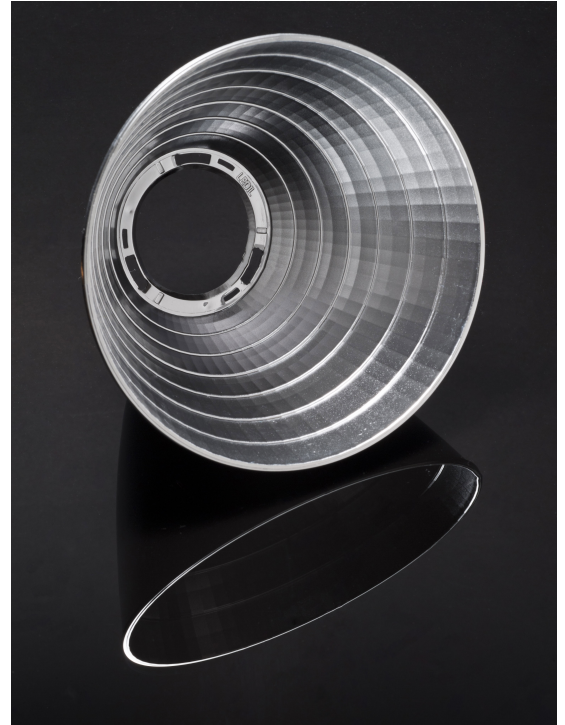


ANGELA-M

~30° medium beam

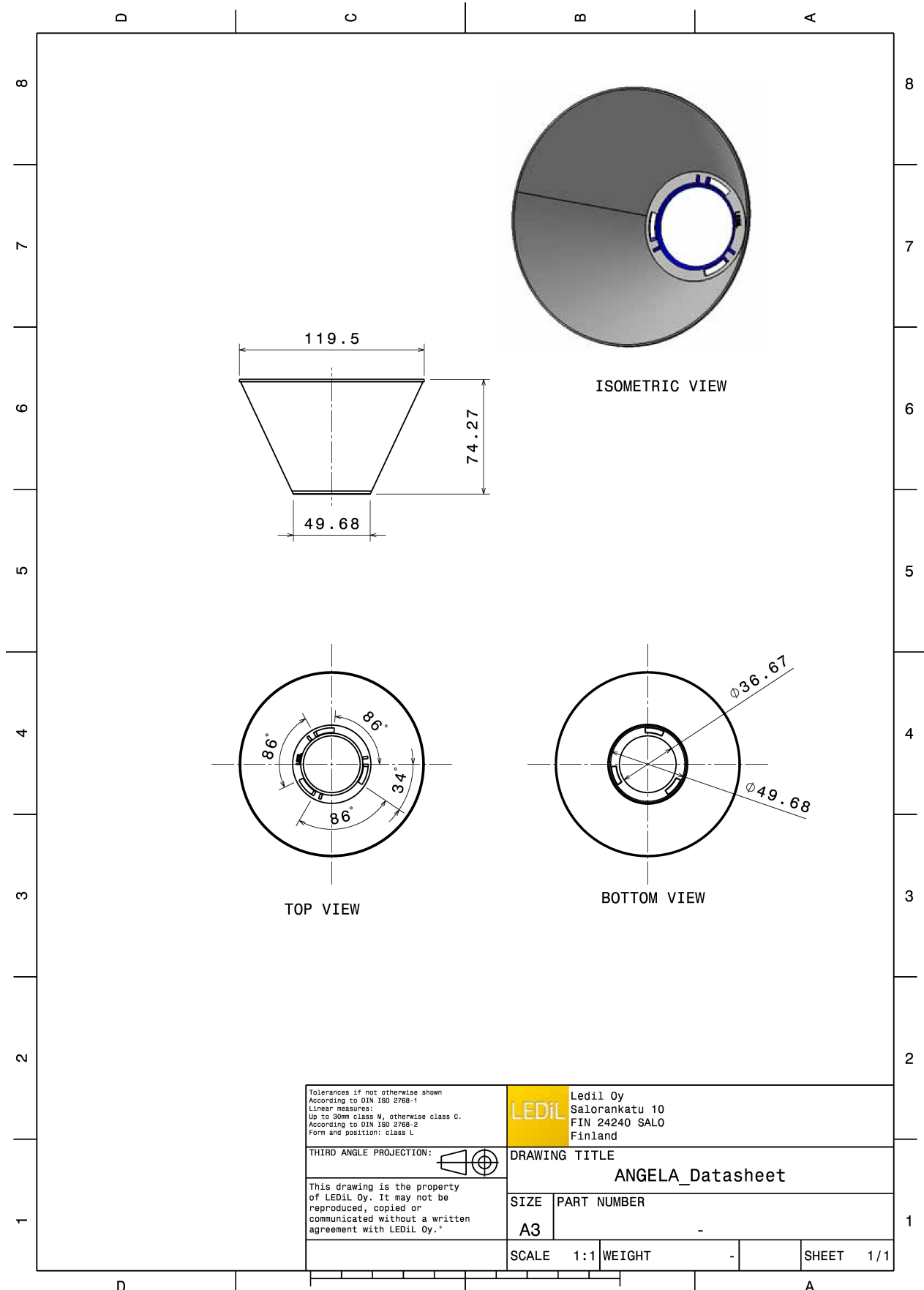
TECHNICAL SPECIFICATIONS:

Dimensions	Ø 119.5 mm
Height	74.3 mm
Fastening	socket
Colour	metal
Box size	398 x 298 x 265 mm
Box weight	9.3 kg
Quantity in Box	180 pcs
ROHS compliant	yes ⓘ


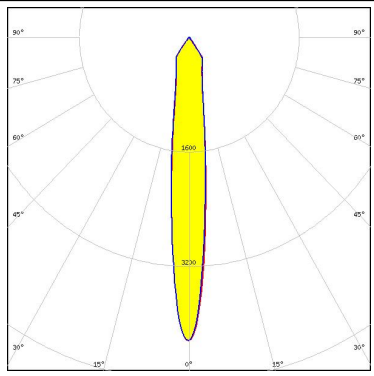
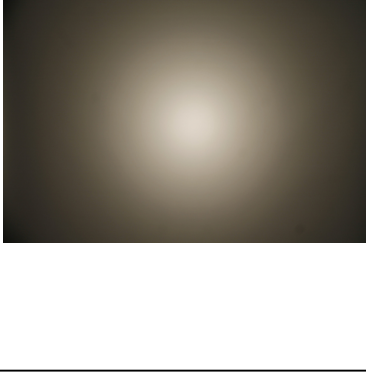
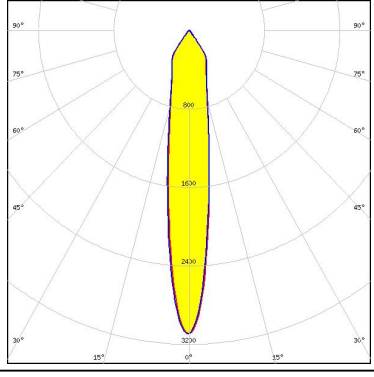

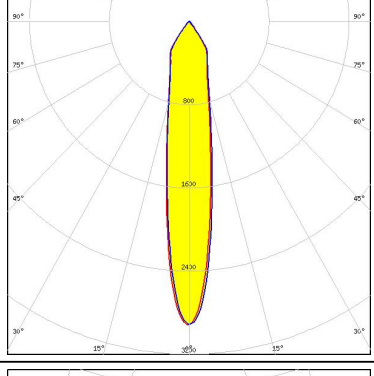

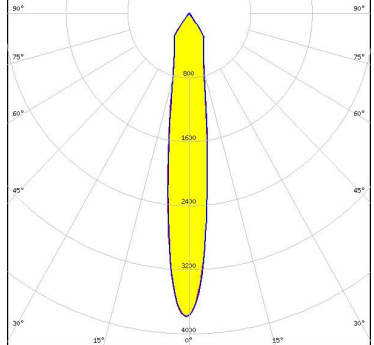


MATERIAL SPECIFICATIONS:



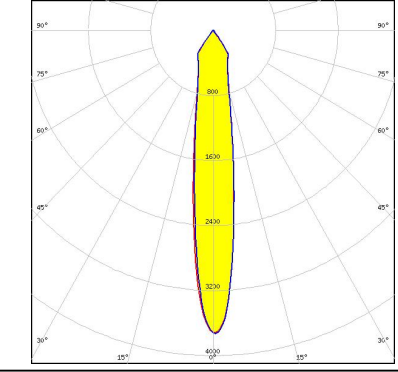

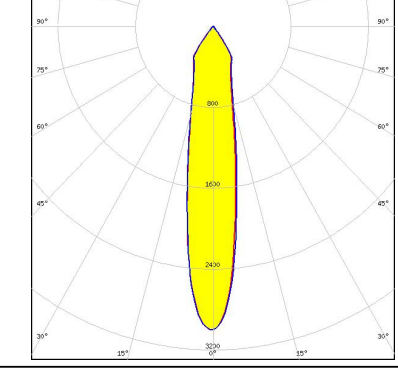

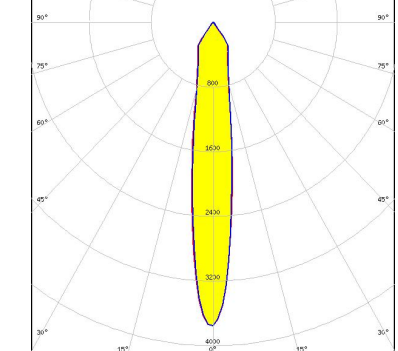
Component	Type	Material	Colour	Coating
ANGELA-M	Reflector	PC	metal	HMDS




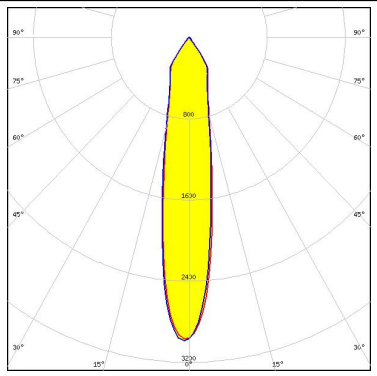

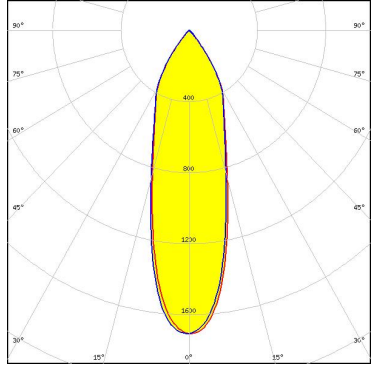
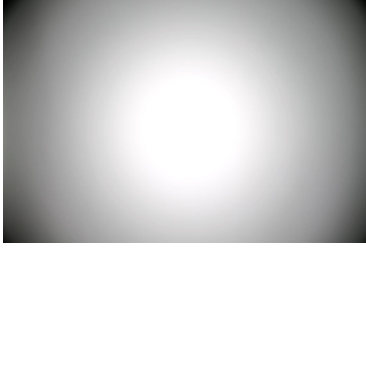
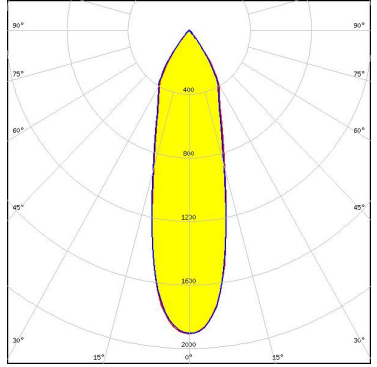

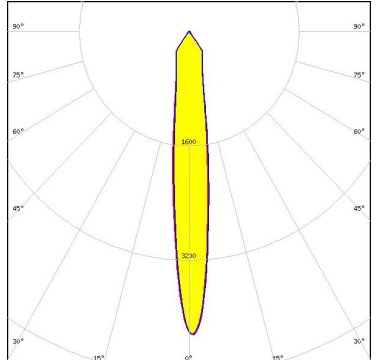
PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V10 Gen7 FWHM 14.0° Efficiency 83 % Peak intensity 4.200 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>		
<p>bridgelux.</p> <p>LED V10 Gen7 FWHM 16.0° Efficiency 78 % Peak intensity 3.100 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 434 Typ L1</p>		
<p>bridgelux.</p> <p>LED V13 Gen7 FWHM 18.0° Efficiency 80 % Peak intensity 2.900 cd/lm LEDs/each optic 1 Light colour White Required components: F13671_ANGE-RZ-LENS TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>bridgelux.</p> <p>LED V13 Gen7 FWHM 16.0° Efficiency 84 % Peak intensity 3.800 cd/lm LEDs/each optic 1 Light colour White Required components: TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		

PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V15 Gen6</p> <p>FWHM 17.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 3.900 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 16.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 3.700 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 19.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 3.000 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		
<p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM 16.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 3.600 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18</p>		

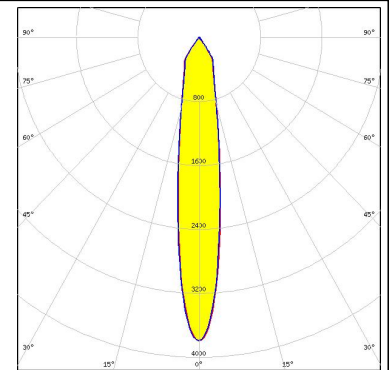
PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED VERO18 FWHM 19.0° Efficiency 85 % Peak intensity 3.000 cd/m LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO29 FWHM 30.0° Efficiency 79 % Peak intensity 1.710 cd/m LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED VERO29 FWHM 29.0° Efficiency 85 % Peak intensity 1.900 cd/m LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29</p>		
<p>CITIZEN</p> <p>LED CLL02x/CLU02x (LES10) FWHM 14.0° Efficiency 84 % Peak intensity 4.300 cd/m LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>		

PHOTOMETRIC DATA (MEASURED):

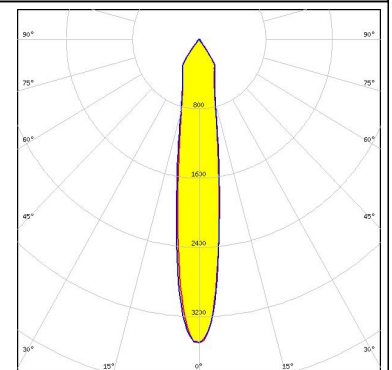
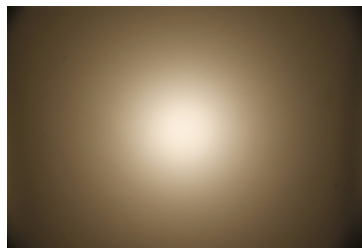
CITIZEN

LED CLL03x/CLU03x
 FWHM 17.0°
 Efficiency 85 %
 Peak intensity 3.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16791_CLAMP-Z45-A
 F13671_ANGE-RZ-LENS
 TE: 2325807-3



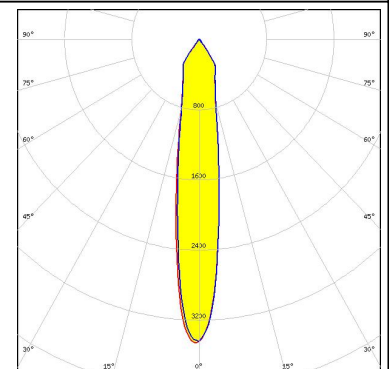
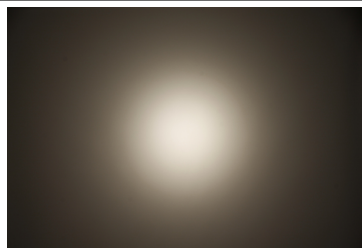
CITIZEN

LED CLL03x/CLU03x
 FWHM 17.0°
 Efficiency 83 %
 Peak intensity 3.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



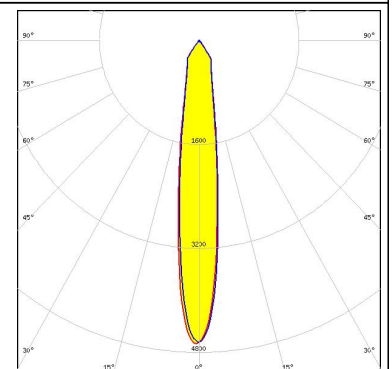
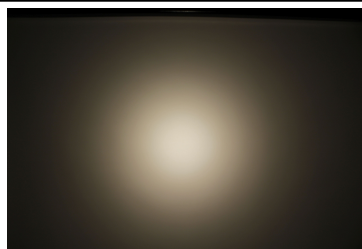
CITIZEN

LED CLL03x/CLU03x
 FWHM 17.0°
 Efficiency 88 %
 Peak intensity 3.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 433 Typ L1



CITIZEN

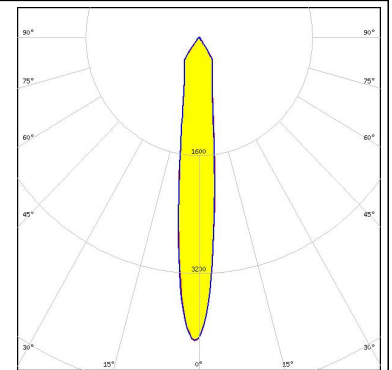
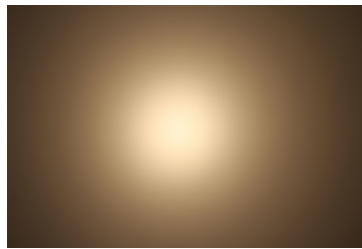
LED CLL03x/CLU03x
 FWHM 15.0°
 Efficiency 89 %
 Peak intensity 4.700 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16791_CLAMP-Z45-A
 TE: 2325807-3



PHOTOMETRIC DATA (MEASURED):

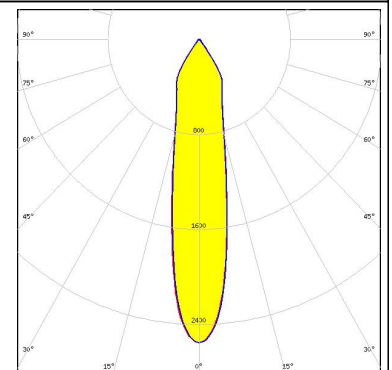
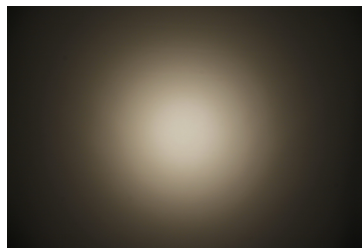
CITIZEN

LED CLL03x/CLU03x
 FWHM 14.0°
 Efficiency 84 %
 Peak intensity 4.100 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



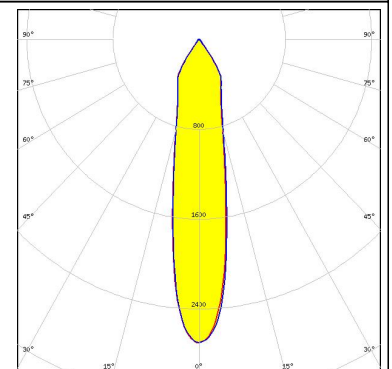
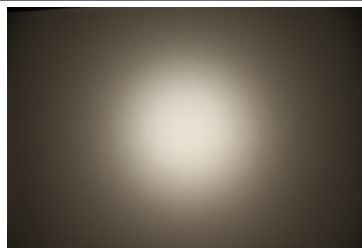
CITIZEN

LED CLL04x/CLU04x
 FWHM 21.0°
 Efficiency 83 %
 Peak intensity 2.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



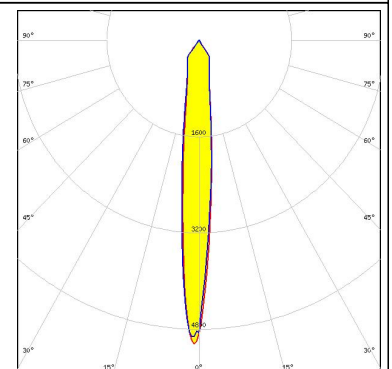
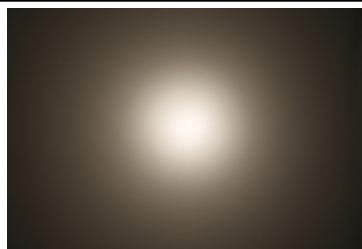
CITIZEN

LED CLL04x/CLU04x
 FWHM 21.0°
 Efficiency 84 %
 Peak intensity 2.700 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 431 Typ L3



CITIZEN

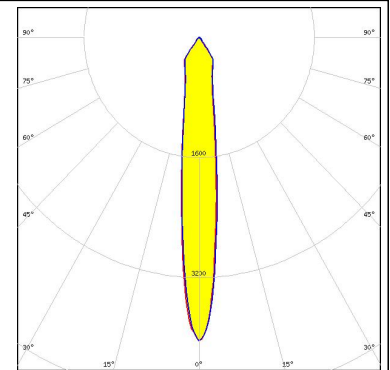
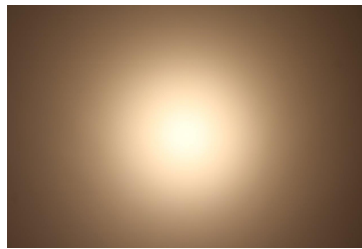
LED CLU700/701
 FWHM 12.0°
 Efficiency 83 %
 Peak intensity 5.200 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



PHOTOMETRIC DATA (MEASURED):

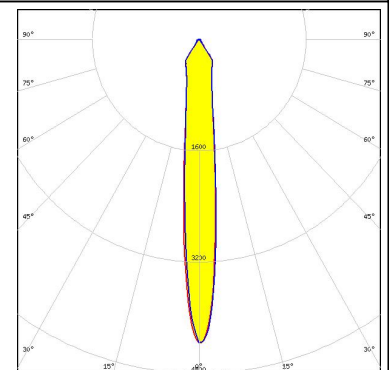
CITIZEN

LED CLU720/721
 FWHM 14.0°
 Efficiency 87 %
 Peak intensity 4.000 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



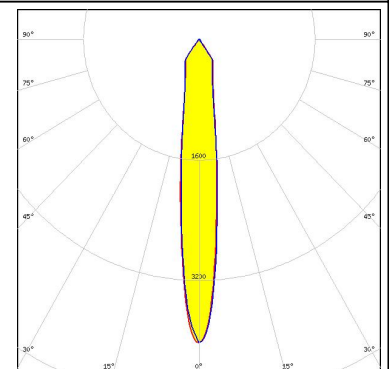
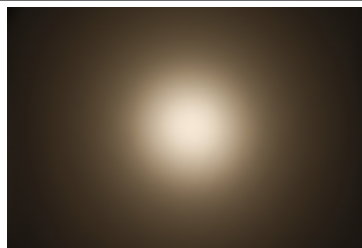
CITIZEN

LED CLU720/721
 FWHM 12.0°
 Efficiency 87 %
 Peak intensity 4.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



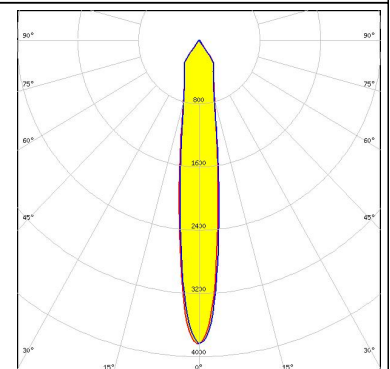
CITIZEN

LED CLU720/721
 FWHM 14.0°
 Efficiency 83 %
 Peak intensity 4.000 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 433 Typ L1



CITIZEN

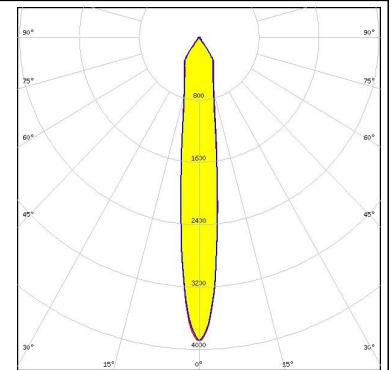
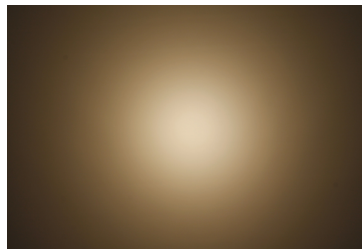
LED CLU730/731
 FWHM 15.0°
 Efficiency 84 %
 Peak intensity 3.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 471 Typ L3



PHOTOMETRIC DATA (MEASURED):

