

ANGELA-XW

White version with ~70° wide beam

SPECIFICATION:

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

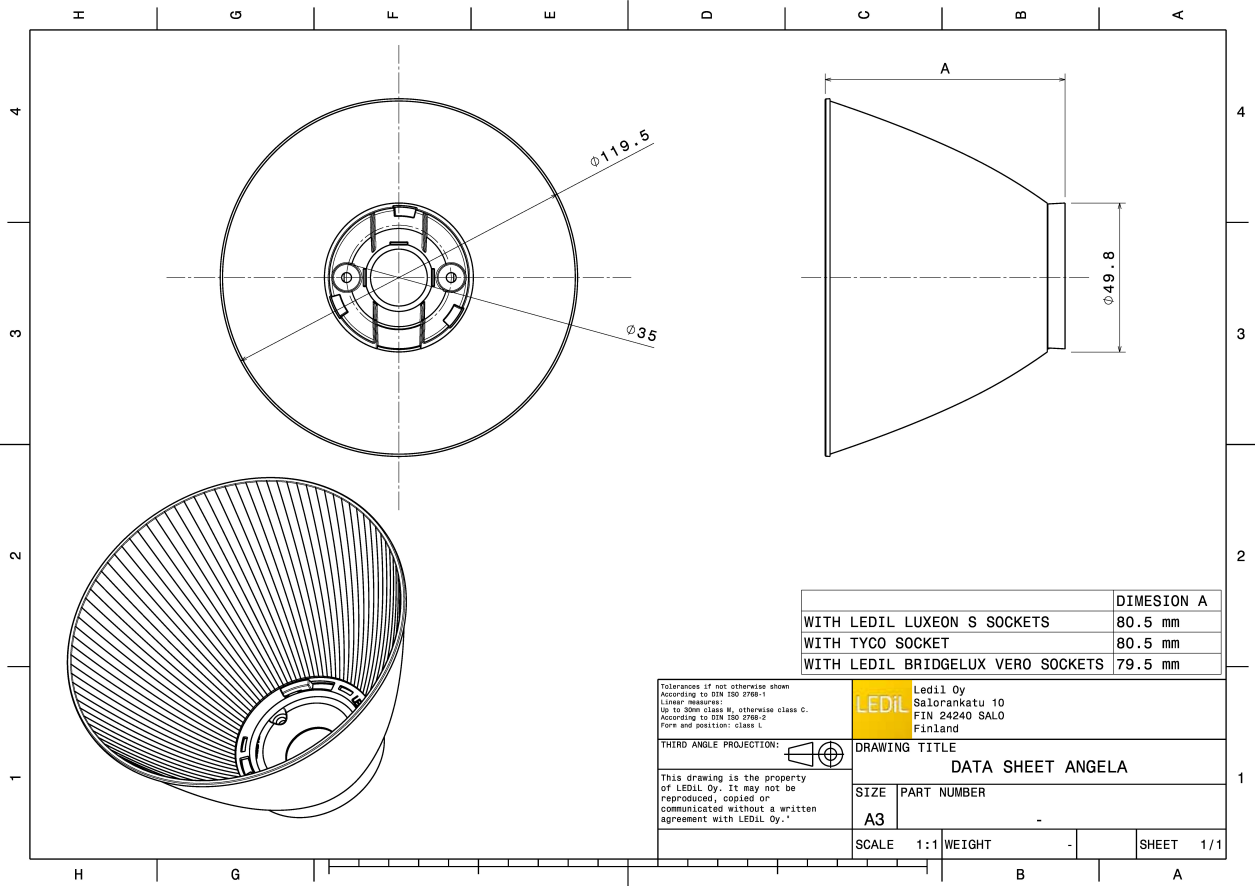
MATERIALS:



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 » Box size: 480 x 280 x 300 mm	160	80	40	8.1



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

OPTICAL RESULTS (MEASURED):



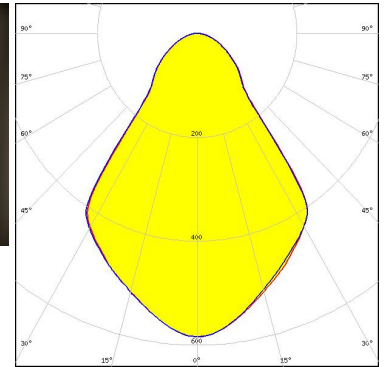
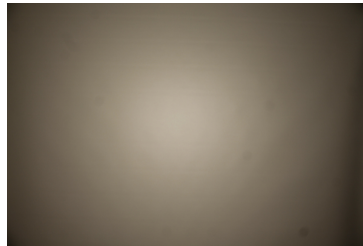
LED V10 Gen7
FWHM / FWTM 72.0° / 126.0°
Efficiency 87 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13658_CLAMP-VERO13-18

F13671_ANGE-RZ-LENS

Bender Wirth: 434 Typ L1



Light distribution files

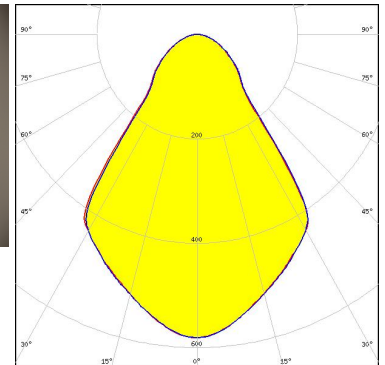
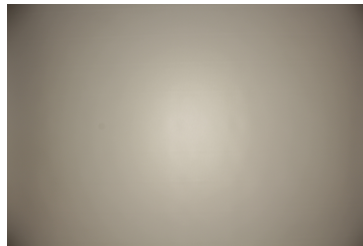


LED V13 Gen7
FWHM / FWTM 72.0° / 126.0°
Efficiency 87 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

F13671_ANGE-RZ-LENS

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



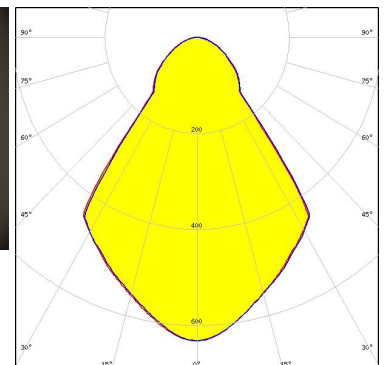
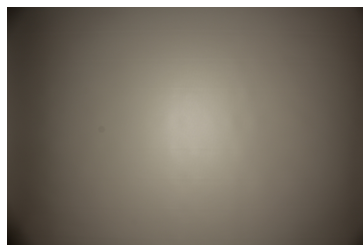
Light distribution files



LED V13 Gen7
FWHM / FWTM 72.0° / 124.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

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

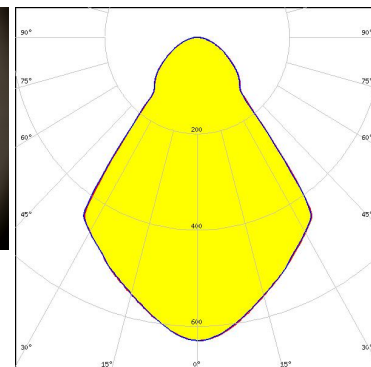
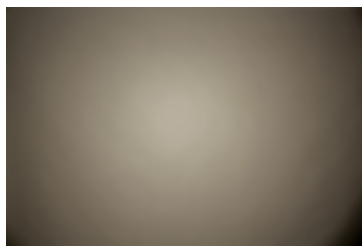


Light distribution files

OPTICAL RESULTS (MEASURED):



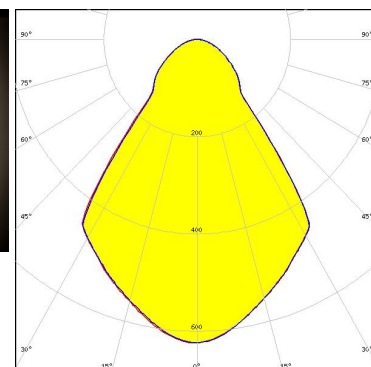
LED Vero SE 13
FWHM / FWTM 73.0° / 125.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16402_CLAMP-VEROSE-13-18



Light distribution files



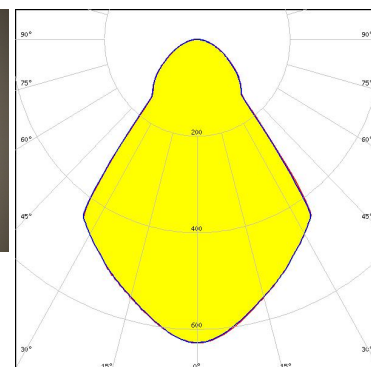
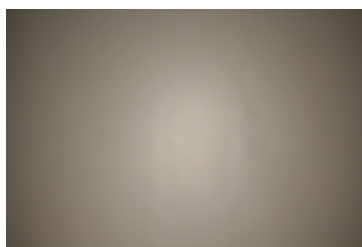
LED Vero SE 18
FWHM / FWTM 73.0° / 125.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16402_CLAMP-VEROSE-13-18



Light distribution files



LED VERO13
FWHM / FWTM 73.0° / 125.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13658_CLAMP-VERO13-18

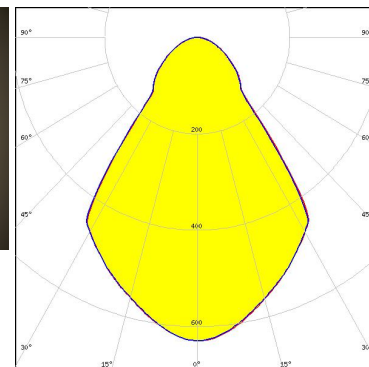
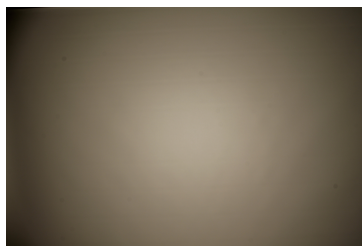


Light distribution files

OPTICAL RESULTS (MEASURED):



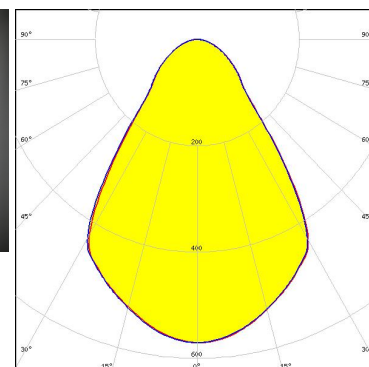
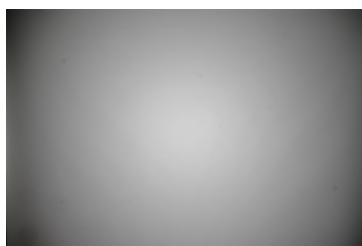
LED VERO18
FWHM / FWTM 72.0° / 124.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13658_CLAMP-VERO13-18



Light distribution files



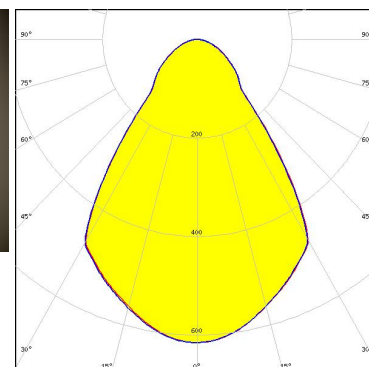
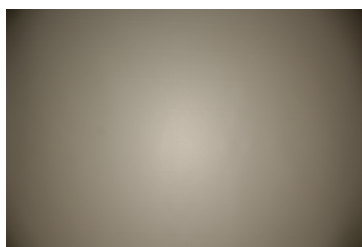
LED VERO29
FWHM / FWTM 72.0° / 127.0°
Efficiency 88 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13584_CLAMP-VERO29
F13671_ANGE-RZ-LENS



Light distribution files



LED VERO29
FWHM / FWTM 72.0° / 125.0°
Efficiency 94 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13584_CLAMP-VERO29



Light distribution files

OPTICAL RESULTS (MEASURED):



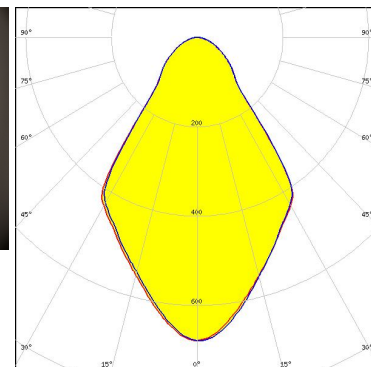
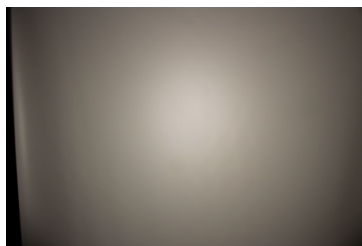
LED Vesta TW 15mm DP
FWHM / FWTM 70.0° / 119.0°
Efficiency 88 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type Tunable White

