

ANGELA-S

~10° spot beam

SPECIFICATION:

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

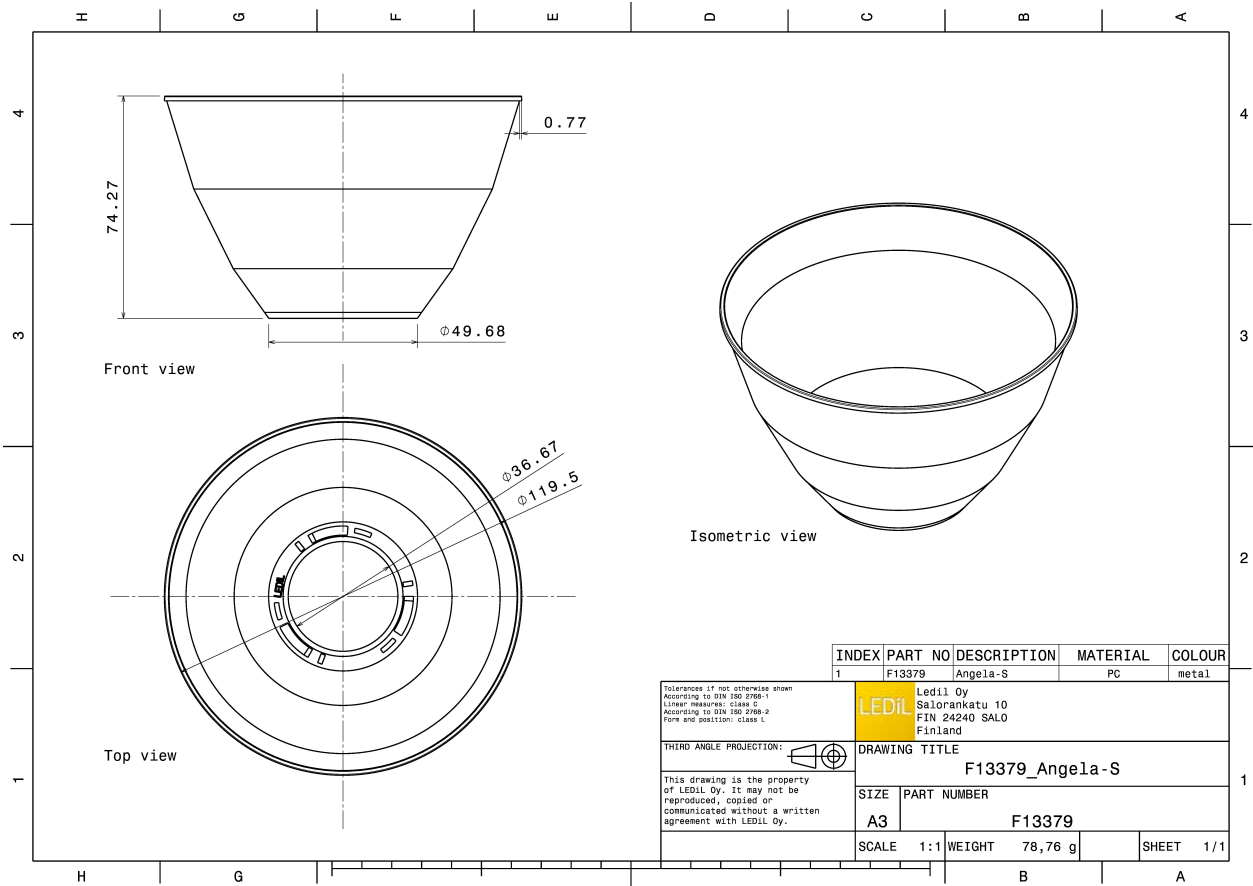
MATERIALS:

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





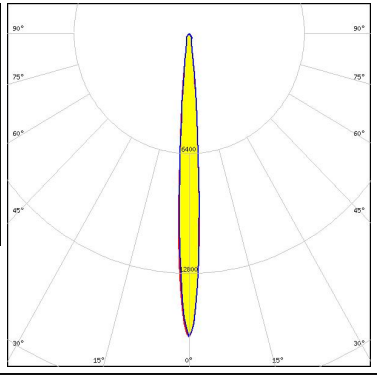


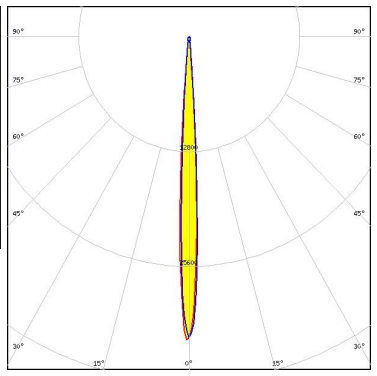


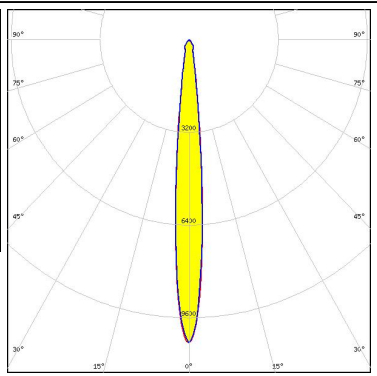


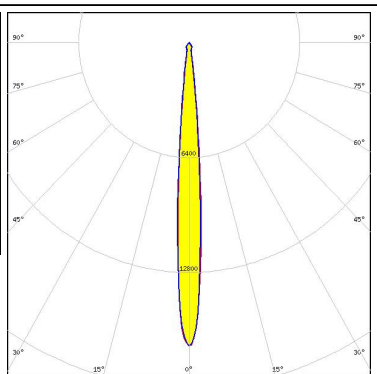
ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F13379_ANGELA-S » Box size: 398 x 298 x 265 mm	200	100	50	9.3



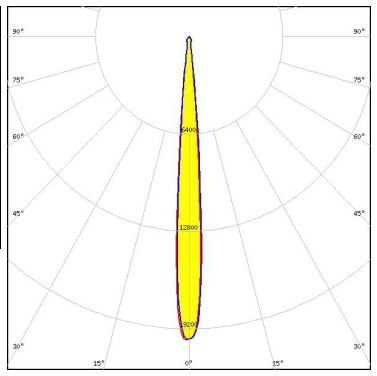

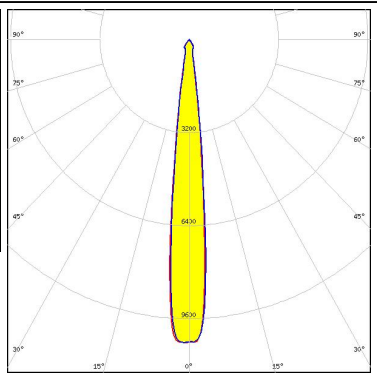

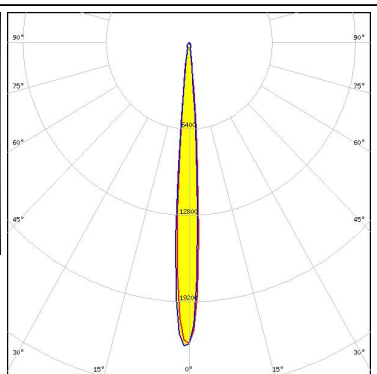


See also our general installation guide: www.ledil.com/installation_guide


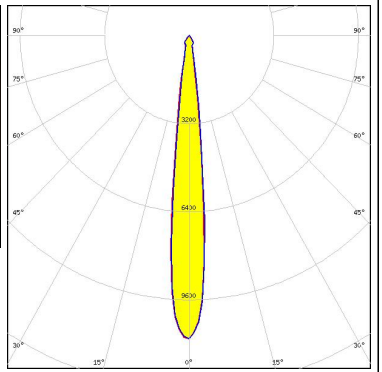

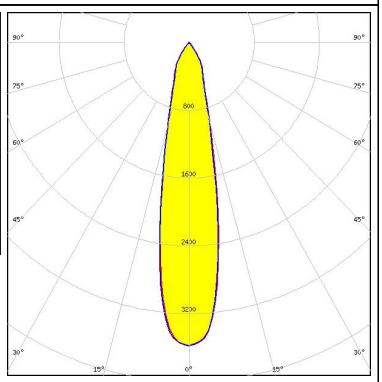

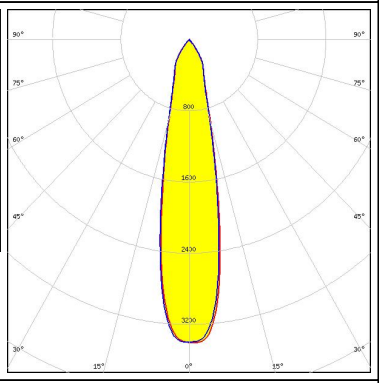

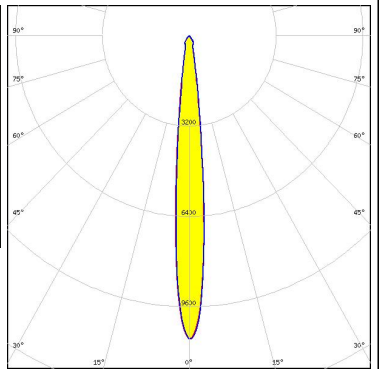
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED V10 Gen7 FWHM / FWTM 8.0° / 17.0° Efficiency 84 % Peak intensity 16.2 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 6.0° / 11.0° Efficiency 89 % Peak intensity 33.8 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 10.0° / 23.0° Efficiency 86 % Peak intensity 10.5 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 9.0° / 17.0° Efficiency 90 % Peak intensity 17 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		



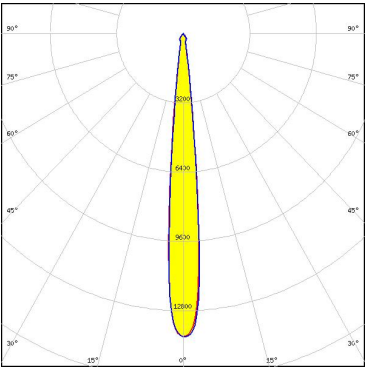


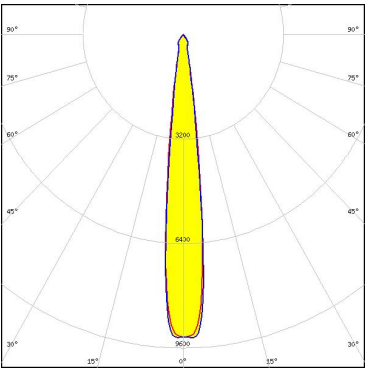


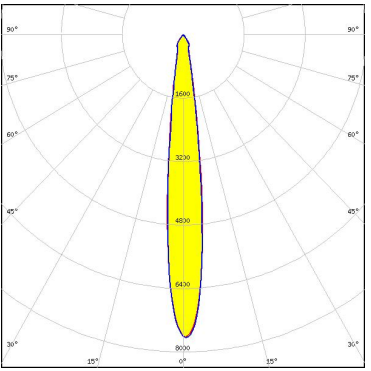


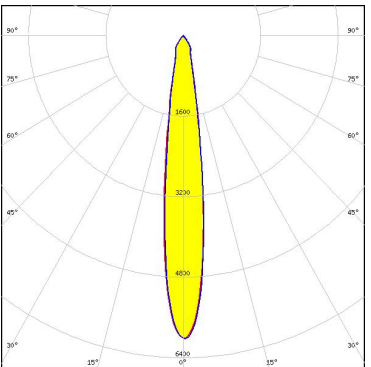
OPTICAL RESULTS (MEASURED):

<p>bridgelux.</p> <p>LED V15 Gen6</p> <p>FWHM / FWTM 10.0° / 22.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 15.3 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 / FWTM 9.0° / 15.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 19.9 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 / FWTM 12.0° / 22.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 10.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		
<p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM / FWTM 8.0° / 15.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 22.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18</p>		



