

## ANGELETTE-WAS

Asymmetric wall-washer beam

### SPECIFICATION:

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

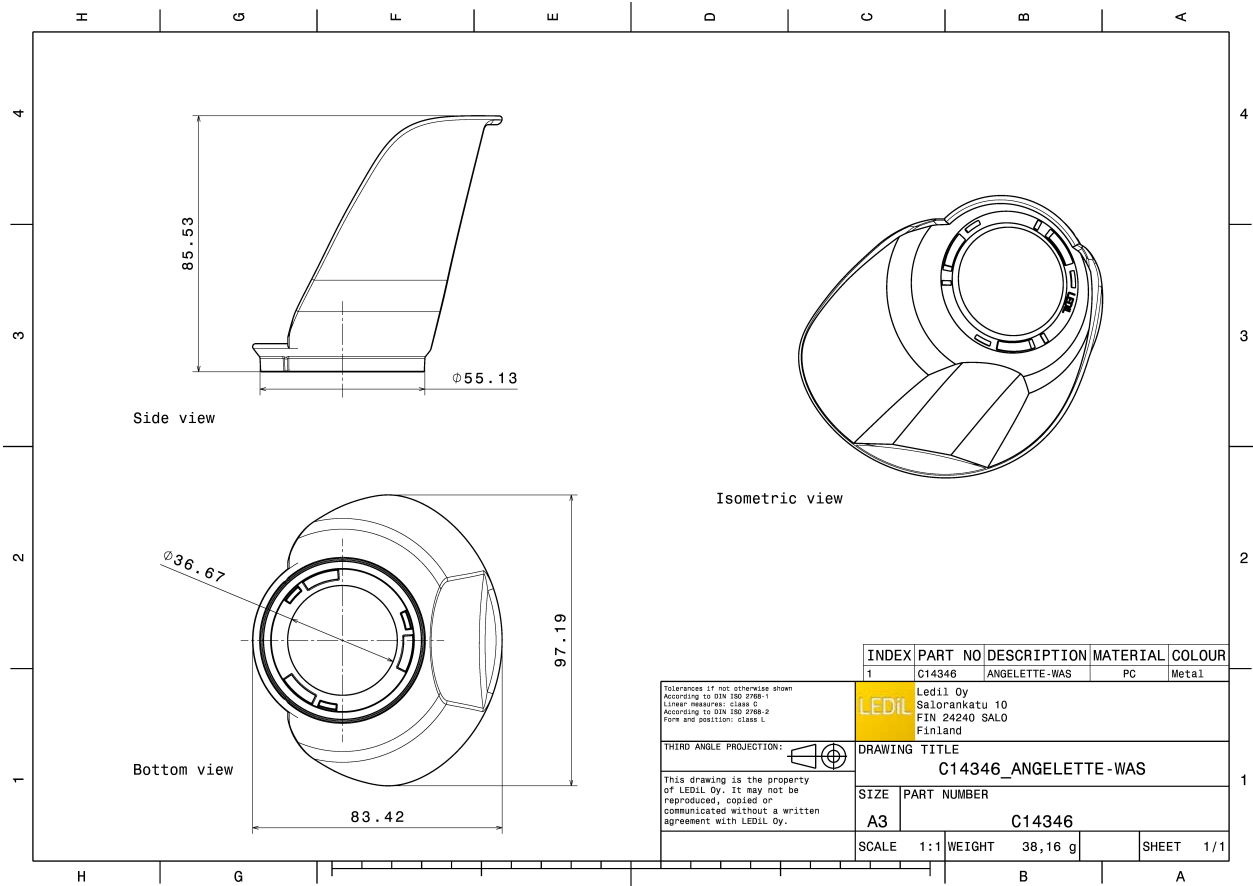
### MATERIALS:

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



### ORDERING INFORMATION:

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




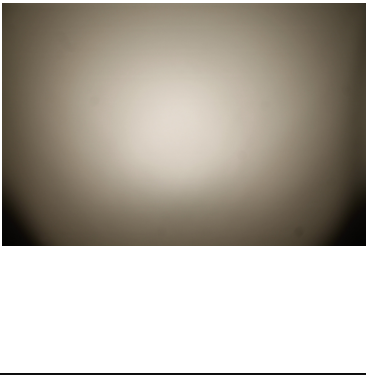
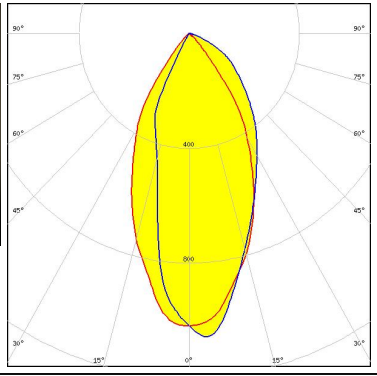

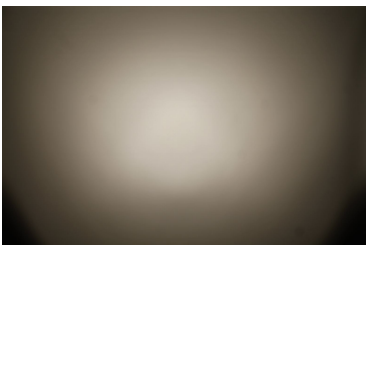
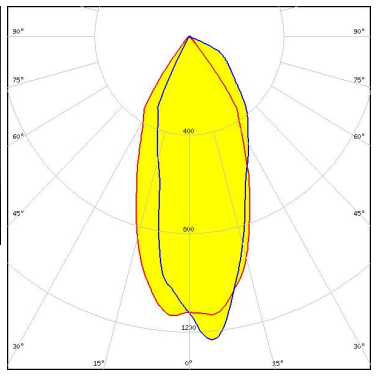


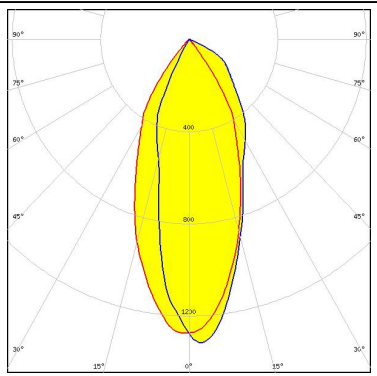


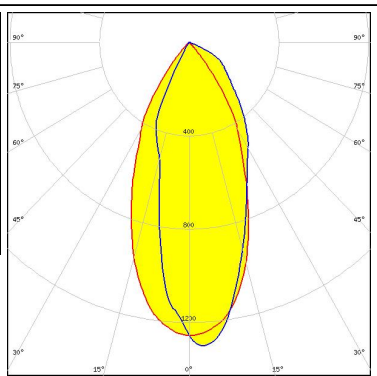
INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	C14346	ANGELETTE-WAS	PC	Metal


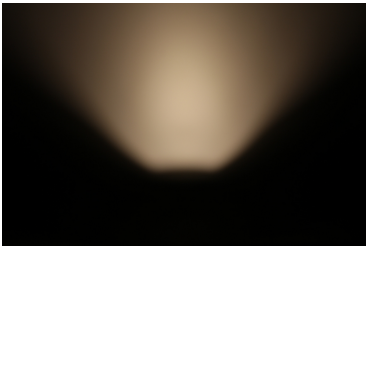
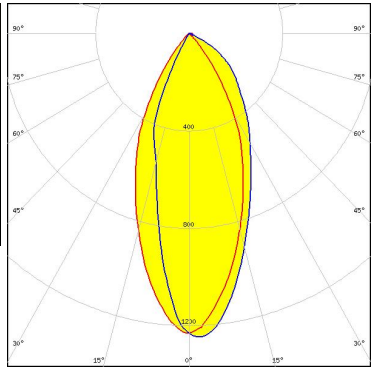

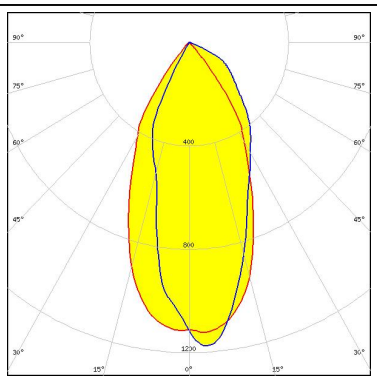

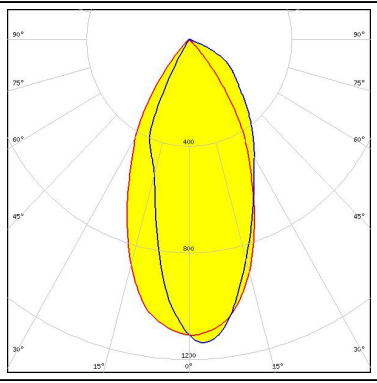


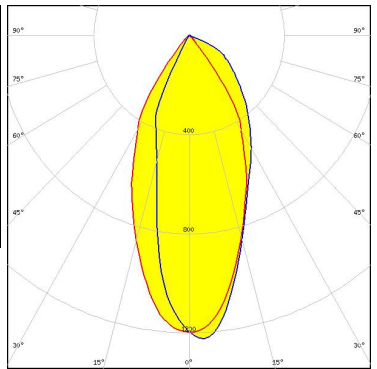
<small>Tolerances if not otherwise shown According to DIN ISO 2768-1 Linear measures: class C According to DIN ISO 2768-2 Form and position: class L</small>			Ledil Oy Salorankatu 10 FIN 24240 SALO Finland
<small>THIRD ANGLE PROJECTION:</small>			DRAWING TITLE C14346_ANGELETTE-WAS
<small>This drawing is the property of LEDiL Oy. It may not be reproduced, copied or communicated without a written agreement with LEDiL Oy.</small>	SIZE A3	PART NUMBER C14346	SCALE 1:1 WEIGHT 38,16 g SHEET 1/1