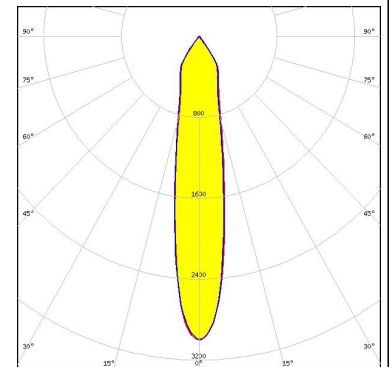
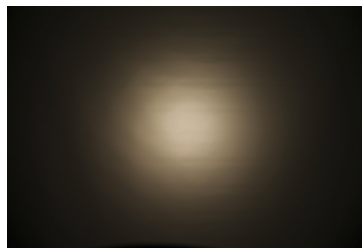
CITIZEN

LED CLU730/731
 FWHM 14.0°
 Efficiency 83 %
 Peak intensity 3.900 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



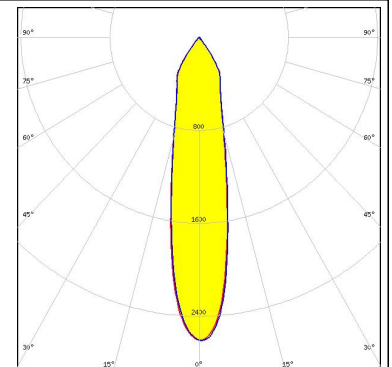
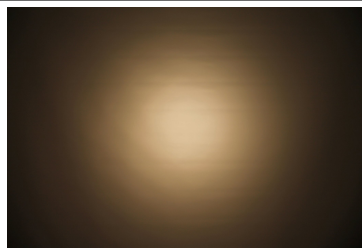
CREE

LED CMA2550
 FWHM 19.0°
 Efficiency 82 %
 Peak intensity 3.000 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



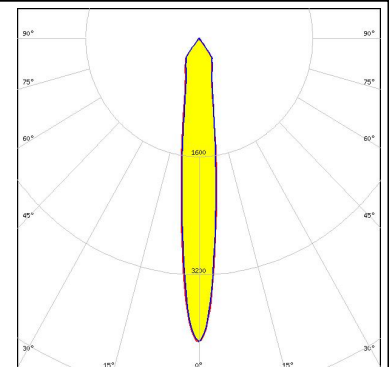
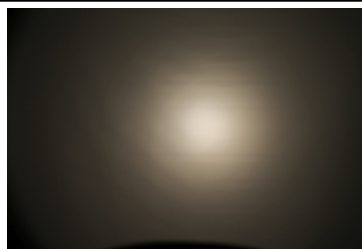
CREE

LED CMA3090
 FWHM 22.0°
 Efficiency 82 %
 Peak intensity 2.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



CREE

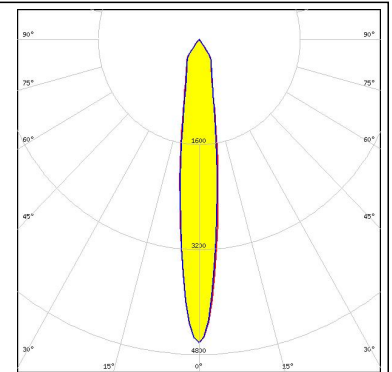
LED CMT14xx
 FWHM 14.0°
 Efficiency 81 %
 Peak intensity 4.150 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



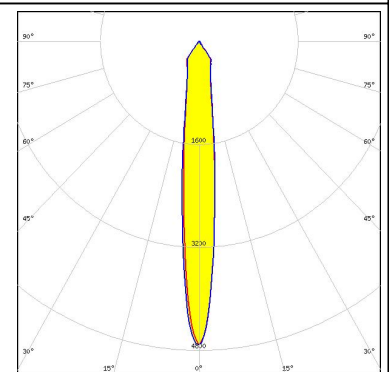
PHOTOMETRIC DATA (MEASURED):



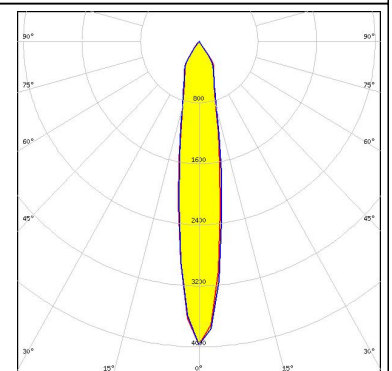
LED CXA/B 15xx
 FWHM 15.0°
 Efficiency 85 %
 Peak intensity 4.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14123_CLAMP-CXA15-18



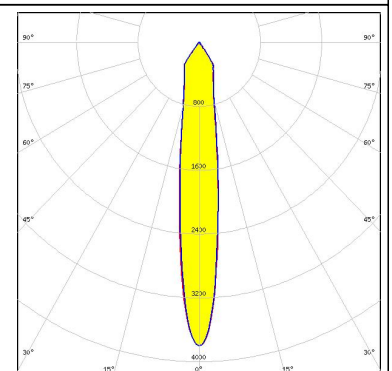
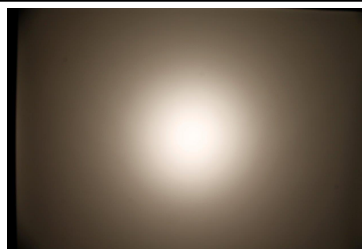
LED CXA/B 15xx
 FWHM 13.0°
 Efficiency 84 %
 Peak intensity 4.700 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 441 Typ L1



LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM 17.0°
 Efficiency 85 %
 Peak intensity 4.000 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14123_CLAMP-CXA15-18



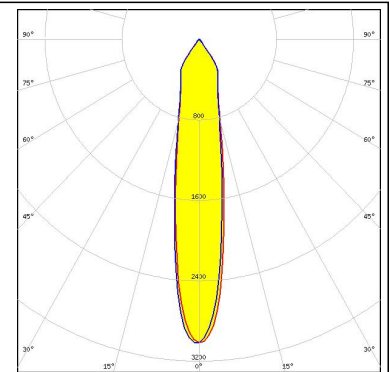
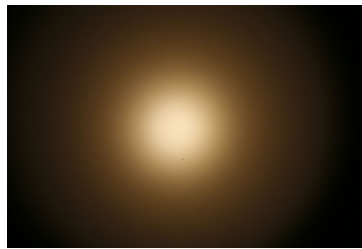
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM 15.0°
 Efficiency 83 %
 Peak intensity 3.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 437 Typ L1



PHOTOMETRIC DATA (MEASURED):

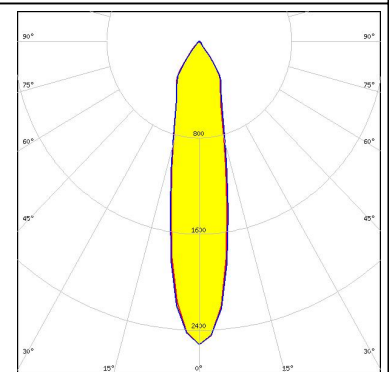
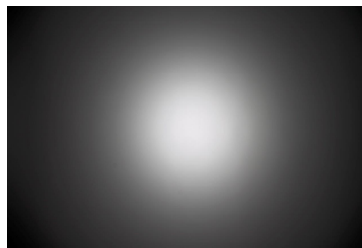
CREE

LED CXA/B 25xx
 FWHM 19.0°
 Efficiency 85 %
 Peak intensity 3.000 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



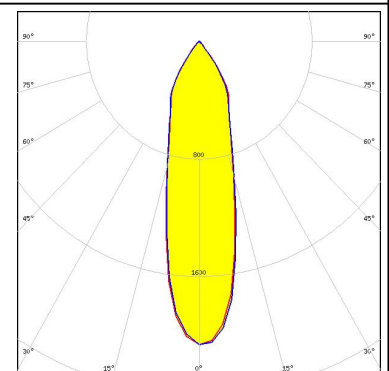
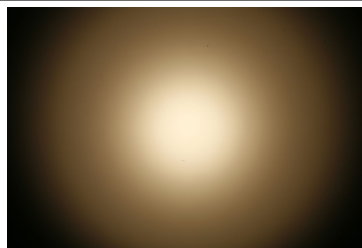
CREE

LED CXA/B 30xx
 FWHM 22.0°
 Efficiency 84 %
 Peak intensity 2.520 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



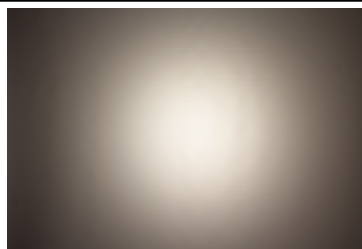
CREE

LED CXA/B 3590
 FWHM 27.0°
 Efficiency 85 %
 Peak intensity 2.070 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2303CR + 50-2300AN



EVERLIGHT

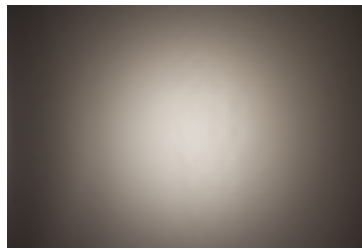
LED CHI3030 19W
 FWHM 21.0°
 Efficiency 83 %
 Peak intensity 2.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 468 Typ L3



PHOTOMETRIC DATA (MEASURED):

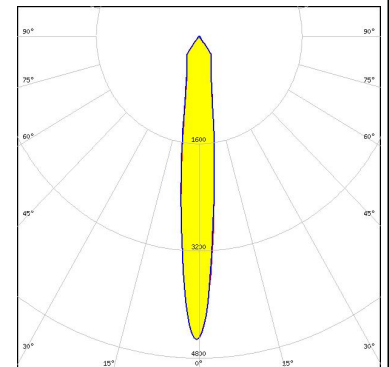
EVERLIGHT

LED CHI3030 29W
 FWHM 26.0°
 Efficiency 83 %
 Peak intensity 2.300 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 468 Typ L3



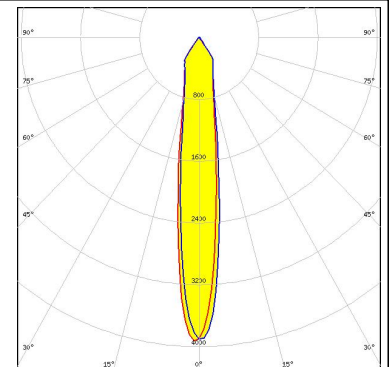
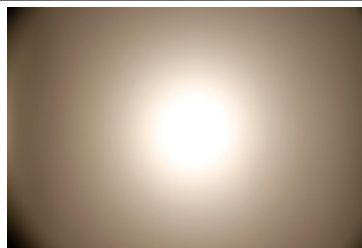
LUMILEDS

LED LUXEON CoB 1202/1203
 FWHM 13.0°
 Efficiency 84 %
 Peak intensity 4.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 438 Typ L1



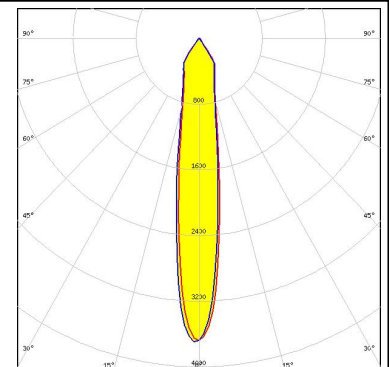
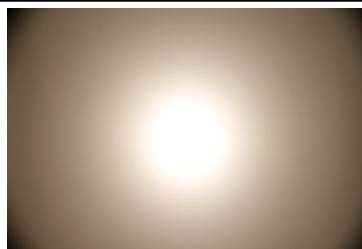
LUMILEDS

LED LUXEON CoB 1204/1205
 FWHM 15.0°
 Efficiency 85 %
 Peak intensity 3.930 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



LUMILEDS

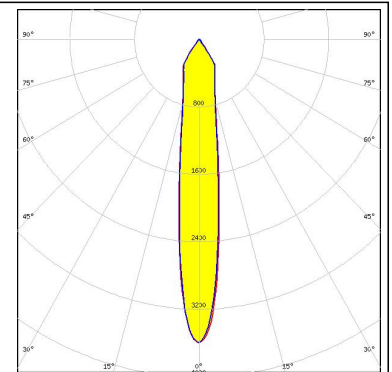
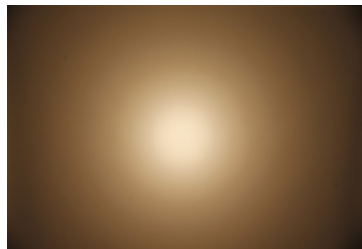
LED LUXEON CoB 1208
 FWHM 16.0°
 Efficiency 85 %
 Peak intensity 3.700 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



