

LENA-WAS

Asymmetric beam for wall-washing

SPECIFICATION:

| | |
|----------------|------------|
| Dimensions | Ø 111.0 mm |
| Height | 37 mm |
| Fastening | glue |
| ROHS compliant | yes ⓘ |

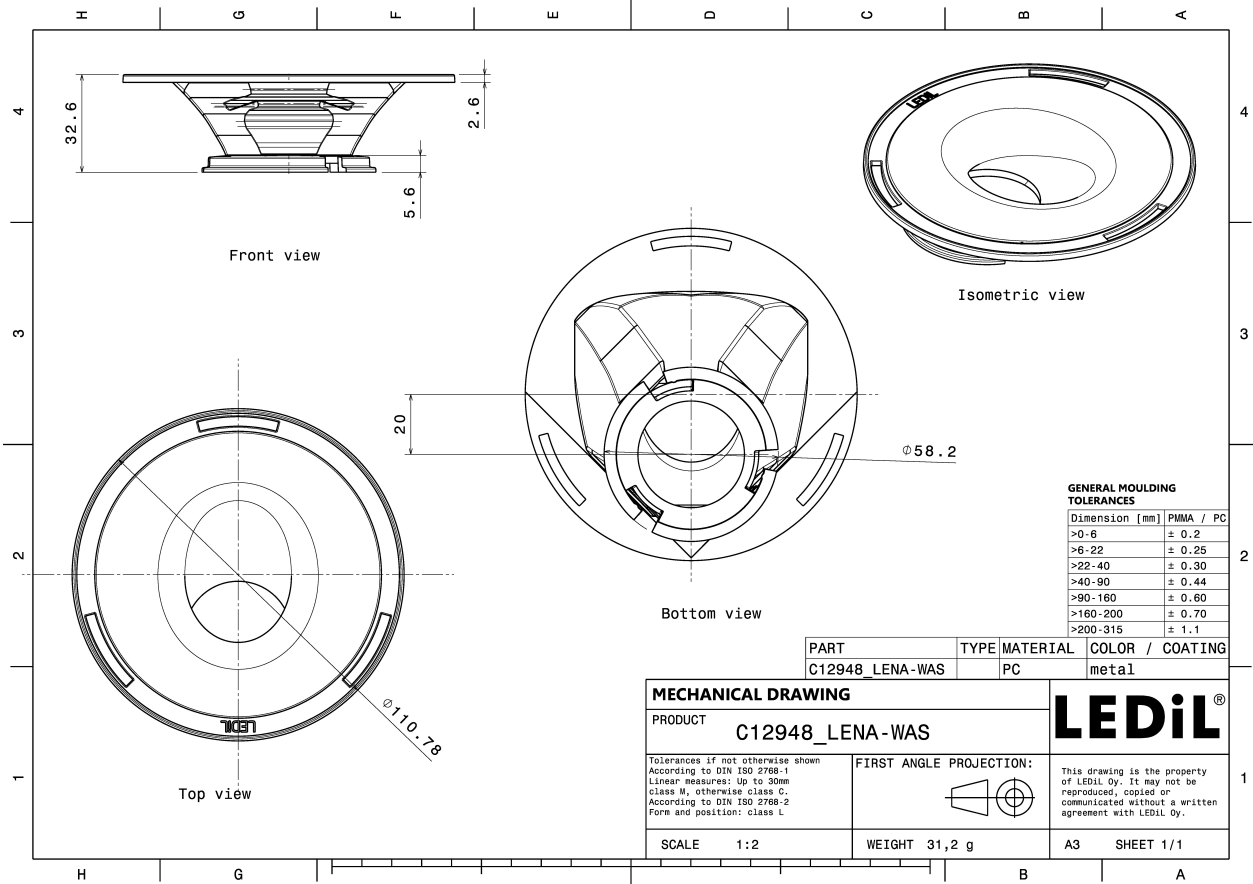


MATERIALS:

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

ORDERING INFORMATION:

| Component | Qty in box | MOQ | MPQ | Box weight (kg) |
|---|------------|-----|-----|-----------------|
| C12948_LENA-WAS » Box size: 480 x 280 x 300 mm | 56 | 56 | 56 | 3.1 |

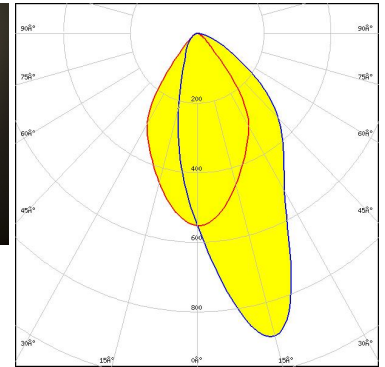


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):



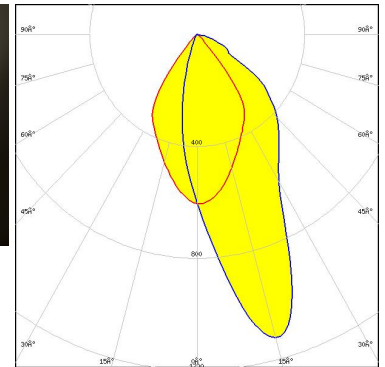
LED BXRA ES Rectangle
FWHM / FWTM Asymmetric
Efficiency 77 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12153_LENA-STD-BASE-BXRA
 C11996_LENA-LENS



Light distribution files



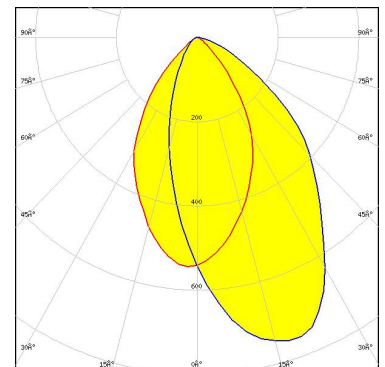
LED BXRA ES Rectangle
FWHM / FWTM Asymmetric
Efficiency 80 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12153_LENA-STD-BASE-BXRA



Light distribution files



LED BXRA RS
FWHM / FWTM Asymmetric
Efficiency 75 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12229_LENA-STD-BASE-RS
 C11996_LENA-LENS

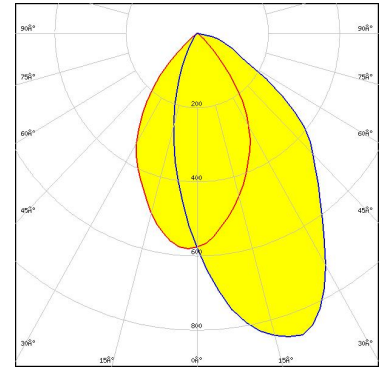


Light distribution files

OPTICAL RESULTS (MEASURED):



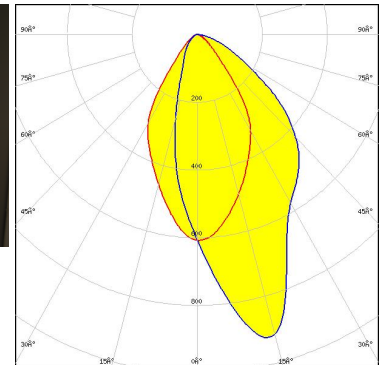
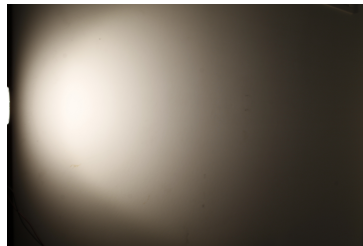
LED BXRA RS
FWHM / FWTM Asymmetric
Efficiency 80 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12229_LENA-STD-BASE-RS



Light distribution files



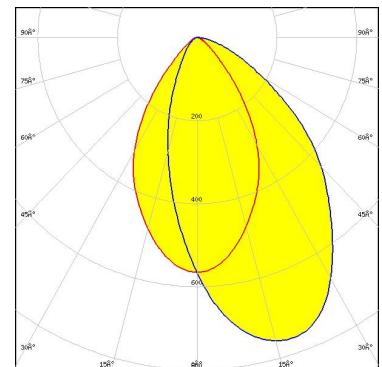
LED V10 Gen6
FWHM / FWTM Asymmetric
Efficiency 83 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13186_LENA-STD-BASE-CXA15
 C11996_LENA-LENS



Light distribution files



LED V22 Gen7
FWHM / FWTM Asymmetric
Efficiency 82 %
Peak intensity 0.8 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

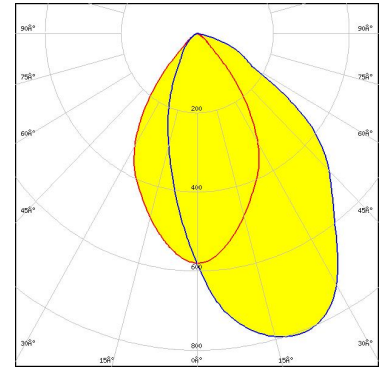
OPTICAL RESULTS (MEASURED):



LED V22 Gen7
 FWHM / FWTM Asymmetric
 Efficiency 84 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29
 C14169_LENA-CLEAR-LENS
 Bender Wirth: 431 Typ L3



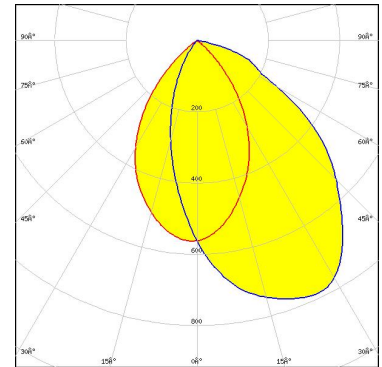
Light distribution files



LED Vero SE 29
 FWHM / FWTM Asymmetric
 Efficiency 87 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C15083_LENA-STD-BASE-VERO29



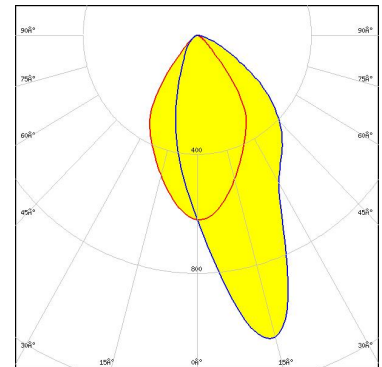
Light distribution files



LED VERO13
 FWHM / FWTM Asymmetric
 Efficiency 87 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

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



Light distribution files

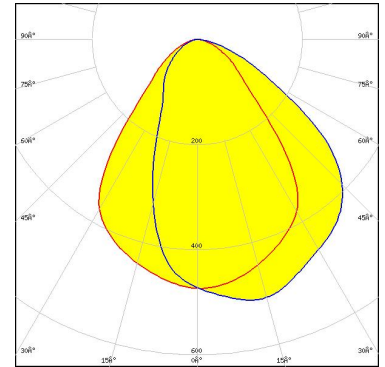
OPTICAL RESULTS (MEASURED):



LED VERO13
 FWHM / FWTM Asymmetric
 Efficiency 87 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

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



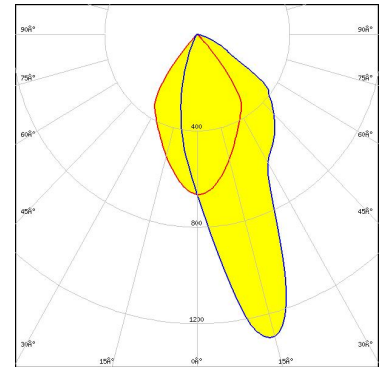
Light distribution files



LED VERO13
 FWHM / FWTM Asymmetric
 Efficiency 91 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18



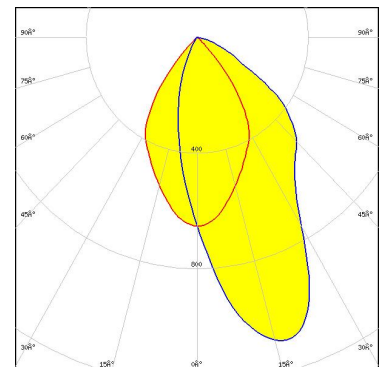
Light distribution files



LED VERO18
 FWHM / FWTM Asymmetric
 Efficiency 90 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

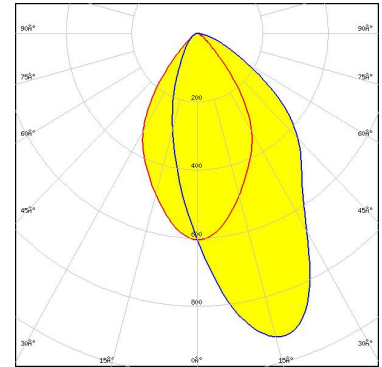


Light distribution files

OPTICAL RESULTS (MEASURED):



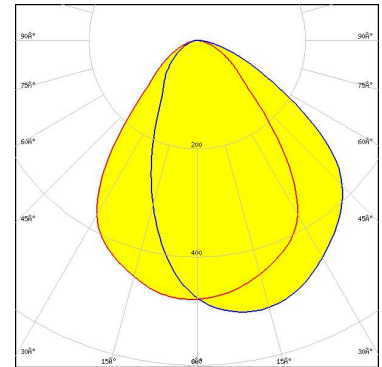
LED VERO18
FWHM / FWTM Asymmetric
Efficiency 86 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS



Light distribution files



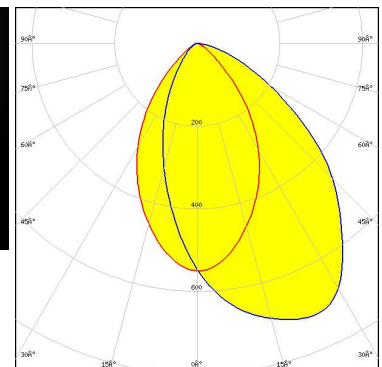
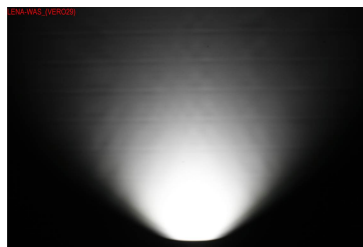
LED VERO18
FWHM / FWTM Asymmetric
Efficiency 87 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS



Light distribution files



LED VERO29
FWHM / FWTM Asymmetric
Efficiency 82 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS

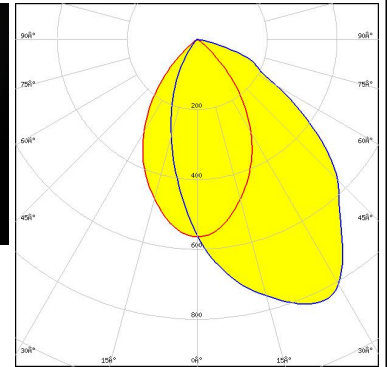
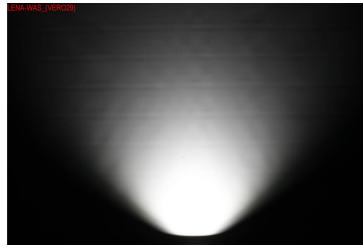


Light distribution files

OPTICAL RESULTS (MEASURED):



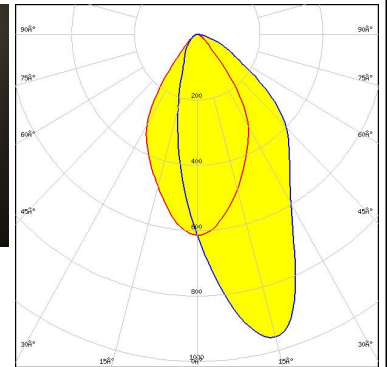
LED VERO29
FWHM / FWTM Asymmetric
Efficiency 87 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13867_LENA-STD-BASE-VERO29



Light distribution files

CITIZEN

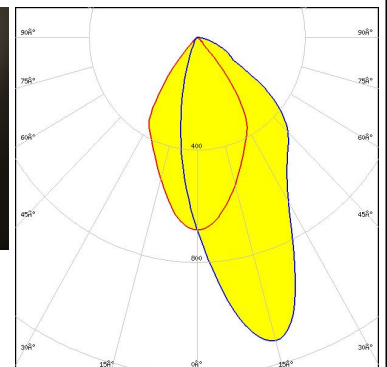
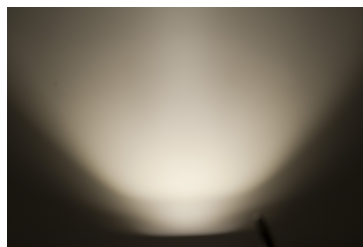
LED CL-L340
FWHM / FWTM Asymmetric
Efficiency 73 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C11995_LENA-STD-BASE-CL340
 C11996_LENA-LENS



