

ANGELA-W

~45° wide beam

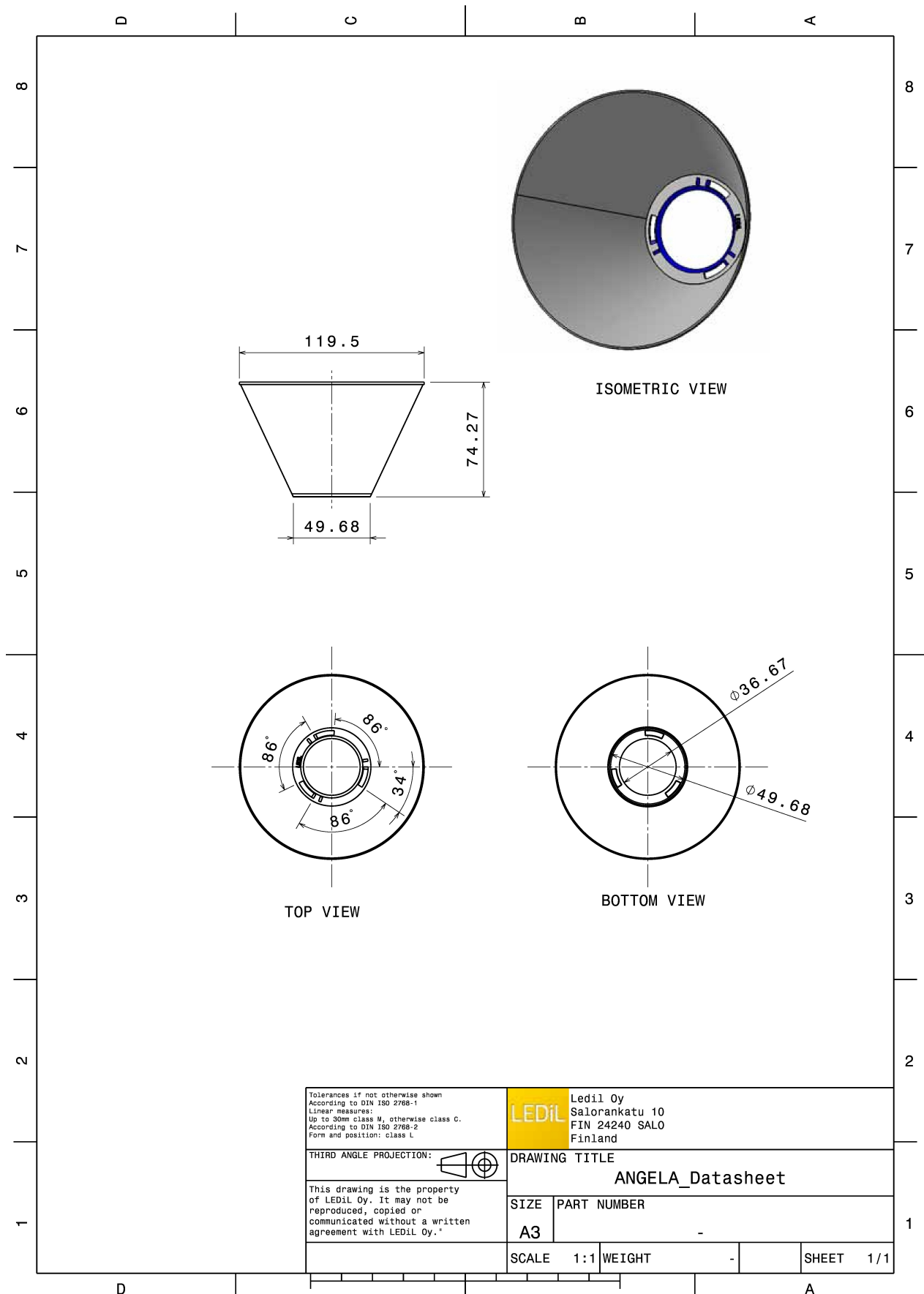
TECHNICAL SPECIFICATIONS:

Dimensions	Ø 119.5 mm
Height	74.3 mm
Fastening	socket
Colour	metal
Box size	398 x 298 x 265 mm
Box weight	9.1 kg
Quantity in Box	180 pcs
ROHS compliant	yes ⓘ


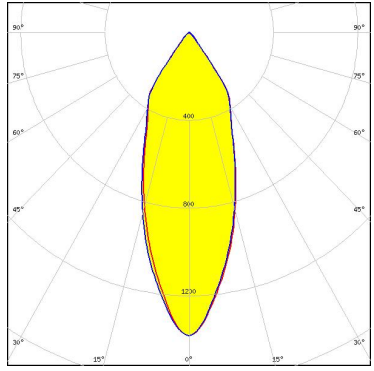

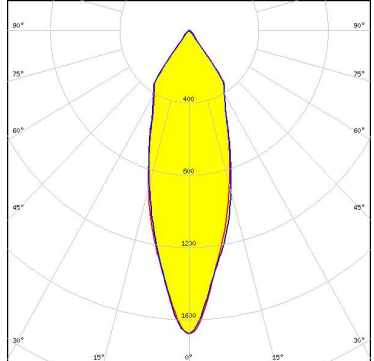

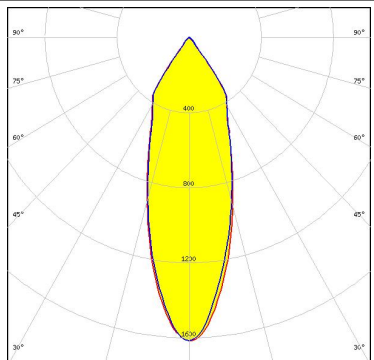

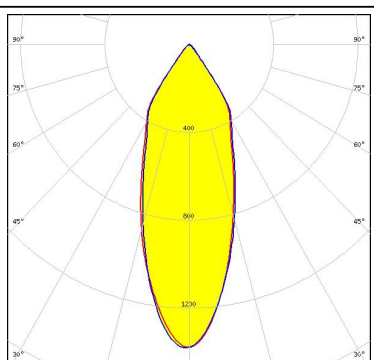


MATERIAL SPECIFICATIONS:



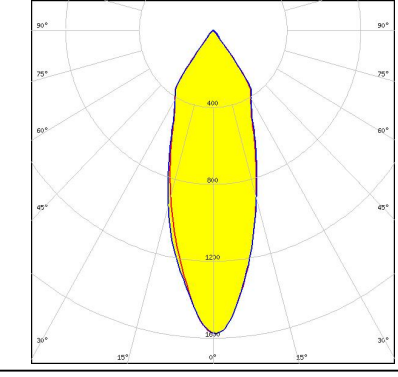

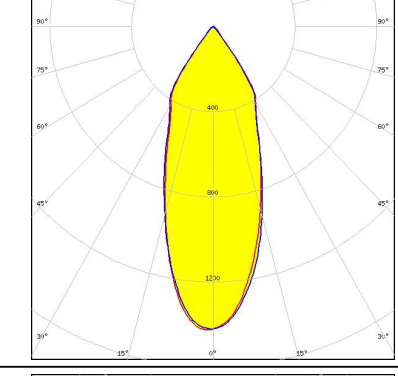

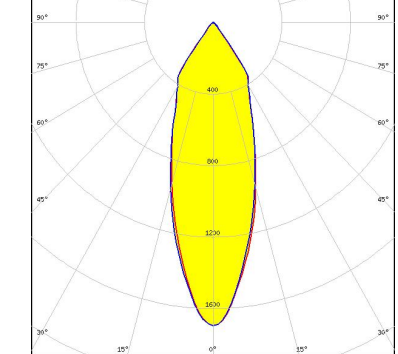
Component	Type	Material	Colour	Coating
ANGELA-W	Reflector	PC	metal	HMDS




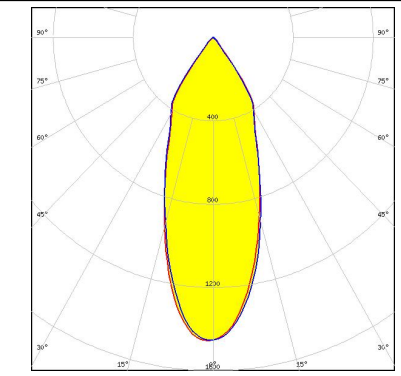

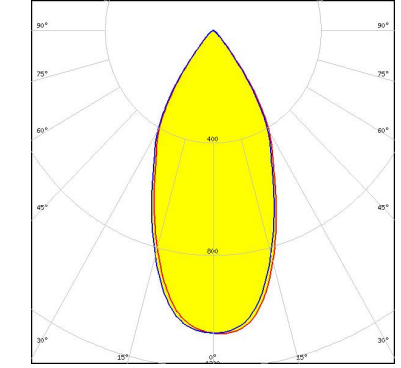
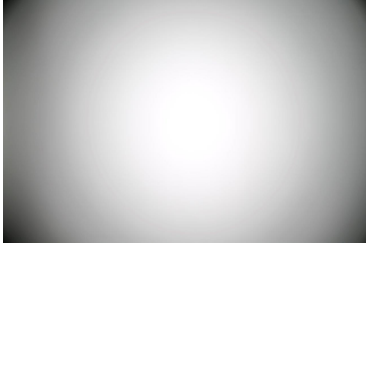
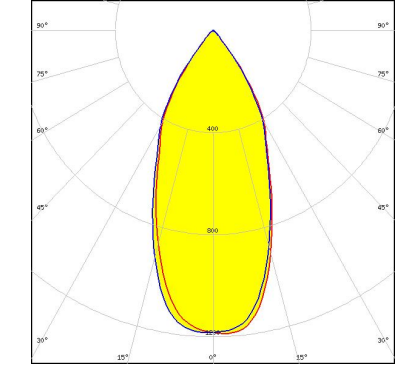

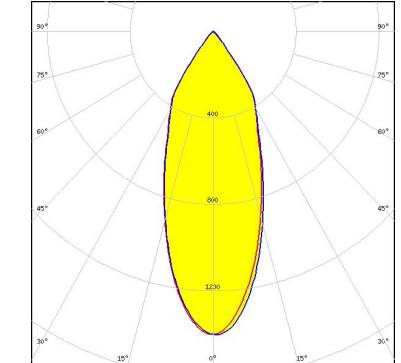
PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V10 Gen7 FWHM 37.0° Efficiency 78 % Peak intensity 1.400 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 434 Typ L1</p>		
<p>bridgelux.</p> <p>LED V10 Gen7 FWHM 33.0° Efficiency 82 % Peak intensity 1.700 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>		
<p>bridgelux.</p> <p>LED V13 Gen7 FWHM 34.0° Efficiency 83 % Peak intensity 1.600 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>bridgelux.</p> <p>LED V13 Gen7 FWHM 37.0° Efficiency 78 % Peak intensity 1.400 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		


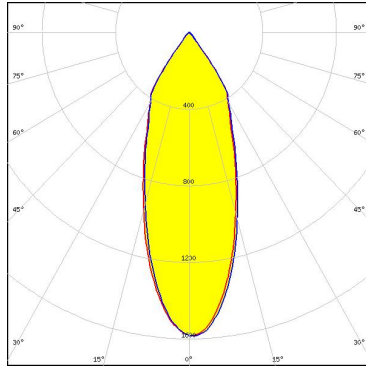
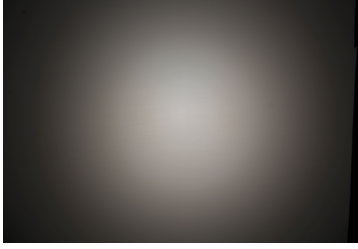
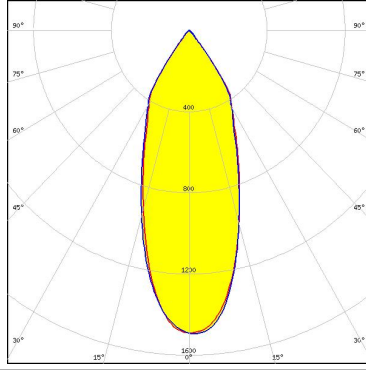
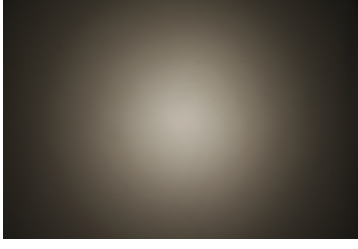
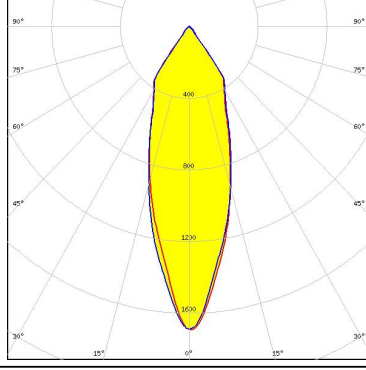
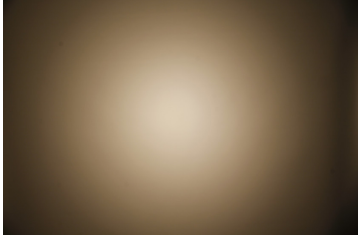
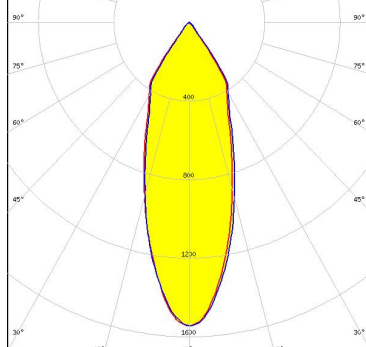
PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V15 Gen6</p> <p>FWHM 35.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 1.700 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 456 Typ L2</p>		
<p>bridgelux.</p> <p>LED Vero SE 13</p> <p>FWHM 34.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.600 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 39.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.400 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		
<p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM 33.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.700 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18</p>		

PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED VERO18</p> <p>FWHM 38.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 1.500 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO29</p> <p>FWHM 48.0°</p> <p>Efficiency 78 %</p> <p>Peak intensity 1.080 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED VERO29</p> <p>FWHM 46.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.190 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29</p>		
<p>bridgelux.</p> <p>LED Vesta TW 15mm DP</p> <p>FWHM 40.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.404 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 482 Typ L2</p>		

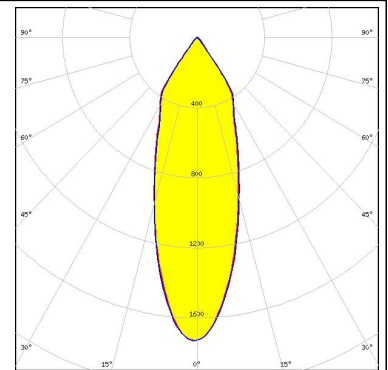
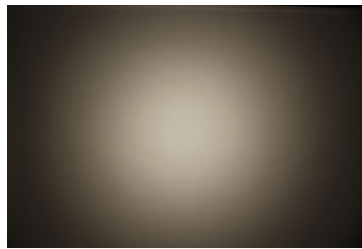
PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED Vesta TW 15mm DP</p> <p>FWHM 37.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.586 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 482 Typ L2</p>		
<p>bridgelux.</p> <p>LED Vesta TW 18mm (31W) DP</p> <p>FWHM 39.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 1.496 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 483 Typ L3</p>		
<p>CITIZEN</p> <p>LED CLL02x/CLU02x (LES10)</p> <p>FWHM 33.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.700 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>		
<p>CITIZEN</p> <p>LED CLL03x/CLU03x</p> <p>FWHM 35.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.500 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		

PHOTOMETRIC DATA (MEASURED):

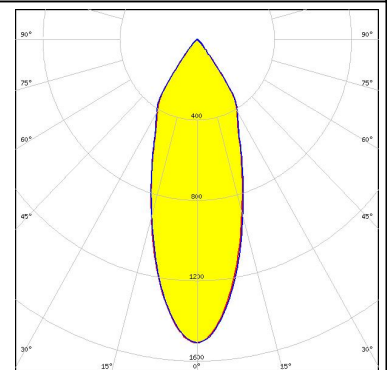
CITIZEN

LED CLL03x/CLU03x
 FWHM 34.0°
 Efficiency 87 %
 Peak intensity 1.700 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16791_CLAMP-Z45-A
 TE: 2325807-3



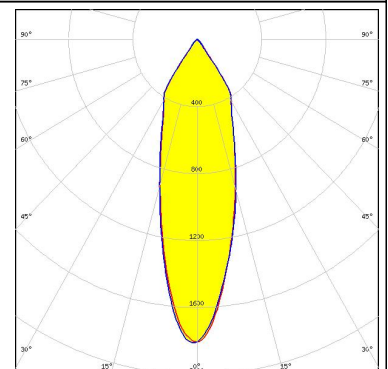
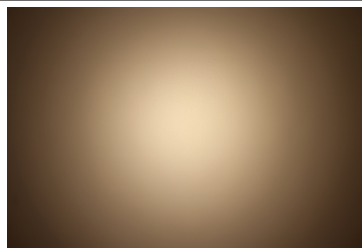
CITIZEN

LED CLL03x/CLU03x
 FWHM 36.0°
 Efficiency 83 %
 Peak intensity 1.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16791_CLAMP-Z45-A
 F13671_ANGE-RZ-LENS
 TE: 2325807-3



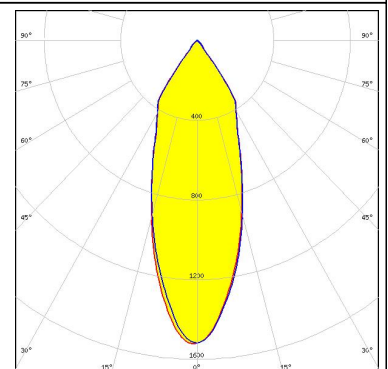
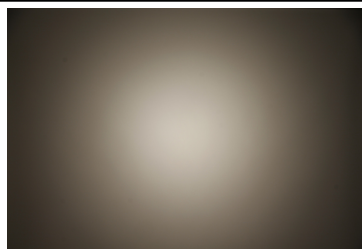
CITIZEN

LED CLL03x/CLU03x
 FWHM 30.0°
 Efficiency 83 %
 Peak intensity 1.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



CITIZEN

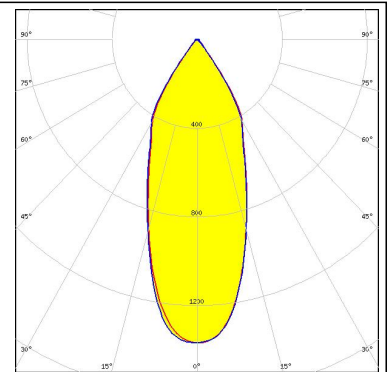
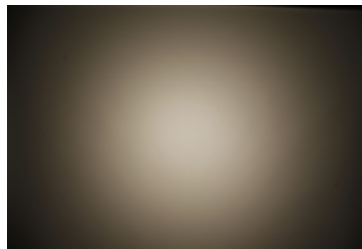
LED CLL03x/CLU03x
 FWHM 36.0°
 Efficiency 82 %
 Peak intensity 1.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 433 Typ L1



PHOTOMETRIC DATA (MEASURED):

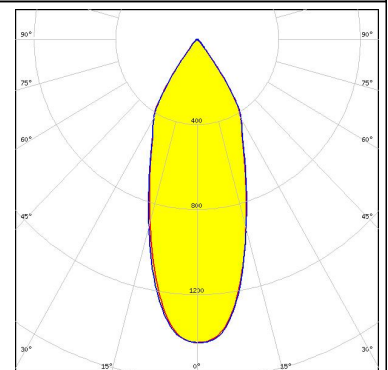
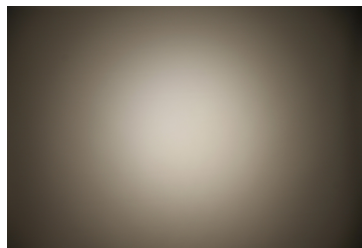
CITIZEN

LED CLL04x/CLU04x
 FWHM 39.0°
 Efficiency 82 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



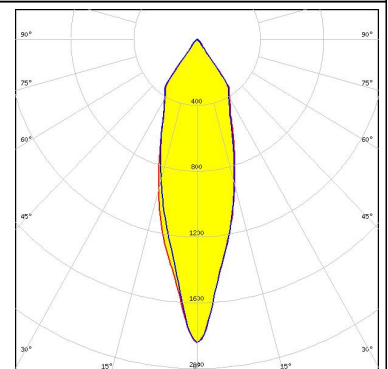
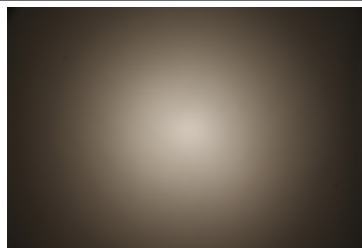
CITIZEN

LED CLL04x/CLU04x
 FWHM 39.0°
 Efficiency 83 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 431 Typ L3



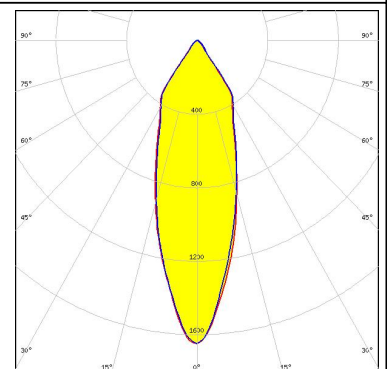
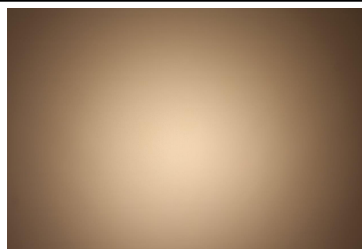
CITIZEN

LED CLU700/701/702
 FWHM 30.0°
 Efficiency 82 %
 Peak intensity 1.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



CITIZEN

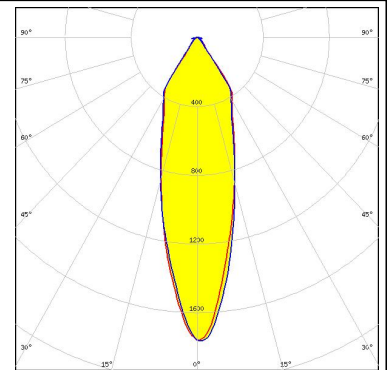
LED CLU720/721
 FWHM 32.0°
 Efficiency 85 %
 Peak intensity 1.700 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



PHOTOMETRIC DATA (MEASURED):

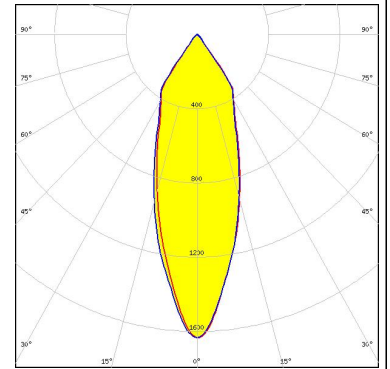
CITIZEN

LED CLU720/721
 FWHM 29.0°
 Efficiency 85 %
 Peak intensity 1.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



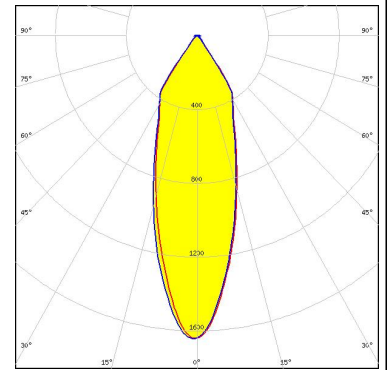
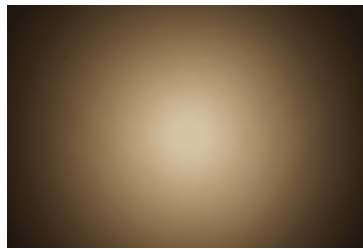
CITIZEN

LED CLU720/721
 FWHM 34.0°
 Efficiency 82 %
 Peak intensity 1.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 433 Typ L1



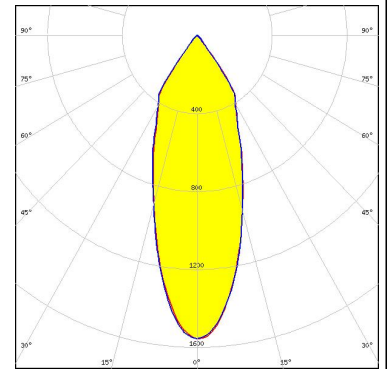
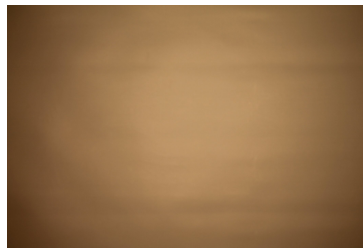
CITIZEN

LED CLU730/731
 FWHM 33.0°
 Efficiency 82 %
 Peak intensity 1.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



CREE

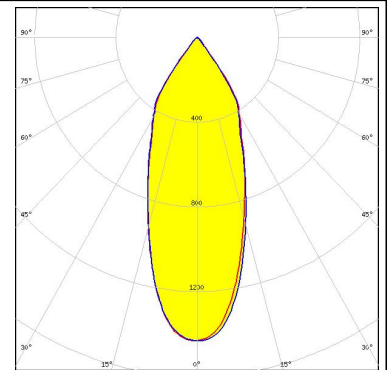
LED CMA1840
 FWHM 36.0°
 Efficiency 84 %
 Peak intensity 1.560 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14123_CLAMP-CXA15-18



PHOTOMETRIC DATA (MEASURED):

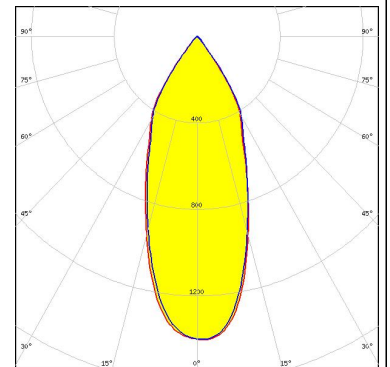
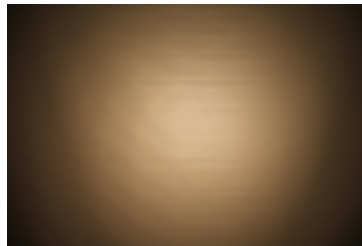
CREE 

