

## ANGELINA-S

~20° spot beam

### TECHNICAL SPECIFICATIONS:

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

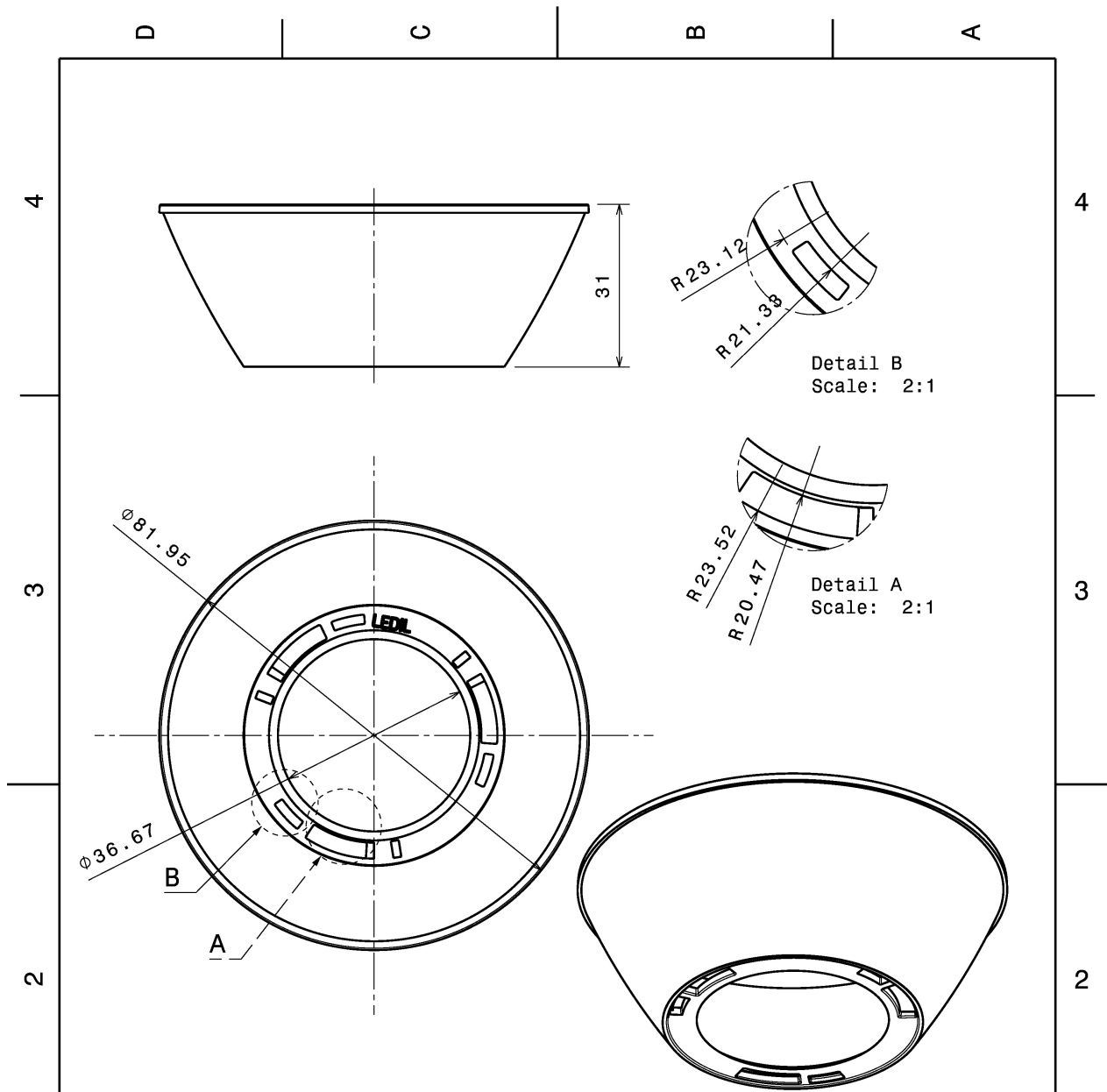
### MATERIAL SPECIFICATIONS:

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



### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F13325_ANGELINA-S » Box size: 480 x 280 x 300 mm	900	120	60	12.7



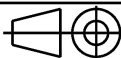
INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1		ANGELINA	PC	metal

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


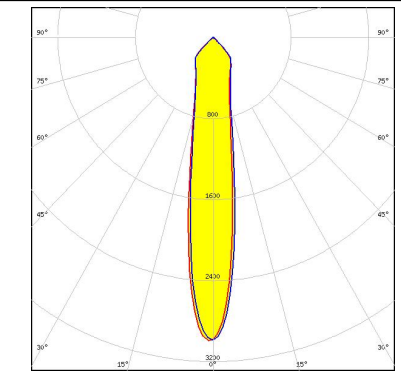
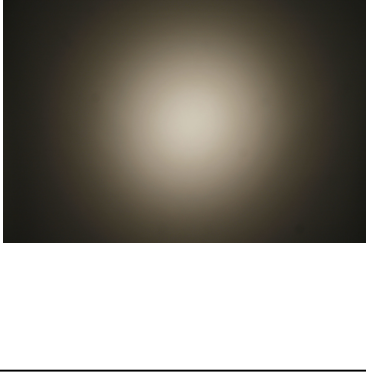
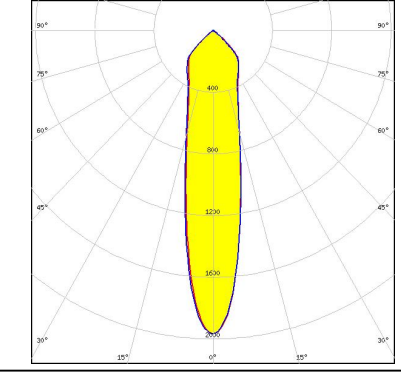

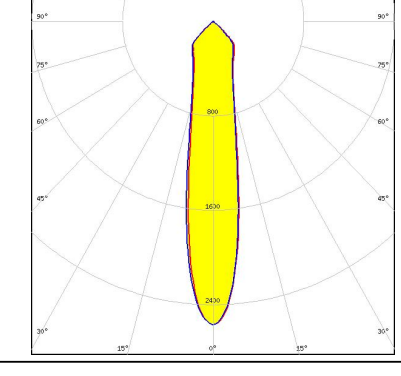
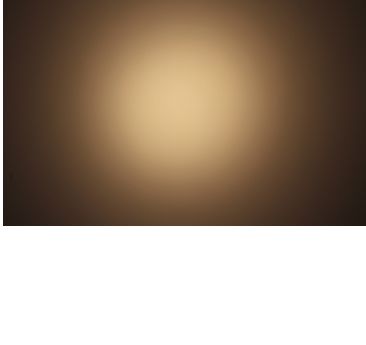

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SCALE 1:1 WEIGHT

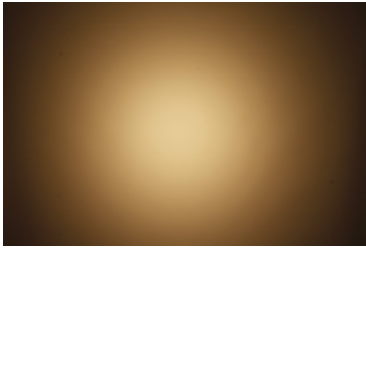
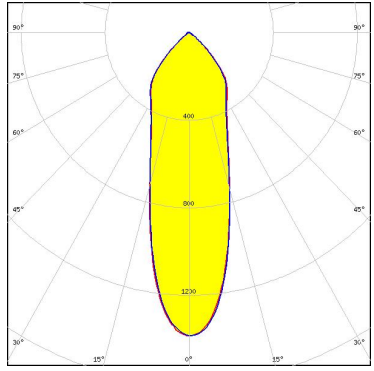
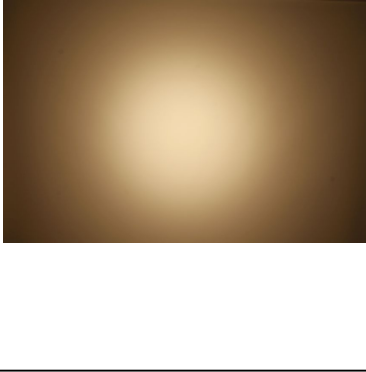
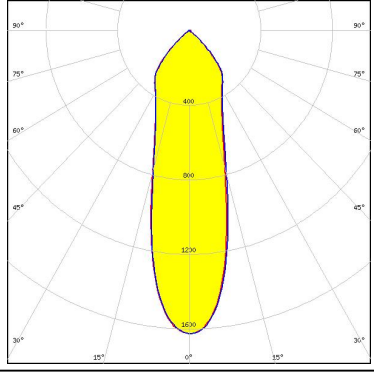
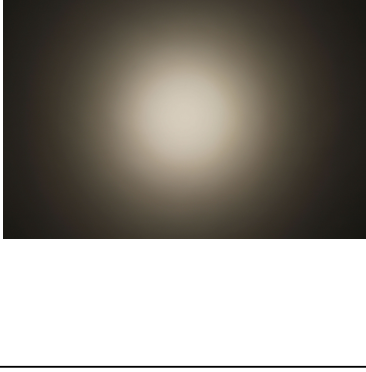
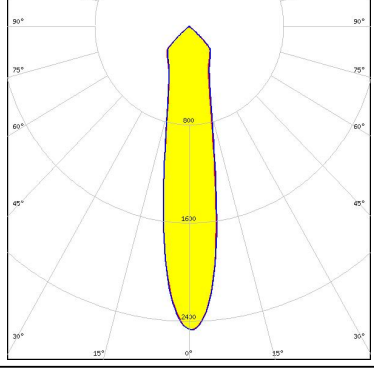

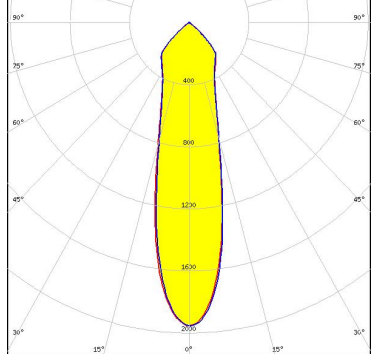
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SHEET 1/1


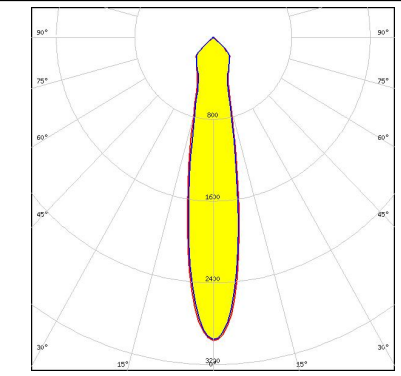
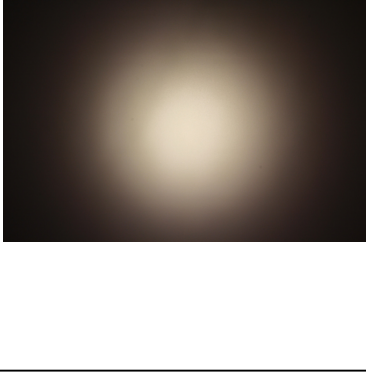
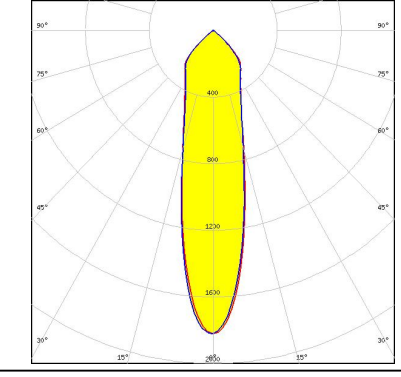
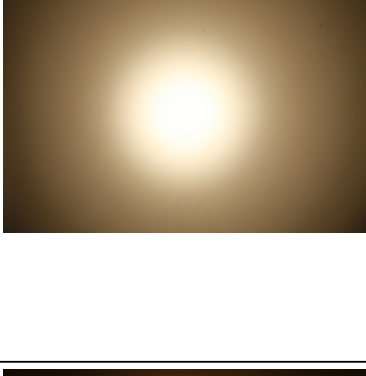
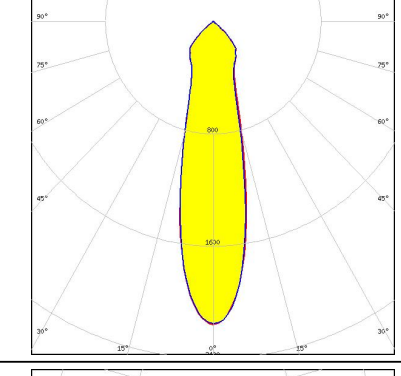

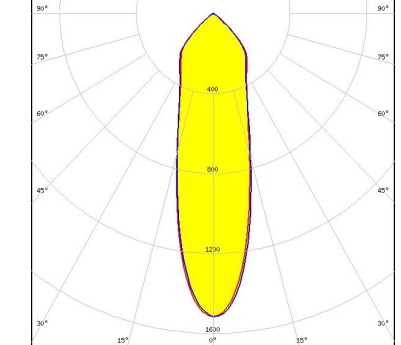
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED BXRA ES Rectangle</p> <p>FWHM 17.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3 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 22.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 2 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 20.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.6 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>		
<p>bridgelux.</p> <p>LED V15 Gen6</p> <p>FWHM 23.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 2.4 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>		


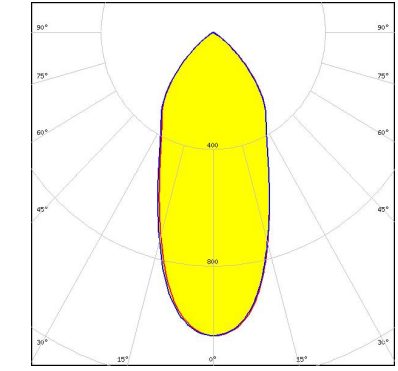
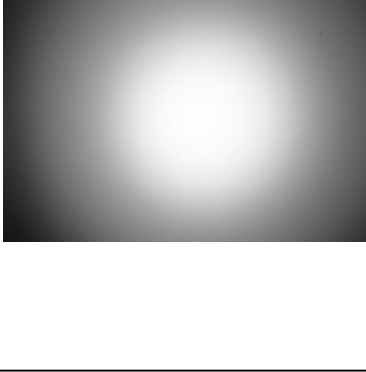
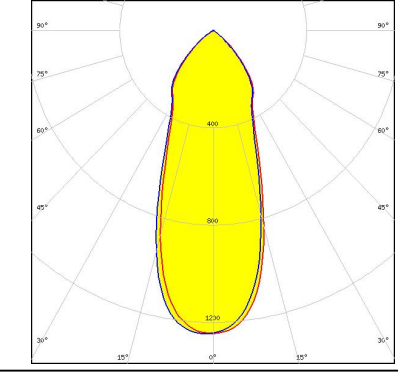

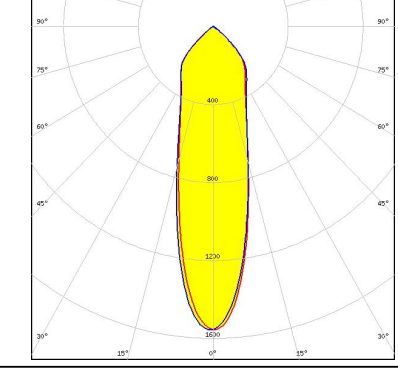
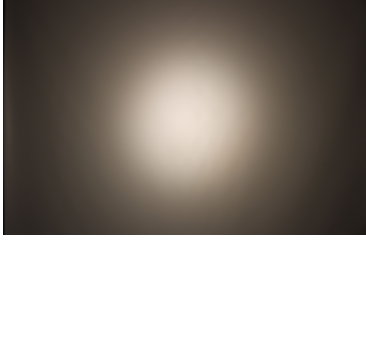
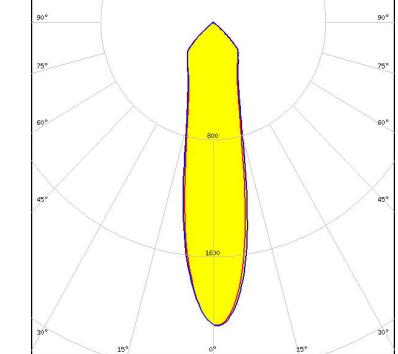
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V22 Gen6</p> <p>FWHM 32.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS IDEAL: 50-2204-CT + 50-2100AN</p>		
<p>bridgelux.</p> <p>LED V22 Gen6</p> <p>FWHM 29.0°</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: 50-2204-CT + 50-2100AN</p>		
<p>bridgelux.</p> <p>LED Vero SE 13</p> <p>FWHM 20.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		
<p>bridgelux.</p> <p>LED Vero SE 18</p> <p>FWHM 26.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		