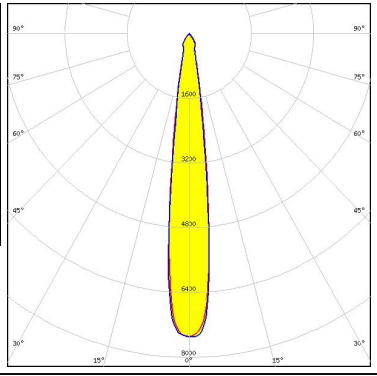

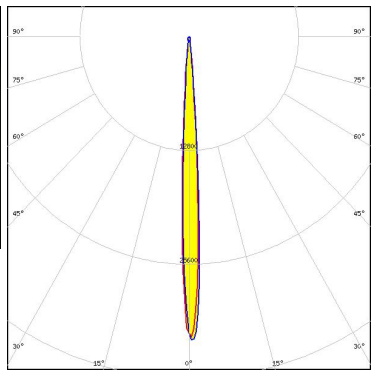

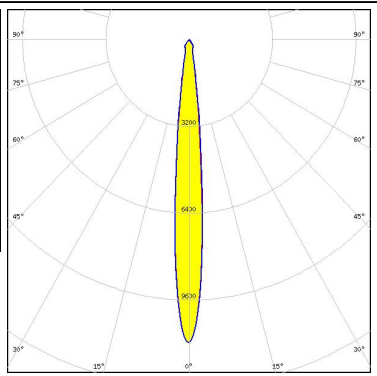
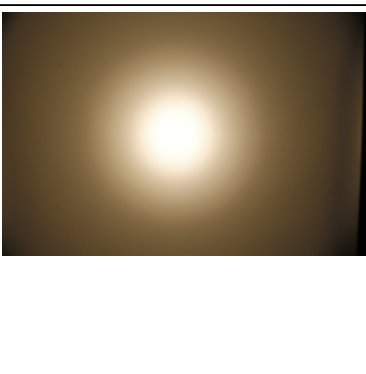
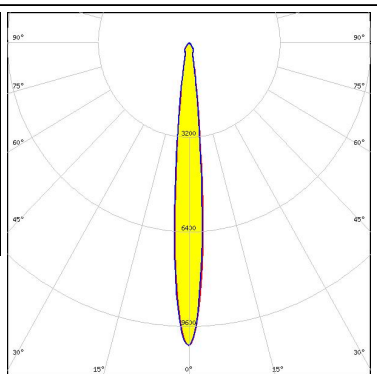
OPTICAL RESULTS (MEASURED):

<p>bridgelux.</p> <p>LED VERO18</p> <p>FWHM / FWTM 12.0° / 22.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 11 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO29</p> <p>FWHM / FWTM 22.0° / 55.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 3.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED VERO29</p> <p>FWHM / FWTM 22.0° / 57.0°</p> <p>Efficiency 85 %</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 F13671_ANGE-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED Vesta TW 15mm DP</p> <p>FWHM / FWTM 11.0° / 24.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 10.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 482 Typ L2</p>		

OPTICAL RESULTS (MEASURED):

<p></p> <p>LED Vesta TW 15mm DP FWHM / FWTM 11.0° / 19.0° Efficiency 92 % Peak intensity 14 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 13.0° / 25.0° Efficiency 92 % Peak intensity 9.3 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 13.0° / 29.0° Efficiency 87 % Peak intensity 7.7 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 15.0° / 35.0° Efficiency 87 % Peak intensity 6 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>		

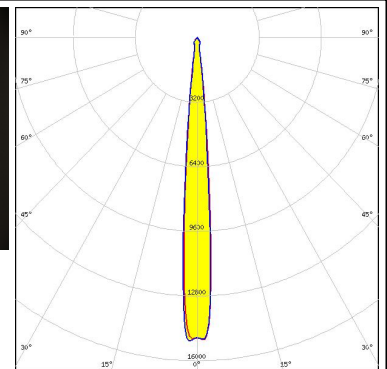
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED Vesta TW 22mm DP FWHM / FWTM 14.0° / 29.0° Efficiency 92 % Peak intensity 7.5 cd/lm 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 6.0° / 12.0° Efficiency 90 % Peak intensity 34.1 cd/lm 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 10.0° / 23.0° Efficiency 89 % Peak intensity 11.2 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C16791_CLAMP-Z45-A F13671_ANGE-RZ-LENS TE Connectivity: 2325807-3</p>		
<p>CITIZEN</p> <p>LED CLL03x/CLU03x FWHM / FWTM 11.0° / 24.0° Efficiency 85 % Peak intensity 10 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>		

OPTICAL RESULTS (MEASURED):

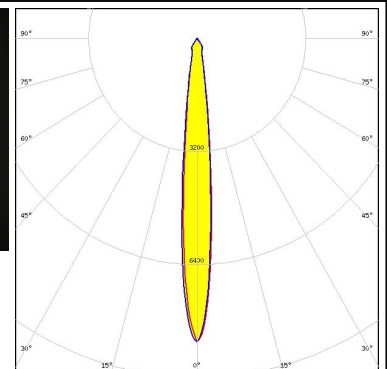
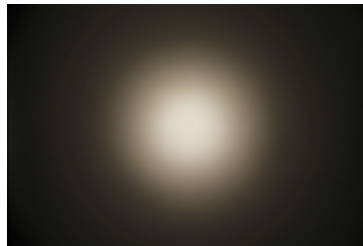
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 10.0° / 18.0°
 Efficiency 88 %
 Peak intensity 15 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 433 Typ L1



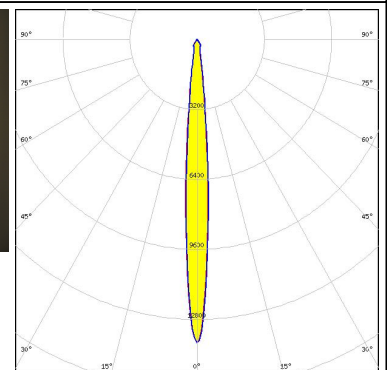
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 11.0° / 26.0°
 Efficiency 84 %
 Peak intensity 8.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 IDEAL: 50-2103CT + 50-2100AN



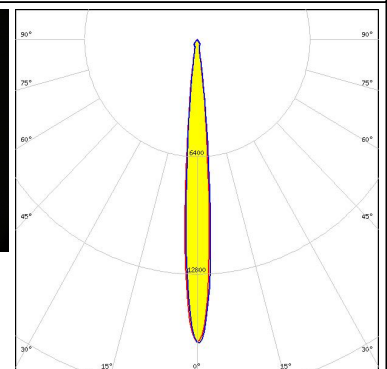
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 9.0° / 20.0°
 Efficiency 88 %
 Peak intensity 14 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 9.0° / 18.0°
 Efficiency 93 %
 Peak intensity 16.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16791_CLAMP-Z45-A
 TE Connectivity: 2325807-3



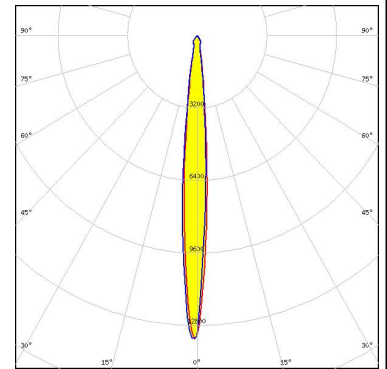
OPTICAL RESULTS (MEASURED):

CITIZEN

LED CLL03x/CLU03x
FWHM / FWTM 9.0° / 17.0°
Efficiency 94 %
Peak intensity 18.6 cd/lm
LEDs/each optic 1
Light colour White

Required components:

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

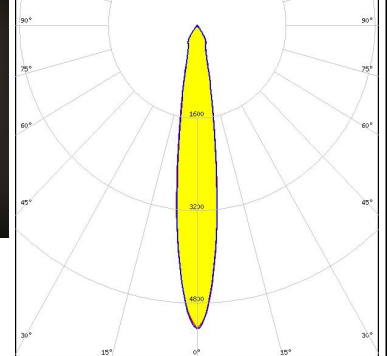
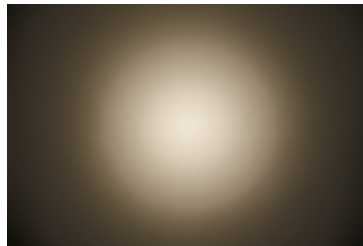


CITIZEN

LED CLL04x/CLU04x
FWHM / FWTM 16.0° / 37.0°
Efficiency 85 %
Peak intensity 5.2 cd/lm
LEDs/each optic 1
Light colour White

Required components:

F13671_ANGE-RZ-LENS
IDEAL: 50-2204-CT + 50-2100AN

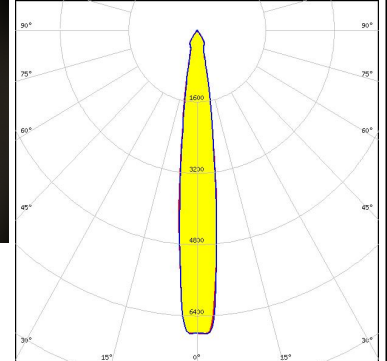


CITIZEN

LED CLL04x/CLU04x
FWHM / FWTM 14.0° / 31.0°
Efficiency 89 %
Peak intensity 6.8 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13584_CLAMP-VERO29
Bender Wirth: 431 Typ L3

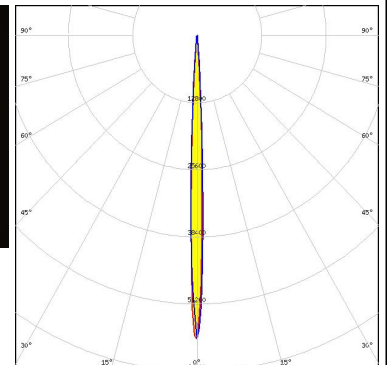


CITIZEN

LED CLU700/701/702/703
FWHM / FWTM 5.0° / 9.0°
Efficiency 88 %
Peak intensity 57.8 cd/lm
LEDs/each optic 1
Light colour White

Required components:

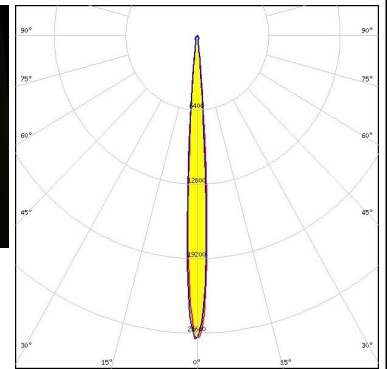
C13658_CLAMP-VERO13-18
Bender Wirth: 434 Typ L1



OPTICAL RESULTS (MEASURED):

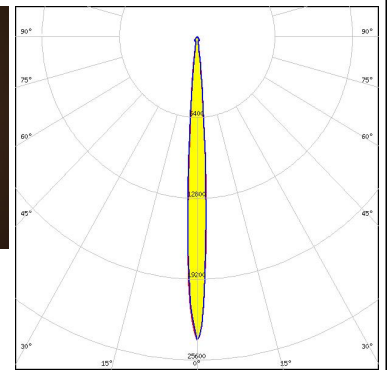
CITIZEN

LED CLU720/721/723
 FWHM / FWTM 7.0° / 13.0°
 Efficiency 88 %
 Peak intensity 26.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 433 Typ L1



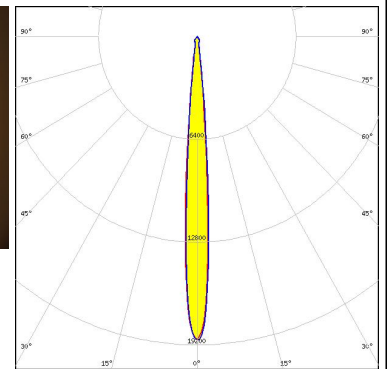
CITIZEN

LED CLU720/721/723
 FWHM / FWTM 7.0° / 14.0°
 Efficiency 94 %
 Peak intensity 24 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



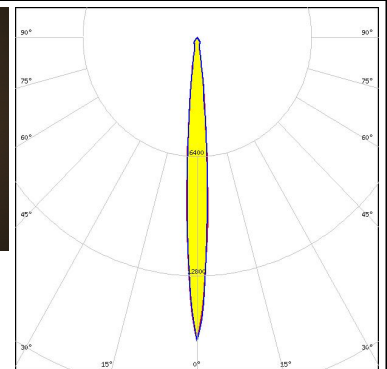
CITIZEN

LED CLU730/731/733
 FWHM / FWTM 8.5° / 16.0°
 Efficiency 91 %
 Peak intensity 18.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 471 Typ L3



CITIZEN

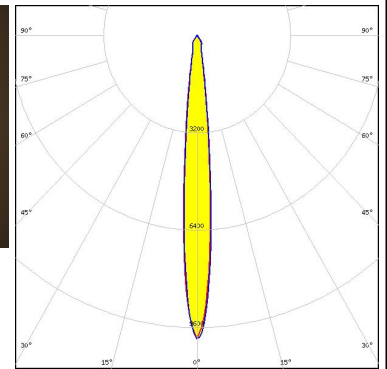
LED CLU730/731/733
 FWHM / FWTM 8.0° / 18.0°
 Efficiency 88 %
 Peak intensity 16.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



