

## ANGELINA-M

~30° medium beam

### TECHNICAL SPECIFICATIONS:

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

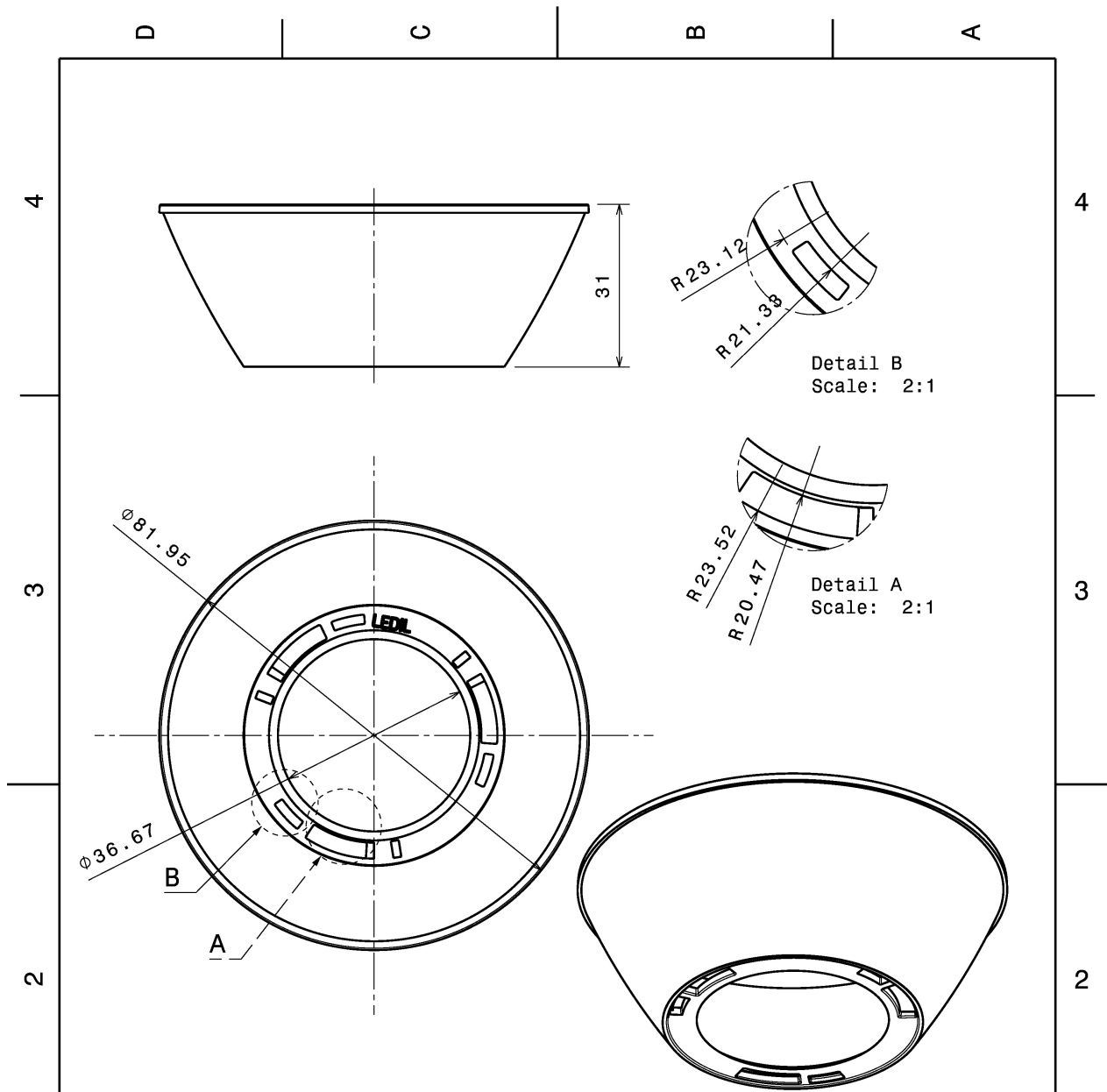
### MATERIAL SPECIFICATIONS:

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



### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F13401_ANGELINA-M » Box size: 480 x 280 x 300 mm	900	120	60	11.0



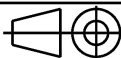
INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1		ANGELINA	PC	metal

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**

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SIZE PART NUMBER

A4

-


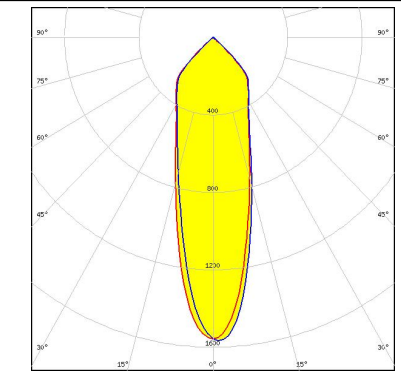
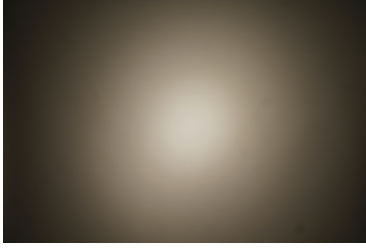
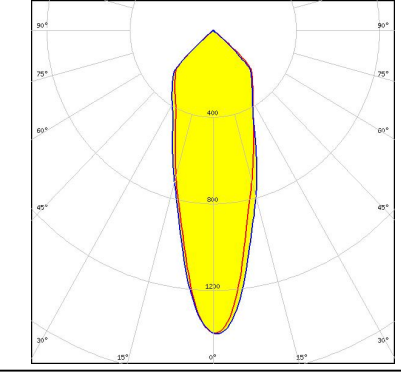
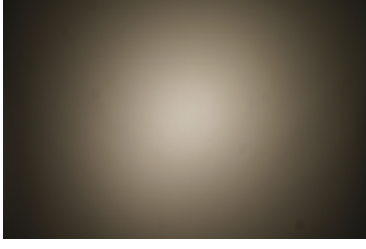
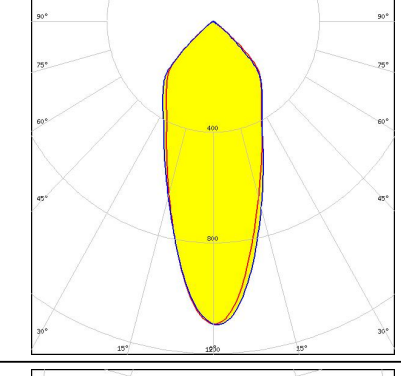

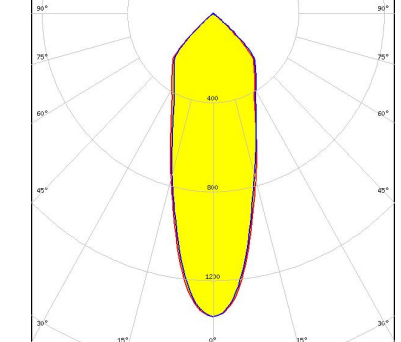
SCALE 1:1 WEIGHT

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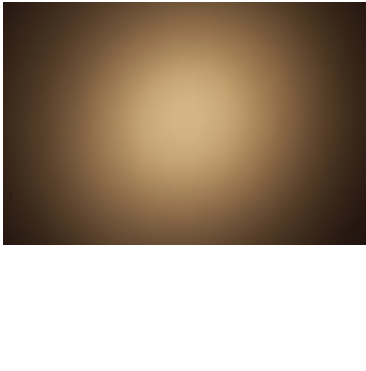
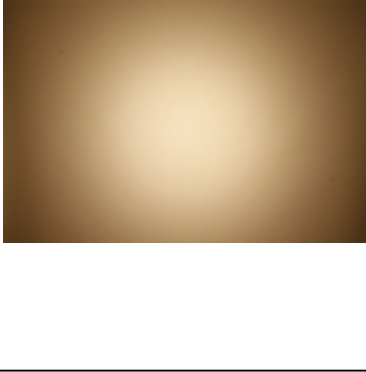
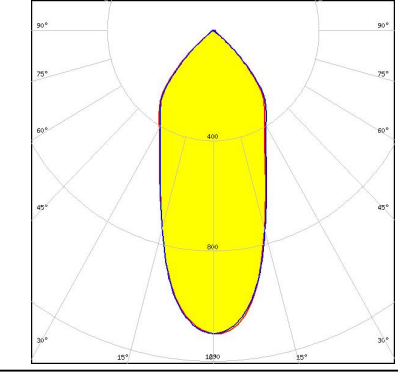
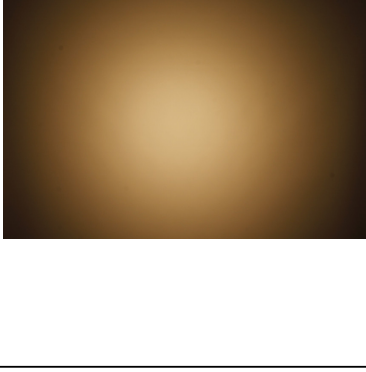
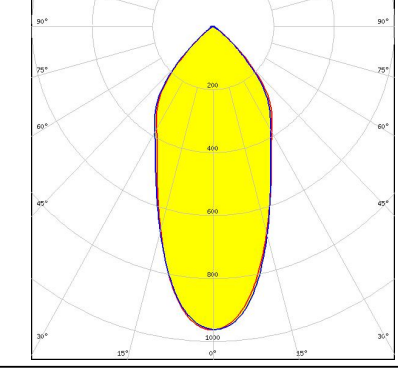

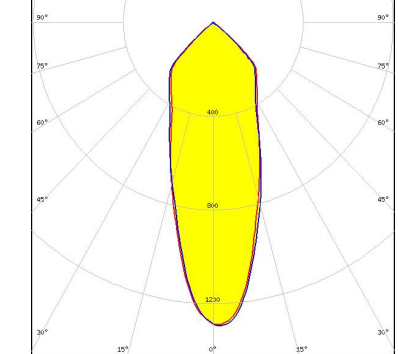
SHEET 1/1



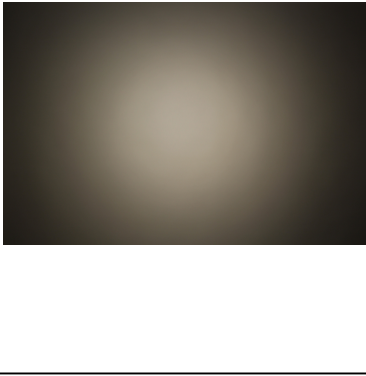
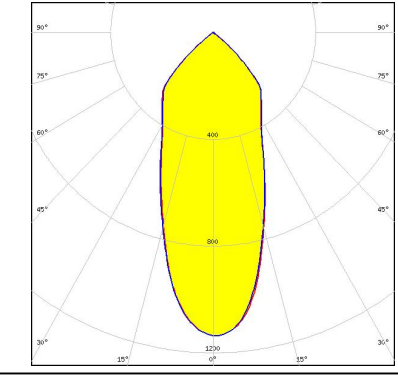
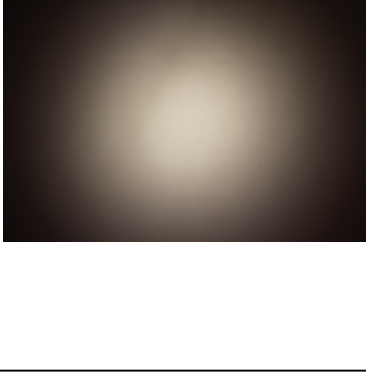
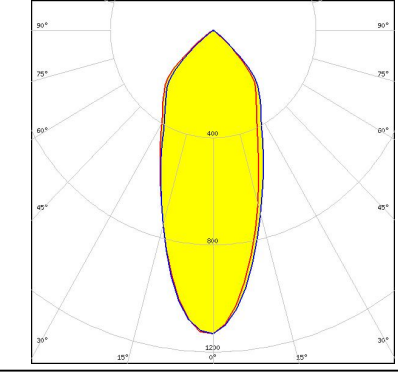
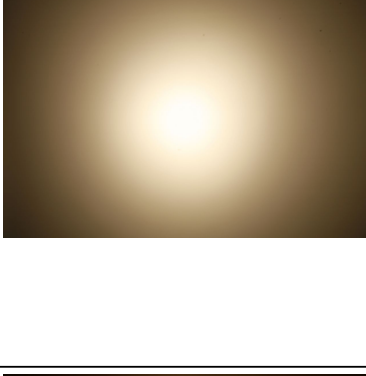
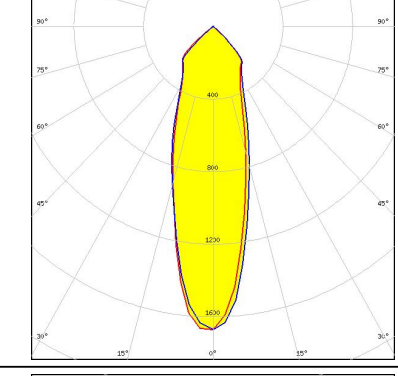
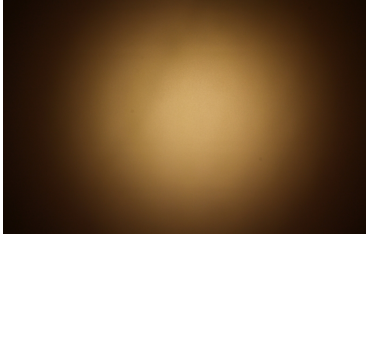
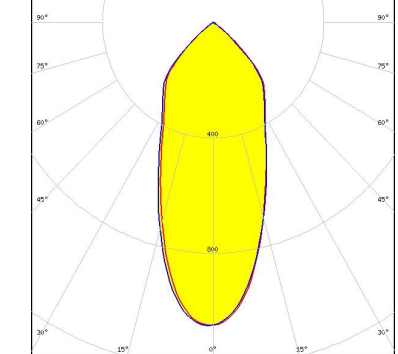
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED BXRA ES Rectangle</p> <p>FWHM 30.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.6 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 30.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.4 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 38.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 434 Typ L1</p>		
<p>bridgelux.</p> <p>LED V13 Gen7</p> <p>FWHM 34.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.4 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>		

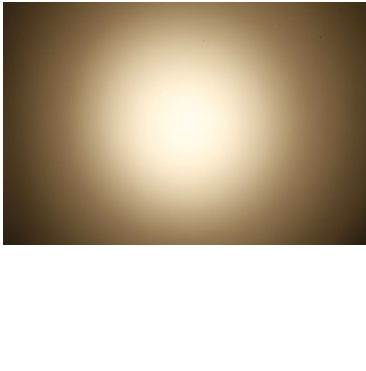
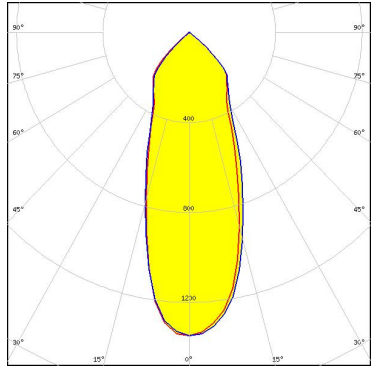
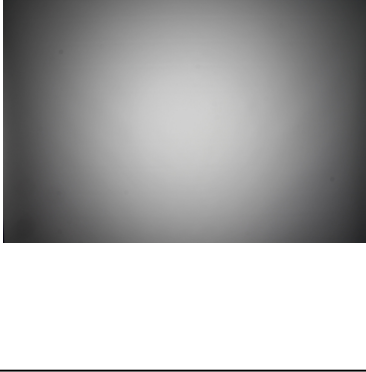
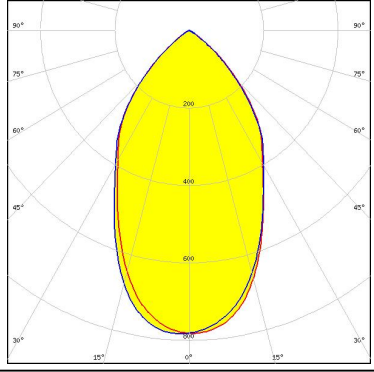
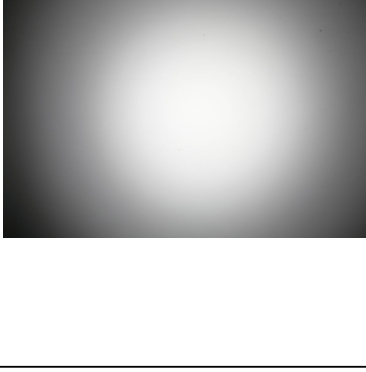
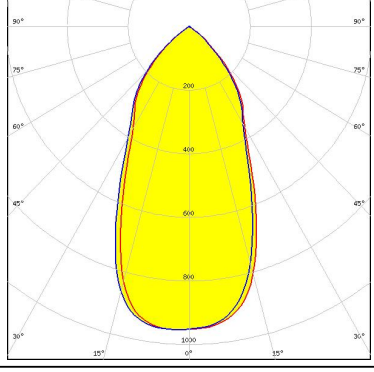
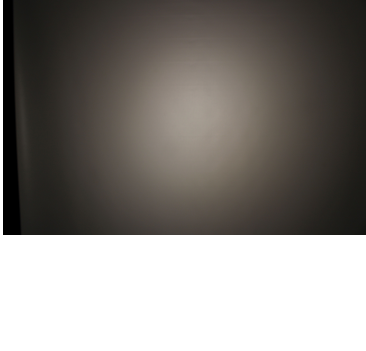
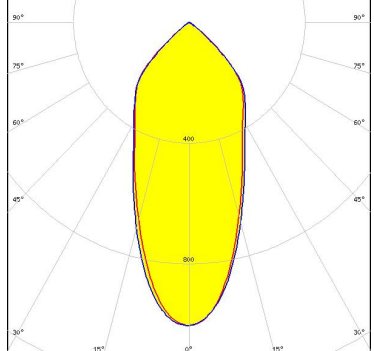
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V15 Gen6</p> <p>FWHM 37.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.4 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 43.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.1 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 V22 Gen6</p> <p>FWHM 47.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS IDEAL: 50-2204-CT + 50-2100AN</p>		
<p>bridgelux.</p> <p>LED Vero SE 13</p> <p>FWHM 36.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		