PHOTOMETRIC DATA (MEASURED):

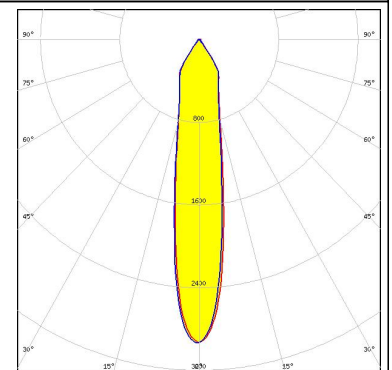
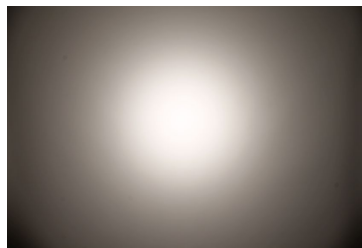
LUMILEDS

LED LUXEON CoB 1208
 FWHM 16.0°
 Efficiency 83 %
 Peak intensity 3.600 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2100SH + 50-2100AN



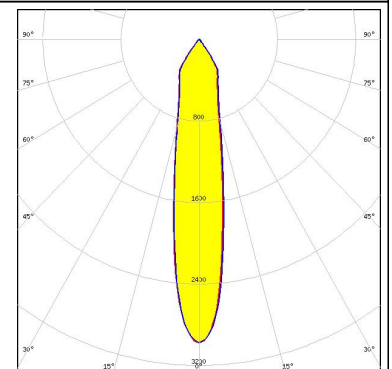
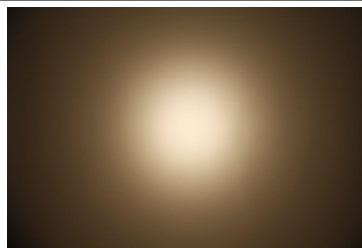
LUMILEDS

LED LUXEON CoB 1211
 FWHM 19.0°
 Efficiency 83 %
 Peak intensity 2.900 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



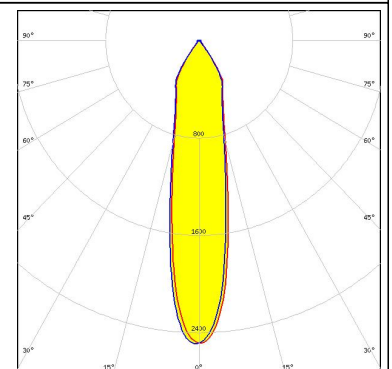
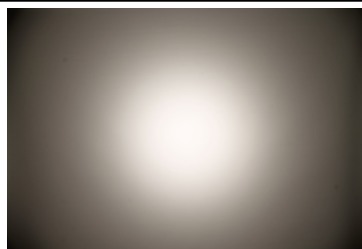
LUMILEDS

LED LUXEON CoB 1211
 FWHM 19.0°
 Efficiency 85 %
 Peak intensity 3.000 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 431 Typ L3



LUMILEDS

LED LUXEON CoB 1216/1812
 FWHM 22.0°
 Efficiency 83 %
 Peak intensity 2.500 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



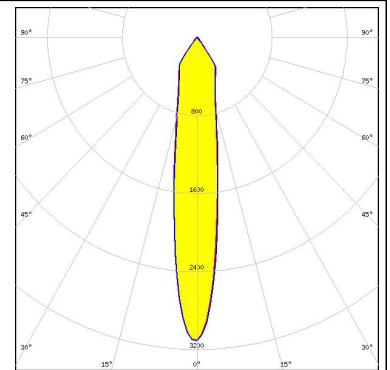
PHOTOMETRIC DATA (MEASURED):

LUMILEDS

LED LUXEON K12
 FWHM 17.0°
 Efficiency 83 %
 Peak intensity 3.000 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

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

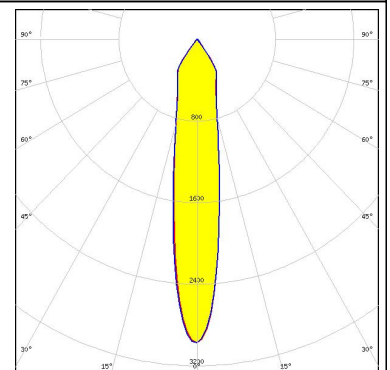
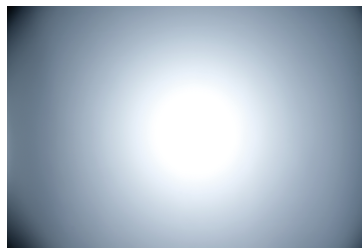


LUMILEDS

LED LUXEON K16
 FWHM 18.0°
 Efficiency 84 %
 Peak intensity 3.000 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

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

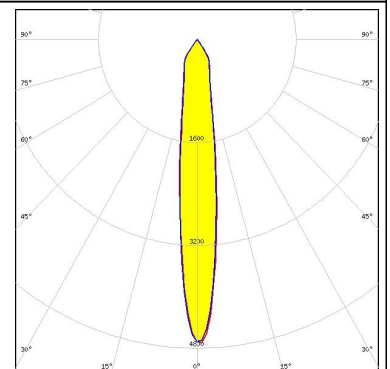
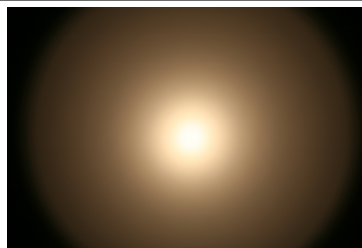


LUMILEDS

LED LUXEON S2000
 FWHM 15.0°
 Efficiency 85 %
 Peak intensity 4.700 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

C13395_CLAMP-S2000

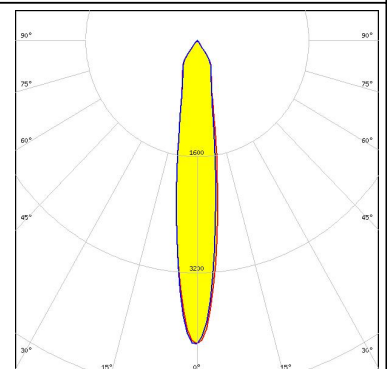
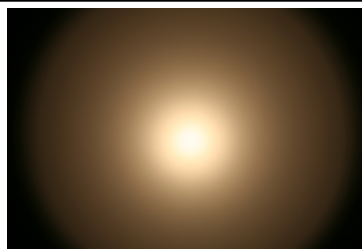


LUMILEDS

LED LUXEON S3000
 FWHM 16.0°
 Efficiency 85 %
 Peak intensity 4.200 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

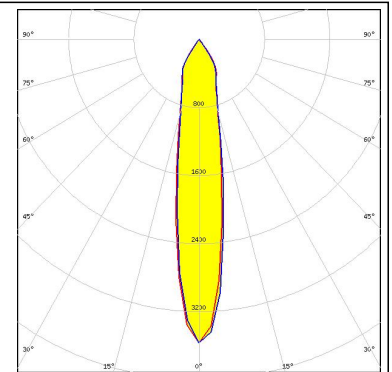
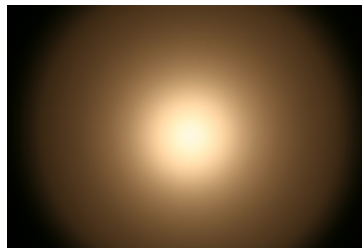
C13397_CLAMP-S3000



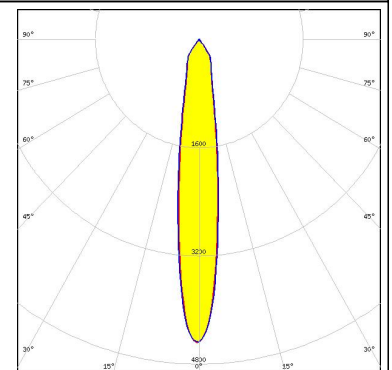
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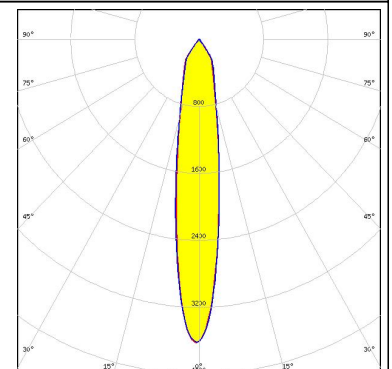
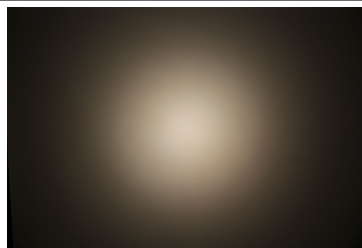
LED LUXEON S5000
 FWHM 19.0°
 Efficiency 86 %
 Peak intensity 3.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13399_CLAMP-S5000



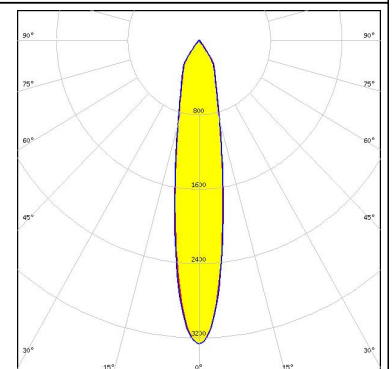
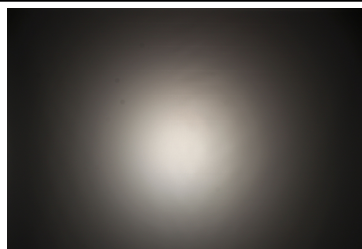
LED CDM-14 (Dim-To-Warm)
 FWHM 16.0°
 Efficiency 87 %
 Peak intensity 4.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 491 Typ L2



LED CDM-14 (Dim-To-Warm)
 FWHM 17.0°
 Efficiency 83 %
 Peak intensity 3.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 F13671_ANGE-RZ-LENS
 Bender Wirth: 486 Typ L5



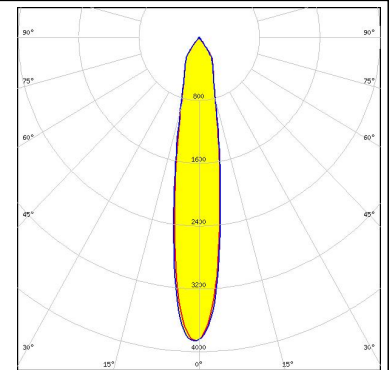
LED CDM-18 (Dim-To-Warm)
 FWHM 19.0°
 Efficiency 83 %
 Peak intensity 3.300 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 F13671_ANGE-RZ-LENS
 Bender Wirth: 491 Typ L2



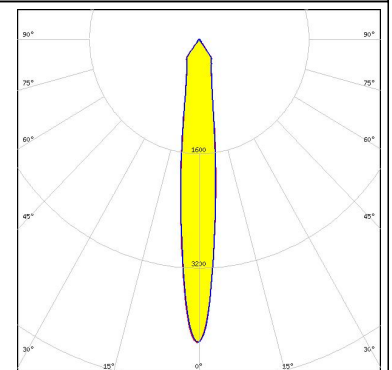
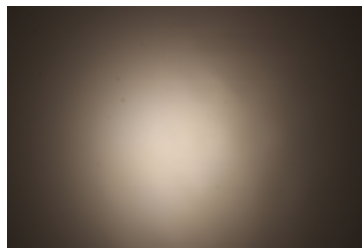
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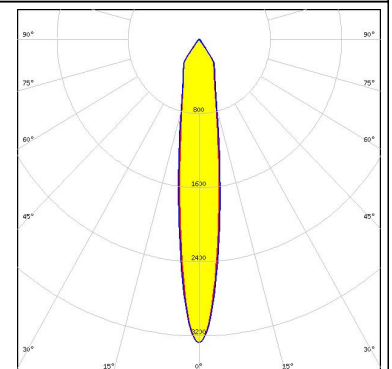
LED CDM-18 (Dim-To-Warm)
 FWHM 18.0°
 Efficiency 87 %
 Peak intensity 3.900 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 491 Typ L2