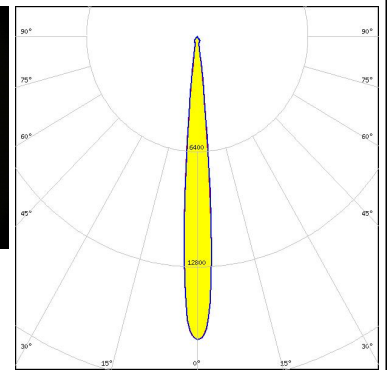
OPTICAL RESULTS (MEASURED):

CITIZEN

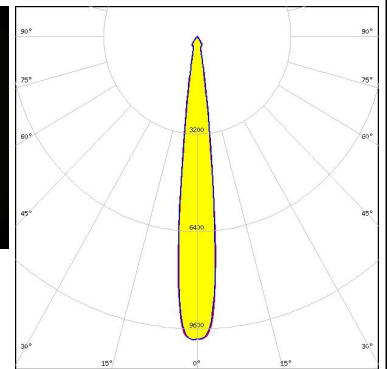
LED CLU730/731/733
 FWHM / FWTM 10.0° / 24.0°
 Efficiency 85 %
 Peak intensity 10 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 IDEAL: 50-2204-CT + 50-2100AN



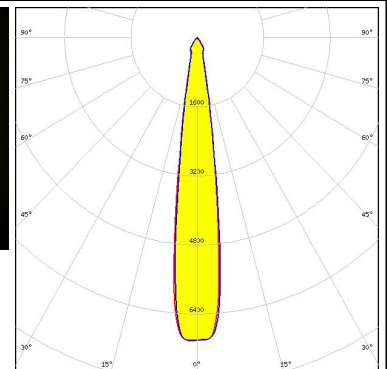
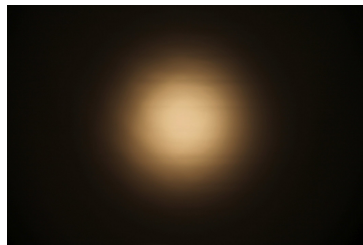
LED CMA1840
 FWHM / FWTM 9.7° / 17.0°
 Efficiency 93 %
 Peak intensity 16.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14123_CLAMP-CXA15-18



LED CMA2550
 FWHM / FWTM 13.0° / 24.0°
 Efficiency 92 %
 Peak intensity 10 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



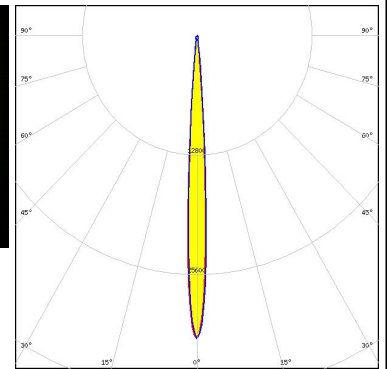
LED CMA3090
 FWHM / FWTM 15.0° / 30.0°
 Efficiency 92 %
 Peak intensity 7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



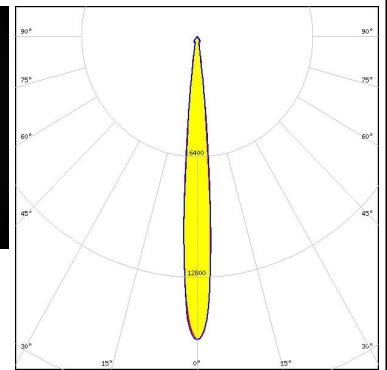
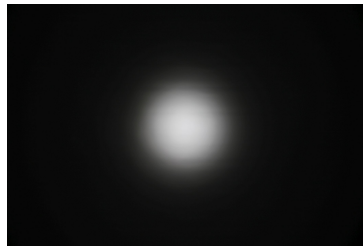
OPTICAL RESULTS (MEASURED):



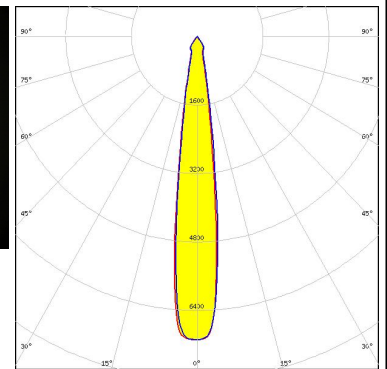
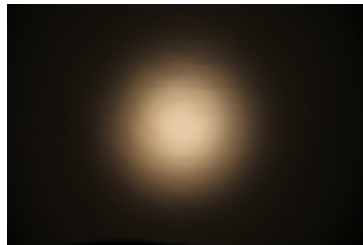
LED CMT14xx
 FWHM / FWTM 7.0° / 12.0°
 Efficiency 93 %
 Peak intensity 33 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



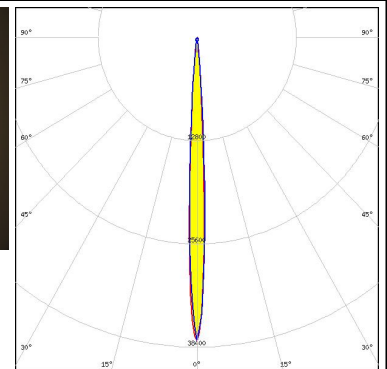
LED CMT19xx
 FWHM / FWTM 10.0° / 18.0°
 Efficiency 92 %
 Peak intensity 16.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 477 Typ L1



LED CMT28xx
 FWHM / FWTM 15.0° / 30.0°
 Efficiency 91 %
 Peak intensity 7.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 471 Typ L3



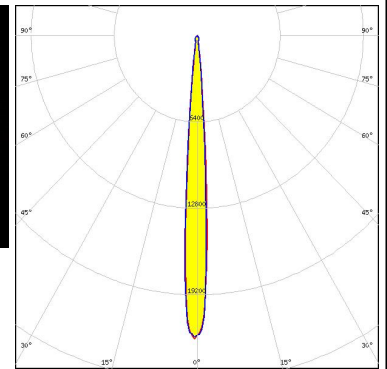
LED CXA/B 15xx
 FWHM / FWTM 5.8° / 11.0°
 Efficiency 92 %
 Peak intensity 37.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 441 Typ L1



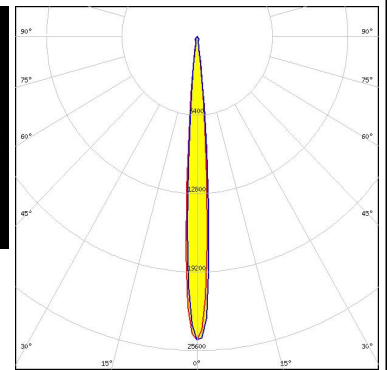
OPTICAL RESULTS (MEASURED):



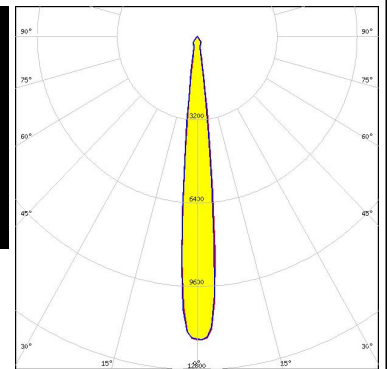
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 8.0° / 14.0°
 Efficiency 89 %
 Peak intensity 22.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 437 Typ L1



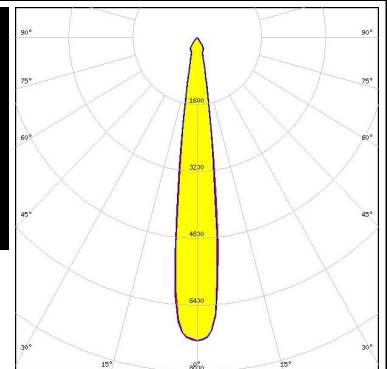
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 9.0° / 15.0°
 Efficiency 91 %
 Peak intensity 24.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14123_CLAMP-CXA15-18



LED CXA/B 25xx
 FWHM / FWTM 11.0° / 21.0°
 Efficiency 92 %
 Peak intensity 11.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



LED CXA/B 30xx
 FWHM / FWTM 14.0° / 29.0°
 Efficiency 92 %
 Peak intensity 7.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14036_CLAMP_CXA25-30



OPTICAL RESULTS (MEASURED):

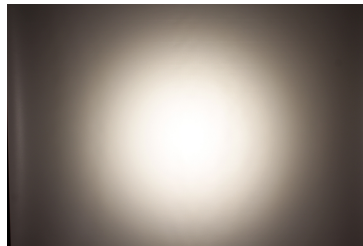
EVERLIGHT

LED CHI3030 19W
 FWHM / FWTM 14.0° / 35.0°
 Efficiency 85 %
 Peak intensity 6.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 468 Typ L3



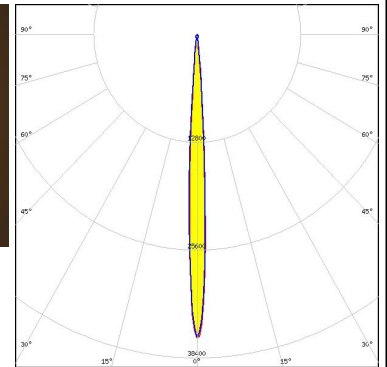
EVERLIGHT

LED CHI3030 29W
 FWHM / FWTM 18.0° / 47.0°
 Efficiency 85 %
 Peak intensity 5.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 468 Typ L3



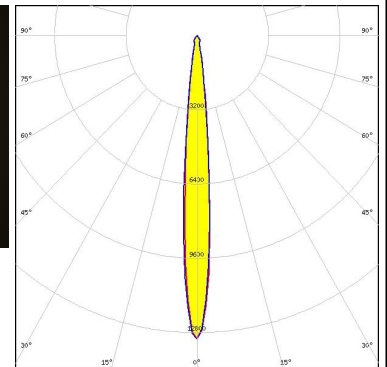
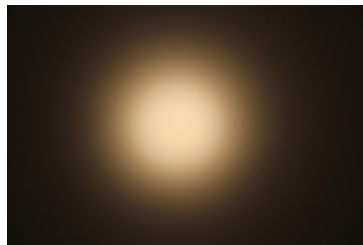
LUMILEDS

LED LUXEON CoB 1202/1203
 FWHM / FWTM 6.0° / 11.0°
 Efficiency 91 %
 Peak intensity 36 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 438 Typ L1


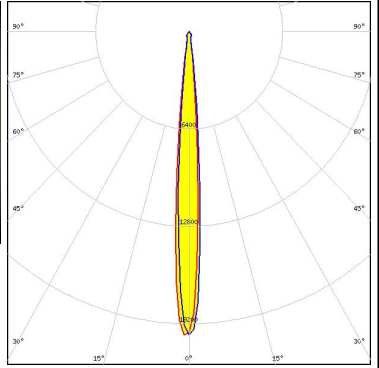
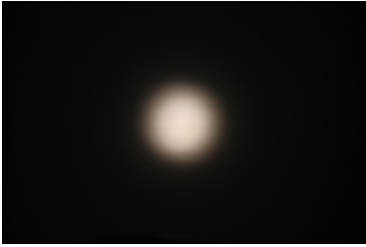
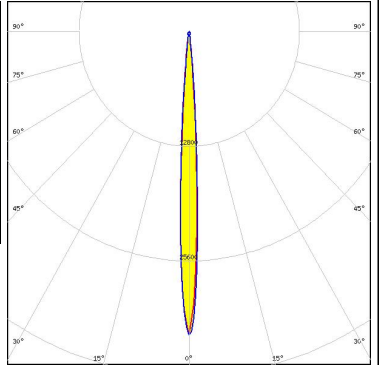
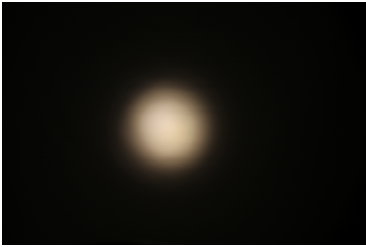
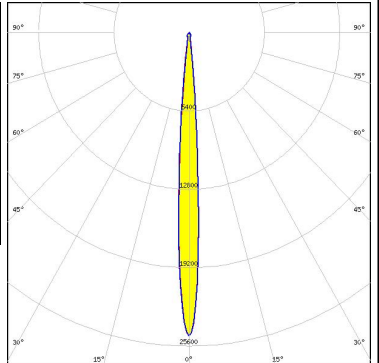