Required components:

C13658_CLAMP-VERO13-18

F13671_ANGE-RZ-LENS

Bender Wirth: 482 Typ L2



Light distribution files

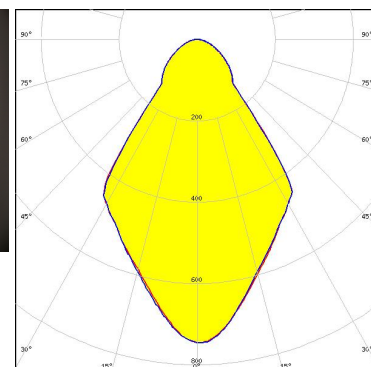
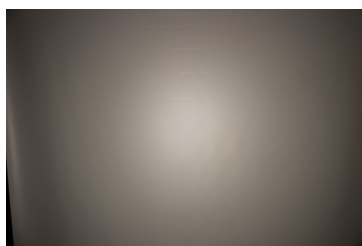


LED Vesta TW 15mm DP
FWHM / FWTM 70.0° / 117.0°
Efficiency 94 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type Tunable White

Required components:

C13658_CLAMP-VERO13-18

Bender Wirth: 482 Typ L2



Light distribution files

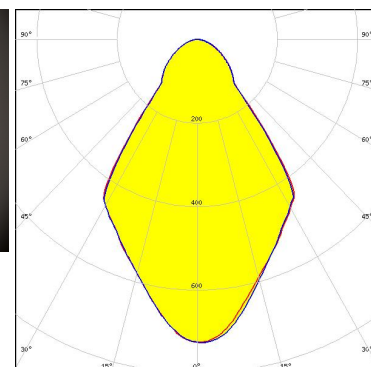
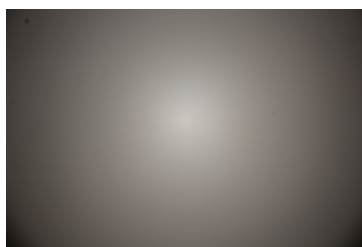


LED Vesta TW 18mm (31W) DP
FWHM / FWTM 70.0° / 118.0°
Efficiency 93 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type Tunable White

Required components:

C13584_CLAMP-VERO29

Bender Wirth: 483 Typ L3



Light distribution files

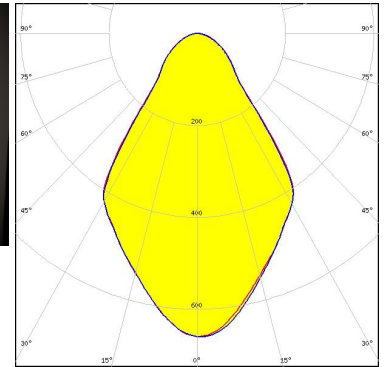
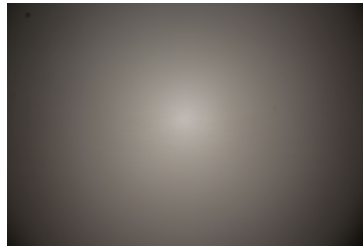
OPTICAL RESULTS (MEASURED):



LED Vesta TW 18mm (31W) DP
FWHM / FWTM 70.0° / 119.0°
Efficiency 87 %
Peak intensity 0.7 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



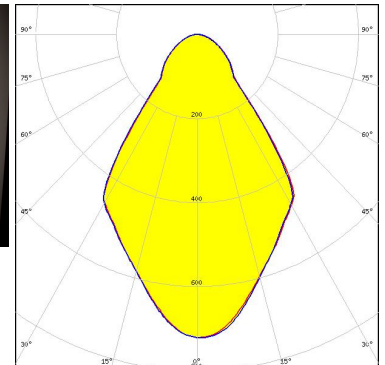
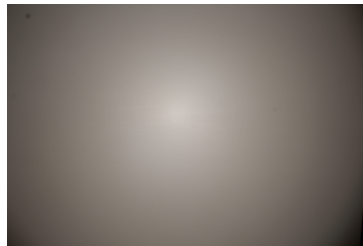
Light distribution files



LED Vesta TW 22mm DP
FWHM / FWTM 69.0° / 117.0°
Efficiency 93 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type Tunable White

Required components:

C13584_CLAMP-VERO29
Bender Wirth: 494 Typ L3



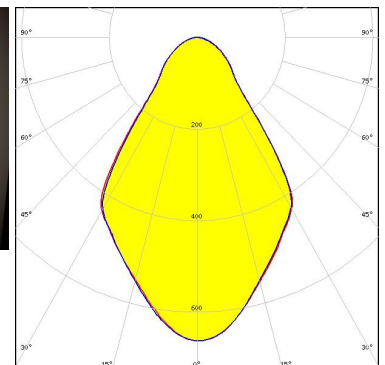
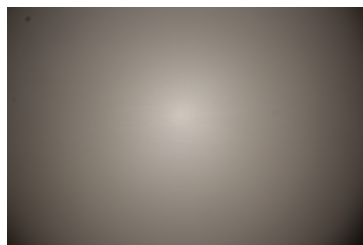
Light distribution files



LED Vesta TW 22mm DP
FWHM / FWTM 69.0° / 119.0°
Efficiency 88 %
Peak intensity 0.7 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

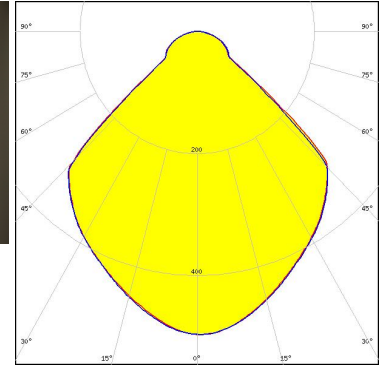


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

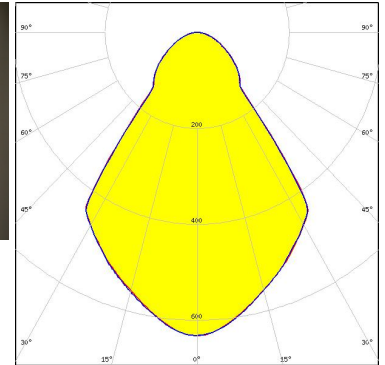
LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



Light distribution files

CITIZEN

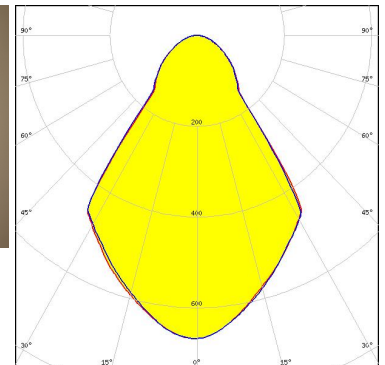
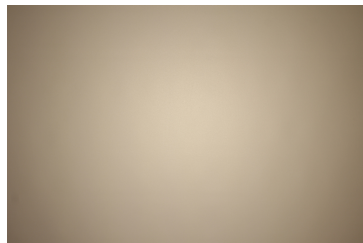
LED CLL03x/CLU03x
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 433 Typ L1



Light distribution files

CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 70.0° / 121.0°
 Efficiency 93 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 IDEAL: 50-2103CT + 50-2100AN

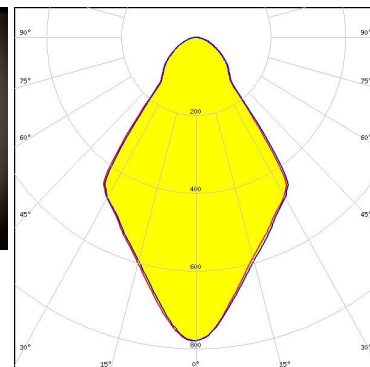
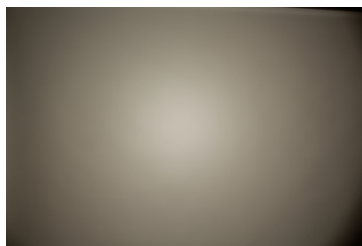


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

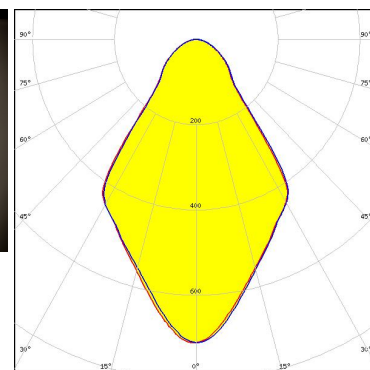
LED CLL03x/CLU03x
FWHM / FWTM 69.0° / 115.0°
Efficiency 94 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16791_CLAMP-Z45-A
TE Connectivity: 2325807-3



Light distribution files

CITIZEN

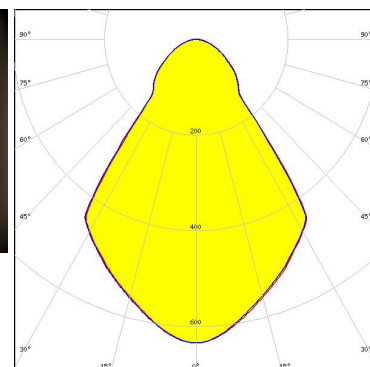
LED CLL03x/CLU03x
FWHM / FWTM 69.0° / 117.0°
Efficiency 90 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16791_CLAMP-Z45-A
F13671_ANGE-RZ-LENS
TE Connectivity: 2325807-3



Light distribution files

CITIZEN

LED CLL03x/CLU03x
FWHM / FWTM 71.0° / 124.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1

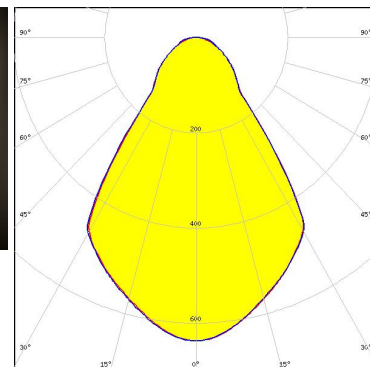
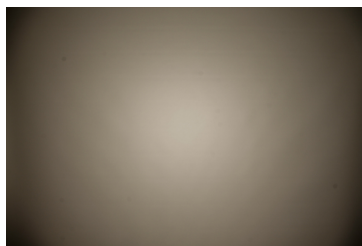


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

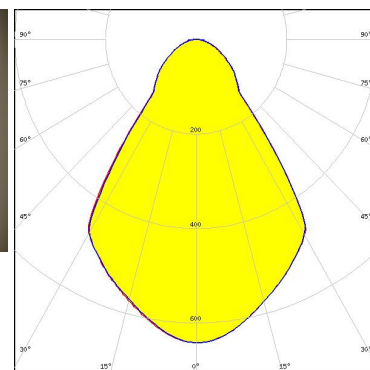
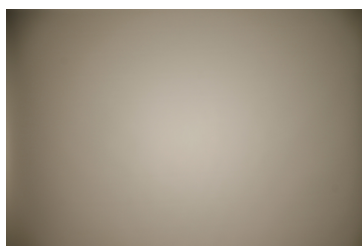
LED CLL04x/CLU04x
FWHM / FWTM 70.0° / 123.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
IDEAL: 50-2204-CT + 50-2100AN



Light distribution files

CITIZEN

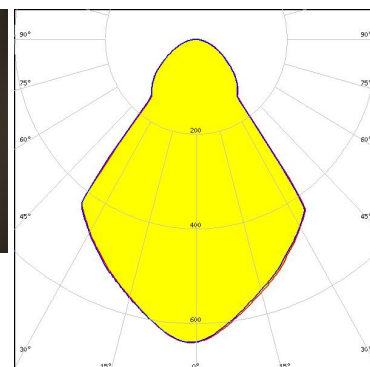
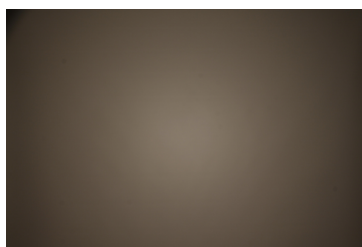
LED CLL04x/CLU04x
FWHM / FWTM 70.0° / 123.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 431 Typ L3



Light distribution files

CITIZEN

LED CLU700/701/702/703
FWHM / FWTM 73.0° / 124.0°
Efficiency 93 %
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

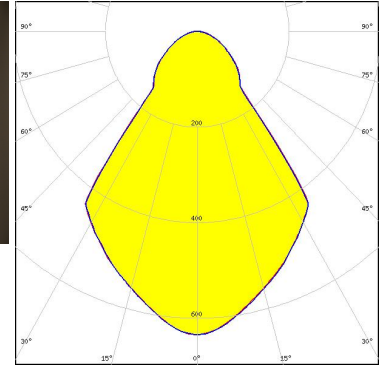
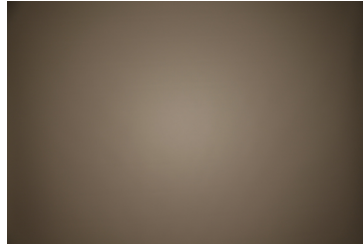


