

## ANGELINA-W

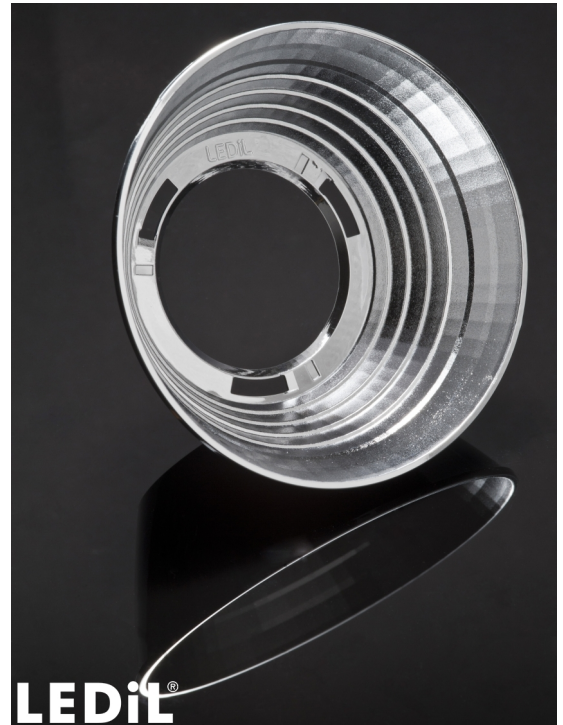
~50° wide beam

### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 82.0 mm
Height	31 mm
Fastening	socket
ROHS compliant	yes ⓘ

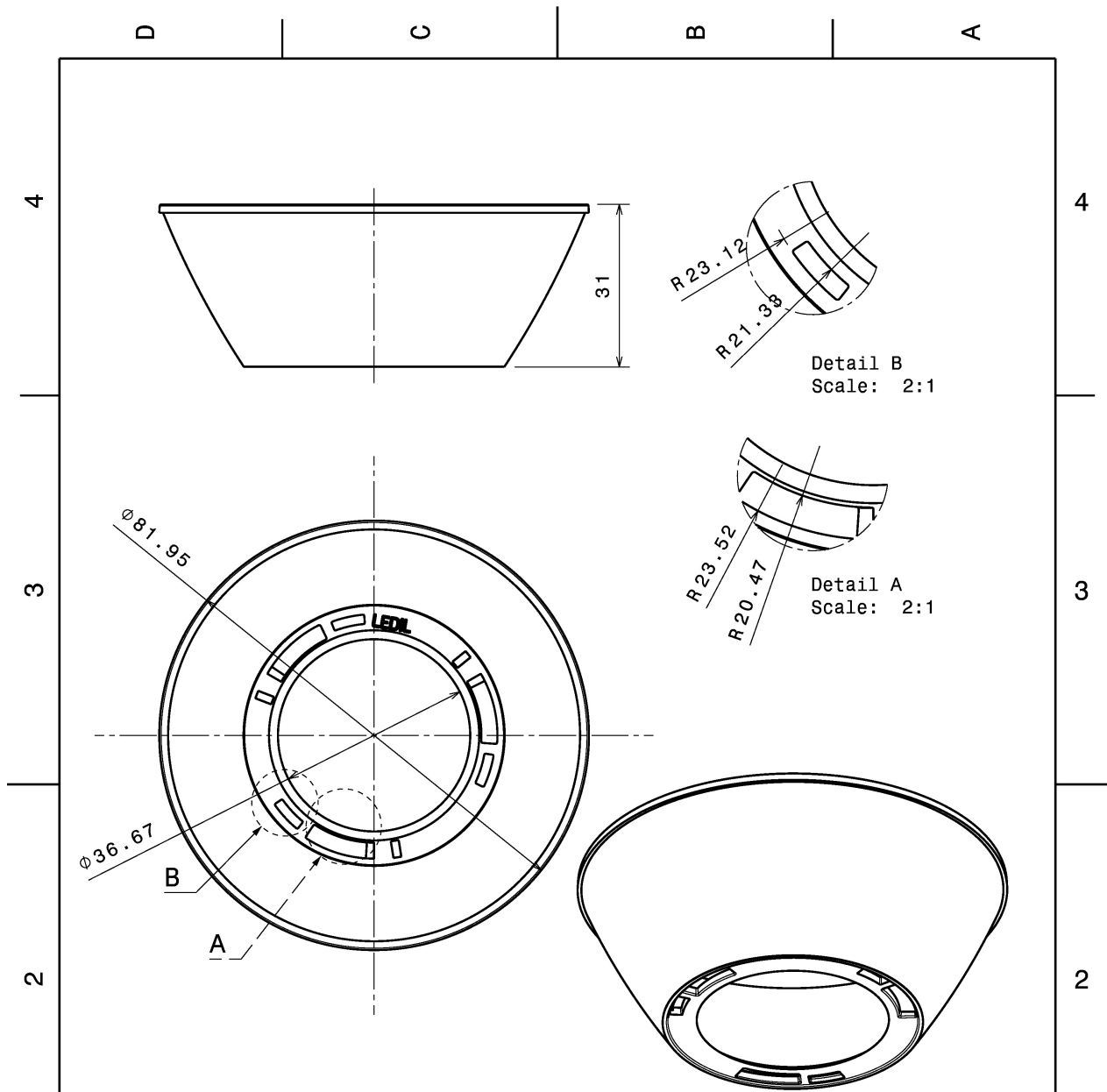
### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish	Coating
ANGELINA-W	Reflector	PC	metal		HMDS



### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F13402_ANGELINA-W » Box size: 480 x 280 x 300 mm	900	120	60	11.3



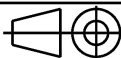
INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1		ANGELINA	PC	metal

Tolerances if not otherwise shown  
According to DIN ISO 2768-1  
Linear measures:  
Up to 30mm class M, otherwise class C.  
According to DIN ISO 2768-2  
Form and position: class L



Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

THIRD ANGLE PROJECTION:



DRAWING TITLE

**ANGELINA series Reflector**

This drawing is the property of LEDiL Oy. It may not be reproduced, copied or communicated without a written agreement with LEDiL Oy."

SIZE PART NUMBER

A4


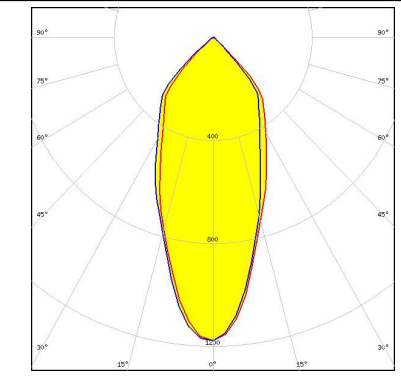
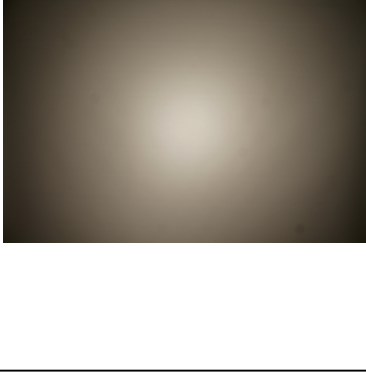
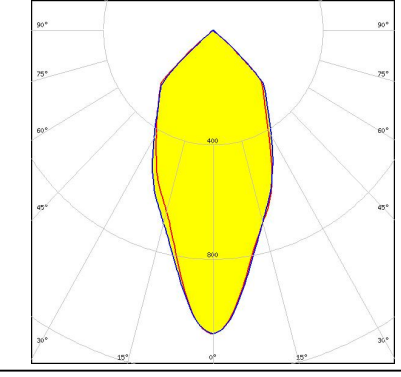
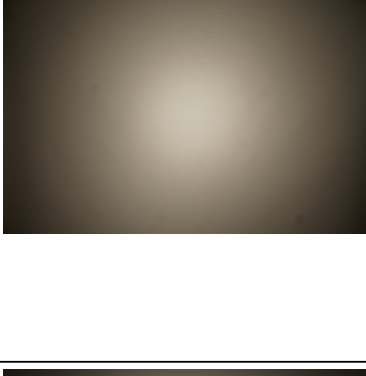
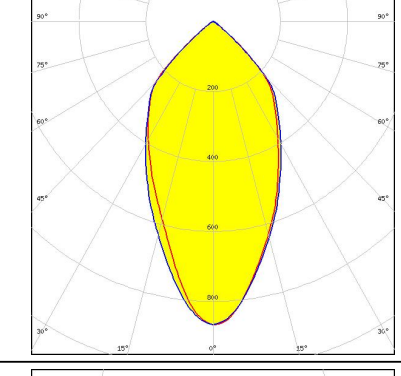
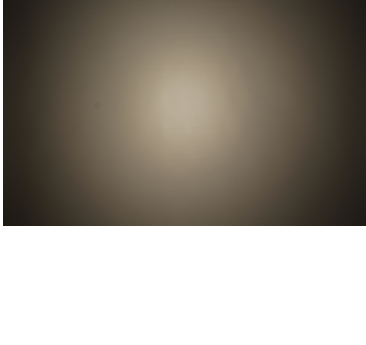
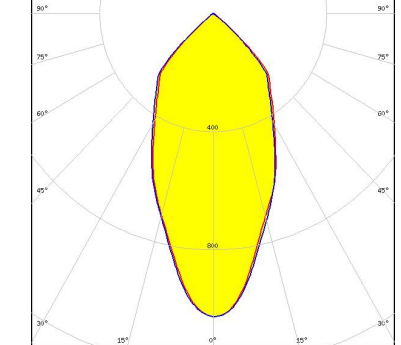
-

SCALE 1:1 WEIGHT

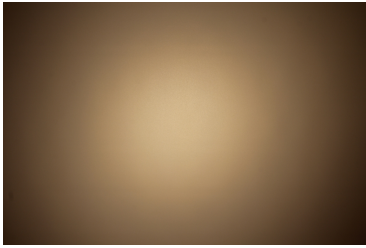
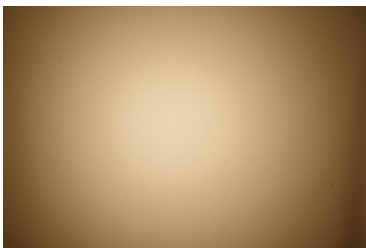
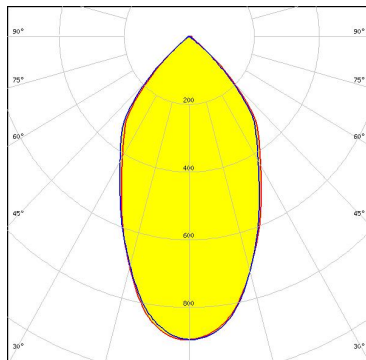

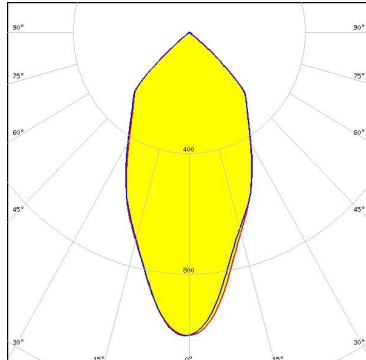
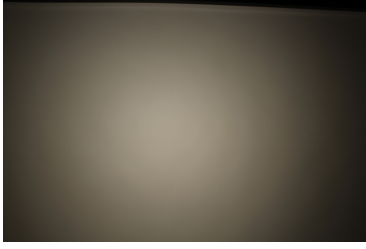
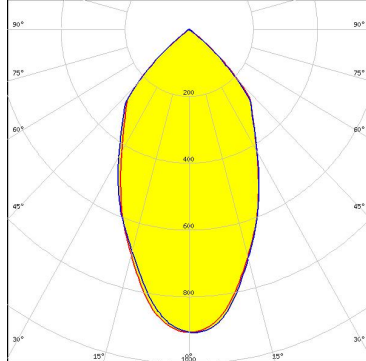
-

SHEET 1/1

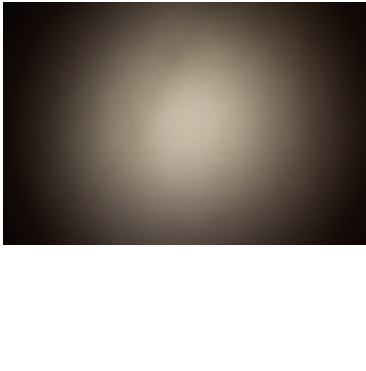
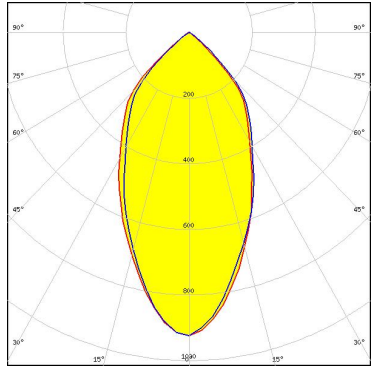
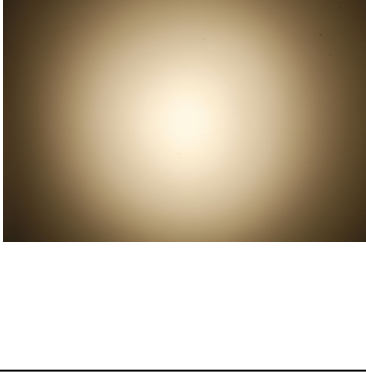
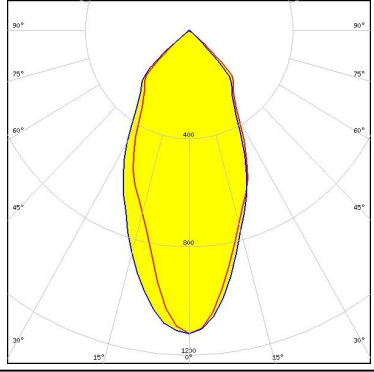
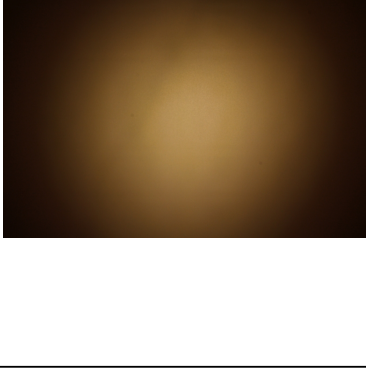
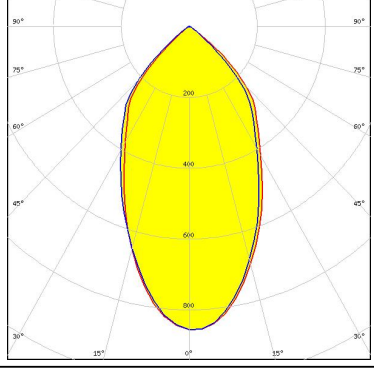
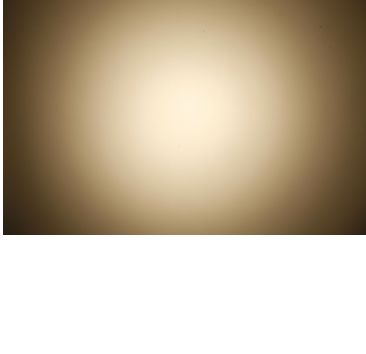
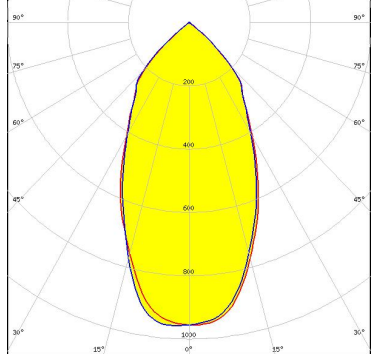
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED BXRA ES Rectangle</p> <p>FWHM 43.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.210 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2100BL + 50-2100AN</p>		
<p>bridgelux.</p> <p>LED V10 Gen7</p> <p>FWHM 47.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.100 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>		
<p>bridgelux.</p> <p>LED V10 Gen7</p> <p>FWHM 54.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 0.900 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: 434 Typ L1</p>		
<p>bridgelux.</p> <p>LED V13 Gen7</p> <p>FWHM 50.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.000 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		