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


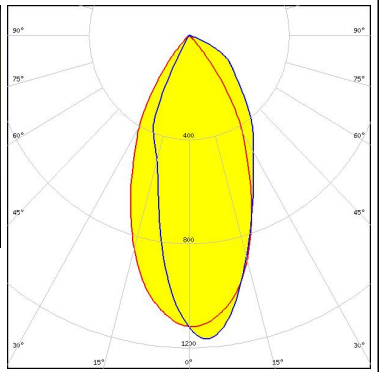

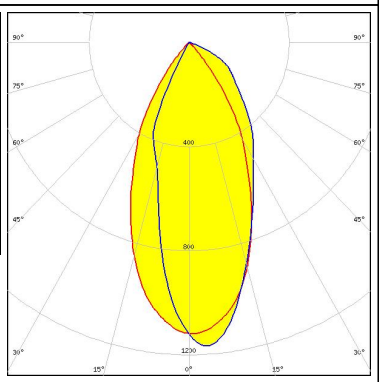

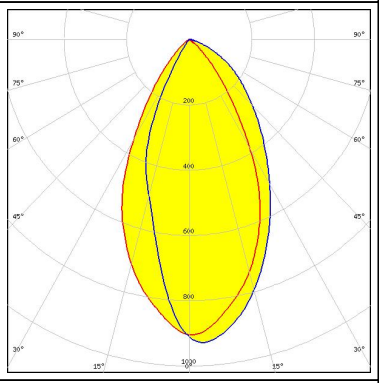

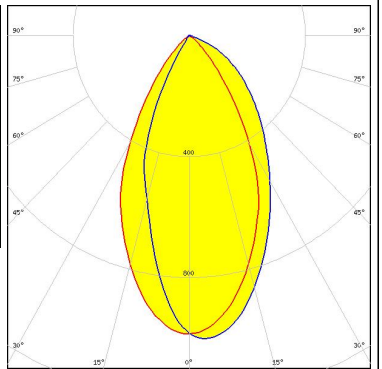
#### OPTICAL RESULTS (MEASURED):

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


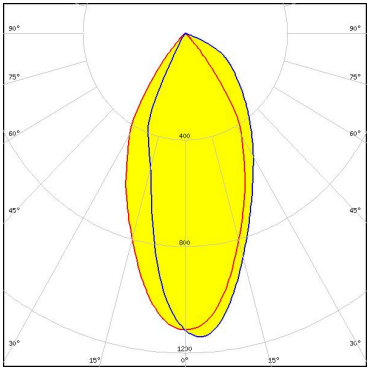

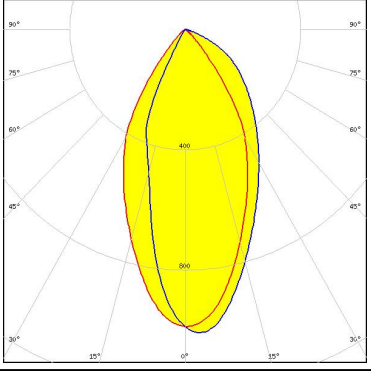

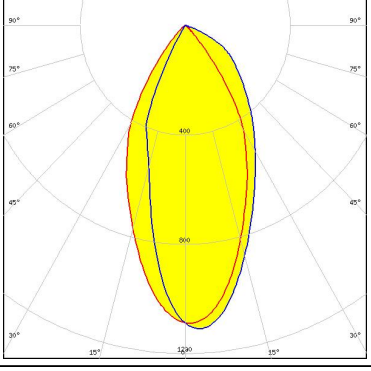

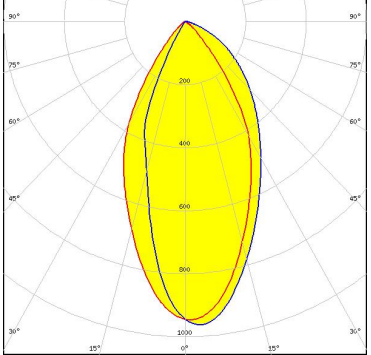
#### OPTICAL RESULTS (MEASURED):

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

#### OPTICAL RESULTS (MEASURED):

<p>bridgelux.</p> <p>LED VERO18</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 90 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO18</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO29</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 85 %</p> <p>Peak intensity 0.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED VERO29</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 92 %</p> <p>Peak intensity 1 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 Vesta TW 15mm DP</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13658_CLAMP-VERO13-18</p> <p>Bender Wirth: 482 Typ L2</p>	
<p></p> <p>LED Vesta TW 15mm DP</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 88 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13658_CLAMP-VERO13-18</p> <p>F13671_ANGE-RZ-LENS</p> <p>Bender Wirth: 482 Typ L2</p>	
<p></p> <p>LED Vesta TW 18mm (31W) DP</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components:</p> <p>C13584_CLAMP-VERO29</p> <p>Bender Wirth: 483 Typ L3</p>	
<p></p> <p>LED Vesta TW 18mm (31W) DP</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 86 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components:</p> <p>C13584_CLAMP-VERO29</p> <p>F13671_ANGE-RZ-LENS</p> <p>Bender Wirth: 483 Typ L3</p>	

#### OPTICAL RESULTS (MEASURED):

**bridgelux.**

LED Vesta TW 22mm DP  
 FWHM / FWTM Asymmetric  
 Efficiency 87 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White

Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 494 Typ L3



**bridgelux.**

LED Vesta TW 22mm DP  
 FWHM / FWTM Asymmetric  
 Efficiency 91 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White

Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 494 Typ L3



### CITIZEN

LED CLL03x/CLU03x  
 FWHM / FWTM Asymmetric  
 Efficiency 91 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White


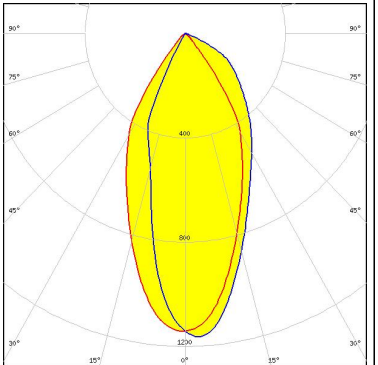
Required components:  
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1




### CITIZEN

LED CLL03x/CLU03x  
 FWHM / FWTM Asymmetric  
 Efficiency 93 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White

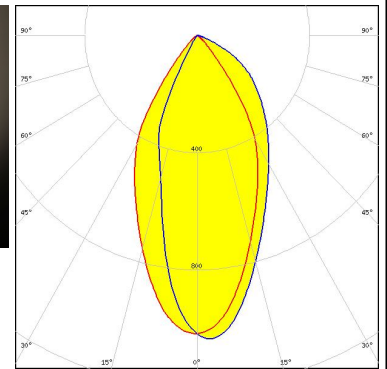
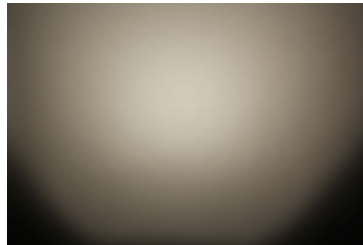
Required components:  
 C16791\_CLAMP-Z45-A  
 TE Connectivity: 2325807-3

#### OPTICAL RESULTS (MEASURED):

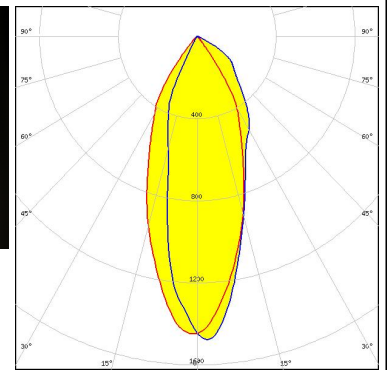
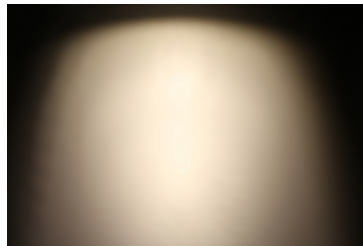
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM / FWTM Asymmetric  
 Efficiency 89 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16791\_CLAMP-Z45-A  
 F13671\_ANGE-RZ-LENS  
 TE Connectivity: 2325807-3



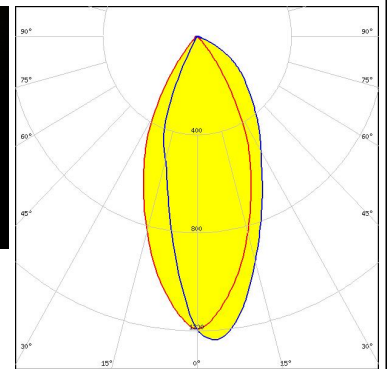
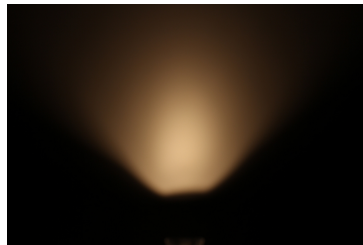
#### CITIZEN

