

ANGELA-M

~30° medium beam

SPECIFICATION:

Dimensions	Ø 119.5 mm
Height	74.3 mm
Fastening	socket
ROHS compliant	yes ⓘ

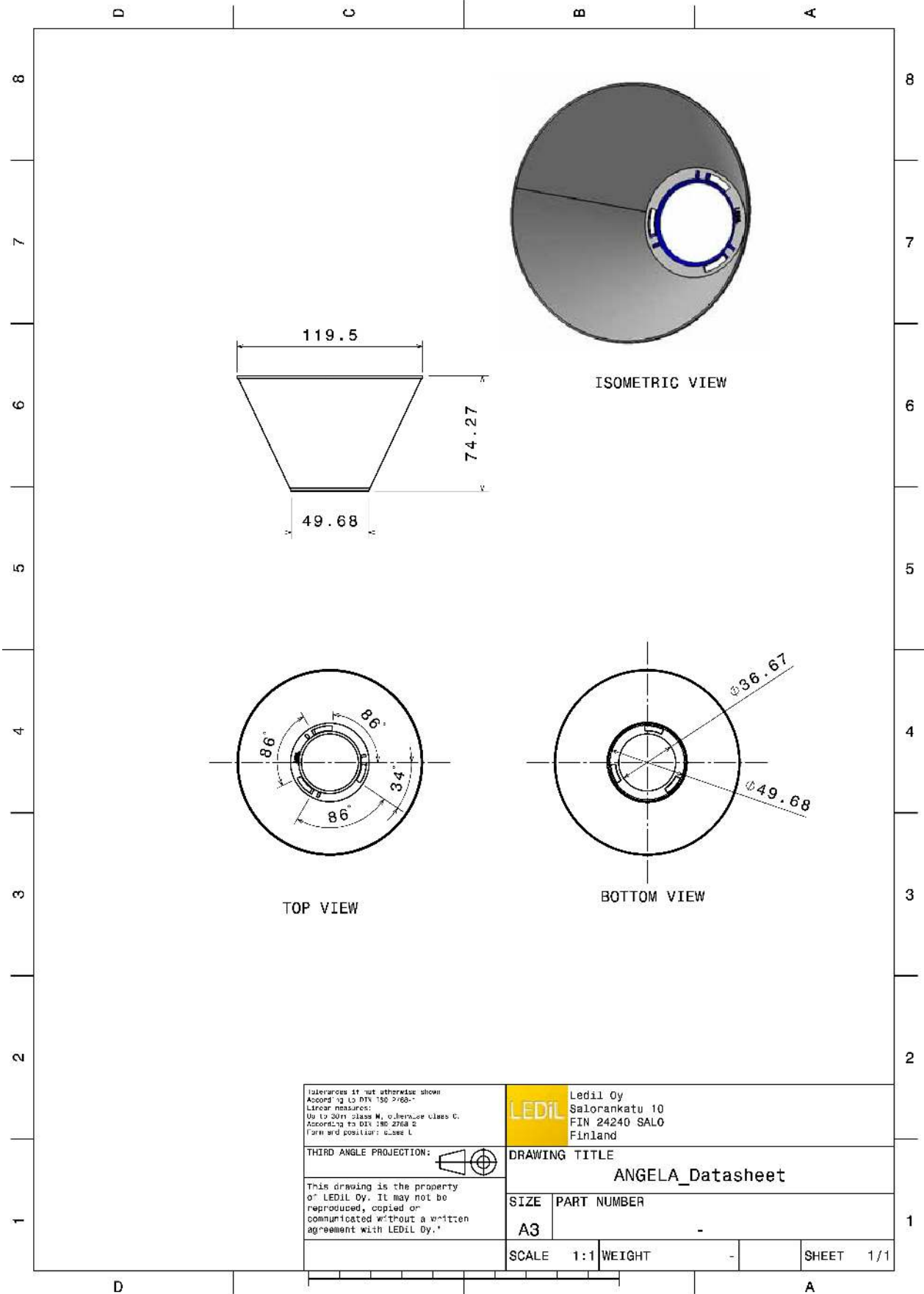
MATERIALS:

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




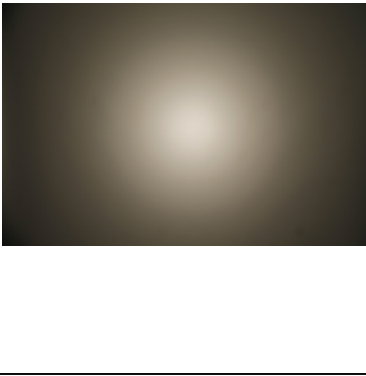
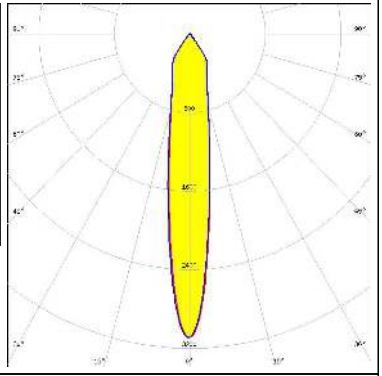


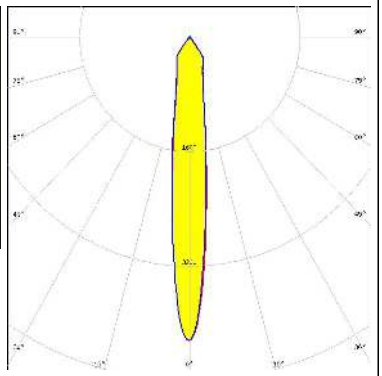


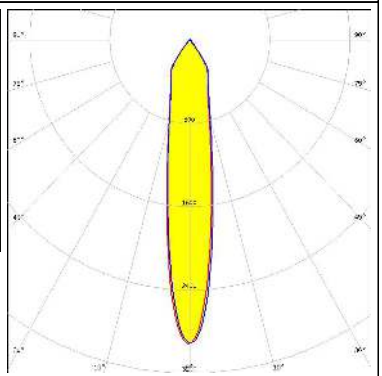


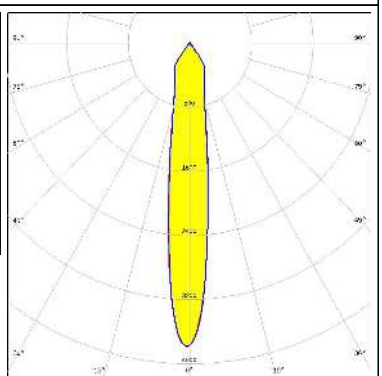
ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F13380_ANGELA-M » Box size: 398 x 298 x 265 mm	180	90	45	9.3


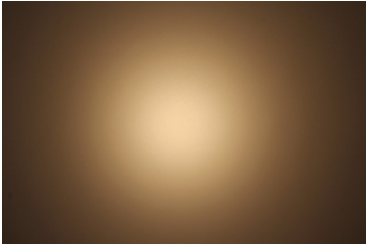


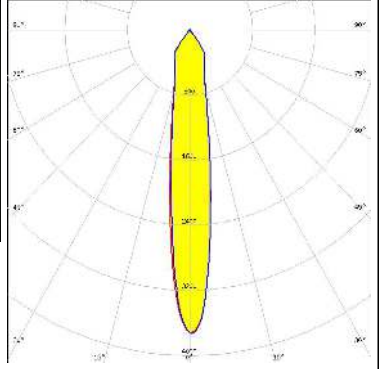


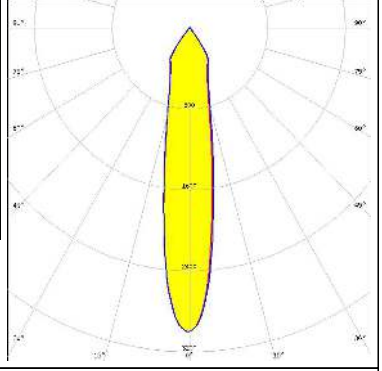

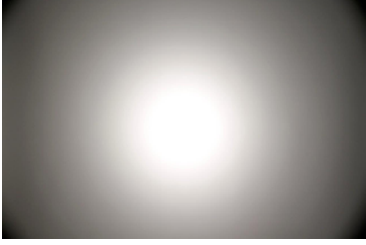
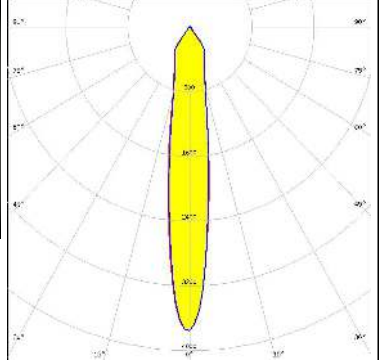


See also our general installation guide: www.ledil.com/installation_guide


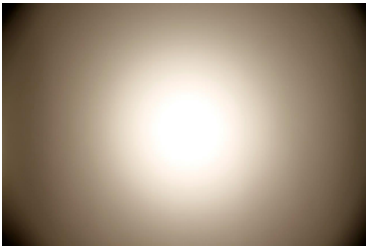
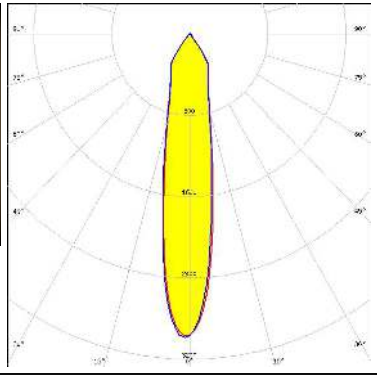

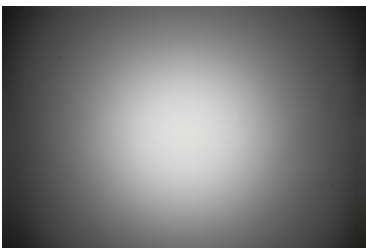
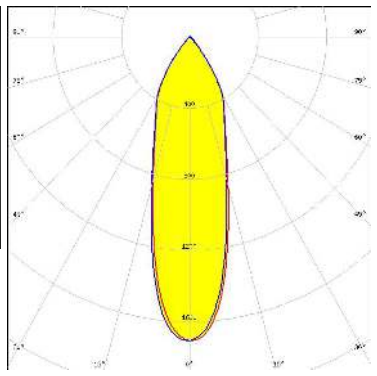

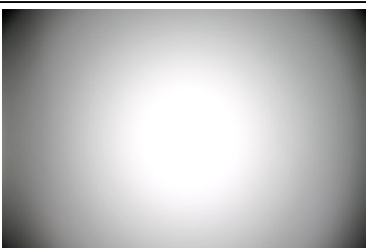
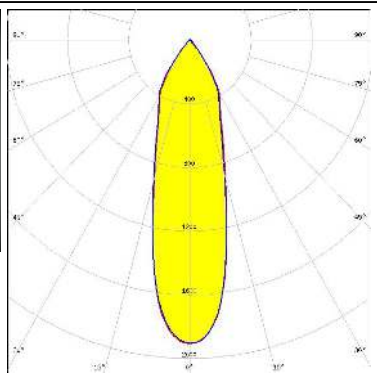

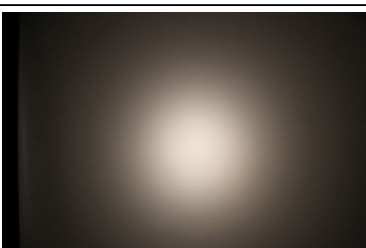
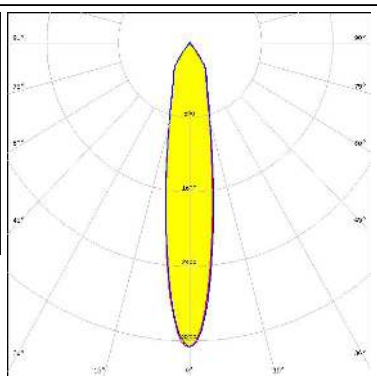
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED V10 Gen7 FWHM / FWTM 16.0° / 68.0° Efficiency 78 % Peak intensity 3.1 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></p> <p>LED V10 Gen7 FWHM / FWTM 14.0° / 53.0° Efficiency 83 % Peak intensity 4.2 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>		
<p></p> <p>LED V13 Gen7 FWHM / FWTM 18.0° / 68.0° Efficiency 80 % Peak intensity 2.9 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p></p> <p>LED V13 Gen7 FWHM / FWTM 16.0° / 61.0° Efficiency 84 % Peak intensity 3.8 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		



