

LENA-M

~20° medium beam

SPECIFICATION:

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

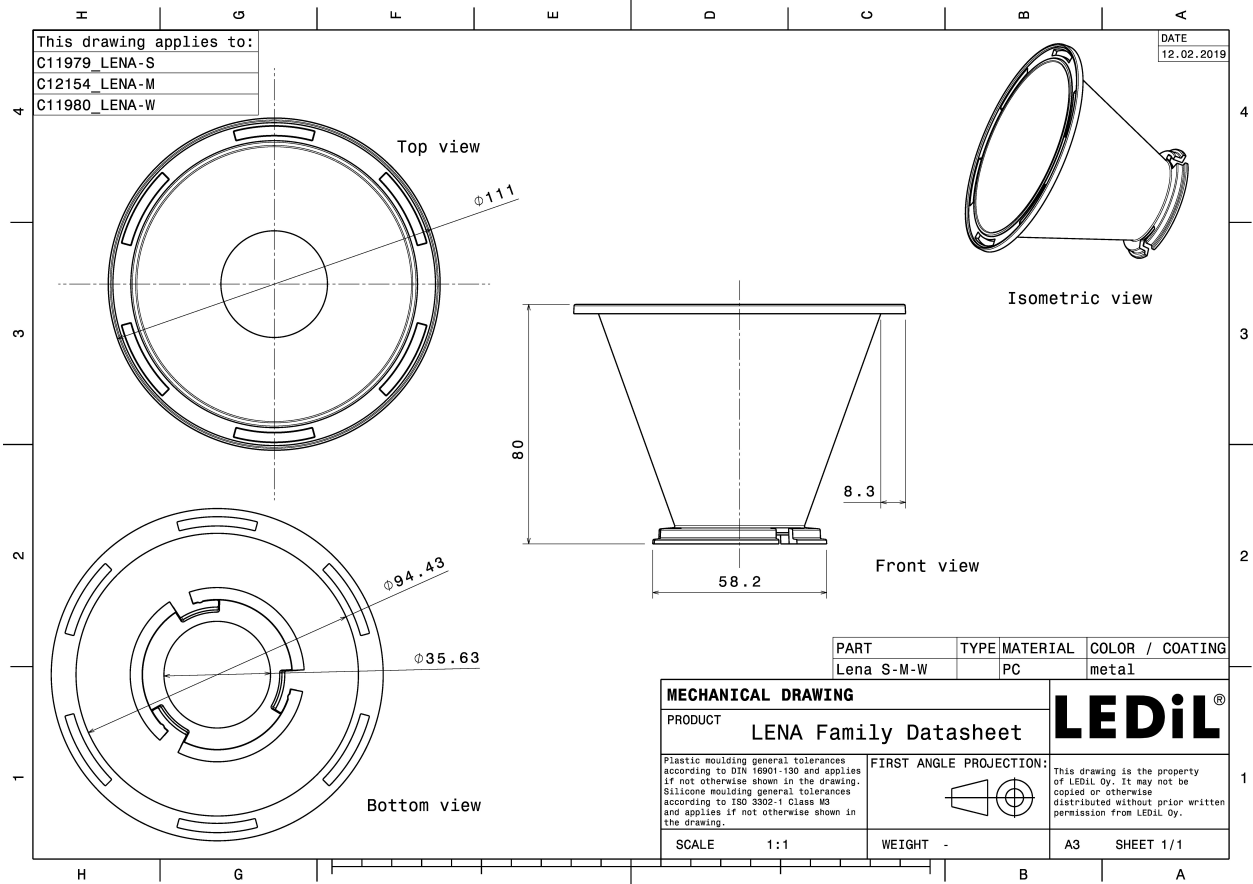
MATERIALS:

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



ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C12154_LENA-M » Box size: 400 x 280 x 380 mm	60	60	60	4.0



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

OPTICAL RESULTS (MEASURED):



LED BXRA ES Rectangle
FWHM / FWTM 20.0° / 44.0°
Efficiency 77 %
LEDs/each optic 1
Light colour/type White
Required components:
C12153_LENA-STD-BASE-BXRA
C11996_LENA-LENS

[Light distribution files](#)

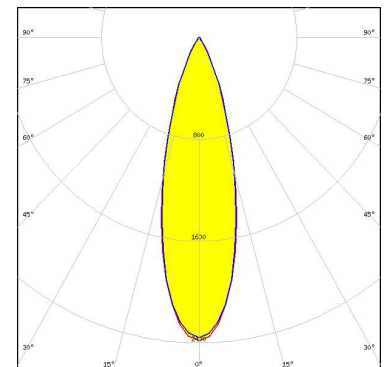


LED BXRA ES Rectangle
FWHM / FWTM 19.0° / 36.0°
Efficiency 83 %
LEDs/each optic 1
Light colour/type White
Required components:
C12153_LENA-STD-BASE-BXRA

[Light distribution files](#)



LED BXRA RS
FWHM / FWTM 29.0°
Efficiency 79 %
LEDs/each optic 1
Light colour/type White
Required components:
C12229_LENA-STD-BASE-RS
C11996_LENA-LENS



[Light distribution files](#)

OPTICAL RESULTS (MEASURED):

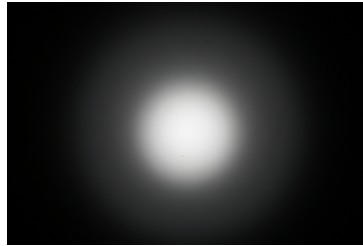


LED BXRA RS
FWHM / FWTM 28.0°
Efficiency 84 %
LEDs/each optic 1
Light colour/type White
Required components:
C12229_LENA-STD-BASE-RS

Light distribution files



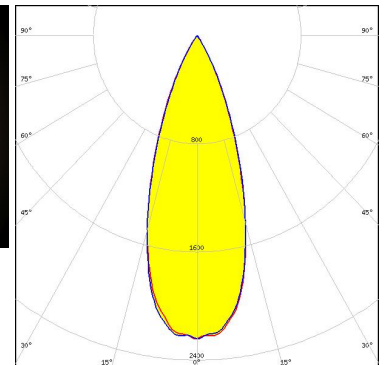
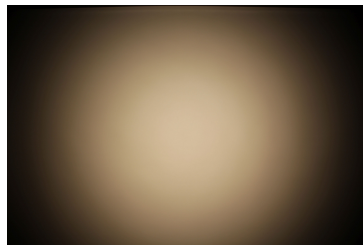
LED V10 Gen6
FWHM / FWTM 18.0° / 40.0°
Efficiency 75 %
Peak intensity 5.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13186_LENA-STD-BASE-CXA15
C11996_LENA-LENS



Light distribution files



LED Vero SE 29
FWHM / FWTM 36.0° / 59.0°
Efficiency 87 %
Peak intensity 2.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C15083_LENA-STD-BASE-VERO29

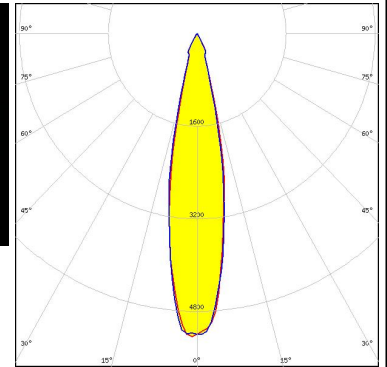


Light distribution files

OPTICAL RESULTS (MEASURED):



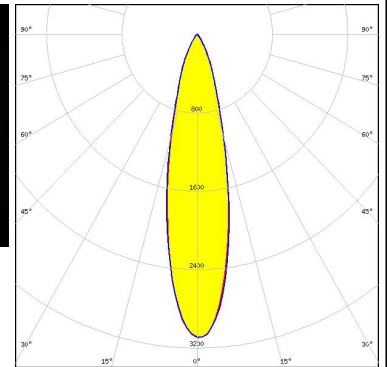
LED VERO13
FWHM / FWTM 21.0° / 36.0°
Efficiency 88 %
Peak intensity 5.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18



Light distribution files



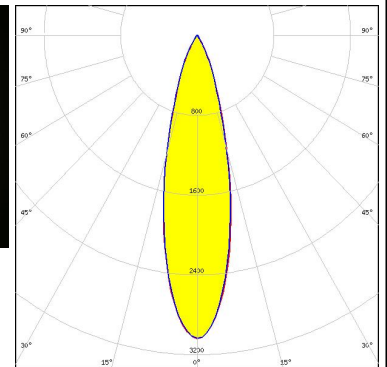
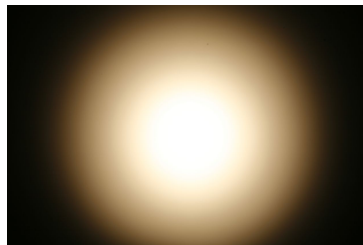
LED VERO13
FWHM / FWTM 24.0° / 53.0°
Efficiency 81 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS



Light distribution files



LED VERO18
FWHM / FWTM 26.0° / 52.0°
Efficiency 81 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS

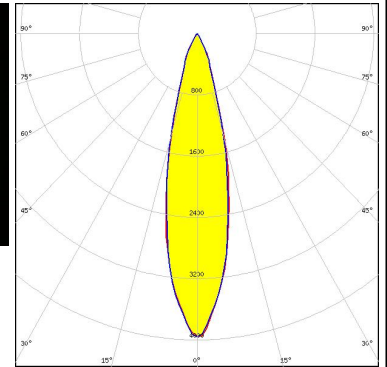


Light distribution files

OPTICAL RESULTS (MEASURED):



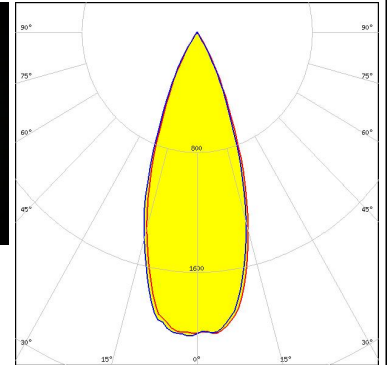
LED VERO18
FWHM / FWTM 24.0° / 59.0°
Efficiency 86 %
Peak intensity 4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18



Light distribution files



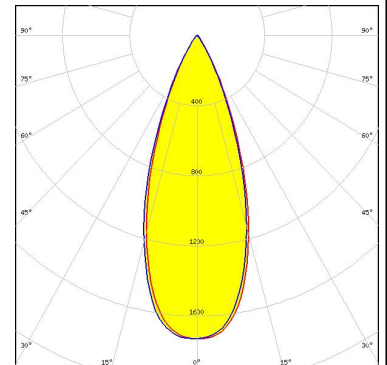
LED VERO29
FWHM / FWTM 38.0° / 60.0°
Efficiency 82 %
Peak intensity 2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13867_LENA-STD-BASE-VERO29



Light distribution files



LED VERO29
FWHM / FWTM 38.0° / 62.0°
Efficiency 77 %
Peak intensity 1.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS



Light distribution files

OPTICAL RESULTS (MEASURED):

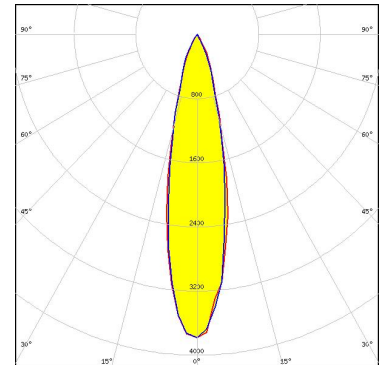
CITIZEN

LED CL-L340
FWHM / FWTM 22.0° / 44.0°
Efficiency 83 %
Peak intensity 4.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C11995_LENA-STD-BASE-CL340

Light distribution files

CITIZEN

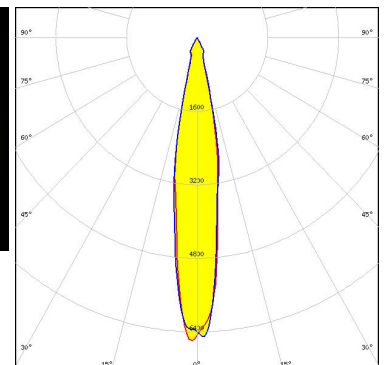
LED CL-L340
FWHM / FWTM 24.0° / 50.0°
Efficiency 78 %
Peak intensity 3.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C11995_LENA-STD-BASE-CL340
C11996_LENA-LENS



Light distribution files

CITIZEN

LED CLL02x/CLU02x (LES10)
FWHM / FWTM 17.0° / 31.0°
Efficiency 83 %
Peak intensity 6.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 434 Typ L1

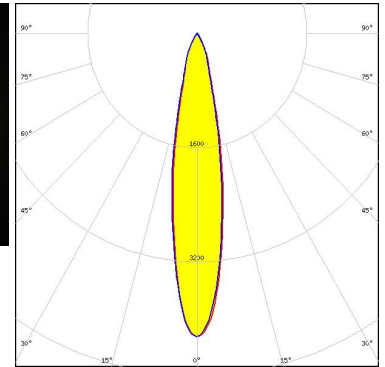


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

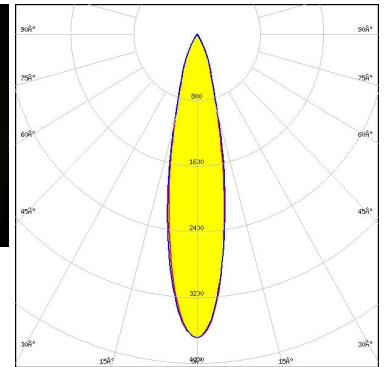
LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 20.0° / 44.0°
 Efficiency 78 %
 Peak intensity 4.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 434 Typ L1