LED CMA2550
 FWHM 39.0°
 Efficiency 84 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



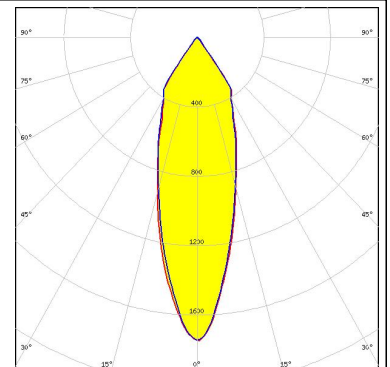
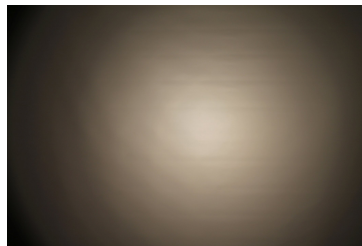
CREE 

LED CMA3090
 FWHM 40.0°
 Efficiency 84 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



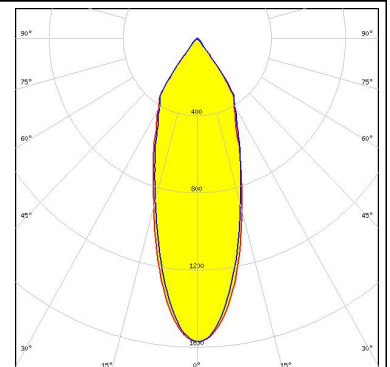
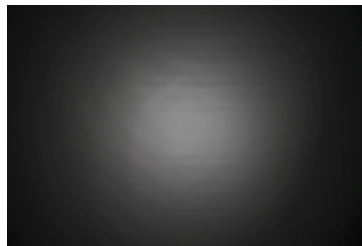
CREE 

LED CMT14xx
 FWHM 31.0°
 Efficiency 82 %
 Peak intensity 1.750 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



CREE 

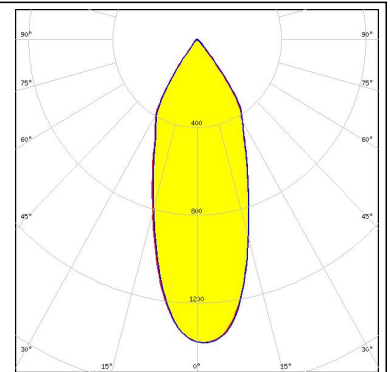
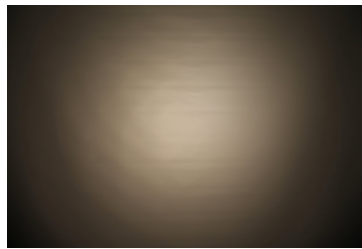
LED CMT19xx
 FWHM 35.0°
 Efficiency 83 %
 Peak intensity 1.573 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 477 Typ L1



PHOTOMETRIC DATA (MEASURED):

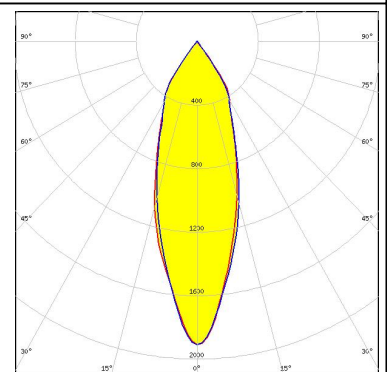
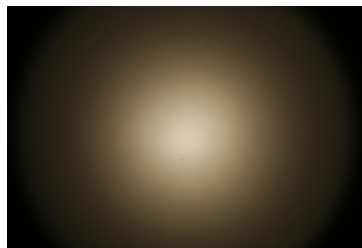
CREE 

LED CMT28xx
 FWHM 38.0°
 Efficiency 80 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 471 Typ L3



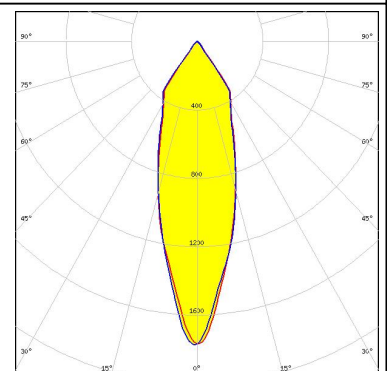
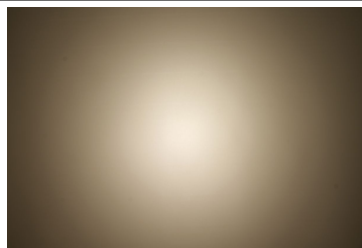
CREE 

LED CXA/B 15xx
 FWHM 33.0°
 Efficiency 84 %
 Peak intensity 1.900 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14123_CLAMP-CXA15-18



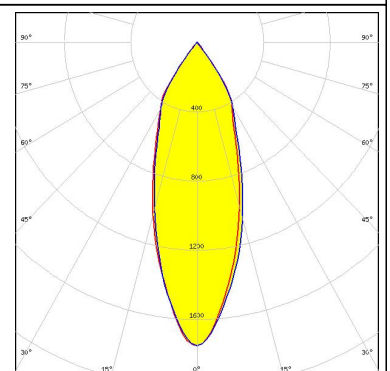
CREE 

LED CXA/B 15xx
 FWHM 31.0°
 Efficiency 83 %
 Peak intensity 1.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 441 Typ L1



CREE 

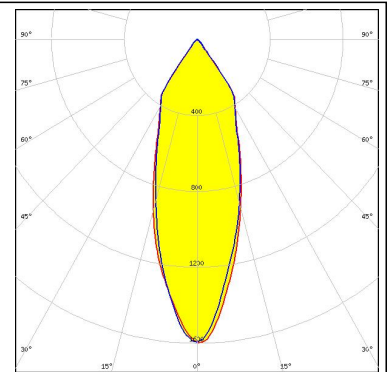
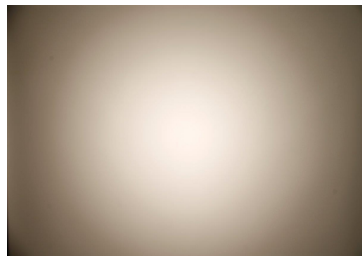
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM 36.0°
 Efficiency 84 %
 Peak intensity 1.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14123_CLAMP-CXA15-18



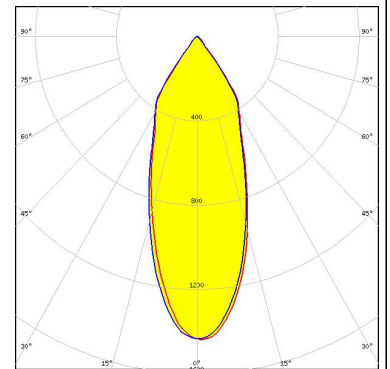
PHOTOMETRIC DATA (MEASURED):



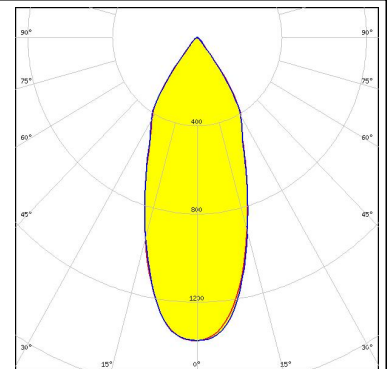
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM 34.0°
 Efficiency 82 %
 Peak intensity 1.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 437 Typ L1



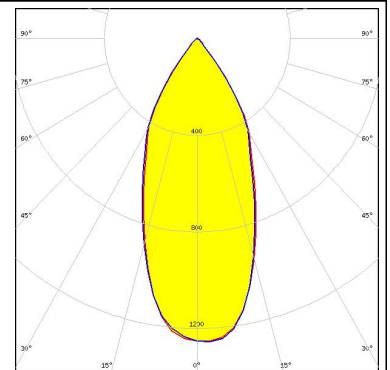
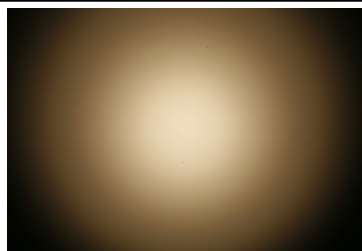
LED CXA/B 25xx
 FWHM 38.0°
 Efficiency 84 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



LED CXA/B 30xx
 FWHM 41.0°
 Efficiency 84 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



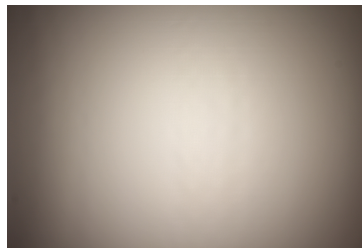
LED CXA/B 3590
 FWHM 44.0°
 Efficiency 84 %
 Peak intensity 1.260 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2303CR + 50-2300AN



PHOTOMETRIC DATA (MEASURED):

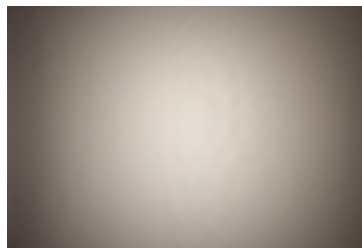
EVERLIGHT

LED CHI3030 19W
 FWHM 40.0°
 Efficiency 80 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 468 Typ L3



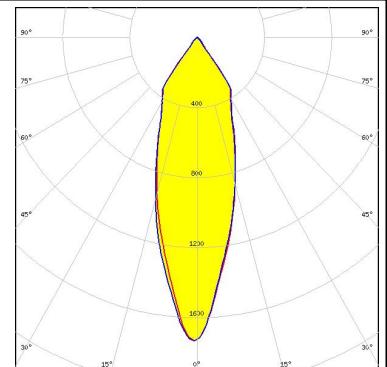
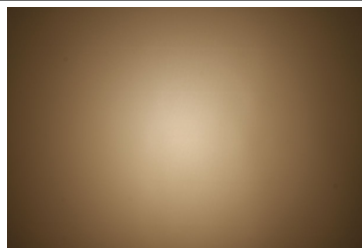
EVERLIGHT

LED CHI3030 29W
 FWHM 43.0°
 Efficiency 80 %
 Peak intensity 1.300 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 468 Typ L3



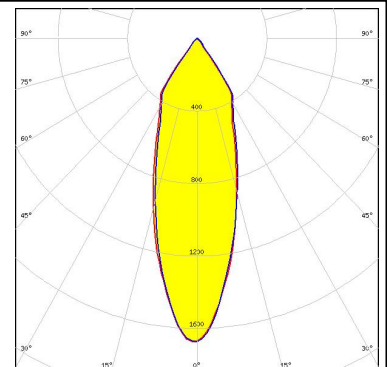
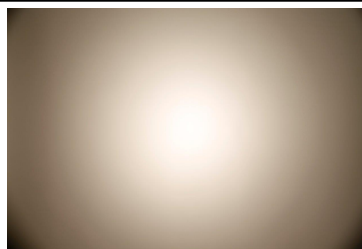
LUMILEDS

LED LUXEON CoB 1202/1203
 FWHM 31.0°
 Efficiency 83 %
 Peak intensity 1.700 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 438 Typ L1

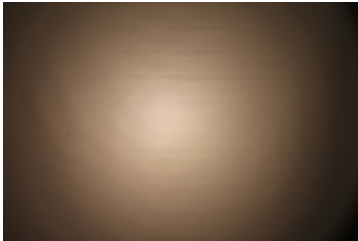
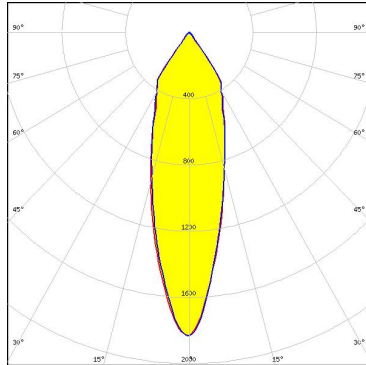
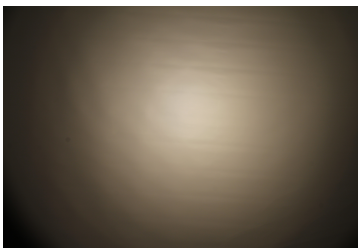
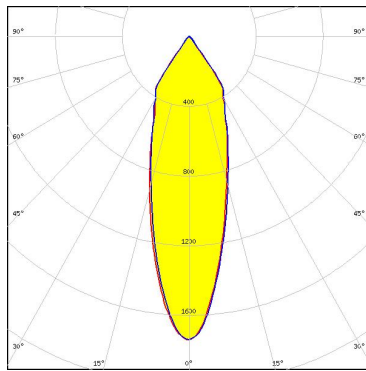
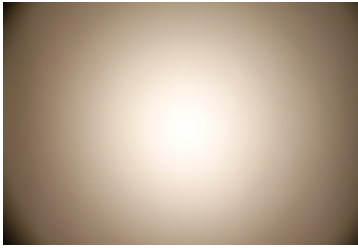
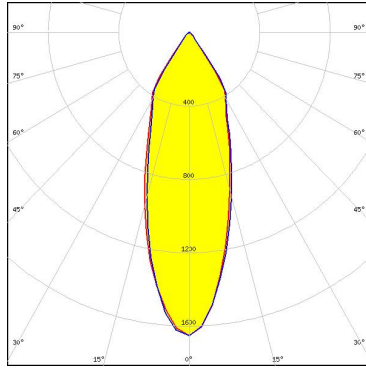

