

LENA-SS

~18° smooth spot beam

SPECIFICATION:

Dimensions	Ø 111.0
Height	80 mm
Fastening	socket
ROHS compliant	yes ⓘ

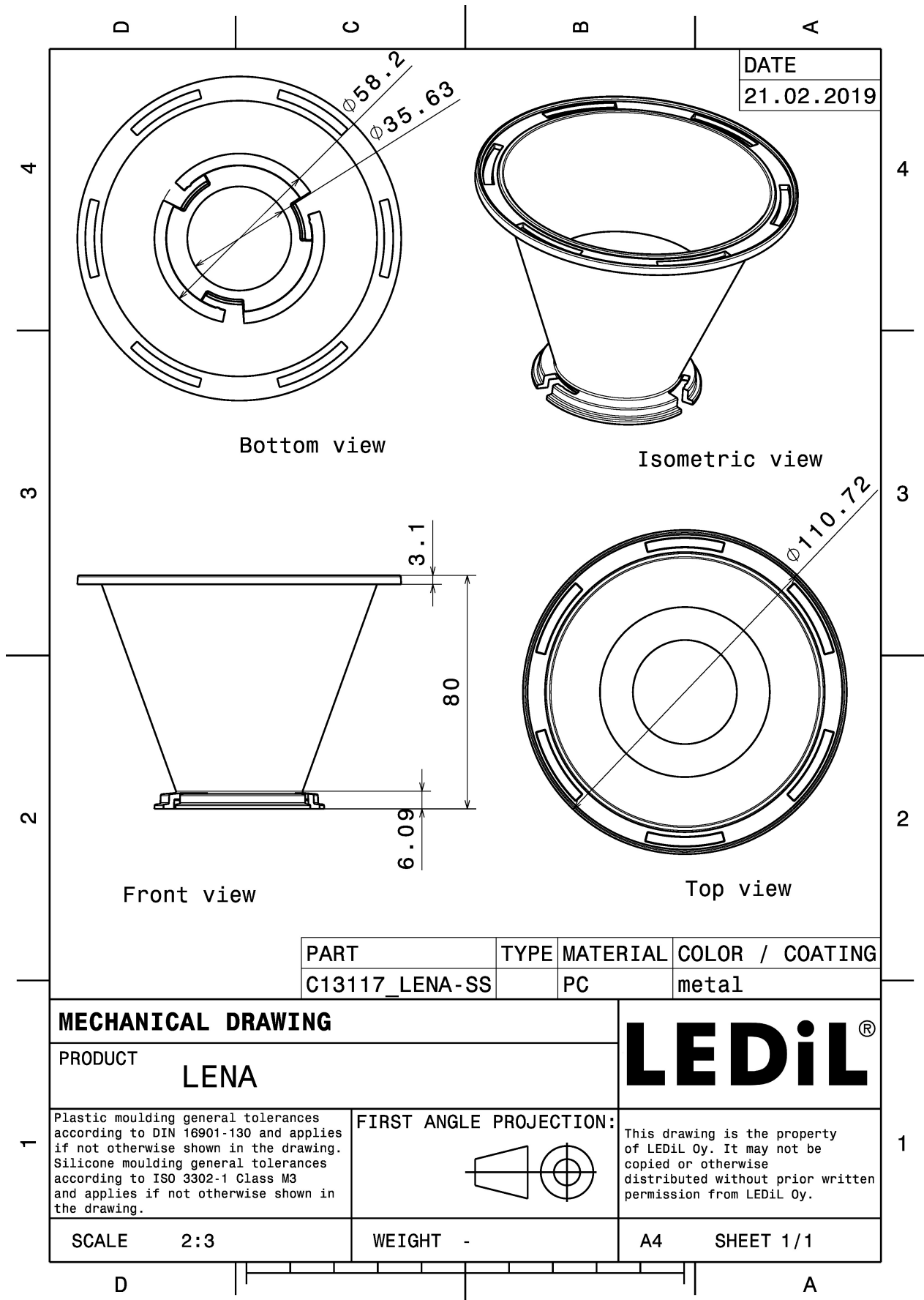
MATERIALS:

Component	Type	Material	Colour	Finish	Coating
LENA-SS	Reflector	PC	metal		lacquer



ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C13117_LENA-SS » Box size: 400 x 280 x 380 mm	60	60	60	4.1

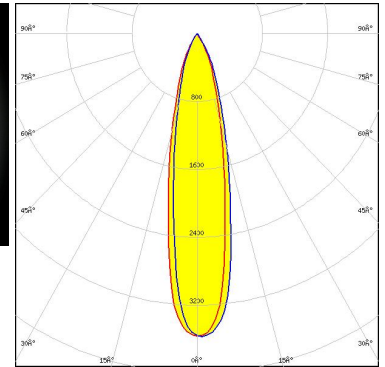
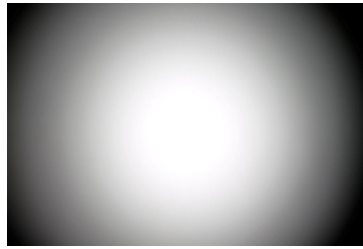


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

bridgelux

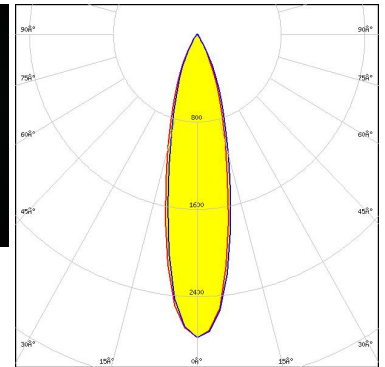
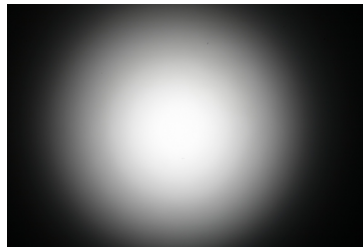
LED BXRA RS
 FWHM / FWTM 22.0° / 52.0°
 Efficiency 83 %
 Peak intensity 3.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12229_LENA-STD-BASE-RS



Light distribution files

bridgelux

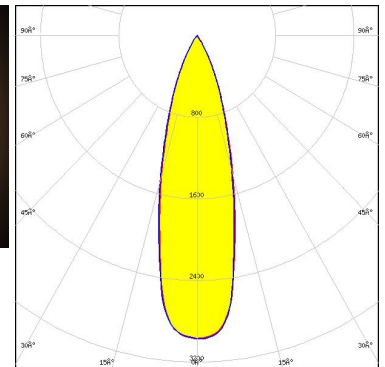
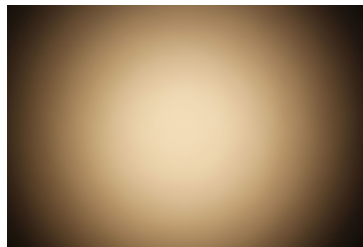
LED BXRA RS
 FWHM / FWTM 25.0° / 54.0°
 Efficiency 76 %
 Peak intensity 2.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12229_LENA-STD-BASE-RS
 C11996_LENA-LENS



Light distribution files

bridgelux

LED Vero SE 29
 FWHM / FWTM 29.0° / 56.0°
 Efficiency 89 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C15083_LENA-STD-BASE-VERO29



Light distribution files

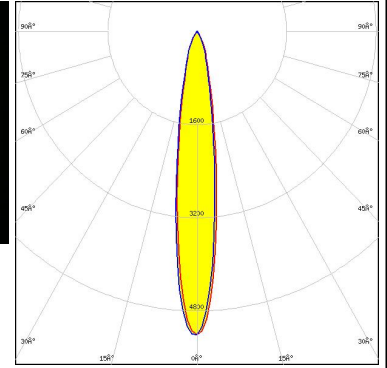
OPTICAL RESULTS (MEASURED):



LED VERO13
 FWHM / FWTM 15.0° / 38.0°
 Efficiency 76 %
 Peak intensity 5.3 cd/m
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS



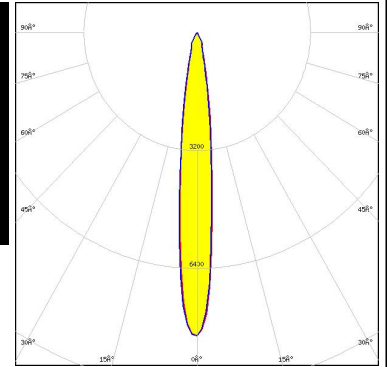
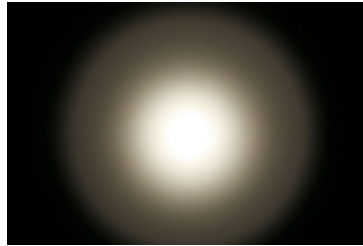
Light distribution files



LED VERO13
 FWHM / FWTM 13.0° / 30.0°
 Efficiency 82 %
 Peak intensity 8.3 cd/m
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18



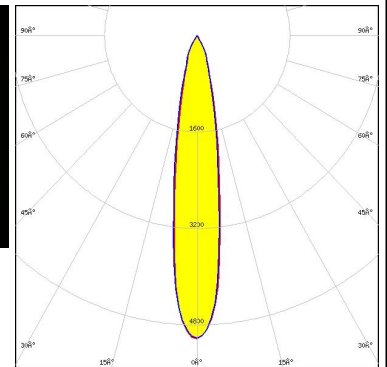
Light distribution files



LED VERO18
 FWHM / FWTM 18.0° / 42.0°
 Efficiency 82 %
 Peak intensity 5 cd/m
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18



Light distribution files

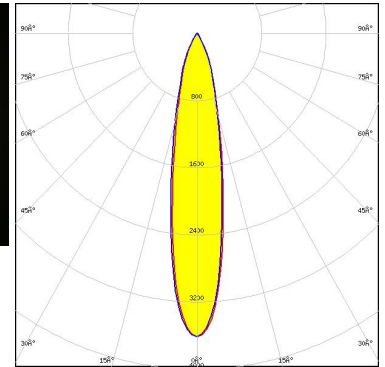
OPTICAL RESULTS (MEASURED):



LED VERO18
 FWHM / FWTM 20.0° / 49.0°
 Efficiency 76 %
 Peak intensity 3.6 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS



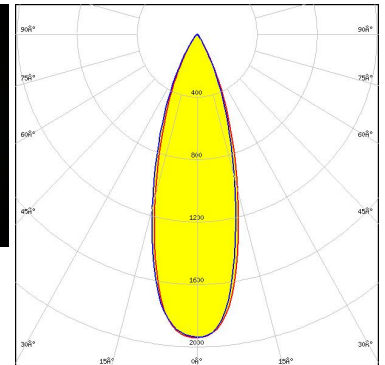
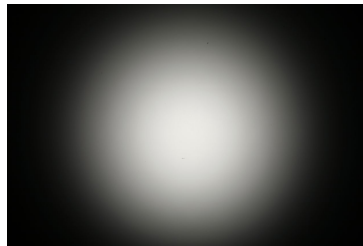
Light distribution files