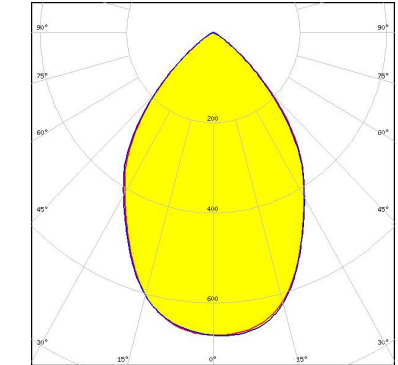

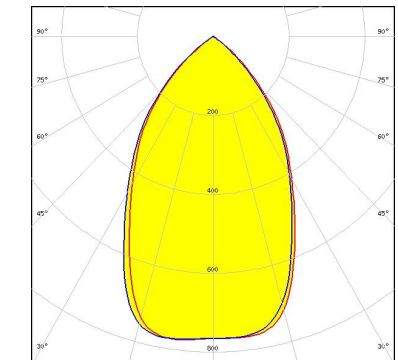
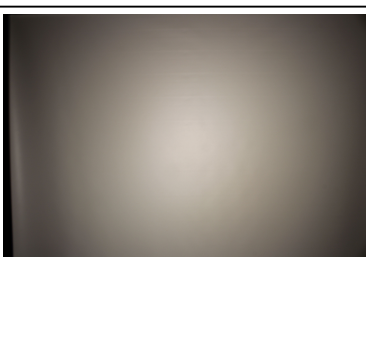
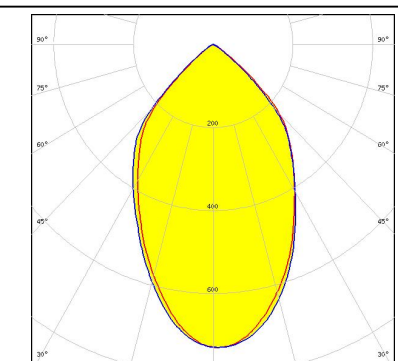

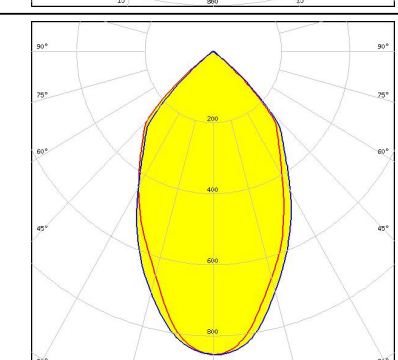
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V15 Gen6</p> <p>FWHM 51.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.100 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 456 Typ L2</p>		
<p>bridgelux.</p> <p>LED V22 Gen6</p> <p>FWHM 57.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.900 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2204-CT + 50-2100AN</p>		
<p>bridgelux.</p> <p>LED Vero SE 13</p> <p>FWHM 51.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.000 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		
<p>bridgelux.</p> <p>LED Vero SE 18</p> <p>FWHM 57.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.910 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		


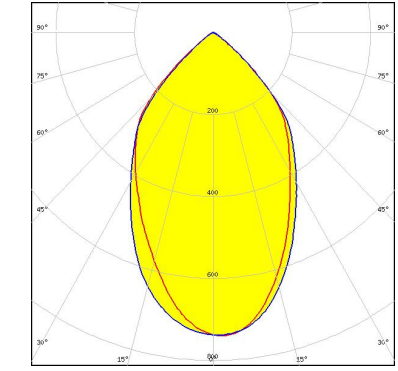
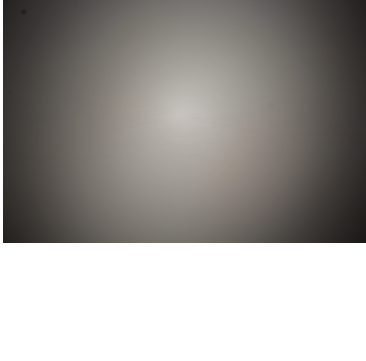
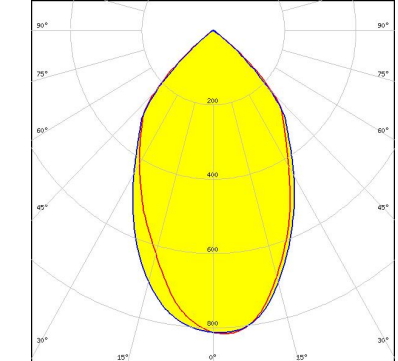
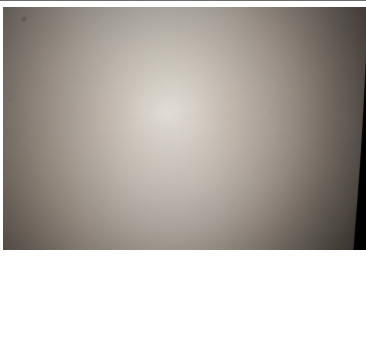
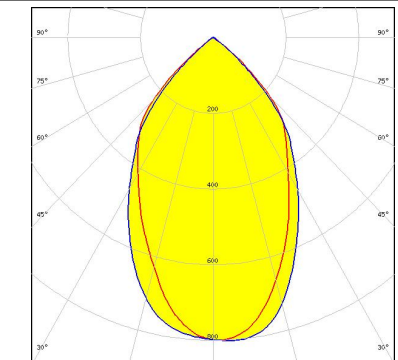
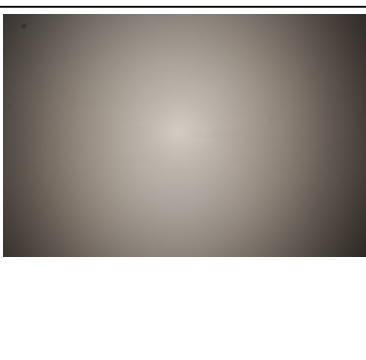
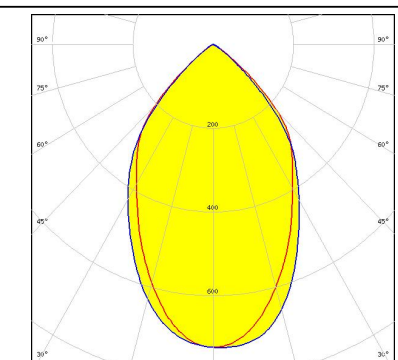
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED VERO13            FWHM 53.0°            Efficiency 89 %            Peak intensity 0.930 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13658_CLAMP-VERO13-18            F13671_ANGE-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED VERO13            FWHM 49.0°            Efficiency 92 %            Peak intensity 1.100 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13658_CLAMP-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO18            FWHM 56.0°            Efficiency 90 %            Peak intensity 0.860 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13658_CLAMP-VERO13-18            F13671_ANGE-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED VERO18            FWHM 55.0°            Efficiency 92 %            Peak intensity 1.000 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13658_CLAMP-VERO13-18</p>		

#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED VERO29</p> <p>FWHM 73.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 0.670 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 64.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 0.800 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29</p>		
<p>bridgelux.</p> <p>LED Vesta TW 15mm DP</p> <p>FWHM 67.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 0.732 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 482 Typ L2</p>		
<p>bridgelux.</p> <p>LED Vesta TW 15mm DP</p> <p>FWHM 62.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.854 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 482 Typ L2</p>		

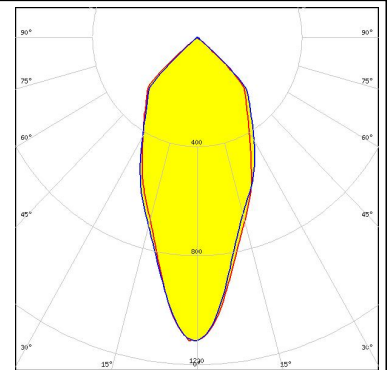
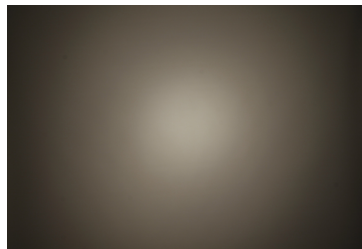
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED Vesta TW 18mm (31W) DP</p> <p>FWHM 66.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 0.742 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 483 Typ L3</p>		
<p>bridgelux.</p> <p>LED Vesta TW 18mm (31W) DP</p> <p>FWHM 63.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.820 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 483 Typ L3</p>		
<p>bridgelux.</p> <p>LED Vesta TW 22mm DP</p> <p>FWHM 65.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.803 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 494 Typ L3</p>		
<p>bridgelux.</p> <p>LED Vesta TW 22mm DP</p> <p>FWHM 67.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 0.725 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 494 Typ L3</p>		

#### PHOTOMETRIC DATA (MEASURED):

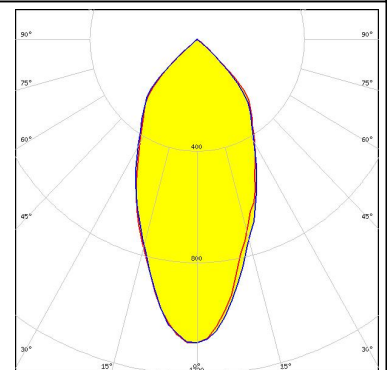
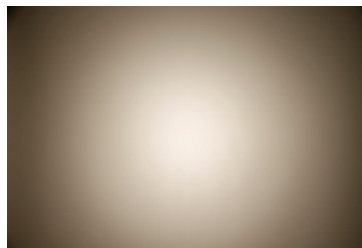
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM 45.0°  
 Efficiency 93 %  
 Peak intensity 1.100 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1



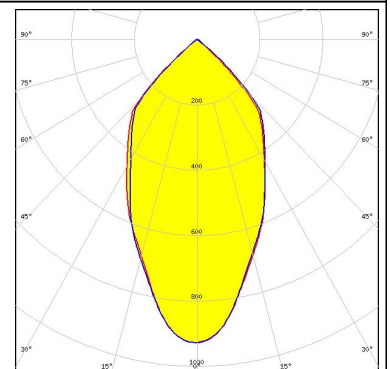
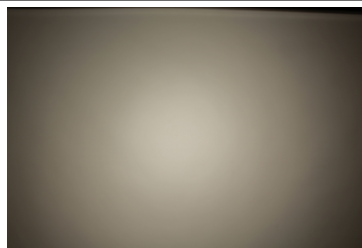
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 48.0°  
 Efficiency 94 %  
 Peak intensity 1.090 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



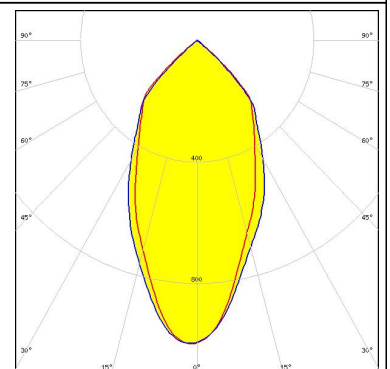
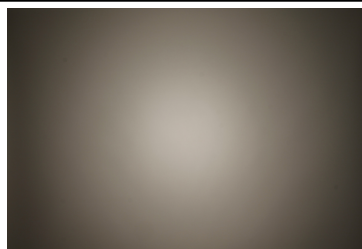
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 57.0°  
 Efficiency 94 %  
 Peak intensity 0.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16791\_CLAMP-Z45-A  
 TE: 2325807-3



#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 52.0°  
 Efficiency 92 %  
 Peak intensity 1.000 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 433 Typ L1

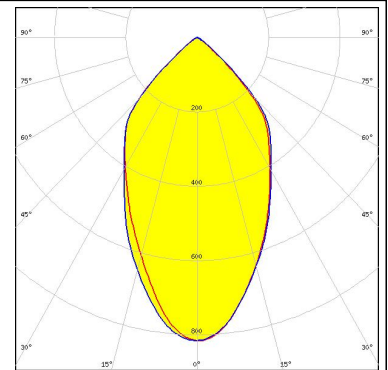




#### PHOTOMETRIC DATA (MEASURED):

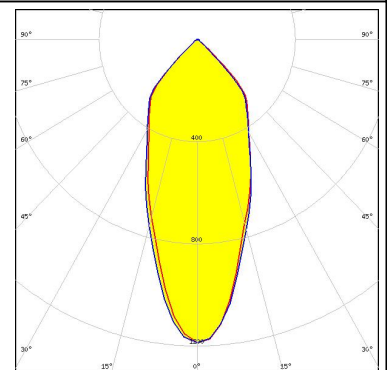
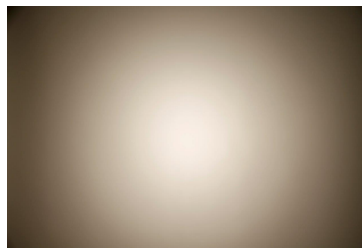
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 60.0°  
 Efficiency 89 %  
 Peak intensity 0.820 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16791\_CLAMP-Z45-A  
 F13671\_ANGE-RZ-LENS  
 TE: 2325807-3



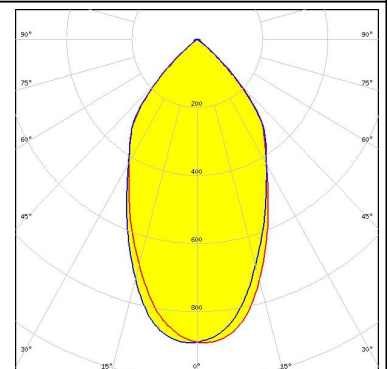
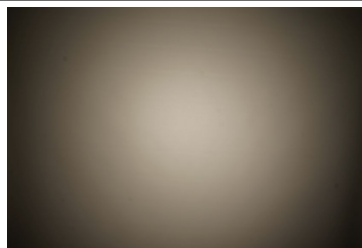
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 43.0°  
 Efficiency 93 %  
 Peak intensity 1.190 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2103CT + 50-2100AN



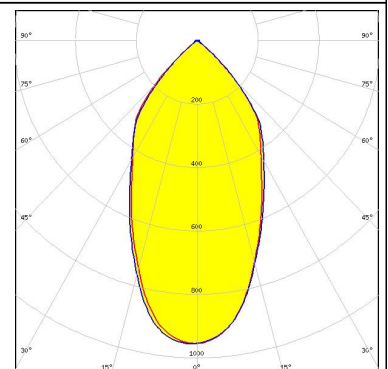
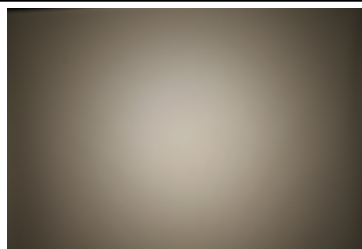
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 43.0°  
 Efficiency 91 %  
 Peak intensity 1.100 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



#### CITIZEN

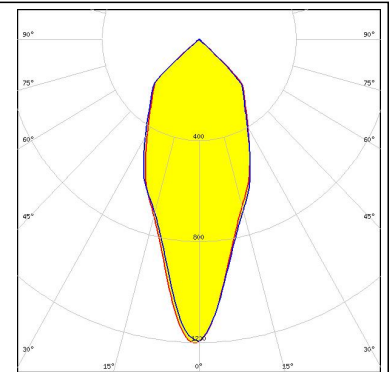
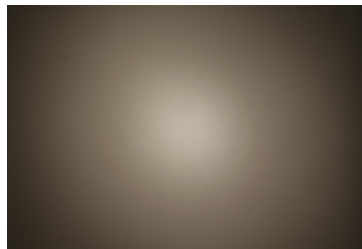
LED CLL04x/CLU04x  
 FWHM 54.0°  
 Efficiency 92 %  
 Peak intensity 0.960 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 431 Typ L3



#### PHOTOMETRIC DATA (MEASURED):

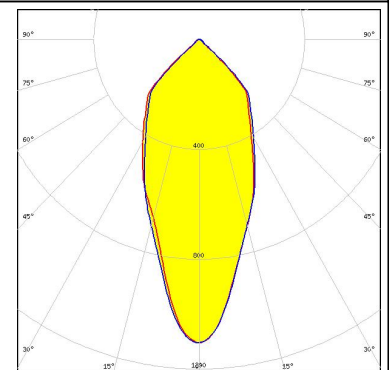
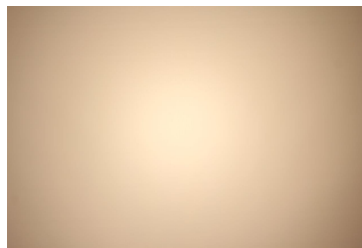
#### CITIZEN