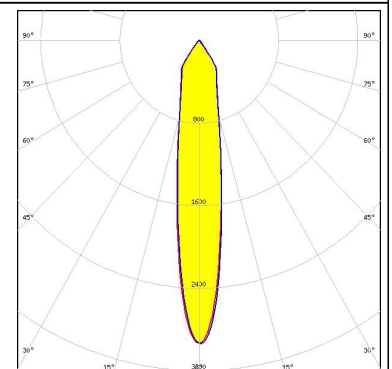
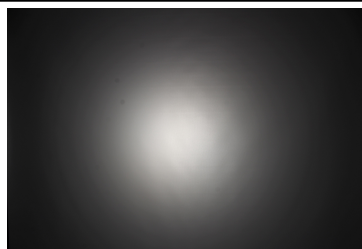
LED CDM-9 (Dim-To-Warm)
 FWHM 14.0°
 Efficiency 82 %
 Peak intensity 4.200 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 490 Typ L1




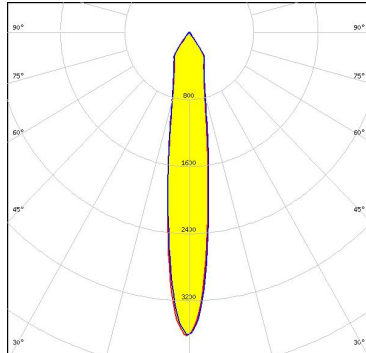
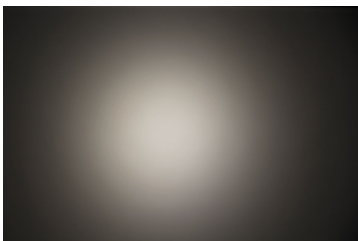
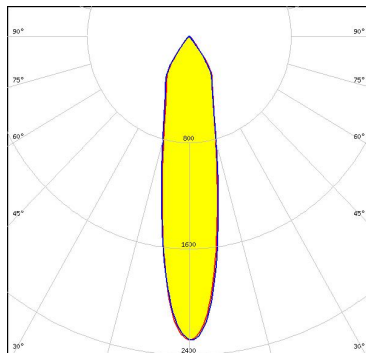

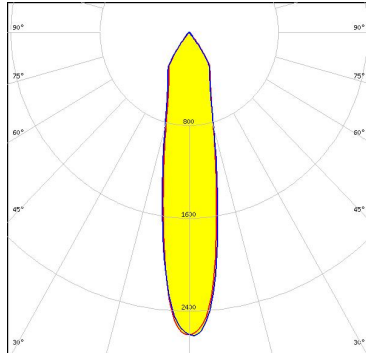

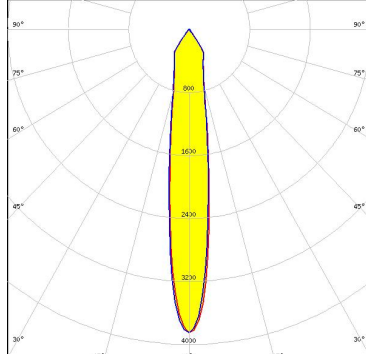
LED CDM-9 (Dim-To-Warm)
 FWHM 16.0°
 Efficiency 78 %
 Peak intensity 3.300 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 F13671_ANGE-RZ-LENS
 Bender Wirth: 490 Typ L1



LED CTM-14 (Tunable White)
 FWHM 18.0°
 Efficiency 78 %
 Peak intensity 2.900 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 442 Typ L3



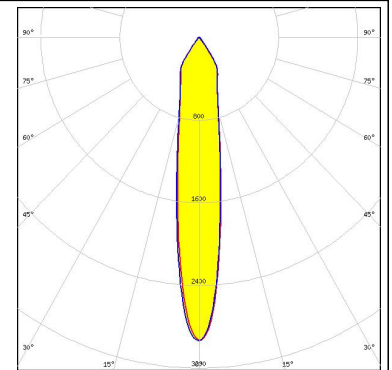
PHOTOMETRIC DATA (MEASURED):

<p>LUMINUS</p> <p>LED CTM-14 (Tunable White) FWHM 16.0° Efficiency 82 % Peak intensity 3.600 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 Bender Wirth: 442 Typ L3</p>		
<p>LUMINUS</p> <p>LED CTM-22 (Tunable White) FWHM 22.0° Efficiency 77 % Peak intensity 2.300 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 494 Typ L3</p>		
<p>LUMINUS</p> <p>LED CTM-22 (Tunable White) FWHM 21.0° Efficiency 82 % Peak intensity 2.600 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 Bender Wirth: 494 Typ L3</p>		
<p>LUMINUS</p> <p>LED CXM-14 FWHM 16.0° Efficiency 85 % Peak intensity 3.860 cd/lm LEDs/each optic 1 Light colour White Required components: TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		

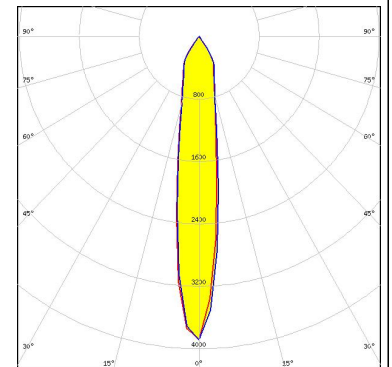
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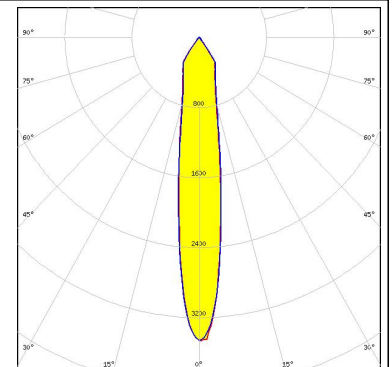
LED COB J-Type
FWHM 17.0°
Efficiency 80 %
Peak intensity 2.900 cd/lm
LEDs/each optic 1
Light colour White
Required components:
 F13671_ANGE-RZ-LENS
 IDEAL: 50-2103NC + 50-2100AN



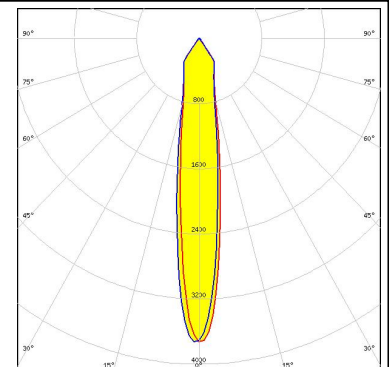
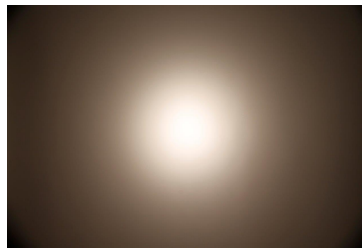
LED COB J-Type
FWHM 17.0°
Efficiency 83 %
Peak intensity 3.890 cd/lm
LEDs/each optic 1
Light colour White
Required components:
 IDEAL: 50-2103NC + 50-2100AN



LED COB J-Type
FWHM 17.0°
Efficiency 83 %
Peak intensity 3.500 cd/lm
LEDs/each optic 1
Light colour White
Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 463 Typ L2



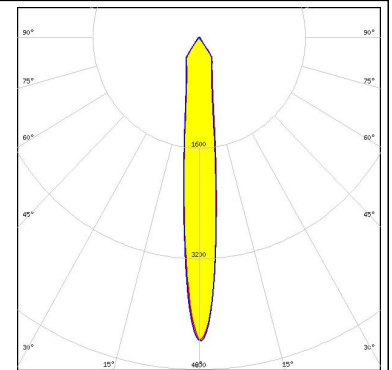
LED COB L-Type (LES 11)
FWHM 16.0°
Efficiency 86 %
Peak intensity 3.740 cd/lm
LEDs/each optic 1
Light colour White
Required components:
 Molex: 180580-0005



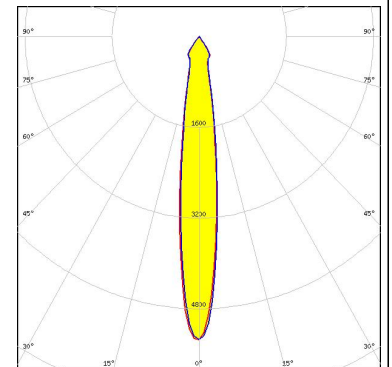
PHOTOMETRIC DATA (MEASURED):



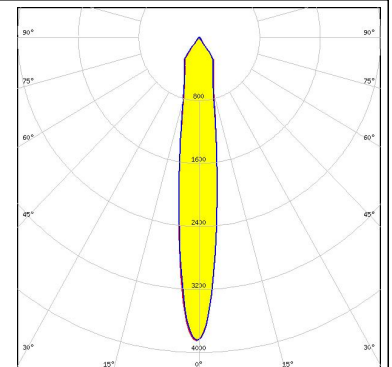
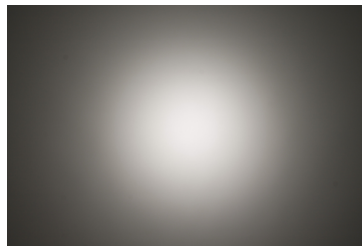
LED COB L-Type (LES 11)
 FWHM 13.0°
 Efficiency 82 %
 Peak intensity 4.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2100NC + 50-2100AN



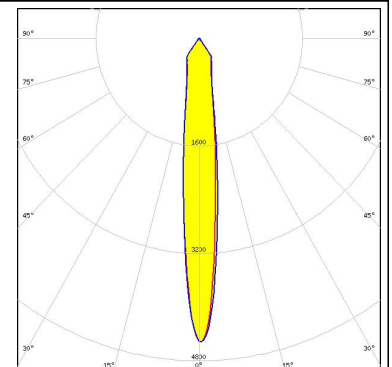
LED COB L-Type (LES 11)
 FWHM 15.0°
 Efficiency 84 %
 Peak intensity 5.350 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1




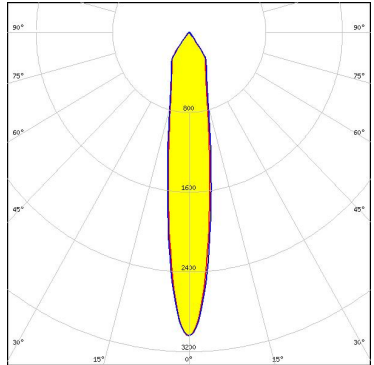
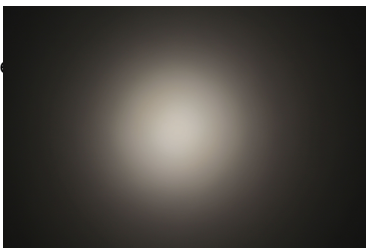
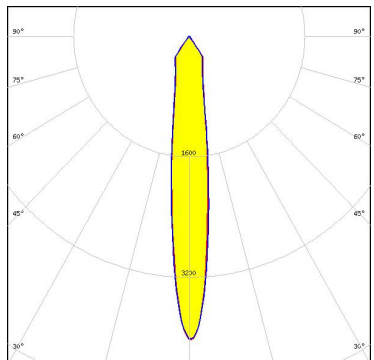
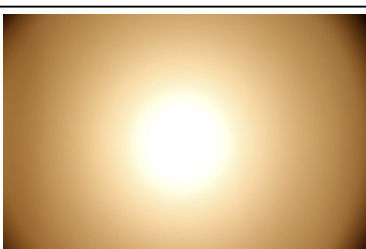
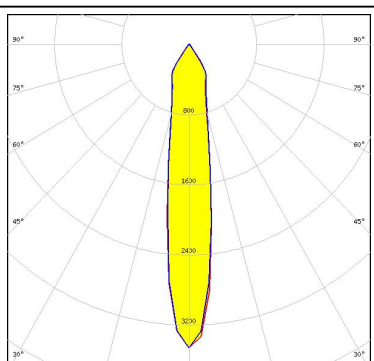
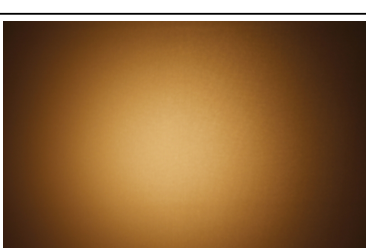
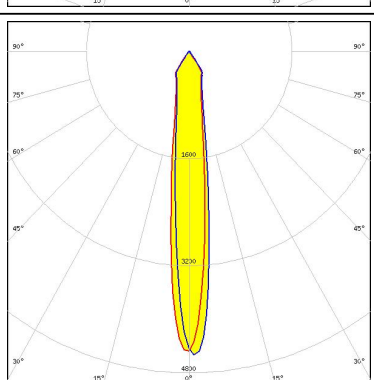
LED COB L-Type (LES 11)
 FWHM 15.0°
 Efficiency 83 %
 Peak intensity 3.900 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 438 Typ L1