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

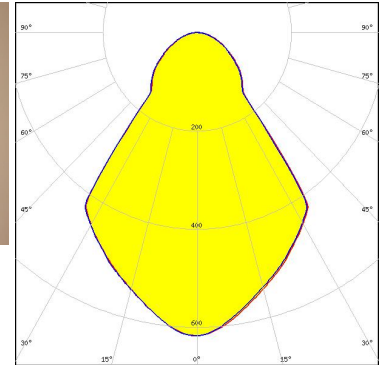
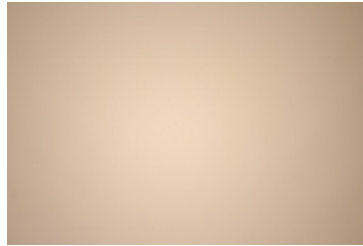
LED CLU720/721/723
FWHM / FWTM 72.0° / 124.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 433 Typ L1



Light distribution files

CITIZEN

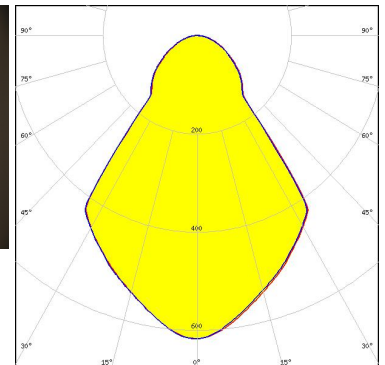
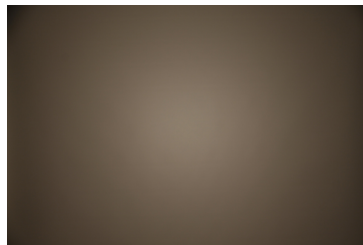
LED CLU720/721/723
FWHM / FWTM 72.0° / 129.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

CITIZEN

LED CLU720/721/723
FWHM / FWTM 70.0° / 127.0°
Efficiency 94 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
IDEAL: 50-2103CT + 50-2100AN

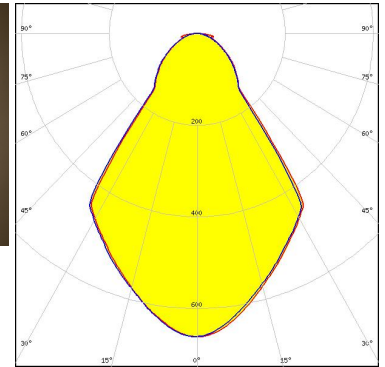
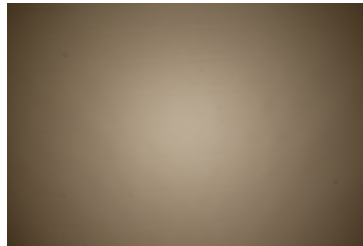


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

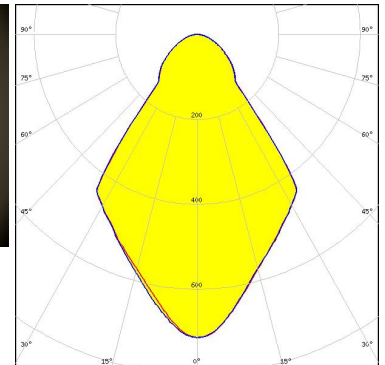
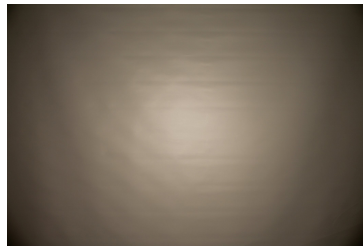
LED CLU730/731/733
 FWHM / FWTM 71.0° / 122.0°
 Efficiency 93 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 IDEAL: 50-2204-CT + 50-2100AN



Light distribution files



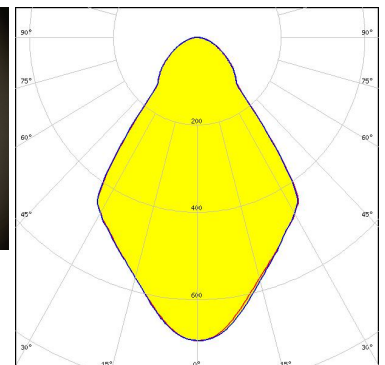
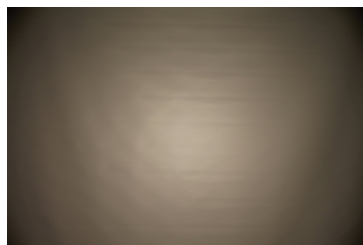
LED CMA1840
 FWHM / FWTM 72.0° / 120.0°
 Efficiency 95 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C14123_CLAMP-CXA15-18



Light distribution files



LED CMA2550
 FWHM / FWTM 71.0° / 121.0°
 Efficiency 94 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C14036_CLAMP_CXA25-30

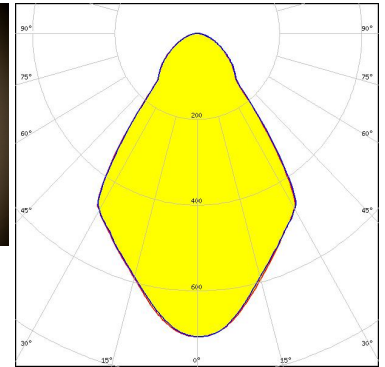
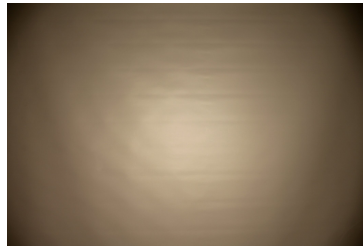


Light distribution files

OPTICAL RESULTS (MEASURED):



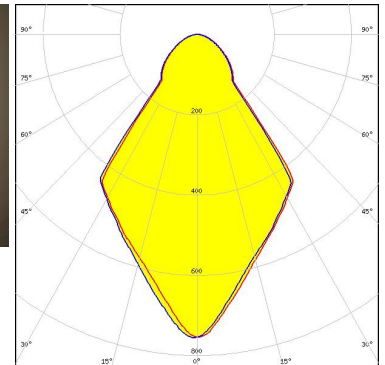
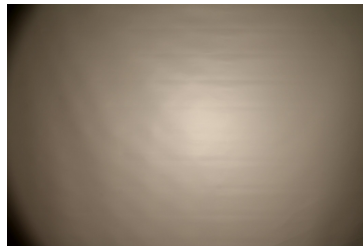
LED CMA3090
FWHM / FWTM 70.0° / 119.0°
Efficiency 94 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C14036_CLAMP_CXA25-30



Light distribution files



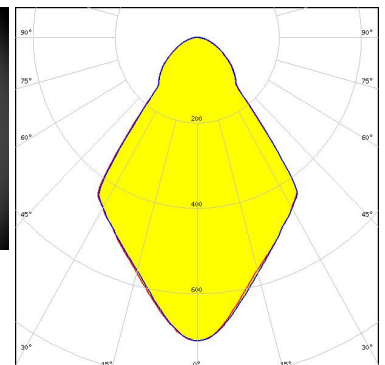
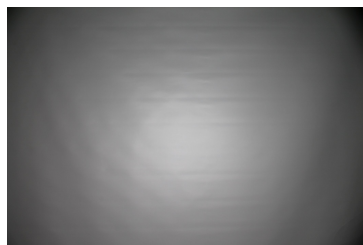
LED CMT14xx
FWHM / FWTM 71.0° / 116.0°
Efficiency 93 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 434 Typ L1



Light distribution files



LED CMT19xx
FWHM / FWTM 72.0° / 120.0°
Efficiency 94 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 477 Typ L1

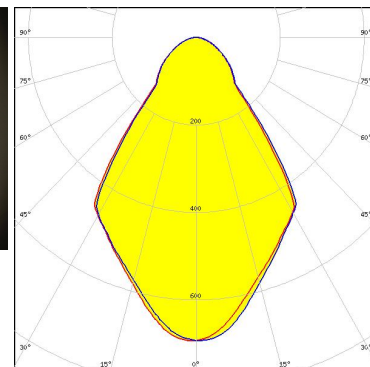
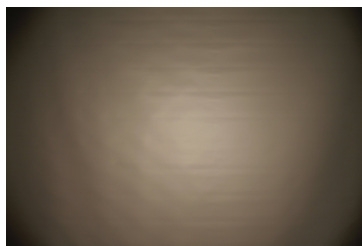


Light distribution files

OPTICAL RESULTS (MEASURED):



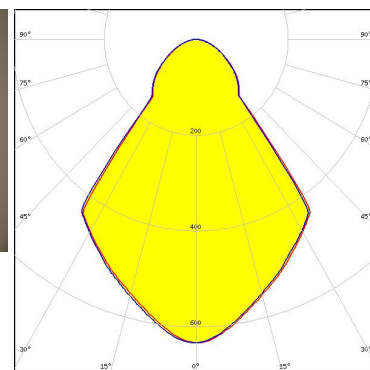
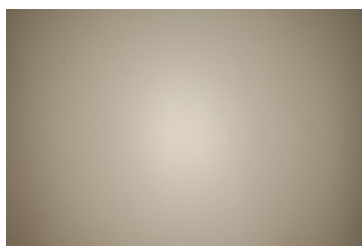
LED CMT28xx
FWHM / FWTM 70.0° / 120.0°
Efficiency 94 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 471 Typ L3



Light distribution files



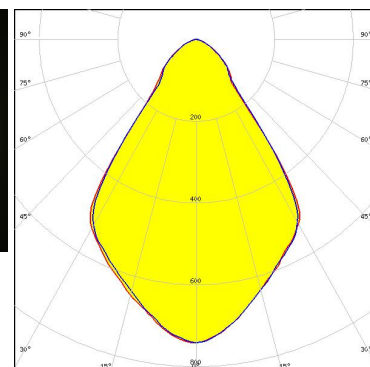
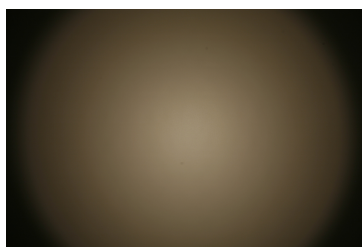
LED CXA/B 15xx
FWHM / FWTM 73.0° / 124.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 441 Typ L1



Light distribution files



LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM / FWTM 72.0° / 112.0°
Efficiency 94 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C14123_CLAMP-CXA15-18

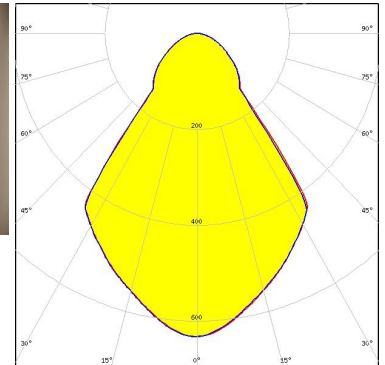
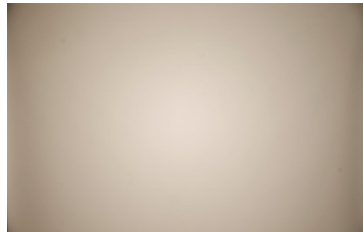


Light distribution files

OPTICAL RESULTS (MEASURED):



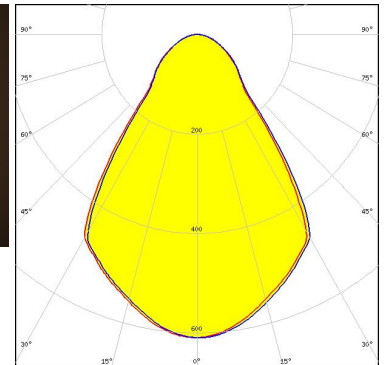
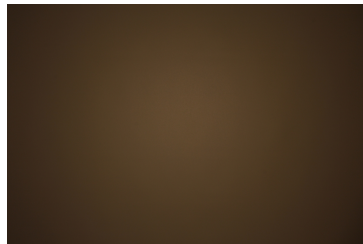
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 437 Typ L1



Light distribution files



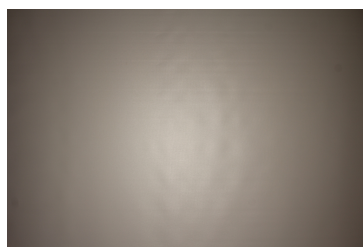
LED CXA/B 3590
 FWHM / FWTM 72.0° / 126.0°
 Efficiency 94 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 IDEAL: 50-2303CR + 50-2300AN



Light distribution files



LED CHI3030 19W
 FWHM / FWTM 71.0° / 130.0°
 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



