

## ANGELA-XW

White version with ~70° wide beam

### TECHNICAL SPECIFICATIONS:

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

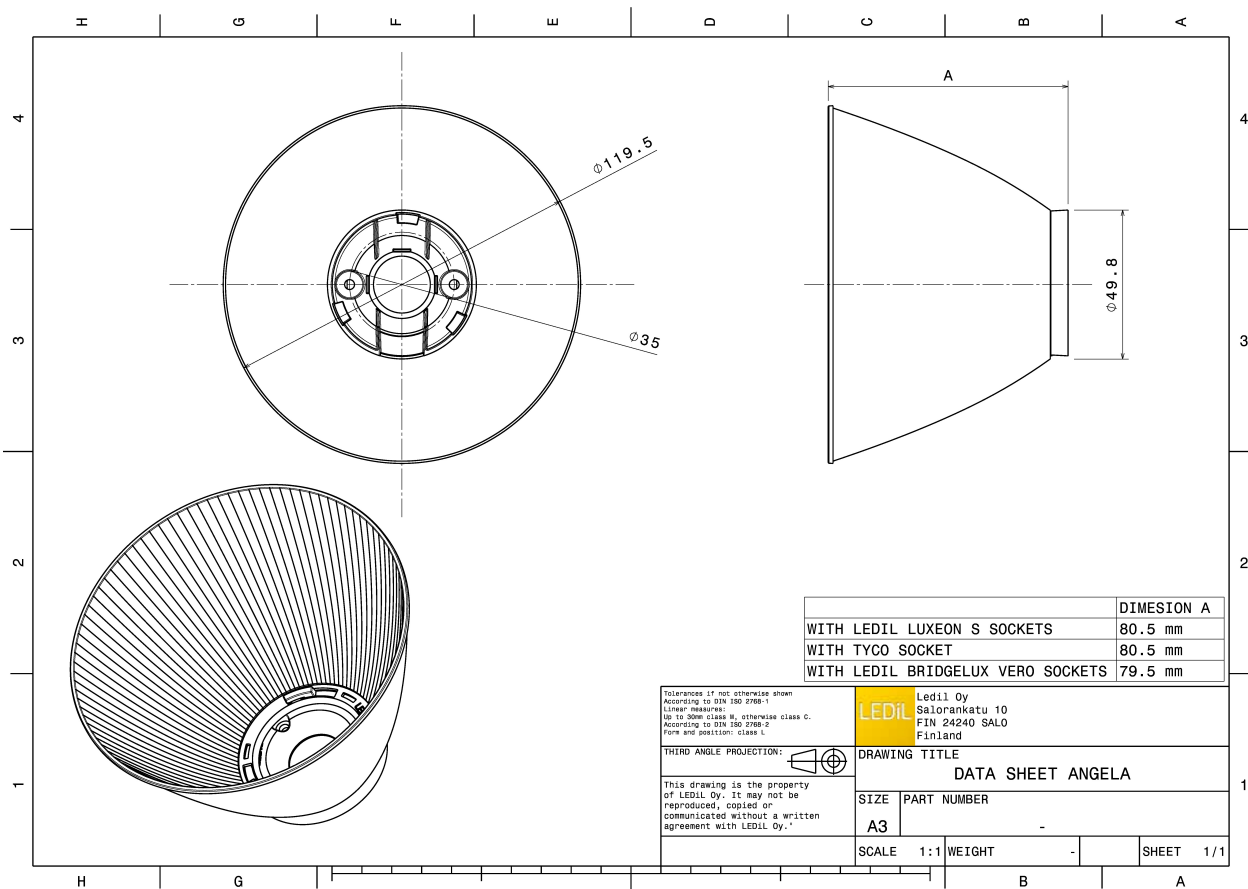


### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish	Coating
ANGELA-XW	Reflector	HRPC	white		

### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F13840_ANGELA-XW	180	80	40	8.1
» Box size: 480 x 280 x 300 mm				



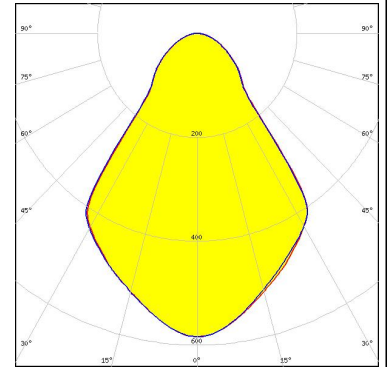
See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)



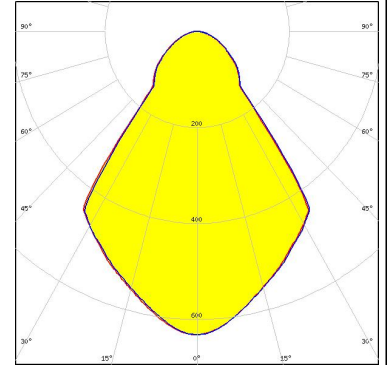
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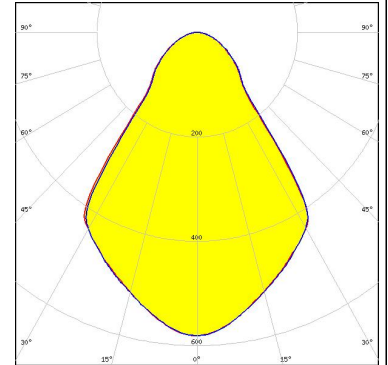
LED V10 Gen7  
 FWHM 72.0°  
 Efficiency 87 %  
 Peak intensity 0.6 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 434 Typ L1



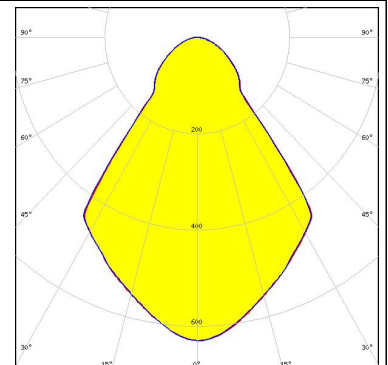
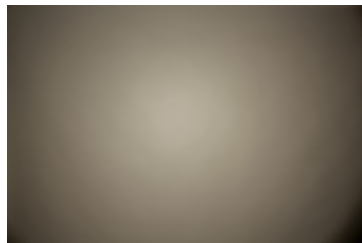
LED V13 Gen7  
 FWHM 72.0°  
 Efficiency 92 %  
 Peak intensity 0.6 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



LED V13 Gen7  
 FWHM 72.0°  
 Efficiency 87 %  
 Peak intensity 0.6 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



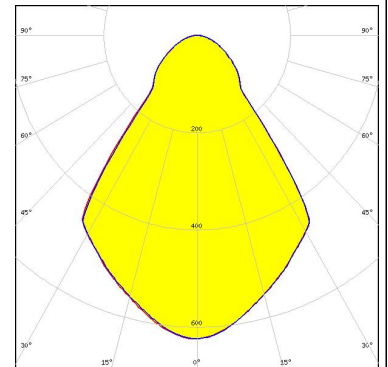
LED Vero SE 13  
 FWHM 73.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16402\_CLAMP-VEROSE-13-18



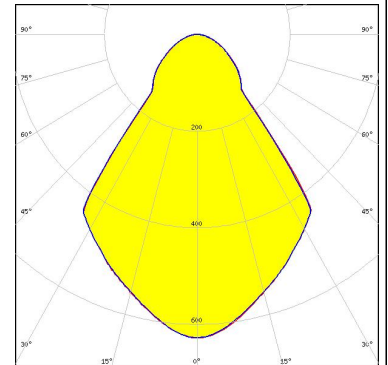
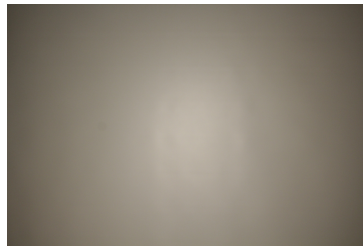
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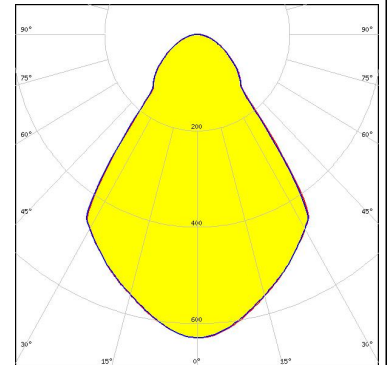
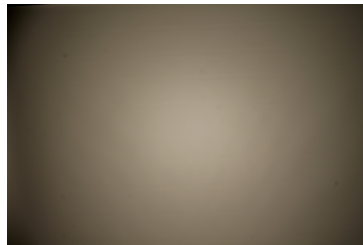
LED Vero SE 18  
FWHM 73.0°  
Efficiency 93 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C16402\_CLAMP-VEROSE-13-18



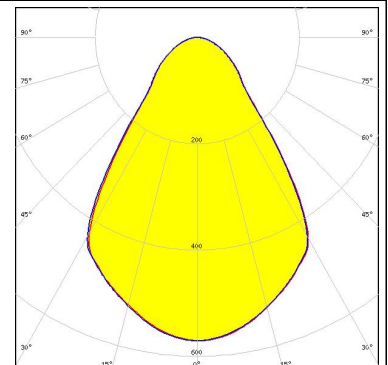
LED VERO13  
FWHM 73.0°  
Efficiency 93 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18



LED VERO18  
FWHM 72.0°  
Efficiency 93 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18



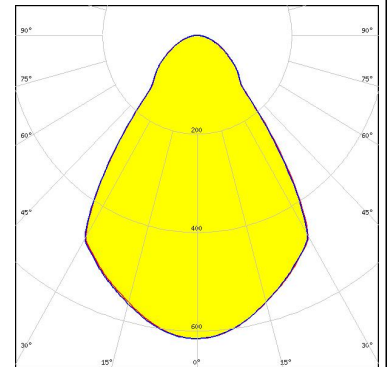
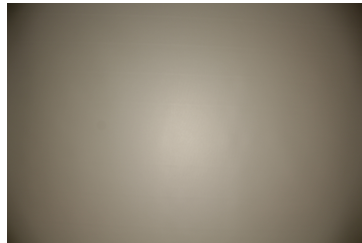
LED VERO29  
FWHM 72.0°  
Efficiency 88 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13584\_CLAMP-VERO29  
F13671\_ANGE-RZ-LENS



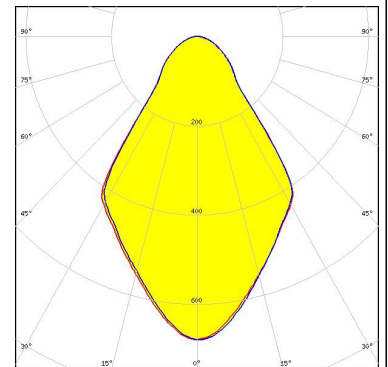
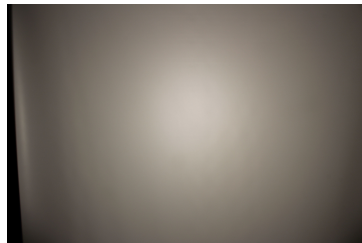
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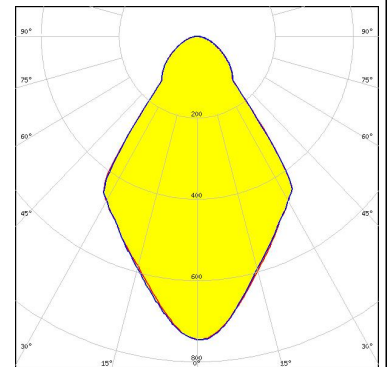
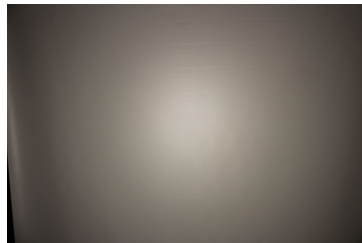
LED VERO29  
FWHM 72.0°  
Efficiency 94 %  
Peak intensity 0.6 cd/Im  
LEDs/each optic 1  
Light colour White  
Required components:  
C13584\_CLAMP-VERO29



