

LENA-S

~11° spot beam

TECHNICAL SPECIFICATIONS:

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

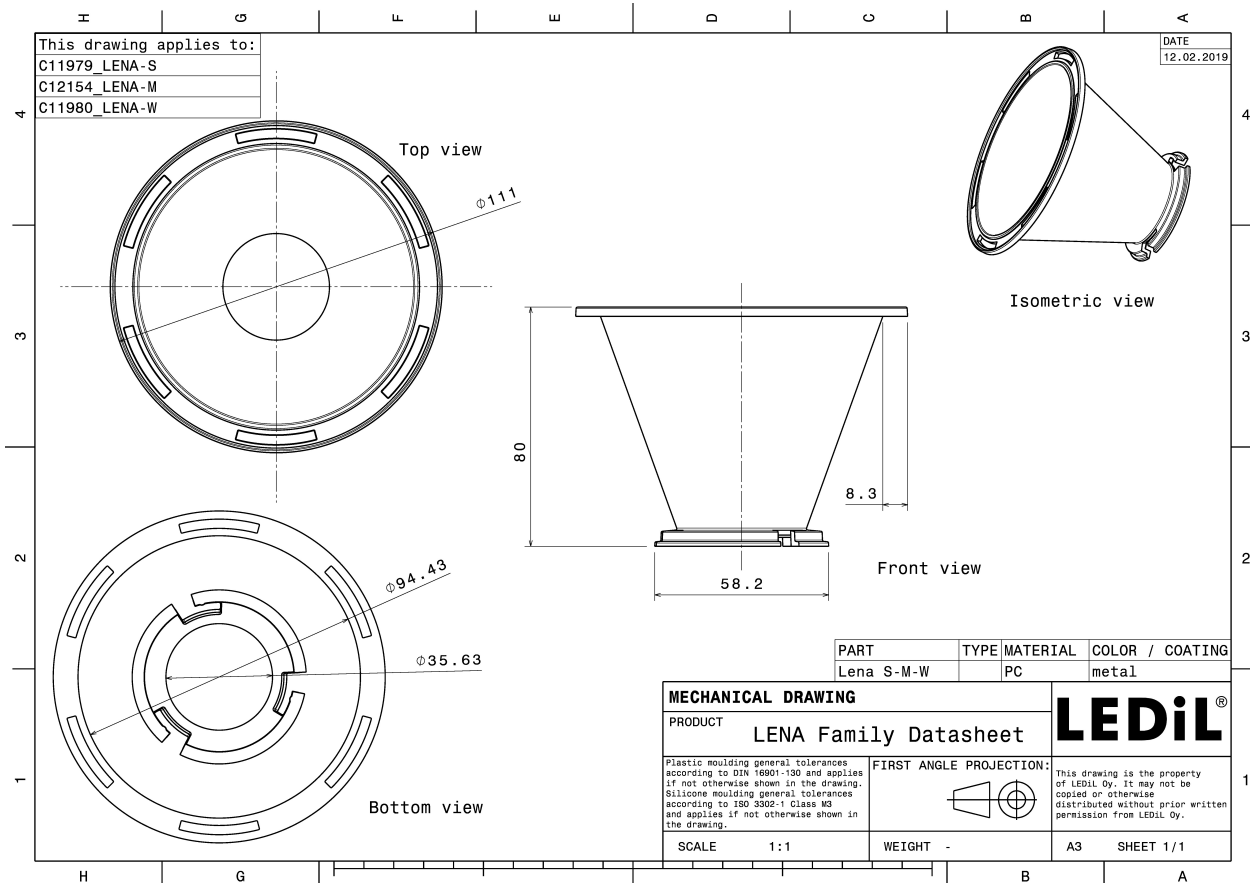
MATERIAL SPECIFICATIONS:

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



ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C11979_LENA-S » Box size: 400 x 280 x 380 mm	60	60	60	3.8



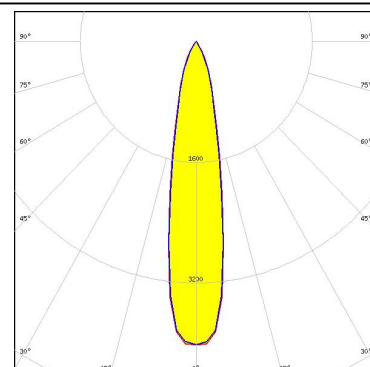
PHOTOMETRIC DATA (MEASURED):



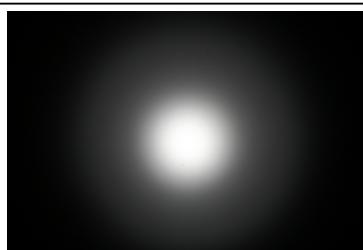
LED BXRA ES Rectangle
FWHM 11.0°
Efficiency 78 %
LEDs/each optic 1
Light colour White
Required components:
C12153_LENA-STD-BASE-BXRA
C11996_LENA-LENS



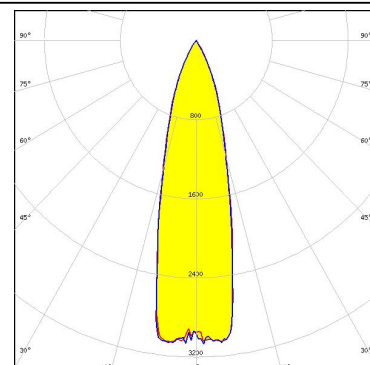
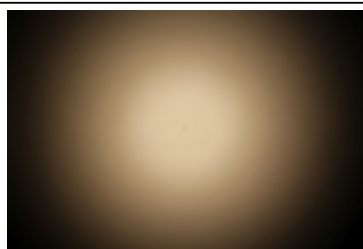
LED BXRA RS
FWHM 20.0°
Efficiency 80 %
LEDs/each optic 1
Light colour White
Required components:
C12229_LENA-STD-BASE-RS
C11996_LENA-LENS



LED V10 Gen6
FWHM 9.0°
Efficiency 76 %
Peak intensity 12.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13186_LENA-STD-BASE-CXA15
C11996_LENA-LENS



