

ANGELINA-XW

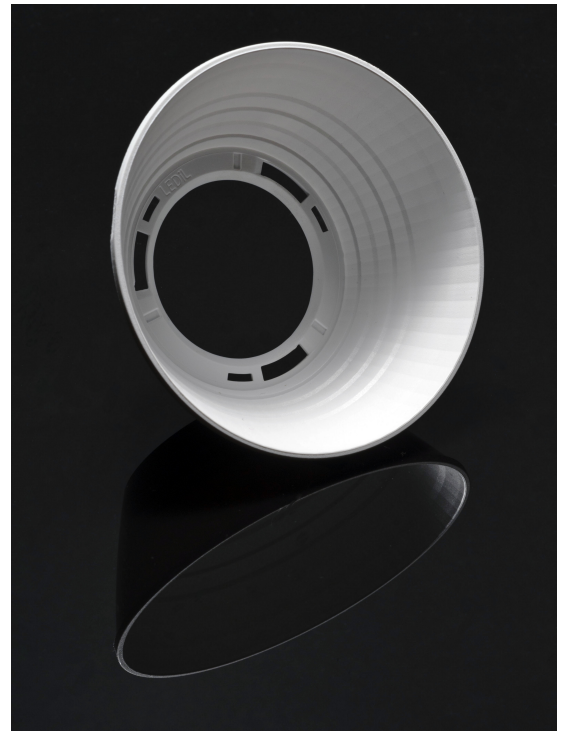
White version with ~91° wide beam

SPECIFICATION:

Dimensions	Ø 82.0
Height	31 mm
Fastening	socket
ROHS compliant	yes ⓘ

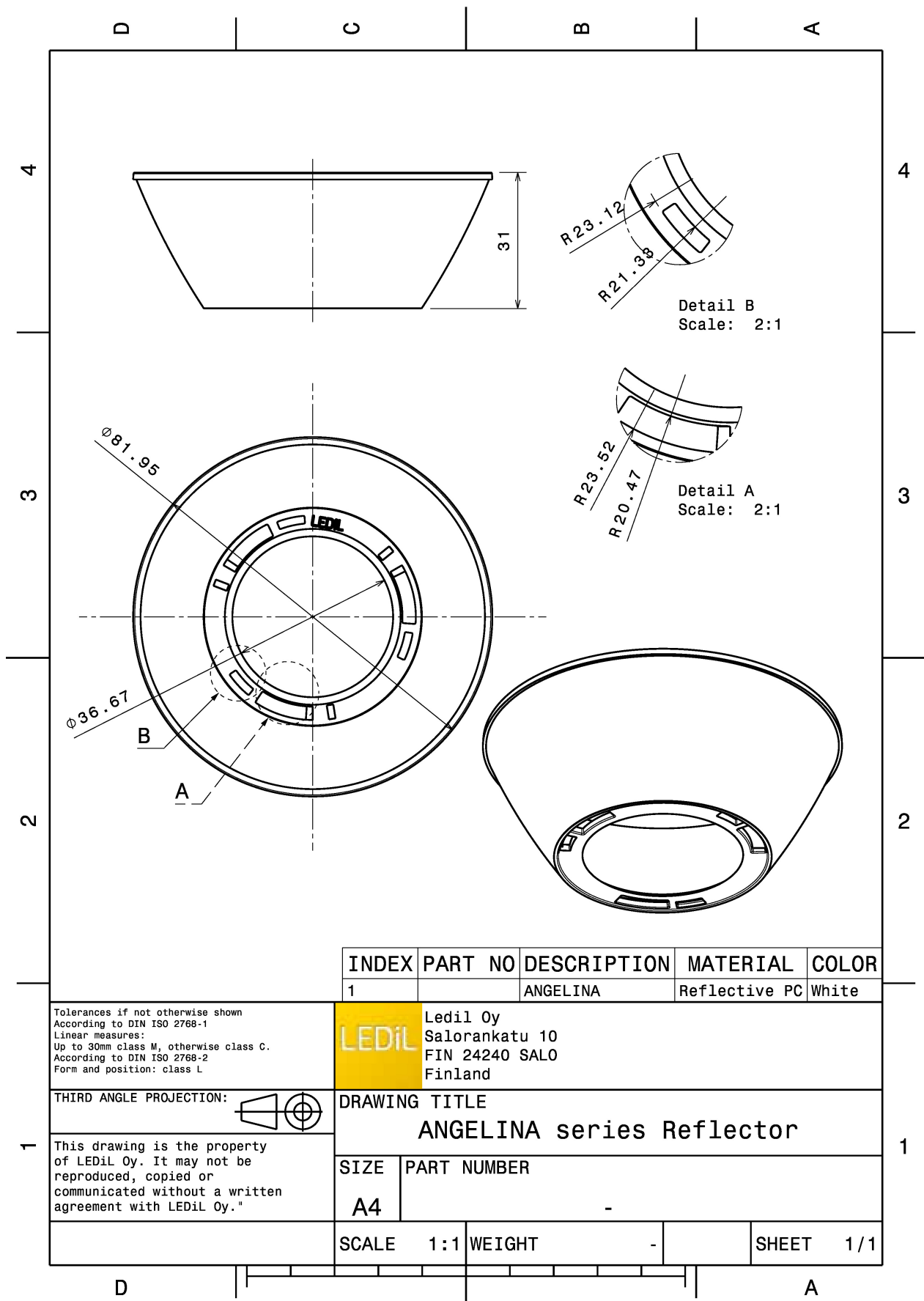
MATERIALS:

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



ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F13838_ANGELINA-XW » Box size: 480 x 280 x 300 mm	900	120	60	12.3



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

OPTICAL RESULTS (MEASURED):



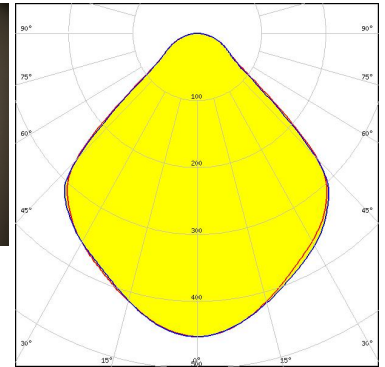
LED V10 Gen7
FWHM / FWTM 93.0° / 132.0°
Efficiency 89 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13658_CLAMP-VERO13-18

F13671_ANGE-RZ-LENS

Bender Wirth: 434 Typ L1



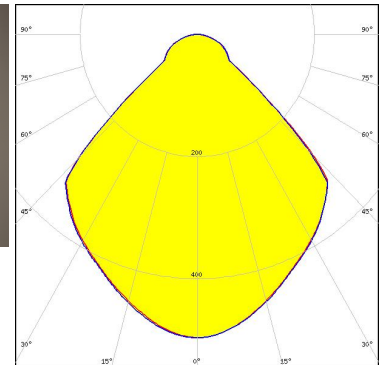
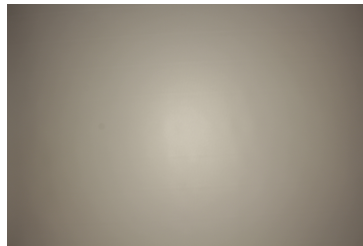
Light distribution files



LED V13 Gen7
FWHM / FWTM 92.0° / 130.0°
Efficiency 94 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

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



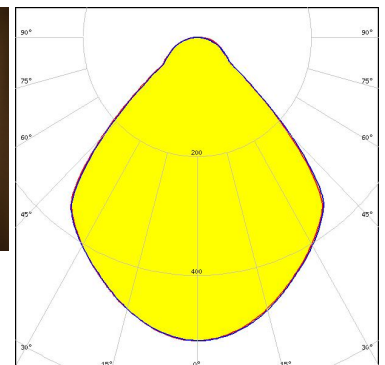
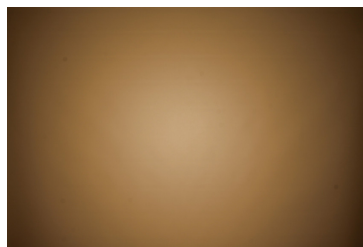
Light distribution files



LED V22 Gen6
FWHM / FWTM 88.0° / 126.0°
Efficiency 94 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

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

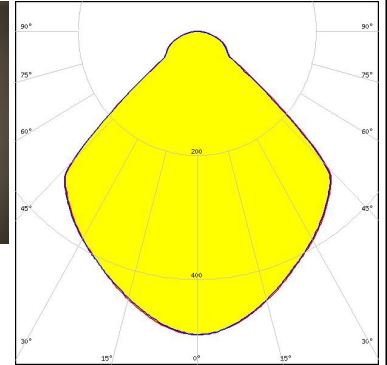


Light distribution files

OPTICAL RESULTS (MEASURED):



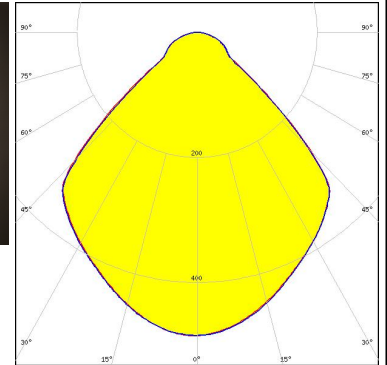
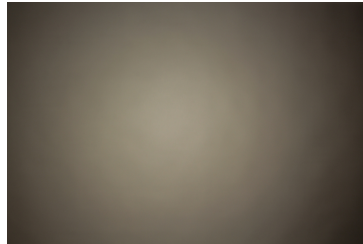
LED Vero SE 13
FWHM / FWTM 94.0° / 131.0°
Efficiency 94 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16402_CLAMP-VEROSE-13-18



Light distribution files



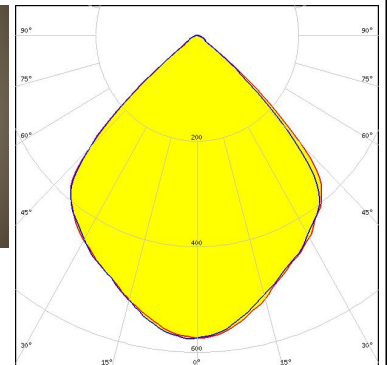
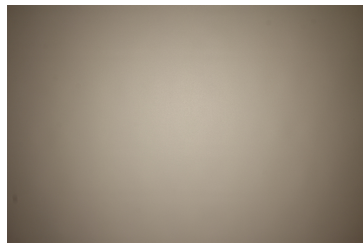
LED Vero SE 18
FWHM / FWTM 93.0° / 131.0°
Efficiency 94 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16402_CLAMP-VEROSE-13-18



Light distribution files



LED VERO18
FWHM / FWTM 90.0° / 106.0°
Efficiency 94 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13658_CLAMP-VERO13-18

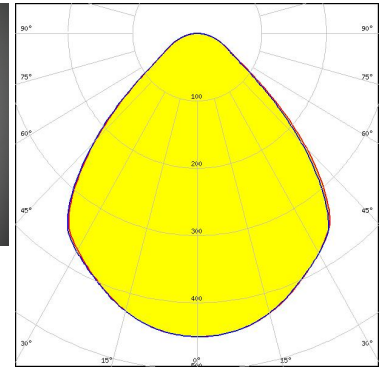
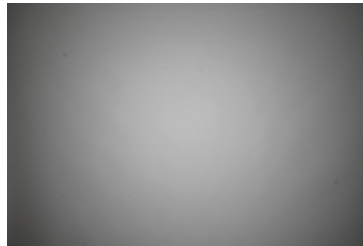


Light distribution files

OPTICAL RESULTS (MEASURED):

bridgelux

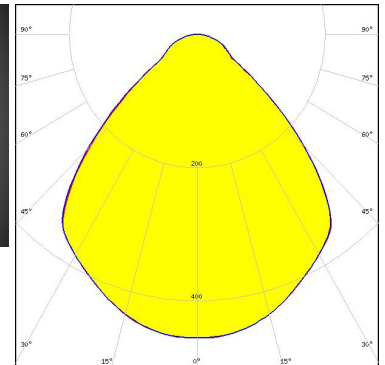
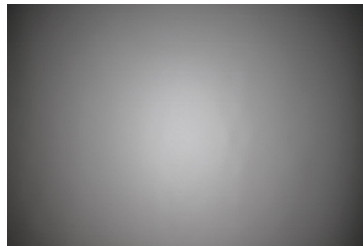
LED VERO29
FWHM / FWTM 90.0° / 133.0°
Efficiency 91 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13584_CLAMP-VERO29
F13671_ANGE-RZ-LENS