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



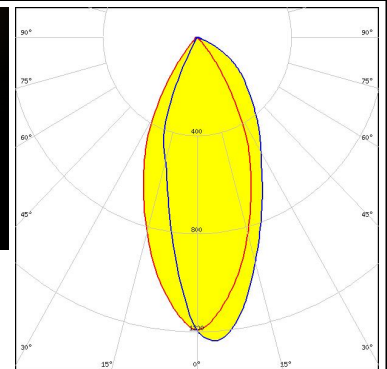
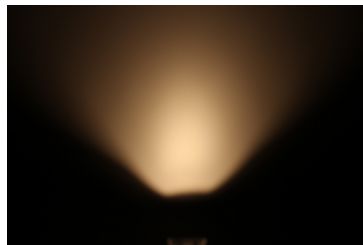
#### CITIZEN

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



#### CITIZEN

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

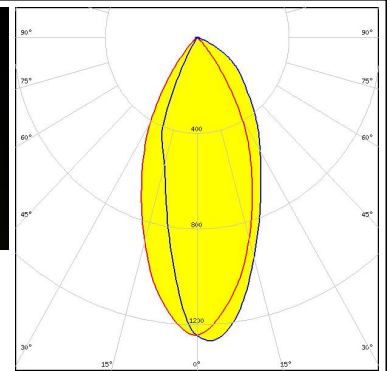
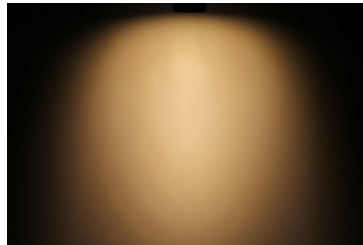




#### OPTICAL RESULTS (MEASURED):

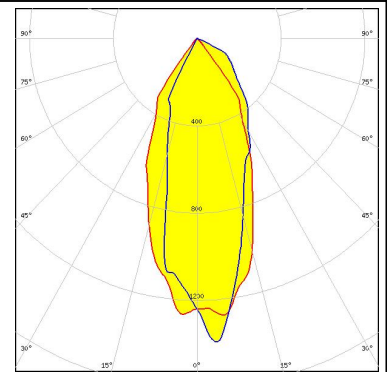
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM / FWTM Asymmetric  
 Efficiency 91 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 431 Typ L3



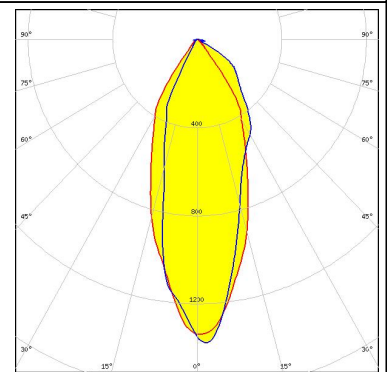
#### CITIZEN

LED CLU700/701/702/703  
 FWHM / FWTM Asymmetric  
 Efficiency 92 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1



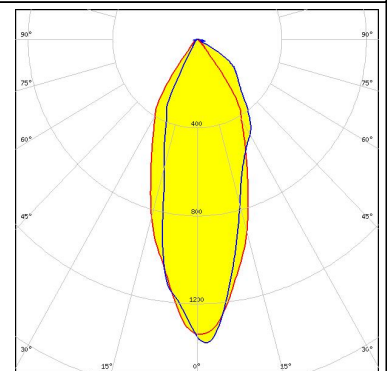
#### CITIZEN

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



#### CITIZEN

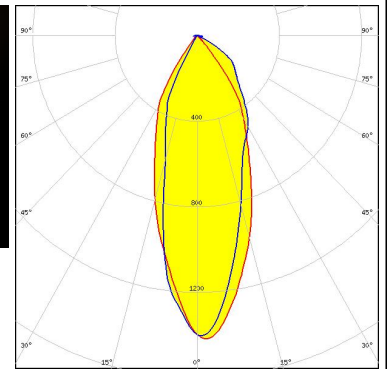
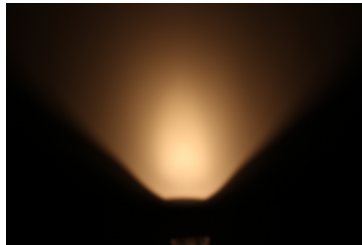
LED CLU720/721/723  
 FWHM / FWTM Asymmetric  
 Efficiency 93 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### OPTICAL RESULTS (MEASURED):

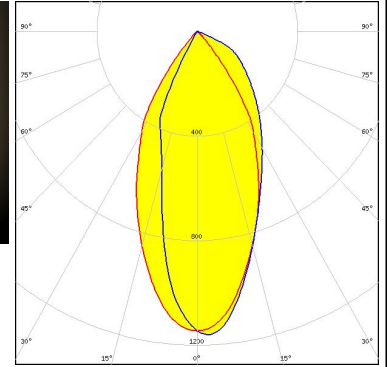
#### CITIZEN

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



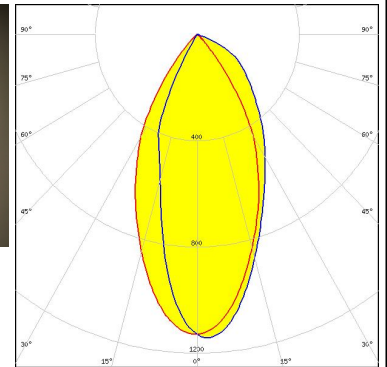
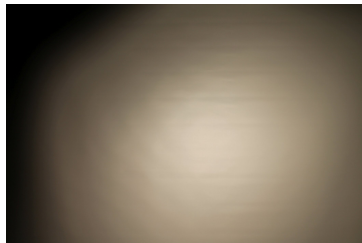
#### CREE LED

LED CMA1840  
 FWHM / FWTM Asymmetric  
 Efficiency 93 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14123\_CLAMP-CXA15-18



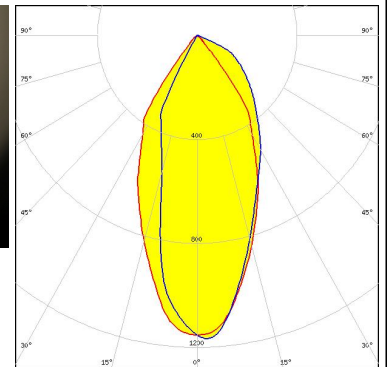
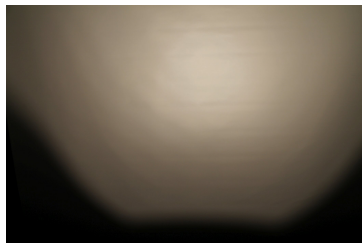
#### CREE LED

LED CMA2550  
 FWHM / FWTM Asymmetric  
 Efficiency 93 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



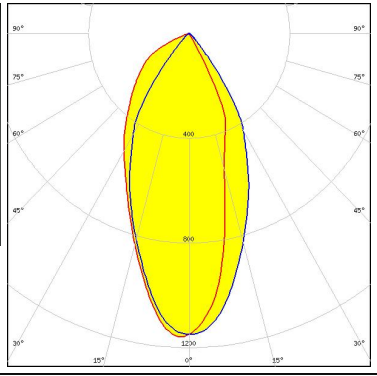


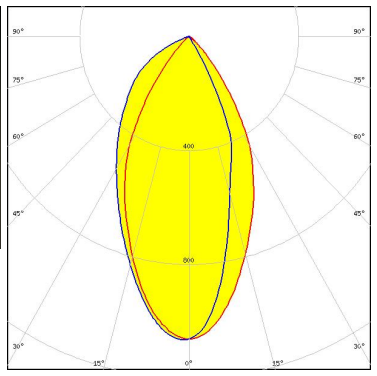


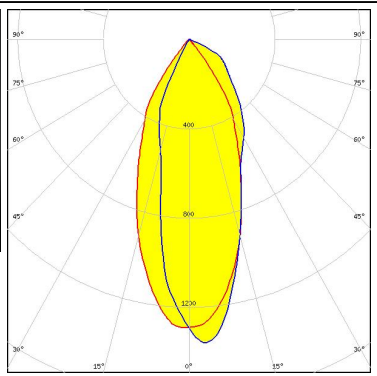

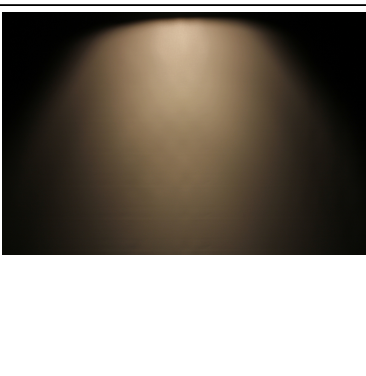
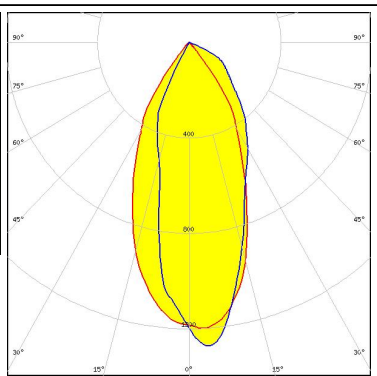


#### CREE LED

LED CMT14xx  
 FWHM / FWTM Asymmetric  
 Efficiency 93 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1



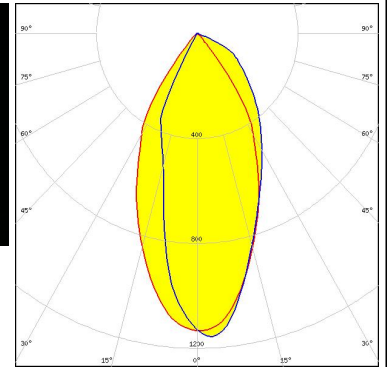
#### OPTICAL RESULTS (MEASURED):