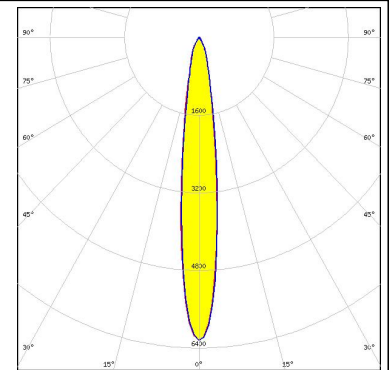
LED Vero SE 29
FWHM 27.0°
Efficiency 87 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C15083_LENA-STD-BASE-VERO29



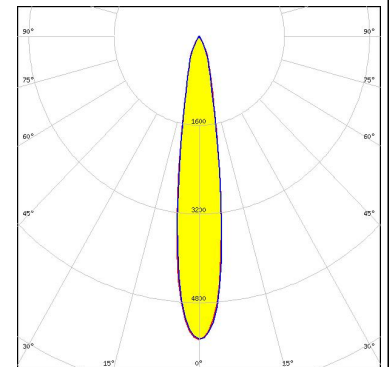
PHOTOMETRIC DATA (MEASURED):



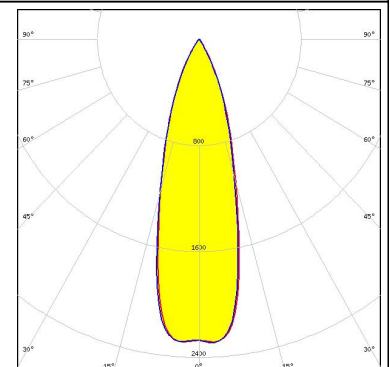
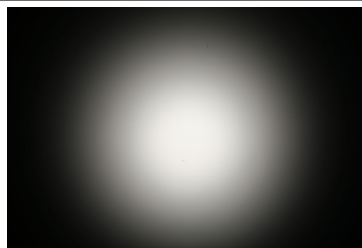
LED VERO13
FWHM 14.0°
Efficiency 83 %
Peak intensity 6.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS



LED VERO18
FWHM 17.0°
Efficiency 83 %
Peak intensity 5.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS

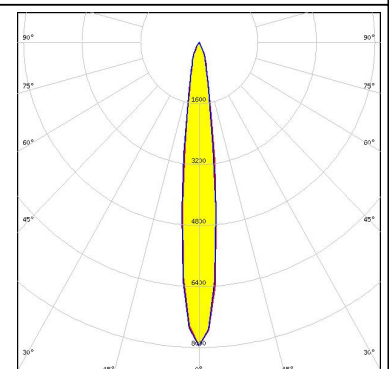


LED VERO29
FWHM 30.0°
Efficiency 80 %
Peak intensity 2.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29



CITIZEN

LED CL-L340
FWHM 14.0°
Efficiency 79 %
Peak intensity 8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C11995_LENA-STD-BASE-CL340
C11996_LENA-LENS



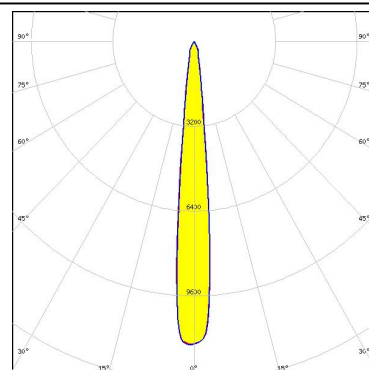
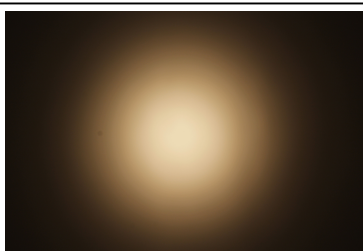
PHOTOMETRIC DATA (MEASURED):

CITIZEN

LED CL-L340
FWHM 11.0°
Efficiency 84 %
Peak intensity 10.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C11995_LENA-STD-BASE-CL340

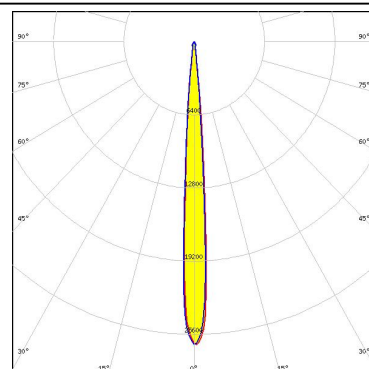
CITIZEN

LED CL-L340
FWHM 11.0°
Efficiency 86 %
Peak intensity 11.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C11995_LENA-STD-BASE-CL340



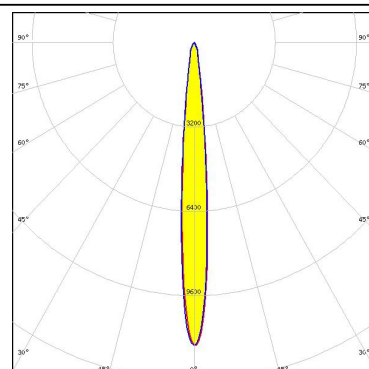
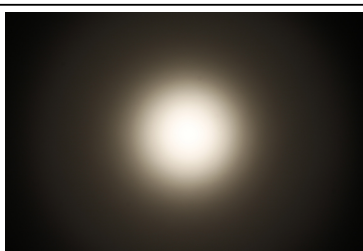
CITIZEN

LED CLL02x/CLU02x (LES10)
FWHM 8.0°
Efficiency 85 %
Peak intensity 26.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 434 Typ L1



CITIZEN

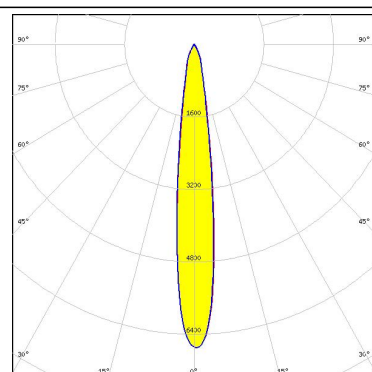
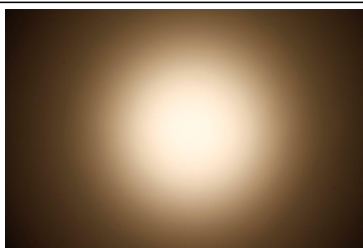
LED CLL02x/CLU02x (LES10)
FWHM 10.0°
Efficiency 80 %
Peak intensity 11.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 434 Typ L1