Light distribution files

bridgelux

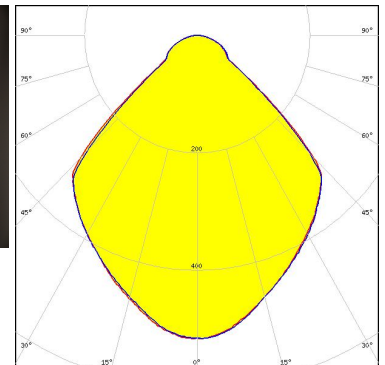
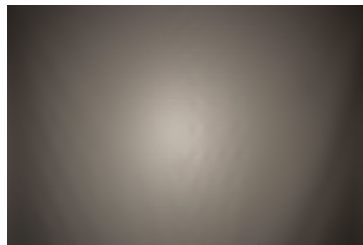
LED VERO29
FWHM / FWTM 91.0° / 134.0°
Efficiency 93 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13584_CLAMP-VERO29



Light distribution files

bridgelux

LED Vesta TW 15mm DP
FWHM / FWTM 92.0° / 129.0°
Efficiency 96 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type Tunable White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 482 Typ L2



Light distribution files

OPTICAL RESULTS (MEASURED):



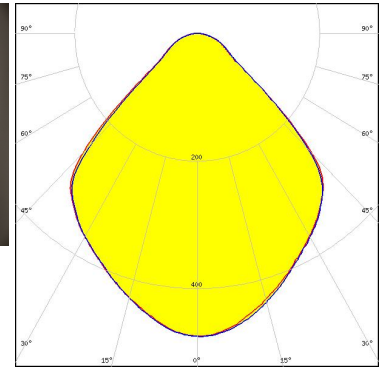
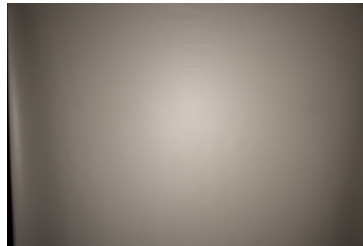
LED Vesta TW 15mm DP
FWHM / FWTM 92.0° / 130.0°
Efficiency 91 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type Tunable White

Required components:

C13658_CLAMP-VERO13-18

F13671_ANGE-RZ-LENS

Bender Wirth: 482 Typ L2



Light distribution files



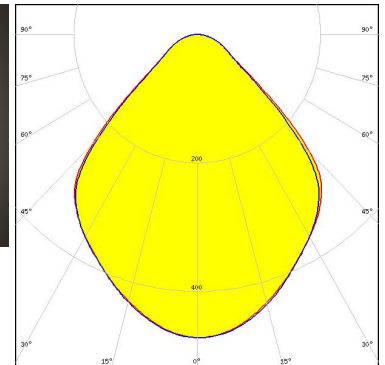
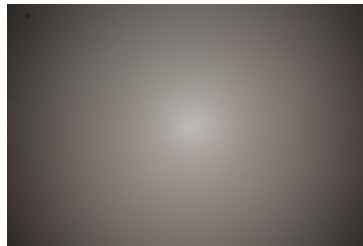
LED Vesta TW 18mm (31W) DP
FWHM / FWTM 90.0° / 130.0°
Efficiency 90 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type Tunable White

Required components:

C13584_CLAMP-VERO29

F13671_ANGE-RZ-LENS

Bender Wirth: 483 Typ L3



Light distribution files

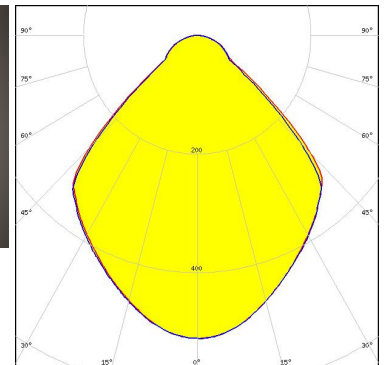
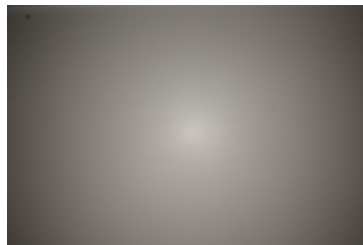


LED Vesta TW 18mm (31W) DP
FWHM / FWTM 91.0° / 128.0°
Efficiency 96 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type Tunable White

Required components:

C13584_CLAMP-VERO29

Bender Wirth: 483 Typ L3



Light distribution files

OPTICAL RESULTS (MEASURED):



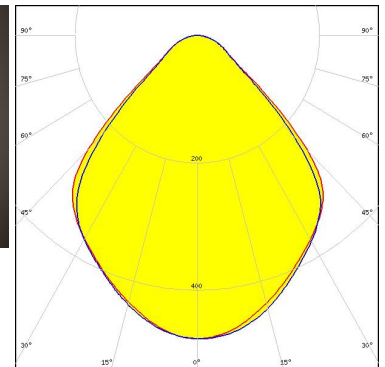
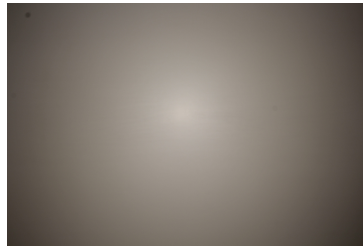
LED Vesta TW 22mm DP
FWHM / FWTM 90.0° / 129.0°
Efficiency 91 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type Tunable White

Required components:

C13584_CLAMP-VERO29

F13671_ANGE-RZ-LENS

Bender Wirth: 494 Typ L3



Light distribution files

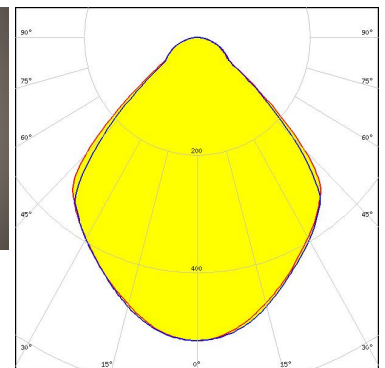
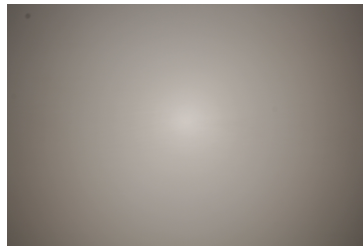


LED Vesta TW 22mm DP
FWHM / FWTM 90.0° / 127.0°
Efficiency 96 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type Tunable White

Required components:

C13584_CLAMP-VERO29

Bender Wirth: 494 Typ L3



Light distribution files

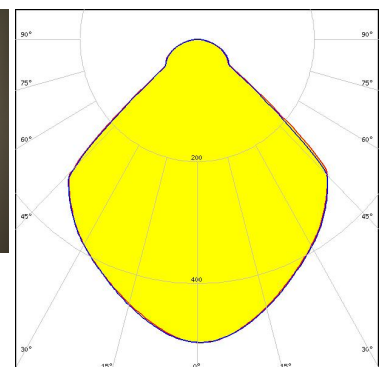
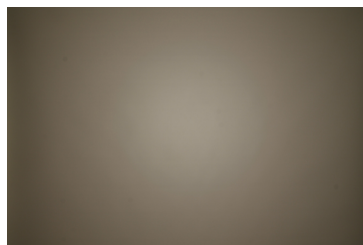
CITIZEN

LED CLL02x/CLU02x (LES10)
FWHM / FWTM 94.0° / 130.0°
Efficiency 95 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13658_CLAMP-VERO13-18

Bender Wirth: 434 Typ L1

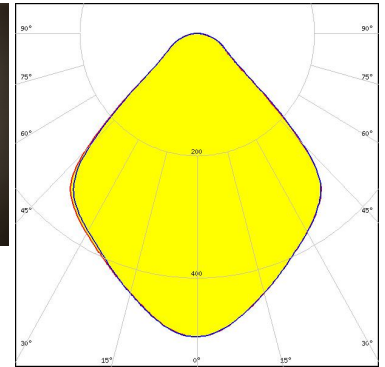
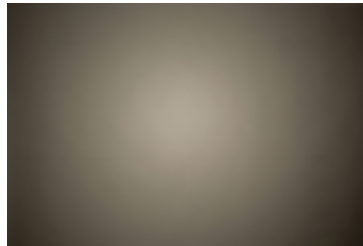


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

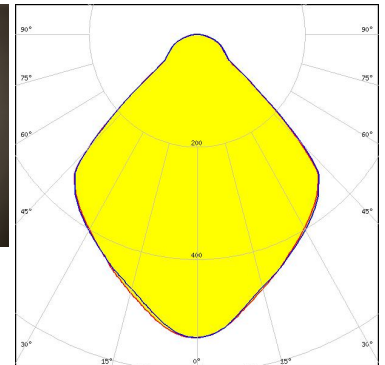
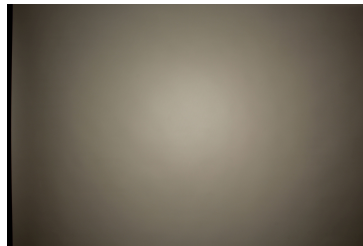
LED CLL03x/CLU03x
 FWHM / FWTM 91.0° / 128.0°
 Efficiency 92 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16791_CLAMP-Z45-A
 F13671_ANGE-RZ-LENS
 TE Connectivity: 2325807-3



Light distribution files

CITIZEN

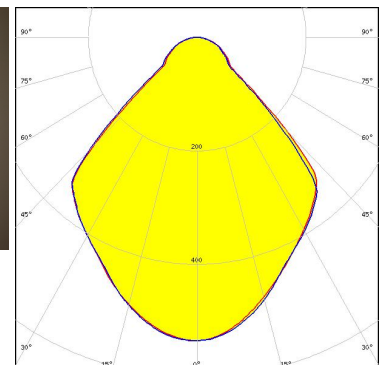
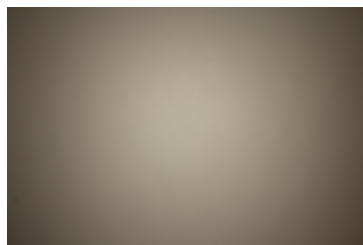
LED CLL03x/CLU03x
 FWHM / FWTM 90.0° / 124.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16791_CLAMP-Z45-A
 TE Connectivity: 2325807-3



Light distribution files

CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 89.0° / 125.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



Light distribution files

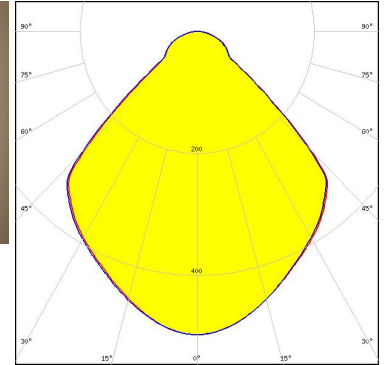
OPTICAL RESULTS (MEASURED):

CITIZEN

LED CLL03x/CLU03x
FWHM / FWTM 91.0° / 130.0°
Efficiency 94 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

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



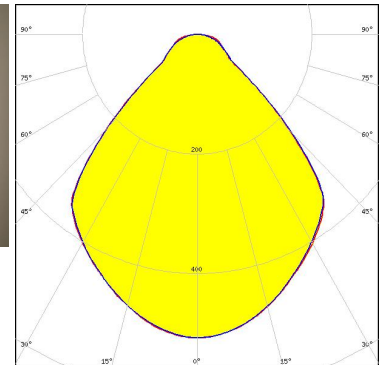
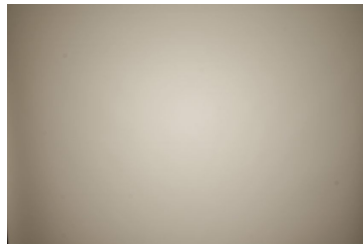
Light distribution files

CITIZEN

LED CLL04x/CLU04x
FWHM / FWTM 88.0° / 126.0°
Efficiency 94 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

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



Light distribution files

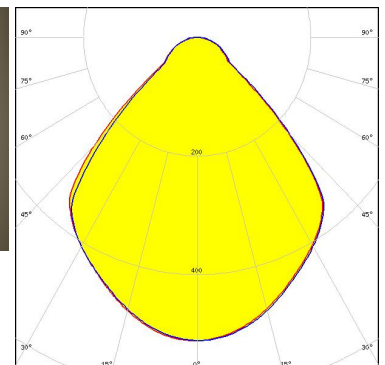
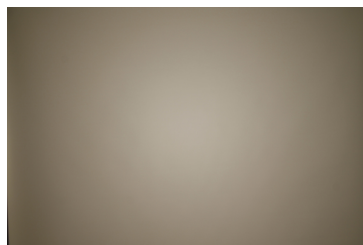
CITIZEN