#### PHOTOMETRIC DATA (MEASURED):

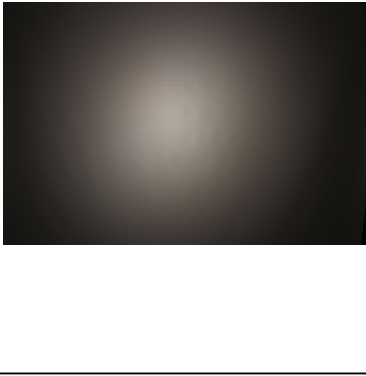
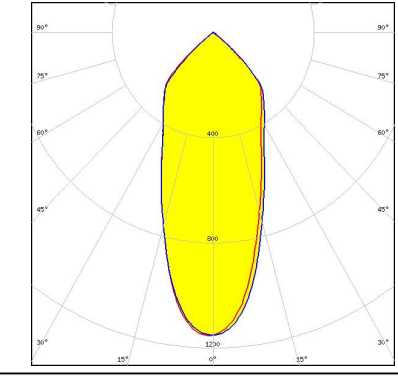
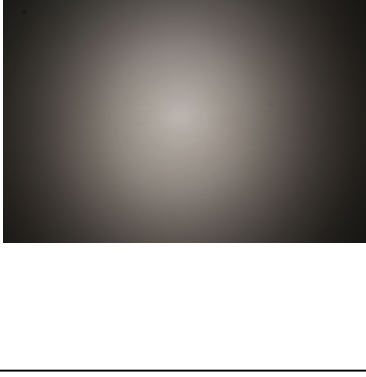
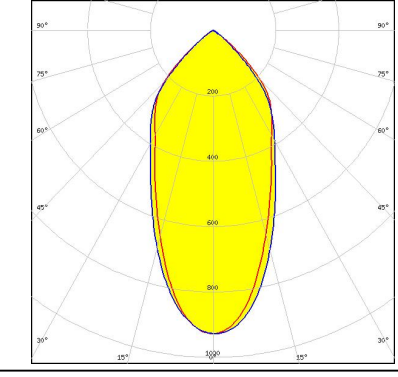

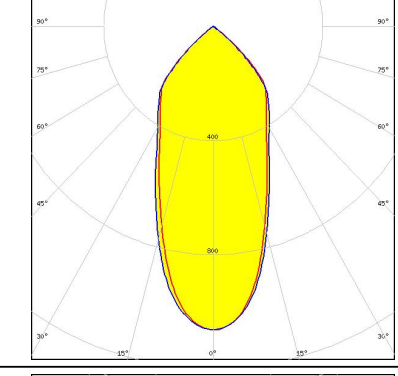
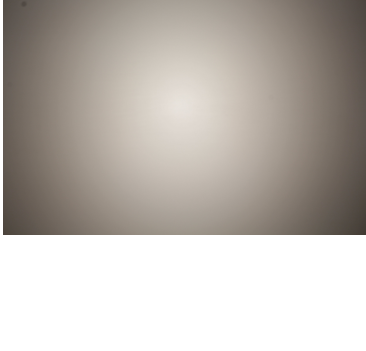
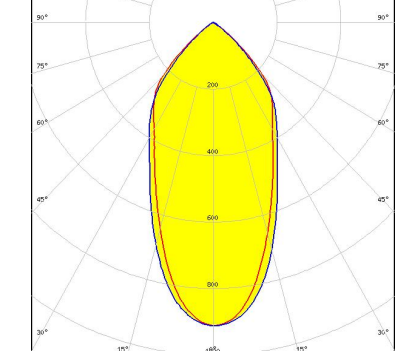
<p>bridgelux.</p> <p>LED Vero SE 18</p> <p>FWHM 42.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		
<p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM 42.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM 31.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO18</p> <p>FWHM 43.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS</p>		

#### PHOTOMETRIC DATA (MEASURED):


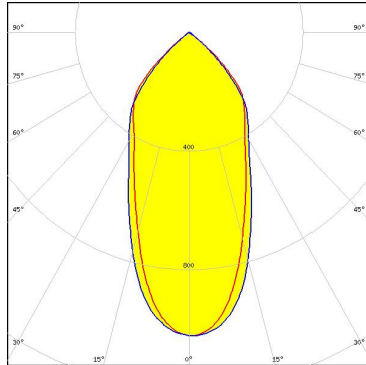
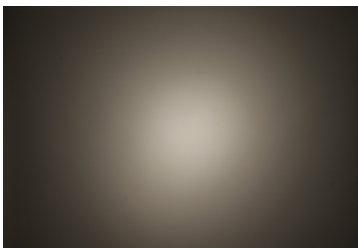
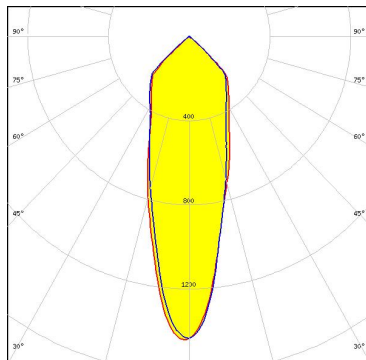
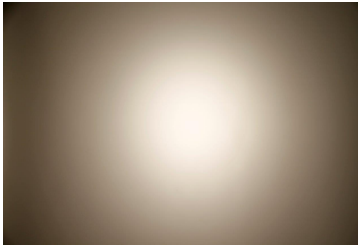
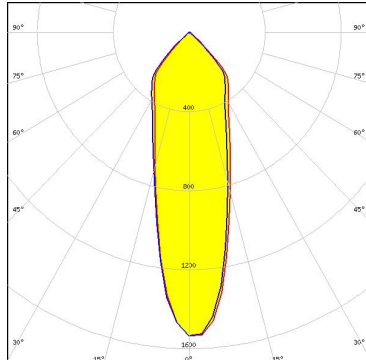
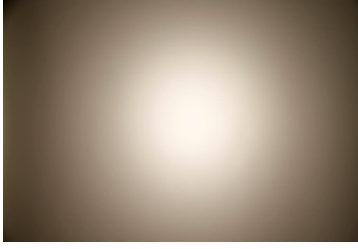
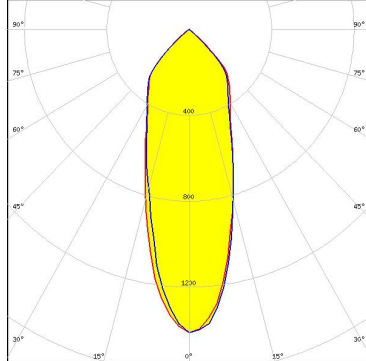
<p>bridgelux.</p> <p>LED VERO18</p> <p>FWHM 38.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO29</p> <p>FWHM 60.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 0.8 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 51.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29</p>		
<p>bridgelux.</p> <p>LED Vesta TW 15mm DP</p> <p>FWHM 45.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1 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>		



#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED Vesta TW 15mm DP</p> <p>FWHM 41.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.2 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>		
<p>bridgelux.</p> <p>LED Vesta TW 18mm (31W) DP</p> <p>FWHM 49.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 0.9 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 45.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.1 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 50.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 0.9 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>		

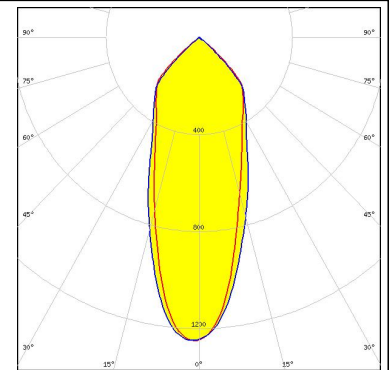
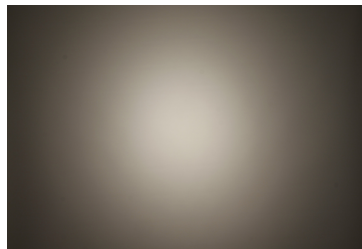
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED Vesta TW 22mm DP</p> <p>FWHM 47.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 1 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><b>CITIZEN</b></p> <p>LED CLL02x/CLU02x (LES10)</p> <p>FWHM 31.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.4 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><b>CITIZEN</b></p> <p>LED CLL03x/CLU03x</p> <p>FWHM 30.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2103CT + 50-2100AN</p>		
<p><b>CITIZEN</b></p> <p>LED CLL03x/CLU03x</p> <p>FWHM 35.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.4 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):

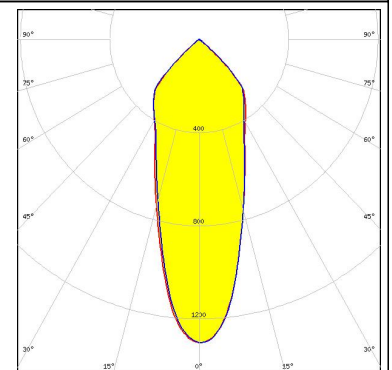
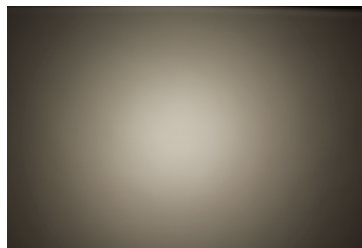
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 37.0°  
 Efficiency 91 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 433 Typ L1



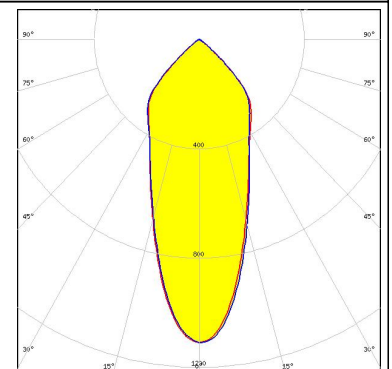
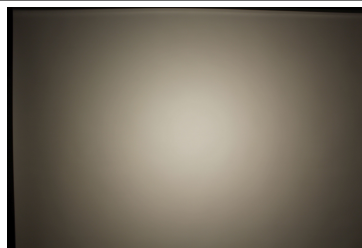
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 36.0°  
 Efficiency 94 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16791\_CLAMP-Z45-A  
 TE: 2325807-3



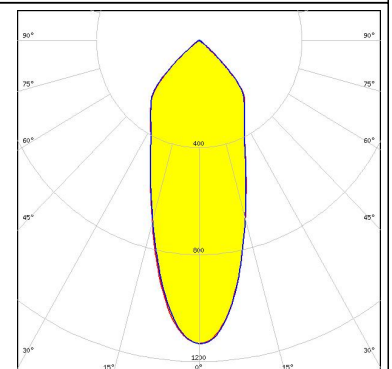
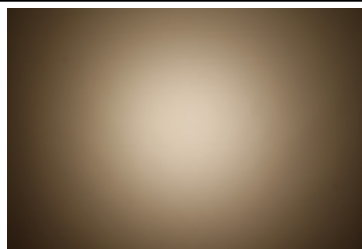
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 39.0°  
 Efficiency 90 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16791\_CLAMP-Z45-A  
 F13671\_ANGE-RZ-LENS  
 TE: 2325807-3



#### CITIZEN

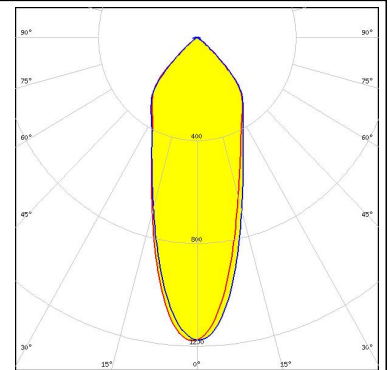
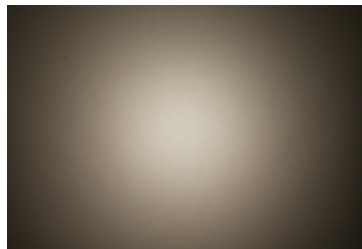
LED CLL03x/CLU03x  
 FWHM 38.0°  
 Efficiency 87 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

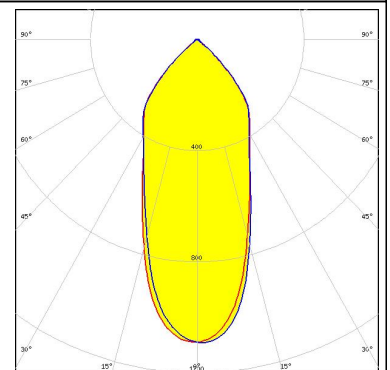
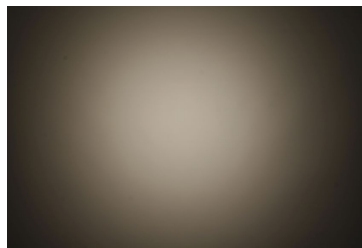
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 36.0°  
 Efficiency 87 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2103CT + 50-2100AN



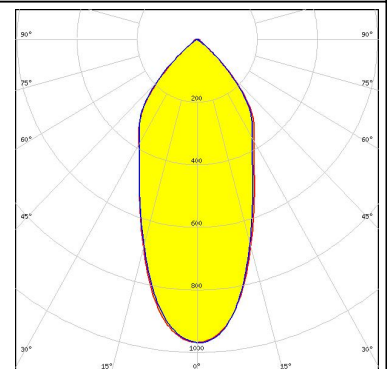
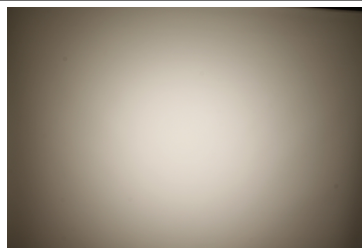
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 43.0°  
 Efficiency 91 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



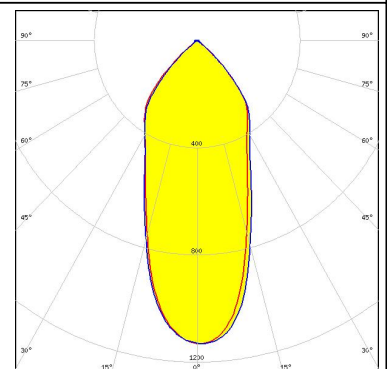
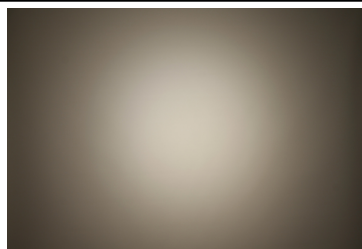
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 46.0°  
 Efficiency 87 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2204-CT + 50-2100AN



#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 42.0°  
 Efficiency 92 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 431 Typ L3

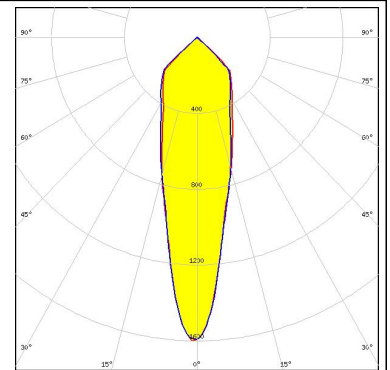
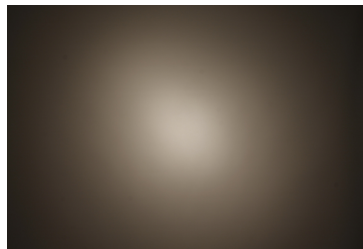




#### PHOTOMETRIC DATA (MEASURED):

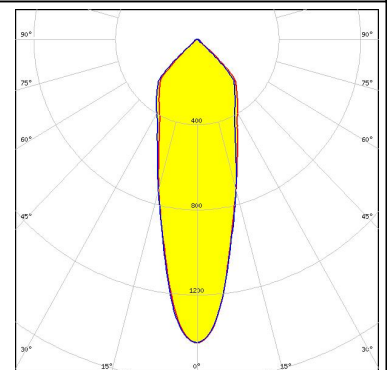
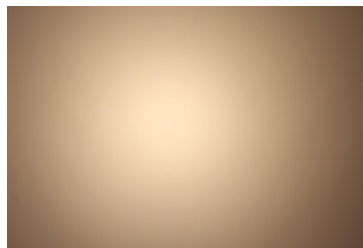
#### CITIZEN

LED CLU700/701/702  
 FWHM 26.0°  
 Efficiency 92 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1



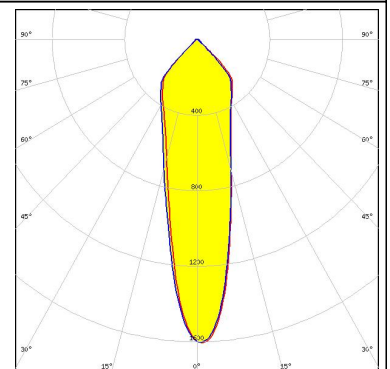
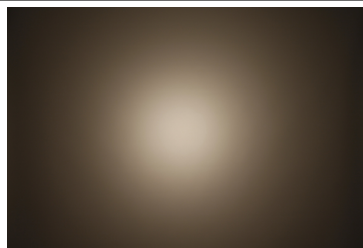
#### CITIZEN