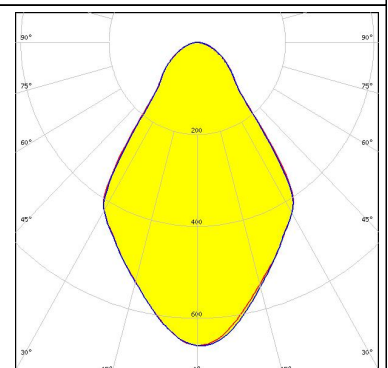
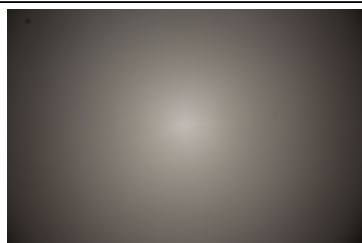
LED Vesta TW 15mm DP  
FWHM 70.0°  
Efficiency 88 %  
Peak intensity 0.7 cd/Im  
LEDs/each optic 1  
Light colour Tunable White  
Required components:  
C13658\_CLAMP-VERO13-18  
F13671\_ANGE-RZ-LENS  
Bender Wirth: 482 Typ L2



LED Vesta TW 15mm DP  
FWHM 70.0°  
Efficiency 94 %  
Peak intensity 0.7 cd/Im  
LEDs/each optic 1  
Light colour Tunable White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 482 Typ L2



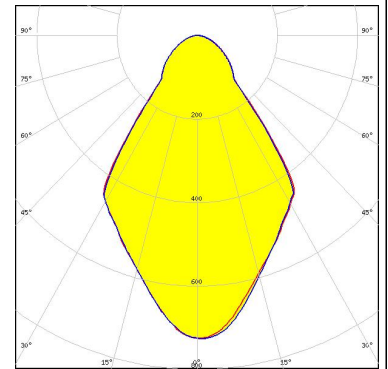
LED Vesta TW 18mm (31W) DP  
FWHM 70.0°  
Efficiency 87 %  
Peak intensity 0.7 cd/Im  
LEDs/each optic 1  
Light colour Tunable White  
Required components:  
C13584\_CLAMP-VERO29  
F13671\_ANGE-RZ-LENS  
Bender Wirth: 483 Typ L3



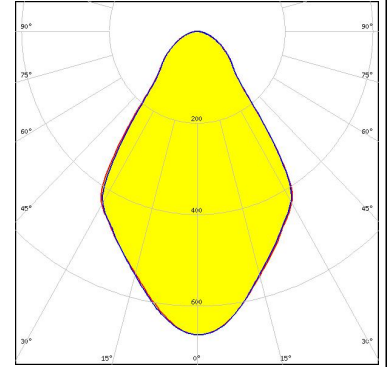
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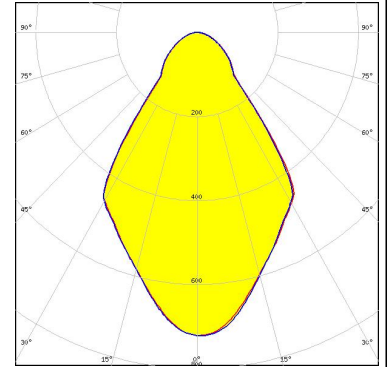
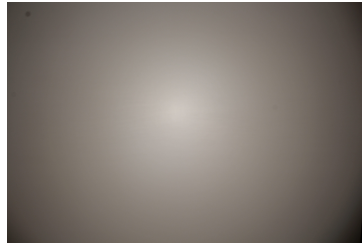
LED Vesta TW 18mm (31W) DP  
 FWHM 70.0°  
 Efficiency 93 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 483 Typ L3



LED Vesta TW 22mm DP  
 FWHM 69.0°  
 Efficiency 88 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 494 Typ L3

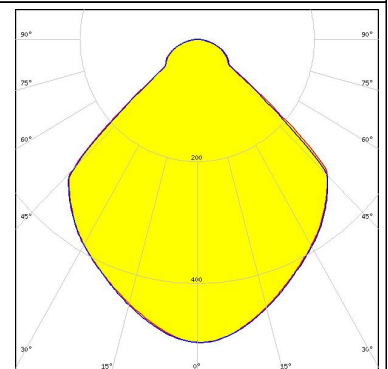
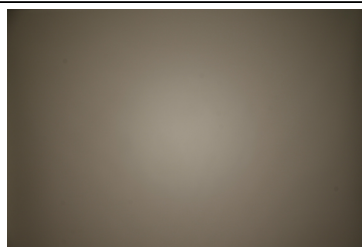


LED Vesta TW 22mm DP  
 FWHM 69.0°  
 Efficiency 93 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 494 Typ L3



#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 434 Typ L1

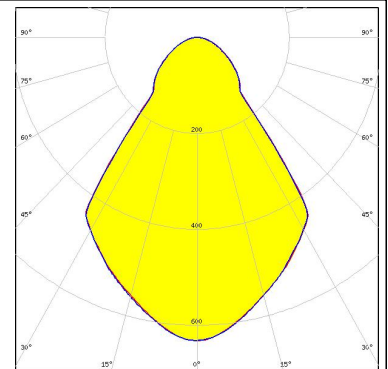
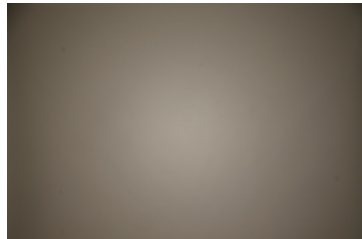




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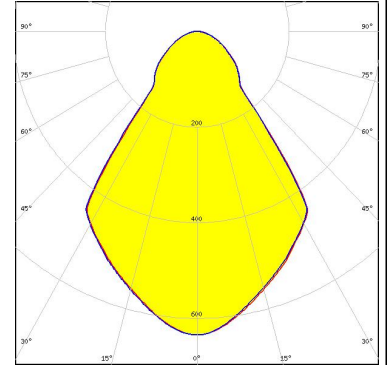
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 433 Typ L1



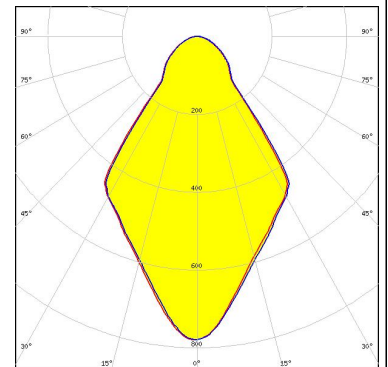
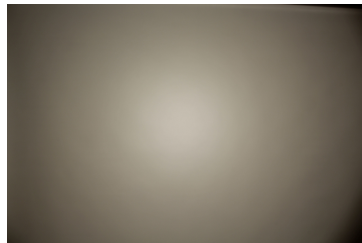
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 71.0°  
 Efficiency 92 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



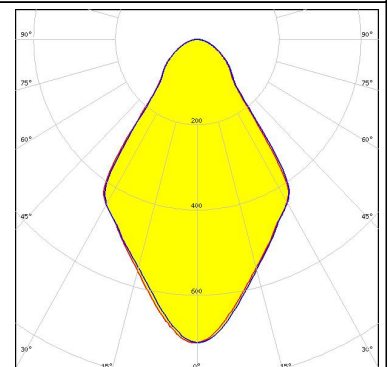
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 69.0°  
 Efficiency 94 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16791\_CLAMP-Z45-A  
 TE: 2325807-3



#### CITIZEN

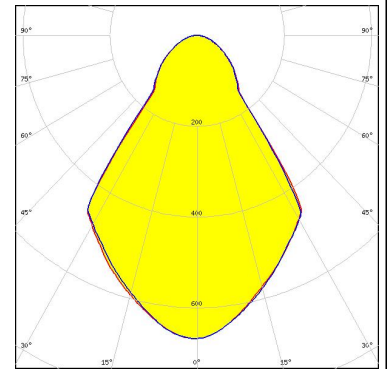
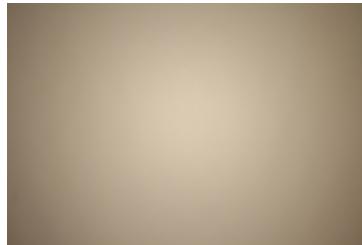
LED CLL03x/CLU03x  
 FWHM 69.0°  
 Efficiency 90 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16791\_CLAMP-Z45-A  
 F13671\_ANGE-RZ-LENS  
 TE: 2325807-3



#### PHOTOMETRIC DATA (MEASURED):

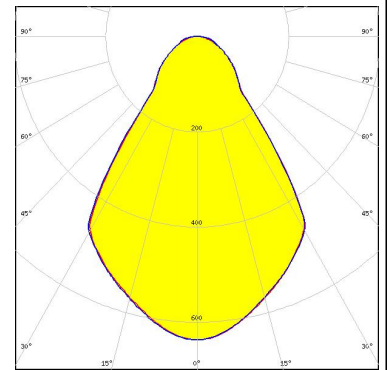
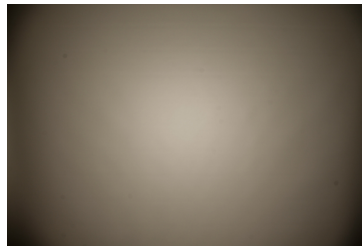
#### CITIZEN

LED CLL03x/CLU03x  
FWHM 70.0°  
Efficiency 93 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
IDEAL: 50-2103CT + 50-2100AN



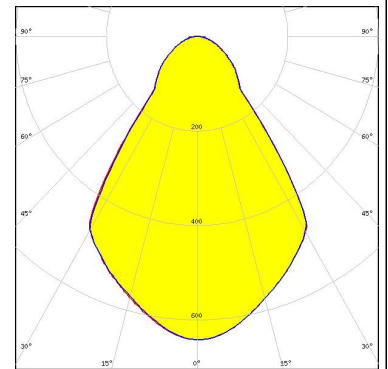
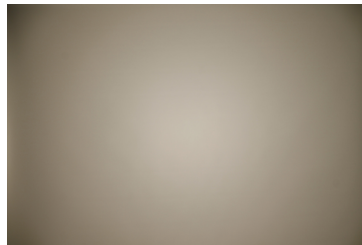
#### CITIZEN

LED CLL04x/CLU04x  
FWHM 70.0°  
Efficiency 93 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
IDEAL: 50-2204-CT + 50-2100AN



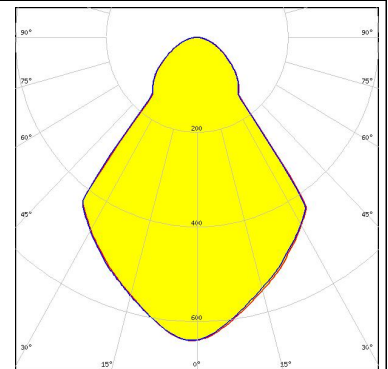
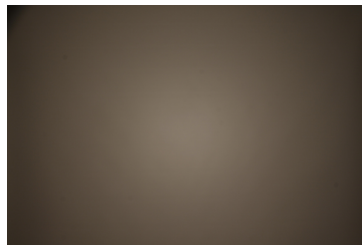
#### CITIZEN

LED CLL04x/CLU04x  
FWHM 70.0°  
Efficiency 93 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13584\_CLAMP-VERO29  
Bender Wirth: 431 Typ L3



#### CITIZEN

LED CLU700/701/702  
FWHM 73.0°  
Efficiency 93 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 434 Typ L1



### PHOTOMETRIC DATA (MEASURED):

#### CITIZEN

LED CLU720/721

FWHM 72.0°

Efficiency 93 %

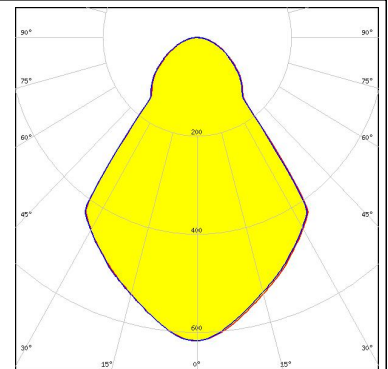
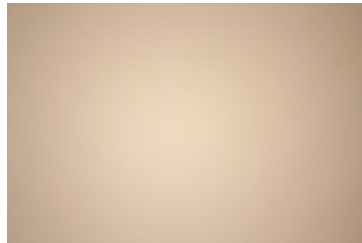
Peak intensity 0.6 cd/lm