LED CLL04x/CLU04x
FWHM / FWTM 88.0° / 125.0°
Efficiency 95 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13584_CLAMP-VERO29

Bender Wirth: 431 Typ L3

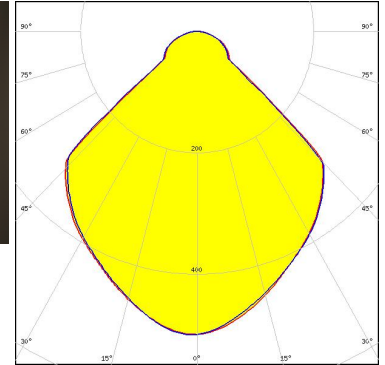


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

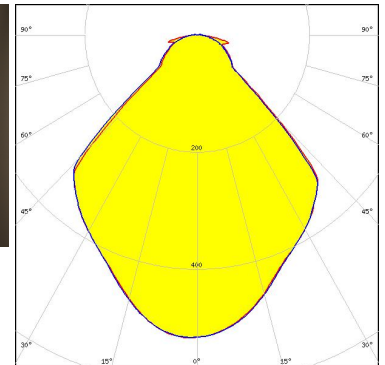
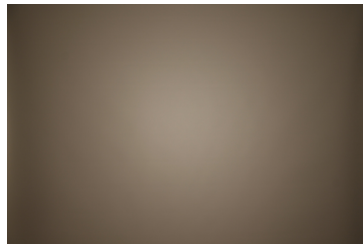
LED CLU700/701/702/703
 FWHM / FWTM 95.0° / 130.0°
 Efficiency 95 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



Light distribution files

CITIZEN

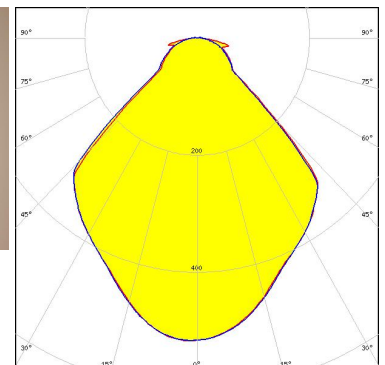
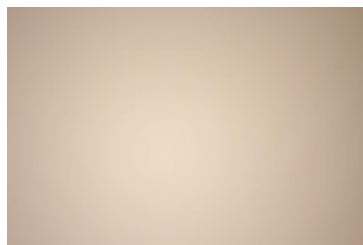
LED CLU720/721/723
 FWHM / FWTM 89.0° / 125.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



Light distribution files

CITIZEN

LED CLU720/721/723
 FWHM / FWTM 93.0° / 137.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1

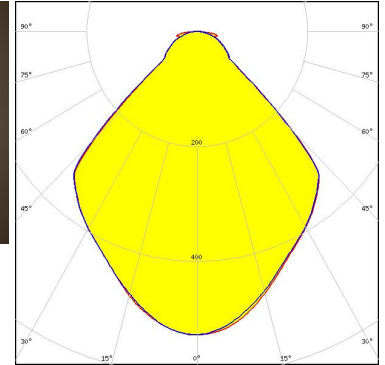


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

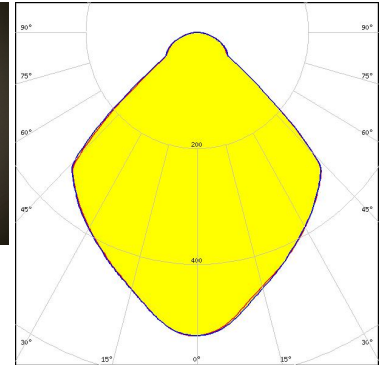
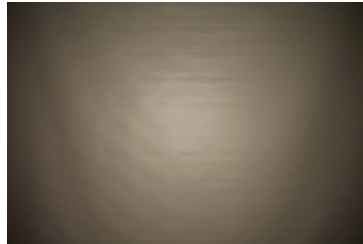
LED CLU730/731/733
 FWHM / FWTM 90.0° / 126.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



Light distribution files



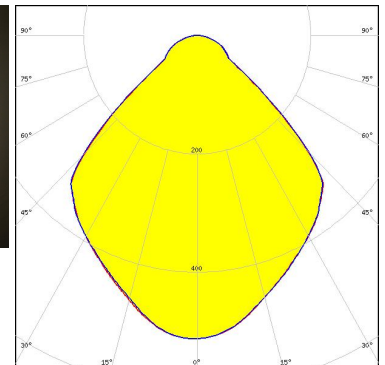
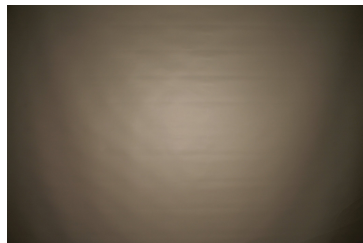
LED CMA1840
 FWHM / FWTM 93.0° / 129.0°
 Efficiency 97 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C14123_CLAMP-CXA15-18



Light distribution files



LED CMA2550
 FWHM / FWTM 92.0° / 130.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C14036_CLAMP_CXA25-30

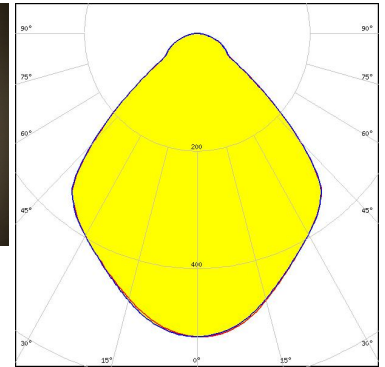
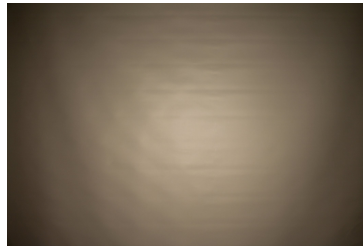


Light distribution files

OPTICAL RESULTS (MEASURED):



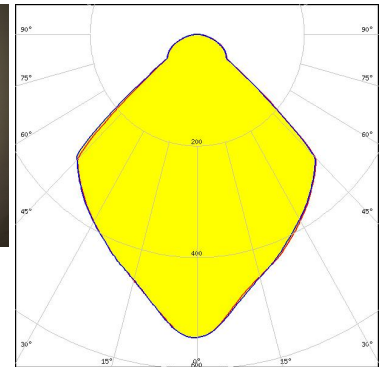
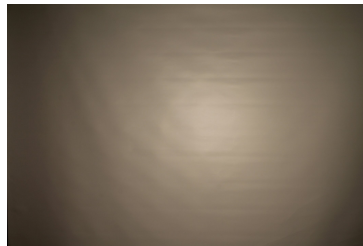
LED CMA3090
 FWHM / FWTM 90.0° / 129.0°
 Efficiency 97 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C14036_CLAMP_CXA25-30



Light distribution files



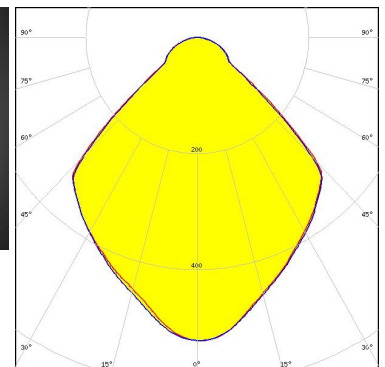
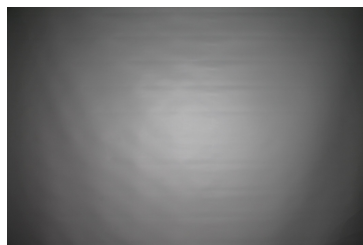
LED CMT14xx
 FWHM / FWTM 93.0° / 127.0°
 Efficiency 94 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



Light distribution files



LED CMT19xx
 FWHM / FWTM 92.0° / 130.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 477 Typ L1

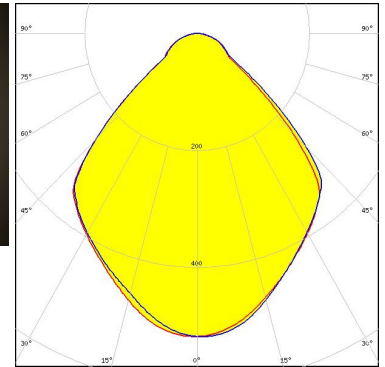
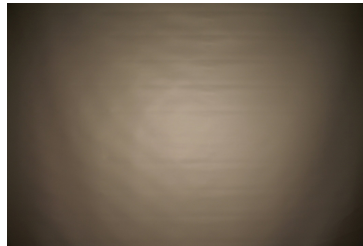


Light distribution files

OPTICAL RESULTS (MEASURED):



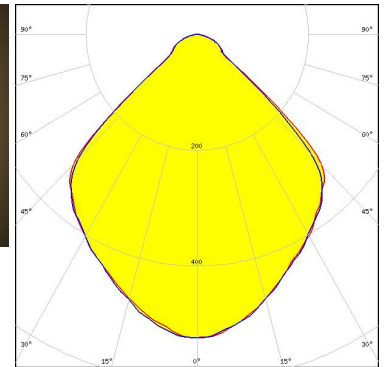
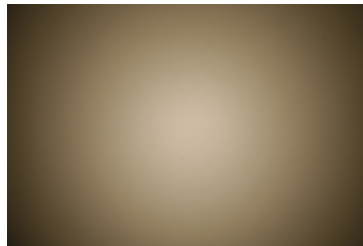
LED CMT28xx
 FWHM / FWTM 89.0° / 127.0°
 Efficiency 96 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 471 Typ L3



Light distribution files



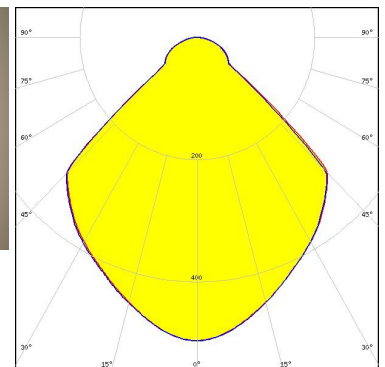
LED CXA/B 15xx
 FWHM / FWTM 94.0° / 115.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C14123_CLAMP-CXA15-18



Light distribution files



LED CXA/B 15xx
 FWHM / FWTM 94.0° / 130.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 441 Typ L1

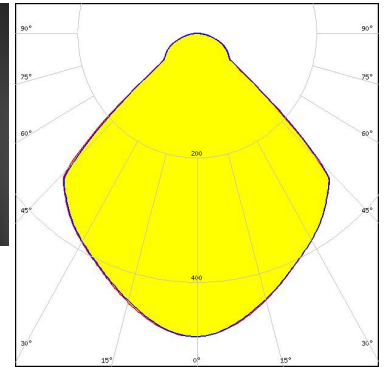
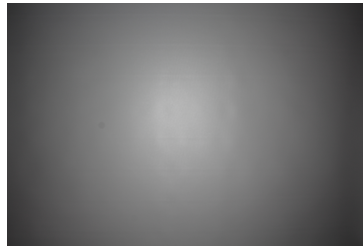


Light distribution files

OPTICAL RESULTS (MEASURED):



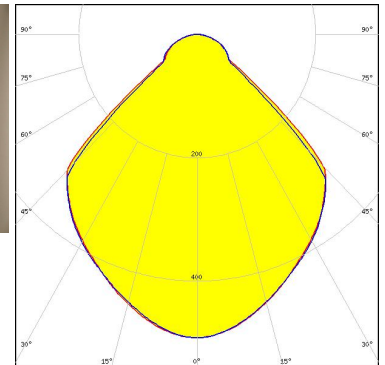
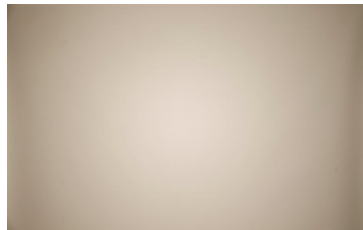
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 93.0° / 132.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files



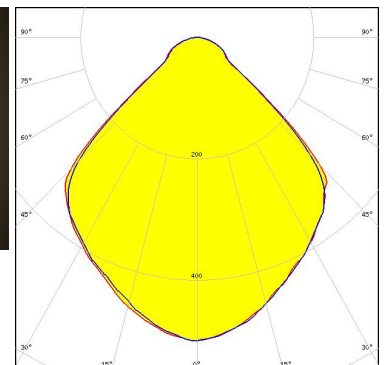
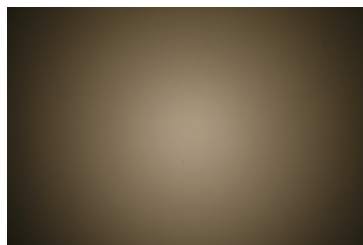
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 94.0° / 130.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 437 Typ L1



