

ANGELA-M

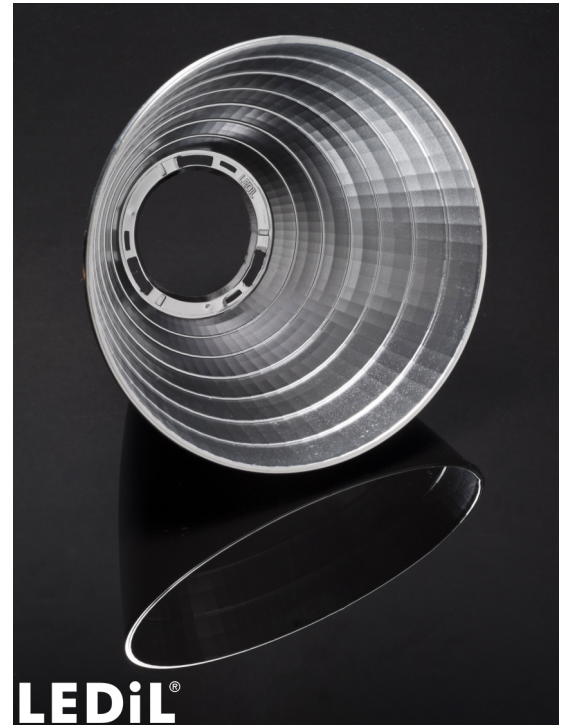
~30° medium beam

TECHNICAL SPECIFICATIONS:

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

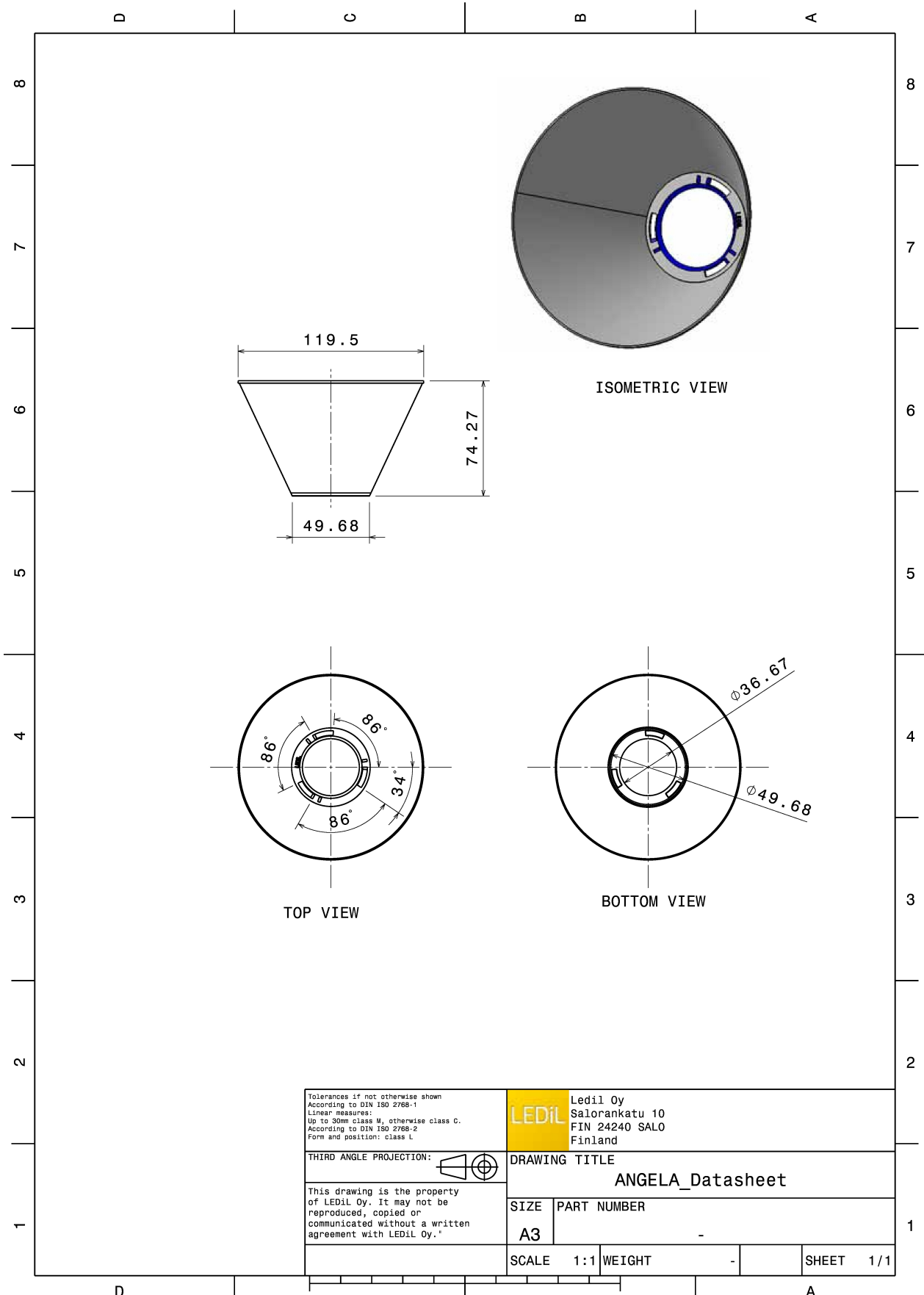
MATERIAL SPECIFICATIONS:

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



ORDERING INFORMATION:

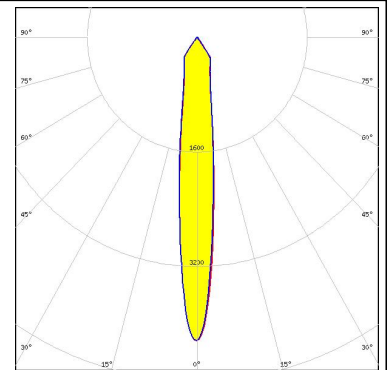
Component	Qty in box	MOQ	MPQ	Box weight (kg)
F13380_ANGELA-M » Box size: 398 x 298 x 265 mm	180	90	45	9.3



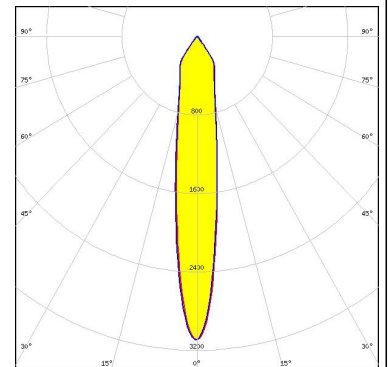
PHOTOMETRIC DATA (MEASURED):



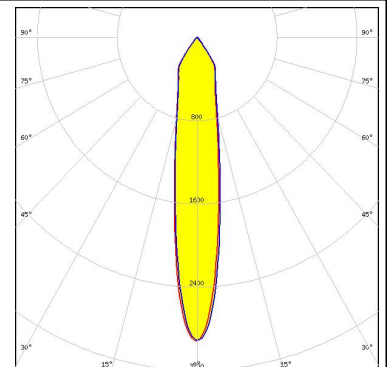
LED V10 Gen7
FWHM 14.0°
Efficiency 83 %
Peak intensity 4.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 434 Typ L1



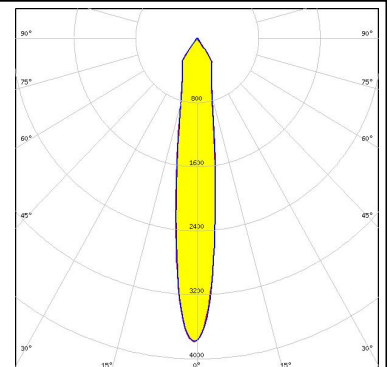
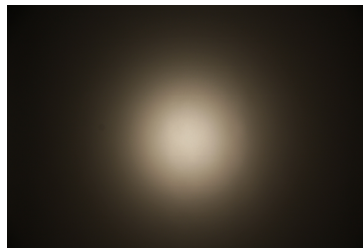
LED V10 Gen7
FWHM 16.0°
Efficiency 78 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
F13671_ANGE-RZ-LENS
Bender Wirth: 434 Typ L1



LED V13 Gen7
FWHM 18.0°
Efficiency 80 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F13671_ANGE-RZ-LENS
TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



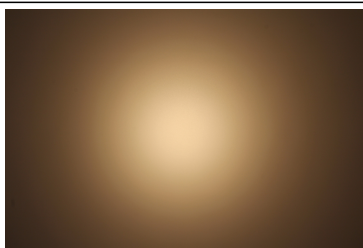
LED V13 Gen7
FWHM 16.0°
Efficiency 84 %
Peak intensity 3.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



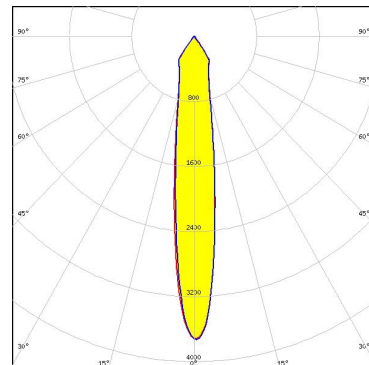
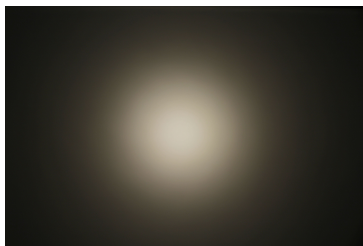
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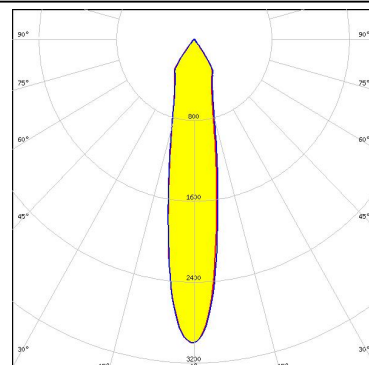
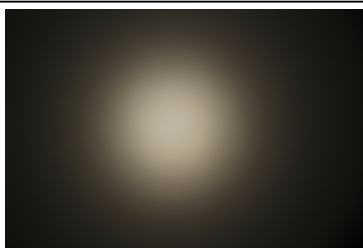
LED V15 Gen6
FWHM 17.0°
Efficiency 92 %
Peak intensity 3.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 456 Typ L2



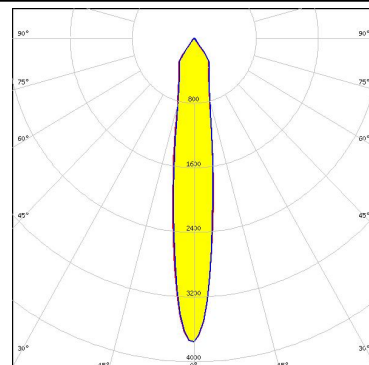
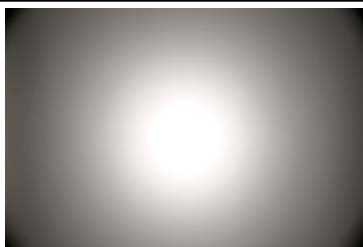
LED Vero SE 13
FWHM 16.0°
Efficiency 84 %
Peak intensity 3.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C16402_CLAMP-VEROSE-13-18



LED Vero SE 18
FWHM 19.0°
Efficiency 84 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C16402_CLAMP-VEROSE-13-18



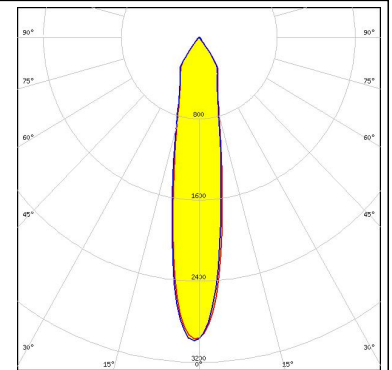
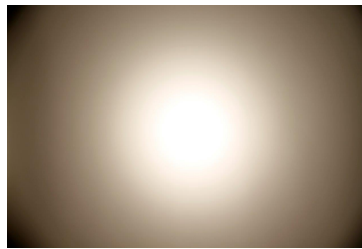
LED VERO13
FWHM 16.0°
Efficiency 87 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18



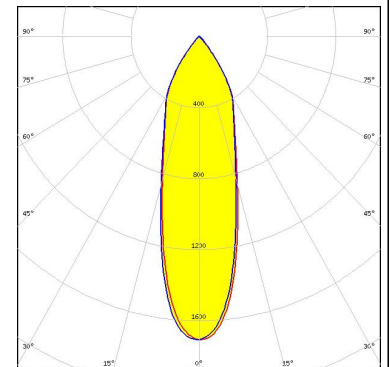
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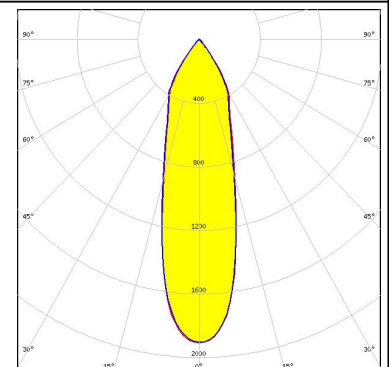
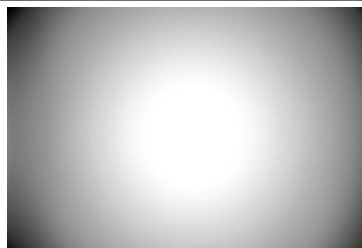
LED VERO18
FWHM 19.0°
Efficiency 85 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18