Light distribution files

CITIZEN

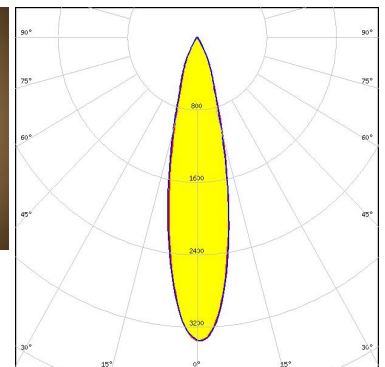
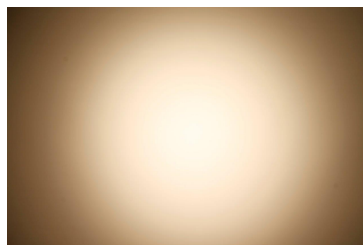
LED CLL03x/CLU03x
 FWHM / FWTM 22.0° / 48.0°
 Efficiency 78 %
 Peak intensity 3.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030
 C11996_LENA-LENS



Light distribution files

CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 23.0° / 50.0°
 Efficiency 78 %
 Peak intensity 3.4 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

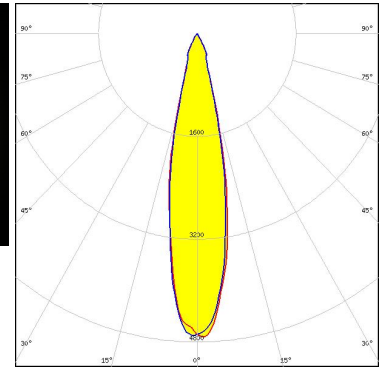


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

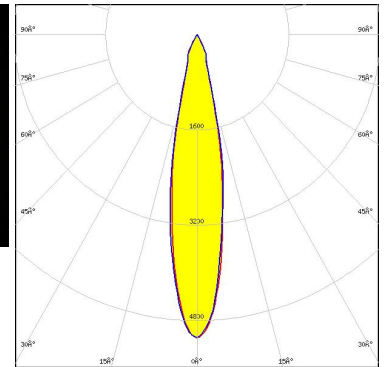
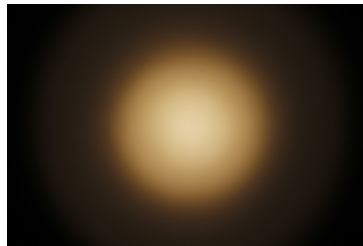
LED CLL03x/CLU03x
FWHM / FWTM 22.0° / 39.0°
Efficiency 83 %
Peak intensity 4.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 433 Typ L1



Light distribution files

CITIZEN

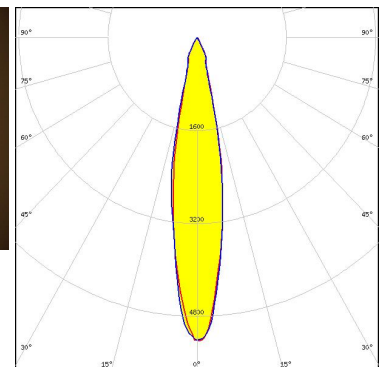
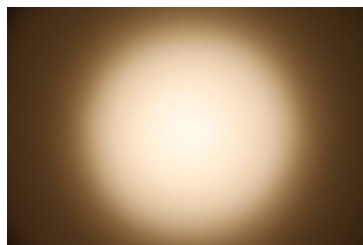
LED CLL03x/CLU03x
FWHM / FWTM 20.0° / 38.0°
Efficiency 83 %
Peak intensity 5.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12691_LENA-STD-BASE-CLL030



Light distribution files

CITIZEN

LED CLL03x/CLU03x
FWHM / FWTM 20.0° / 37.0°
Efficiency 81 %
Peak intensity 5.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
A.A.G. STUCCHI: 8101-G2 + S-8000-11

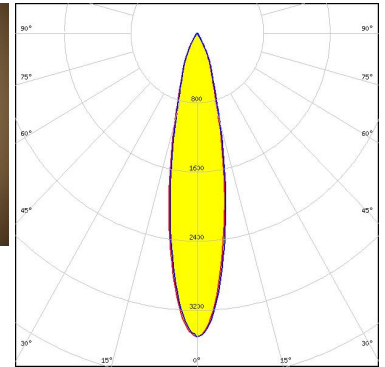
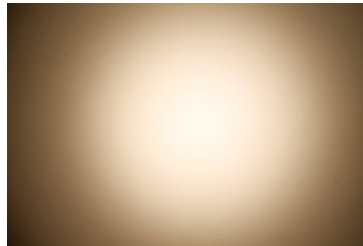


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

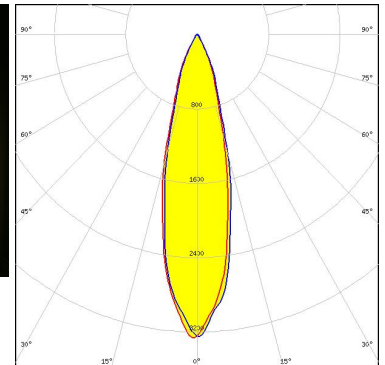
LED CLL03x/CLU03x
 FWHM / FWTM 22.0° / 49.0°
 Efficiency 76 %
 Peak intensity 3.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C11996_LENA-LENS
 A.A.G. STUCCHI: 8101-G2 + S-8000-11



Light distribution files

CITIZEN

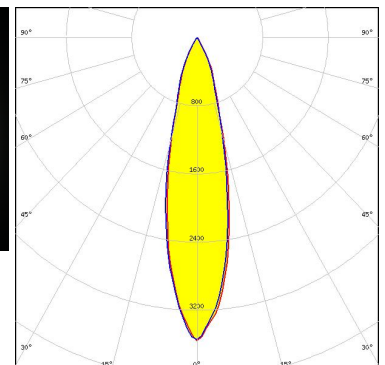
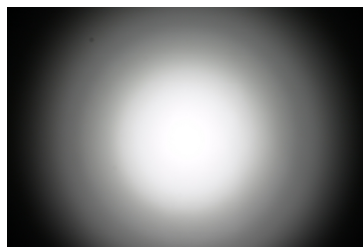
LED CLL04x/CLU04x
 FWHM / FWTM 26.0° / 53.0°
 Efficiency 88 %
 Peak intensity 3.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040



Light distribution files

CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 24.0° / 52.0°
 Efficiency 80 %
 Peak intensity 3.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 IDEAL: 50-2204CT + 50-2100LN



Light distribution files

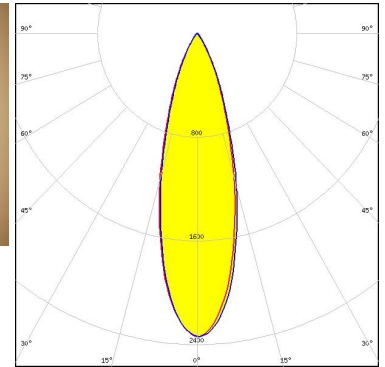
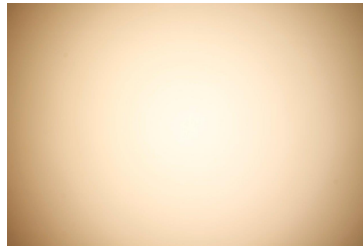
OPTICAL RESULTS (MEASURED):

CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 30.0° / 51.0°
 Efficiency 78 %
 Peak intensity 2.3 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



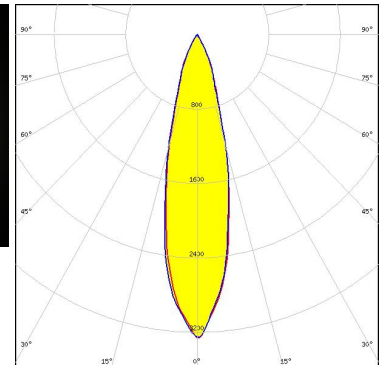
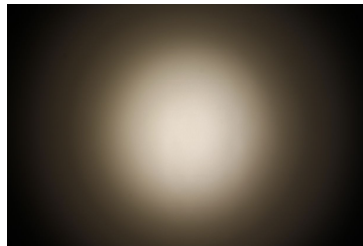
Light distribution files

CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 25.0° / 52.0°
 Efficiency 76 %
 Peak intensity 3.3 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

A.A.G. STUCCHI: 8102-G2 + S-8000-12



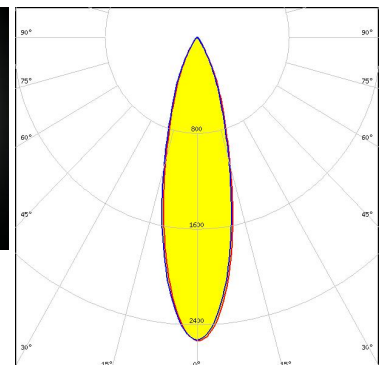
Light distribution files

CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 27.0° / 56.0°
 Efficiency 78 %
 Peak intensity 2.5 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C11996_LENA-LENS
 IDEAL: 50-2204CT + 50-2100LN

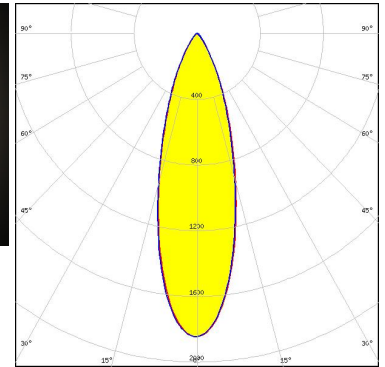
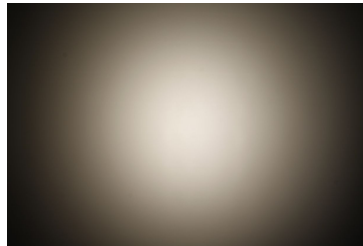


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 30.0° / 62.0°
 Efficiency 71 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C11996_LENA-LENS
 A.A.G. STUCCHI: 8102-G2 + S-8000-12



Light distribution files

CITIZEN

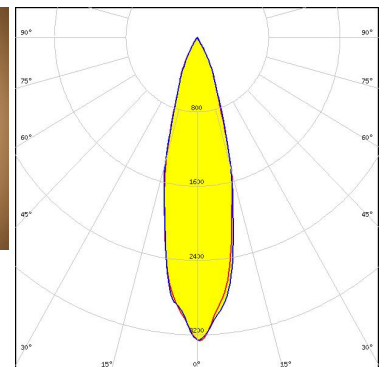
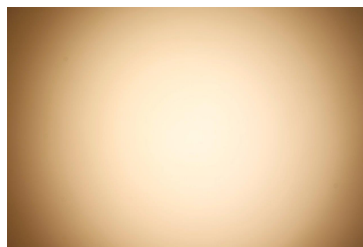
LED CLL04x/CLU04x
 FWHM / FWTM 24.0° / 52.0°
 Efficiency 77 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



Light distribution files

CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 27.0° / 53.0°
 Efficiency 83 %
 Peak intensity 3.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 431 Typ L3

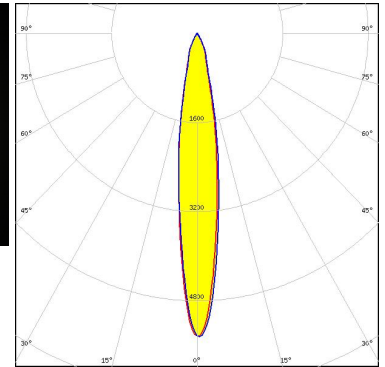


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

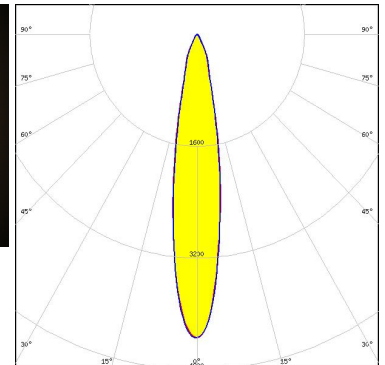
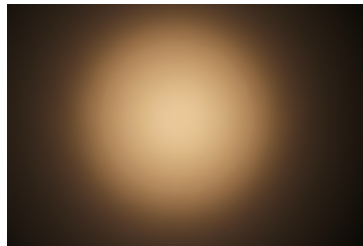
LED CLU700/701/702/703
 FWHM / FWTM 16.0° / 37.0°
 Efficiency 78 %
 Peak intensity 5.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 434 Typ L1



Light distribution files

CITIZEN

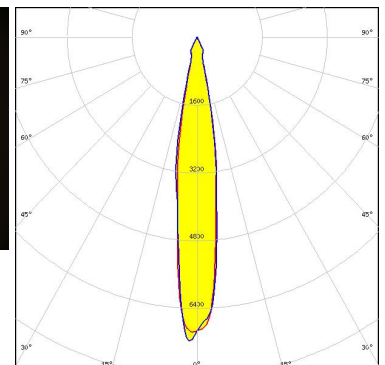
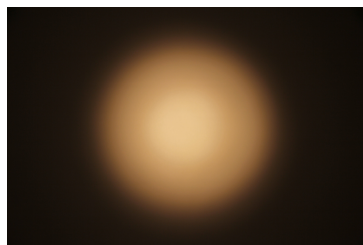
LED CLU710/711
 FWHM / FWTM 18.0° / 43.0°
 Efficiency 81 %
 Peak intensity 4.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030
 C11996_LENA-LENS



Light distribution files

CITIZEN

LED CLU710/711
 FWHM / FWTM 16.0° / 29.0°
 Efficiency 86 %
 Peak intensity 7.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030

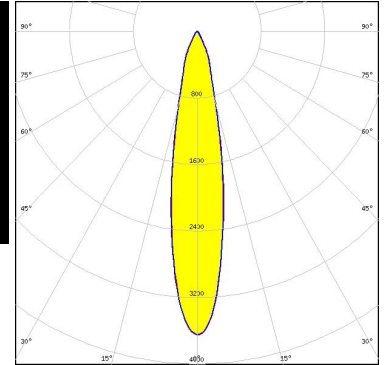


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

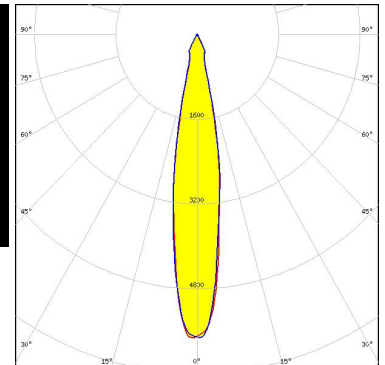
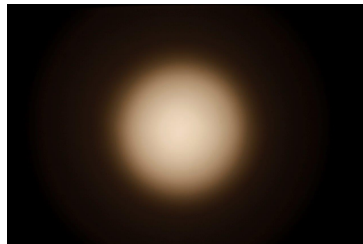
LED CLU720/721/723
 FWHM / FWTM 20.0° / 48.0°
 Efficiency 77 %
 Peak intensity 3.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030
 C11996_LENA-LENS