LED CLU720/721  
 FWHM 31.0°  
 Efficiency 94 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



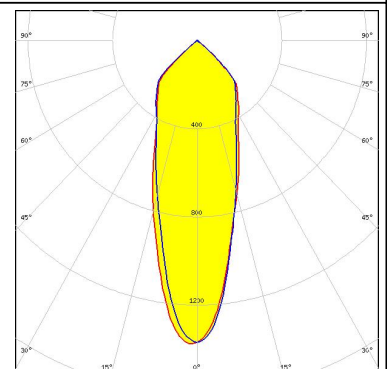
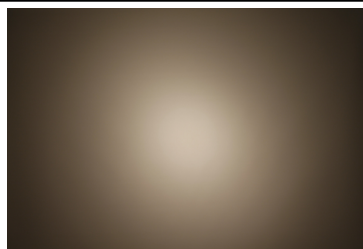
#### CITIZEN

LED CLU720/721  
 FWHM 26.0°  
 Efficiency 93 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2103CT + 50-2100AN



#### CITIZEN

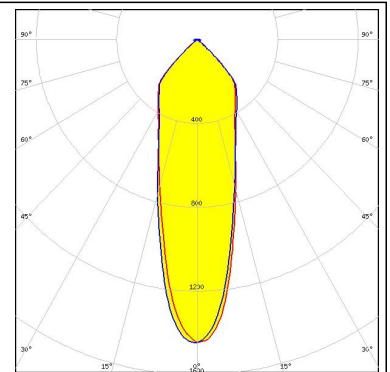
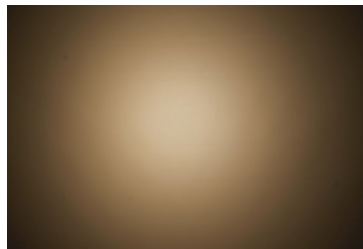
LED CLU720/721  
 FWHM 33.0°  
 Efficiency 91 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18



#### PHOTOMETRIC DATA (MEASURED):

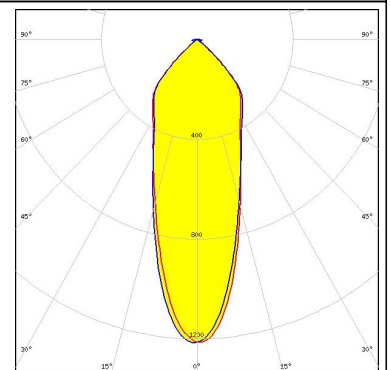
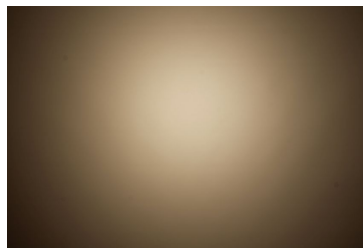
#### CITIZEN

LED CLU730/731  
 FWHM 31.0°  
 Efficiency 91 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



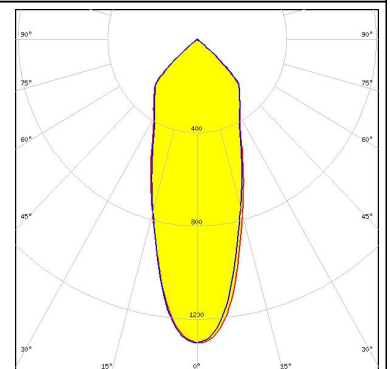
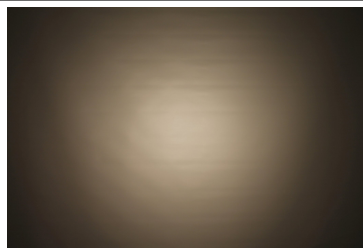
#### CITIZEN

LED CLU730/731  
 FWHM 35.0°  
 Efficiency 87 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2204-CT + 50-2100AN



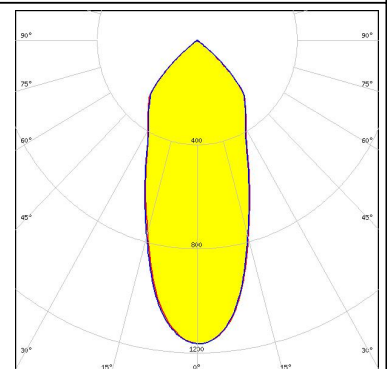
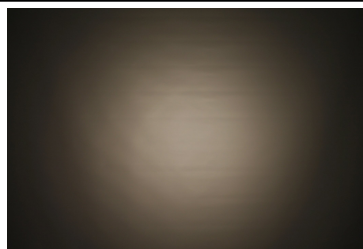
#### CREE

LED CMA1840  
 FWHM 37.0°  
 Efficiency 94 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14123\_CLAMP-CXA15-18



#### CREE

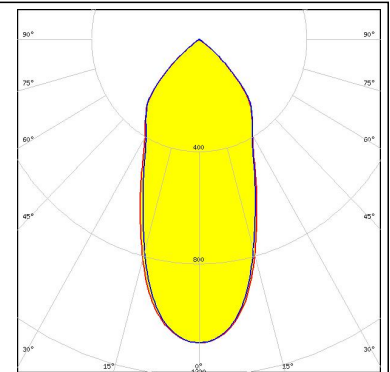
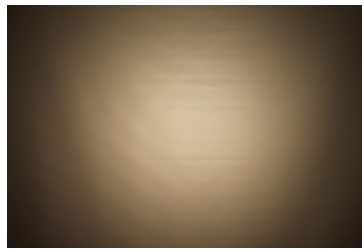
LED CMA2550  
 FWHM 42.0°  
 Efficiency 94 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



#### PHOTOMETRIC DATA (MEASURED):

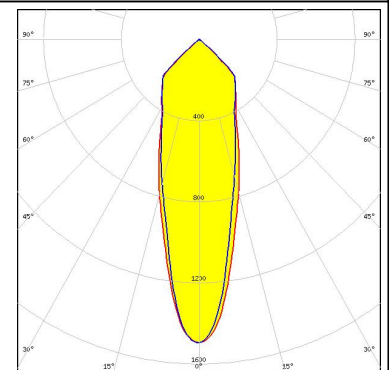
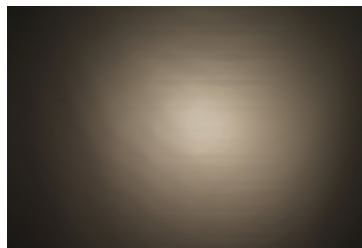
**CREE** 

LED CMA3090  
 FWHM 46.0°  
 Efficiency 94 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



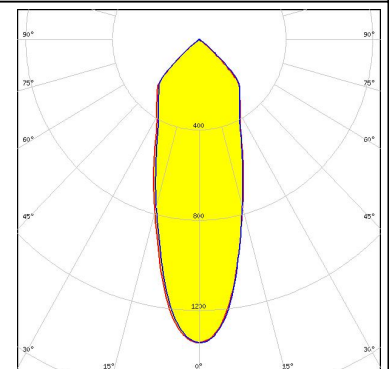
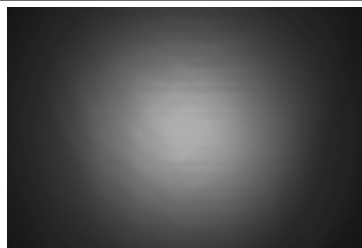
**CREE** 

LED CMT14xx  
 FWHM 30.0°  
 Efficiency 93 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1



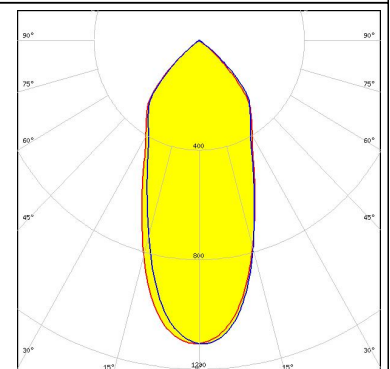
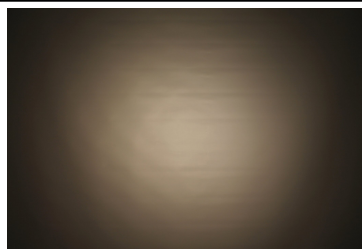
**CREE** 

LED CMT19xx  
 FWHM 36.0°  
 Efficiency 94 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 477 Typ L1



**CREE** 

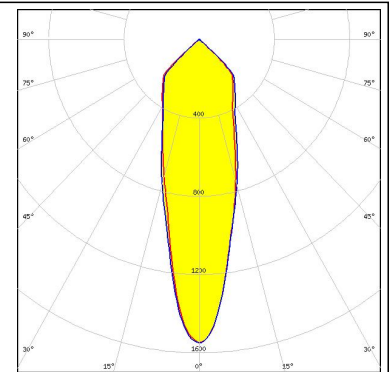
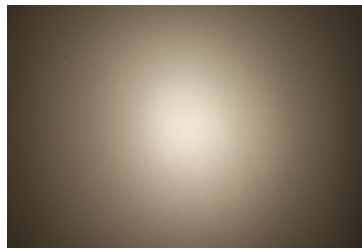
LED CMT28xx  
 FWHM 44.0°  
 Efficiency 94 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 471 Typ L3



#### PHOTOMETRIC DATA (MEASURED):

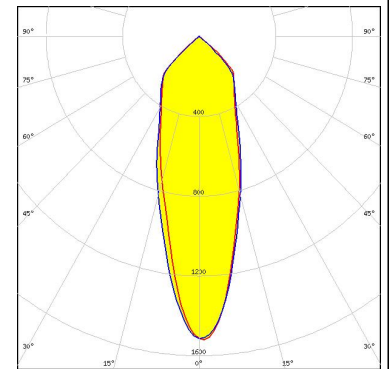
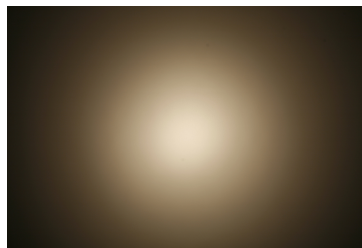
**CREE** 

LED CXA/B 15xx  
 FWHM 28.0°  
 Efficiency 92 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 441 Typ L1



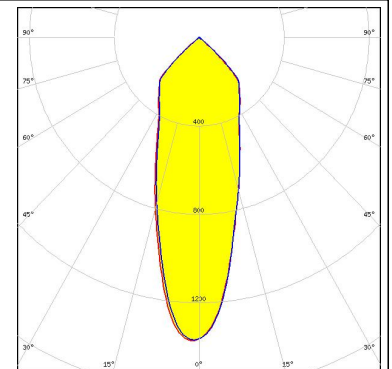
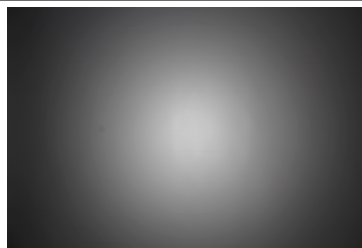
**CREE** 

LED CXA/B 15xx  
 FWHM 33.0°  
 Efficiency 94 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14123\_CLAMP-CXA15-18



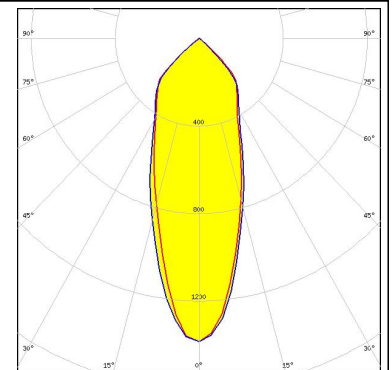
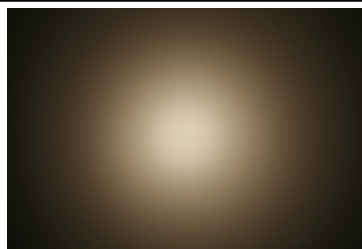
**CREE** 

LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 33.0°  
 Efficiency 92 %  
 Peak intensity 1.4 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 37.0°  
 Efficiency 94 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14123\_CLAMP-CXA15-18

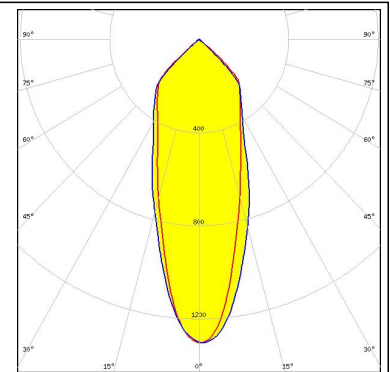
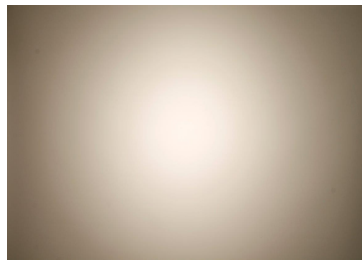




#### PHOTOMETRIC DATA (MEASURED):

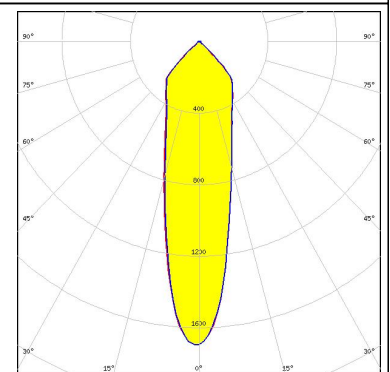
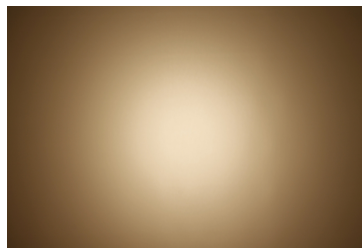
**CREE** 

LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 36.0°  
 Efficiency 91 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 437 Typ L1



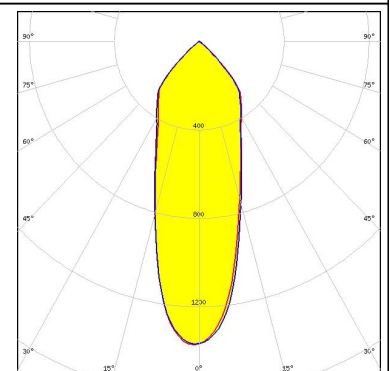
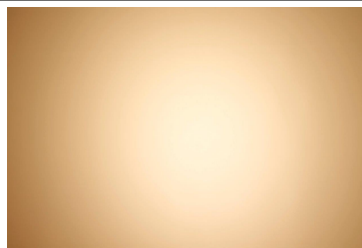
**CREE** 

LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 26.0°  
 Efficiency 93 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2101CR + 50-2100AN



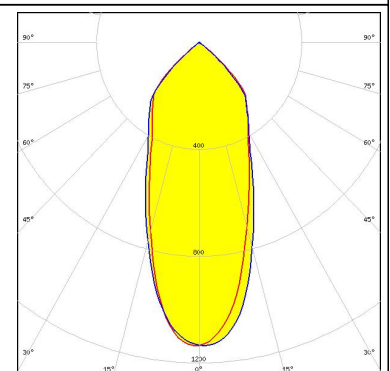
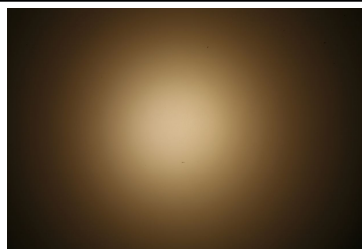
**CREE** 

LED CXA/B 25xx  
 FWHM 34.0°  
 Efficiency 93 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2102CR + 50-2100AN



**CREE** 

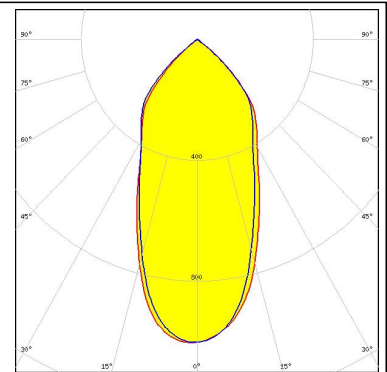
LED CXA/B 25xx  
 FWHM 42.0°  
 Efficiency 92 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



#### PHOTOMETRIC DATA (MEASURED):

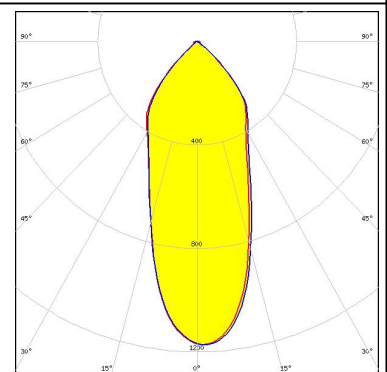
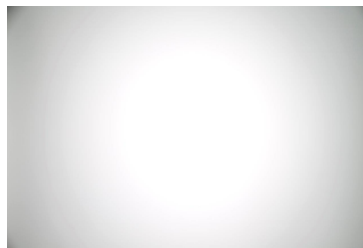
#### CREE

LED CXA/B 30xx  
 FWHM 48.0°  
 Efficiency 91 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



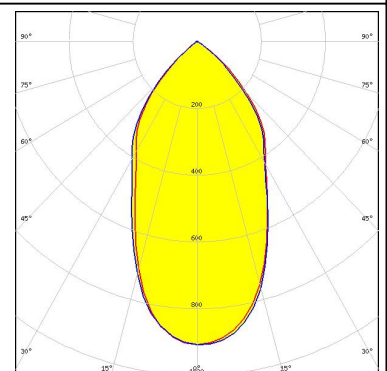
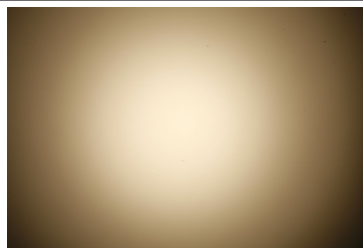
#### CREE

