak intensity 0.620 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour    White</p> <p>Required components:</p> <p>    C13584_CLAMP-VERO29</p>		

#### PHOTOMETRIC DATA (MEASURED):

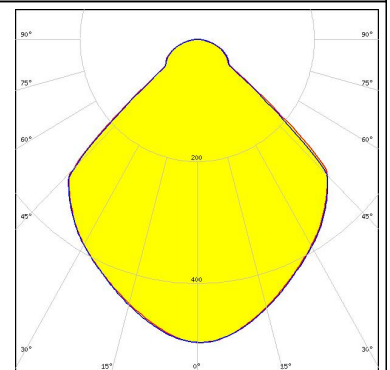
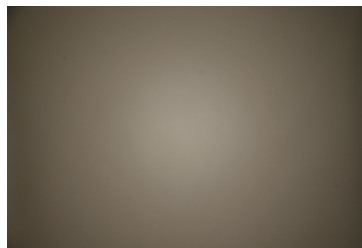
bridgelux

LED VERO29  
 FWHM 72.0°  
 Efficiency 88 %  
 Peak intensity 0.570 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS



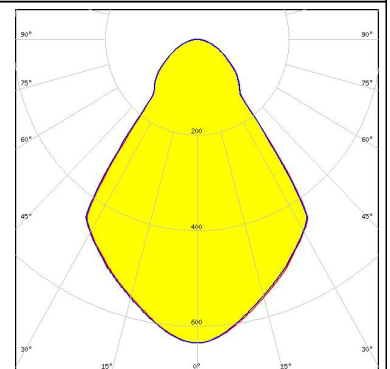
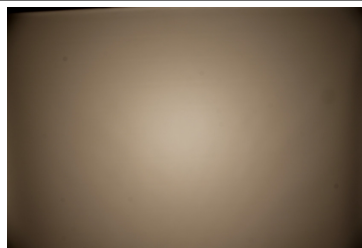
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.640 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1



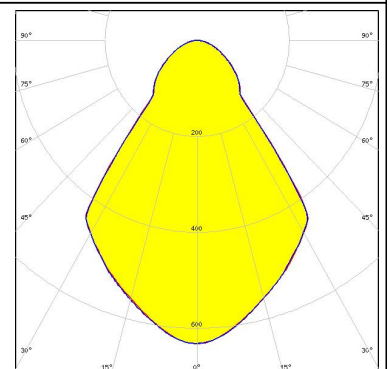
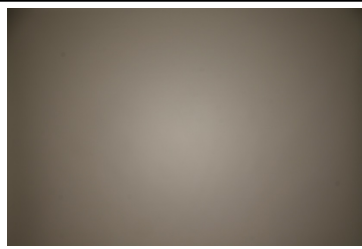
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 71.0°  
 Efficiency 92 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### CITIZEN

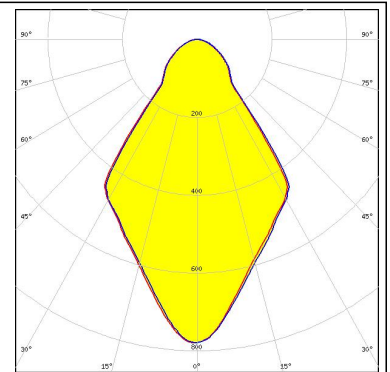
LED CLL03x/CLU03x  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 433 Typ L1



#### PHOTOMETRIC DATA (MEASURED):

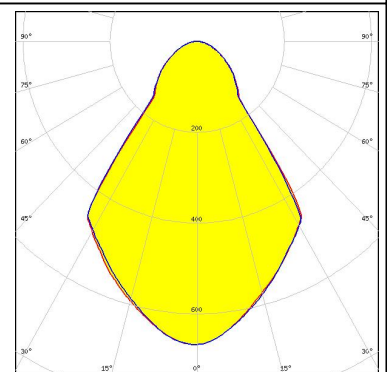
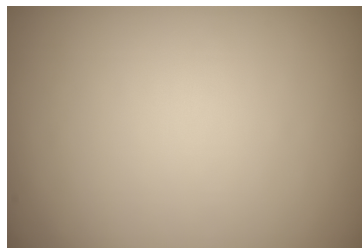
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 69.0°  
 Efficiency 94 %  
 Peak intensity 0.800 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16791\_CLAMP-Z45-A  
 TE: 2325807-3



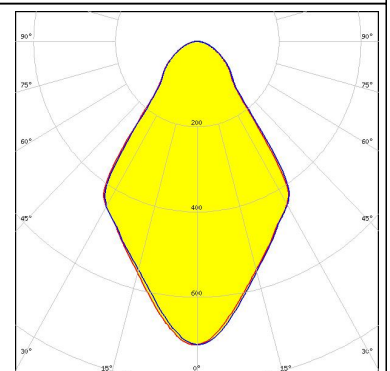
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 70.0°  
 Efficiency 93 %  
 Peak intensity 0.700 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2103CT + 50-2100AN



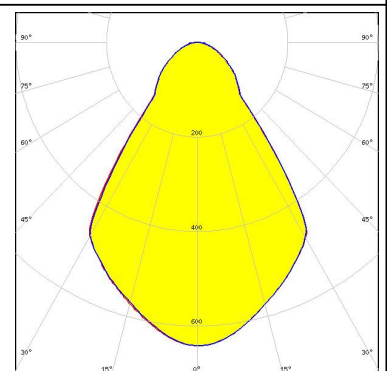
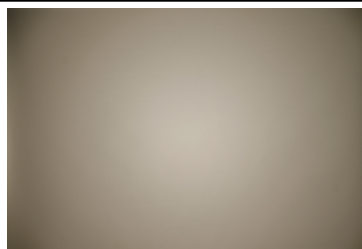
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 69.0°  
 Efficiency 90 %  
 Peak intensity 0.700 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16791\_CLAMP-Z45-A  
 F13671\_ANGE-RZ-LENS  
 TE: 2325807-3



#### CITIZEN

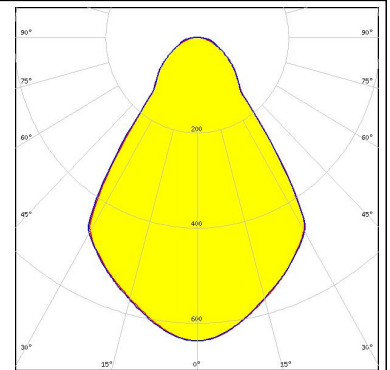
LED CLL04x/CLU04x  
 FWHM 70.0°  
 Efficiency 93 %  
 Peak intensity 0.640 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 431 Typ L3



#### PHOTOMETRIC DATA (MEASURED):

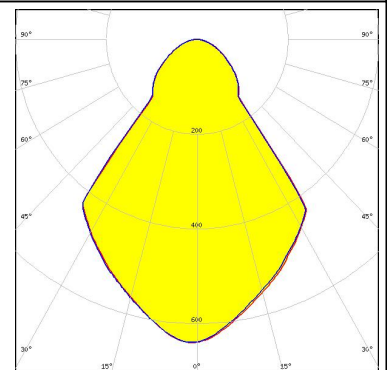
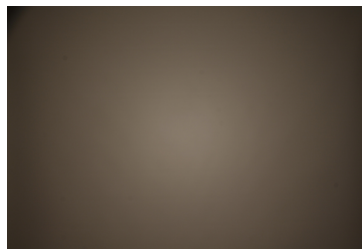
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 70.0°  
 Efficiency 93 %  
 Peak intensity 0.640 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



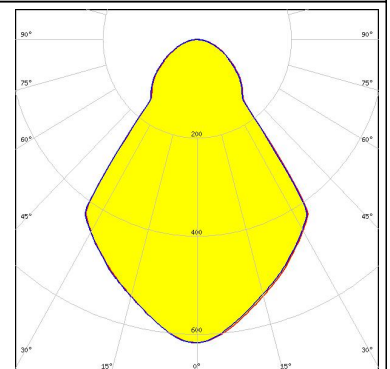
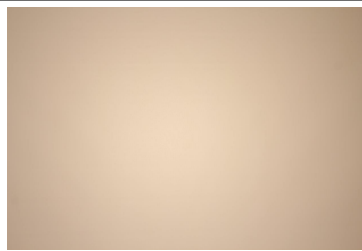
#### CITIZEN

LED CLU700/701  
 FWHM 73.0°  
 Efficiency 93 %  
 Peak intensity 0.640 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1



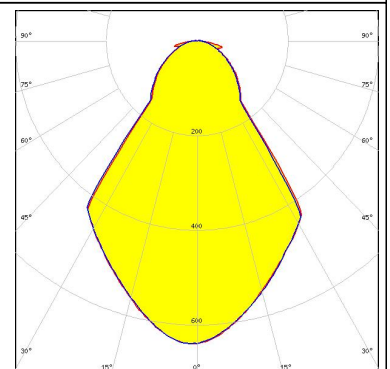
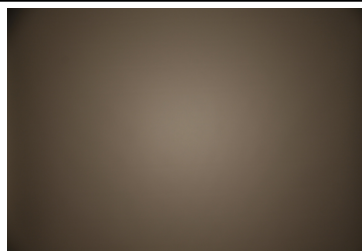
#### CITIZEN

LED CLU720/721  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.620 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### CITIZEN