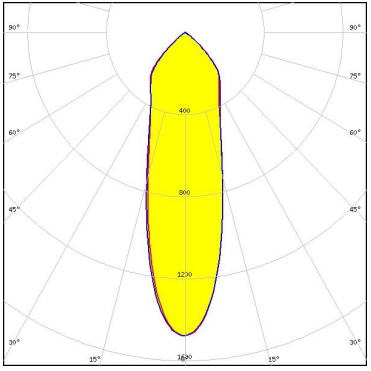
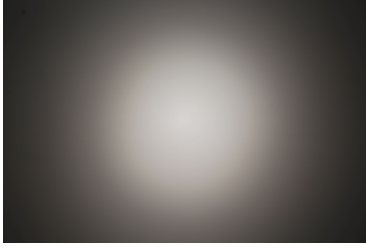
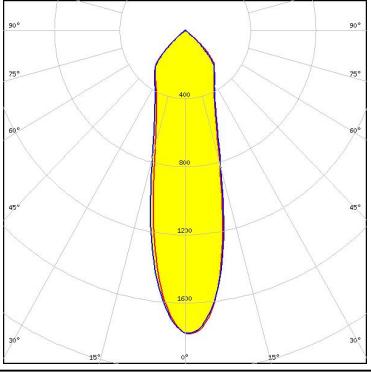
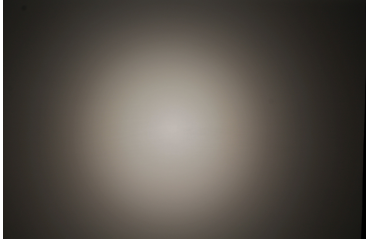
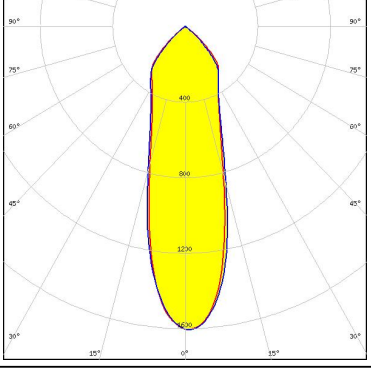
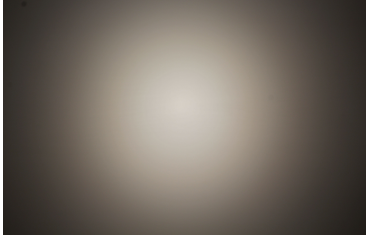
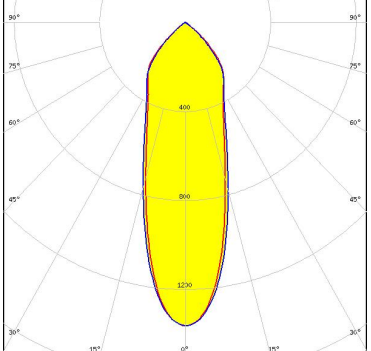
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED VERO13 FWHM 20.0° Efficiency 93 % Peak intensity 3 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO13 FWHM 25.0° Efficiency 88 % Peak intensity 1.8 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED VERO18 FWHM 25.0° Efficiency 92 % Peak intensity 2.2 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO18 FWHM 29.0° Efficiency 89 % Peak intensity 1.5 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS</p>		

#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED VERO29 FWHM 44.0° Efficiency 89 % Peak intensity 1 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED VERO29 FWHM 39.0° Efficiency 90 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29</p>		
<p>bridgelux.</p> <p>LED Vesta TW 15mm DP FWHM 28.0° Efficiency 89 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 482 Typ L2</p>		
<p>bridgelux.</p> <p>LED Vesta TW 15mm DP FWHM 24.0° Efficiency 92 % Peak intensity 2.1 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 482 Typ L2</p>		

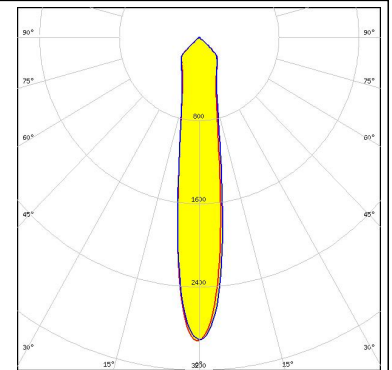
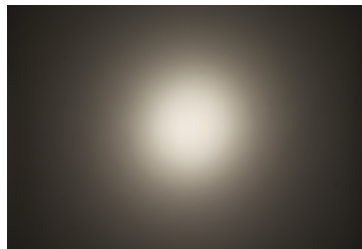
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED Vesta TW 18mm (31W) DP</p> <p>FWHM 30.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components:</p> <p>C13584_CLAMP-VERO29</p> <p>F13671_ANGE-RZ-LENS</p> <p>Bender Wirth: 483 Typ L3</p>		
<p>bridgelux.</p> <p>LED Vesta TW 18mm (31W) DP</p> <p>FWHM 27.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components:</p> <p>C13584_CLAMP-VERO29</p> <p>Bender Wirth: 483 Typ L3</p>		
<p>bridgelux.</p> <p>LED Vesta TW 22mm DP</p> <p>FWHM 30.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components:</p> <p>C13584_CLAMP-VERO29</p> <p>Bender Wirth: 494 Typ L3</p>		
<p>bridgelux.</p> <p>LED Vesta TW 22mm DP</p> <p>FWHM 33.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components:</p> <p>C13584_CLAMP-VERO29</p> <p>F13671_ANGE-RZ-LENS</p> <p>Bender Wirth: 494 Typ L3</p>		

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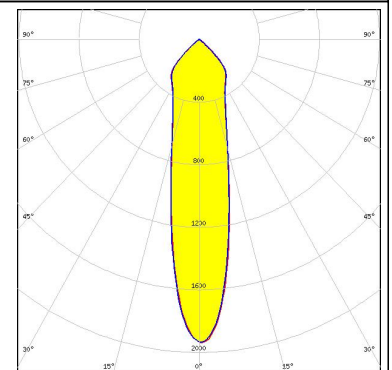
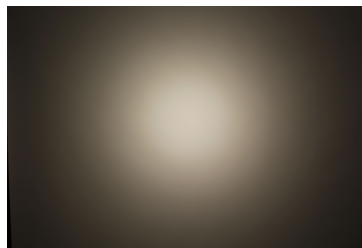
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM 17.0°  
 Efficiency 93 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1



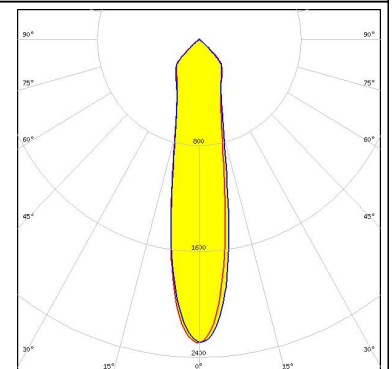
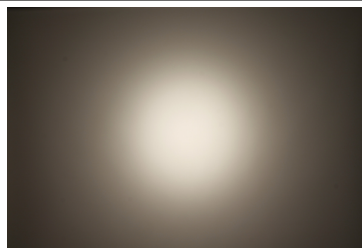
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 23.0°  
 Efficiency 91 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16791\_CLAMP-Z45-A  
 F13671\_ANGE-RZ-LENS  
 TE: 2325807-3



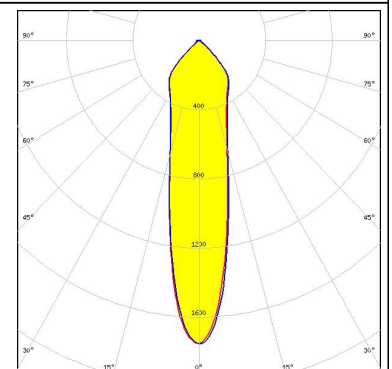
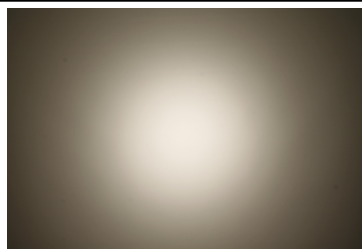
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 21.0°  
 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



#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 23.0°  
 Efficiency 87 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2103CT + 50-2100AN





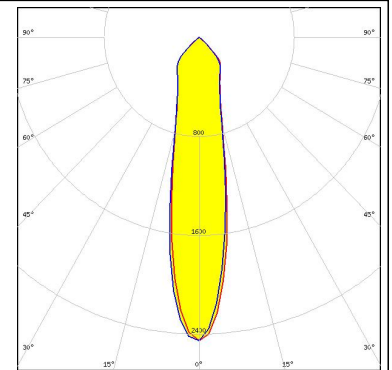
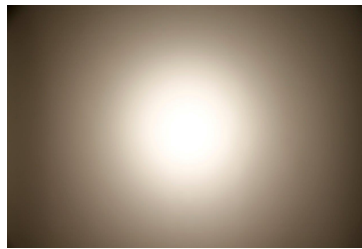
#### PHOTOMETRIC DATA (MEASURED):

#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 22.0°  
 Efficiency 94 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

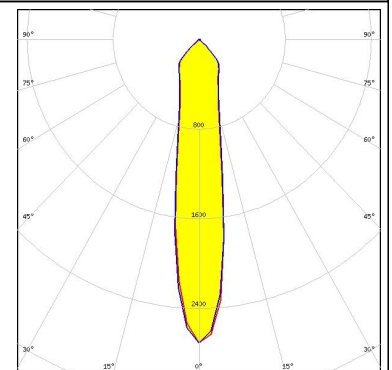
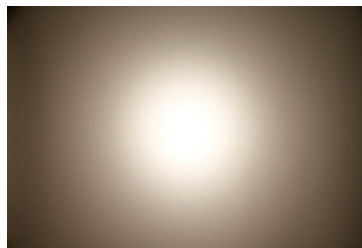


#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 19.0°  
 Efficiency 94 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

IDEAL: 50-2103CT + 50-2100AN



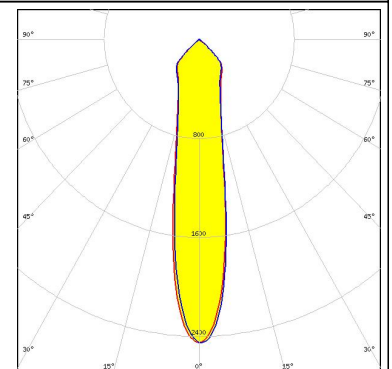
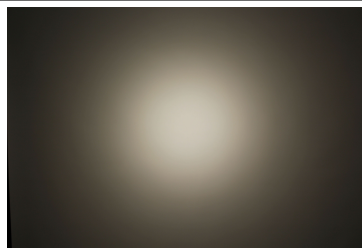
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 20.0°  
 Efficiency 94 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

C16791\_CLAMP-Z45-A

TE: 2325807-3



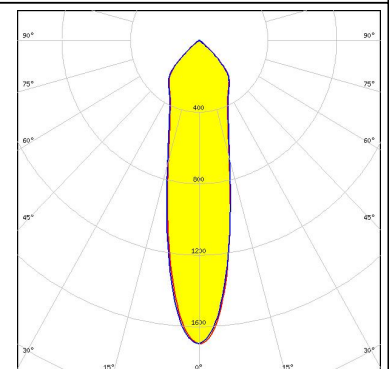
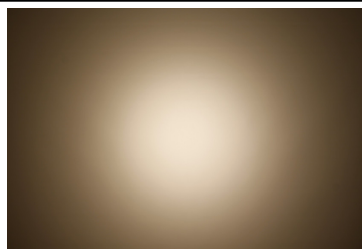
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 25.0°  
 Efficiency 87 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

F13671\_ANGE-RZ-LENS

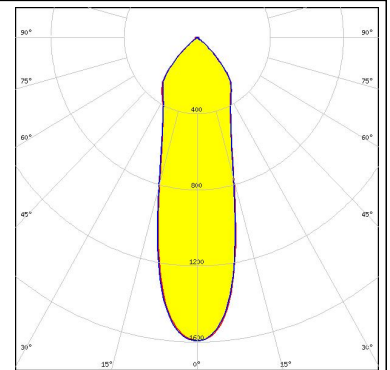
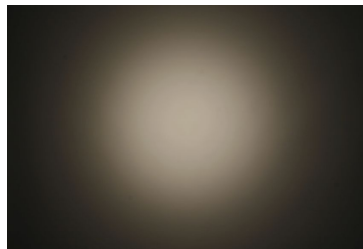
TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

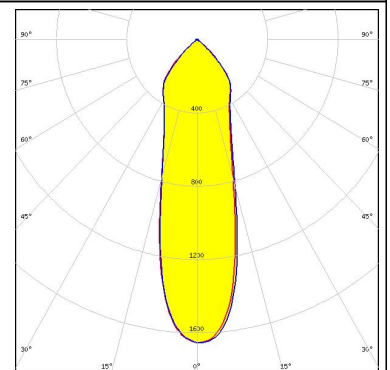
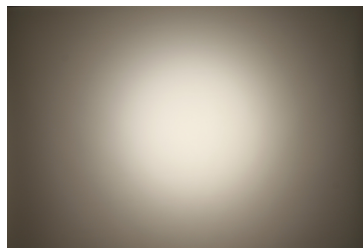
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 30.0°  
 Efficiency 92 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



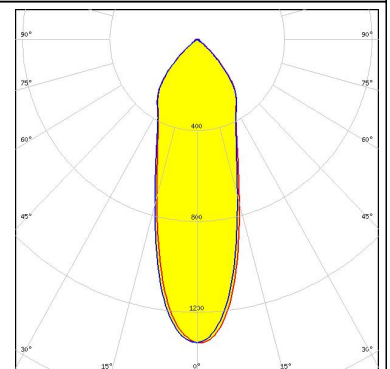
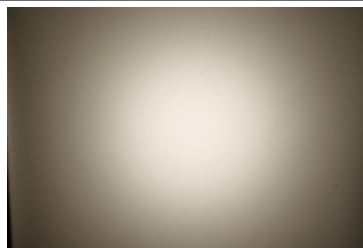
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 29.0°  
 Efficiency 93 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 431 Typ L3



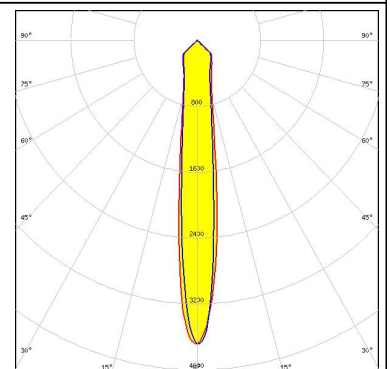
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 33.0°  
 Efficiency 88 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2204-CT + 50-2100AN



#### CITIZEN

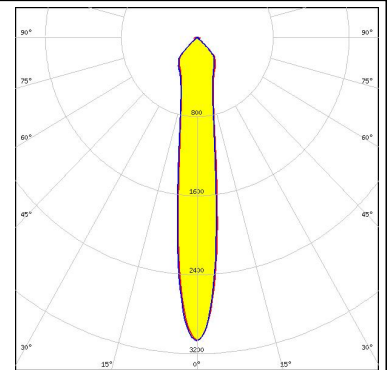
LED CLU700/701/702  
 FWHM 14.0°  
 Efficiency 93 %  
 Peak intensity 3.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1