LED CXA/B 30xx  
 FWHM 40.0°  
 Efficiency 93 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2234C + 50-2100AN



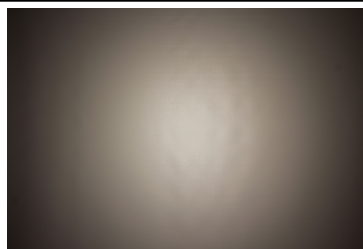
#### CREE

LED CXA/B 3590  
 FWHM 54.0°  
 Efficiency 92 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2303CR + 50-2300AN



#### EVERLIGHT

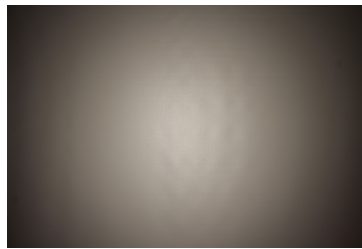
LED CHI3030 19W  
 FWHM 43.0°  
 Efficiency 87 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 468 Typ L3



#### PHOTOMETRIC DATA (MEASURED):

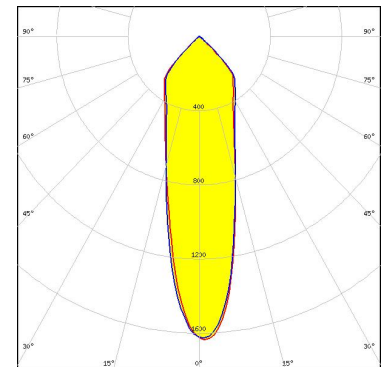
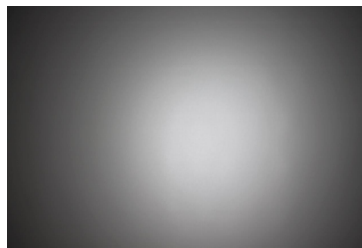
#### EVERLIGHT

LED CHI3030 29W  
 FWHM 52.0°  
 Efficiency 87 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 468 Typ L3



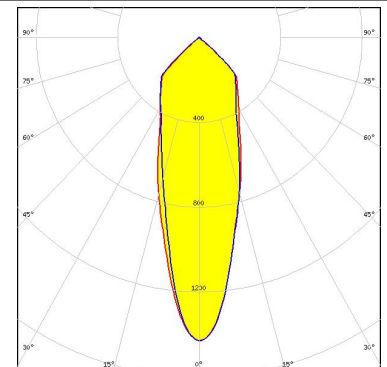
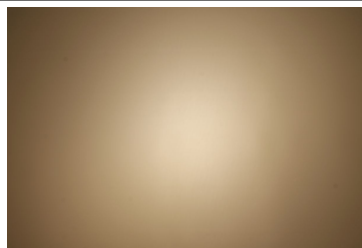
#### LG Innotek

LED COB 10W/13W/17W/24W  
 FWHM 28.0°  
 Efficiency 92 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2100LG + 50-2100AN



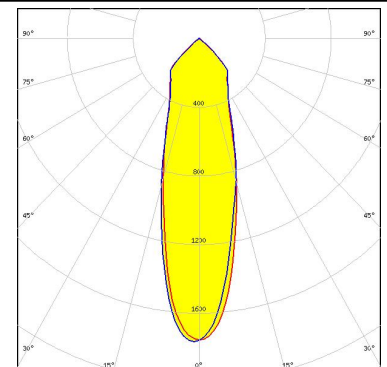
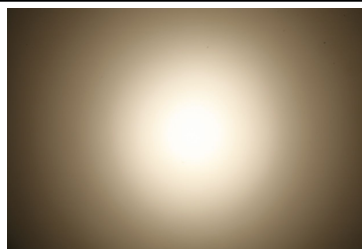
#### LUMILEDS

LED LUXEON CoB 1202/1203  
 FWHM 32.0°  
 Efficiency 92 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 438 Typ L1

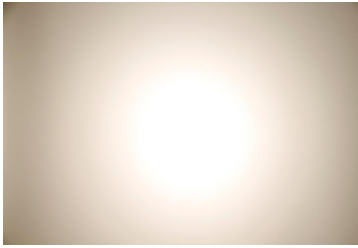
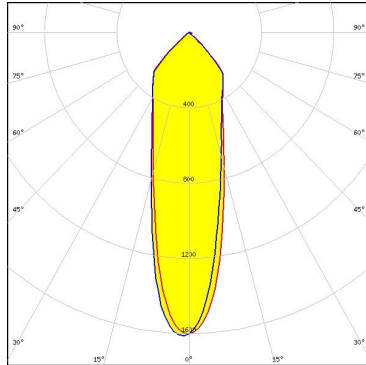
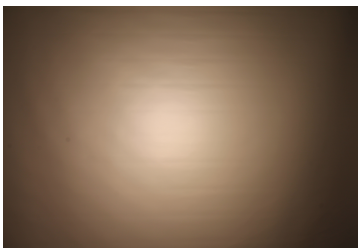
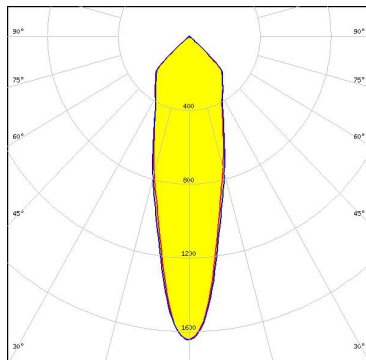

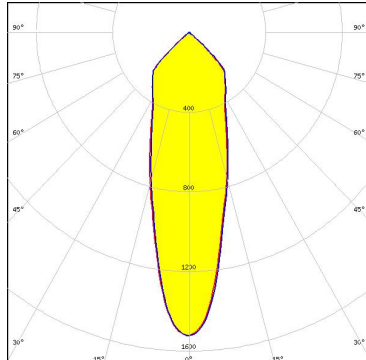
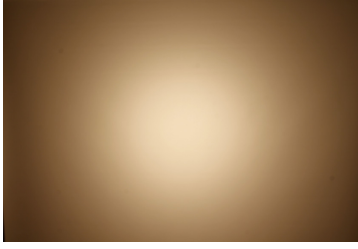
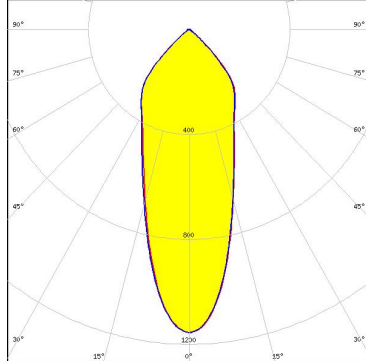


#### LUMILEDS

LED LUXEON CoB 1204/1205  
 FWHM 30.0°  
 Efficiency 94 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

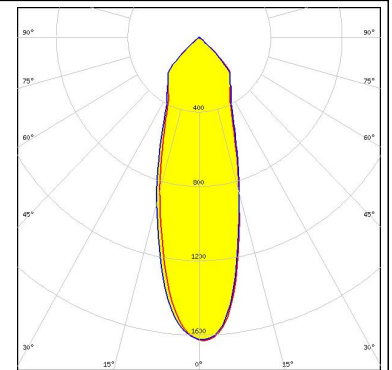
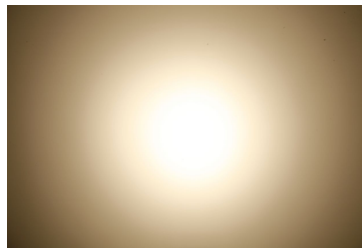
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1204/1205            FWHM 28.0°            Efficiency 92 %            Peak intensity 1.6 cd/lm            LEDs/each optic 1            Light colour White            Required components:            IDEAL: 50-2100SH + 50-2100AN</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1204HD            FWHM 27.0°            Efficiency 93 %            Peak intensity 1.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1205HD            FWHM 30.0°            Efficiency 93 %            Peak intensity 1.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1208            FWHM 36.0°            Efficiency 86 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F13671_ANGE-RZ-LENS            IDEAL: 50-2100SH + 50-2100AN</p>		



#### PHOTOMETRIC DATA (MEASURED):

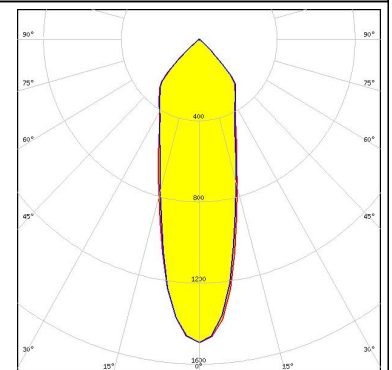
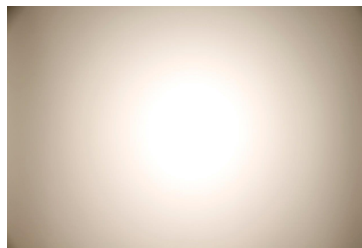
#### LUMILEDS

LED LUXEON CoB 1208  
 FWHM 32.0°  
 Efficiency 93 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



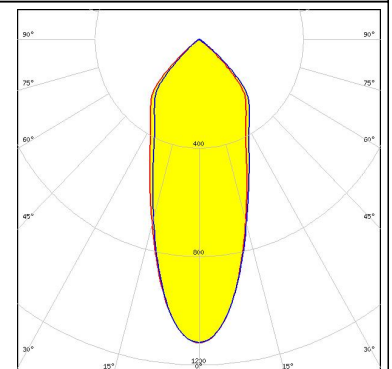
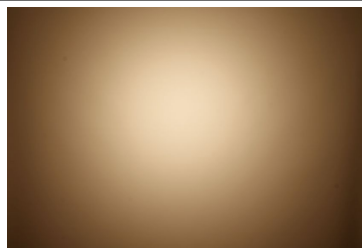
#### LUMILEDS

LED LUXEON CoB 1208  
 FWHM 31.0°  
 Efficiency 93 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2100SH + 50-2100AN



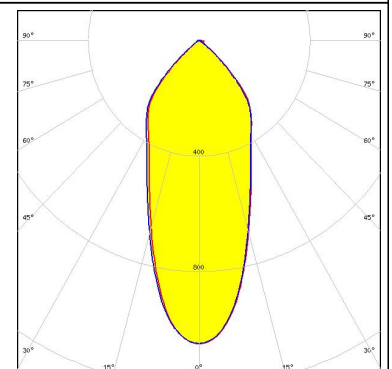
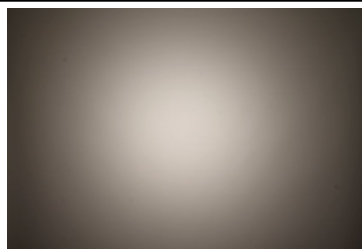
#### LUMILEDS

LED LUXEON CoB 1208  
 FWHM 39.0°  
 Efficiency 87 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### LUMILEDS

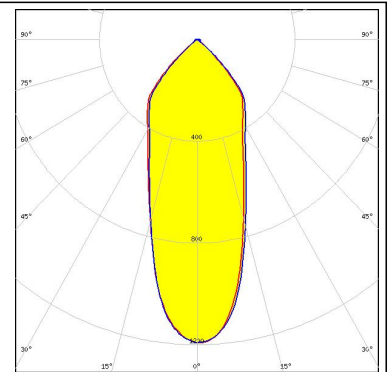
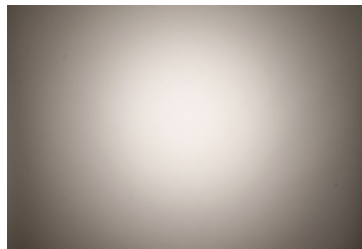
LED LUXEON CoB 1211  
 FWHM 41.0°  
 Efficiency 87 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2204-CT + 50-2100AN



#### PHOTOMETRIC DATA (MEASURED):

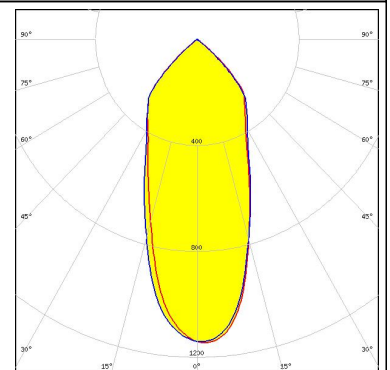
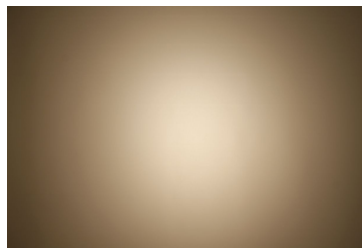
#### LUMILEDS

LED LUXEON CoB 1211  
 FWHM 39.0°  
 Efficiency 91 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



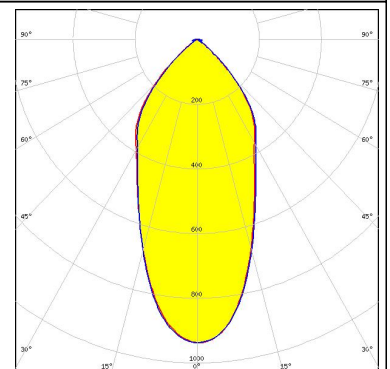
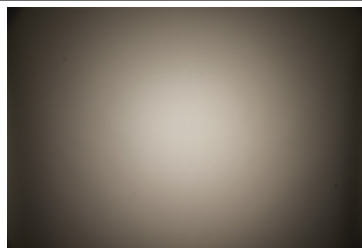
#### LUMILEDS

LED LUXEON CoB 1211  
 FWHM 42.0°  
 Efficiency 92 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 431 Typ L3



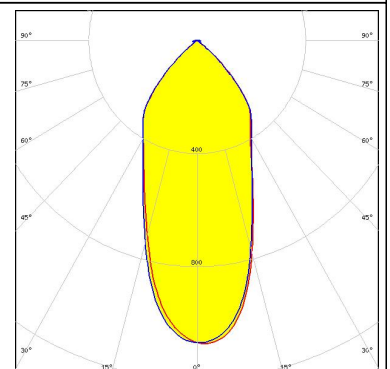
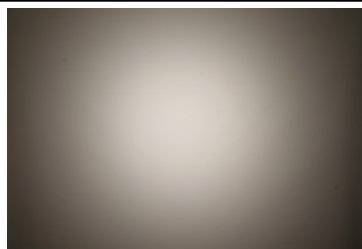
#### LUMILEDS

LED LUXEON CoB 1216/1812  
 FWHM 48.0°  
 Efficiency 87 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2204-CT + 50-2100AN



#### LUMILEDS

LED LUXEON CoB 1216/1812  
 FWHM 44.0°  
 Efficiency 91 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



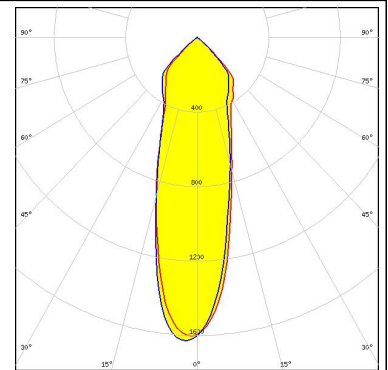
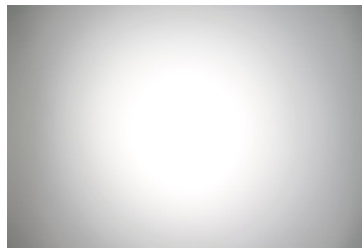
#### PHOTOMETRIC DATA (MEASURED):

##### LUMILEDS

LED LUXEON K12  
 FWHM 29.0°  
 Efficiency 94 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1



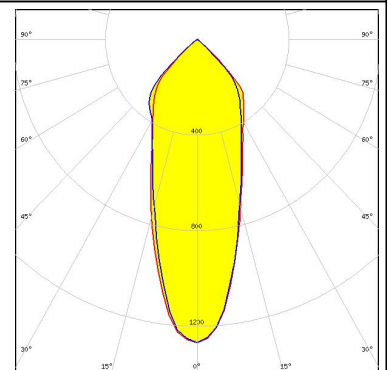
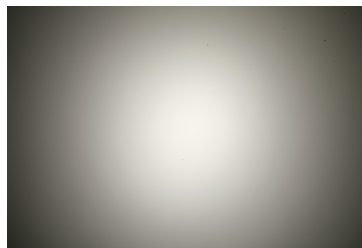
##### LUMILEDS

LED LUXEON K12  
 FWHM 37.0°  
 Efficiency 89 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

F13671\_ANGE-RZ-LENS

TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1



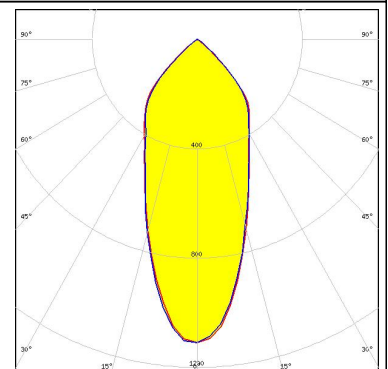
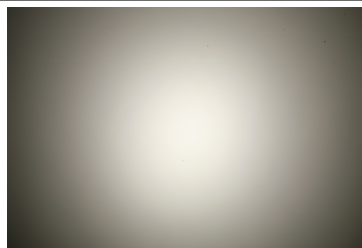
##### LUMILEDS