LEDs/each optic 1

Light colour White

Required components:

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



#### CITIZEN

LED CLU720/721

FWHM 70.0°

Efficiency 94 %

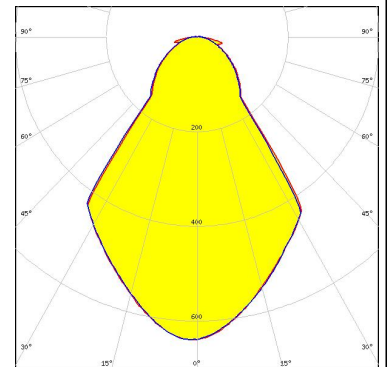
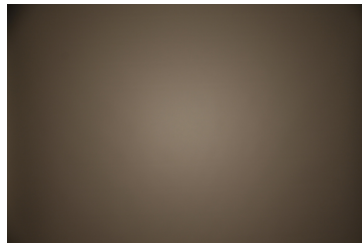
Peak intensity 0.6 cd/lm

LEDs/each optic 1

Light colour White

Required components:

IDEAL: 50-2103CT + 50-2100AN



#### CITIZEN

LED CLU720/721

FWHM 72.0°

Efficiency 93 %

Peak intensity 0.6 cd/lm

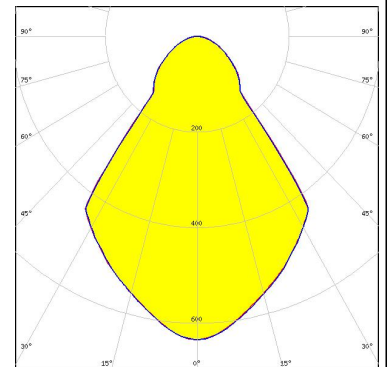
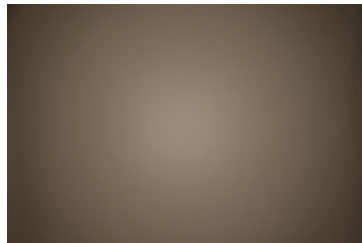
LEDs/each optic 1

Light colour White

Required components:

C13658\_CLAMP-VERO13-18

Bender Wirth: 433 Typ L1



#### CITIZEN

LED CLU730/731

FWHM 71.0°

Efficiency 93 %

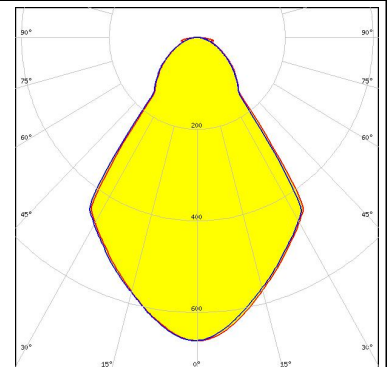
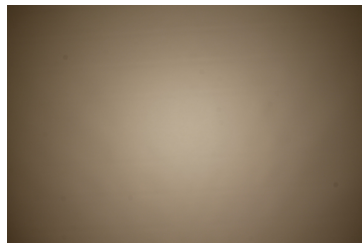
Peak intensity 0.7 cd/lm

LEDs/each optic 1

Light colour White

Required components:

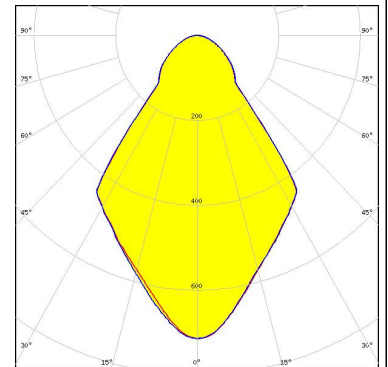
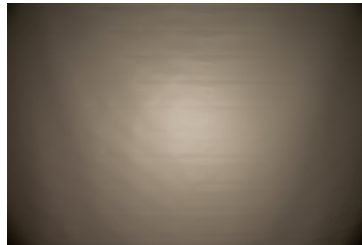
IDEAL: 50-2204-CT + 50-2100AN



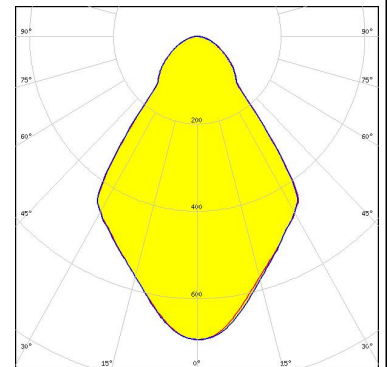
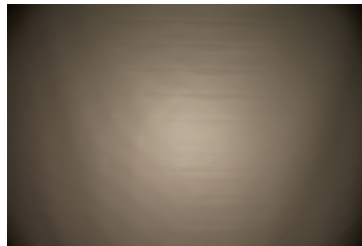
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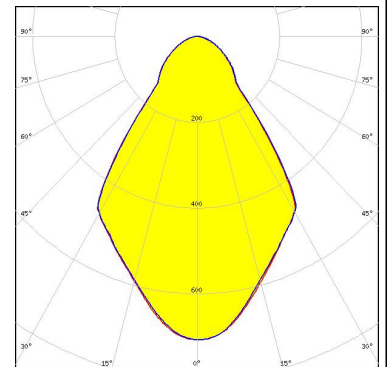
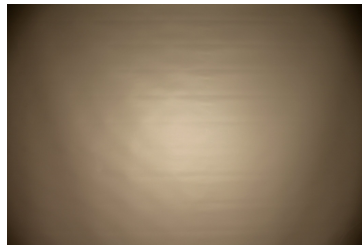
LED CMA1840  
FWHM 72.0°  
Efficiency 95 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C14123\_CLAMP-CXA15-18



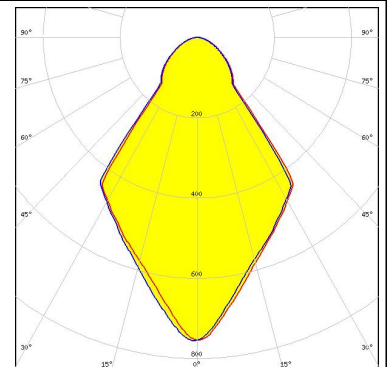
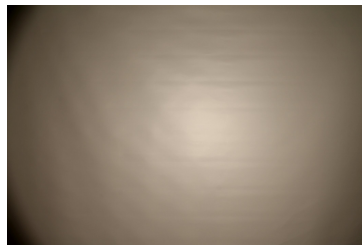
LED CMA2550  
FWHM 71.0°  
Efficiency 94 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C14036\_CLAMP\_CXA25-30



LED CMA3090  
FWHM 70.0°  
Efficiency 94 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C14036\_CLAMP\_CXA25-30



LED CMT14xx  
FWHM 71.0°  
Efficiency 93 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 434 Typ L1

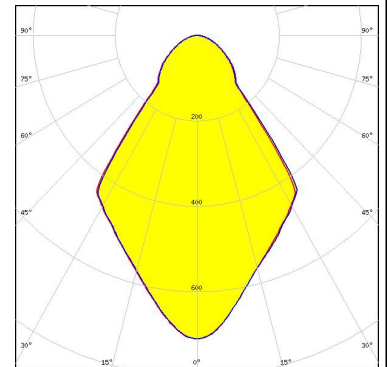
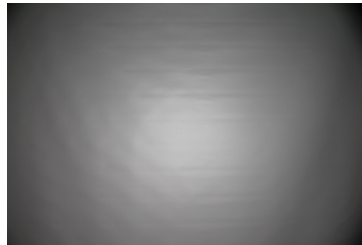




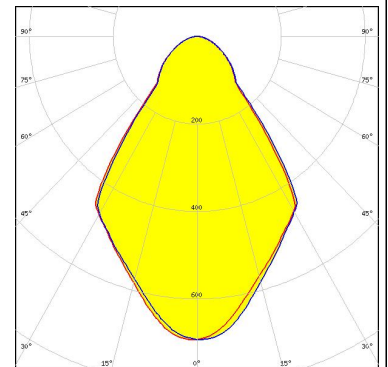
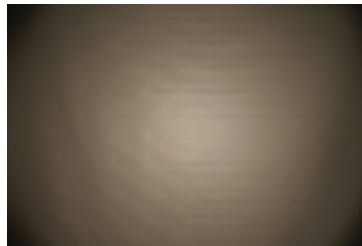
#### PHOTOMETRIC DATA (MEASURED):



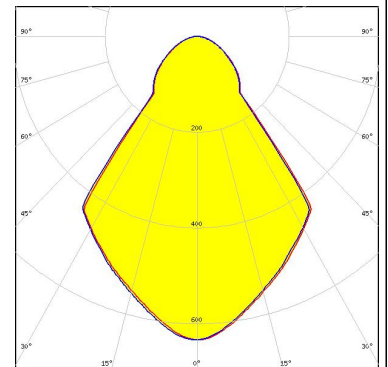
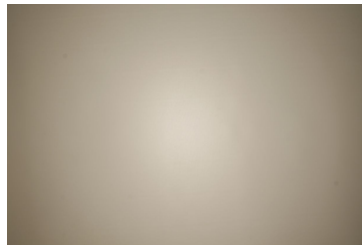
LED CMT19xx  
FWHM 72.0°  
Efficiency 94 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 477 Typ L1



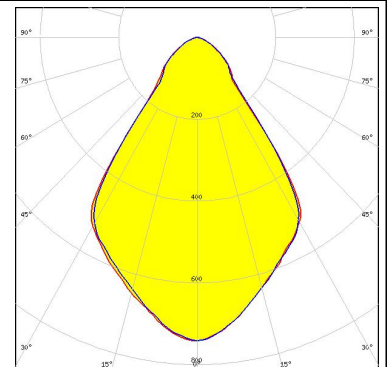
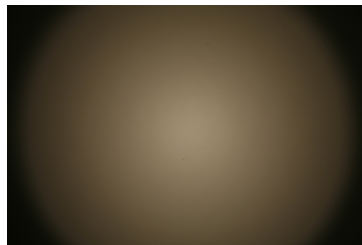
LED CMT28xx  
FWHM 70.0°  
Efficiency 94 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13584\_CLAMP-VERO29  
Bender Wirth: 471 Typ L3



LED CXA/B 15xx  
FWHM 73.0°  
Efficiency 93 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 441 Typ L1



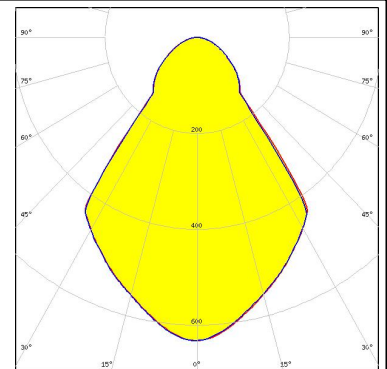
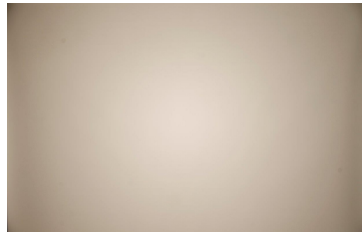
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
FWHM 72.0°  
Efficiency 94 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C14123\_CLAMP-CXA15-18



### PHOTOMETRIC DATA (MEASURED):

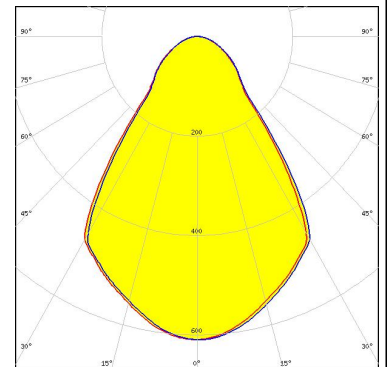
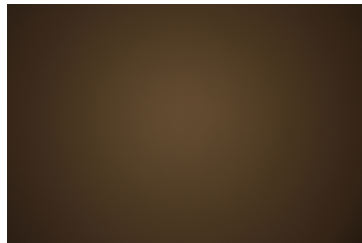
#### CREE

LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
FWHM 72.0°  
Efficiency 92 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 437 Typ L1