Light distribution files



LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 94.0° / 128.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C14123_CLAMP-CXA15-18

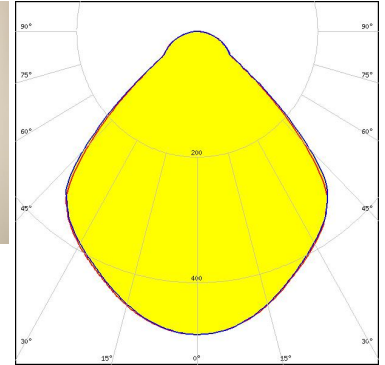
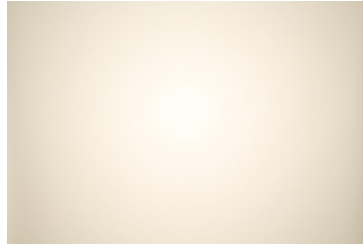


Light distribution files

OPTICAL RESULTS (MEASURED):



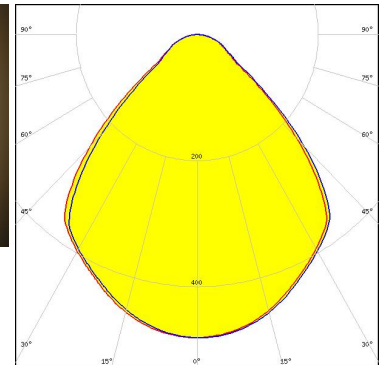
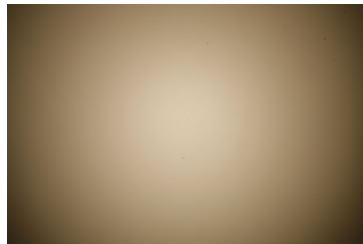
LED CXA/B 30xx
 FWHM / FWTM 91.0° / 131.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C14036_CLAMP_CXA25-30



Light distribution files



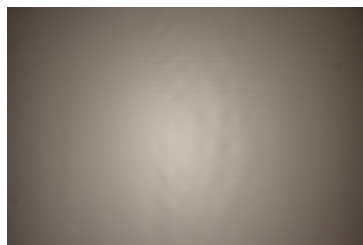
LED CXA/B 3590
 FWHM / FWTM 90.0° / 131.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 IDEAL: 50-2303CR + 50-2300AN



Light distribution files



LED CHI3030 19W
 FWHM / FWTM 88.0° / 132.0°
 Efficiency 91 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 468 Typ L3



Light distribution files

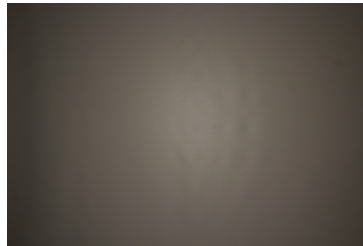
OPTICAL RESULTS (MEASURED):

EVERLIGHT

LED CHI3030 29W
FWHM / FWTM 89.0° / 132.0°
Efficiency 91 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13584_CLAMP-VERO29
F13671_ANGE-RZ-LENS
Bender Wirth: 468 Typ L3



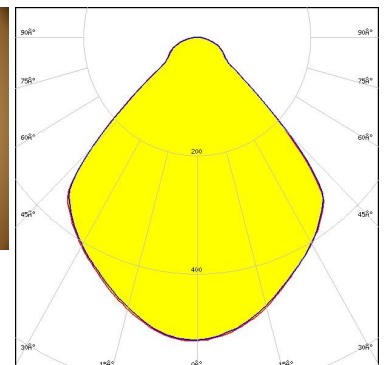
Light distribution files

inventronics

LED PrevaLED Core AC (LEP-2000)
FWHM / FWTM 89.0° / 125.0°
Efficiency 94 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



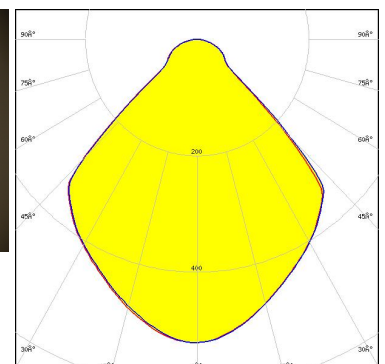
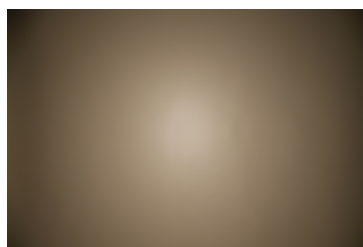
Light distribution files

inventronics

LED PrevaLED Core AC (LEP-800)
FWHM / FWTM 90.0° / 126.0°
Efficiency 94 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

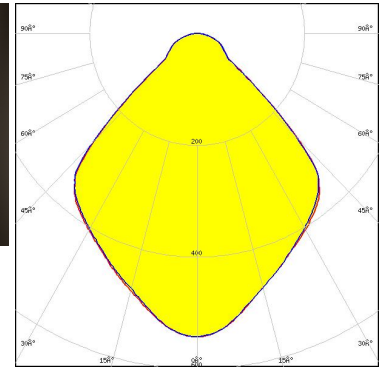
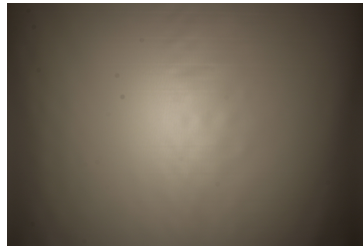


Light distribution files

OPTICAL RESULTS (MEASURED):

inventronics

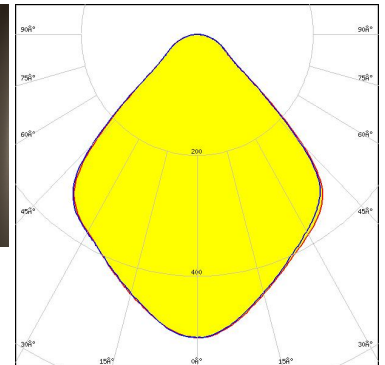
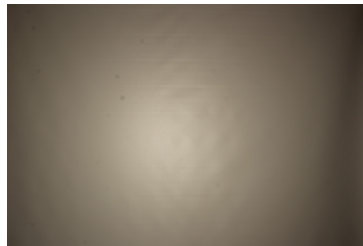
LED PrevaLED Core G7 L15 H1
 FWHM / FWTM 90.0° / 125.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16685_CLAMP-PRV-A



Light distribution files

inventronics

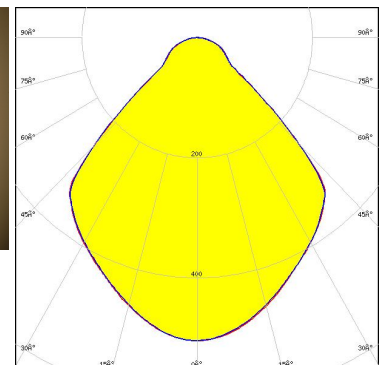
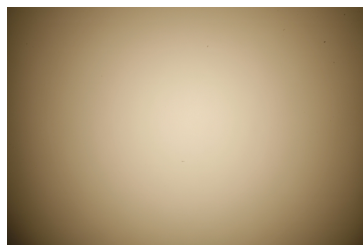
LED PrevaLED Core G7 L15 H1
 FWHM / FWTM 90.0° / 127.0°
 Efficiency 92 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16685_CLAMP-PRV-A
 F13671_ANGE-RZ-LENS



Light distribution files

inventronics

LED PrevaLED Core Z4 LES19
 FWHM / FWTM 90.0° / 129.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

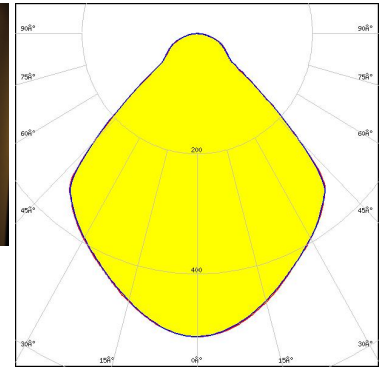
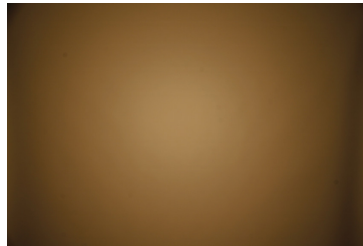


Light distribution files

OPTICAL RESULTS (MEASURED):

inventronics

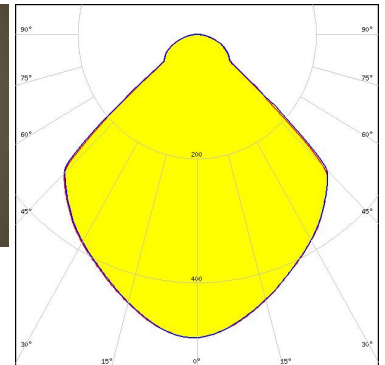
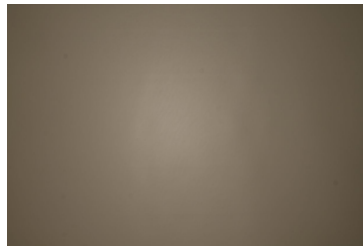
LED PrevaLED Core Z4 LES19
 FWHM / FWTM 90.0° / 129.0°
 Efficiency 90 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

LUMILEDS

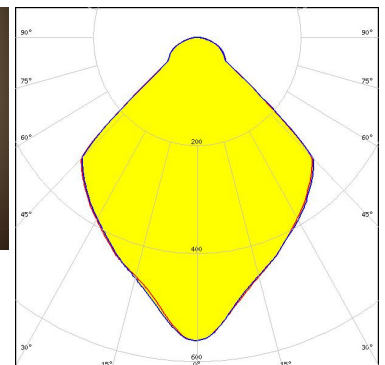
LED LUXEON CoB 1202/1203
 FWHM / FWTM 95.0° / 131.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 438 Typ L1



Light distribution files

LUMILEDS

LED LUXEON CoB 1204HD
 FWHM / FWTM 92.0° / 124.0°
 Efficiency 96 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

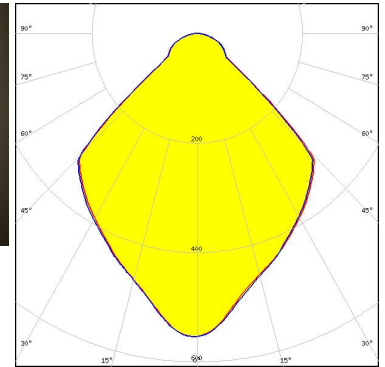
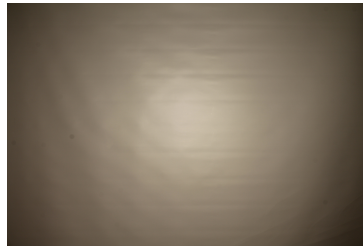
OPTICAL RESULTS (MEASURED):



LED LUXEON CoB 1205HD
 FWHM / FWTM 92.0° / 125.0°
 Efficiency 96 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

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



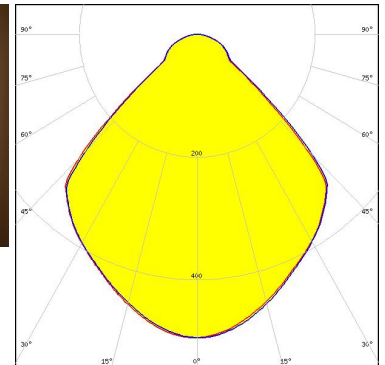
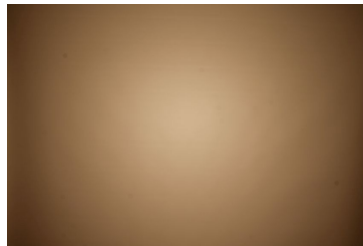
Light distribution files



LED LUXEON CoB 1208
 FWHM / FWTM 92.0° / 131.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

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



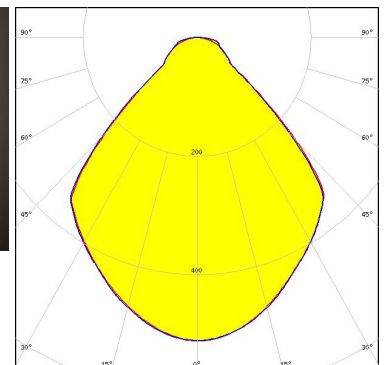
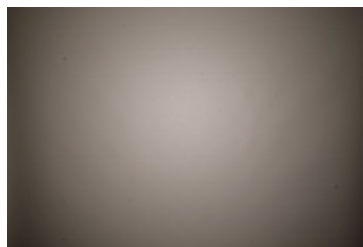
Light distribution files