LED VERO29
 FWHM / FWTM 32.0° / 60.0°
 Efficiency 74 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS



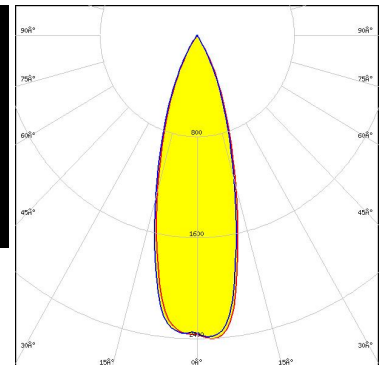
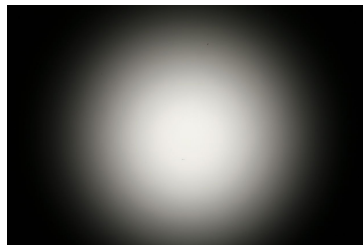
Light distribution files



LED VERO29
 FWHM / FWTM 31.0° / 57.0°
 Efficiency 80 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29

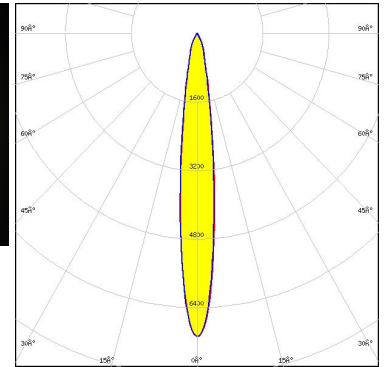


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

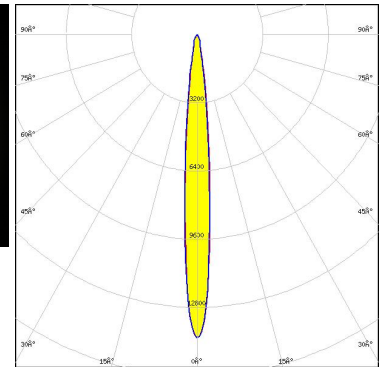
LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 13.0° / 32.0°
 Efficiency 82 %
 Peak intensity 7.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 434 Typ L1



Light distribution files

CITIZEN

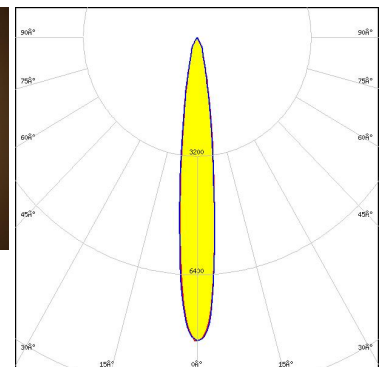
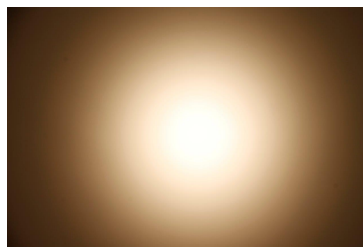
LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 10.0° / 22.0°
 Efficiency 87 %
 Peak intensity 14.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 434 Typ L1



Light distribution files

CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 13.0° / 31.0°
 Efficiency 85 %
 Peak intensity 8.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 A.A.G. STUCCHI: 8101-G2 + S-8000-11

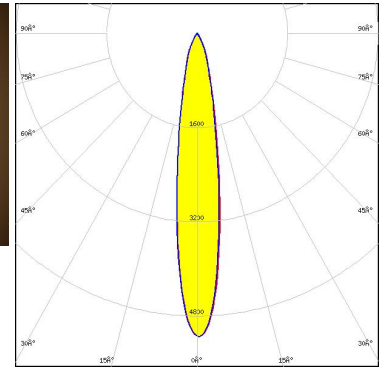
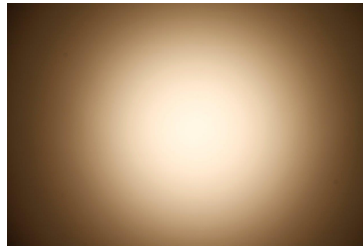


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

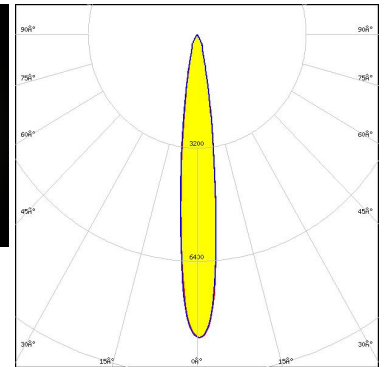
LED CLL03x/CLU03x
 FWHM / FWTM 17.0° / 41.0°
 Efficiency 82 %
 Peak intensity 5.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 433 Typ L1



Light distribution files

CITIZEN

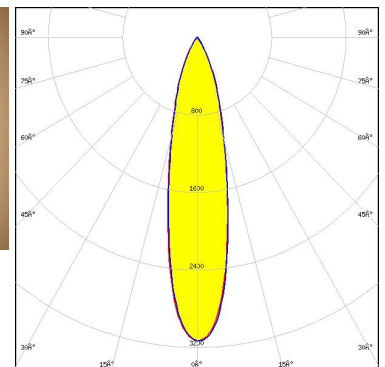
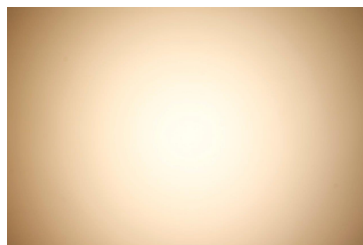
LED CLL03x/CLU03x
 FWHM / FWTM 14.0° / 31.0°
 Efficiency 87 %
 Peak intensity 8.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 433 Typ L1



Light distribution files

CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 23.0° / 54.0°
 Efficiency 82 %
 Peak intensity 3.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS
 Bender Wirth: 431 Typ L3

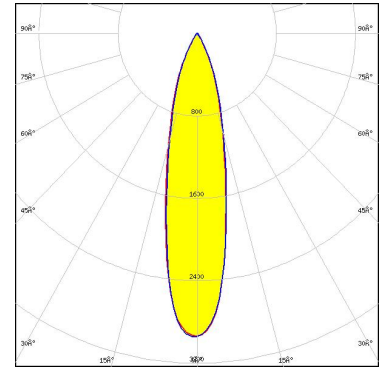


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

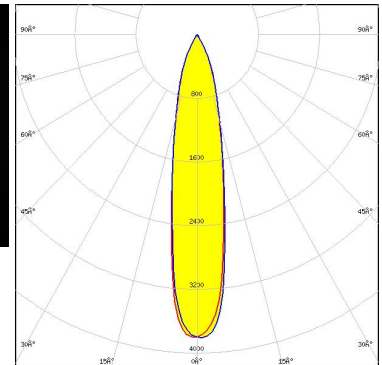
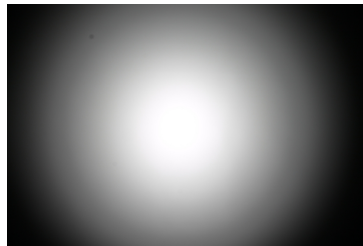
LED CLL04x/CLU04x
 FWHM / FWTM 24.0° / 53.0°
 Efficiency 77 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



Light distribution files

CITIZEN

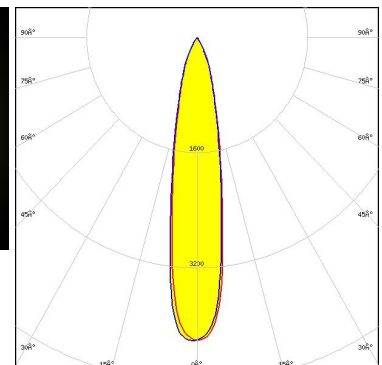
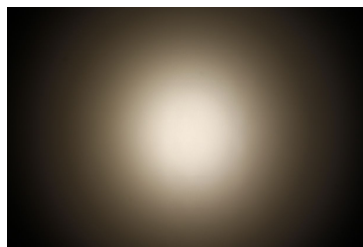
LED CLL04x/CLU04x
 FWHM / FWTM 20.0° / 51.0°
 Efficiency 80 %
 Peak intensity 3.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 IDEAL: 50-2204CT + 50-2100LN



Light distribution files

CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 20.0° / 48.0°
 Efficiency 79 %
 Peak intensity 4.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 A.A.G. STUCCHI: 8102-G2 + S-8000-12

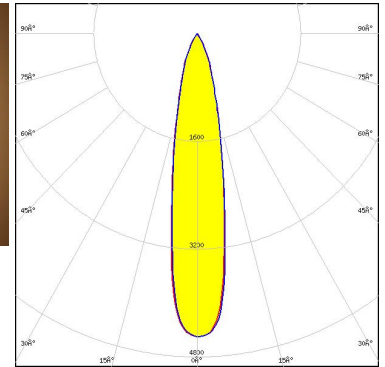
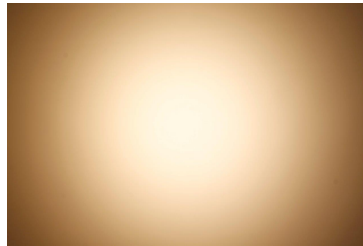


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

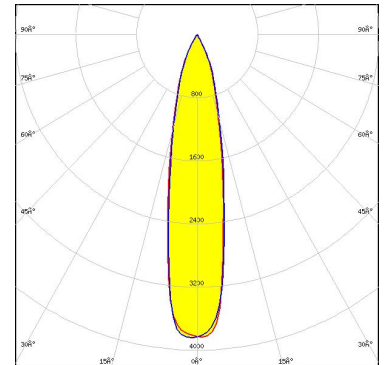
LED CLL04x/CLU04x
 FWHM / FWTM 20.0° / 48.0°
 Efficiency 87 %
 Peak intensity 4.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 431 Typ L3



Light distribution files

CITIZEN

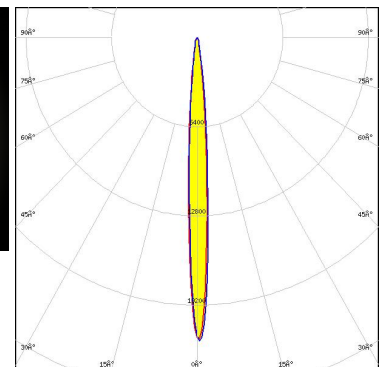
LED CLL04x/CLU04x
 FWHM / FWTM 22.0° / 51.0°
 Efficiency 82 %
 Peak intensity 3.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040



Light distribution files

CITIZEN

LED CLU700/701/702/703
 FWHM / FWTM 7.0° / 18.0°
 Efficiency 87 %
 Peak intensity 21.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 434 Typ L1