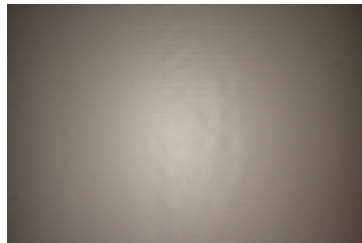
#### CREE

LED CXA/B 3590  
FWHM 72.0°  
Efficiency 94 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
IDEAL: 50-2303CR + 50-2300AN



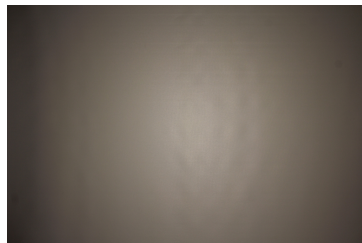
#### EVERLIGHT

LED CHI3030 19W  
FWHM 71.0°  
Efficiency 91 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13584\_CLAMP-VERO29  
F13671\_ANGE-RZ-LENS  
Bender Wirth: 468 Typ L3



#### EVERLIGHT

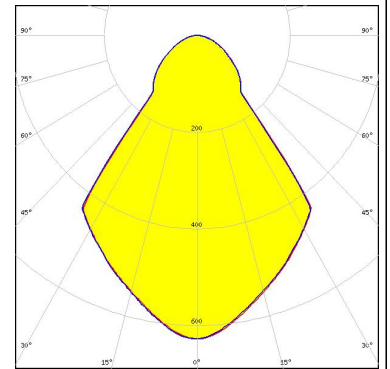
LED CHI3030 29W  
FWHM 71.0°  
Efficiency 90 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13584\_CLAMP-VERO29  
F13671\_ANGE-RZ-LENS  
Bender Wirth: 468 Typ L3



#### PHOTOMETRIC DATA (MEASURED):

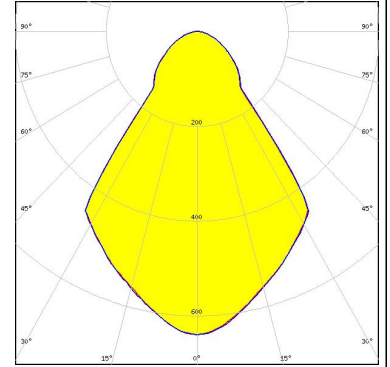
##### LUMILEDS

LED LUXEON CoB 1202/1203  
 FWHM 73.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 438 Typ L1



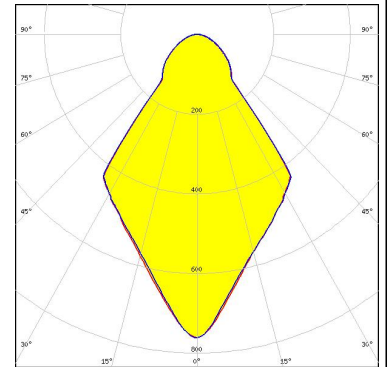
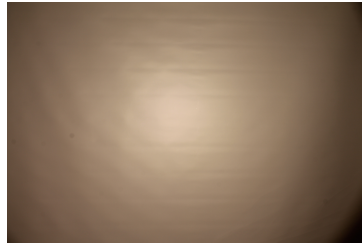
##### LUMILEDS

LED LUXEON CoB 1204/1205  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



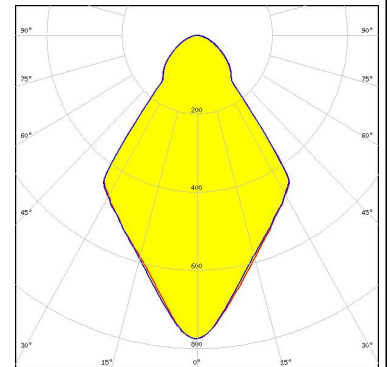
##### LUMILEDS

LED LUXEON CoB 1204HD  
 FWHM 71.0°  
 Efficiency 93 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



##### LUMILEDS

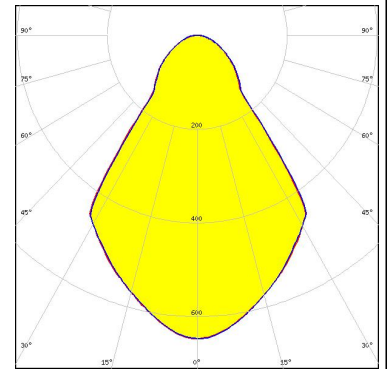
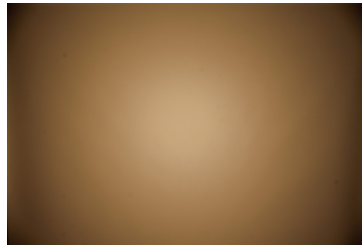
LED LUXEON CoB 1205HD  
 FWHM 70.0°  
 Efficiency 93 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

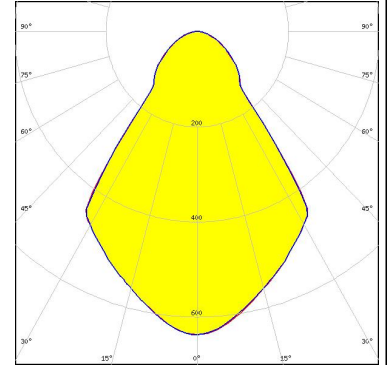
##### LUMILEDS

LED LUXEON CoB 1208  
 FWHM 71.0°  
 Efficiency 93 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2100SH + 50-2100AN



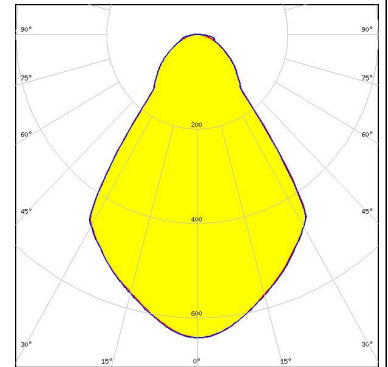
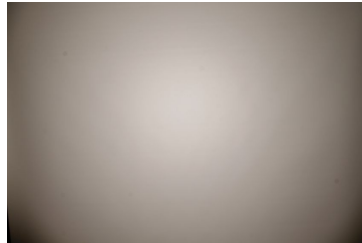
##### LUMILEDS

LED LUXEON CoB 1208  
 FWHM 71.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



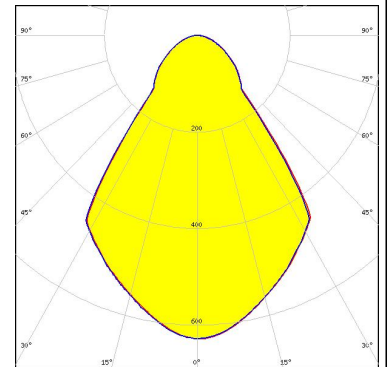
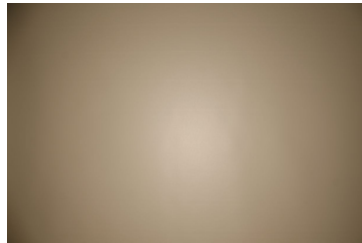
##### LUMILEDS

LED LUXEON CoB 1211  
 FWHM 71.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



##### LUMILEDS

LED LUXEON CoB 1211  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 431 Typ L3

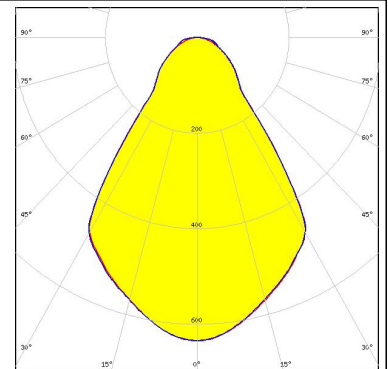




#### PHOTOMETRIC DATA (MEASURED):

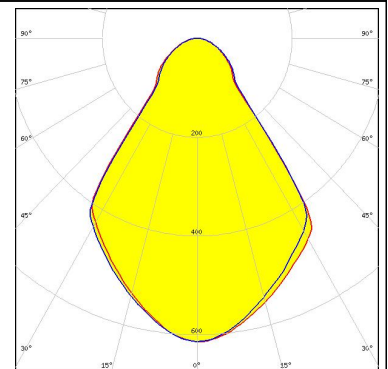
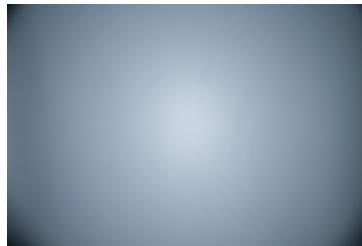
##### LUMILEDS

LED LUXEON CoB 1216/1812  
 FWHM 70.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



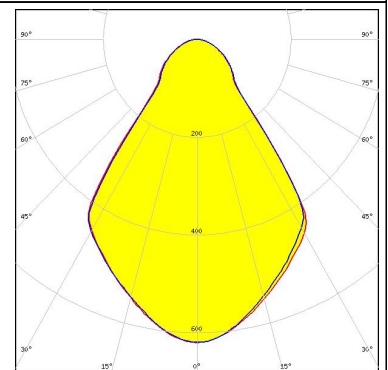
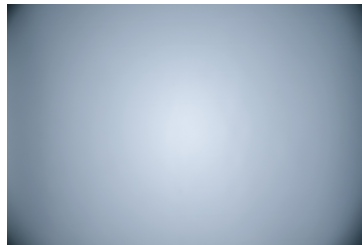
##### LUMILEDS

LED LUXEON K12  
 FWHM 72.0°  
 Efficiency 89 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1



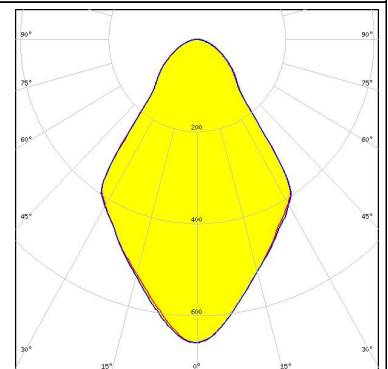
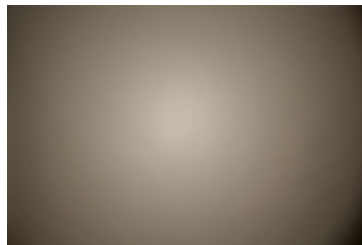
##### LUMILEDS

LED LUXEON K16  
 FWHM 72.0°  
 Efficiency 88 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1



##### LUMINUS

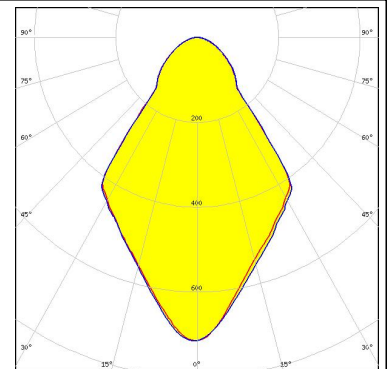
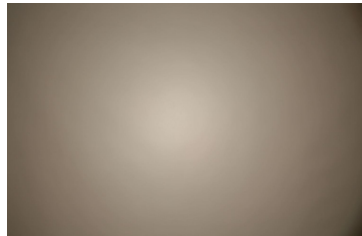
LED CDM-14 (Dim-To-Warm)  
 FWHM 71.0°  
 Efficiency 87 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 491 Typ L2



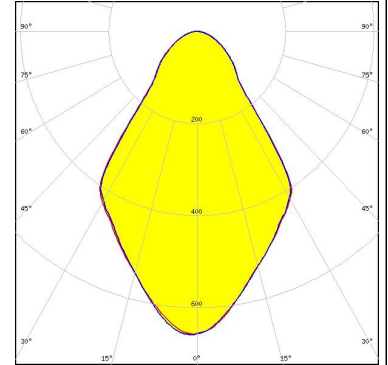
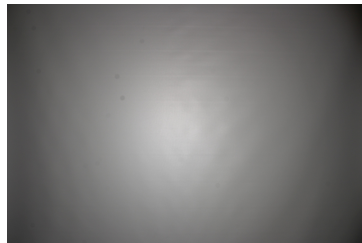
#### PHOTOMETRIC DATA (MEASURED):