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

#### OPTICAL RESULTS (MEASURED):

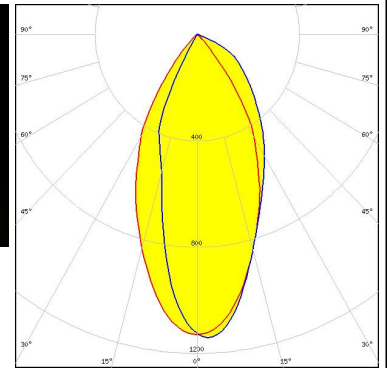
##### CREE LED

LED CXA/B 1830  
 FWHM / FWTM Asymmetric  
 Efficiency 92 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14123\_CLAMP-CXA15-18



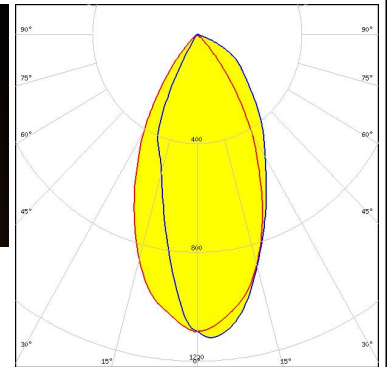
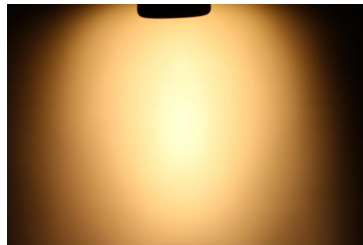
##### CREE LED

LED CXA/B 25xx  
 FWHM / FWTM Asymmetric  
 Efficiency 92 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



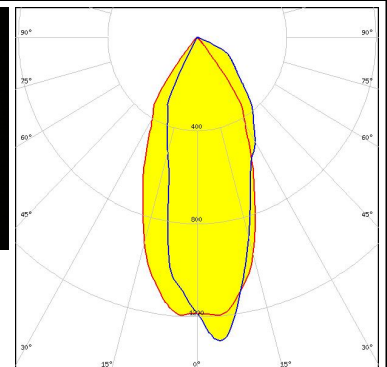
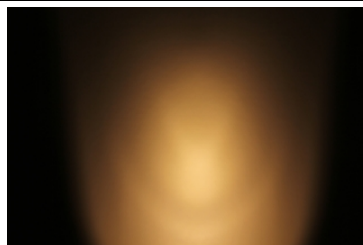
##### CREE LED

LED CXA/B 30xx  
 FWHM / FWTM Asymmetric  
 Efficiency 91 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



##### LUMILEDS

LED LUXEON CoB 1202/1203  
 FWHM / FWTM Asymmetric  
 Efficiency 92 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 438 Typ L1



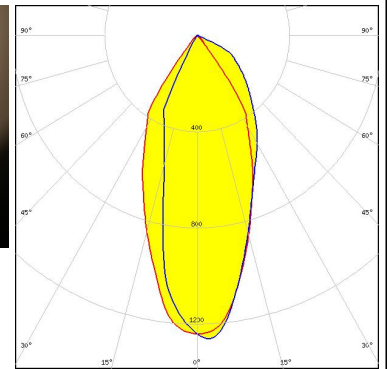
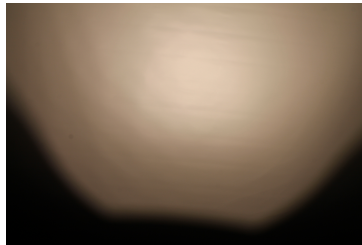
#### OPTICAL RESULTS (MEASURED):

##### LUMILEDS

LED LUXEON CoB 1204HD  
 FWHM / FWTM Asymmetric  
 Efficiency 92 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

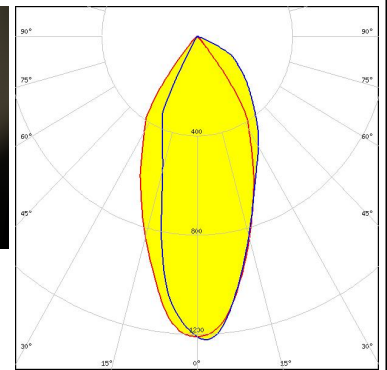
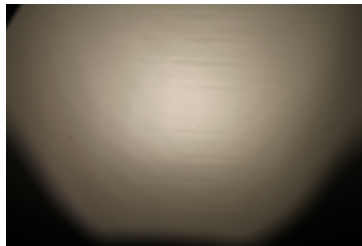


##### LUMILEDS

LED LUXEON CoB 1205HD  
 FWHM / FWTM Asymmetric  
 Efficiency 92 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

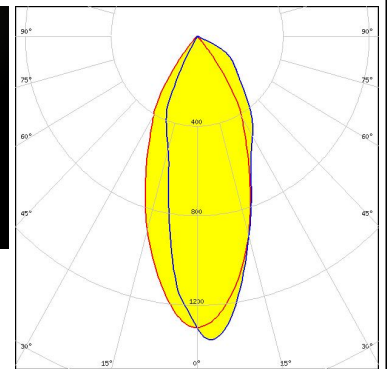
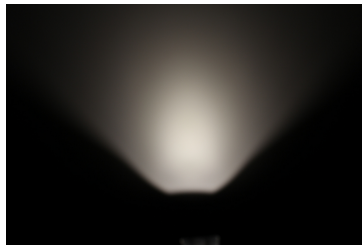


##### LUMILEDS

LED LUXEON CoB 1208  
 FWHM / FWTM Asymmetric  
 Efficiency 91 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

TE Connectivity: 2213130-2

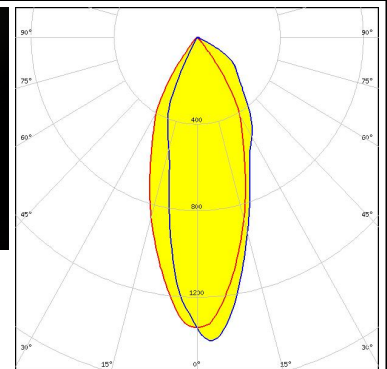
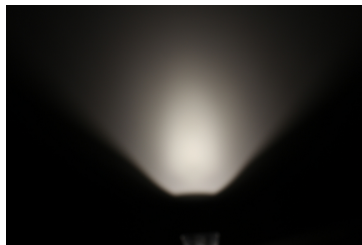


##### LUMILEDS

LED LUXEON CoB 1208  
 FWHM / FWTM Asymmetric  
 Efficiency 89 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

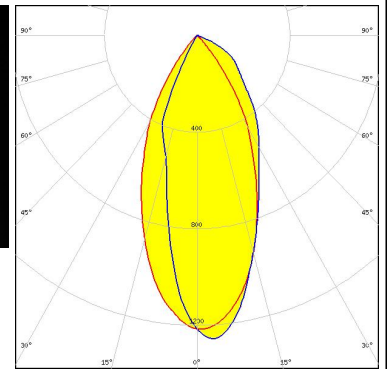
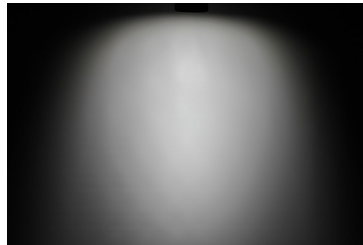
IDEAL: 50-2100SH + 50-2100AN



#### OPTICAL RESULTS (MEASURED):

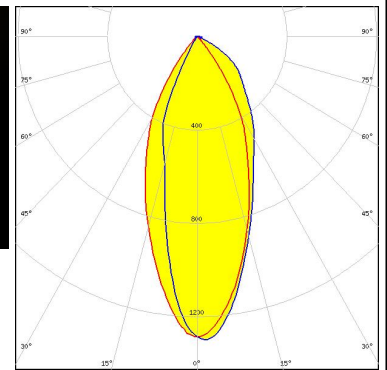
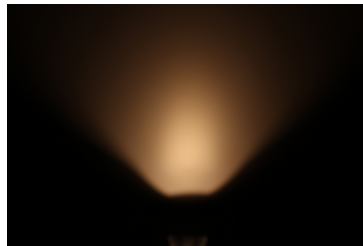
##### LUMILEDS

LED LUXEON CoB 1211  
 FWHM / FWTM Asymmetric  
 Efficiency 92 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 431 Typ L3



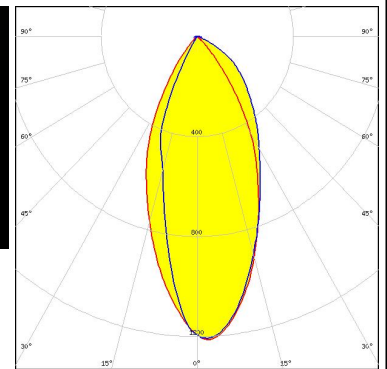
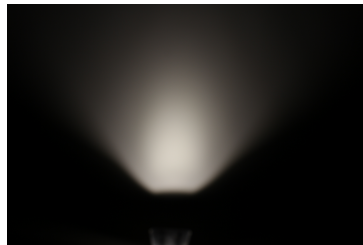
##### LUMILEDS

LED LUXEON CoB 1211  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



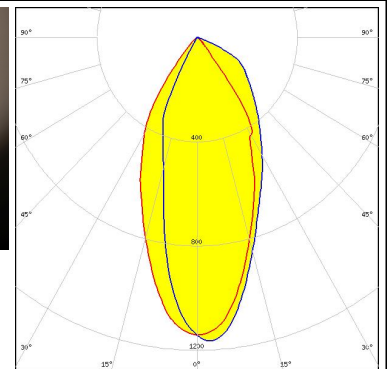
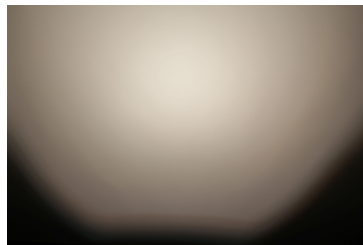
##### LUMILEDS