PHOTOMETRIC DATA (MEASURED):

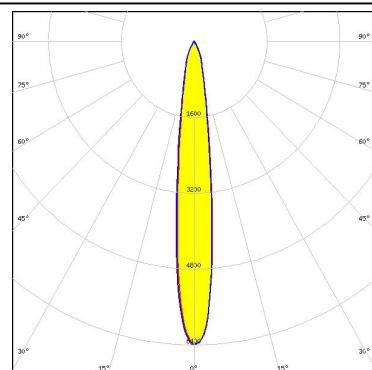
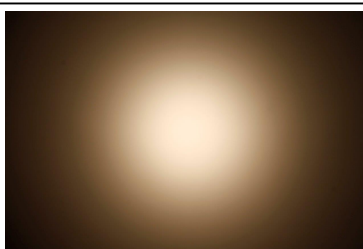
CITIZEN

LED CLL03x/CLU03x
FWHM 14.0°
Efficiency 80 %
Peak intensity 6.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 433 Typ L1



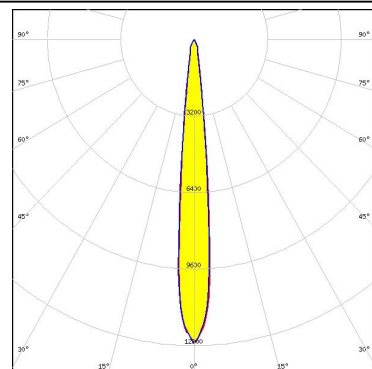
CITIZEN

LED CLL03x/CLU03x
FWHM 13.0°
Efficiency 78 %
Peak intensity 6.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
A.A.G. STUCCHI: 8101/G2 + S-8000/11



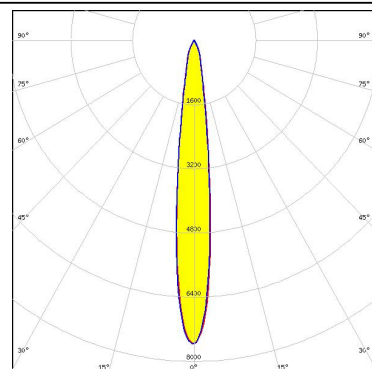
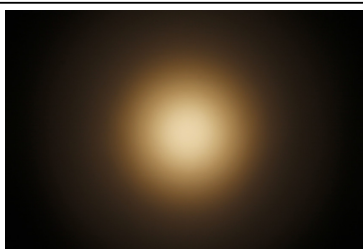
CITIZEN

LED CLL03x/CLU03x
FWHM 11.0°
Efficiency 85 %
Peak intensity 13 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030



CITIZEN

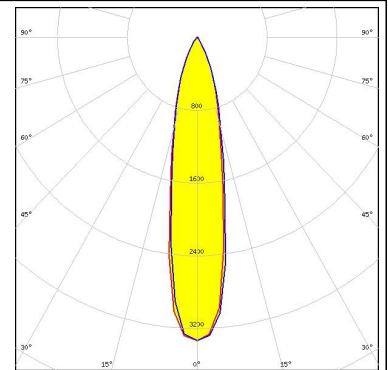
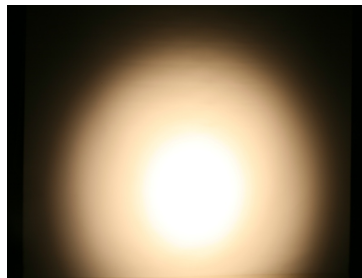
LED CLL03x/CLU03x
FWHM 13.0°
Efficiency 80 %
Peak intensity 7.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030
C11996_LENA-LENS



PHOTOMETRIC DATA (MEASURED):

CITIZEN

LED CLL04x/CLU04x
FWHM 16.0°
Efficiency 79 %
Peak intensity 3.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS



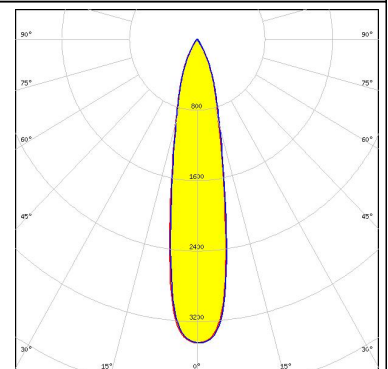
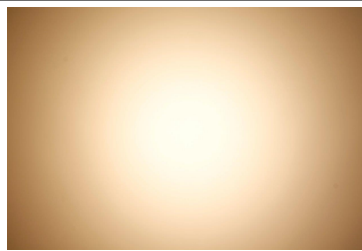
CITIZEN

LED CLL04x/CLU04x
FWHM 15.0°
Efficiency 84 %
Peak intensity 5.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040



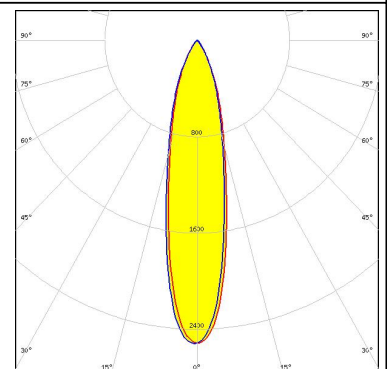
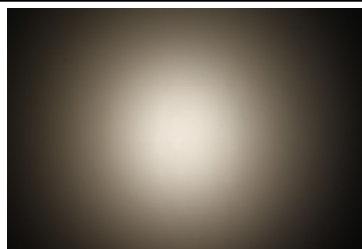
CITIZEN

LED CLL04x/CLU04x
FWHM 21.0°
Efficiency 80 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
Bender Wirth: 431 Typ L3