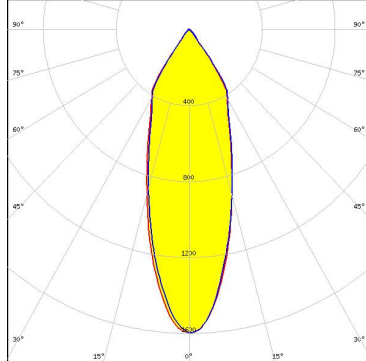


LUMILEDS

LED LUXEON CoB 1204/1205
 FWHM 33.0°
 Efficiency 84 %
 Peak intensity 1.680 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



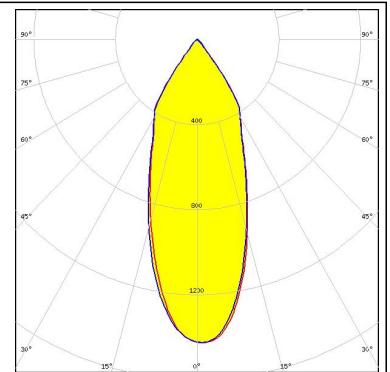
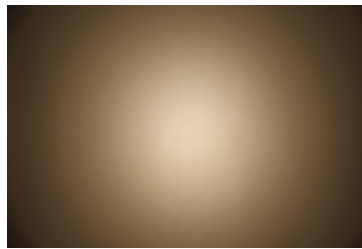
PHOTOMETRIC DATA (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1204HD FWHM 29.0° Efficiency 82 % Peak intensity 1.830 cd/lm LEDs/each optic 1 Light colour White Required components: TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1205HD FWHM 31.0° Efficiency 82 % Peak intensity 1.740 cd/lm LEDs/each optic 1 Light colour White Required components: TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1208 FWHM 34.0° Efficiency 84 % Peak intensity 1.660 cd/lm LEDs/each optic 1 Light colour White Required components: TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1208 FWHM 34.0° Efficiency 82 % Peak intensity 1.600 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2100SH + 50-2100AN</p>		

PHOTOMETRIC DATA (MEASURED):

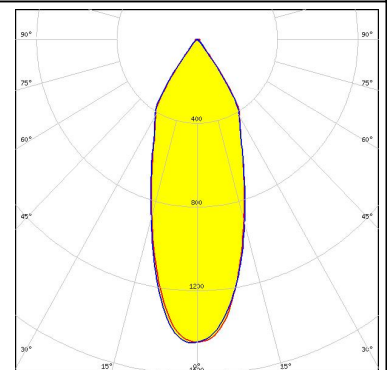
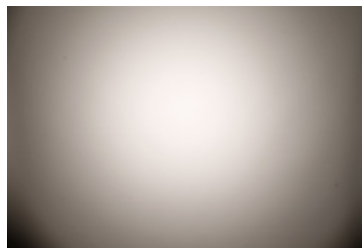
LUMILEDS

LED LUXEON CoB 1211
 FWHM 39.0°
 Efficiency 83 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 431 Typ L3



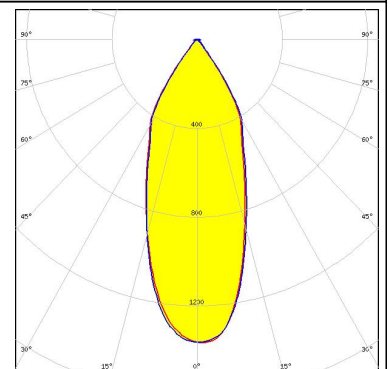
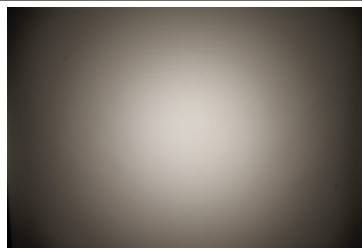
LUMILEDS

LED LUXEON CoB 1211
 FWHM 37.0°
 Efficiency 82 %
 Peak intensity 1.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



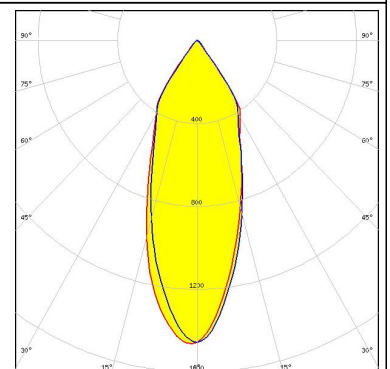
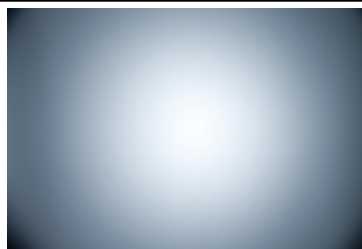
LUMILEDS

LED LUXEON CoB 1216/1812
 FWHM 40.0°
 Efficiency 82 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



LUMILEDS

LED LUXEON K12
 FWHM 37.0°
 Efficiency 82 %
 Peak intensity 1.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1



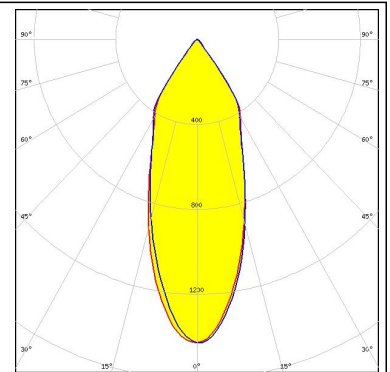
PHOTOMETRIC DATA (MEASURED):

LUMILEDS

LED LUXEON K16
 FWHM 38.0°
 Efficiency 83 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

F13671_ANGE-RZ-LENS
 TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1

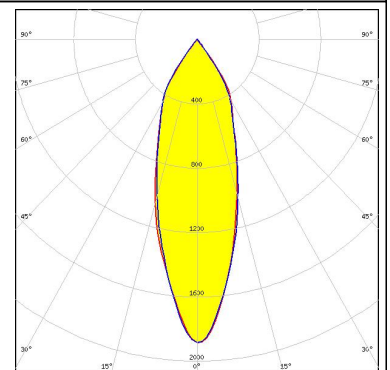
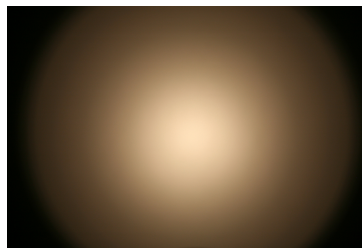


LUMILEDS

LED LUXEON S2000
 FWHM 34.0°
 Efficiency 84 %
 Peak intensity 1.900 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

C13395_CLAMP-S2000

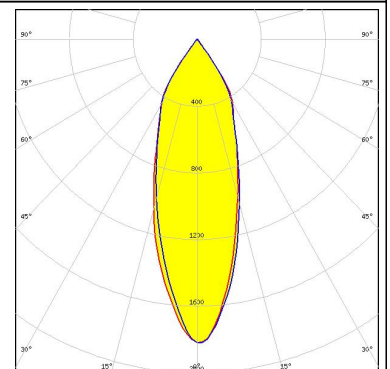
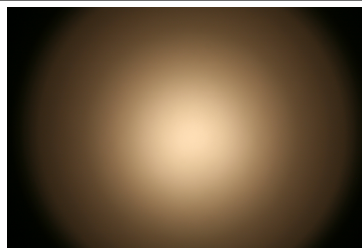


LUMILEDS

LED LUXEON S3000
 FWHM 34.0°
 Efficiency 84 %
 Peak intensity 1.800 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

C13397_CLAMP-S3000

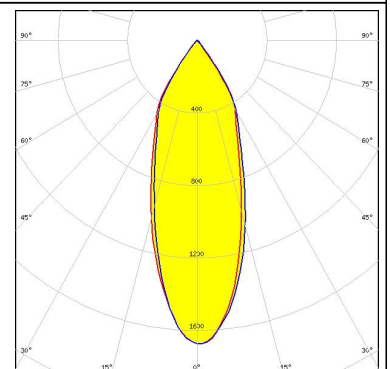


LUMILEDS

LED LUXEON S5000
 FWHM 37.0°
 Efficiency 85 %
 Peak intensity 1.700 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

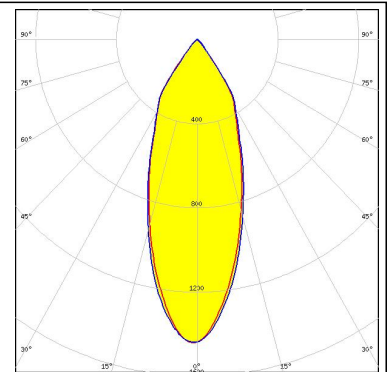
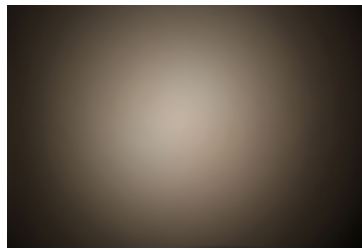
C13399_CLAMP-S5000



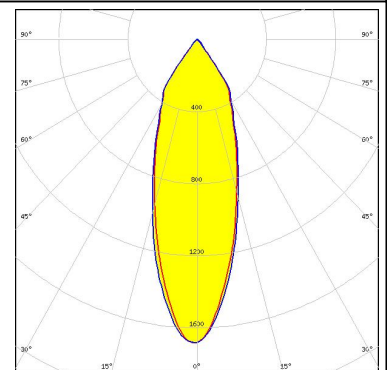
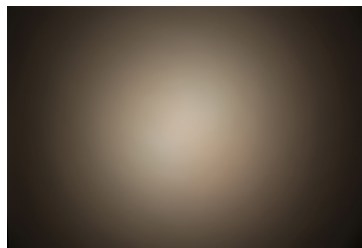
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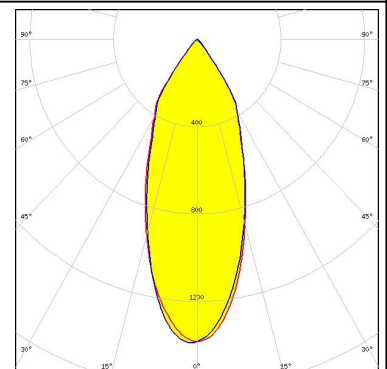
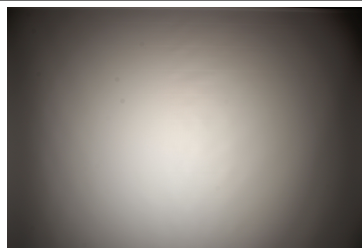
LED CDM-14 (Dim-To-Warm)
 FWHM 38.0°
 Efficiency 80 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 F13671_ANGE-RZ-LENS
 Bender Wirth: 491 Typ L2



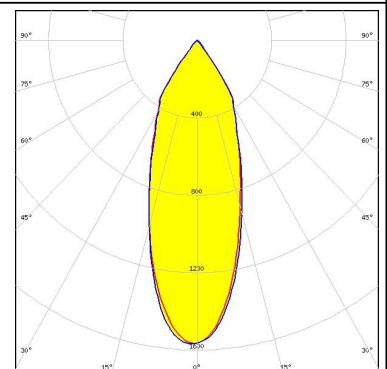
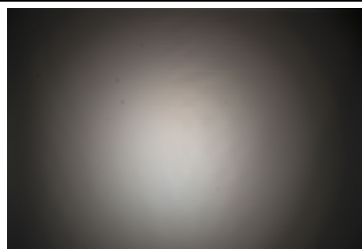
LED CDM-14 (Dim-To-Warm)
 FWHM 34.0°
 Efficiency 84 %
 Peak intensity 1.700 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 491 Typ L2