Light distribution files

CITIZEN

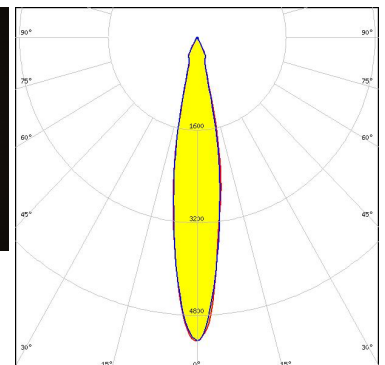
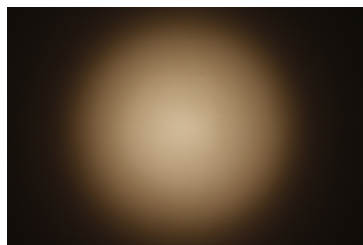
LED CLU720/721/723
 FWHM / FWTM 18.0° / 32.0°
 Efficiency 83 %
 Peak intensity 5.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030



Light distribution files

CITIZEN

LED CLU730/731/733
 FWHM / FWTM 19.0° / 34.0°
 Efficiency 80 %
 Peak intensity 5.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040

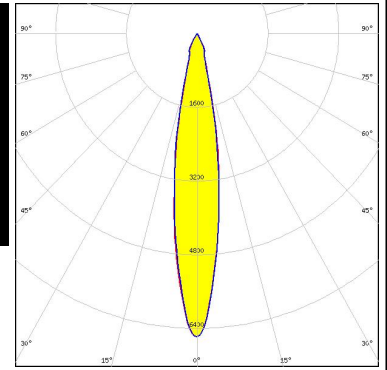


Light distribution files

OPTICAL RESULTS (MEASURED):



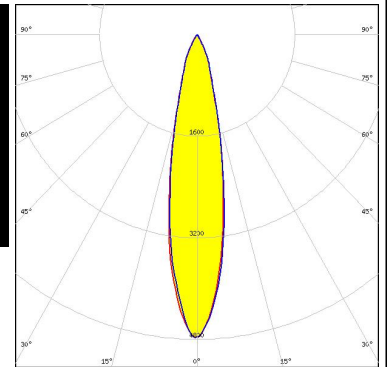
LED CMA1840
FWHM / FWTM 18.0° / 34.0°
Efficiency 90 %
Peak intensity 6.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C14146_LENA-STD-BASE-CXA18



Light distribution files



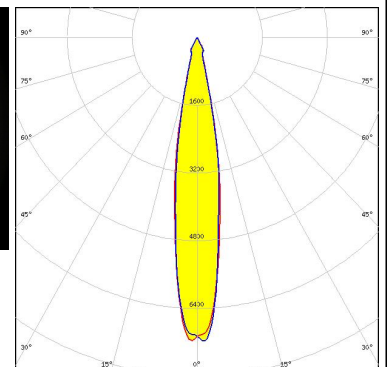
LED CMA2550
FWHM / FWTM 21.0° / 47.0°
Efficiency 90 %
Peak intensity 4.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13324_LENA-STD-BASE-CXA25



Light distribution files



LED CMT14xx
FWHM / FWTM 17.0° / 31.0°
Efficiency 90 %
Peak intensity 7.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 434 Typ L1

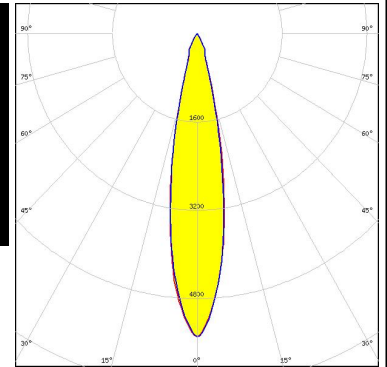
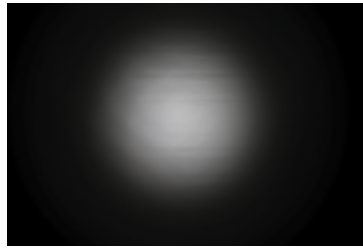


Light distribution files

OPTICAL RESULTS (MEASURED):



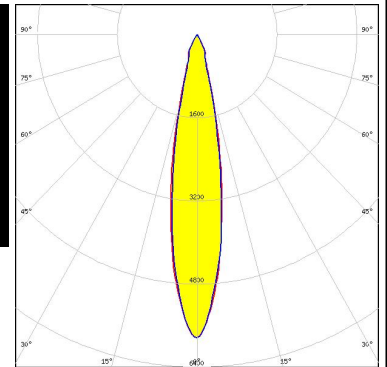
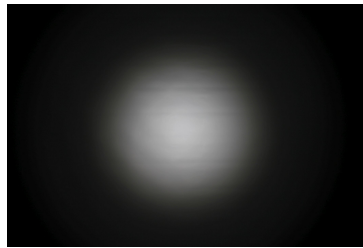
LED CMT19xx
 FWHM / FWTM 21.0° / 38.0°
 Efficiency 90 %
 Peak intensity 5.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 477 Typ L1



Light distribution files



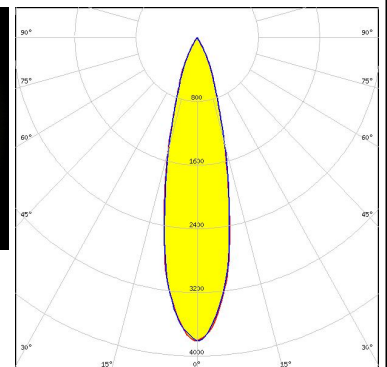
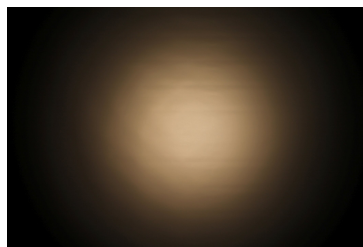
LED CMT19xx
 FWHM / FWTM 20.0° / 37.0°
 Efficiency 90 %
 Peak intensity 5.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030



Light distribution files



LED CMT28xx
 FWHM / FWTM 25.0° / 51.0°
 Efficiency 90 %
 Peak intensity 3.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040



Light distribution files

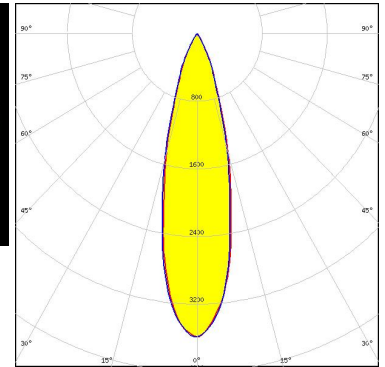
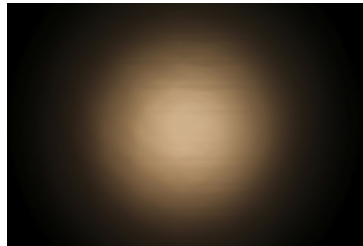
OPTICAL RESULTS (MEASURED):



LED CMT28xx
FWHM / FWTM 26.0° / 52.0°
Efficiency 90 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29
Bender Wirth: 471 Typ L3



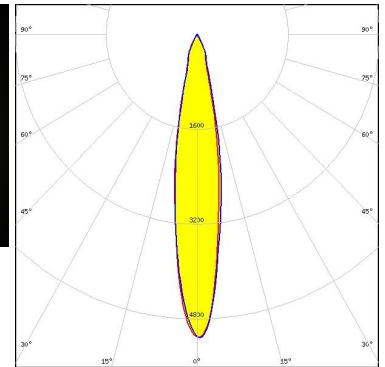
Light distribution files



LED CXA/B 15xx
FWHM / FWTM 18.0° / 37.0°
Efficiency 78 %
Peak intensity 5.1 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



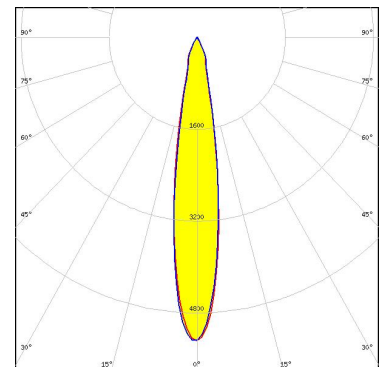
Light distribution files



LED CXA/B 15xx
FWHM / FWTM 17.0° / 36.0°
Efficiency 79 %
Peak intensity 5.3 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13186_LENA-STD-BASE-CXA15
C11996_LENA-LENS

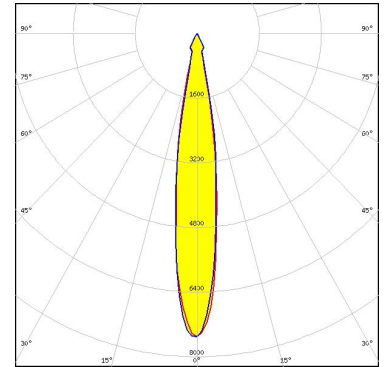


Light distribution files

OPTICAL RESULTS (MEASURED):



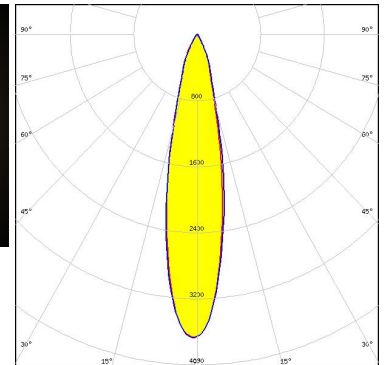
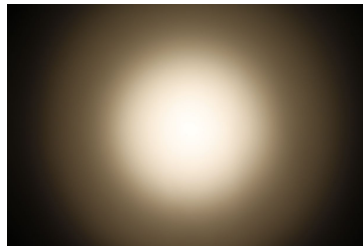
LED CXA/B 15xx
FWHM / FWTM 16.0° / 27.0°
Efficiency 84 %
Peak intensity 7.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13186_LENA-STD-BASE-CXA15



Light distribution files



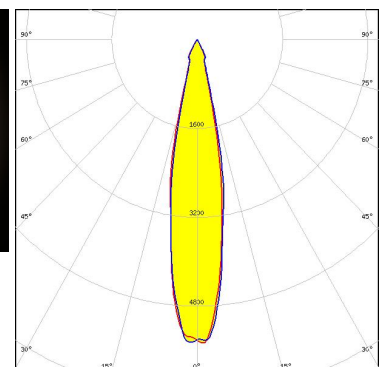
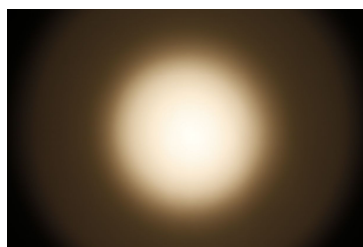
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM / FWTM 22.0° / 49.0°
Efficiency 80 %
Peak intensity 3.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 437 Typ L1



Light distribution files



LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM / FWTM 21.0° / 35.0°
Efficiency 85 %
Peak intensity 5.3 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):



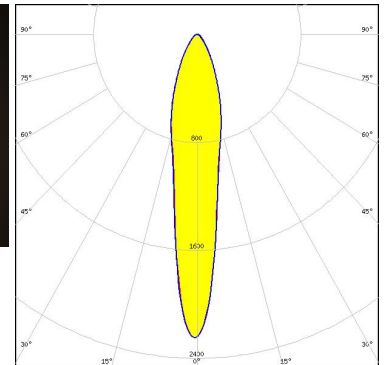
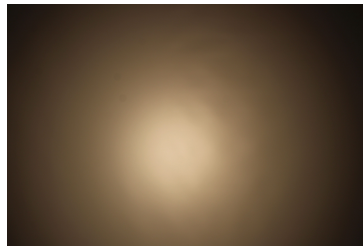
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM / FWTM 17.0° / 32.0°
Efficiency 84 %
Peak intensity 7.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C14146_LENA-STD-BASE-CXA18



Light distribution files



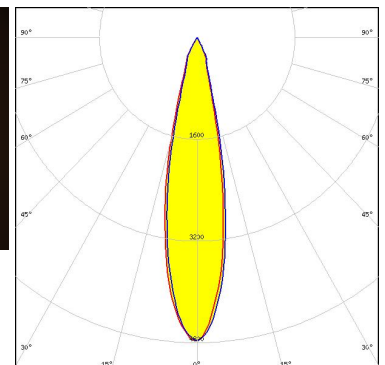
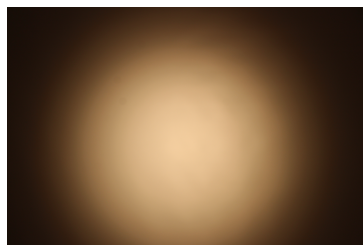
LED CXA/B 1830
FWHM / FWTM 17.0° / 62.0°
Efficiency 75 %
Peak intensity 2.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C12231_LENA-FRESNEL
Bender Wirth: 437 Typ L1



Light distribution files



LED CXA/B 1830
FWHM / FWTM 23.0° / 42.0°
Efficiency 88 %
Peak intensity 4.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 437 Typ L1

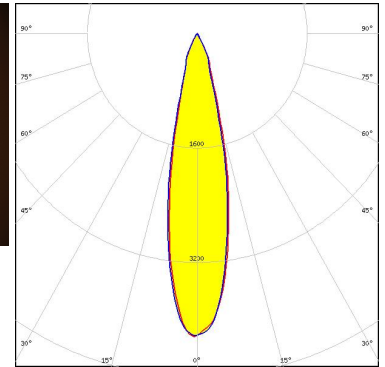
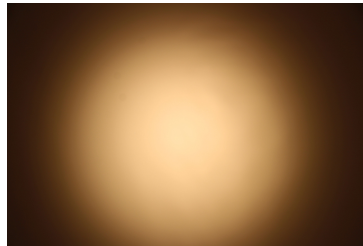