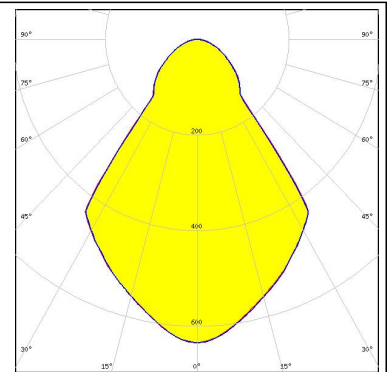
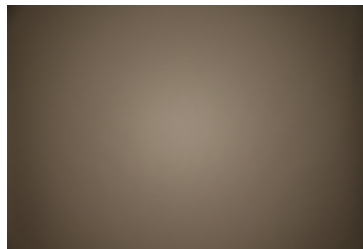
LED CLU720/721  
 FWHM 70.0°  
 Efficiency 94 %  
 Peak intensity 0.640 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2103CT + 50-2100AN



#### PHOTOMETRIC DATA (MEASURED):

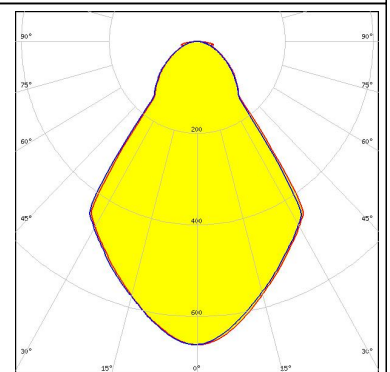
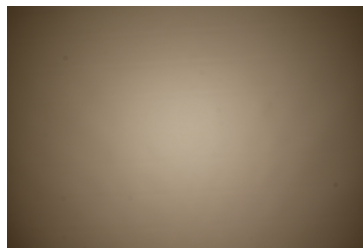
#### CITIZEN

LED CLU720/721  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.640 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 433 Typ L1



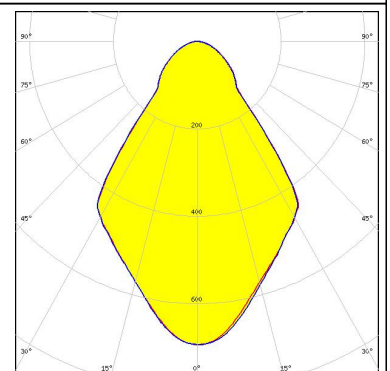
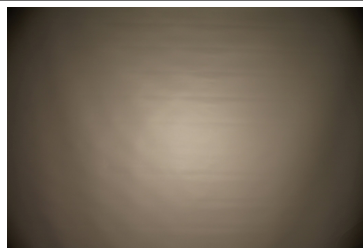
#### CITIZEN

LED CLU730/731  
 FWHM 71.0°  
 Efficiency 93 %  
 Peak intensity 0.660 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



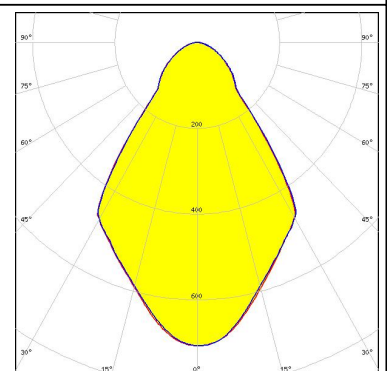
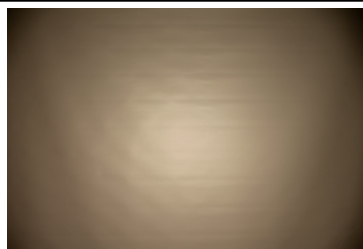
#### CREE

LED CMA2550  
 FWHM 71.0°  
 Efficiency 94 %  
 Peak intensity 0.690 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



#### CREE

LED CMA3090  
 FWHM 70.0°  
 Efficiency 94 %  
 Peak intensity 0.700 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30

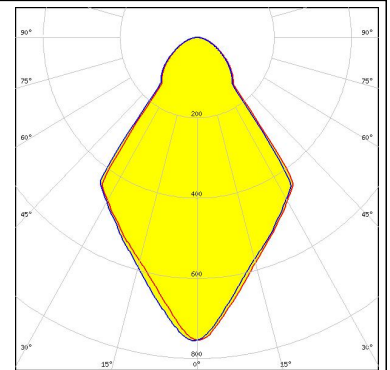




#### PHOTOMETRIC DATA (MEASURED):

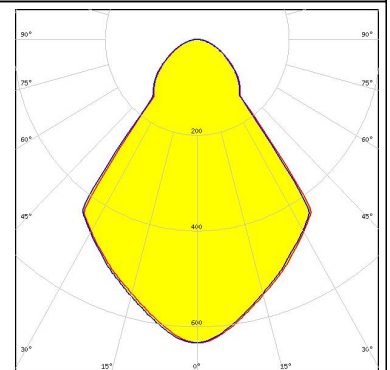
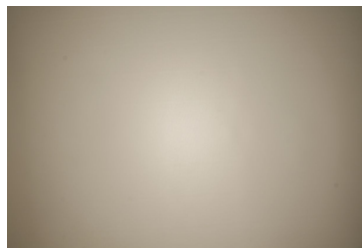
**CREE** 

LED CMT14xx  
 FWHM 71.0°  
 Efficiency 93 %  
 Peak intensity 0.750 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1



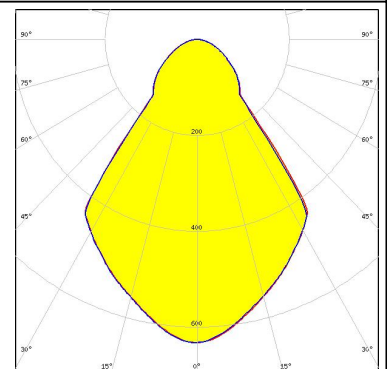
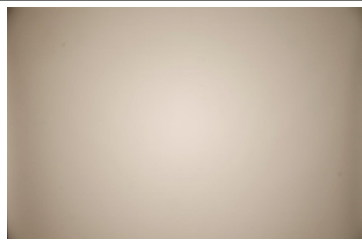
**CREE** 

LED CXA/B 15xx  
 FWHM 73.0°  
 Efficiency 93 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 441 Typ L1



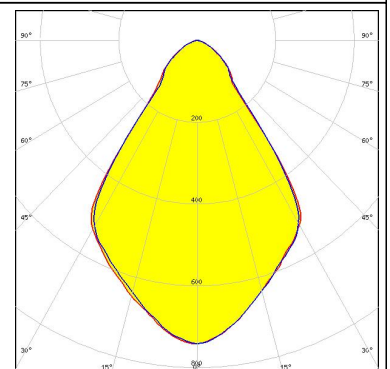
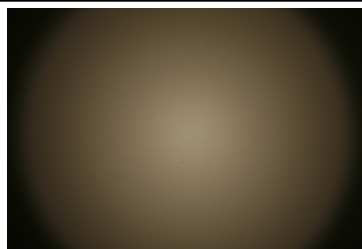
**CREE** 

LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 72.0°  
 Efficiency 92 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 437 Typ L1



**CREE** 

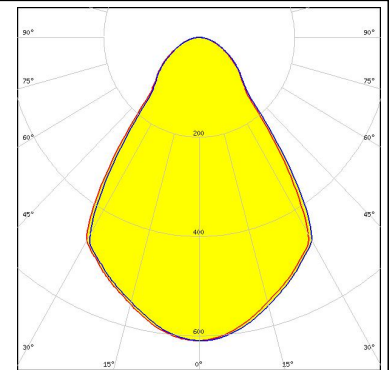
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 72.0°  
 Efficiency 94 %  
 Peak intensity 0.740 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14123\_CLAMP-CXA15-18



#### PHOTOMETRIC DATA (MEASURED):

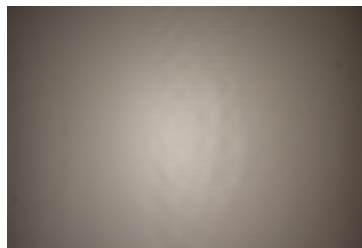
#### CREE

LED CXA/B 3590  
 FWHM 72.0°  
 Efficiency 94 %  
 Peak intensity 0.610 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2303CR + 50-2300AN



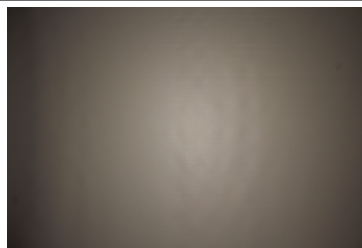
#### EVERLIGHT

LED CHI3030 19W  
 FWHM 71.0°  
 Efficiency 91 %  
 Peak intensity 0.500 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 468 Typ L3



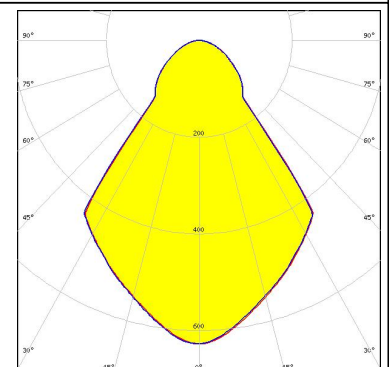
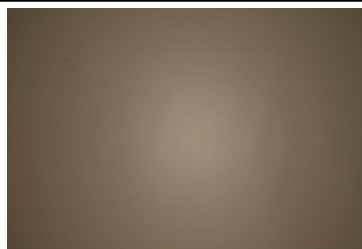
#### EVERLIGHT

LED CHI3030 29W  
 FWHM 71.0°  
 Efficiency 90 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 468 Typ L3