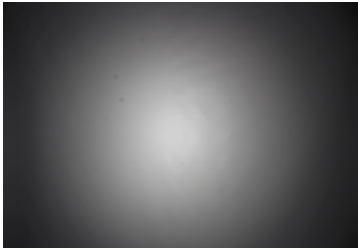
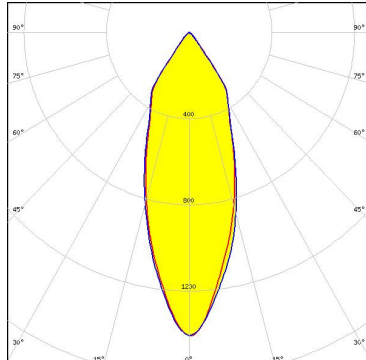
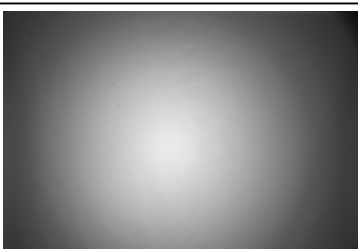
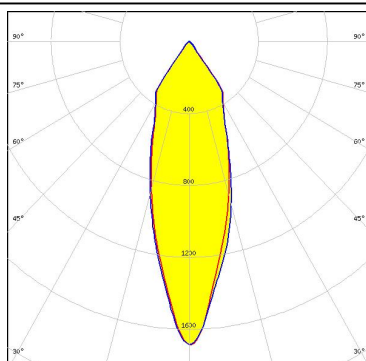
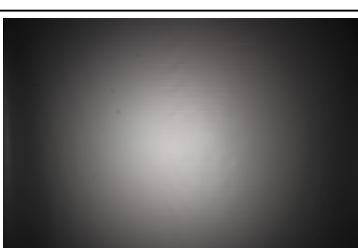
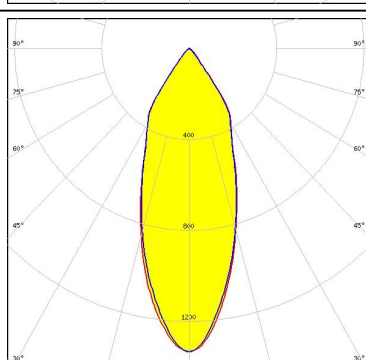
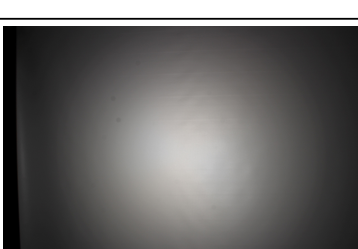
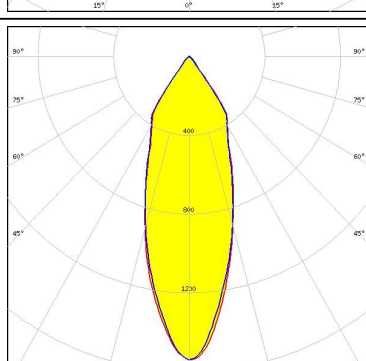
LED CDM-18 (Dim-To-Warm)
 FWHM 40.0°
 Efficiency 81 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 F13671_ANGE-RZ-LENS
 Bender Wirth: 491 Typ L2



LED CDM-18 (Dim-To-Warm)
 FWHM 37.0°
 Efficiency 85 %
 Peak intensity 1.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 491 Typ L2



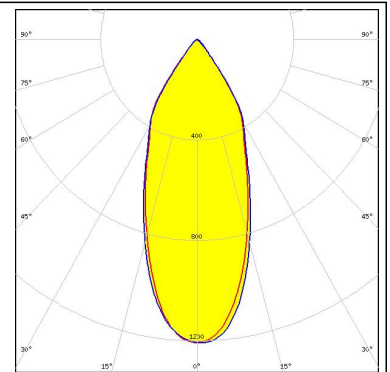
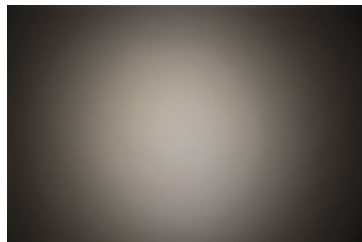
PHOTOMETRIC DATA (MEASURED):

<p>LUMINUS</p> <p>LED CDM-9 (Dim-To-Warm) FWHM 36.0° Efficiency 76 % Peak intensity 1.400 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>LUMINUS</p> <p>LED CDM-9 (Dim-To-Warm) FWHM 32.0° Efficiency 80 % Peak intensity 1.700 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 490 Typ L1</p>		
<p>LUMINUS</p> <p>LED CTM-14 (Tunable White) FWHM 38.0° Efficiency 76 % Peak intensity 1.300 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 442 Typ L3</p>		
<p>LUMINUS</p> <p>LED CTM-14 (Tunable White) FWHM 35.0° Efficiency 80 % Peak intensity 1.500 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 442 Typ L3</p>		

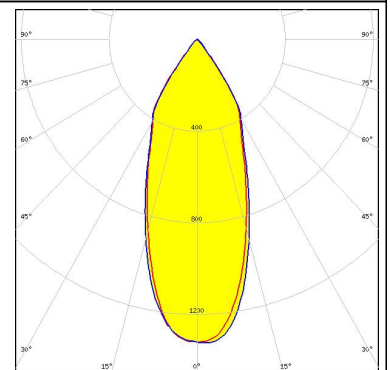
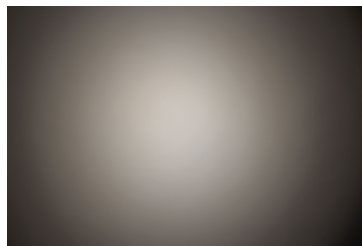
PHOTOMETRIC DATA (MEASURED):



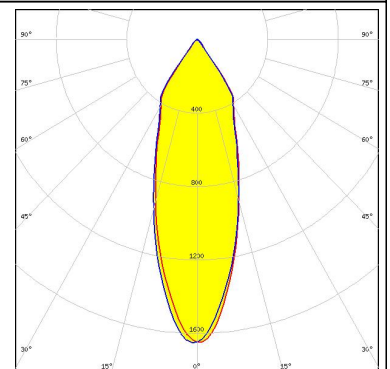
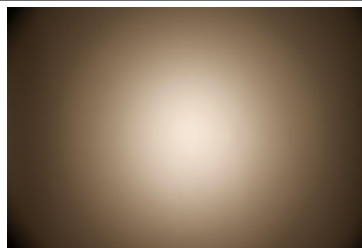
LED CTM-22 (Tunable White)
 FWHM 42.0°
 Efficiency 76 %
 Peak intensity 1.200 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 494 Typ L3



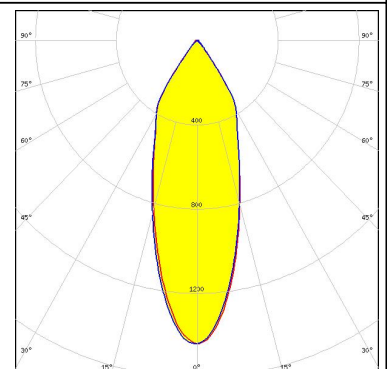
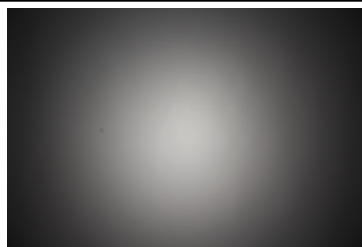
LED CTM-22 (Tunable White)
 FWHM 40.0°
 Efficiency 80 %
 Peak intensity 1.300 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 494 Typ L3




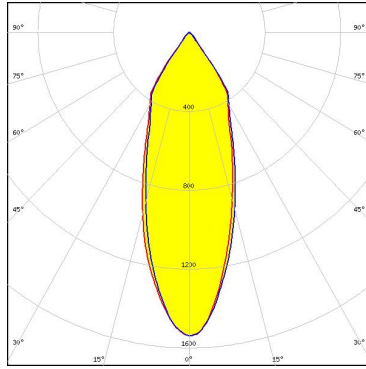
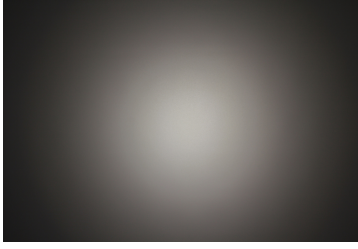
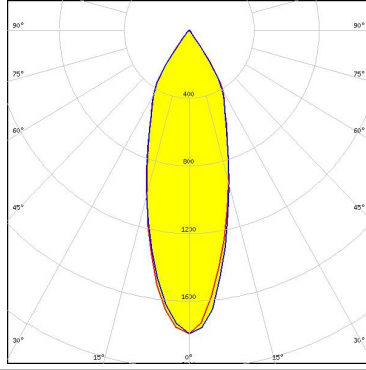
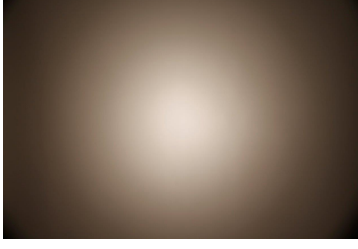
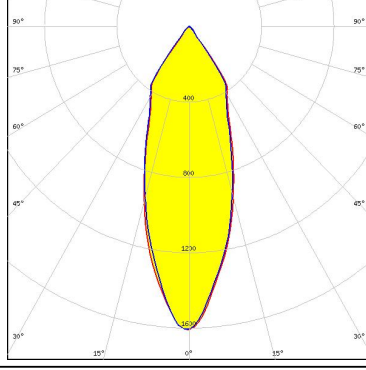
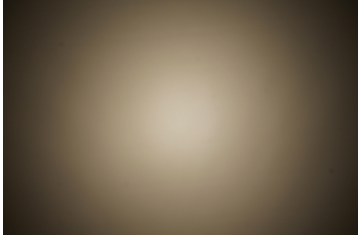
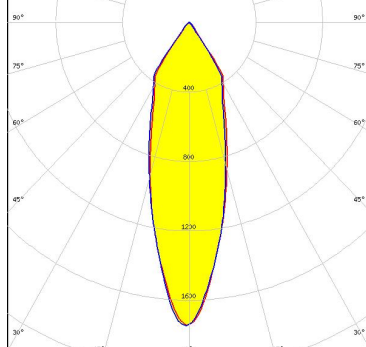
LED CxM-14 (19x19)
 FWHM 34.0°
 Efficiency 84 %
 Peak intensity 1.660 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



LED COB J-Type
 FWHM 35.0°
 Efficiency 79 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 IDEAL: 50-2103NC + 50-2100AN



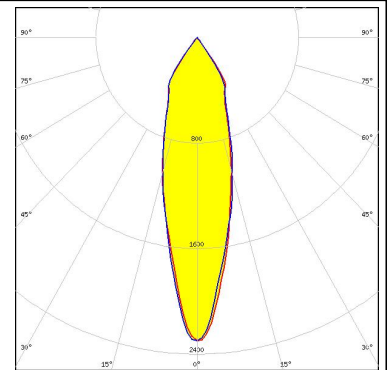
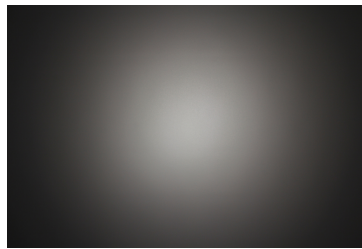
PHOTOMETRIC DATA (MEASURED):

<p>NICHIA</p> <p>LED COB J-Type FWHM 36.0° Efficiency 82 % Peak intensity 1.500 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 463 Typ L2</p>		
<p>NICHIA</p> <p>LED COB J-Type FWHM 33.0° Efficiency 82 % Peak intensity 1.790 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2103NC + 50-2100AN</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 11) FWHM 35.0° Efficiency 85 % Peak intensity 1.610 cd/lm LEDs/each optic 1 Light colour White Required components: Molex: 180580-0005</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 11) FWHM 31.0° Efficiency 81 % Peak intensity 1.800 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2100NC + 50-2100AN</p>		

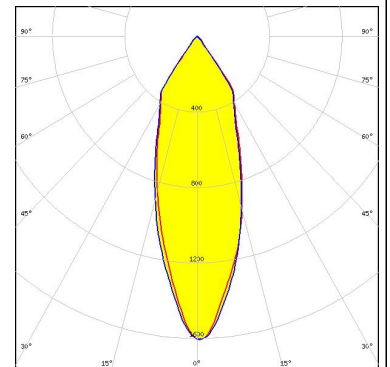
PHOTOMETRIC DATA (MEASURED):



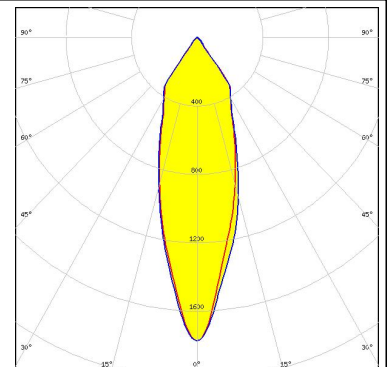
LED COB L-Type (LES 11)
 FWHM 28.0°
 Efficiency 87 %
 Peak intensity 2.300 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



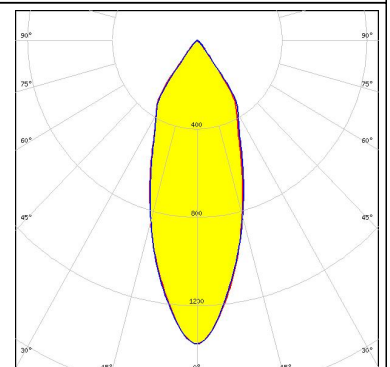
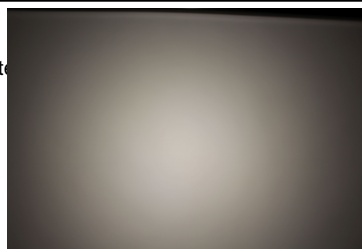
LED COB L-Type (LES 11)
 FWHM 34.0°
 Efficiency 82 %
 Peak intensity 1.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 438 Typ L1