Light distribution files

CITIZEN

LED CL-L340
FWHM / FWTM Asymmetric
Efficiency 84 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C11995_LENA-STD-BASE-CL340

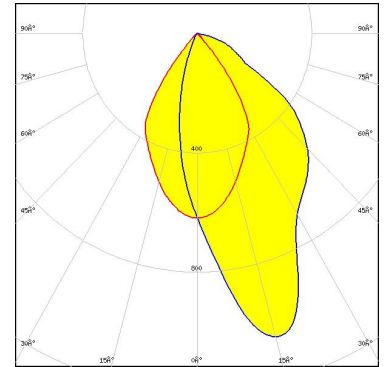


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

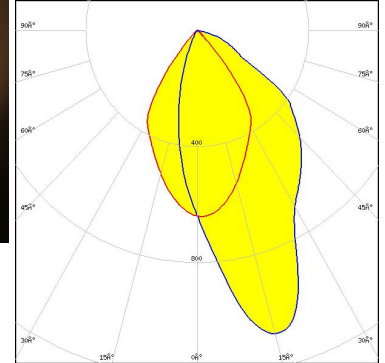
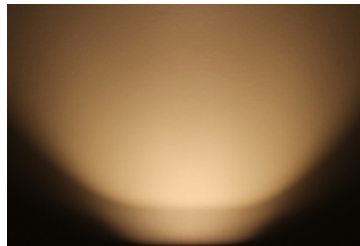
LED CLL03x/CLU03x
 FWHM / FWTM Asymmetric
 Efficiency 87 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 A.A.G. STUCCHI: 8101-G2 + S-8000-11



Light distribution files

CITIZEN

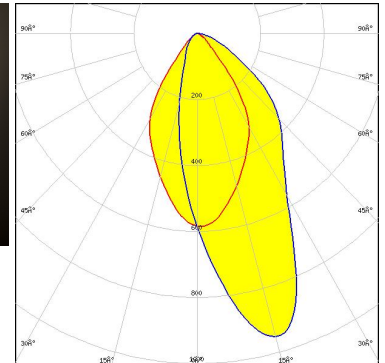
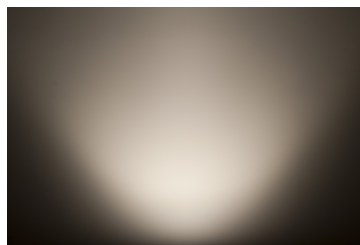
LED CLL03x/CLU03x
 FWHM / FWTM Asymmetric
 Efficiency 90 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 433 Typ L1



Light distribution files

CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM Asymmetric
 Efficiency 76 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030
 C11996_LENA-LENS

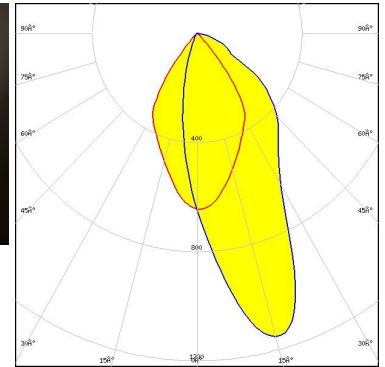


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

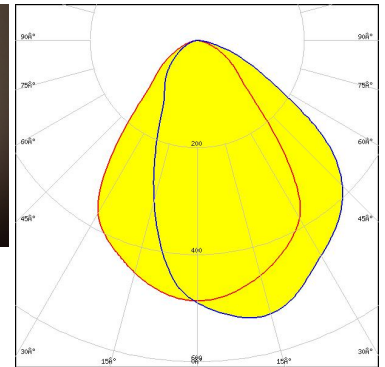
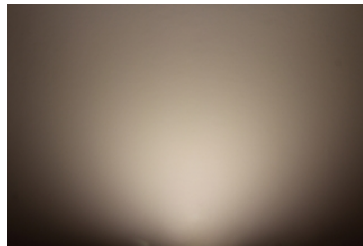
LED CLL03x/CLU03x
 FWHM / FWTM Asymmetric
 Efficiency 81 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030



Light distribution files

CITIZEN

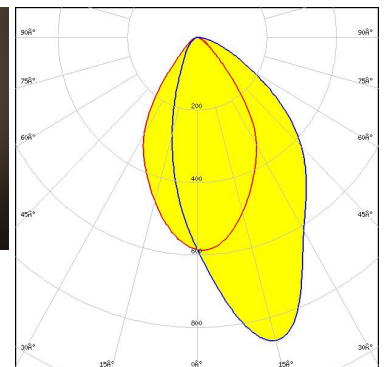
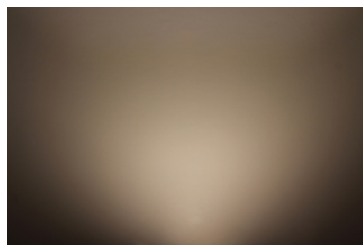
LED CLL03x/CLU03x
 FWHM / FWTM Asymmetric
 Efficiency 87 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 433 Typ L1



Light distribution files

CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM Asymmetric
 Efficiency 85 %
 Peak intensity 0.9 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

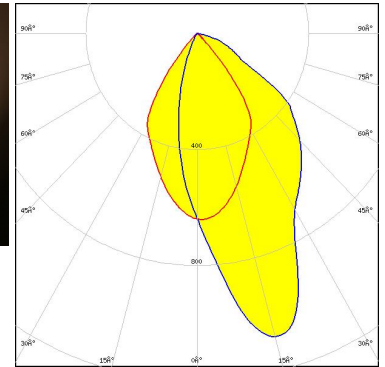
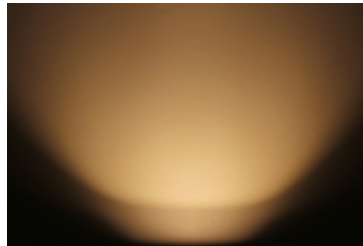


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

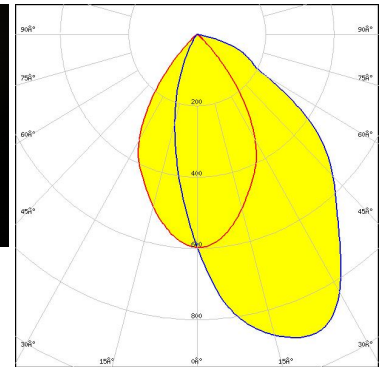
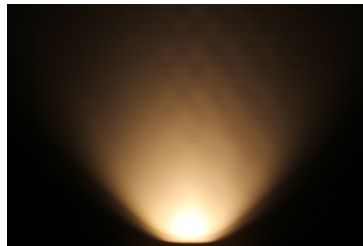
LED CLL03x/CLU03x
 FWHM / FWTM Asymmetric
 Efficiency 90 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 433 Typ L1



Light distribution files

CITIZEN

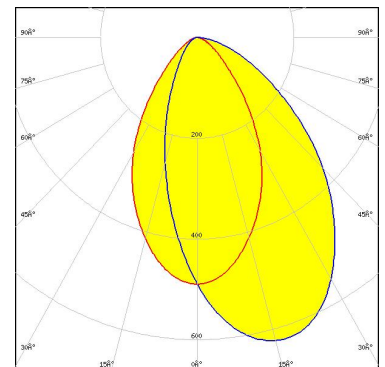
LED CLL04x/CLU04x
 FWHM / FWTM Asymmetric
 Efficiency 89 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 431 Typ L3



Light distribution files

CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM Asymmetric
 Efficiency 74 %
 Peak intensity 0.6 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

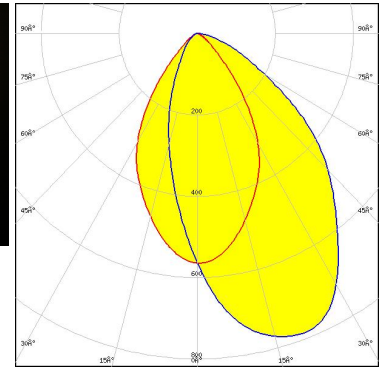
OPTICAL RESULTS (MEASURED):

CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM Asymmetric
 Efficiency 84 %
 Peak intensity 0.8 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



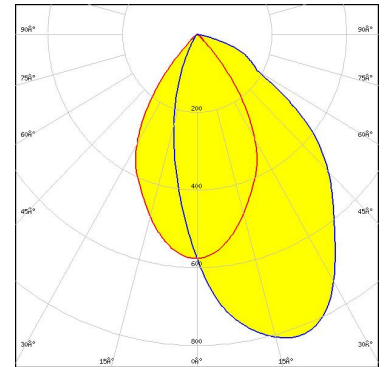
Light distribution files

CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM Asymmetric
 Efficiency 80 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

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



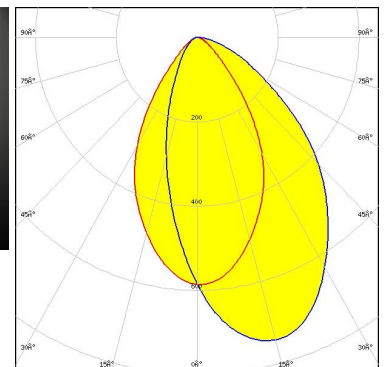
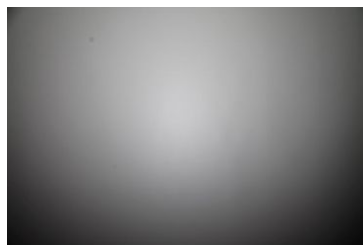
Light distribution files

CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM Asymmetric
 Efficiency 82 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

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

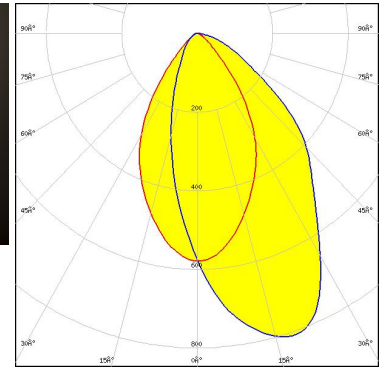


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

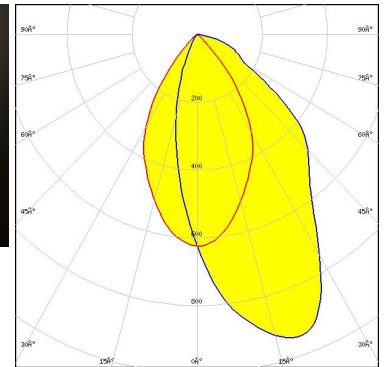
LED CLL04x/CLU04x
 FWHM / FWTM Asymmetric
 Efficiency 78 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



Light distribution files

CITIZEN

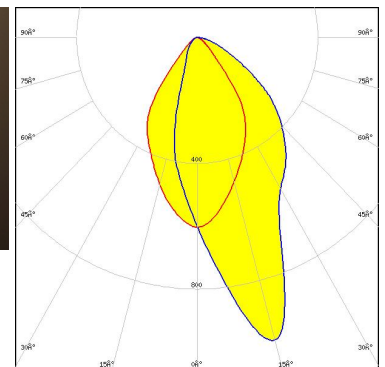
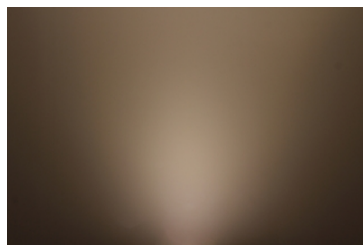
LED CLL04x/CLU04x
 FWHM / FWTM Asymmetric
 Efficiency 82 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040



Light distribution files

CITIZEN

LED CLU700/701/702/703
 FWHM / FWTM Asymmetric
 Efficiency 84 %
 Peak intensity 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

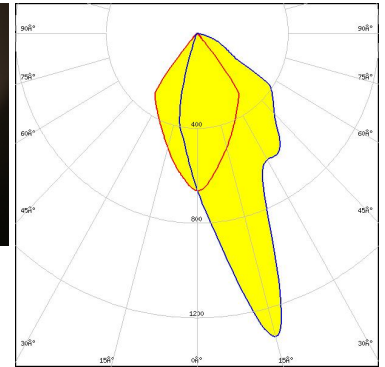
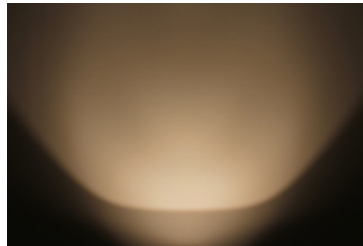


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

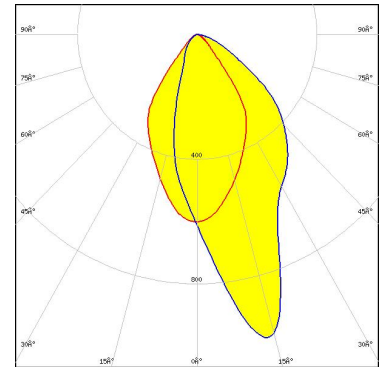
LED CLU700/701/702/703
FWHM / FWTM Asymmetric
Efficiency 89 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 434 Typ L1



Light distribution files

CITIZEN

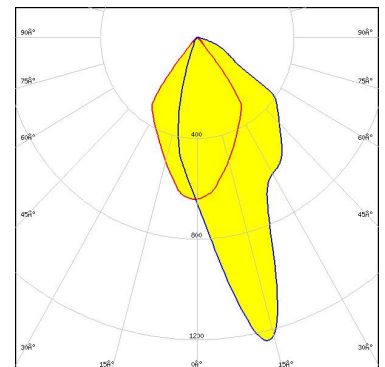
LED CLU710/711
FWHM / FWTM Asymmetric
Efficiency 84 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12691_LENA-STD-BASE-CLL030
C11996_LENA-LENS



Light distribution files

CITIZEN

LED CLU710/711
FWHM / FWTM Asymmetric
Efficiency 89 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12691_LENA-STD-BASE-CLL030

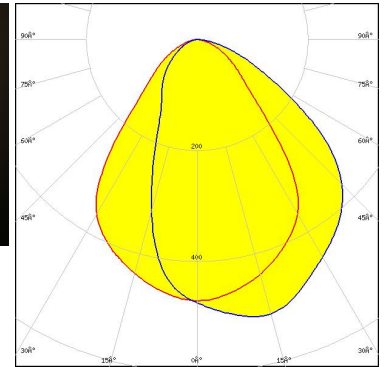


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

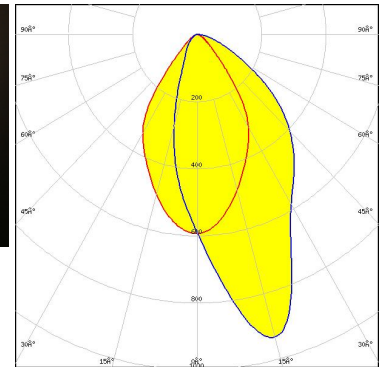
LED CLU720/721/723
FWHM / FWTM Asymmetric
Efficiency 86 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 433 Typ L1



Light distribution files

CITIZEN

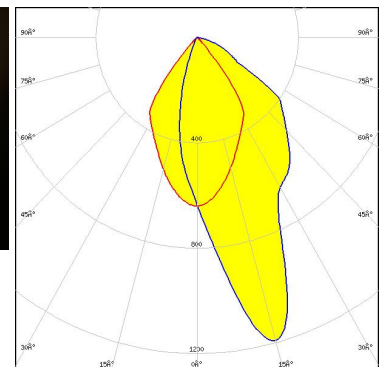
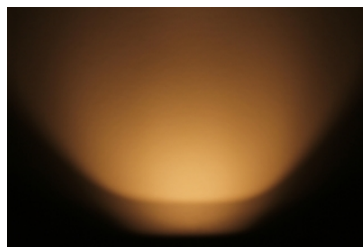
LED CLU720/721/723
FWHM / FWTM Asymmetric
Efficiency 85 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 433 Typ L1



Light distribution files

CITIZEN

LED CLU720/721/723
FWHM / FWTM Asymmetric
Efficiency 90 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 433 Typ L1