Light distribution files

OPTICAL RESULTS (MEASURED):



LED CXA/B 1830
FWHM / FWTM 23.0° / 47.0°
Efficiency 83 %
Peak intensity 4.3 cd/lm
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



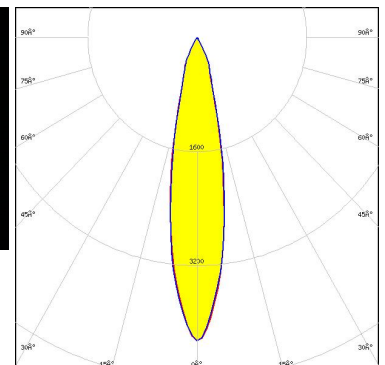
Light distribution files



LED CXA/B 25xx
FWHM / FWTM 21.0° / 49.0°
Efficiency 77 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13324_LENA-STD-BASE-CXA25
 C11996_LENA-LENS



LED CXA/B 25xx
FWHM / FWTM 20.0° / 48.0°
Efficiency 82 %
Peak intensity 4.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13324_LENA-STD-BASE-CXA25



Light distribution files

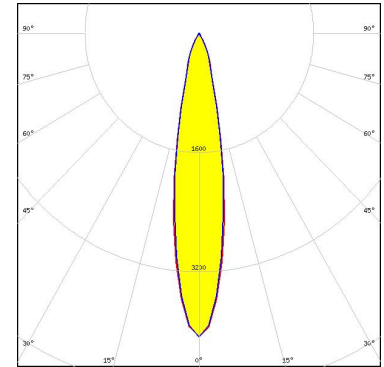
OPTICAL RESULTS (MEASURED):



LED CXA2011
FWHM / FWTM 19.0° / 44.0°
Efficiency 78 %
Peak intensity 4.1 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C12105_LENA-STD-BASE-CXA20
C11996_LENA-LENS



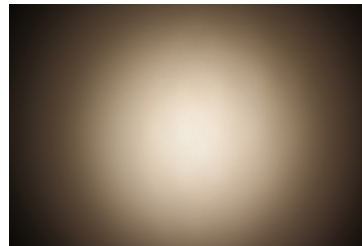
Light distribution files



LED CHI3030 19W
FWHM / FWTM 27.0° / 55.0°
Efficiency 81 %
Peak intensity 2.9 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



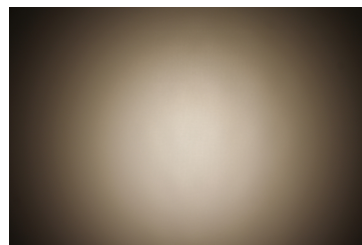
Light distribution files



LED CHI3030 29W
FWHM / FWTM 34.0° / 62.0°
Efficiency 78 %
Peak intensity 1.9 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

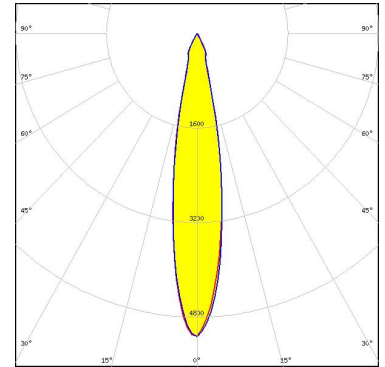


Light distribution files

OPTICAL RESULTS (MEASURED):



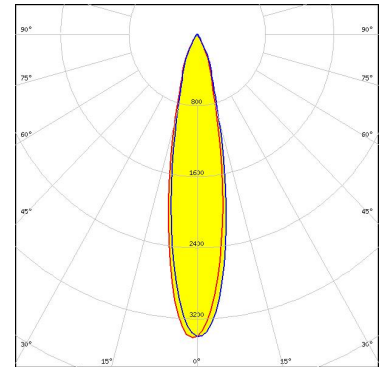
LED LUXEON CoB 1204/1205
 FWHM / FWTM 19.0° / 36.0°
 Efficiency 79 %
 Peak intensity 5.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12292_LENA-STD-BASE-MEZ



Light distribution files



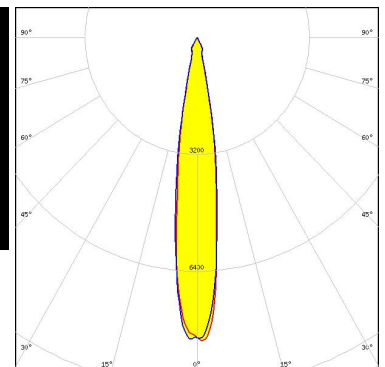
LED LUXEON CoB 1204/1205
 FWHM / FWTM 21.0° / 49.0°
 Efficiency 74 %
 Peak intensity 3.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12292_LENA-STD-BASE-MEZ
 C11996_LENA-LENS



Light distribution files



LED LUXEON CoB 1204HD
 FWHM / FWTM 15.0° / 28.0°
 Efficiency 90 %
 Peak intensity 8.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C11981_LENA-STD-BASE-COB-L110

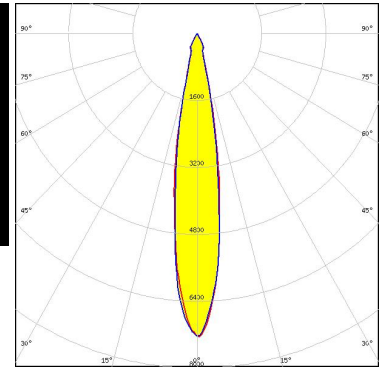


Light distribution files

OPTICAL RESULTS (MEASURED):



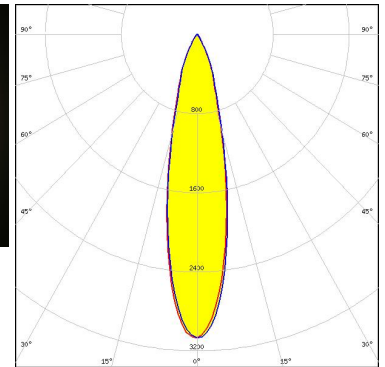
LED LUXEON CoB 1205HD
FWHM / FWTM 17.0° / 31.0°
Efficiency 90 %
Peak intensity 7.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C11981_LENA-STD-BASE-COB-L110



Light distribution files



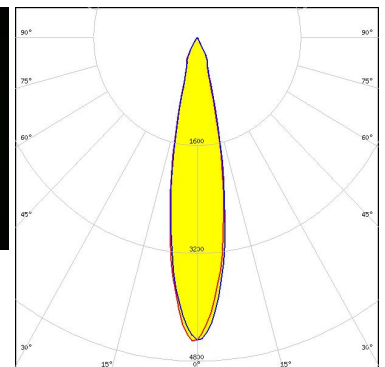
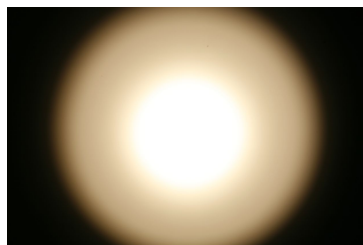
LED LUXEON CoB 1208
FWHM / FWTM 23.0° / 52.0°
Efficiency 74 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12292_LENA-STD-BASE-MEZ
 C11996_LENA-LENS



Light distribution files



LED LUXEON CoB 1208
FWHM / FWTM 21.0° / 41.0°
Efficiency 80 %
Peak intensity 4.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12292_LENA-STD-BASE-MEZ

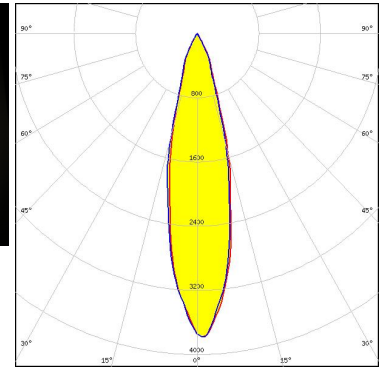


Light distribution files

OPTICAL RESULTS (MEASURED):



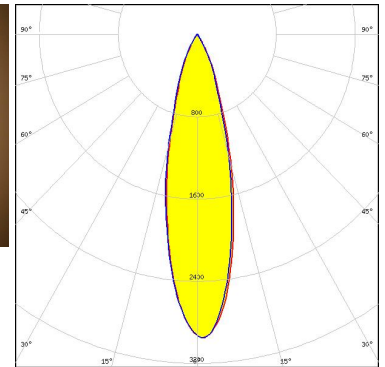
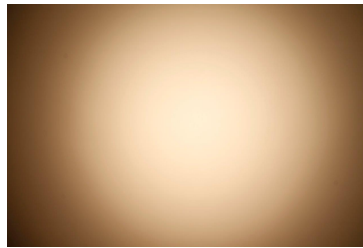
LED LUXEON CoB 1211
 FWHM / FWTM 24.0° / 50.0°
 Efficiency 87 %
 Peak intensity 3.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 431 Typ L3



Light distribution files



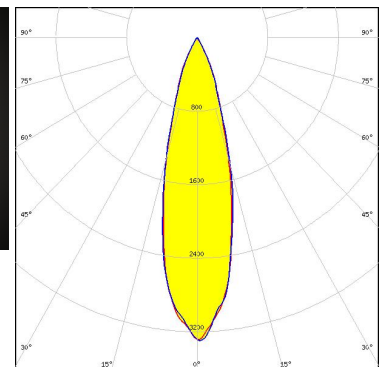
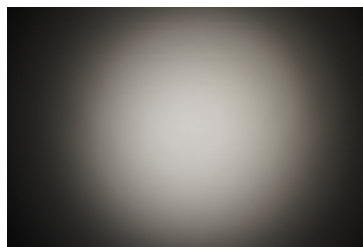
LED LUXEON CoB 1211
 FWHM / FWTM 26.0° / 53.0°
 Efficiency 78 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS
 Bender Wirth: 431 Typ L3



Light distribution files



LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM 27.0° / 52.0°
 Efficiency 83 %
 Peak intensity 3.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040

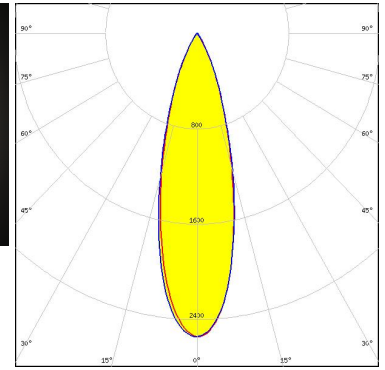


Light distribution files

OPTICAL RESULTS (MEASURED):



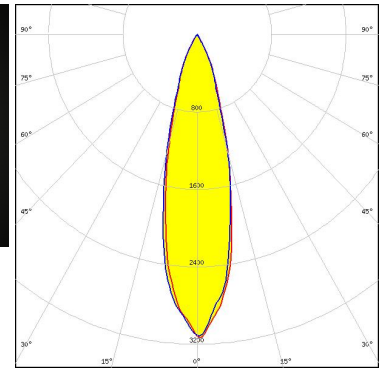
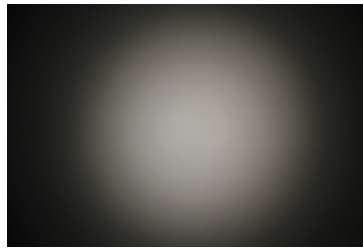
LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM 29.0° / 55.0°
 Efficiency 80 %
 Peak intensity 3.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



Light distribution files



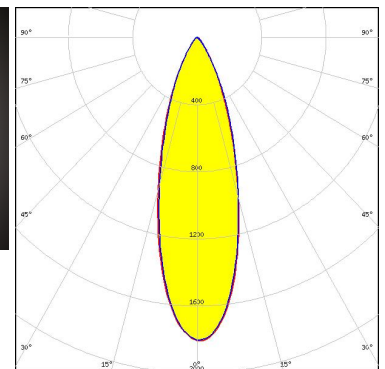
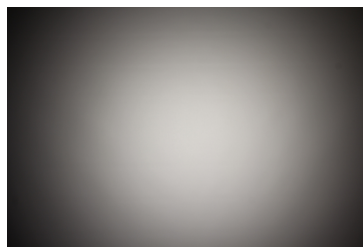
LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM 26.0° / 52.0°
 Efficiency 77 %
 Peak intensity 3.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 A.A.G. STUCCHI: 8102-G2 + S-8000-12



Light distribution files



LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM 31.0° / 63.0°
 Efficiency 72 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C11996_LENA-LENS
 A.A.G. STUCCHI: 8102-G2 + S-8000-12

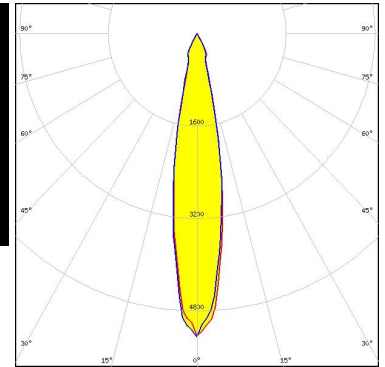
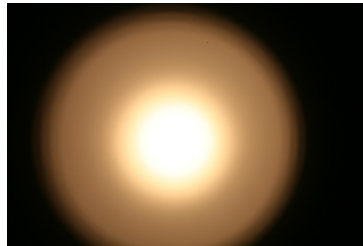


Light distribution files

OPTICAL RESULTS (MEASURED):



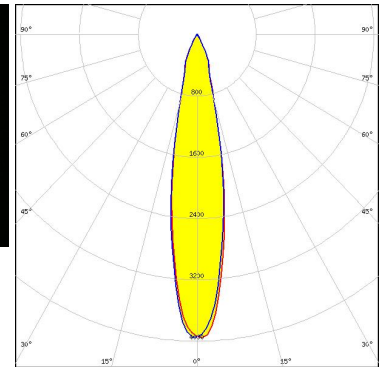
LED LUXEON K12
FWHM / FWTM 19.0° / 36.0°
Efficiency 80 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12924_LENA-STD-BASE-LUXEON-K