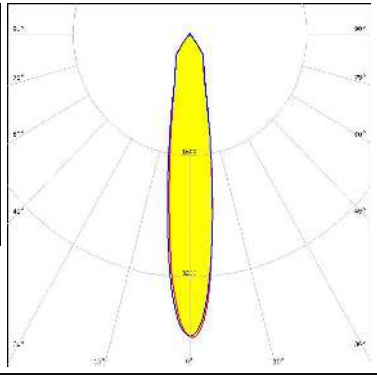


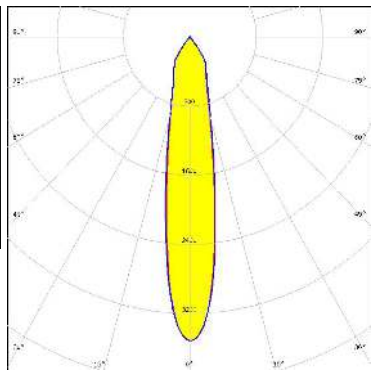


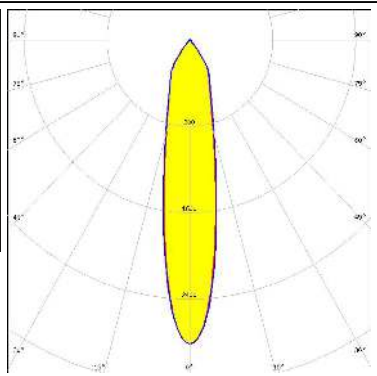


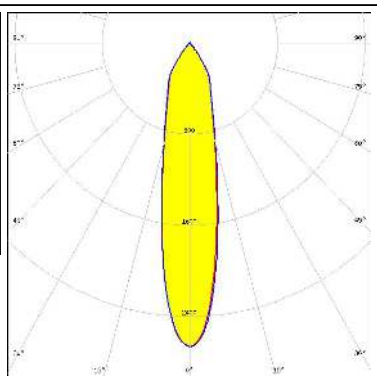
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED V15 Gen6 FWHM / FWTM 17.0° / 66.0° Efficiency 92 % Peak intensity 3.9 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 456 Typ L2</p>		
<p></p> <p>LED Vero SE 13 FWHM / FWTM 16.0° / 62.0° Efficiency 84 % Peak intensity 3.7 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		
<p></p> <p>LED Vero SE 18 FWHM / FWTM 19.0° / 69.0° Efficiency 84 % Peak intensity 3 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		
<p></p> <p>LED VERO13 FWHM / FWTM 16.0° / 64.0° Efficiency 87 % Peak intensity 3.6 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18</p>		



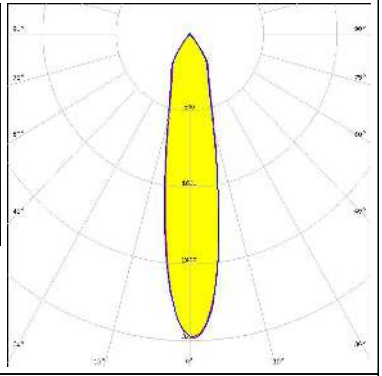

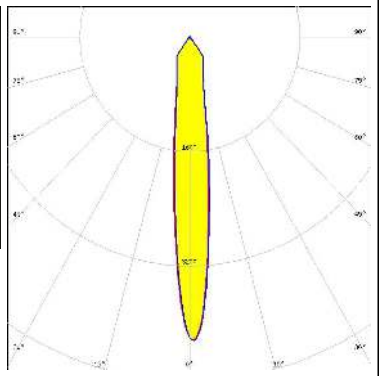

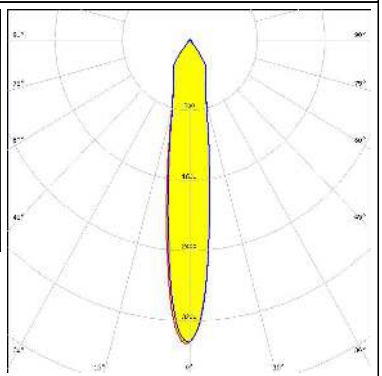
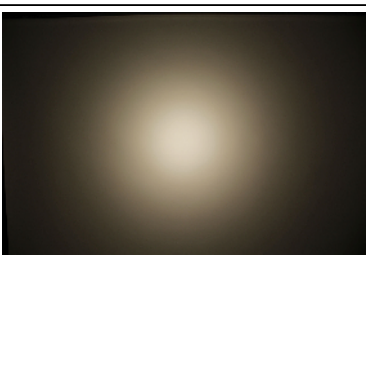
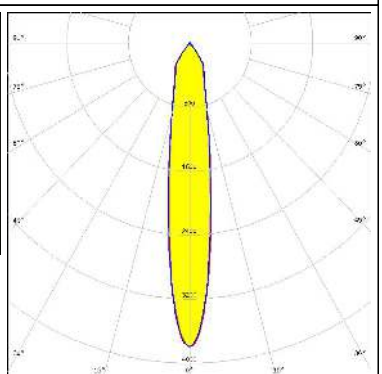
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED VERO18 FWHM / FWTM 19.0° / 69.0° Efficiency 85 % Peak intensity 3 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18</p>		
<p></p> <p>LED VERO29 FWHM / FWTM 30.0° / 74.0° Efficiency 79 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS</p>		
<p></p> <p>LED VERO29 FWHM / FWTM 29.0° / 73.0° Efficiency 85 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29</p>		
<p></p> <p>LED Vesta TW 15mm DP FWHM / FWTM 19.0° / 64.0° Efficiency 82 % Peak intensity 3.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 482 Typ L2</p>		

OPTICAL RESULTS (MEASURED):

<p></p> <p>LED Vesta TW 15mm DP FWHM / FWTM 18.0° / 57.0° Efficiency 88 % Peak intensity 4 cd/lm LEDs/each optic 1 Light colour Tunable White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 482 Typ L2</p>		
<p></p> <p>LED Vesta TW 18mm (31W) DP FWHM / FWTM 19.0° / 64.0° Efficiency 88 % Peak intensity 3.5 cd/lm LEDs/each optic 1 Light colour Tunable White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 483 Typ L3</p>		
<p></p> <p>LED Vesta TW 18mm (31W) DP FWHM / FWTM 21.0° / 67.0° Efficiency 82 % Peak intensity 2.8 cd/lm LEDs/each optic 1 Light colour Tunable White</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 483 Typ L3</p>		
<p></p> <p>LED Vesta TW 22mm DP FWHM / FWTM 22.0° / 68.0° Efficiency 83 % Peak intensity 2.7 cd/lm LEDs/each optic 1 Light colour Tunable White</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 494 Typ L3</p>		

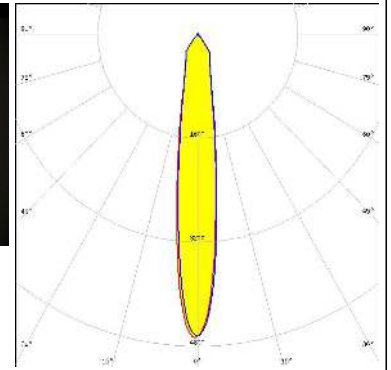
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED Vesta TW 22mm DP FWHM / FWTM 21.0° / 66.0° Efficiency 87 % Peak intensity 3.2 cd/m LEDs/each optic 1 Light colour Tunable White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 494 Typ L3</p>		
<p>CITIZEN</p> <p>LED CLL02x/CLU02x (LES10) FWHM / FWTM 14.0° / 53.0° Efficiency 84 % Peak intensity 4.3 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>		
<p>CITIZEN</p> <p>LED CLL03x/CLU03x FWHM / FWTM 17.0° / 66.0° Efficiency 88 % Peak intensity 3.4 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 433 Typ L1</p>		
<p>CITIZEN</p> <p>LED CLL03x/CLU03x FWHM / FWTM 17.0° / 58.0° Efficiency 85 % Peak intensity 3.8 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C16791_CLAMP-Z45-A F13671_ANGE-RZ-LENS TE Connectivity: 2325807-3</p>		

OPTICAL RESULTS (MEASURED):

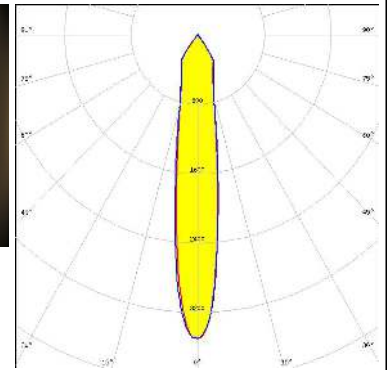
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 15.0° / 49.0°
 Efficiency 89 %
 Peak intensity 4.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16791_CLAMP-Z45-A
 TE Connectivity: 2325807-3



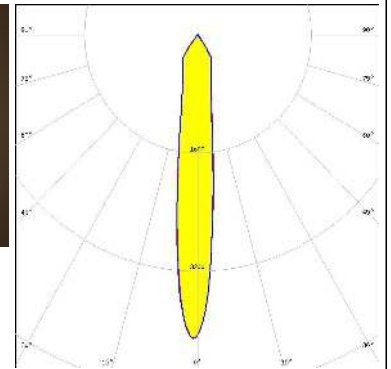
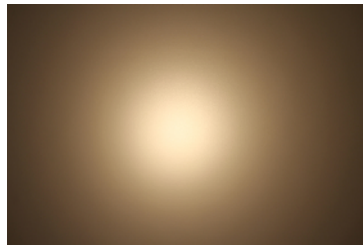
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 17.0° / 66.0°
 Efficiency 83 %
 Peak intensity 3.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



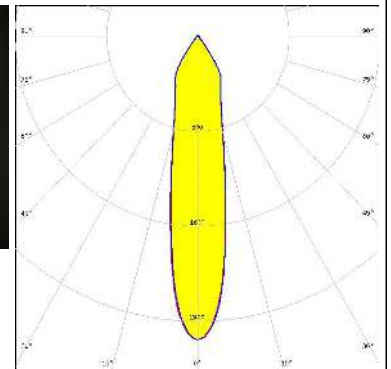
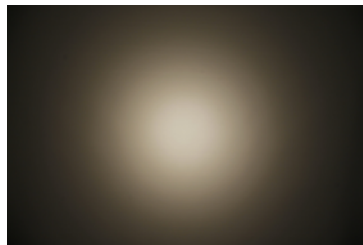
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 14.0° / 57.0°
 Efficiency 84 %
 Peak intensity 4.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



CITIZEN

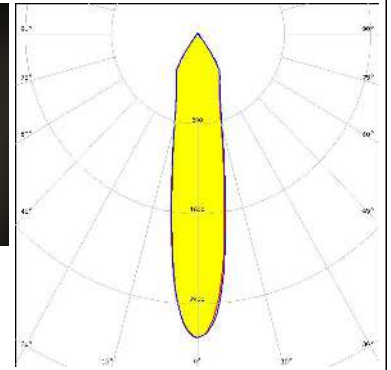
LED CLL04x/CLU04x
 FWHM / FWTM 21.0° / 69.0°
 Efficiency 83 %
 Peak intensity 2.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



OPTICAL RESULTS (MEASURED):

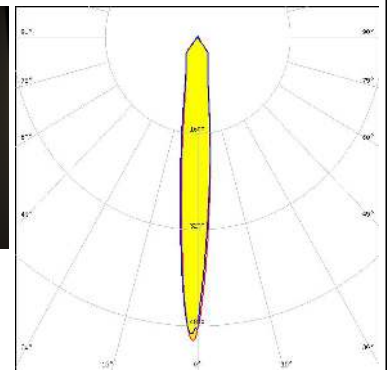
CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 21.0° / 68.0°
 Efficiency 84 %
 Peak intensity 2.7 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 431 Typ L3



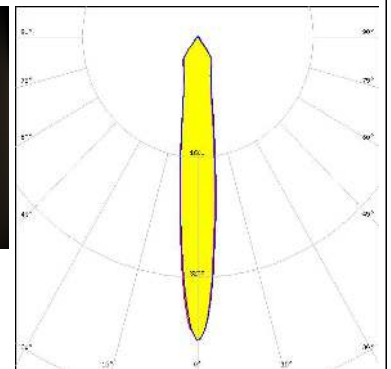
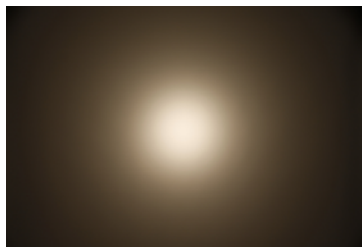
CITIZEN

LED CLU700/701/702/703
 FWHM / FWTM 12.0° / 44.0°
 Efficiency 83 %
 Peak intensity 5.2 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



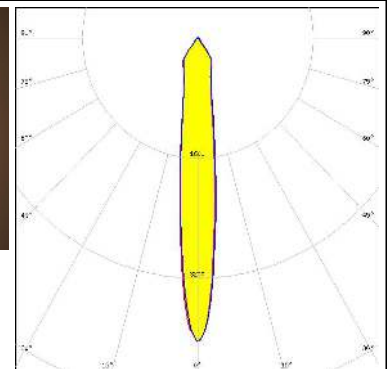
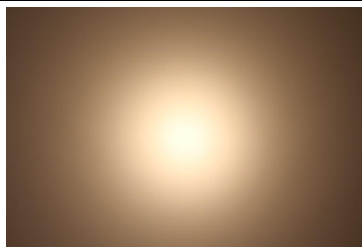
CITIZEN

LED CLU720/721/723
 FWHM / FWTM 12.0° / 53.0°
 Efficiency 87 %
 Peak intensity 4.4 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



CITIZEN

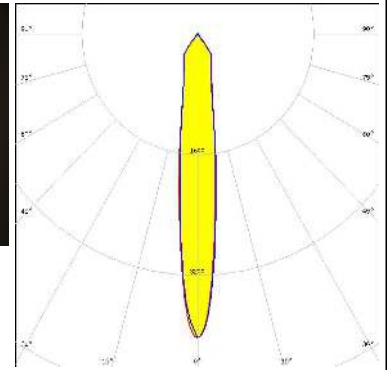
LED CLU720/721/723
 FWHM / FWTM 14.0° / 58.0°
 Efficiency 87 %
 Peak intensity 4 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