CITIZEN

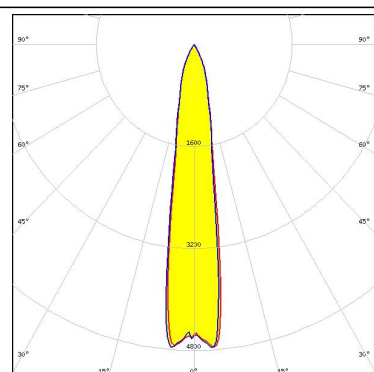
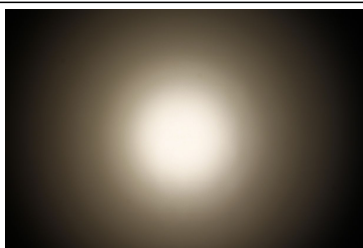
LED CLL04x/CLU04x
FWHM 23.0°
Efficiency 73 %
Peak intensity 2.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
A.A.G. STUCCHI: 8102/G2 + S-8000/12



PHOTOMETRIC DATA (MEASURED):

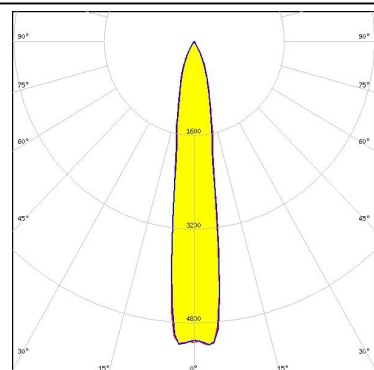
CITIZEN

LED CLL04x/CLU04x
FWHM 17.0°
Efficiency 78 %
Peak intensity 4.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
A.A.G. STUCCHI: 8102/G2 + S-8000/12



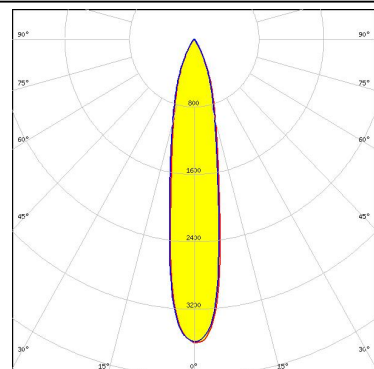
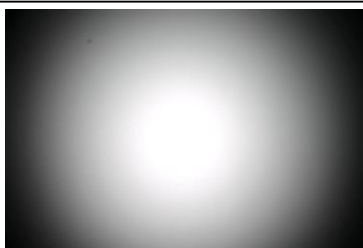
CITIZEN

LED CLL04x/CLU04x
FWHM 16.0°
Efficiency 85 %
Peak intensity 5.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2204CT + 50-2100LN



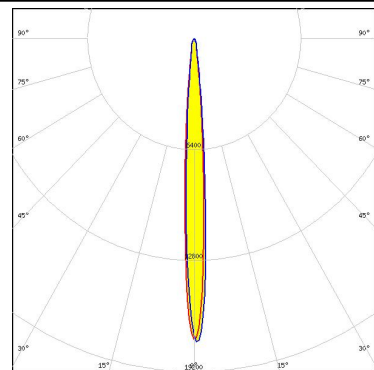
CITIZEN

LED CLL04x/CLU04x
FWHM 19.0°
Efficiency 81 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2204CT + 50-2100LN



CITIZEN

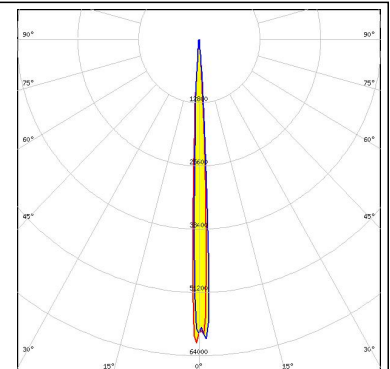
LED CLU700/701/702
FWHM 8.0°
Efficiency 80 %
Peak intensity 17.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 434 Typ L1



PHOTOMETRIC DATA (MEASURED):

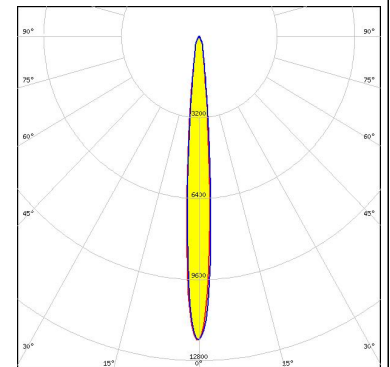
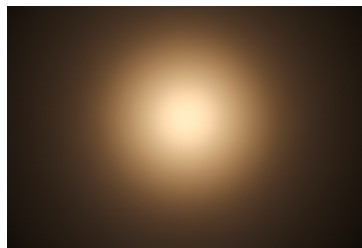
CITIZEN

LED CLU700/701/702
FWHM 5.0°
Efficiency 87 %
Peak intensity 61.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 434 Typ L1



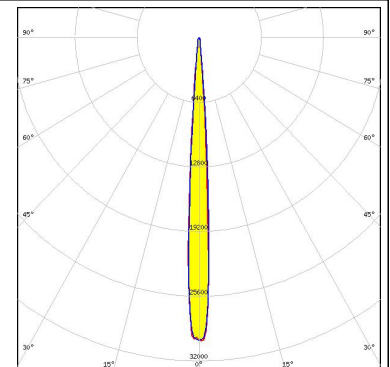
CITIZEN

LED CLU710/711
FWHM 9.0°
Efficiency 83 %
Peak intensity 12 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030
C11996_LENA-LENS



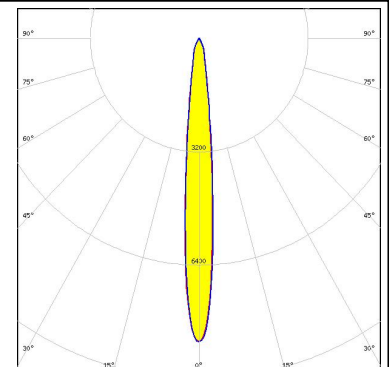
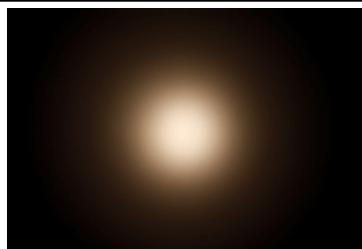
CITIZEN