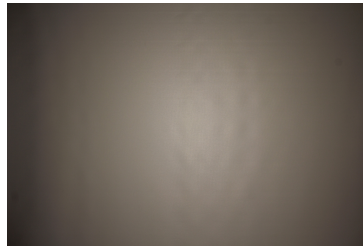
OPTICAL RESULTS (MEASURED):

EVERLIGHT

LED CHI3030 29W
FWHM / FWTM 71.0° / 128.0°
Efficiency 90 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

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

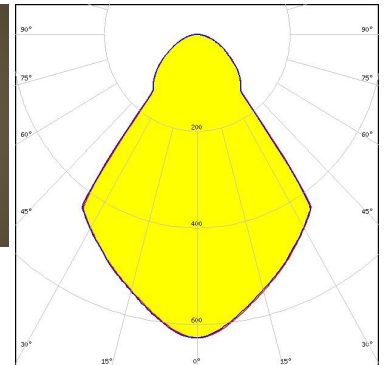
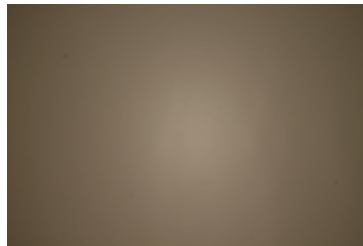


LUMILEDS

LED LUXEON CoB 1202/1203
FWHM / FWTM 73.0° / 125.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13658_CLAMP-VERO13-18
Bender Wirth: 438 Typ L1

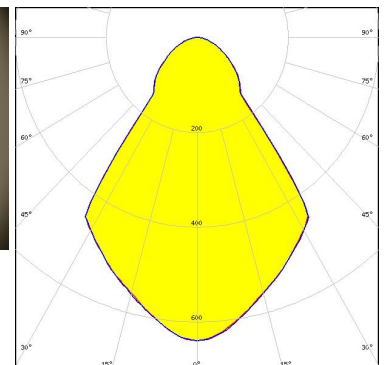
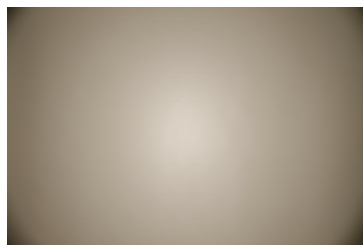


Light distribution files

LUMILEDS

LED LUXEON CoB 1204/1205
FWHM / FWTM 72.0° / 124.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:



Light distribution files

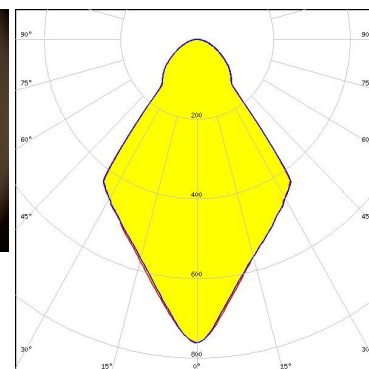
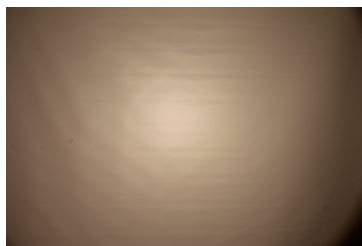
OPTICAL RESULTS (MEASURED):



LED LUXEON CoB 1204HD
FWHM / FWTM 71.0° / 116.0°
Efficiency 93 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

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



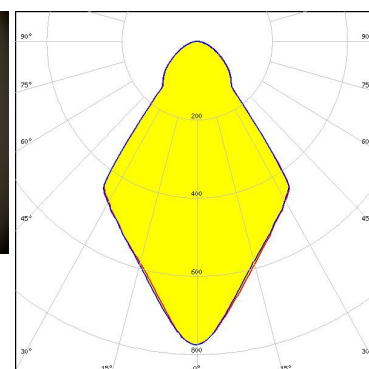
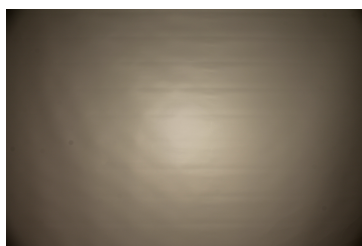
Light distribution files



LED LUXEON CoB 1205HD
FWHM / FWTM 70.0° / 114.0°
Efficiency 93 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

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



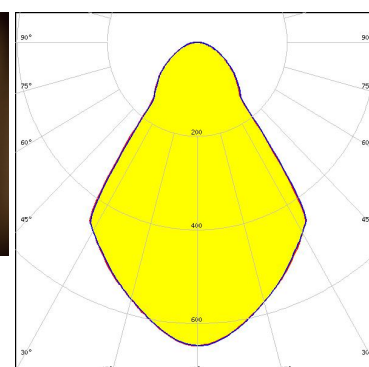
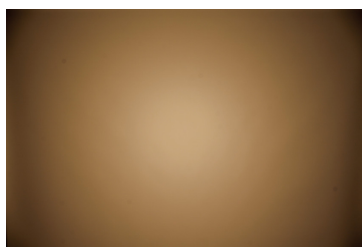
Light distribution files



LED LUXEON CoB 1208
FWHM / FWTM 71.0° / 123.0°
Efficiency 93 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

IDEAL: 50-2100SH + 50-2100AN



Light distribution files

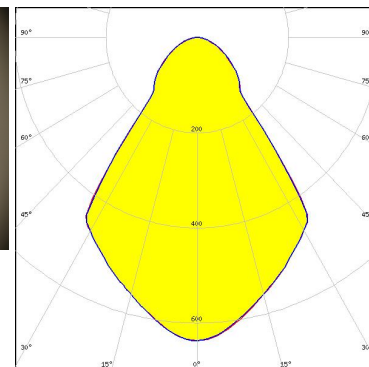
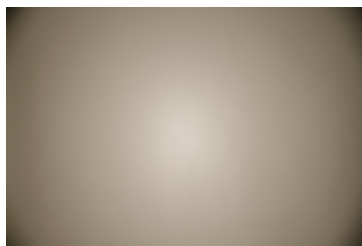
OPTICAL RESULTS (MEASURED):



LED LUXEON CoB 1208
FWHM / FWTM 71.0° / 124.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

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



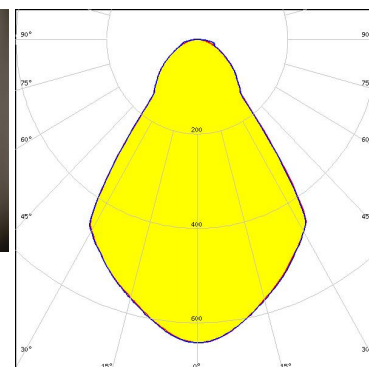
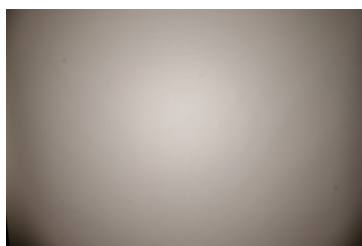
Light distribution files



LED LUXEON CoB 1211
FWHM / FWTM 71.0° / 123.0°
Efficiency 93 %
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

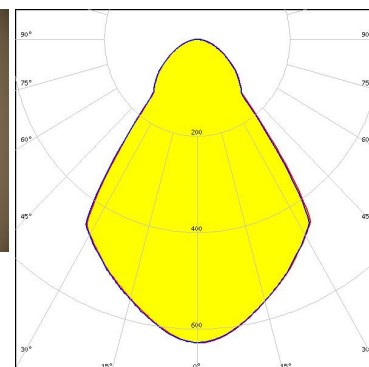
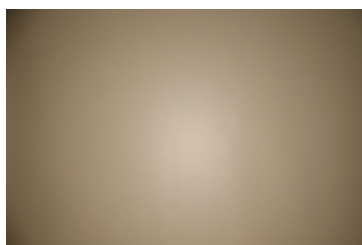


LED LUXEON CoB 1211
FWHM / FWTM 72.0° / 124.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13584_CLAMP-VERO29

Bender Wirth: 431 Typ L3

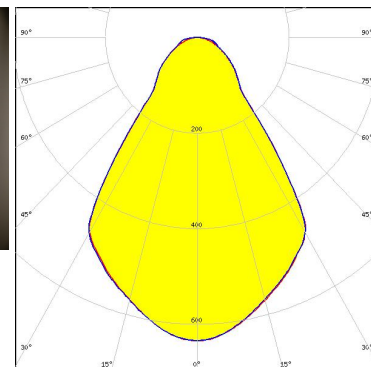
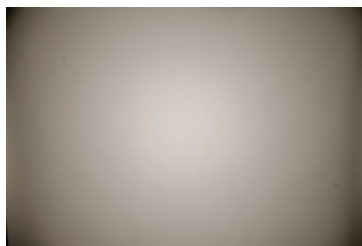


Light distribution files

OPTICAL RESULTS (MEASURED):



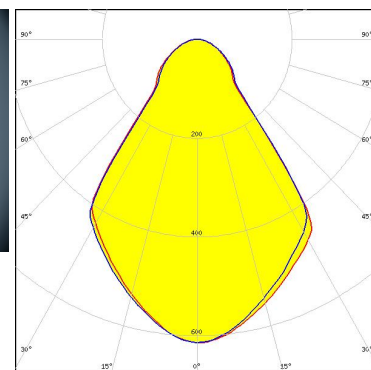
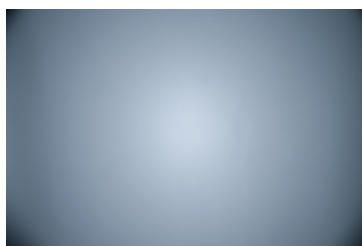
LED LUXEON CoB 1213/1216/1812
FWHM / FWTM 70.0° / 124.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
IDEAL: 50-2204-CT + 50-2100AN



Light distribution files



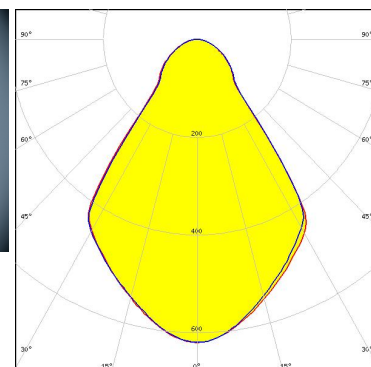
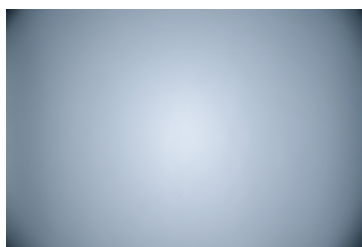
LED LUXEON K12
FWHM / FWTM 72.0° / 123.0°
Efficiency 89 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F13671_ANGE-RZ-LENS
TE Connectivity: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files



LED LUXEON K16
FWHM / FWTM 72.0° / 122.0°
Efficiency 88 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F13671_ANGE-RZ-LENS
TE Connectivity: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1

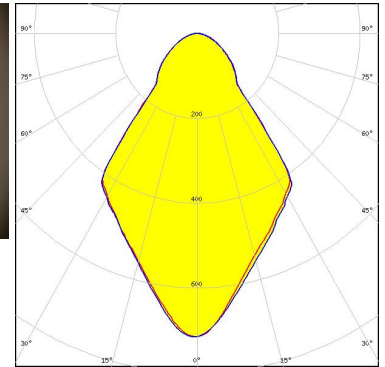
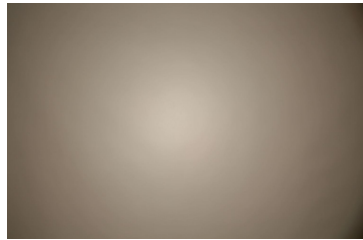


Light distribution files

OPTICAL RESULTS (MEASURED):



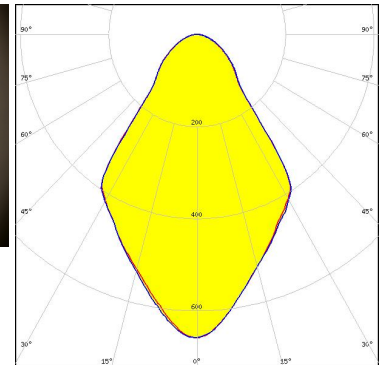
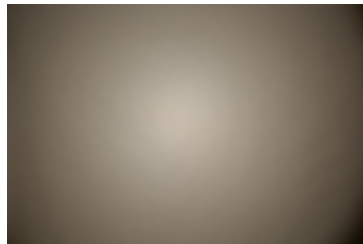
LED CDM-14 (Dim-To-Warm)
 FWHM / FWTM 71.0° / 120.0°
 Efficiency 92 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 491 Typ L2