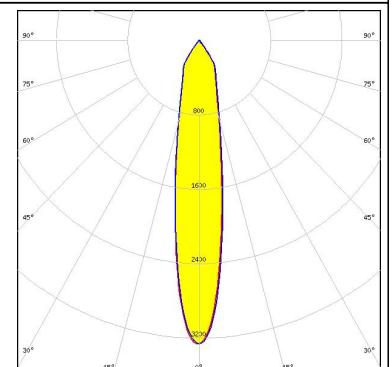
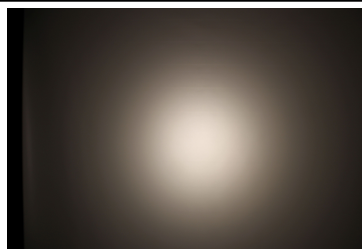
LED VERO29
FWHM 30.0°
Efficiency 79 %
Peak intensity 1.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13584_CLAMP-VERO29
F13671_ANGE-RZ-LENS



LED VERO29
FWHM 29.0°
Efficiency 85 %
Peak intensity 1.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13584_CLAMP-VERO29



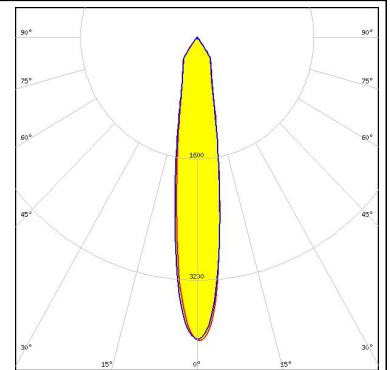
LED Vesta TW 15mm DP
FWHM 19.0°
Efficiency 82 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour Tunable White
Required components:
C13658_CLAMP-VERO13-18
F13671_ANGE-RZ-LENS
Bender Wirth: 482 Typ L2



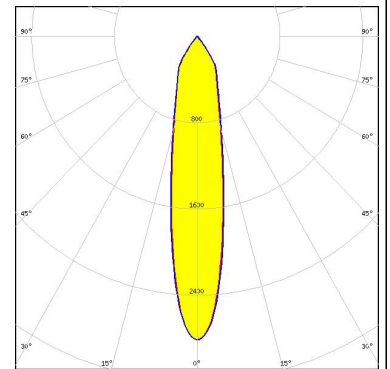
PHOTOMETRIC DATA (MEASURED):



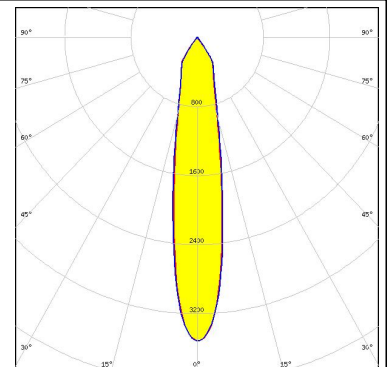
LED Vesta TW 15mm DP
FWHM 18.0°
Efficiency 88 %
Peak intensity 4 cd/Im
LEDs/each optic 1
Light colour Tunable White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 482 Typ L2



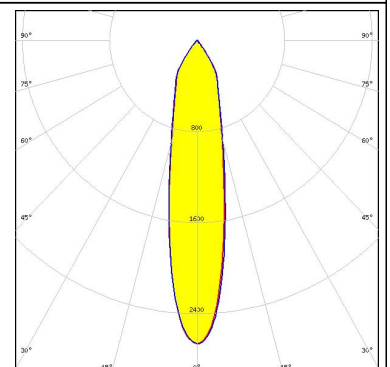
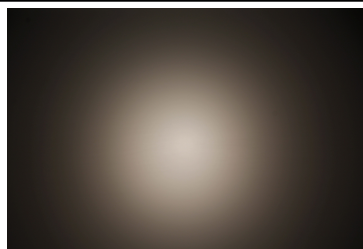
LED Vesta TW 18mm (31W) DP
FWHM 21.0°
Efficiency 82 %
Peak intensity 2.8 cd/Im
LEDs/each optic 1
Light colour Tunable White
Required components:
C13584_CLAMP-VERO29
F13671_ANGE-RZ-LENS
Bender Wirth: 483 Typ L3



LED Vesta TW 18mm (31W) DP
FWHM 19.0°
Efficiency 88 %
Peak intensity 3.5 cd/Im
LEDs/each optic 1
Light colour Tunable White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 483 Typ L3



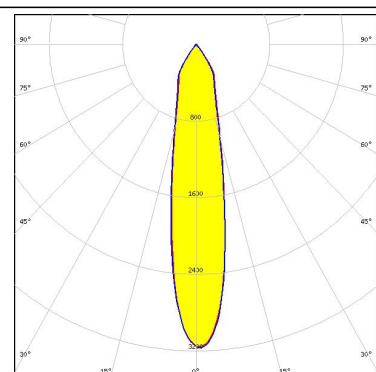
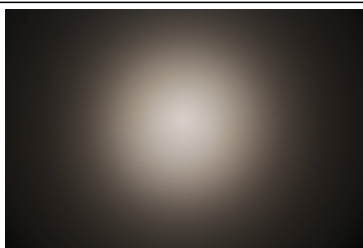
LED Vesta TW 22mm DP
FWHM 22.0°
Efficiency 83 %
Peak intensity 2.7 cd/Im
LEDs/each optic 1
Light colour Tunable White
Required components:
C13584_CLAMP-VERO29
F13671_ANGE-RZ-LENS
Bender Wirth: 494 Typ L3



PHOTOMETRIC DATA (MEASURED):

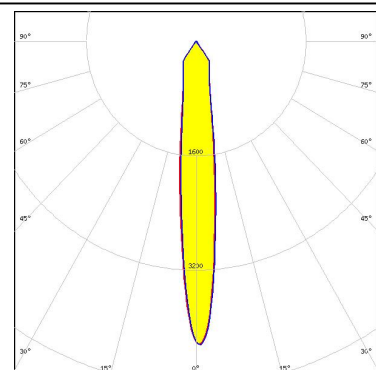
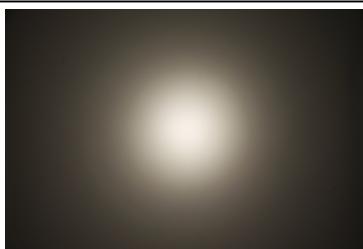


LED Vesta TW 22mm DP
FWHM 21.0°
Efficiency 87 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour Tunable White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 494 Typ L3



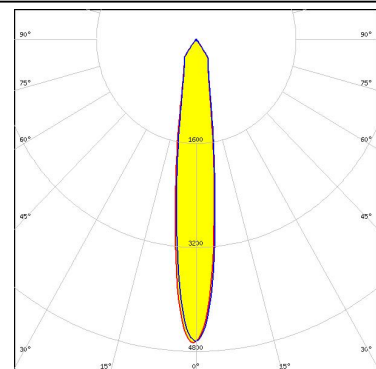
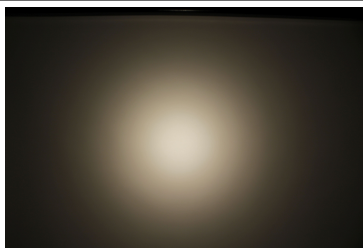
CITIZEN

LED CLL02x/CLU02x (LES10)
FWHM 14.0°
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



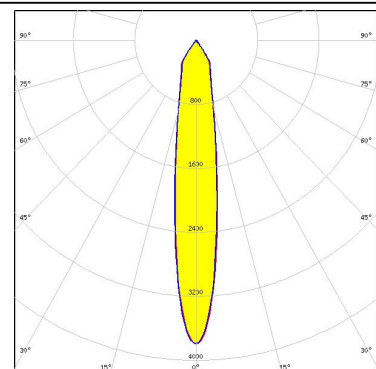
CITIZEN

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



CITIZEN

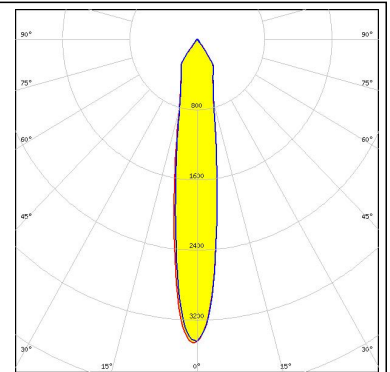
LED CLL03x/CLU03x
FWHM 17.0°
Efficiency 85 %
Peak intensity 3.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C16791_CLAMP-Z45-A
F13671_ANGE-RZ-LENS
TE: 2325807-3



PHOTOMETRIC DATA (MEASURED):

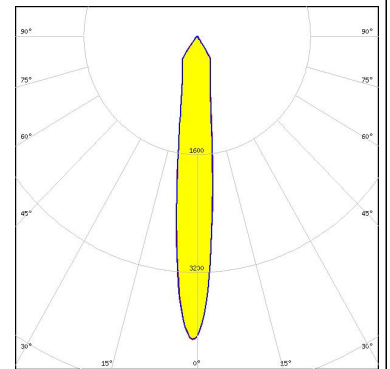
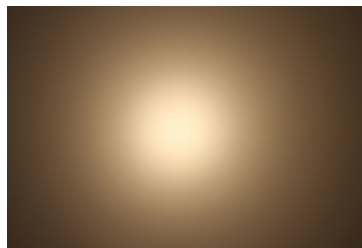
CITIZEN

LED CLL03x/CLU03x
FWHM 17.0°
Efficiency 88 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 433 Typ L1



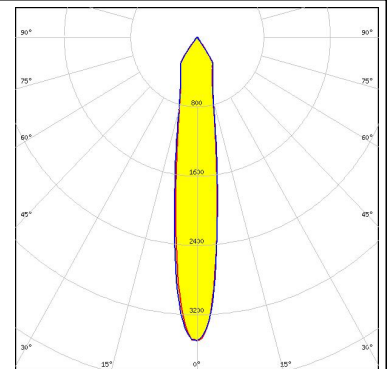
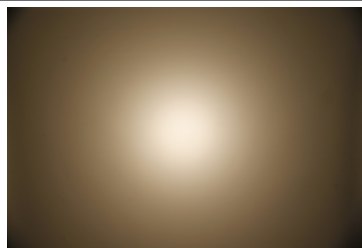
CITIZEN

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



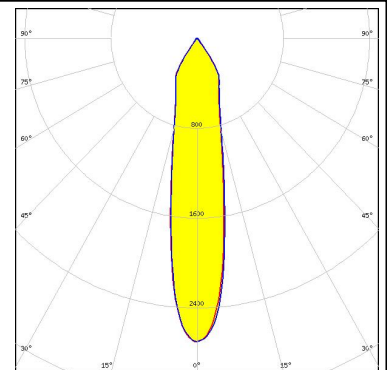
CITIZEN

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



CITIZEN

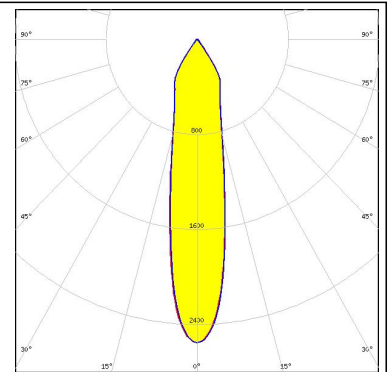
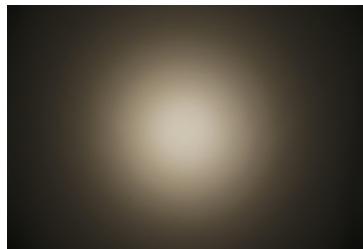
LED CLL04x/CLU04x
FWHM 21.0°
Efficiency 84 %
Peak intensity 2.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 431 Typ L3



PHOTOMETRIC DATA (MEASURED):

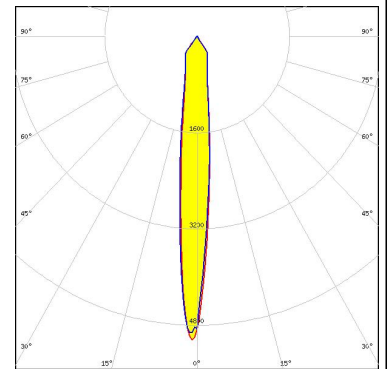
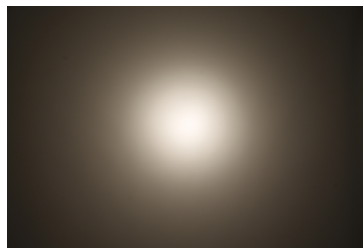
CITIZEN

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



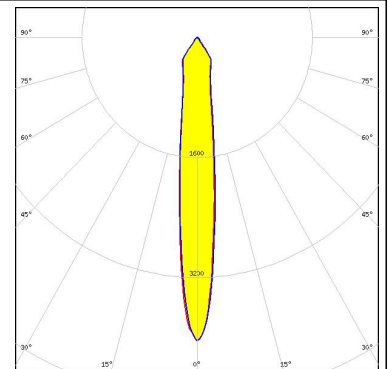
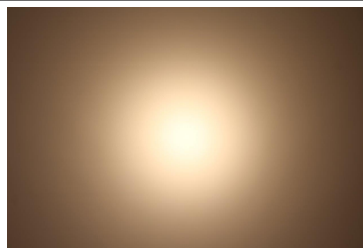
CITIZEN

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



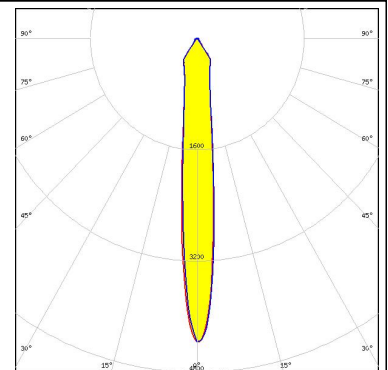
CITIZEN

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



CITIZEN

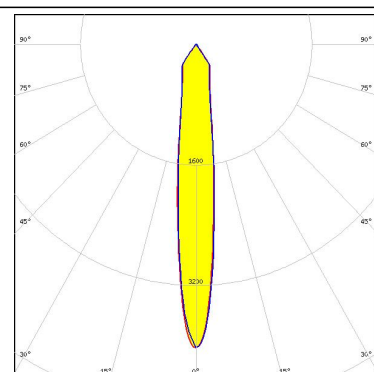
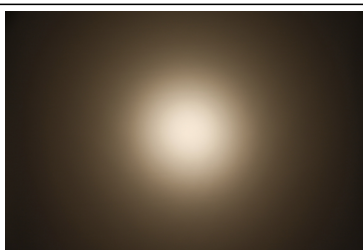
LED CLU720/721
FWHM 12.0°
Efficiency 87 %
Peak intensity 4.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2103CT + 50-2100AN