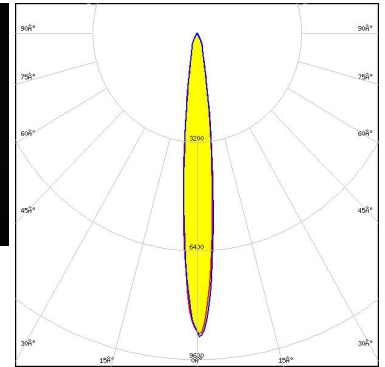


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

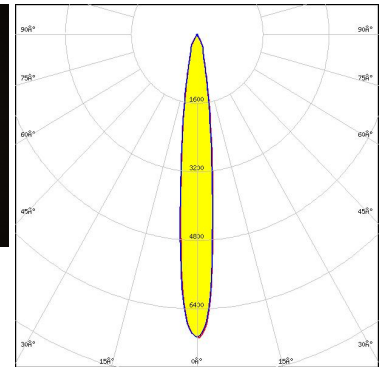
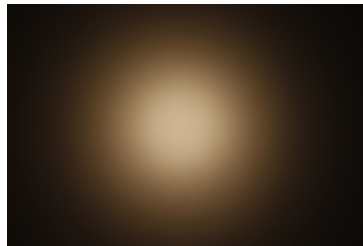
LED CLU700/701/702/703
 FWHM / FWTM 11.0° / 27.0°
 Efficiency 82 %
 Peak intensity 8.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 434 Typ L1



Light distribution files

CITIZEN

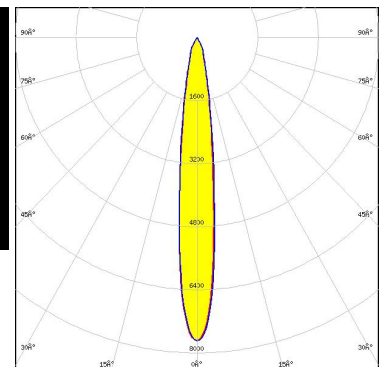
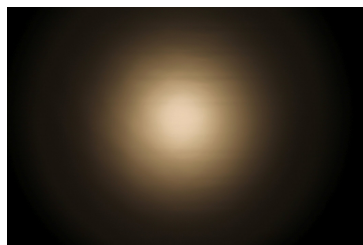
LED CLU730/731/733
 FWHM / FWTM 13.0° / 31.0°
 Efficiency 78 %
 Peak intensity 7.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040



Light distribution files



LED CMA1840
 FWHM / FWTM 13.0° / 33.0°
 Efficiency 85 %
 Peak intensity 7.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C14146_LENA-STD-BASE-CXA18

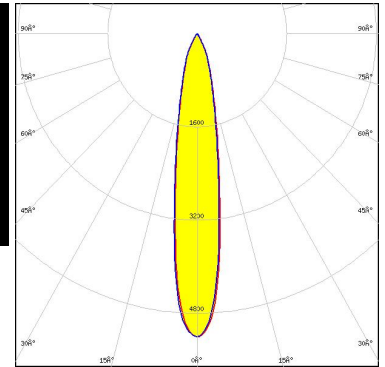
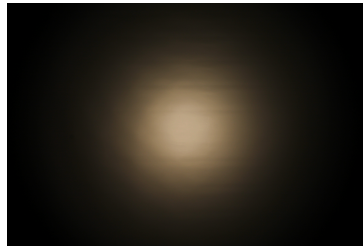


Light distribution files

OPTICAL RESULTS (MEASURED):



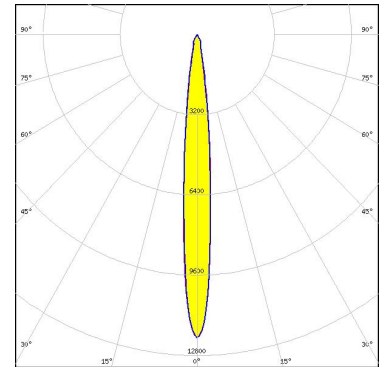
LED CMA2550
 FWHM / FWTM 17.0° / 45.0°
 Efficiency 86 %
 Peak intensity 5.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13324_LENA-STD-BASE-CXA25



Light distribution files



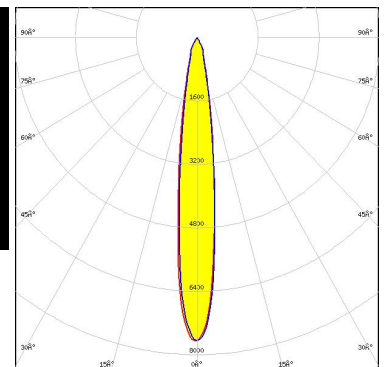
LED CMT14xx
 FWHM / FWTM 10.0° / 24.0°
 Efficiency 86 %
 Peak intensity 12.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 434 Typ L1



Light distribution files



LED CMT19xx
 FWHM / FWTM 14.0° / 33.0°
 Efficiency 86 %
 Peak intensity 7.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030

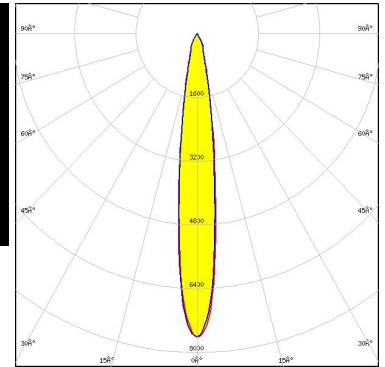
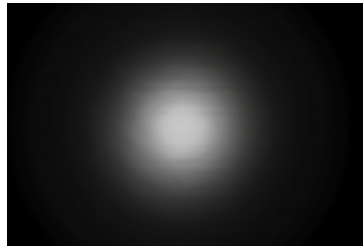


Light distribution files

OPTICAL RESULTS (MEASURED):



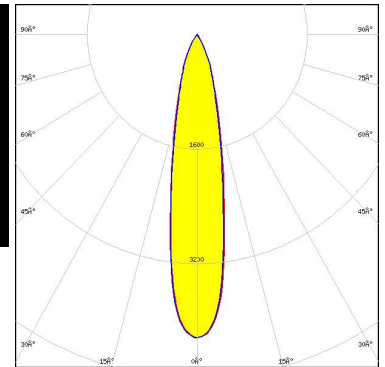
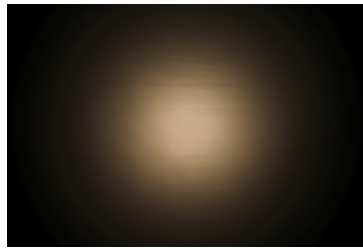
LED CMT19xx
FWHM / FWTM 14.0° / 33.0°
Efficiency 85 %
Peak intensity 7.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 477 Typ L1



Light distribution files



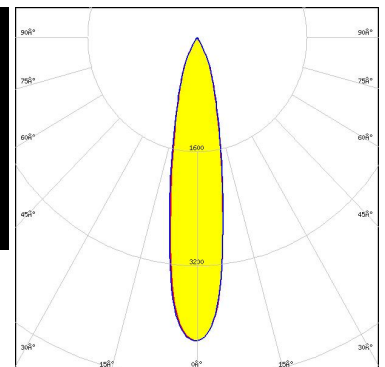
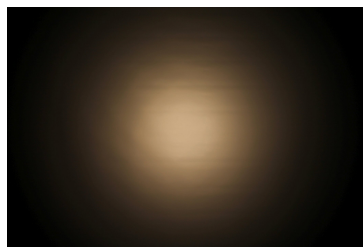
LED CMT28xx
FWHM / FWTM 20.0° / 50.0°
Efficiency 85 %
Peak intensity 4.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 471 Typ L3



Light distribution files



LED CMT28xx
FWHM / FWTM 20.0° / 50.0°
Efficiency 85 %
Peak intensity 4.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12692_LENA-STD-BASE-CLL040



Light distribution files

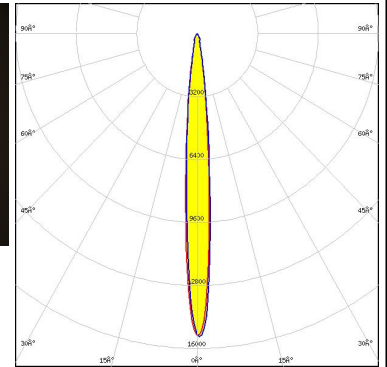
OPTICAL RESULTS (MEASURED):



LED CXA/B 15xx
 FWHM / FWTM 9.0° / 21.0°
 Efficiency 87 %
 Peak intensity 15.4 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 441 Typ L1



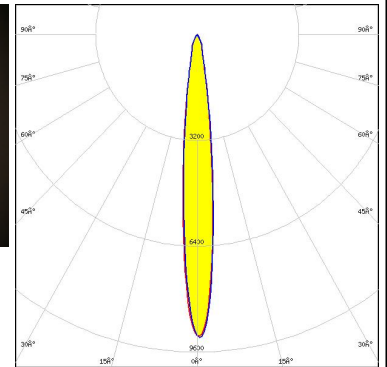
Light distribution files



LED CXA/B 15xx
 FWHM / FWTM 12.0° / 27.0°
 Efficiency 82 %
 Peak intensity 9.2 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 441 Typ L1



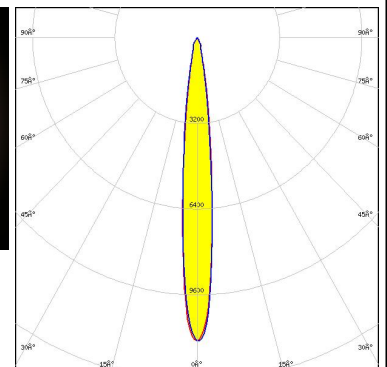
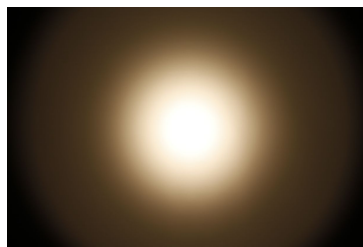
Light distribution files



LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 11.0° / 26.0°
 Efficiency 89 %
 Peak intensity 11.3 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 437 Typ L1

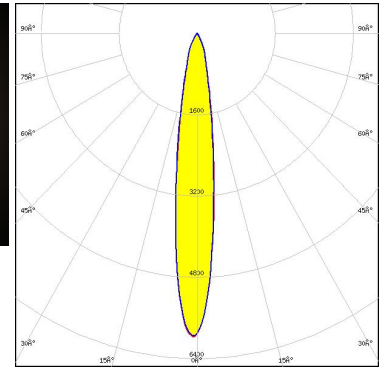


Light distribution files

OPTICAL RESULTS (MEASURED):



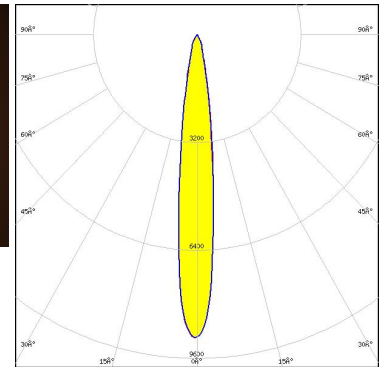
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM / FWTM 15.0° / 37.0°
Efficiency 84 %
Peak intensity 6 cd/m
LEDs/each optic 1
Light colour/type White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 437 Typ L1