LED LUXEON CoB 1216/1812  
 FWHM / FWTM Asymmetric  
 Efficiency 89 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204CT + 50-2100LN


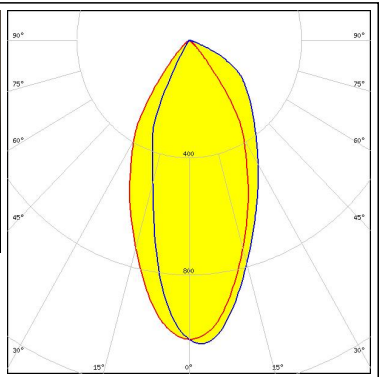

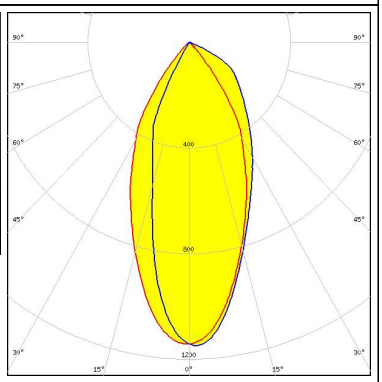
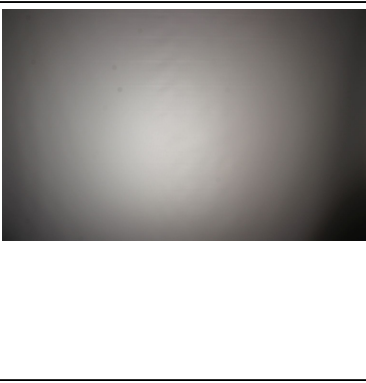
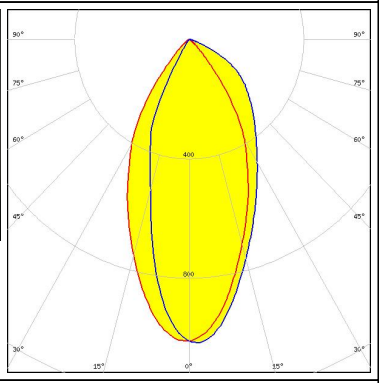

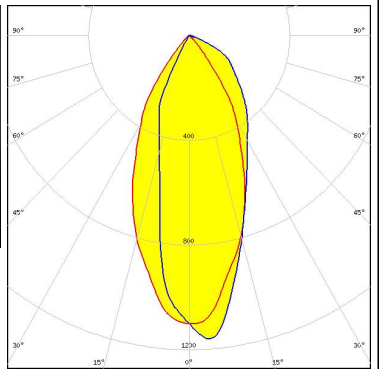


##### LUMINUS

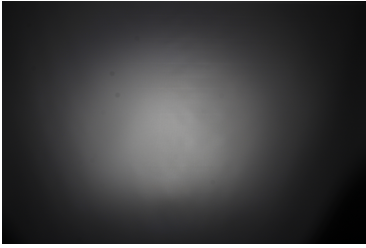
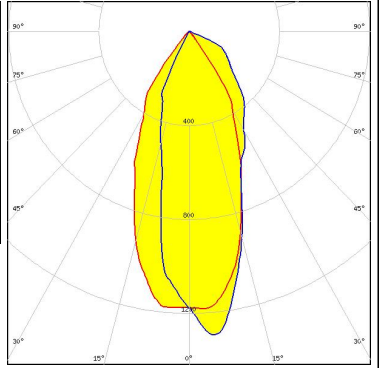
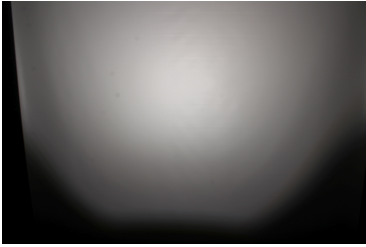
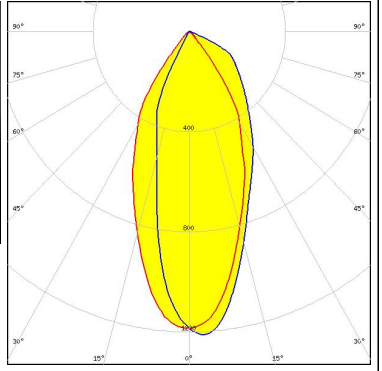
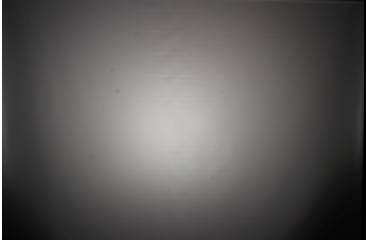
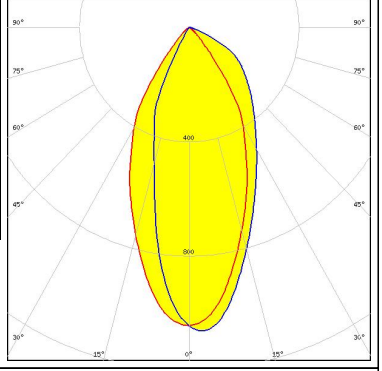

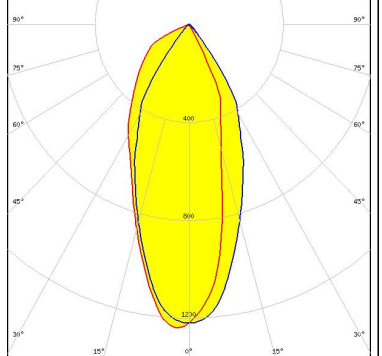
LED CDM-14 (Dim-To-Warm)  
 FWHM / FWTM Asymmetric  
 Efficiency 91 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 491 Typ L2



#### OPTICAL RESULTS (MEASURED):

<p><b>LUMINUS</b></p> <p>LED CDM-14 (Dim-To-Warm)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 87 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13658_CLAMP-VERO13-18</p> <p>F13671_ANGE-RZ-LENS</p> <p>Bender Wirth: 491 Typ L2</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-18 (Dim-To-Warm)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13658_CLAMP-VERO13-18</p> <p>Bender Wirth: 491 Typ L2</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-18 (Dim-To-Warm)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 87 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13658_CLAMP-VERO13-18</p> <p>F13671_ANGE-RZ-LENS</p> <p>Bender Wirth: 491 Typ L2</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-9 (Dim-To-Warm)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 85 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13658_CLAMP-VERO13-18</p> <p>F13671_ANGE-RZ-LENS</p> <p>Bender Wirth: 490 Typ L1</p>		

#### OPTICAL RESULTS (MEASURED):

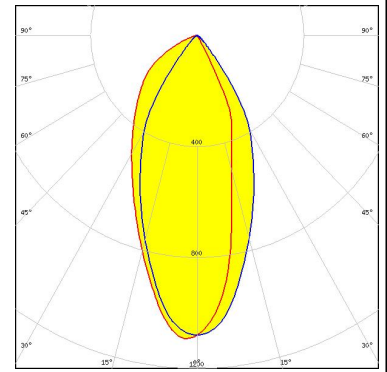
<p><b>LUMINUS</b></p> <p>LED CDM-9 (Dim-To-Warm)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 90 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 490 Typ L1</p>		
<p><b>LUMINUS</b></p> <p>LED CTM-14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



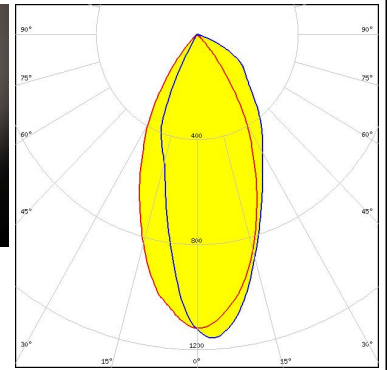
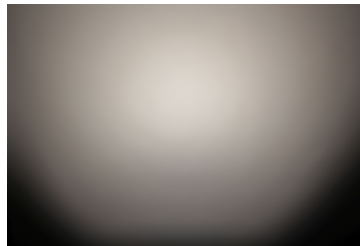
#### OPTICAL RESULTS (MEASURED):



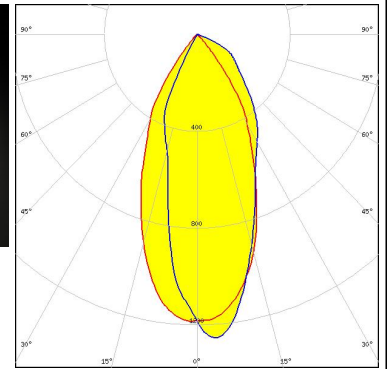
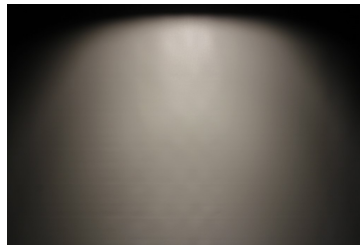
**LED** CTM-14 RGBW  
**FWHM / FWTM** Asymmetric  
**Efficiency** 87 %  
**Peak intensity** 1.1 cd/lm  
**LEDs/each optic** 1  
**Light colour** RGBW  
**Required components:**  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 500 Typ L3-1