PHOTOMETRIC DATA (MEASURED):

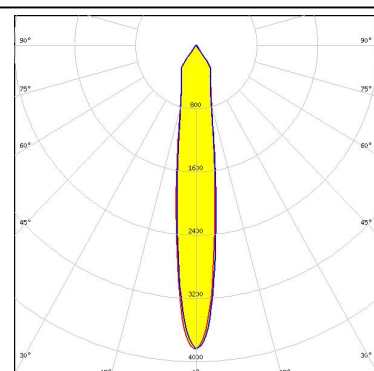
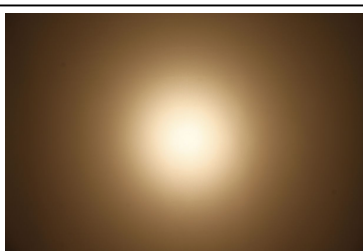
CITIZEN

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



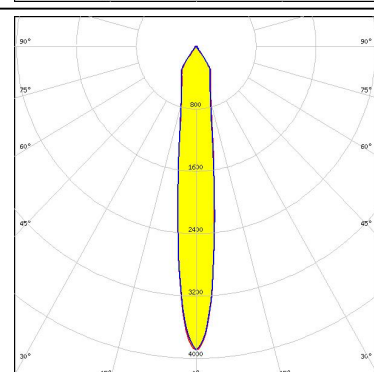
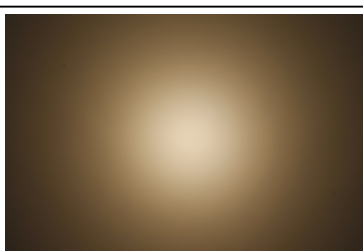
CITIZEN

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



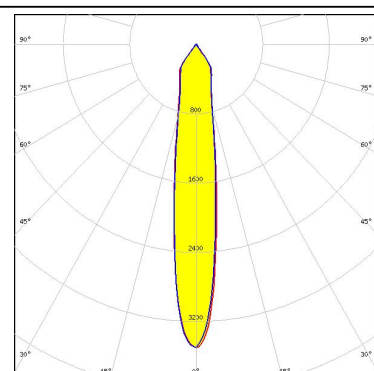
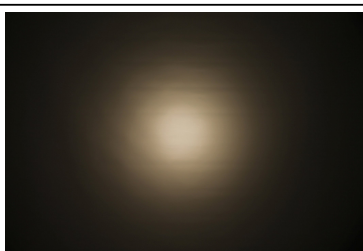
CITIZEN

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



CREE

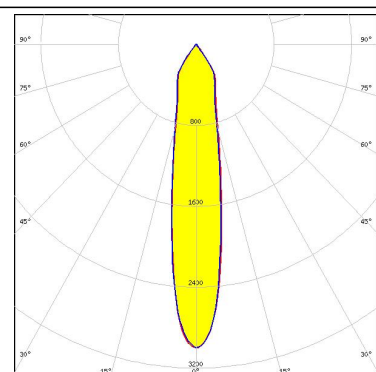
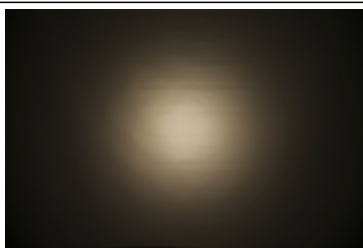
LED CMA1840
FWHM 17.0°
Efficiency 82 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14123_CLAMP-CXA15-18



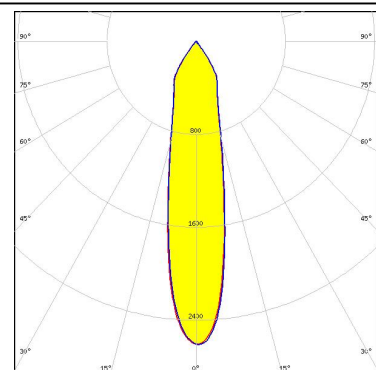
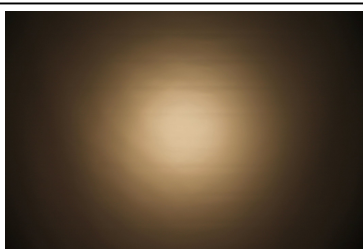
PHOTOMETRIC DATA (MEASURED):



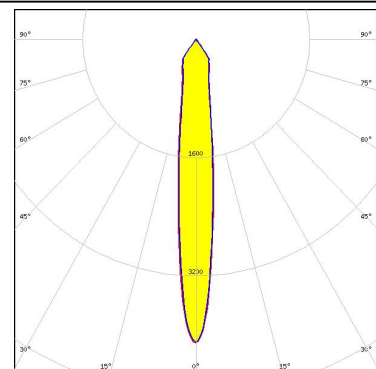
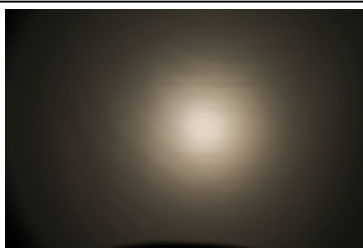
LED CMA2550
FWHM 19.0°
Efficiency 82 %
Peak intensity 3 cd/Im
LEDs/each optic 1
Light colour White
Required components:
C14036_CLAMP_CXA25-30



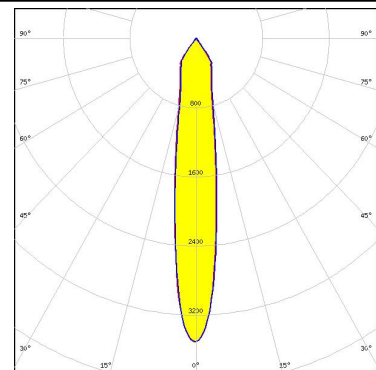
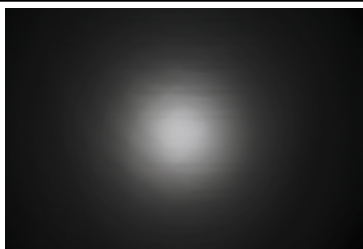
LED CMA3090
FWHM 22.0°
Efficiency 82 %
Peak intensity 2.6 cd/Im
LEDs/each optic 1
Light colour White
Required components:
C14036_CLAMP_CXA25-30



LED CMT14xx
FWHM 14.0°
Efficiency 81 %
Peak intensity 4.2 cd/Im
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 434 Typ L1



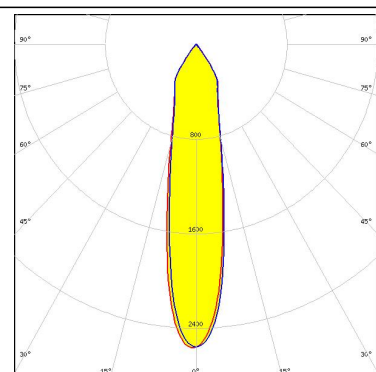
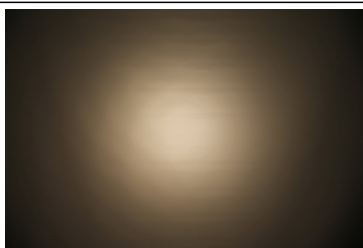
LED CMT19xx
FWHM 16.0°
Efficiency 81 %
Peak intensity 3.5 cd/Im
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 477 Typ L1



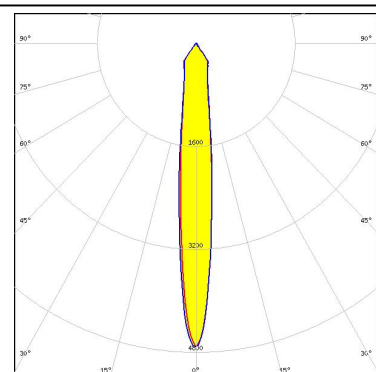
PHOTOMETRIC DATA (MEASURED):



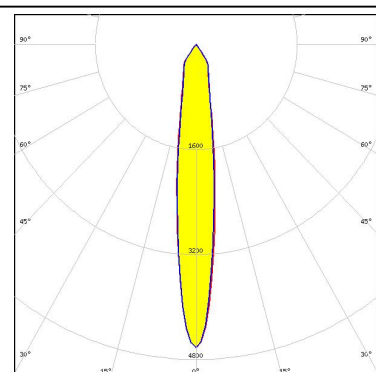
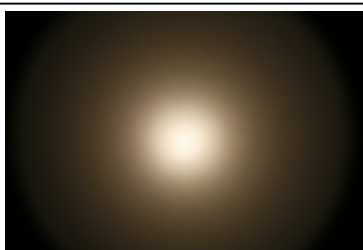
LED CMT28xx
FWHM 21.0°
Efficiency 81 %
Peak intensity 2.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 471 Typ L3



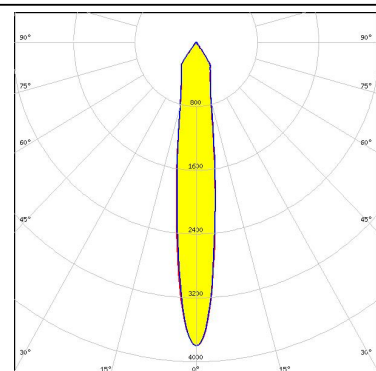
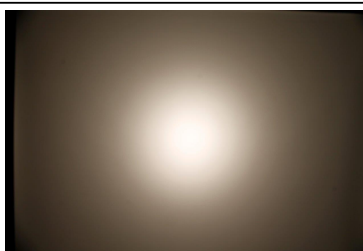
LED CXA/B 15xx
FWHM 13.0°
Efficiency 84 %
Peak intensity 4.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 441 Typ L1



LED CXA/B 15xx
FWHM 15.0°
Efficiency 85 %
Peak intensity 4.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14123_CLAMP-CXA15-18



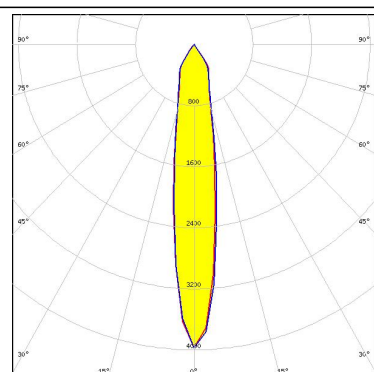
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM 15.0°
Efficiency 83 %
Peak intensity 3.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 437 Typ L1



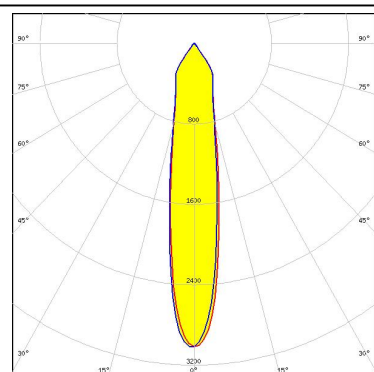
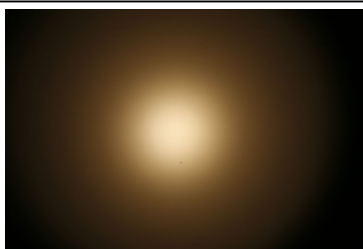
PHOTOMETRIC DATA (MEASURED):



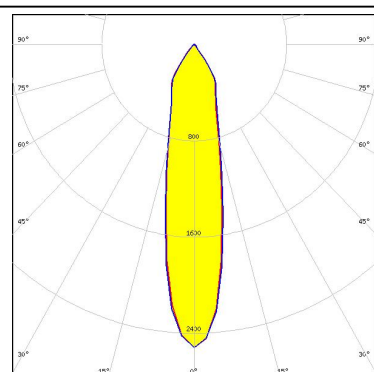
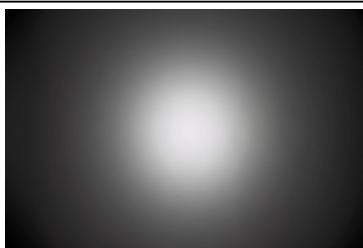
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM 17.0°
Efficiency 85 %
Peak intensity 4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14123_CLAMP-CXA15-18



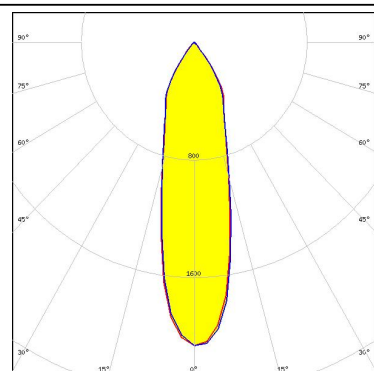
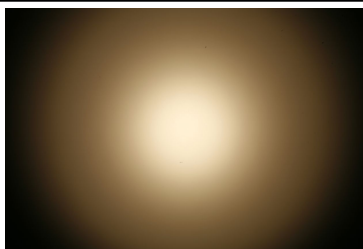
LED CXA/B 25xx
FWHM 19.0°
Efficiency 85 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14036_CLAMP_CXA25-30



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



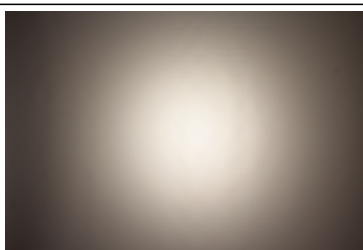
LED CXA/B 3590
FWHM 27.0°
Efficiency 85 %
Peak intensity 2.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2303CR + 50-2300AN



PHOTOMETRIC DATA (MEASURED):