OPTICAL RESULTS (MEASURED):

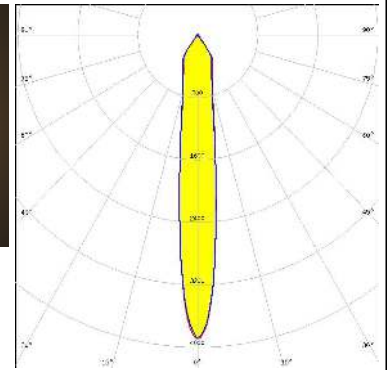
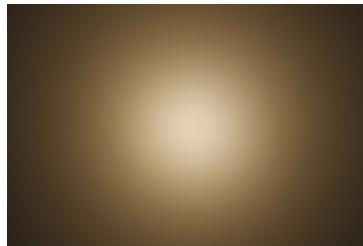
CITIZEN

LED CLU720/721/723
 FWHM / FWTM 14.0° / 56.0°
 Efficiency 83 %
 Peak intensity 4 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 433 Typ L1



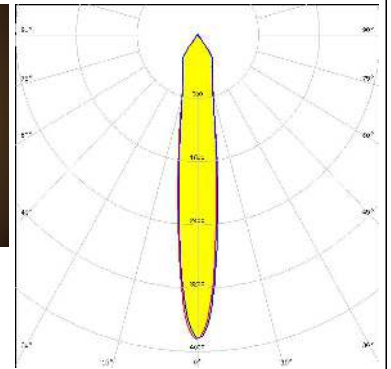
CITIZEN

LED CLU730/731/733
 FWHM / FWTM 14.0° / 59.0°
 Efficiency 83 %
 Peak intensity 3.9 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



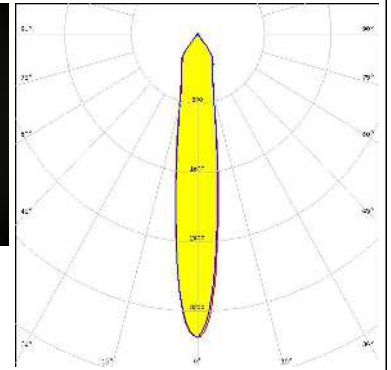
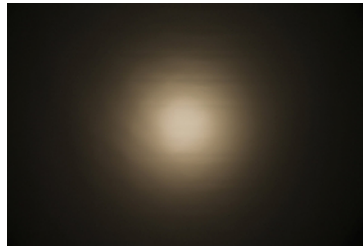
CITIZEN

LED CLU730/731/733
 FWHM / FWTM 15.0° / 60.0°
 Efficiency 84 %
 Peak intensity 3.8 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 471 Typ L3

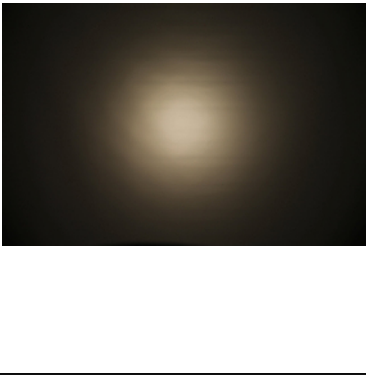
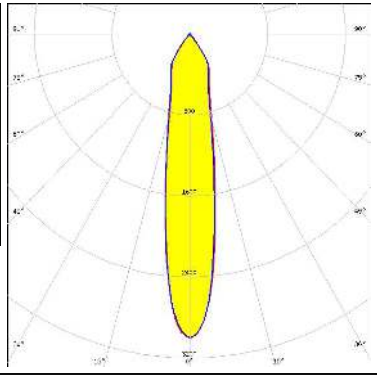
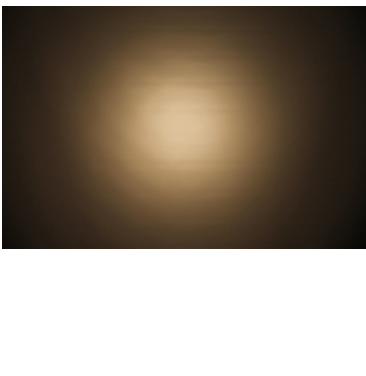
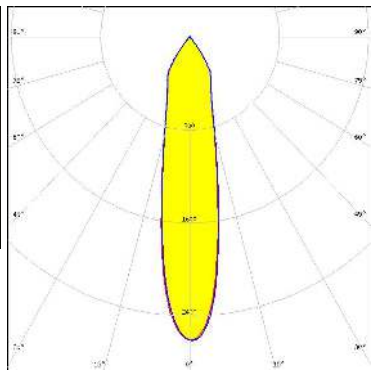
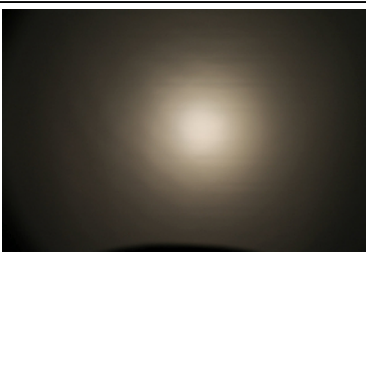
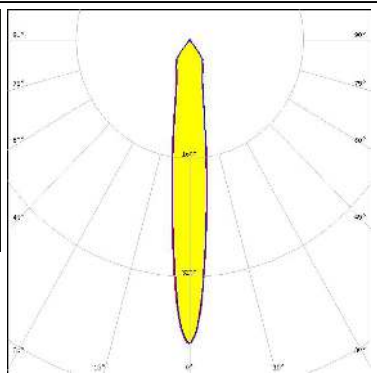

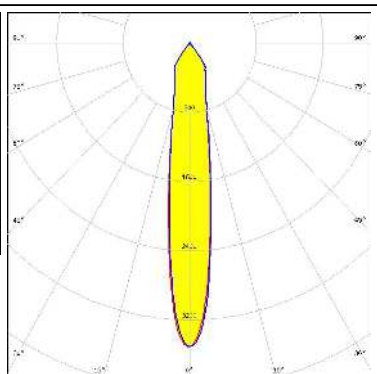


CREE LED


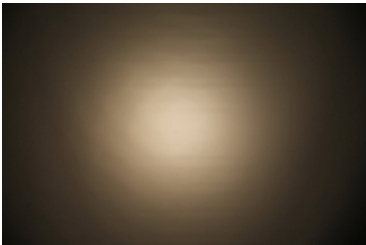
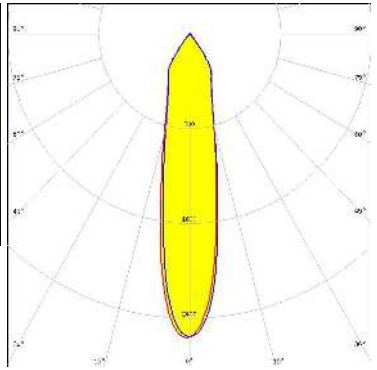

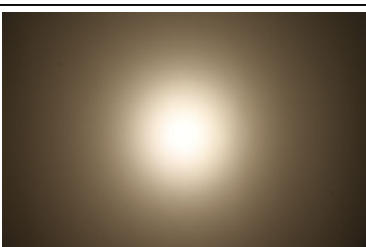
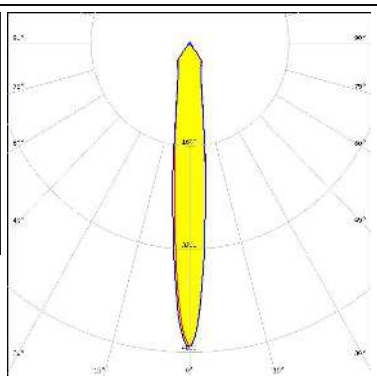


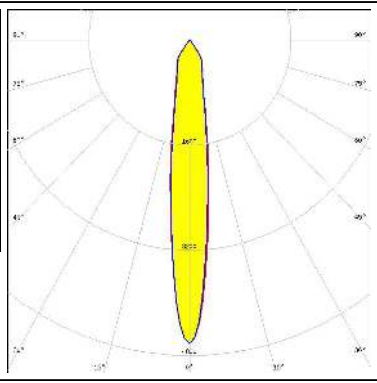


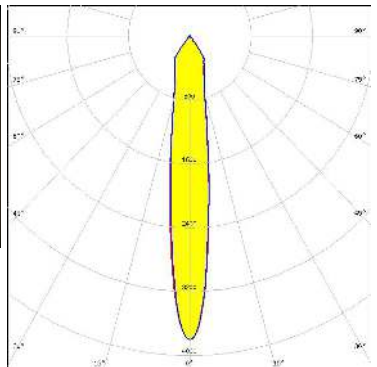
LED CMA1840
 FWHM / FWTM 17.0° / 64.0°
 Efficiency 82 %
 Peak intensity 3.5 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C14123_CLAMP-CXA15-18



OPTICAL RESULTS (MEASURED):

<p>CREE → LED</p> <p>LED CMA2550 FWHM / FWTM 19.0° / 68.0° Efficiency 82 % Peak intensity 3 cd/lm LEDs/each optic 1 Light colour White Required components: C14036_CLAMP_CXA25-30</p>		
<p>CREE → LED</p> <p>LED CMA3090 FWHM / FWTM 22.0° / 69.0° Efficiency 82 % Peak intensity 2.6 cd/lm LEDs/each optic 1 Light colour White Required components: C14036_CLAMP_CXA25-30</p>		
<p>CREE → LED</p> <p>LED CMT14xx FWHM / FWTM 14.0° / 54.0° Efficiency 81 % Peak intensity 4.2 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>		
<p>CREE → LED</p> <p>LED CMT19xx FWHM / FWTM 16.0° / 62.0° Efficiency 81 % Peak intensity 3.5 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 477 Typ L1</p>		

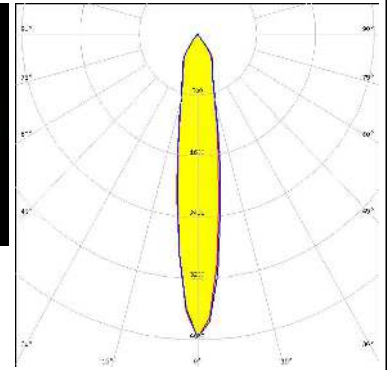
OPTICAL RESULTS (MEASURED):

<p>CREE  LED</p> <p>LED CMT28xx FWHM / FWTM 21.0° / 70.0° Efficiency 81 % Peak intensity 2.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 Bender Wirth: 471 Typ L3</p>		
<p>CREE  LED</p> <p>LED CXA/B 15xx FWHM / FWTM 13.0° / 47.0° Efficiency 84 % Peak intensity 4.7 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 441 Typ L1</p>		
<p>CREE  LED</p> <p>LED CXA/B 15xx FWHM / FWTM 15.0° / 51.0° Efficiency 85 % Peak intensity 4.6 cd/lm LEDs/each optic 1 Light colour White Required components: C14123_CLAMP-CXA15-18</p>		
<p>CREE  LED</p> <p>LED CXA/B 1816 & CXA/B 1820 & CXA 1850 FWHM / FWTM 15.0° / 60.0° Efficiency 83 % Peak intensity 3.8 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 437 Typ L1</p>		

OPTICAL RESULTS (MEASURED):

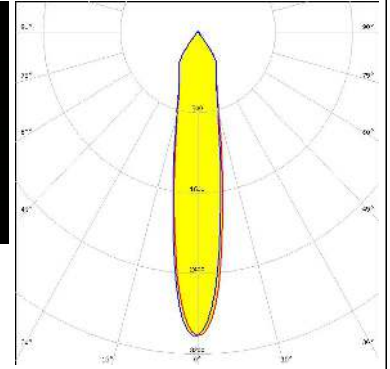
CREE LED

LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 17.0° / 59.0°
 Efficiency 85 %
 Peak intensity 4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14123_CLAMP-CXA15-18



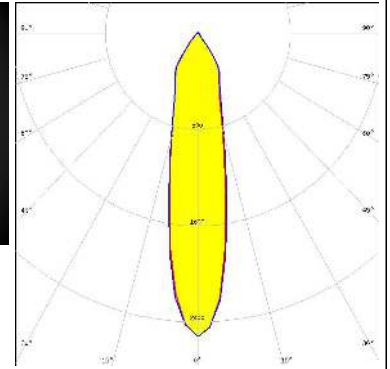
CREE LED

LED CXA/B 25xx
 FWHM / FWTM 19.0° / 69.0°
 Efficiency 85 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



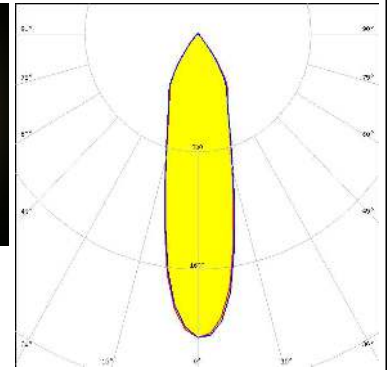
CREE LED

LED CXA/B 30xx
 FWHM / FWTM 22.0° / 70.0°
 Efficiency 84 %
 Peak intensity 2.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