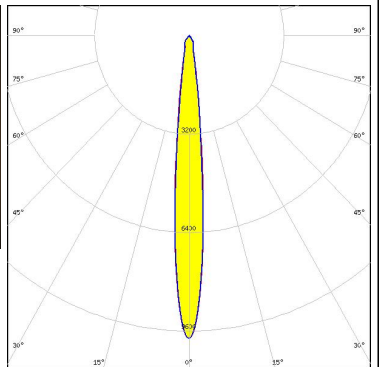


LUMILEDS


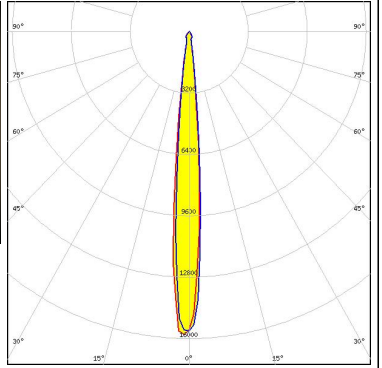

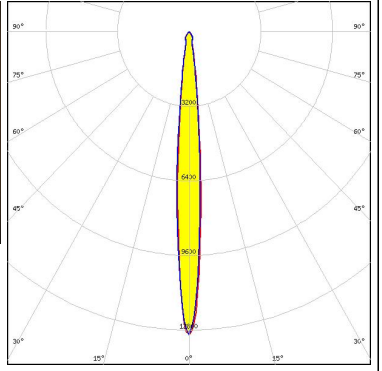

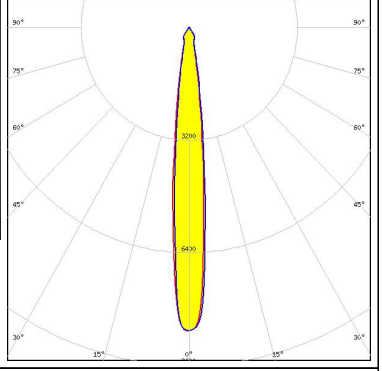

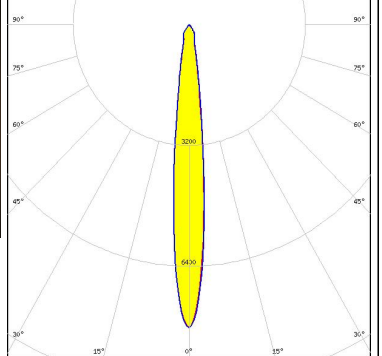
LED LUXEON CoB 1204/1205
 FWHM / FWTM 10.0° / 22.0°
 Efficiency 85 %
 Peak intensity 13.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1




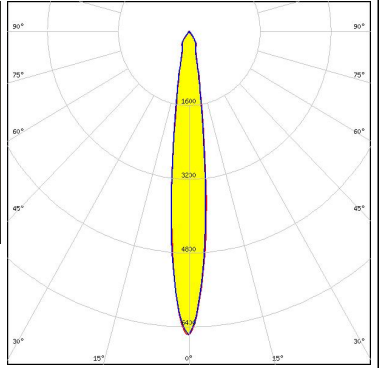

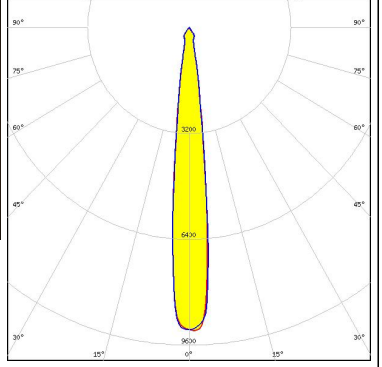
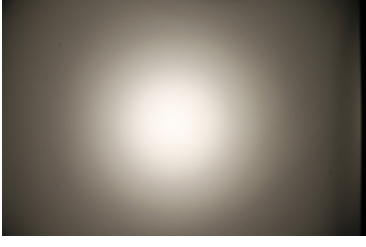
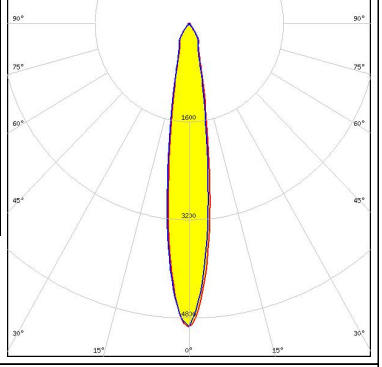

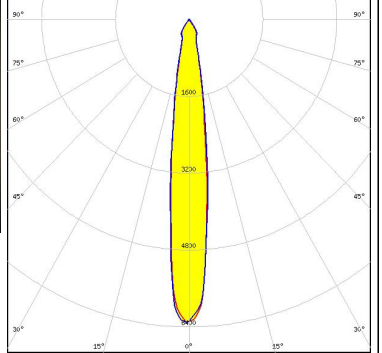
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1204/1205</p> <p>FWHM / FWTM 8.0° / 16.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 19.9 cd/lm</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>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1204HD</p> <p>FWHM / FWTM 6.4° / 12.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 34 cd/lm</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 7.5° / 15.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 24.8 cd/lm</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 11.0° / 24.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 9.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		

OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1208</p> <p>FWHM / FWTM 10.0° / 19.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 15.9 cd/lm</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>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1208</p> <p>FWHM / FWTM 9.0° / 21.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 13 cd/lm</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 12.0° / 27.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 8.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2204-CT + 50-2100AN</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1208</p> <p>FWHM / FWTM 12.0° / 28.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS IDEAL: 50-2100SH + 50-2100AN</p>		

OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1211</p> <p>FWHM / FWTM 13.0° / 32.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 6.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS IDEAL: 50-2204-CT + 50-2100AN</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1211</p> <p>FWHM / FWTM 13.0° / 25.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 9.2 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 1213/1216/1812</p> <p>FWHM / FWTM 16.0° / 39.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 4.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS IDEAL: 50-2204-CT + 50-2100AN</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1213/1216/1812</p> <p>FWHM / FWTM 14.0° / 33.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 6.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2204-CT + 50-2100AN</p>		

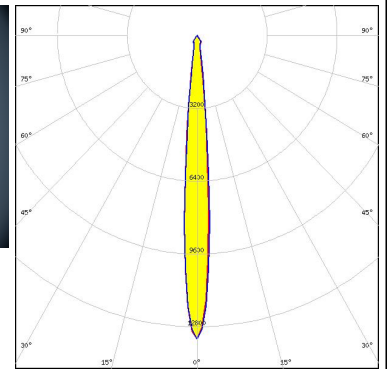
OPTICAL RESULTS (MEASURED):

LUMILEDS

LED LUXEON K12
 FWHM / FWTM 9.0° / 19.0°
 Efficiency 90 %
 Peak intensity 13 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

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

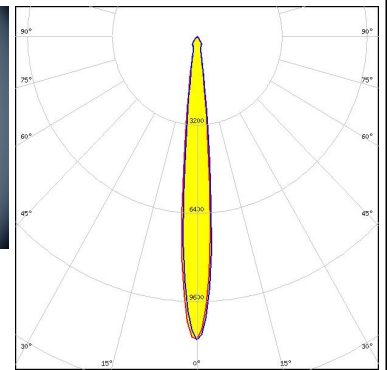


LUMILEDS

LED LUXEON K16
 FWHM / FWTM 10.0° / 22.0°
 Efficiency 90 %
 Peak intensity 11 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

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

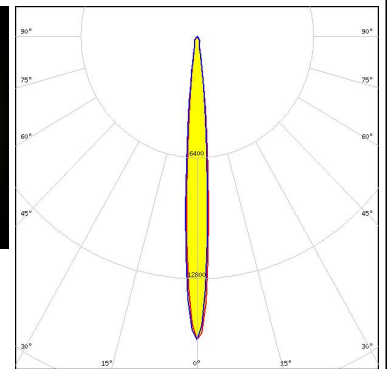


LUMILEDS

LED LUXEON S2000
 FWHM / FWTM 9.0° / 19.0°
 Efficiency 87 %
 Peak intensity 16 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

C13395_CLAMP-S2000
 F13671_ANGE-RZ-LENS

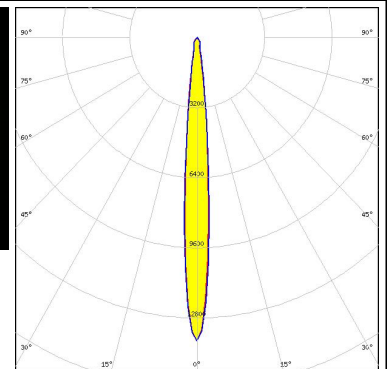


LUMILEDS


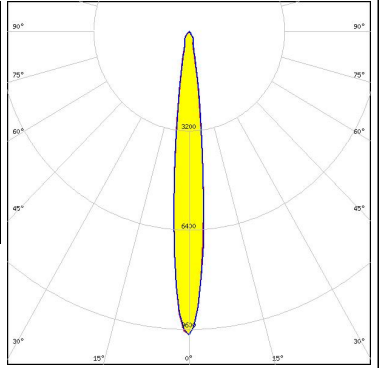

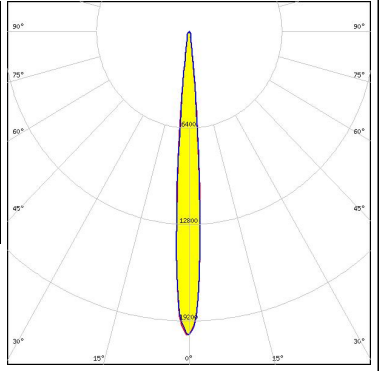

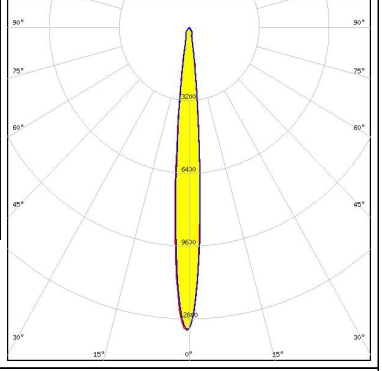

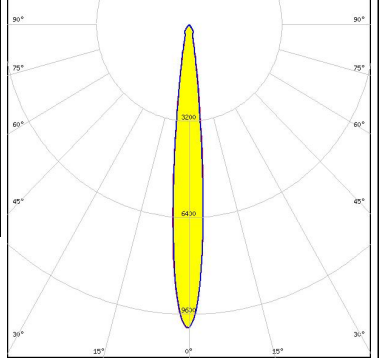
LED LUXEON S3000
 FWHM / FWTM 10.0° / 21.0°
 Efficiency 87 %
 Peak intensity 13.8 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:


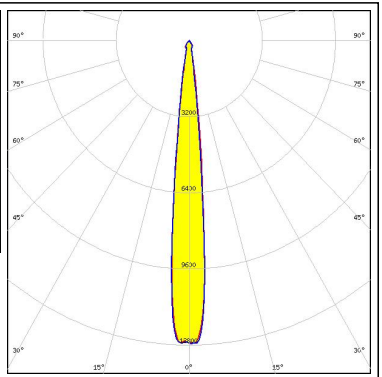

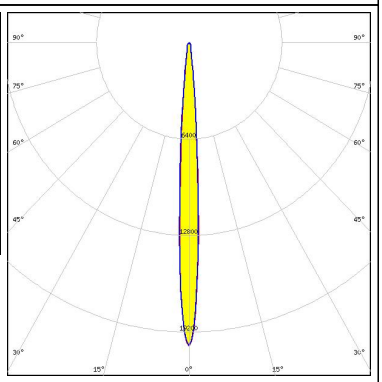

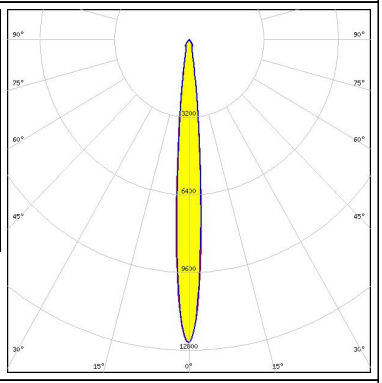

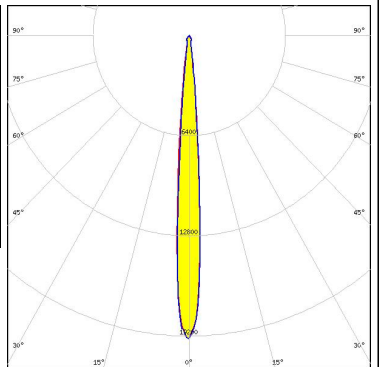
C13397_CLAMP-S3000
 F13671_ANGE-RZ-LENS



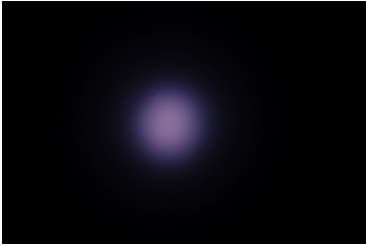
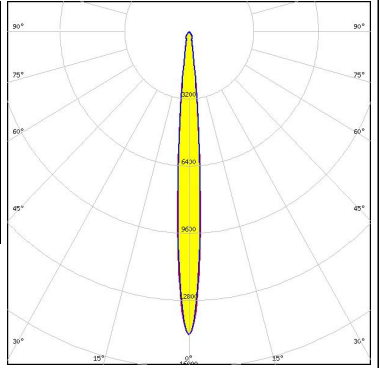
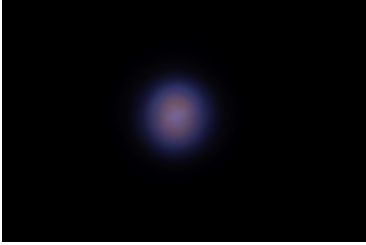
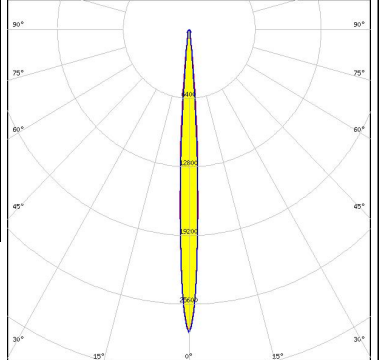