LED CLU710/711
FWHM 7.0°
Efficiency 90 %
Peak intensity 30 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030



CITIZEN

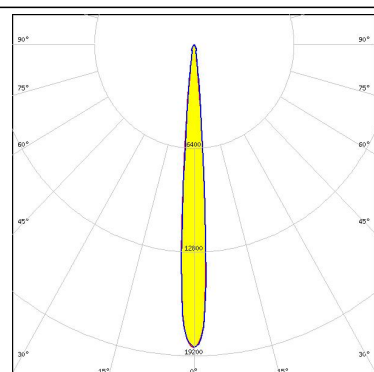
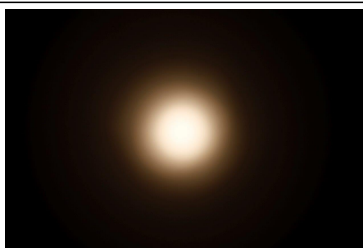
LED CLU720/721
FWHM 11.0°
Efficiency 79 %
Peak intensity 8.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030
C11996_LENA-LENS



PHOTOMETRIC DATA (MEASURED):

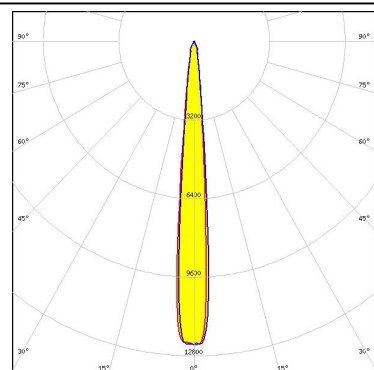
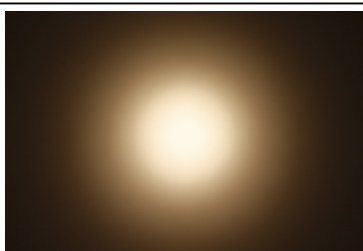
CITIZEN

LED CLU720/721
FWHM 9.0°
Efficiency 85 %
Peak intensity 18.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030



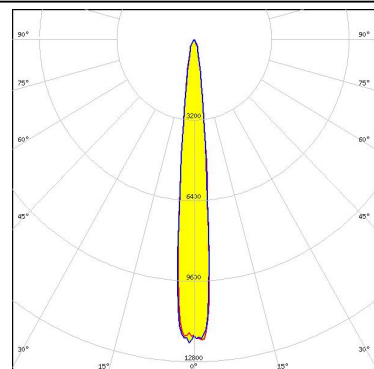
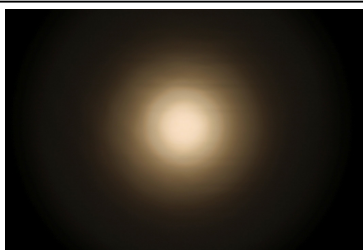
CITIZEN

LED CLU730/731
FWHM 10.0°
Efficiency 82 %
Peak intensity 12.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040



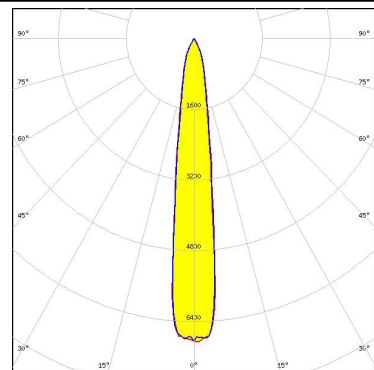
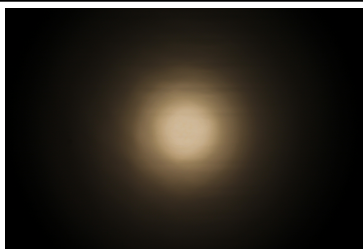
CREE

LED CMA1840
FWHM 11.0°
Efficiency 88 %
Peak intensity 12 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14146_LENA-STD-BASE-CXA18



CREE

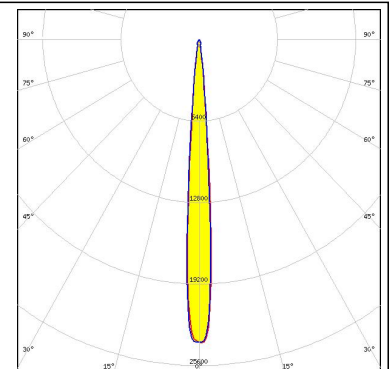
LED CMA2550
FWHM 14.0°
Efficiency 86 %
Peak intensity 6.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13324_LENA-STD-BASE-CXA25



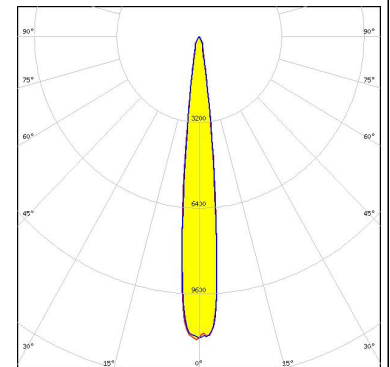
PHOTOMETRIC DATA (MEASURED):



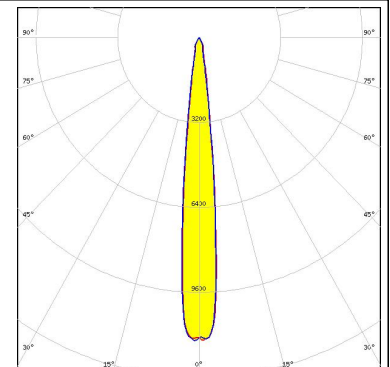
LED CMT14xx
FWHM 8.0°
Efficiency 88 %
Peak intensity 24.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 434 Typ L1