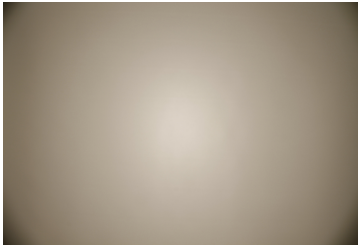
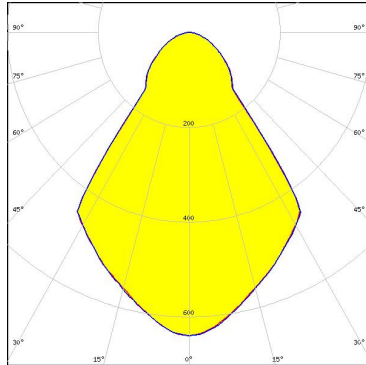
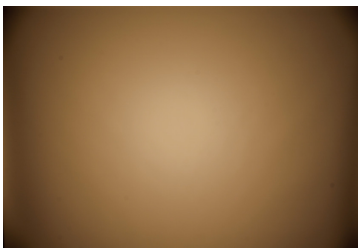
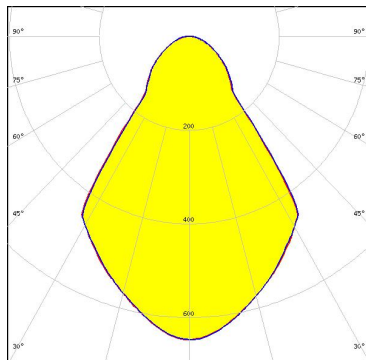
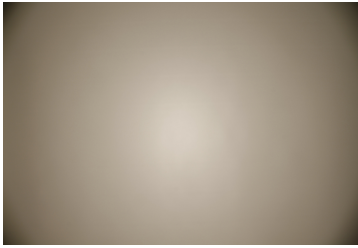
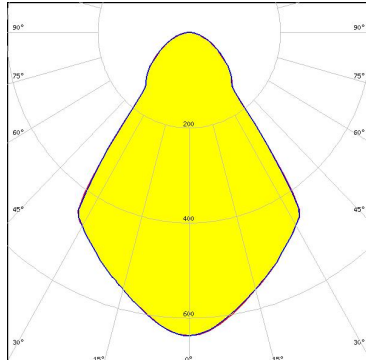
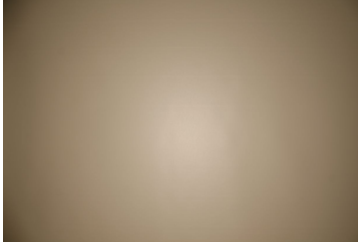
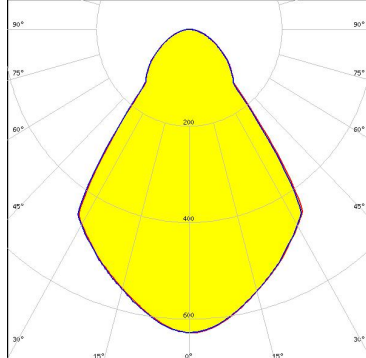


#### LUMILEDS

LED LUXEON CoB 1202/1203  
 FWHM 73.0°  
 Efficiency 93 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 438 Typ L1



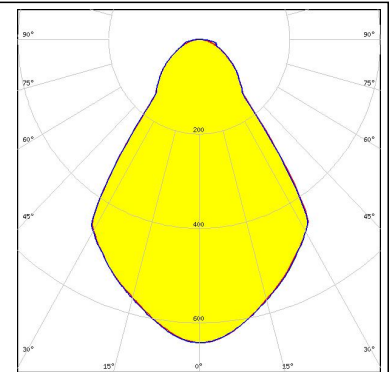
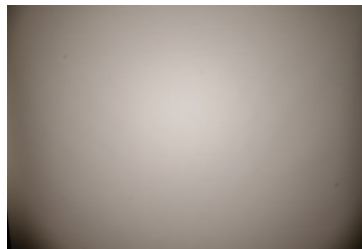
#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1204/1205</p> <p>FWHM 72.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.600 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1208</p> <p>FWHM 71.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.650 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2100SH + 50-2100AN</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1208</p> <p>FWHM 71.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.600 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1211</p> <p>FWHM 72.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.630 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>		

#### PHOTOMETRIC DATA (MEASURED):

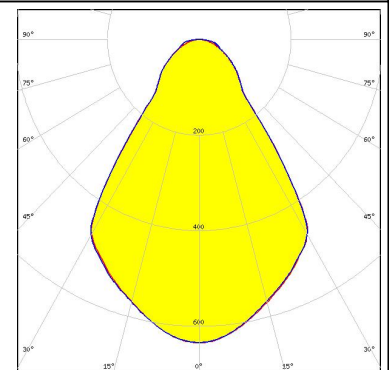
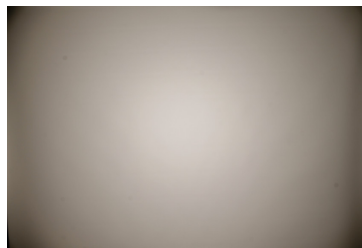
#### LUMILEDS

LED LUXEON CoB 1211  
 FWHM 71.0°  
 Efficiency 93 %  
 Peak intensity 0.640 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



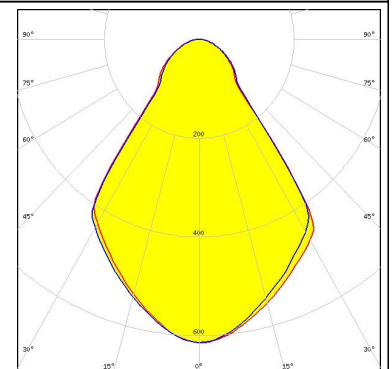
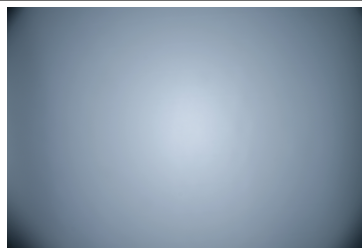
#### LUMILEDS

LED LUXEON CoB 1216/1812  
 FWHM 70.0°  
 Efficiency 93 %  
 Peak intensity 0.640 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



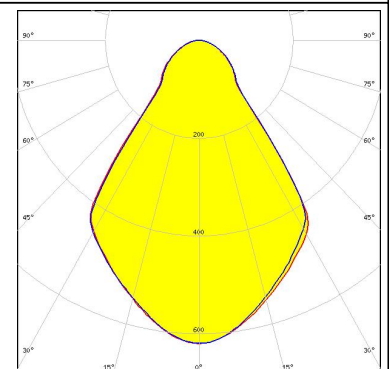
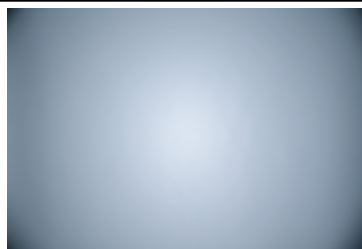
#### LUMILEDS

LED LUXEON K12  
 FWHM 72.0°  
 Efficiency 89 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1

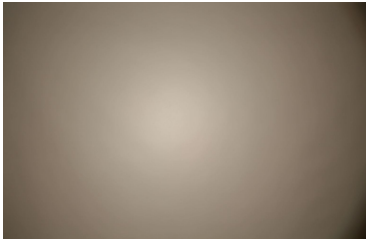
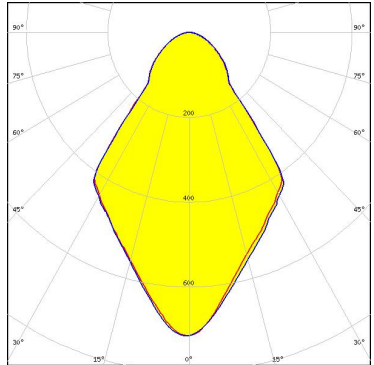
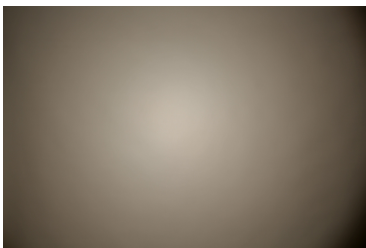
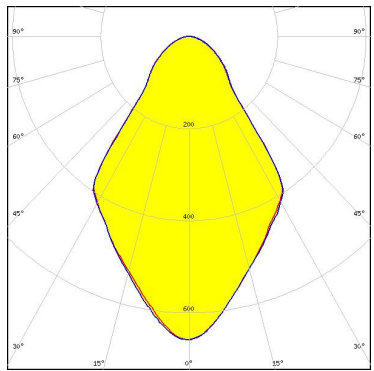