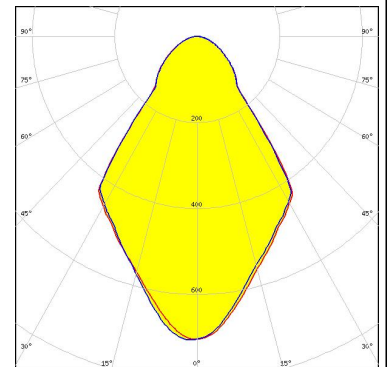
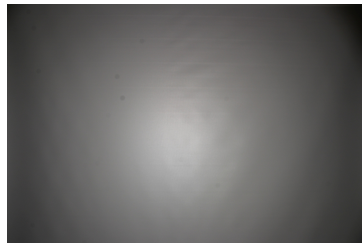
LED CDM-14 (Dim-To-Warm)  
 FWHM 71.0°  
 Efficiency 92 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 491 Typ L2



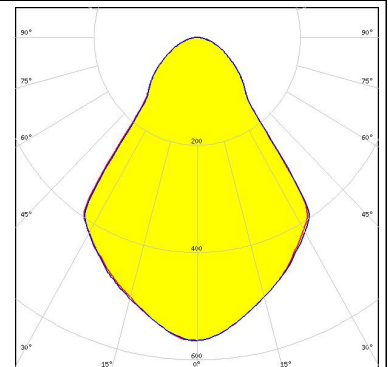
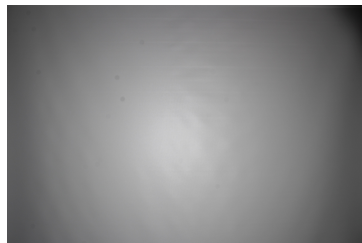
LED CDM-18 (Dim-To-Warm)  
 FWHM 70.0°  
 Efficiency 88 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 491 Typ L2



LED CDM-18 (Dim-To-Warm)  
 FWHM 70.0°  
 Efficiency 93 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 491 Typ L2



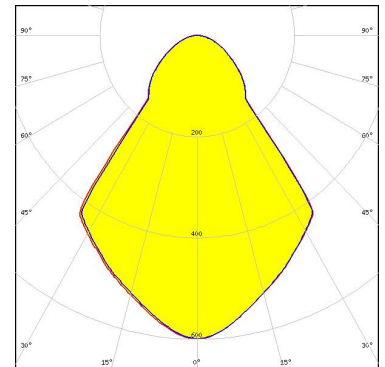
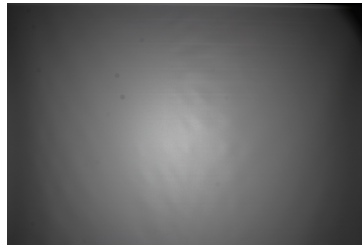
LED CDM-9 (Dim-To-Warm)  
 FWHM 73.0°  
 Efficiency 86 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 490 Typ L1



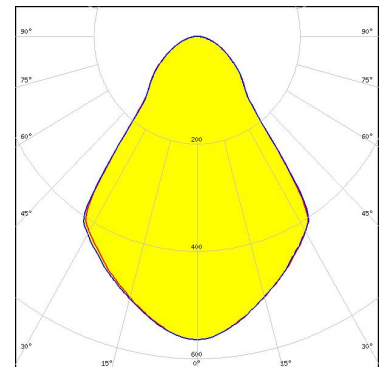
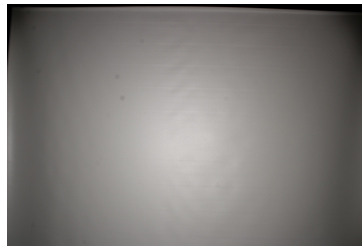
#### PHOTOMETRIC DATA (MEASURED):



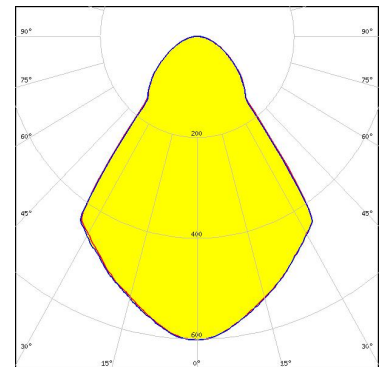
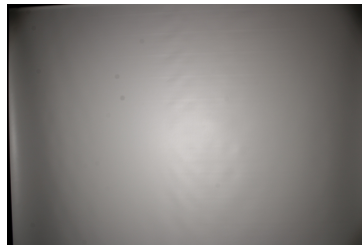
LED CDM-9 (Dim-To-Warm)  
 FWHM 73.0°  
 Efficiency 92 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 490 Typ L1



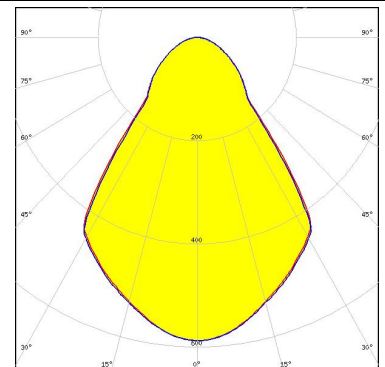
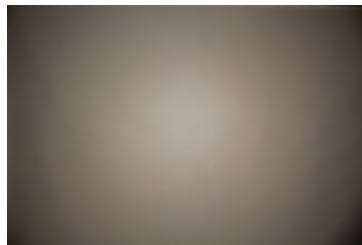
LED CTM-14 (Tunable White)  
 FWHM 72.0°  
 Efficiency 86 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 442 Typ L3



LED CTM-14 (Tunable White)  
 FWHM 73.0°  
 Efficiency 92 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 442 Typ L3



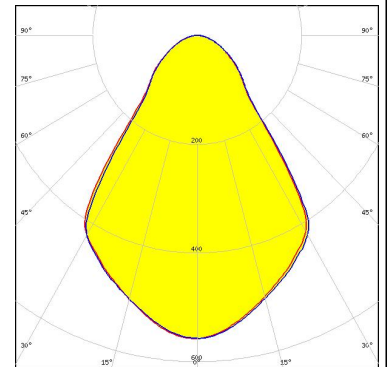
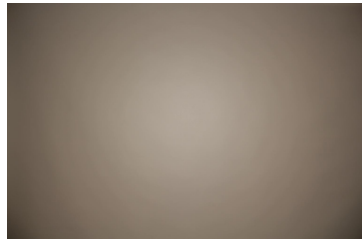
LED CTM-22 (Tunable White)  
 FWHM 73.0°  
 Efficiency 91 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 494 Typ L3



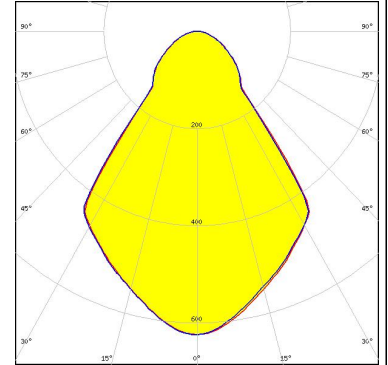
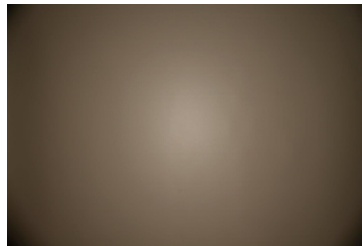
#### PHOTOMETRIC DATA (MEASURED):



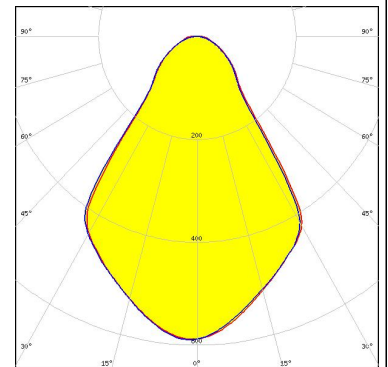
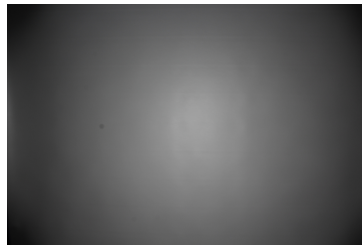
LED CTM-22 (Tunable White)  
 FWHM 72.0°  
 Efficiency 86 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 494 Typ L3



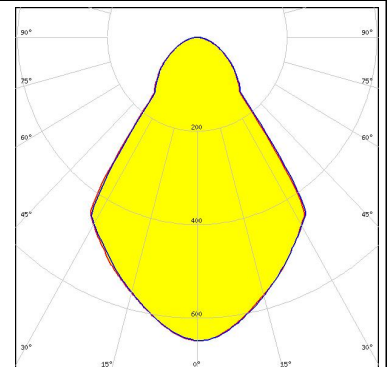
LED CxM-14 (19x19)  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



LED COB J-Type  
 FWHM 71.0°  
 Efficiency 87 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2103NC + 50-2100AN



LED COB J-Type  
 FWHM 71.0°  
 Efficiency 91 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2103NC + 50-2100AN

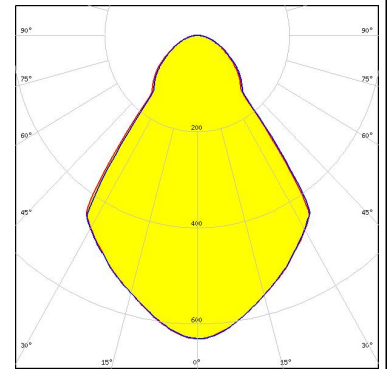
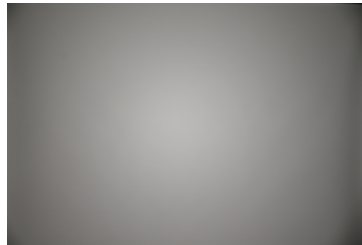




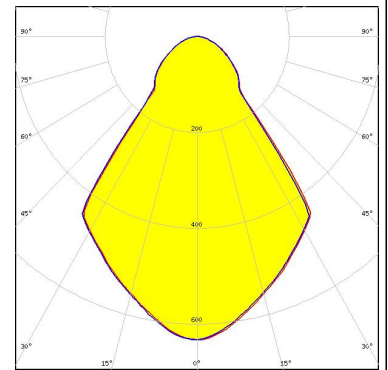
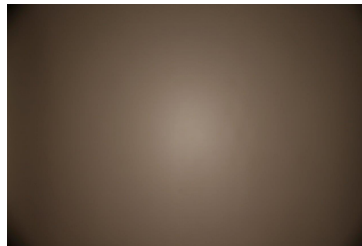
#### PHOTOMETRIC DATA (MEASURED):



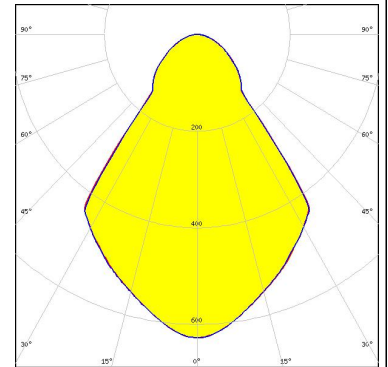
LED COB J-Type  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 463 Typ L2



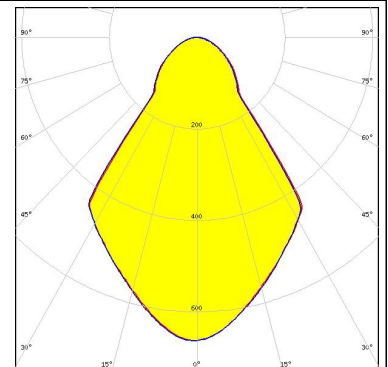
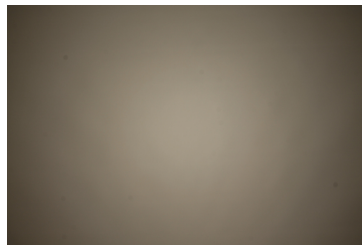
LED COB L-Type (LES 11)  
 FWHM 73.0°  
 Efficiency 94 %  
 Peak intensity 0.6 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Molex: 180580-0005



LED COB L-Type (LES 11)  
 FWHM 73.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/Im  
 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 71.0°  
 Efficiency 92 %  
 Peak intensity 0.7 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2100NC + 50-2100AN