LED COB L-Type (LES 9)
 FWHM 13.0°
 Efficiency 85 %
 Peak intensity 4.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 438 Typ L1



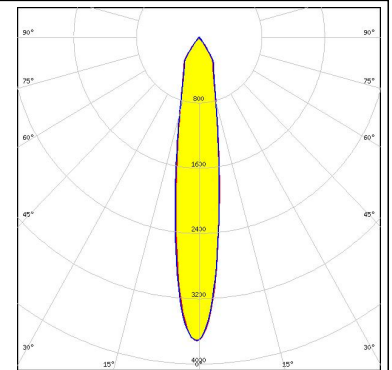
PHOTOMETRIC DATA (MEASURED):

<p>NICHIA</p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM 17.0°</p> <p>Efficiency 78 %</p> <p>Peak intensity 3.000 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>NICHIA</p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM 14.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 4.000 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>OSRAM</p> <p>LED PrevaLED Core AC (LEP-2000)</p> <p>FWHM 17.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 3.470 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>OSRAM</p> <p>LED PrevaLED Core AC (LEP-800)</p> <p>FWHM 13.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 4.560 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

PHOTOMETRIC DATA (MEASURED):

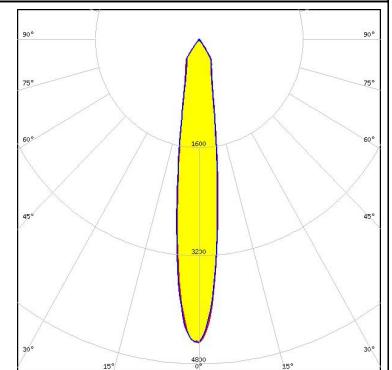
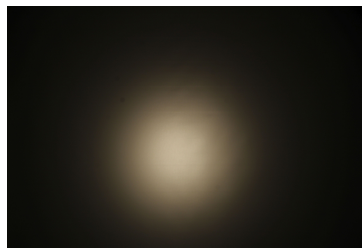
OSRAM

LED PrevaLED Core G7 L15 H1
 FWHM 17.0°
 Efficiency 85 %
 Peak intensity 3.700 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16685_CLAMP-PRV-A
 F13671_ANGE-RZ-LENS



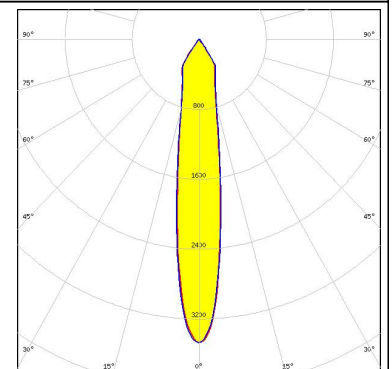
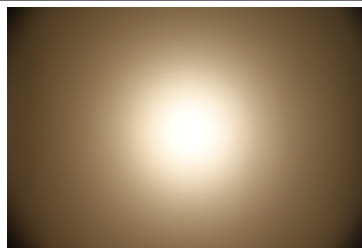
OSRAM

LED PrevaLED Core G7 L15 H1
 FWHM 16.0°
 Efficiency 89 %
 Peak intensity 4.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16685_CLAMP-PRV-A



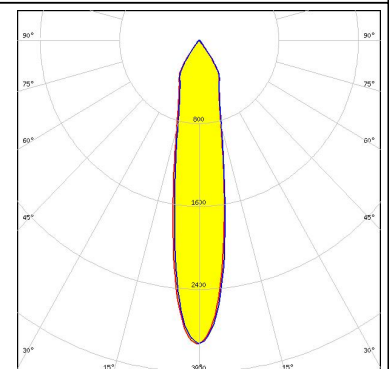
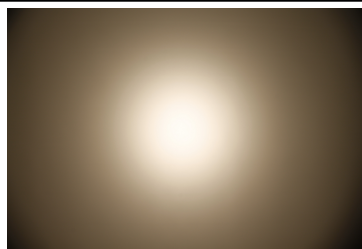
OSRAM

LED PrevaLED Core Z3 LES19
 FWHM 17.0°
 Efficiency 85 %
 Peak intensity 3.470 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



OSRAM

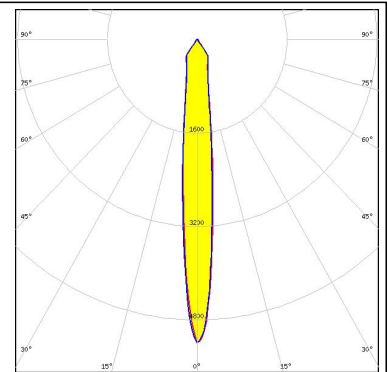
LED PrevaLED Core Z3 LES23
 FWHM 20.0°
 Efficiency 85 %
 Peak intensity 2.930 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



PHOTOMETRIC DATA (MEASURED):

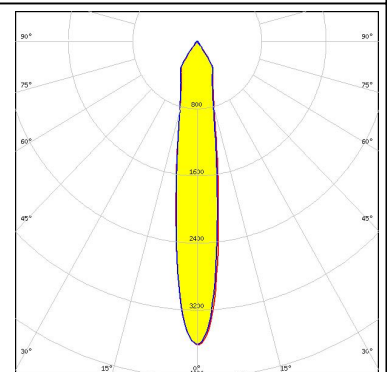
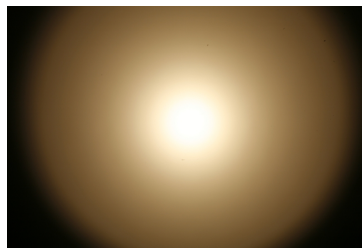
OSRAM

LED PrevaLED Core Z3 LES9
 FWHM 12.0°
 Efficiency 85 %
 Peak intensity 5.190 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



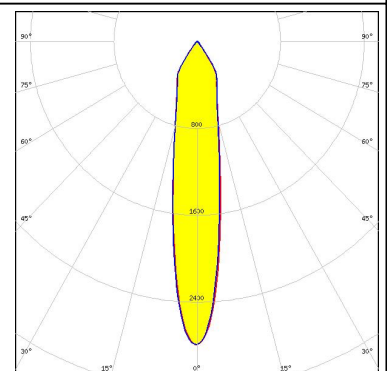
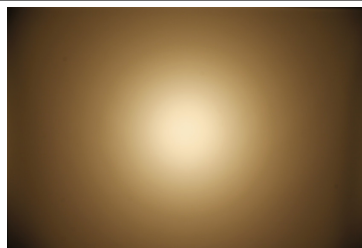
OSRAM

LED PrevaLED Core Z4 LES19
 FWHM 16.0°
 Efficiency 85 %
 Peak intensity 3.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



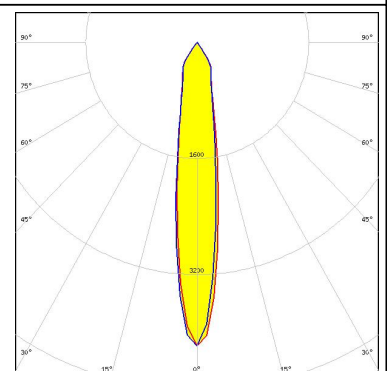
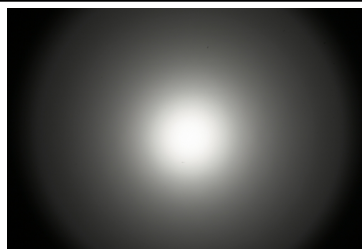
OSRAM

LED PrevaLED Core Z4 LES19
 FWHM 19.0°
 Efficiency 80 %
 Peak intensity 2.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



OSRAM

Opto Semiconductors
 LED Soleriq S13
 FWHM 15.0°
 Efficiency 86 %
 Peak intensity 4.200 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1

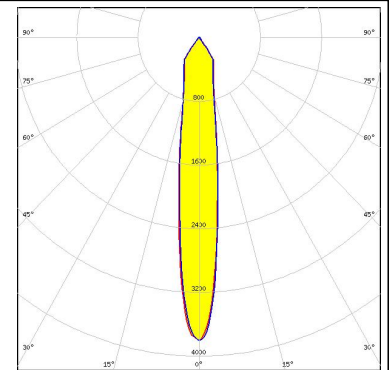
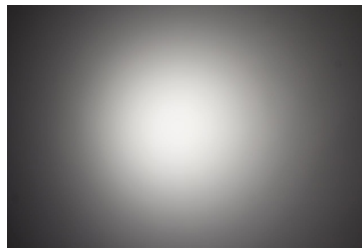


PHOTOMETRIC DATA (MEASURED):

OSRAM

Opto Semiconductors

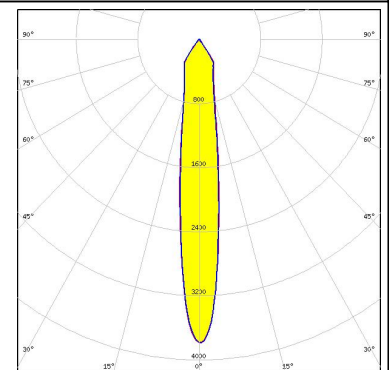
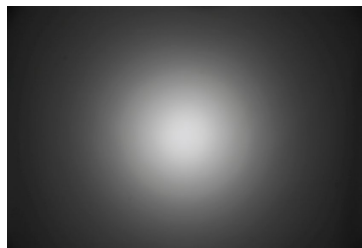
LED Soleriq S13
 FWHM 15.0°
 Efficiency 83 %
 Peak intensity 3.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 437 Typ L1



OSRAM

Opto Semiconductors

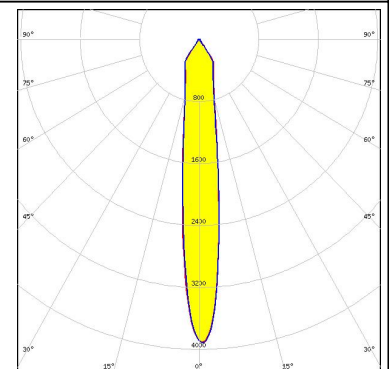
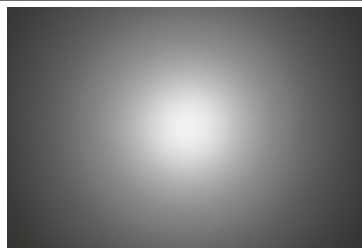
LED Soleriq S13 Gen2
 FWHM 15.0°
 Efficiency 82 %
 Peak intensity 3.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



OSRAM

Opto Semiconductors

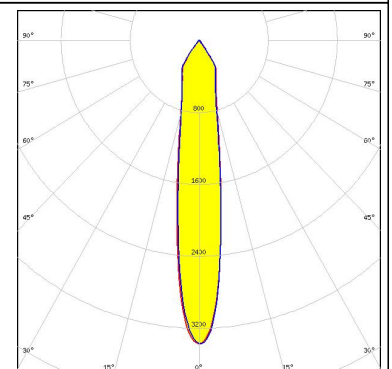
LED Soleriq S13 Gen2
 FWHM 14.0°
 Efficiency 82 %
 Peak intensity 3.900 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



OSRAM

Opto Semiconductors

LED Soleriq S19
 FWHM 17.0°
 Efficiency 83 %
 Peak intensity 3.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 462 Typ L3



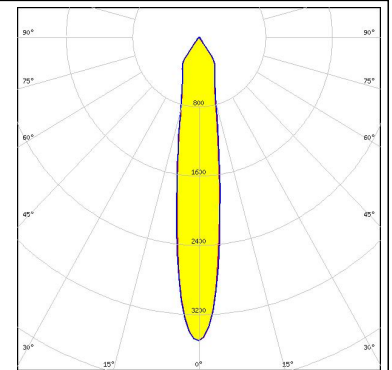
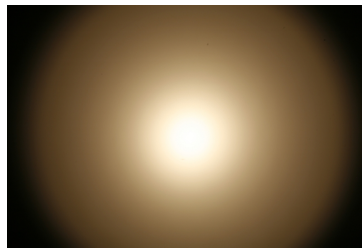
PHOTOMETRIC DATA (MEASURED):

OSRAM
Opto Semiconductors

LED Soleriq S19
FWHM 17.0°
Efficiency 86 %
Peak intensity 3.510 cd/lm
LEDs/each optic 1
Light colour White

Required components:

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



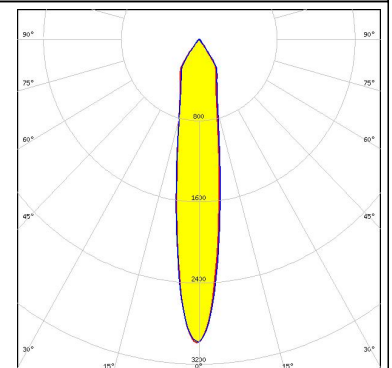
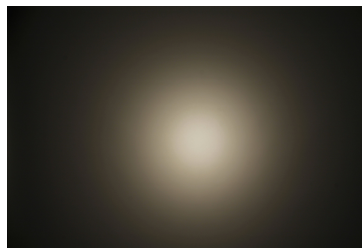
PHILIPS

LED Fortimo SLM 1208 L15 G6 Standard
FWHM 17.0°
Efficiency 78 %
Peak intensity 3.000 cd/lm
LEDs/each optic 1
Light colour White

Required components:

F13671_ANGE-RZ-LENS

TE: OPTIC CLIP Z50 TYPE1 2213194-1

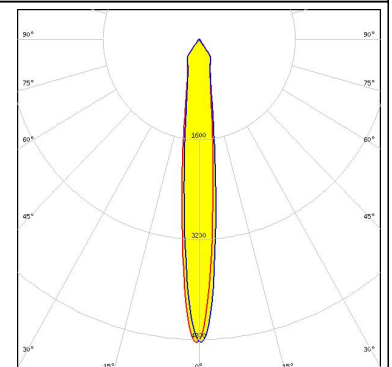
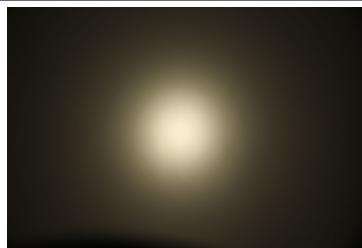


PHILIPS

LED Fortimo SLM L09 + SLM holder
FWHM 13.0°
Efficiency 84 %
Peak intensity 4.870 cd/lm
LEDs/each optic 1
Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1

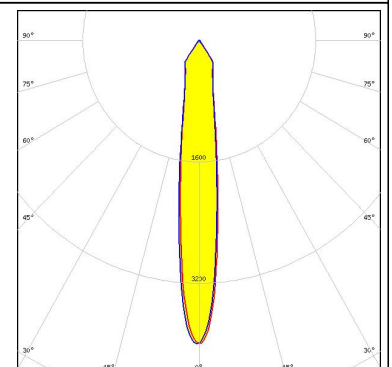
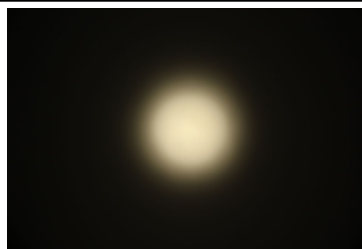


PHILIPS

LED Fortimo SLM L13 + SLM holder
FWHM 15.0°
Efficiency 84 %
Peak intensity 4.000 cd/lm
LEDs/each optic 1
Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1



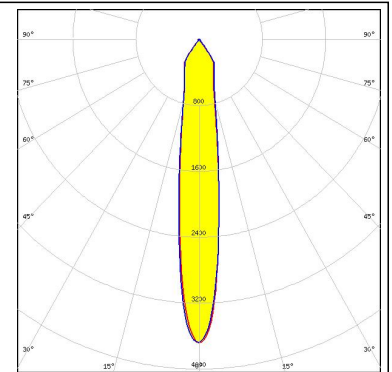
PHOTOMETRIC DATA (MEASURED):

PHILIPS

LED Fortimo SLM L13 CoB
 FWHM 16.0°
 Efficiency 81 %
 Peak intensity 3.700 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

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



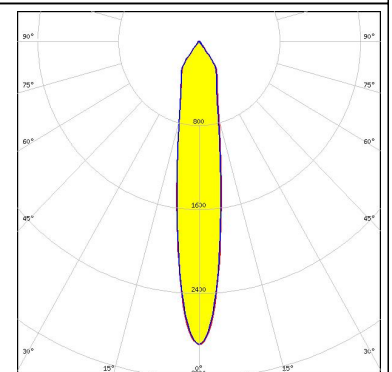
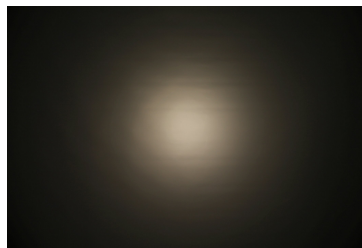
PHILIPS

LED Fortimo SLM L13 CoB
 FWHM 17.0°
 Efficiency 76 %
 Peak intensity 2.900 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

F13671_ANGE-RZ-LENS

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

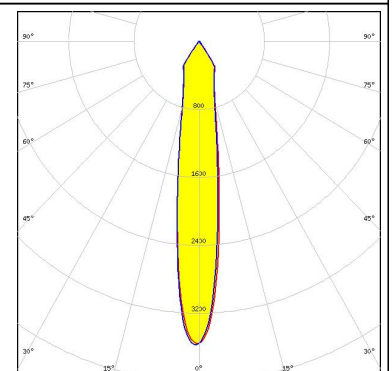
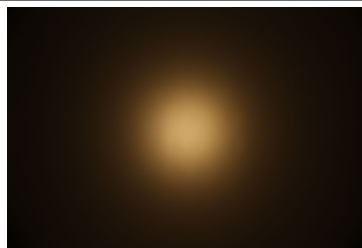


PHILIPS

LED Fortimo SLM L15 + SLM holder
 FWHM 16.0°
 Efficiency 82 %
 Peak intensity 3.580 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1



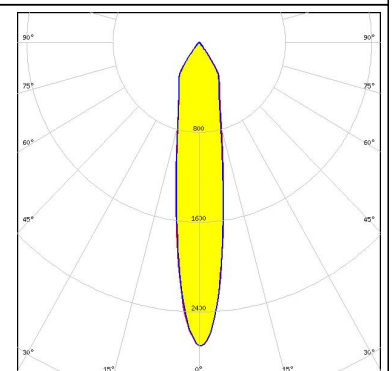
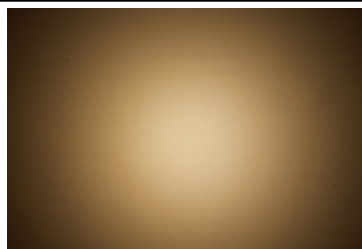
PHILIPS

LED Fortimo SLM L15 + SLM holder
 FWHM 19.0°
 Efficiency 78 %
 Peak intensity 2.700 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

F13671_ANGE-RZ-LENS

TE: OPTIC CLIP Z50 TYPE1 2213194-1



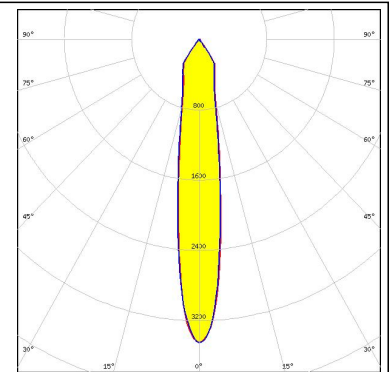
PHOTOMETRIC DATA (MEASURED):

PHILIPS

LED Fortimo SLM L15 CoB
 FWHM 17.0°
 Efficiency 81 %
 Peak intensity 3.400 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

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



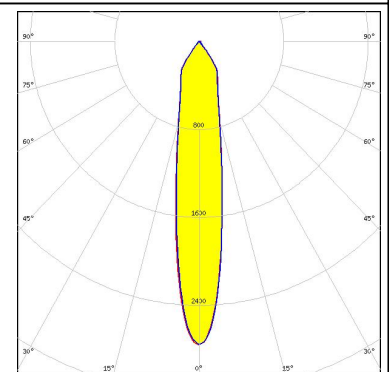
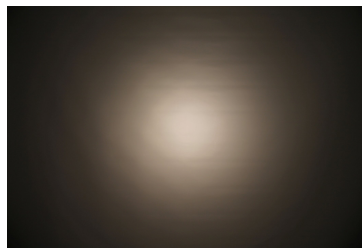
PHILIPS

LED Fortimo SLM L15 CoB
 FWHM 18.0°
 Efficiency 75 %
 Peak intensity 2.800 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

F13671_ANGE-RZ-LENS

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

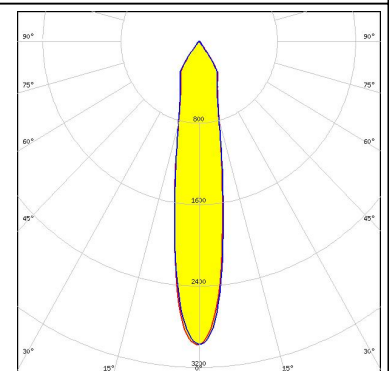
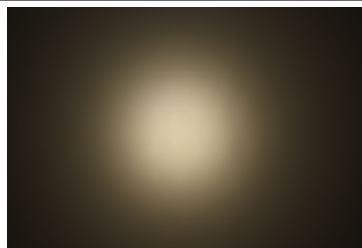


PHILIPS

LED Fortimo SLM L19 + SLM holder
 FWHM 19.0°
 Efficiency 81 %
 Peak intensity 2.980 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1

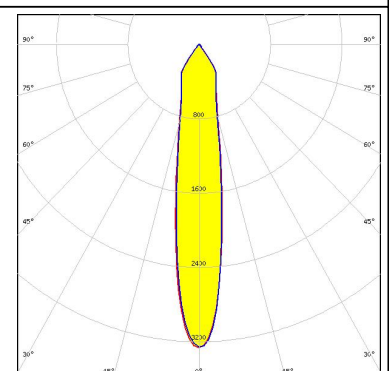
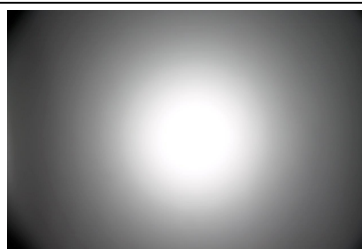


SAMSUNG

LED LC026B / 033B / 040B
 FWHM 18.0°
 Efficiency 85 %
 Peak intensity 3.300 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

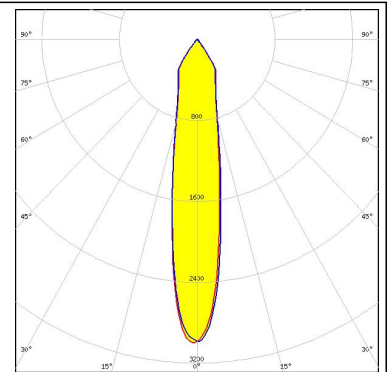
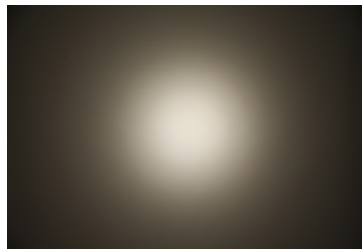
TE: 2213258-2 + OPTIC CLIP Z50 TYPE1 2213194-1



PHOTOMETRIC DATA (MEASURED):

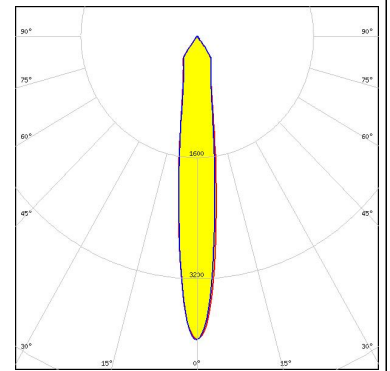
SAMSUNG

LED LC026B / 033B / 040B
 FWHM 19.0°
 Efficiency 83 %
 Peak intensity 3.000 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 450 Typ L2



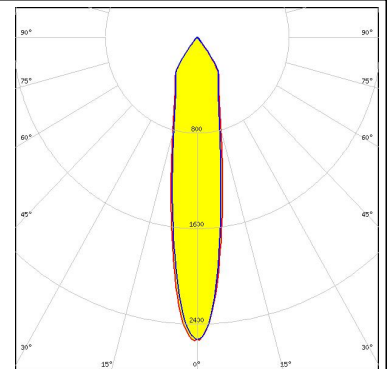
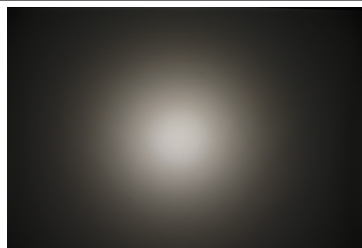
SAMSUNG