Light distribution files



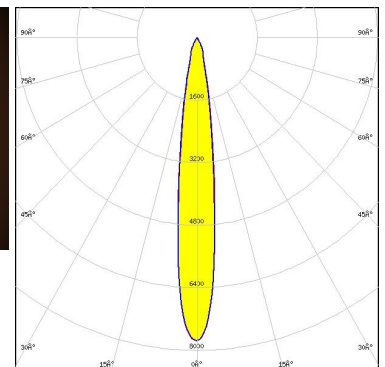
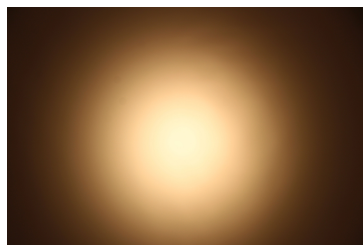
LED CXA/B 1830
FWHM / FWTM 13.0° / 30.0°
Efficiency 89 %
Peak intensity 8.9 cd/m
LEDs/each optic 1
Light colour/type White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 437 Typ L1



Light distribution files



LED CXA/B 1830
FWHM / FWTM 14.0° / 31.0°
Efficiency 84 %
Peak intensity 7.8 cd/m
LEDs/each optic 1
Light colour/type White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C14169_LENA-CLEAR-LENS
Bender Wirth: 437 Typ L1



Light distribution files

OPTICAL RESULTS (MEASURED):



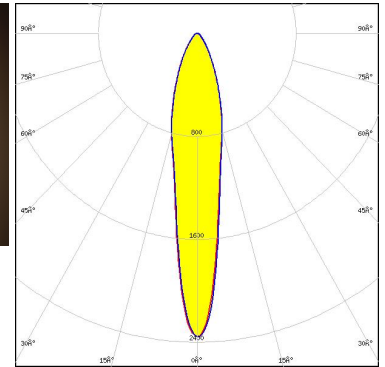
LED CXA/B 1830
 FWHM / FWTM 18.0° / 61.0°
 Efficiency 77 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C12231_LENA-FRESNEL

Bender Wirth: 437 Typ L1



Light distribution files



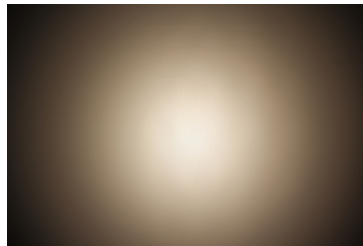
LED CHI3030 19W
 FWHM / FWTM 21.0° / 53.0°
 Efficiency 83 %
 Peak intensity 3.5 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29

C11996_LENA-LENS

Bender Wirth: 468 Typ L3



Light distribution files



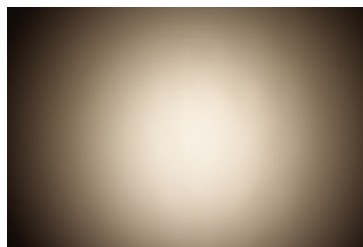
LED CHI3030 29W
 FWHM / FWTM 28.0° / 59.0°
 Efficiency 82 %
 Peak intensity 2.5 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29

C11996_LENA-LENS

Bender Wirth: 468 Typ L3

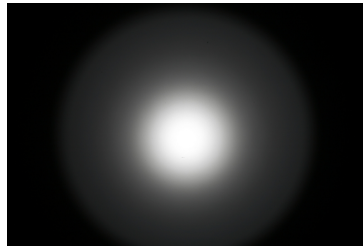


Light distribution files

OPTICAL RESULTS (MEASURED):

LITEON

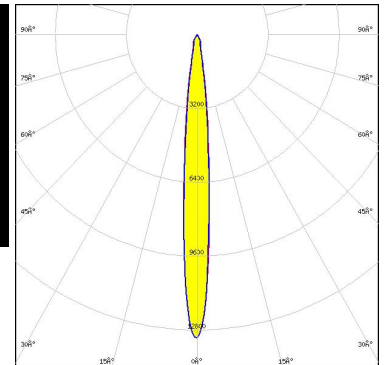
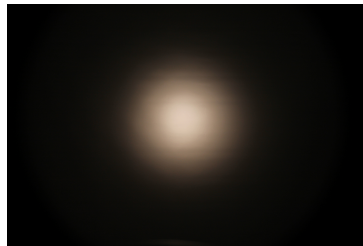
LED LTPL-M036
FWHM / FWTM 9.0° / 24.0°
Efficiency 77 %
Peak intensity 13.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13186_LENA-STD-BASE-CXA15



Light distribution files

LUMILEDS

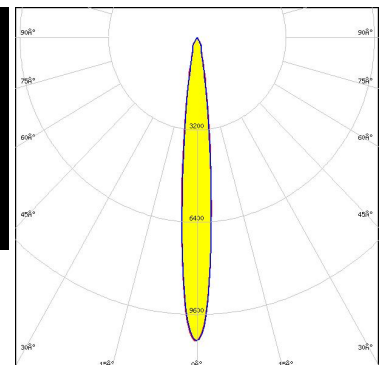
LED LUXEON CoB 1204HD
FWHM / FWTM 10.0° / 23.0°
Efficiency 85 %
Peak intensity 13.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C11981_LENA-STD-BASE-COB-L110



Light distribution files

LUMILEDS

LED LUXEON CoB 1205HD
FWHM / FWTM 26.5° / 11.6°
Efficiency 85 %
Peak intensity 10.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C11981_LENA-STD-BASE-COB-L110

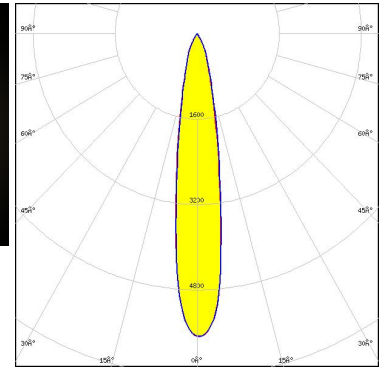
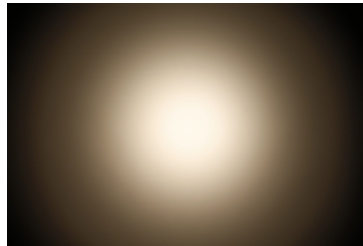


Light distribution files

OPTICAL RESULTS (MEASURED):



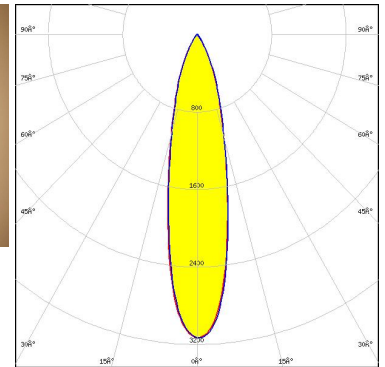
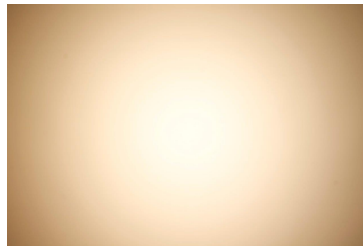
LED LUXEON CoB 1211
FWHM / FWTM 17.0° / 41.0°
Efficiency 87 %
Peak intensity 6.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 431 Typ L3



Light distribution files



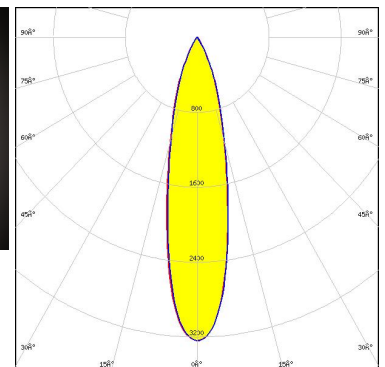
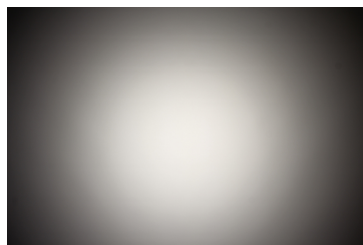
LED LUXEON CoB 1211
FWHM / FWTM 19.0° / 47.0°
Efficiency 82 %
Peak intensity 4.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS
 Bender Wirth: 431 Typ L3



Light distribution files



LED LUXEON CoB 1213/1216/1812
FWHM / FWTM 24.0° / 52.0°
Efficiency 82 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS

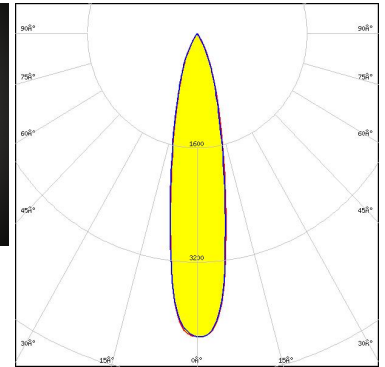
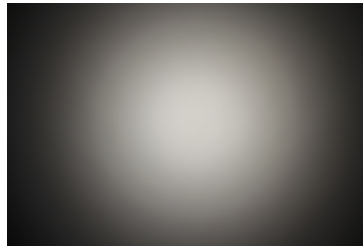


Light distribution files

OPTICAL RESULTS (MEASURED):



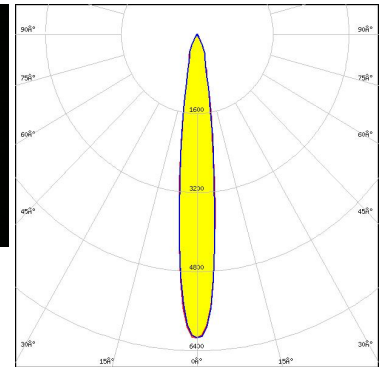
LED LUXEON CoB 1213/1216/1812
FWHM / FWTM 21.0° / 49.0°
Efficiency 87 %
Peak intensity 4.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12692_LENA-STD-BASE-CLL040



Light distribution files



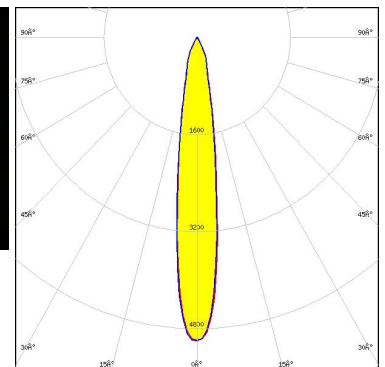
LED LUXEON K12
FWHM / FWTM 14.0° / 39.0°
Efficiency 75 %
Peak intensity 6.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12924_LENA-STD-BASE-LUXEON-K
 C11996_LENA-LENS



Light distribution files



LED LUXEON K16
FWHM / FWTM 15.0° / 40.0°
Efficiency 73 %
Peak intensity 5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12924_LENA-STD-BASE-LUXEON-K
 C11996_LENA-LENS