#### PHOTOMETRIC DATA (MEASURED):



LED COB L-Type (LES 11)

FWHM 72.0°

Efficiency 92 %

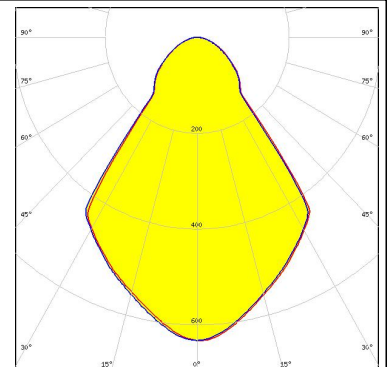
Peak intensity 0.6 cd/lm

LEDs/each optic 1

Light colour White

Required components:

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



LED COB L-Type (LES 9)

FWHM 73.0°

Efficiency 94 %

Peak intensity 0.6 cd/lm

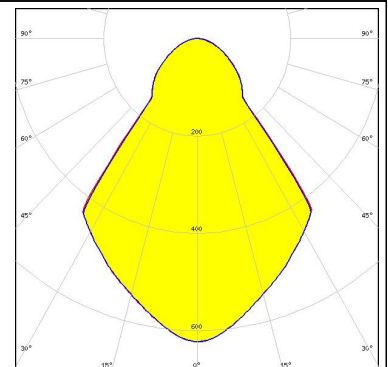
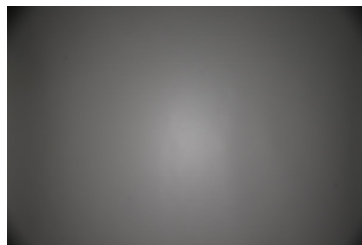
LEDs/each optic 1

Light colour White

Required components:

C13658\_CLAMP-VERO13-18

Bender Wirth: 438 Typ L1



LED COB L-Type (LES 9)

FWHM 72.0°

Efficiency 92 %

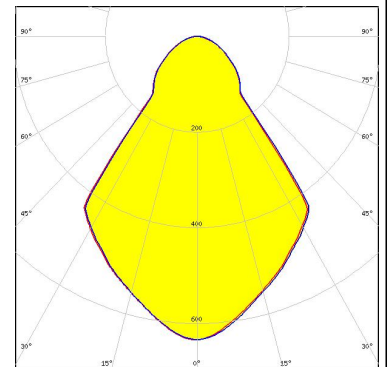
Peak intensity 0.6 cd/lm

LEDs/each optic 1

Light colour White

Required components:

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



LED NVCWJ024Z-V1MT: COB J-Type Tunable White

FWHM 72.0°

Efficiency 85 %

Peak intensity 0.6 cd/lm

LEDs/each optic 1

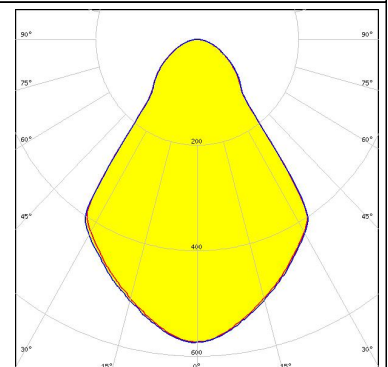
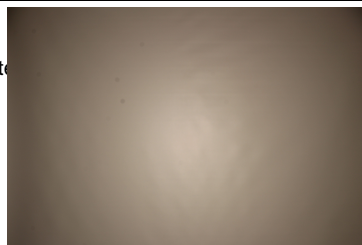
Light colour White

Required components:

C13658\_CLAMP-VERO13-18

F13671\_ANGE-RZ-LENS

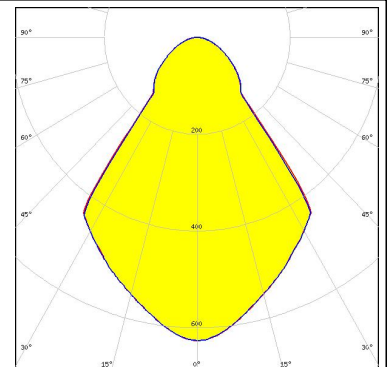
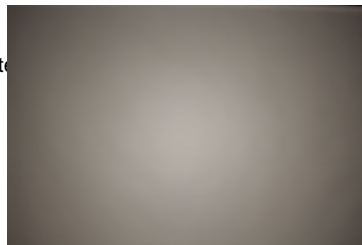
Bender Wirth: 498 Typ L2



#### PHOTOMETRIC DATA (MEASURED):

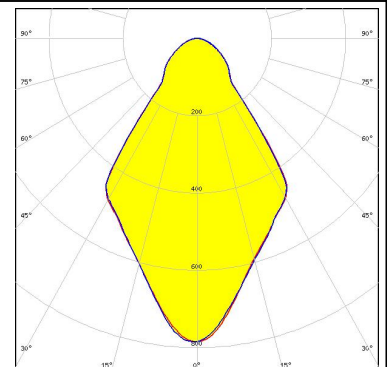
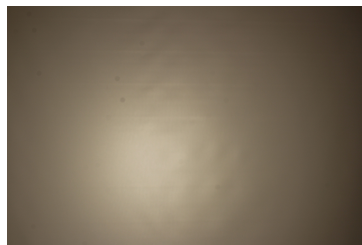


LED NVCWJ024Z-V1MT: COB J-Type Tunable White  
 FWHM 73.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 498 Typ L2



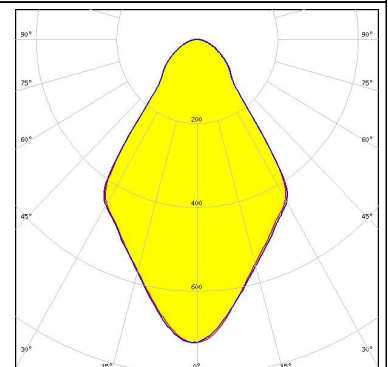
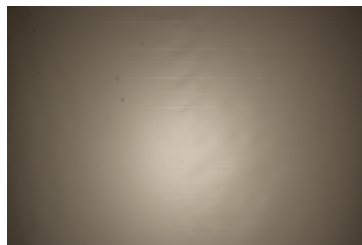
#### OSRAM

LED PrevaLED Core G7 L15 H1  
 FWHM 69.0°  
 Efficiency 94 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16685\_CLAMP-PRV-A



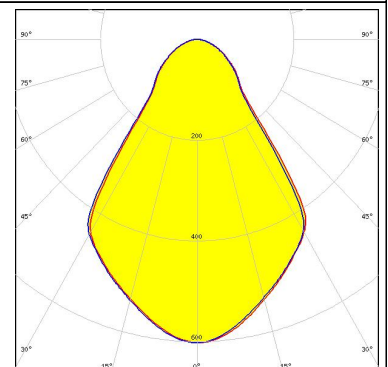
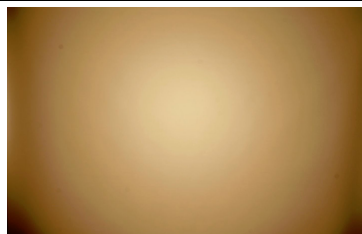
#### OSRAM

LED PrevaLED Core G7 L15 H1  
 FWHM 69.0°  
 Efficiency 90 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16685\_CLAMP-PRV-A  
 F13671\_ANGE-RZ-LENS



#### OSRAM

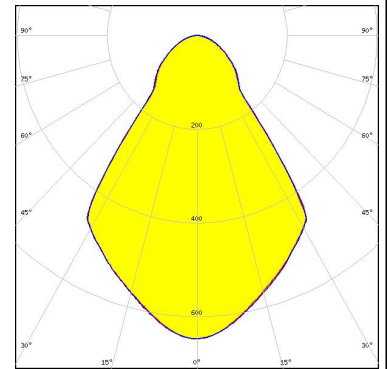
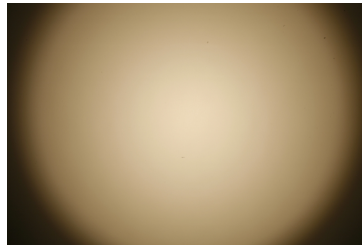
LED PrevaLED Core Z4 LES19  
 FWHM 71.0°  
 Efficiency 88 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

#### OSRAM

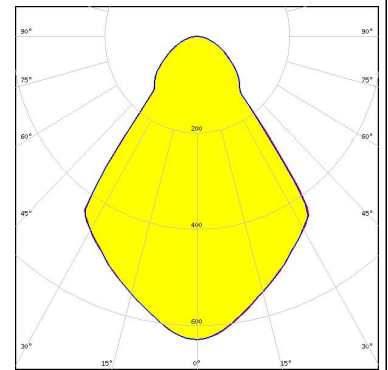
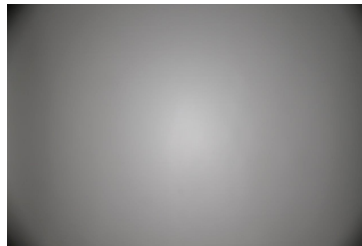
LED PrevaLED Core Z4 LES19  
 FWHM 71.0°  
 Efficiency 93 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### OSRAM

Opto Semiconductors

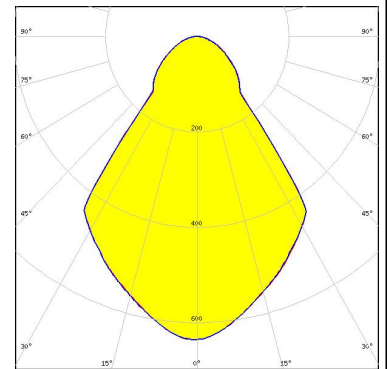
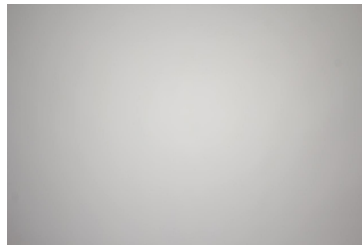
LED Soleriq S13  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### OSRAM

Opto Semiconductors

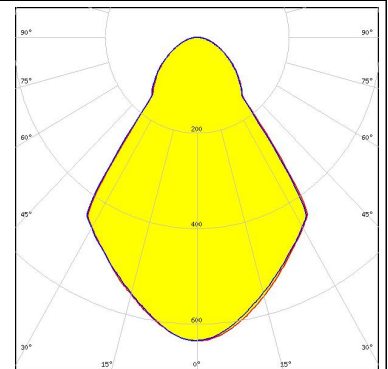
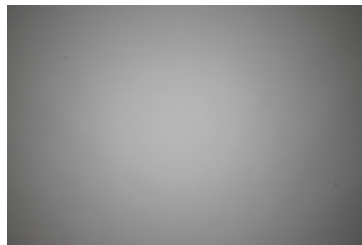
LED Soleriq S13  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 437 Typ L1



#### OSRAM

Opto Semiconductors

LED Soleriq S13 19x19  
 FWHM 71.0°  
 Efficiency 92 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2103CT + 50-2100AN





#### PHOTOMETRIC DATA (MEASURED):

##### OSRAM

Opto Semiconductors

LED Soleriq S13 19x19

FWHM 72.0°

Efficiency 92 %

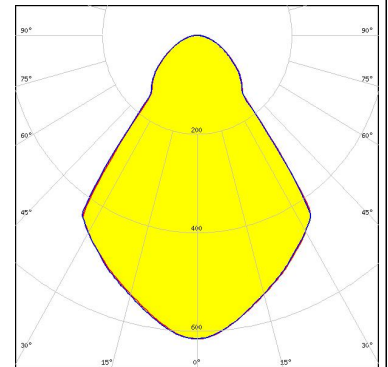
Peak intensity 0.6 cd/lm

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 71.0°

Efficiency 92 %

Peak intensity 0.6 cd/lm

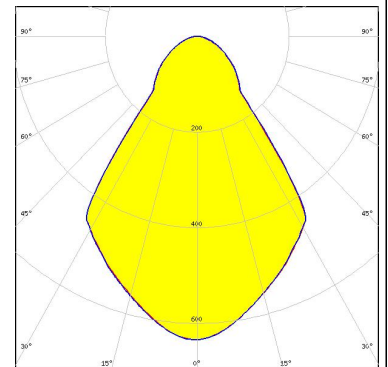
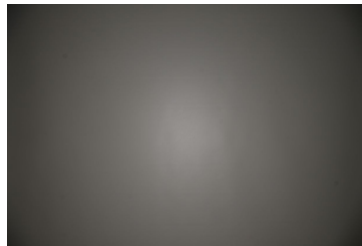
LEDs/each optic 1