#### PHOTOMETRIC DATA (MEASURED):

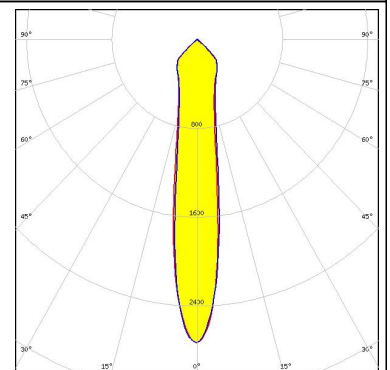
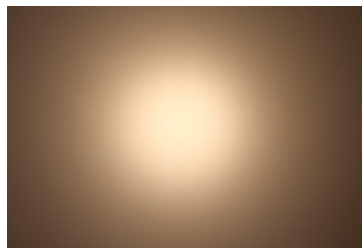
#### CITIZEN

LED CLU720/721  
 FWHM 15.0°  
 Efficiency 94 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2103CT + 50-2100AN



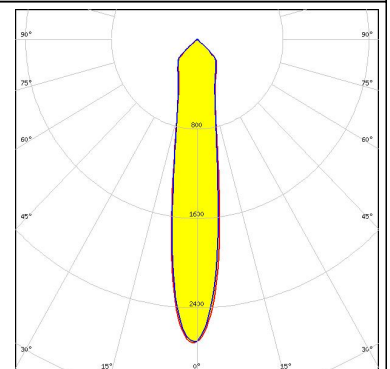
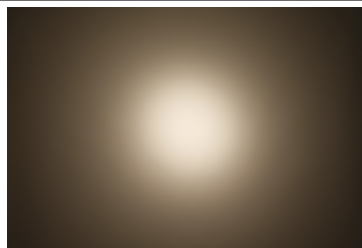
#### CITIZEN

LED CLU720/721  
 FWHM 17.0°  
 Efficiency 94 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



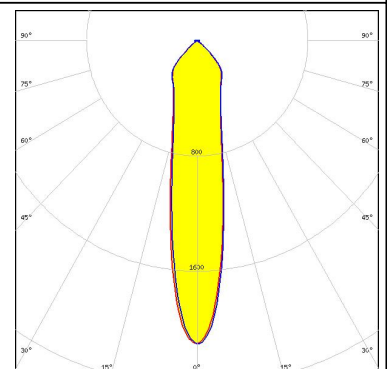
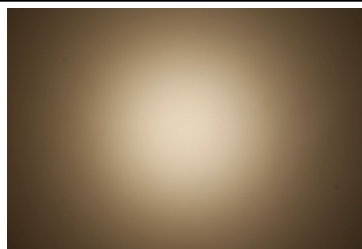
#### CITIZEN

LED CLU720/721  
 FWHM 18.0°  
 Efficiency 92 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18



#### CITIZEN

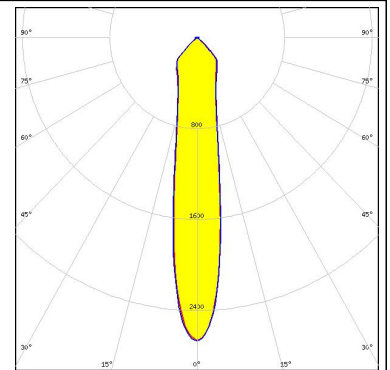
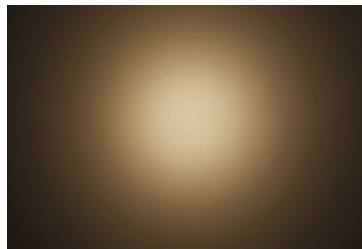
LED CLU730/731  
 FWHM 21.0°  
 Efficiency 87 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2204-CT + 50-2100AN



#### PHOTOMETRIC DATA (MEASURED):

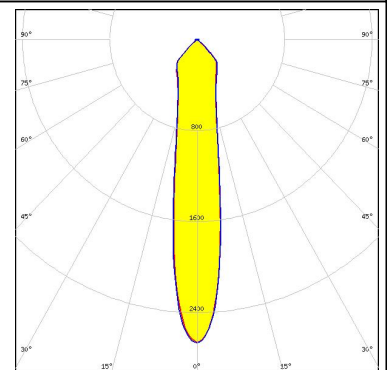
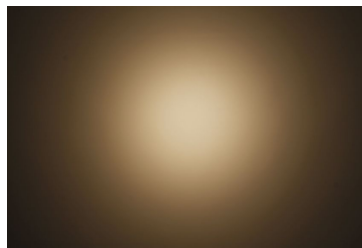
#### CITIZEN

LED CLU730/731  
 FWHM 18.0°  
 Efficiency 92 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



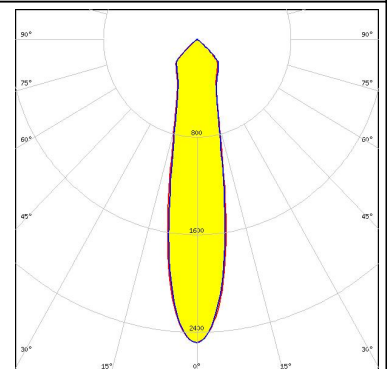
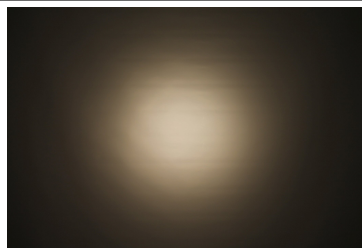
#### CITIZEN

LED CLU730/731  
 FWHM 18.0°  
 Efficiency 92 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



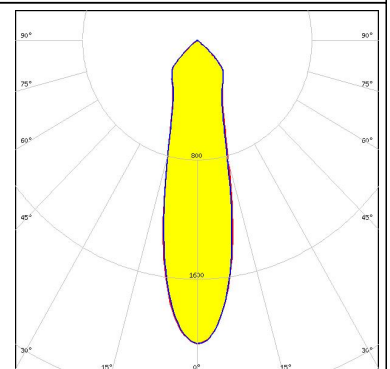
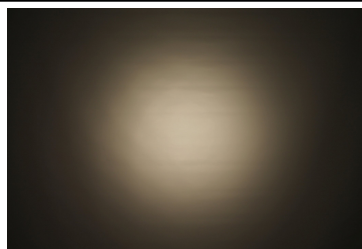
#### CREE

LED CMA1840  
 FWHM 22.0°  
 Efficiency 95 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14123\_CLAMP-CXA15-18



#### CREE

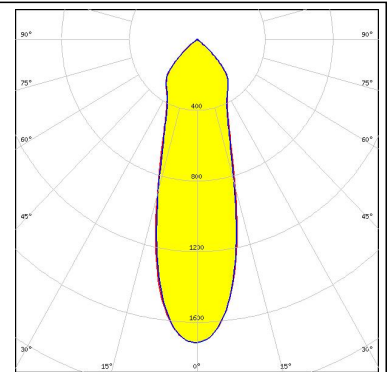
LED CMA2550  
 FWHM 26.0°  
 Efficiency 94 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



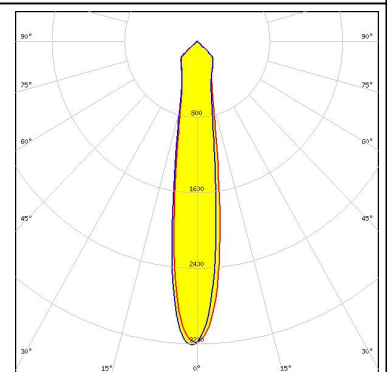
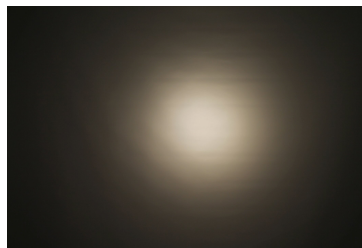
#### PHOTOMETRIC DATA (MEASURED):



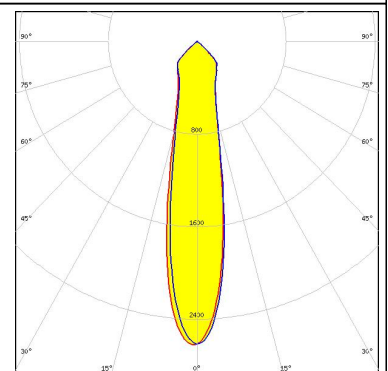
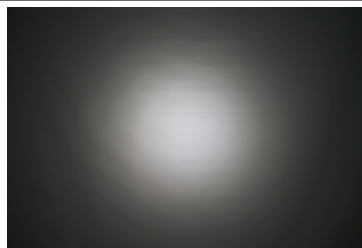
LED CMA3090  
 FWHM 30.0°  
 Efficiency 94 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



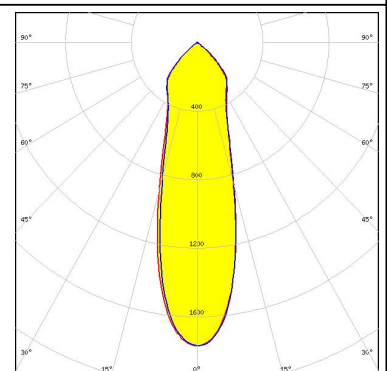
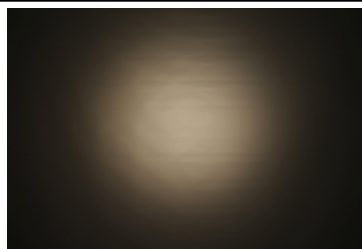
LED CMT14xx  
 FWHM 17.0°  
 Efficiency 94 %  
 Peak intensity 3.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1



LED CMT19xx  
 FWHM 21.0°  
 Efficiency 94 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 477 Typ L1



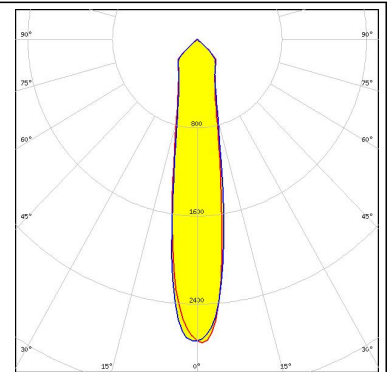
LED CMT28xx  
 FWHM 29.0°  
 Efficiency 94 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 471 Typ L3



#### PHOTOMETRIC DATA (MEASURED):

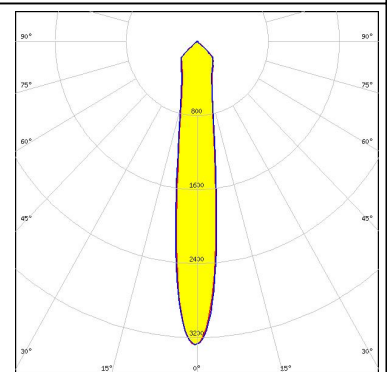
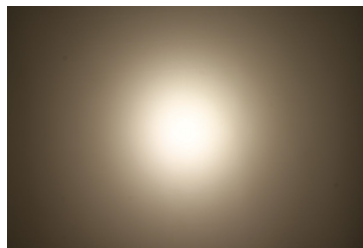
#### CREE

LED CXA/B 15xx  
 FWHM 20.0°  
 Efficiency 94 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14123\_CLAMP-CXA15-18



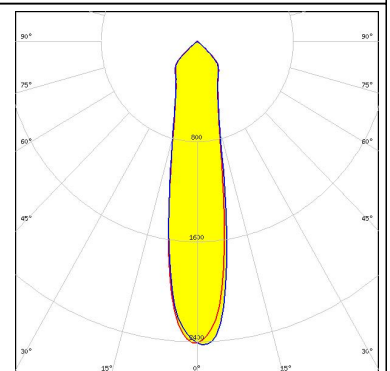
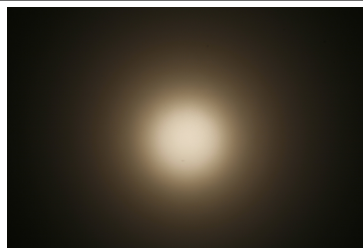
#### CREE

LED CXA/B 15xx  
 FWHM 15.0°  
 Efficiency 93 %  
 Peak intensity 3.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 441 Typ L1



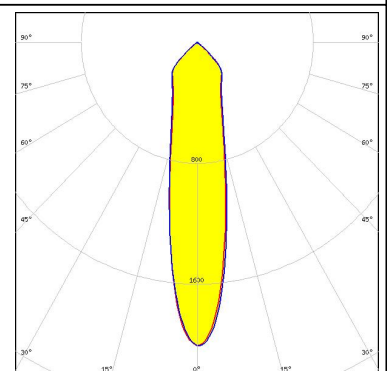
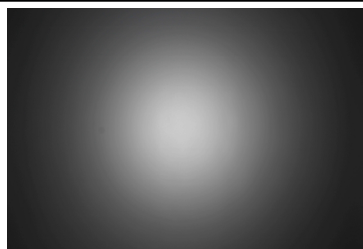
#### CREE

LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 22.0°  
 Efficiency 94 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14123\_CLAMP-CXA15-18



#### CREE

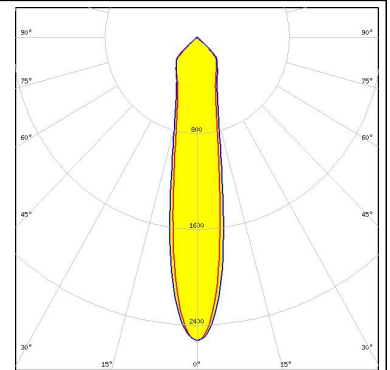
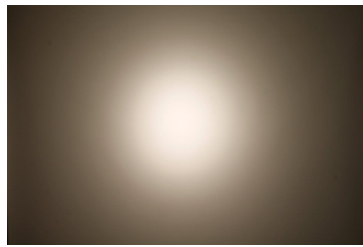
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 22.0°  
 Efficiency 89 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



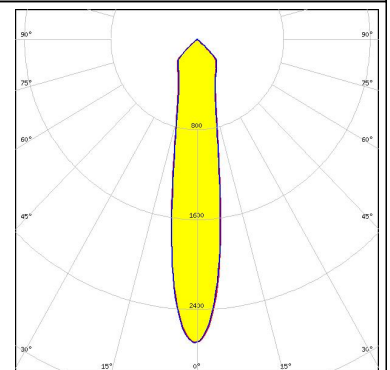
#### PHOTOMETRIC DATA (MEASURED):



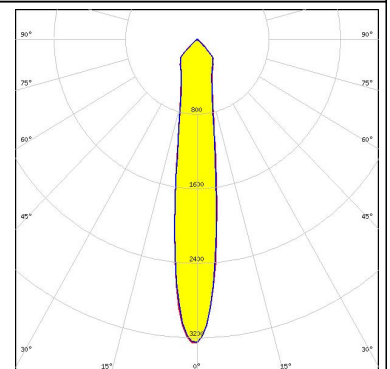
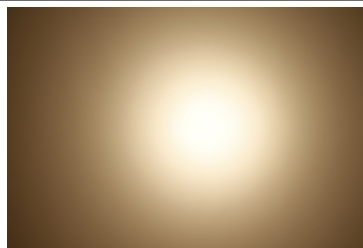
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 19.0°  
 Efficiency 93 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 437 Typ L1



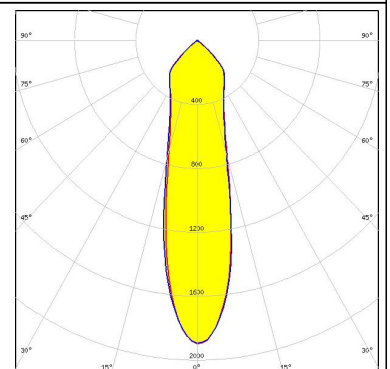
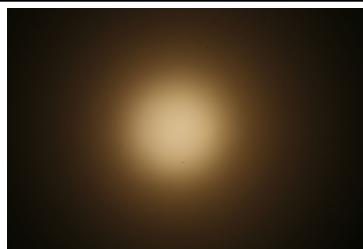
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 19.0°  
 Efficiency 93 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 16.0°  
 Efficiency 94 %  
 Peak intensity 3.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2101CR + 50-2100AN