CREE LED

LED CXA/B 3590
 FWHM / FWTM 27.0° / 73.0°
 Efficiency 85 %
 Peak intensity 2.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2303CR + 50-2300AN



OPTICAL RESULTS (MEASURED):

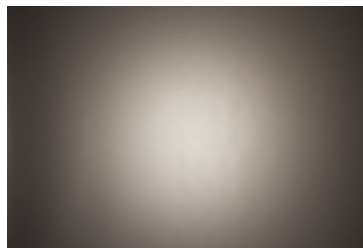
EVERLIGHT

LED CHI3030 19W
 FWHM / FWTM 21.0° / 71.0°
 Efficiency 83 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 468 Typ L3



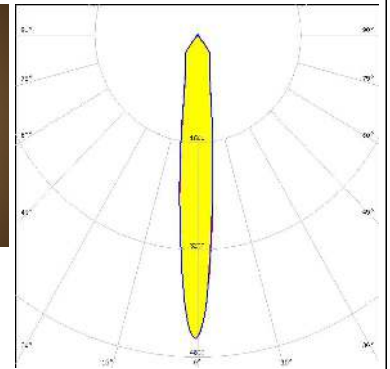
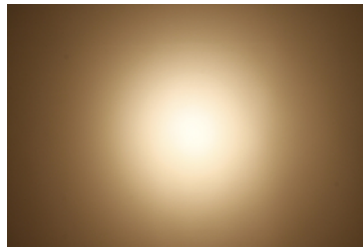
EVERLIGHT

LED CHI3030 29W
 FWHM / FWTM 26.0° / 73.0°
 Efficiency 83 %
 Peak intensity 2.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 468 Typ L3



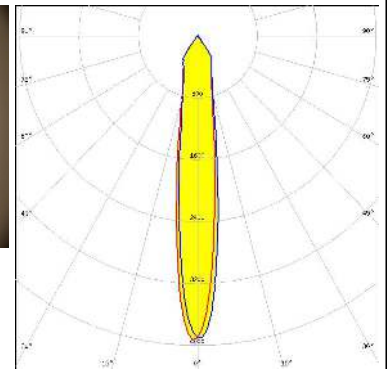
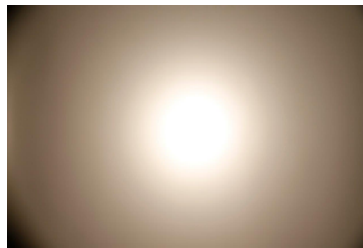
LUMILEDS

LED LUXEON CoB 1202/1203
 FWHM / FWTM 13.0° / 49.0°
 Efficiency 84 %
 Peak intensity 4.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 438 Typ L1


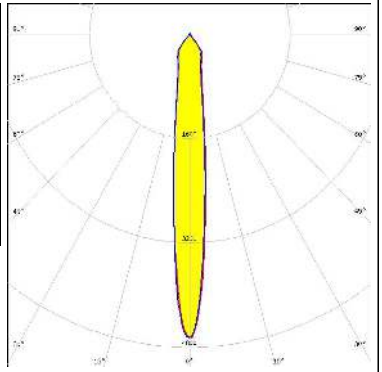

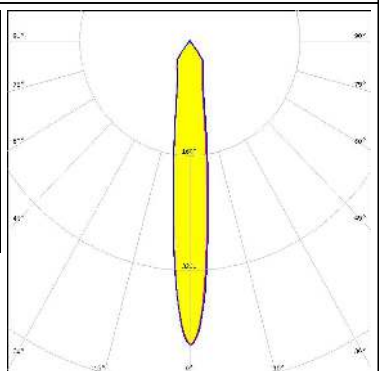

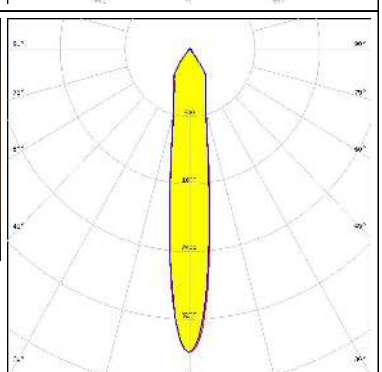
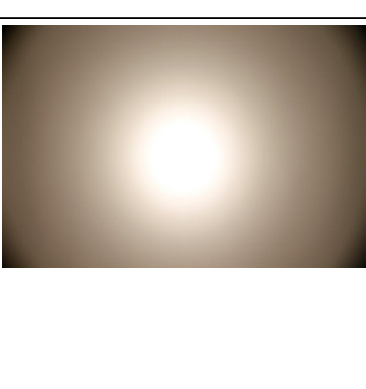
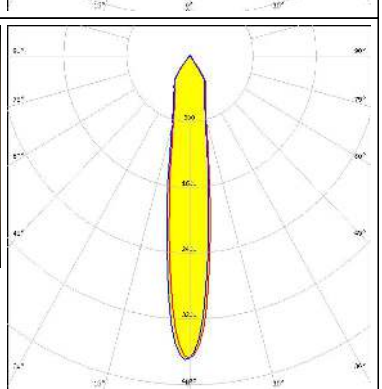


LUMILEDS

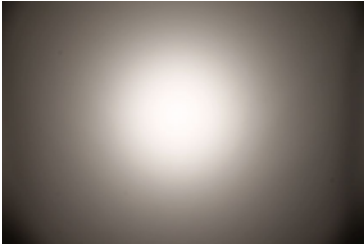
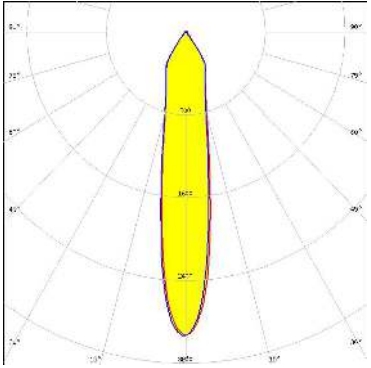
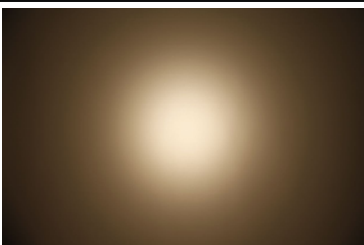
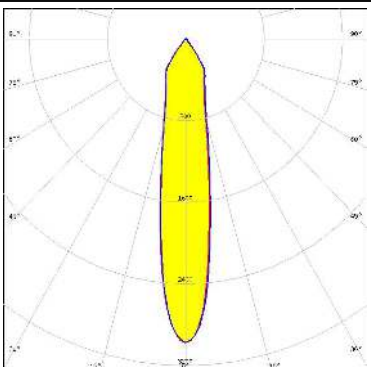
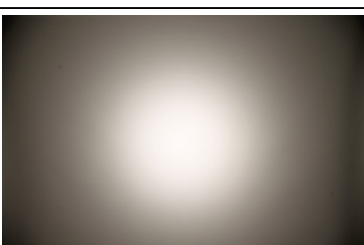
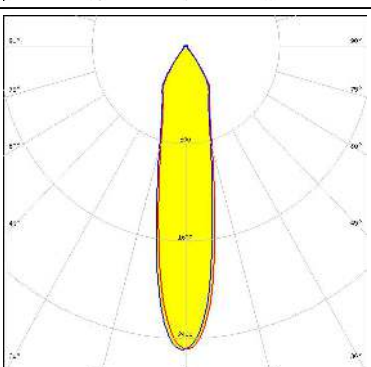

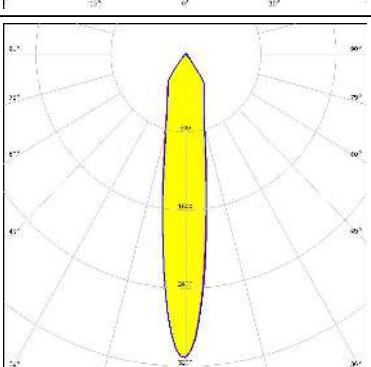
LED LUXEON CoB 1204/1205
 FWHM / FWTM 15.0° / 59.0°
 Efficiency 85 %
 Peak intensity 3.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



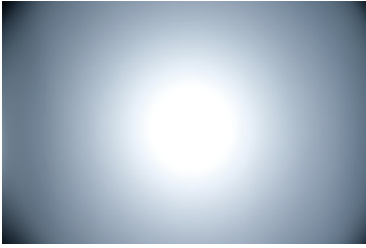
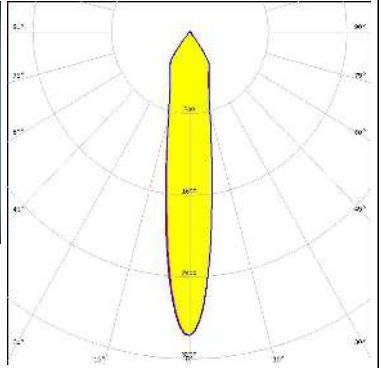
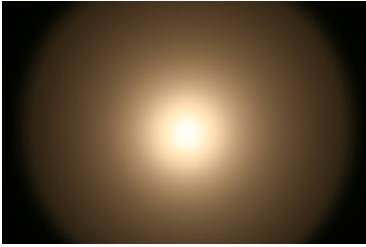
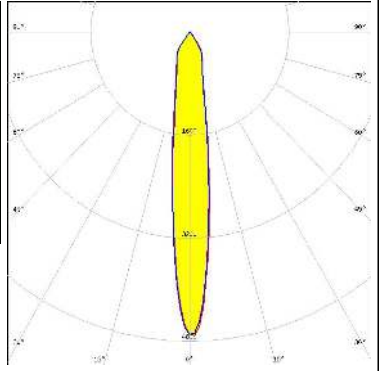

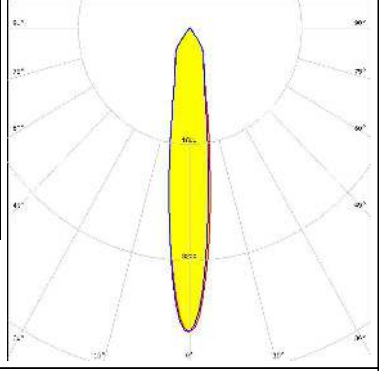

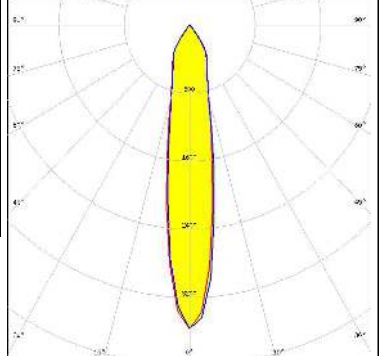
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1204HD</p> <p>FWHM / FWTM 12.0° / 46.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 4.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1205HD</p> <p>FWHM / FWTM 14.0° / 52.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 4.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1208</p> <p>FWHM / FWTM 16.0° / 65.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 3.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2100SH + 50-2100AN</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1208</p> <p>FWHM / FWTM 16.0° / 64.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 3.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		


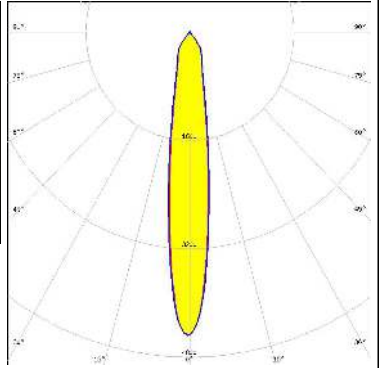

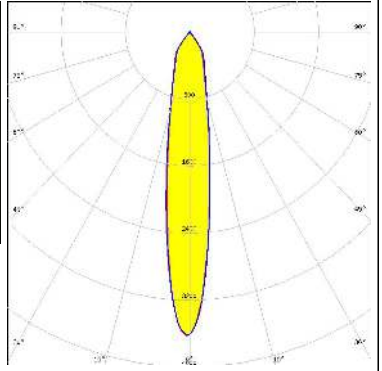

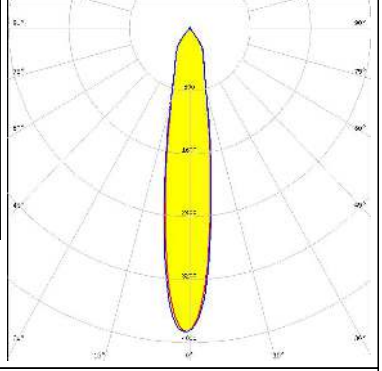

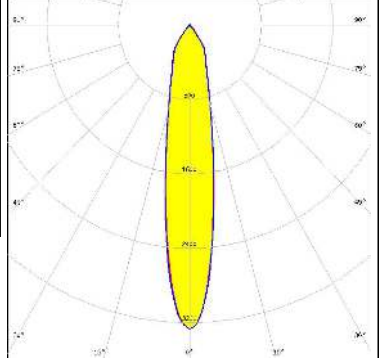
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1211</p> <p>FWHM / FWTM 19.0° / 68.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 2.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2204-CT + 50-2100AN</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1211</p> <p>FWHM / FWTM 19.0° / 69.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 431 Typ L3</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1216/1812</p> <p>FWHM / FWTM 22.0° / 69.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 2.5 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2204-CT + 50-2100AN</p>		
<p>LUMILEDS</p> <p>LED LUXEON K12</p> <p>FWHM / FWTM 17.0° / 69.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS TE Connectivity: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		