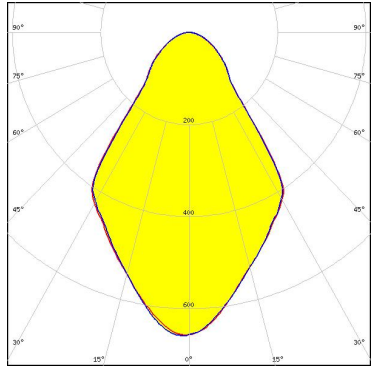

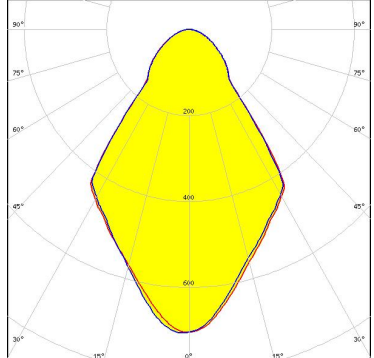


#### LUMILEDS

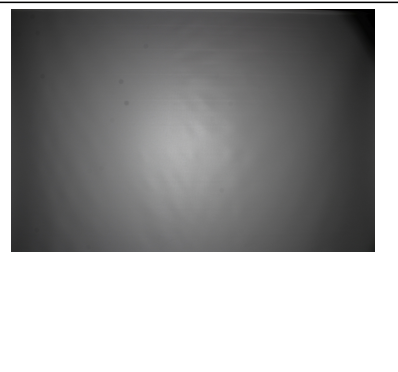
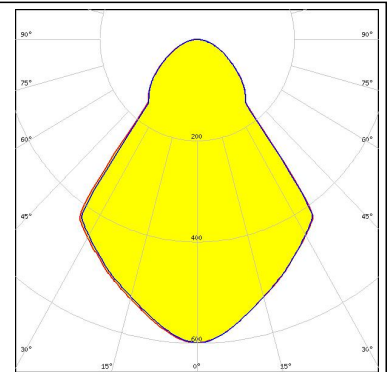

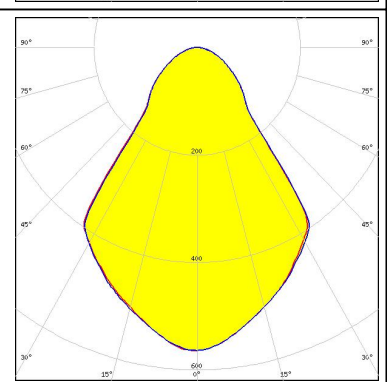

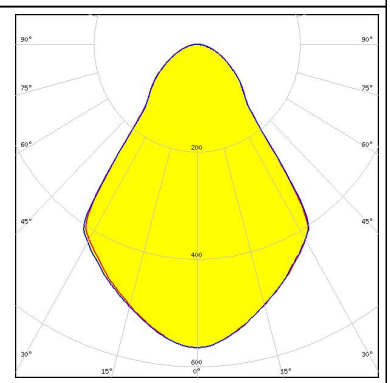
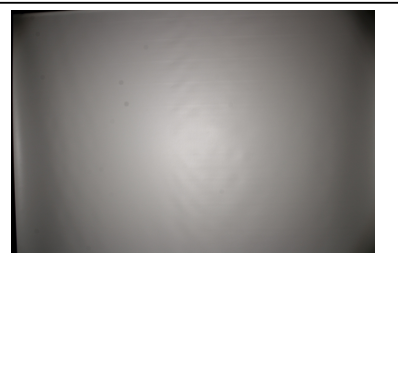
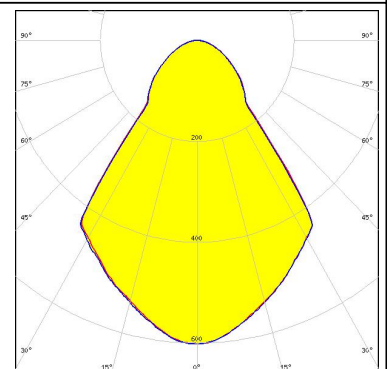
LED LUXEON K16  
 FWHM 72.0°  
 Efficiency 88 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMINUS</b></p> <p>LED CDM-14 (Dim-To-Warm)</p> <p>FWHM 71.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.700 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>		
<p><b>LUMINUS</b></p> <p>LED CDM-14 (Dim-To-Warm)</p> <p>FWHM 71.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 0.660 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: 491 Typ L2</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-18 (Dim-To-Warm)</p> <p>FWHM 70.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 0.660 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: 491 Typ L2</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-18 (Dim-To-Warm)</p> <p>FWHM 70.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.700 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>		

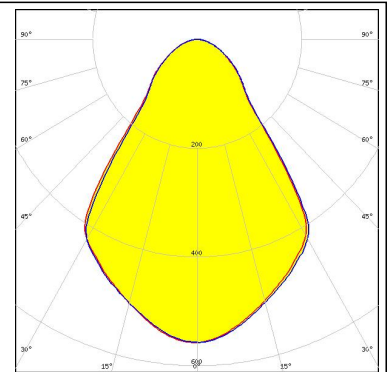
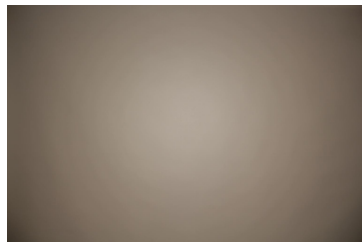
#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMINUS</b></p> <p>LED CDM-9 (Dim-To-Warm)            FWHM 73.0°            Efficiency 92 %            Peak intensity 0.600 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13658_CLAMP-VERO13-18            Bender Wirth: 490 Typ L1</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-9 (Dim-To-Warm)            FWHM 73.0°            Efficiency 86 %            Peak intensity 0.560 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13658_CLAMP-VERO13-18            F13671_ANGE-RZ-LENS            Bender Wirth: 490 Typ L1</p>		
<p><b>LUMINUS</b></p> <p>LED CTM-14 (Tunable White)            FWHM 72.0°            Efficiency 86 %            Peak intensity 0.570 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13584_CLAMP-VERO29            F13671_ANGE-RZ-LENS            Bender Wirth: 442 Typ L3</p>		
<p><b>LUMINUS</b></p> <p>LED CTM-14 (Tunable White)            FWHM 73.0°            Efficiency 92 %            Peak intensity 0.600 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13584_CLAMP-VERO29            Bender Wirth: 442 Typ L3</p>		

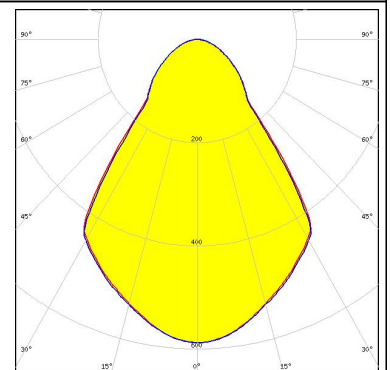
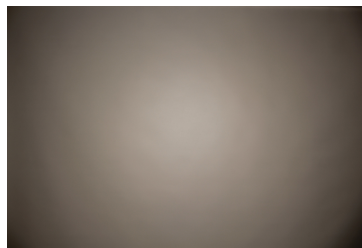
#### PHOTOMETRIC DATA (MEASURED):



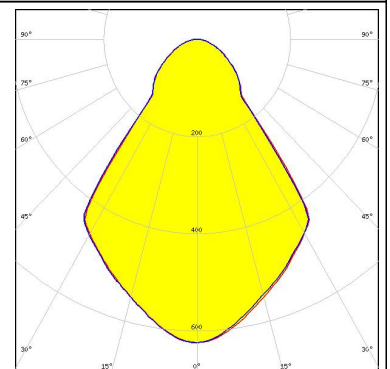
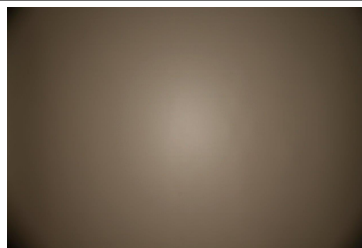
LED CTM-22 (Tunable White)  
 FWHM 72.0°  
 Efficiency 86 %  
 Peak intensity 0.560 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 494 Typ L3



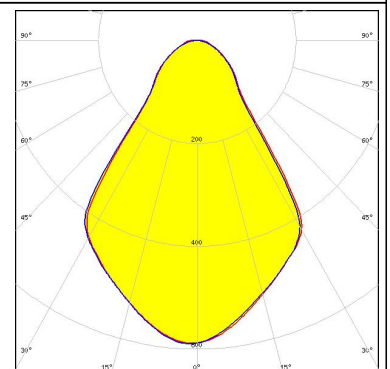
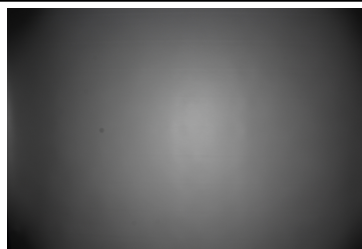
LED CTM-22 (Tunable White)  
 FWHM 73.0°  
 Efficiency 91 %  
 Peak intensity 0.590 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 494 Typ L3



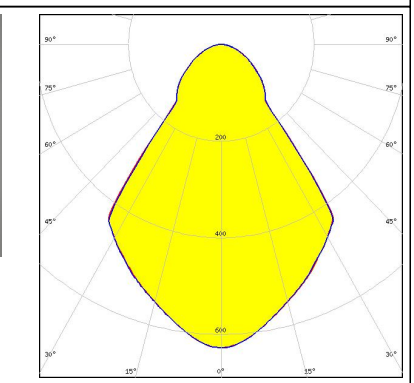

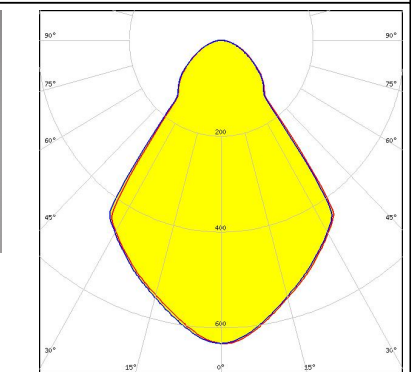
LED CXM-14  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



LED COB J-Type  
 FWHM 71.0°  
 Efficiency 87 %  
 Peak intensity 0.590 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2103NC + 50-2100AN