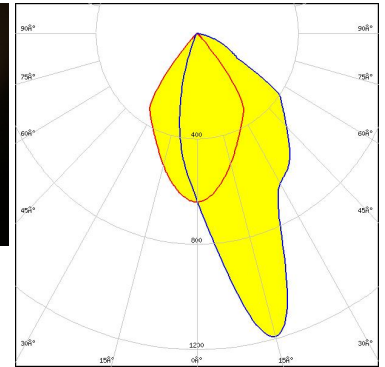
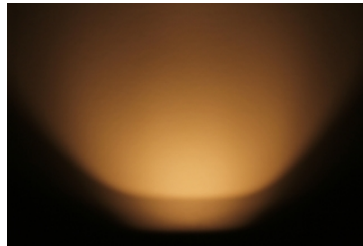


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

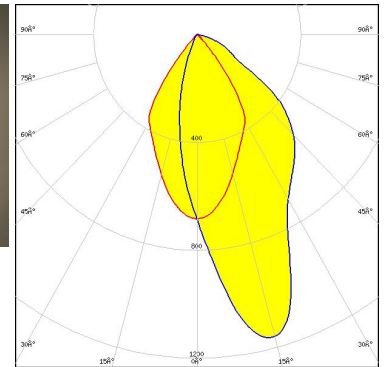
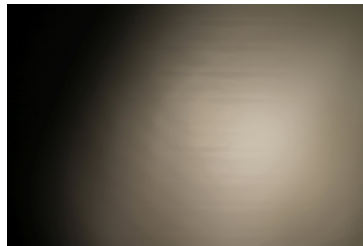
LED CLU720/721/723
 FWHM / FWTM Asymmetric
 Efficiency 90 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 433 Typ L1



Light distribution files



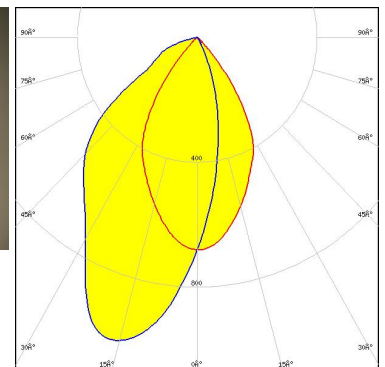
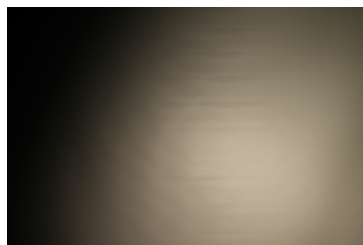
LED CMA1840
 FWHM / FWTM Asymmetric
 Efficiency 86 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C14146_LENA-STD-BASE-CXA18



Light distribution files



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

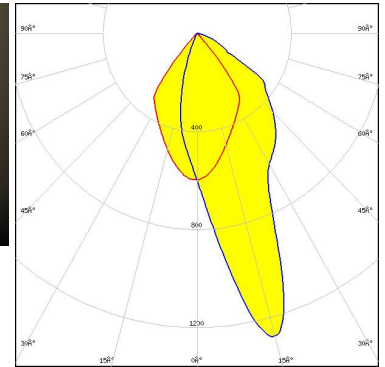


Light distribution files

OPTICAL RESULTS (MEASURED):



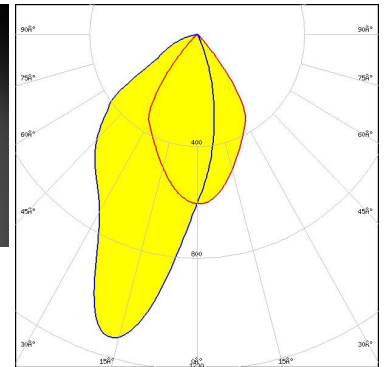
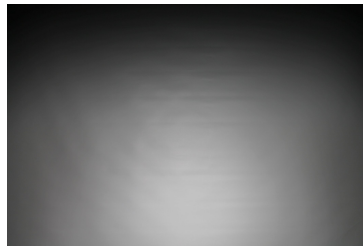
LED CMT14xx
FWHM / FWTM Asymmetric
Efficiency 85 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 434 Typ L1



Light distribution files



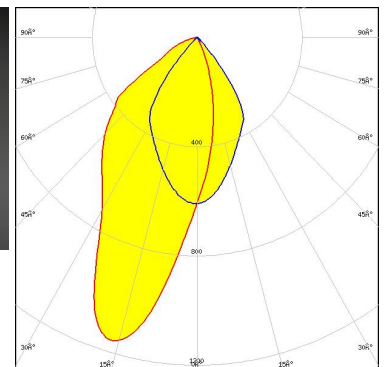
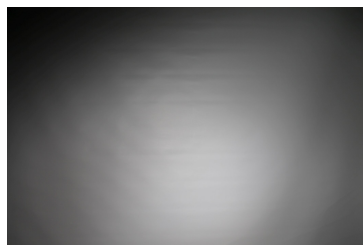
LED CMT19xx
FWHM / FWTM Asymmetric
Efficiency 86 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12691_LENA-STD-BASE-CLL030



Light distribution files



LED CMT19xx
FWHM / FWTM Asymmetric
Efficiency 86 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 477 Typ L1

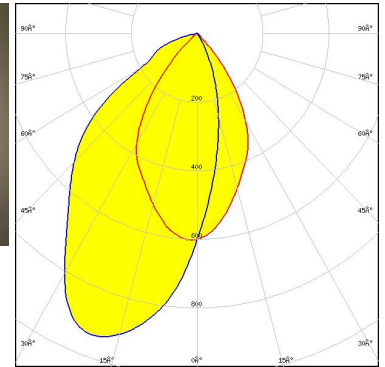
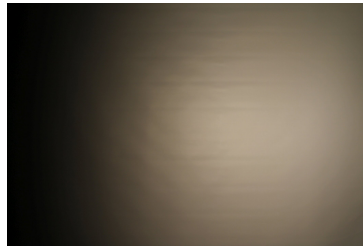


Light distribution files

OPTICAL RESULTS (MEASURED):



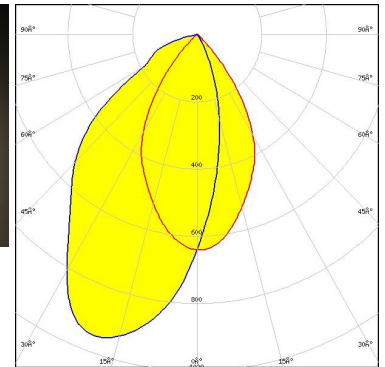
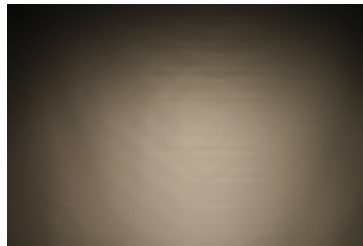
LED CMT28xx
 FWHM / FWTM Asymmetric
 Efficiency 85 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 471 Typ L3



Light distribution files



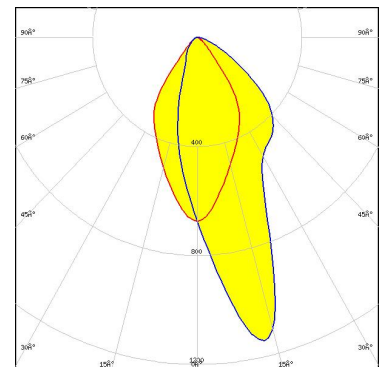
LED CMT28xx
 FWHM / FWTM Asymmetric
 Efficiency 85 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040



Light distribution files



LED CXA/B 15xx
 FWHM / FWTM Asymmetric
 Efficiency 84 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13186_LENA-STD-BASE-CXA15
 C11996_LENA-LENS

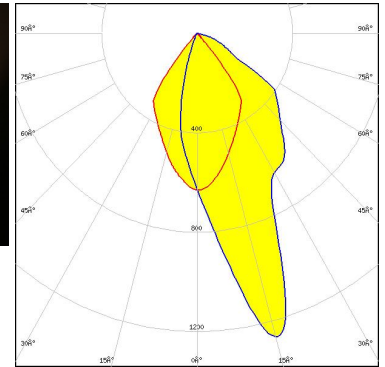
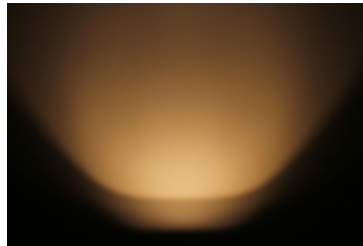


Light distribution files

OPTICAL RESULTS (MEASURED):



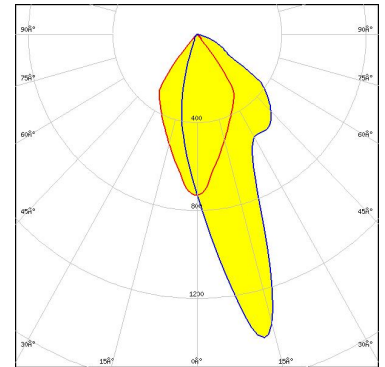
LED CXA/B 15xx
FWHM / FWTM Asymmetric
Efficiency 89 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 441 Typ L1



Light distribution files



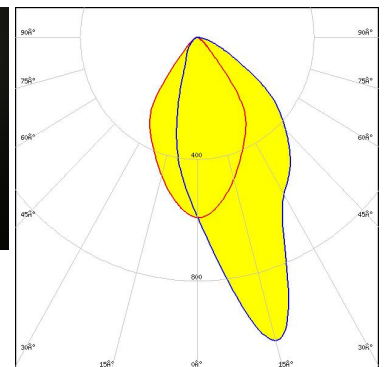
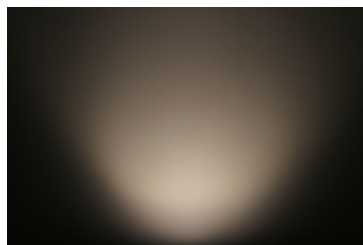
LED CXA/B 15xx
FWHM / FWTM Asymmetric
Efficiency 88 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13186_LENA-STD-BASE-CXA15



Light distribution files



LED CXA/B 15xx
FWHM / FWTM Asymmetric
Efficiency 85 %
Peak intensity 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

OPTICAL RESULTS (MEASURED):



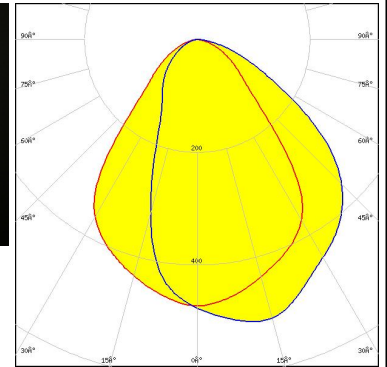
LED CXA/B 15xx
 FWHM / FWTM Asymmetric
 Efficiency 86 %
 Peak intensity 0.5 cd/m
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 441 Typ L1



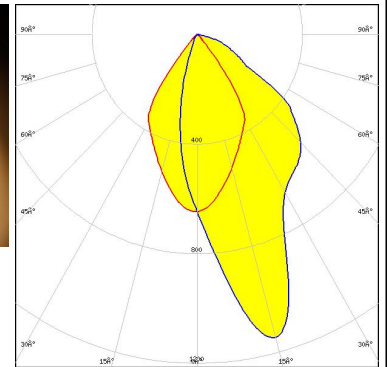
Light distribution files



LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM Asymmetric
 Efficiency 88 %
 Peak intensity 1.1 cd/m
 LEDs/each optic 1
 Light colour/type White

Required components:

C14146_LENA-STD-BASE-CXA18



Light distribution files



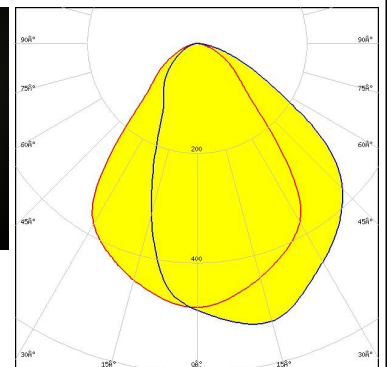
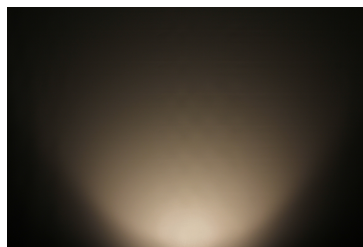
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM Asymmetric
 Efficiency 86 %
 Peak intensity 0.5 cd/m
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 437 Typ L1

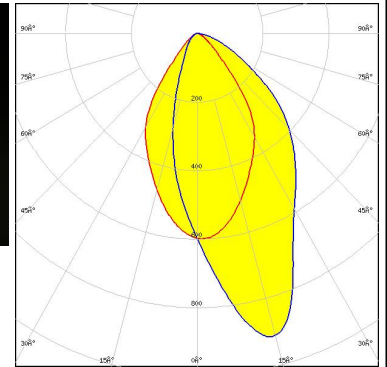
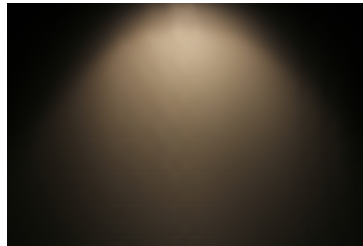


Light distribution files

OPTICAL RESULTS (MEASURED):



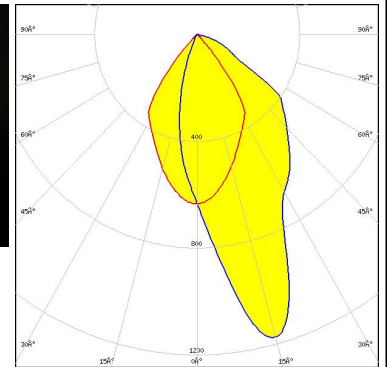
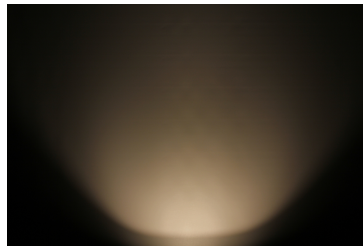
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM Asymmetric
 Efficiency 84 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 437 Typ L1



Light distribution files



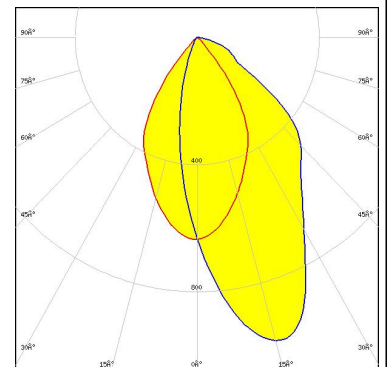
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM Asymmetric
 Efficiency 87 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 437 Typ L1



Light distribution files



LED CXA/B 25xx
 FWHM / FWTM Asymmetric
 Efficiency 75 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13324_LENA-STD-BASE-CXA25

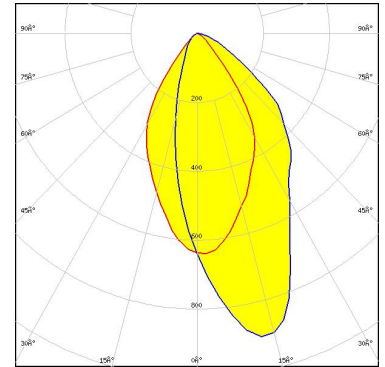


Light distribution files

OPTICAL RESULTS (MEASURED):



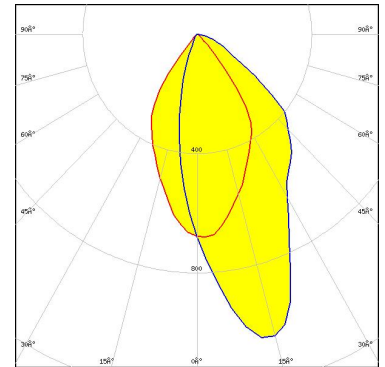
LED CXA2011
FWHM / FWTM Asymmetric
Efficiency 75 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12105_LENA-STD-BASE-CXA20
 C11996_LENA-LENS