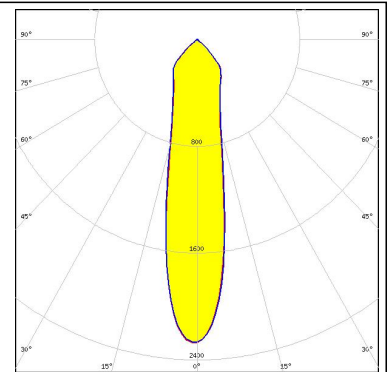
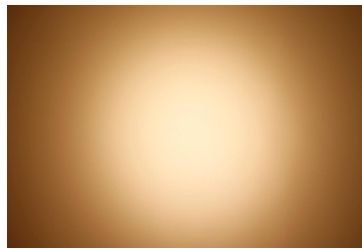
LED CXA/B 25xx  
 FWHM 25.0°  
 Efficiency 93 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



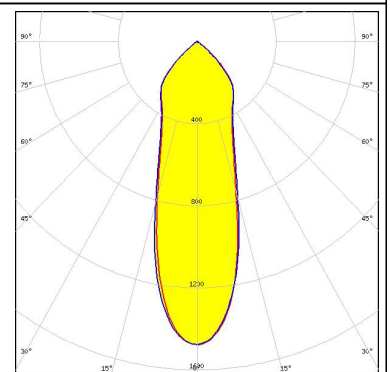
#### PHOTOMETRIC DATA (MEASURED):



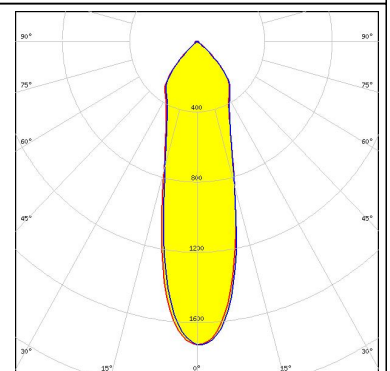
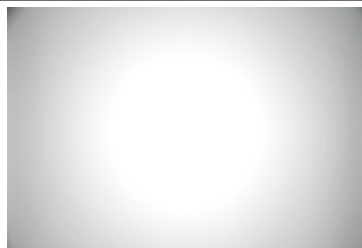
LED CXA/B 25xx  
 FWHM 22.0°  
 Efficiency 94 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2102CR + 50-2100AN



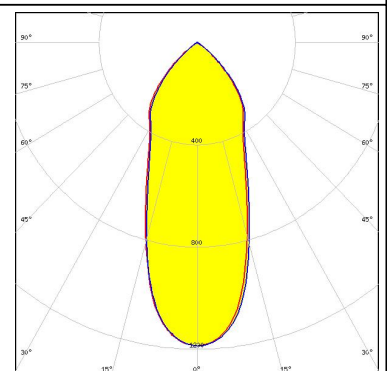
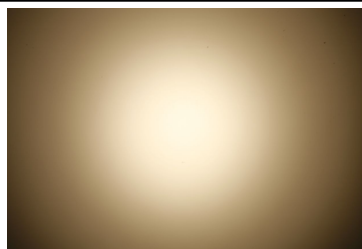
LED CXA/B 30xx  
 FWHM 32.0°  
 Efficiency 92 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14036\_CLAMP\_CXA25-30



LED CXA/B 30xx  
 FWHM 28.0°  
 Efficiency 94 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2234C + 50-2100AN



LED CXA/B 3590  
 FWHM 40.0°  
 Efficiency 93 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2303CR + 50-2300AN

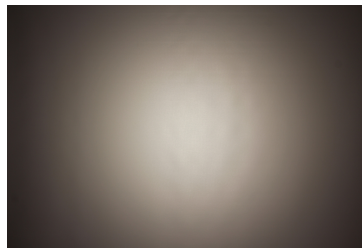




#### PHOTOMETRIC DATA (MEASURED):

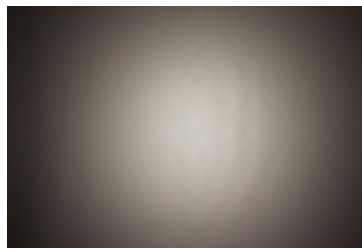
#### EVERLIGHT

LED CHI3030 19W  
 FWHM 29.0°  
 Efficiency 88 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 468 Typ L3



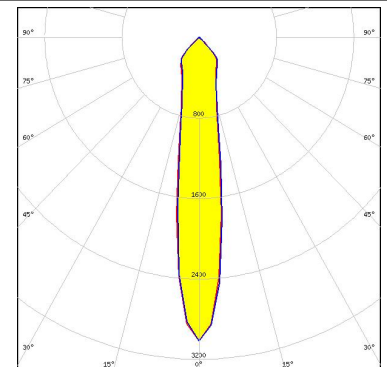
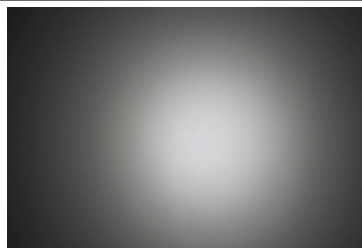
#### EVERLIGHT

LED CHI3030 29W  
 FWHM 39.0°  
 Efficiency 88 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 468 Typ L3



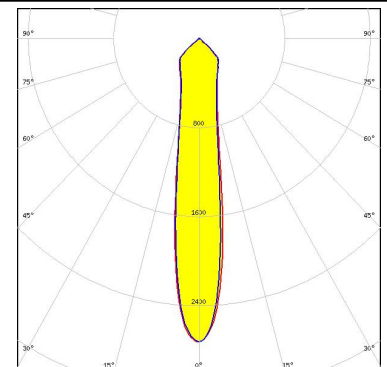
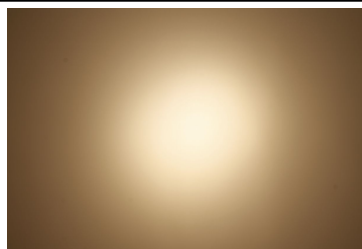
#### LG Innotek

LED COB 10W/13W/17W/24W  
 FWHM 17.0°  
 Efficiency 94 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2100LG + 50-2100AN



#### LUMILEDS

LED LUXEON CoB 1202/1203  
 FWHM 18.0°  
 Efficiency 93 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 438 Typ L1



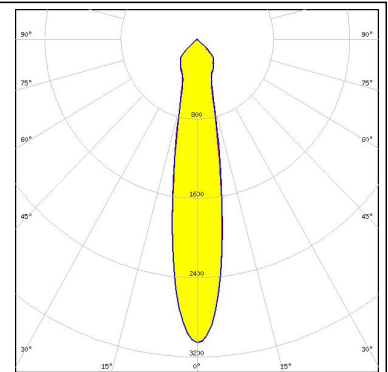
#### PHOTOMETRIC DATA (MEASURED):

##### LUMILEDS

LED LUXEON CoB 1204/1205  
 FWHM 19.0°  
 Efficiency 94 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

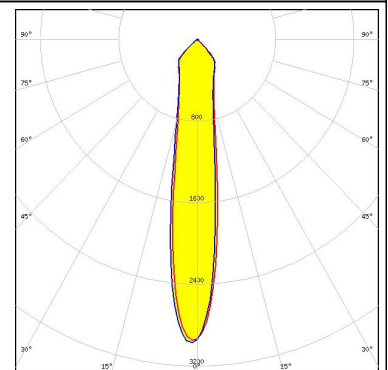
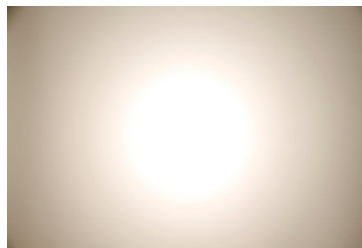


##### LUMILEDS

LED LUXEON CoB 1204/1205  
 FWHM 17.0°  
 Efficiency 94 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

IDEAL: 50-2100SH + 50-2100AN

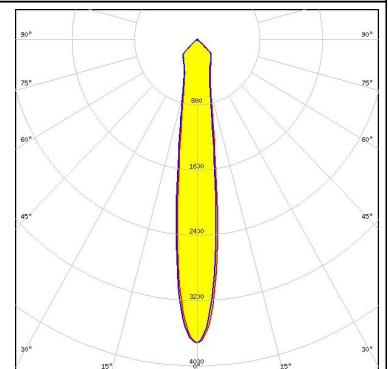
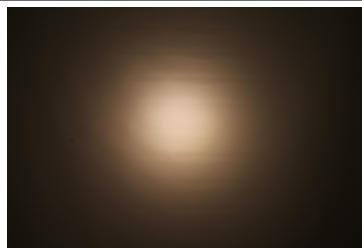


##### LUMILEDS

LED LUXEON CoB 1204HD  
 FWHM 15.0°  
 Efficiency 95 %  
 Peak intensity 3.7 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

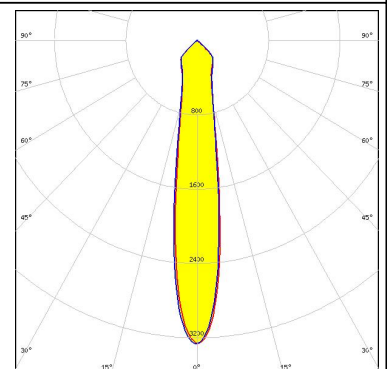
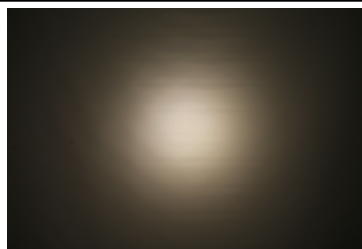


##### LUMILEDS

LED LUXEON CoB 1205HD  
 FWHM 17.0°  
 Efficiency 95 %  
 Peak intensity 3.3 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

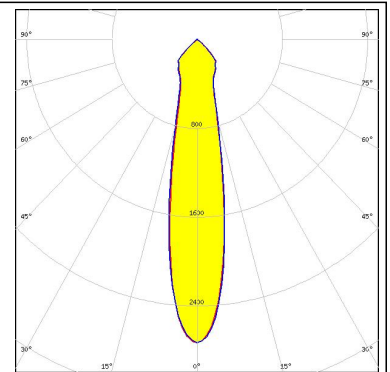
TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

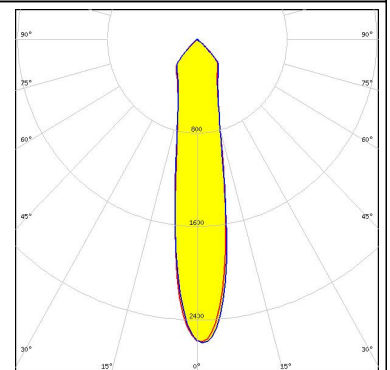
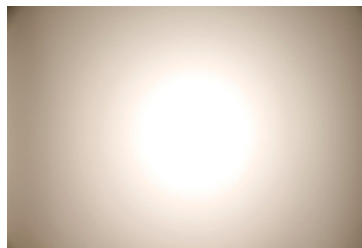
#### LUMILEDS

LED LUXEON CoB 1208  
 FWHM 21.0°  
 Efficiency 93 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



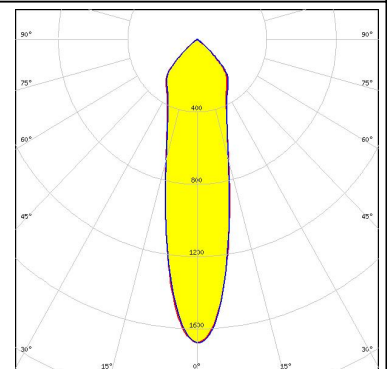
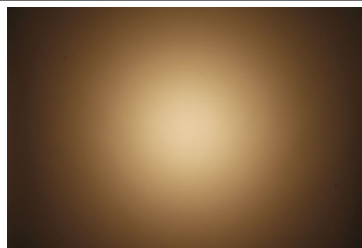
#### LUMILEDS

LED LUXEON CoB 1208  
 FWHM 20.0°  
 Efficiency 94 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2100SH + 50-2100AN



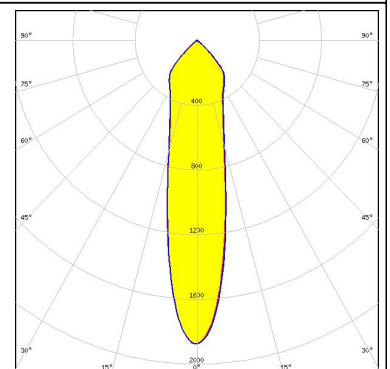
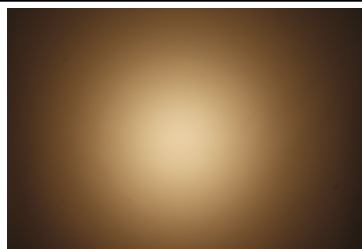
#### LUMILEDS

LED LUXEON CoB 1208  
 FWHM 25.0°  
 Efficiency 87 %  
 Peak intensity 1.7 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

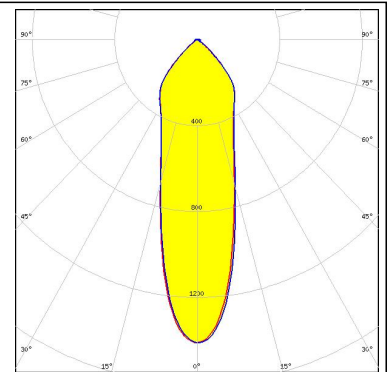
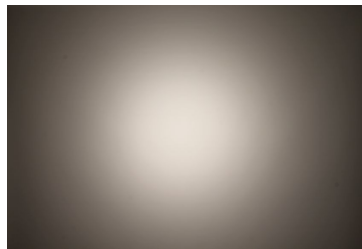
LED LUXEON CoB 1208  
 FWHM 23.0°  
 Efficiency 88 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2100SH + 50-2100AN



#### PHOTOMETRIC DATA (MEASURED):

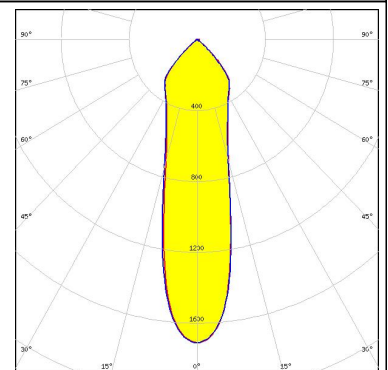
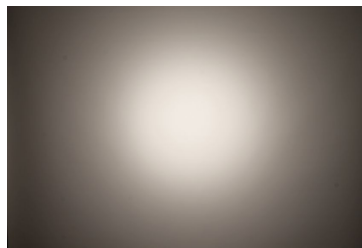
#### LUMILEDS

LED LUXEON CoB 1211  
 FWHM 30.0°  
 Efficiency 87 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2204-CT + 50-2100AN



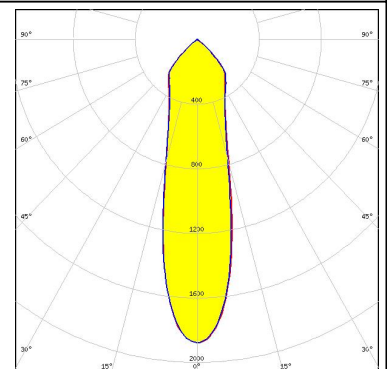
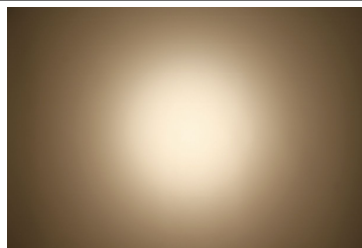
#### LUMILEDS

LED LUXEON CoB 1211  
 FWHM 26.0°  
 Efficiency 91 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



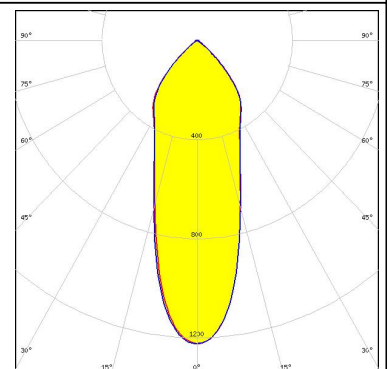
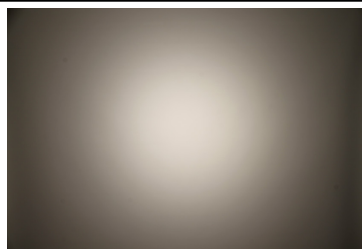
#### LUMILEDS