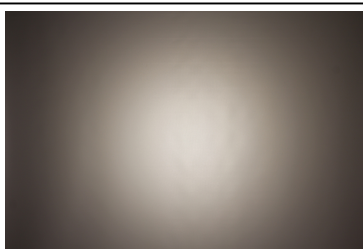
EVERLIGHT

LED CHI3030 19W
FWHM 21.0°
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



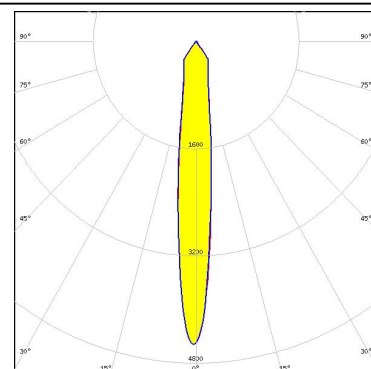
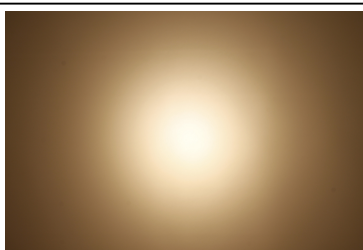
EVERLIGHT

LED CHI3030 29W
FWHM 26.0°
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



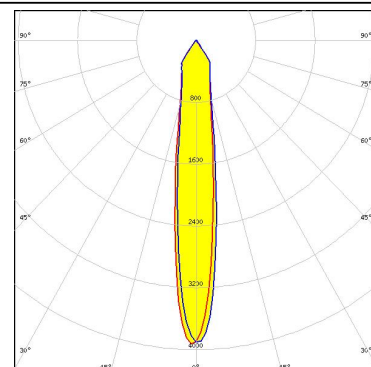
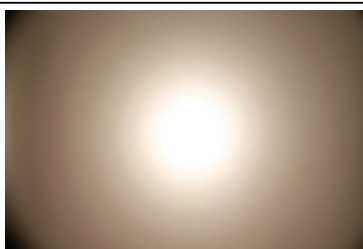
LUMILEDS

LED LUXEON CoB 1202/1203
FWHM 13.0°
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 15.0°
Efficiency 85 %
Peak intensity 3.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



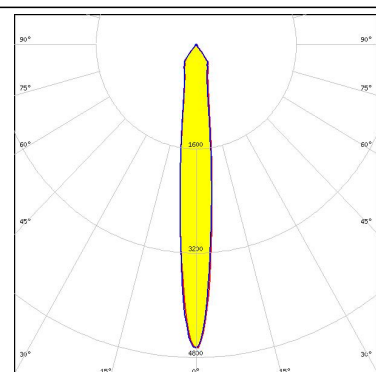
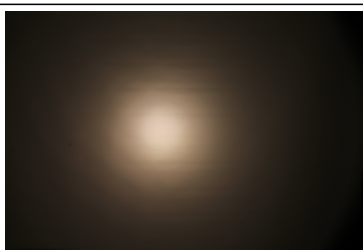
PHOTOMETRIC DATA (MEASURED):



LED LUXEON CoB 1204HD
FWHM 12.0°
Efficiency 81 %
Peak intensity 4.7 cd/lm
LEDs/each optic 1
Light colour White

Required components:

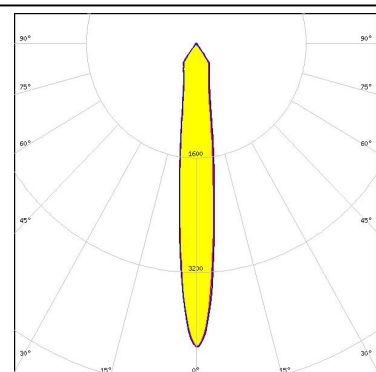
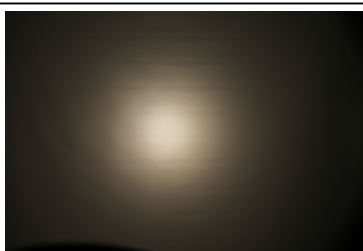
TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



LED LUXEON CoB 1205HD
FWHM 14.0°
Efficiency 81 %
Peak intensity 4.3 cd/lm
LEDs/each optic 1
Light colour White

Required components:

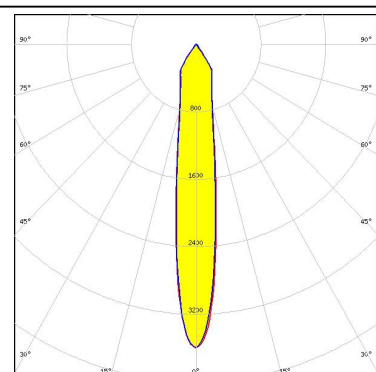
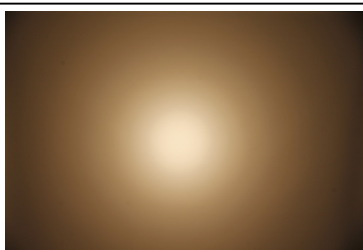
TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



LED LUXEON CoB 1208
FWHM 16.0°
Efficiency 83 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour White

Required components:

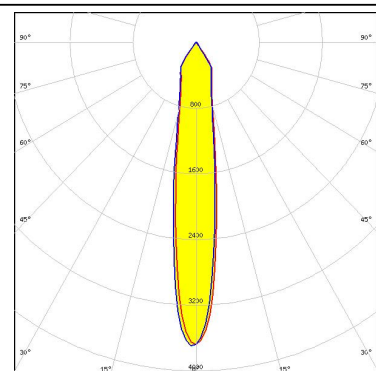
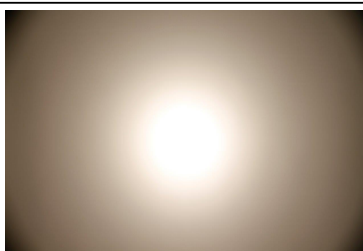
IDEAL: 50-2100SH + 50-2100AN



LED LUXEON CoB 1208
FWHM 16.0°
Efficiency 85 %
Peak intensity 3.7 cd/lm
LEDs/each optic 1
Light colour White

Required components:

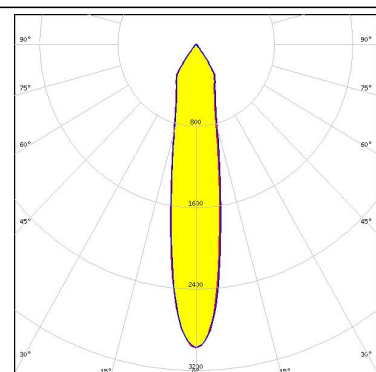
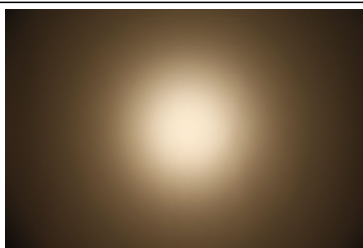
TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



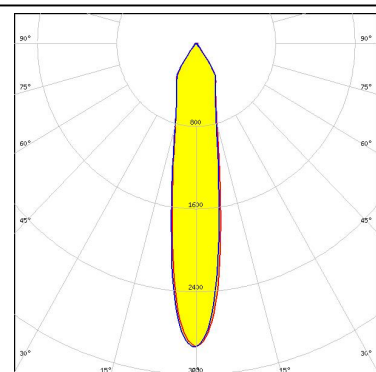
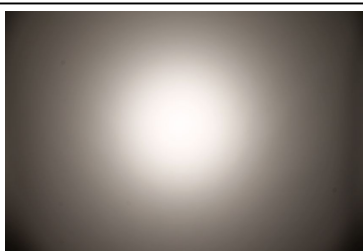
PHOTOMETRIC DATA (MEASURED):



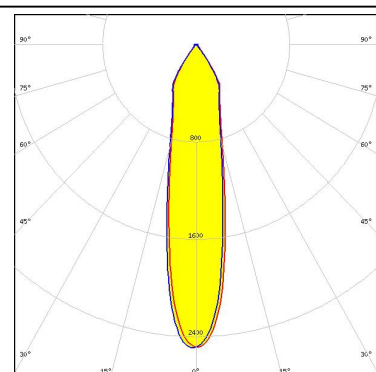
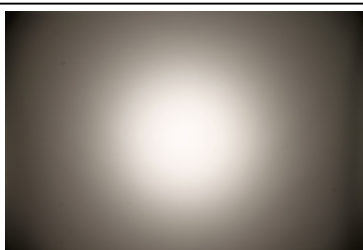
LED LUXEON CoB 1211
FWHM 19.0°
Efficiency 85 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 431 Typ L3



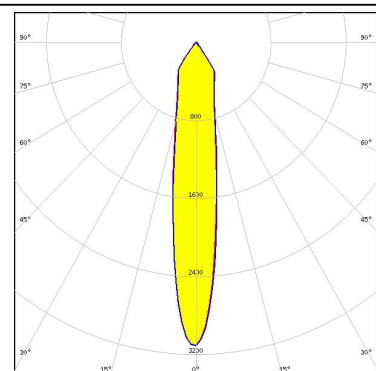
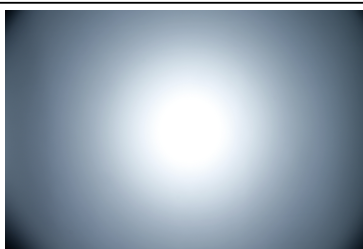
LED LUXEON CoB 1211
FWHM 19.0°
Efficiency 83 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2204-CT + 50-2100AN



LED LUXEON CoB 1216/1812
FWHM 22.0°
Efficiency 83 %
Peak intensity 2.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2204-CT + 50-2100AN



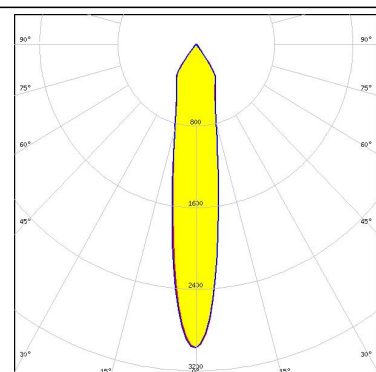
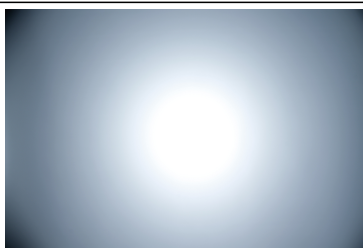
LED LUXEON K12
FWHM 17.0°
Efficiency 83 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F13671_ANGE-RZ-LENS
TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1



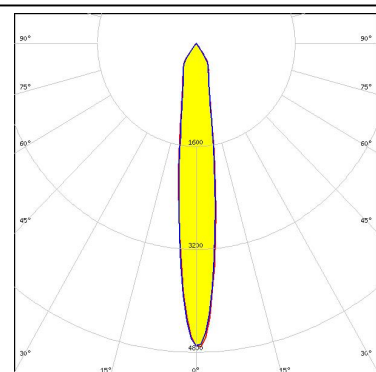
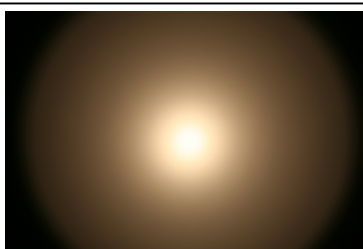
PHOTOMETRIC DATA (MEASURED):



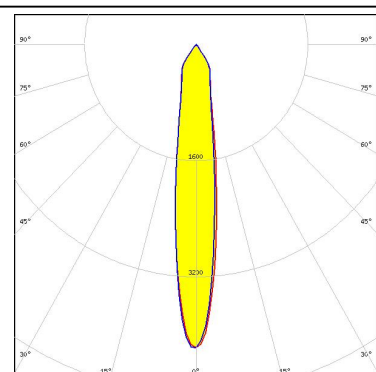
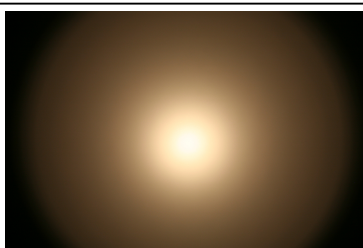
LED LUXEON K16
 FWHM 18.0°
 Efficiency 84 %
 Peak intensity 3 cd/Im
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1



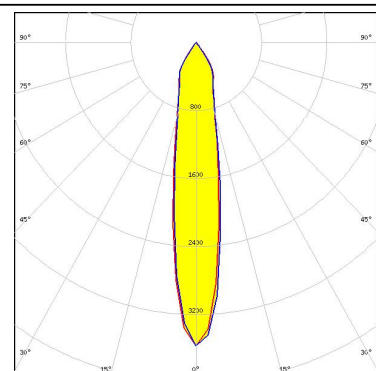
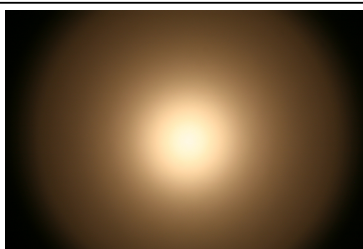
LED LUXEON S2000
 FWHM 15.0°
 Efficiency 85 %
 Peak intensity 4.7 cd/Im
 LEDs/each optic 1
 Light colour White
 Required components:
 C13395_CLAMP-S2000



LED LUXEON S3000
 FWHM 16.0°
 Efficiency 85 %
 Peak intensity 4.2 cd/Im
 LEDs/each optic 1
 Light colour White
 Required components:
 C13397_CLAMP-S3000



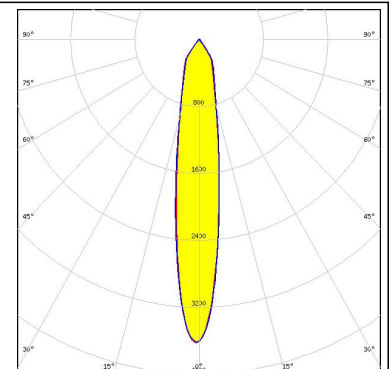
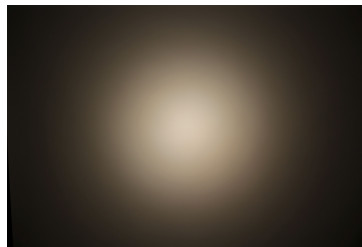
LED LUXEON S5000
 FWHM 19.0°
 Efficiency 86 %
 Peak intensity 3.6 cd/Im
 LEDs/each optic 1
 Light colour White
 Required components:
 C13399_CLAMP-S5000