LED LUXEON K16  
 FWHM 43.0°  
 Efficiency 89 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

F13671\_ANGE-RZ-LENS

TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1

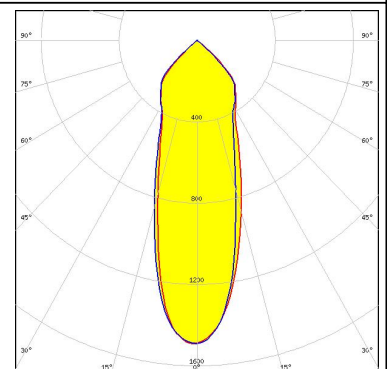
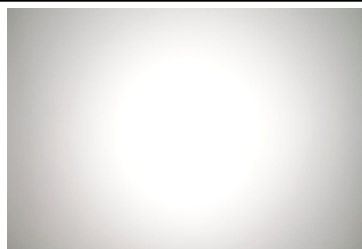


##### LUMILEDS

LED LUXEON K16  
 FWHM 32.0°  
 Efficiency 94 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

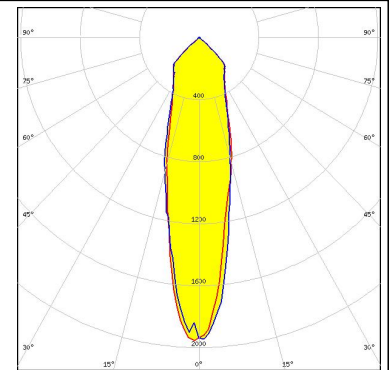
TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

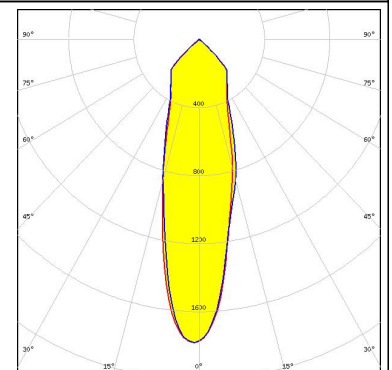
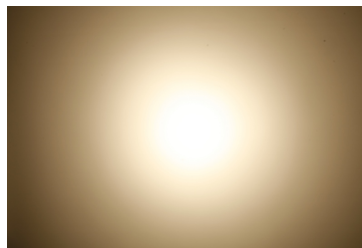
##### LUMILEDS

LED LUXEON S2000  
 FWHM 25.0°  
 Efficiency 92 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13395\_CLAMP-S2000



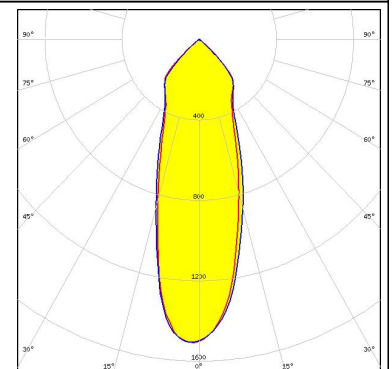
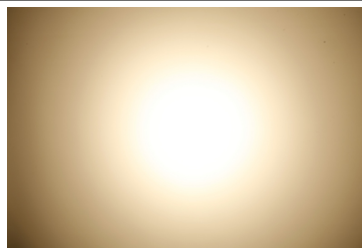
##### LUMILEDS

LED LUXEON S3000  
 FWHM 28.0°  
 Efficiency 92 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13397\_CLAMP-S3000



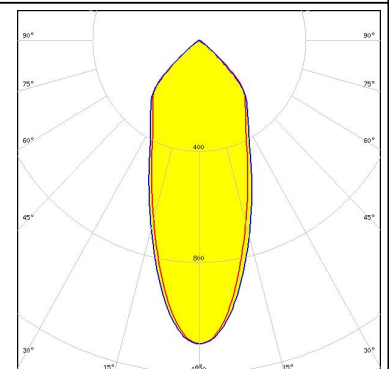
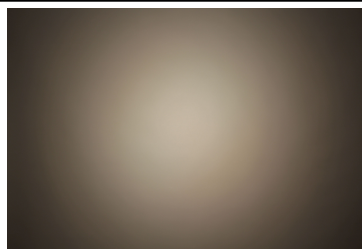
##### LUMILEDS

LED LUXEON S5000  
 FWHM 33.0°  
 Efficiency 92 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13399\_CLAMP-S5000


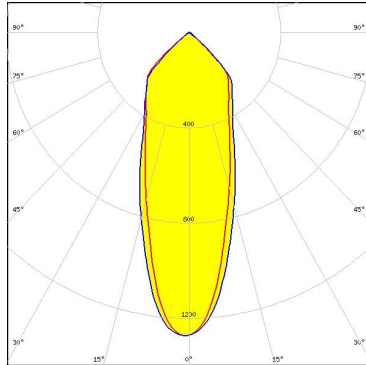
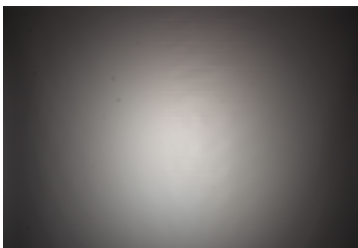
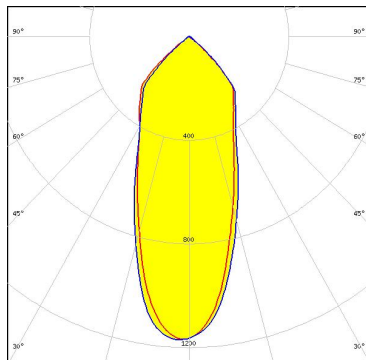

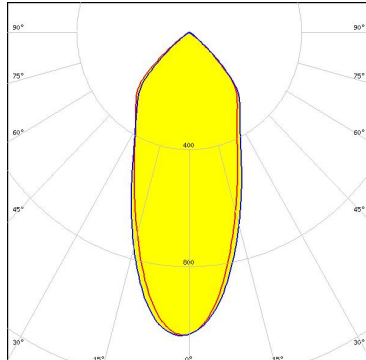
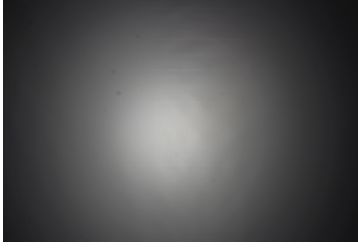
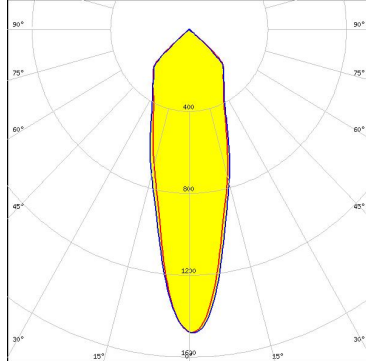


##### LUMINUS

LED CDM-14 (Dim-To-Warm)  
 FWHM 40.0°  
 Efficiency 88 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 491 Typ L2



#### PHOTOMETRIC DATA (MEASURED):

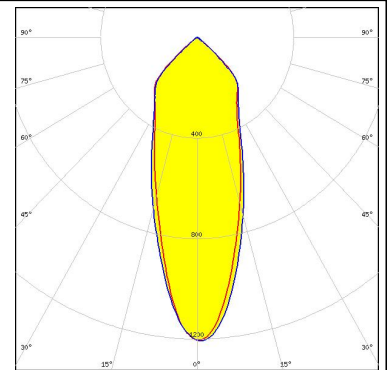
<p><b>LUMINUS</b></p> <p>LED CDM-14 (Dim-To-Warm)</p> <p>FWHM 36.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 491 Typ L2</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-18 (Dim-To-Warm)</p> <p>FWHM 40.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 491 Typ L2</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-18 (Dim-To-Warm)</p> <p>FWHM 43.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 491 Typ L2</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-9 (Dim-To-Warm)</p> <p>FWHM 30.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 490 Typ L1</p>		



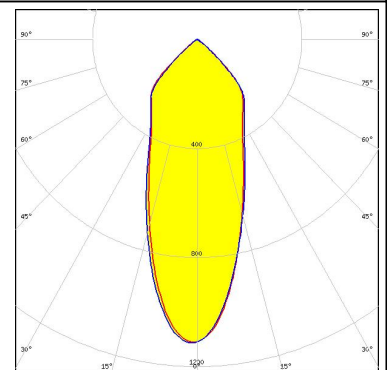
#### PHOTOMETRIC DATA (MEASURED):



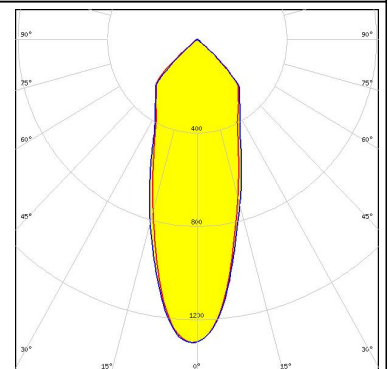
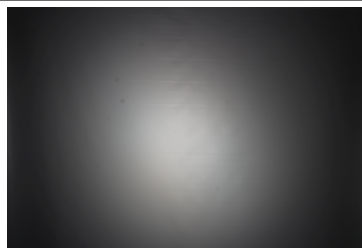
LED CDM-9 (Dim-To-Warm)  
 FWHM 36.0°  
 Efficiency 87 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 490 Typ L1



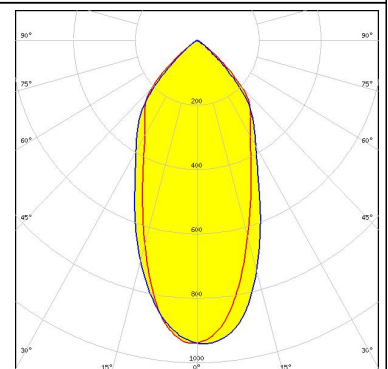
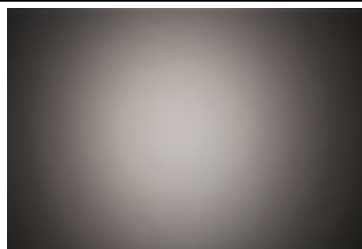
LED CTM-14 (Tunable White)  
 FWHM 39.0°  
 Efficiency 86 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 442 Typ L3



LED CTM-14 (Tunable White)  
 FWHM 35.0°  
 Efficiency 91 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 442 Typ L3



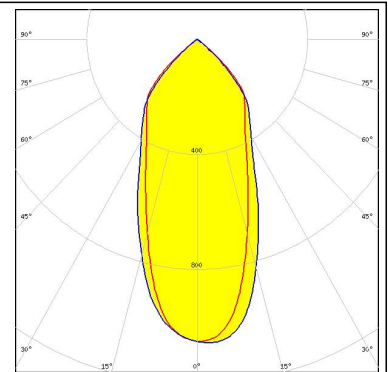
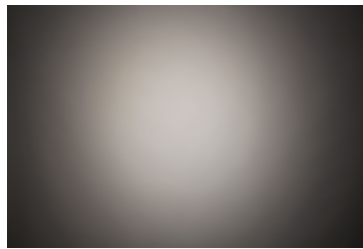
LED CTM-22 (Tunable White)  
 FWHM 47.0°  
 Efficiency 86 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 494 Typ L3



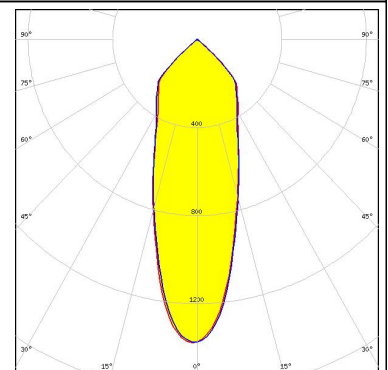
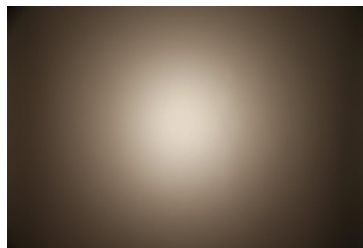
#### PHOTOMETRIC DATA (MEASURED):



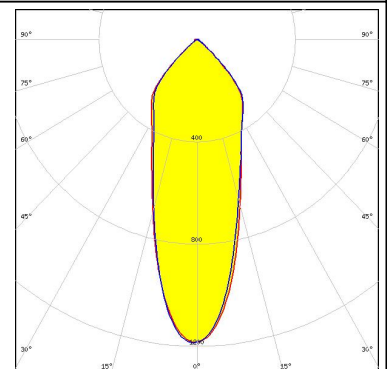
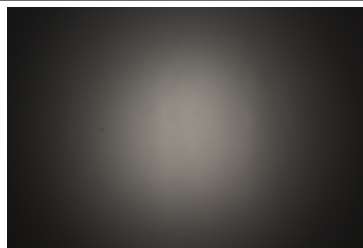
LED CTM-22 (Tunable White)  
 FWHM 44.0°  
 Efficiency 90 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 494 Typ L3



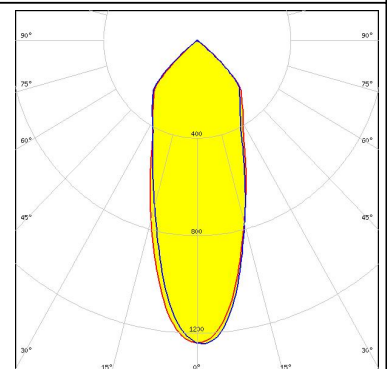
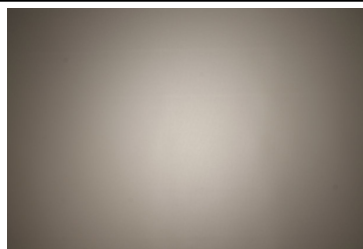
LED CxM-14 (19x19)  
 FWHM 34.0°  
 Efficiency 93 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



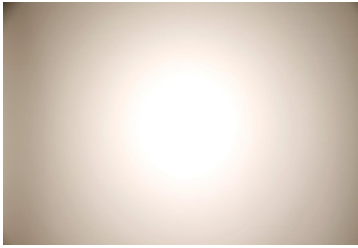
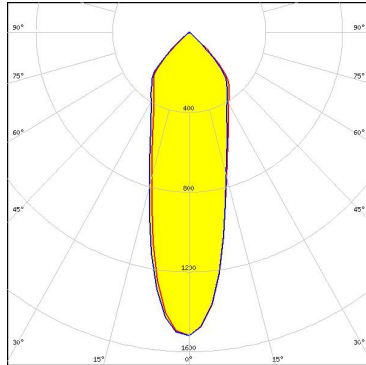
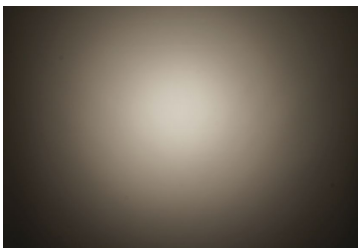
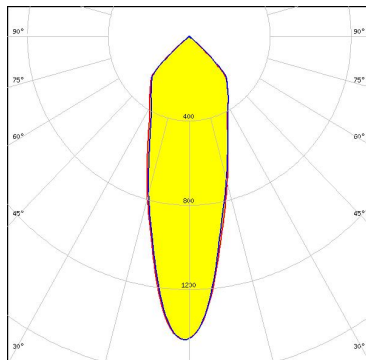
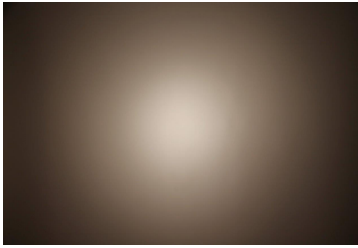
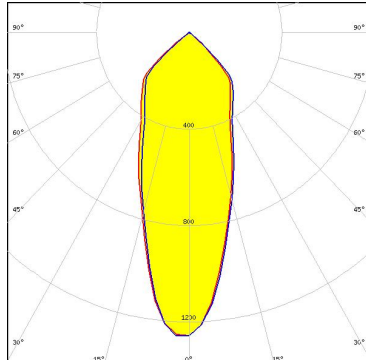
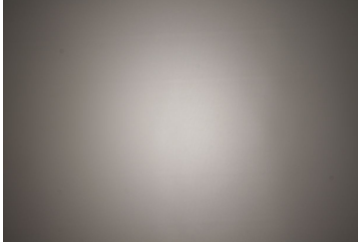
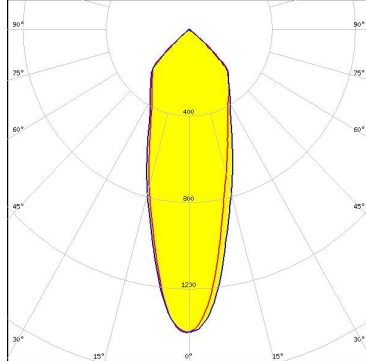
LED COB J-Type  
 FWHM 36.0°  
 Efficiency 87 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2103NC + 50-2100AN



LED COB J-Type  
 FWHM 38.0°  
 Efficiency 92 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 463 Typ L2