LED CLU700/701/702  
 FWHM 42.0°  
 Efficiency 92 %  
 Peak intensity 1.200 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1



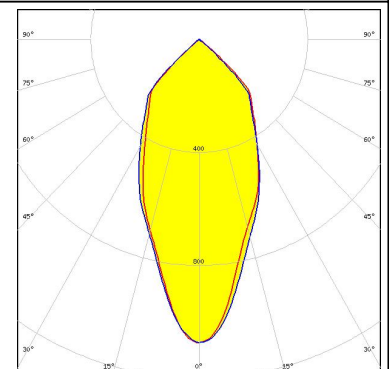
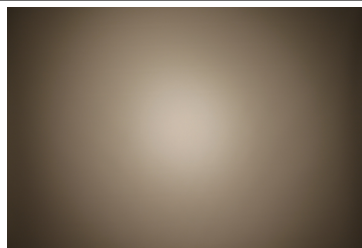
#### CITIZEN

LED CLU720/721  
 FWHM 45.0°  
 Efficiency 94 %  
 Peak intensity 1.100 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



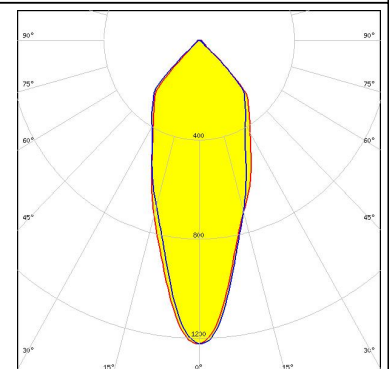
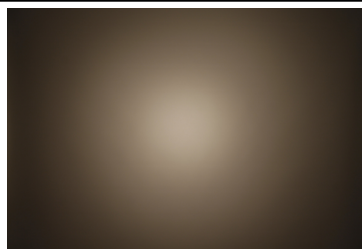
#### CITIZEN

LED CLU720/721  
 FWHM 48.0°  
 Efficiency 92 %  
 Peak intensity 1.700 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18



#### CITIZEN

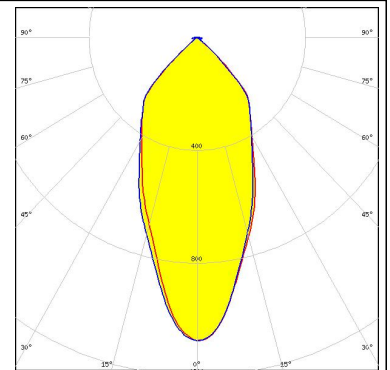
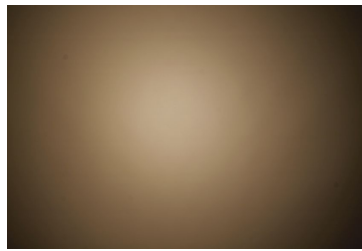
LED CLU720/721  
 FWHM 38.0°  
 Efficiency 93 %  
 Peak intensity 1.200 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2103CT + 50-2100AN



#### PHOTOMETRIC DATA (MEASURED):

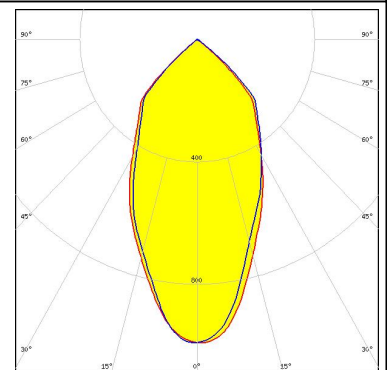
#### CITIZEN

LED CLU730/731  
 FWHM 56.0°  
 Efficiency 91 %  
 Peak intensity 1.100 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



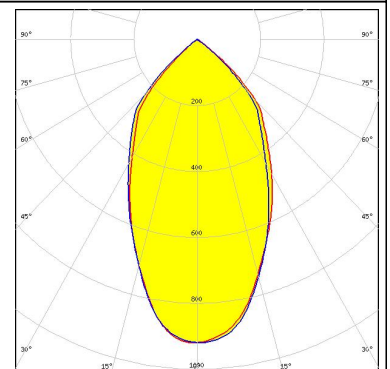
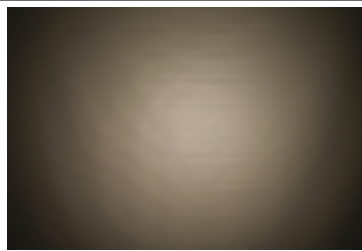
#### CREE

LED CMA1840  
 FWHM 53.0°  
 Efficiency 95 %  
 Peak intensity 1.000 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14123\_CLAMP-CXA15-18



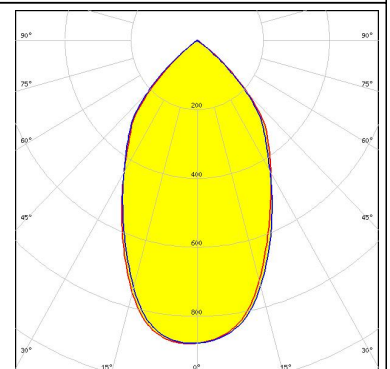
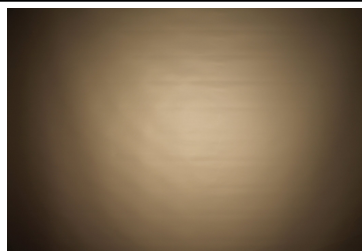
#### CREE

LED CMA2550  
 FWHM 57.0°  
 Efficiency 94 %  
 Peak intensity 0.920 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



#### CREE

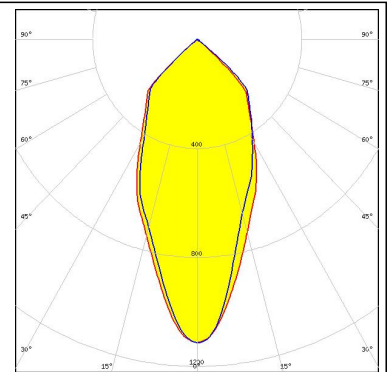
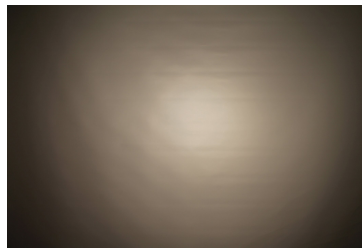
LED CMA3090  
 FWHM 60.0°  
 Efficiency 95 %  
 Peak intensity 0.800 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



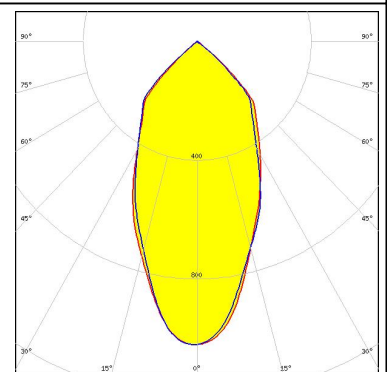
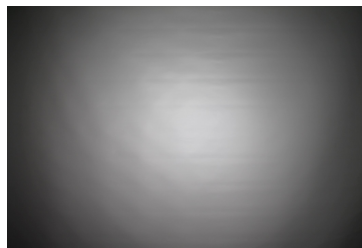
#### PHOTOMETRIC DATA (MEASURED):



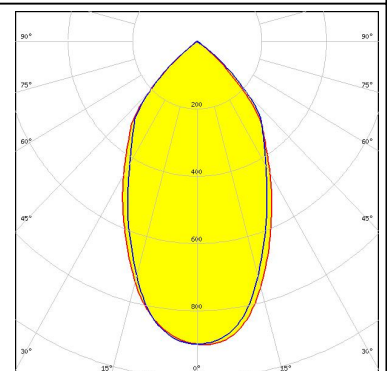
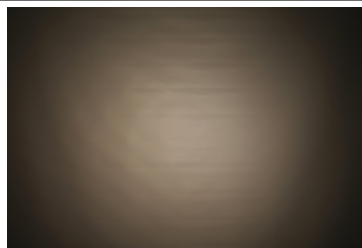
LED CMT14xx  
 FWHM 47.0°  
 Efficiency 94 %  
 Peak intensity 1.100 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1



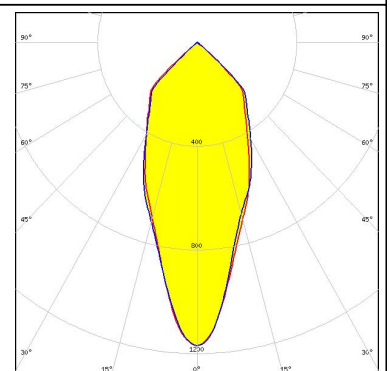
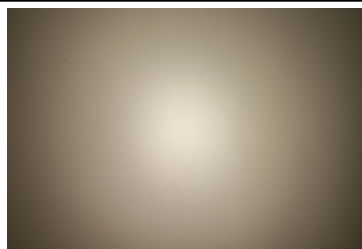
LED CMT19xx  
 FWHM 51.0°  
 Efficiency 94 %  
 Peak intensity 1.022 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 477 Typ L1



LED CMT28xx  
 FWHM 58.0°  
 Efficiency 94 %  
 Peak intensity 0.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 471 Typ L3



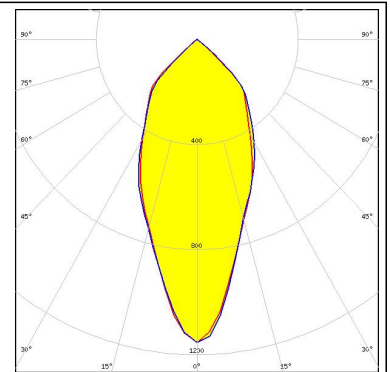
LED CXA/B 15xx  
 FWHM 42.0°  
 Efficiency 93 %  
 Peak intensity 1.200 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 441 Typ L1



#### PHOTOMETRIC DATA (MEASURED):

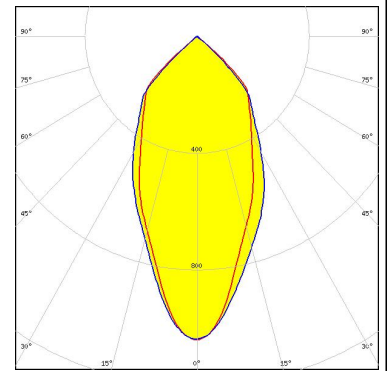
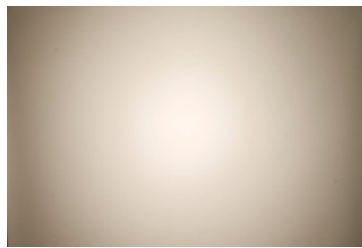
#### CREE

LED CXA/B 15xx  
 FWHM 46.0°  
 Efficiency 93 %  
 Peak intensity 1.200 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14123\_CLAMP-CXA15-18



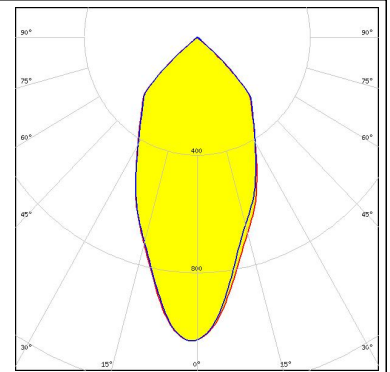
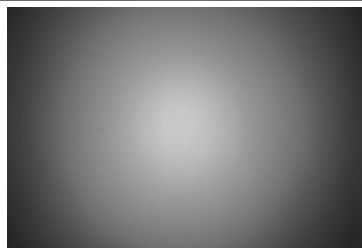
#### CREE

LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 50.0°  
 Efficiency 92 %  
 Peak intensity 1.000 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 437 Typ L1



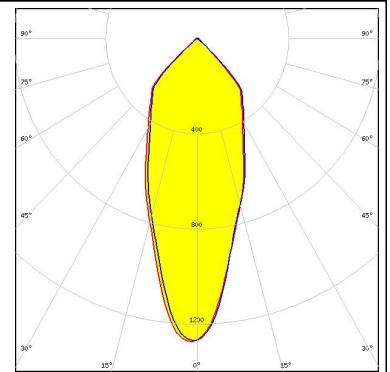
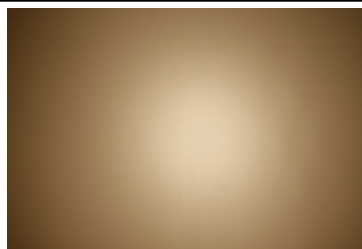
#### CREE

LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 49.0°  
 Efficiency 92 %  
 Peak intensity 1.000 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### CREE

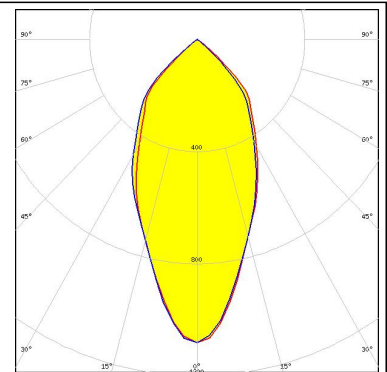
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 39.0°  
 Efficiency 94 %  
 Peak intensity 1.280 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2101CR + 50-2100AN



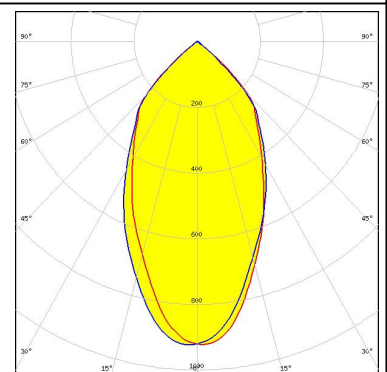
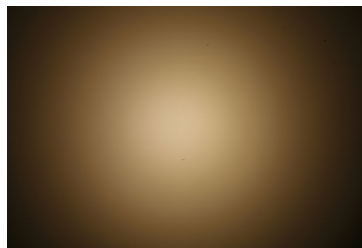
#### PHOTOMETRIC DATA (MEASURED):



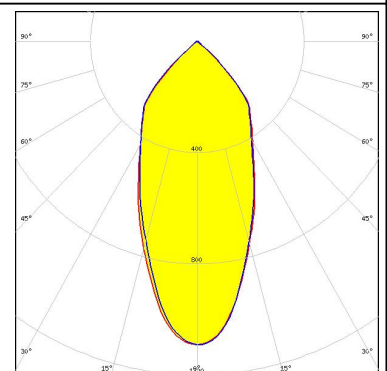
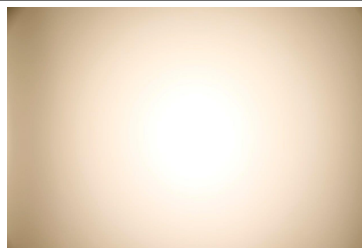
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 50.0°  
 Efficiency 94 %  
 Peak intensity 1.100 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14123\_CLAMP-CXA15-18



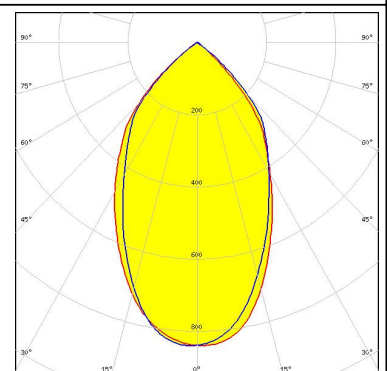
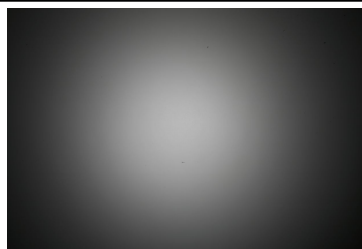
LED CXA/B 25xx  
 FWHM 56.0°  
 Efficiency 93 %  
 Peak intensity 0.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