#### PHOTOMETRIC DATA (MEASURED):

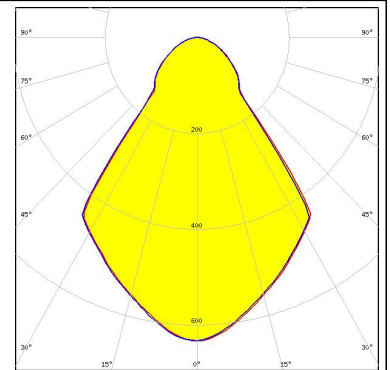
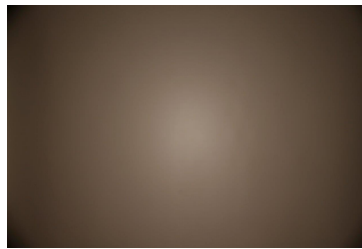
<p><b>NICHIA</b></p> <p>LED COB J-Type            FWHM 71.0°            Efficiency 91 %            Peak intensity 0.650 cd/lm            LEDs/each optic 1            Light colour White            Required components:            IDEAL: 50-2103NC + 50-2100AN</p>		
<p><b>NICHIA</b></p> <p>LED COB J-Type            FWHM 72.0°            Efficiency 93 %            Peak intensity 0.630 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13658_CLAMP-VERO13-18            Bender Wirth: 463 Typ L2</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)            FWHM 73.0°            Efficiency 93 %            Peak intensity 0.630 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13658_CLAMP-VERO13-18            Bender Wirth: 438 Typ L1</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)            FWHM 72.0°            Efficiency 92 %            Peak intensity 0.630 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		



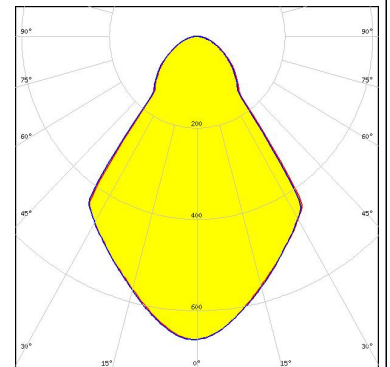
#### PHOTOMETRIC DATA (MEASURED):



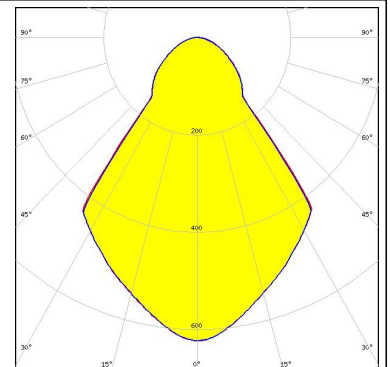
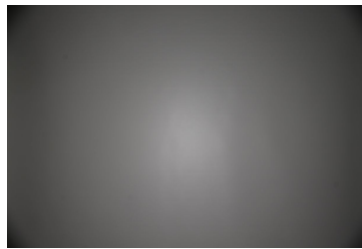
LED COB L-Type (LES 11)  
 FWHM 73.0°  
 Efficiency 94 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Molex: 180580-0005



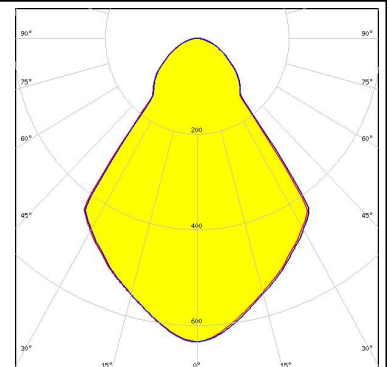
LED COB L-Type (LES 11)  
 FWHM 71.0°  
 Efficiency 92 %  
 Peak intensity 0.660 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2100NC + 50-2100AN



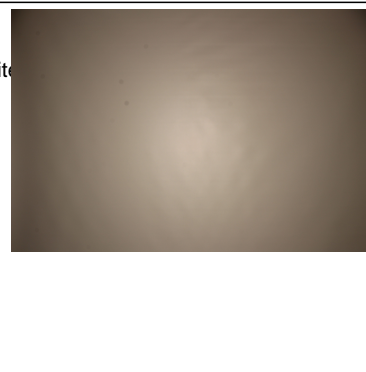
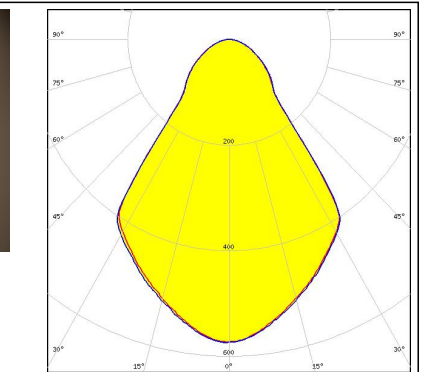
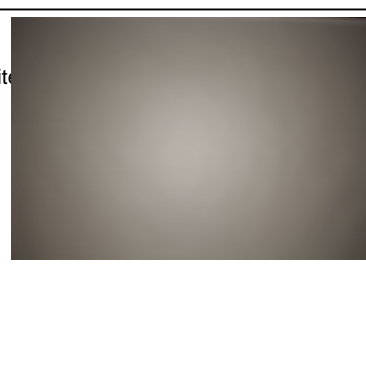
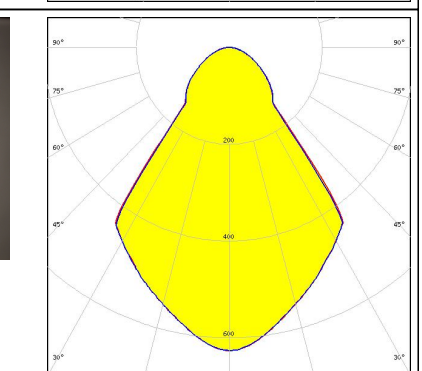

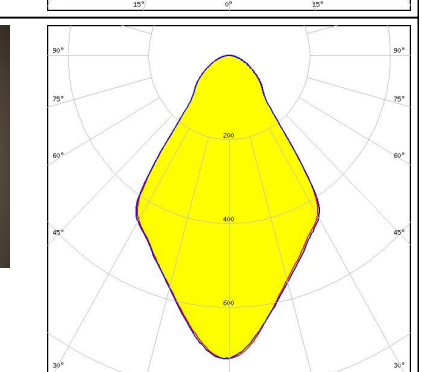
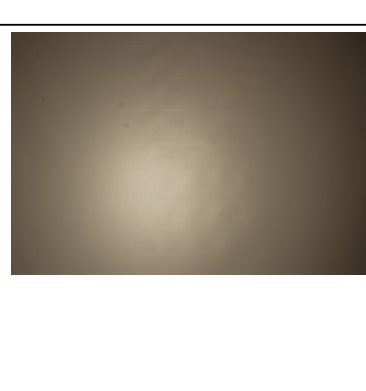
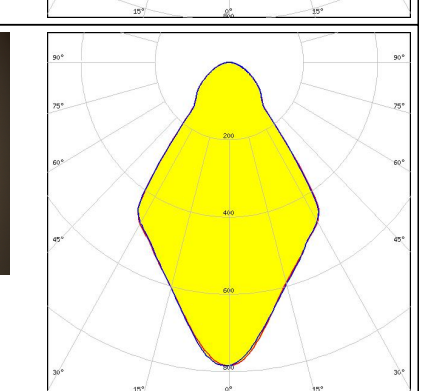
LED COB L-Type (LES 9)  
 FWHM 73.0°  
 Efficiency 94 %  
 Peak intensity 0.620 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 438 Typ L1



LED COB L-Type (LES 9)  
 FWHM 72.0°  
 Efficiency 92 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



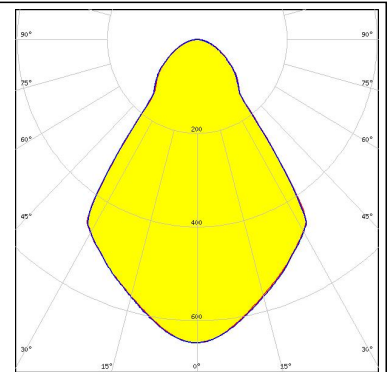
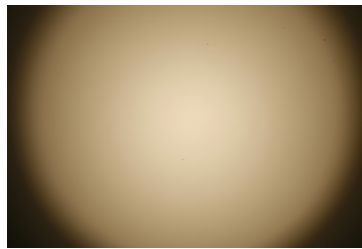
#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM 72.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 0.574 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: 498 Typ L2</p>		
<p><b>NICHIA</b></p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM 73.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.630 cd/lm</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><b>OSRAM</b></p> <p>LED PrevaLED Core G7 L15 H1</p> <p>FWHM 69.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 0.720 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16685_CLAMP-PRV-A F13671_ANGE-RZ-LENS</p>		
<p><b>OSRAM</b></p> <p>LED PrevaLED Core G7 L15 H1</p> <p>FWHM 69.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.790 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16685_CLAMP-PRV-A</p>		