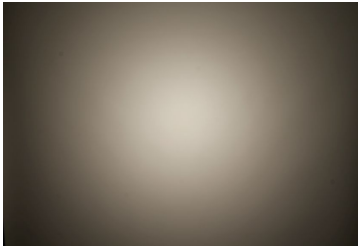
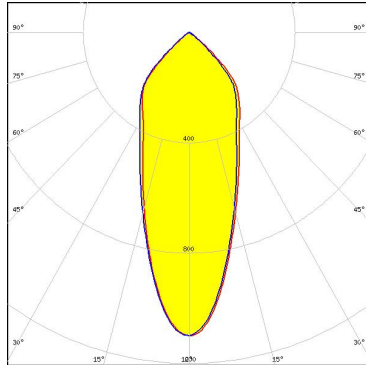
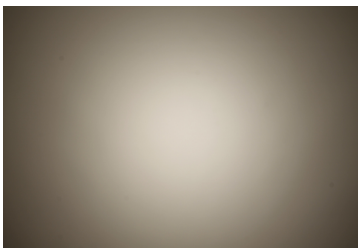
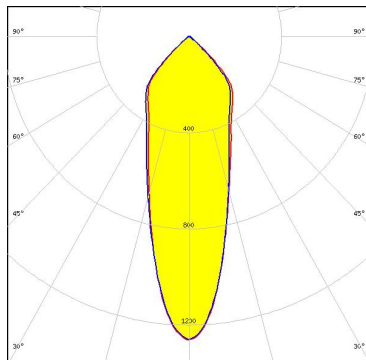
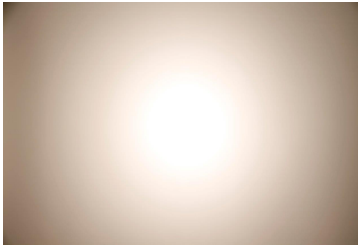
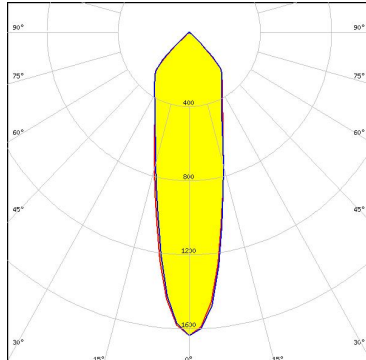
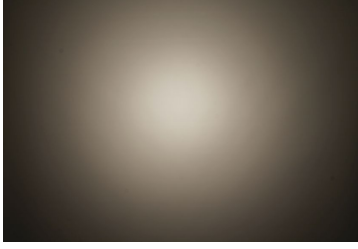
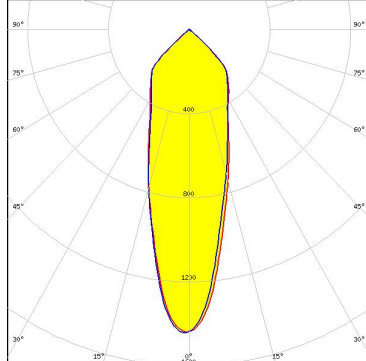


#### PHOTOMETRIC DATA (MEASURED):

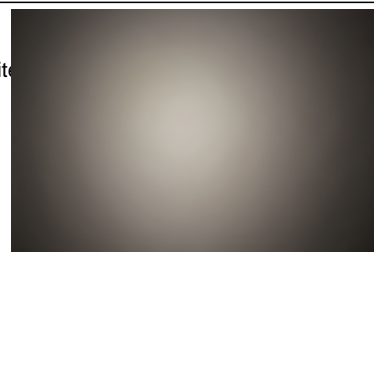
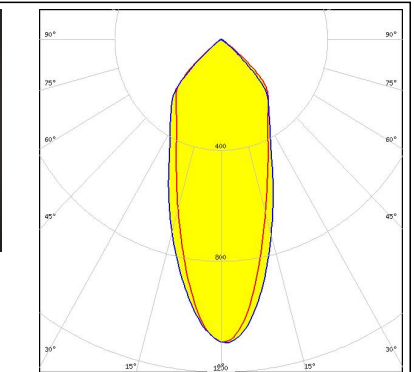
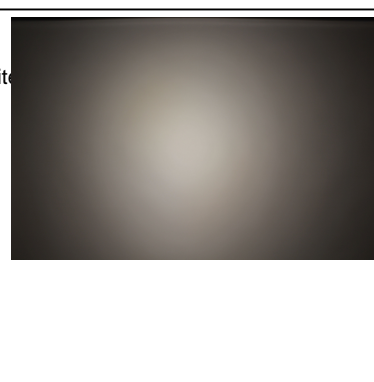
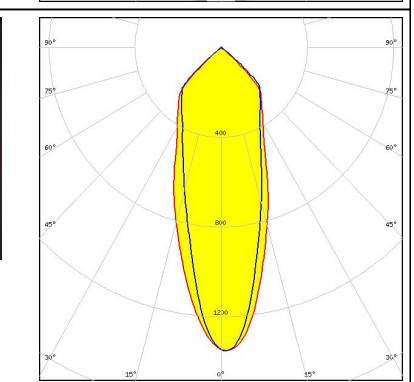

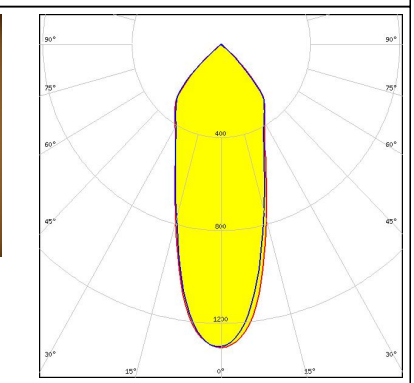

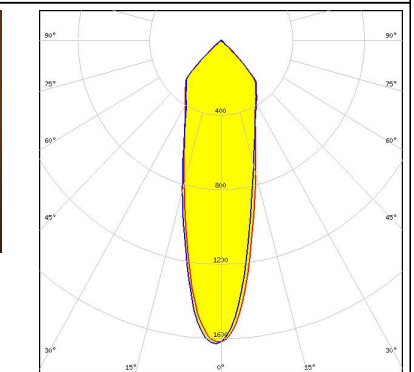
<p><b>NICHIA</b></p> <p>LED COB J-Type            FWHM 31.0°            Efficiency 94 %            Peak intensity 1.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:            IDEAL: 50-2103NC + 50-2100AN</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)            FWHM 32.0°            Efficiency 91 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)            FWHM 37.0°            Efficiency 94 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            Molex: 180580-0005</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)            FWHM 32.0°            Efficiency 92 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13658_CLAMP-VERO13-18            Bender Wirth: 438 Typ L1</p>		



#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM 39.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS 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 32.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS IDEAL: 50-2100NC + 50-2100AN</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM 27.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.6 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 31.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		

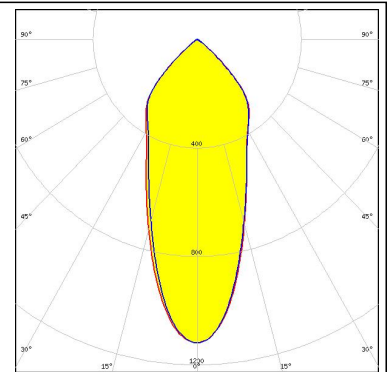
#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM 42.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:            C13658_CLAMP-VERO13-18            F13671_ANGE-RZ-LENS            Bender Wirth: 498 Typ L2</p>		
<p><b>NICHIA</b></p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM 38.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:            C13658_CLAMP-VERO13-18            Bender Wirth: 498 Typ L2</p>		
<p><b>OSRAM</b></p> <p>LED PrevaLED Core AC (LEP-2000)</p> <p>FWHM 36.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:            TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>OSRAM</b></p> <p>LED PrevaLED Core AC (LEP-800)</p> <p>FWHM 28.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:            TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

#### PHOTOMETRIC DATA (MEASURED):

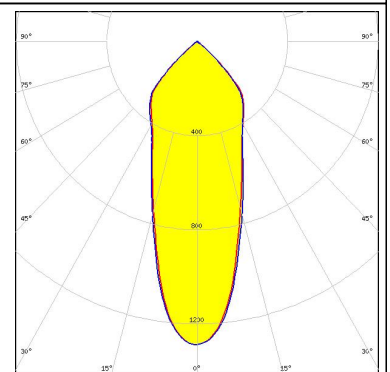
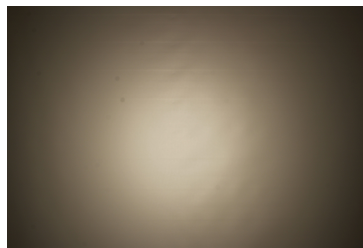
#### OSRAM

LED PrevaLED Core G7 L15 H1  
 FWHM 40.0°  
 Efficiency 90 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16685\_CLAMP-PRV-A  
 F13671\_ANGE-RZ-LENS



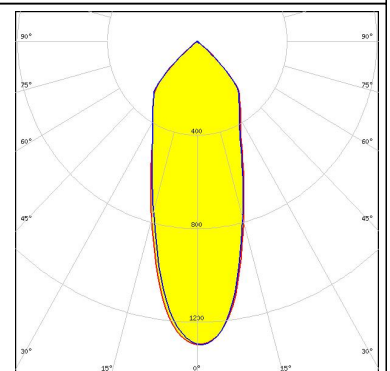
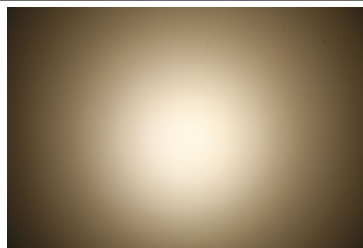
#### OSRAM

LED PrevaLED Core G7 L15 H1  
 FWHM 36.0°  
 Efficiency 94 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16685\_CLAMP-PRV-A



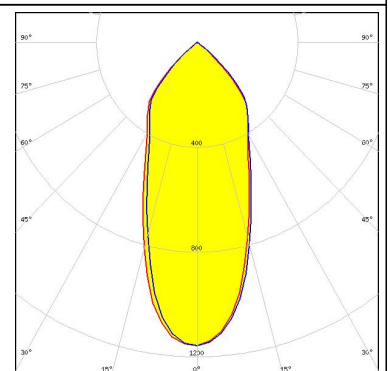
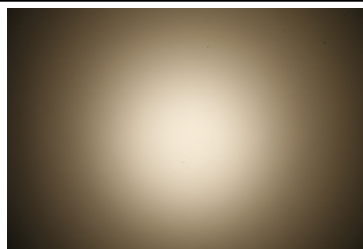
#### OSRAM

LED PrevaLED Core Z3 LES19  
 FWHM 37.0°  
 Efficiency 93 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### OSRAM

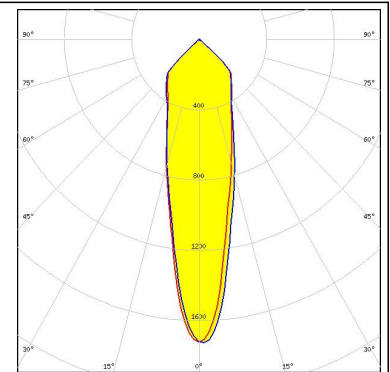
LED PrevaLED Core Z3 LES23  
 FWHM 43.0°  
 Efficiency 94 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

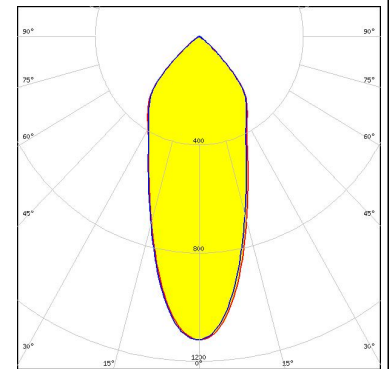
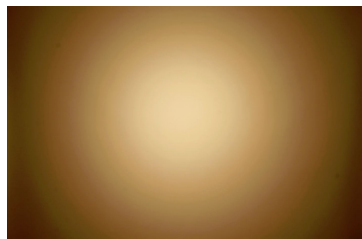
#### OSRAM

LED PrevaLED Core Z3 LES9  
 FWHM 26.0°  
 Efficiency 93 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



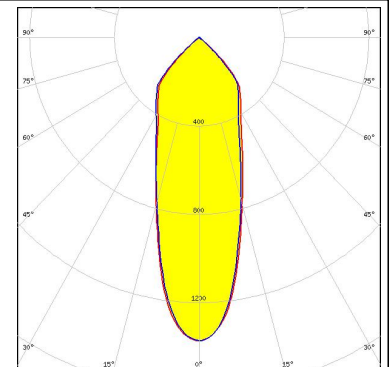
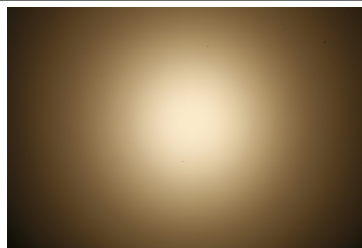
#### OSRAM

LED PrevaLED Core Z4 LES19  
 FWHM 40.0°  
 Efficiency 88 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



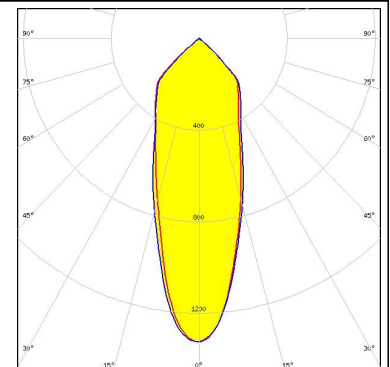
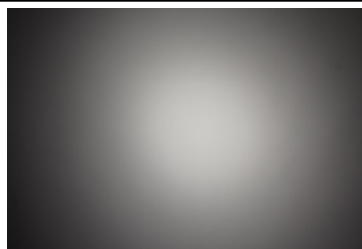
#### OSRAM

LED PrevaLED Core Z4 LES19  
 FWHM 34.0°  
 Efficiency 93 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### OSRAM

Opto Semiconductors  
 LED Soleriq S13  
 FWHM 34.0°  
 Efficiency 92 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 437 Typ L1





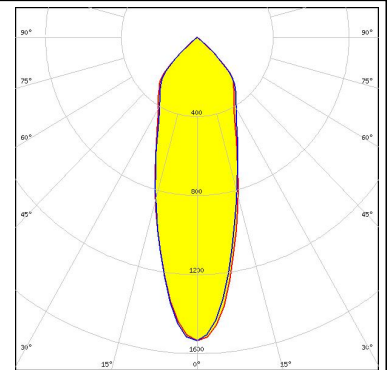
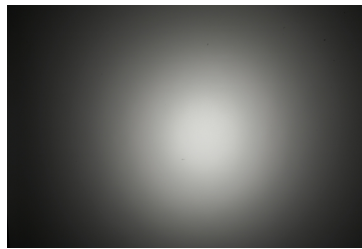
#### PHOTOMETRIC DATA (MEASURED):

**OSRAM**  
Opto Semiconductors

LED Soleriq S13  
FWHM 34.0°  
Efficiency 94 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



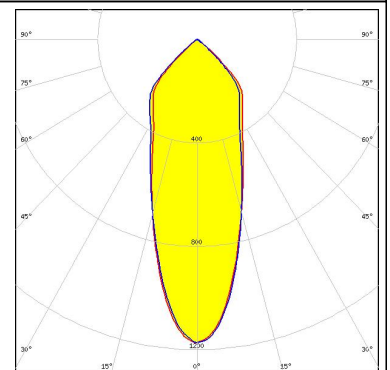
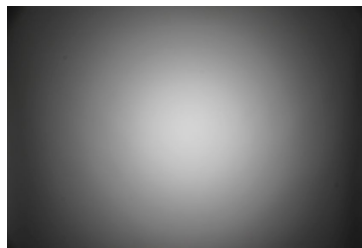
**OSRAM**  
Opto Semiconductors

LED Soleriq S13 19x19  
FWHM 37.0°  
Efficiency 87 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

F13671\_ANGE-RZ-LENS

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



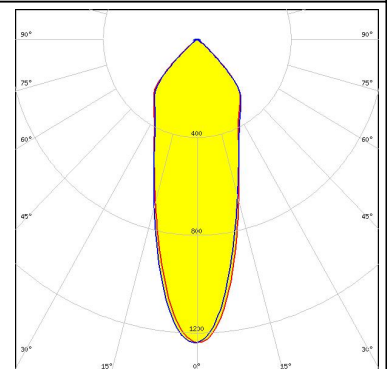
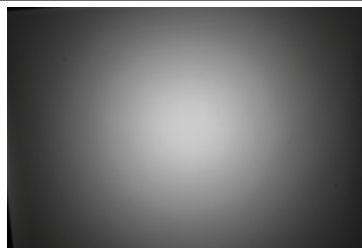
**OSRAM**  
Opto Semiconductors

LED Soleriq S13 19x19  
FWHM 34.0°  
Efficiency 87 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

F13671\_ANGE-RZ-LENS

IDEAL: 50-2103CT + 50-2100AN

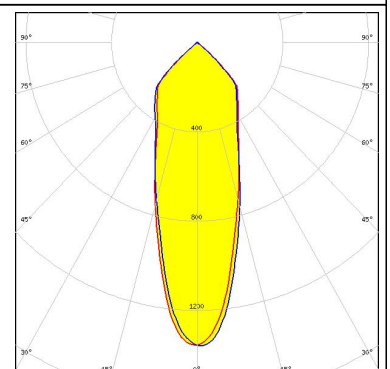
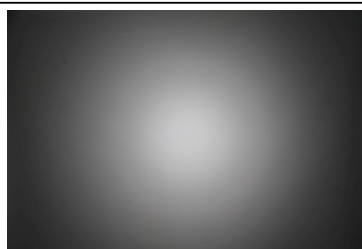


**OSRAM**  
Opto Semiconductors

LED Soleriq S13 19x19  
FWHM 34.0°  
Efficiency 93 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