Light distribution files



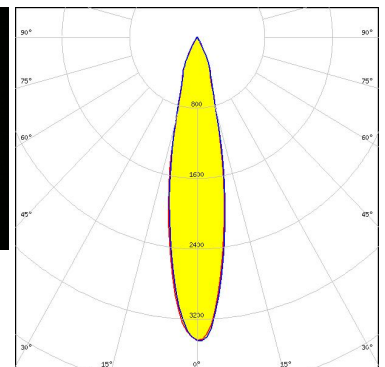
LED LUXEON K12
FWHM / FWTM 21.0° / 47.0°
Efficiency 74 %
Peak intensity 4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12924_LENA-STD-BASE-LUXEON-K
 C11996_LENA-LENS



Light distribution files



LED LUXEON K16
FWHM / FWTM 22.0° / 48.0°
Efficiency 72 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12924_LENA-STD-BASE-LUXEON-K
 C11996_LENA-LENS

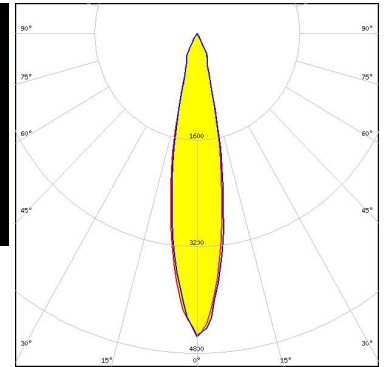
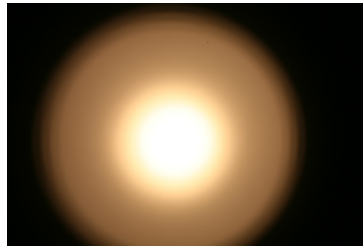


Light distribution files

OPTICAL RESULTS (MEASURED):



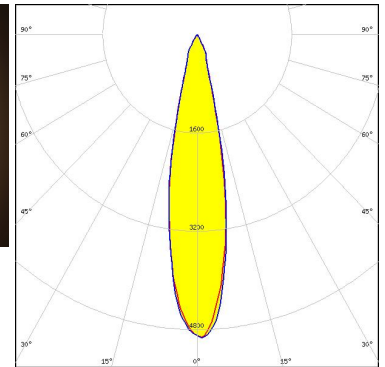
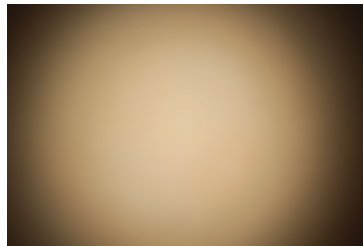
LED LUXEON K16
FWHM / FWTM 20.0° / 40.0°
Efficiency 77 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12924_LENA-STD-BASE-LUXEON-K



Light distribution files



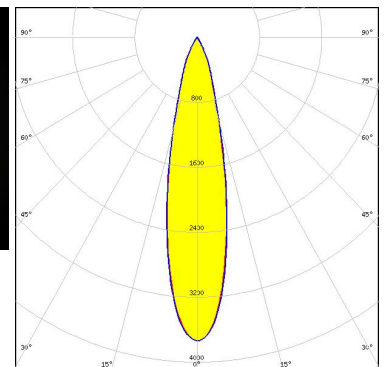
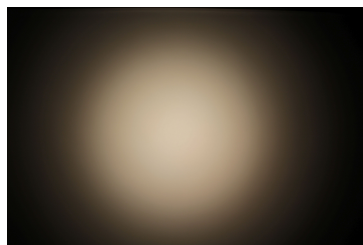
LED CDM-14 (Dim-To-Warm)
FWHM / FWTM 22.0° / 40.0°
Efficiency 87 %
Peak intensity 4.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 491 Typ L2



Light distribution files



LED CDM-14 (Dim-To-Warm)
FWHM / FWTM 23.0° / 49.0°
Efficiency 82 %
Peak intensity 3.7 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

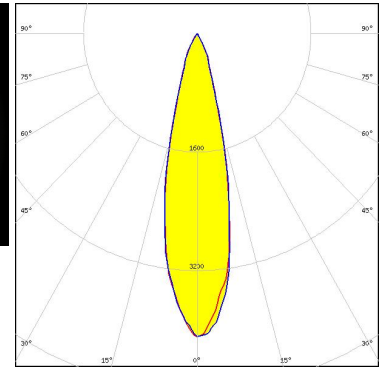
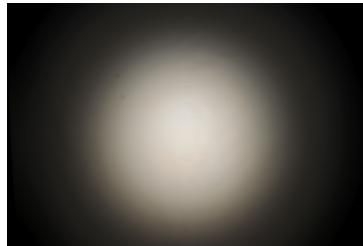


Light distribution files

OPTICAL RESULTS (MEASURED):



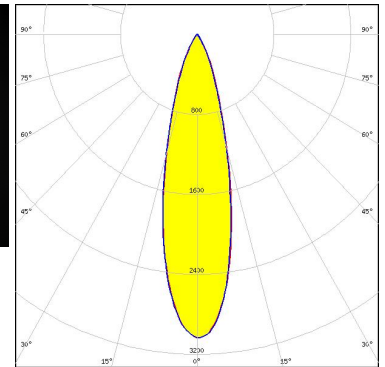
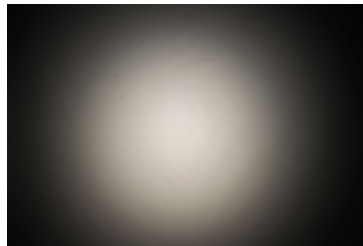
LED CDM-18 (Dim-To-Warm)
FWHM / FWTM 25.0° / 47.0°
Efficiency 87 %
Peak intensity 4.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 491 Typ L2



Light distribution files



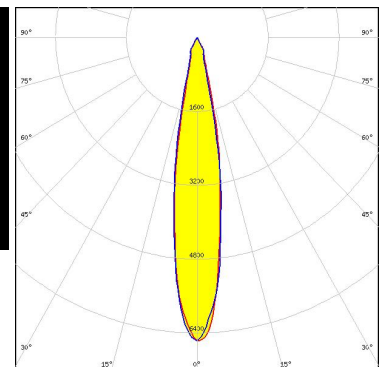
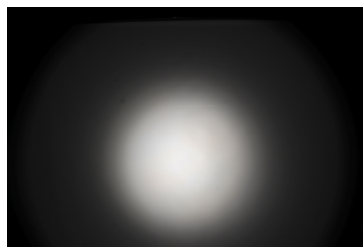
LED CDM-18 (Dim-To-Warm)
FWHM / FWTM 26.0° / 53.0°
Efficiency 82 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 491 Typ L2



Light distribution files



LED CDM-9 (Dim-To-Warm)
FWHM / FWTM 18.0° / 33.0°
Efficiency 88 %
Peak intensity 6.6 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):



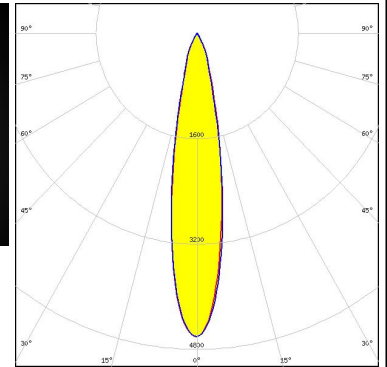
LED CDM-9 (Dim-To-Warm)
 FWHM / FWTM 20.0° / 43.0°
 Efficiency 82 %
 Peak intensity 4.6 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 490 Typ L1



Light distribution files

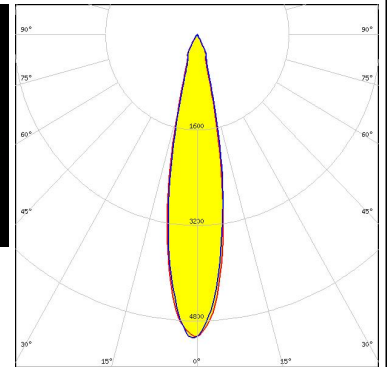
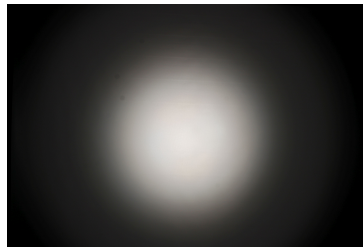


LED CTM-14 (Tunable White)
 FWHM / FWTM 21.0° / 39.0°
 Efficiency 87 %
 Peak intensity 5.1 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29

Bender Wirth: 442 Typ L3



Light distribution files



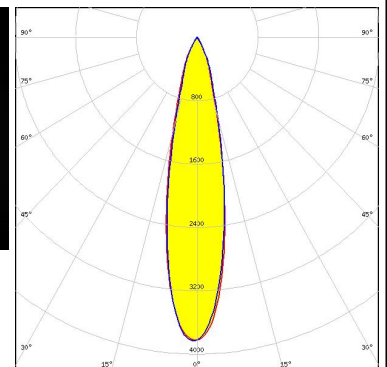
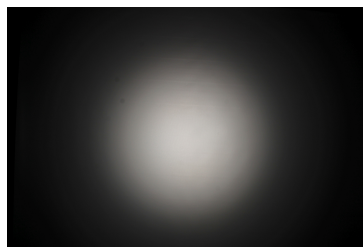
LED CTM-14 (Tunable White)
 FWHM / FWTM 22.0° / 48.0°
 Efficiency 81 %
 Peak intensity 3.8 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29

C12606_LENINA-DL

Bender Wirth: 442 Typ L3



Light distribution files

OPTICAL RESULTS (MEASURED):



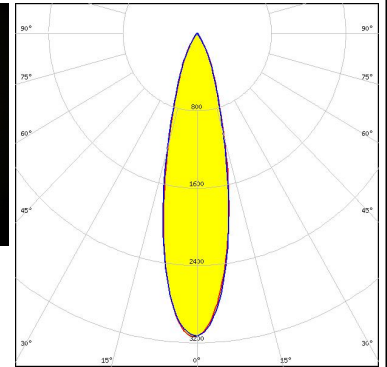
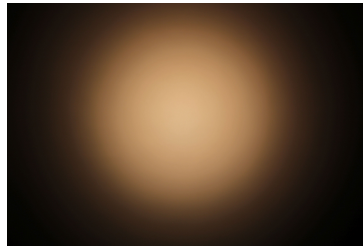
LED CTM-18 (Tunable White)
 FWHM / FWTM 25.0° / 53.0°
 Efficiency 82 %
 Peak intensity 3.1 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29

C11996_LENA-LENS

Bender Wirth: 442 Typ L3



Light distribution files

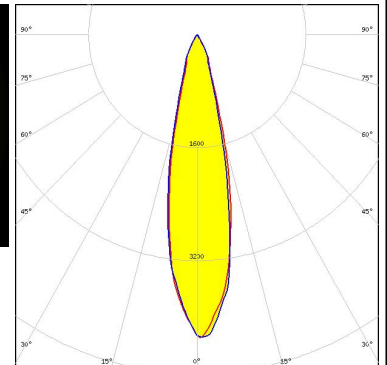


LED CTM-18 (Tunable White)
 FWHM / FWTM 24.0° / 45.0°
 Efficiency 87 %
 Peak intensity 4.3 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29

Bender Wirth: 442 Typ L3



Light distribution files



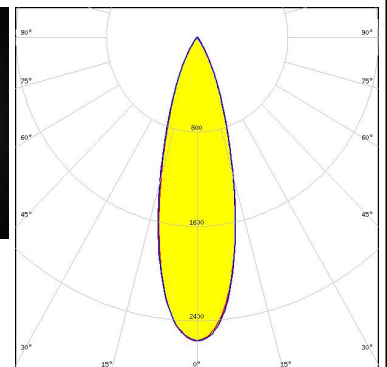
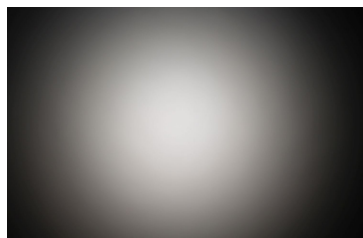
LED CTM-22 (Tunable White)
 FWHM / FWTM 29.0° / 56.0°
 Efficiency 82 %
 Peak intensity 2.6 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29

C11996_LENA-LENS

Bender Wirth: 494 Typ L3

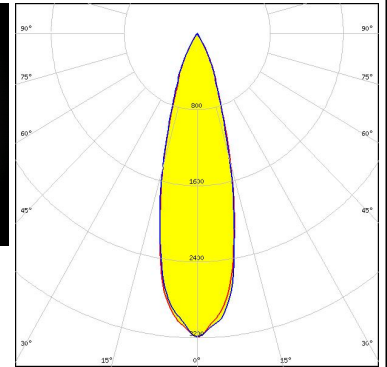
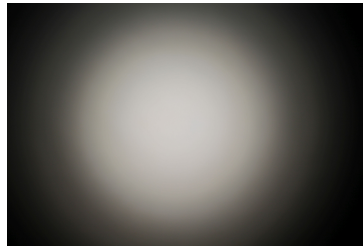


Light distribution files

OPTICAL RESULTS (MEASURED):



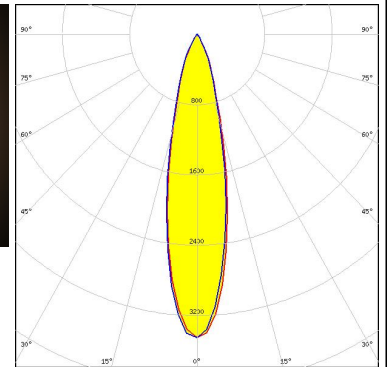
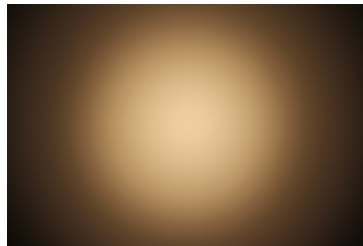
LED CTM-22 (Tunable White)
 FWHM / FWTM 28.0° / 54.0°
 Efficiency 87 %
 Peak intensity 3.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 494 Typ L3