LED LUXEON CoB 1211  
 FWHM 26.0°  
 Efficiency 94 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 431 Typ L3



#### LUMILEDS

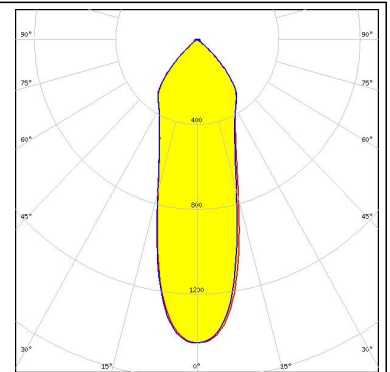
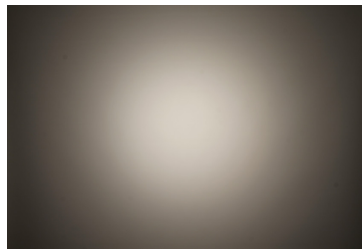
LED LUXEON CoB 1216/1812  
 FWHM 34.0°  
 Efficiency 87 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2204CT + 50-2100LN



#### PHOTOMETRIC DATA (MEASURED):

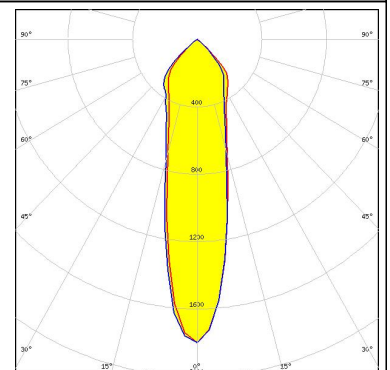
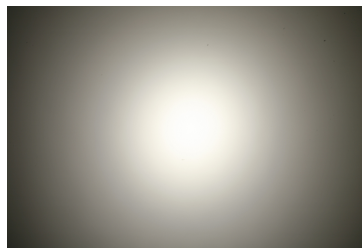
##### LUMILEDS

LED LUXEON CoB 1216/1812  
 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



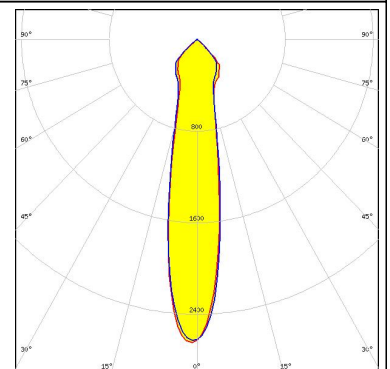
##### LUMILEDS

LED LUXEON K12  
 FWHM 25.0°  
 Efficiency 89 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1



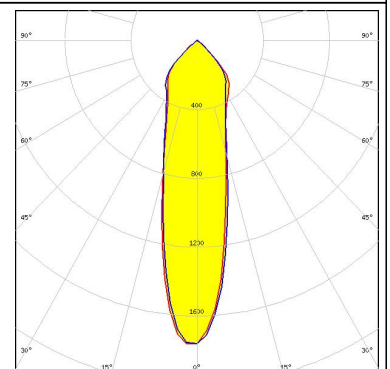
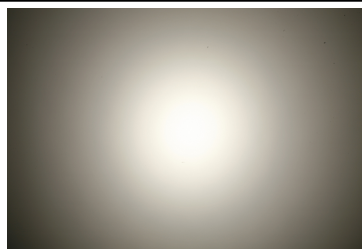
##### LUMILEDS

LED LUXEON K12  
 FWHM 20.0°  
 Efficiency 94 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1

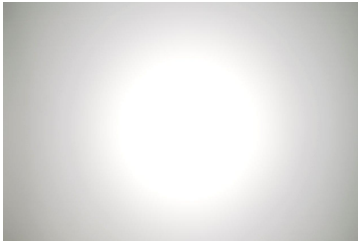
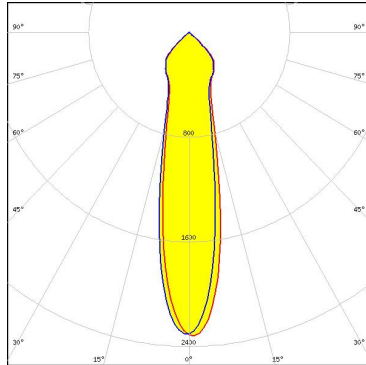
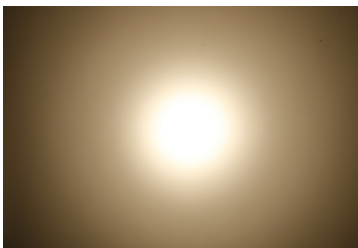
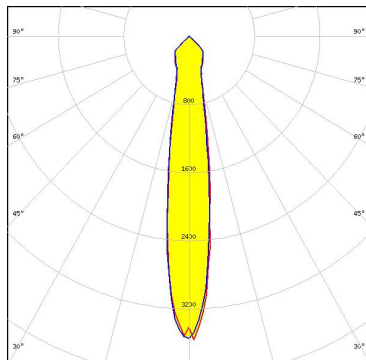

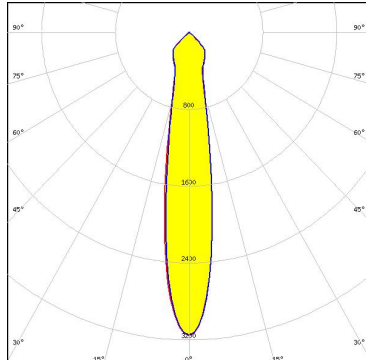

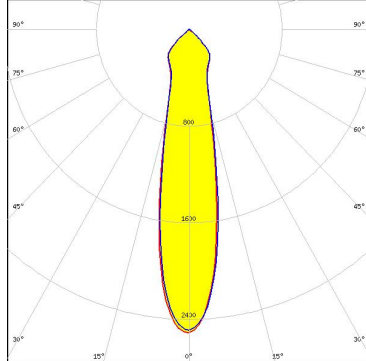


##### LUMILEDS

LED LUXEON K16  
 FWHM 26.0°  
 Efficiency 89 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1



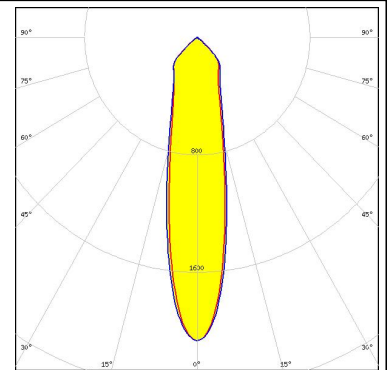
#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON K16            FWHM 22.0°            Efficiency 94 %            Peak intensity 2.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON S2000            FWHM 17.0°            Efficiency 93 %            Peak intensity 3.6 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13395_CLAMP-S2000</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON S3000            FWHM 18.0°            Efficiency 92 %            Peak intensity 3.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13397_CLAMP-S3000</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON S5000            FWHM 22.0°            Efficiency 93 %            Peak intensity 2.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13399_CLAMP-S5000</p>		

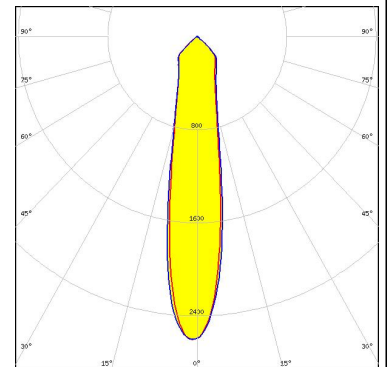
#### PHOTOMETRIC DATA (MEASURED):



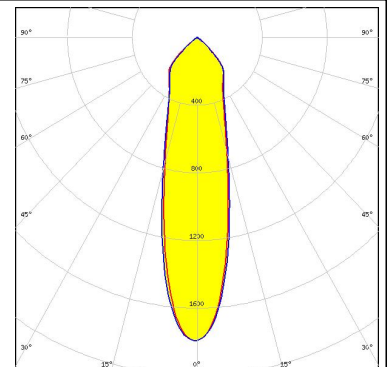
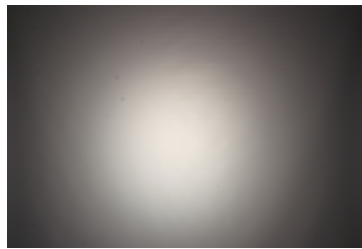
LED CDM-14 (Dim-To-Warm)  
 FWHM 23.0°  
 Efficiency 89 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 491 Typ L2



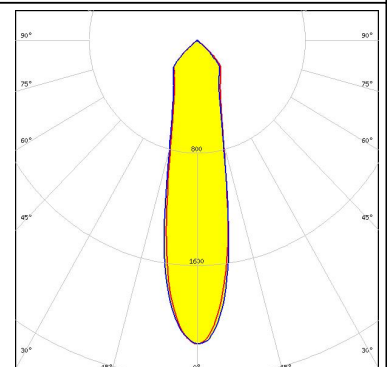
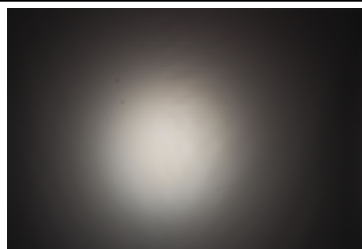
LED CDM-14 (Dim-To-Warm)  
 FWHM 20.0°  
 Efficiency 93 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 491 Typ L2




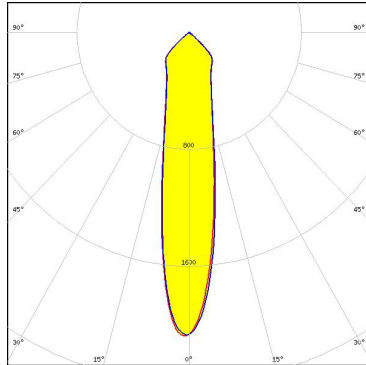

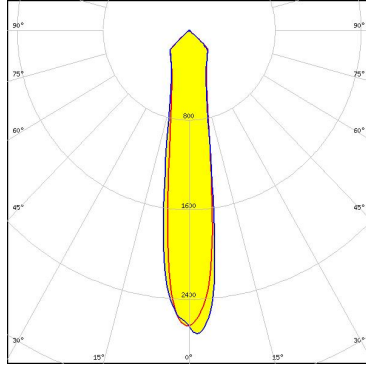
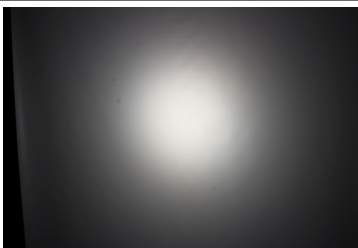
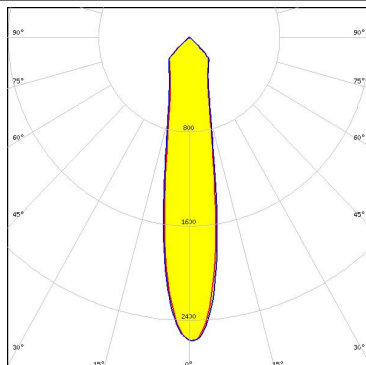
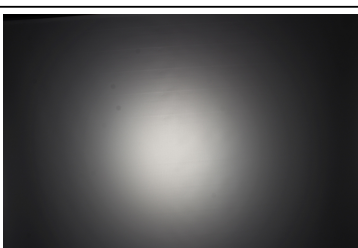
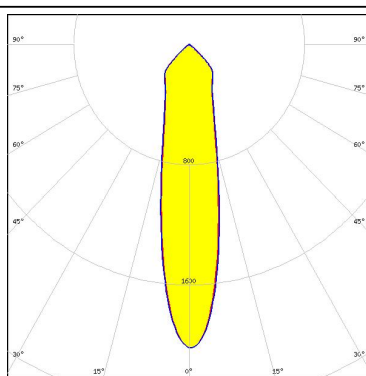
LED CDM-18 (Dim-To-Warm)  
 FWHM 26.0°  
 Efficiency 89 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 491 Typ L2



LED CDM-18 (Dim-To-Warm)  
 FWHM 24.0°  
 Efficiency 93 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 491 Typ L2



#### PHOTOMETRIC DATA (MEASURED):

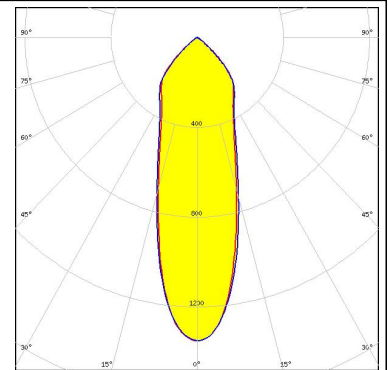
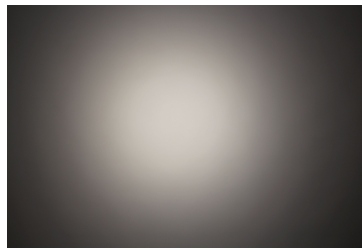
<p><b>LUMINUS</b></p> <p>LED CDM-9 (Dim-To-Warm)            FWHM 21.0°            Efficiency 87 %            Peak intensity 2.1 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13658_CLAMP-VERO13-18            F13671_ANGE-RZ-LENS            Bender Wirth: 490 Typ L1</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-9 (Dim-To-Warm)            FWHM 18.0°            Efficiency 92 %            Peak intensity 2.7 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13658_CLAMP-VERO13-18            Bender Wirth: 490 Typ L1</p>		
<p><b>LUMINUS</b></p> <p>LED CTM-14 (Tunable White)            FWHM 20.0°            Efficiency 93 %            Peak intensity 2.6 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13584_CLAMP-VERO29            Bender Wirth: 442 Typ L3</p>		
<p><b>LUMINUS</b></p> <p>LED CTM-14 (Tunable White)            FWHM 23.0°            Efficiency 88 %            Peak intensity 2 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13584_CLAMP-VERO29            F13671_ANGE-RZ-LENS            Bender Wirth: 442 Typ L3</p>		



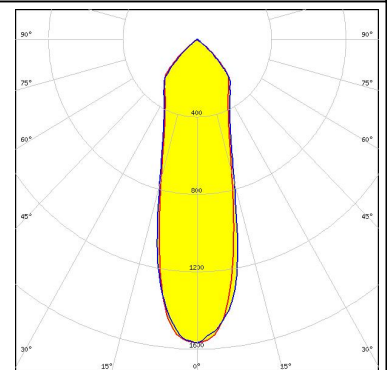
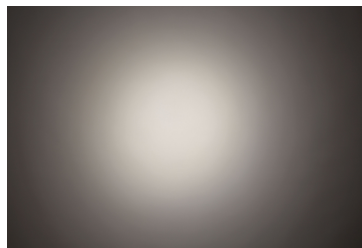
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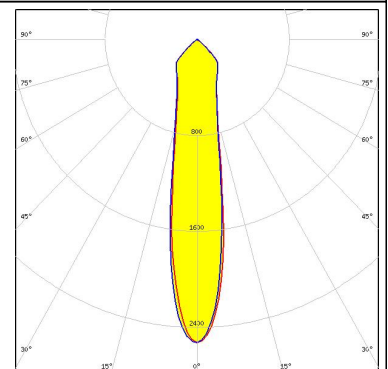
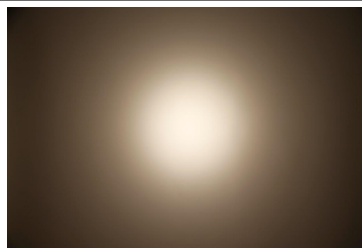
LED CTM-22 (Tunable White)  
 FWHM 32.0°  
 Efficiency 87 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 494 Typ L3