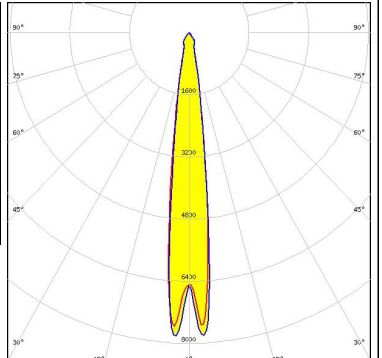
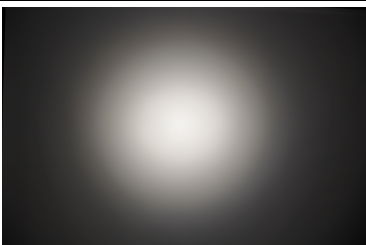
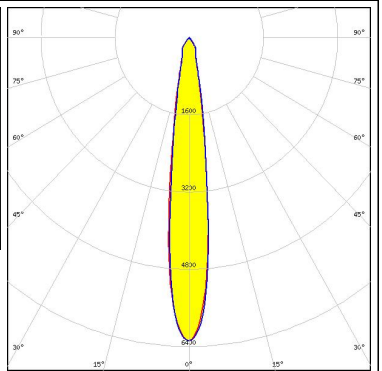
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON S5000</p> <p>FWHM / FWTM 12.0° / 26.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 9.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13399_CLAMP-S5000 F13671_ANGE-RZ-LENS</p>		
<p>LUMINUS</p> <p>LED CDM-14 (Dim-To-Warm)</p> <p>FWHM / FWTM 8.6° / 16.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 20.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 491 Typ L2</p>		
<p>LUMINUS</p> <p>LED CDM-14 (Dim-To-Warm)</p> <p>FWHM / FWTM 9.5° / 21.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 13.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 491 Typ L2</p>		
<p>LUMINUS</p> <p>LED CDM-18 (Dim-To-Warm)</p> <p>FWHM / FWTM 11.0° / 25.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 10 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 491 Typ L2</p>		


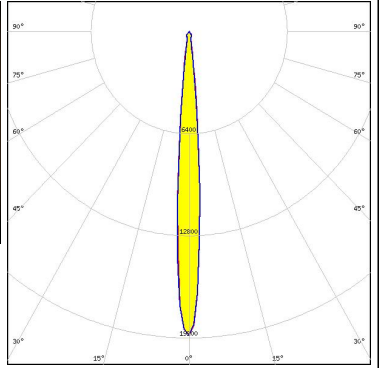

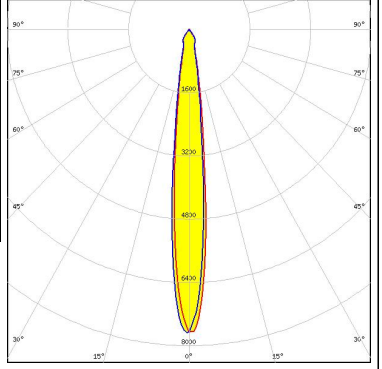

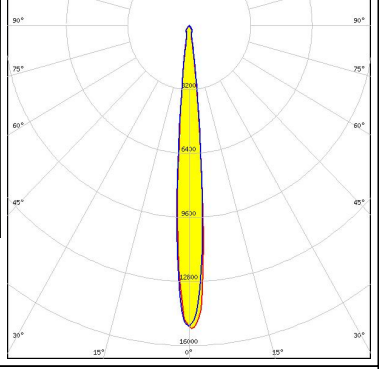

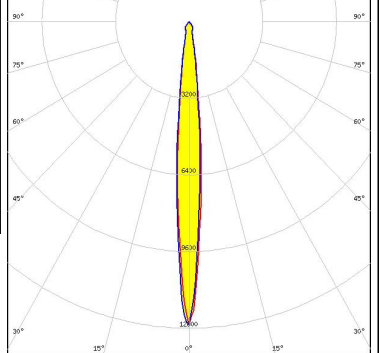
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CDM-18 (Dim-To-Warm)</p> <p>FWHM / FWTM 11.0° / 21.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 12.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 491 Typ L2</p>		
<p>LUMINUS</p> <p>LED CDM-9 (Dim-To-Warm)</p> <p>FWHM / FWTM 7.2° / 16.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 20.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 490 Typ L1</p>		
<p>LUMINUS</p> <p>LED CTM-14 (Tunable White)</p> <p>FWHM / FWTM 9.0° / 21.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 12.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>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)</p> <p>FWHM / FWTM 8.0° / 16.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 19.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 442 Typ L3</p>		


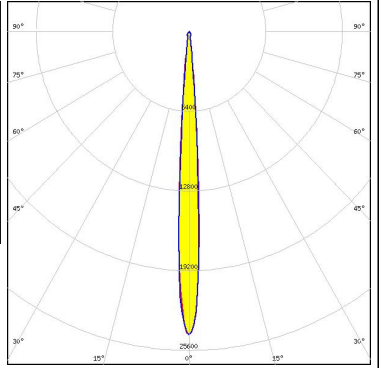

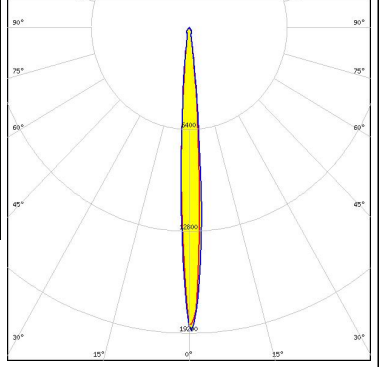

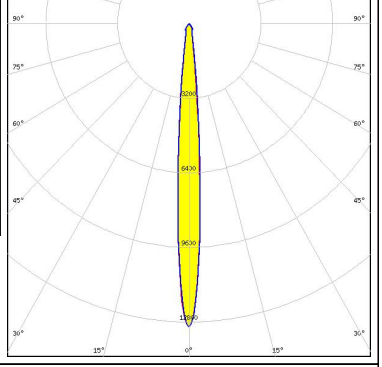

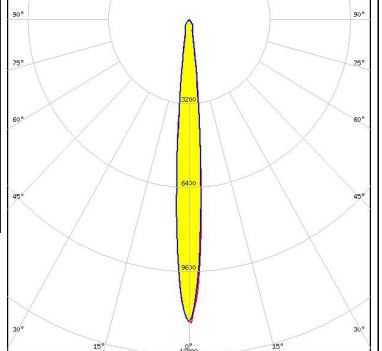
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CTM-14 RGBW</p> <p>FWHM / FWTM 9.0° / 20.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 14.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour RGBW</p> <p>Required components:</p> <p>C13584_CLAMP-VERO29</p> <p>F13671_ANGE-RZ-LENS</p> <p>Bender Wirth: 500 Typ L3-1</p>		
<p>LUMINUS</p> <p>LED CTM-14 RGBW</p> <p>FWHM / FWTM 7.0° / 14.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 28.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour RGBW</p> <p>Required components:</p> <p>C13584_CLAMP-VERO29</p> <p>Bender Wirth: 500 Typ L3-1</p>		
<p>LUMINUS</p> <p>LED CTM-22 (Tunable White)</p> <p>FWHM / FWTM 14.0° / 28.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 7.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13584_CLAMP-VERO29</p> <p>Bender Wirth: 494 Typ L3</p>		
<p>LUMINUS</p> <p>LED CTM-22 (Tunable White)</p> <p>FWHM / FWTM 15.0° / 33.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 6.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13584_CLAMP-VERO29</p> <p>F13671_ANGE-RZ-LENS</p> <p>Bender Wirth: 494 Typ L3</p>		


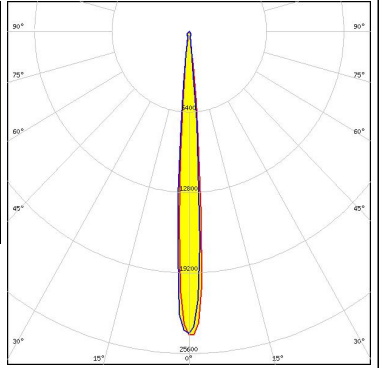

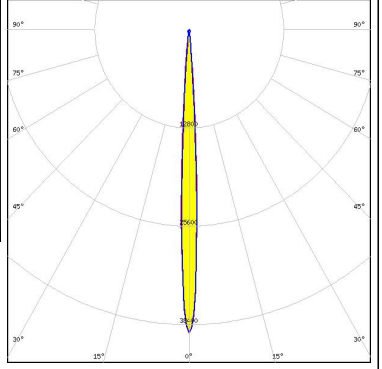

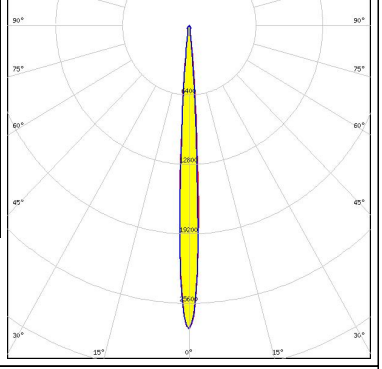

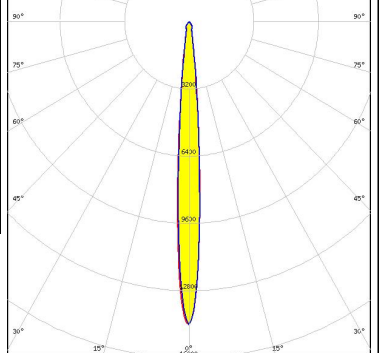
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CxM-14 (19x19) FWHM / FWTM 9.0° / 17.0° Efficiency 94 % Peak intensity 19 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>NICHIA</p> <p>LED COB J-Type FWHM / FWTM 12.0° / 28.0° Efficiency 86 % Peak intensity 7.7 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS IDEAL: 50-2103NC + 50-2100AN</p>		
<p>NICHIA</p> <p>LED COB J-Type FWHM / FWTM 9.0° / 18.0° Efficiency 89 % Peak intensity 15.2 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 463 Typ L2</p>		
<p>NICHIA</p> <p>LED COB J-Type FWHM / FWTM 9.0° / 22.0° Efficiency 91 % Peak intensity 12.7 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: IDEAL: 50-2103NC + 50-2100AN</p>		

OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 7.0° / 14.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 24.3 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 COB L-Type (LES 11)</p> <p>FWHM / FWTM 8.0° / 16.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 19 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2100NC + 50-2100AN</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 9.0° / 20.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 13 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS 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 9.0° / 21.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 12 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS IDEAL: 50-2100NC + 50-2100AN</p>		