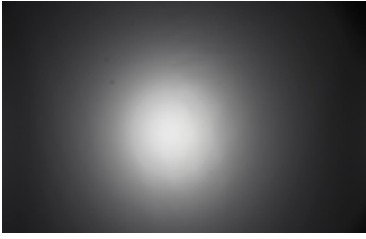
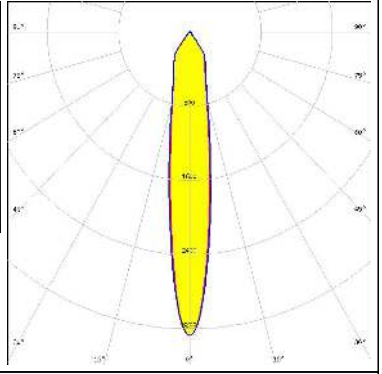

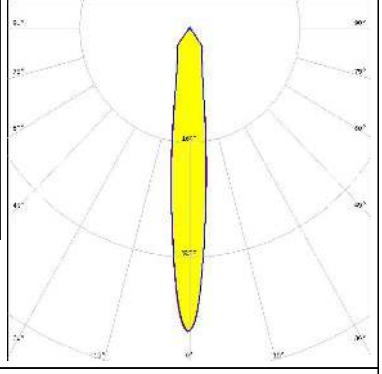

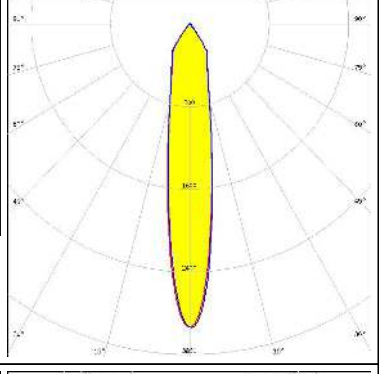

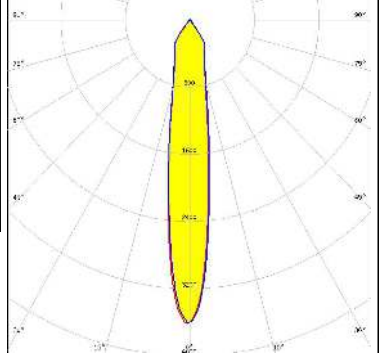
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON K16</p> <p>FWHM / FWTM 18.0° / 69.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS TE Connectivity: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>LUMILEDS</p> <p>LED LUXEON S2000</p> <p>FWHM / FWTM 15.0° / 52.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 4.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13395_CLAMP-S2000</p>		
<p>LUMILEDS</p> <p>LED LUXEON S3000</p> <p>FWHM / FWTM 16.0° / 59.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 4.2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13397_CLAMP-S3000</p>		
<p>LUMILEDS</p> <p>LED LUXEON S5000</p> <p>FWHM / FWTM 19.0° / 65.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 3.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13399_CLAMP-S5000</p>		


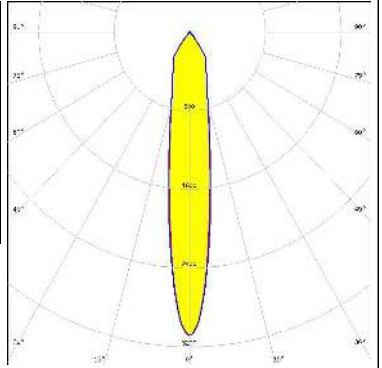

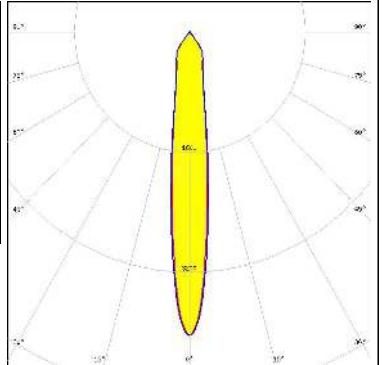

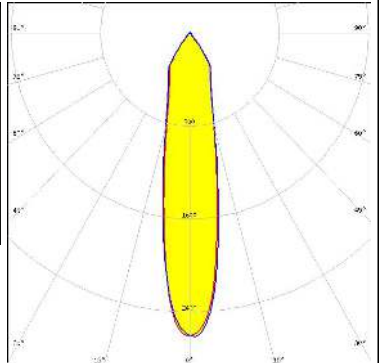
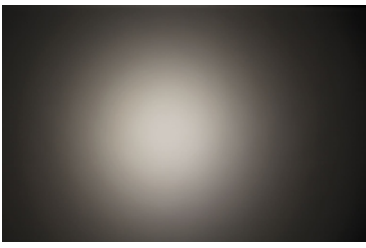
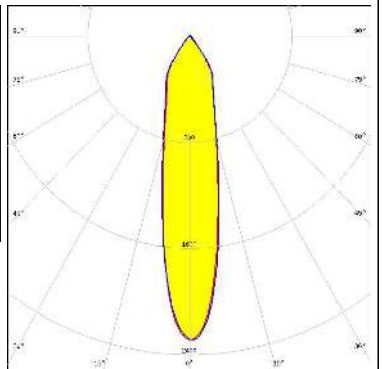
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CDM-14 (Dim-To-Warm)</p> <p>FWHM / FWTM 16.0° / 49.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 4.5 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 491 Typ L2</p>		
<p>LUMINUS</p> <p>LED CDM-14 (Dim-To-Warm)</p> <p>FWHM / FWTM 17.0° / 57.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 3.6 cd/m</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: 486 Typ L5</p>		
<p>LUMINUS</p> <p>LED CDM-18 (Dim-To-Warm)</p> <p>FWHM / FWTM 18.0° / 57.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 3.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 491 Typ L2</p>		
<p>LUMINUS</p> <p>LED CDM-18 (Dim-To-Warm)</p> <p>FWHM / FWTM 19.0° / 62.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 3.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 491 Typ L2</p>		

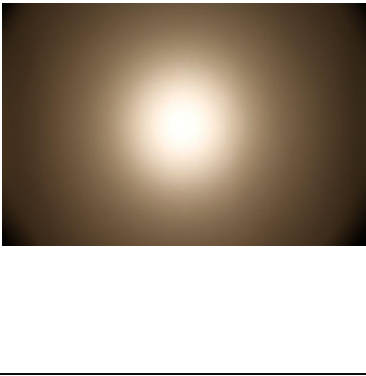
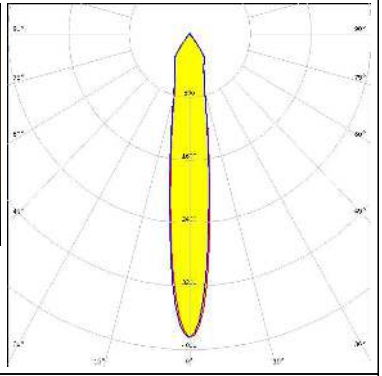
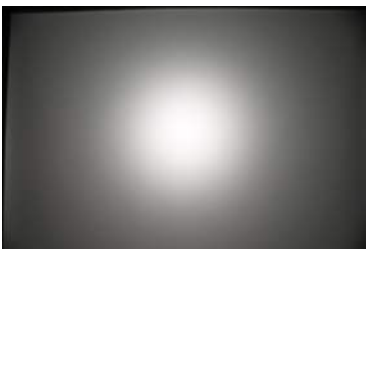
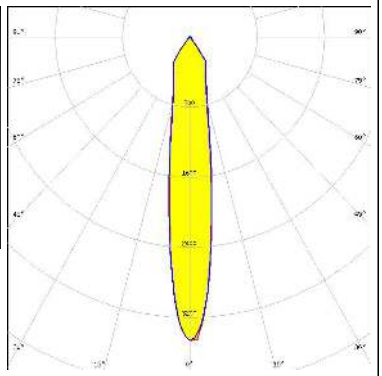

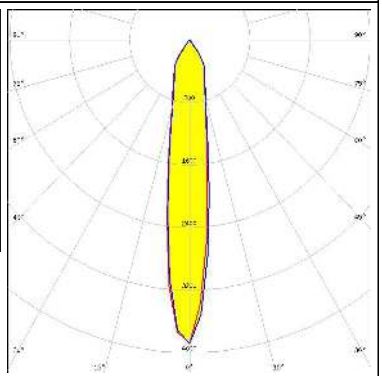

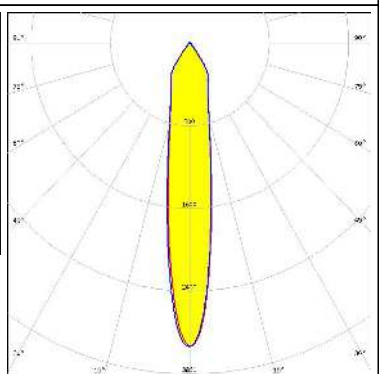
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CDM-9 (Dim-To-Warm) FWHM / FWTM 16.0° / 63.0° Efficiency 78 % Peak intensity 3.3 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 / FWTM 14.0° / 50.0° Efficiency 82 % Peak intensity 4.2 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 / FWTM 18.0° / 68.0° Efficiency 78 % Peak intensity 2.9 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 / FWTM 16.0° / 61.0° Efficiency 82 % Peak intensity 3.6 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 442 Typ L3</p>		


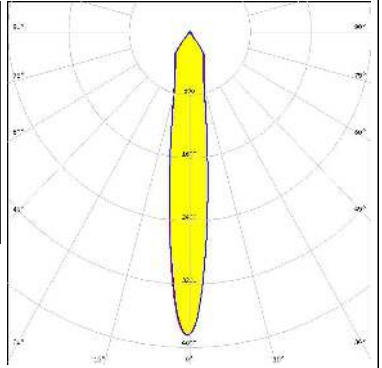

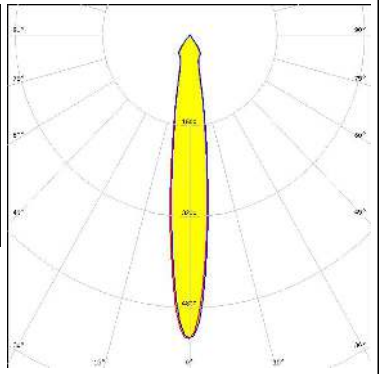

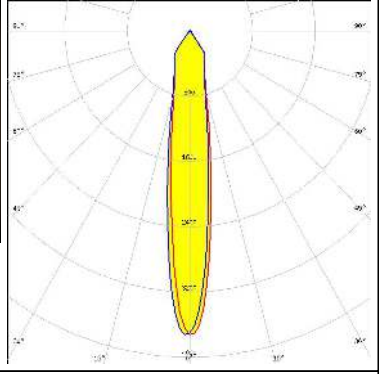

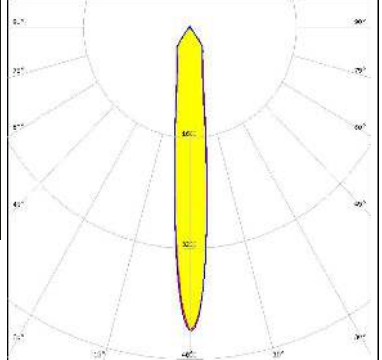
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CTM-14 RGBW FWHM / FWTM 16.0° / 65.0° Efficiency 75 % Peak intensity 3.1 cd/lm LEDs/each optic 1 Light colour RGBW</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 500 Typ L3-1</p>		
<p>LUMINUS</p> <p>LED CTM-14 RGBW FWHM / FWTM 14.0° / 53.0° Efficiency 79 % Peak intensity 4 cd/lm LEDs/each optic 1 Light colour RGBW</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 500 Typ L3-1</p>		
<p>LUMINUS</p> <p>LED CTM-22 (Tunable White) FWHM / FWTM 21.0° / 69.0° Efficiency 82 % Peak intensity 2.6 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 494 Typ L3</p>		
<p>LUMINUS</p> <p>LED CTM-22 (Tunable White) FWHM / FWTM 22.0° / 70.0° Efficiency 77 % Peak intensity 2.3 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS Bender Wirth: 494 Typ L3</p>		