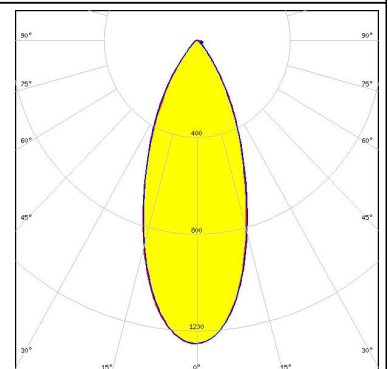
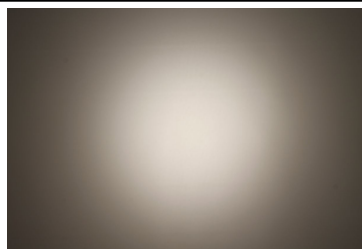
LED CTM-22 (Tunable White)  
 FWHM 29.0°  
 Efficiency 91 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 494 Typ L3



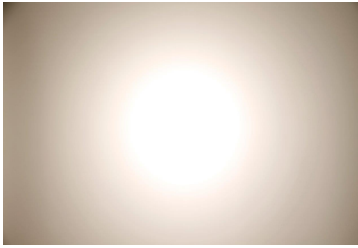
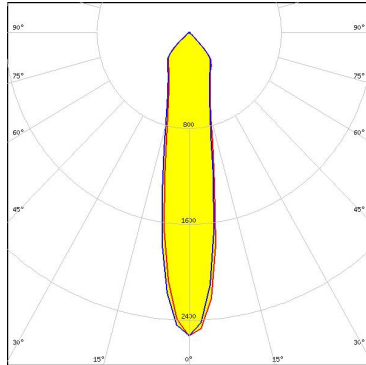
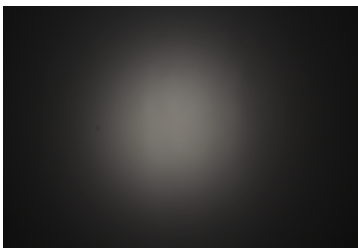
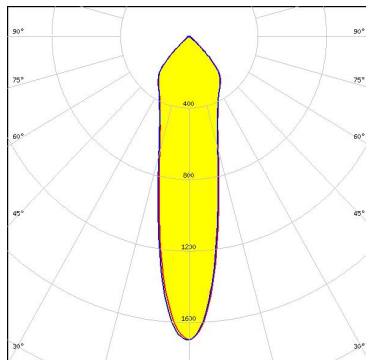
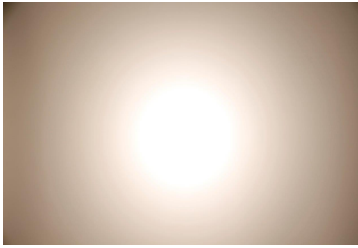
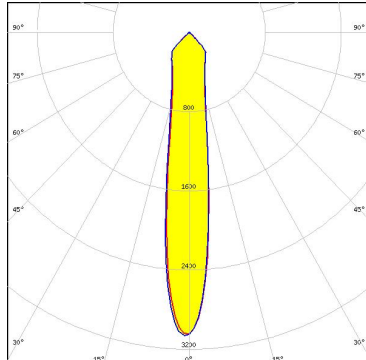
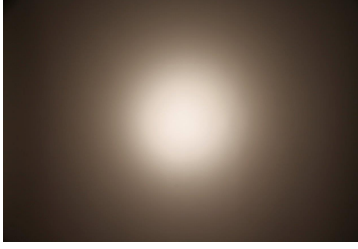
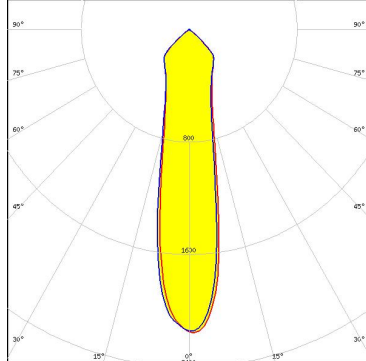
LED CxM-14 (19x19)  
 FWHM 20.0°  
 Efficiency 94 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1




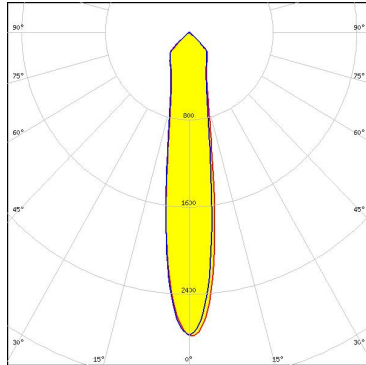
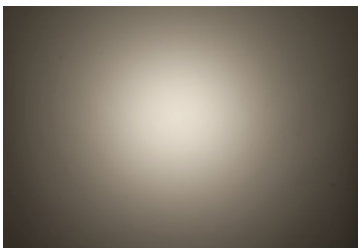
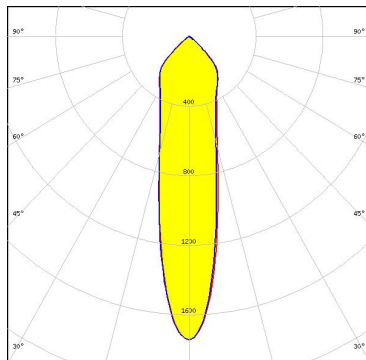
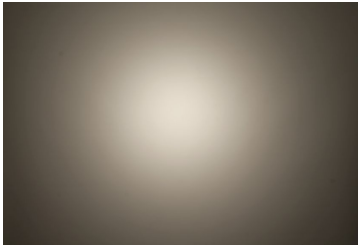
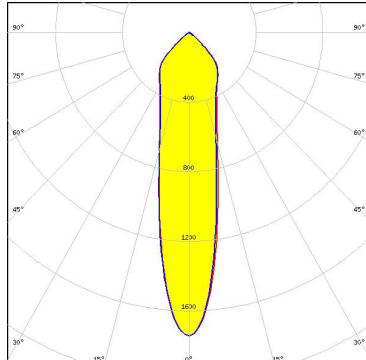
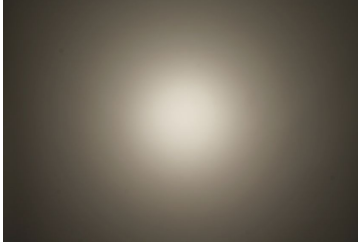
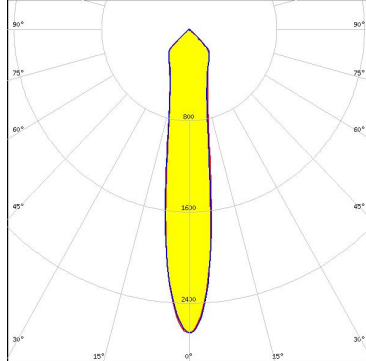
LED COB J-Type  
 FWHM 22.0°  
 Efficiency 93 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 463 Typ L2




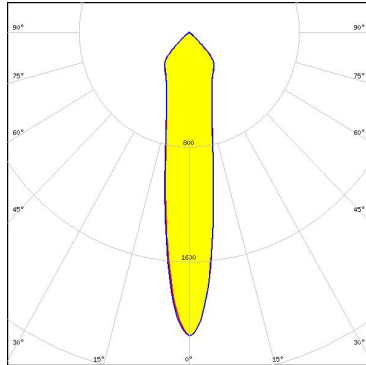
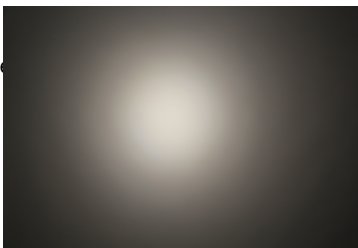
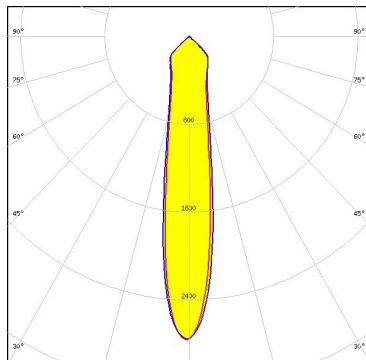

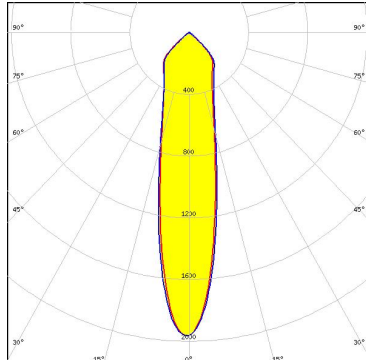

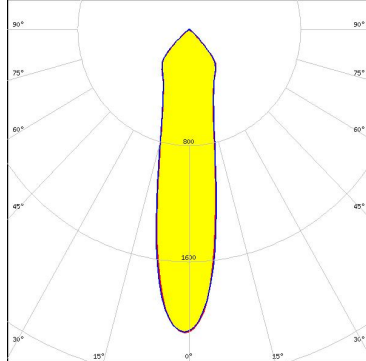
#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED COB J-Type            FWHM 20.0°            Efficiency 94 %            Peak intensity 2.5 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 J-Type            FWHM 24.0°            Efficiency 87 %            Peak intensity 1.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F13671_ANGE-RZ-LENS            IDEAL: 50-2103NC + 50-2100AN</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)            FWHM 16.0°            Efficiency 91 %            Peak intensity 3.1 cd/lm            LEDs/each optic 1            Light colour White            Required components:            IDEAL: 50-2100NC + 50-2100AN</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)            FWHM 22.0°            Efficiency 94 %            Peak intensity 2.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:            Molex: 180580-0005</p>		

#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)            FWHM 18.0°            Efficiency 93 %            Peak intensity 2.8 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13658_CLAMP-VERO13-18            Bender Wirth: 438 Typ L1</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)            FWHM 17.0°            Efficiency 92 %            Peak intensity 2.7 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 23.0°            Efficiency 86 %            Peak intensity 1.7 cd/lm            LEDs/each optic 1            Light colour White            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)            FWHM 17.0°            Efficiency 92 %            Peak intensity 2.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		

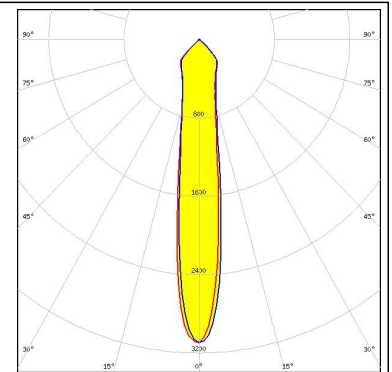
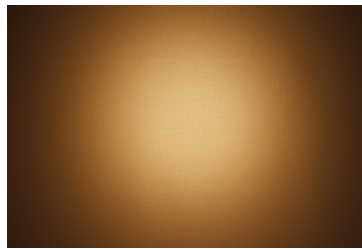
#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM 19.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 2.1 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 NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM 18.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 2.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 498 Typ L2</p>		
<p><b>NICHIA</b></p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM 22.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 498 Typ L2</p>		
<p><b>OSRAM</b></p> <p>LED PrevaLED Core AC (LEP-2000)</p> <p>FWHM 23.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 2.1 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):

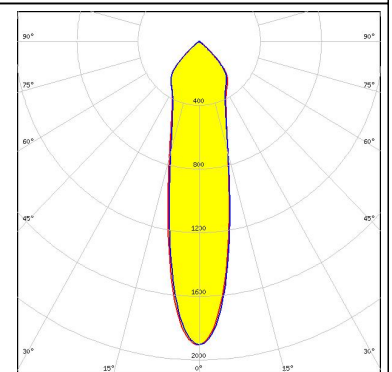
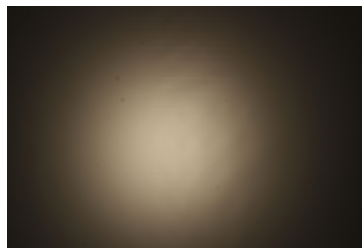
#### OSRAM

LED PrevaLED Core AC (LEP-800)  
 FWHM 16.0°  
 Efficiency 94 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



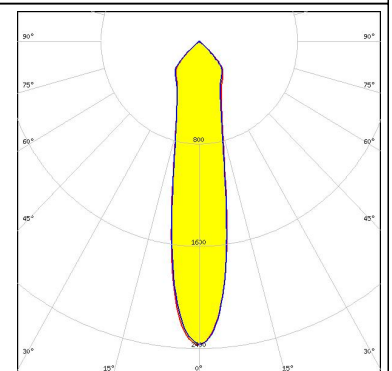
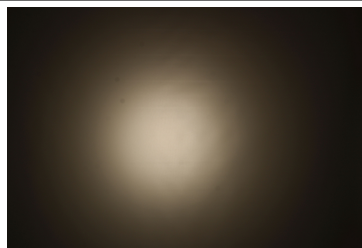
#### OSRAM

LED PrevaLED Core G7 L15 H1  
 FWHM 24.0°  
 Efficiency 91 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16685\_CLAMP-PRV-A  
 F13671\_ANGE-RZ-LENS



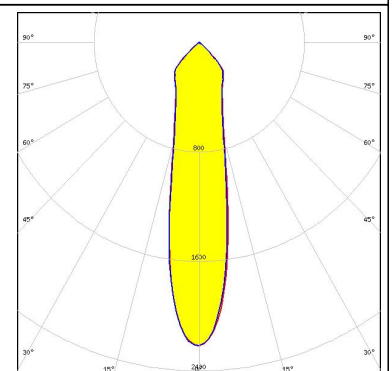
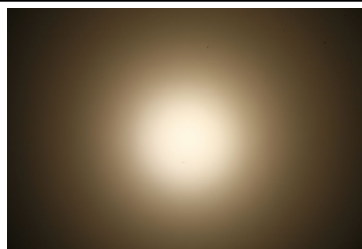
#### OSRAM

LED PrevaLED Core G7 L15 H1  
 FWHM 21.0°  
 Efficiency 94 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16685\_CLAMP-PRV-A



#### OSRAM

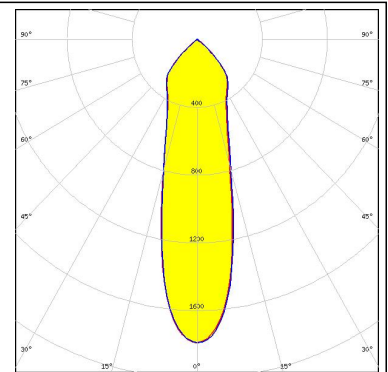
LED PrevaLED Core Z3 LES19  
 FWHM 23.0°  
 Efficiency 94 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

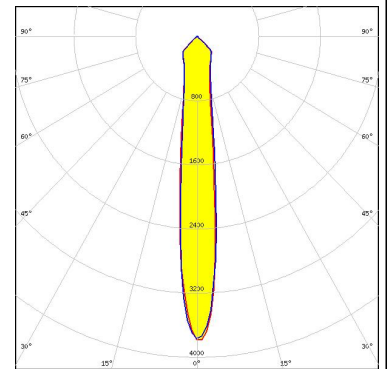
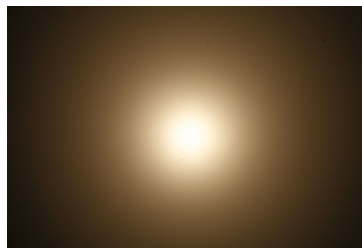
#### OSRAM

LED PrevaLED Core Z3 LES23  
 FWHM 27.0°  
 Efficiency 94 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



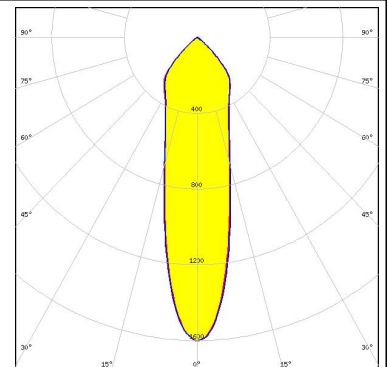
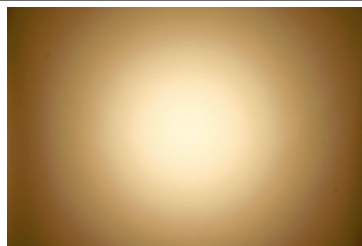
#### OSRAM

LED PrevaLED Core Z3 LES9  
 FWHM 14.0°  
 Efficiency 94 %  
 Peak intensity 3.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