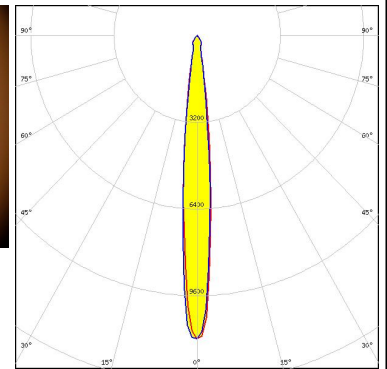
OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 8.0° / 14.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 24 cd/lm</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 9)</p> <p>FWHM / FWTM 6.0° / 11.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 39 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 7.0° / 13.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 28 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 9.0° / 19.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 14.4 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>		

OPTICAL RESULTS (MEASURED):

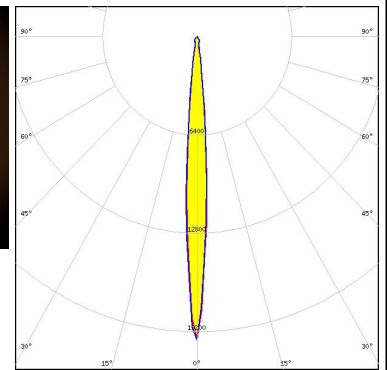
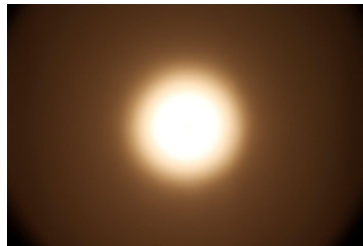
OSRAM

LED PrevaLED Core AC (LEP-2000)
 FWHM / FWTM 11.0° / 23.0°
 Efficiency 92 %
 Peak intensity 11.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



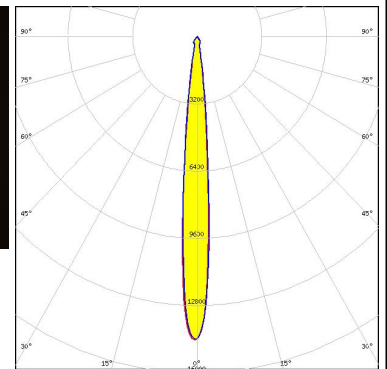
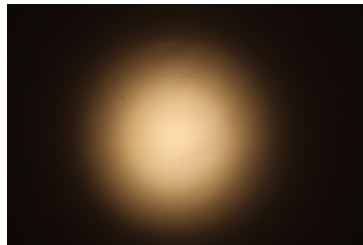
OSRAM

LED PrevaLED Core AC (LEP-800)
 FWHM / FWTM 8.0° / 17.0°
 Efficiency 94 %
 Peak intensity 19.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



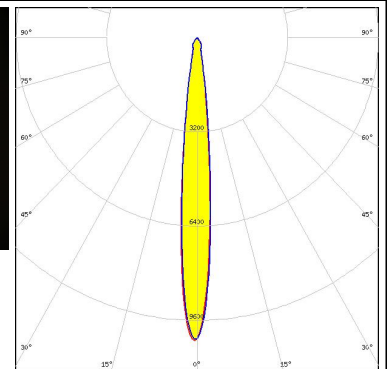
OSRAM

LED PrevaLED Core G7 L15 H1
 FWHM / FWTM 10.0° / 20.0°
 Efficiency 93 %
 Peak intensity 14.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16685_CLAMP-PRV-A



OSRAM

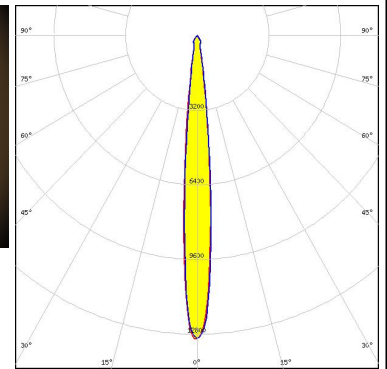
LED PrevaLED Core G7 L15 H1
 FWHM / FWTM 11.0° / 24.0°
 Efficiency 89 %
 Peak intensity 10.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16685_CLAMP-PRV-A
 F13671_ANGE-RZ-LENS



OPTICAL RESULTS (MEASURED):

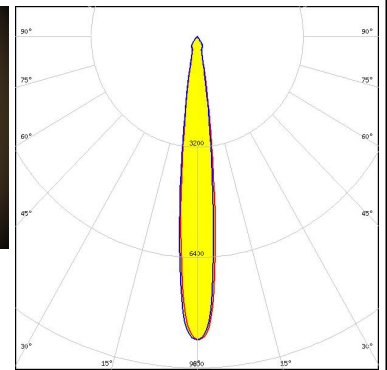
OSRAM

LED PrevaLED Core Z3 LES19
 FWHM / FWTM 10.0° / 21.0°
 Efficiency 93 %
 Peak intensity 13 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



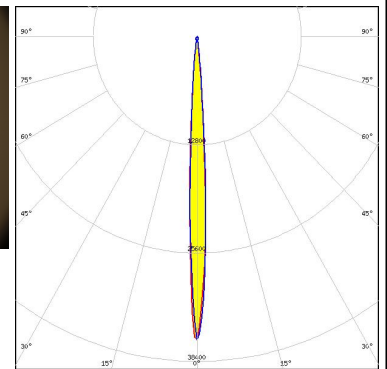
OSRAM

LED PrevaLED Core Z3 LES23
 FWHM / FWTM 13.0° / 27.0°
 Efficiency 93 %
 Peak intensity 8.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



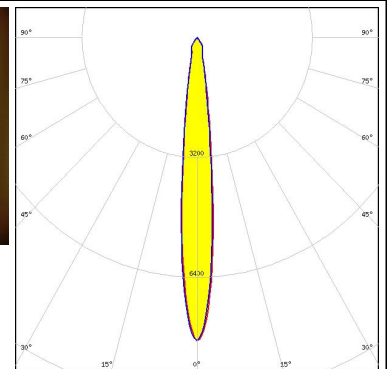
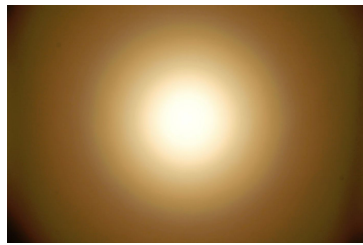
OSRAM

LED PrevaLED Core Z3 LES9
 FWHM / FWTM 6.0° / 12.0°
 Efficiency 94 %
 Peak intensity 36 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



OSRAM

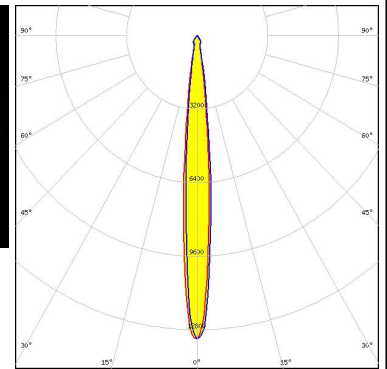
LED PrevaLED Core Z4 LES19
 FWHM / FWTM 12.0° / 28.0°
 Efficiency 85 %
 Peak intensity 8.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



OPTICAL RESULTS (MEASURED):

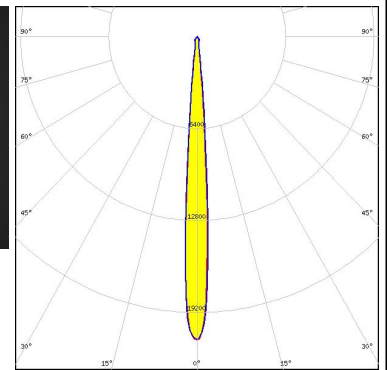
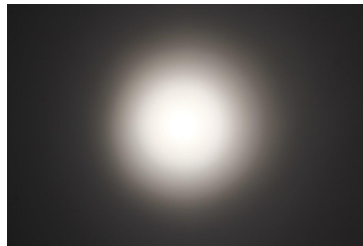
OSRAM

LED PrevaLED Core Z4 LES19
 FWHM / FWTM 10.0° / 21.0°
 Efficiency 93 %
 Peak intensity 13.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



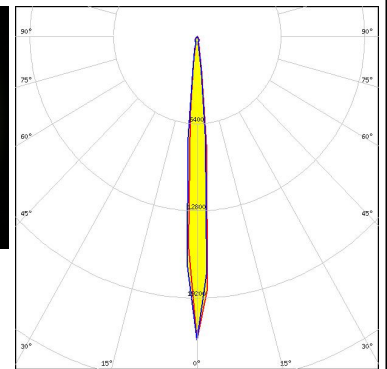
OSRAM

Opto Semiconductors
 LED Soleriq S13
 FWHM / FWTM 8.0° / 15.0°
 Efficiency 89 %
 Peak intensity 21 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 437 Typ L1



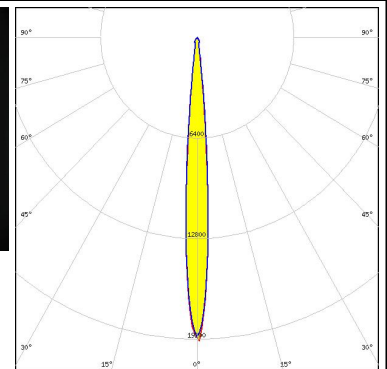
OSRAM

Opto Semiconductors
 LED Soleriq S13
 FWHM / FWTM 8.0° / 15.0°
 Efficiency 94 %
 Peak intensity 22 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1


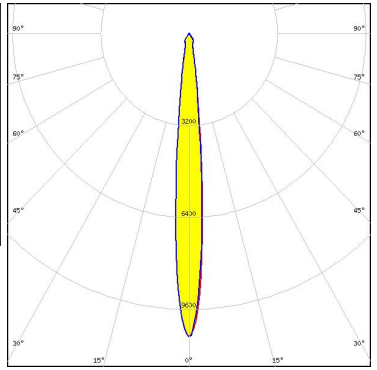
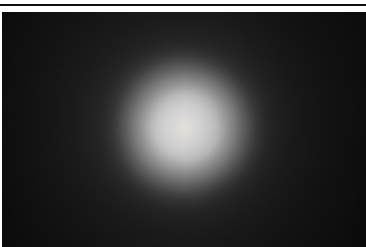
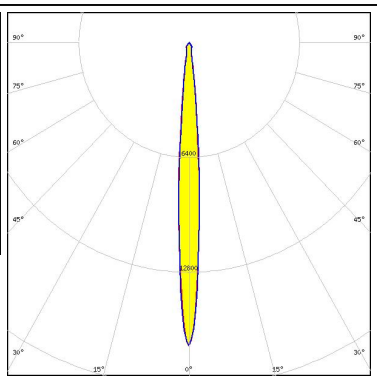

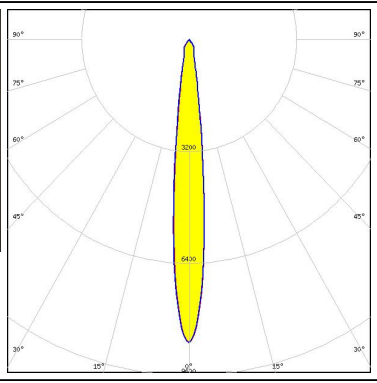

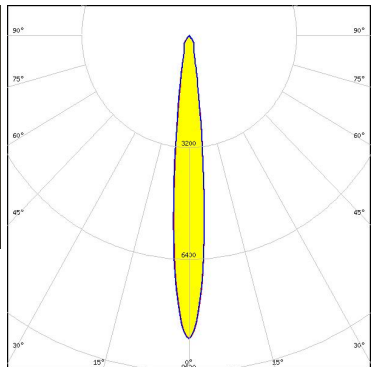


OSRAM

Opto Semiconductors
 LED Soleriq S13 19x19
 FWHM / FWTM 8.0° / 16.0°
 Efficiency 90 %
 Peak intensity 19 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



OPTICAL RESULTS (MEASURED):

<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13 19x19</p> <p>FWHM / FWTM 10.0° / 23.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 11 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS IDEAL: 50-2103CT + 50-2100AN</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13 19x19</p> <p>FWHM / FWTM 8.0° / 18.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 16.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: IDEAL: 50-2103CT + 50-2100AN</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13 19x19</p> <p>FWHM / FWTM 9.0° / 20.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 13 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S19</p> <p>FWHM / FWTM 12.0° / 26.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 8.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS TE Connectivity: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		

OPTICAL RESULTS (MEASURED):