LED LUXEON CoB 1211
 FWHM / FWTM 89.0° / 127.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

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

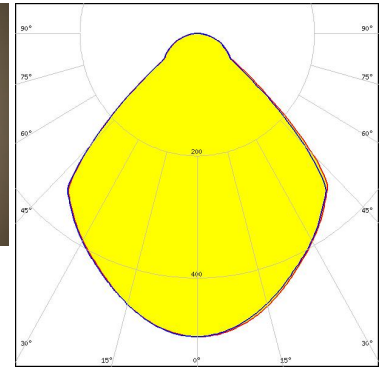
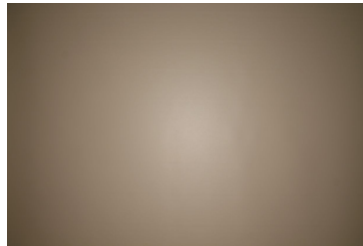


Light distribution files

OPTICAL RESULTS (MEASURED):



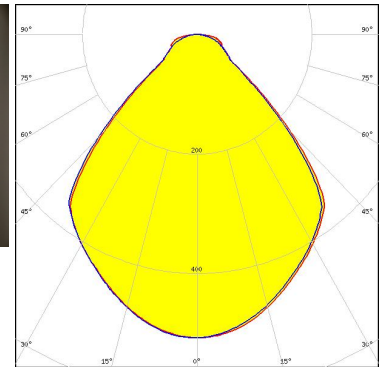
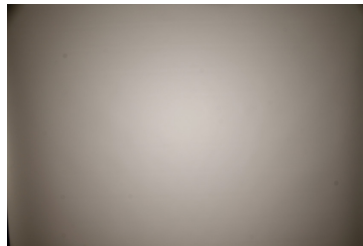
LED LUXEON CoB 1211
 FWHM / FWTM 91.0° / 129.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 431 Typ L3



Light distribution files



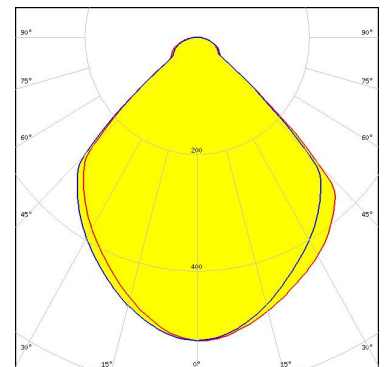
LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM 88.0° / 127.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



Light distribution files



LED LUXEON K12
 FWHM / FWTM 92.0° / 110.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1

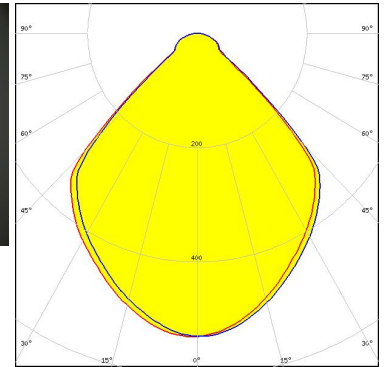
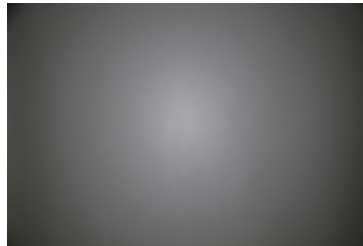


Light distribution files

OPTICAL RESULTS (MEASURED):



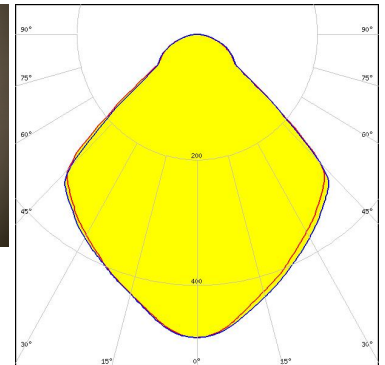
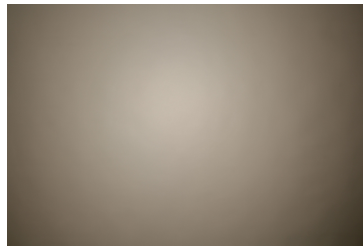
LED LUXEON K16
 FWHM / FWTM 90.0° / 107.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 BJB: 47.319.2070



Light distribution files



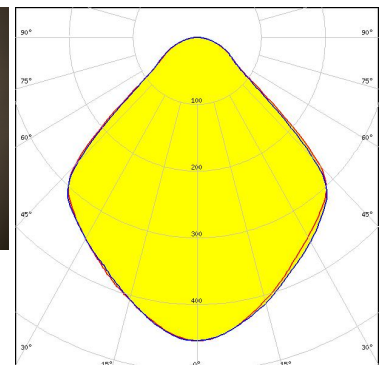
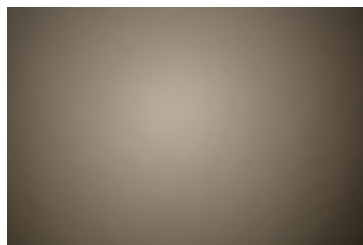
LED CDM-14 (Dim-To-Warm)
 FWHM / FWTM 94.0° / 136.0°
 Efficiency 95 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 491 Typ L2



Light distribution files



LED CDM-14 (Dim-To-Warm)
 FWHM / FWTM 94.0° / 135.0°
 Efficiency 90 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 F13671_ANGE-RZ-LENS
 Bender Wirth: 491 Typ L2

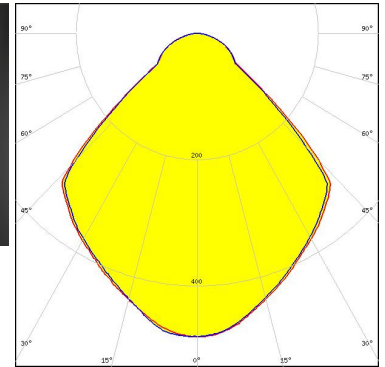
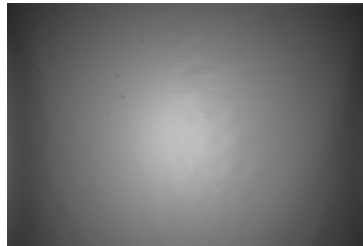


Light distribution files

OPTICAL RESULTS (MEASURED):



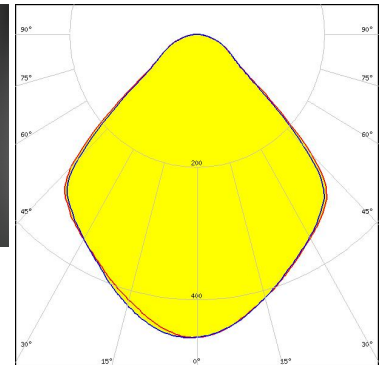
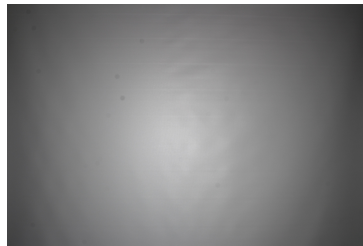
LED CDM-18 (Dim-To-Warm)
 FWHM / FWTM 93.0° / 137.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 491 Typ L2



Light distribution files



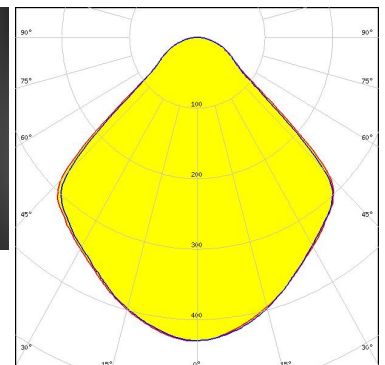
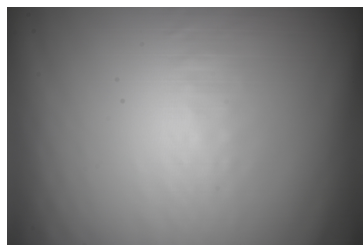
LED CDM-18 (Dim-To-Warm)
 FWHM / FWTM 93.0° / 135.0°
 Efficiency 91 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 F13671_ANGE-RZ-LENS
 Bender Wirth: 491 Typ L2



Light distribution files



LED CDM-9 (Dim-To-Warm)
 FWHM / FWTM 95.0° / 136.0°
 Efficiency 89 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 F13671_ANGE-RZ-LENS
 Bender Wirth: 490 Typ L1

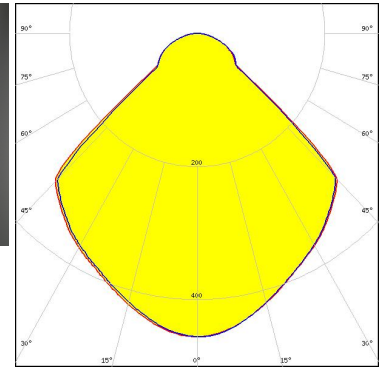
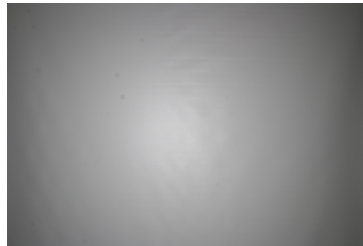


Light distribution files

OPTICAL RESULTS (MEASURED):



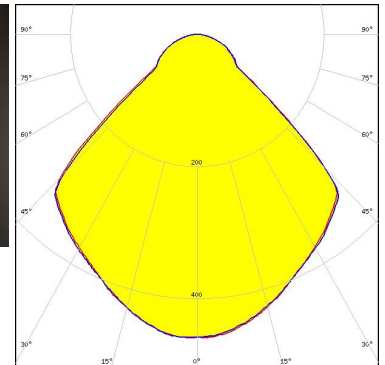
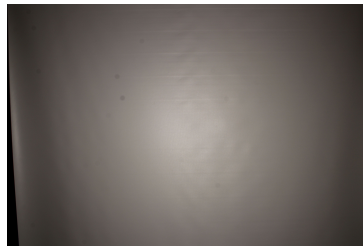
LED CDM-9 (Dim-To-Warm)
 FWHM / FWTM 95.0° / 138.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 490 Typ L1



Light distribution files



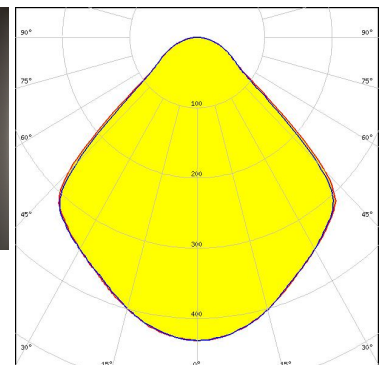
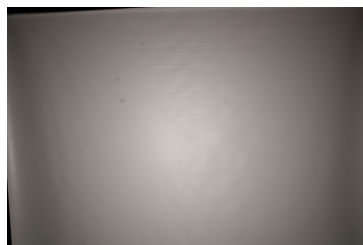
LED CTM-14 (Tunable White)
 FWHM / FWTM 94.0° / 137.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 442 Typ L3



Light distribution files



LED CTM-14 (Tunable White)
 FWHM / FWTM 94.0° / 136.0°
 Efficiency 88 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 442 Typ L3

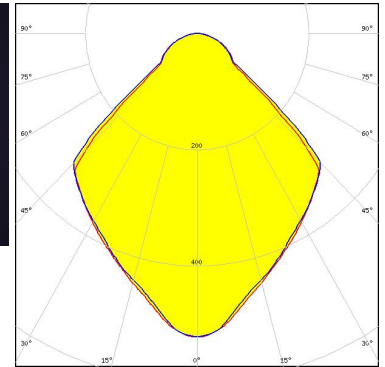
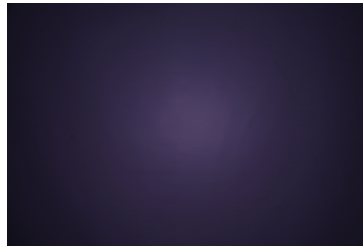


Light distribution files

OPTICAL RESULTS (MEASURED):