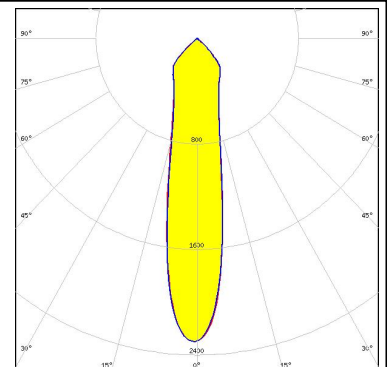
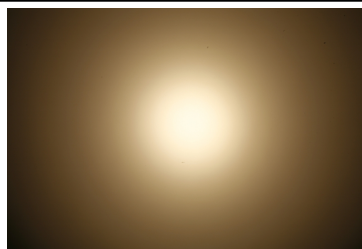
#### OSRAM

LED PrevaLED Core Z4 LES19  
 FWHM 26.0°  
 Efficiency 88 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### OSRAM

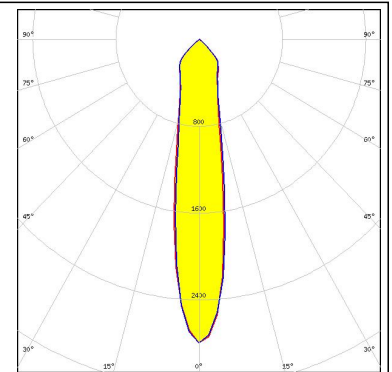
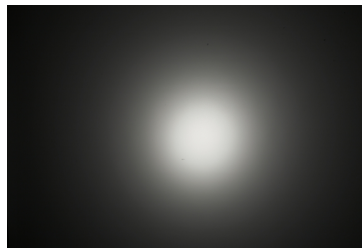
LED PrevaLED Core Z4 LES19  
 FWHM 21.0°  
 Efficiency 94 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

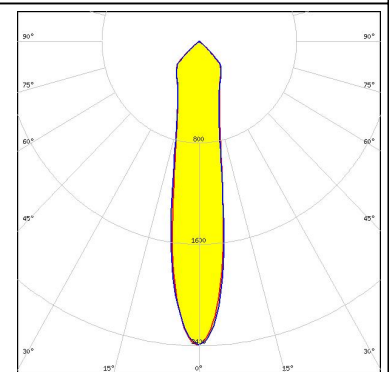
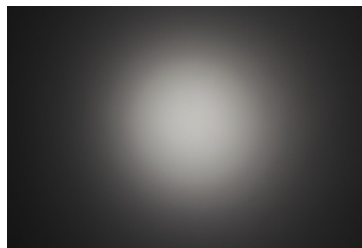
**OSRAM**  
Opto Semiconductors

LED Soleriq S13  
 FWHM 20.0°  
 Efficiency 94 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



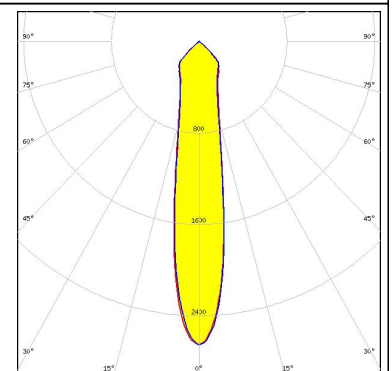
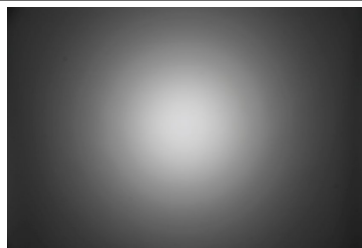
**OSRAM**  
Opto Semiconductors

LED Soleriq S13  
 FWHM 20.0°  
 Efficiency 92 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 437 Typ L1



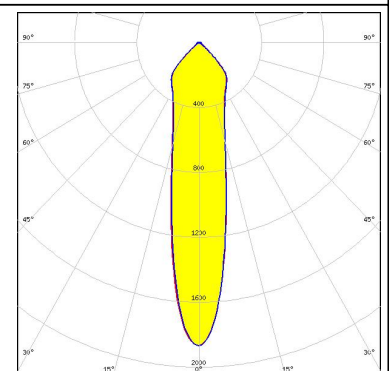
**OSRAM**  
Opto Semiconductors

LED Soleriq S13 19x19  
 FWHM 19.0°  
 Efficiency 93 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



**OSRAM**  
Opto Semiconductors

LED Soleriq S13 19x19  
 FWHM 22.0°  
 Efficiency 87 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2103CT + 50-2100AN

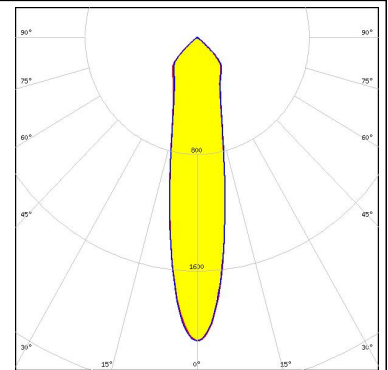
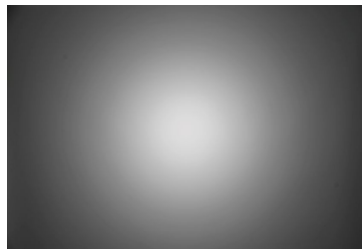


#### PHOTOMETRIC DATA (MEASURED):

#### OSRAM

Opto Semiconductors

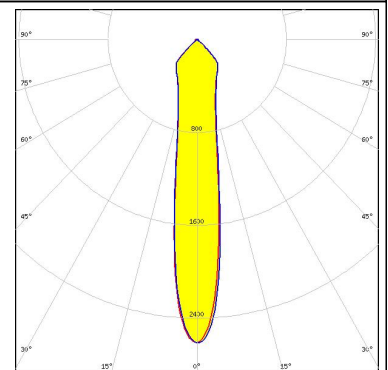
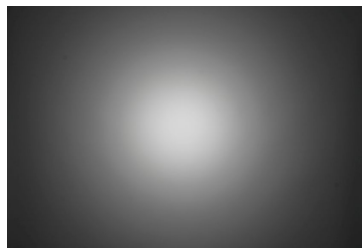
LED Soleriq S13 19x19  
 FWHM 22.0°  
 Efficiency 88 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### OSRAM

Opto Semiconductors

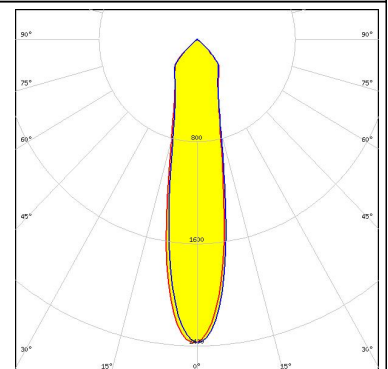
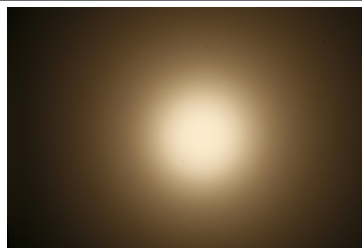
LED Soleriq S13 19x19  
 FWHM 17.0°  
 Efficiency 91 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2103CT + 50-2100AN



#### OSRAM

Opto Semiconductors

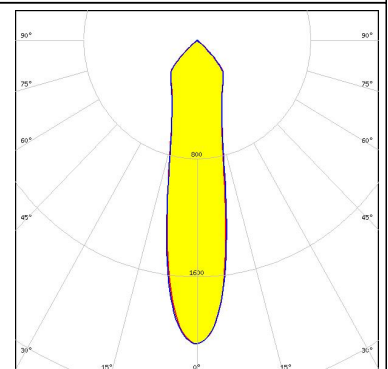
LED Soleriq S19  
 FWHM 22.0°  
 Efficiency 94 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### OSRAM

Opto Semiconductors

LED Soleriq S19  
 FWHM 23.0°  
 Efficiency 92 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 462 Typ L3





#### PHOTOMETRIC DATA (MEASURED):

#### OSRAM

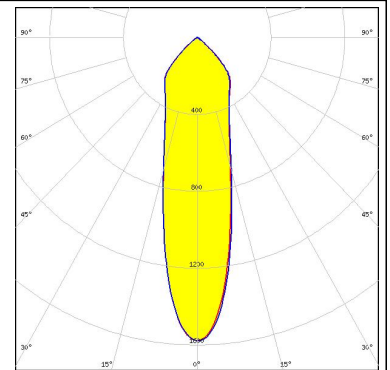
Opto Semiconductors

LED Soleriq S19  
 FWHM 27.0°  
 Efficiency 88 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

F13671\_ANGE-RZ-LENS

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

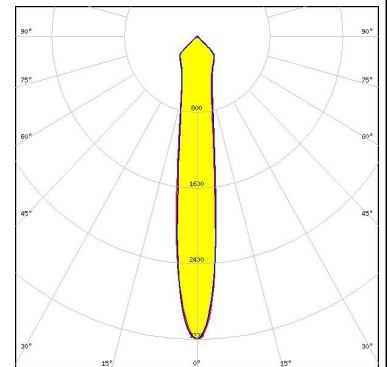


#### PHILIPS

LED Fortimo SLM L09 + SLM holder  
 FWHM 15.0°  
 Efficiency 92 %  
 Peak intensity 3.2 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1

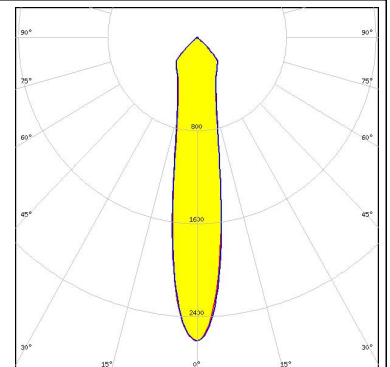
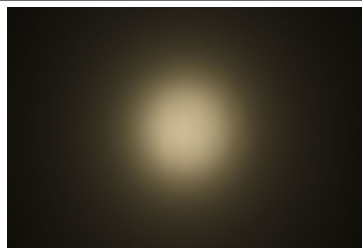


#### PHILIPS

LED Fortimo SLM L13 + SLM holder  
 FWHM 19.0°  
 Efficiency 92 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1



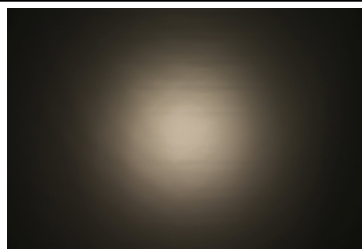
#### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM 23.0°  
 Efficiency 88 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

F13671\_ANGE-RZ-LENS

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



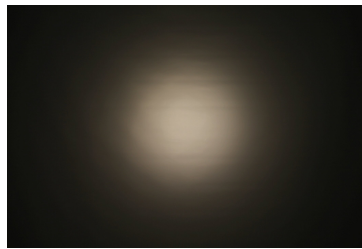
#### PHOTOMETRIC DATA (MEASURED):

#### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM 20.0°  
 Efficiency 94 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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



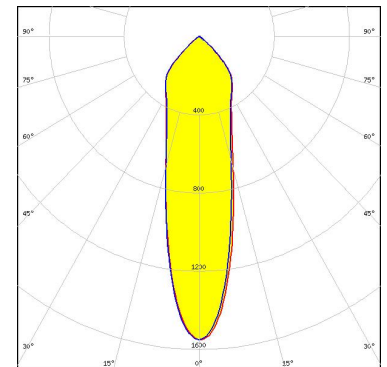
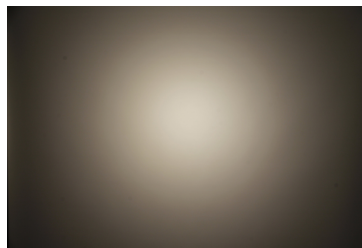
#### PHILIPS

LED Fortimo SLM L15 + SLM holder  
 FWHM 27.0°  
 Efficiency 87 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

F13671\_ANGE-RZ-LENS

TE: OPTIC CLIP Z50 TYPE1 2213194-1

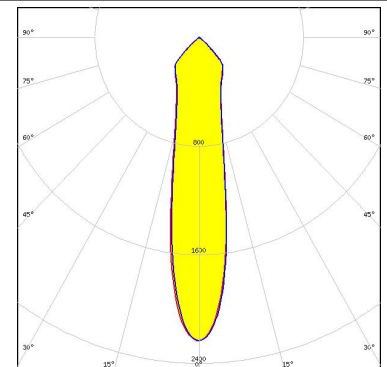
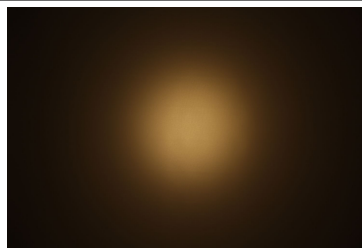


#### PHILIPS

LED Fortimo SLM L15 + SLM holder  
 FWHM 21.0°  
 Efficiency 91 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1

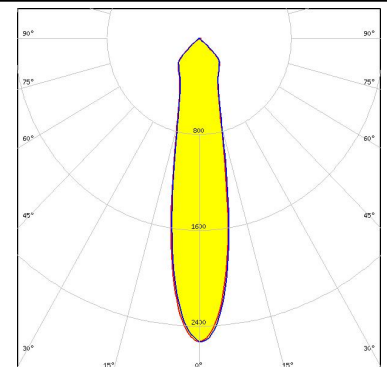
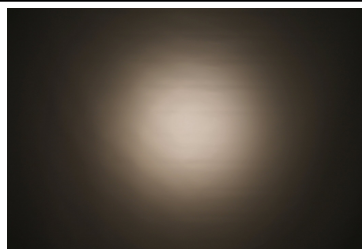


#### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM 22.0°  
 Efficiency 94 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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



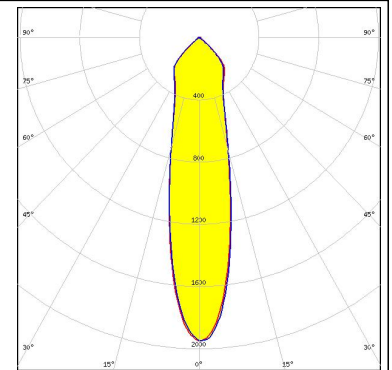
#### PHOTOMETRIC DATA (MEASURED):

#### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM 24.0°  
 Efficiency 88 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

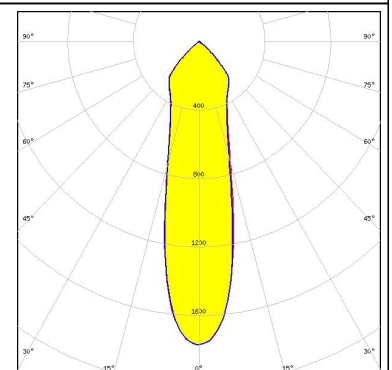
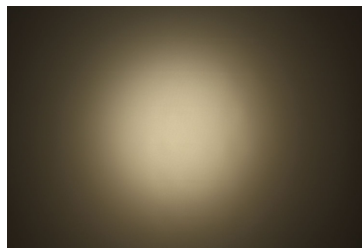


#### PHILIPS

LED Fortimo SLM L19 + SLM holder  
 FWHM 26.0°  
 Efficiency 90 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1

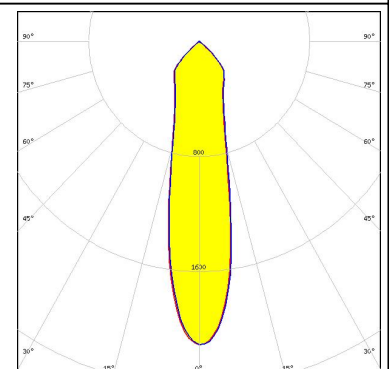
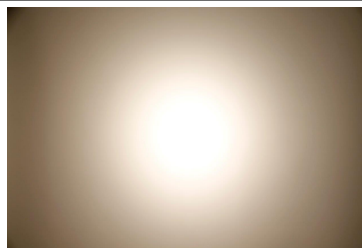


#### SAMSUNG

LED LC026B / 033B / 040B  
 FWHM 24.0°  
 Efficiency 93 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