LED COB L-Type (LES 9)
 FWHM 31.0°
 Efficiency 84 %
 Peak intensity 1.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 438 Typ L1



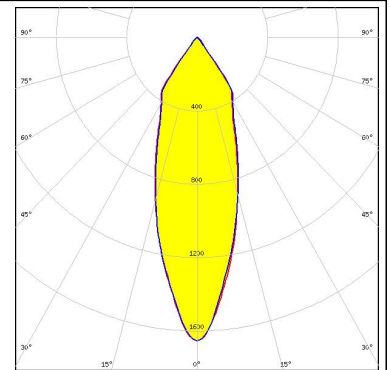
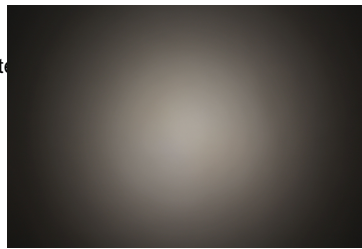
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM 37.0°
 Efficiency 77 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 F13671_ANGE-RZ-LENS
 Bender Wirth: 498 Typ L2



PHOTOMETRIC DATA (MEASURED):

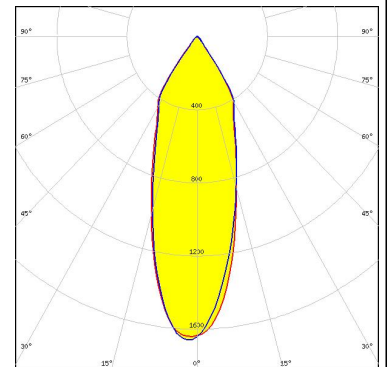
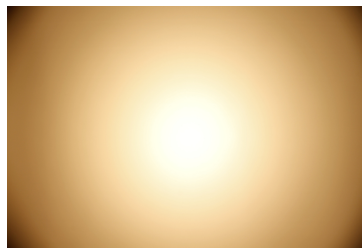


LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM 33.0°
 Efficiency 82 %
 Peak intensity 1.700 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 498 Typ L2



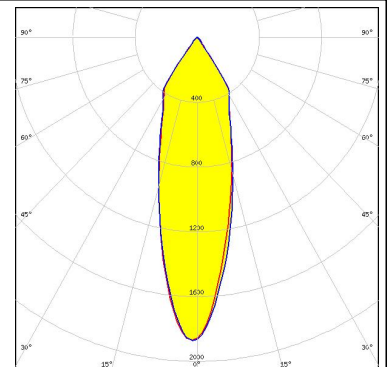
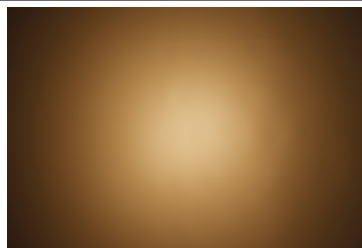
OSRAM

LED PrevaLED Core AC (LEP-2000)
 FWHM 34.0°
 Efficiency 84 %
 Peak intensity 1.670 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



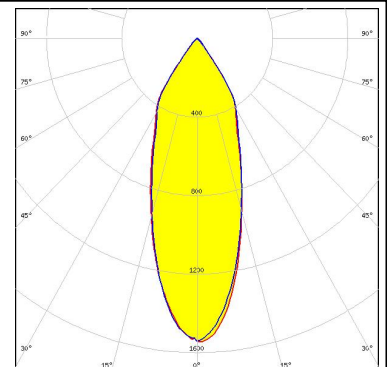
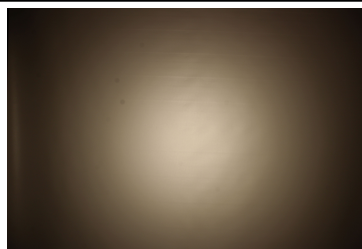
OSRAM

LED PrevaLED Core AC (LEP-800)
 FWHM 29.0°
 Efficiency 84 %
 Peak intensity 1.880 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



OSRAM

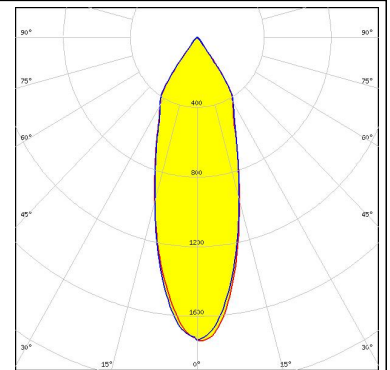
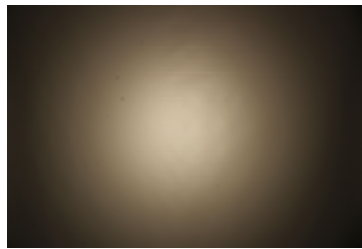
LED PrevaLED Core G7 L15 H1
 FWHM 36.0°
 Efficiency 83 %
 Peak intensity 1.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16685_CLAMP-PRV-A
 F13671_ANGE-RZ-LENS



PHOTOMETRIC DATA (MEASURED):

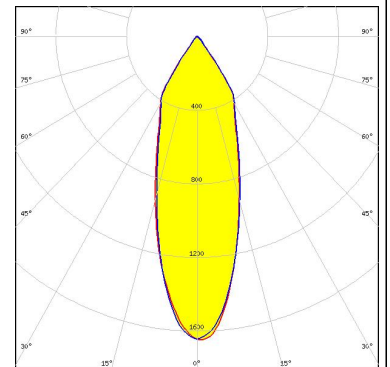
OSRAM

LED PrevaLED Core G7 L15 H1
 FWHM 34.0°
 Efficiency 86 %
 Peak intensity 1.700 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16685_CLAMP-PRV-A



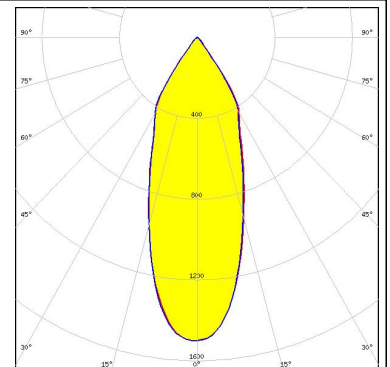
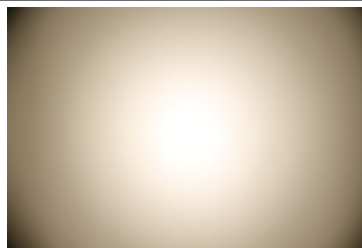
OSRAM

LED PrevaLED Core Z3 LES19
 FWHM 33.0°
 Efficiency 83 %
 Peak intensity 1.650 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



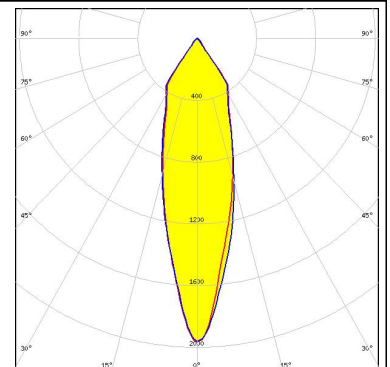
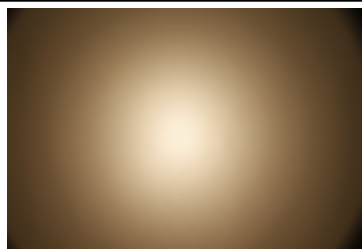
OSRAM

LED PrevaLED Core Z3 LES23
 FWHM 38.0°
 Efficiency 85 %
 Peak intensity 1.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



OSRAM

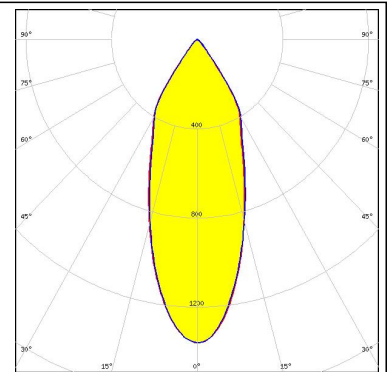
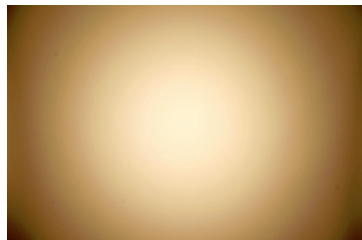
LED PrevaLED Core Z3 LES9
 FWHM 28.0°
 Efficiency 84 %
 Peak intensity 1.960 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



PHOTOMETRIC DATA (MEASURED):

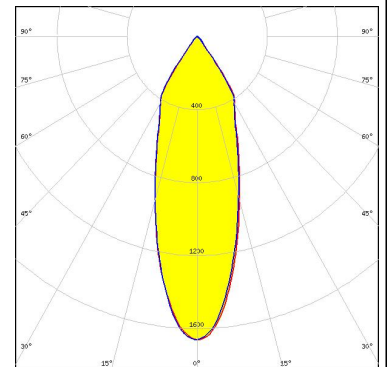
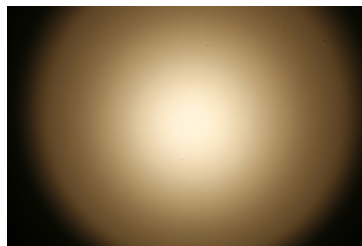
OSRAM

LED PrevaLED Core Z4 LES19
 FWHM 38.0°
 Efficiency 78 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



OSRAM

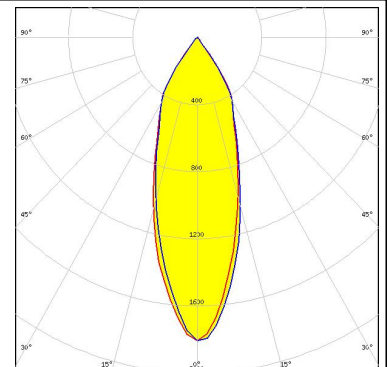
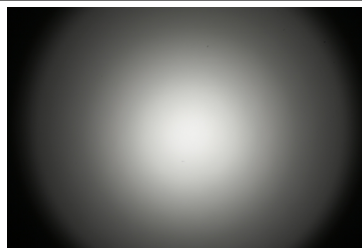
LED PrevaLED Core Z4 LES19
 FWHM 34.0°
 Efficiency 84 %
 Peak intensity 1.700 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



OSRAM

Opto Semiconductors

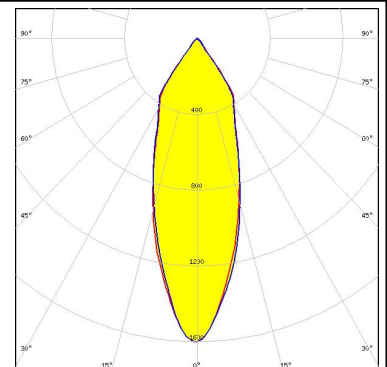
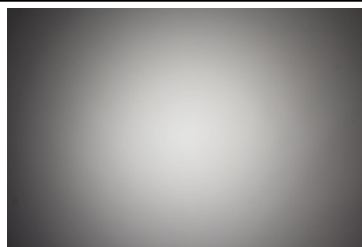
LED Soleriq S13
 FWHM 33.0°
 Efficiency 85 %
 Peak intensity 1.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



OSRAM

Opto Semiconductors

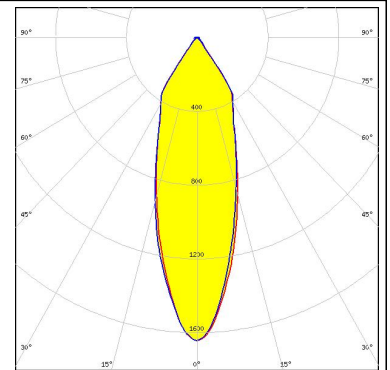
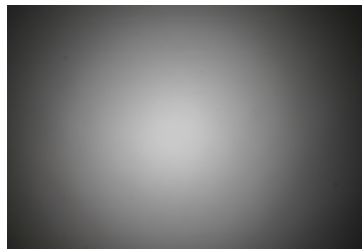
LED Soleriq S13
 FWHM 35.0°
 Efficiency 82 %
 Peak intensity 1.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 437 Typ L1



PHOTOMETRIC DATA (MEASURED):

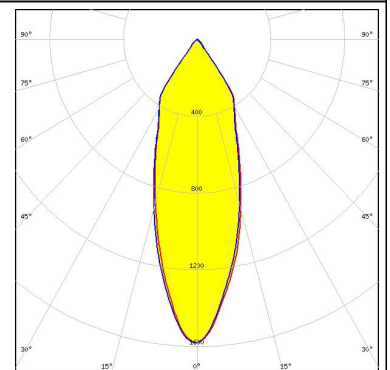
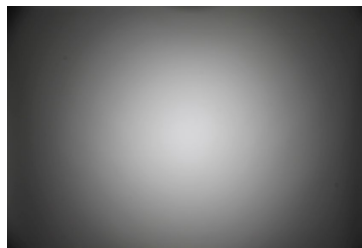
OSRAM
Opto Semiconductors