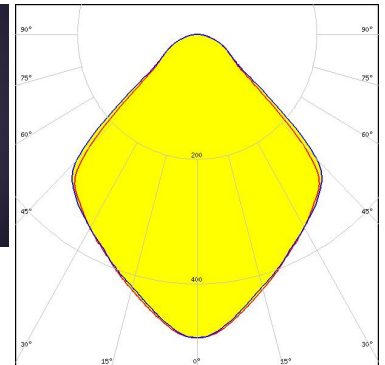
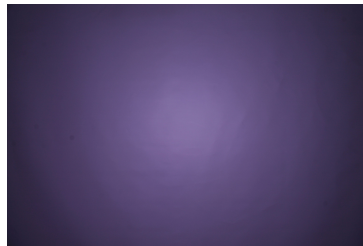
LED CTM-14 RGBW
 FWHM / FWTM 93.0° / 132.0°
 Efficiency 95 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type RGBW
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 500 Typ L3-1



Light distribution files



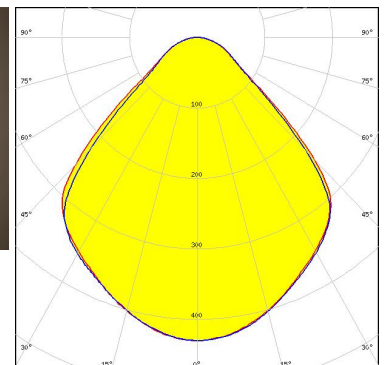
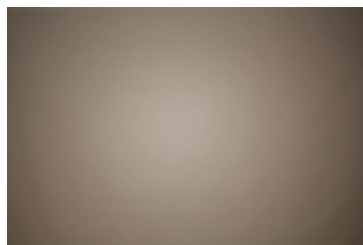
LED CTM-14 RGBW
 FWHM / FWTM 92.0° / 132.0°
 Efficiency 91 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type RGBW
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 500 Typ L3-1



Light distribution files



LED CTM-22 (Tunable White)
 FWHM / FWTM 92.0° / 136.0°
 Efficiency 88 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 494 Typ L3

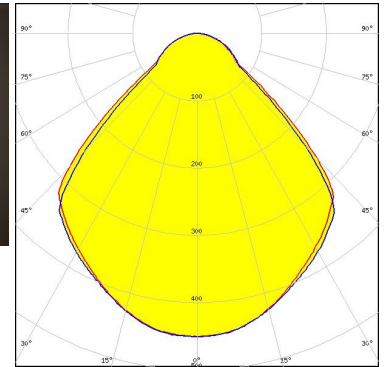
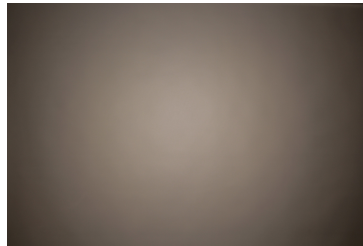


Light distribution files

OPTICAL RESULTS (MEASURED):



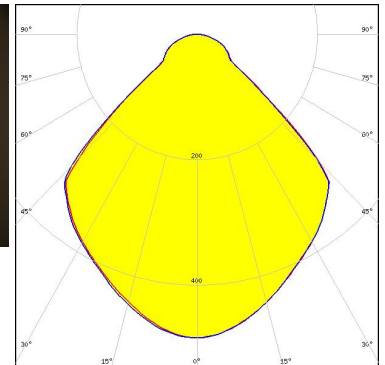
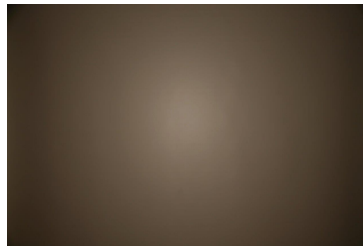
LED CTM-22 (Tunable White)
 FWHM / FWTM 93.0° / 137.0°
 Efficiency 93 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 494 Typ L3



Light distribution files



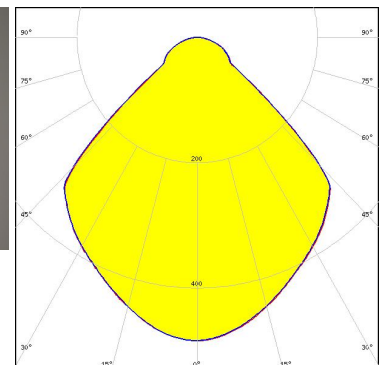
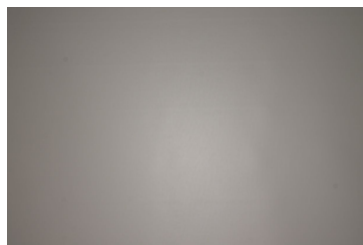
LED CxM-14 (19x19)
 FWHM / FWTM 93.0° / 134.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files



LED COB J-Type
 FWHM / FWTM 93.0° / 132.0°
 Efficiency 95 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 463 Typ L2

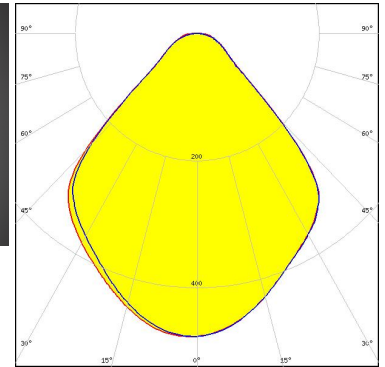


Light distribution files

OPTICAL RESULTS (MEASURED):



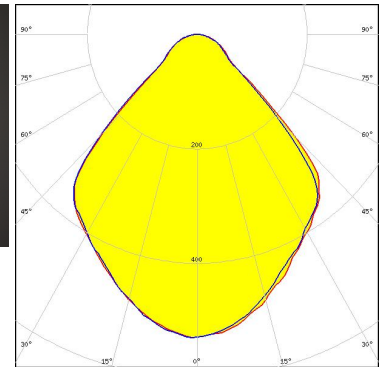
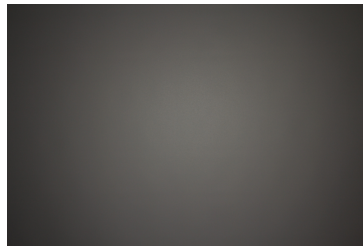
LED COB J-Type
 FWHM / FWTM 89.0° / 129.0°
 Efficiency 90 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F13671_ANGE-RZ-LENS
 IDEAL: 50-2103NC + 50-2100AN



Light distribution files



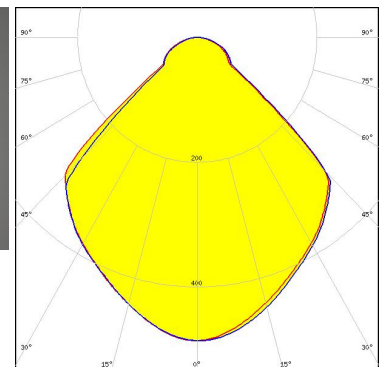
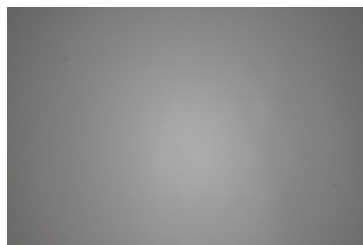
LED COB J-Type
 FWHM / FWTM 88.0° / 124.0°
 Efficiency 92 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 IDEAL: 50-2103NC + 50-2100AN



Light distribution files



LED COB L-Type (LES 11)
 FWHM / FWTM 94.0° / 132.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 438 Typ L1



Light distribution files

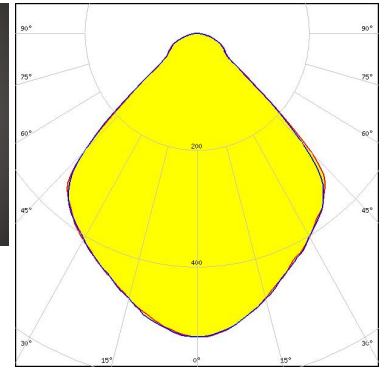
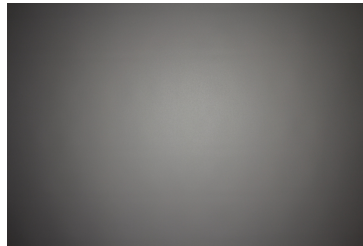
OPTICAL RESULTS (MEASURED):



LED COB L-Type (LES 11)
 FWHM / FWTM 92.0° / 126.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

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



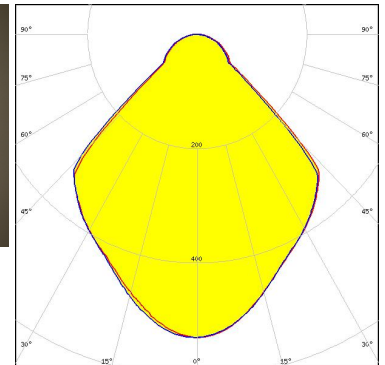
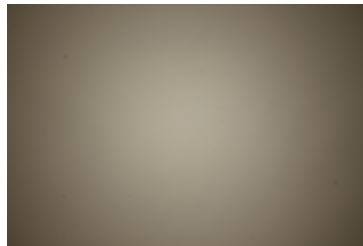
Light distribution files



LED COB L-Type (LES 11)
 FWHM / FWTM 90.0° / 125.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

IDEAL: 50-2100NC + 50-2100AN



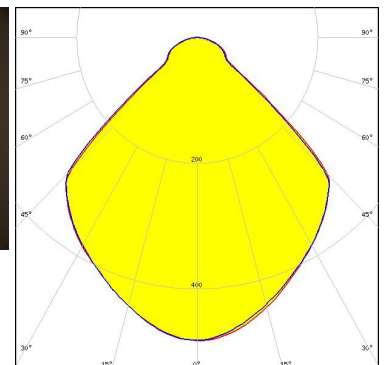
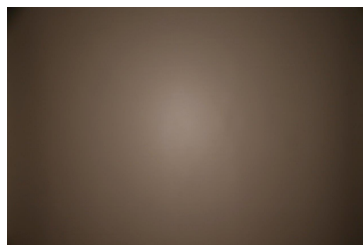
Light distribution files



LED COB L-Type (LES 11)
 FWHM / FWTM 94.0° / 130.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

Molex: 180580-0005

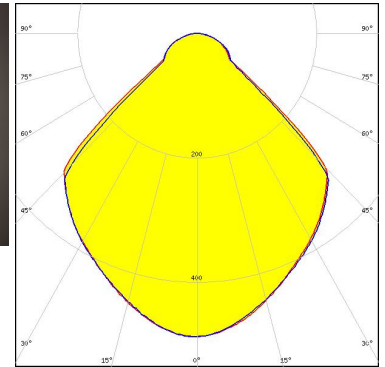
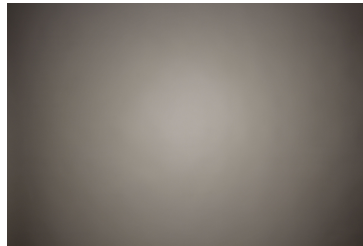


Light distribution files

OPTICAL RESULTS (MEASURED):



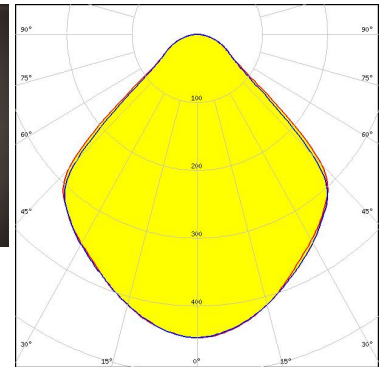
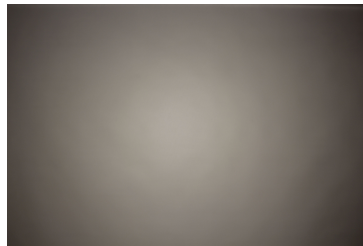
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM / FWTM 94.0° / 131.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 498 Typ L2



Light distribution files



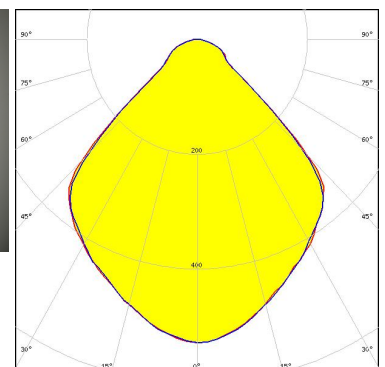
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM / FWTM 94.0° / 132.0°
 Efficiency 89 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 F13671_ANGE-RZ-LENS
 Bender Wirth: 498 Typ L2



Light distribution files



LED Soleriq S13
 FWHM / FWTM 92.0° / 128.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1