Light colour White

Required components:

C13584\_CLAMP-VERO29

Bender Wirth: 462 Typ L3



##### OSRAM

Opto Semiconductors

LED Soleriq S19

FWHM 72.0°

Efficiency 92 %

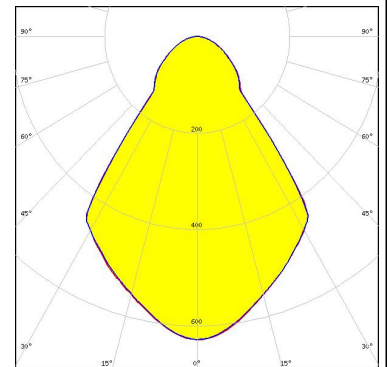
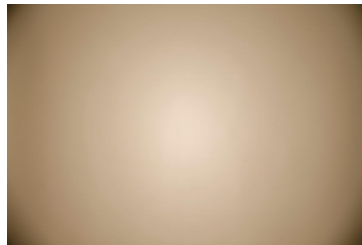
Peak intensity 0.6 cd/lm

LEDs/each optic 1

Light colour White

Required components:

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



##### PHILIPS

LED Fortimo SLM 1208 L15 G6 Standard

FWHM 72.0°

Efficiency 87 %

Peak intensity 0.6 cd/lm

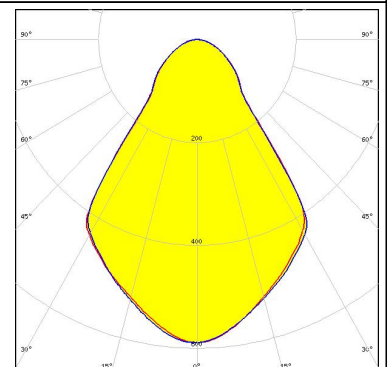
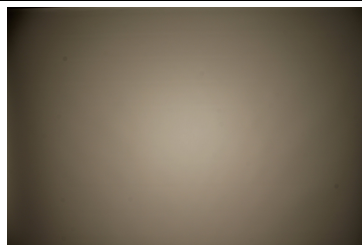
LEDs/each optic 1

Light colour White

Required components:

F13671\_ANGE-RZ-LENS

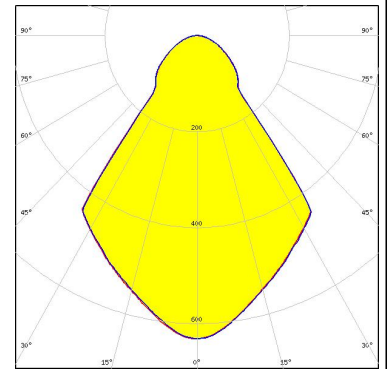
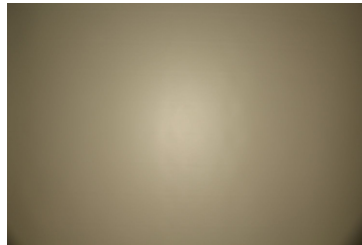
TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

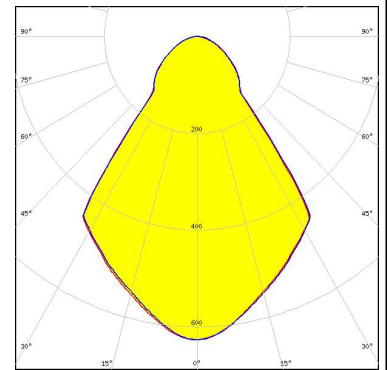
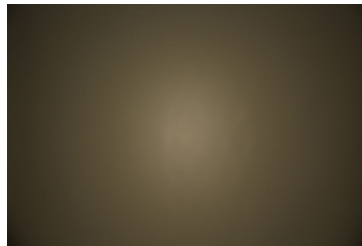
#### PHILIPS

LED Fortimo SLM L09 + SLM holder  
 FWHM 72.0°  
 Efficiency 92 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



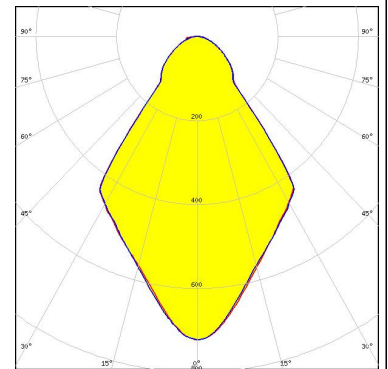
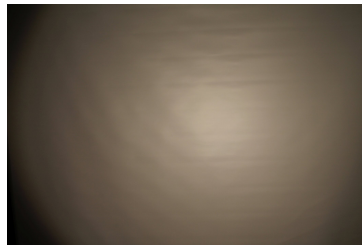
#### PHILIPS

LED Fortimo SLM L13 + SLM holder  
 FWHM 72.0°  
 Efficiency 92 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



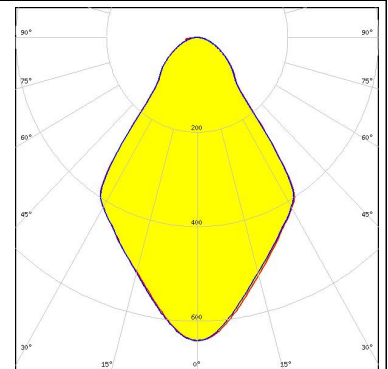
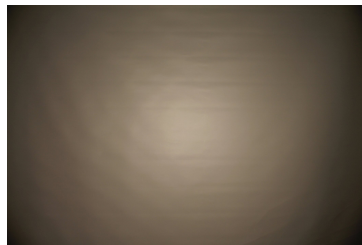
#### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM 71.0°  
 Efficiency 93 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHILIPS

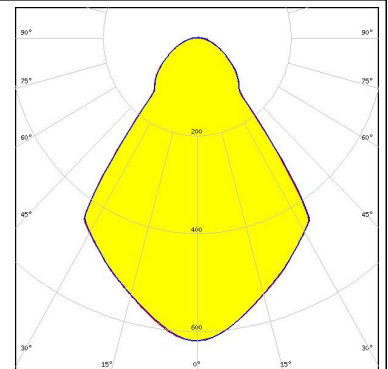
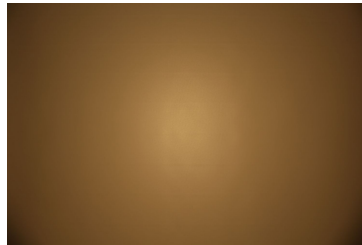
LED Fortimo SLM L13 CoB  
 FWHM 71.0°  
 Efficiency 85 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

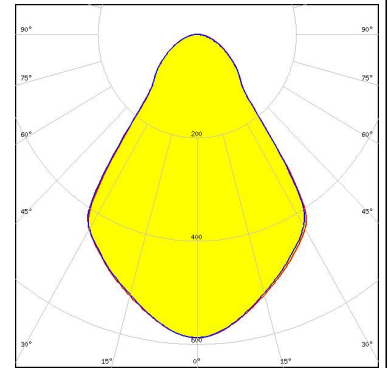
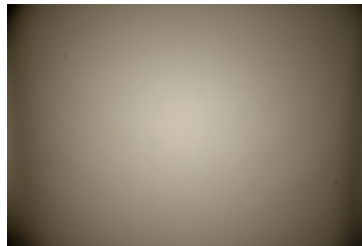
#### PHILIPS

LED Fortimo SLM L15 + SLM holder  
 FWHM 72.0°  
 Efficiency 90 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



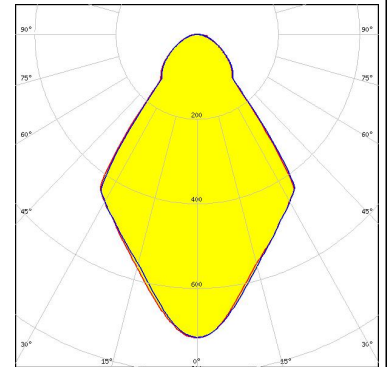
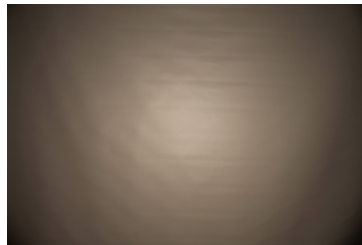
#### PHILIPS

LED Fortimo SLM L15 + SLM holder  
 FWHM 72.0°  
 Efficiency 87 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



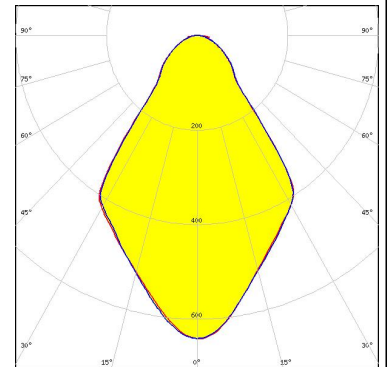
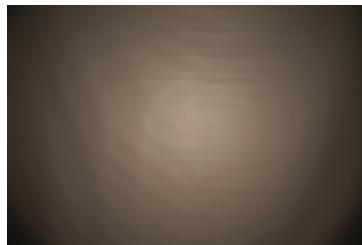
#### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM 71.0°  
 Efficiency 92 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHILIPS

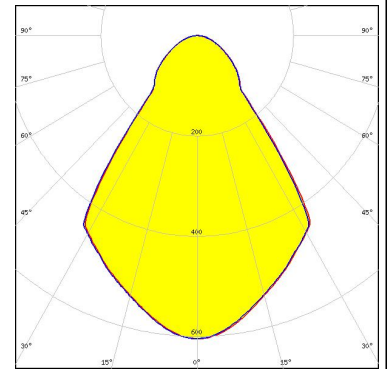
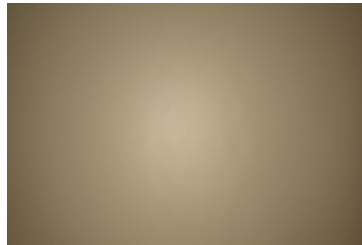
LED Fortimo SLM L15 CoB  
 FWHM 70.0°  
 Efficiency 85 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



#### PHOTOMETRIC DATA (MEASURED):

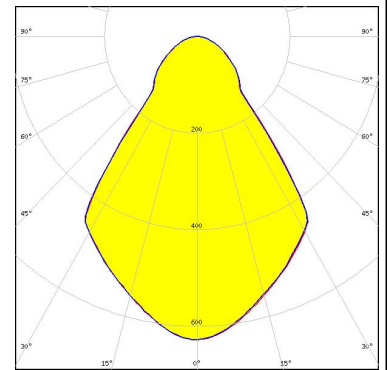
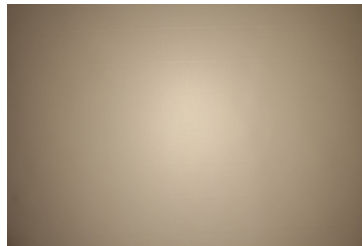
#### PHILIPS

LED Fortimo SLM L19 + SLM holder  
 FWHM 72.0°  
 Efficiency 89 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



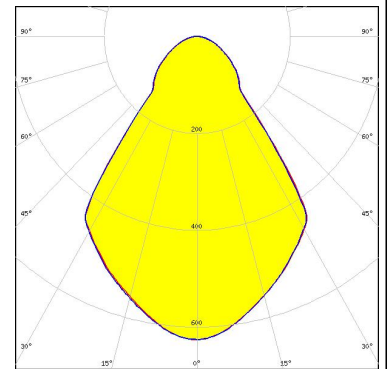
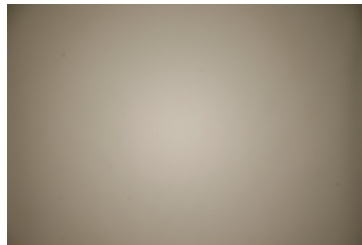
#### SAMSUNG

LED LC026B / 033B / 040B  
 FWHM 72.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