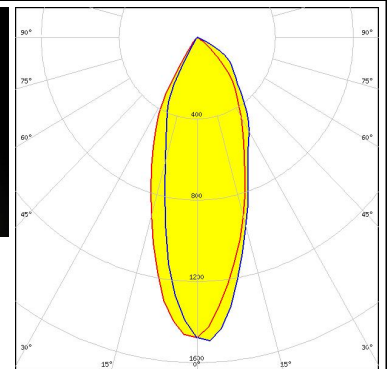
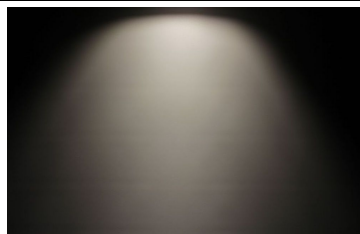
**LED** CTM-22 (Tunable White)  
**FWHM / FWTM** Asymmetric  
**Efficiency** 90 %  
**Peak intensity** 1.2 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 494 Typ L3



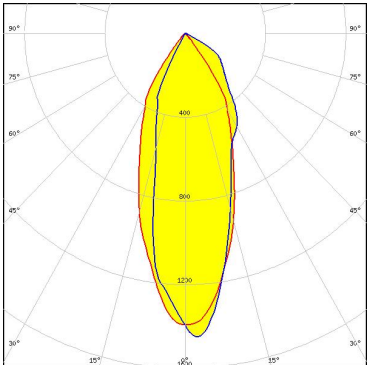
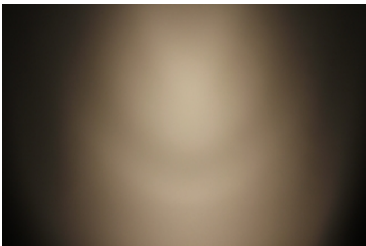
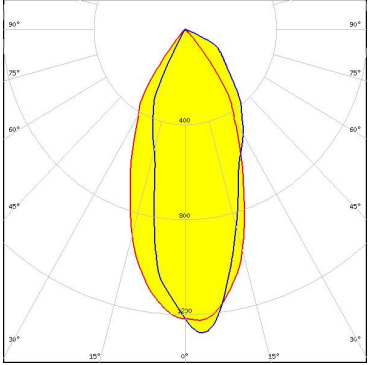
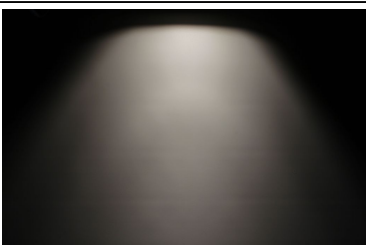
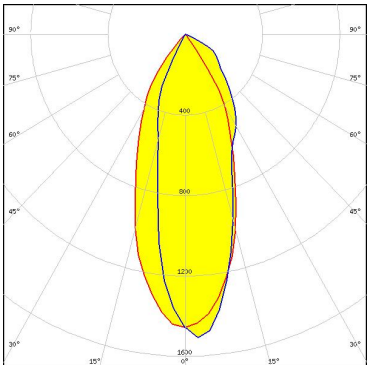
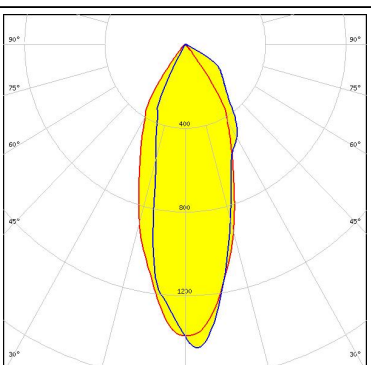
**LED** COB J-Type  
**FWHM / FWTM** Asymmetric  
**Efficiency** 92 %  
**Peak intensity** 1.3 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 463 Typ L2



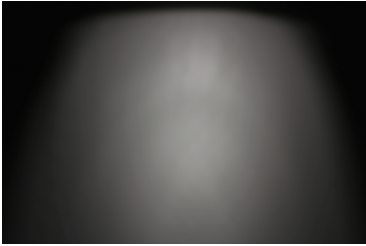
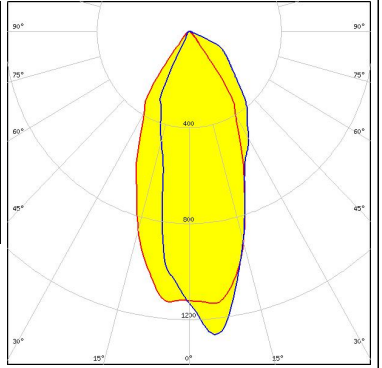

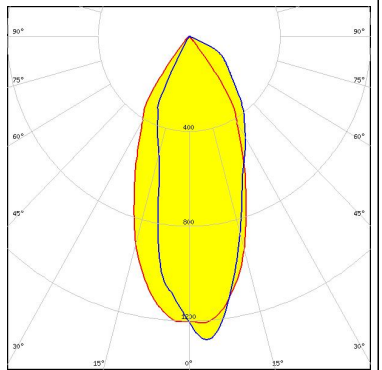

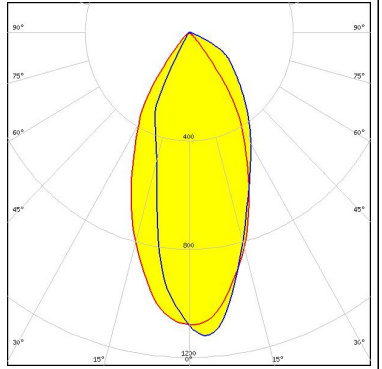
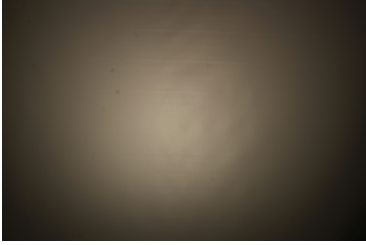
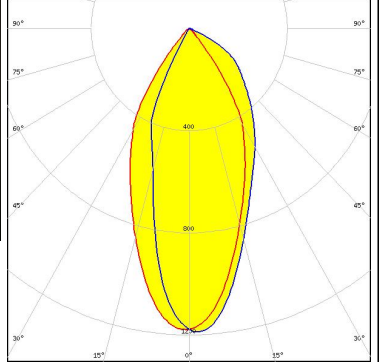
**LED** COB J-Type  
**FWHM / FWTM** Asymmetric  
**Efficiency** 89 %  
**Peak intensity** 1.5 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 IDEAL: 50-2103NC + 50-2100AN



#### OPTICAL RESULTS (MEASURED):

<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 90 %</p> <p>Peak intensity 1.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2100NC + 50-2100AN</p>	
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 438 Typ L1</p>	 
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.5 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><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2100NC + 50-2100AN</p>	

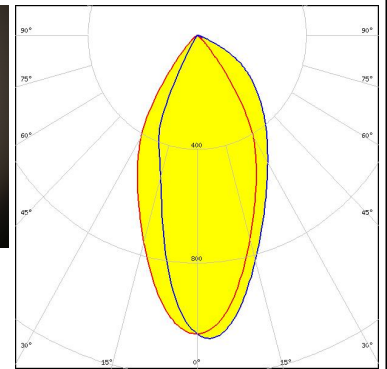
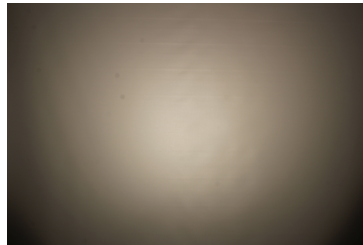
#### OPTICAL RESULTS (MEASURED):

<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.3 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><b>NICHIA</b></p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.3 cd/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>NICHIA</b></p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.1 cd/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>OSRAM</b></p> <p>LED PrevaLED Core G7 L15 H1</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16685_CLAMP-PRV-A</p>		

#### OPTICAL RESULTS (MEASURED):

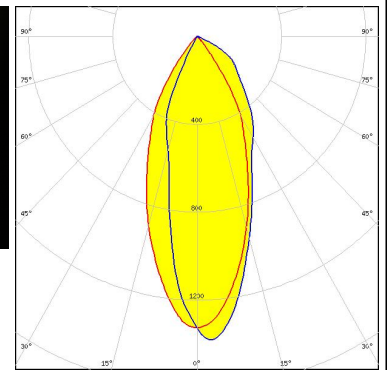
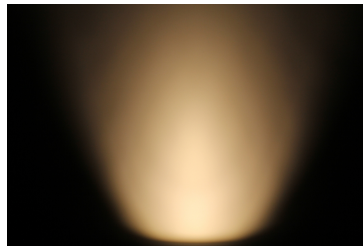
#### OSRAM

LED PrevaLED Core G7 L15 H1  
 FWHM / FWTM Asymmetric  
 Efficiency 89 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16685\_CLAMP-PRV-A  
 F13671\_ANGE-RZ-LENS



#### OSRAM

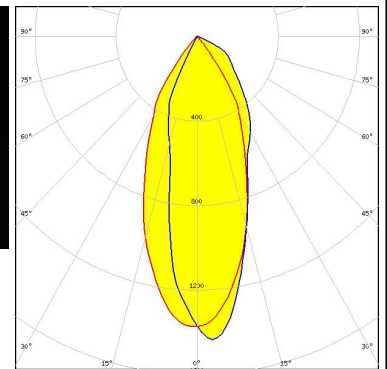
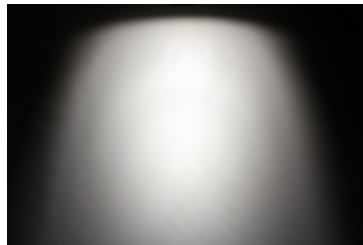
LED PrevaLED Core Z4 LES19  
 FWHM / FWTM Asymmetric  
 Efficiency 91 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