LED Soleriq S13 19x19
FWHM 32.0°
Efficiency 81 %
Peak intensity 1.600 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2103CT + 50-2100AN



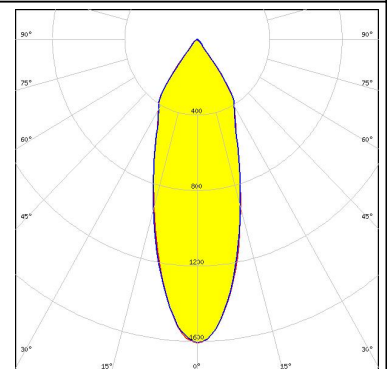
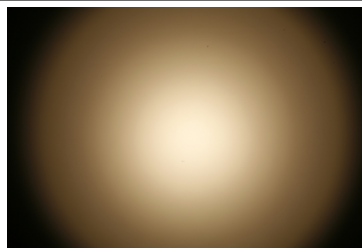
OSRAM
Opto Semiconductors

LED Soleriq S13 19x19
FWHM 34.0°
Efficiency 81 %
Peak intensity 1.600 cd/lm
LEDs/each optic 1
Light colour White
Required components:
TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



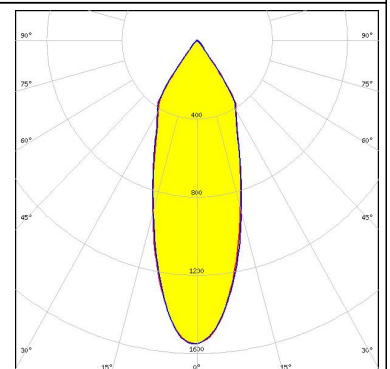
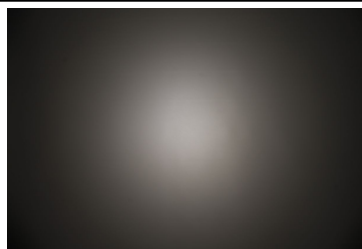
OSRAM
Opto Semiconductors

LED Soleriq S19
FWHM 35.0°
Efficiency 84 %
Peak intensity 1.610 cd/lm
LEDs/each optic 1
Light colour White
Required components:
TE: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1



OSRAM
Opto Semiconductors

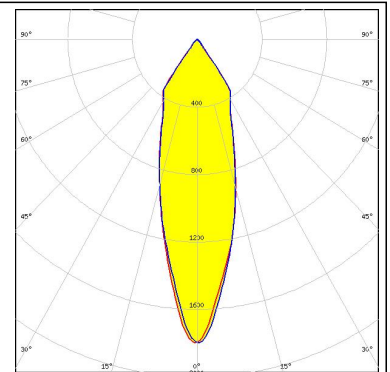
LED Soleriq S19
FWHM 35.0°
Efficiency 82 %
Peak intensity 1.600 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 462 Typ L3



PHOTOMETRIC DATA (MEASURED):

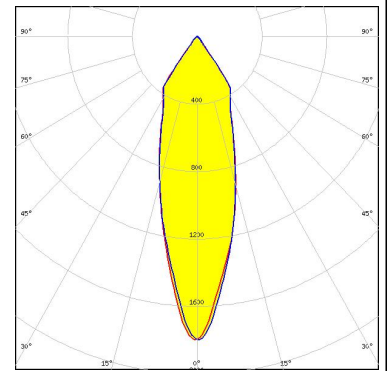
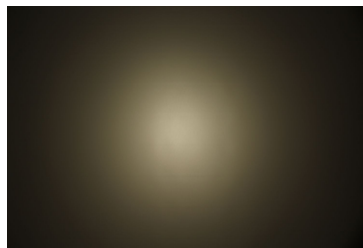
PHILIPS

LED Fortimo SLM L09 + SLM holder
 FWHM 30.0°
 Efficiency 83 %
 Peak intensity 1.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



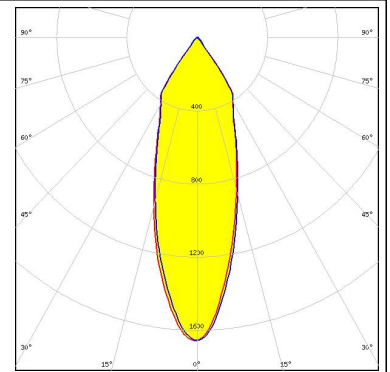
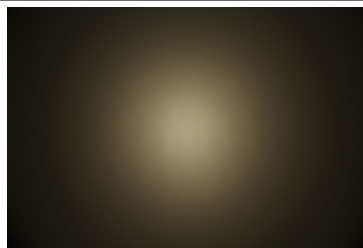
PHILIPS

LED Fortimo SLM L09 + SLM holder
 FWHM 30.0°
 Efficiency 83 %
 Peak intensity 1.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



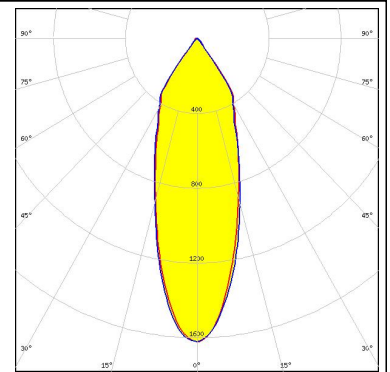
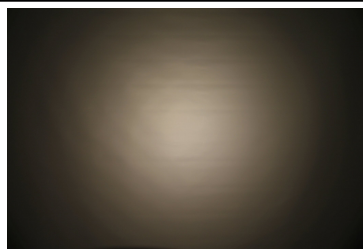
PHILIPS

LED Fortimo SLM L13 + SLM holder
 FWHM 33.0°
 Efficiency 82 %
 Peak intensity 1.700 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 33.0°
 Efficiency 83 %
 Peak intensity 1.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



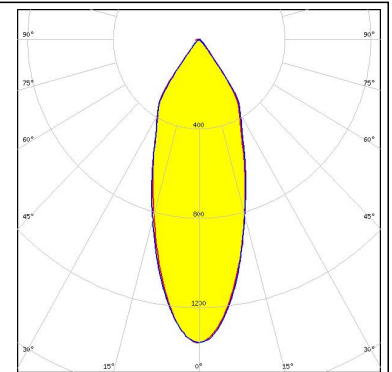
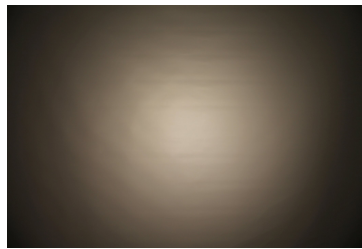
PHOTOMETRIC DATA (MEASURED):

PHILIPS

LED Fortimo SLM L13 CoB
 FWHM 37.0°
 Efficiency 77 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

F13671_ANGE-RZ-LENS
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1

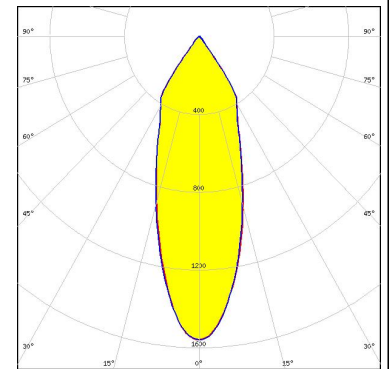
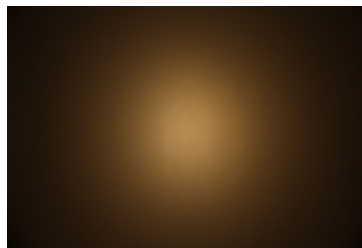


PHILIPS

LED Fortimo SLM L15 + SLM holder
 FWHM 34.0°
 Efficiency 81 %
 Peak intensity 1.560 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1

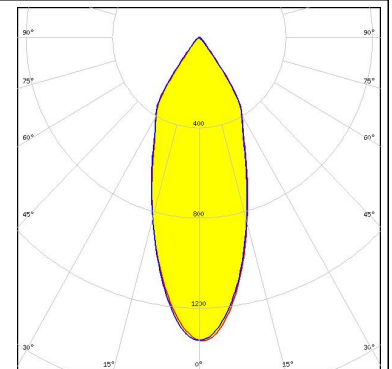
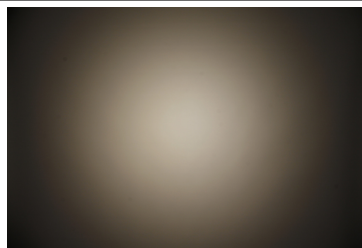


PHILIPS

LED Fortimo SLM L15 + SLM holder
 FWHM 38.0°
 Efficiency 76 %
 Peak intensity 1.300 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

F13671_ANGE-RZ-LENS
 TE: OPTIC CLIP Z50 TYPE1 2213194-1

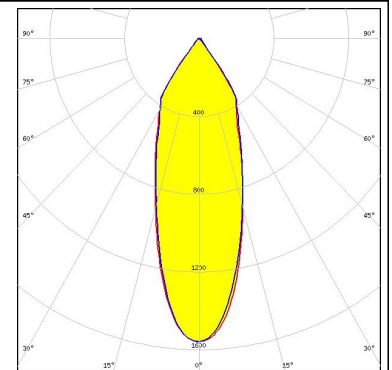
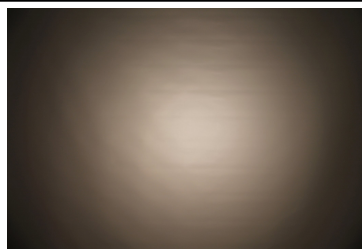


PHILIPS

LED Fortimo SLM L15 CoB
 FWHM 35.0°
 Efficiency 82 %
 Peak intensity 1.600 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

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

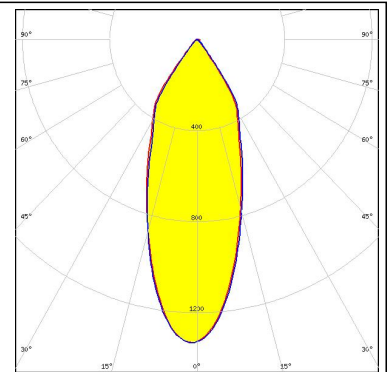
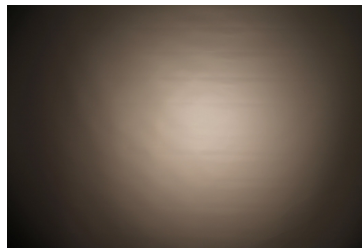


PHOTOMETRIC DATA (MEASURED):

PHILIPS

LED Fortimo SLM L15 CoB
 FWHM 40.0°
 Efficiency 77 %
 Peak intensity 1.300 cd/lm
 LEDs/each optic 1
 Light colour White

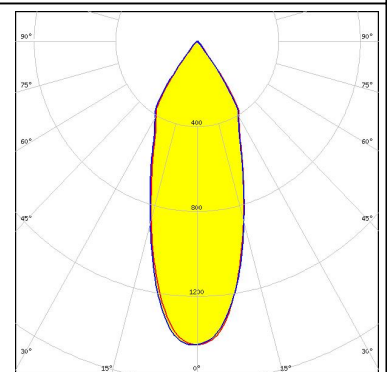
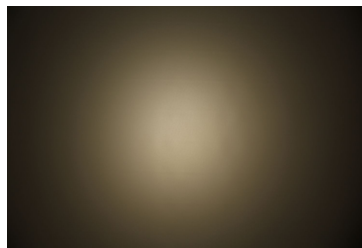
Required components:
 F13671_ANGE-RZ-LENS
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



PHILIPS

LED Fortimo SLM L19 + SLM holder
 FWHM 37.0°
 Efficiency 80 %
 Peak intensity 1.430 cd/lm
 LEDs/each optic 1
 Light colour White

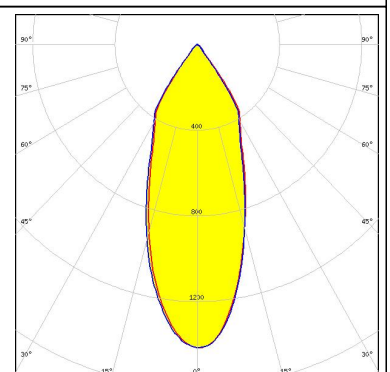
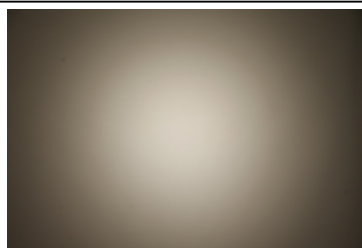
Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



SAMSUNG

LED LC026B / 033B / 040B
 FWHM 39.0°
 Efficiency 82 %
 Peak intensity 1.400 cd/lm
 LEDs/each optic 1
 Light colour White

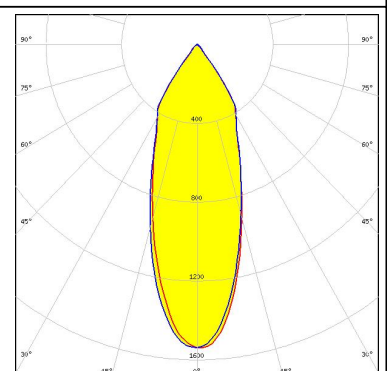
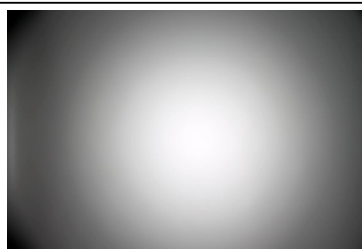
Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 450 Typ L2