Light distribution files



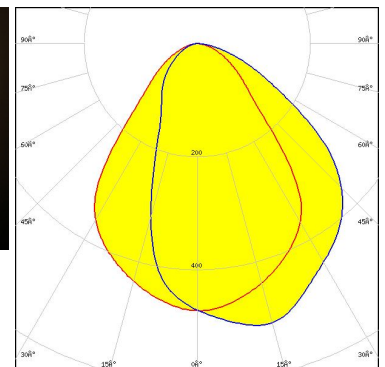
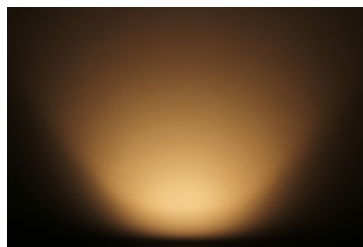
LED CXA2011
FWHM / FWTM Asymmetric
Efficiency 79 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12105_LENA-STD-BASE-CXA20



Light distribution files



LED LUXEON CoB 1202/1203
FWHM / FWTM Asymmetric
Efficiency 86 %
Peak intensity 0.5 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

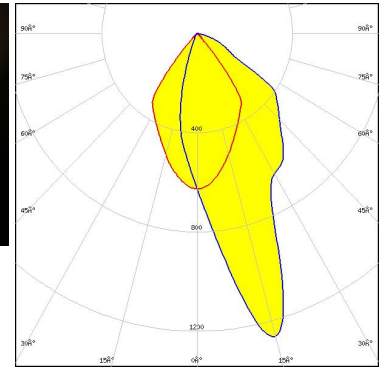
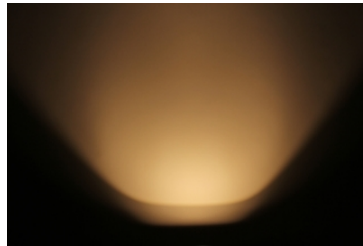


Light distribution files

OPTICAL RESULTS (MEASURED):



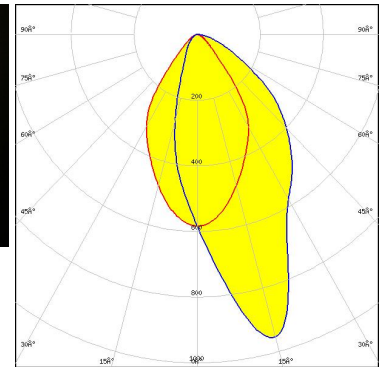
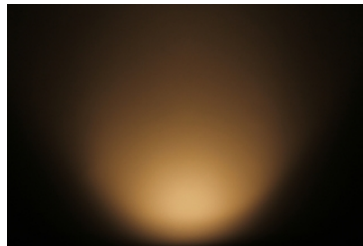
LED LUXEON CoB 1202/1203
FWHM / FWTM Asymmetric
Efficiency 89 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 438 Typ L1



Light distribution files



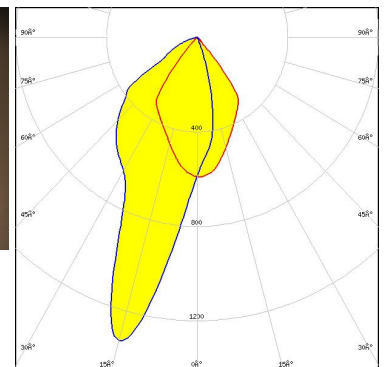
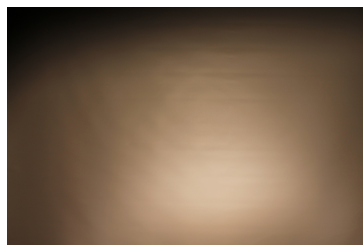
LED LUXEON CoB 1202/1203
FWHM / FWTM Asymmetric
Efficiency 84 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 438 Typ L1



Light distribution files



LED LUXEON CoB 1204HD
FWHM / FWTM Asymmetric
Efficiency 86 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C11981_LENA-STD-BASE-COB-L110

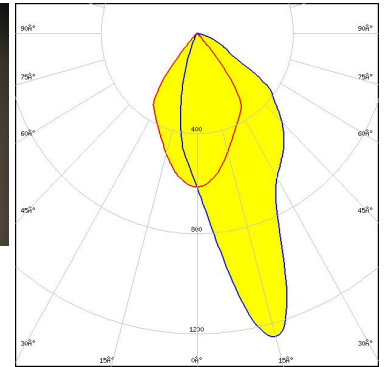
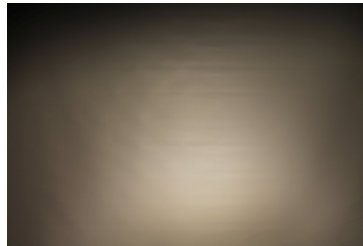


Light distribution files

OPTICAL RESULTS (MEASURED):



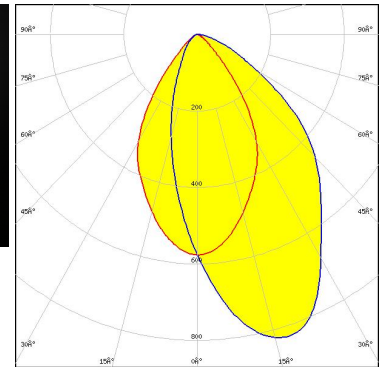
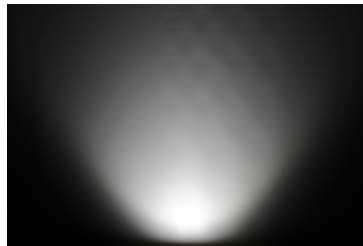
LED LUXEON CoB 1205HD
FWHM / FWTM Asymmetric
Efficiency 86 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C11981_LENA-STD-BASE-COB-L110



Light distribution files



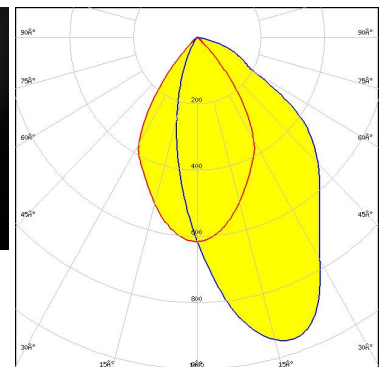
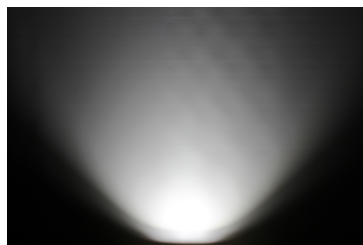
LED LUXEON CoB 1211
FWHM / FWTM Asymmetric
Efficiency 84 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS
 Bender Wirth: 431 Typ L3



Light distribution files



LED LUXEON CoB 1211
FWHM / FWTM Asymmetric
Efficiency 89 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 431 Typ L3

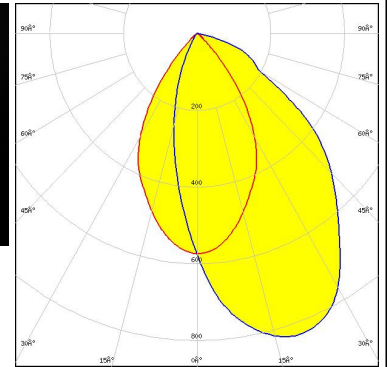
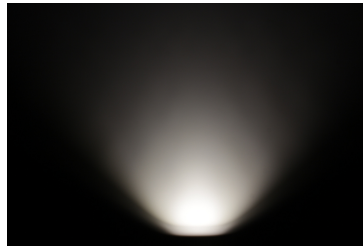


Light distribution files

OPTICAL RESULTS (MEASURED):



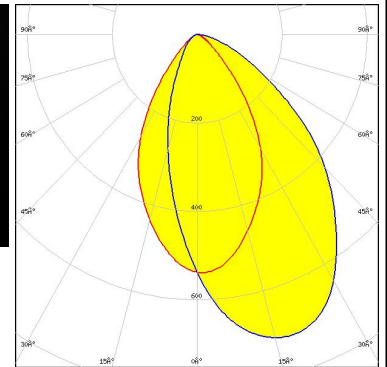
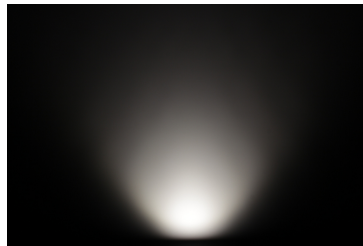
LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM 60.0° / 95.0°
 Efficiency 81 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 A.A.G. STUCCHI: 8102-G2 + S-8000-12



Light distribution files



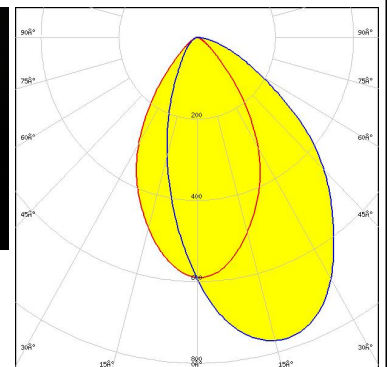
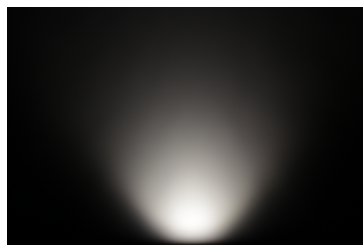
LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM Asymmetric
 Efficiency 77 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C11996_LENA-LENS
 A.A.G. STUCCHI: 8102-G2 + S-8000-12



Light distribution files



LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM Asymmetric
 Efficiency 84 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS

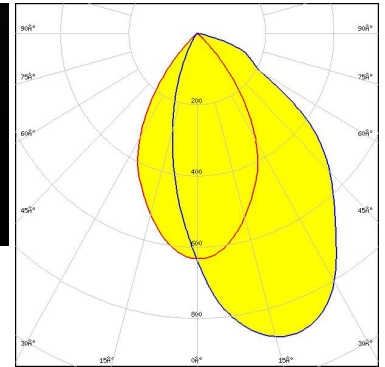
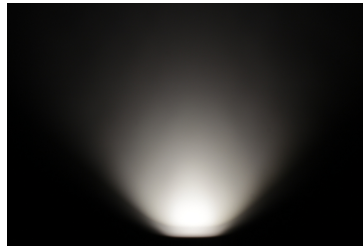


Light distribution files

OPTICAL RESULTS (MEASURED):



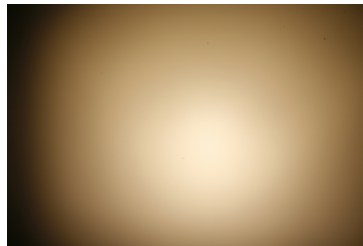
LED LUXEON CoB 1213/1216/1812
FWHM / FWTM Asymmetric
Efficiency 88 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12692_LENA-STD-BASE-CLL040



Light distribution files



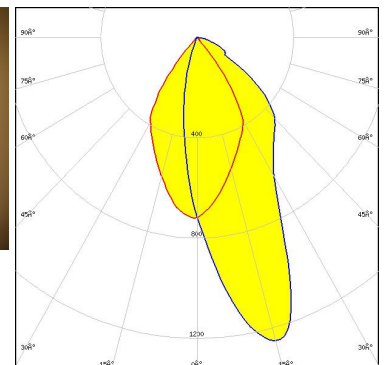
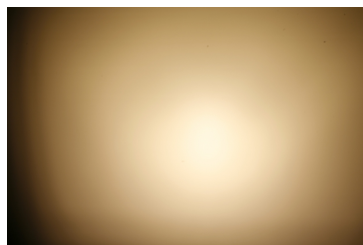
LED LUXEON K12
FWHM / FWTM Asymmetric
Efficiency 77 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12924_LENA-STD-BASE-LUXEON-K
C11996_LENA-LENS



Light distribution files



LED LUXEON K12
FWHM / FWTM Asymmetric
Efficiency 82 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12924_LENA-STD-BASE-LUXEON-K



Light distribution files

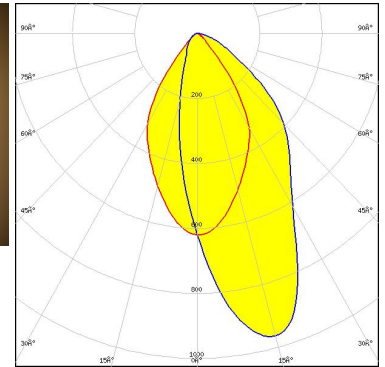
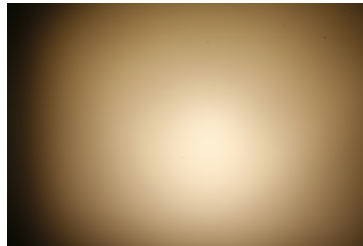
OPTICAL RESULTS (MEASURED):



LED LUXEON K16
 FWHM / FWTM Asymmetric
 Efficiency 76 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C12924_LENA-STD-BASE-LUXEON-K
 C11996_LENA-LENS



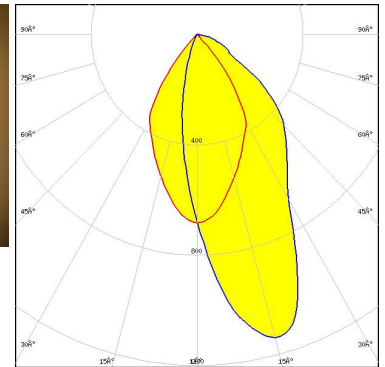
Light distribution files



LED LUXEON K16
 FWHM / FWTM Asymmetric
 Efficiency 81 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C12924_LENA-STD-BASE-LUXEON-K



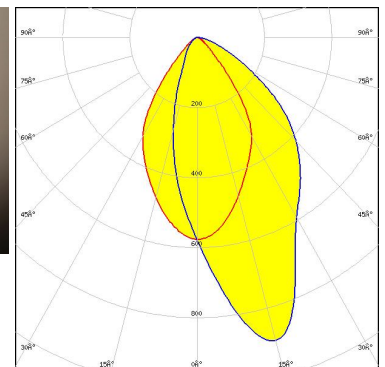
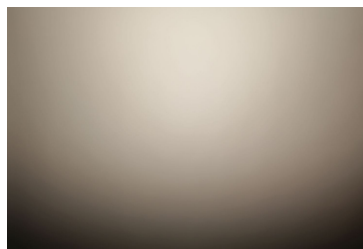
Light distribution files



LED CDM-14 (Dim-To-Warm)
 FWHM / FWTM Asymmetric
 Efficiency 83 %
 Peak intensity 0.9 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

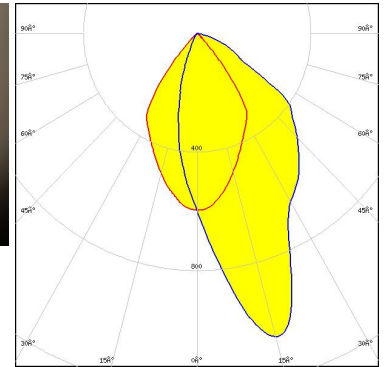
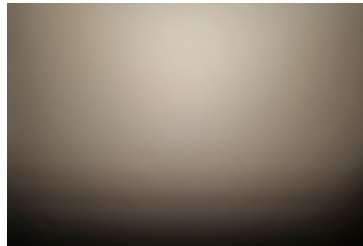


Light distribution files

OPTICAL RESULTS (MEASURED):



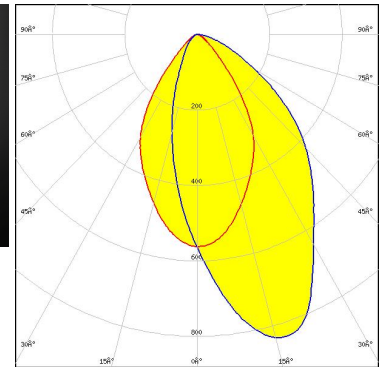
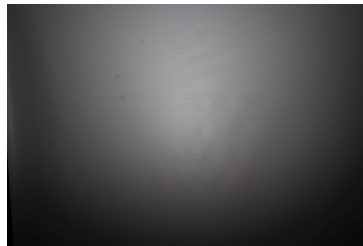
LED CDM-14 (Dim-To-Warm)
FWHM / FWTM 59.0° / 90.0°
Efficiency 88 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 491 Typ L2