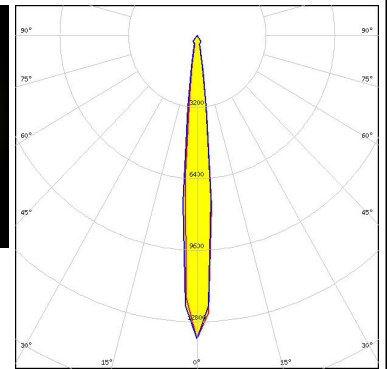
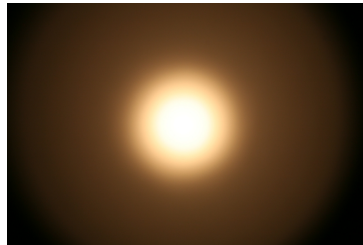
OSRAM

Opto Semiconductors

LED Soleriq S19
 FWHM / FWTM 10.0° / 20.0°
 Efficiency 94 %
 Peak intensity 13.5 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

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



OSRAM

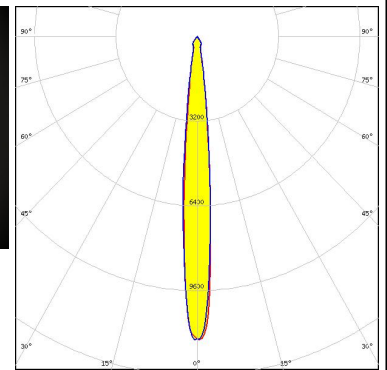
Opto Semiconductors

LED Soleriq S19
 FWHM / FWTM 11.0° / 23.0°
 Efficiency 90 %
 Peak intensity 11.5 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

C13584_CLAMP-VERO29

Bender Wirth: 462 Typ L3

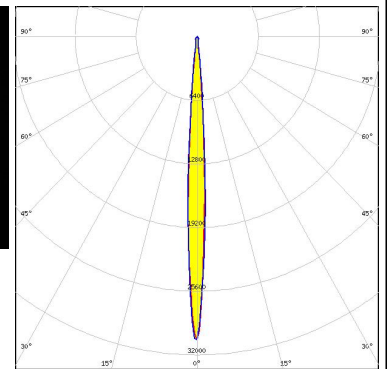


PHILIPS

LED Fortimo SLM L09 + SLM holder
 FWHM / FWTM 7.0° / 13.0°
 Efficiency 91 %
 Peak intensity 30.6 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

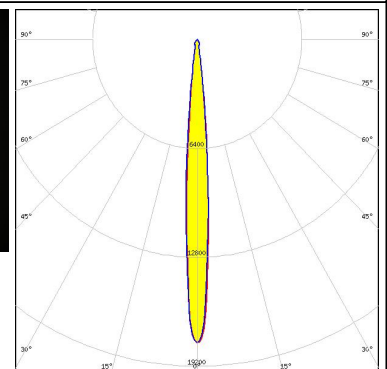


PHILIPS

LED Fortimo SLM L13 + SLM holder
 FWHM / FWTM 8.5° / 17.0°
 Efficiency 91 %
 Peak intensity 17.8 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

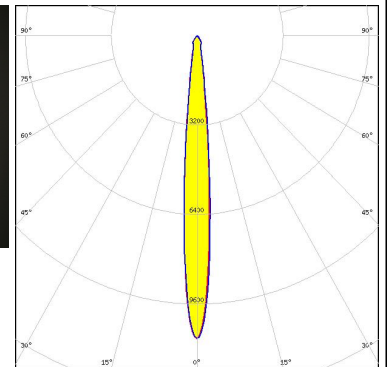
TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



OPTICAL RESULTS (MEASURED):

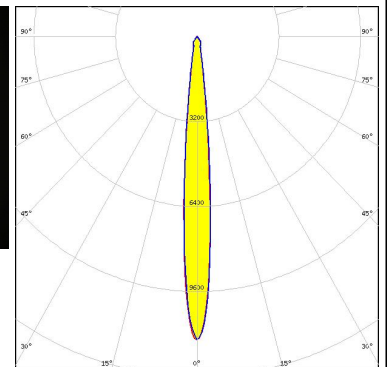
PHILIPS

LED Fortimo SLM L13 + SLM holder
 FWHM / FWTM 10.0° / 22.0°
 Efficiency 84 %
 Peak intensity 11 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



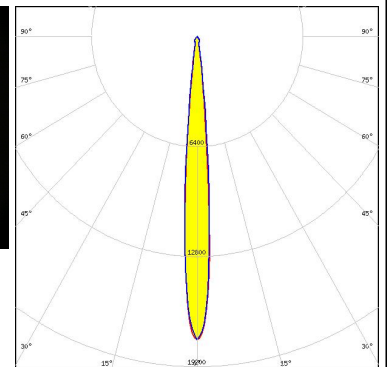
PHILIPS

LED Fortimo SLM L13 CoB
 FWHM / FWTM 10.0° / 22.0°
 Efficiency 86 %
 Peak intensity 11.5 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



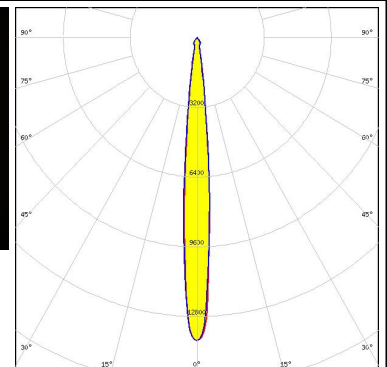
PHILIPS

LED Fortimo SLM L13 CoB
 FWHM / FWTM 9.0° / 17.0°
 Efficiency 92 %
 Peak intensity 17.7 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 L15 + SLM holder
 FWHM / FWTM 10.0° / 20.0°
 Efficiency 89 %
 Peak intensity 13.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



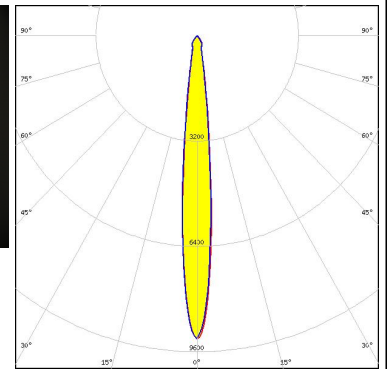
OPTICAL RESULTS (MEASURED):

PHILIPS

LED Fortimo SLM L15 + SLM holder
 FWHM / FWTM 11.0° / 25.0°
 Efficiency 84 %
 Peak intensity 9.2 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

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

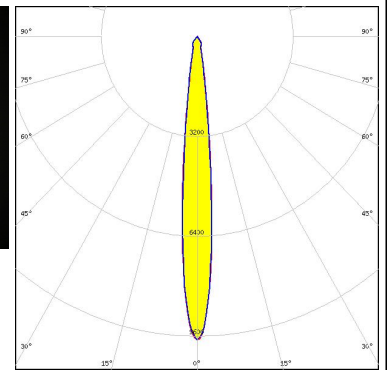
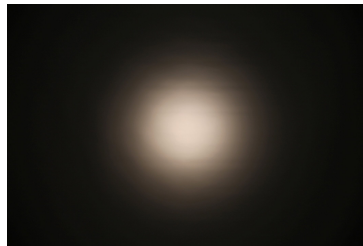


PHILIPS

LED Fortimo SLM L15 CoB
 FWHM / FWTM 11.0° / 24.0°
 Efficiency 86 %
 Peak intensity 9.7 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

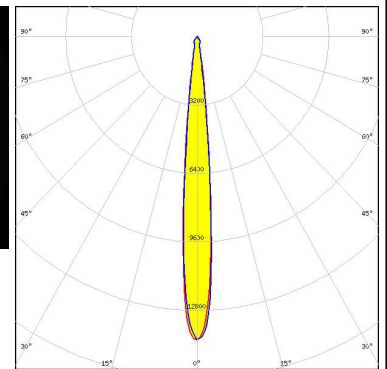


PHILIPS

LED Fortimo SLM L15 CoB
 FWHM / FWTM 10.0° / 20.0°
 Efficiency 92 %
 Peak intensity 14.2 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

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

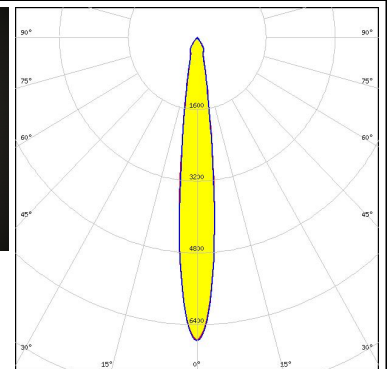


PHILIPS

LED Fortimo SLM L19 + SLM holder
 FWHM / FWTM 13.0° / 31.0°
 Efficiency 84 %
 Peak intensity 6.8 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

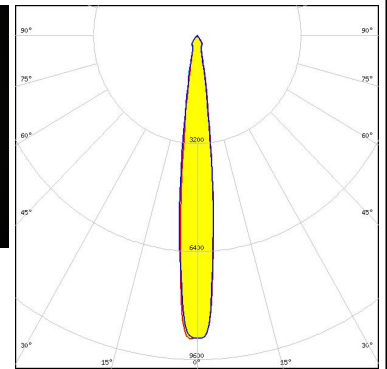
F13671_ANGE-RZ-LENS
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



OPTICAL RESULTS (MEASURED):

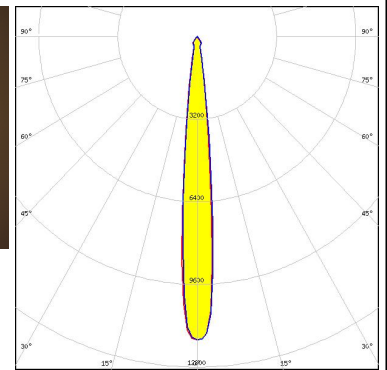
PHILIPS

LED Fortimo SLM L19 + SLM holder
 FWHM / FWTM 13.0° / 25.0°
 Efficiency 88 %
 Peak intensity 9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



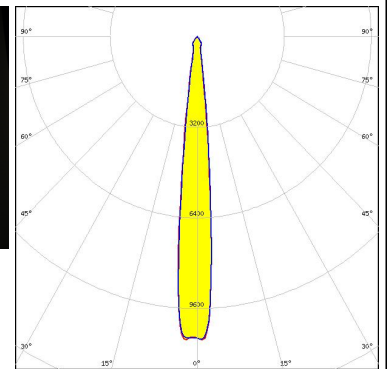
SAMSUNG

LED LC026B / 033B / 040B
 FWHM / FWTM 11.0° / 22.0°
 Efficiency 93 %
 Peak intensity 11.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213258-2 + OPTIC CLIP Z50 TYPE1 2213194-1



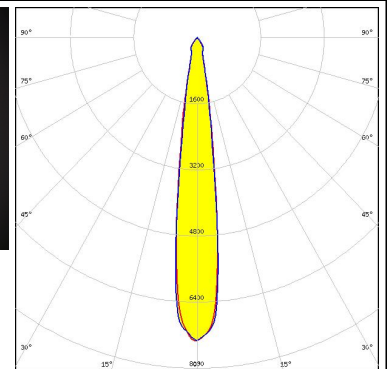
SAMSUNG

LED LC026B / 033B / 040B
 FWHM / FWTM 11.0° / 21.0°
 Efficiency 8 %
 Peak intensity 10.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 450 Typ L2



SAMSUNG

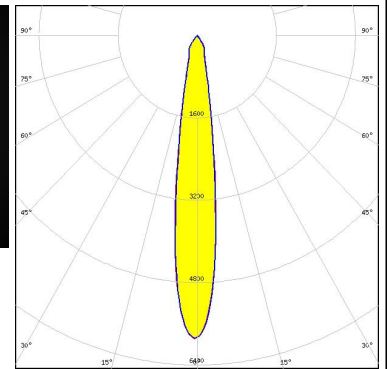
LED LC035T (Tunable white)
 FWHM / FWTM 15.0° / 30.0°
 Efficiency 92 %
 Peak intensity 7.3 cd/lm
 LEDs/each optic 1
 Light colour Tunable White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 502 Typ L3



OPTICAL RESULTS (MEASURED):

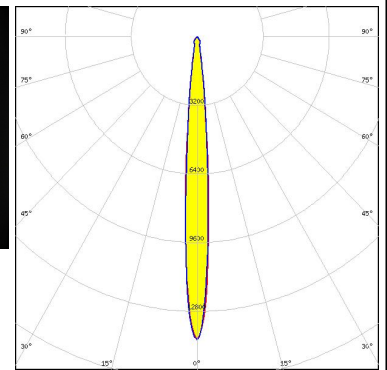
SAMSUNG

LED LC035T (Tunable white)
 FWHM / FWTM 15.0° / 35.0°
 Efficiency 87 %
 Peak intensity 5.9 cd/lm
 LEDs/each optic 1
 Light colour Tunable White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 502 Typ L3