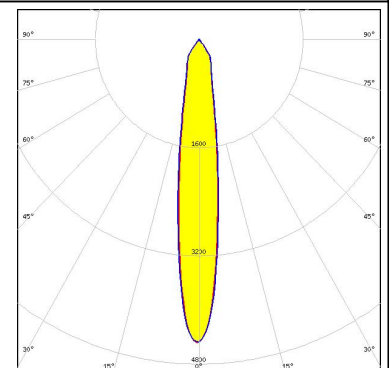
PHOTOMETRIC DATA (MEASURED):



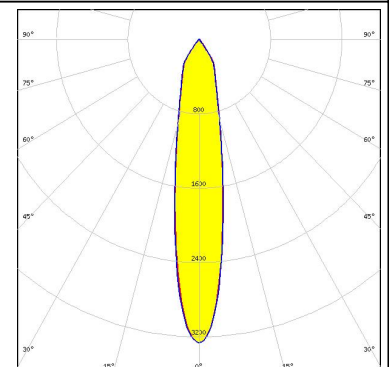
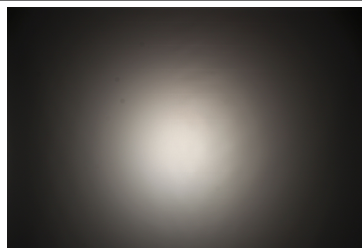
LED CDM-14 (Dim-To-Warm)
FWHM 17.0°
Efficiency 83 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
F13671_ANGE-RZ-LENS
Bender Wirth: 486 Typ L5



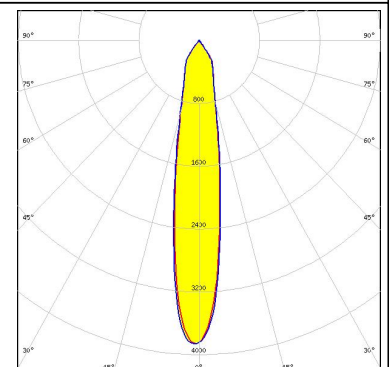
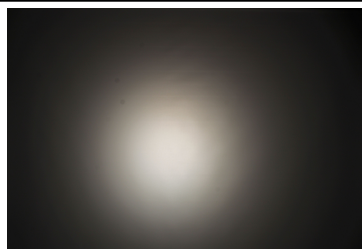
LED CDM-14 (Dim-To-Warm)
FWHM 16.0°
Efficiency 87 %
Peak intensity 4.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 491 Typ L2



LED CDM-18 (Dim-To-Warm)
FWHM 19.0°
Efficiency 83 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
F13671_ANGE-RZ-LENS
Bender Wirth: 491 Typ L2



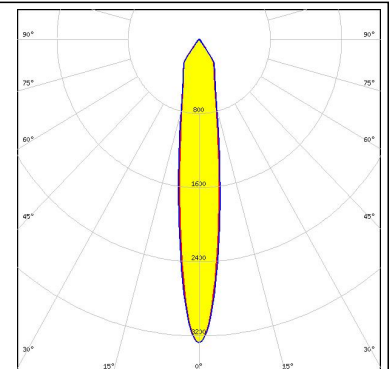
LED CDM-18 (Dim-To-Warm)
FWHM 18.0°
Efficiency 87 %
Peak intensity 3.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 491 Typ L2



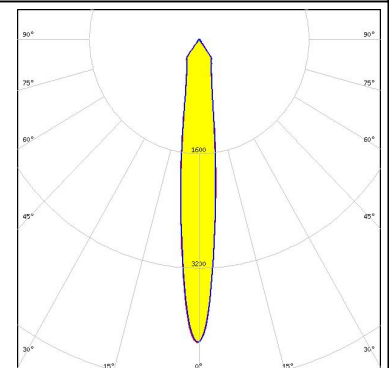
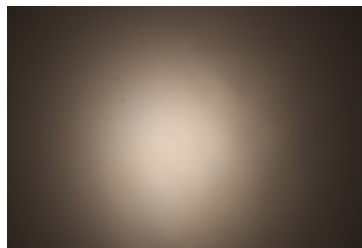
PHOTOMETRIC DATA (MEASURED):



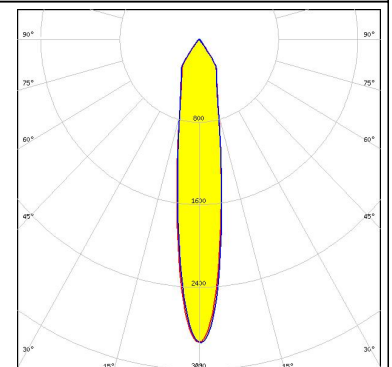
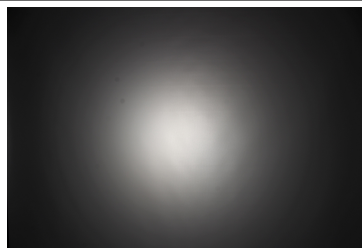
LED CDM-9 (Dim-To-Warm)
FWHM 16.0°
Efficiency 78 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
F13671_ANGE-RZ-LENS
Bender Wirth: 490 Typ L1



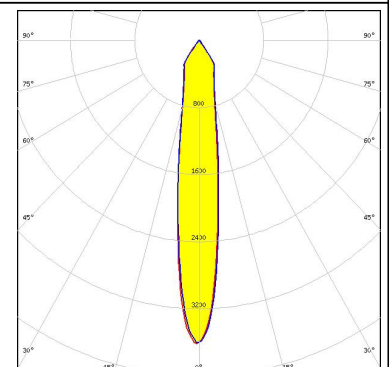
LED CDM-9 (Dim-To-Warm)
FWHM 14.0°
Efficiency 82 %
Peak intensity 4.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 490 Typ L1



LED CTM-14 (Tunable White)
FWHM 18.0°
Efficiency 78 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13584_CLAMP-VERO29
F13671_ANGE-RZ-LENS
Bender Wirth: 442 Typ L3



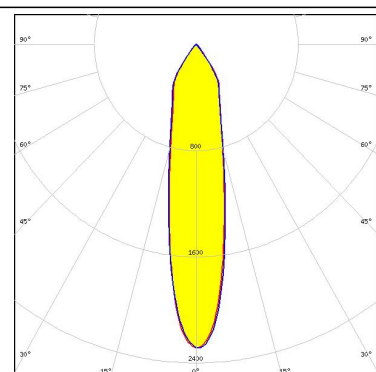
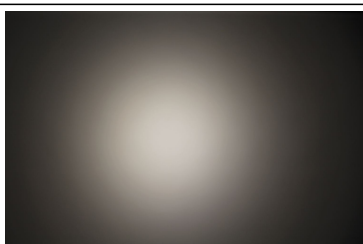
LED CTM-14 (Tunable White)
FWHM 16.0°
Efficiency 82 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 442 Typ L3



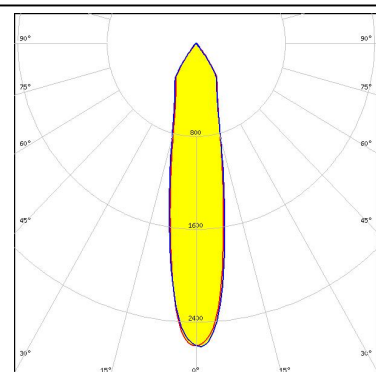
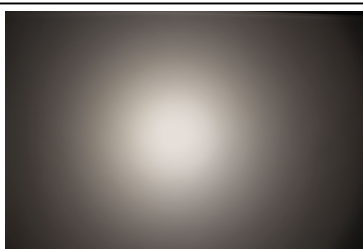
PHOTOMETRIC DATA (MEASURED):



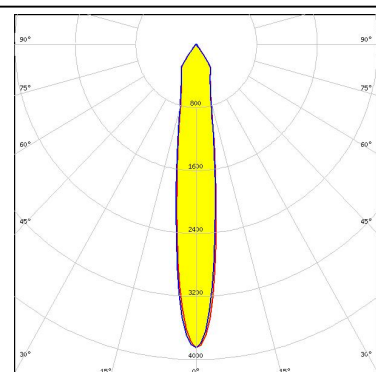
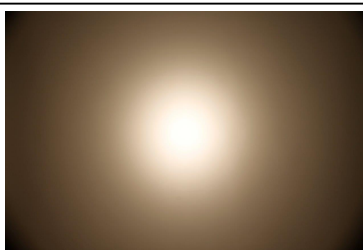
LED CTM-22 (Tunable White)
FWHM 22.0°
Efficiency 77 %
Peak intensity 2.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13584_CLAMP-VERO29
F13671_ANGE-RZ-LENS
Bender Wirth: 494 Typ L3



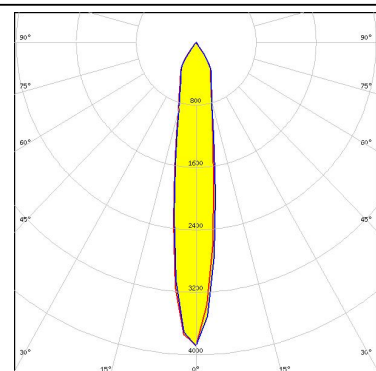
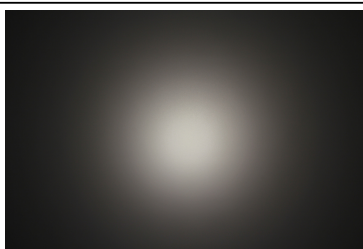
LED CTM-22 (Tunable White)
FWHM 21.0°
Efficiency 82 %
Peak intensity 2.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 494 Typ L3



LED CxM-14 (19x19)
FWHM 16.0°
Efficiency 85 %
Peak intensity 3.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



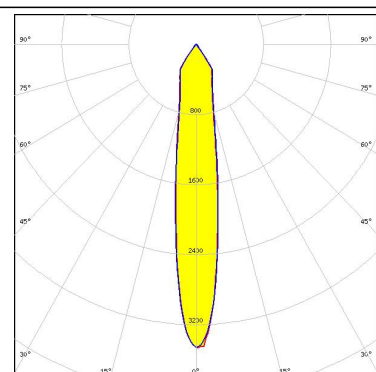
LED COB J-Type
FWHM 17.0°
Efficiency 83 %
Peak intensity 3.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2103NC + 50-2100AN



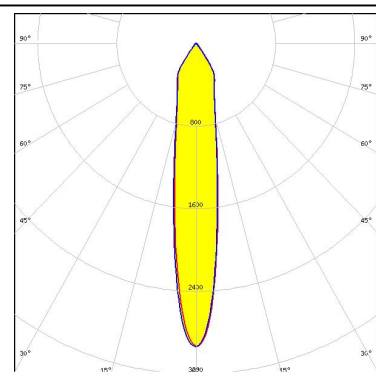
PHOTOMETRIC DATA (MEASURED):



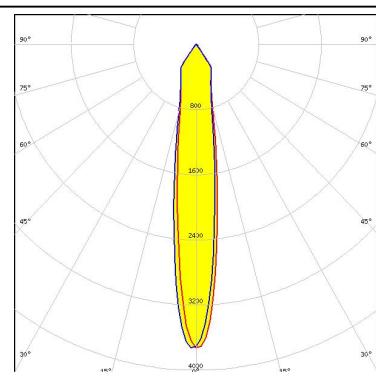
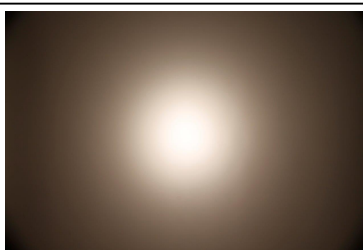
LED COB J-Type
FWHM 17.0°
Efficiency 83 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 463 Typ L2



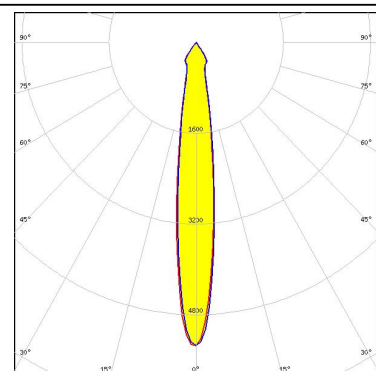
LED COB J-Type
FWHM 17.0°
Efficiency 80 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F13671_ANGE-RZ-LENS
IDEAL: 50-2103NC + 50-2100AN



LED COB L-Type (LES 11)
FWHM 16.0°
Efficiency 86 %
Peak intensity 3.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
Molex: 180580-0005



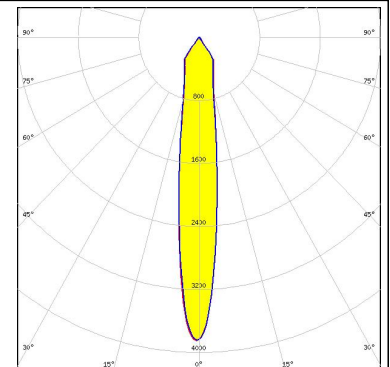
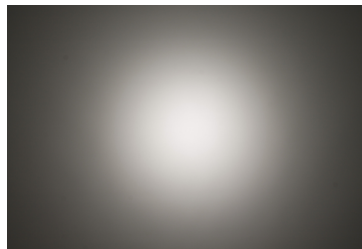
LED COB L-Type (LES 11)
FWHM 15.0°
Efficiency 84 %
Peak intensity 5.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