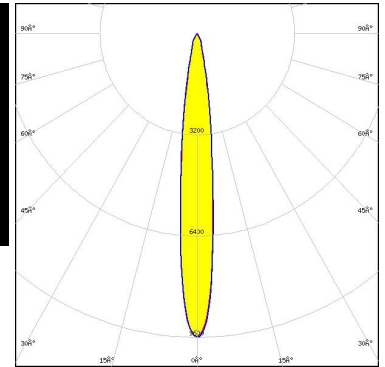


Light distribution files

OPTICAL RESULTS (MEASURED):



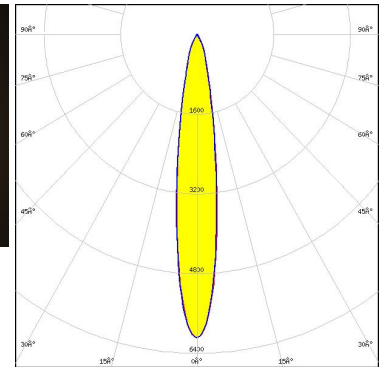
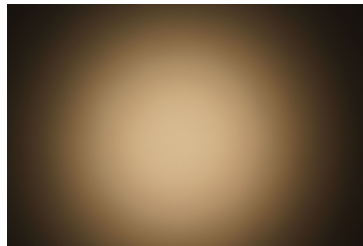
LED CDM-14 (Dim-To-Warm)
FWHM / FWTM 13.0° / 29.0°
Efficiency 89 %
Peak intensity 9.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 491 Typ L2



Light distribution files



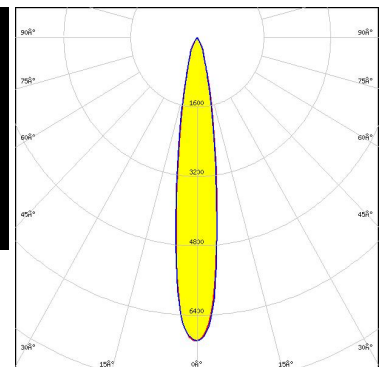
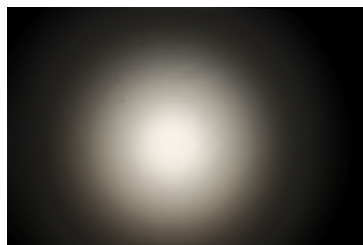
LED CDM-14 (Dim-To-Warm)
FWHM / FWTM 16.0° / 37.0°
Efficiency 84 %
Peak intensity 6.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 491 Typ L2



Light distribution files



LED CDM-18 (Dim-To-Warm)
FWHM / FWTM 16.0° / 36.0°
Efficiency 89 %
Peak intensity 7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 491 Typ L2

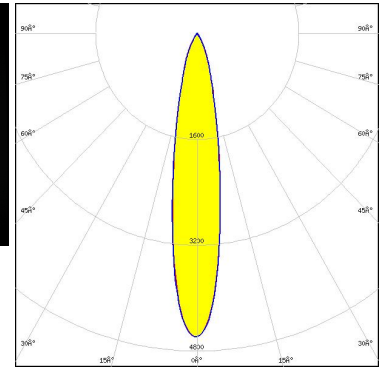


Light distribution files

OPTICAL RESULTS (MEASURED):



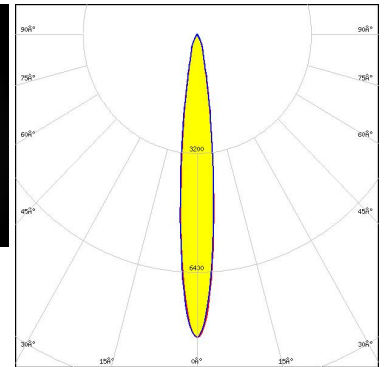
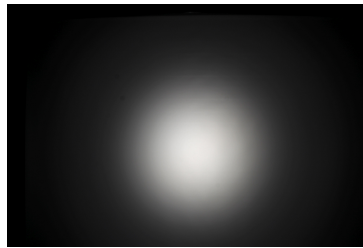
LED CDM-18 (Dim-To-Warm)
FWHM / FWTM 19.0° / 45.0°
Efficiency 84 %
Peak intensity 4.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 491 Typ L2



Light distribution files



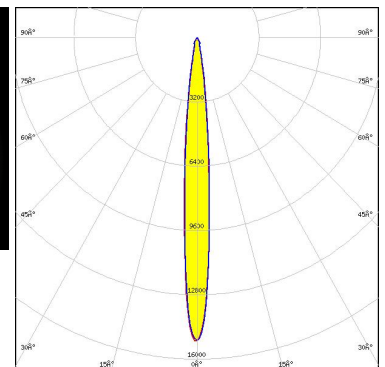
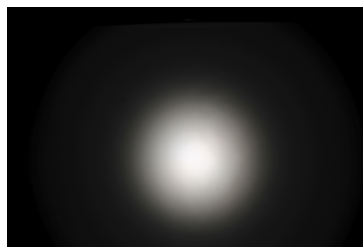
LED CDM-9 (Dim-To-Warm)
FWHM / FWTM 13.0° / 30.0°
Efficiency 84 %
Peak intensity 8.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 490 Typ L1



Light distribution files



LED CDM-9 (Dim-To-Warm)
FWHM / FWTM 10.0° / 22.0°
Efficiency 89 %
Peak intensity 15.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 490 Typ L1

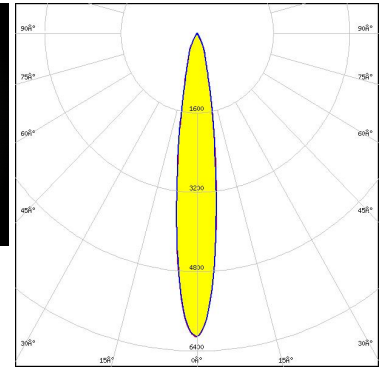


Light distribution files

OPTICAL RESULTS (MEASURED):



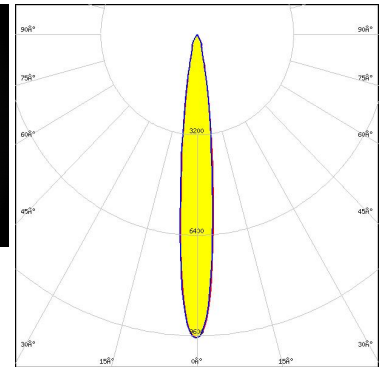
LED CTM-14 (Tunable White)
 FWHM / FWTM 15.0° / 36.0°
 Efficiency 83 %
 Peak intensity 6.1 cd/m
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 442 Typ L3



Light distribution files



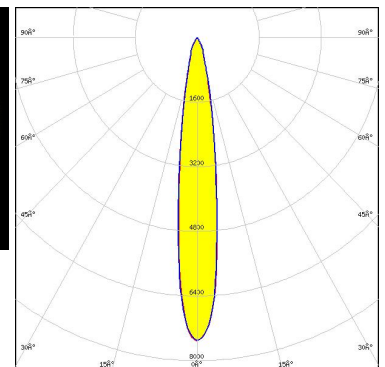
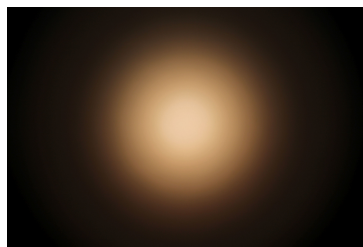
LED CTM-14 (Tunable White)
 FWHM / FWTM 13.0° / 29.0°
 Efficiency 89 %
 Peak intensity 9.7 cd/m
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 442 Typ L3



Light distribution files



LED CTM-18 (Tunable White)
 FWHM / FWTM 15.0° / 34.0°
 Efficiency 89 %
 Peak intensity 7.5 cd/m
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 442 Typ L3

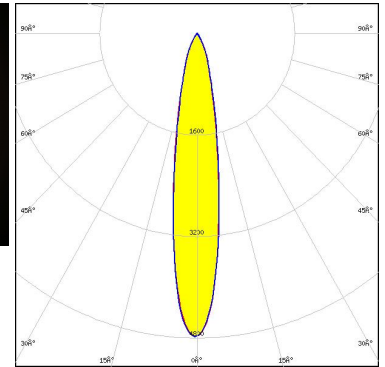


Light distribution files

OPTICAL RESULTS (MEASURED):



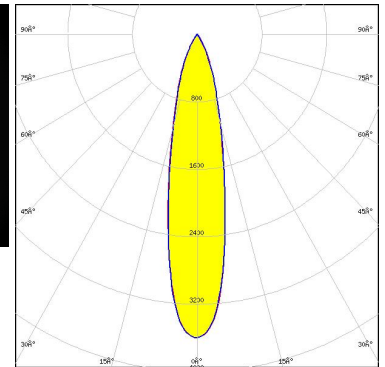
LED CTM-18 (Tunable White)
FWHM / FWTM 18.0° / 44.0°
Efficiency 84 %
Peak intensity 4.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13867_LENA-STD-BASE-VERO29
C11996_LENA-LENS
Bender Wirth: 442 Typ L3



Light distribution files



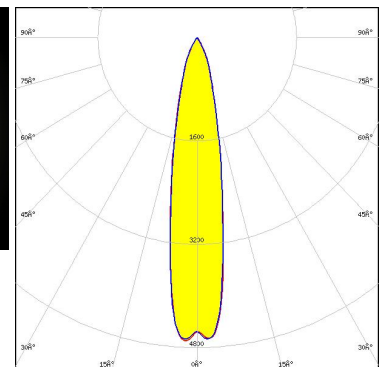
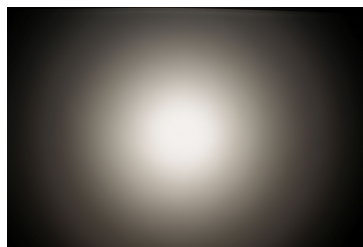
LED CTM-22 (Tunable White)
FWHM / FWTM 22.0° / 51.0°
Efficiency 84 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13867_LENA-STD-BASE-VERO29
C11996_LENA-LENS
Bender Wirth: 494 Typ L3



Light distribution files



LED CTM-22 (Tunable White)
FWHM / FWTM 20.0° / 47.0°
Efficiency 89 %
Peak intensity 4.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13867_LENA-STD-BASE-VERO29
Bender Wirth: 494 Typ L3



Light distribution files

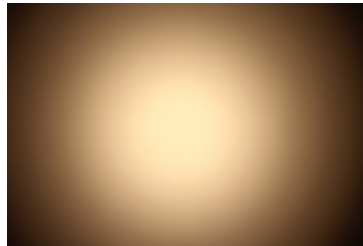
OPTICAL RESULTS (MEASURED):



LED CxM-22 (28x28)
FWHM / FWTM 23.0° / 56.0°
Efficiency 81 %
Peak intensity 3.8 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C12692_LENA-STD-BASE-CLL040



Light distribution files

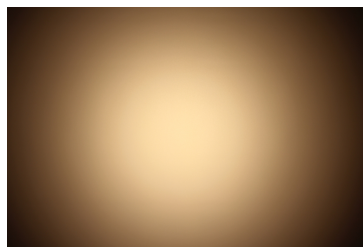


LED CxM-22 (28x28)
FWHM / FWTM 25.0° / 56.0°
Efficiency 76 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C12692_LENA-STD-BASE-CLL040