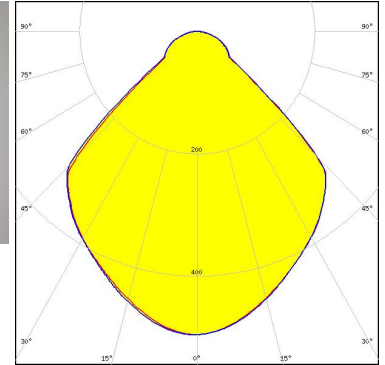


Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

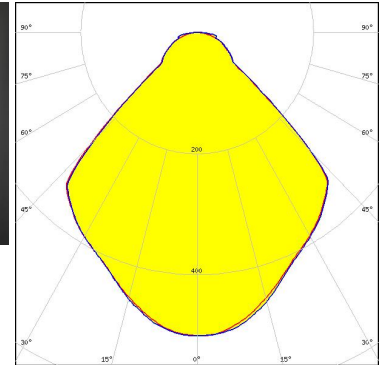
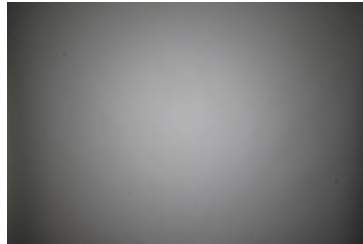
LED Soleriq S13
FWHM / FWTM 93.0° / 130.0°
Efficiency 94 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 437 Typ L1



Light distribution files

OSRAM
Opto Semiconductors

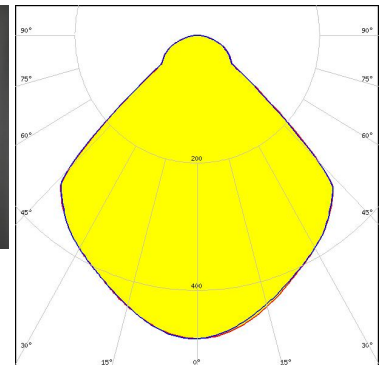
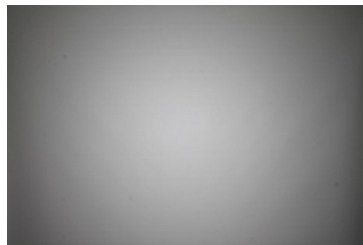
LED Soleriq S13 19x19
FWHM / FWTM 91.0° / 131.0°
Efficiency 94 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
IDEAL: 50-2103CT + 50-2100AN



Light distribution files

OSRAM
Opto Semiconductors

LED Soleriq S13 19x19
FWHM / FWTM 93.0° / 134.0°
Efficiency 94 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1

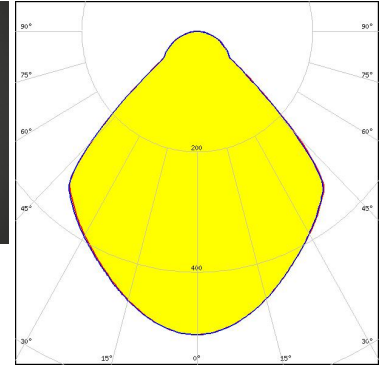


Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

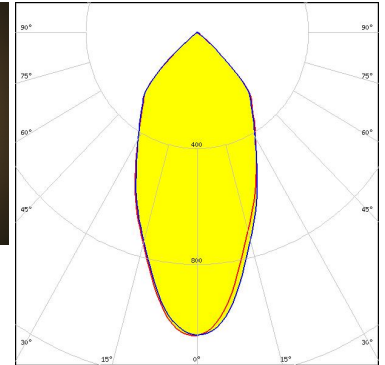
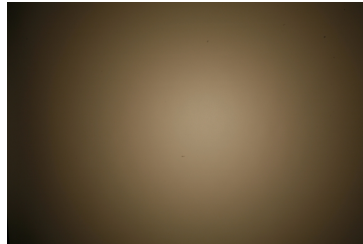
LED Soleriq S19
FWHM / FWTM 90.0° / 127.0°
Efficiency 93 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 462 Typ L3



Light distribution files

OSRAM
Opto Semiconductors

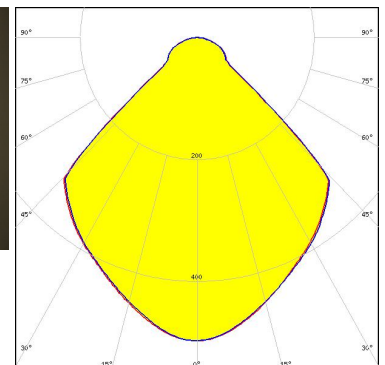
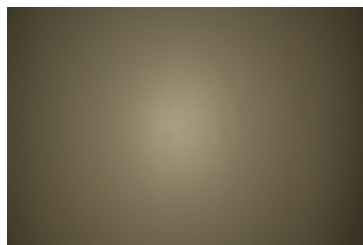
LED Soleriq S19
FWHM / FWTM 91.0° / 130.0°
Efficiency 94 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
TE Connectivity: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

PHILIPS

LED Fortimo SLM L09 + SLM holder
FWHM / FWTM 93.0° / 128.0°
Efficiency 94 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

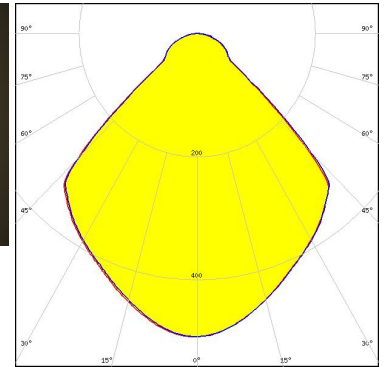
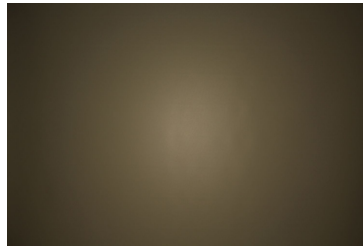


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

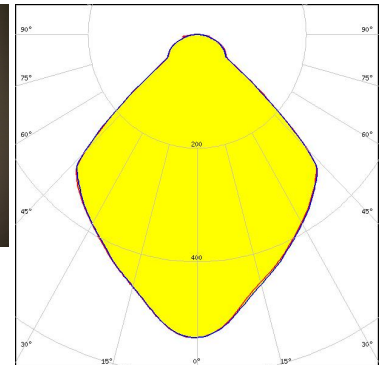
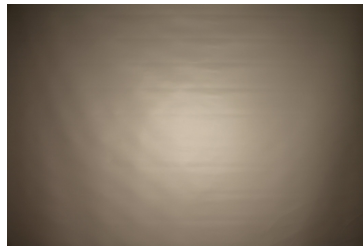
LED Fortimo SLM L13 + SLM holder
 FWHM / FWTM 92.0° / 131.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

PHILIPS

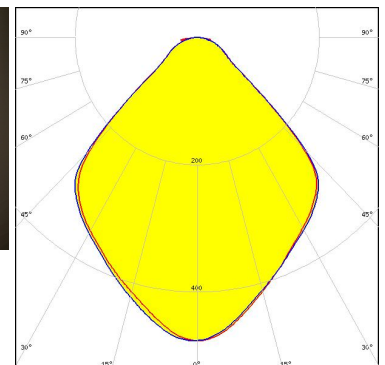
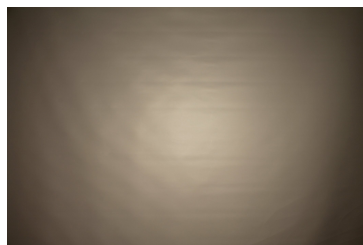
LED Fortimo SLM L13 CoB
 FWHM / FWTM 92.0° / 127.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

PHILIPS

LED Fortimo SLM L13 CoB
 FWHM / FWTM 91.0° / 128.0°
 Efficiency 88 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1

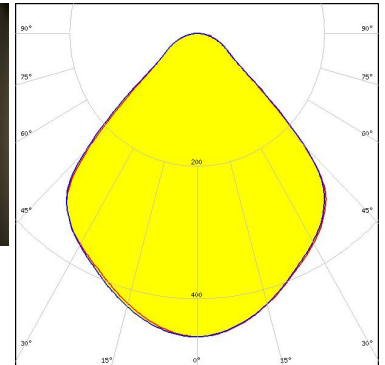
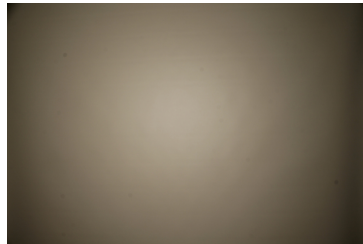


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

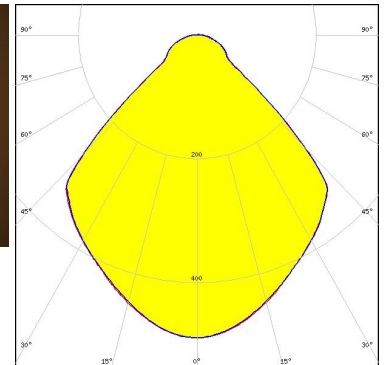
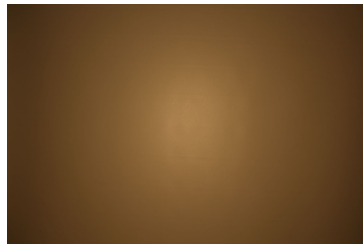
LED Fortimo SLM L15 + SLM holder
 FWHM / FWTM 91.0° / 131.0°
 Efficiency 89 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

PHILIPS

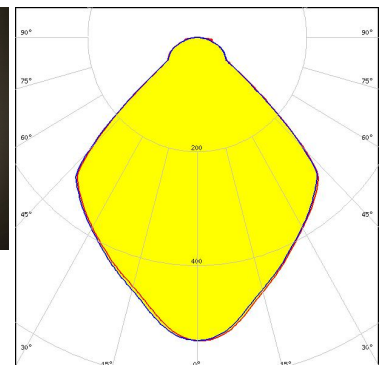
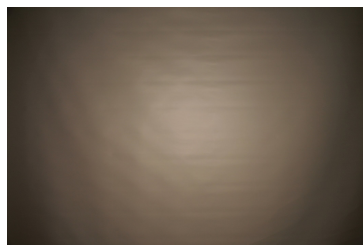
LED Fortimo SLM L15 + SLM holder
 FWHM / FWTM 91.0° / 129.0°
 Efficiency 92 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

PHILIPS

LED Fortimo SLM L15 CoB
 FWHM / FWTM 91.0° / 127.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1

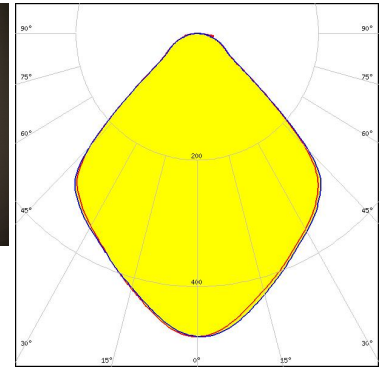
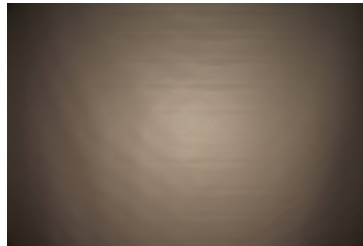


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

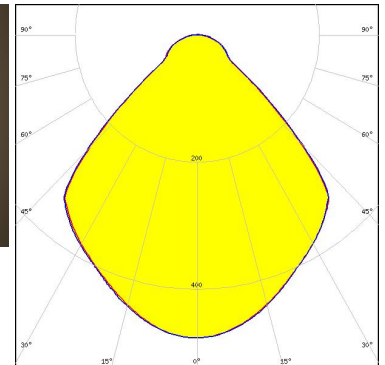
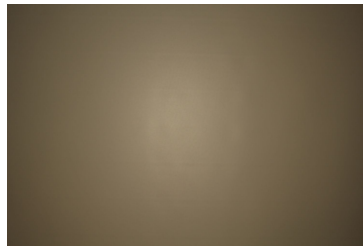
LED Fortimo SLM L15 CoB
 FWHM / FWTM 91.0° / 128.0°
 Efficiency 89 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

PHILIPS

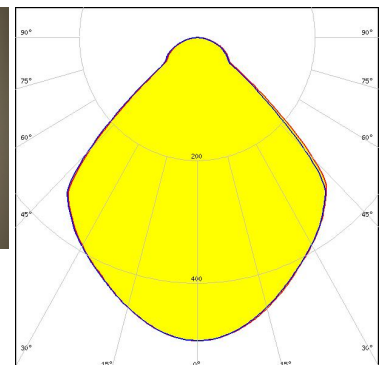
LED Fortimo SLM L19 + SLM holder
 FWHM / FWTM 90.0° / 130.0°
 Efficiency 91 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