Light distribution files



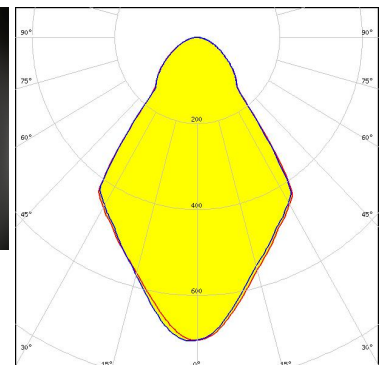
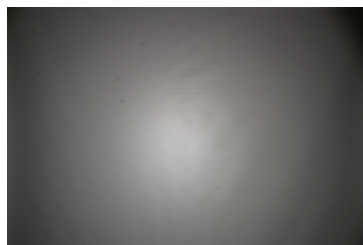
LED CDM-14 (Dim-To-Warm)
 FWHM / FWTM 71.0° / 121.0°
 Efficiency 87 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 F13671_ANGE-RZ-LENS
 Bender Wirth: 491 Typ L2



Light distribution files



LED CDM-18 (Dim-To-Warm)
 FWHM / FWTM 70.0° / 120.0°
 Efficiency 93 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 491 Typ L2

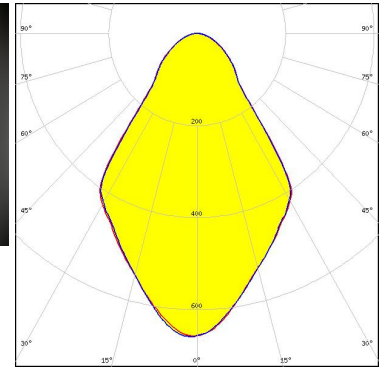
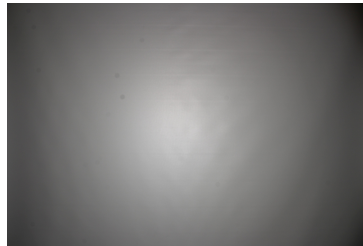


Light distribution files

OPTICAL RESULTS (MEASURED):



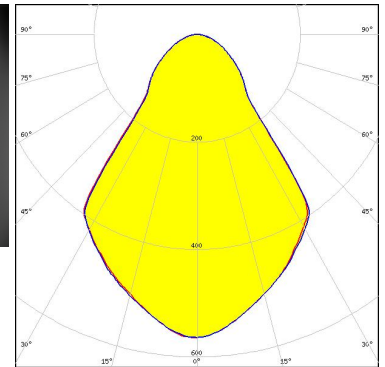
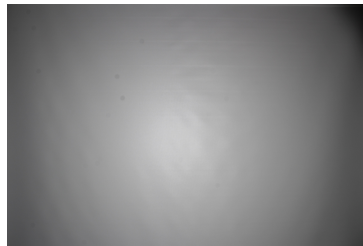
LED CDM-18 (Dim-To-Warm)
 FWHM / FWTM 70.0° / 121.0°
 Efficiency 88 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 F13671_ANGE-RZ-LENS
 Bender Wirth: 491 Typ L2



Light distribution files



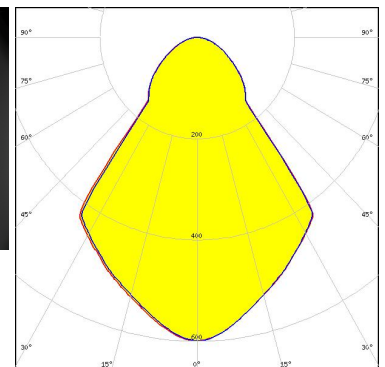
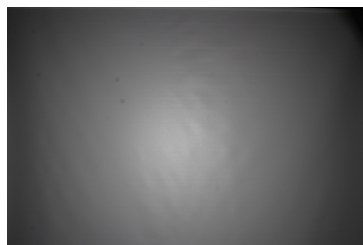
LED CDM-9 (Dim-To-Warm)
 FWHM / FWTM 73.0° / 127.0°
 Efficiency 86 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 F13671_ANGE-RZ-LENS
 Bender Wirth: 490 Typ L1



Light distribution files



LED CDM-9 (Dim-To-Warm)
 FWHM / FWTM 73.0° / 127.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 490 Typ L1

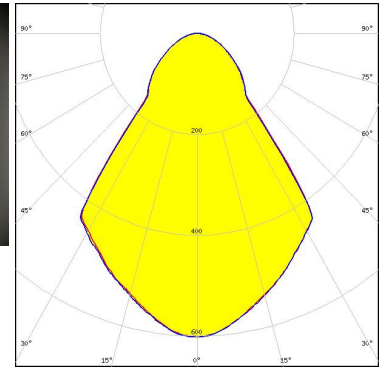
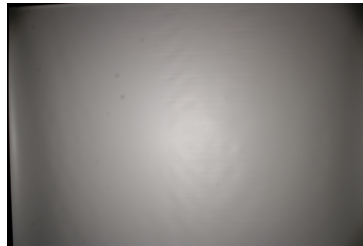


Light distribution files

OPTICAL RESULTS (MEASURED):



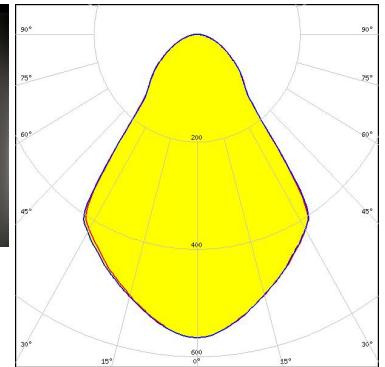
LED CTM-14 (Tunable White)
 FWHM / FWTM 73.0° / 127.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 442 Typ L3



Light distribution files



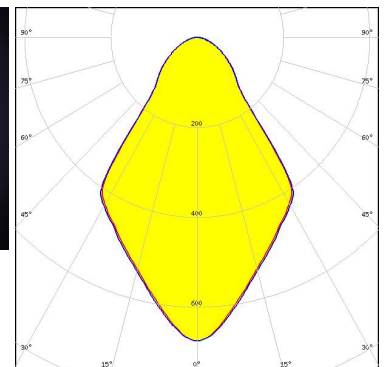
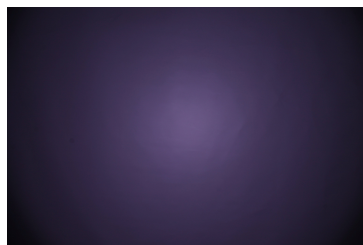
LED CTM-14 (Tunable White)
 FWHM / FWTM 72.0° / 127.0°
 Efficiency 86 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 442 Typ L3



Light distribution files



LED CTM-14 RGBW
 FWHM / FWTM 70.0° / 119.0°
 Efficiency 88 %
 Peak intensity 0.7 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

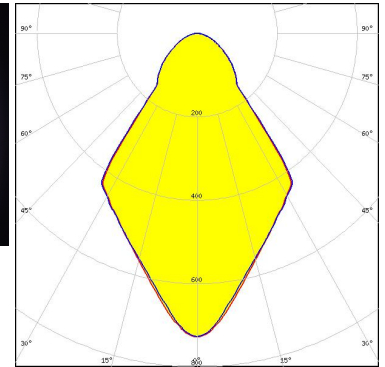
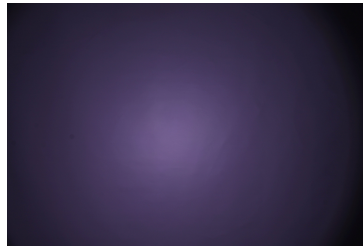


Light distribution files

OPTICAL RESULTS (MEASURED):



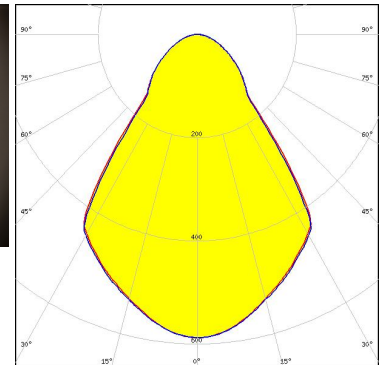
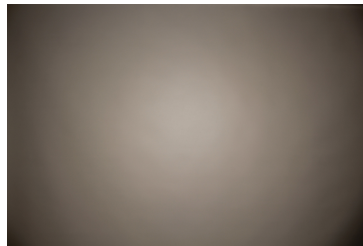
LED CTM-14 RGBW
 FWHM / FWTM 71.0° / 118.0°
 Efficiency 92 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type RGBW
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 500 Typ L3-1



Light distribution files



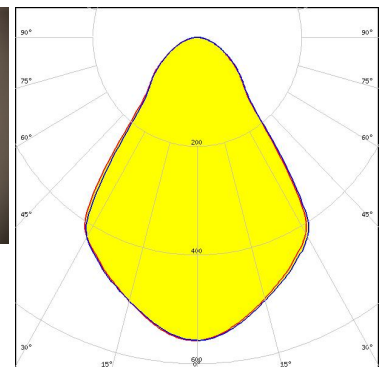
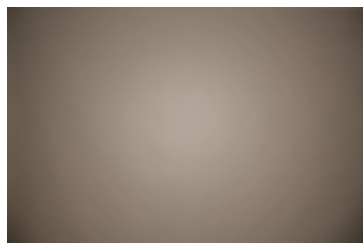
LED CTM-22 (Tunable White)
 FWHM / FWTM 73.0° / 127.0°
 Efficiency 91 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 494 Typ L3



Light distribution files



LED CTM-22 (Tunable White)
 FWHM / FWTM 72.0° / 127.0°
 Efficiency 86 %
 Peak intensity 0.6 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

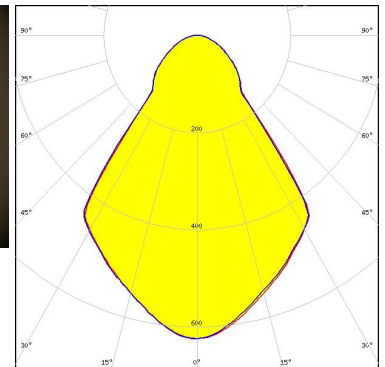
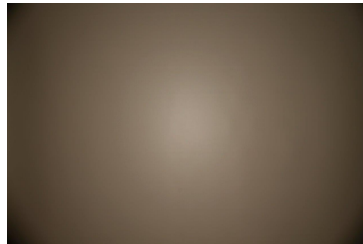
OPTICAL RESULTS (MEASURED):



LED CxM-14 (19x19)
FWHM / FWTM 72.0° / 125.0°
Efficiency 93 %
Peak intensity 0.6 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

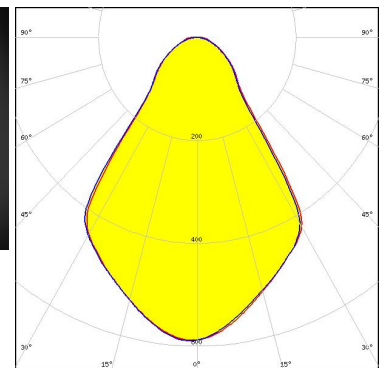
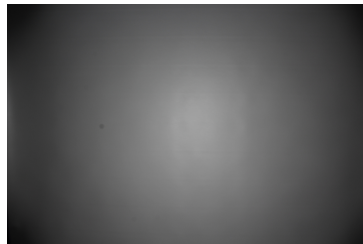


LED COB J-Type
FWHM / FWTM 71.0° / 124.0°
Efficiency 87 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

F13671_ANGE-RZ-LENS

IDEAL: 50-2103NC + 50-2100AN



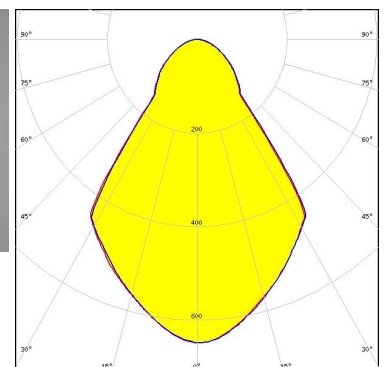
Light distribution files



LED COB J-Type
FWHM / FWTM 71.0° / 122.0°
Efficiency 91 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

IDEAL: 50-2103NC + 50-2100AN

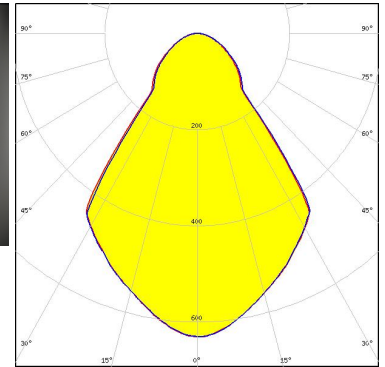
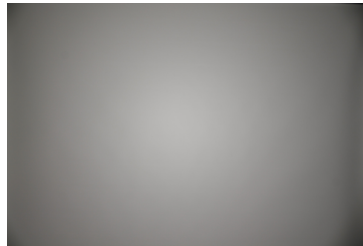


Light distribution files

OPTICAL RESULTS (MEASURED):