Light distribution files



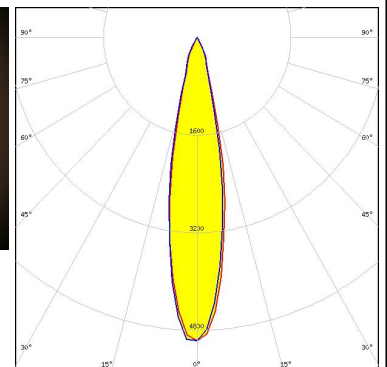
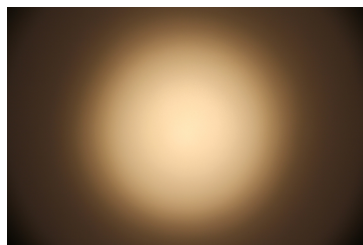
LED CxM-14 (19x19)
 FWHM / FWTM 24.0° / 51.0°
 Efficiency 79 %
 Peak intensity 3.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030
 C11996_LENA-LENS



Light distribution files



LED CxM-14 (19x19)
 FWHM / FWTM 22.0° / 40.0°
 Efficiency 84 %
 Peak intensity 5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030



Light distribution files

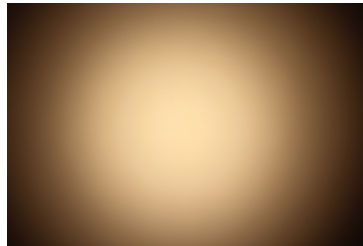
OPTICAL RESULTS (MEASURED):



LED CxM-22 (28x28)
FWHM / FWTM 29.0° / 58.0°
Efficiency 79 %
Peak intensity 2.7 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS



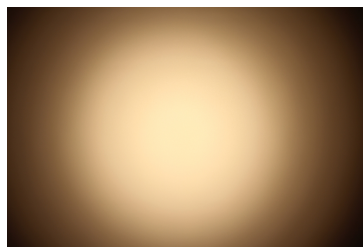
Light distribution files



LED CxM-22 (28x28)
FWHM / FWTM 27.0° / 56.0°
Efficiency 84 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C12692_LENA-STD-BASE-CLL040



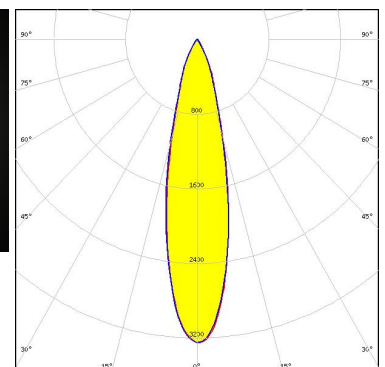
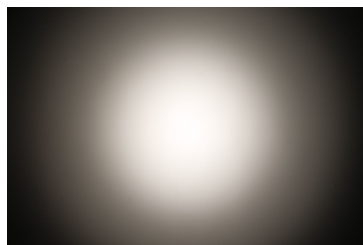
Light distribution files



LED COB J-Type
FWHM / FWTM 24.0° / 52.0°
Efficiency 80 %
Peak intensity 3.3 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

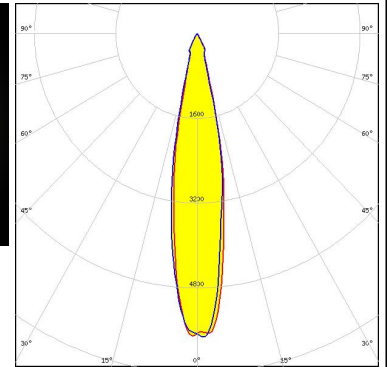
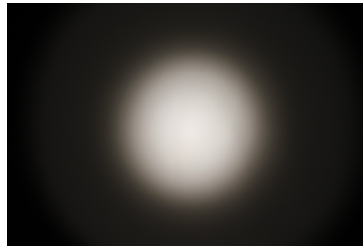


Light distribution files

OPTICAL RESULTS (MEASURED):



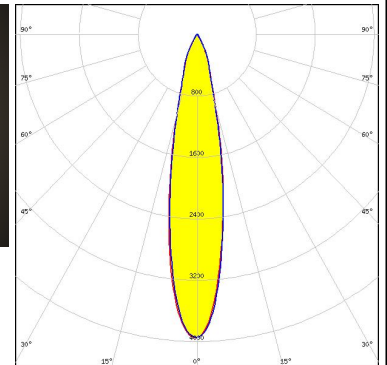
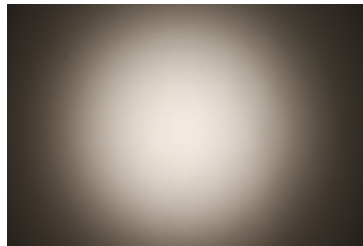
LED COB L-Type (LES 11)
FWHM / FWTM 20.0° / 34.0°
Efficiency 85 %
Peak intensity 5.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 438 Typ L1



Light distribution files



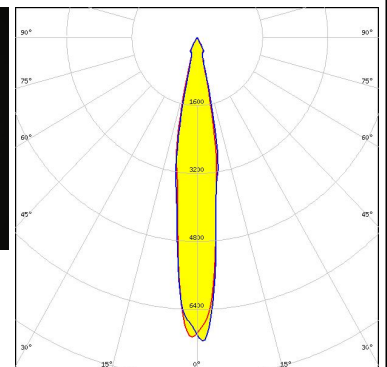
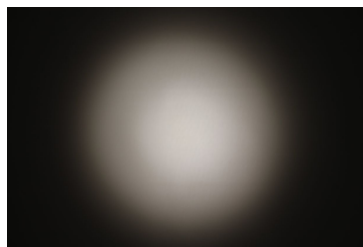
LED COB L-Type (LES 11)
FWHM / FWTM 21.0° / 47.0°
Efficiency 80 %
Peak intensity 4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 438 Typ L1



Light distribution files



LED COB L-Type (LES 9)
FWHM / FWTM 16.0° / 30.0°
Efficiency 86 %
Peak intensity 7.2 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

OPTICAL RESULTS (MEASURED):



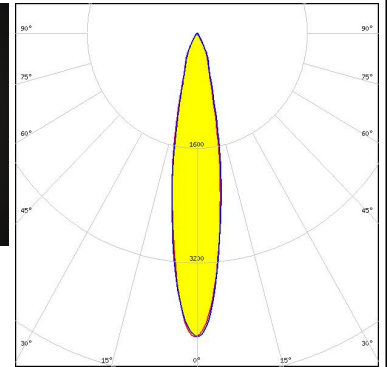
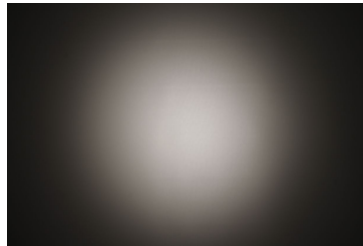
LED COB L-Type (LES 9)
 FWHM / FWTM 19.0° / 45.0°
 Efficiency 81 %
 Peak intensity 4.2 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 438 Typ L1



Light distribution files



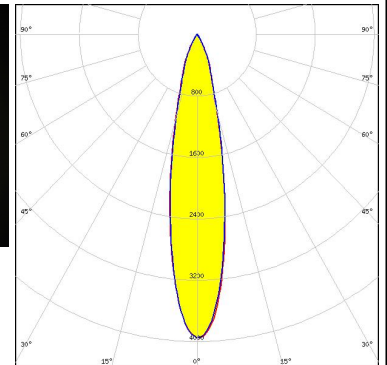
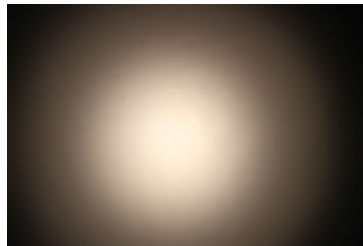
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM / FWTM 21.0° / 48.0°
 Efficiency 82 %
 Peak intensity 4 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 498 Typ L2



Light distribution files

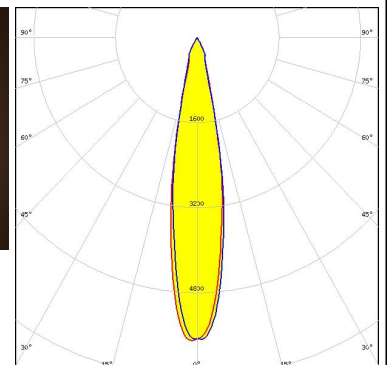
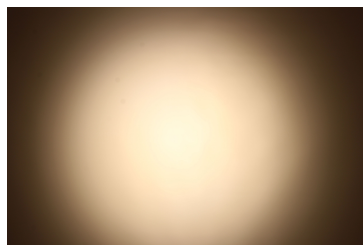


LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM / FWTM 20.0° / 36.0°
 Efficiency 87 %
 Peak intensity 5.7 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

Bender Wirth: 498 Typ L2



Light distribution files

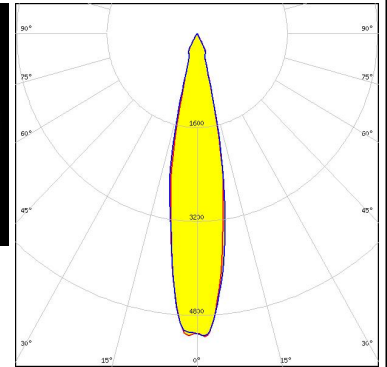
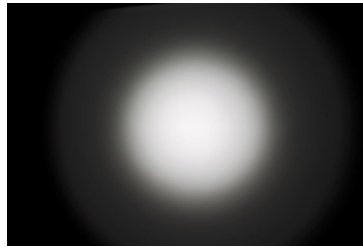
OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

LED Soleriq S13
FWHM / FWTM 21.0° / 36.0°
Efficiency 83 %
Peak intensity 5.2 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

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



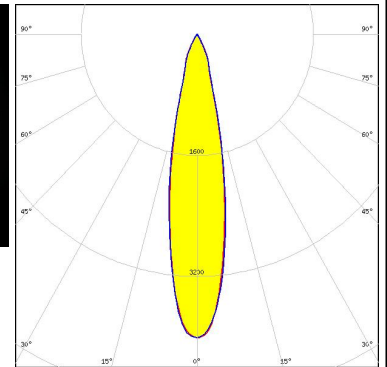
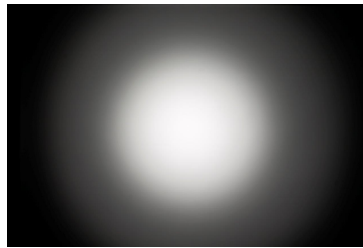
Light distribution files

OSRAM
Opto Semiconductors

LED Soleriq S13
FWHM / FWTM 22.0° / 46.0°
Efficiency 78 %
Peak intensity 4 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



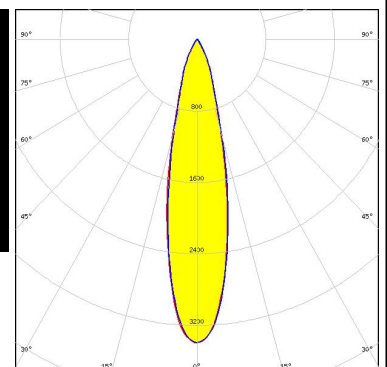
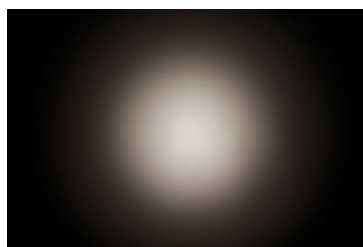
Light distribution files

OSRAM
Opto Semiconductors

LED Soleriq S13
FWHM / FWTM 23.0° / 50.0°
Efficiency 81 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

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



Light distribution files

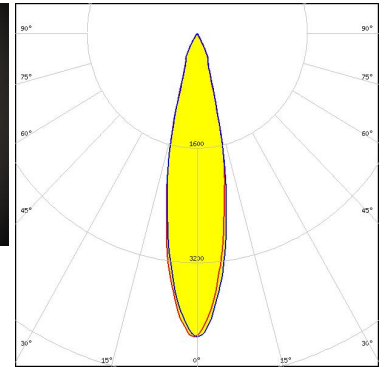
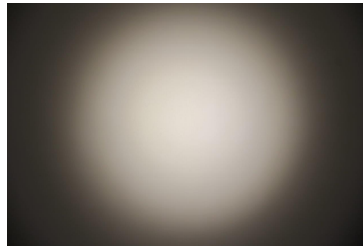
OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

LED Soleriq S19
FWHM / FWTM 23.0° / 45.0°
Efficiency 83 %
Peak intensity 4.2 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29
Bender Wirth: 462 Typ L3



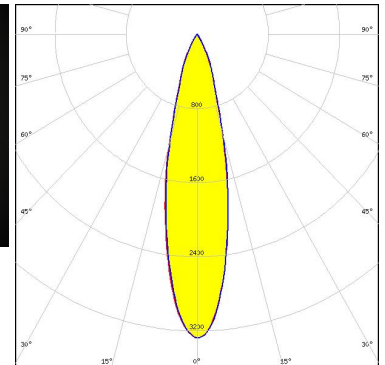
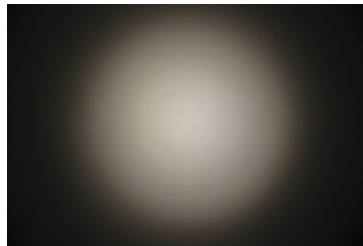
Light distribution files

OSRAM
Opto Semiconductors

LED Soleriq S19
FWHM / FWTM 24.0° / 51.0°
Efficiency 78 %
Peak intensity 3.3 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



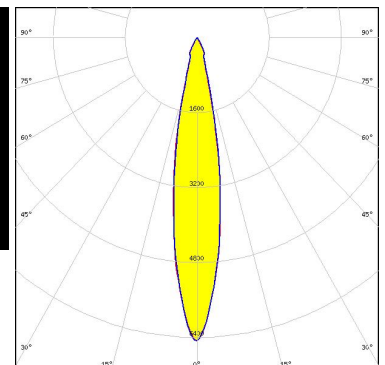
Light distribution files

PHILIPS

LED Fortimo SLM L13 CoB
FWHM / FWTM 18.0° / 34.0°
Efficiency 89 %
Peak intensity 6.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C12292_LENA-STD-BASE-MEZ