SAMSUNG

LED LC026B / 033B / 040B
 FWHM 36.0°
 Efficiency 84 %
 Peak intensity 1.500 cd/lm
 LEDs/each optic 1
 Light colour White

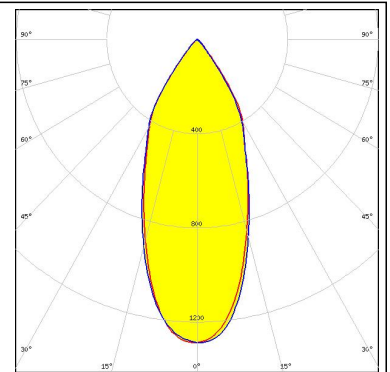
Required components:
 TE: 2213258-2 + OPTIC CLIP Z50 TYPE1 2213194-1



PHOTOMETRIC DATA (MEASURED):

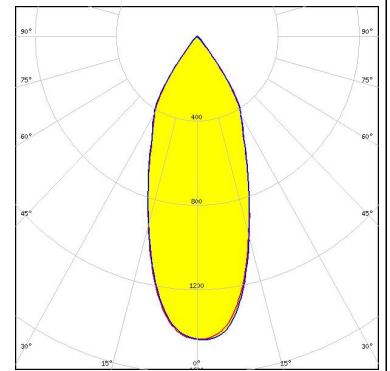
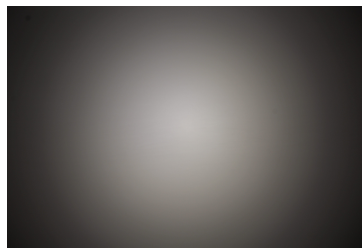
SAMSUNG

LED LC035T (Tunable white)
 FWHM 42.0°
 Efficiency 81 %
 Peak intensity 1.289 cd/lm
 LEDs/each optic 1
 Light colour Tunable White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 502 Typ L3



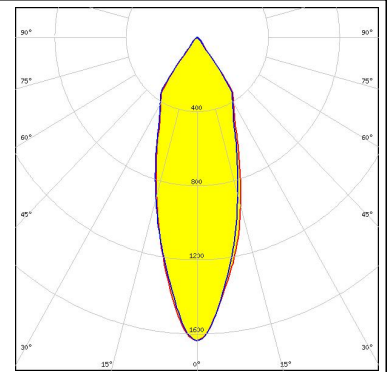
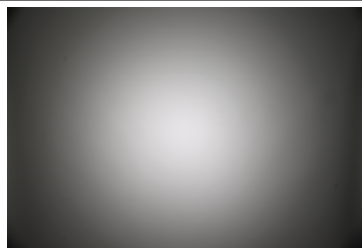
SAMSUNG

LED LC035T (Tunable white)
 FWHM 40.0°
 Efficiency 85 %
 Peak intensity 1.439 cd/lm
 LEDs/each optic 1
 Light colour Tunable White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 502 Typ L3



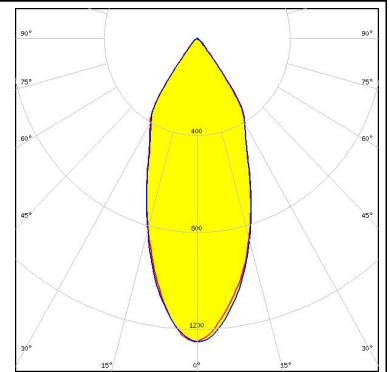
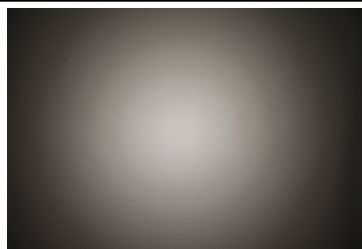
SAMSUNG

LED LC040C
 FWHM 33.0°
 Efficiency 82 %
 Peak intensity 1.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1


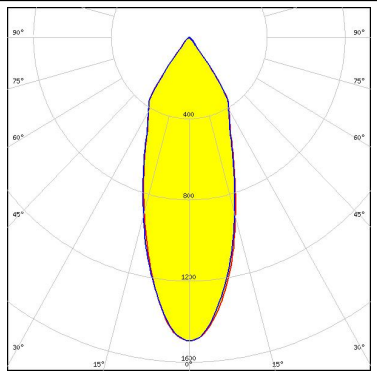

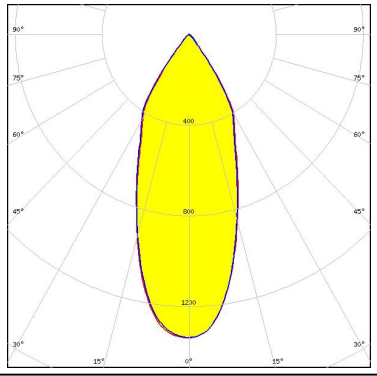
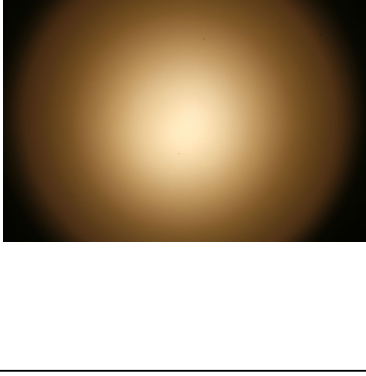
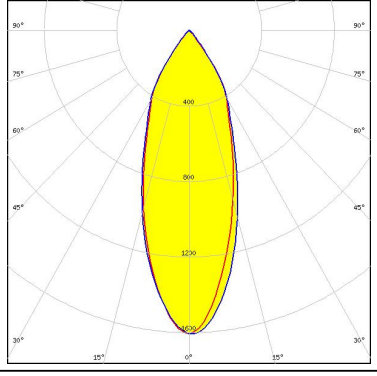

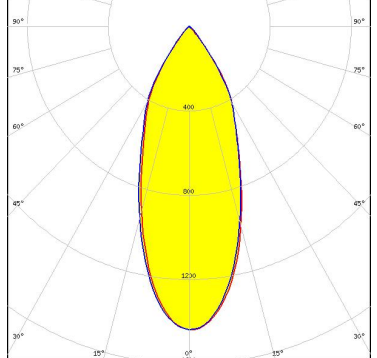


SEOUL SEMICONDUCTOR

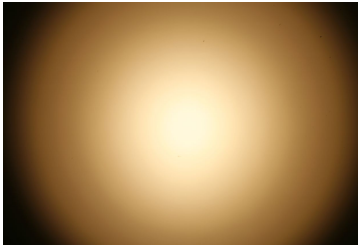
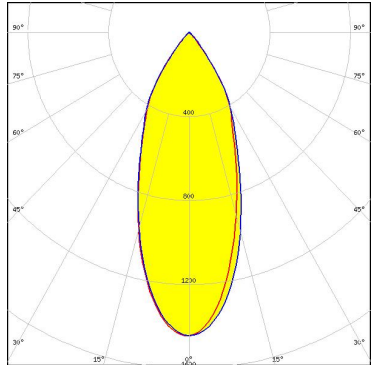
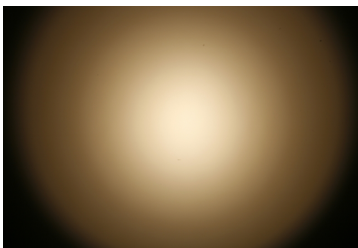
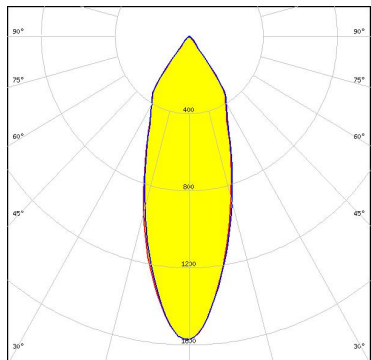
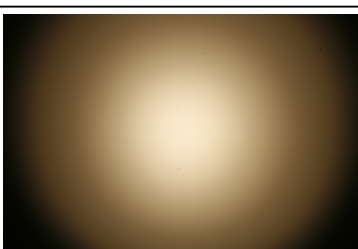
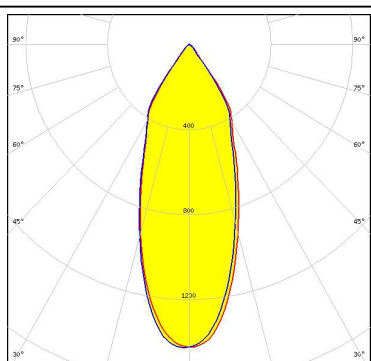
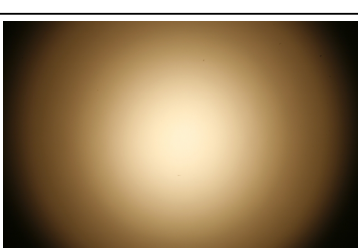
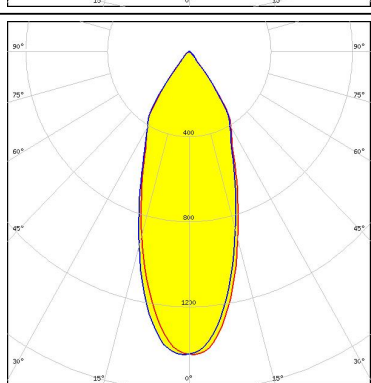
LED AC Zhaga COB
 FWHM 41.0°
 Efficiency 79 %
 Peak intensity 1.300 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 Optosource: SEHSMJD-A



PHOTOMETRIC DATA (MEASURED):

<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED MJT COB LES 14.5 FWHM 37.0° Efficiency 82 % Peak intensity 1.500 cd/lm LEDs/each optic 1 Light colour White Required components: TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED MJT COB LES 22 FWHM 40.0° Efficiency 81 % Peak intensity 1.300 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 Bender Wirth: 431 Typ L3</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-461 FWHM 37.0° Efficiency 84 % Peak intensity 1.600 cd/lm LEDs/each optic 1 Light colour White Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-462 FWHM 41.0° Efficiency 83 % Peak intensity 1.440 cd/lm LEDs/each optic 1 Light colour White Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

PHOTOMETRIC DATA (MEASURED):

<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-464 FWHM 41.0° Efficiency 83 % Peak intensity 1.440 cd/lm LEDs/each optic 1 Light colour White Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-484 FWHM 35.0° Efficiency 83 % Peak intensity 1.570 cd/lm LEDs/each optic 1 Light colour White Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-485 FWHM 39.0° Efficiency 83 % Peak intensity 1.430 cd/lm LEDs/each optic 1 Light colour White Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-486 FWHM 39.0° Efficiency 83 % Peak intensity 1.430 cd/lm LEDs/each optic 1 Light colour White Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

PHOTOMETRIC DATA (SIMULATED):

<p>bridgelux.</p> <p>LED V10 Gen7 FWHM 34.0° Efficiency 89 % Peak intensity 2.300 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 486 Typ L1</p>	
<p>bridgelux.</p> <p>LED V13 Gen7 FWHM 32.0° Efficiency 89 % Peak intensity 2.500 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2103CT + 50-2100AN</p>	
<p>bridgelux.</p> <p>LED V22 Gen7 FWHM 34.0° Efficiency 93 % Peak intensity 2.260 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2204-CT + 50-2100AN</p>	
<p>CREE ⇄</p> <p>LED CXA/B 1830 FWHM 35.0° Efficiency 87 % Peak intensity 2.200 cd/lm LEDs/each optic 1 Light colour White Required components: TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>	

PHOTOMETRIC DATA (SIMULATED):



LED CxM-14 (19x19)
FWHM 36.0°
Efficiency 82 %
Peak intensity 1.500 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 433 Typ L1

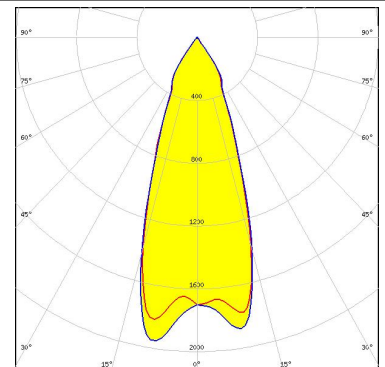


LED CxM-9 (13.5x13.5)
FWHM 33.0°
Efficiency 83 %
Peak intensity 1.700 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 434 Typ L1



Opto Semiconductors


LED Soleriq S15
FWHM 36.0°
Efficiency 89 %
Peak intensity 1.954 cd/lm
LEDs/each optic 1
Light colour White
Required components:
TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



SEOUL SEMICONDUCTOR

LED ZC12/18
FWHM 36.0°
Efficiency 82 %
Peak intensity 1.500 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 433 Typ L1

PHOTOMETRIC DATA (SIMULATED):

	
SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM	33.0°
Efficiency	83 %
Peak intensity	1.700 cd/m
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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