LED CXA/B 25xx  
 FWHM 47.0°  
 Efficiency 94 %  
 Peak intensity 1.090 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2102CR + 50-2100AN



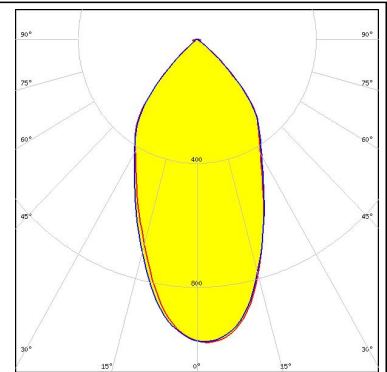
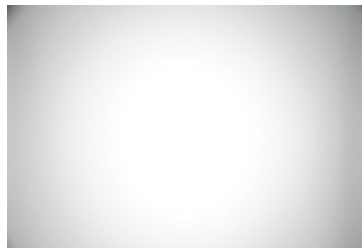
LED CXA/B 30xx  
 FWHM 61.0°  
 Efficiency 92 %  
 Peak intensity 0.840 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



#### PHOTOMETRIC DATA (MEASURED):

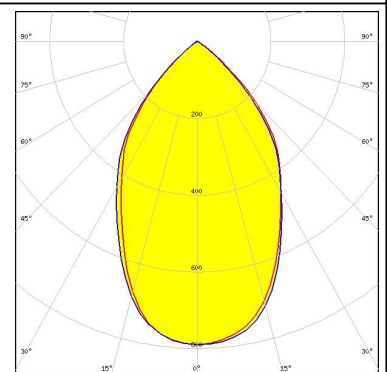
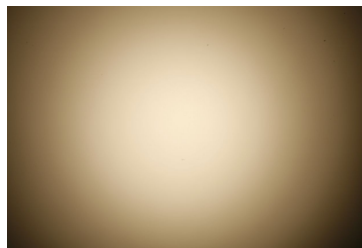
#### CREE

LED CXA/B 30xx  
 FWHM 52.0°  
 Efficiency 93 %  
 Peak intensity 0.980 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2234C + 50-2100AN



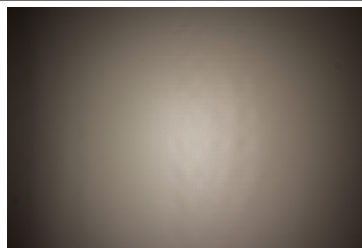
#### CREE

LED CXA/B 3590  
 FWHM 66.0°  
 Efficiency 93 %  
 Peak intensity 0.790 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2303CR + 50-2300AN



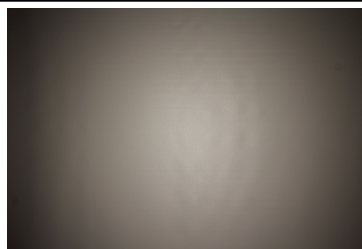
#### EVERLIGHT

LED CHI3030 19W  
 FWHM 54.0°  
 Efficiency 88 %  
 Peak intensity 0.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 468 Typ L3

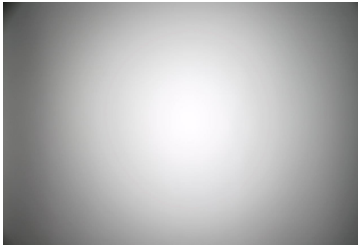
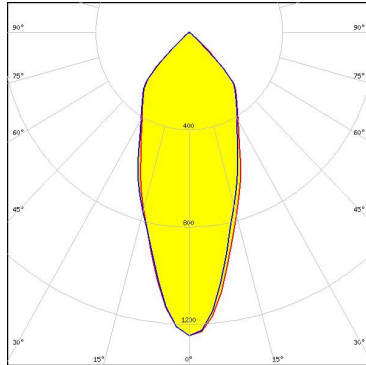
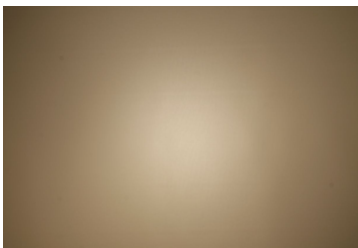
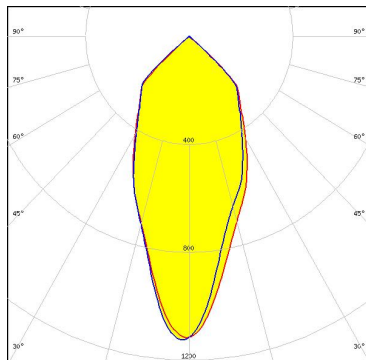

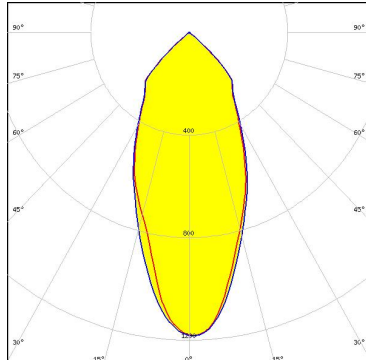
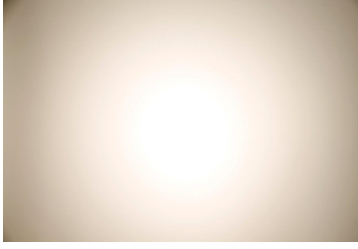
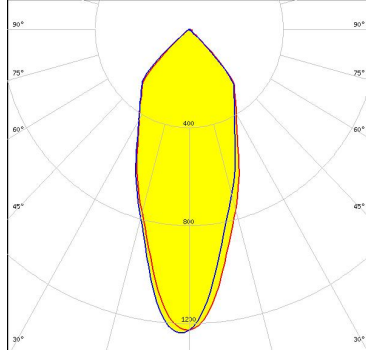


#### EVERLIGHT

LED CHI3030 29W  
 FWHM 62.0°  
 Efficiency 87 %  
 Peak intensity 0.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 468 Typ L3



#### PHOTOMETRIC DATA (MEASURED):

<p><b>LG Innotek</b></p> <p>LED COB 10W/13W/17W/24W            FWHM 40.0°            Efficiency 93 %            Peak intensity 1.250 cd/lm            LEDs/each optic 1            Light colour White            Required components:            IDEAL: 50-2100LG + 50-2100AN</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202/1203            FWHM 45.0°            Efficiency 93 %            Peak intensity 1.100 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13658_CLAMP-VERO13-18            Bender Wirth: 438 Typ L1</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1204/1205            FWHM 45.0°            Efficiency 94 %            Peak intensity 1.200 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1204/1205            FWHM 40.0°            Efficiency 93 %            Peak intensity 1.240 cd/lm            LEDs/each optic 1            Light colour White            Required components:            IDEAL: 50-2100SH + 50-2100AN</p>		



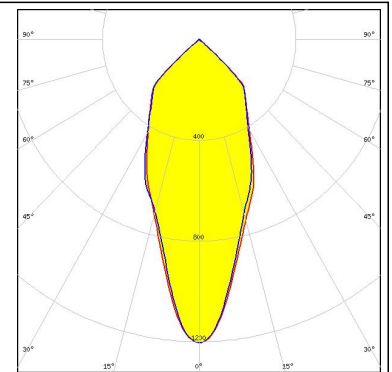
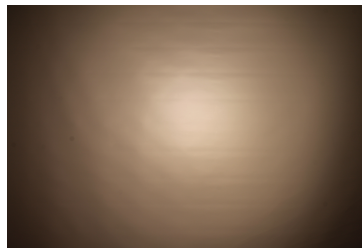
#### PHOTOMETRIC DATA (MEASURED):

#### LUMILEDS

LED LUXEON CoB 1204HD  
 FWHM 43.0°  
 Efficiency 94 %  
 Peak intensity 1.200 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

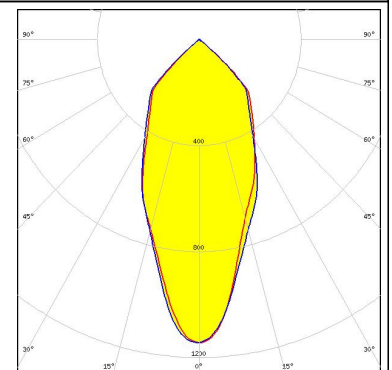
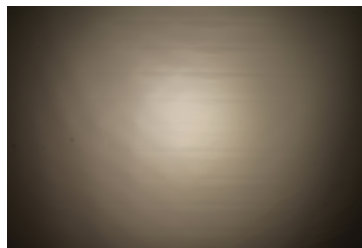
TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### LUMILEDS

LED LUXEON CoB 1205HD  
 FWHM 46.0°  
 Efficiency 94 %  
 Peak intensity 1.140 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

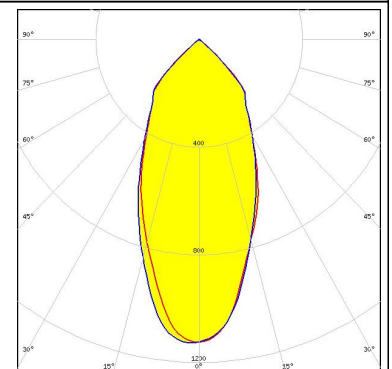
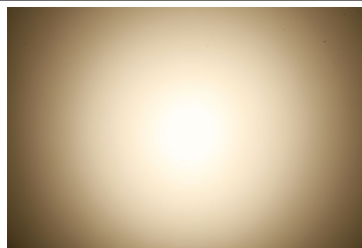


#### LUMILEDS

LED LUXEON CoB 1208  
 FWHM 48.0°  
 Efficiency 93 %  
 Peak intensity 1.100 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

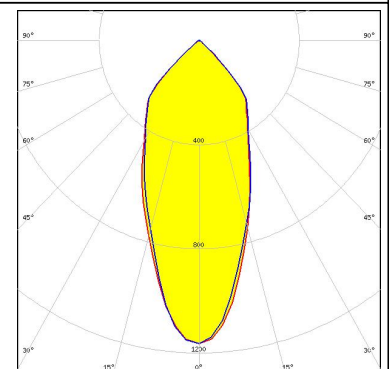
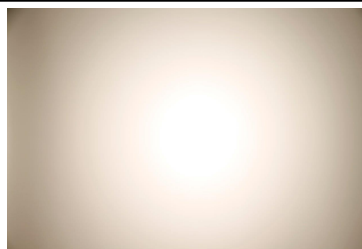


#### LUMILEDS

LED LUXEON CoB 1208  
 FWHM 44.0°  
 Efficiency 93 %  
 Peak intensity 1.170 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

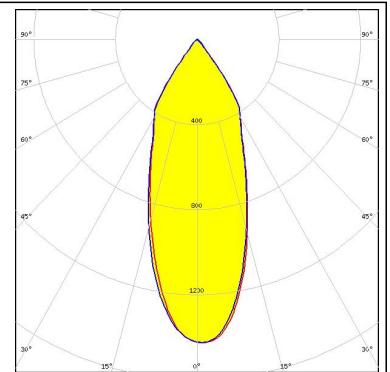
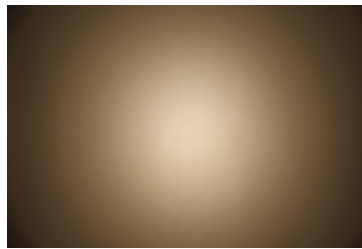
IDEAL: 50-2100SH + 50-2100AN



#### PHOTOMETRIC DATA (MEASURED):

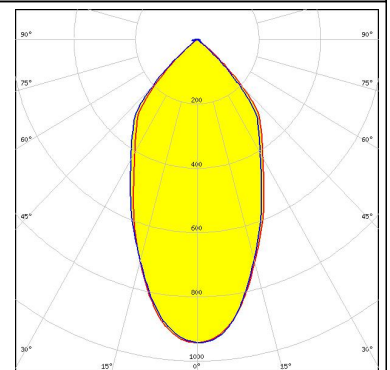
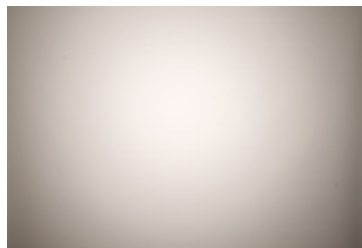
#### LUMILEDS

LED LUXEON CoB 1211  
 FWHM 55.0°  
 Efficiency 93 %  
 Peak intensity 0.940 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 431 Typ L3



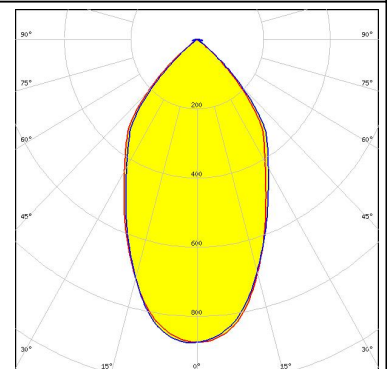
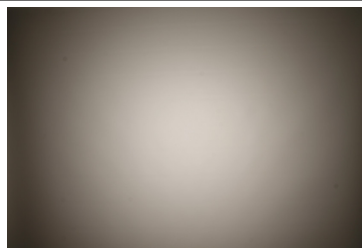
#### LUMILEDS

LED LUXEON CoB 1211  
 FWHM 53.0°  
 Efficiency 91 %  
 Peak intensity 0.910 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



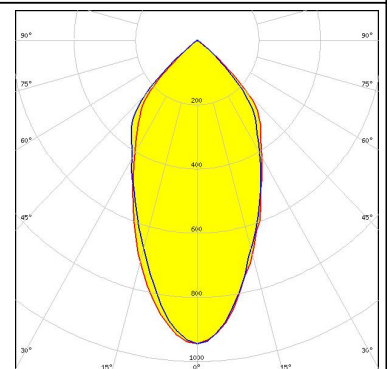
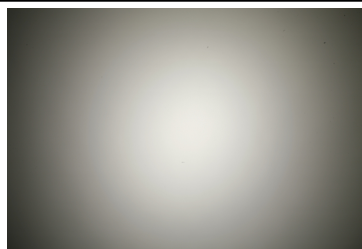
#### LUMILEDS

LED LUXEON CoB 1216/1812  
 FWHM 58.0°  
 Efficiency 91 %  
 Peak intensity 0.880 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN


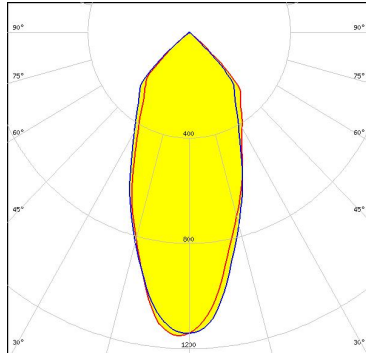
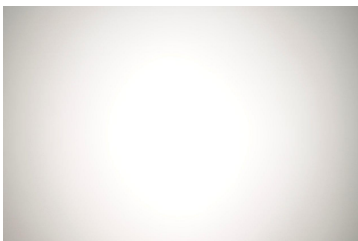
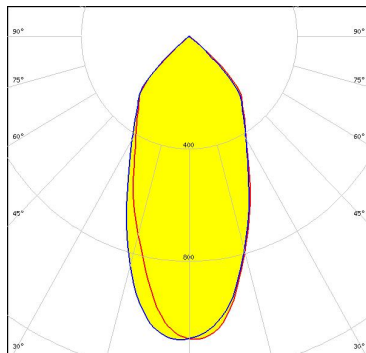
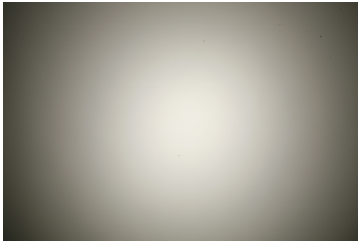
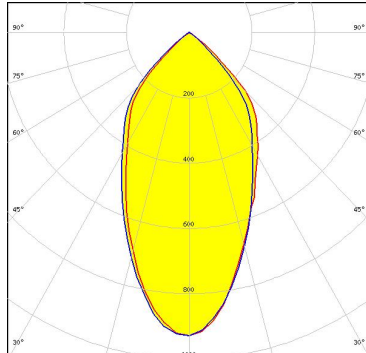