C11996_LENA-LENS



Light distribution files



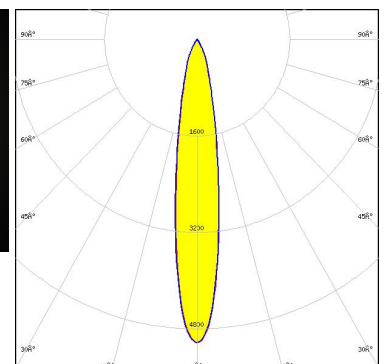
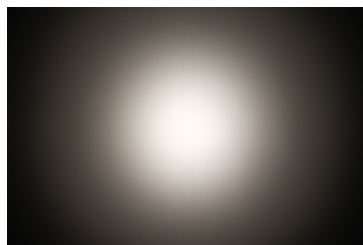
LED COB J-Type
FWHM / FWTM 17.0° / 42.0°
Efficiency 84 %
Peak intensity 5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 463 Typ L2

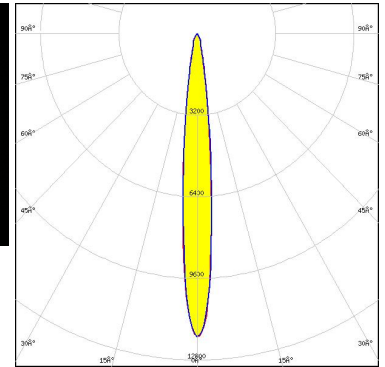


Light distribution files

OPTICAL RESULTS (MEASURED):



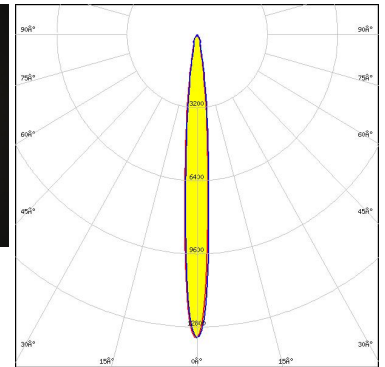
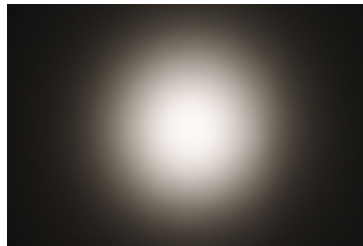
LED COB L-Type (LES 11)
FWHM / FWTM 11.0° / 25.0°
Efficiency 89 %
Peak intensity 11.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 438 Typ L1



Light distribution files



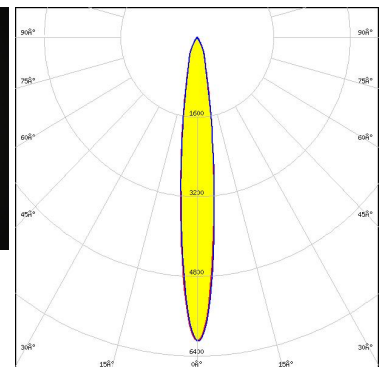
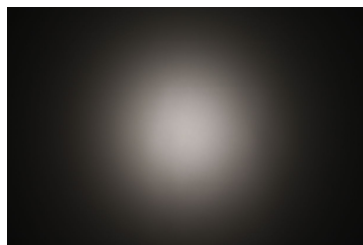
LED COB L-Type (LES 9)
FWHM / FWTM 9.0° / 23.0°
Efficiency 84 %
Peak intensity 13.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 438 Typ L1



Light distribution files



LED COB L-Type (LES 9)
FWHM / FWTM 13.0° / 34.0°
Efficiency 78 %
Peak intensity 6.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 438 Typ L1

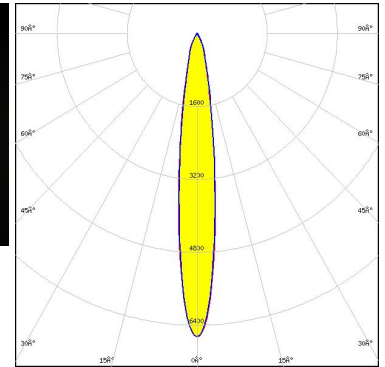


Light distribution files

OPTICAL RESULTS (MEASURED):



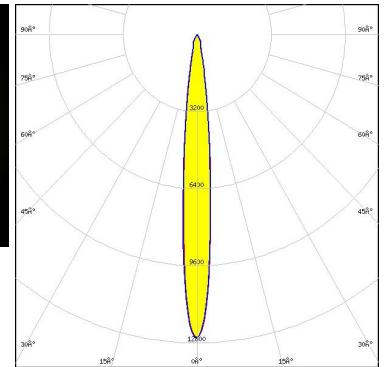
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM / FWTM 14.0° / 35.0°
 Efficiency 84 %
 Peak intensity 6.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 498 Typ L2



Light distribution files



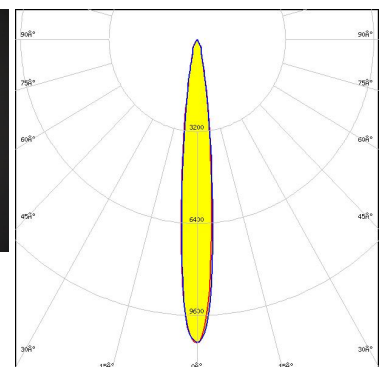
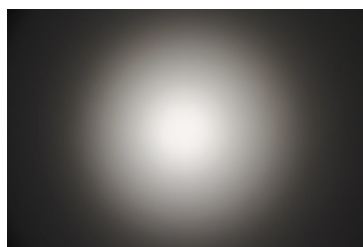
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM / FWTM 11.0° / 25.0°
 Efficiency 89 %
 Peak intensity 12.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 498 Typ L2



Light distribution files



LED Soleriq S13
 FWHM / FWTM 12.0° / 27.0°
 Efficiency 87 %
 Peak intensity 11 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 437 Typ L1



Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

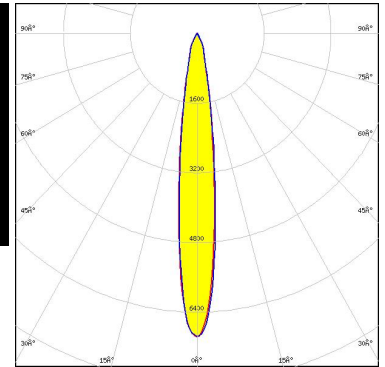
LED Soleriq S13
FWHM / FWTM 14.0° / 33.0°
Efficiency 82 %
Peak intensity 7 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 437 Typ L1



Light distribution files

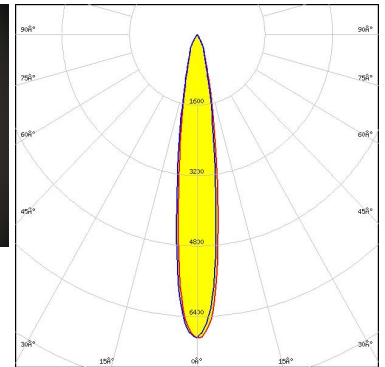
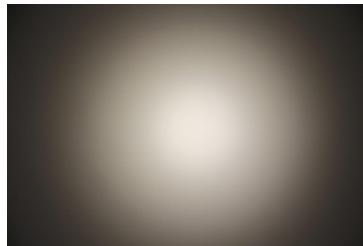
OSRAM
Opto Semiconductors

LED Soleriq S19
FWHM / FWTM 15.0° / 36.0°
Efficiency 87 %
Peak intensity 6.9 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29

Bender Wirth: 462 Typ L3



Light distribution files

OSRAM
Opto Semiconductors

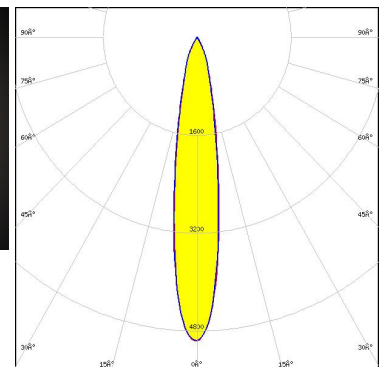
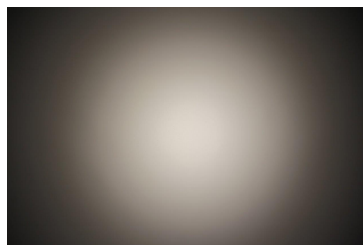
LED Soleriq S19
FWHM / FWTM 17.0° / 42.0°
Efficiency 82 %
Peak intensity 5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29

C11996_LENA-LENS

Bender Wirth: 462 Typ L3



Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

LED Fortimo SLM L13 CoB
FWHM / FWTM 14.0° / 35.0°
Efficiency 79 %
Peak intensity 6.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS



Light distribution files

PHILIPS

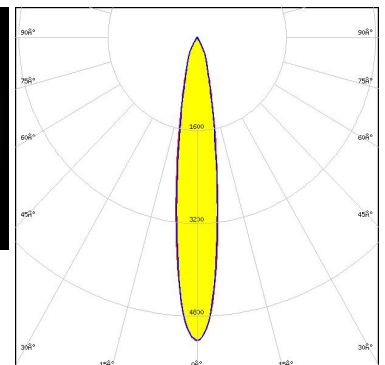
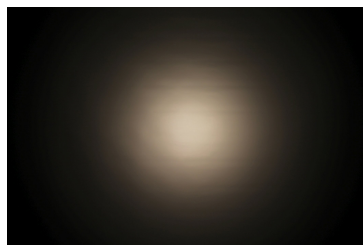
LED Fortimo SLM L13 CoB
FWHM / FWTM 13.0° / 31.0°
Efficiency 85 %
Peak intensity 8.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12292_LENA-STD-BASE-MEZ



Light distribution files

PHILIPS

LED Fortimo SLM L15 CoB
FWHM / FWTM 16.0° / 40.0°
Efficiency 79 %
Peak intensity 5.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS

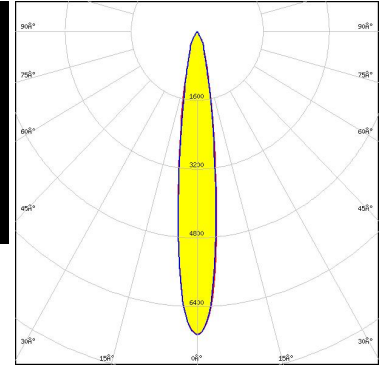


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

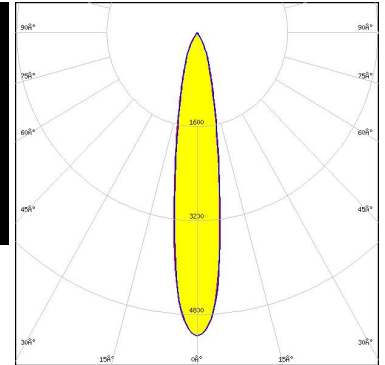
LED Fortimo SLM L15 CoB
FWHM / FWTM 15.0° / 35.0°
Efficiency 85 %
Peak intensity 7.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12292_LENA-STD-BASE-MEZ