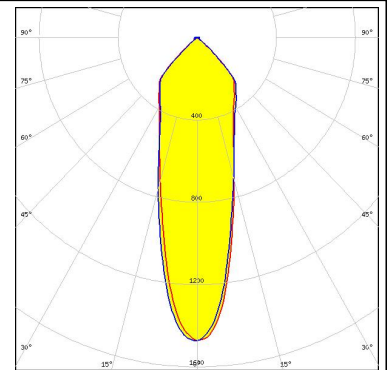
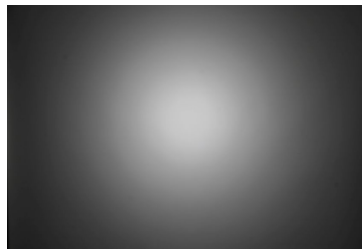
TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

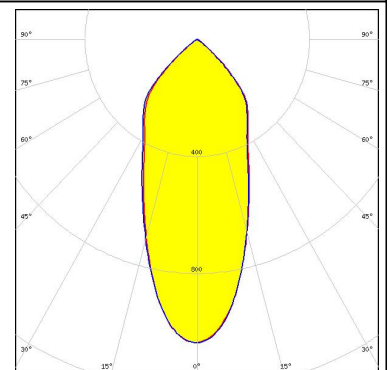
**OSRAM**  
Opto Semiconductors

LED Soleriq S13 19x19  
FWHM 30.0°  
Efficiency 91 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
IDEAL: 50-2103CT + 50-2100AN



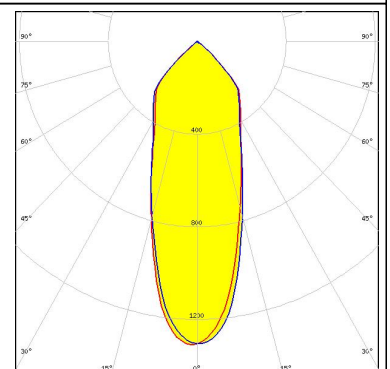
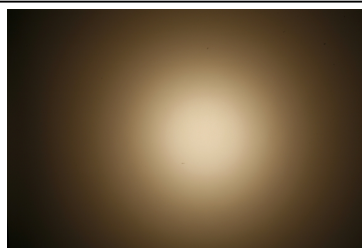
**OSRAM**  
Opto Semiconductors

LED Soleriq S19  
FWHM 43.0°  
Efficiency 87 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F13671\_ANGE-RZ-LENS  
TE: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1



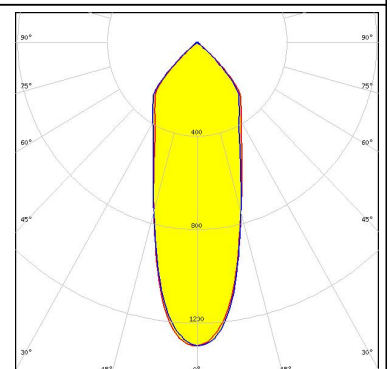
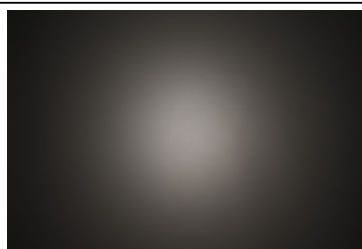
**OSRAM**  
Opto Semiconductors

LED Soleriq S19  
FWHM 37.0°  
Efficiency 93 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
TE: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1



**OSRAM**  
Opto Semiconductors

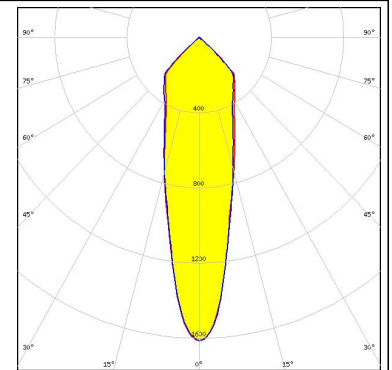
LED Soleriq S19  
FWHM 35.0°  
Efficiency 91 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13584\_CLAMP-VERO29  
Bender Wirth: 462 Typ L3



#### PHOTOMETRIC DATA (MEASURED):

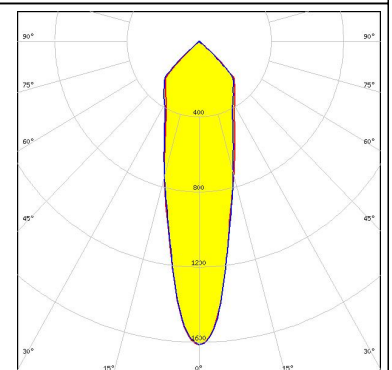
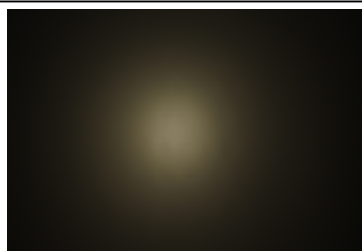
#### PHILIPS

LED Fortimo SLM L09 + SLM holder  
 FWHM 27.0°  
 Efficiency 92 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



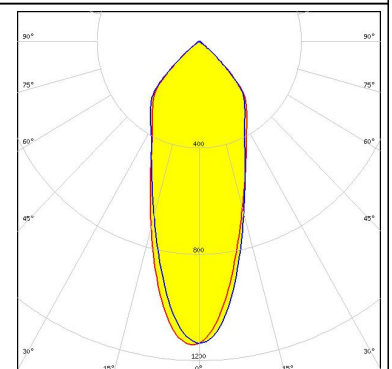
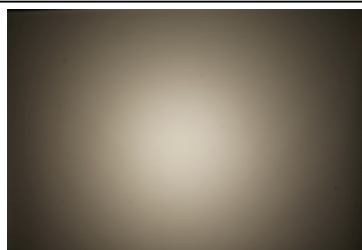
#### PHILIPS

LED Fortimo SLM L09 + SLM holder  
 FWHM 27.0°  
 Efficiency 92 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



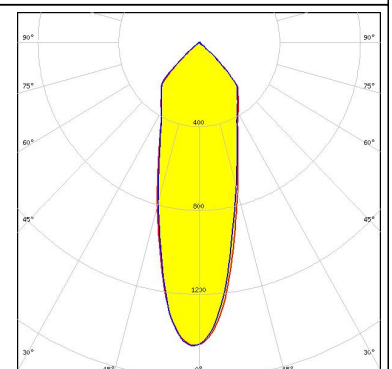
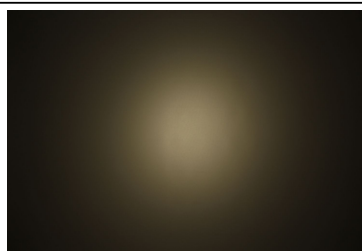
#### PHILIPS

LED Fortimo SLM L13 + SLM holder  
 FWHM 38.0°  
 Efficiency 87 %  
 Peak intensity 1.1 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 L13 + SLM holder  
 FWHM 32.0°  
 Efficiency 91 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



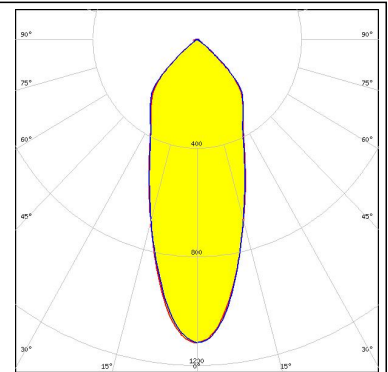
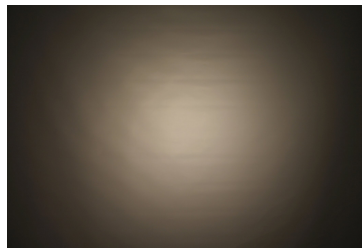
#### PHOTOMETRIC DATA (MEASURED):

#### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM 38.0°  
 Efficiency 87 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

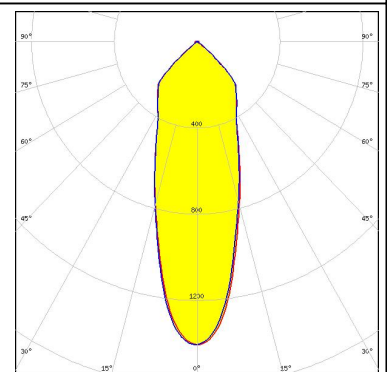
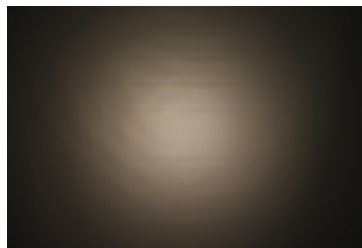


#### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM 34.0°  
 Efficiency 94 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

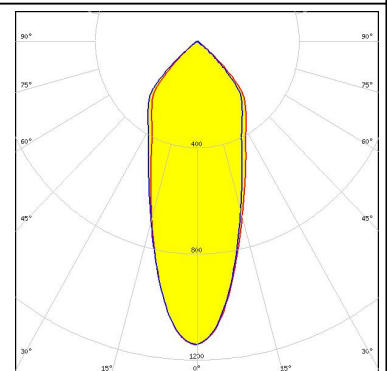
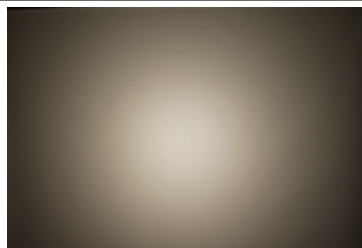


#### PHILIPS

LED Fortimo SLM L15 + SLM holder  
 FWHM 37.0°  
 Efficiency 87 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

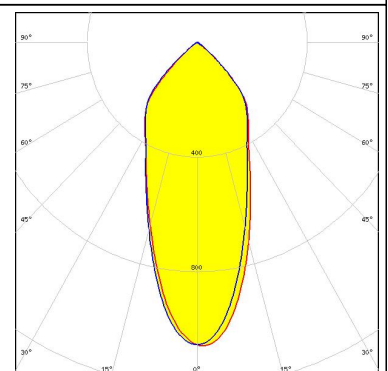
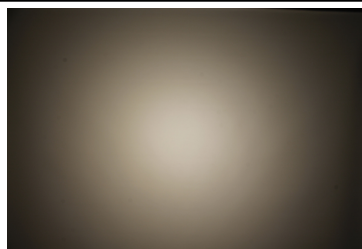


#### PHILIPS

LED Fortimo SLM L15 + SLM holder  
 FWHM 41.0°  
 Efficiency 86 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

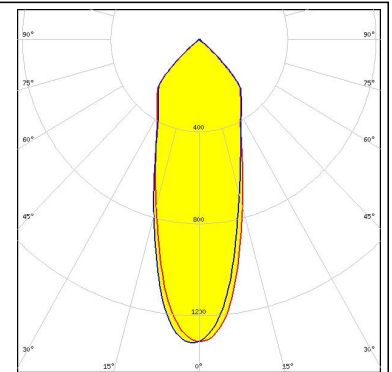
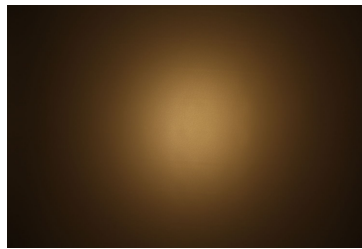




#### PHOTOMETRIC DATA (MEASURED):

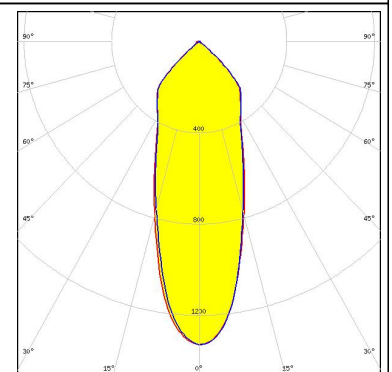
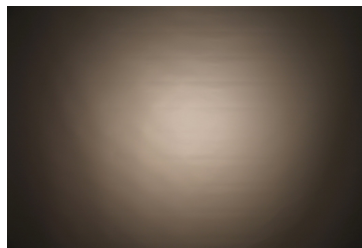
#### PHILIPS

LED Fortimo SLM L15 + SLM holder  
 FWHM 35.0°  
 Efficiency 90 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



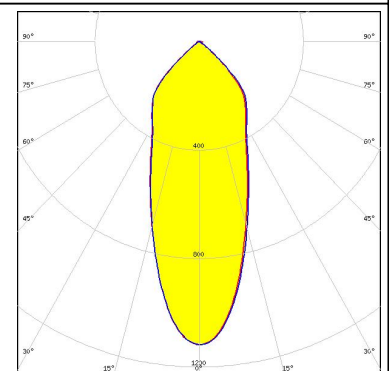
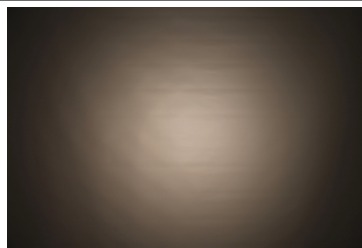
#### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM 36.0°  
 Efficiency 93 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



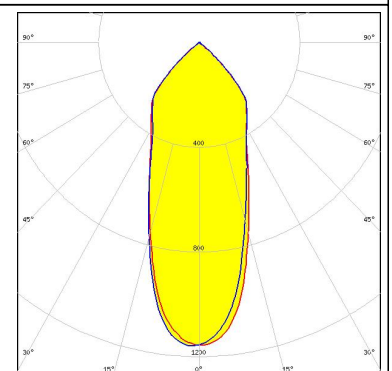
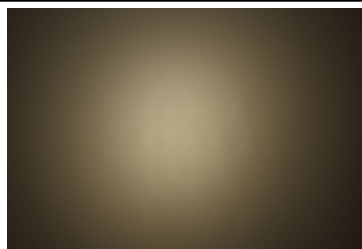
#### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM 39.0°  
 Efficiency 88 %  
 Peak intensity 1.1 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

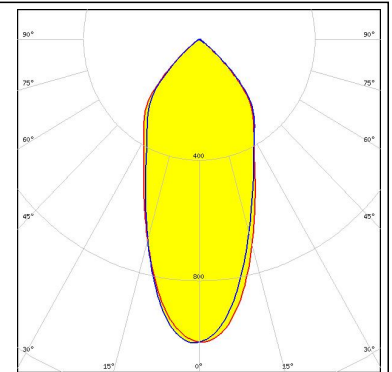
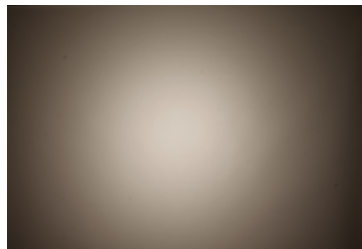
LED Fortimo SLM L19 + SLM holder  
 FWHM 40.0°  
 Efficiency 89 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

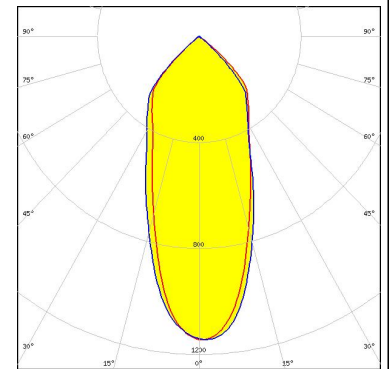
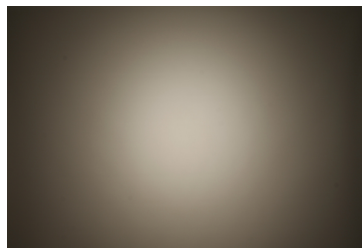
#### PHILIPS

LED Fortimo SLM L19 + SLM holder  
 FWHM 44.0°  
 Efficiency 87 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



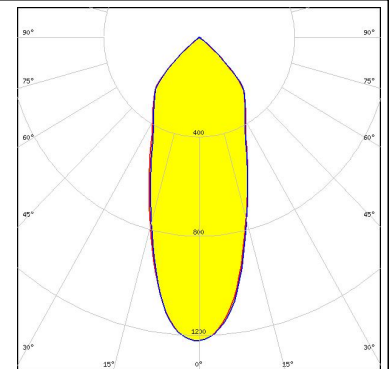
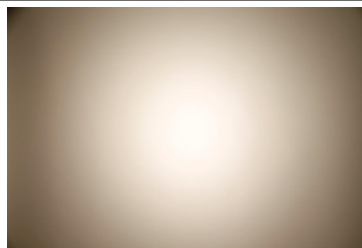
#### SAMSUNG

LED LC026B / 033B / 040B  
 FWHM 41.0°  
 Efficiency 92 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 450 Typ L2



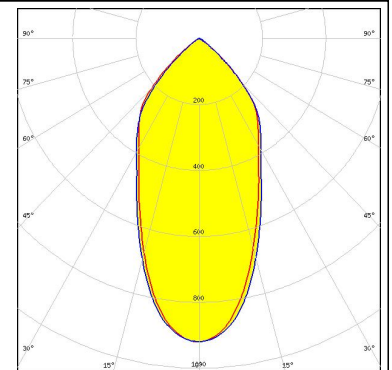
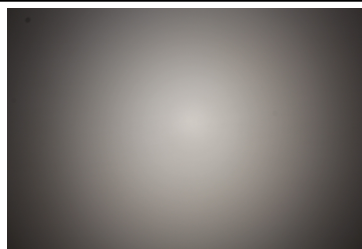
#### SAMSUNG

LED LC026B / 033B / 040B  
 FWHM 39.0°  
 Efficiency 93 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213258-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### SAMSUNG