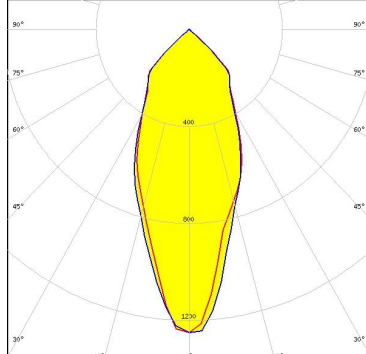


#### LUMILEDS

LED LUXEON K12  
 FWHM 54.0°  
 Efficiency 89 %  
 Peak intensity 1.000 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1



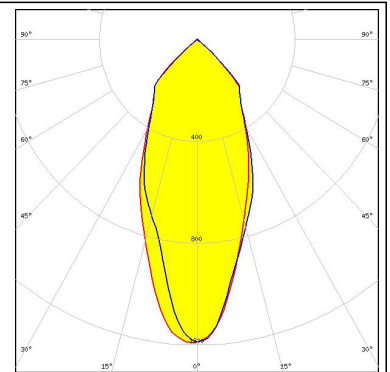
#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON K12</p> <p>FWHM 45.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.150 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON K16</p> <p>FWHM 48.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.000 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON K16</p> <p>FWHM 54.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 0.900 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON S2000</p> <p>FWHM 42.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.300 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13395_CLAMP-S2000</p>		

#### PHOTOMETRIC DATA (MEASURED):

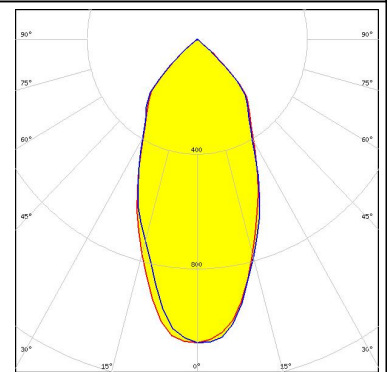
#### LUMILEDS

LED LUXEON S3000  
 FWHM 44.0°  
 Efficiency 92 %  
 Peak intensity 1.200 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13397\_CLAMP-S3000



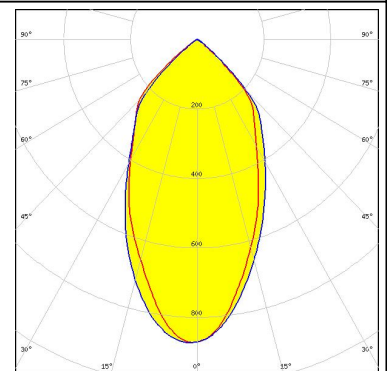
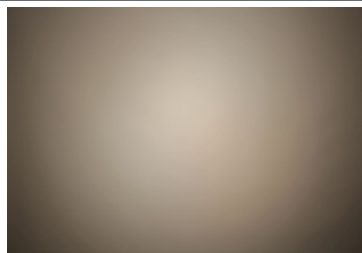
#### LUMILEDS

LED LUXEON S5000  
 FWHM 49.0°  
 Efficiency 92 %  
 Peak intensity 1.000 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13399\_CLAMP-S5000



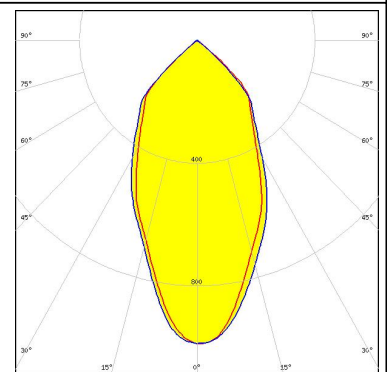
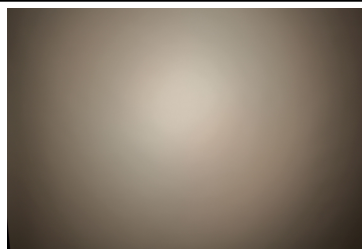
#### LUMINUS

LED CDM-14 (Dim-To-Warm)  
 FWHM 55.0°  
 Efficiency 89 %  
 Peak intensity 0.880 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 491 Typ L2



#### LUMINUS

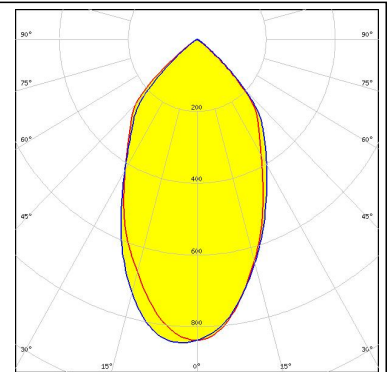
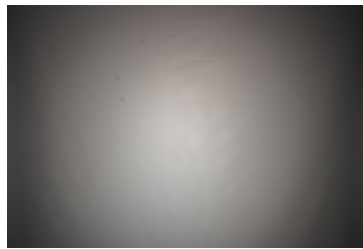
LED CDM-14 (Dim-To-Warm)  
 FWHM 53.0°  
 Efficiency 93 %  
 Peak intensity 1.000 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 491 Typ L2



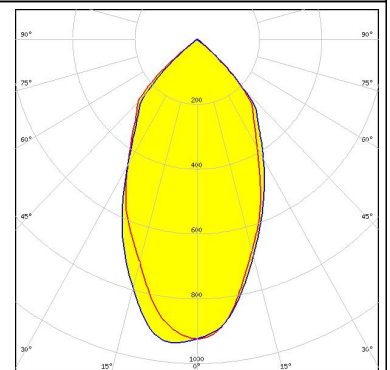
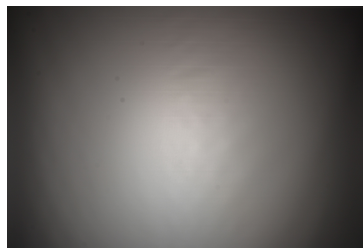
#### PHOTOMETRIC DATA (MEASURED):



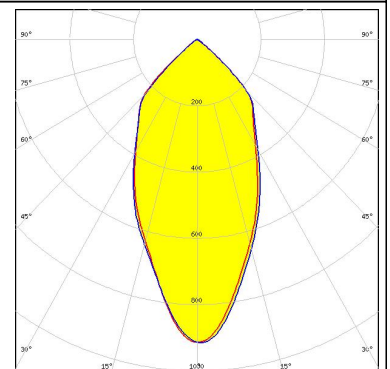
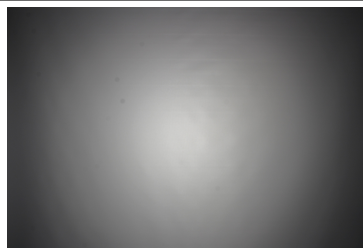
LED CDM-18 (Dim-To-Warm)  
 FWHM 58.0°  
 Efficiency 90 %  
 Peak intensity 0.800 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 491 Typ L2



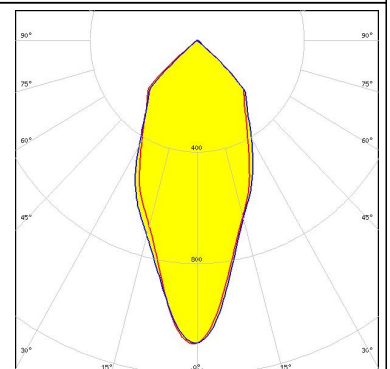
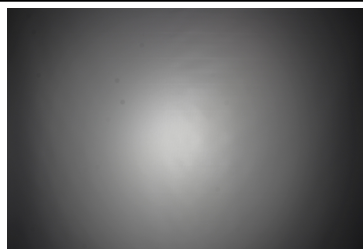
LED CDM-18 (Dim-To-Warm)  
 FWHM 56.0°  
 Efficiency 94 %  
 Peak intensity 0.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 491 Typ L2



LED CDM-9 (Dim-To-Warm)  
 FWHM 51.0°  
 Efficiency 87 %  
 Peak intensity 0.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 490 Typ L1



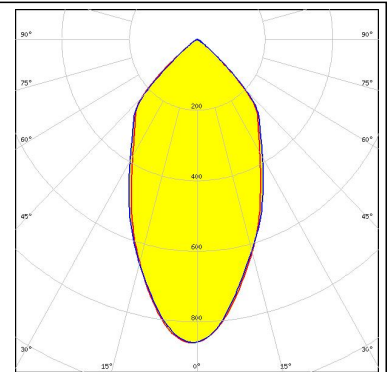
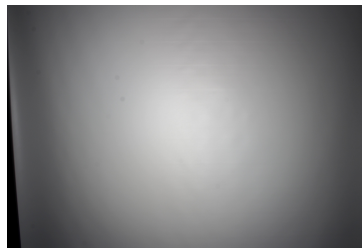
LED CDM-9 (Dim-To-Warm)  
 FWHM 46.0°  
 Efficiency 91 %  
 Peak intensity 1.100 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 490 Typ L1



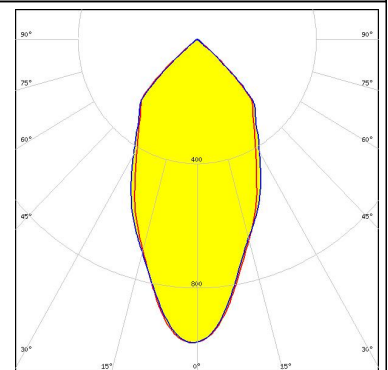
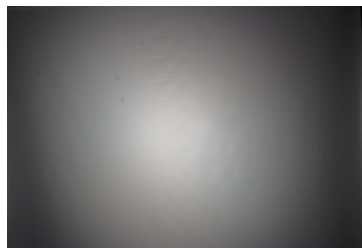
#### PHOTOMETRIC DATA (MEASURED):



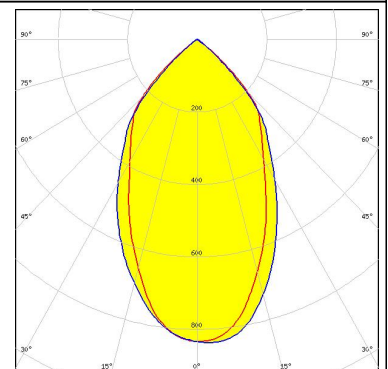
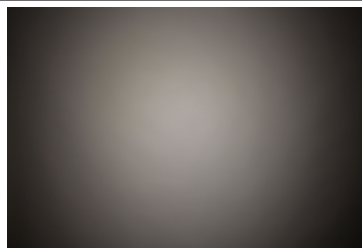
LED CTM-14 (Tunable White)  
 FWHM 54.0°  
 Efficiency 87 %  
 Peak intensity 0.860 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 442 Typ L3



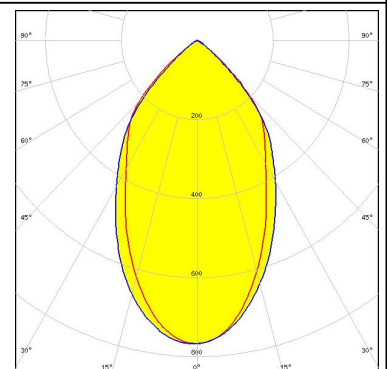
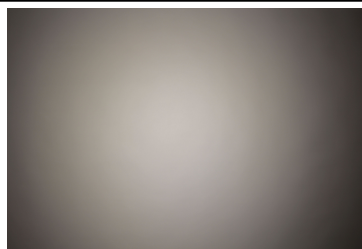
LED CTM-14 (Tunable White)  
 FWHM 51.0°  
 Efficiency 91 %  
 Peak intensity 0.980 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 442 Typ L3



LED CTM-22 (Tunable White)  
 FWHM 60.0°  
 Efficiency 90 %  
 Peak intensity 0.840 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 494 Typ L3



LED CTM-22 (Tunable White)  
 FWHM 61.0°  
 Efficiency 86 %  
 Peak intensity 0.770 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 494 Typ L3



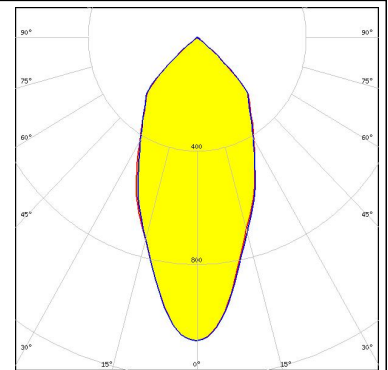
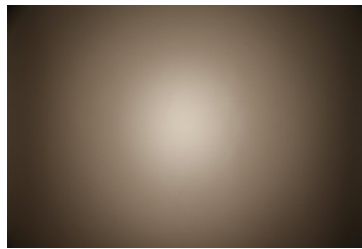
#### PHOTOMETRIC DATA (MEASURED):



LED CxM-14 (19x19)  
 FWHM 48.0°  
 Efficiency 93 %  
 Peak intensity 1.070 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

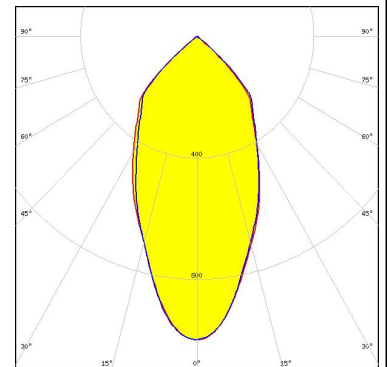
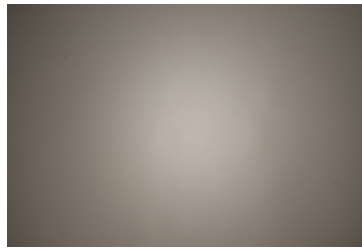
TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



LED COB J-Type  
 FWHM 51.0°  
 Efficiency 93 %  
 Peak intensity 1.000 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

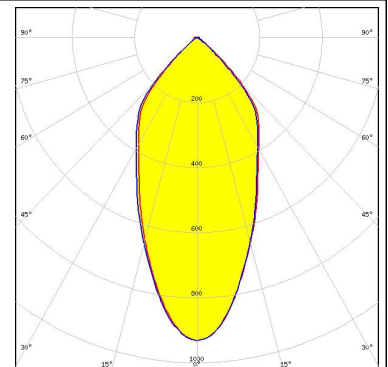
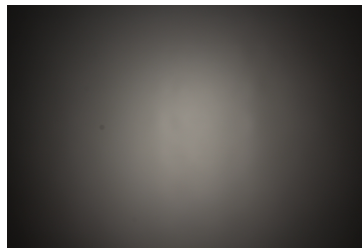
C13658\_CLAMP-VERO13-18  
 Bender Wirth: 463 Typ L2



LED COB J-Type  
 FWHM 48.0°  
 Efficiency 87 %  
 Peak intensity 0.930 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

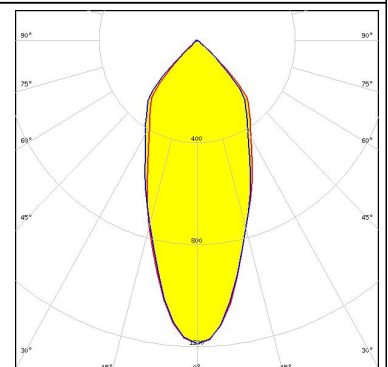
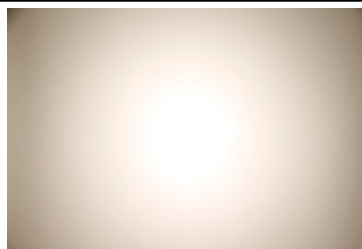
F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2103NC + 50-2100AN