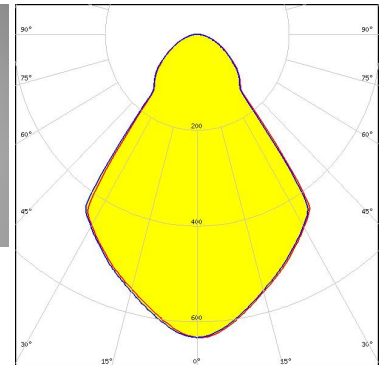
LED COB J-Type
 FWHM / FWTM 72.0° / 125.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 463 Typ L2



Light distribution files



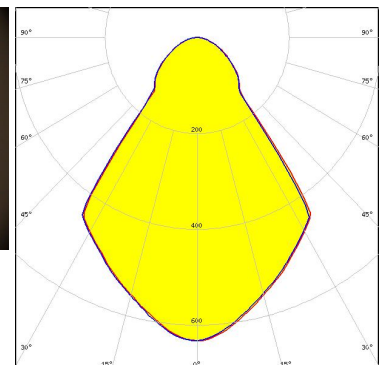
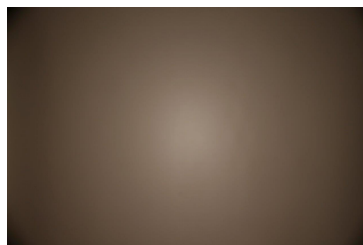
LED COB L-Type (LES 11)
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files



LED COB L-Type (LES 11)
 FWHM / FWTM 73.0° / 125.0°
 Efficiency 94 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Molex: 180580-0005

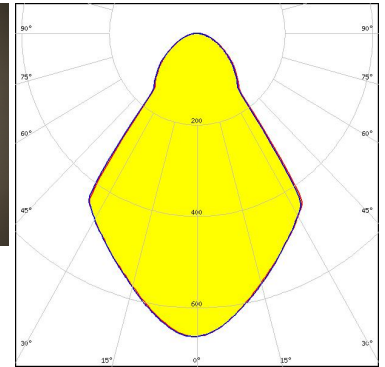
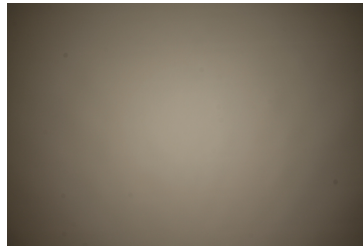


Light distribution files

OPTICAL RESULTS (MEASURED):



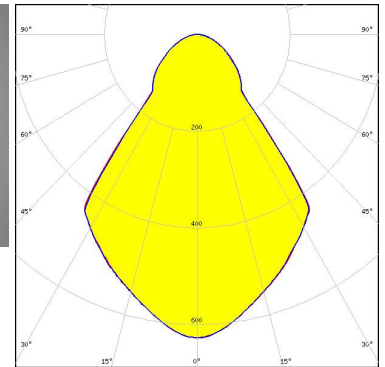
LED COB L-Type (LES 11)
 FWHM / FWTM 71.0° / 122.0°
 Efficiency 92 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 IDEAL: 50-2100NC + 50-2100AN



Light distribution files



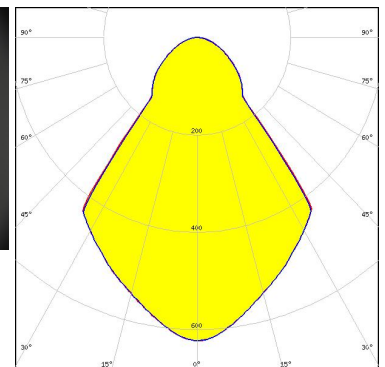
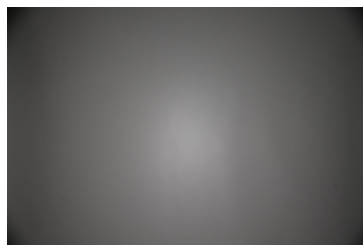
LED COB L-Type (LES 11)
 FWHM / FWTM 73.0° / 125.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 438 Typ L1



Light distribution files



LED COB L-Type (LES 9)
 FWHM / FWTM 73.0° / 126.0°
 Efficiency 94 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 438 Typ L1



Light distribution files

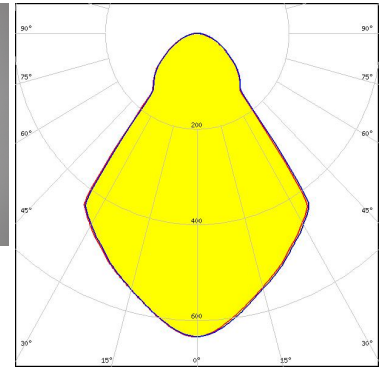
OPTICAL RESULTS (MEASURED):



LED COB L-Type (LES 9)
FWHM / FWTM 72.0° / 124.0°
Efficiency 92 %
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



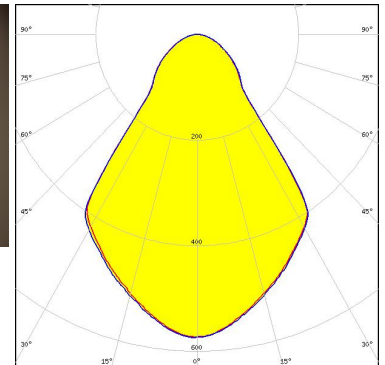
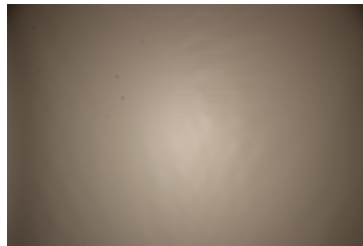
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
FWHM / FWTM 72.0° / 125.0°
Efficiency 85 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13658_CLAMP-VERO13-18

F13671_ANGE-RZ-LENS

Bender Wirth: 498 Typ L2



Light distribution files

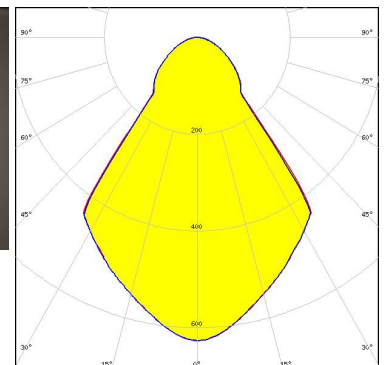
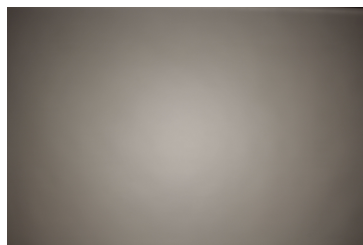


LED NVCWJ024Z-V1MT: COB J-Type Tunable White
FWHM / FWTM 73.0° / 125.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13658_CLAMP-VERO13-18

Bender Wirth: 498 Typ L2

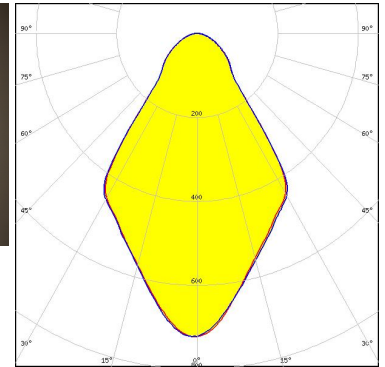
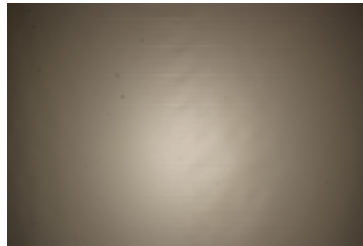


Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM

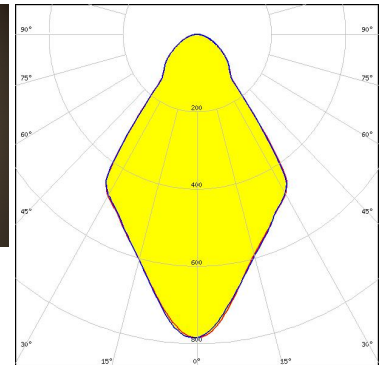
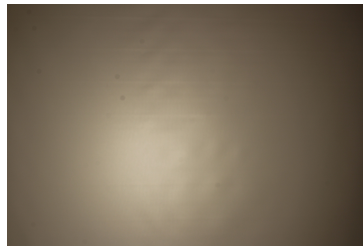
LED PrevaLED Core G7 L15 H1
 FWHM / FWTM 69.0° / 116.0°
 Efficiency 90 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16685_CLAMP-PRV-A
 F13671_ANGE-RZ-LENS



Light distribution files

OSRAM

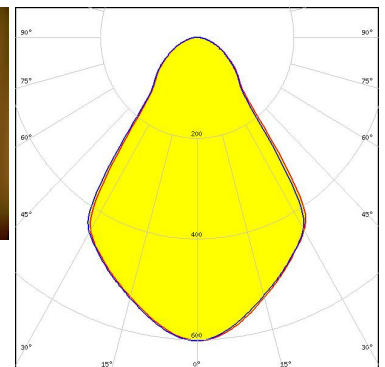
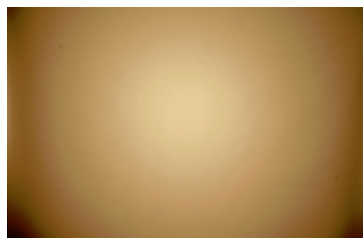
LED PrevaLED Core G7 L15 H1
 FWHM / FWTM 69.0° / 114.0°
 Efficiency 94 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16685_CLAMP-PRV-A



Light distribution files

OSRAM

LED PrevaLED Core Z4 LES19
 FWHM / FWTM 71.0° / 124.0°
 Efficiency 88 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

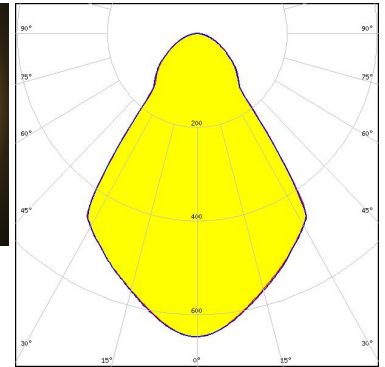


Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM

LED PrevaLED Core Z4 LES19
 FWHM / FWTM 71.0° / 123.0°
 Efficiency 93 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

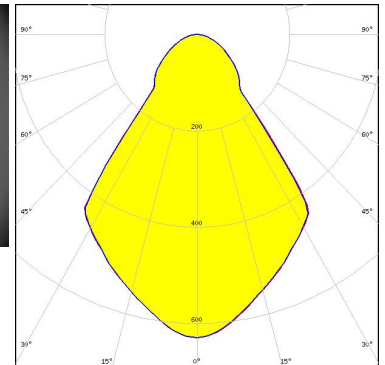
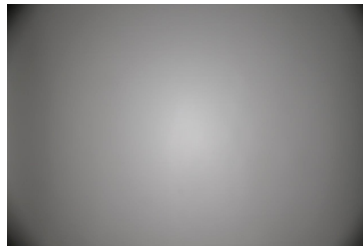


Light distribution files

OSRAM

Opto Semiconductors

LED Soleriq S13
 FWHM / FWTM 72.0° / 125.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1

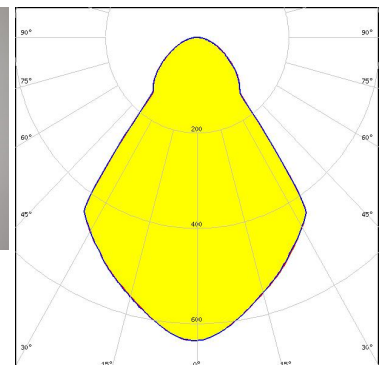
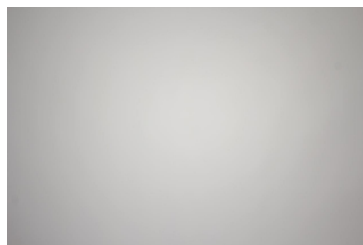


Light distribution files

OSRAM

Opto Semiconductors

LED Soleriq S13
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 437 Typ L1



Light distribution files

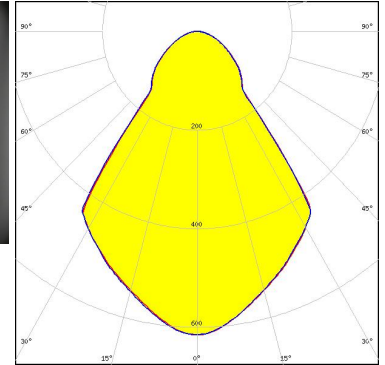
OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

LED Soleriq S13 19x19
FWHM / FWTM 72.0° / 126.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

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



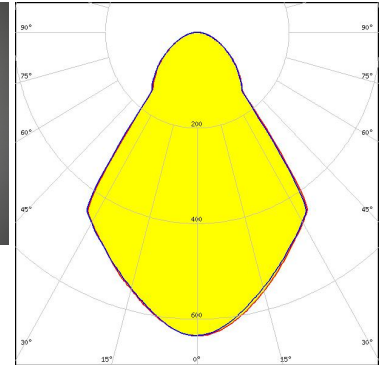
Light distribution files

OSRAM
Opto Semiconductors

LED Soleriq S13 19x19
FWHM / FWTM 71.0° / 124.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