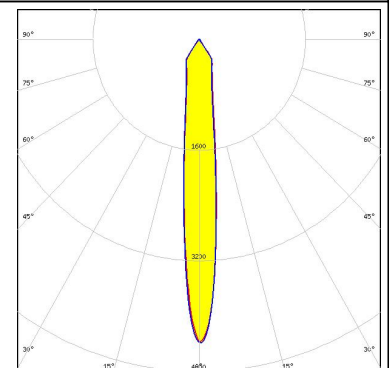
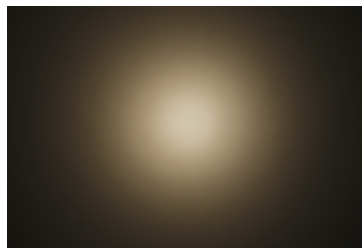
PHOTOMETRIC DATA (MEASURED):



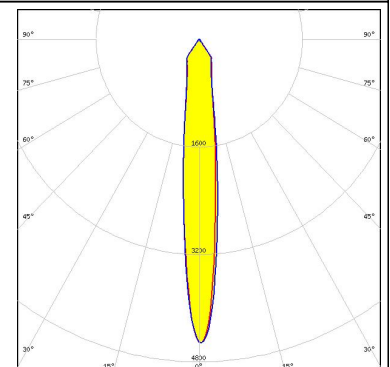
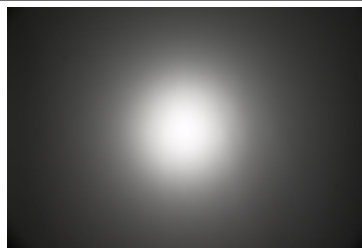
LED COB L-Type (LES 11)
FWHM 15.0°
Efficiency 83 %
Peak intensity 3.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 438 Typ L1



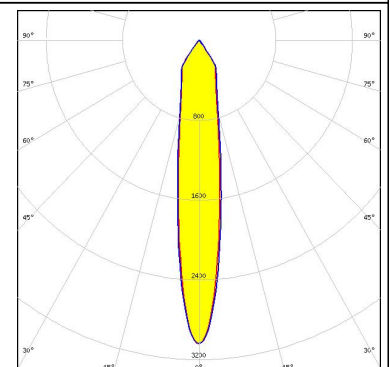
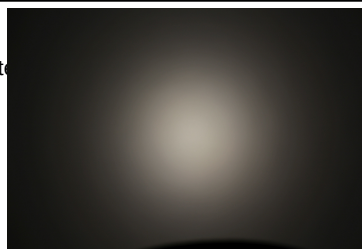
LED COB L-Type (LES 11)
FWHM 13.0°
Efficiency 82 %
Peak intensity 4.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2100NC + 50-2100AN



LED COB L-Type (LES 9)
FWHM 13.0°
Efficiency 85 %
Peak intensity 4.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 438 Typ L1



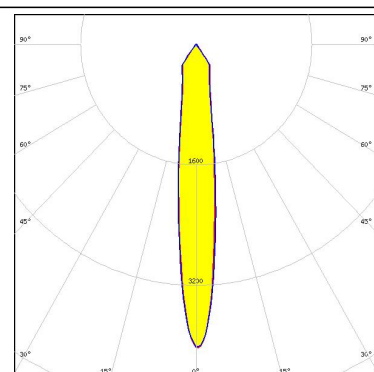
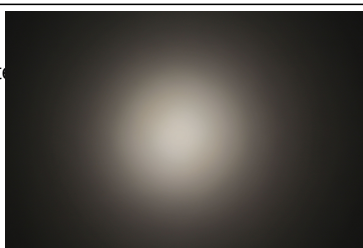
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
FWHM 17.0°
Efficiency 78 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
F13671_ANGE-RZ-LENS
Bender Wirth: 498 Typ L2



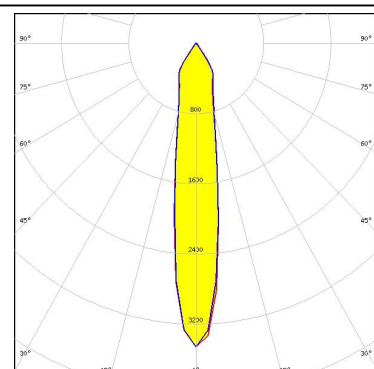
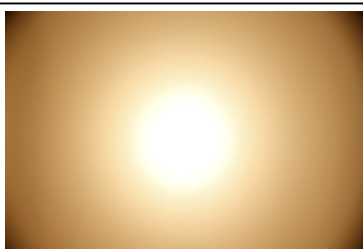
PHOTOMETRIC DATA (MEASURED):



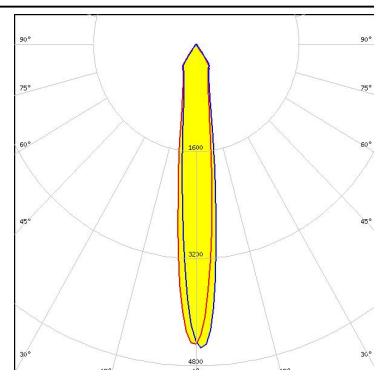
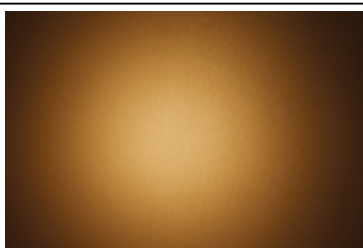
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
FWHM 14.0°
Efficiency 83 %
Peak intensity 4 cd/Im
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 498 Typ L2



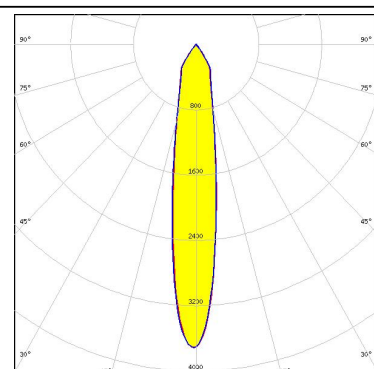
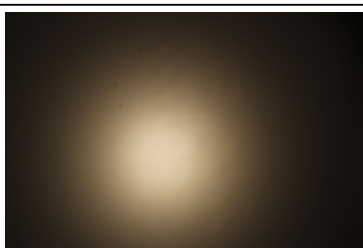
LED PrevaLED Core AC (LEP-2000)
FWHM 17.0°
Efficiency 85 %
Peak intensity 3.5 cd/Im
LEDs/each optic 1
Light colour White
Required components:
TE: OPTIC CLIP Z50 TYPE1 2213194-1



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



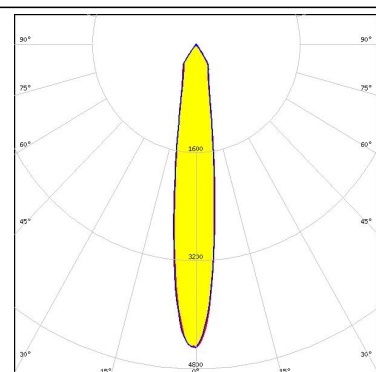
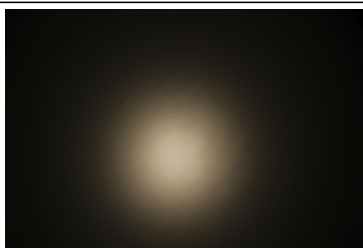
LED PrevaLED Core G7 L15 H1
FWHM 17.0°
Efficiency 85 %
Peak intensity 3.7 cd/Im
LEDs/each optic 1
Light colour White
Required components:
C16685_CLAMP-PRV-A
F13671_ANGE-RZ-LENS



PHOTOMETRIC DATA (MEASURED):

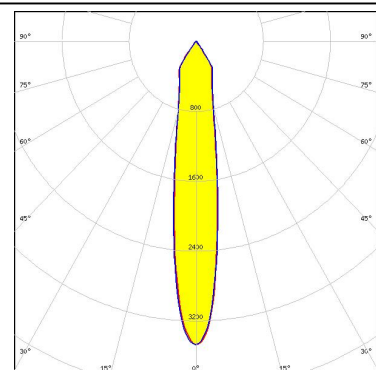
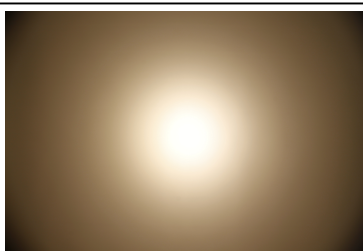
OSRAM

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



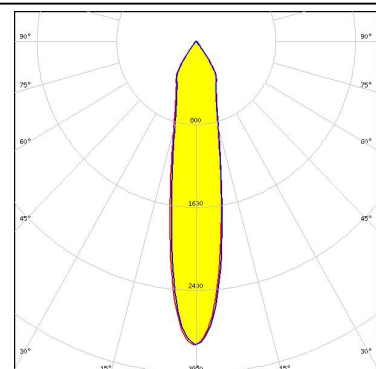
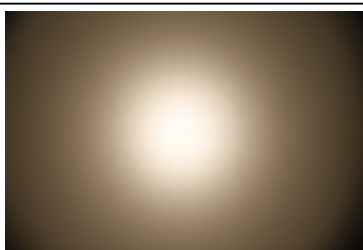
OSRAM

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



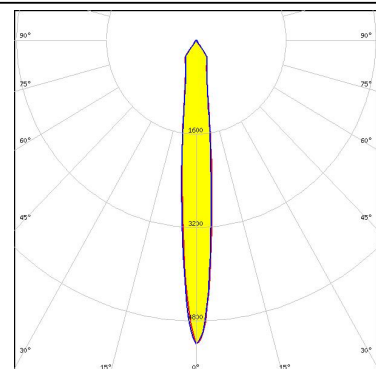
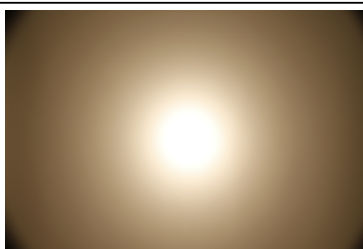
OSRAM

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



OSRAM

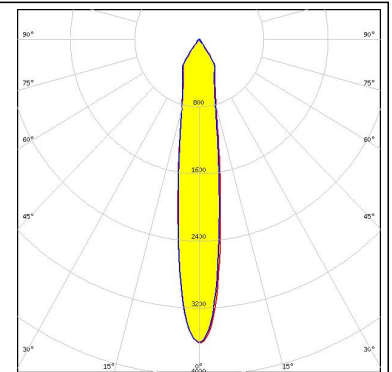
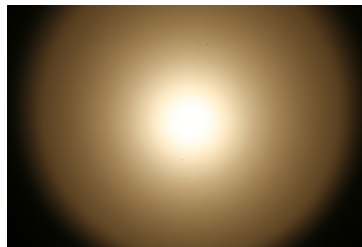
LED PrevaLED Core Z3 LES9
FWHM 12.0°
Efficiency 85 %
Peak intensity 5.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
TE: OPTIC CLIP Z50 TYPE1 2213194-1



PHOTOMETRIC DATA (MEASURED):

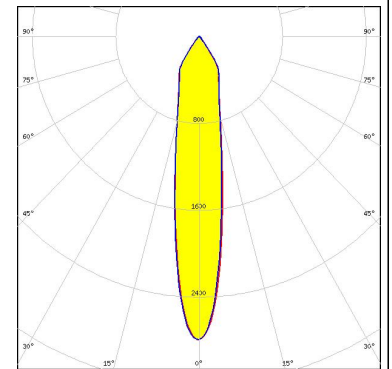
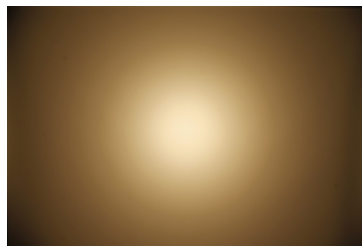
OSRAM

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



OSRAM

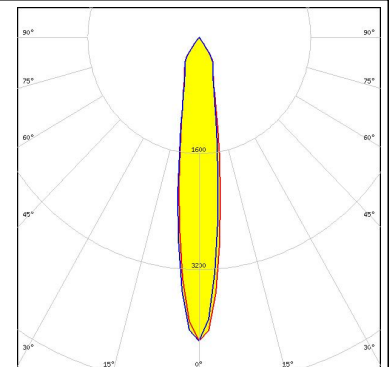
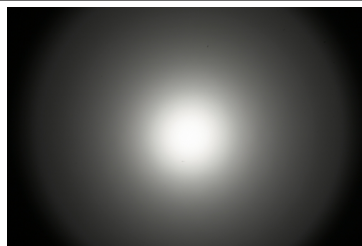
LED PrevaLED Core Z4 LES19
FWHM 19.0°
Efficiency 80 %
Peak intensity 2.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F13671_ANGE-RZ-LENS
TE: OPTIC CLIP Z50 TYPE1 2213194-1



OSRAM

Opto Semiconductors

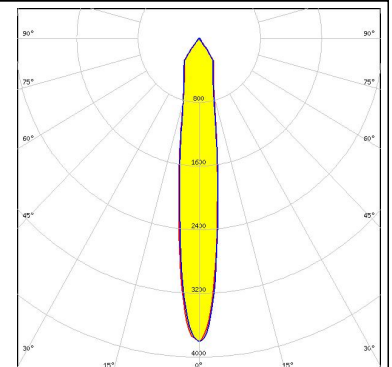
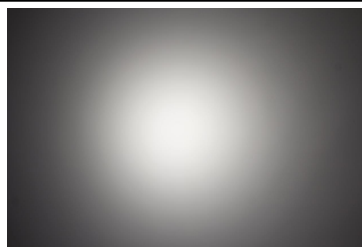
LED Soleriq S13
FWHM 15.0°
Efficiency 86 %
Peak intensity 4.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