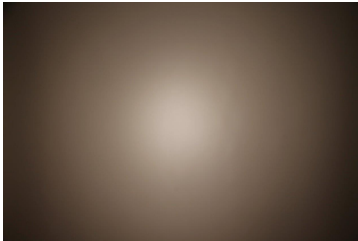
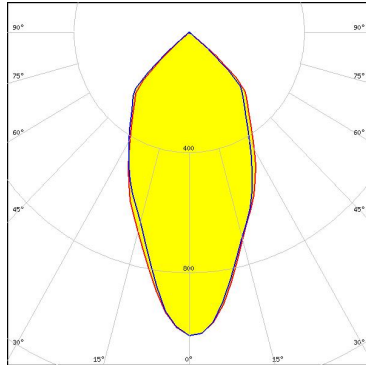
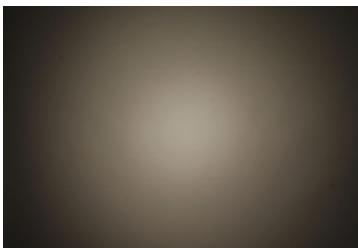
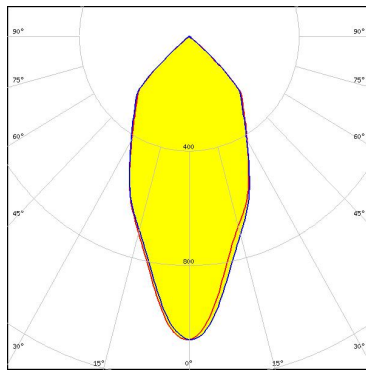
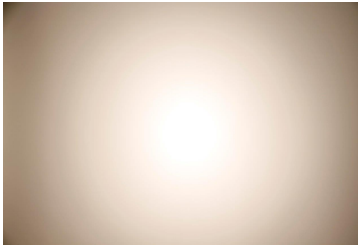
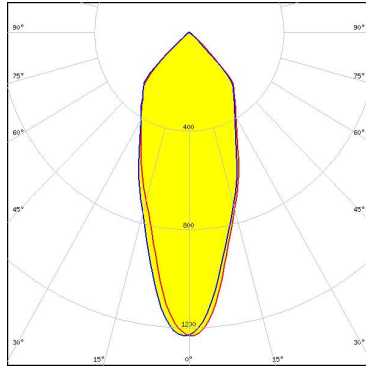
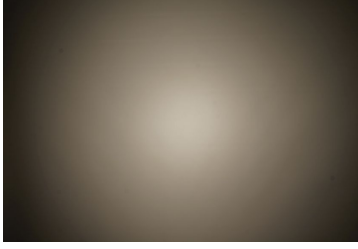
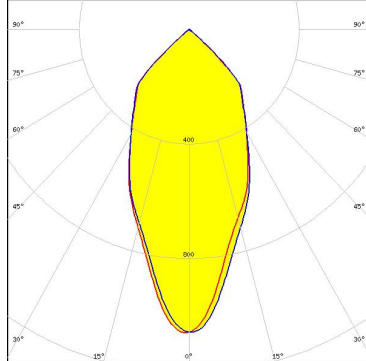
LED COB J-Type  
 FWHM 43.0°  
 Efficiency 94 %  
 Peak intensity 1.190 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

IDEAL: 50-2103NC + 50-2100AN

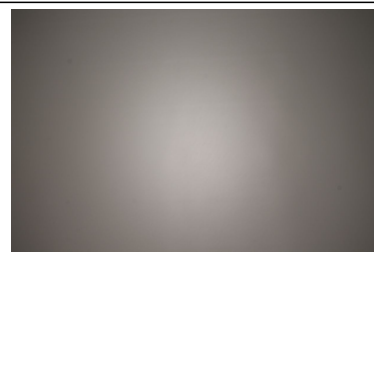
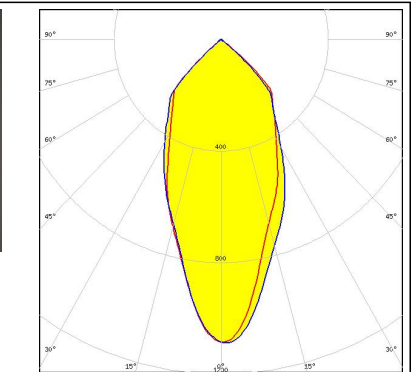
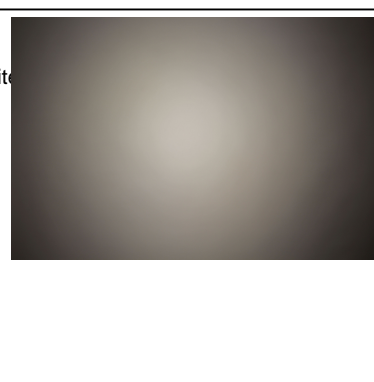
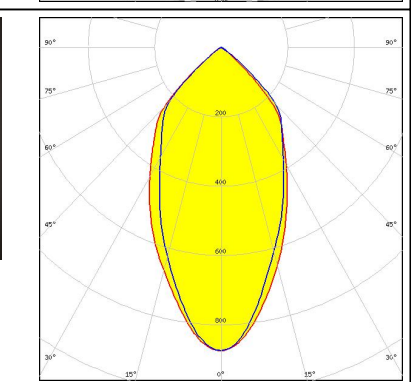
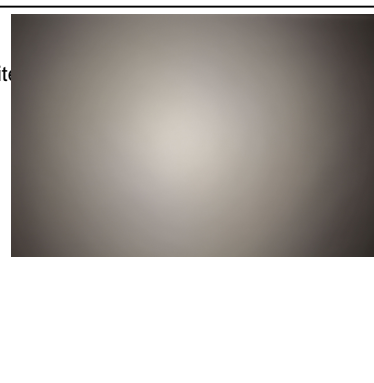
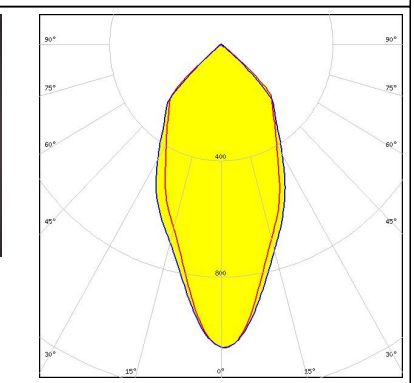

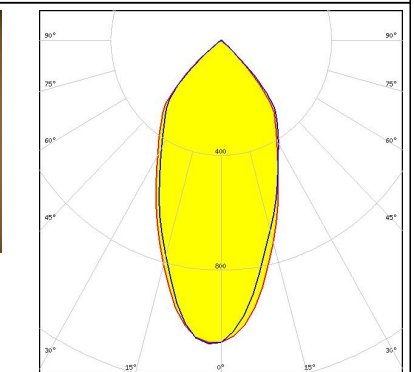


#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM 51.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.015 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Molex: 180580-0005</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM 48.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.100 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM 39.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.230 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 48.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.060 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		



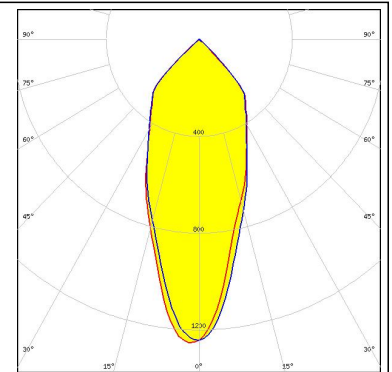
#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)            FWHM 47.0°            Efficiency 92 %            Peak intensity 1.100 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 NVCWJ024Z-V1MT: COB J-Type Tunable White            FWHM 57.0°            Efficiency 87 %            Peak intensity 0.880 cd/lm            LEDs/each optic 1            Light colour White            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            FWHM 53.0°            Efficiency 92 %            Peak intensity 1.000 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13658_CLAMP-VERO13-18            Bender Wirth: 498 Typ L2</p>		
<p><b>OSRAM</b></p> <p>LED PrevaLED Core AC (LEP-2000)            FWHM 49.0°            Efficiency 93 %            Peak intensity 1.070 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

#### PHOTOMETRIC DATA (MEASURED):

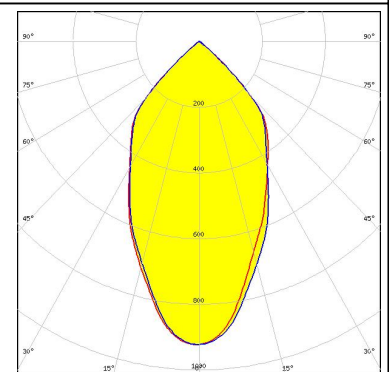
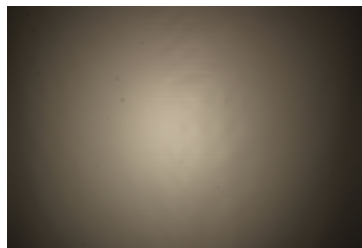
#### OSRAM

LED PrevaLED Core AC (LEP-800)  
 FWHM 40.0°  
 Efficiency 93 %  
 Peak intensity 1.260 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



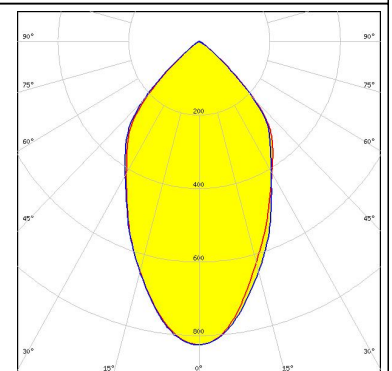
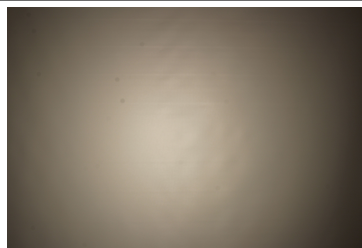
#### OSRAM

LED PrevaLED Core G7 L15 H1  
 FWHM 57.0°  
 Efficiency 93 %  
 Peak intensity 0.920 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16685\_CLAMP-PRV-A



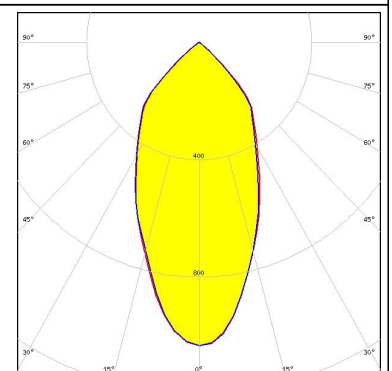
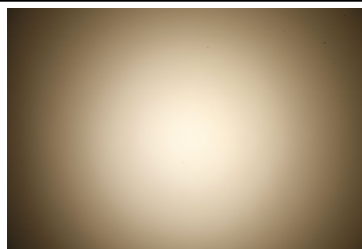
#### OSRAM

LED PrevaLED Core G7 L15 H1  
 FWHM 60.0°  
 Efficiency 90 %  
 Peak intensity 0.830 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16685\_CLAMP-PRV-A  
 F13671\_ANGE-RZ-LENS



#### OSRAM

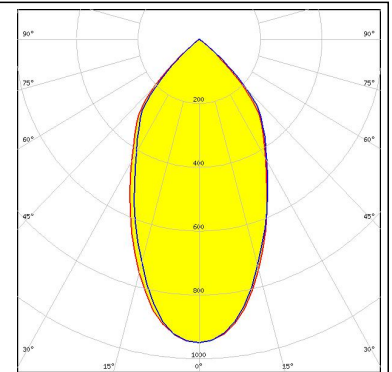
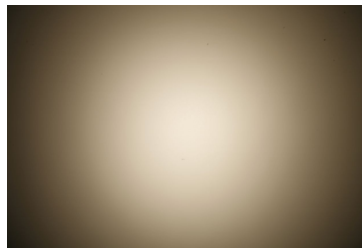
LED PrevaLED Core Z3 LES19  
 FWHM 50.0°  
 Efficiency 94 %  
 Peak intensity 1.040 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

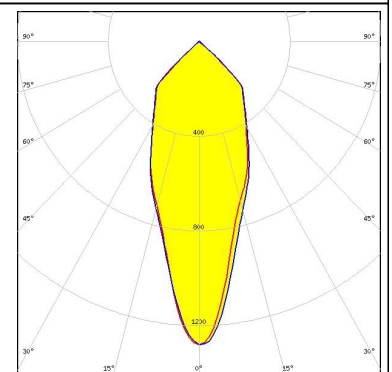
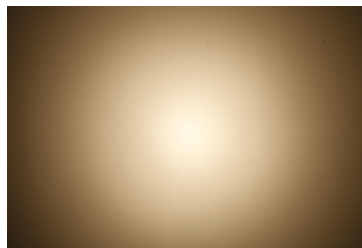
#### OSRAM

LED PrevaLED Core Z3 LES23  
 FWHM 55.0°  
 Efficiency 94 %  
 Peak intensity 0.950 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



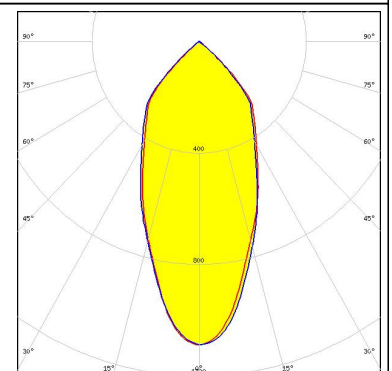
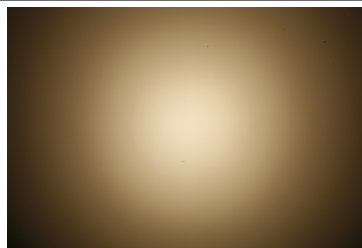
#### OSRAM

LED PrevaLED Core Z3 LES9  
 FWHM 38.0°  
 Efficiency 93 %  
 Peak intensity 1.280 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



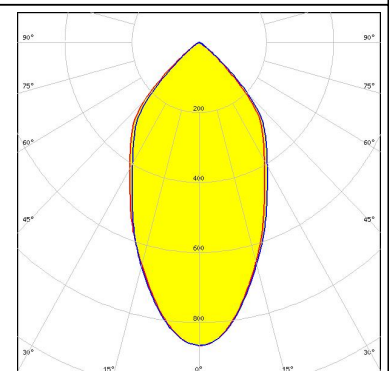
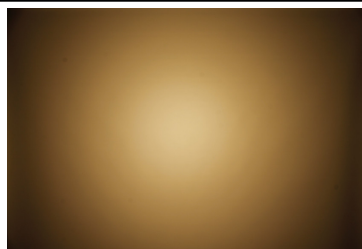
#### OSRAM

LED PrevaLED Core Z4 LES19  
 FWHM 47.0°  
 Efficiency 93 %  
 Peak intensity 1.100 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### OSRAM

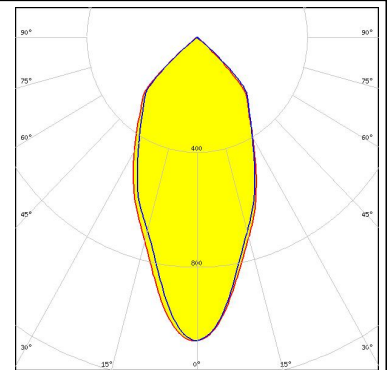
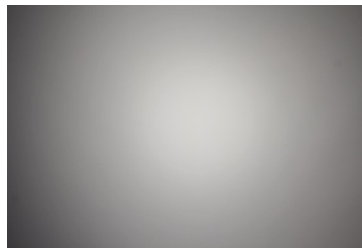
LED PrevaLED Core Z4 LES19  
 FWHM 55.0°  
 Efficiency 88 %  
 Peak intensity 0.870 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

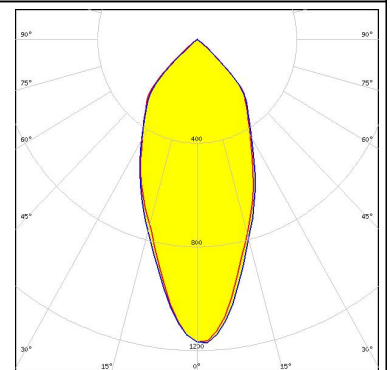
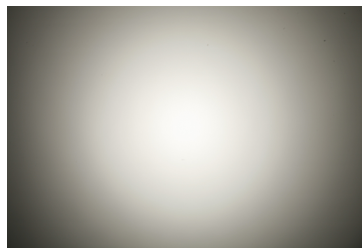
**OSRAM**  
Opto Semiconductors

LED Soleriq S13  
FWHM 49.0°  
Efficiency 92 %  
Peak intensity 1.100 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 437 Typ L1