IDEAL: 50-2103CT + 50-2100AN



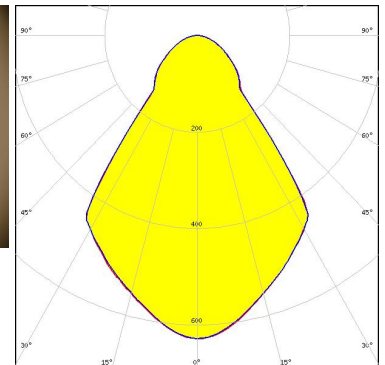
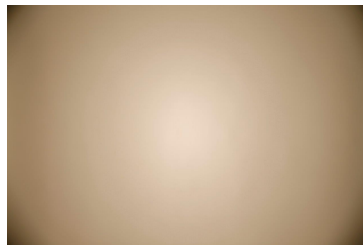
Light distribution files

OSRAM
Opto Semiconductors

LED Soleriq S19
FWHM / FWTM 72.0° / 125.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

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

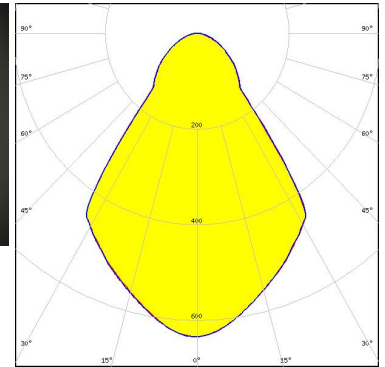
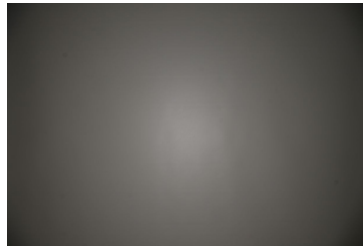


Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

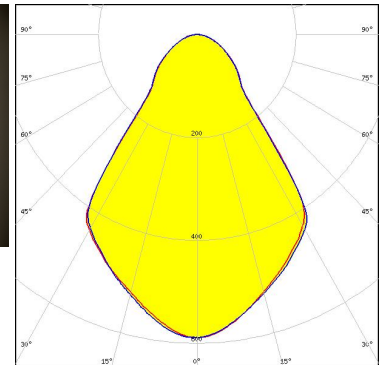
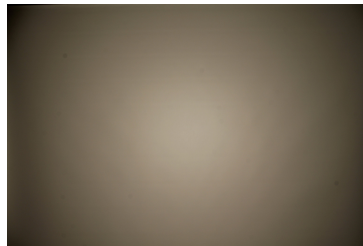
LED Soleriq S19
FWHM / FWTM 71.0° / 123.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 462 Typ L3



Light distribution files

PHILIPS

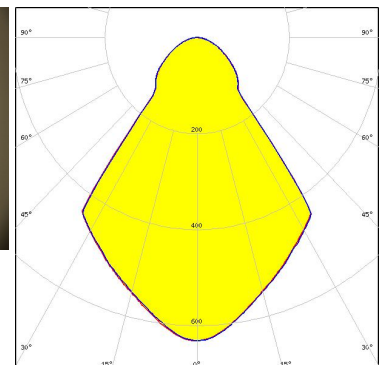
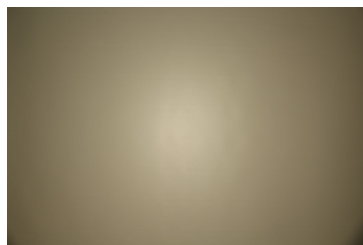
LED Fortimo SLM 1208 L15 G6 Standard
FWHM / FWTM 72.0° / 125.0°
Efficiency 87 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F13671_ANGE-RZ-LENS
TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

PHILIPS

LED Fortimo SLM L09 + SLM holder
FWHM / FWTM 72.0° / 124.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

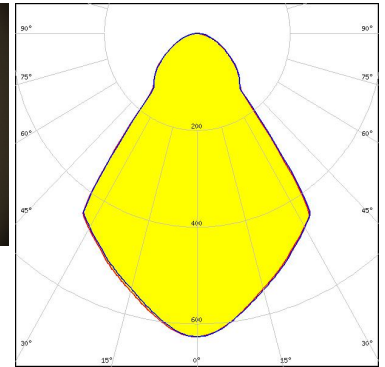
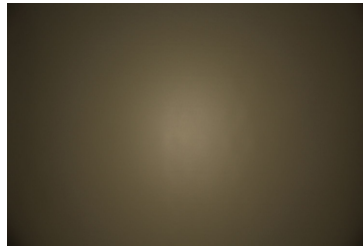


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

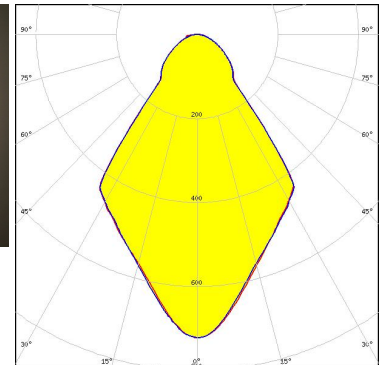
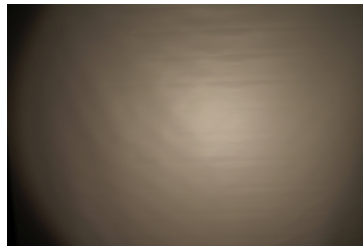
LED Fortimo SLM L13 + SLM holder
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

PHILIPS

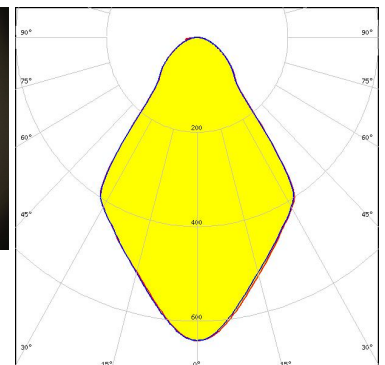
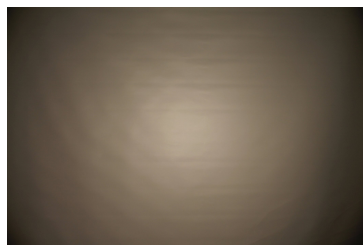
LED Fortimo SLM L13 CoB
 FWHM / FWTM 71.0° / 118.0°
 Efficiency 93 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

PHILIPS

LED Fortimo SLM L13 CoB
 FWHM / FWTM 71.0° / 120.0°
 Efficiency 85 %
 Peak intensity 0.6 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

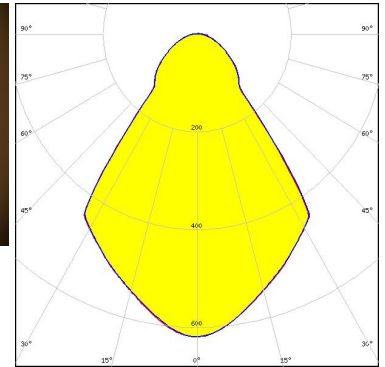
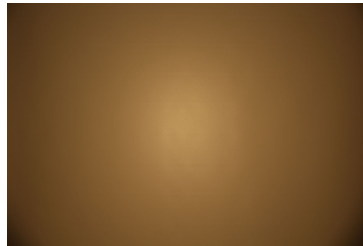


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

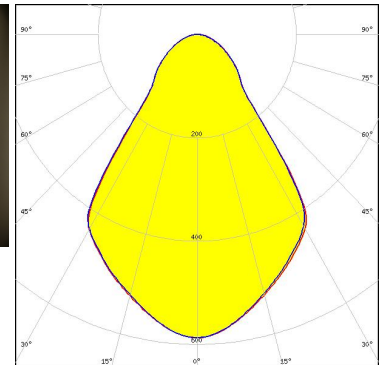
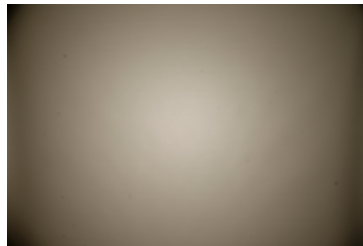
LED Fortimo SLM L15 + SLM holder
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 90 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

PHILIPS

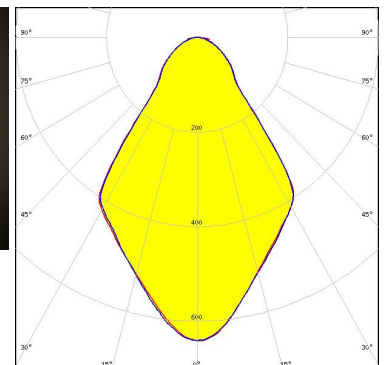
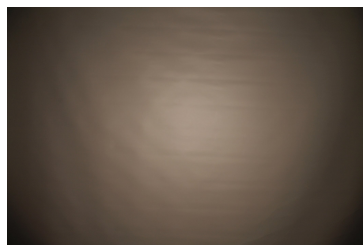
LED Fortimo SLM L15 + SLM holder
 FWHM / FWTM 72.0° / 125.0°
 Efficiency 87 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F13671_ANGE-RZ-LENS
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

PHILIPS

LED Fortimo SLM L15 CoB
 FWHM / FWTM 70.0° / 119.0°
 Efficiency 85 %
 Peak intensity 0.6 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 CoB

FWHM / FWTM 71.0° / 118.0°

Efficiency 92 %

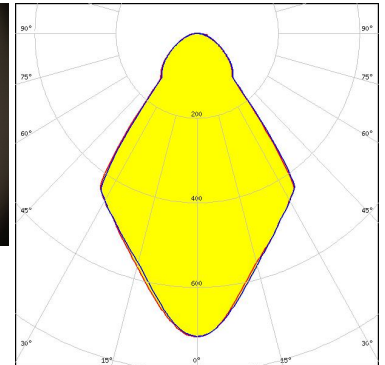
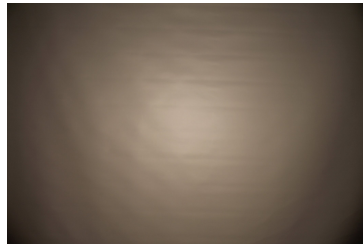
Peak intensity 0.7 cd/lm

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 L19 + SLM holder

FWHM / FWTM 72.0° / 124.0°

Efficiency 89 %

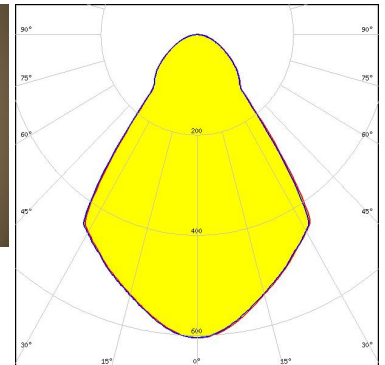
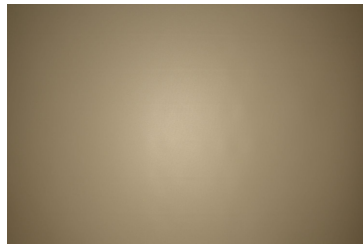
Peak intensity 0.6 cd/lm

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 72.0° / 125.0°

Efficiency 92 %

Peak intensity 0.6 cd/lm

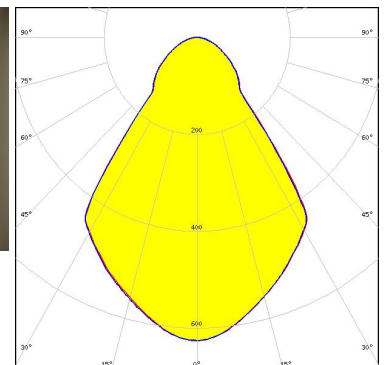
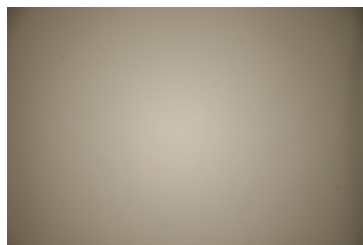
LEDs/each optic 1

Light colour/type White

Required components:

C13658_CLAMP-VERO13-18

Bender Wirth: 450 Typ L2

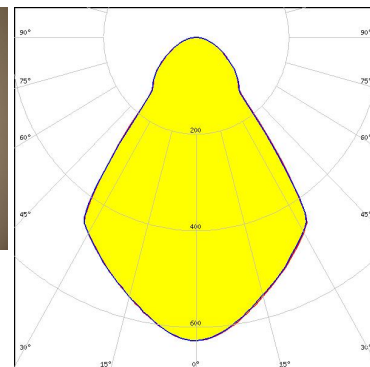
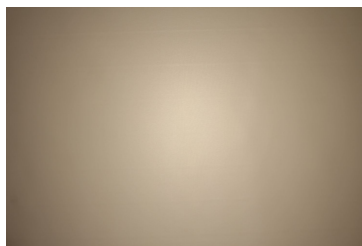