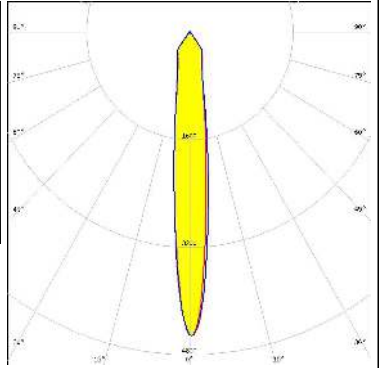

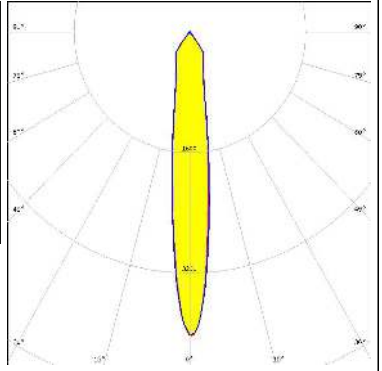

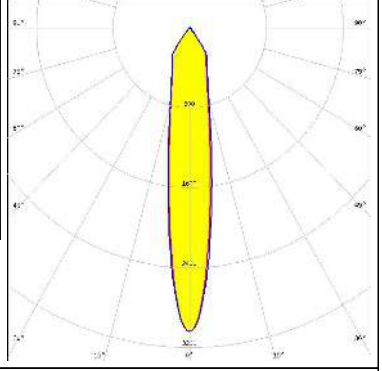

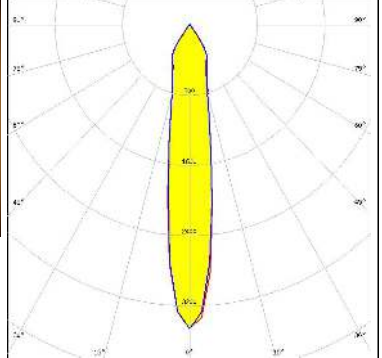
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CxM-14 (19x19) FWHM / FWTM 16.0° / 60.0° Efficiency 85 % Peak intensity 3.9 cd/m LEDs/each optic 1 Light colour White Required components: TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>NICHIA</p> <p>LED COB J-Type FWHM / FWTM 17.0° / 66.0° Efficiency 83 % Peak intensity 3.5 cd/m 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 / FWTM 17.0° / 61.0° Efficiency 83 % Peak intensity 3.9 cd/m LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2103NC + 50-2100AN</p>		
<p>NICHIA</p> <p>LED COB J-Type FWHM / FWTM 17.0° / 67.0° Efficiency 80 % Peak intensity 2.9 cd/m LEDs/each optic 1 Light colour White Required components: F13671_ANGE-RZ-LENS IDEAL: 50-2103NC + 50-2100AN</p>		

OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 15.0° / 58.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 3.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 438 Typ L1</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 15.0° / 37.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 5.4 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 16.0° / 64.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 3.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Molex: 180580-0005</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 13.0° / 52.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 4.4 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2100NC + 50-2100AN</p>		

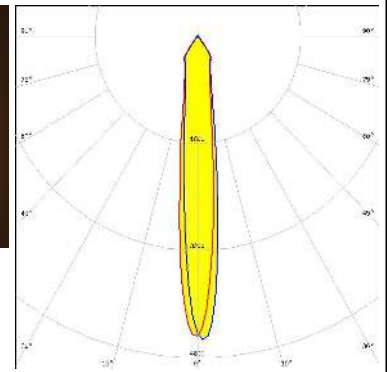
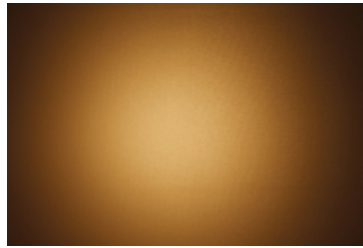
OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM 13.0° / 49.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 4.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 438 Typ L1</p>		
<p>NICHIA</p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM / FWTM 14.0° / 56.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 498 Typ L2</p>		
<p>NICHIA</p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM / FWTM 17.0° / 68.0°</p> <p>Efficiency 78 %</p> <p>Peak intensity 3 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>OSRAM</p> <p>LED PrevaLED Core AC (LEP-2000)</p> <p>FWHM / FWTM 17.0° / 66.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 3.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

OPTICAL RESULTS (MEASURED):

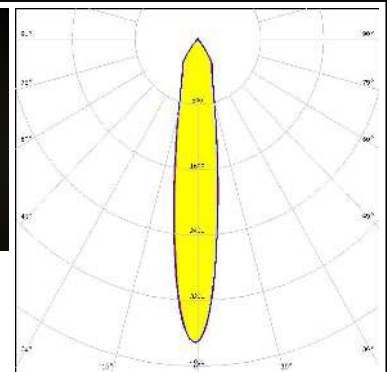
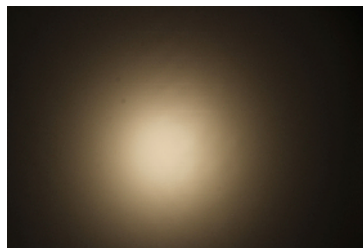
OSRAM

LED PrevaLED Core AC (LEP-800)
 FWHM / FWTM 13.0° / 51.0°
 Efficiency 86 %
 Peak intensity 4.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



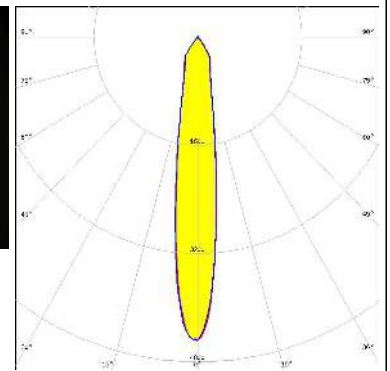
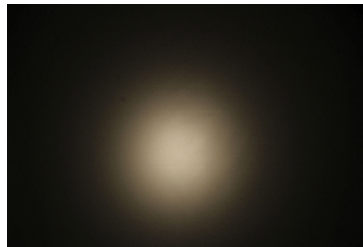
OSRAM

LED PrevaLED Core G7 L15 H1
 FWHM / FWTM 17.0° / 60.0°
 Efficiency 85 %
 Peak intensity 3.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16685_CLAMP-PRV-A
 F13671_ANGE-RZ-LENS



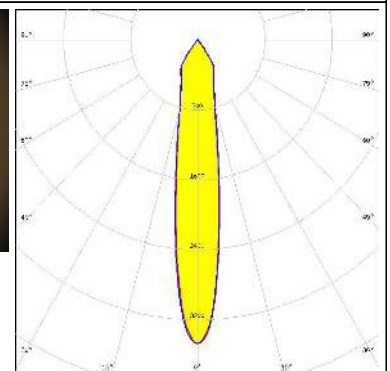
OSRAM

LED PrevaLED Core G7 L15 H1
 FWHM / FWTM 16.0° / 51.0°
 Efficiency 89 %
 Peak intensity 4.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16685_CLAMP-PRV-A



OSRAM

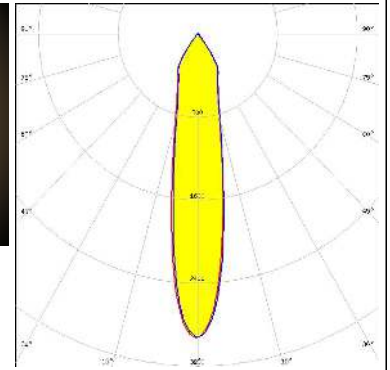
LED PrevaLED Core Z3 LES19
 FWHM / FWTM 17.0° / 65.0°
 Efficiency 85 %
 Peak intensity 3.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



OPTICAL RESULTS (MEASURED):

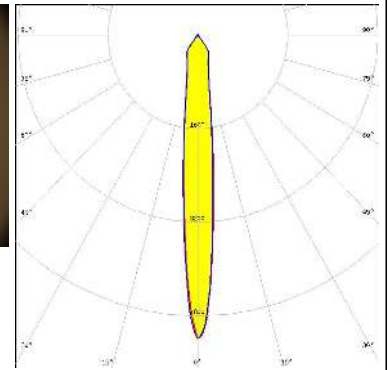
OSRAM

LED PrevaLED Core Z3 LES23
 FWHM / FWTM 20.0° / 68.0°
 Efficiency 85 %
 Peak intensity 2.9 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



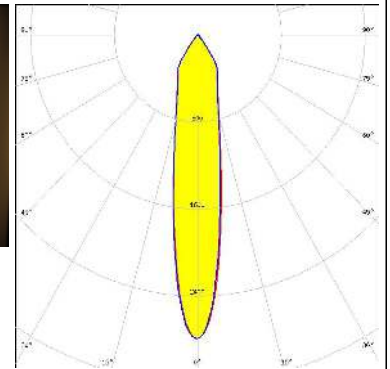
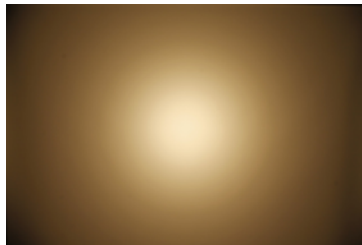
OSRAM

LED PrevaLED Core Z3 LES9
 FWHM / FWTM 12.0° / 42.0°
 Efficiency 85 %
 Peak intensity 5.2 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



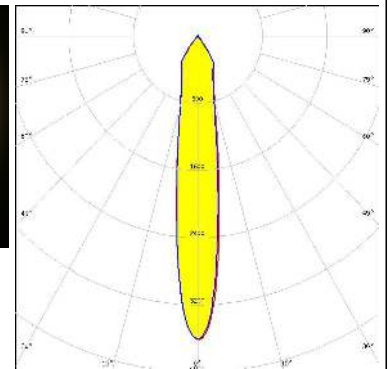
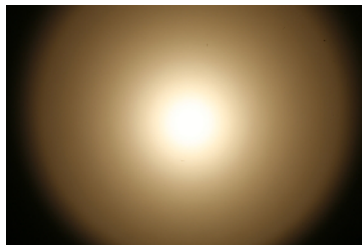
OSRAM

LED PrevaLED Core Z4 LES19
 FWHM / FWTM 19.0° / 68.0°
 Efficiency 80 %
 Peak intensity 2.8 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

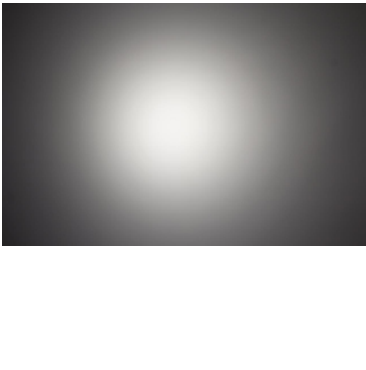
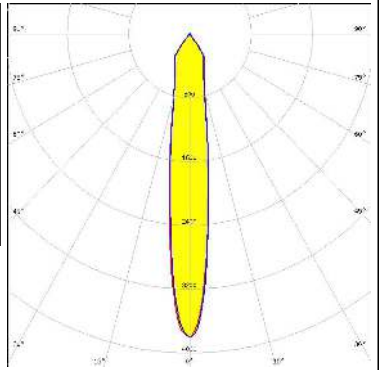
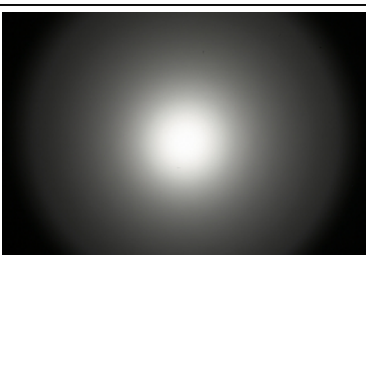
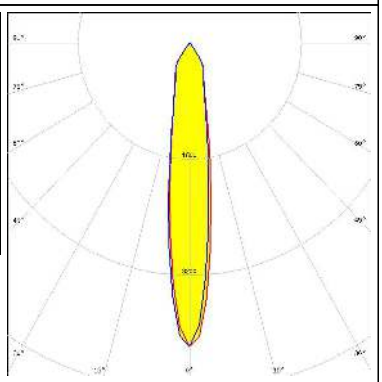
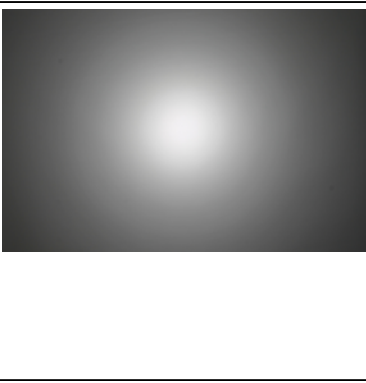
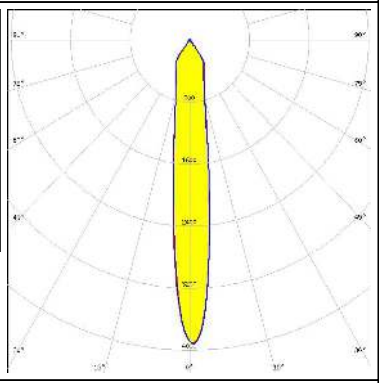
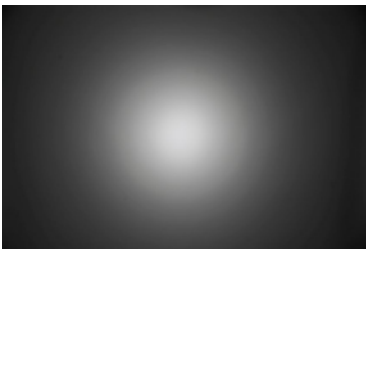
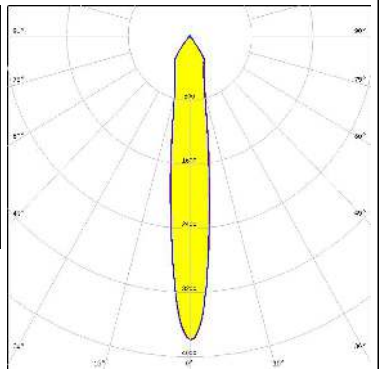