#### OSRAM

Opto Semiconductors

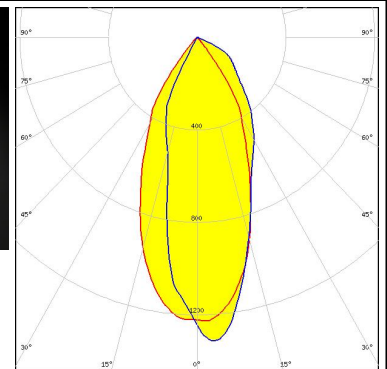
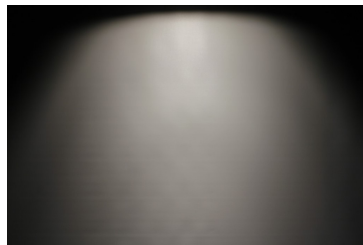
LED Soleriq S13  
 FWHM / FWTM Asymmetric  
 Efficiency 93 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE Connectivity: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### OSRAM

Opto Semiconductors

LED Soleriq S13  
 FWHM / FWTM Asymmetric  
 Efficiency 91 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 437 Typ L1

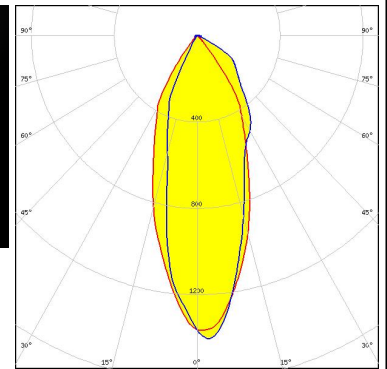
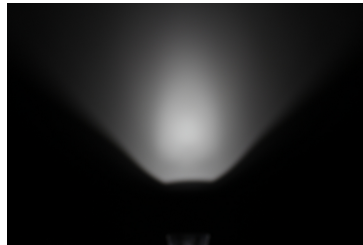


#### OPTICAL RESULTS (MEASURED):

##### OSRAM

Opto Semiconductors

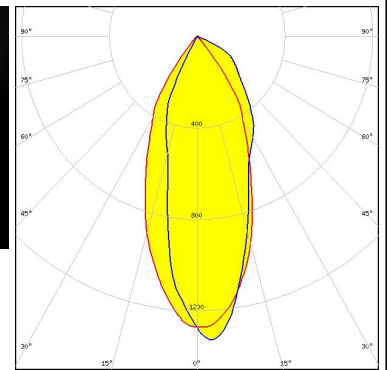
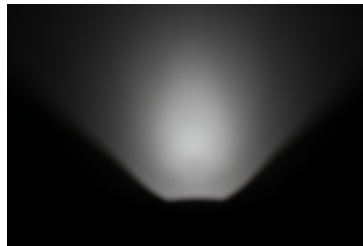
LED Soleriq S13 19x19  
 FWHM / FWTM Asymmetric  
 Efficiency 89 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2103CT + 50-2100AN



##### OSRAM

Opto Semiconductors

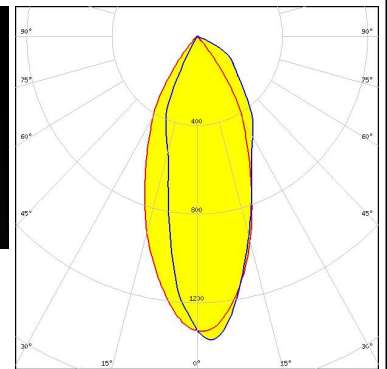
LED Soleriq S13 19x19  
 FWHM / FWTM Asymmetric  
 Efficiency 91 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



##### OSRAM

Opto Semiconductors

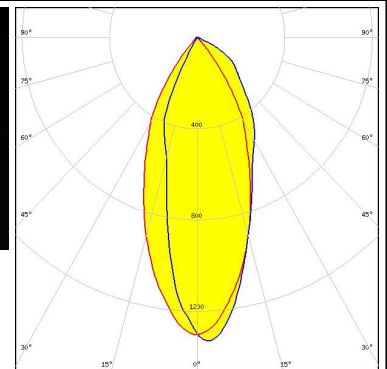
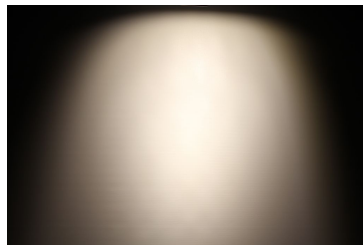
LED Soleriq S19  
 FWHM / FWTM Asymmetric  
 Efficiency 93 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE Connectivity: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1



##### OSRAM

Opto Semiconductors

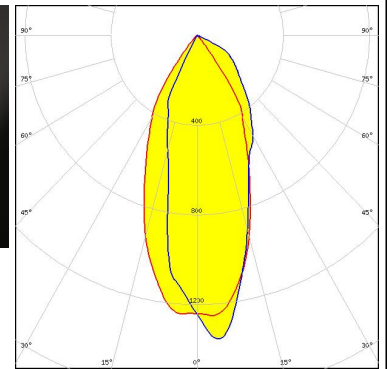
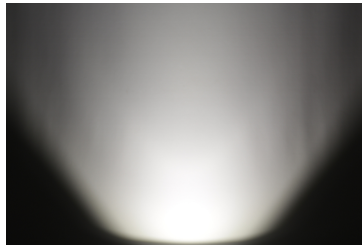
LED Soleriq S19  
 FWHM / FWTM Asymmetric  
 Efficiency 91 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 462 Typ L3



#### OPTICAL RESULTS (MEASURED):

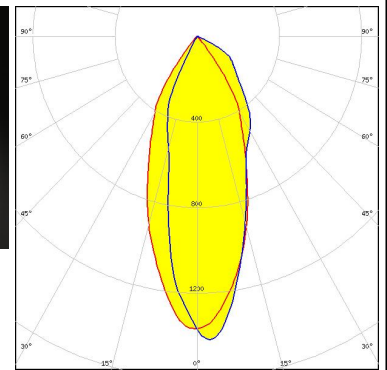
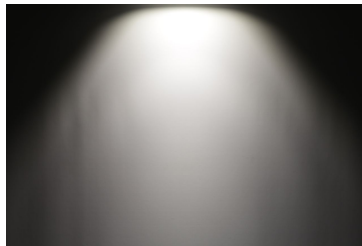
### PHILIPS

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



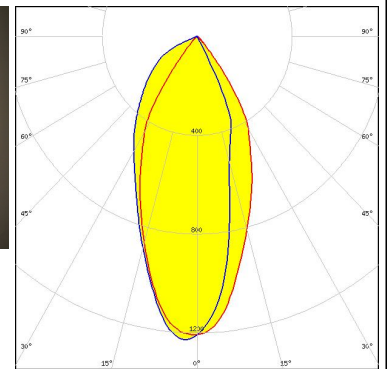
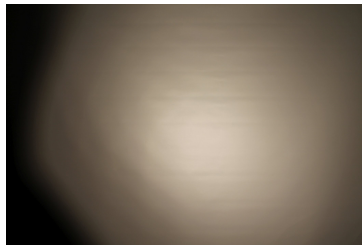
### PHILIPS

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



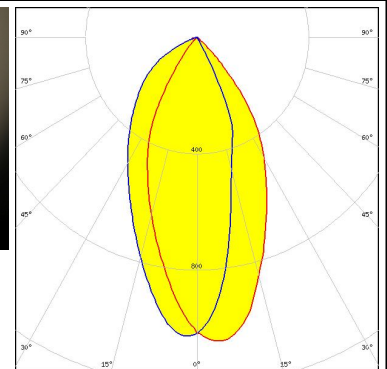
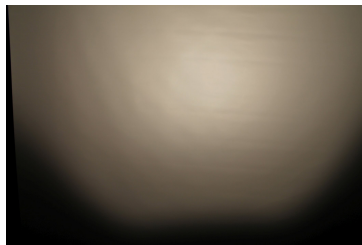
### PHILIPS

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



### PHILIPS

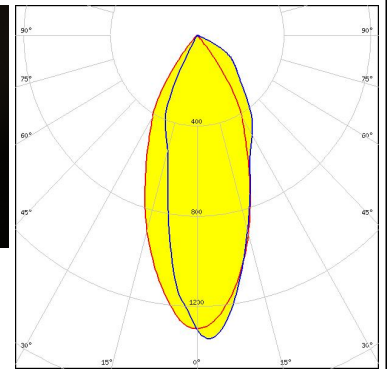
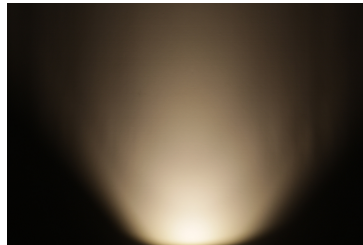
LED Fortimo SLM L13 CoB  
 FWHM / FWTM Asymmetric  
 Efficiency 85 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### OPTICAL RESULTS (MEASURED):

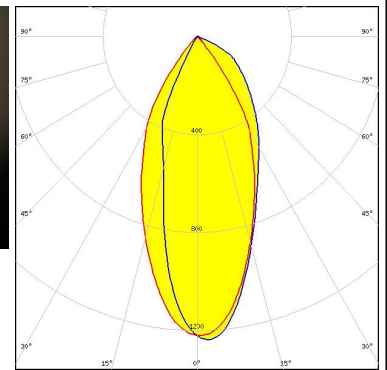
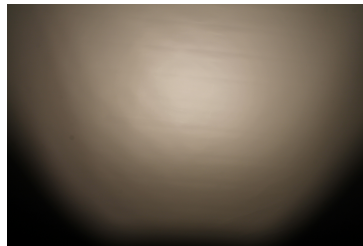
### PHILIPS