Light distribution files



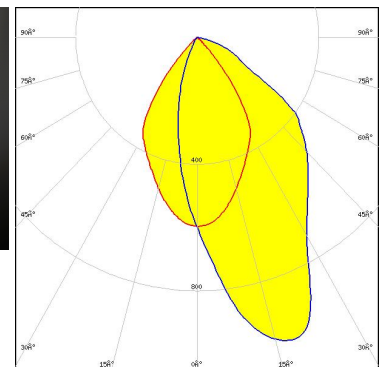
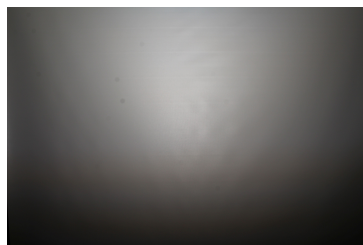
LED CDM-18 (Dim-To-Warm)
FWHM / FWTM Asymmetric
Efficiency 83 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 491 Typ L2



Light distribution files



LED CDM-18 (Dim-To-Warm)
FWHM / FWTM Asymmetric
Efficiency 88 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 491 Typ L2

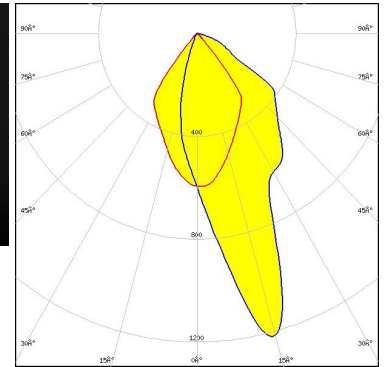
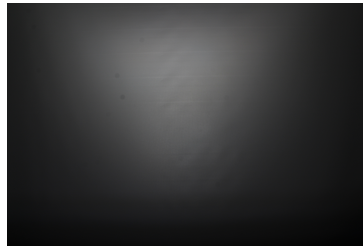


Light distribution files

OPTICAL RESULTS (MEASURED):



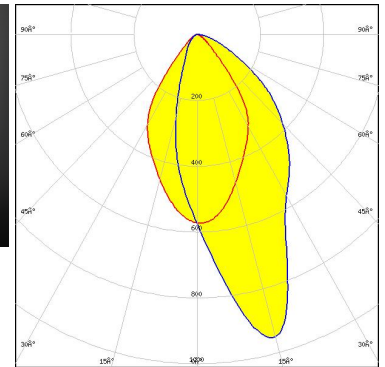
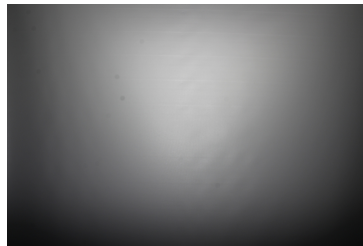
LED CDM-9 (Dim-To-Warm)
 FWHM / FWTM Asymmetric
 Efficiency 88 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 490 Typ L1



Light distribution files



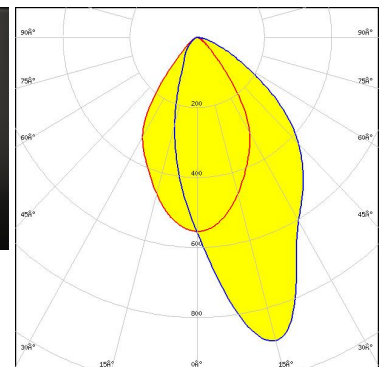
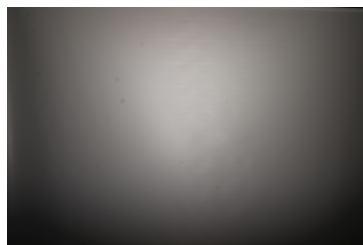
LED CDM-9 (Dim-To-Warm)
 FWHM / FWTM Asymmetric
 Efficiency 83 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 490 Typ L1



Light distribution files



LED CTM-14 (Tunable White)
 FWHM / FWTM Asymmetric
 Efficiency 87 %
 Peak intensity 1.1 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

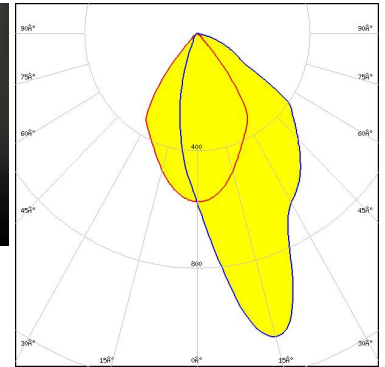


Light distribution files

OPTICAL RESULTS (MEASURED):



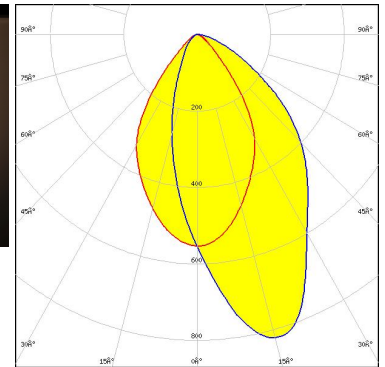
LED CTM-14 (Tunable White)
FWHM / FWTM Asymmetric
Efficiency 87 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 442 Typ L3



Light distribution files



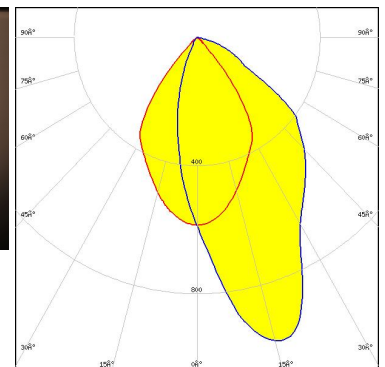
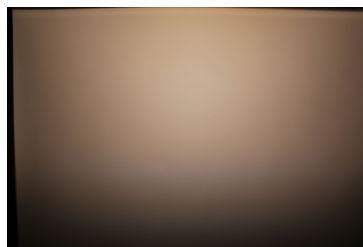
LED CTM-18 (Tunable White)
FWHM / FWTM Asymmetric
Efficiency 82 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS
 Bender Wirth: 442 Typ L3



Light distribution files



LED CTM-18 (Tunable White)
FWHM / FWTM Asymmetric
Efficiency 88 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 442 Typ L3

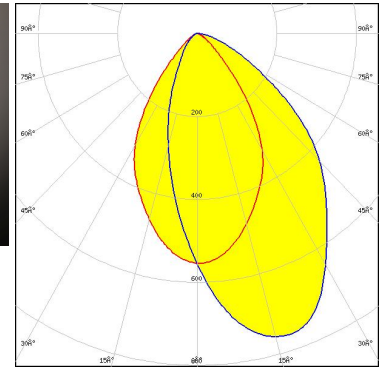
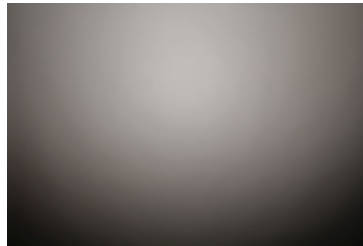


Light distribution files

OPTICAL RESULTS (MEASURED):



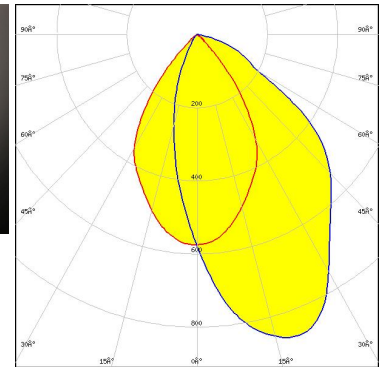
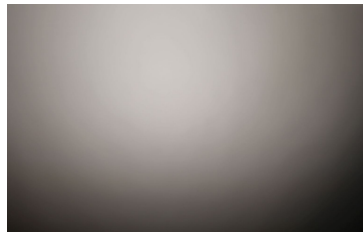
LED CTM-22 (Tunable White)
 FWHM / FWTM Asymmetric
 Efficiency 83 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS
 Bender Wirth: 494 Typ L3



Light distribution files



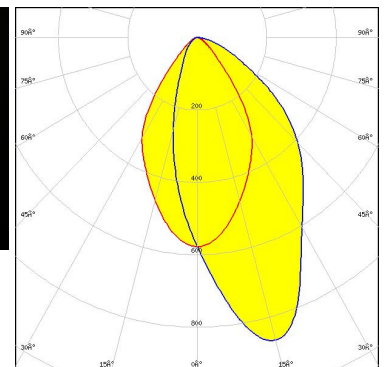
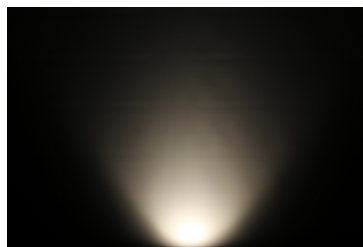
LED CTM-22 (Tunable White)
 FWHM / FWTM Asymmetric
 Efficiency 87 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 494 Typ L3



Light distribution files



LED CxM-14 (19x19)
 FWHM / FWTM Asymmetric
 Efficiency 82 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12691_LENA-STD-BASE-CLL030
 C11996_LENA-LENS

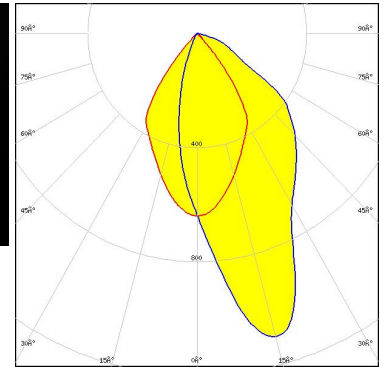
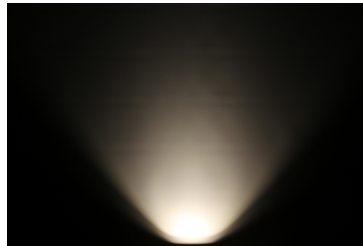


Light distribution files

OPTICAL RESULTS (MEASURED):



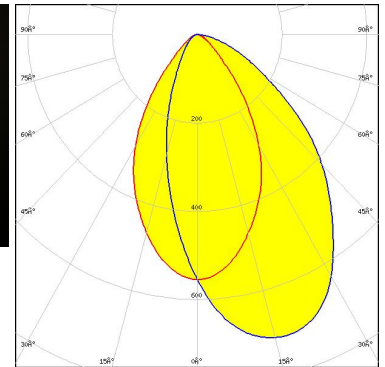
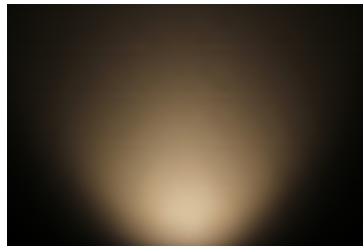
LED CxM-14 (19x19)
FWHM / FWTM Asymmetric
Efficiency 87 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12691_LENA-STD-BASE-CLL030



Light distribution files



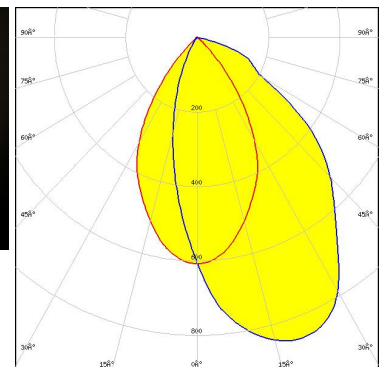
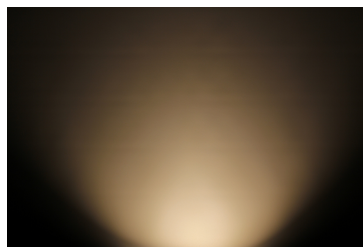
LED CxM-22 (28x28)
FWHM / FWTM Asymmetric
Efficiency 79 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



Light distribution files



LED CxM-22 (28x28)
FWHM / FWTM Asymmetric
Efficiency 84 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C12692_LENA-STD-BASE-CLL040



Light distribution files

OPTICAL RESULTS (MEASURED):



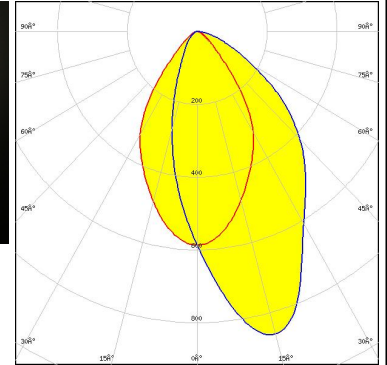
LED COB J-Type
 FWHM / FWTM Asymmetric
 Efficiency 84 %
 Peak intensity 0.9 cd/m
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 463 Typ L2



Light distribution files

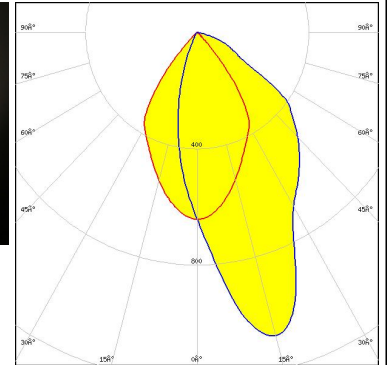


LED COB J-Type
 FWHM / FWTM Asymmetric
 Efficiency 89 %
 Peak intensity 1.1 cd/m
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

Bender Wirth: 463 Typ L2



Light distribution files



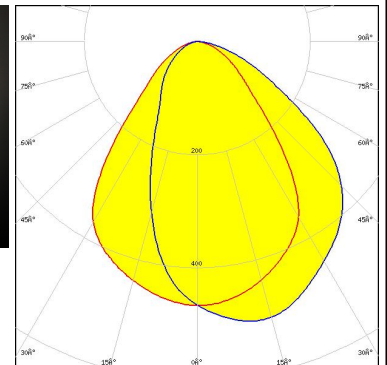
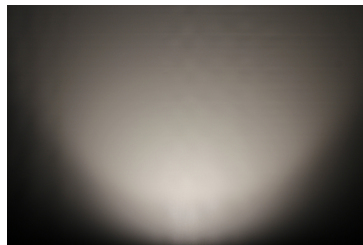
LED COB J-Type
 FWHM / FWTM Asymmetric
 Efficiency 86 %
 Peak intensity 0.5 cd/m
 LEDs/each optic 1
 Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 463 Typ L2

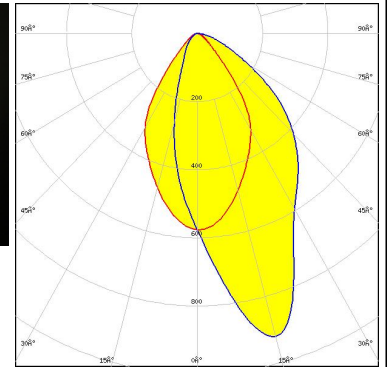


Light distribution files

OPTICAL RESULTS (MEASURED):



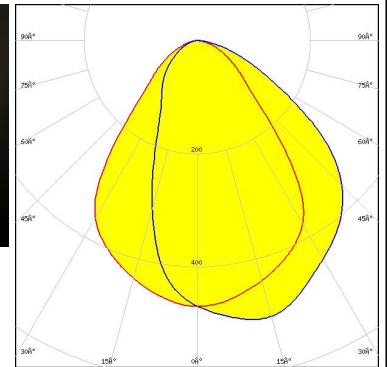
LED COB L-Type (LES 11)
FWHM / FWTM Asymmetric
Efficiency 84 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 438 Typ L1



Light distribution files



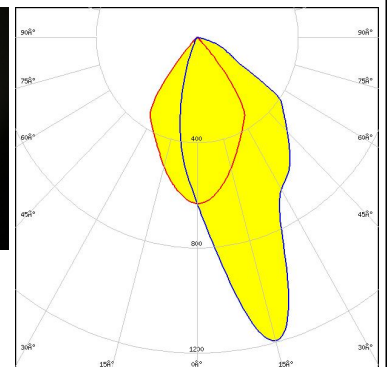
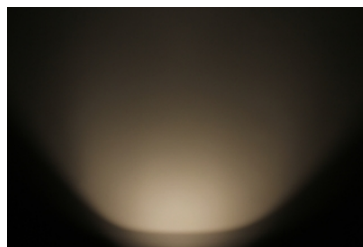
LED COB L-Type (LES 11)
FWHM / FWTM Asymmetric
Efficiency 86 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 438 Typ L1