#### PHOTOMETRIC DATA (MEASURED):

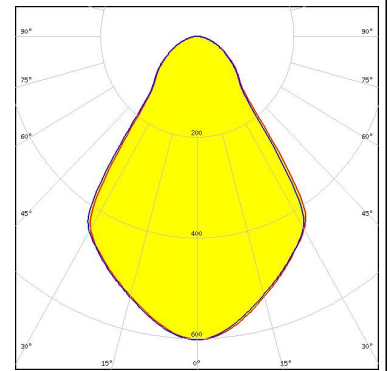
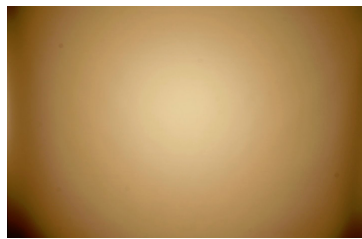
#### OSRAM

LED PrevaLED Core Z4 LES19  
 FWHM 71.0°  
 Efficiency 93 %  
 Peak intensity 0.650 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### OSRAM

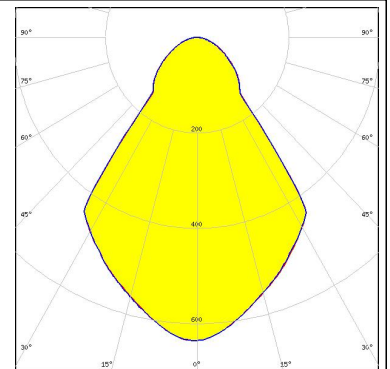
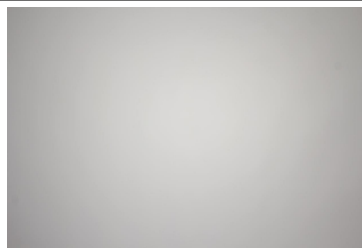
LED PrevaLED Core Z4 LES19  
 FWHM 71.0°  
 Efficiency 88 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### OSRAM

Opto Semiconductors

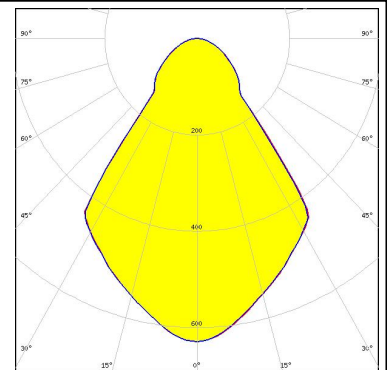
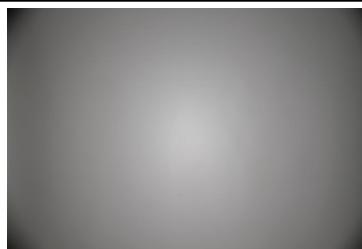
LED Soleriq S13  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.640 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 437 Typ L1




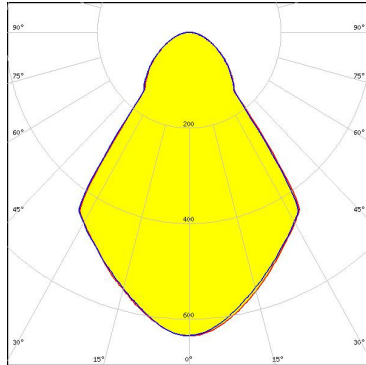
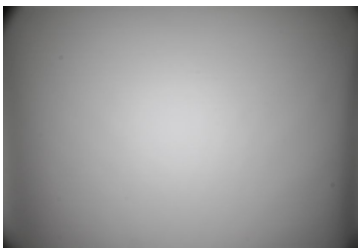
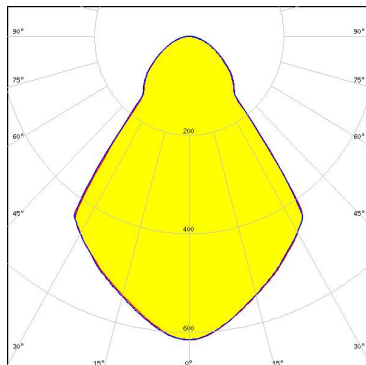
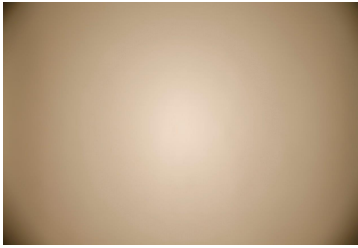
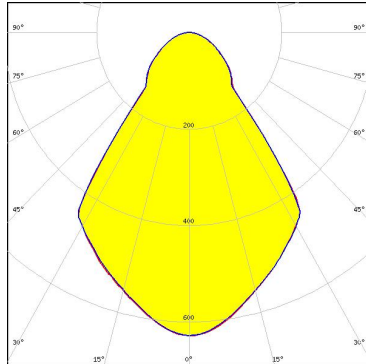
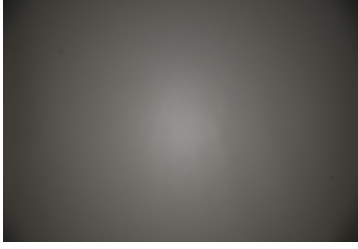
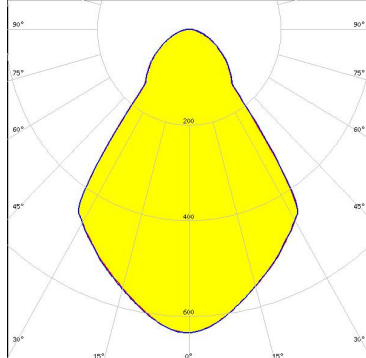
#### OSRAM

Opto Semiconductors

LED Soleriq S13  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



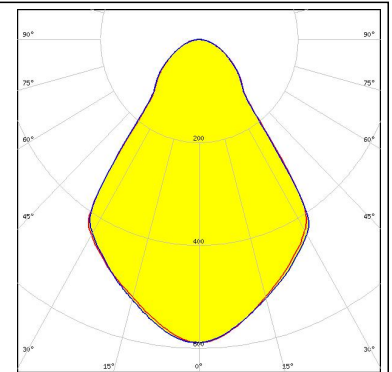
#### PHOTOMETRIC DATA (MEASURED):

<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S13 Gen2            FWHM 71.0°            Efficiency 92 %            Peak intensity 0.640 cd/lm            LEDs/each optic 1            Light colour White            Required components:            IDEAL: 50-2103CT + 50-2100AN</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S13 Gen2            FWHM 72.0°            Efficiency 92 %            Peak intensity 0.620 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S19            FWHM 72.0°            Efficiency 92 %            Peak intensity 0.630 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S19            FWHM 71.0°            Efficiency 92 %            Peak intensity 0.630 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13584_CLAMP-VERO29            Bender Wirth: 462 Typ L3</p>		

#### PHOTOMETRIC DATA (MEASURED):

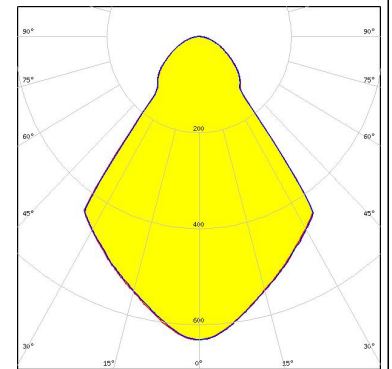
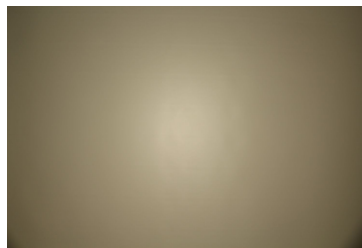
#### PHILIPS

LED Fortimo SLM 1208 L15 G6 Standard  
 FWHM 72.0°  
 Efficiency 87 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



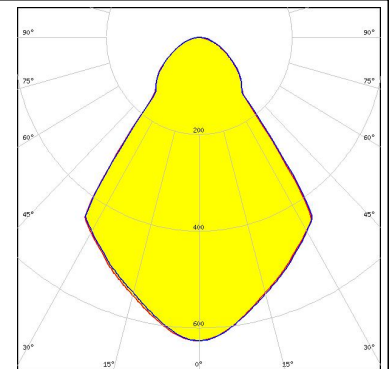
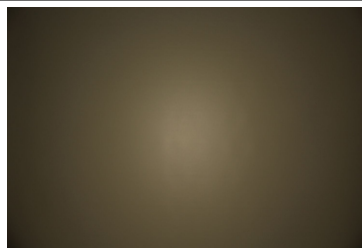
#### PHILIPS

LED Fortimo SLM L09 + SLM holder  
 FWHM 72.0°  
 Efficiency 92 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



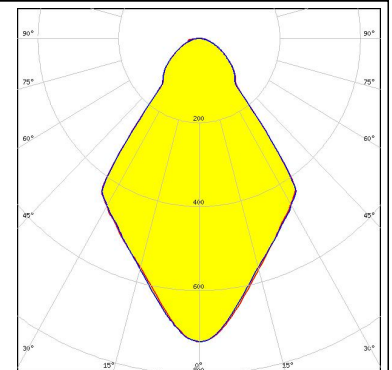
#### PHILIPS

LED Fortimo SLM L13 + SLM holder  
 FWHM 72.0°  
 Efficiency 92 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM 71.0°  
 Efficiency 93 %  
 Peak intensity 0.720 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



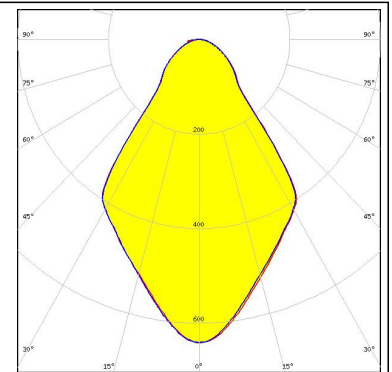
#### PHOTOMETRIC DATA (MEASURED):

#### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM 71.0°  
 Efficiency 85 %  
 Peak intensity 0.640 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

F13671\_ANGE-RZ-LENS  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1

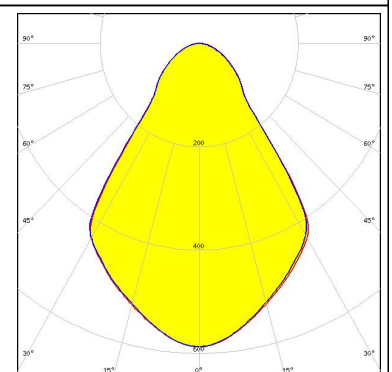
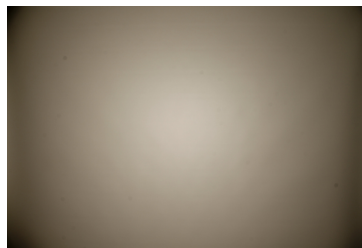


#### PHILIPS

LED Fortimo SLM L15 + SLM holder  
 FWHM 72.0°  
 Efficiency 87 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

F13671\_ANGE-RZ-LENS  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1

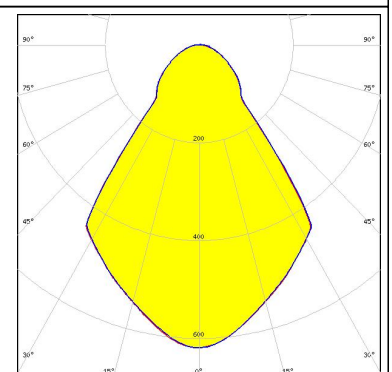
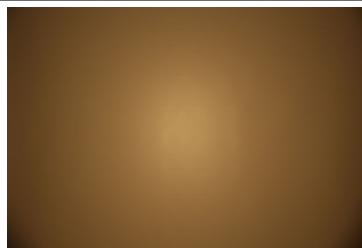


#### PHILIPS

LED Fortimo SLM L15 + SLM holder  
 FWHM 72.0°  
 Efficiency 90 %  
 Peak intensity 0.620 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1

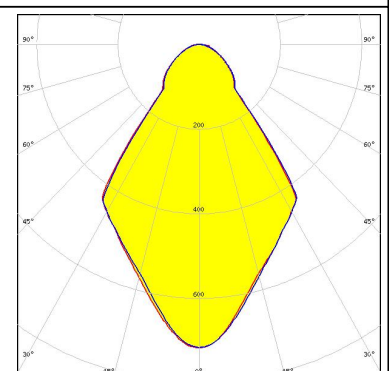
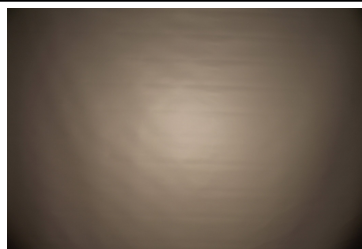


#### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM 71.0°  
 Efficiency 92 %  
 Peak intensity 0.700 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

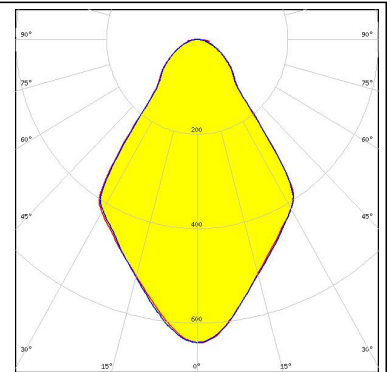


#### PHOTOMETRIC DATA (MEASURED):

#### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM 70.0°  
 Efficiency 85 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White

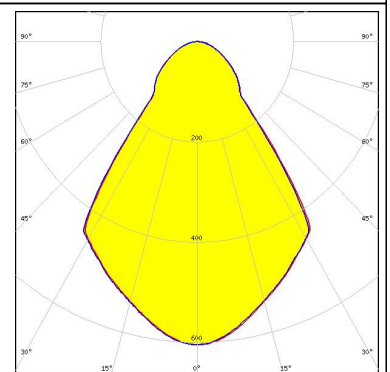
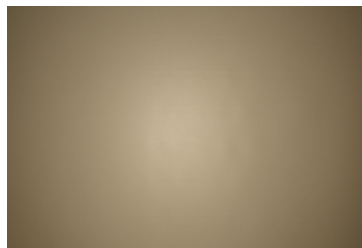
Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHILIPS

LED Fortimo SLM L19 + SLM holder  
 FWHM 72.0°  
 Efficiency 89 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White

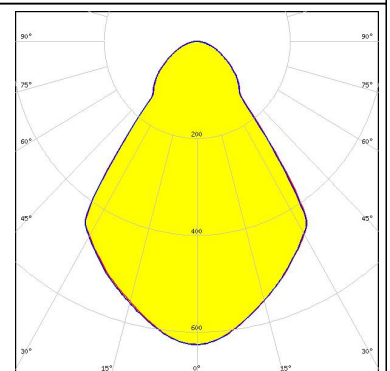
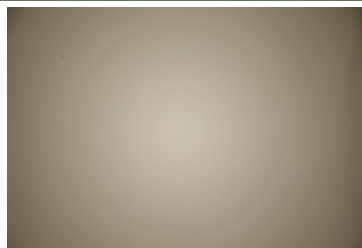
Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### SAMSUNG

LED LC026B / 033B / 040B  
 FWHM 72.0°  
 Efficiency 92 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White

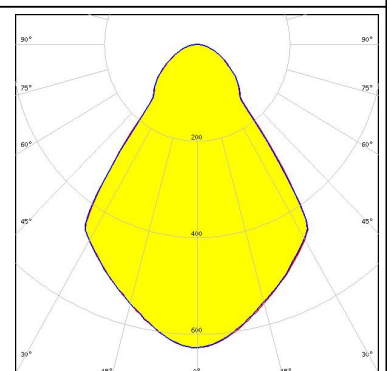
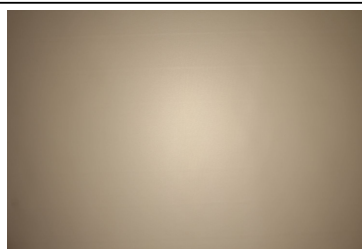
Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 450 Typ L2



#### SAMSUNG

LED LC026B / 033B / 040B  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:



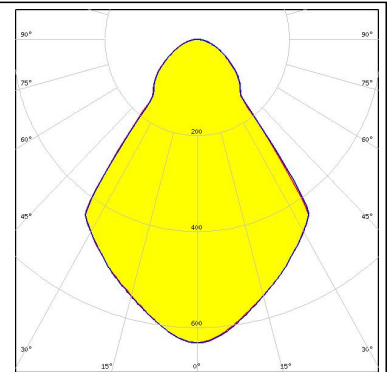
#### PHOTOMETRIC DATA (MEASURED):

### SAMSUNG

LED LC040C  
 FWHM 72.0°  
 Efficiency 92 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1

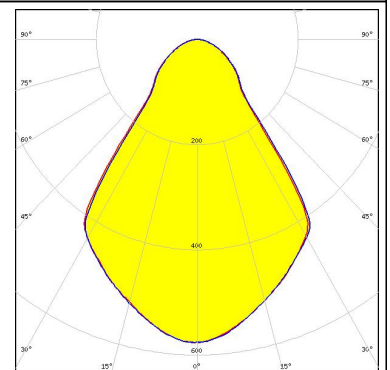
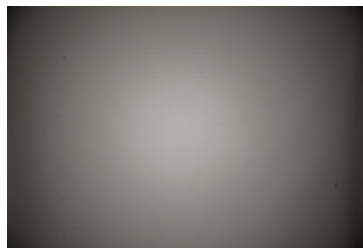


SEOUL SEMICONDUCTOR

LED AC Zhaga COB  
 FWHM 72.0°  
 Efficiency 87 %  
 Peak intensity 0.580 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

F13671\_ANGE-RZ-LENS  
 Optosource: SEHSMJD-A

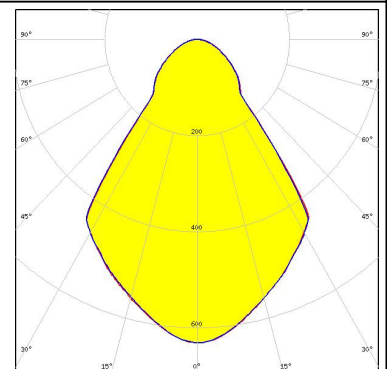
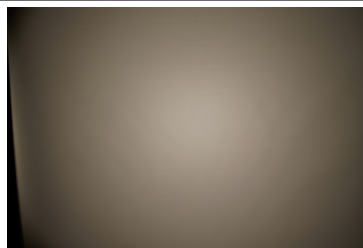


SEOUL SEMICONDUCTOR

LED MJT COB LES 14.5  
 FWHM 72.0°  
 Efficiency 92 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

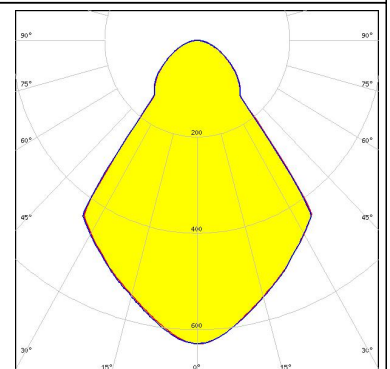
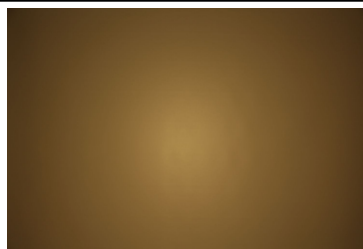