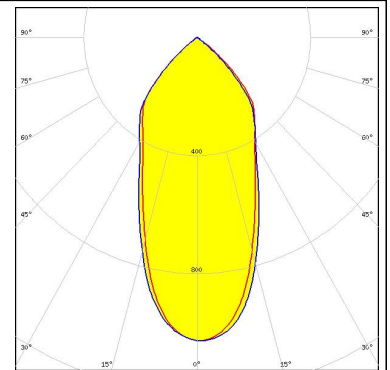
LED LC035T (Tunable white)  
 FWHM 50.0°  
 Efficiency 88 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 502 Typ L3



#### PHOTOMETRIC DATA (MEASURED):

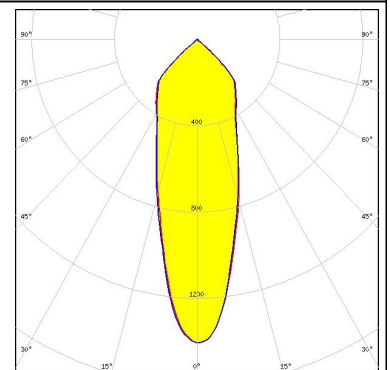
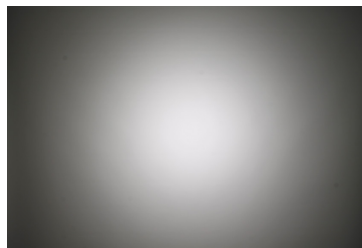
#### SAMSUNG

LED LC035T (Tunable white)  
 FWHM 47.0°  
 Efficiency 93 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 502 Typ L3



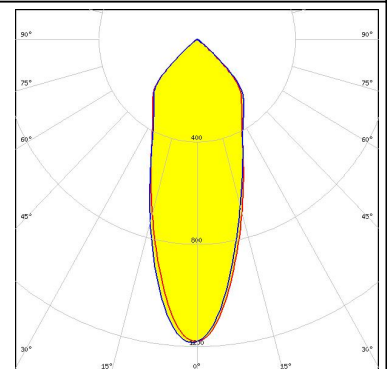
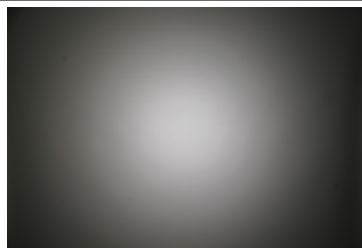
#### SAMSUNG

LED LC040C  
 FWHM 32.0°  
 Efficiency 91 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



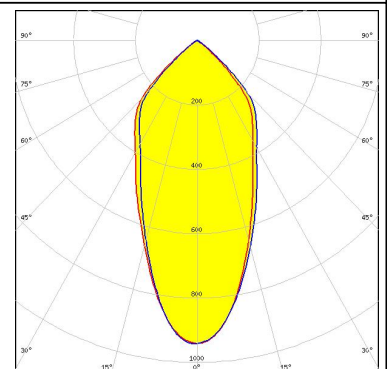
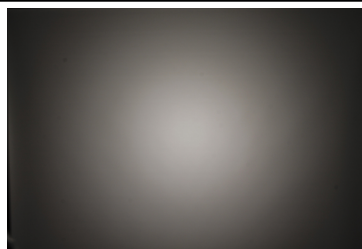
#### SAMSUNG

LED LC040C  
 FWHM 37.0°  
 Efficiency 88 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1


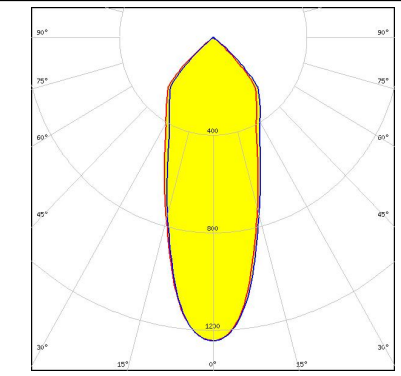
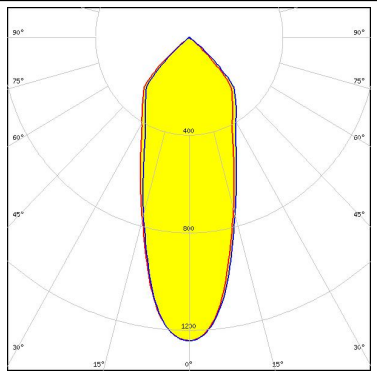
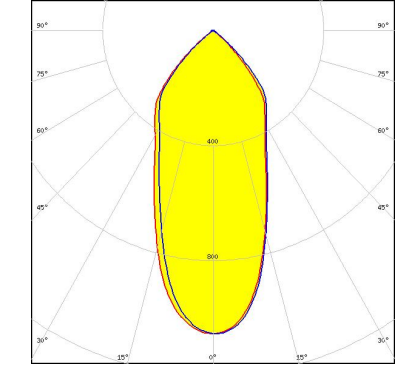

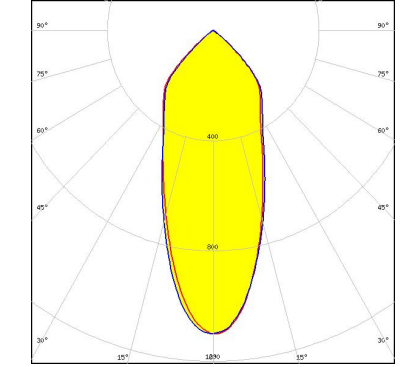

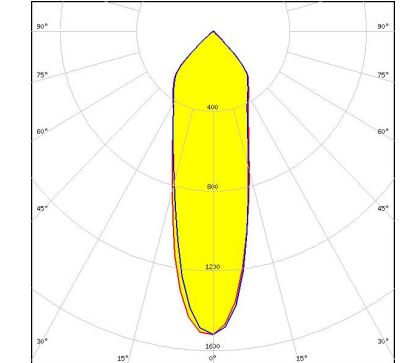
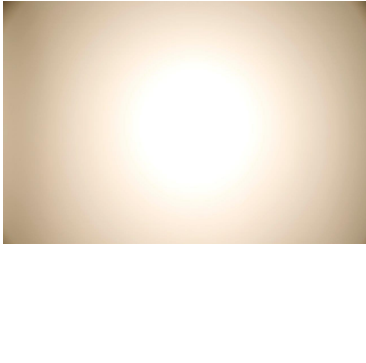
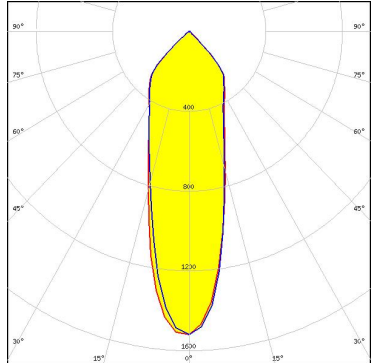


SEOUL SEMICONDUCTOR

LED AC Zhaga COB  
 FWHM 47.0°  
 Efficiency 88 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 Optosource: SEHSMJD-A



#### PHOTOMETRIC DATA (MEASURED):

<p> SEUL SEMICONDUCTOR</p> <p>LED MJT COB LES 14.5            FWHM 38.0°            Efficiency 92 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p> SEUL SEMICONDUCTOR</p> <p>LED MJT COB LES 22            FWHM 44.0°            Efficiency 90 %            Peak intensity 1.1 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 40.0°            Efficiency 88 %            Peak intensity 1.1 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F13671_ANGE-RZ-LENS            TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>SHARP</b></p> <p>LED Mega Zenigata (GW6DME)            FWHM 30.0°            Efficiency 93 %            Peak intensity 1.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:            IDEAL: 50-2100SH + 50-2100AN</p>		



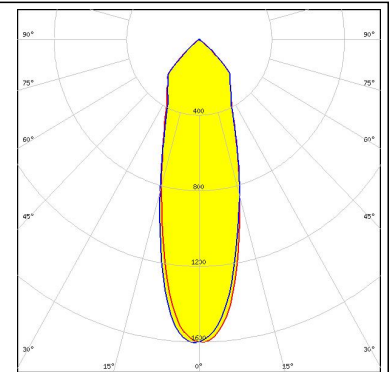
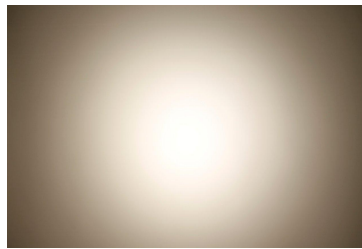
#### PHOTOMETRIC DATA (MEASURED):

### SHARP

LED Mega Zenigata (GW6DME)  
 FWHM 32.0°  
 Efficiency 92 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

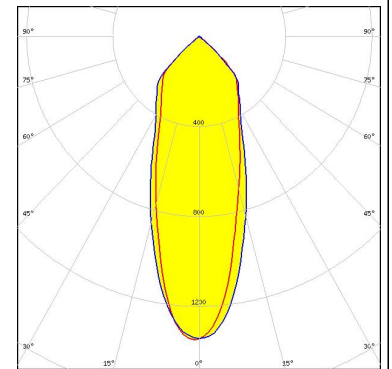
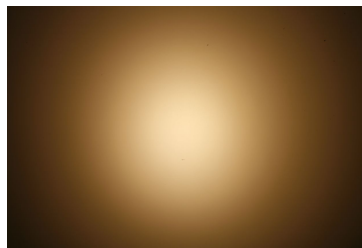


### VS LIGHTING SOLUTIONS

LED WU-M-461  
 FWHM 35.0°  
 Efficiency 93 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1

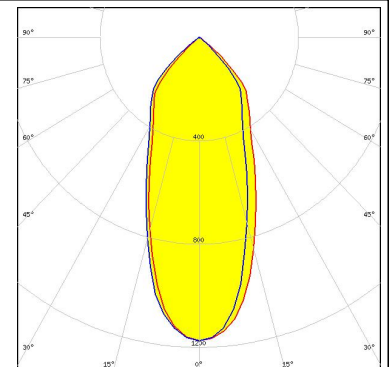
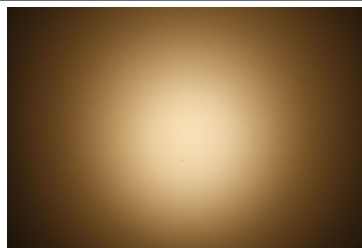


### VS LIGHTING SOLUTIONS

LED WU-M-462  
 FWHM 42.0°  
 Efficiency 93 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1

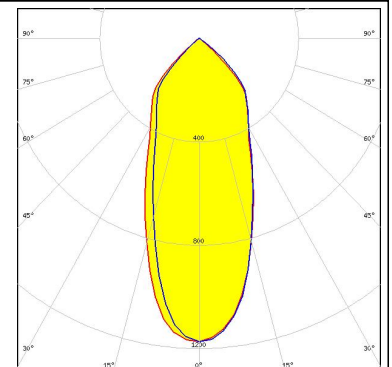
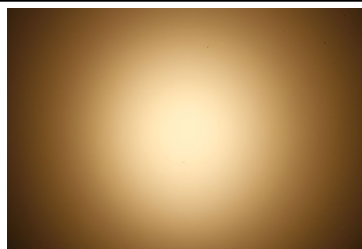


### VS LIGHTING SOLUTIONS

LED WU-M-464  
 FWHM 42.0°  
 Efficiency 93 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White


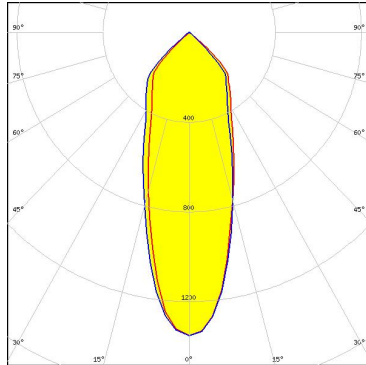
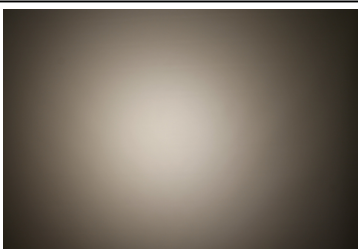
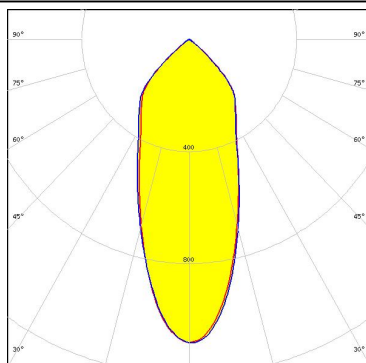
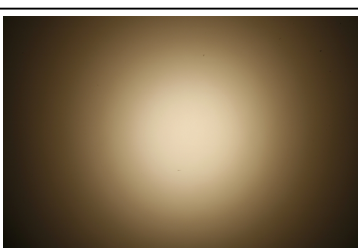
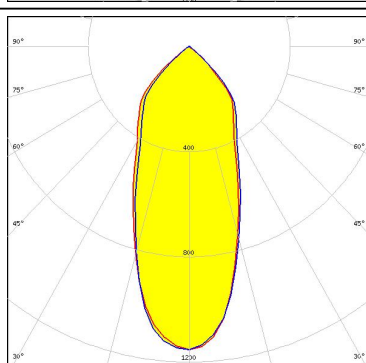
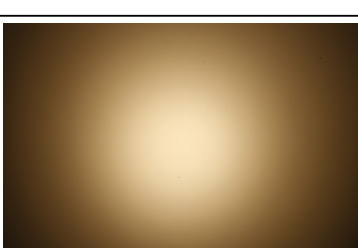
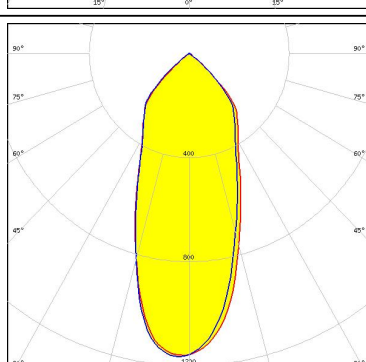
Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1

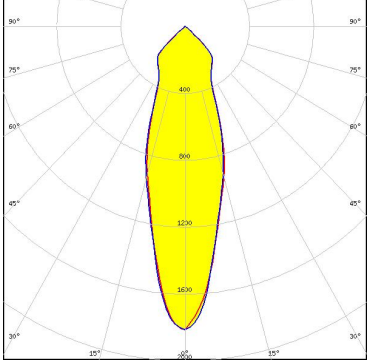
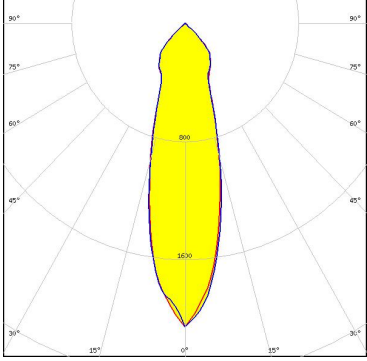
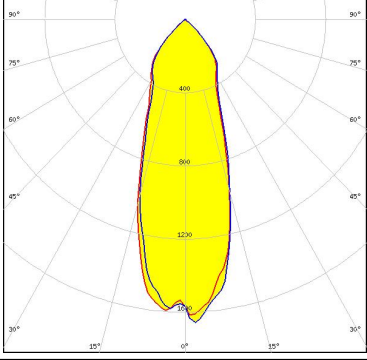




#### PHOTOMETRIC DATA (MEASURED):

<p><b>VS LIGHTING SOLUTIONS</b></p> <p>LED WU-M-484            FWHM 36.0°            Efficiency 93 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>VS LIGHTING SOLUTIONS</b></p> <p>LED WU-M-484            FWHM 40.0°            Efficiency 86 %            Peak intensity 1.1 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F13671_ANGE-RZ-LENS            TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>VS LIGHTING SOLUTIONS</b></p> <p>LED WU-M-485            FWHM 43.0°            Efficiency 93 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>VS LIGHTING SOLUTIONS</b></p> <p>LED WU-M-486            FWHM 42.0°            Efficiency 92 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

#### PHOTOMETRIC DATA (SIMULATED):

<p><b>bridgelux.</b></p> <p>LED V10 Gen7            FWHM 31.0°            Efficiency 93 %            Peak intensity 1.8 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13658_CLAMP-VERO13-18            Bender Wirth: 486 Typ L1</p>	
<p><b>bridgelux.</b></p> <p>LED V13 Gen7            FWHM 28.0°            Efficiency 93 %            Peak intensity 2.1 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            IDEAL: 50-2103CT + 50-2100AN</p>	
<p><b>bridgelux.</b></p> <p>LED V22 Gen7            FWHM 34.0°            Efficiency 94 %            Peak intensity 1.7 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            IDEAL: 50-2204-CT + 50-2100AN</p>	
<p><b>LUMINUS</b></p> <p>LED CxM-14 (19x19)            FWHM 37.0°            Efficiency 91 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13658_CLAMP-VERO13-18            Bender Wirth: 433 Typ L1</p>	

## PHOTOMETRIC DATA (SIMULATED):



LED CxM-9 (13.5x13.5)  
FWHM 31.0°  
Efficiency 92 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 434 Typ L1



SEOUL SEMICONDUCTOR

LED ZC12/18  
FWHM 37.0°  
Efficiency 92 %  
Peak intensity 2.3 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 31.0°  
Efficiency 92 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 434 Typ L1

### 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.

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

#### Shipping locations

Salo, Finland  
Hong Kong, China

#### Distribution Partners

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Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».



## JONHON

«**JONHON**» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«**FORSTAR**» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,  
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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