Light distribution files

PHILIPS

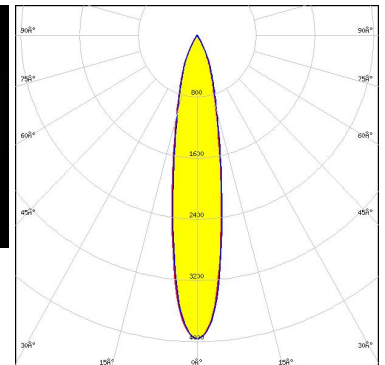
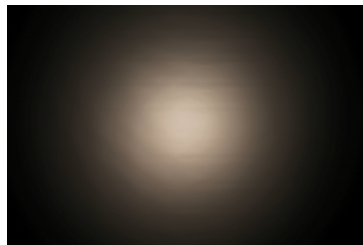
LED Fortimo SLM L19 CoB
FWHM / FWTM 18.0° / 44.0°
Efficiency 85 %
Peak intensity 5.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12692_LENA-STD-BASE-CLL040



Light distribution files

PHILIPS

LED Fortimo SLM L19 CoB
FWHM / FWTM 19.0° / 49.0°
Efficiency 79 %
Peak intensity 4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS

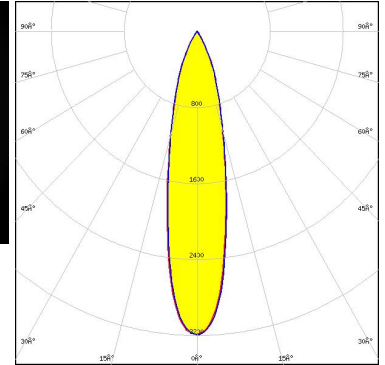


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

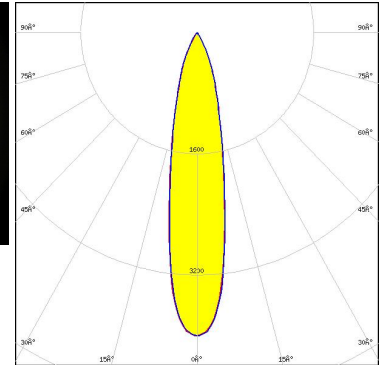
LED Fortimo SLM L23 CoB
 FWHM / FWTM 23.0° / 53.0°
 Efficiency 79 %
 Peak intensity 3.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



Light distribution files

PHILIPS

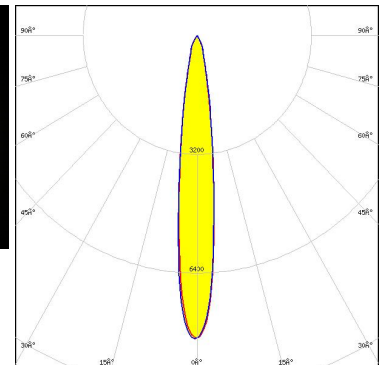
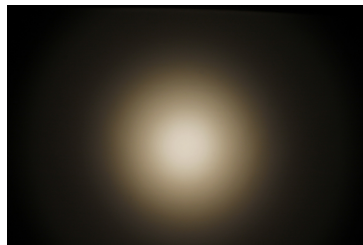
LED Fortimo SLM L23 CoB
 FWHM / FWTM 21.0° / 51.0°
 Efficiency 85 %
 Peak intensity 4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040



Light distribution files

SAMSUNG

LED LC016D / LC019D / LC026D / LC033D
 FWHM / FWTM 14.0° / 32.0°
 Efficiency 88 %
 Peak intensity 8.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030

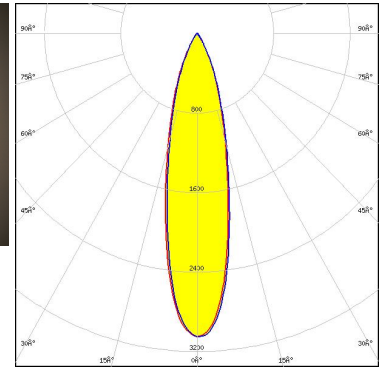
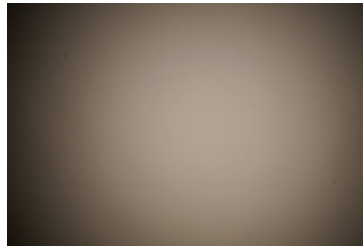


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

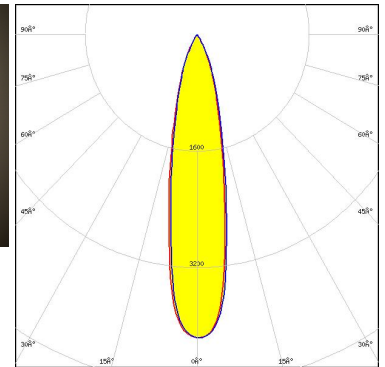
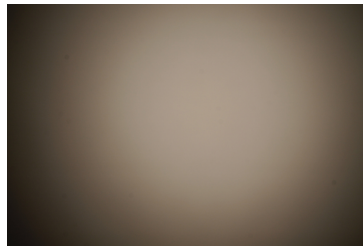
LED LC040D / LC060D / LC080D
 FWHM / FWTM 25.0° / 54.0°
 Efficiency 82 %
 Peak intensity 3.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



Light distribution files

SAMSUNG

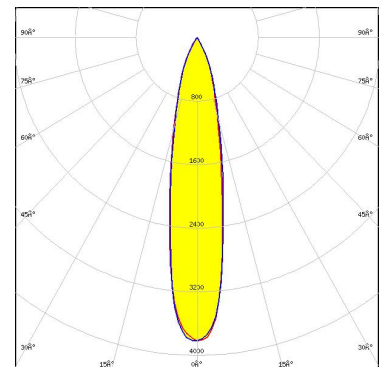
LED LC040D / LC060D / LC080D
 FWHM / FWTM 22.0° / 49.0°
 Efficiency 87 %
 Peak intensity 4.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040



Light distribution files

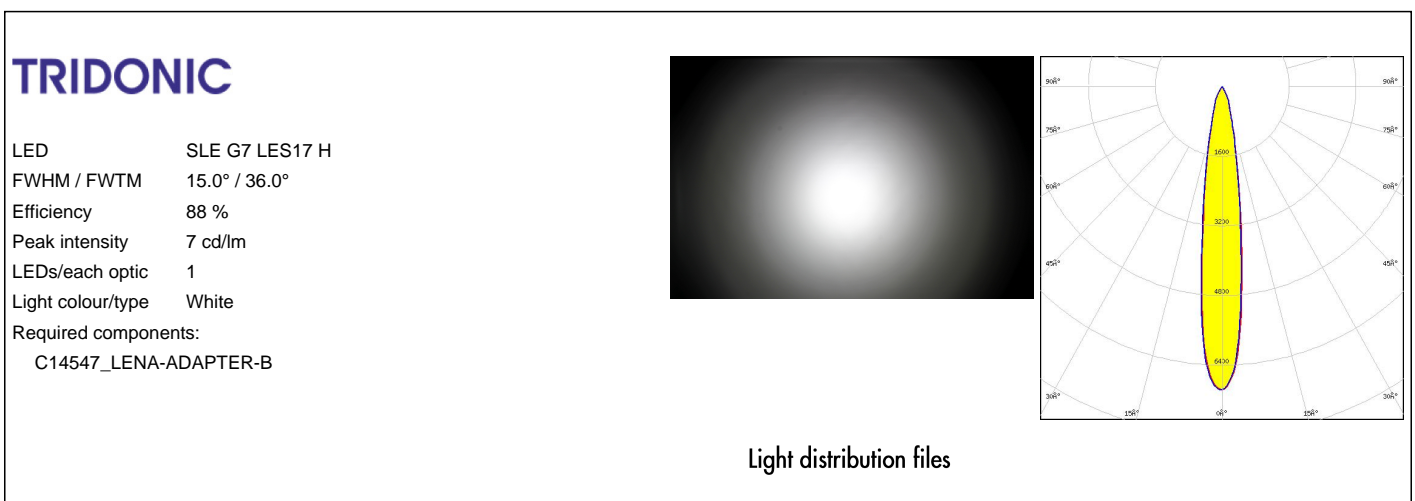
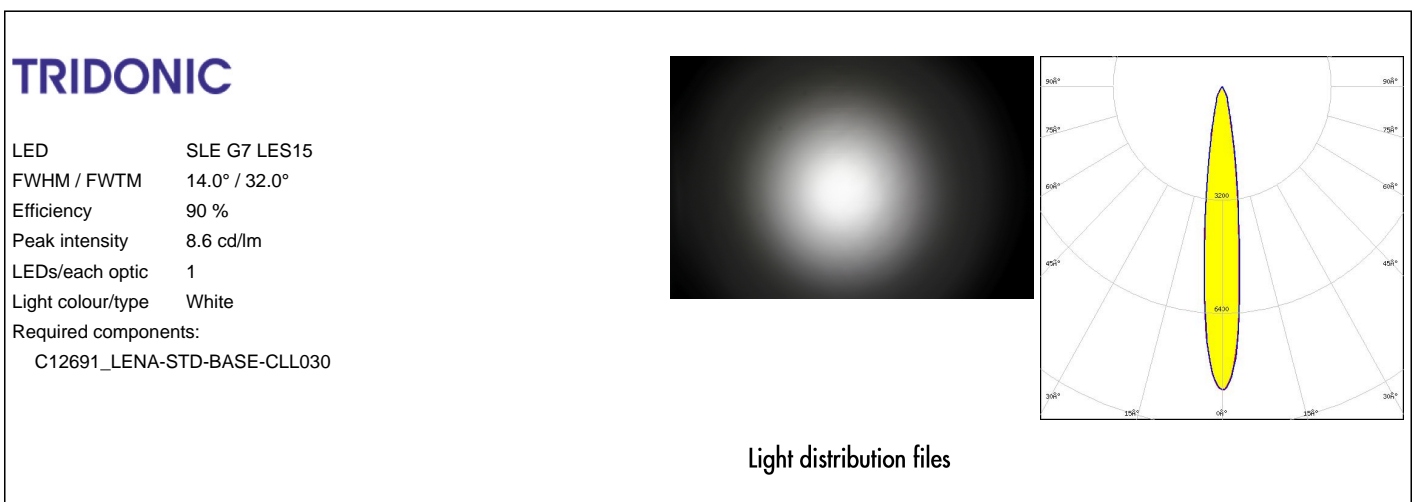
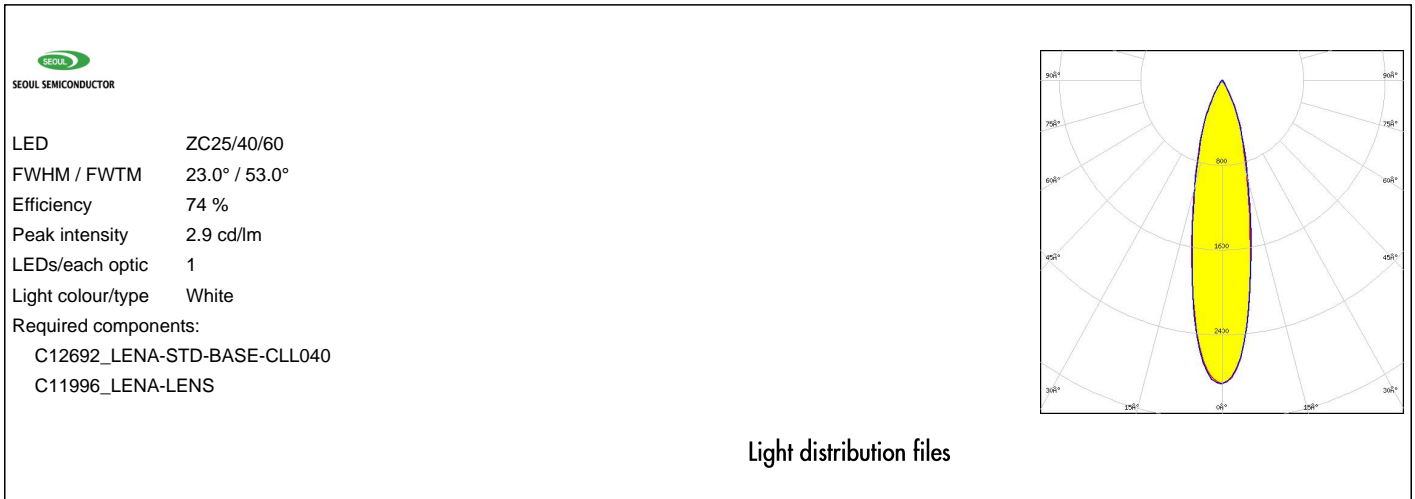