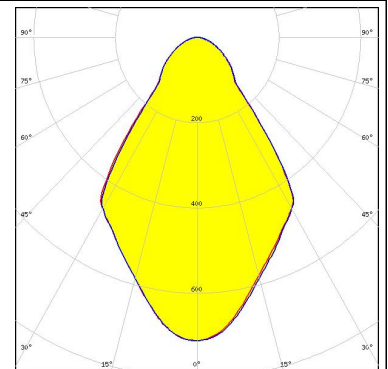
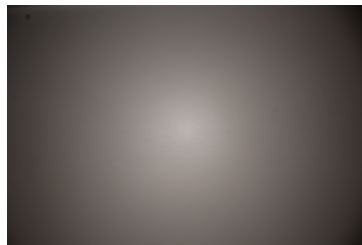
#### SAMSUNG

LED LC026B / 033B / 040B  
 FWHM 72.0°  
 Efficiency 92 %  
 Peak intensity 0.6 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 70.0°  
 Efficiency 93 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 502 Typ L3

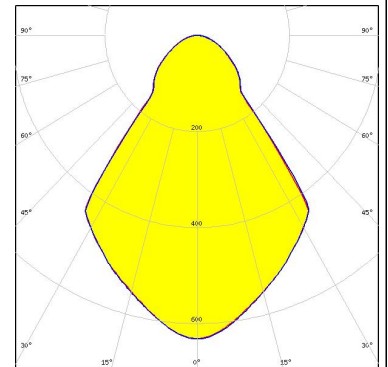




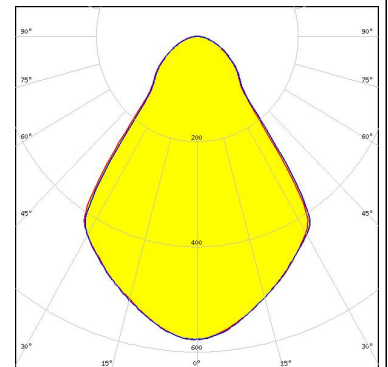
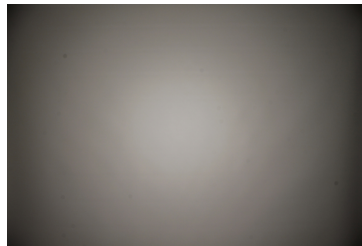
#### PHOTOMETRIC DATA (MEASURED):

#### SAMSUNG

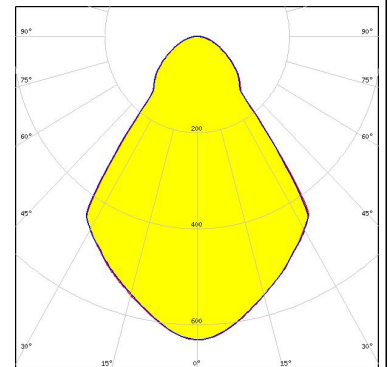
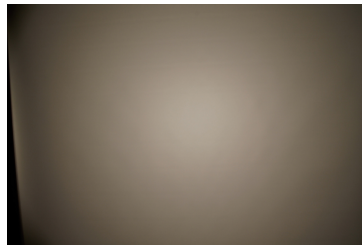
LED LC040C  
 FWHM 72.0°  
 Efficiency 92 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



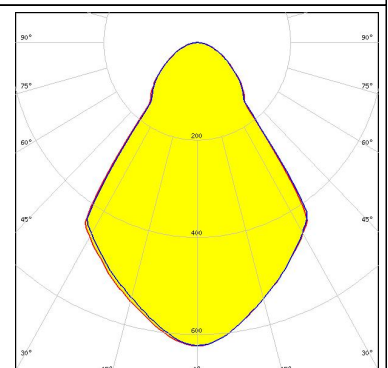
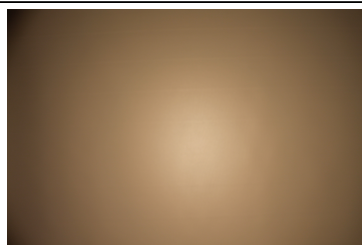
LED AC Zhaga COB  
 FWHM 72.0°  
 Efficiency 87 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 Optosource: SEHSMJD-A



LED MJT COB LES 14.5  
 FWHM 72.0°  
 Efficiency 92 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



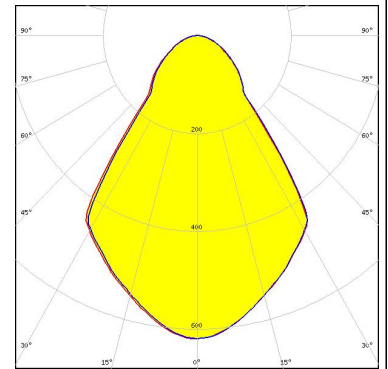
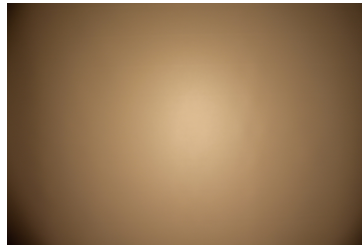
LED WU-M-461  
 FWHM 72.0°  
 Efficiency 92 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



### PHOTOMETRIC DATA (MEASURED):

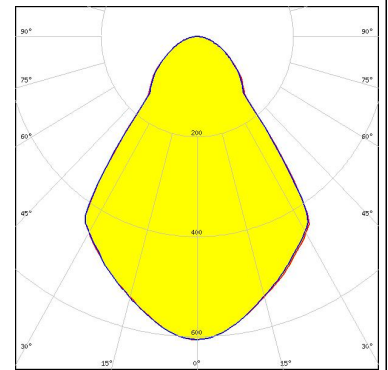
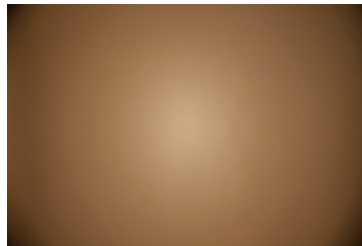
#### VS LIGHTING SOLUTIONS

LED WU-M-462  
FWHM 72.0°  
Efficiency 92 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
TE: OPTIC CLIP Z50 TYPE1 2213194-1



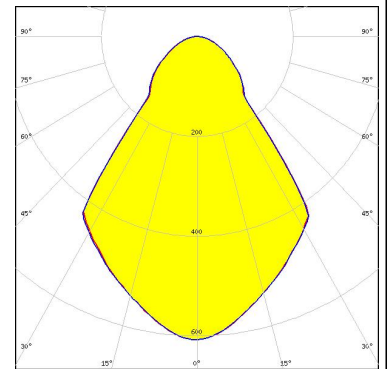
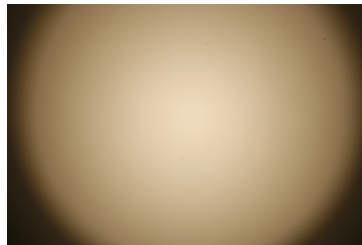
#### VS LIGHTING SOLUTIONS

LED WU-M-464  
FWHM 73.0°  
Efficiency 92 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
TE: OPTIC CLIP Z50 TYPE1 2213194-1



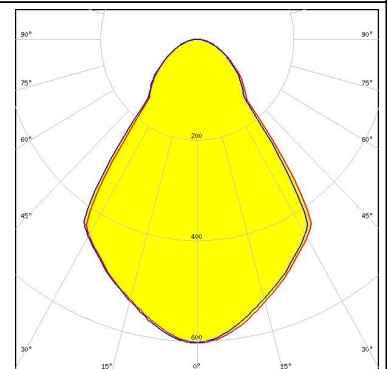
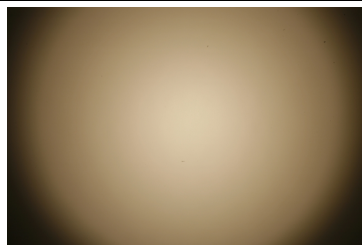
#### VS LIGHTING SOLUTIONS

LED WU-M-484  
FWHM 73.0°  
Efficiency 92 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
TE: OPTIC CLIP Z50 TYPE1 2213194-1



#### VS LIGHTING SOLUTIONS

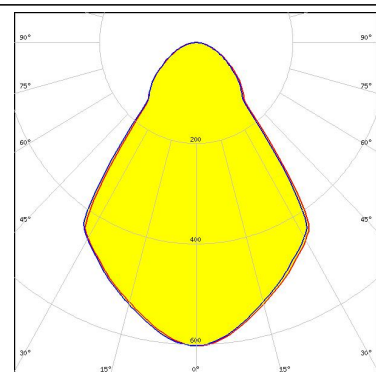
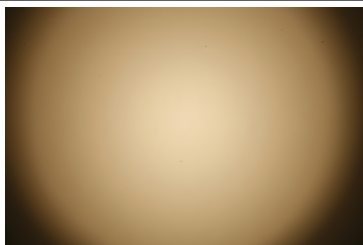
LED WU-M-485  
FWHM 73.0°  
Efficiency 92 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
TE: OPTIC CLIP Z50 TYPE1 2213194-1



### PHOTOMETRIC DATA (MEASURED):



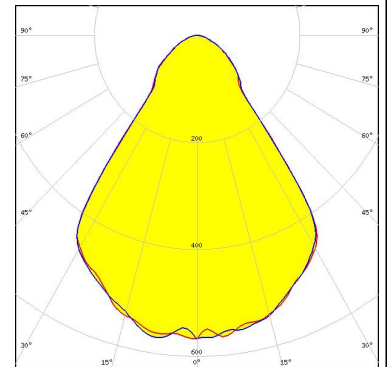
LED WU-M-486  
 FWHM 73.0°  
 Efficiency 92 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 TE: OPTIC CLIP Z50 TYPE1 2213194-1



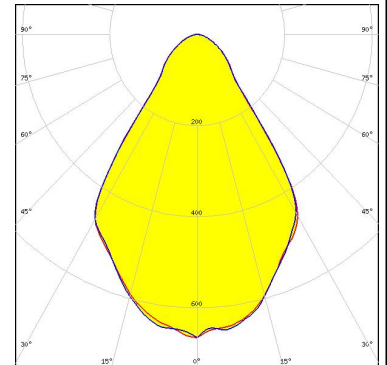
### PHOTOMETRIC DATA (SIMULATED):



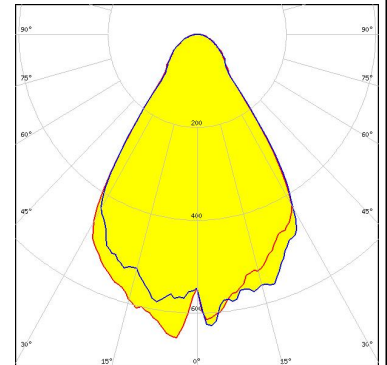
LED V10 Gen7  
FWHM 72.0°  
Efficiency 86 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 486 Typ L1



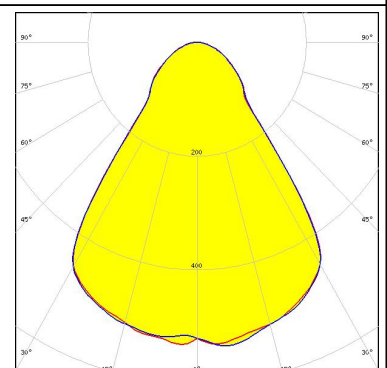
LED V13 Gen7  
FWHM 69.0°  
Efficiency 86 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
IDEAL: 50-2103CT + 50-2100AN



LED V22 Gen7  
FWHM 66.0°  
Efficiency 80 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
IDEAL: 50-2204-CT + 50-2100AN



LED CXA/B 1830  
FWHM 73.0°  
Efficiency 88 %  
Peak intensity 0.5 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 72.0°  
Efficiency 93 %  
Peak intensity 0.6 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 72.0°  
Efficiency 93 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 434 Typ L1



SEOUL SEMICONDUCTOR

LED ZC12/18  
FWHM 72.0°  
Efficiency 93 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 433 Typ L1



SEOUL SEMICONDUCTOR

LED ZC4/6  
FWHM 72.0°  
Efficiency 93 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 434 Typ L1

### GENERAL INFORMATION:

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

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

### MATERIALS:

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

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

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