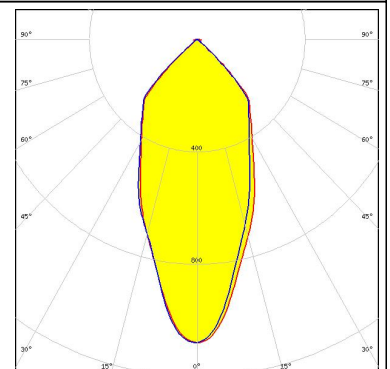
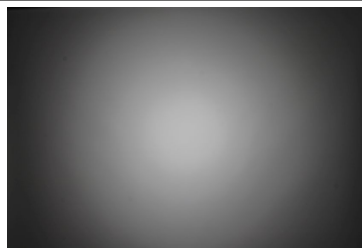
**OSRAM**  
Opto Semiconductors

LED Soleriq S13  
FWHM 47.0°  
Efficiency 94 %  
Peak intensity 1.200 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



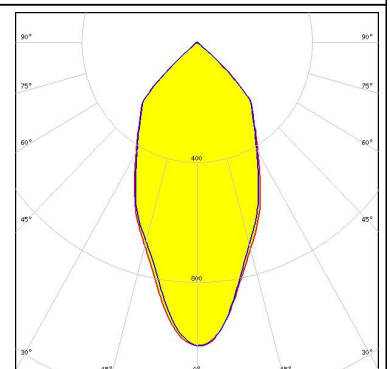
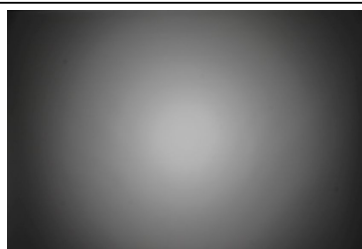
**OSRAM**  
Opto Semiconductors

LED Soleriq S13 19x19  
FWHM 45.0°  
Efficiency 91 %  
Peak intensity 1.100 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
IDEAL: 50-2103CT + 50-2100AN



**OSRAM**  
Opto Semiconductors

LED Soleriq S13 19x19  
FWHM 51.0°  
Efficiency 92 %  
Peak intensity 1.000 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

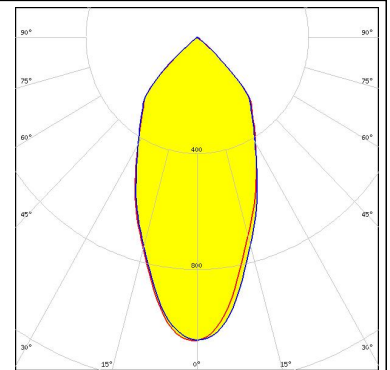
#### OSRAM

Opto Semiconductors

LED Soleriq S19  
 FWHM 49.0°  
 Efficiency 94 %  
 Peak intensity 1.050 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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



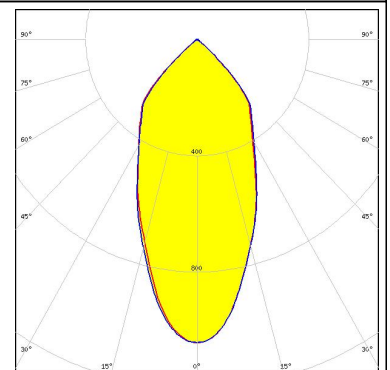
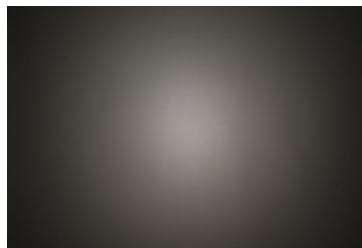
#### OSRAM

Opto Semiconductors

LED Soleriq S19  
 FWHM 48.0°  
 Efficiency 91 %  
 Peak intensity 1.000 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

C13584\_CLAMP-VERO29  
 Bender Wirth: 462 Typ L3

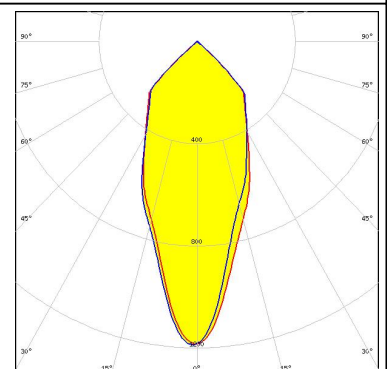
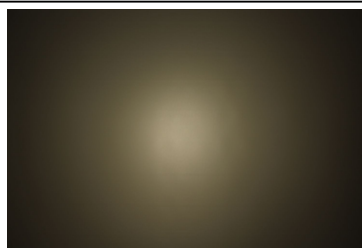


#### PHILIPS

LED Fortimo SLM L09 + SLM holder  
 FWHM 42.0°  
 Efficiency 92 %  
 Peak intensity 1.190 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1

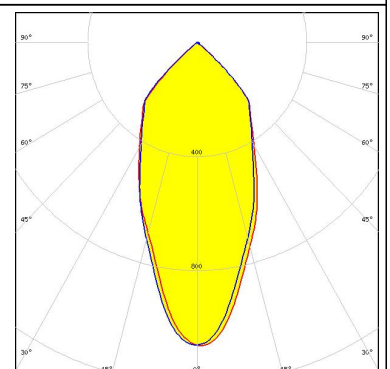
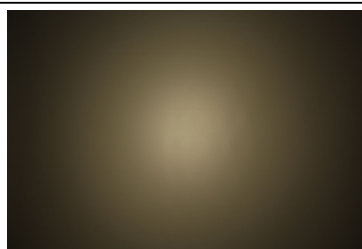


#### PHILIPS

LED Fortimo SLM L13 + SLM holder  
 FWHM 48.0°  
 Efficiency 92 %  
 Peak intensity 1.070 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1

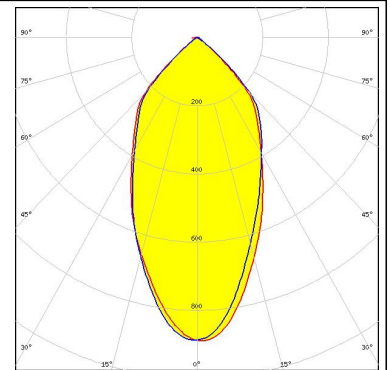


#### PHOTOMETRIC DATA (MEASURED):

#### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM 54.0°  
 Efficiency 88 %  
 Peak intensity 0.900 cd/lm  
 LEDs/each optic 1  
 Light colour White

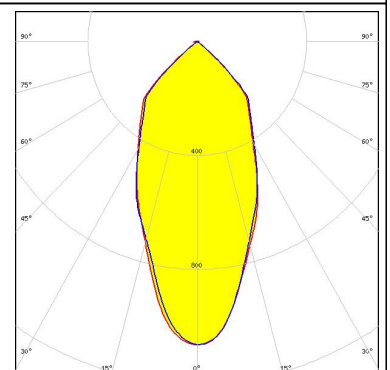
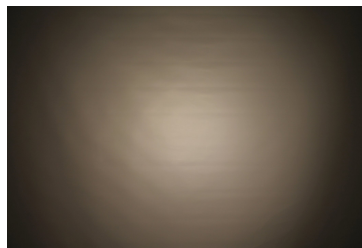
Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM 49.0°  
 Efficiency 94 %  
 Peak intensity 1.100 cd/lm  
 LEDs/each optic 1  
 Light colour White

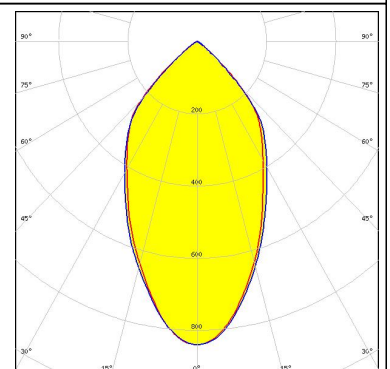
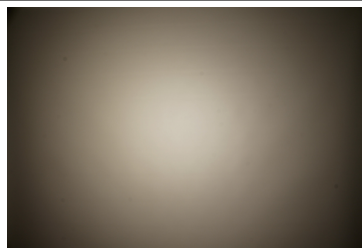
Required components:  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHILIPS

LED Fortimo SLM L15 + SLM holder  
 FWHM 57.0°  
 Efficiency 87 %  
 Peak intensity 0.840 cd/lm  
 LEDs/each optic 1  
 Light colour White

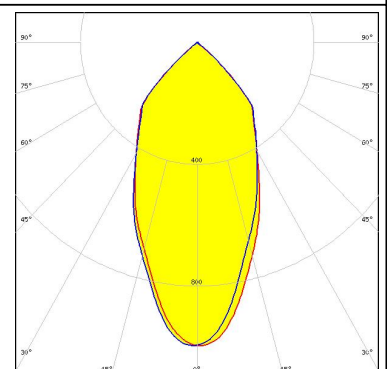
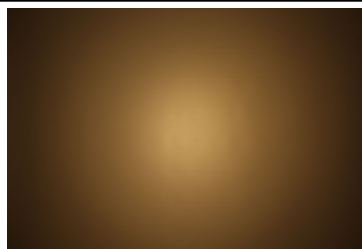
Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### PHILIPS

LED Fortimo SLM L15 + SLM holder  
 FWHM 51.0°  
 Efficiency 90 %  
 Peak intensity 1.000 cd/lm  
 LEDs/each optic 1  
 Light colour White

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



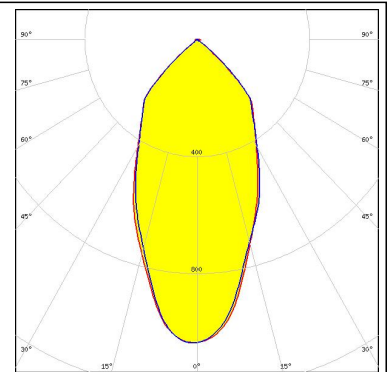
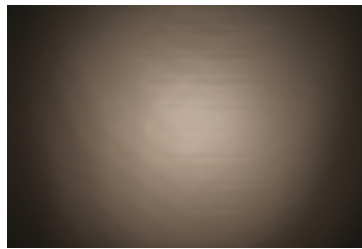
#### PHOTOMETRIC DATA (MEASURED):

#### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM 50.0°  
 Efficiency 94 %  
 Peak intensity 1.000 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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



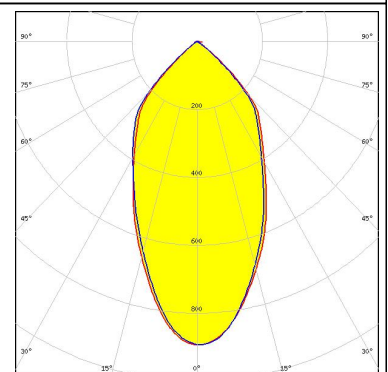
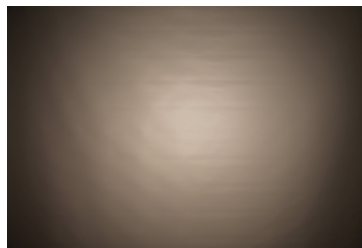
#### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM 53.0°  
 Efficiency 89 %  
 Peak intensity 0.900 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

F13671\_ANGE-RZ-LENS

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

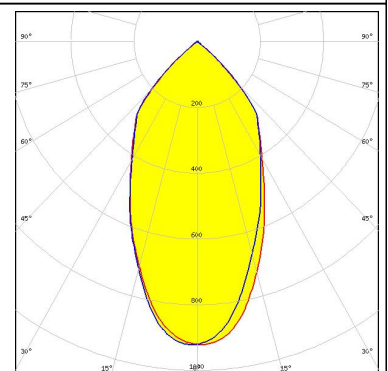
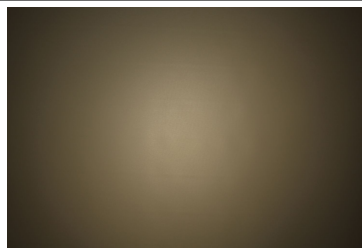


#### PHILIPS

LED Fortimo SLM L19 + SLM holder  
 FWHM 54.0°  
 Efficiency 89 %  
 Peak intensity 0.920 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1



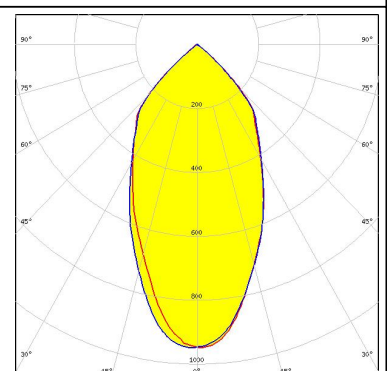
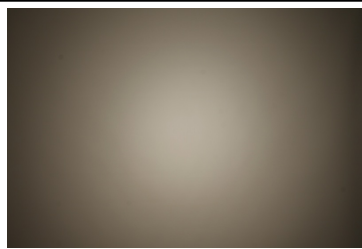
#### SAMSUNG

LED LC026B / 033B / 040B  
 FWHM 54.0°  
 Efficiency 92 %  
 Peak intensity 0.950 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

C13658\_CLAMP-VERO13-18

Bender Wirth: 450 Typ L2



#### PHOTOMETRIC DATA (MEASURED):

### SAMSUNG

LED LC026B / 033B / 040B

FWHM 51.0°

Efficiency 92 %

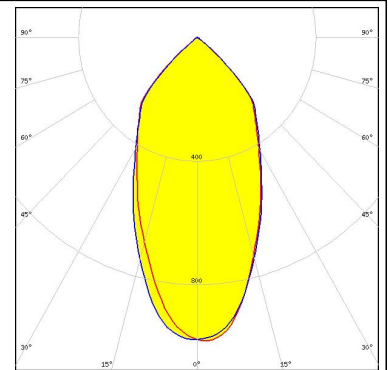
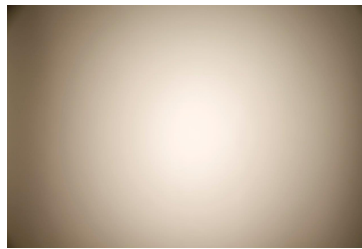
Peak intensity 1.000 cd/lm

LEDs/each optic 1

Light colour White

Required components:

TE: 2213258-2 + OPTIC CLIP Z50 TYPE1 2213194-1



### SAMSUNG

LED LC035T (Tunable white)

FWHM 69.0°

Efficiency 88 %

Peak intensity 0.714 cd/lm

LEDs/each optic 1

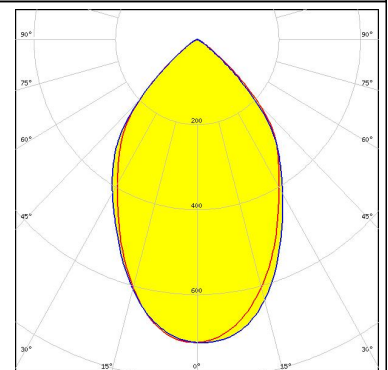
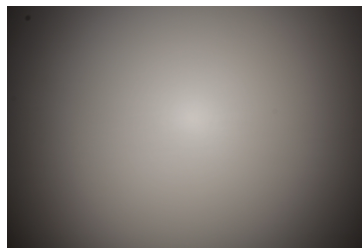
Light colour Tunable White

Required components:

C13584\_CLAMP-VERO29

F13671\_ANGE-RZ-LENS

Bender Wirth: 502 Typ L3



### SAMSUNG

LED LC035T (Tunable white)

FWHM 66.0°

Efficiency 93 %

Peak intensity 0.796 cd/lm

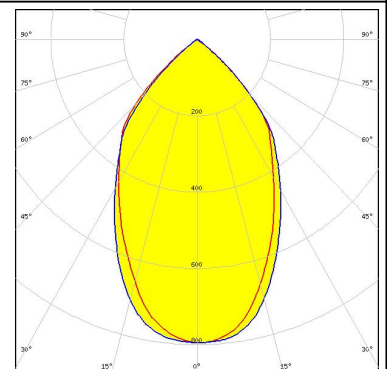
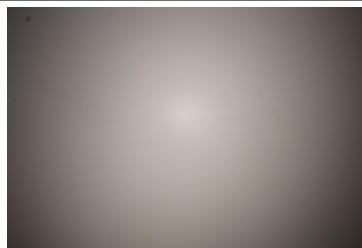
LEDs/each optic 1