LED LC040C
 FWHM 15.0°
 Efficiency 83 %
 Peak intensity 4.000 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



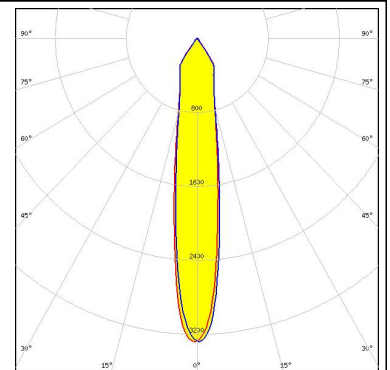
SEOUL SEMICONDUCTOR

LED AC Zhaga COB
 FWHM 19.0°
 Efficiency 79 %
 Peak intensity 2.500 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 Optosource: SEHSMJD-A



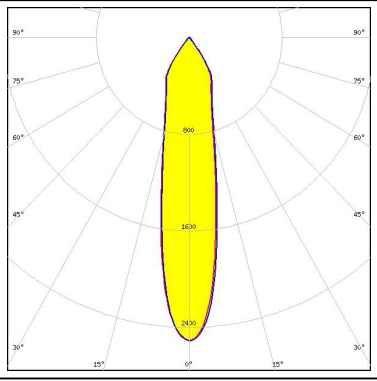

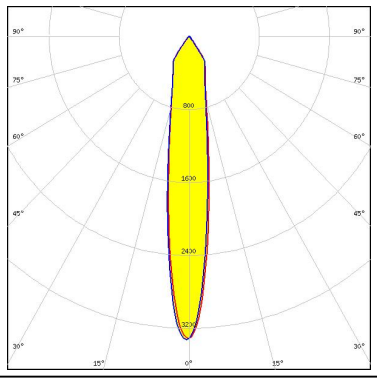

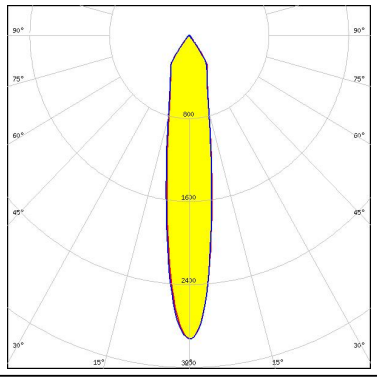

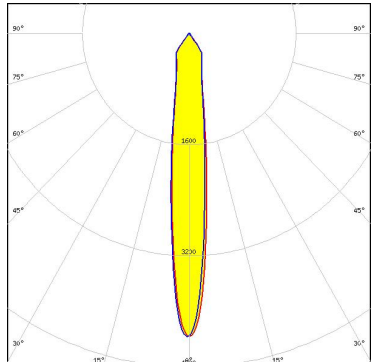


SEOUL SEMICONDUCTOR

LED MJT COB LES 14.5
 FWHM 17.0°
 Efficiency 82 %
 Peak intensity 3.300 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



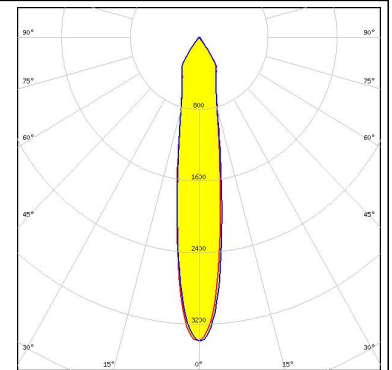
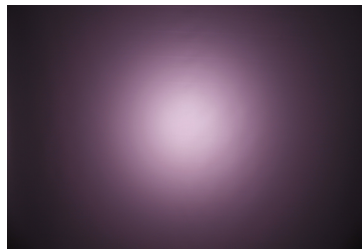
PHOTOMETRIC DATA (MEASURED):

<p> SEUL SEMICONDUCTOR</p> <p>LED MJT COB LES 22 FWHM 22.0° Efficiency 82 % Peak intensity 2.500 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 Bender Wirth: 431 Typ L3</p>		
<p>TRIDONIC</p> <p>LED SLE G1 11mm 1000lm 927 Sunset R EXC FWHM 16.0° Efficiency 80 % Peak intensity 3.300 cd/lm LEDs/each optic 1 Light colour White Required components: F13671_ANGE-RZ-LENS TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>TRIDONIC</p> <p>LED SLE G1 15mm 2000lm 927 Sunset R EXC FWHM 18.0° Efficiency 79 % Peak intensity 2.900 cd/lm LEDs/each optic 1 Light colour White Required components: F13671_ANGE-RZ-LENS TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>TRIDONIC</p> <p>LED SLE G5 LES11 FWHM 14.0° Efficiency 84 % Peak intensity 4.400 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>		

PHOTOMETRIC DATA (MEASURED):

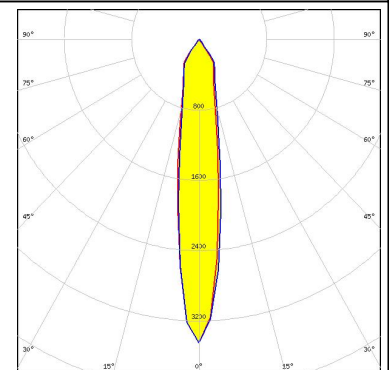
TRIDONIC

LED SLE G6 LES19 H
 FWHM 17.0°
 Efficiency 84 %
 Peak intensity 3.400 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



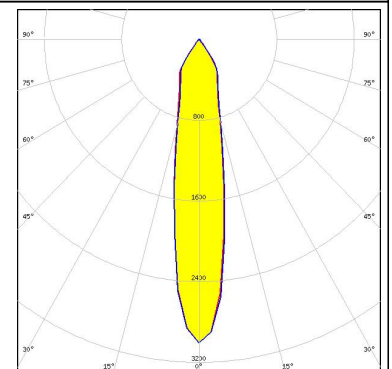
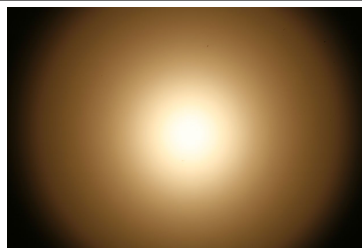
VS LIGHTING SOLUTIONS

LED WU-M-461
 FWHM 17.0°
 Efficiency 83 %
 Peak intensity 3.450 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



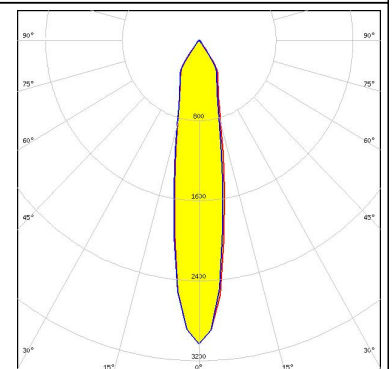
VS LIGHTING SOLUTIONS

LED WU-M-462
 FWHM 20.0°
 Efficiency 85 %
 Peak intensity 3.000 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1

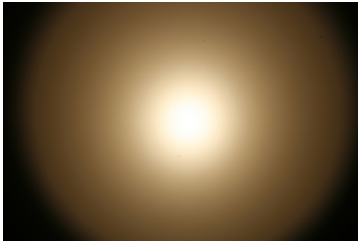
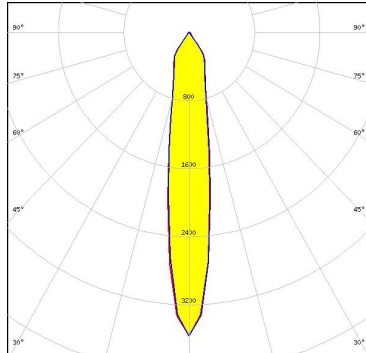
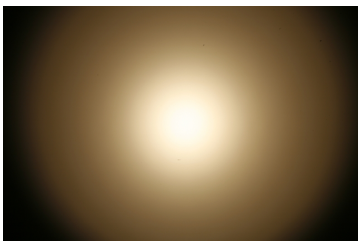
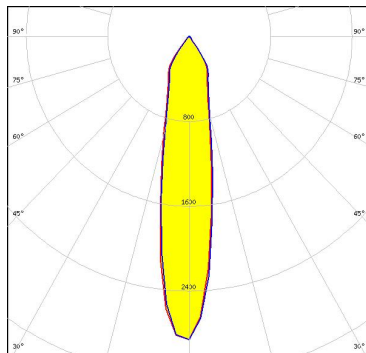
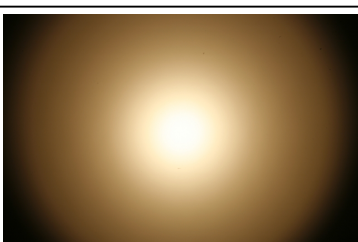
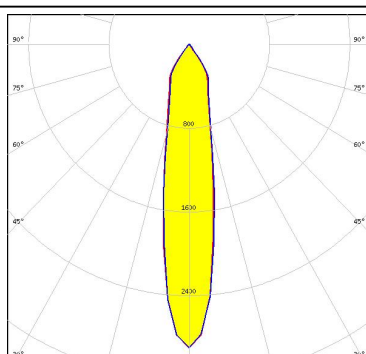


VS LIGHTING SOLUTIONS

LED WU-M-464
 FWHM 20.0°
 Efficiency 85 %
 Peak intensity 3.000 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



PHOTOMETRIC DATA (MEASURED):

<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-484 FWHM 17.0° Efficiency 85 % Peak intensity 3.600 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-485 FWHM 20.0° Efficiency 85 % Peak intensity 2.890 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 20.0° Efficiency 84 % Peak intensity 2.900 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 15.0° Efficiency 90 % Peak intensity 7.030 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 14.5° Efficiency 91 % Peak intensity 7.530 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 17.0° Efficiency 93 % Peak intensity 6.339 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 17.0° Efficiency 88 % Peak intensity 5.900 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
FWHM 17.0°
Efficiency 83 %
Peak intensity 3.400 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 433 Typ L1

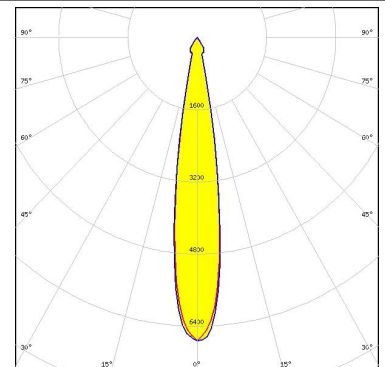


LED CXM-9
FWHM 14.0°
Efficiency 84 %
Peak intensity 4.300 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 434 Typ L1



Opto Semiconductors


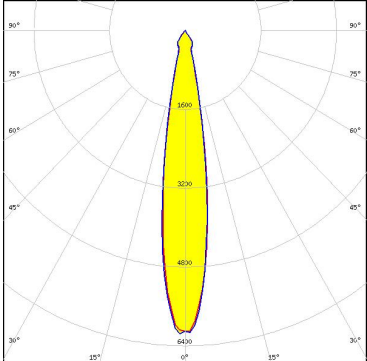
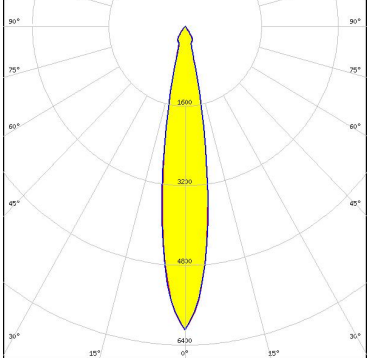
LED Soleriq S15
FWHM 16.0°
Efficiency 90 %
Peak intensity 6.750 cd/lm
LEDs/each optic 1
Light colour White
Required components:
TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



SEOUL SEMICONDUCTOR

LED ZC12/18
FWHM 17.0°
Efficiency 83 %
Peak intensity 3.400 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	14.0°
Efficiency	84 %
Peak intensity	4.300 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	C13658_CLAMP-VERO13-18
	Bender Wirth: 434 Typ L1
TRIDONIC	
LED	SLE G6 LES15
FWHM	17.0°
Efficiency	89 %
Peak intensity	6.200 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1
	
TRIDONIC	
LED	SLE G6 LES17
FWHM	18.0°
Efficiency	91 %
Peak intensity	6.100 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1
	

GENERAL INFORMATION:

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

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

MATERIALS:

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

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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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