### TRIDONIC

LED SLE G5 LES11  
 FWHM 73.0°  
 Efficiency 92 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White


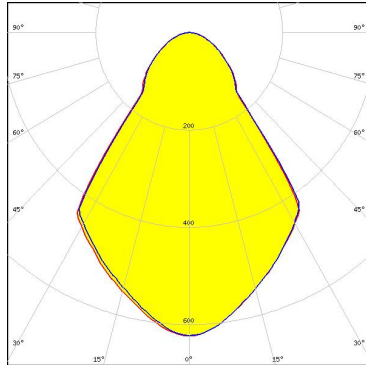
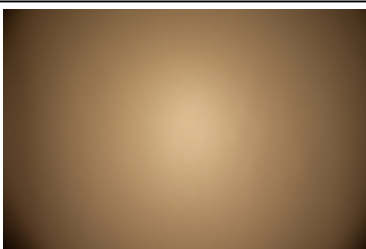
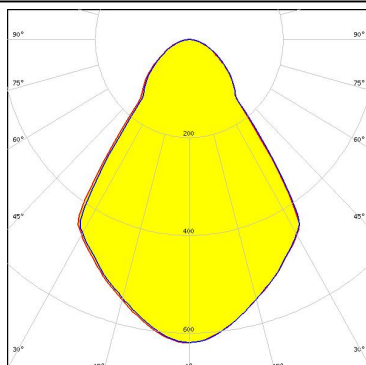
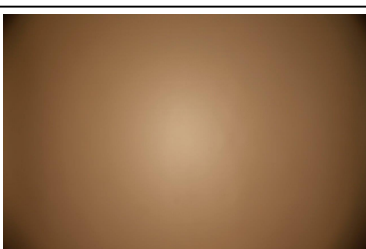
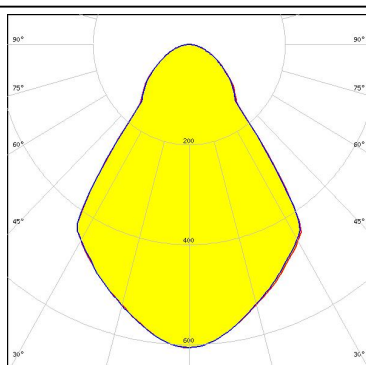
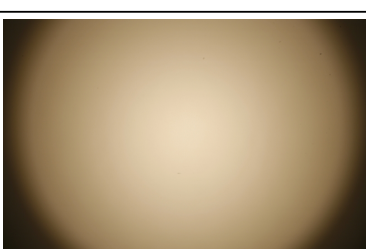
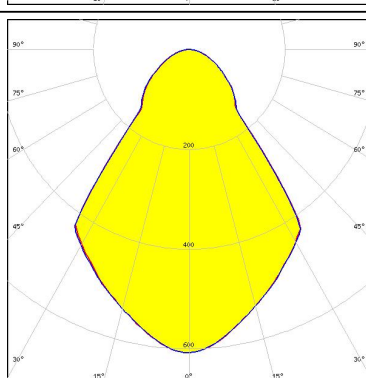
Required components:

C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1





#### PHOTOMETRIC DATA (MEASURED):

<p><b>VS LIGHTING SOLUTIONS</b></p> <p>LED WU-M-461            FWHM 72.0°            Efficiency 92 %            Peak intensity 0.600 cd/m            LEDs/each optic 1            Light colour White            Required components:            TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>VS LIGHTING SOLUTIONS</b></p> <p>LED WU-M-462            FWHM 72.0°            Efficiency 92 %            Peak intensity 0.600 cd/m            LEDs/each optic 1            Light colour White            Required components:            TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>VS LIGHTING SOLUTIONS</b></p> <p>LED WU-M-464            FWHM 73.0°            Efficiency 92 %            Peak intensity 0.600 cd/m            LEDs/each optic 1            Light colour White            Required components:            TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>VS LIGHTING SOLUTIONS</b></p> <p>LED WU-M-484            FWHM 73.0°            Efficiency 92 %            Peak intensity 0.608 cd/m            LEDs/each optic 1            Light colour White            Required components:            TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

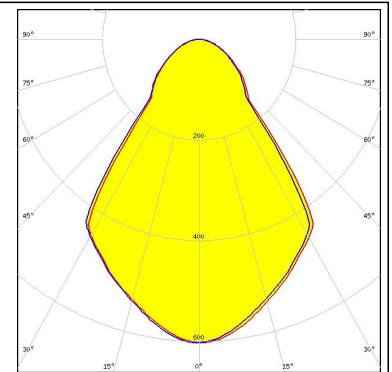
#### PHOTOMETRIC DATA (MEASURED):



LED WU-M-485  
FWHM 73.0°  
Efficiency 92 %  
Peak intensity 0.600 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

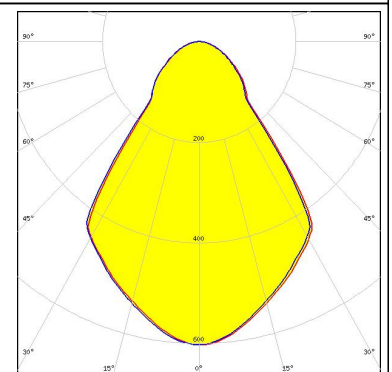
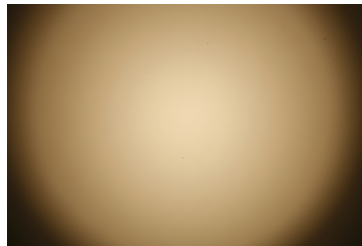
TE: OPTIC CLIP Z50 TYPE1 2213194-1



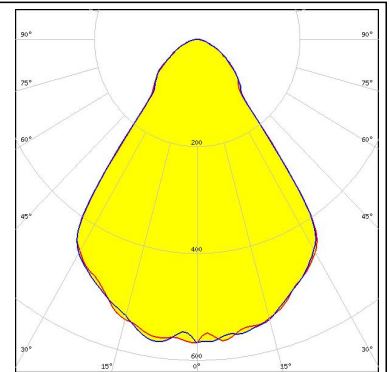
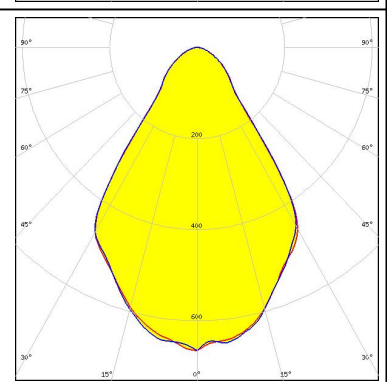
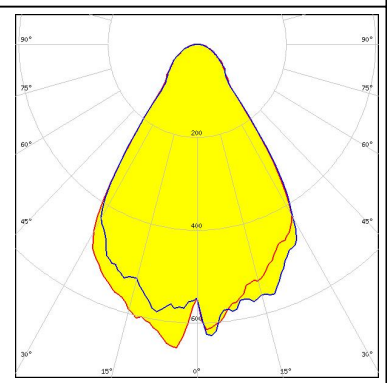
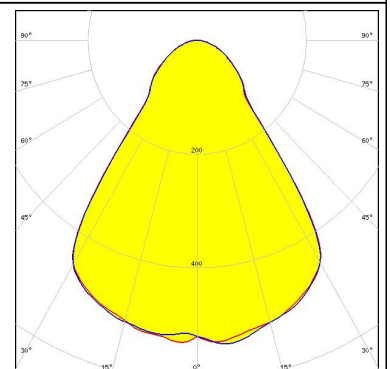
LED WU-M-486  
FWHM 73.0°  
Efficiency 92 %  
Peak intensity 0.600 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (SIMULATED):

<p><b>bridgelux.</b></p> <p>LED V10 Gen7            FWHM 72.0°            Efficiency 86 %            Peak intensity 0.580 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13658_CLAMP-VERO13-18            Bender Wirth: 486 Typ L1</p>	
<p><b>bridgelux.</b></p> <p>LED V13 Gen7            FWHM 69.0°            Efficiency 86 %            Peak intensity 0.667 cd/lm            LEDs/each optic 1            Light colour White            Required components:            IDEAL: 50-2103CT + 50-2100AN</p>	
<p><b>bridgelux.</b></p> <p>LED V22 Gen7            FWHM 66.0°            Efficiency 80 %            Peak intensity 0.658 cd/lm            LEDs/each optic 1            Light colour White            Required components:            IDEAL: 50-2204-CT + 50-2100AN</p>	
<p><b>CREE</b> ⇄</p> <p>LED CXA/B 1830            FWHM 73.0°            Efficiency 88 %            Peak intensity 0.540 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>	

#### PHOTOMETRIC DATA (SIMULATED):



LED CXM-14  
FWHM 72.0°  
Efficiency 93 %  
Peak intensity 0.630 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 433 Typ L1



LED CXM-9  
FWHM 72.0°  
Efficiency 93 %  
Peak intensity 0.640 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 434 Typ L1



SEOUL SEMICONDUCTOR

LED ZC12/18  
FWHM 72.0°  
Efficiency 93 %  
Peak intensity 0.630 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 433 Typ L1



SEOUL SEMICONDUCTOR

LED ZC4/6  
FWHM 72.0°  
Efficiency 93 %  
Peak intensity 0.640 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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