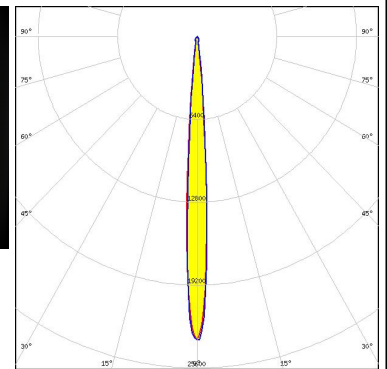
SAMSUNG

LED LC040C
 FWHM / FWTM 9.0° / 19.0°
 Efficiency 85 %
 Peak intensity 14 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1

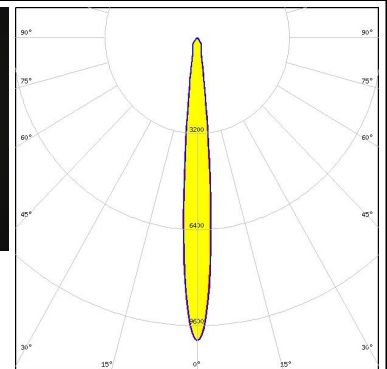


SAMSUNG


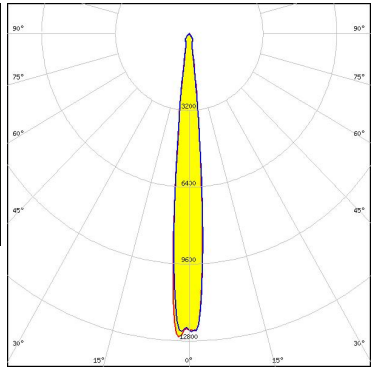

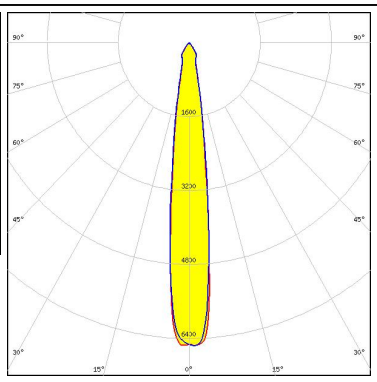

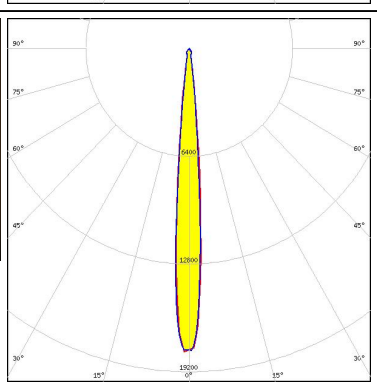

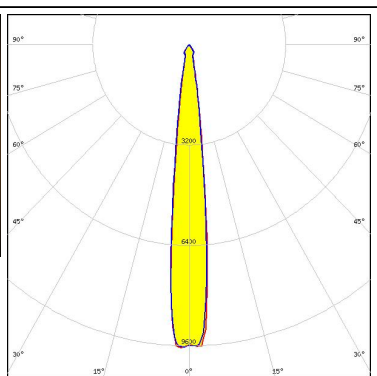
LED LC040C
 FWHM / FWTM 7.0° / 15.0°
 Efficiency 89 %
 Peak intensity 23 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1




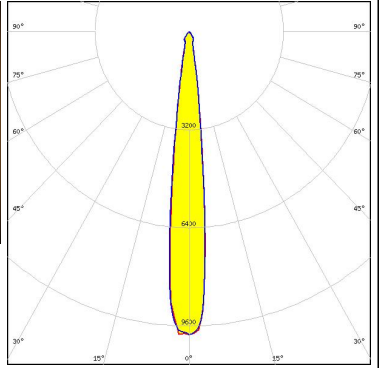
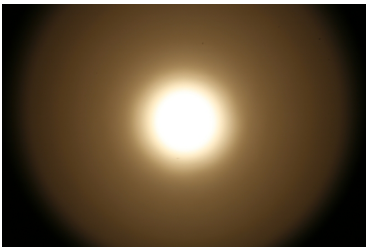
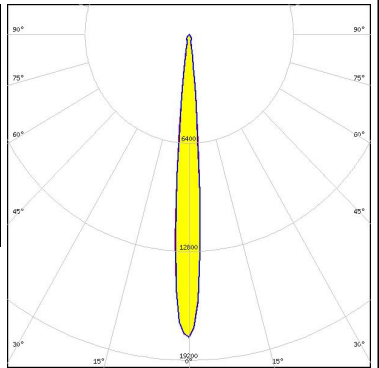

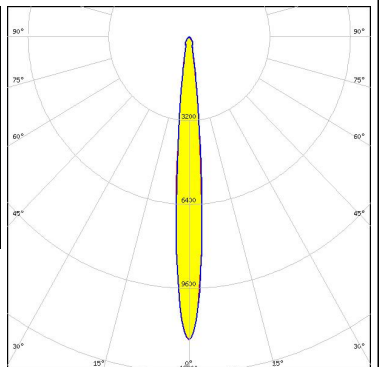
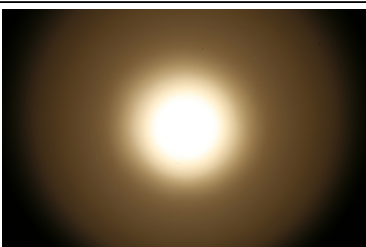
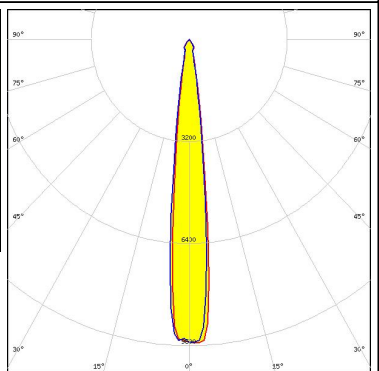
SEMI-LED SEMICONDUCTOR
 LED AC Zhaga COB
 FWHM / FWTM 10.0° / 23.0°
 Efficiency 84 %
 Peak intensity 10.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 Optosource: SEHSMJD-A



OPTICAL RESULTS (MEASURED):

<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED MJT COB LES 14.5 FWHM / FWTM 10.0° / 20.0° Efficiency 88 % Peak intensity 12.6 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED MJT COB LES 22 FWHM / FWTM 14.0° / 31.0° Efficiency 88 % Peak intensity 6.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 Bender Wirth: 431 Typ L3</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-461 FWHM / FWTM 9.0° / 17.0° Efficiency 93 % Peak intensity 18 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 13.0° / 25.0° Efficiency 92 % Peak intensity 9.7 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

OPTICAL RESULTS (MEASURED):

<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-464 FWHM / FWTM 12.0° / 24.0° Efficiency 92 % Peak intensity 9.9 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 9.0° / 17.0° Efficiency 93 % Peak intensity 17.9 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 10.0° / 22.0° Efficiency 84 % Peak intensity 12 cd/lm LEDs/each optic 1 Light colour White Required components: F13671_ANGE-RZ-LENS TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-485 FWHM / FWTM 13.0° / 25.0° Efficiency 93 % Peak intensity 9.5 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

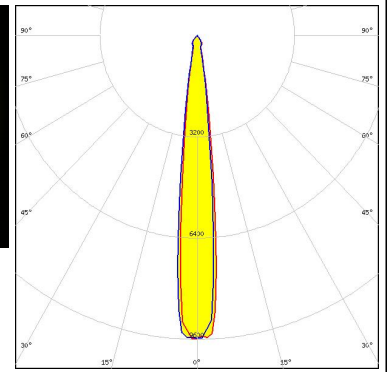
OPTICAL RESULTS (MEASURED):



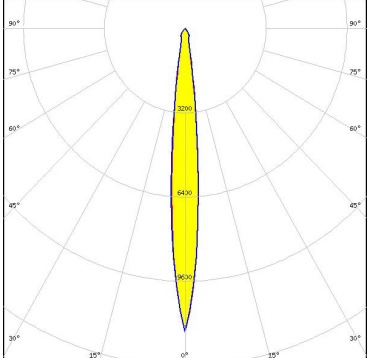
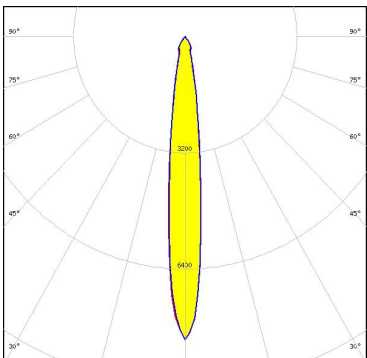
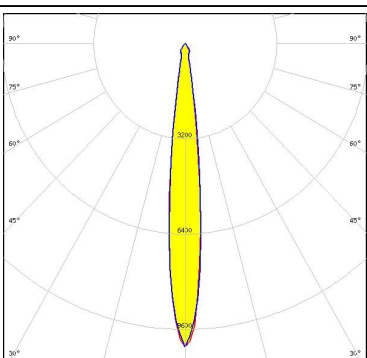
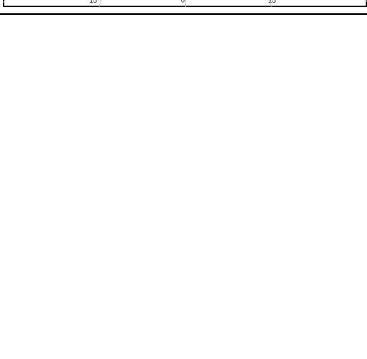
LED WU-M-486
FWHM / FWTM 13.0° / 25.0°
Efficiency 93 %
Peak intensity 9.6 cd/lm
LEDs/each optic 1
Light colour White

Required components:

TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



OPTICAL RESULTS (SIMULATED):

<p>bridgelux.</p> <p>LED V13 Gen7 FWHM / FWTM 11.0° / 22.0° Efficiency 90 % Peak intensity 11.5 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 / FWTM 12.0° / 30.0° Efficiency 93 % Peak intensity 8.3 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2204-CT + 50-2100AN</p>	
<p>CREE LEDs</p> <p>LED CXA/B 1830 FWHM / FWTM 12.0° / 24.0° Efficiency 88 % Peak intensity 10.2 cd/lm LEDs/each optic 1 Light colour White Required components: TE Connectivity: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>	
<p>LUMINUS</p> <p>LED CxM-14 (19x19) FWHM / FWTM 10.0° / 18.0° Efficiency 88 % Peak intensity 15 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 486 Typ L1</p>	

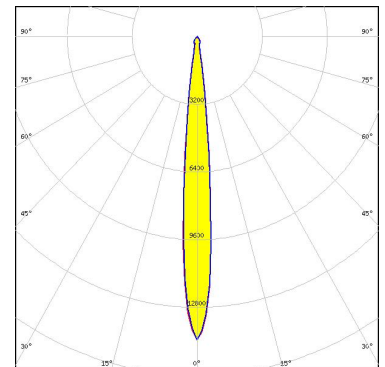
OPTICAL RESULTS (SIMULATED):



LED CxM-9 (13.5x13.5)
 FWHM / FWTM 6.0° / 12.0°
 Efficiency 90 %
 Peak intensity 34.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



LED Soleriq S15
 FWHM / FWTM 10.0° / 19.0°
 Efficiency 90 %
 Peak intensity 14.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



SEOL SEMICONDUCTOR
 LED ZC12/18
 FWHM / FWTM 10.0° / 18.0°
 Efficiency 88 %
 Peak intensity 15 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 433 Typ L1

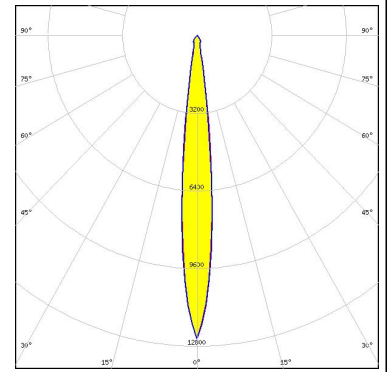


SEOL SEMICONDUCTOR
 LED ZC4/6
 FWHM / FWTM 6.0° / 12.0°
 Efficiency 90 %
 Peak intensity 34.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1

OPTICAL RESULTS (SIMULATED):

TRIDONIC

LED	SLE G7 LES13
FWHM / FWTM	12.0° / 22.0°
Efficiency	94 %
Peak intensity	12.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
Bender Wirth: 633c 3Hook	



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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