LED ZC25/40/60
 FWHM / FWTM 21.0° / 50.0°
 Efficiency 80 %
 Peak intensity 3.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040



Light distribution files

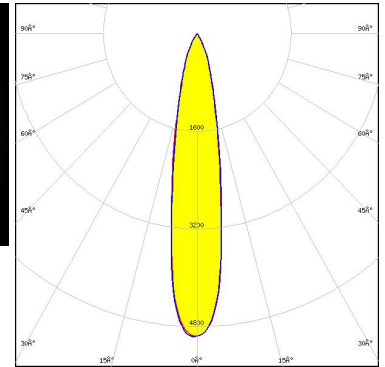
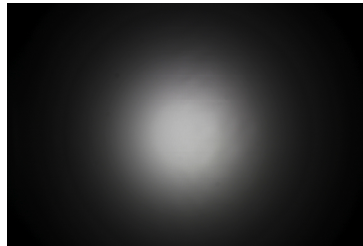
OPTICAL RESULTS (MEASURED):



OPTICAL RESULTS (MEASURED):

TRIDONIC

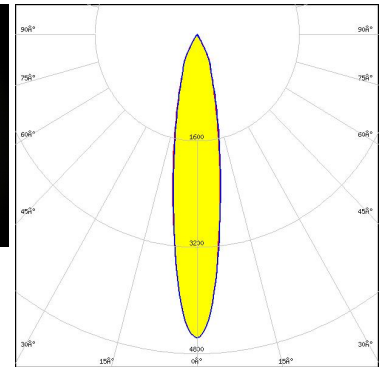
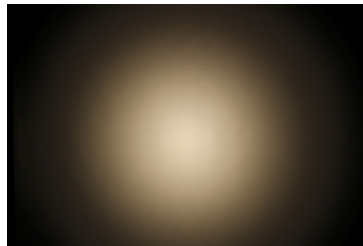
LED SLE G7 LES21 H
FWHM / FWTM 19.0° / 46.0°
Efficiency 88 %
Peak intensity 5 cd/m
LEDs/each optic 1
Light colour/type White
Required components:
C14547_LENA-ADAPTER-B



Light distribution files

XICATO

LED XOB 14.5 mm
FWHM / FWTM 19.0° / 51.0°
Efficiency 88 %
Peak intensity 4.6 cd/m
LEDs/each optic 1
Light colour/type White
Required components:
C12691_LENA-STD-BASE-CLL030



Light distribution files

OPTICAL RESULTS (SIMULATED):

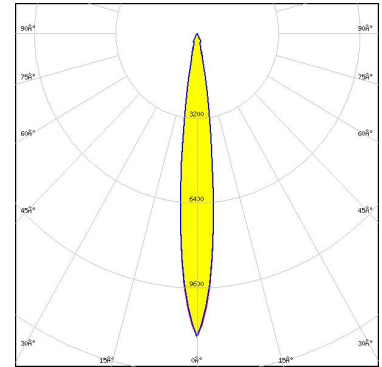


LED V10 Gen7
 FWHM / FWTM 13.0° / 25.0°
 Efficiency 89 %
 Peak intensity 11.5 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

Bender Wirth: 486 Typ L1



Light distribution files



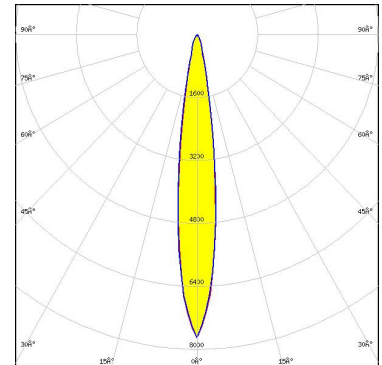
LED V10 Gen7
 FWHM / FWTM 15.0° / 30.0°
 Efficiency 79 %
 Peak intensity 7.7 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 486 Typ L1



Light distribution files

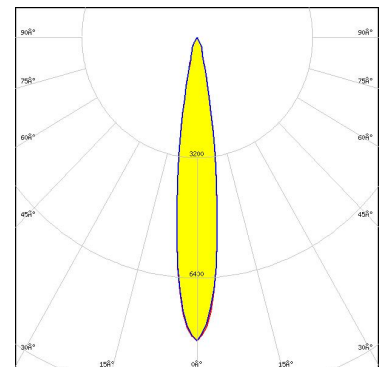


LED V13 Gen7
 FWHM / FWTM 16.0° / 31.0°
 Efficiency 88 %
 Peak intensity 8.1 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

Bender Wirth: 477 Typ L1

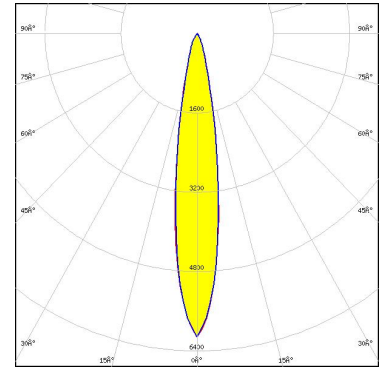


Light distribution files

OPTICAL RESULTS (SIMULATED):



LED V13 Gen7
FWHM / FWTM 17.0° / 35.0°
Efficiency 81 %
Peak intensity 6.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS

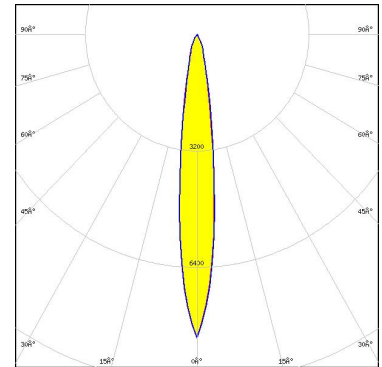


Light distribution files

Bender Wirth: 477 Typ L1



LED V13 Gen7
FWHM / FWTM 14.0° / 32.0°
Efficiency 88 %
Peak intensity 8.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

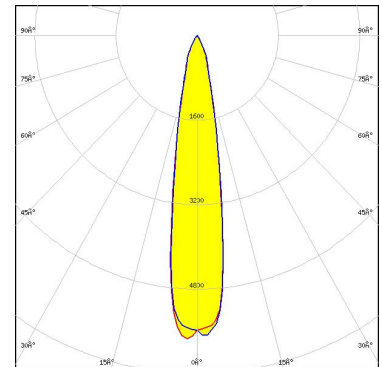


Light distribution files

IDEAL: 50-2103CT + 50-2100LN




LED V22 Gen7
FWHM / FWTM 18.0° / 41.0°
Efficiency 93 %
Peak intensity 5.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13867_LENA-STD-BASE-VERO29





Light distribution files

Bender Wirth: 431 Typ L3


OPTICAL RESULTS (SIMULATED):

	
LED	CxM-14 (19x19)
FWHM / FWTM	14.0° / 31.0°
Efficiency	87 %
Peak intensity	8.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components: C13868_LENA-STD-BASE-VERO13-18	
Bender Wirth: 433 Typ L1	Light distribution files

	
LED	CxM-14 (19x19)
FWHM / FWTM	17.0° / 41.0°
Efficiency	82 %
Peak intensity	5.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components: C13868_LENA-STD-BASE-VERO13-18 C11996_LENA-LENS	
Bender Wirth: 433 Typ L1	Light distribution files

	
LED	CxM-9 (13.5x13.5)
FWHM / FWTM	10.0° / 22.0°
Efficiency	87 %
Peak intensity	14.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components: C13868_LENA-STD-BASE-VERO13-18	
Bender Wirth: 434 Typ L1	Light distribution files


OPTICAL RESULTS (SIMULATED):


	
LED	CxM-9 (13.5x13.5)
FWHM / FWTM	13.0° / 32.0°
Efficiency	82 %
Peak intensity	7.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C13868_LENA-STD-BASE-VERO13-18	
C11996_LENA-LENS	
Light distribution files	
Bender Wirth: 434 Typ L1	

	
LED	ZC12/18
FWHM / FWTM	14.0° / 31.0°
Efficiency	87 %
Peak intensity	8.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C13868_LENA-STD-BASE-VERO13-18	
Bender Wirth: 433 Typ L1	

	
LED	ZC12/18
FWHM / FWTM	17.0° / 41.0°
Efficiency	82 %
Peak intensity	5.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C13868_LENA-STD-BASE-VERO13-18	
C11996_LENA-LENS	
Bender Wirth: 433 Typ L1	

OPTICAL RESULTS (SIMULATED):

 SEOL SEMICONDUCTOR	
LED	ZC4/6
FWHM / FWTM	10.0° / 22.0°
Efficiency	87 %
Peak intensity	14.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components: C13868_LENA-STD-BASE-VERO13-18	
Bender Wirth: 434 Typ L1	

 SEOL SEMICONDUCTOR	
LED	ZC4/6
FWHM / FWTM	13.0° / 32.0°
Efficiency	82 %
Peak intensity	7.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components: C13868_LENA-STD-BASE-VERO13-18 C11996_LENA-LENS	
Bender Wirth: 434 Typ L1	

GENERAL INFORMATION:

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

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

MATERIALS:

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

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

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