Light colour Tunable White

Required components:

C13584\_CLAMP-VERO29

Bender Wirth: 502 Typ L3



### SAMSUNG

LED LC040C

FWHM 46.0°

Efficiency 90 %

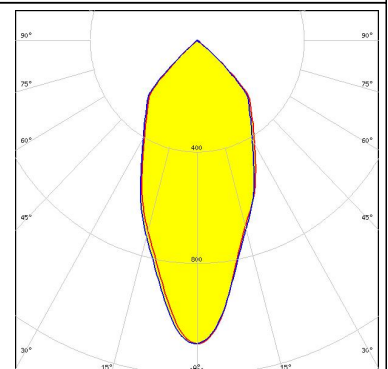
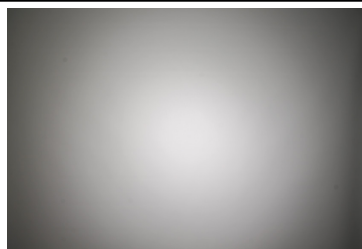
Peak intensity 1.100 cd/lm

LEDs/each optic 1

Light colour White

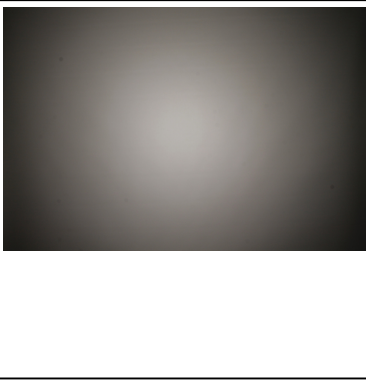
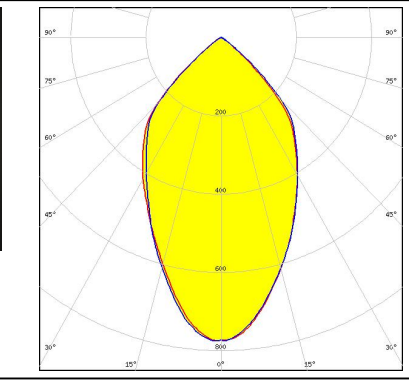

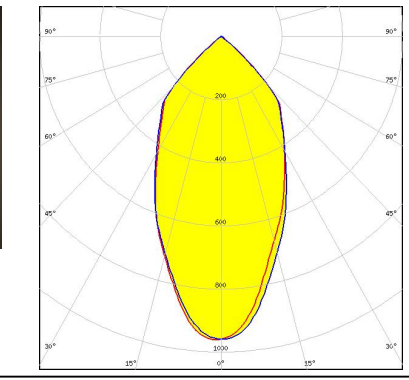

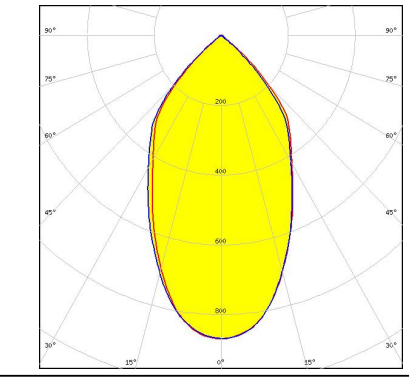
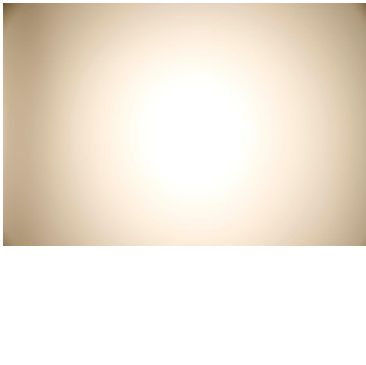
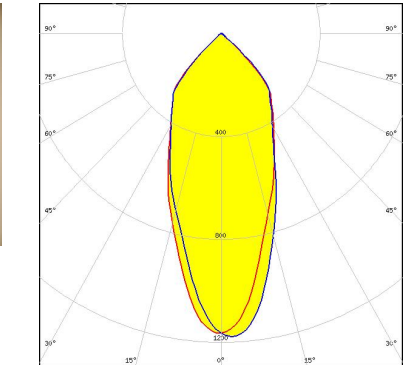
Required components:

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





#### PHOTOMETRIC DATA (MEASURED):

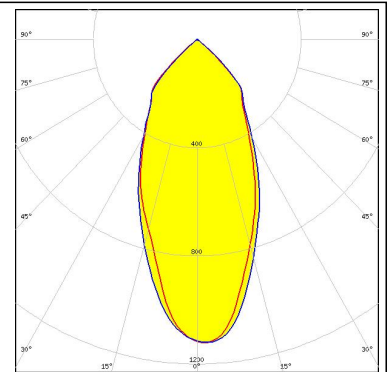
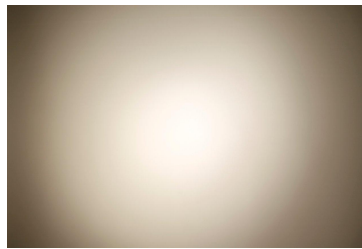
<p><b>SEOL</b> SEOUL SEMICONDUCTOR</p> <p>LED AC Zhaga COB FWHM 64.0° Efficiency 89 % Peak intensity 0.780 cd/lm LEDs/each optic 1 Light colour White Required components: F13671_ANGE-RZ-LENS Optosource: SEHSMJD-A</p>		
<p><b>SEOL</b> SEOUL SEMICONDUCTOR</p> <p>LED MJT COB LES 14.5 FWHM 54.0° Efficiency 92 % Peak intensity 1.000 cd/lm LEDs/each optic 1 Light colour White Required components: TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>SEOL</b> SEOUL SEMICONDUCTOR</p> <p>LED MJT COB LES 22 FWHM 58.0° Efficiency 90 % Peak intensity 0.870 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 Bender Wirth: 431 Typ L3</p>		
<p><b>SHARP</b></p> <p>LED Mega Zenigata (GW6DME) FWHM 43.0° Efficiency 93 % Peak intensity 1.180 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2100SH + 50-2100AN</p>		

#### PHOTOMETRIC DATA (MEASURED):

### SHARP

LED Mega Zenigata (GW6DME)  
 FWHM 47.0°  
 Efficiency 92 %  
 Peak intensity 1.100 cd/lm  
 LEDs/each optic 1  
 Light colour White

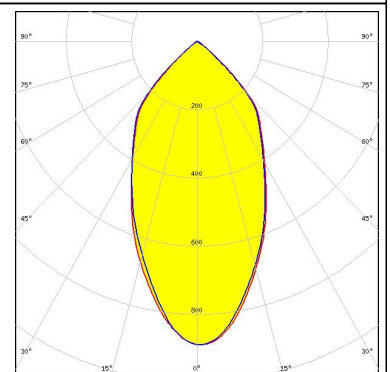
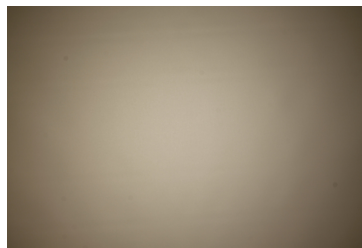
Required components:  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



### SHARP

LED Mega Zenigata (GW6DME)  
 FWHM 55.0°  
 Efficiency 89 %  
 Peak intensity 0.890 cd/lm  
 LEDs/each optic 1  
 Light colour White

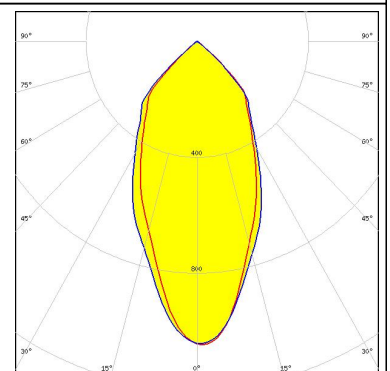
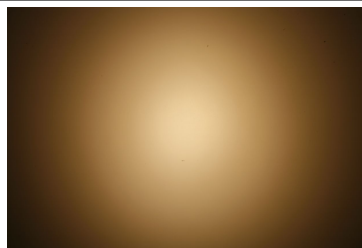
Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



### VS LIGHTING SOLUTIONS

LED WU-M-461  
 FWHM 50.0°  
 Efficiency 93 %  
 Peak intensity 1.050 cd/lm  
 LEDs/each optic 1  
 Light colour White

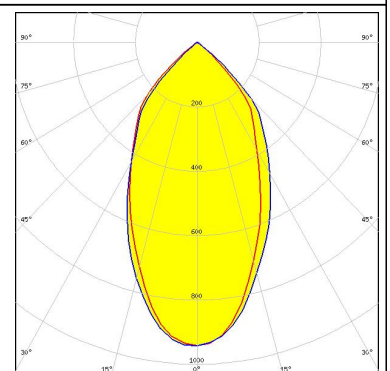
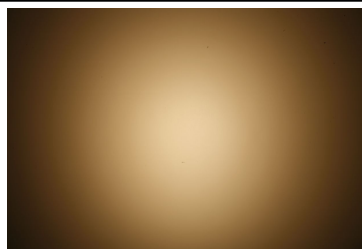
Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



### VS LIGHTING SOLUTIONS

LED WU-M-462  
 FWHM 55.0°  
 Efficiency 93 %  
 Peak intensity 0.940 cd/lm  
 LEDs/each optic 1  
 Light colour White

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



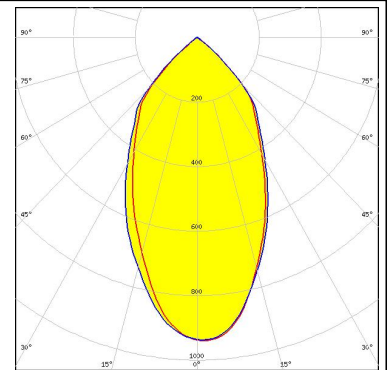
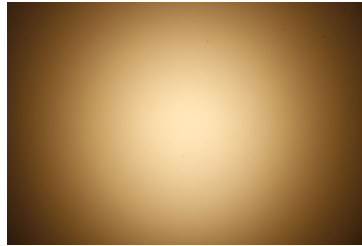
#### PHOTOMETRIC DATA (MEASURED):



LED WU-M-464  
 FWHM 55.0°  
 Efficiency 93 %  
 Peak intensity 0.940 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

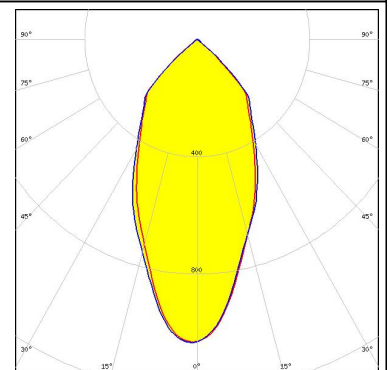
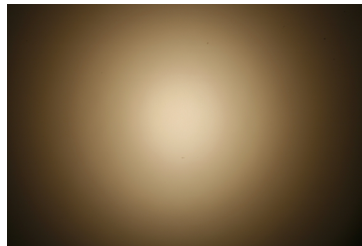
TE: OPTIC CLIP Z50 TYPE1 2213194-1



LED WU-M-484  
 FWHM 51.0°  
 Efficiency 93 %  
 Peak intensity 1.040 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

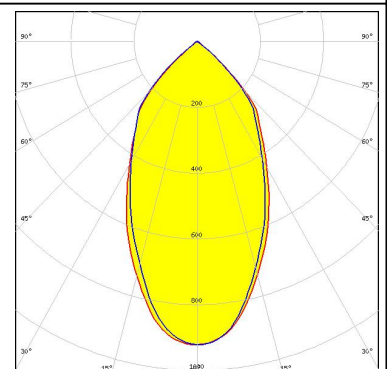
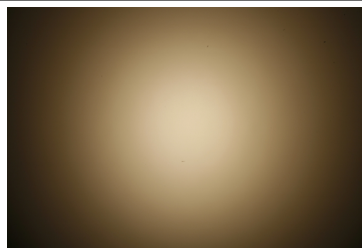
TE: OPTIC CLIP Z50 TYPE1 2213194-1



LED WU-M-485  
 FWHM 57.0°  
 Efficiency 93 %  
 Peak intensity 0.920 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

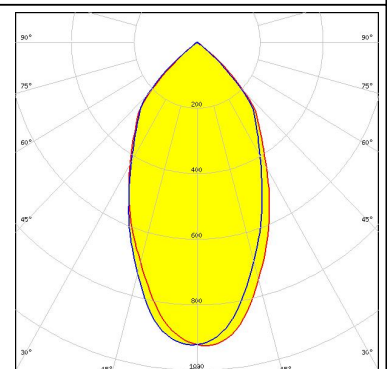
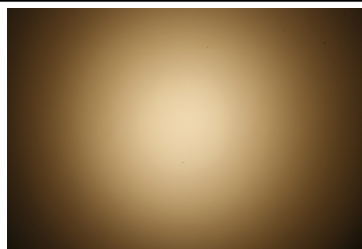
TE: OPTIC CLIP Z50 TYPE1 2213194-1




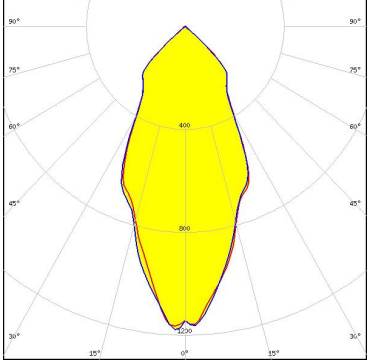

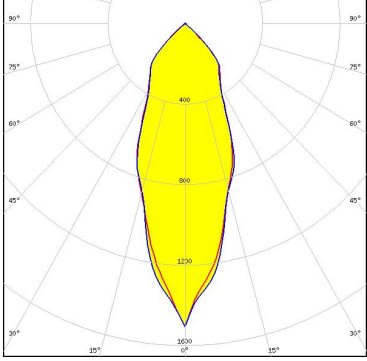

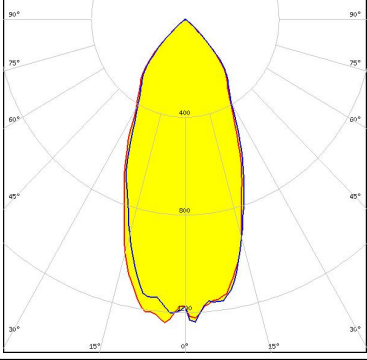

LED WU-M-486  
 FWHM 56.0°  
 Efficiency 93 %  
 Peak intensity 0.930 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (SIMULATED):

<p> <b>bridgelux.</b></p> <p>LED V10 Gen7            FWHM 50.0°            Efficiency 93 %            Peak intensity 1.190 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 38.0°            Efficiency 93 %            Peak intensity 1.507 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 43.0°            Efficiency 94 %            Peak intensity 1.279 cd/lm            LEDs/each optic 1            Light colour White            Required components:            IDEAL: 50-2204-CT + 50-2100AN</p>	
<p> <b>LUMINUS</b></p> <p>LED CxM-14 (19x19)            FWHM 52.0°            Efficiency 92 %            Peak intensity 1.000 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13658_CLAMP-VERO13-18            Bender Wirth: 433 Typ L1</p>	

## PHOTOMETRIC DATA (SIMULATED):



LED CxM-9 (13.5x13.5)  
FWHM 45.0°  
Efficiency 93 %  
Peak intensity 1.100 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 52.0°  
Efficiency 92 %  
Peak intensity 1.000 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 45.0°  
Efficiency 93 %  
Peak intensity 1.100 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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

#### LEDiL Oy

Joensuunkatu 13  
FI-24240 SALO  
Finland

#### LEDiL Inc.

228 West Page Street  
Suite D  
Sycamore IL 60178  
USA

#### Local sales and technical support

[www.ledil.com/where\\_to\\_buy](http://www.ledil.com/where_to_buy)

#### Shipping locations

Salo, Finland  
Hong Kong, China

#### Distribution Partners

[www.ledil.com/where\\_to\\_buy](http://www.ledil.com/where_to_buy)