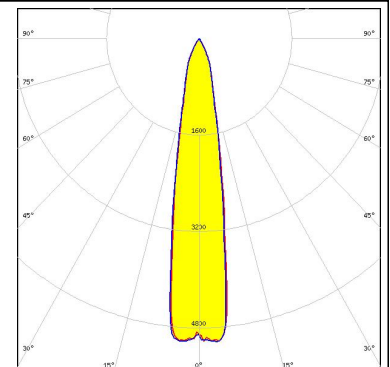
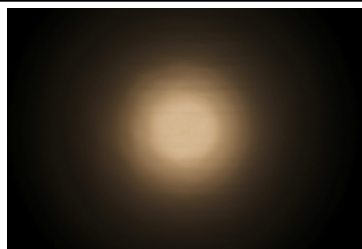
LED CMT19xx
FWHM 12.0°
Efficiency 87 %
Peak intensity 11.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 477 Typ L1



LED CMT19xx
FWHM 12.0°
Efficiency 88 %
Peak intensity 11.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030



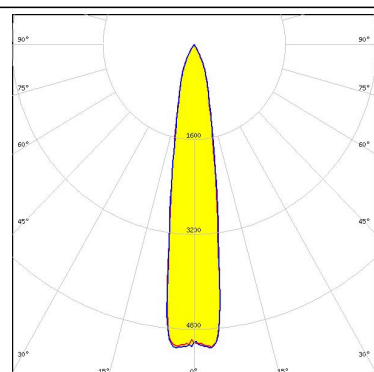
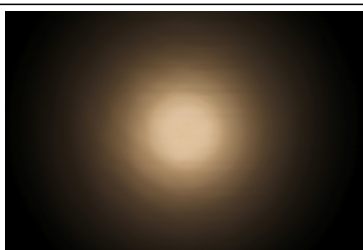
LED CMT28xx
FWHM 19.0°
Efficiency 87 %
Peak intensity 5.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
Bender Wirth: 471 Typ L3



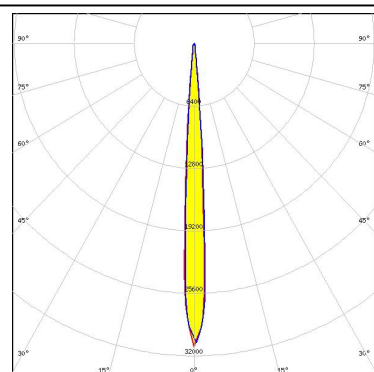
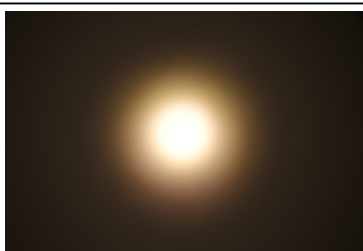
PHOTOMETRIC DATA (MEASURED):



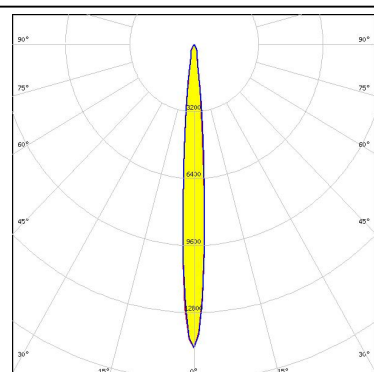
LED CMT28xx
FWHM 18.0°
Efficiency 87 %
Peak intensity 5.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040



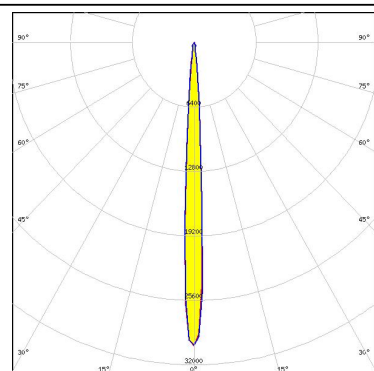
LED CXA/B 15xx
FWHM 7.0°
Efficiency 86 %
Peak intensity 31.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 441 Typ L1



LED CXA/B 15xx
FWHM 8.0°
Efficiency 81 %
Peak intensity 15.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13186_LENA-STD-BASE-CXA15
C11996_LENA-LENS



LED CXA/B 15xx
FWHM 7.0°
Efficiency 87 %
Peak intensity 30.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13186_LENA-STD-BASE-CXA15



PHOTOMETRIC DATA (MEASURED):



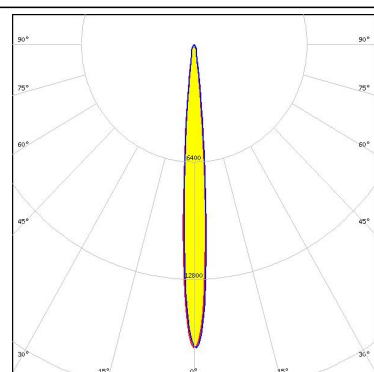
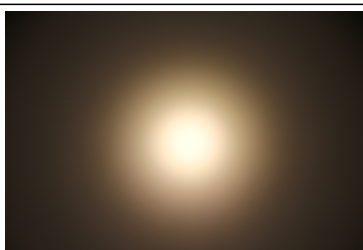
LED CXA/B 15xx
FWHM 8.0°
Efficiency 80 %
Peak intensity 16.5 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 441 Typ L1



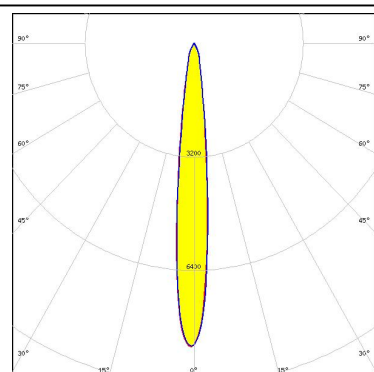
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM 12.0°
Efficiency 82 %
Peak intensity 8.6 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 437 Typ L1