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

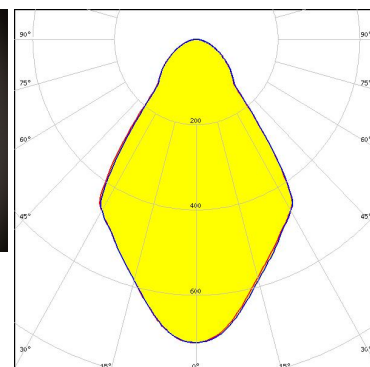
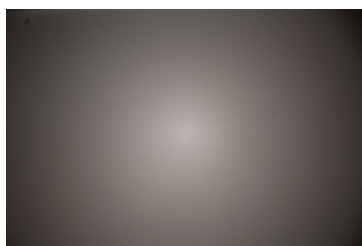
LED LC026B / 033B / 040B
FWHM / FWTM 72.0° / 125.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

SAMSUNG

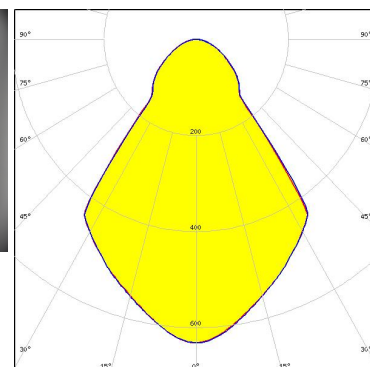
LED LC035T (Tunable white)
FWHM / FWTM 70.0° / 119.0°
Efficiency 93 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type Tunable White
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 502 Typ L3



Light distribution files

SAMSUNG

LED LC040C
FWHM / FWTM 72.0° / 124.0°
Efficiency 92 %
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

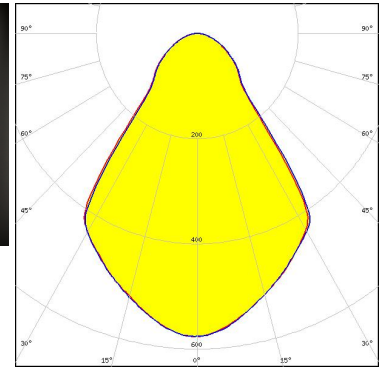
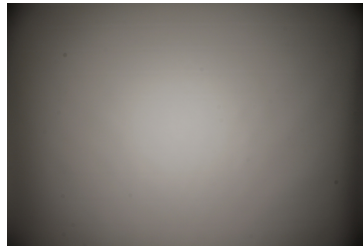


Light distribution files

OPTICAL RESULTS (MEASURED):



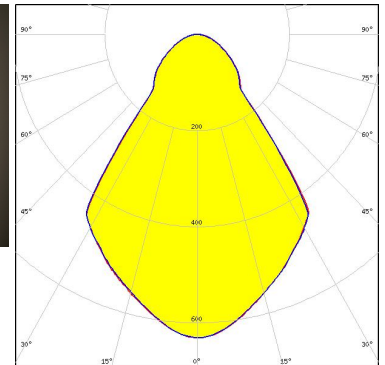
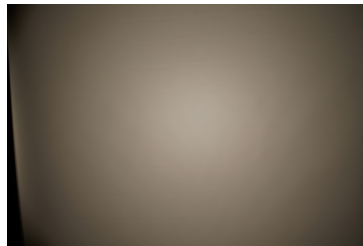
LED AC Zhaga COB
FWHM / FWTM 72.0° / 126.0°
Efficiency 87 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F13671_ANGE-RZ-LENS
Optosource: SEHSMJD-A



Light distribution files



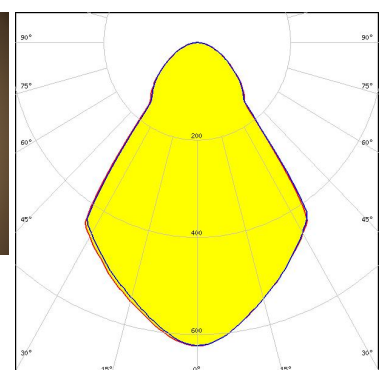
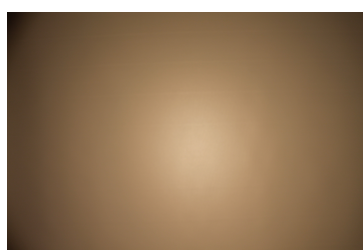
LED MJT COB LES 14.5
FWHM / FWTM 72.0° / 124.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files



LED WU-M-461
FWHM / FWTM 72.0° / 125.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

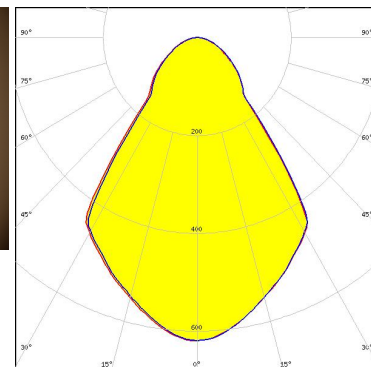
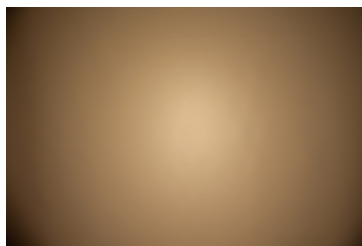
OPTICAL RESULTS (MEASURED):



LED WU-M-462
FWHM / FWTM 72.0° / 125.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



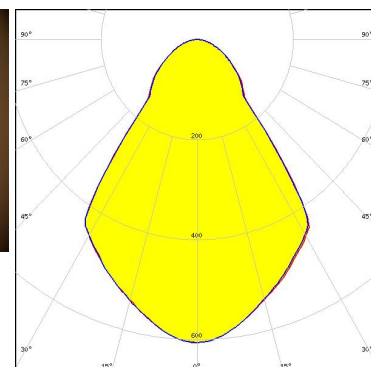
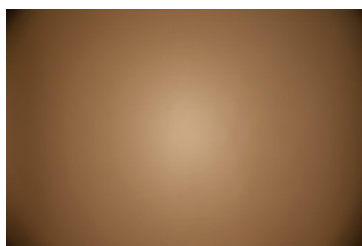
Light distribution files



LED WU-M-464
FWHM / FWTM 73.0° / 127.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



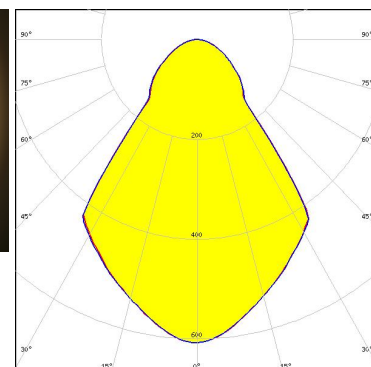
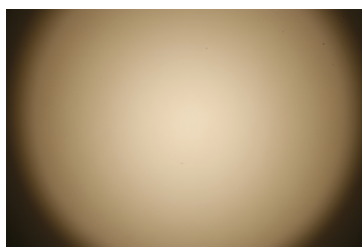
Light distribution files



LED WU-M-484
FWHM / FWTM 73.0° / 127.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

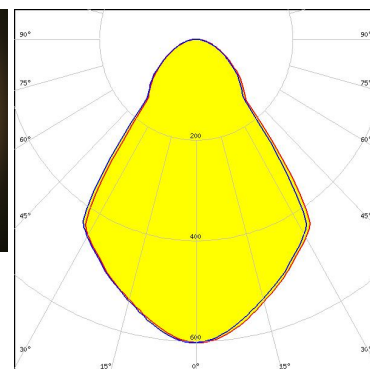
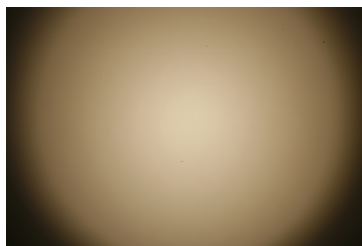


Light distribution files

OPTICAL RESULTS (MEASURED):



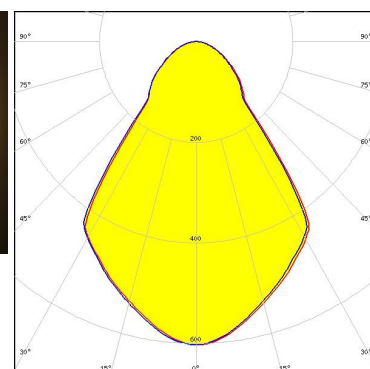
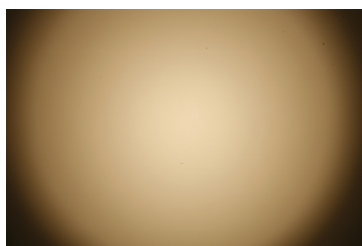
LED WU-M-485
FWHM / FWTM 73.0° / 127.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files



LED WU-M-486
FWHM / FWTM 73.0° / 127.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

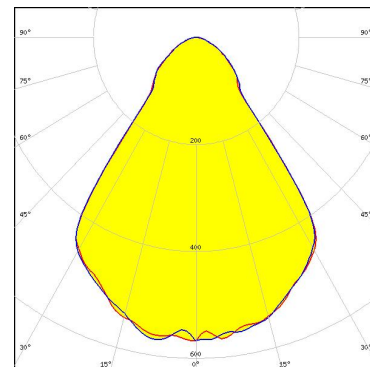
OPTICAL RESULTS (SIMULATED):



LED V10 Gen7
FWHM / FWTM 72.0° / 120.0°
Efficiency 86 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13658_CLAMP-VERO13-18

Bender Wirth: 486 Typ L1

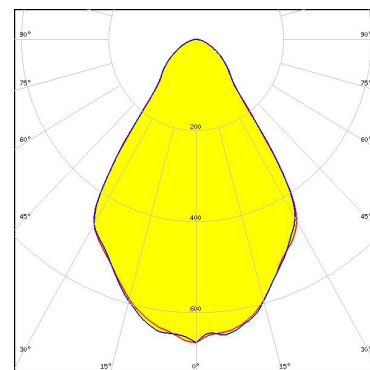
Light distribution files



LED V13 Gen7
FWHM / FWTM 69.0° / 114.0°
Efficiency 86 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

IDEAL: 50-2103CT + 50-2100AN

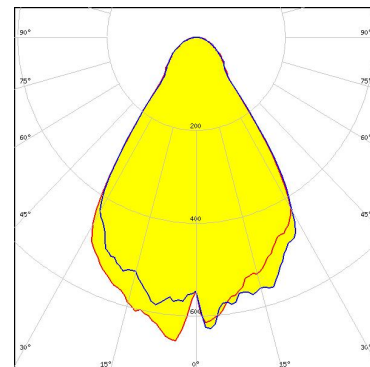
Light distribution files



LED V22 Gen7
FWHM / FWTM 66.0° / 110.0°
Efficiency 80 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

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

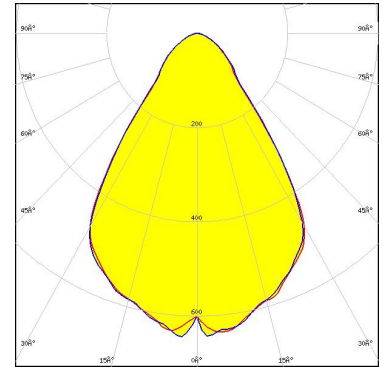
Light distribution files



OPTICAL RESULTS (SIMULATED):



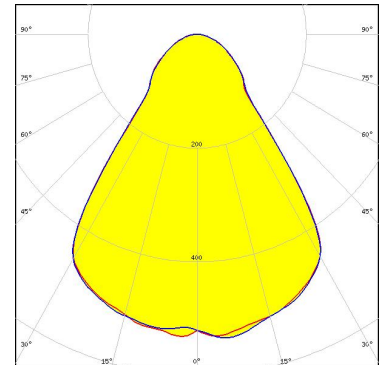
LED Vesta TW 29mm DP
FWHM / FWTM 70.0° / 114.0°
Efficiency 88 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED CXA/B 1830
FWHM / FWTM 73.0° / 129.0°
Efficiency 88 %
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 CxM-14 (19x19)
FWHM / FWTM 72.0° / 124.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

C13658_CLAMP-VERO13-18

Bender Wirth: 433 Typ L1

OPTICAL RESULTS (SIMULATED):



LED CxM-9 (13.5x13.5)
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 93 %
 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



LED ZC12/18
 FWHM / FWTM 72.0° / 124.0°
 Efficiency 93 %
 Peak intensity 0.6 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 72.0° / 124.0°
 Efficiency 93 %
 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

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 13
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)