OSRAM


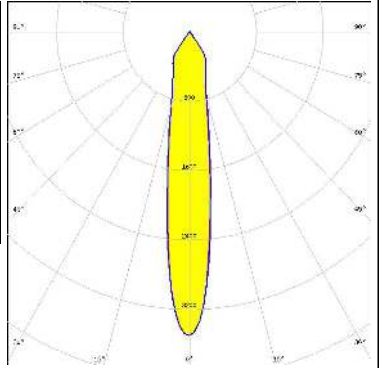

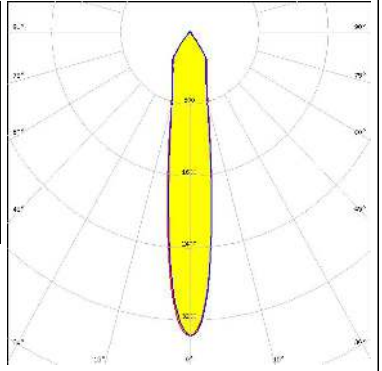

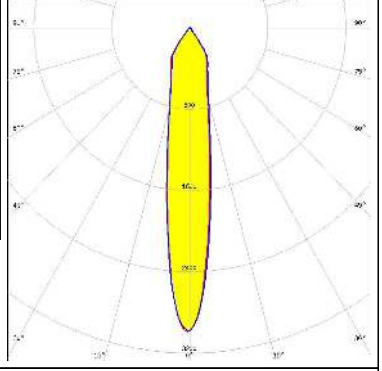

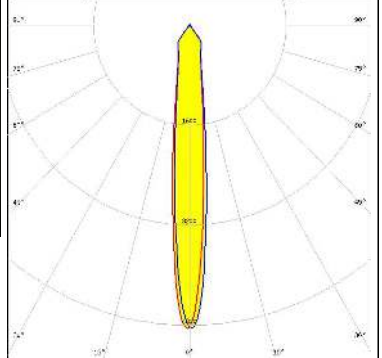
LED PrevaLED Core Z4 LES19
 FWHM / FWTM 16.0° / 65.0°
 Efficiency 85 %
 Peak intensity 3.6 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



OPTICAL RESULTS (MEASURED):

<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13 FWHM / FWTM 15.0° / 60.0° Efficiency 83 % Peak intensity 3.8 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 437 Typ L1</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13 FWHM / FWTM 15.0° / 58.0° Efficiency 86 % Peak intensity 4.2 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: TE Connectivity: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13 19x19 FWHM / FWTM 14.0° / 58.0° Efficiency 82 % Peak intensity 3.9 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: IDEAL: 50-2103CT + 50-2100AN</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13 19x19 FWHM / FWTM 15.0° / 59.0° Efficiency 82 % Peak intensity 3.8 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		

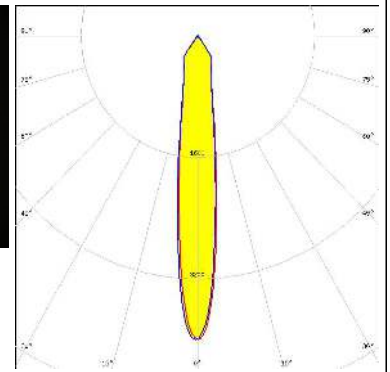
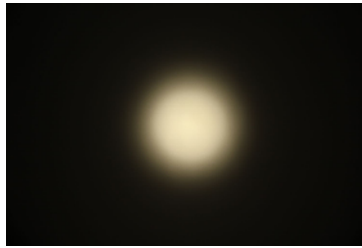
OPTICAL RESULTS (MEASURED):

<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S19</p> <p>FWHM / FWTM 17.0° / 66.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 3.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE Connectivity: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S19</p> <p>FWHM / FWTM 17.0° / 66.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 3.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 462 Typ L3</p>		
<p>PHILIPS</p> <p>LED Fortimo SLM 1208 L15 G6 Standard</p> <p>FWHM / FWTM 17.0° / 67.0°</p> <p>Efficiency 78 %</p> <p>Peak intensity 3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>PHILIPS</p> <p>LED Fortimo SLM L09 + SLM holder</p> <p>FWHM / FWTM 13.0° / 45.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 4.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

OPTICAL RESULTS (MEASURED):

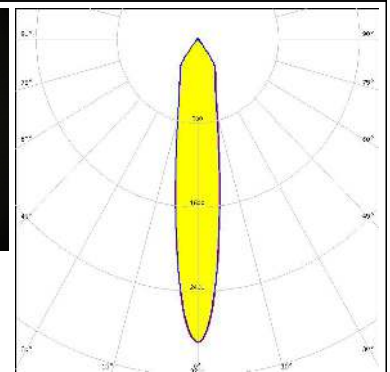
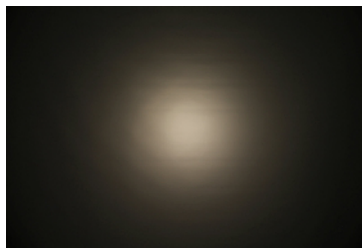
PHILIPS

LED Fortimo SLM L13 + SLM holder
 FWHM / FWTM 15.0° / 57.0°
 Efficiency 84 %
 Peak intensity 4 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



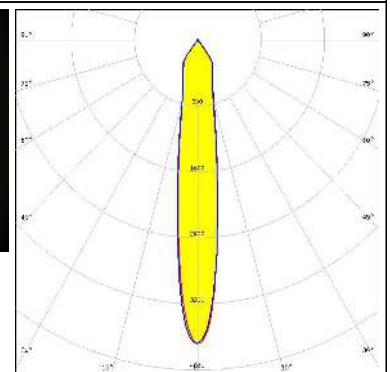
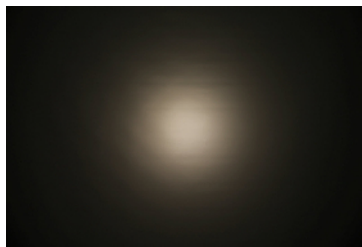
PHILIPS

LED Fortimo SLM L13 CoB
 FWHM / FWTM 17.0° / 68.0°
 Efficiency 76 %
 Peak intensity 2.9 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



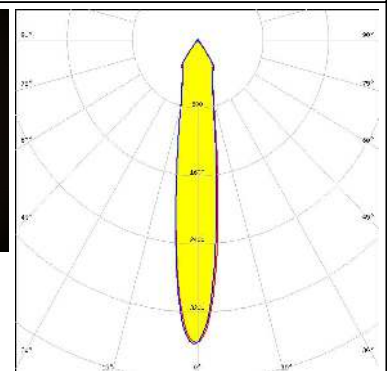
PHILIPS

LED Fortimo SLM L13 CoB
 FWHM / FWTM 16.0° / 60.0°
 Efficiency 81 %
 Peak intensity 3.7 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



PHILIPS

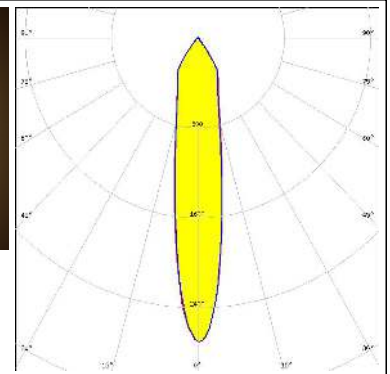
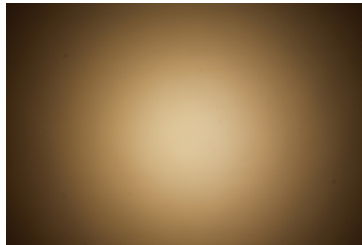
LED Fortimo SLM L15 + SLM holder
 FWHM / FWTM 16.0° / 65.0°
 Efficiency 82 %
 Peak intensity 3.6 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



OPTICAL RESULTS (MEASURED):

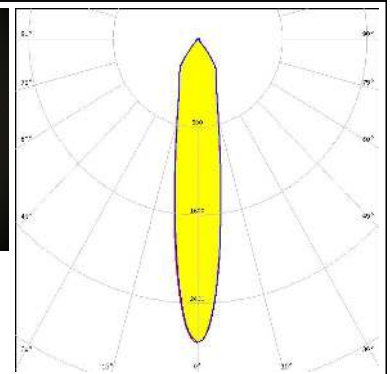
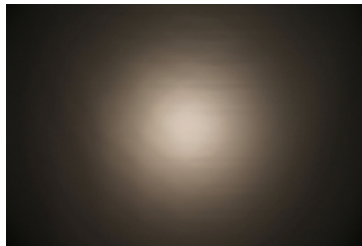
PHILIPS

LED Fortimo SLM L15 + SLM holder
 FWHM / FWTM 19.0° / 67.0°
 Efficiency 78 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



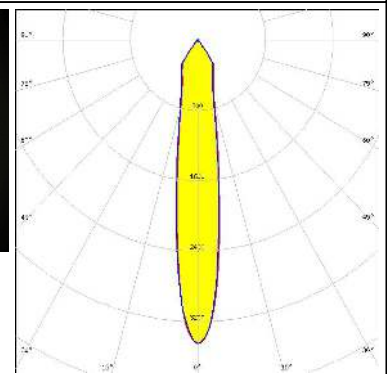
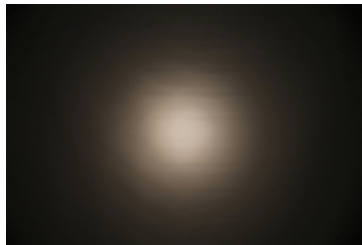
PHILIPS

LED Fortimo SLM L15 CoB
 FWHM / FWTM 18.0° / 68.0°
 Efficiency 75 %
 Peak intensity 2.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



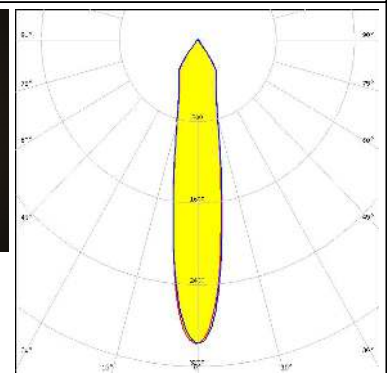
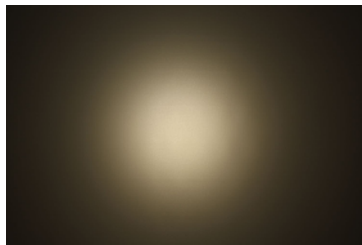
PHILIPS

LED Fortimo SLM L15 CoB
 FWHM / FWTM 17.0° / 64.0°
 Efficiency 81 %
 Peak intensity 3.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



PHILIPS

LED Fortimo SLM L19 + SLM holder
 FWHM / FWTM 19.0° / 68.0°
 Efficiency 81 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



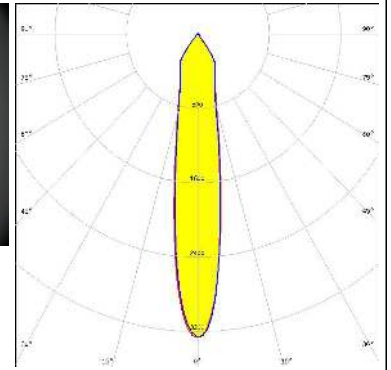
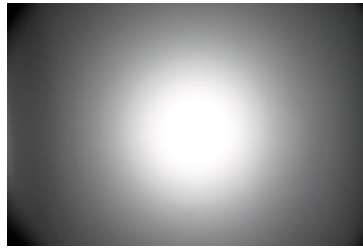
OPTICAL RESULTS (MEASURED):

SAMSUNG

LED LC026B / 033B / 040B
 FWHM / FWTM 18.0° / 67.0°
 Efficiency 85 %
 Peak intensity 3.3 cd/m
 LEDs/each optic 1
 Light colour White

Required components:

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

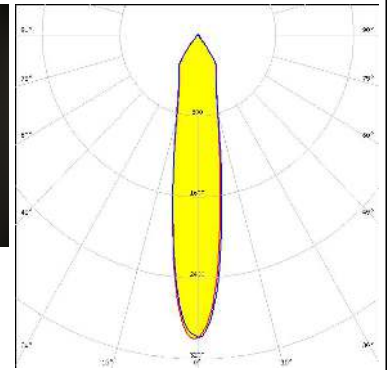


SAMSUNG

LED LC026B / 033B / 040B
 FWHM / FWTM 19.0° / 68.0°
 Efficiency 83 %
 Peak intensity 3 cd/m
 LEDs/each optic 1
 Light colour White

Required components:

C13658_CLAMP-VERO13-18
 Bender Wirth: 450 Typ L2

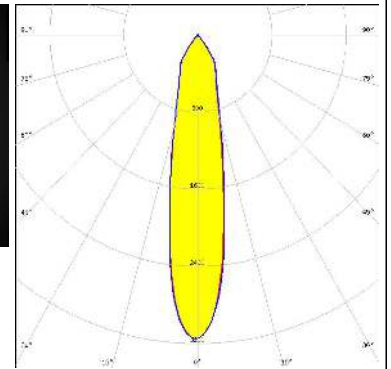
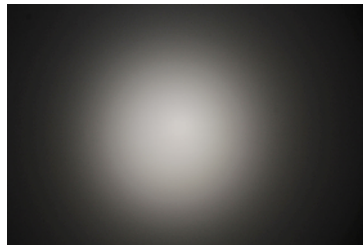