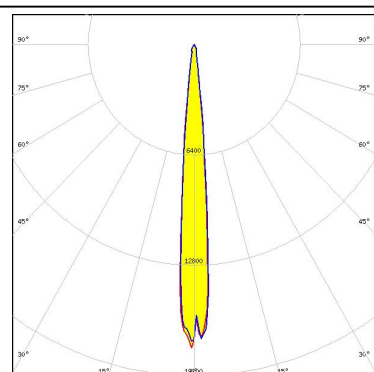
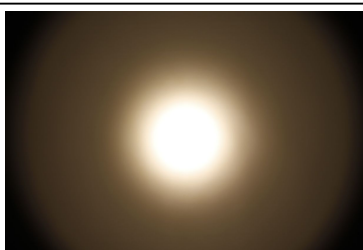


LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM 10.0°
Efficiency 87 %
Peak intensity 17.6 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

Bender Wirth: 437 Typ L1



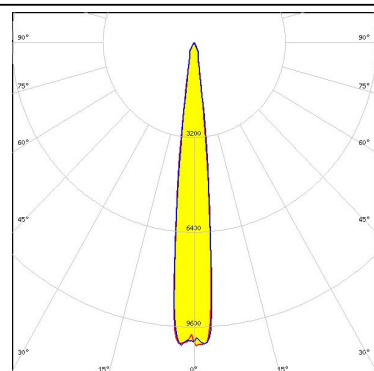
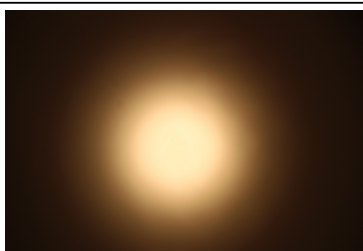
LED CXA/B 1830
FWHM 12.0°
Efficiency 82 %
Peak intensity 10.3 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C14169_LENA-CLEAR-LENS

Bender Wirth: 437 Typ L1



PHOTOMETRIC DATA (MEASURED):



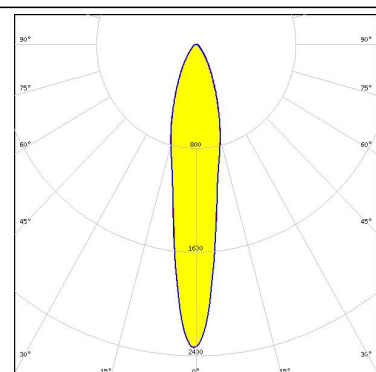
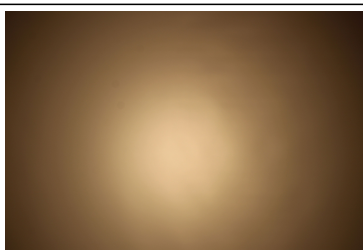
LED CXA/B 1830
FWHM 18.0°
Efficiency 75 %
Peak intensity 2.3 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C12231_LENA-FRESNEL

Bender Wirth: 437 Typ L1

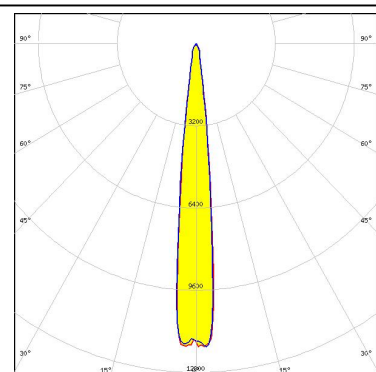
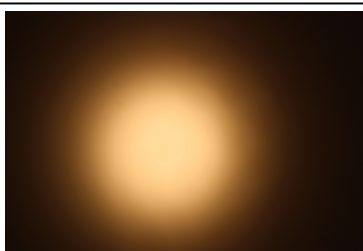


LED CXA/B 1830
FWHM 12.0°
Efficiency 87 %
Peak intensity 11.9 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

Bender Wirth: 437 Typ L1

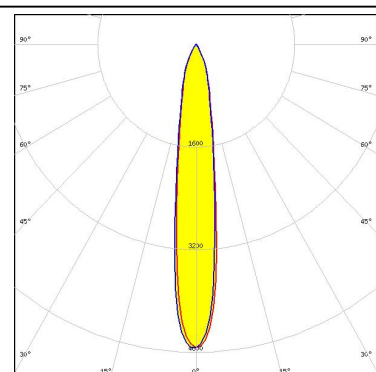


LED CXA/B 25xx
FWHM 13.0°
Efficiency 79 %
Peak intensity 5.9 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13324_LENA-STD-BASE-CXA25

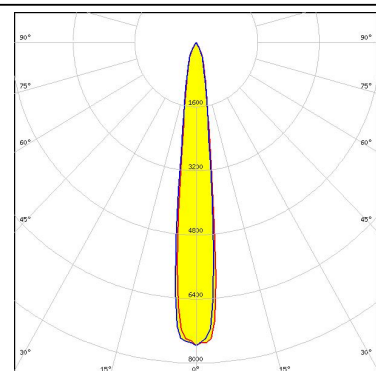
C11996_LENA-LENS



LED CXA/B 25xx
FWHM 13.0°
Efficiency 84 %
Peak intensity 8 cd/lm
LEDs/each optic 1
Light colour White

Required components:

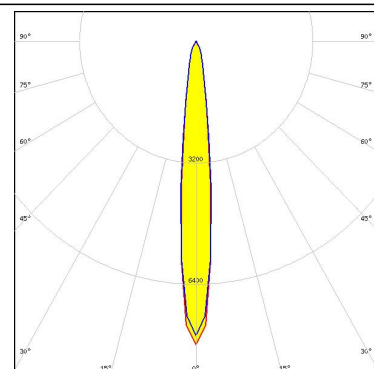
C13324_LENA-STD-BASE-CXA25



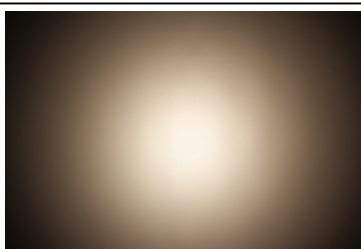
PHOTOMETRIC DATA (MEASURED):