Light distribution files

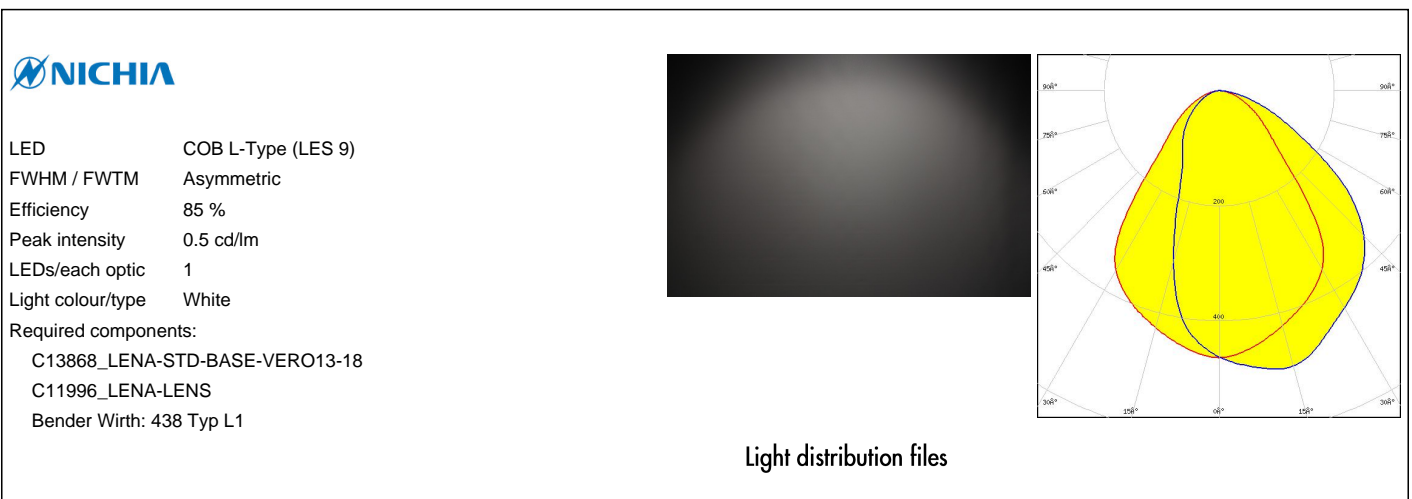
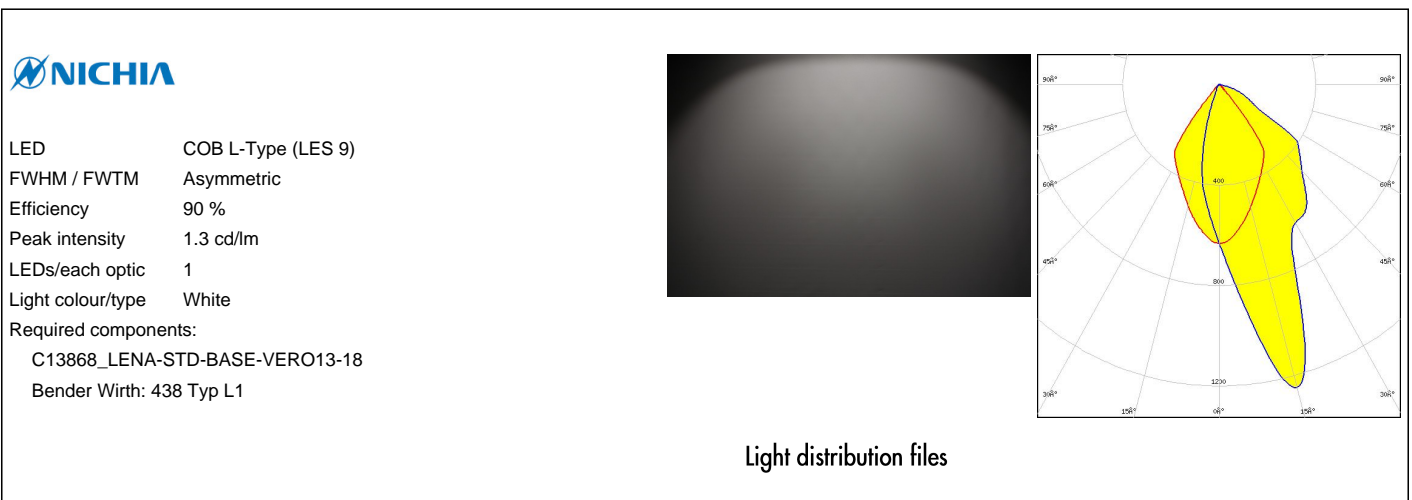
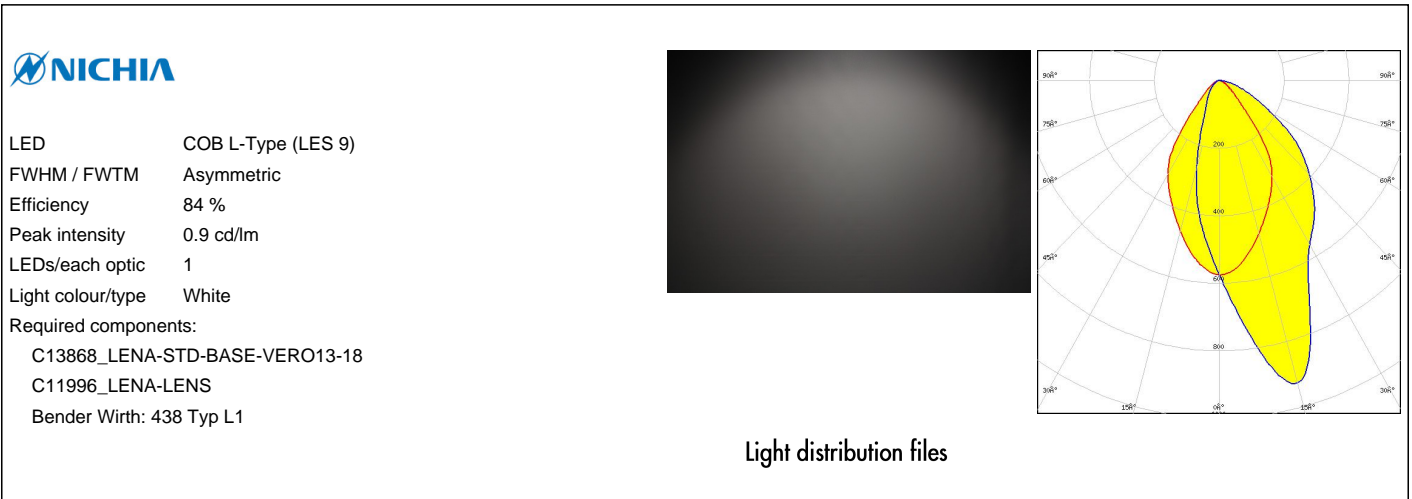


LED COB L-Type (LES 11)
FWHM / FWTM Asymmetric
Efficiency 89 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 438 Typ L1



Light distribution files

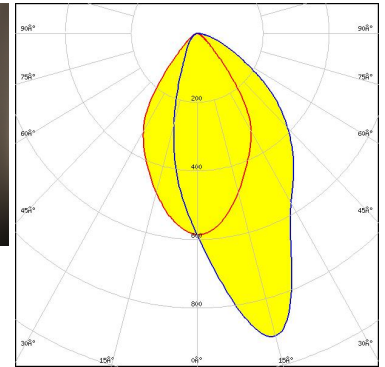
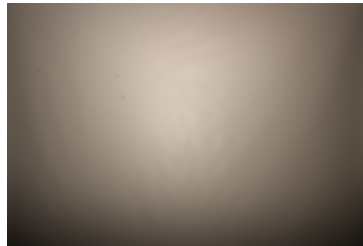
OPTICAL RESULTS (MEASURED):



OPTICAL RESULTS (MEASURED):



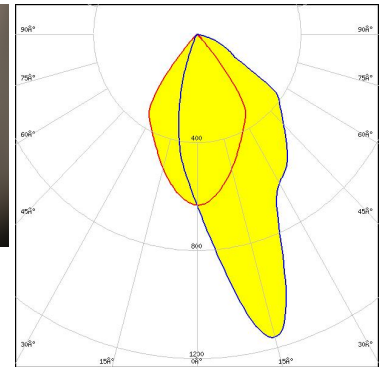
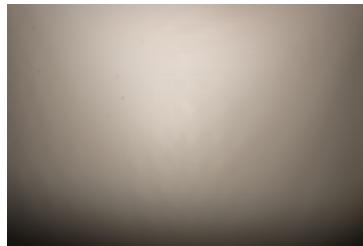
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM / FWTM Asymmetric
 Efficiency 83 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 498 Typ L2



Light distribution files



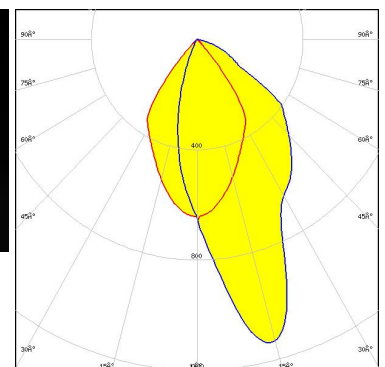
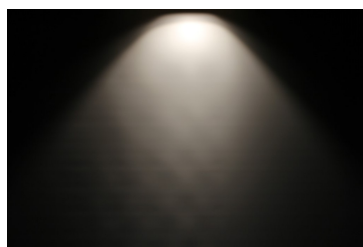
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM / FWTM Asymmetric
 Efficiency 88 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 498 Typ L2



Light distribution files



LED Soleriq S13
 FWHM / FWTM Asymmetric
 Efficiency 88 %
 Peak intensity 1.1 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

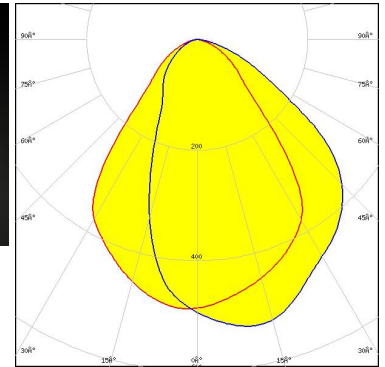
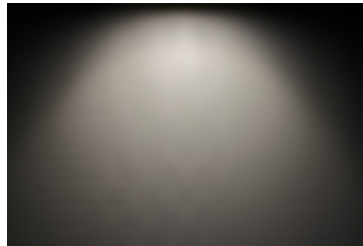
LED Soleriq S13
FWHM / FWTM Asymmetric
Efficiency 86 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 437 Typ L1



Light distribution files

OSRAM
Opto Semiconductors

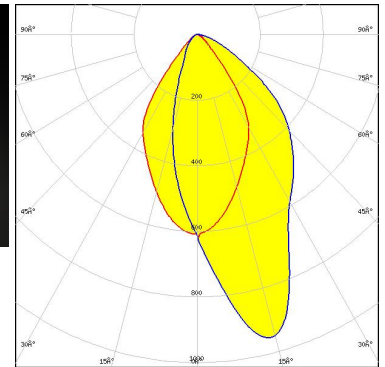
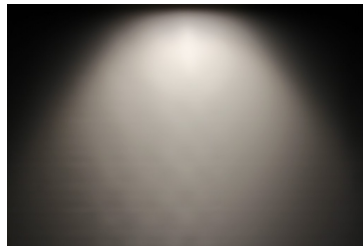
LED Soleriq S13
FWHM / FWTM Asymmetric
Efficiency 84 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 437 Typ L1



Light distribution files

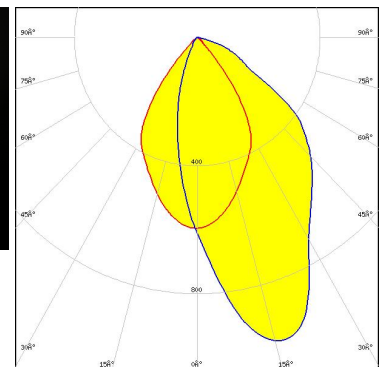
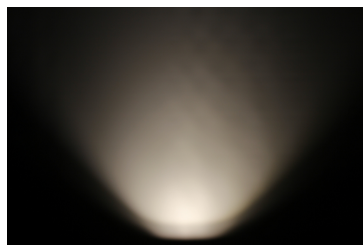
OSRAM
Opto Semiconductors

LED Soleriq S19
FWHM / FWTM Asymmetric
Efficiency 89 %
Peak intensity 1 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

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

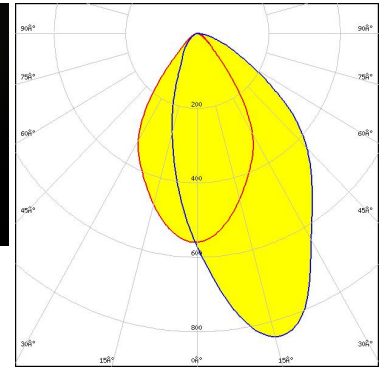
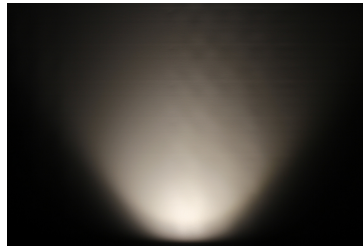
LED Soleriq S19
FWHM / FWTM Asymmetric
Efficiency 84 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13867_LENA-STD-BASE-VERO29

C11996_LENA-LENS

Bender Wirth: 462 Typ L3



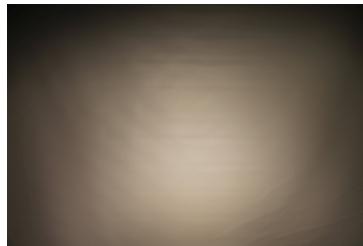
Light distribution files

PHILIPS

LED Fortimo SLM L13 CoB
FWHM / FWTM Asymmetric
Efficiency 85 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C12292_LENA-STD-BASE-MEZ



Light distribution files

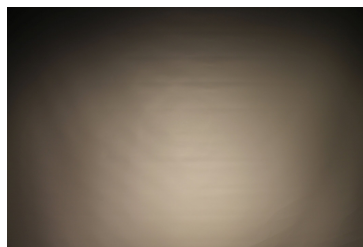
PHILIPS

LED Fortimo SLM L13 CoB
FWHM / FWTM Asymmetric
Efficiency 80 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C12292_LENA-STD-BASE-MEZ

C11996_LENA-LENS

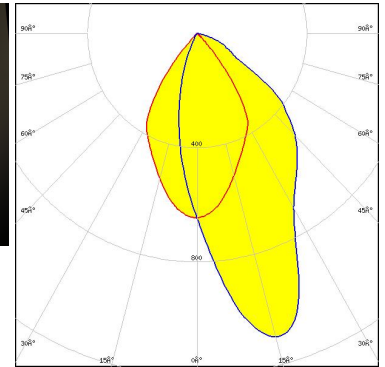


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

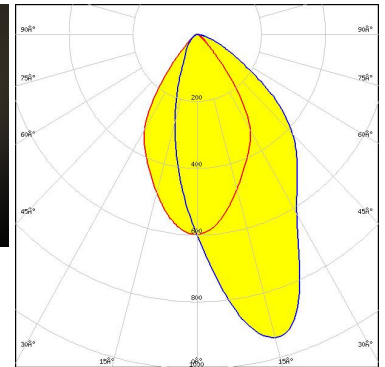
LED Fortimo SLM L15 CoB
 FWHM / FWTM Asymmetric
 Efficiency 85 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12292_LENA-STD-BASE-MEZ



Light distribution files

PHILIPS

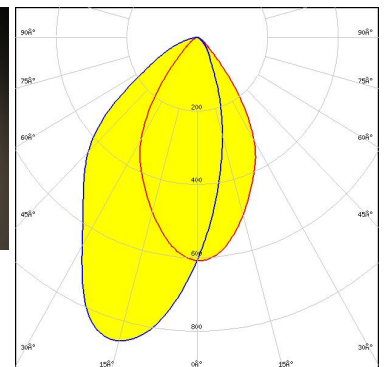
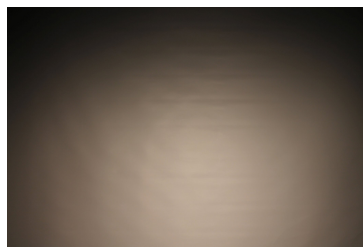
LED Fortimo SLM L15 CoB
 FWHM / FWTM Asymmetric
 Efficiency 80 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12292_LENA-STD-BASE-MEZ
 C11996_LENA-LENS