SAMSUNG

LED LC035T (Tunable white)
 FWHM / FWTM 21.0° / 66.0°
 Efficiency 87 %
 Peak intensity 3.2 cd/m
 LEDs/each optic 1
 Light colour Tunable White

Required components:

C13584_CLAMP-VERO29
 Bender Wirth: 502 Typ L3

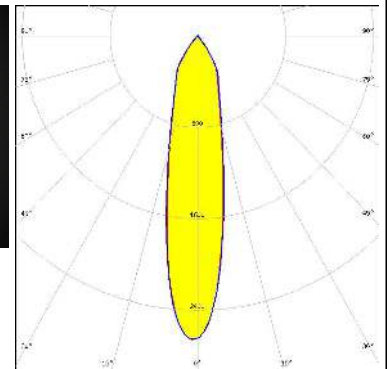
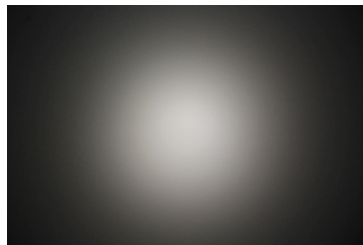


SAMSUNG

LED LC035T (Tunable white)
 FWHM / FWTM 22.0° / 68.0°
 Efficiency 83 %
 Peak intensity 2.7 cd/m
 LEDs/each optic 1
 Light colour Tunable White

Required components:

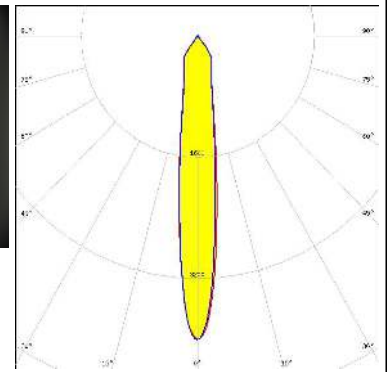
C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 502 Typ L3



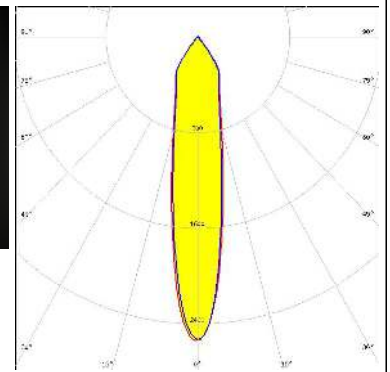
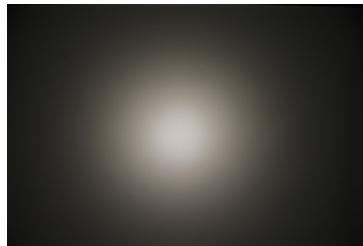
OPTICAL RESULTS (MEASURED):

SAMSUNG

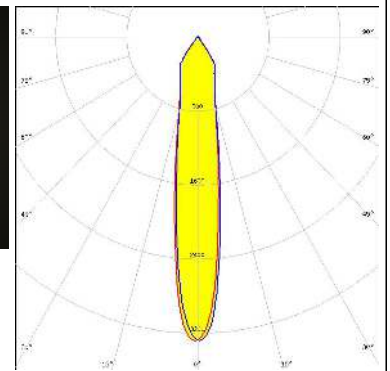
LED LC040C
 FWHM / FWTM 15.0° / 57.0°
 Efficiency 83 %
 Peak intensity 4 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



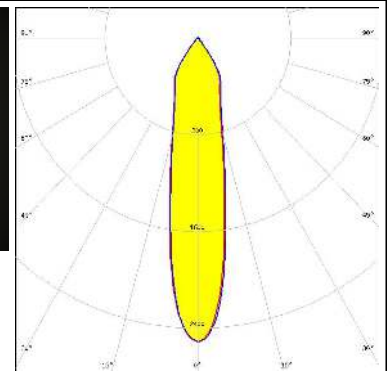
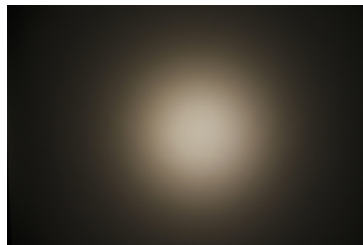
SEOUL SEMICONDUCTOR
 LED AC Zhaga COB
 FWHM / FWTM 19.0° / 71.0°
 Efficiency 79 %
 Peak intensity 2.5 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 Optosource: SEHSMJD-A




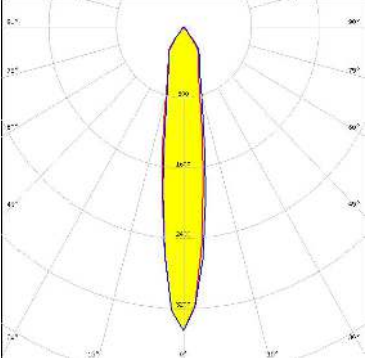

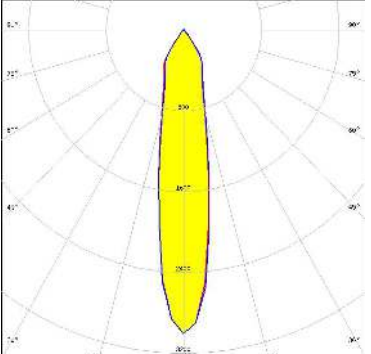

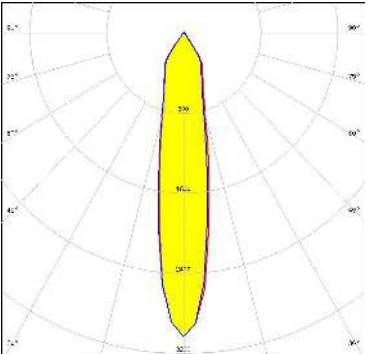
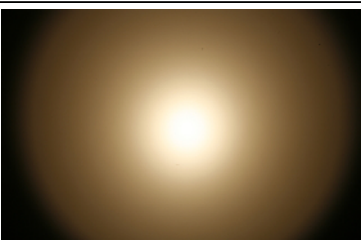
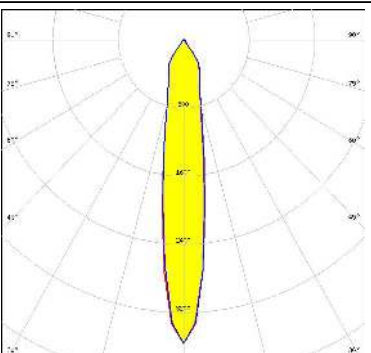
SEOUL SEMICONDUCTOR
 LED MJT COB LES 14.5
 FWHM / FWTM 17.0° / 67.0°
 Efficiency 82 %
 Peak intensity 3.3 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1





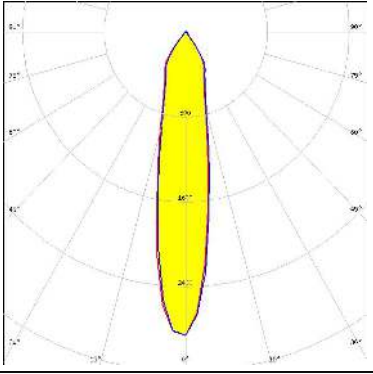

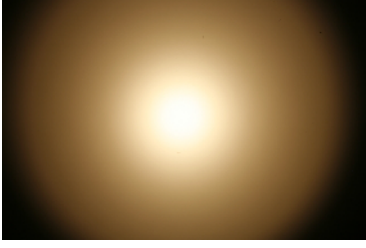
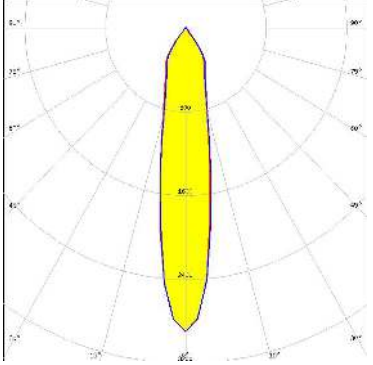
SEOUL SEMICONDUCTOR
 LED MJT COB LES 22
 FWHM / FWTM 22.0° / 69.0°
 Efficiency 82 %
 Peak intensity 2.5 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 431 Typ L3




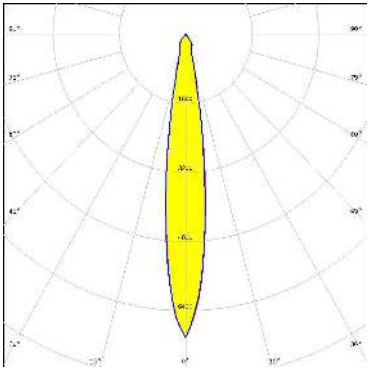

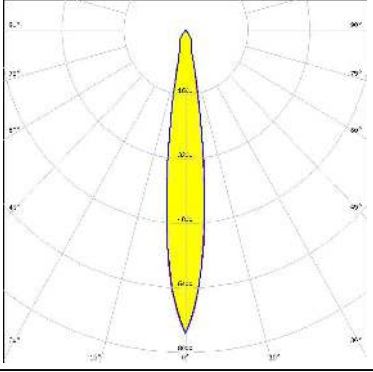

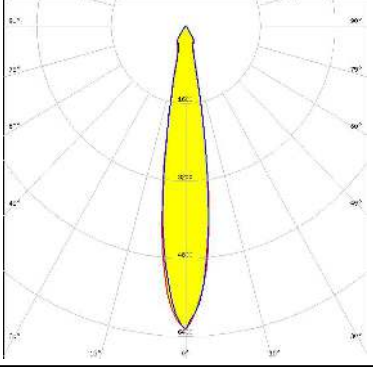

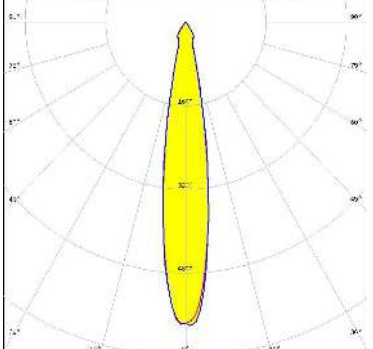
OPTICAL RESULTS (MEASURED):

<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-461 FWHM / FWTM 17.0° / 62.0° Efficiency 83 % Peak intensity 3.5 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-462 FWHM / FWTM 20.0° / 68.0° Efficiency 85 % Peak intensity 3 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-464 FWHM / FWTM 20.0° / 68.0° Efficiency 85 % Peak intensity 3 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-484 FWHM / FWTM 17.0° / 64.0° Efficiency 85 % Peak intensity 3.6 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

OPTICAL RESULTS (MEASURED):

 LED WU-M-485 FWHM / FWTM 20.0° / 69.0° Efficiency 85 % Peak intensity 2.9 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1		
 LED WU-M-486 FWHM / FWTM 20.0° / 69.0° Efficiency 84 % Peak intensity 2.9 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1		

OPTICAL RESULTS (SIMULATED):

<p></p> <p>LED V10 Gen7 FWHM / FWTM 15.0° / 30.0° Efficiency 90 % Peak intensity 7 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 486 Typ L1</p>	
<p></p> <p>LED V13 Gen7 FWHM / FWTM 14.5° / 28.0° Efficiency 91 % Peak intensity 7.5 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2103CT + 50-2100AN</p>	
<p></p> <p>LED V22 Gen7 FWHM / FWTM 17.0° / 33.0° Efficiency 93 % Peak intensity 6.3 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2204-CT + 50-2100AN</p>	
<p></p> <p>LED CXA/B 1830 FWHM / FWTM 17.0° / 33.0° Efficiency 88 % Peak intensity 5.9 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>	

OPTICAL RESULTS (SIMULATED):



LED CxM-14 (19x19)
FWHM / FWTM 17.0° / 66.0°
Efficiency 83 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 433 Typ L1



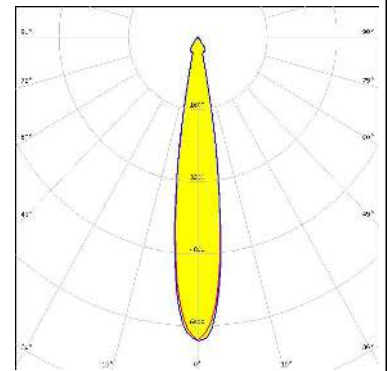
LED CxM-9 (13.5x13.5)
FWHM / FWTM 14.0° / 53.0°
Efficiency 84 %
Peak intensity 4.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



Opto Semiconductors

LED Soleriq S15
FWHM / FWTM 16.0°
Efficiency 90 %
Peak intensity 6.8 cd/lm
LEDs/each optic 1
Light colour White

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



LED ZC12/18
FWHM / FWTM 17.0° / 66.0°
Efficiency 83 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour White

Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 433 Typ L1

OPTICAL RESULTS (SIMULATED):

	
SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM / FWTM	14.0° / 53.0°
Efficiency	84 %
Peak intensity	4.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
C13658_CLAMP-VERO13-18	
Bender Wirth: 434 Typ L1	

GENERAL INFORMATION:

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

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

MATERIALS:

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

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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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