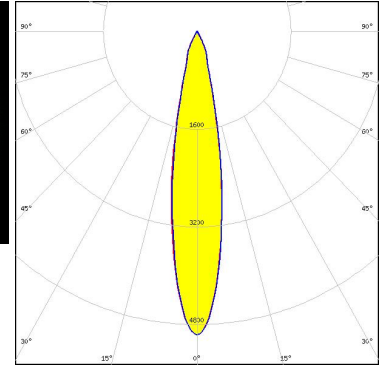


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

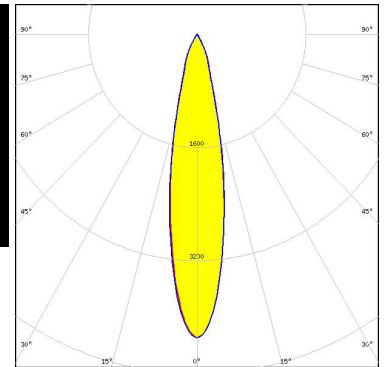
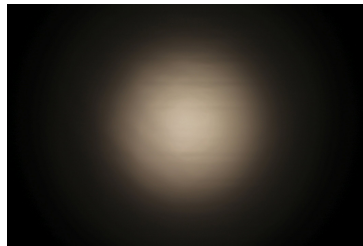
LED Fortimo SLM L13 CoB
FWHM / FWTM 19.0° / 40.0°
Efficiency 84 %
Peak intensity 5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS



Light distribution files

PHILIPS

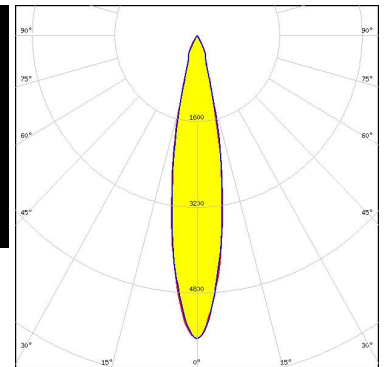
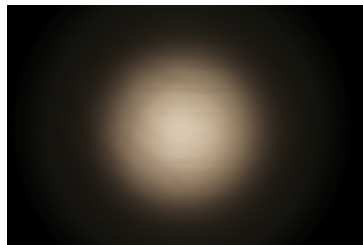
LED Fortimo SLM L15 CoB
FWHM / FWTM 21.0° / 46.0°
Efficiency 84 %
Peak intensity 4.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS



Light distribution files

PHILIPS

LED Fortimo SLM L15 CoB
FWHM / FWTM 20.0° / 38.0°
Efficiency 90 %
Peak intensity 5.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12292_LENA-STD-BASE-MEZ

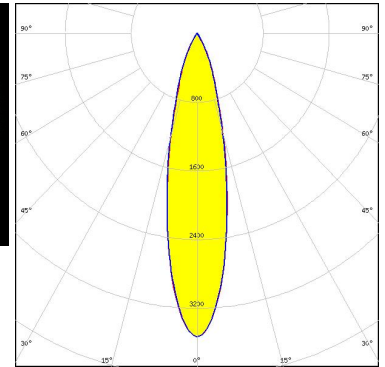
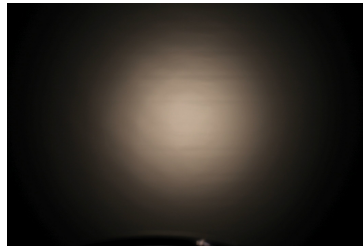


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

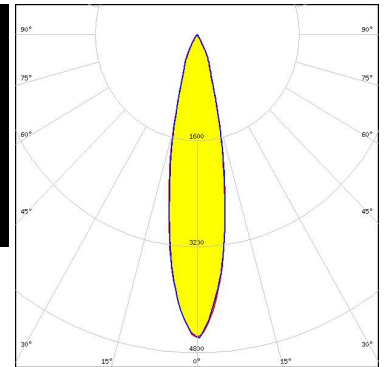
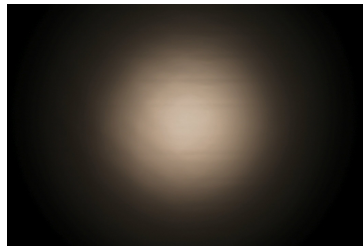
LED Fortimo SLM L19 CoB
 FWHM / FWTM 24.0° / 51.0°
 Efficiency 84 %
 Peak intensity 3.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



Light distribution files

PHILIPS

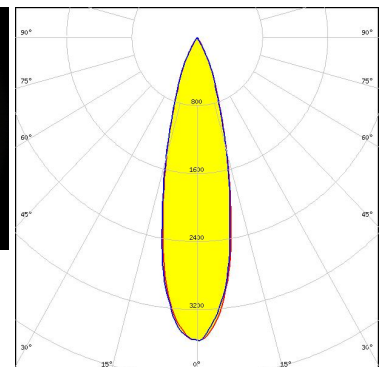
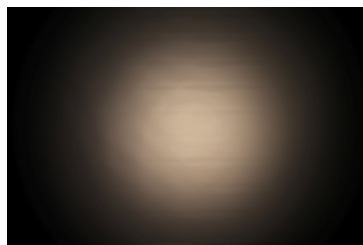
LED Fortimo SLM L19 CoB
 FWHM / FWTM 22.0° / 48.0°
 Efficiency 90 %
 Peak intensity 4.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040



Light distribution files

PHILIPS

LED Fortimo SLM L23 CoB
 FWHM / FWTM 26.0° / 52.0°
 Efficiency 89 %
 Peak intensity 3.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040

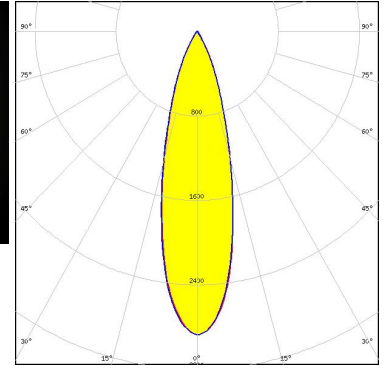


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

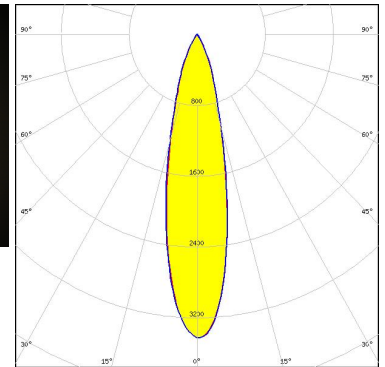
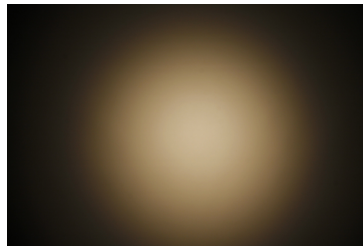
LED Fortimo SLM L23 CoB
 FWHM / FWTM 27.0° / 54.0°
 Efficiency 83 %
 Peak intensity 2.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



Light distribution files

SAMSUNG

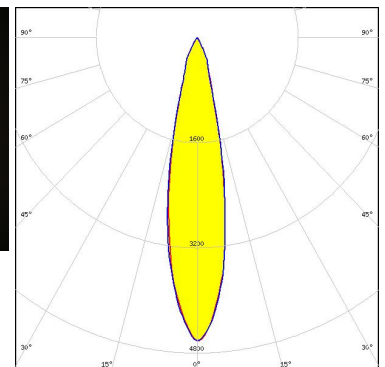
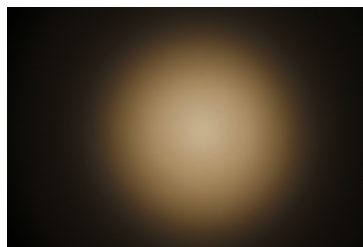
LED LC016D / LC019D / LC026D / LC033D
 FWHM / FWTM 23.0° / 51.0°
 Efficiency 81 %
 Peak intensity 3.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030
 C11996_LENA-LENS



Light distribution files

SAMSUNG

LED LC016D / LC019D / LC026D / LC033D
 FWHM / FWTM 22.0° / 44.0°
 Efficiency 86 %
 Peak intensity 4.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030

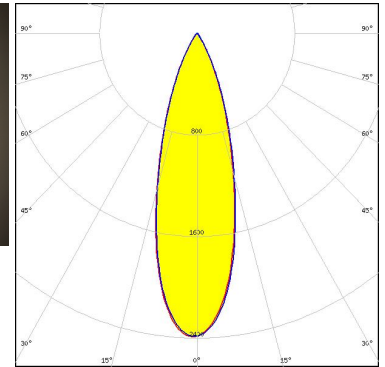
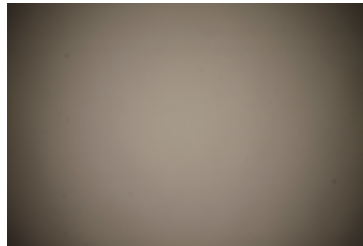


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

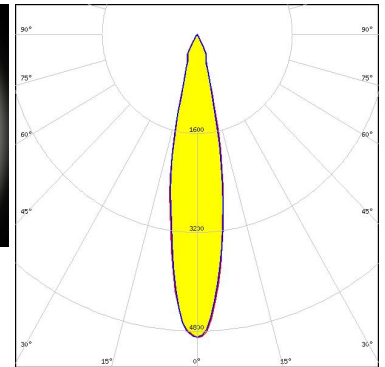
LED LC040D / LC060D / LC080D
 FWHM / FWTM 30.0° / 57.0°
 Efficiency 81 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



Light distribution files



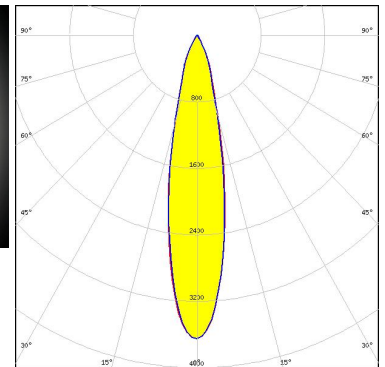
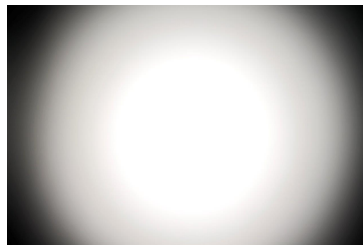
LED ZC12/18
 FWHM / FWTM 21.0° / 39.0°
 Efficiency 83 %
 Peak intensity 4.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030



Light distribution files



LED ZC12/18
 FWHM / FWTM 22.0° / 49.0°
 Efficiency 78 %
 Peak intensity 3.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030
 C11996_LENA-LENS



Light distribution files

OPTICAL RESULTS (MEASURED):

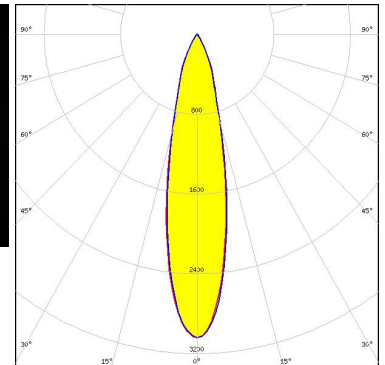
SHARP

LED Mega Zenigata (GW5DGC)
FWHM / FWTM 21.0° / 46.0°
Efficiency 79 %
LEDs/each optic 1
Light colour/type White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS

Light distribution files

SHARP

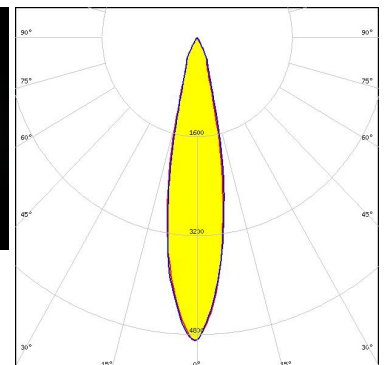
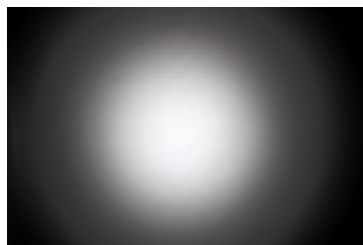
LED Mega Zenigata (GW6DME)
FWHM / FWTM 23.0° / 52.0°
Efficiency 73 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS



Light distribution files

TRIDONIC

LED SLE G7 LES15
FWHM / FWTM 22.0° / 43.0°
Efficiency 88 %
Peak intensity 4.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12691_LENA-STD-BASE-CLL030

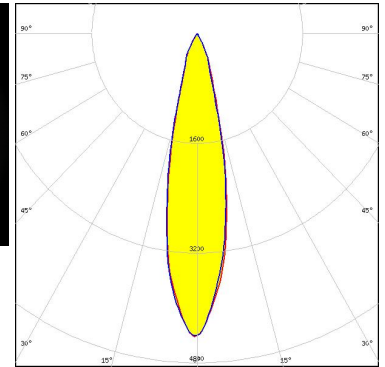
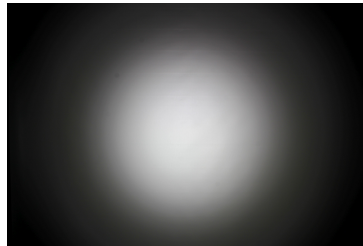


Light distribution files

OPTICAL RESULTS (MEASURED):