Light distribution files

PHILIPS

LED Fortimo SLM L19 CoB
 FWHM / FWTM Asymmetric
 Efficiency 80 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS

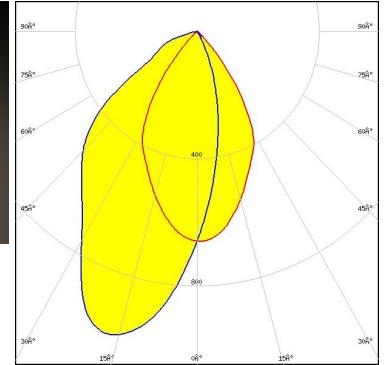
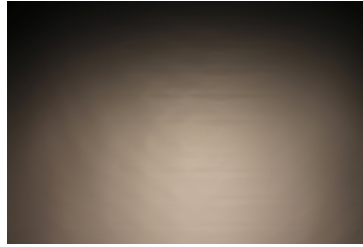


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

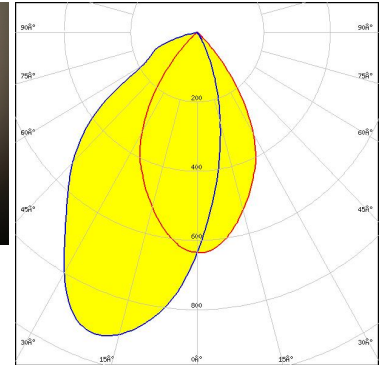
LED Fortimo SLM L19 CoB
FWHM / FWTM Asymmetric
Efficiency 85 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12692_LENA-STD-BASE-CLL040



Light distribution files

PHILIPS

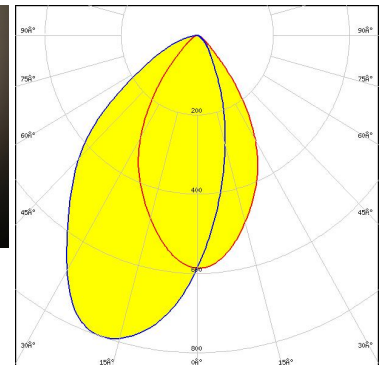
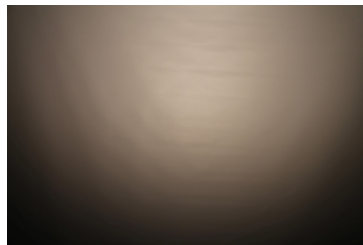
LED Fortimo SLM L23 CoB
FWHM / FWTM Asymmetric
Efficiency 85 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12692_LENA-STD-BASE-CLL040



Light distribution files

PHILIPS

LED Fortimo SLM L23 CoB
FWHM / FWTM Asymmetric
Efficiency 80 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS

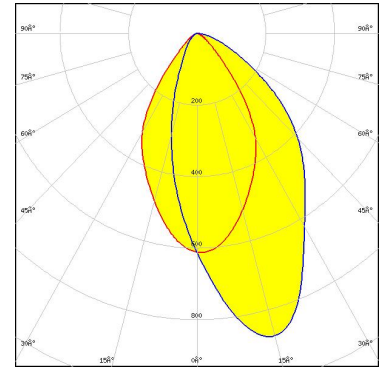


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

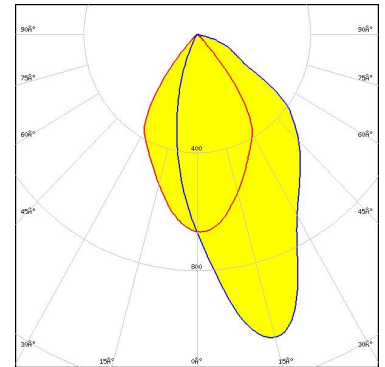
LED LC016D / LC019D / LC026D / LC033D
FWHM / FWTM Asymmetric
Efficiency 84 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12691_LENA-STD-BASE-CLL030
C11996_LENA-LENS



Light distribution files

SAMSUNG

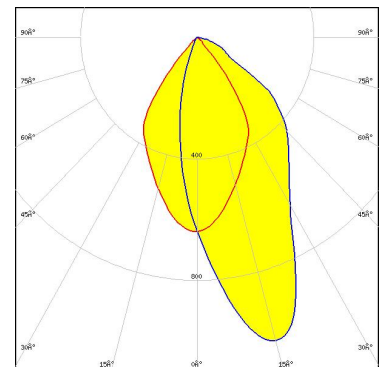
LED LC016D / LC019D / LC026D / LC033D
FWHM / FWTM Asymmetric
Efficiency 89 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12691_LENA-STD-BASE-CLL030



Light distribution files

SHARP

LED Mega Zenigata (GW6DME)
FWHM / FWTM Asymmetric
Efficiency 80 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12292_LENA-STD-BASE-MEZ

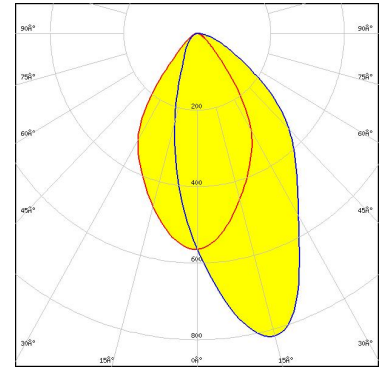


Light distribution files

OPTICAL RESULTS (MEASURED):

SHARP

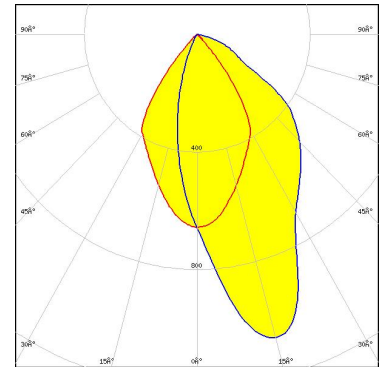
LED Mega Zenigata (GW6DME)
FWHM / FWTM Asymmetric
Efficiency 75 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS



Light distribution files

TRIDONIC

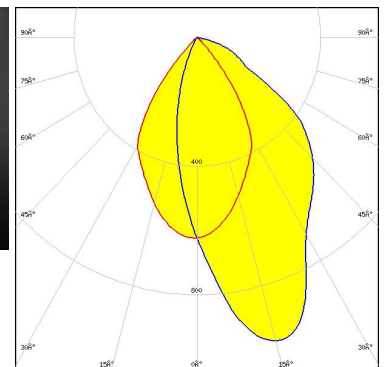
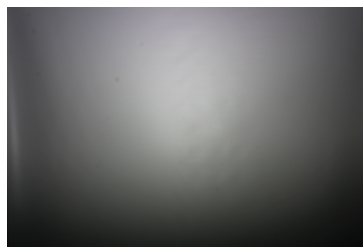
LED SLE G7 LES15
FWHM / FWTM Asymmetric
Efficiency 89 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12691_LENA-STD-BASE-CLL030



Light distribution files

TRIDONIC

LED SLE G7 LES17 H
FWHM / FWTM Asymmetric
Efficiency 87 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C14547_LENA-ADAPTER-B

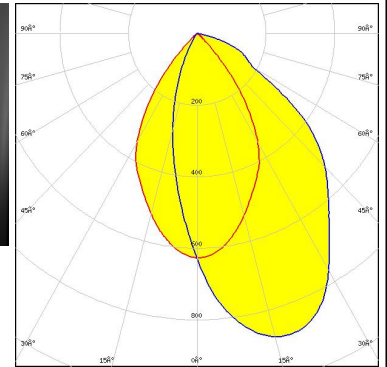
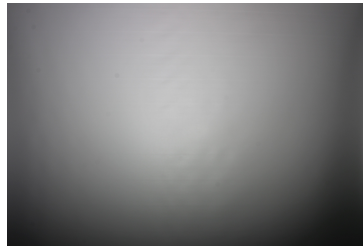


Light distribution files

OPTICAL RESULTS (MEASURED):

TRIDONIC

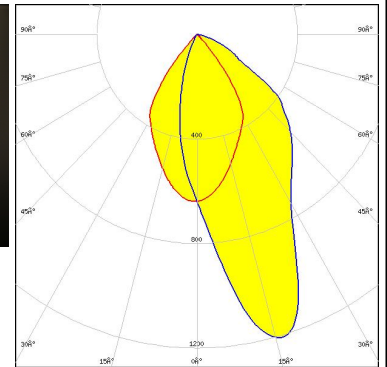
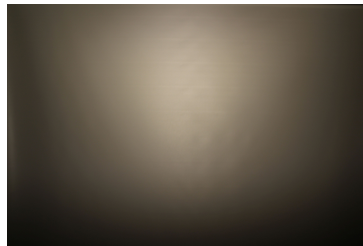
LED SLE G7 LES21 H
FWHM / FWTM Asymmetric
Efficiency 86 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C14547_LENA-ADAPTER-B



Light distribution files

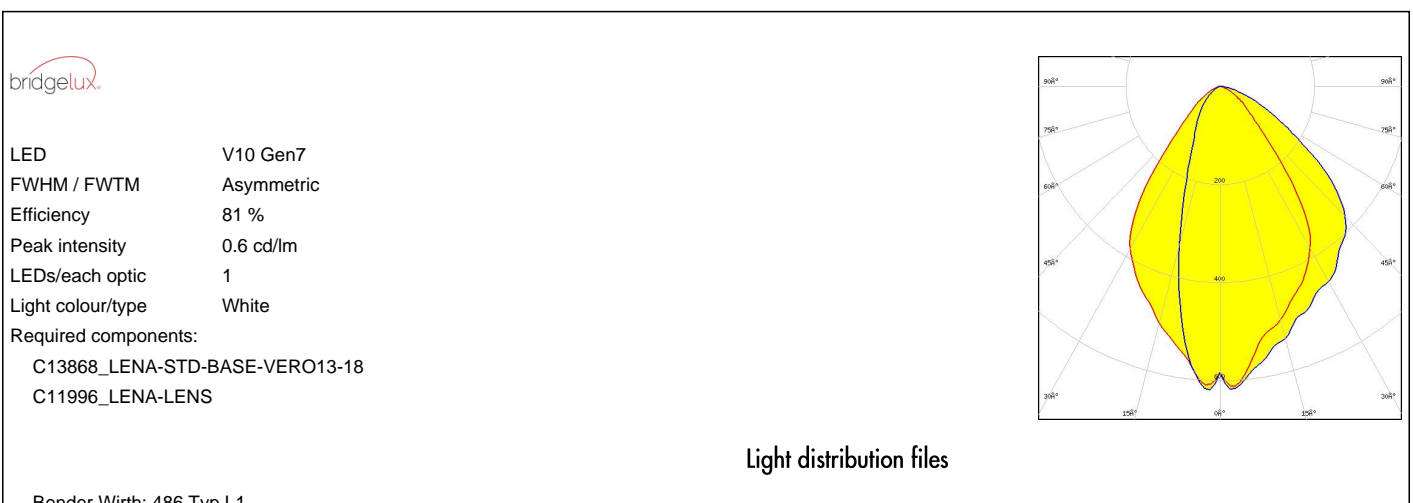
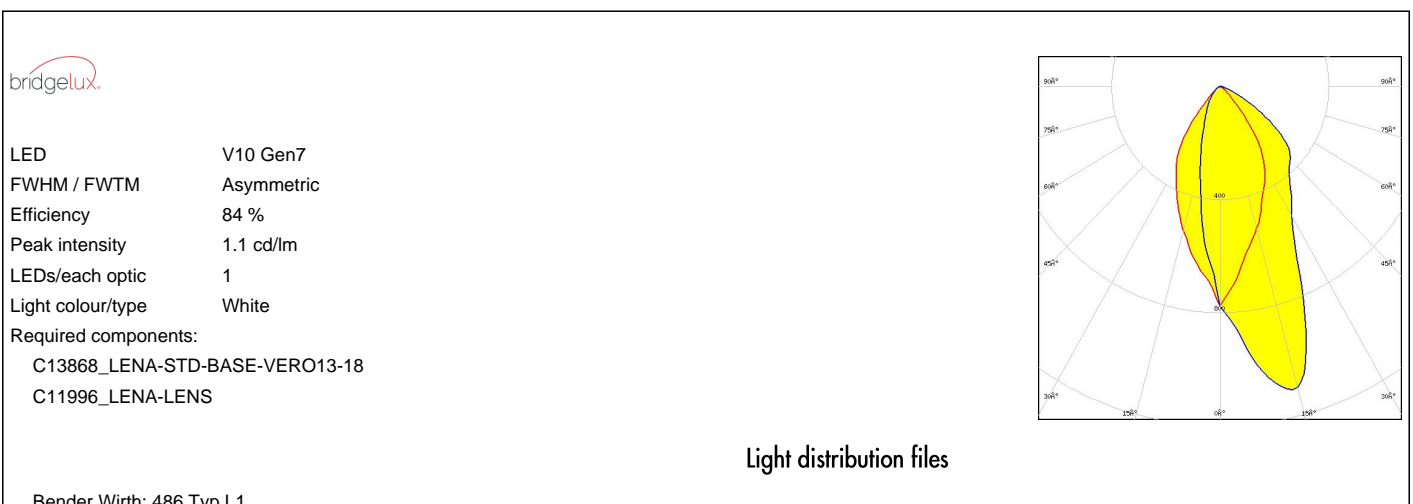
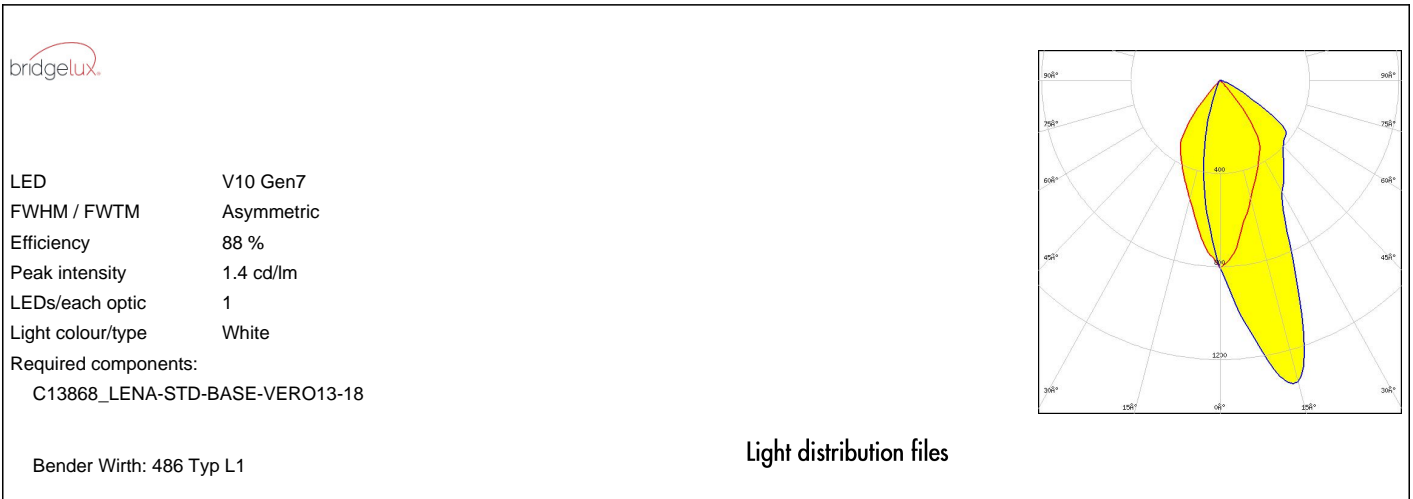
XICATO

LED XOB 14.5 mm
FWHM / FWTM Asymmetric
Efficiency 91 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12691_LENA-STD-BASE-CLL030