OSRAM

Opto Semiconductors

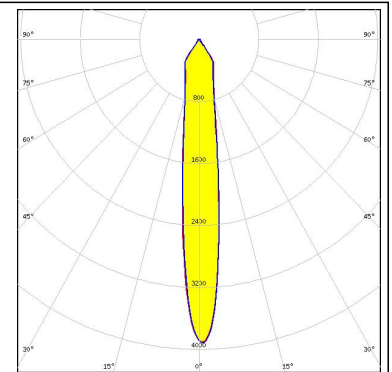
LED Soleriq S13
FWHM 15.0°
Efficiency 83 %
Peak intensity 3.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 437 Typ L1



PHOTOMETRIC DATA (MEASURED):

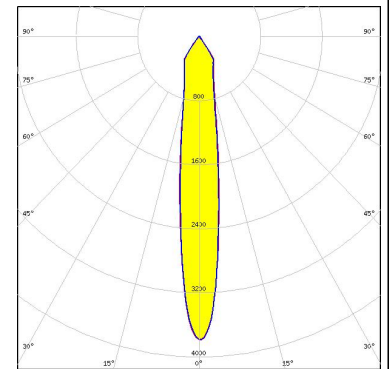
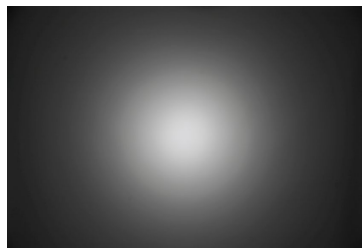
OSRAM Opto Semiconductors

LED Soleriq S13 19x19
FWHM 14.0°
Efficiency 82 %
Peak intensity 3.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2103CT + 50-2100AN



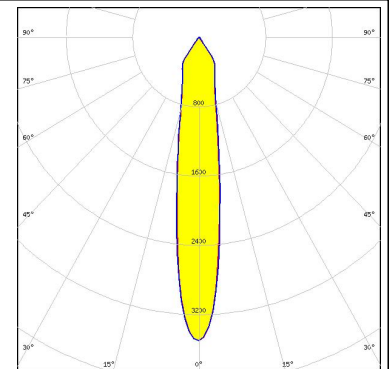
OSRAM Opto Semiconductors

LED Soleriq S13 19x19
FWHM 15.0°
Efficiency 82 %
Peak intensity 3.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



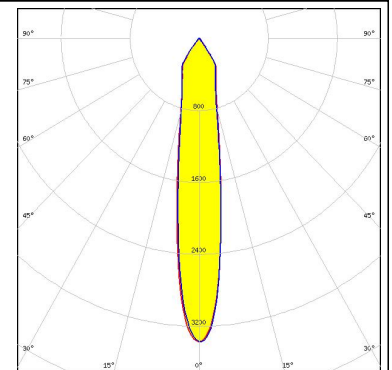
OSRAM Opto Semiconductors

LED Soleriq S19
FWHM 17.0°
Efficiency 86 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
TE: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1



OSRAM Opto Semiconductors

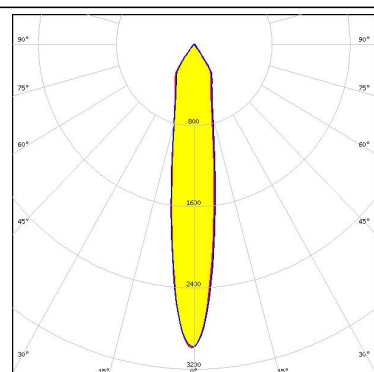
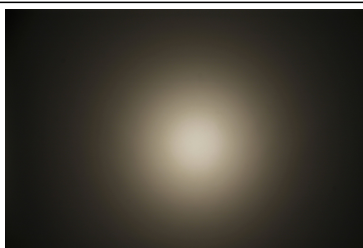
LED Soleriq S19
FWHM 17.0°
Efficiency 83 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 462 Typ L3



PHOTOMETRIC DATA (MEASURED):

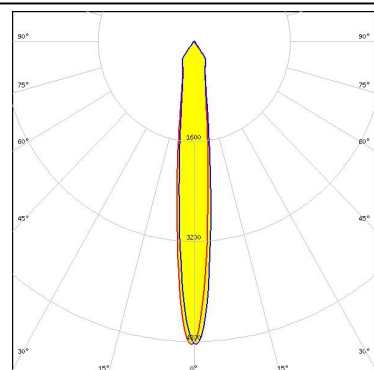
PHILIPS

LED Fortimo SLM 1208 L15 G6 Standard
FWHM 17.0°
Efficiency 78 %
Peak intensity 3 cd/Im
LEDs/each optic 1
Light colour White
Required components:
F13671_ANGE-RZ-LENS
TE: OPTIC CLIP Z50 TYPE1 2213194-1



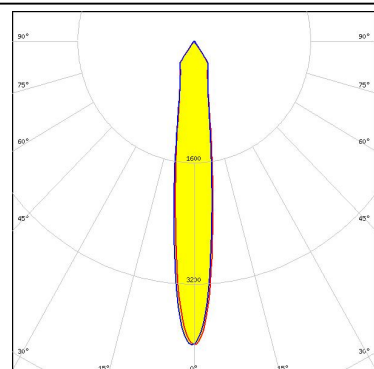
PHILIPS

LED Fortimo SLM L09 + SLM holder
FWHM 13.0°
Efficiency 84 %
Peak intensity 4.9 cd/Im
LEDs/each optic 1
Light colour White
Required components:
TE: OPTIC CLIP Z50 TYPE1 2213194-1



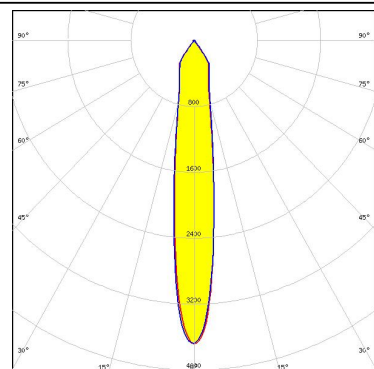
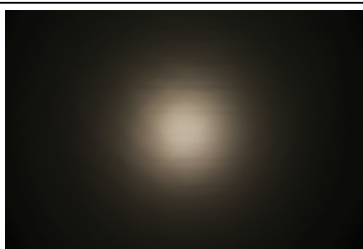
PHILIPS

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



PHILIPS

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



PHOTOMETRIC DATA (MEASURED):

PHILIPS

LED Fortimo SLM L13 CoB

FWHM 17.0°

Efficiency 76 %

Peak intensity 2.9 cd/lm

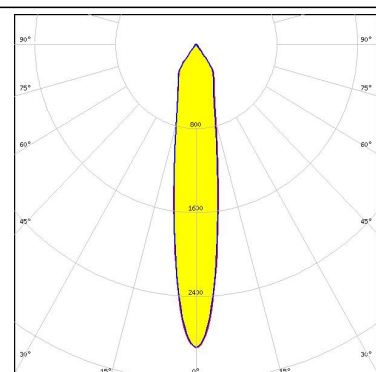
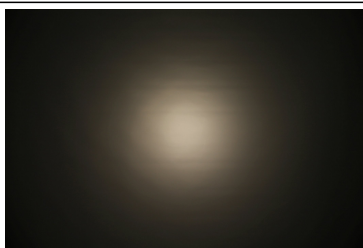
LEDs/each optic 1

Light colour White

Required components:

F13671_ANGE-RZ-LENS

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



PHILIPS

LED Fortimo SLM L15 + SLM holder

FWHM 16.0°

Efficiency 82 %

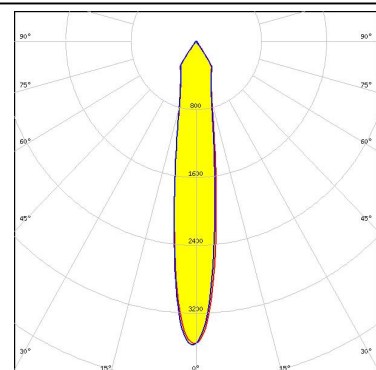
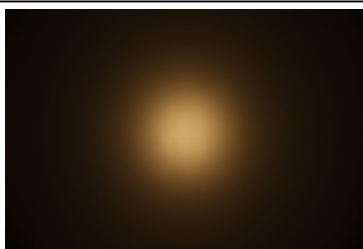
Peak intensity 3.6 cd/lm

LEDs/each optic 1

Light colour White

Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1



PHILIPS

LED Fortimo SLM L15 + SLM holder

FWHM 19.0°

Efficiency 78 %

Peak intensity 2.7 cd/lm

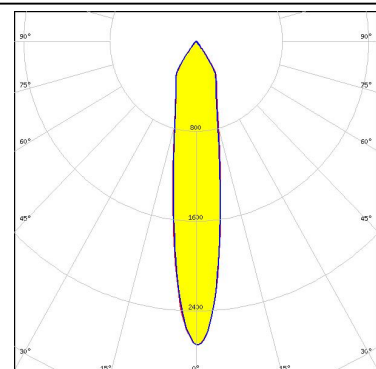
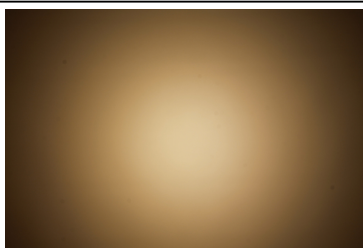
LEDs/each optic 1

Light colour White

Required components:

F13671_ANGE-RZ-LENS

TE: OPTIC CLIP Z50 TYPE1 2213194-1



PHILIPS

LED Fortimo SLM L15 CoB

FWHM 17.0°

Efficiency 81 %

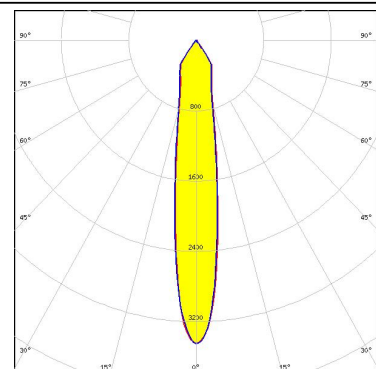
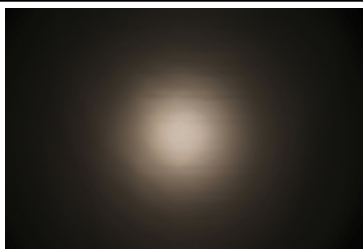
Peak intensity 3.4 cd/lm

LEDs/each optic 1

Light colour White

Required components:

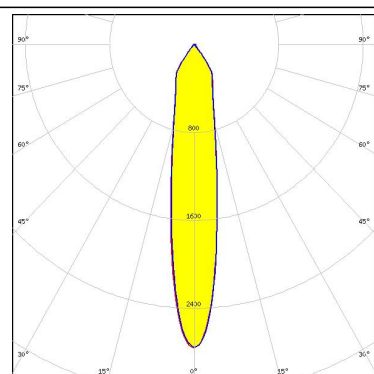
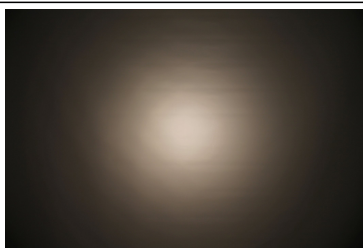
TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



PHOTOMETRIC DATA (MEASURED):

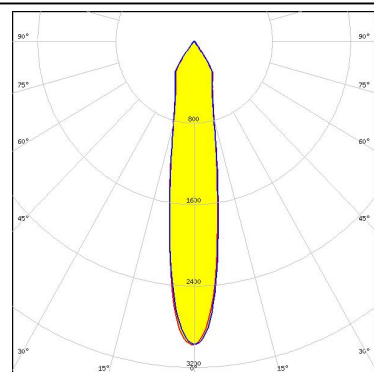
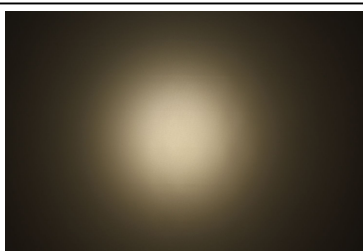
PHILIPS

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



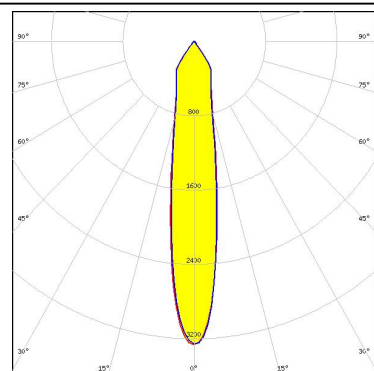
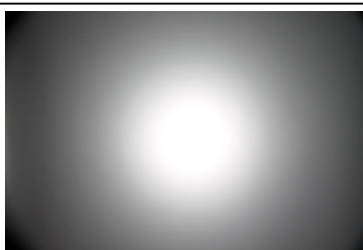
PHILIPS

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



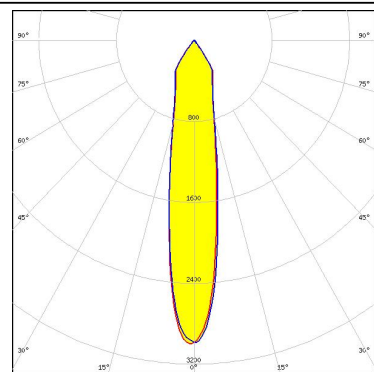
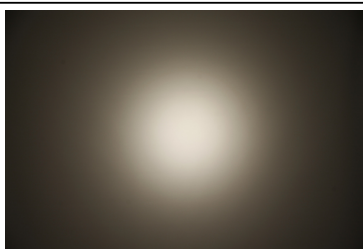
SAMSUNG

LED LC026B / 033B / 040B
FWHM 18.0°
Efficiency 85 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
TE: 2213258-2 + OPTIC CLIP Z50 TYPE1 2213194-1