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

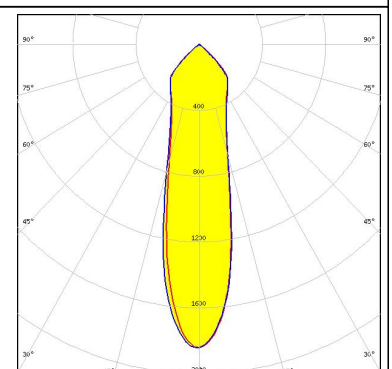
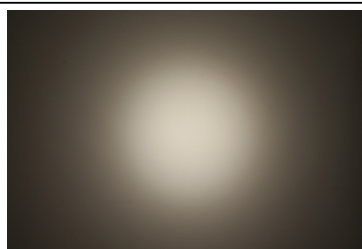


#### SAMSUNG

LED LC026B / 033B / 040B  
 FWHM 25.0°  
 Efficiency 92 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White

Required components:

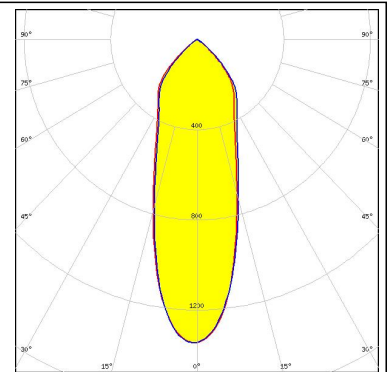
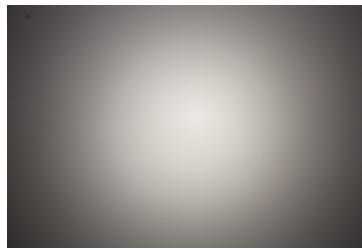
C13658\_CLAMP-VERO13-18  
 Bender Wirth: 450 Typ L2



#### PHOTOMETRIC DATA (MEASURED):

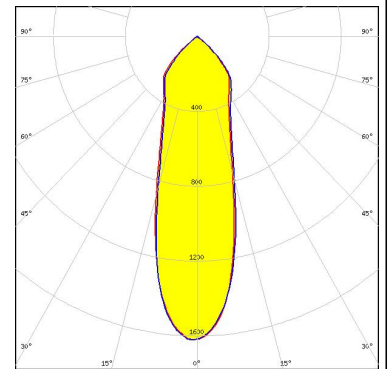
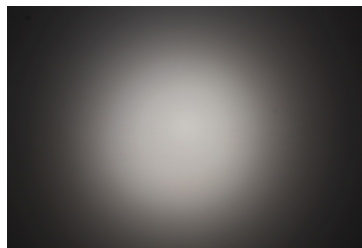
#### SAMSUNG

LED LC035T (Tunable white)  
 FWHM 34.0°  
 Efficiency 89 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 502 Typ L3



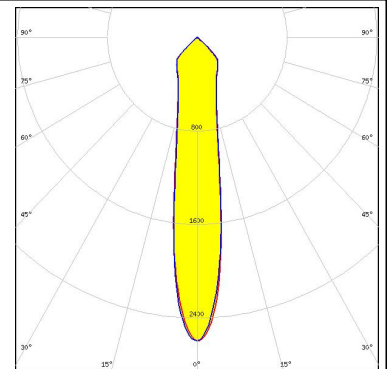
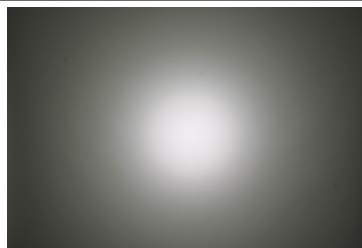
#### SAMSUNG

LED LC035T (Tunable white)  
 FWHM 31.0°  
 Efficiency 94 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 502 Typ L3



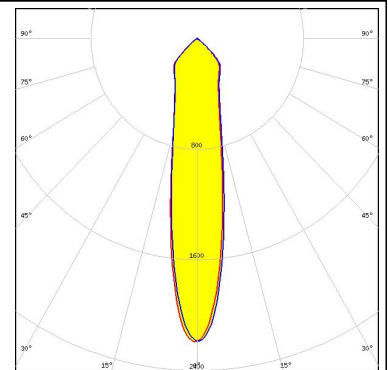
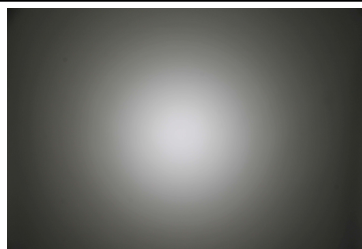
#### SAMSUNG

LED LC040C  
 FWHM 18.0°  
 Efficiency 92 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1


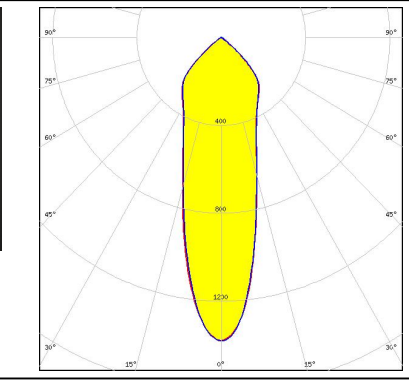

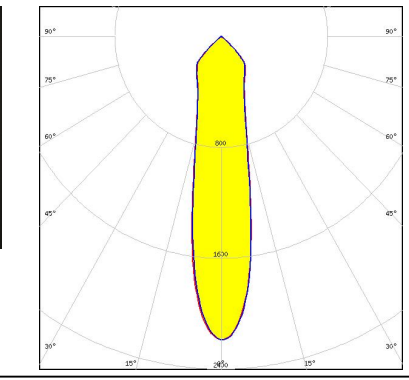

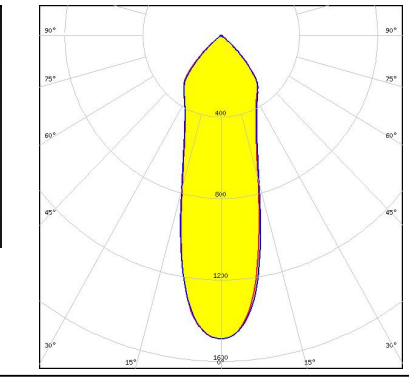

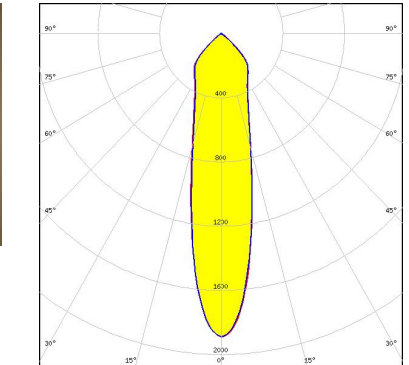


#### SAMSUNG

LED LC040C  
 FWHM 21.0°  
 Efficiency 89 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



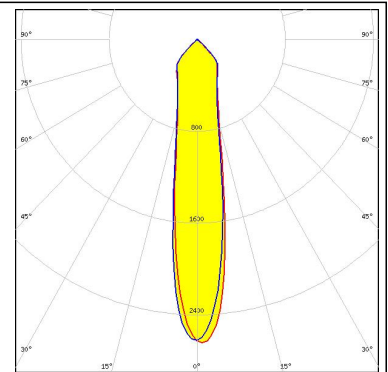
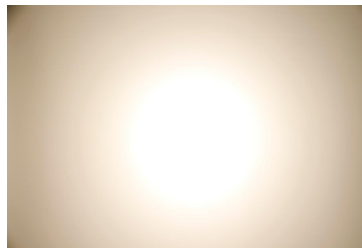
#### PHOTOMETRIC DATA (MEASURED):

<p><b>SEOUL</b> SEOUL SEMICONDUCTOR</p> <p>LED AC Zhaga COB FWHM 30.0° Efficiency 88 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components: F13671_ANGE-RZ-LENS Optosource: SEHSMJD-A</p>		
<p><b>SEOUL</b> SEOUL SEMICONDUCTOR</p> <p>LED MJT COB LES 14.5 FWHM 22.0° Efficiency 93 % Peak intensity 2.2 cd/lm LEDs/each optic 1 Light colour White Required components: TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>SEOUL</b> SEOUL SEMICONDUCTOR</p> <p>LED MJT COB LES 22 FWHM 30.0° Efficiency 91 % Peak intensity 1.5 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 24.0° Efficiency 89 % Peak intensity 1.9 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>		

#### PHOTOMETRIC DATA (MEASURED):

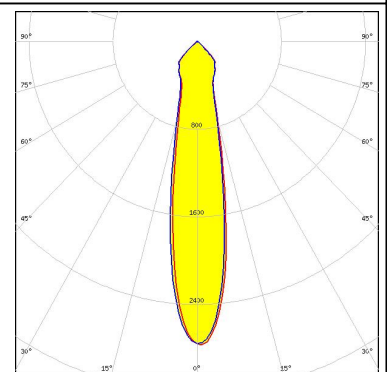
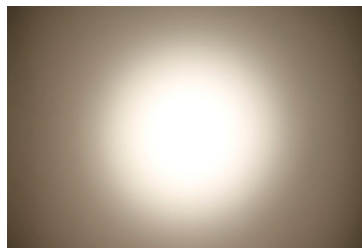
#### SHARP

LED Mega Zenigata (GW6DME)  
 FWHM 20.0°  
 Efficiency 94 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2100SH + 50-2100AN



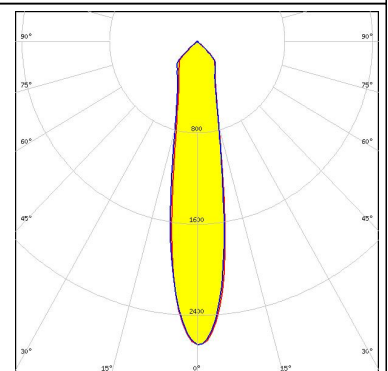
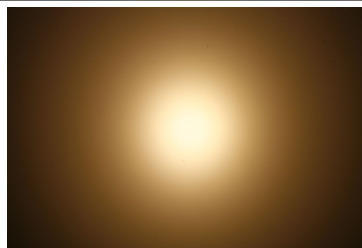
#### SHARP

LED Mega Zenigata (GW6DME)  
 FWHM 21.0°  
 Efficiency 92 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



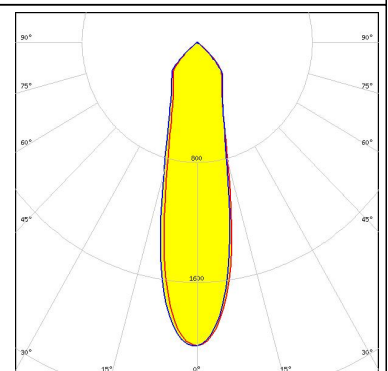
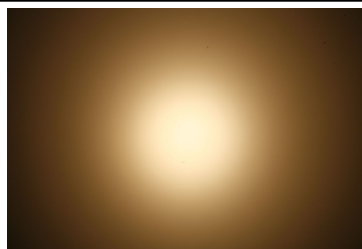
#### VS LIGHTING SOLUTIONS

LED WU-M-461  
 FWHM 20.0°  
 Efficiency 94 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1

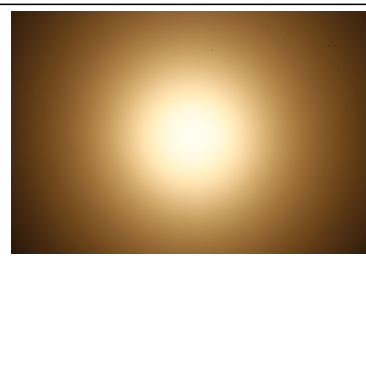
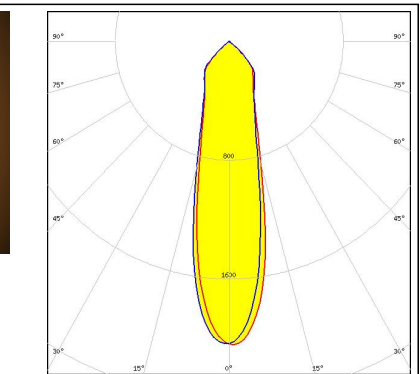

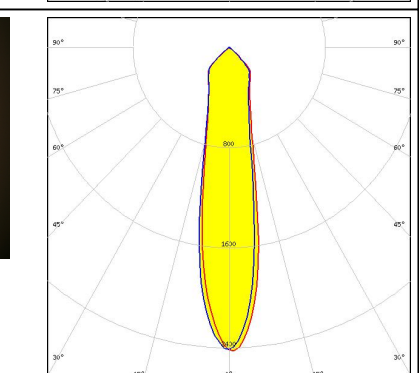

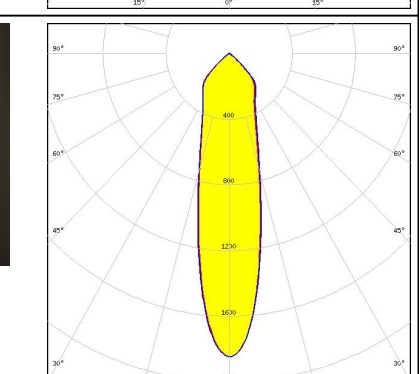

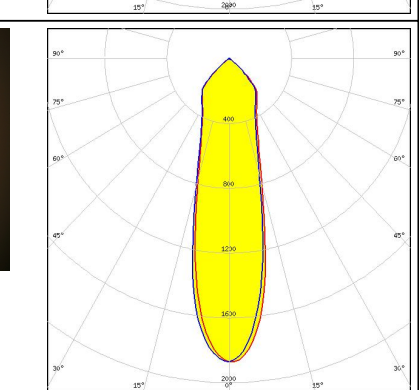


#### VS LIGHTING SOLUTIONS

LED WU-M-462  
 FWHM 26.0°  
 Efficiency 94 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



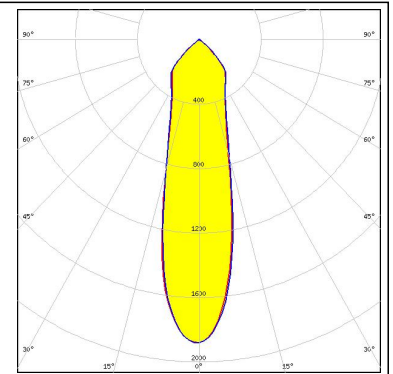
#### PHOTOMETRIC DATA (MEASURED):

<p><b>VS LIGHTING SOLUTIONS</b></p> <p>LED WU-M-464            FWHM 26.0°            Efficiency 94 %            Peak intensity 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-484            FWHM 21.0°            Efficiency 93 %            Peak intensity 2.4 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 25.0°            Efficiency 88 %            Peak intensity 1.8 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13333_MIRELLA-CL            TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p><b>VS LIGHTING SOLUTIONS</b></p> <p>LED WU-M-485            FWHM 27.0°            Efficiency 93 %            Peak intensity 1.9 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

### PHOTOMETRIC DATA (MEASURED):



LED WU-M-486  
FWHM 26.0°  
Efficiency 93 %  
Peak intensity 1.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
TE: OPTIC CLIP Z50 TYPE1 2213194-1





#### PHOTOMETRIC DATA (SIMULATED):

<p>bridgelux.</p> <p>LED V10 Gen7</p> <p>FWHM 17.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 4.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 486 Typ L1</p>	
<p>bridgelux.</p> <p>LED V10 Gen7</p> <p>FWHM 17.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 4.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 486 Typ L1</p>	
<p>bridgelux.</p> <p>LED V13 Gen7</p> <p>FWHM 16.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 4.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2103CT + 50-2100AN</p>	
<p>bridgelux.</p> <p>LED V22 Gen7</p> <p>FWHM 21.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2204-CT + 50-2100AN</p>	

#### PHOTOMETRIC DATA (SIMULATED):



LED CxM-14 (19x19)  
FWHM 21.0°  
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



LED CxM-9 (13.5x13.5)  
FWHM 17.0°  
Efficiency 93 %  
Peak intensity 2.9 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 21.0°  
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 17.0°  
Efficiency 93 %  
Peak intensity 2.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 434 Typ L1

#### GENERAL INFORMATION:

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

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

#### MATERIALS:

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

#### PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

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

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