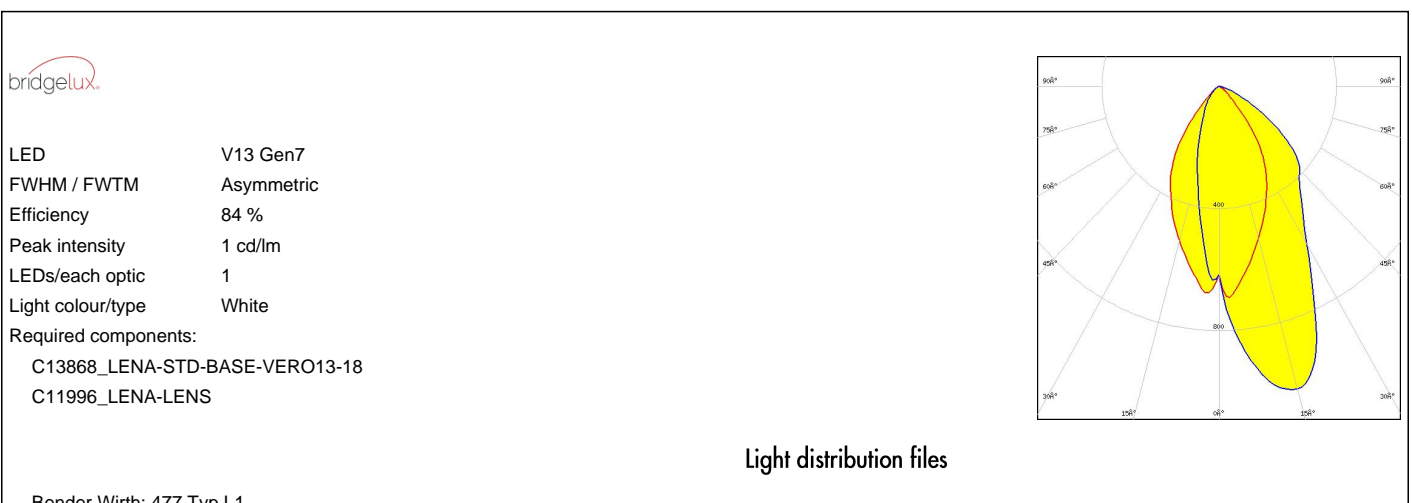
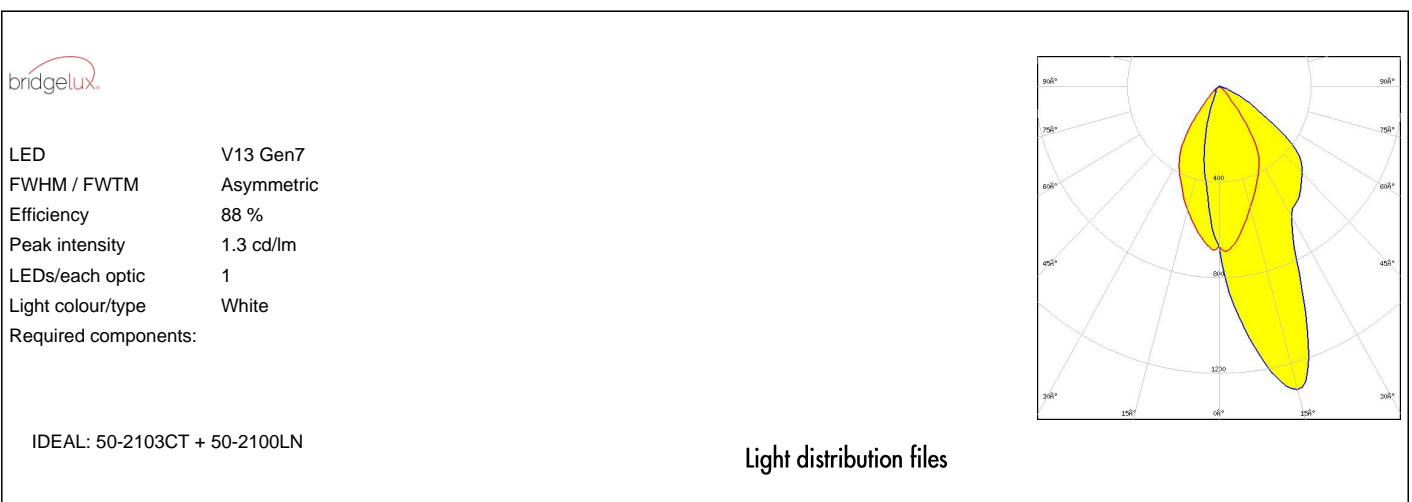
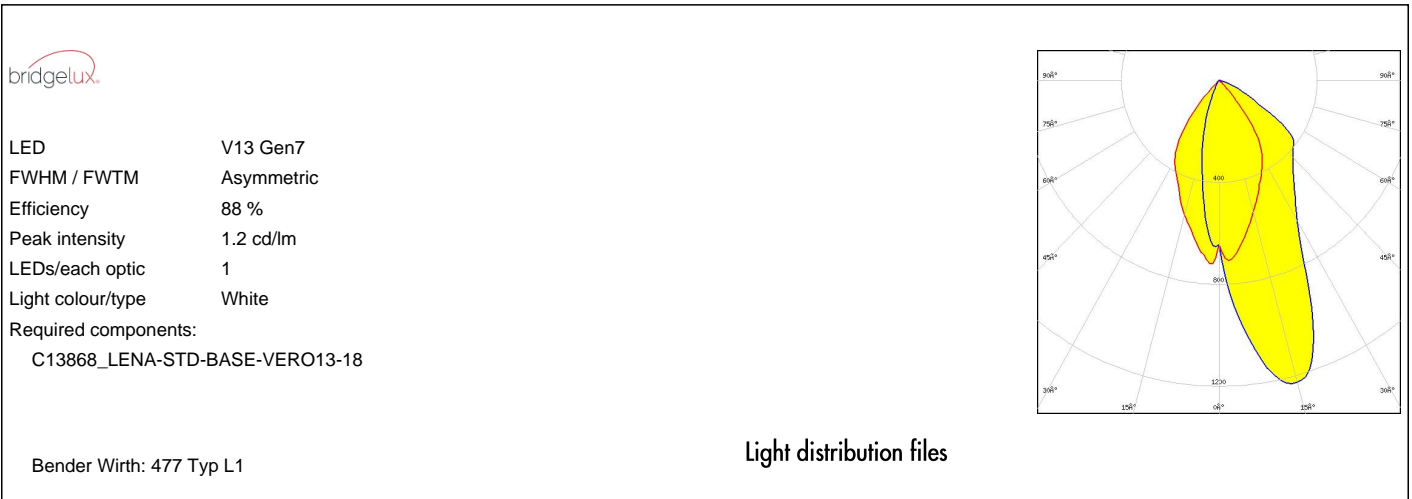


Light distribution files

OPTICAL RESULTS (SIMULATED):



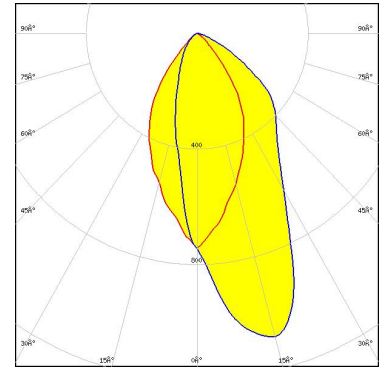
OPTICAL RESULTS (SIMULATED):



OPTICAL RESULTS (SIMULATED):



LED V13 Gen7
FWHM / FWTM Asymmetric
Efficiency 88 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS

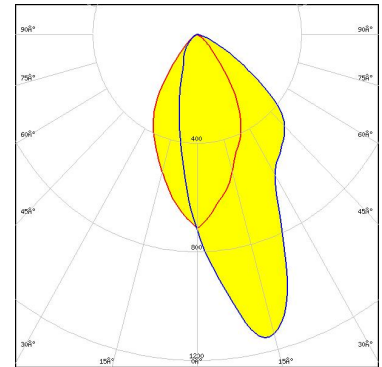


Light distribution files

Bender Wirth: 477 Typ L1



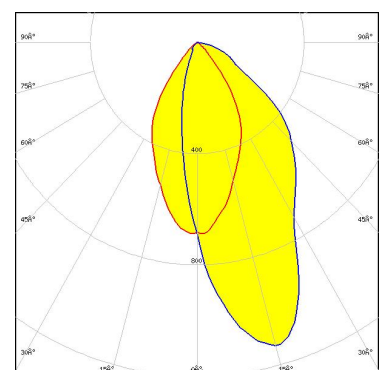
LED V13 Gen7
FWHM / FWTM Asymmetric
Efficiency 85 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C11996_LENA-LENS



Light distribution files



LED CXA/B 30xx
FWHM / FWTM Asymmetric
Efficiency 85 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

IDEAL: 50-2234C + 50-2100LN

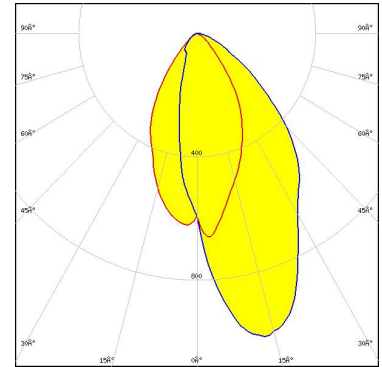
OPTICAL RESULTS (SIMULATED):



LED CXA/B 30xx
FWHM / FWTM Asymmetric
Efficiency 81 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:
C11996_LENA-LENS

IDEAL: 50-2234C + 50-2100LN

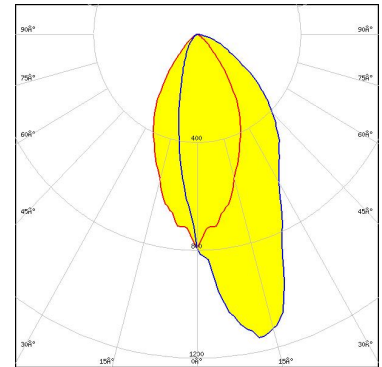


Light distribution files



LED LUXEON CoB 1204/1205
FWHM / FWTM Asymmetric
Efficiency 88 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS

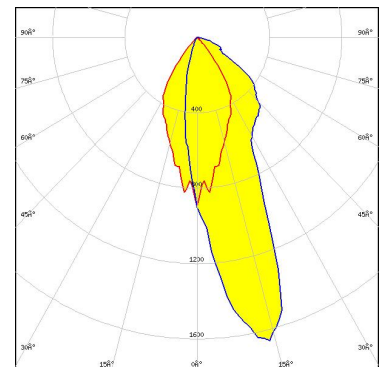


Light distribution files



LED LUXEON CoB 1204/1205
FWHM / FWTM Asymmetric
Efficiency 93 %
Peak intensity 1.7 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:
C12292_LENA-STD-BASE-MEZ

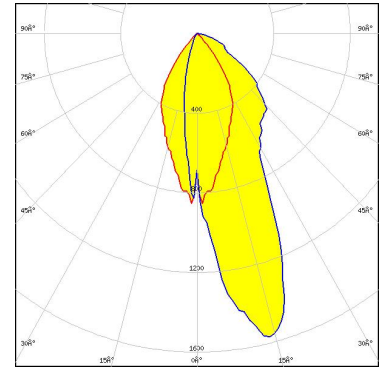


Light distribution files

OPTICAL RESULTS (SIMULATED):



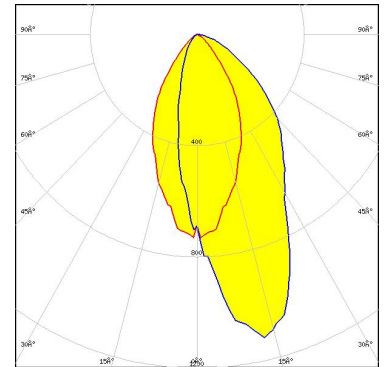
LED LUXEON CoB 1208
FWHM / FWTM Asymmetric
Efficiency 92 %
Peak intensity 1.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12292_LENA-STD-BASE-MEZ



Light distribution files



LED LUXEON CoB 1208
FWHM / FWTM Asymmetric
Efficiency 87 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS



Light distribution files



LED CxM-14 (19x19)
FWHM / FWTM Asymmetric
Efficiency 85 %
Peak intensity 0.9 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: 433 Typ L1

OPTICAL RESULTS (SIMULATED):



LED CxM-14 (19x19)
FWHM / FWTM Asymmetric
Efficiency 87 %
Peak intensity 0.5 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: 433 Typ L1



LED CxM-14 (19x19)
FWHM / FWTM Asymmetric
Efficiency 90 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C13868_LENA-STD-BASE-VERO13-18

[Light distribution files](#)

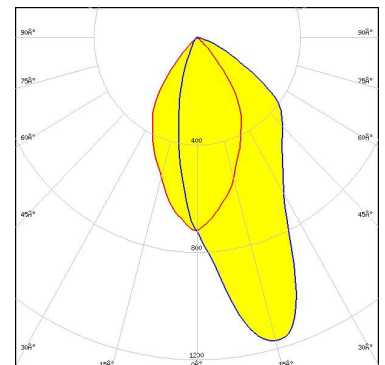
Bender Wirth: 433 Typ L1



LED Soleriq S15
FWHM / FWTM Asymmetric
Efficiency 88 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C12691_LENA-STD-BASE-CLL030



[Light distribution files](#)

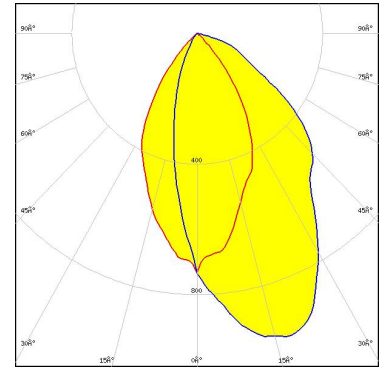
OPTICAL RESULTS (SIMULATED):

SAMSUNG

LED LC040D / LC060D / LC080D
 FWHM / FWTM Asymmetric
 Efficiency 86 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour/type White

Required components:

C12692_LENA-STD-BASE-CLL040



Light distribution files



SEOUL SEMICONDUCTOR

LED ZC12/18
 FWHM / FWTM Asymmetric
 Efficiency 87 %
 Peak intensity 0.5 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



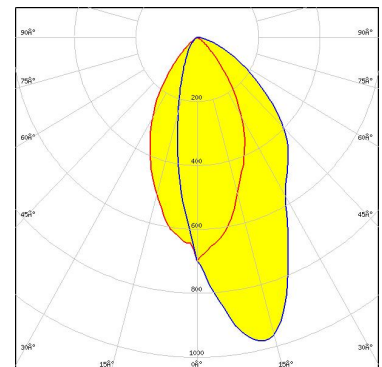
SEOUL SEMICONDUCTOR

LED ZC12/18
 FWHM / FWTM Asymmetric
 Efficiency %
 LEDs/each optic 1
 Light colour/type White

Required components:


C12691_LENA-STD-BASE-CLL030

C11996_LENA-LENS


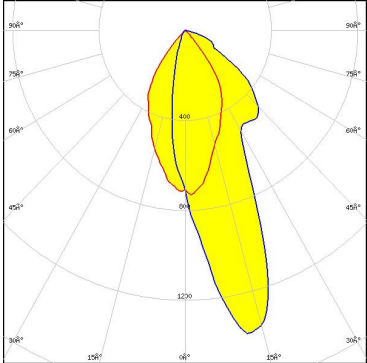


Light distribution files

OPTICAL RESULTS (SIMULATED):

| | |
|---|------------|
|  SEOL SEMICONDUCTOR | |
| LED | ZC12/18 |
| FWHM / FWTM | Asymmetric |
| Efficiency | 90 % |
| Peak intensity | 1.1 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 | ZC12/18 |
| FWHM / FWTM | Asymmetric |
| Efficiency | 85 % |
| Peak intensity | 0.9 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 | Asymmetric |
| Efficiency | 86 % |
| Peak intensity | 1.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: C12691_LENA-STD-BASE-CLL030 | |
|  | |
| Light distribution files | |

OPTICAL RESULTS (SIMULATED):

SHARP

| | |
|-------------------|------------------------|
| LED | Mega Zenigata (GW5DGC) |
| FWHM / FWTM | Asymmetric |
| Efficiency | % |
| LEDs/each optic | 1 |
| Light colour/type | White |

Required components:

C12292_LENA-STD-BASE-MEZ

Light distribution files

SHARP

| | |
|-------------------|------------------------|
| LED | Mega Zenigata (GW5DGC) |
| FWHM / FWTM | Asymmetric |
| Efficiency | % |
| LEDs/each optic | 1 |
| Light colour/type | White |

Required components:

C12292_LENA-STD-BASE-MEZ

C11996_LENA-LENS

Light distribution files

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.

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LEDiL Oy

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P.R.CHINA

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Hong Kong, China

Distribution Partners

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