SAMSUNG

LED LC026B / 033B / 040B
 FWHM / FWTM 91.0° / 130.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 450 Typ L2

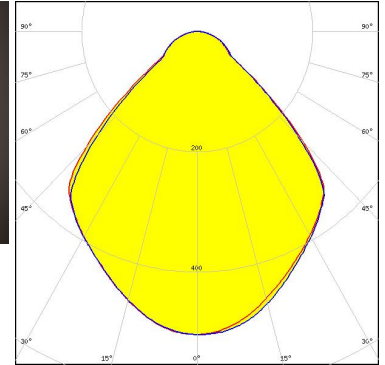


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

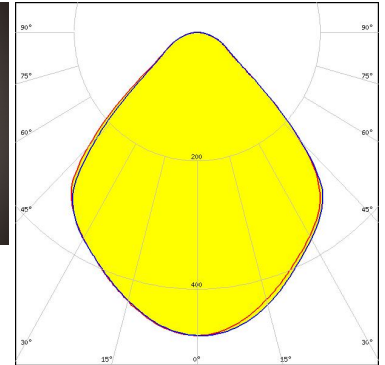
LED LC035T (Tunable white)
 FWHM / FWTM 91.0° / 130.0°
 Efficiency 96 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type Tunable White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 502 Typ L3



Light distribution files

SAMSUNG

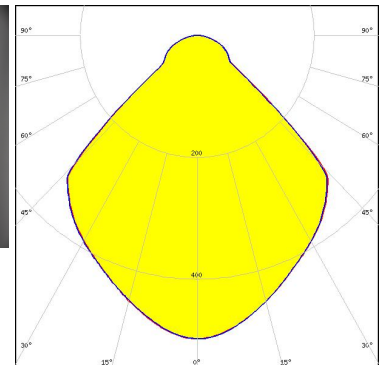
LED LC035T (Tunable white)
 FWHM / FWTM 90.0° / 131.0°
 Efficiency 91 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type Tunable White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 502 Typ L3



Light distribution files

SAMSUNG

LED LC040C
 FWHM / FWTM 93.0° / 132.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1

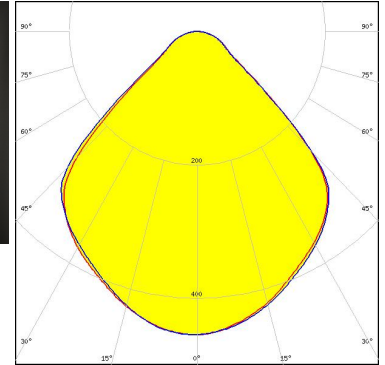


Light distribution files

OPTICAL RESULTS (MEASURED):



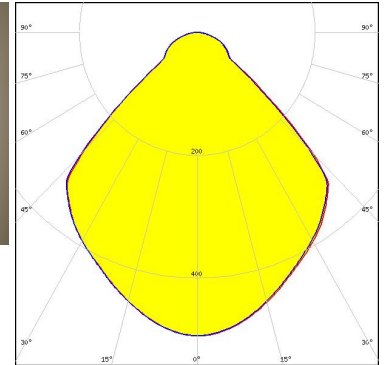
LED AC Zhaga COB
 FWHM / FWTM 93.0° / 130.0°
 Efficiency 91 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F13671_ANGE-RZ-LENS



Light distribution files



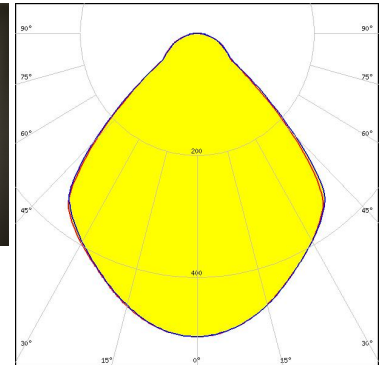
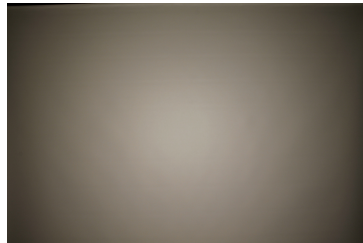
LED MJT COB LES 14.5
 FWHM / FWTM 92.0° / 131.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files



LED MJT COB LES 22
 FWHM / FWTM 89.0° / 128.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 431 Typ L3

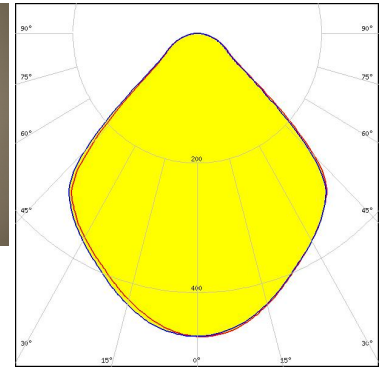


Light distribution files

OPTICAL RESULTS (MEASURED):

SHARP

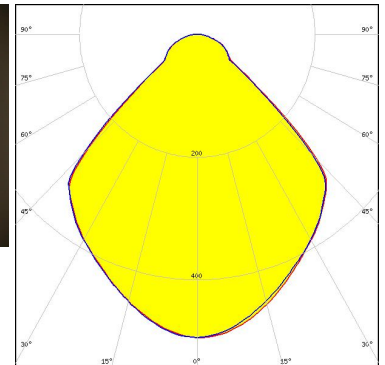
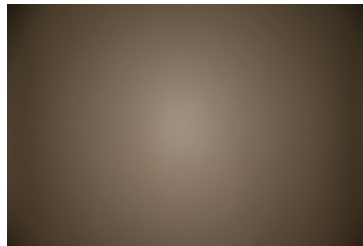
LED Mega Zenigata (GW6DME)
 FWHM / FWTM 92.0° / 130.0°
 Efficiency 92 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

SHARP

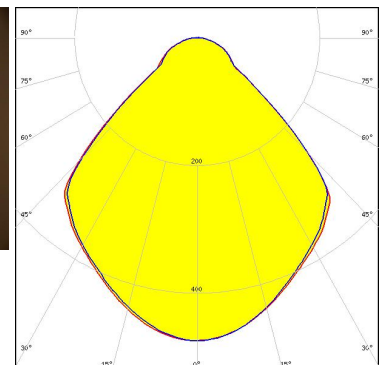
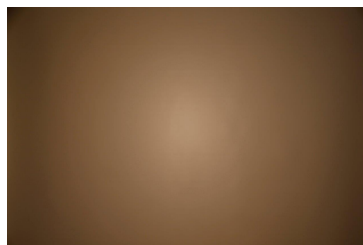
LED Mega Zenigata (GW6DME)
 FWHM / FWTM 92.0° / 131.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

VS LIGHTING SOLUTIONS

LED WU-M-464
 FWHM / FWTM 93.0° / 136.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

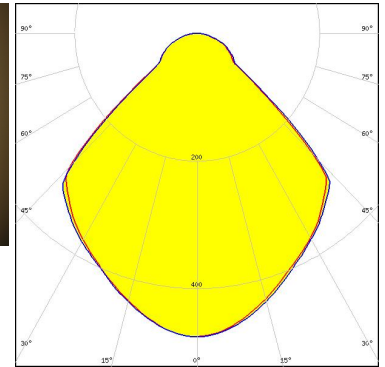
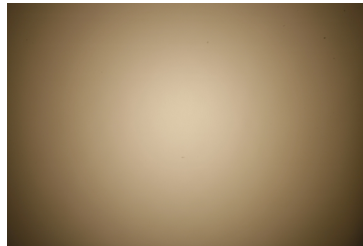


Light distribution files

OPTICAL RESULTS (MEASURED):



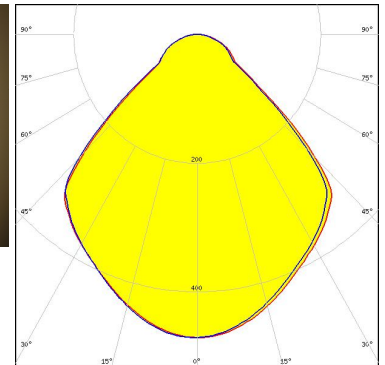
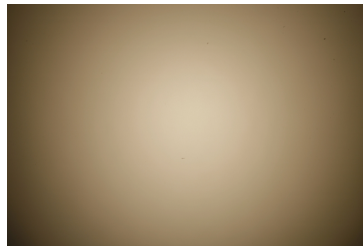
LED WU-M-484
 FWHM / FWTM 93.0° / 137.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files



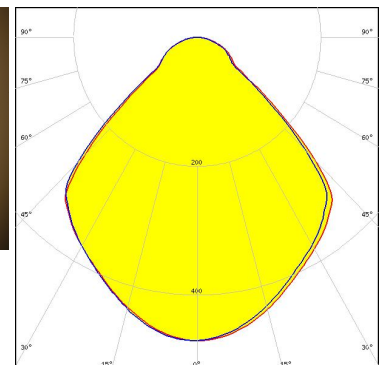
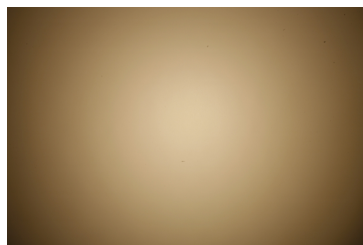
LED WU-M-485
 FWHM / FWTM 93.0° / 137.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files



LED WU-M-486
 FWHM / FWTM 92.0° / 136.0°
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



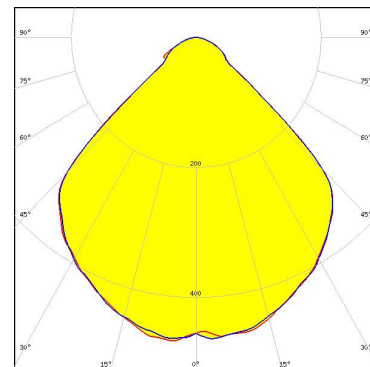
Light distribution files

OPTICAL RESULTS (SIMULATED):



LED V10 Gen7
 FWHM / FWTM 93.0° / 123.0°
 Efficiency 92 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18

Bender Wirth: 486 Typ L1

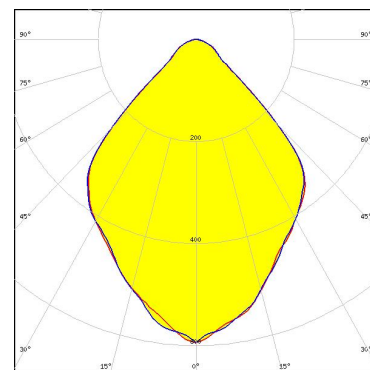


Light distribution files



LED V13 Gen7
 FWHM / FWTM 86.0° / 112.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

IDEAL: 50-2103CT + 50-2100AN

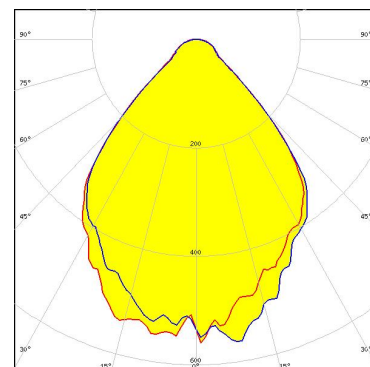


Light distribution files



LED V22 Gen7
 FWHM / FWTM 82.0° / 110.0°
 Efficiency 94 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

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



Light distribution files

OPTICAL RESULTS (SIMULATED):



LED CxM-9 (13.5x13.5)
FWHM / FWTM 94.0° / 130.0°
Efficiency 95 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13658_CLAMP-VERO13-18

Bender Wirth: 434 Typ L1



LED ZC12/18
FWHM / FWTM 92.0° / 130.0°
Efficiency 95 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13658_CLAMP-VERO13-18

Bender Wirth: 433 Typ L1



LED ZC4/6
FWHM / FWTM 94.0° / 130.0°
Efficiency 95 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type 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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

LEDiL Oy

Joensuunkatu 7
FI-24240 SALO
Finland

LEDiL Inc.

228 West Page Street
Suite D
Sycamore IL 60178
USA

Ledil Optics Technology (Shenzhen) Co., Ltd.

405 , Block B
Casic Motor Building
Shenzhen 518057
P.R.CHINA

Local sales and technical support

[www.ledil.com/
where_to_buy](http://www.ledil.com/where_to_buy)

Shipping locations

Poznan, Poland
Hong Kong, China

Distribution Partners

[www.ledil.com/
where_to_buy](http://www.ledil.com/where_to_buy)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Ledil:](#)

[F13838_ANGELINA-XW](#)