TRIDONIC

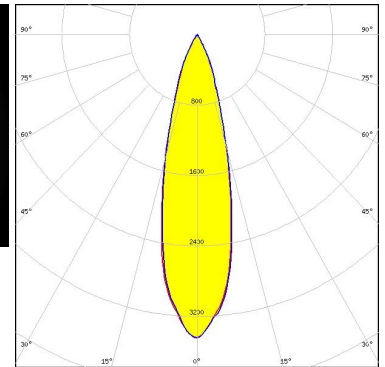
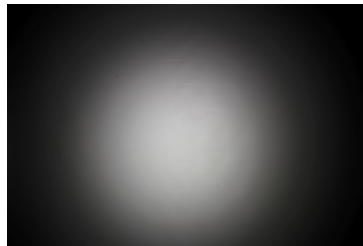
LED SLE G7 LES17 H
FWHM / FWTM 23.0° / 46.0°
Efficiency 86 %
Peak intensity 4.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C14547_LENA-ADAPTER-B



Light distribution files

TRIDONIC

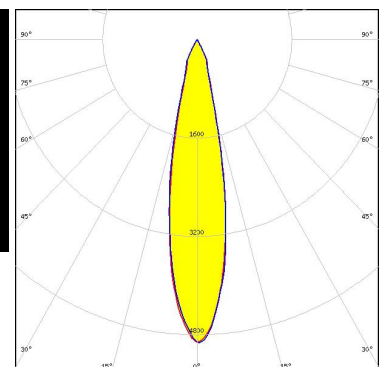
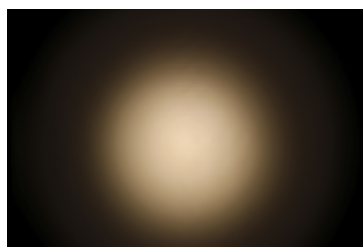
LED SLE G7 LES21 H
FWHM / FWTM 27.0° / 52.0°
Efficiency 86 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C14547_LENA-ADAPTER-B



Light distribution files

XICATO

LED XOB 14.5 mm
FWHM / FWTM 22.0° / 42.0°
Efficiency 88 %
Peak intensity 4.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12691_LENA-STD-BASE-CLL030

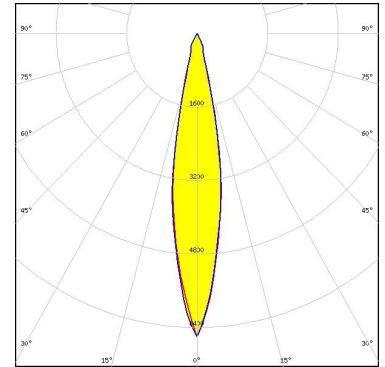


Light distribution files

OPTICAL RESULTS (SIMULATED):



LED V10 Gen7
 FWHM / FWTM 19.0° / 33.0°
 Efficiency 88 %
 Peak intensity 6.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18

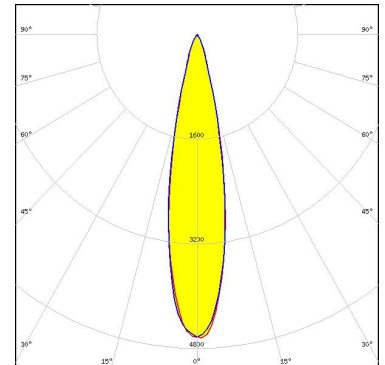


Bender Wirth: 486 Typ L1

Light distribution files



LED V10 Gen7
 FWHM / FWTM 22.0° / 39.0°
 Efficiency 81 %
 Peak intensity 4.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS

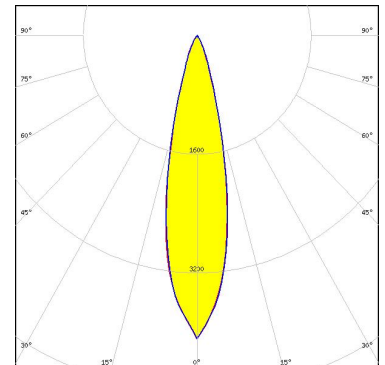


Bender Wirth: 486 Typ L1

Light distribution files



LED V13 Gen7
 FWHM / FWTM 24.0° / 44.0°
 Efficiency 82 %
 Peak intensity 4.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS



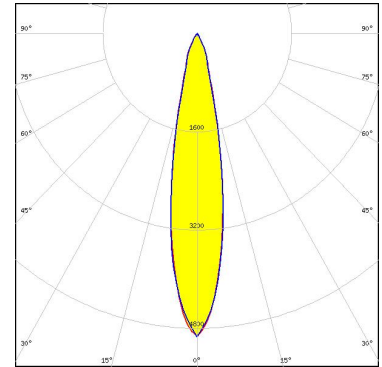
Light distribution files

OPTICAL RESULTS (SIMULATED):



LED V13 Gen7
 FWHM / FWTM 20.0° / 42.0°
 Efficiency 84 %
 Peak intensity 4.9 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:
 C11996_LENA-LENS



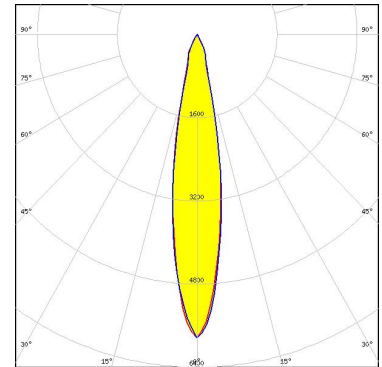
IDEAL: 50-2103CT + 50-2100LN

Light distribution files



LED V13 Gen7
 FWHM / FWTM 18.0° / 36.0°
 Efficiency 87 %
 Peak intensity 5.8 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:



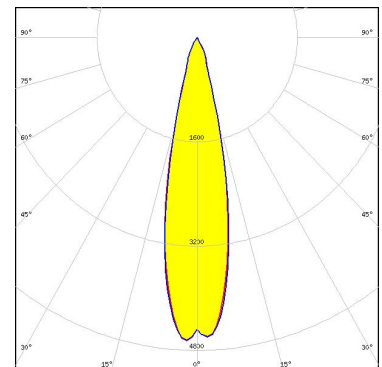
IDEAL: 50-2103CT + 50-2100LN

Light distribution files



LED V13 Gen7
 FWHM / FWTM 23.0° / 40.0°
 Efficiency 88 %
 Peak intensity 4.7 cd/lm
 LEDs/each optic 1
 Light colour/type White

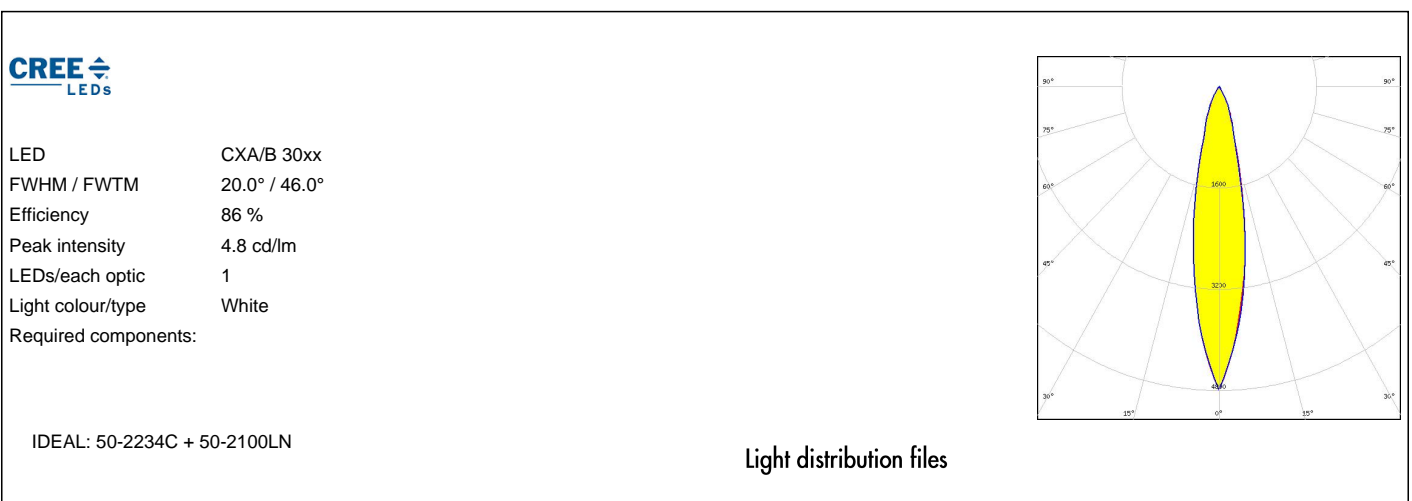
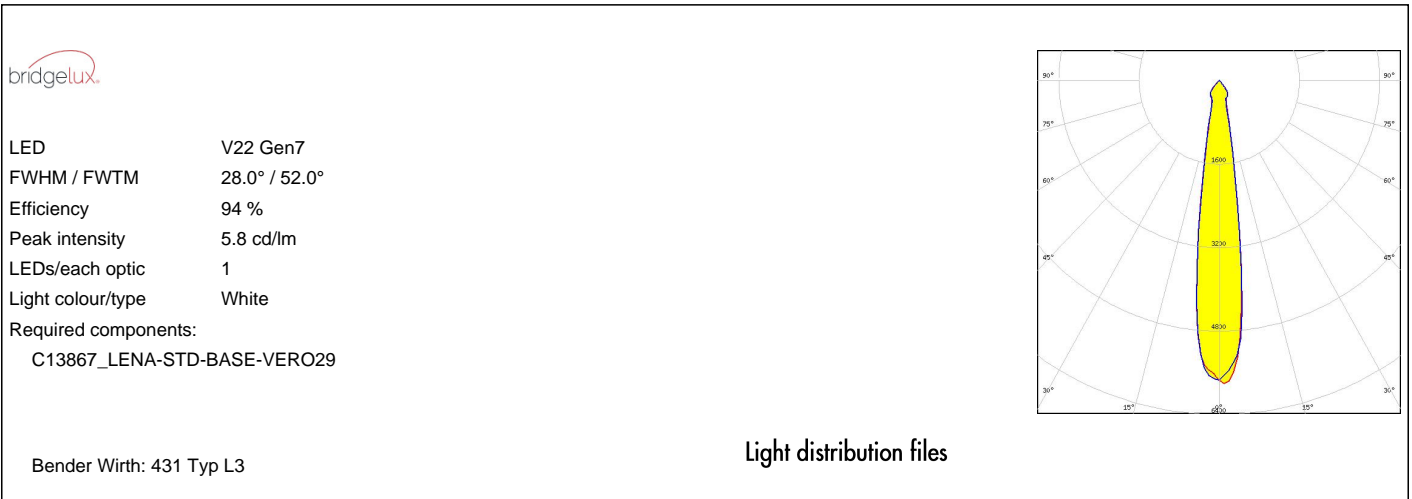
Required components:
 C13868_LENA-STD-BASE-VERO13-18



Bender Wirth: 477 Typ L1

Light distribution files

OPTICAL RESULTS (SIMULATED):

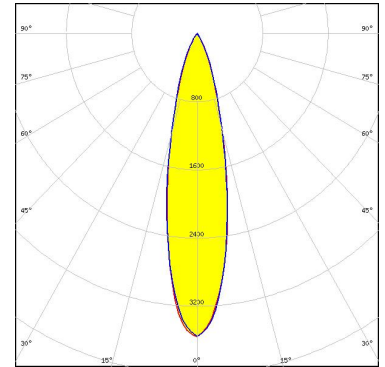


OPTICAL RESULTS (SIMULATED):



LED CXA/B 30xx
FWHM / FWTM 24.0° / 50.0°
Efficiency 80 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:
C11996_LENA-LENS



IDEAL: 50-2234C + 50-2100LN

Light distribution files



LED CxM-14 (19x19)
FWHM / FWTM 22.0° / 39.0°
Efficiency 83 %
Peak intensity 4.7 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 23.0° / 50.0°
Efficiency 78 %
Peak intensity 3.4 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

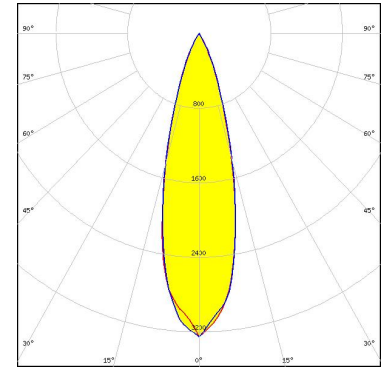
OPTICAL RESULTS (SIMULATED):



LED CxM-22 (28x28)
FWHM / FWTM 28.0° / 51.0°
Efficiency 83 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C12692_LENA-STD-BASE-CLL040



Light distribution files



LED CxM-9 (13.5x13.5)
FWHM / FWTM 17.0° / 31.0°
Efficiency 83 %
Peak intensity 6.6 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 CxM-9 (13.5x13.5)
FWHM / FWTM 20.0° / 44.0°
Efficiency 78 %
Peak intensity 4.3 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


OPTICAL RESULTS (SIMULATED):

 SEOL SEMICONDUCTOR	
LED	ZC12/18
FWHM / FWTM	23.0° / 50.0°
Efficiency	78 %
Peak intensity	3.4 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	

 SEOL SEMICONDUCTOR	
LED	ZC12/18
FWHM / FWTM	22.0° / 39.0°
Efficiency	83 %
Peak intensity	4.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C13868_LENA-STD-BASE-VERO13-18	
Bender Wirth: 433 Typ L1	

 SEOL SEMICONDUCTOR	
LED	ZC4/6
FWHM / FWTM	20.0° / 44.0°
Efficiency	78 %
Peak intensity	4.3 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	

OPTICAL RESULTS (SIMULATED):

 SEOL SEMICONDUCTOR	
LED	ZC4/6
FWHM / FWTM	17.0° / 31.0°
Efficiency	83 %
Peak intensity	6.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components: C13868_LENA-STD-BASE-VERO13-18	
Bender Wirth: 434 Typ L1	

GENERAL INFORMATION:

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

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

MATERIALS:

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

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

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

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

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

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

LEDiL Oy

Joensuunkatu 7
FI-24240 SALO
Finland

LEDiL Inc.

228 West Page Street
Suite D
Sycamore IL 60178
USA

Ledil Optics Technology (Shenzhen) Co., Ltd.

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

Local sales and technical support

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

Shipping locations

Poznan, Poland
Hong Kong, China

Distribution Partners

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