SAMSUNG

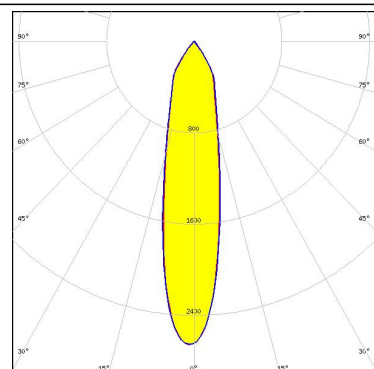
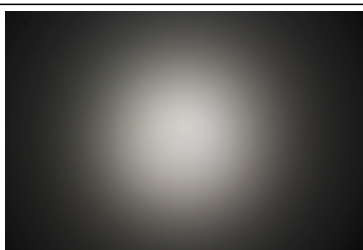
LED LC026B / 033B / 040B
FWHM 19.0°
Efficiency 83 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 450 Typ L2



PHOTOMETRIC DATA (MEASURED):

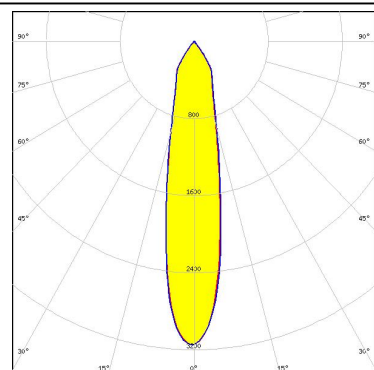
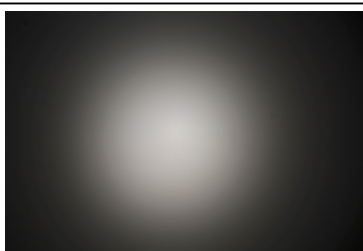
SAMSUNG

LED LC035T (Tunable white)
FWHM 22.0°
Efficiency 83 %
Peak intensity 2.7 cd/lm
LEDs/each optic 1
Light colour Tunable White
Required components:
C13584_CLAMP-VERO29
F13671_ANGE-RZ-LENS
Bender Wirth: 502 Typ L3



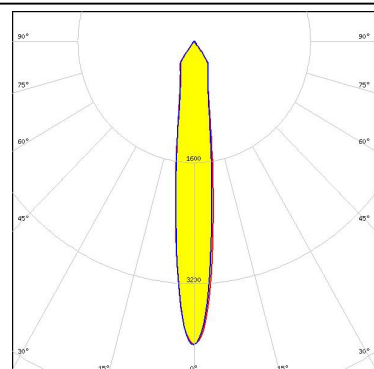
SAMSUNG

LED LC035T (Tunable white)
FWHM 21.0°
Efficiency 87 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour Tunable White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 502 Typ L3



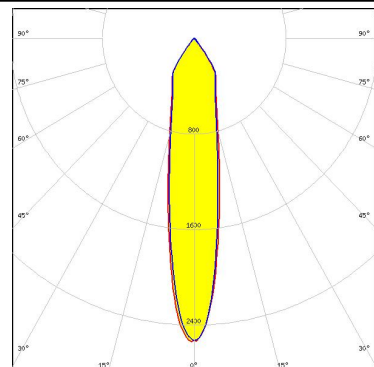
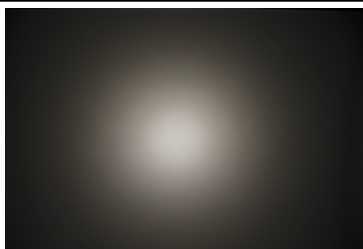
SAMSUNG

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

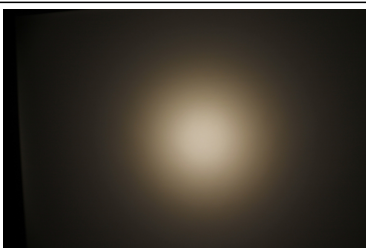
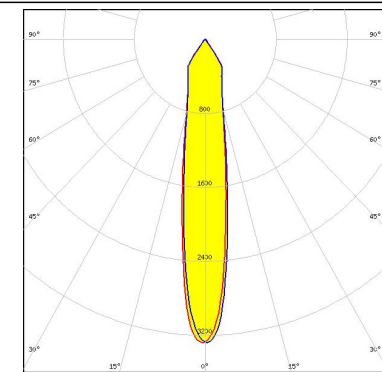
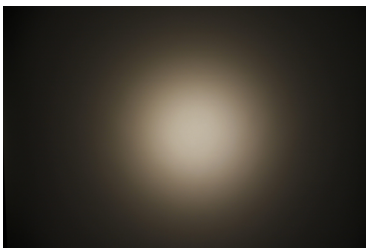
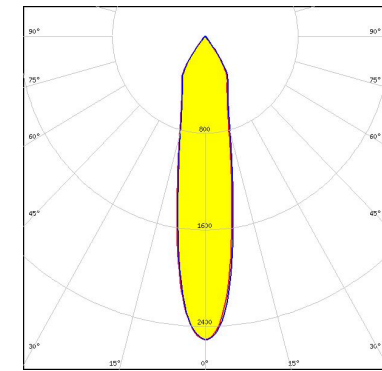
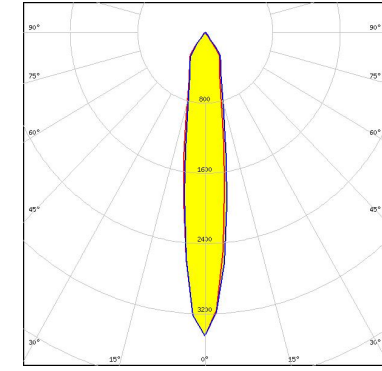
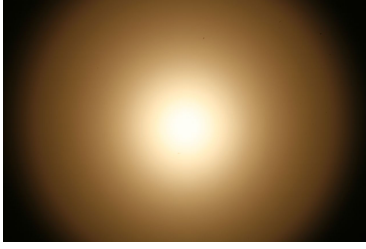
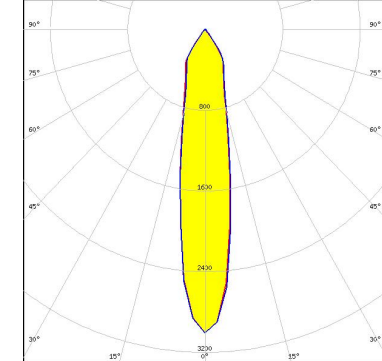


SEOL SEMICONDUCTOR

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



PHOTOMETRIC DATA (MEASURED):

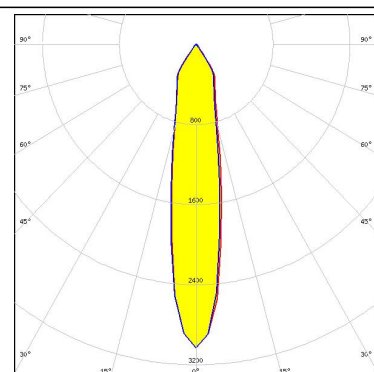
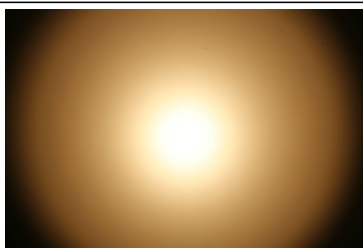
SEOL SEOUL SEMICONDUCTOR LED MJT COB LES 14.5 FWHM 17.0° Efficiency 82 % Peak intensity 3.3 cd/lm LEDs/each optic 1 Light colour White Required components: TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1		
SEOL SEOUL SEMICONDUCTOR LED MJT COB LES 22 FWHM 22.0° Efficiency 82 % Peak intensity 2.5 cd/lm LEDs/each optic 1 Light colour White Required components: C13584_CLAMP-VERO29 Bender Wirth: 431 Typ L3		
VS LIGHTING SOLUTIONS LED WU-M-461 FWHM 17.0° Efficiency 83 % Peak intensity 3.5 cd/lm LEDs/each optic 1 Light colour White Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1		
VS LIGHTING SOLUTIONS LED WU-M-462 FWHM 20.0° Efficiency 85 % Peak intensity 3 cd/lm LEDs/each optic 1 Light colour White Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1		

PHOTOMETRIC DATA (MEASURED):



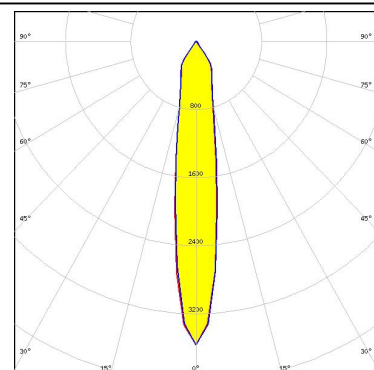
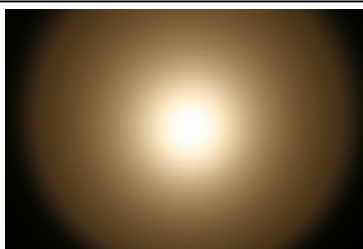
LED WU-M-464
FWHM 20.0°
Efficiency 85 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour White
Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1



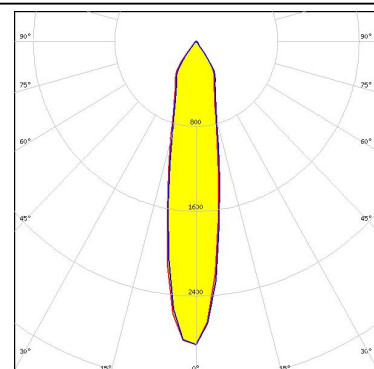
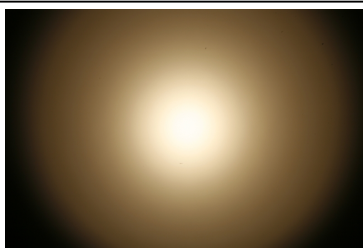
LED WU-M-484
FWHM 17.0°
Efficiency 85 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1



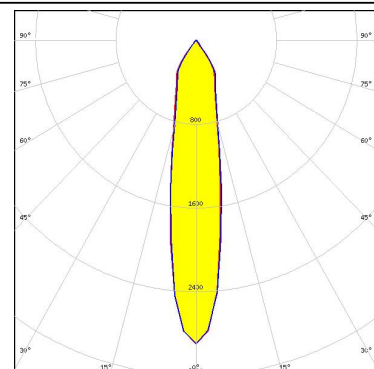
LED WU-M-485
FWHM 20.0°
Efficiency 85 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:

TE: OPTIC CLIP Z50 TYPE1 2213194-1



LED WU-M-486
FWHM 20.0°
Efficiency 84 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:

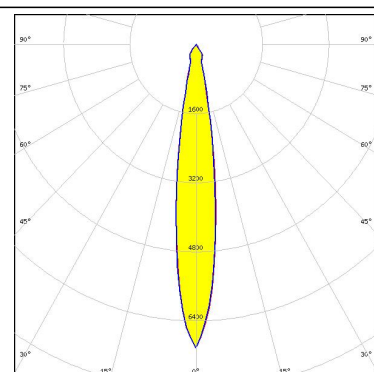
TE: OPTIC CLIP Z50 TYPE1 2213194-1



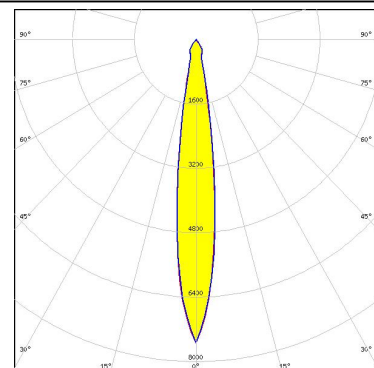
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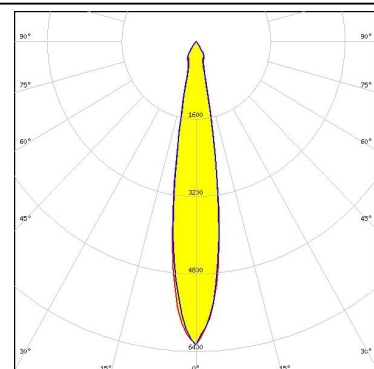
LED V10 Gen7
FWHM 15.0°
Efficiency 90 %
Peak intensity 7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 486 Typ L1



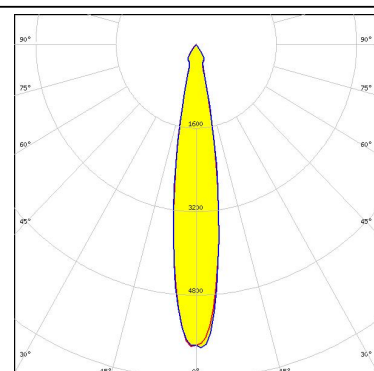
LED V13 Gen7
FWHM 14.5°
Efficiency 91 %
Peak intensity 7.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2103CT + 50-2100AN



LED V22 Gen7
FWHM 17.0°
Efficiency 93 %
Peak intensity 6.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2204-CT + 50-2100AN



LED CXA/B 1830
FWHM 17.0°
Efficiency 88 %
Peak intensity 5.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



PHOTOMETRIC DATA (SIMULATED):



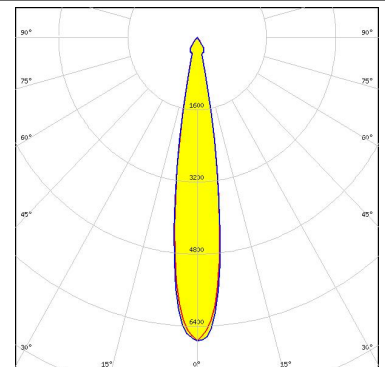
LED CxM-14 (19x19)
 FWHM 17.0°
 Efficiency 83 %
 Peak intensity 3.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 433 Typ L1



LED CxM-9 (13.5x13.5)
 FWHM 14.0°
 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



LED Soleriq S15
 FWHM 16.0°
 Efficiency 90 %
 Peak intensity 6.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



LED ZC12/18
 FWHM 17.0°
 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

PHOTOMETRIC DATA (SIMULATED):



SEOUL SEMICONDUCTOR

LED	ZC4/6
FWHM	14.0°
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.

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

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

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