LED Fortimo SLM L15 + SLM holder  
 FWHM / FWTM Asymmetric  
 Efficiency 90 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



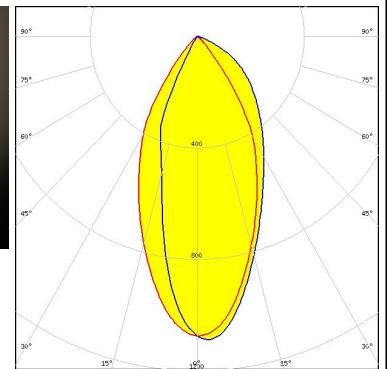
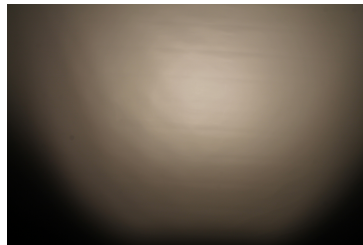
### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM / FWTM Asymmetric  
 Efficiency 92 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



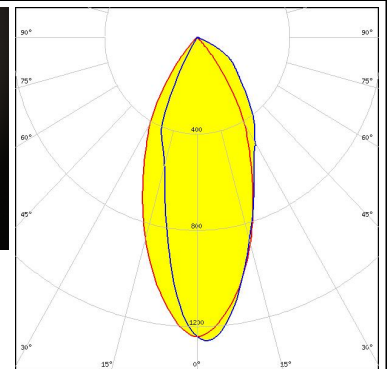
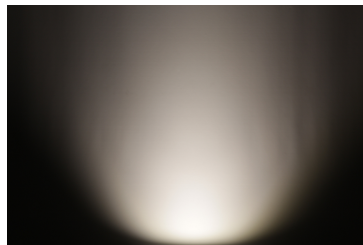
### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM / FWTM Asymmetric  
 Efficiency 87 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



### PHILIPS

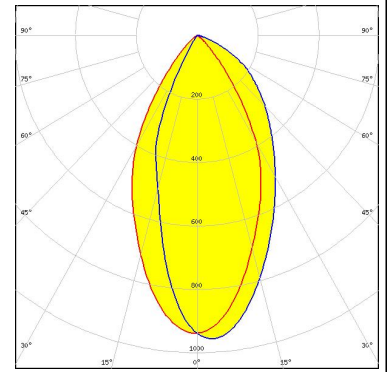
LED Fortimo SLM L19 + SLM holder  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



#### OPTICAL RESULTS (MEASURED):

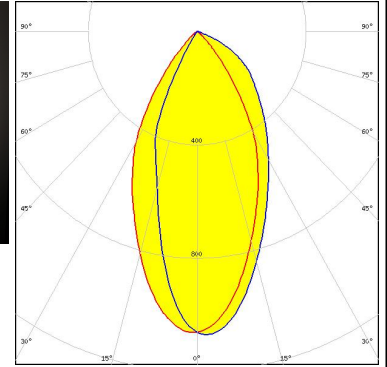
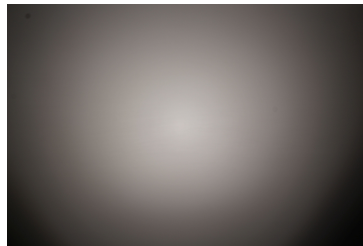
### SAMSUNG

LED LC035T (Tunable white)  
 FWHM / FWTM Asymmetric  
 Efficiency 87 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 502 Typ L3



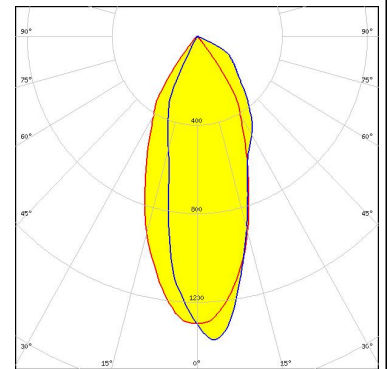
### SAMSUNG

LED LC035T (Tunable white)  
 FWHM / FWTM Asymmetric  
 Efficiency 92 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 502 Typ L3



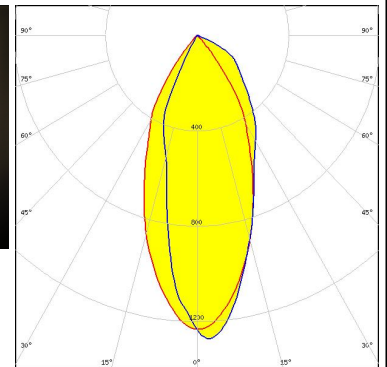
### SAMSUNG

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



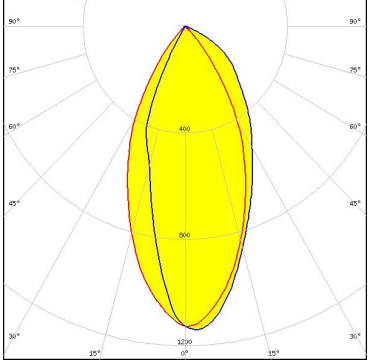
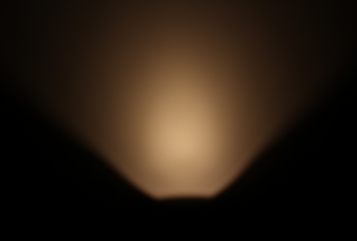
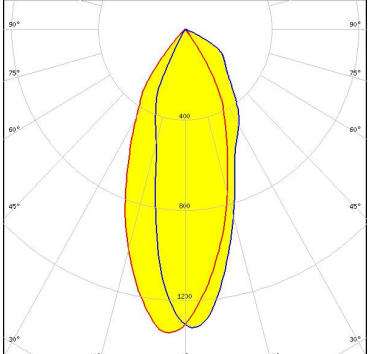
SEOUL SEMICONDUCTOR

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


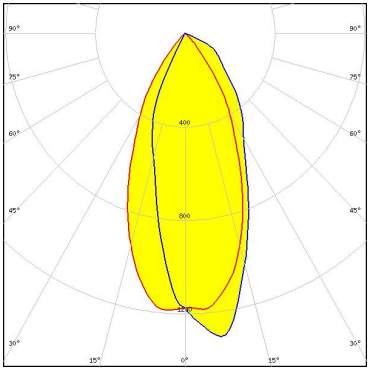

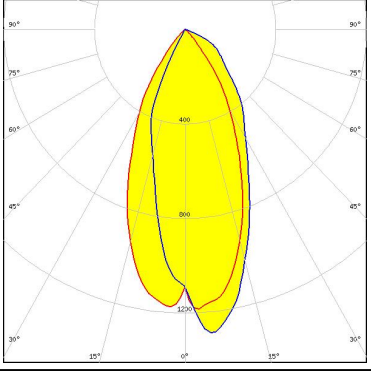

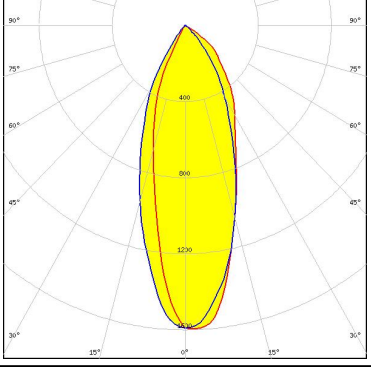

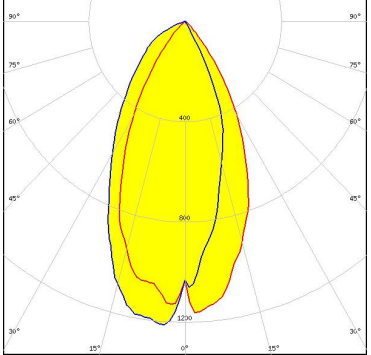




#### OPTICAL RESULTS (MEASURED):

<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED MJT COB LES 22</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 431 Typ L3</p>		
<p><b>V5 LIGHTING SOLUTIONS</b></p> <p>LED WU-M-484</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

#### OPTICAL RESULTS (SIMULATED):

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

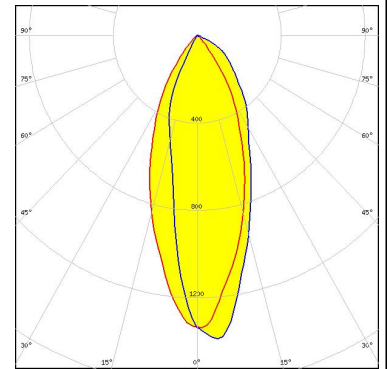
#### OPTICAL RESULTS (SIMULATED):



LED COB D-Type  
FWHM / FWTM Asymmetric  
Efficiency 84 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

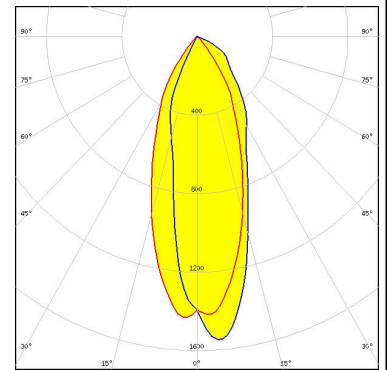
TE Connectivity: 2213580-2 + OPTIC CLIP Z50 TYPE1 2213194-1



LED COB D-Type  
FWHM / FWTM Asymmetric  
Efficiency 90 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

TE Connectivity: 2213580-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### 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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P.R.CHINA

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