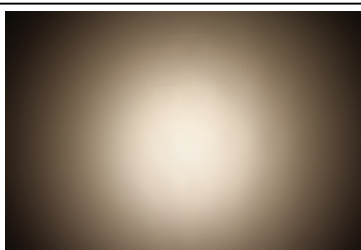
LED CXA2011
FWHM 11.0°
Efficiency 80 %
LEDs/each optic 1
Light colour White
Required components:
C12105_LENA-STD-BASE-CXA20
C11996_LENA-LENS



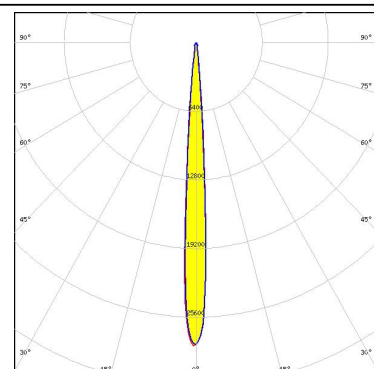
LED CHI3030 19W
FWHM 20.0°
Efficiency 86 %
Peak intensity 4.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
Bender Wirth: 468 Typ L3



LED CHI3030 29W
FWHM 25.0°
Efficiency 80 %
Peak intensity 2.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
Bender Wirth: 468 Typ L3



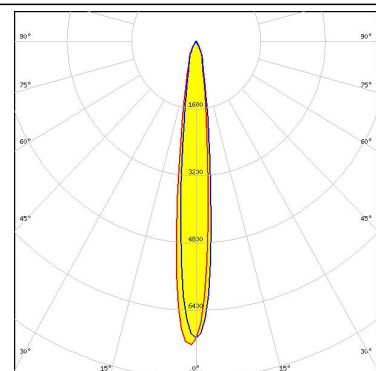
LED LUXEON CoB 1202/1203
FWHM 7.0°
Efficiency 87 %
Peak intensity 28.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 438 Typ L1



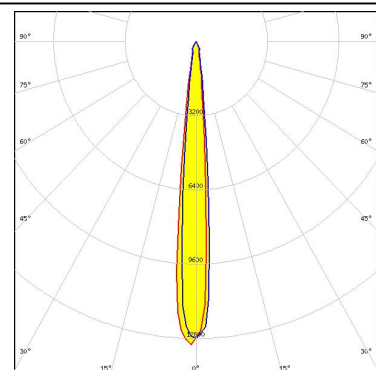
PHOTOMETRIC DATA (MEASURED):



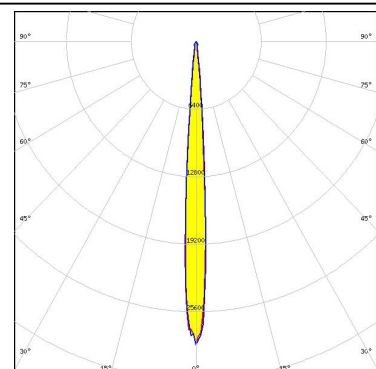
LED LUXEON CoB 1204/1205
FWHM 12.0°
Efficiency 77 %
Peak intensity 7.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS



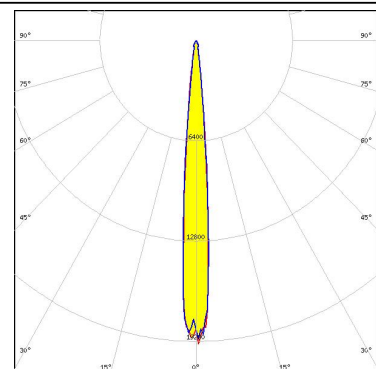
LED LUXEON CoB 1204/1205
FWHM 10.0°
Efficiency 83 %
Peak intensity 13.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ



LED LUXEON CoB 1204HD
FWHM 7.5°
Efficiency 88 %
Peak intensity 28.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C11981_LENA-STD-BASE-COB-L110



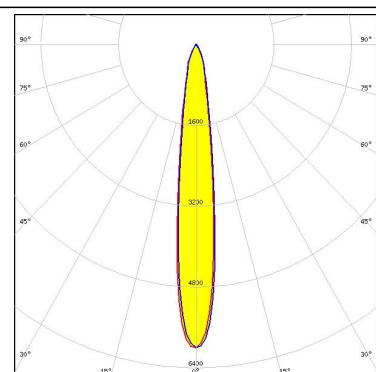
LED LUXEON CoB 1205HD
FWHM 9.0°
Efficiency 88 %
Peak intensity 19.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C11981_LENA-STD-BASE-COB-L110



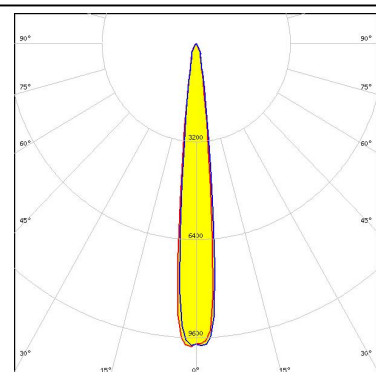
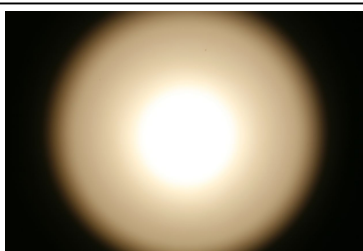
PHOTOMETRIC DATA (MEASURED):



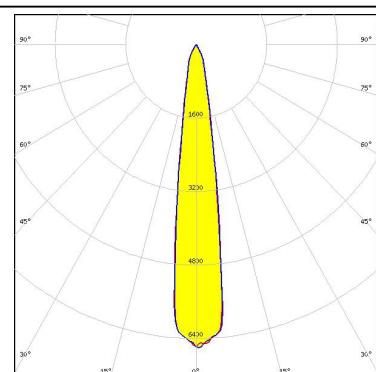
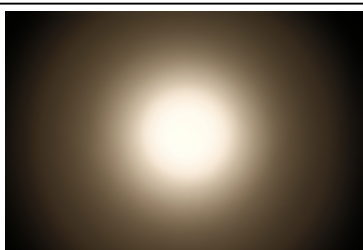
LED LUXEON CoB 1208
FWHM 14.0°
Efficiency 78 %
Peak intensity 6 cd/Im
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS



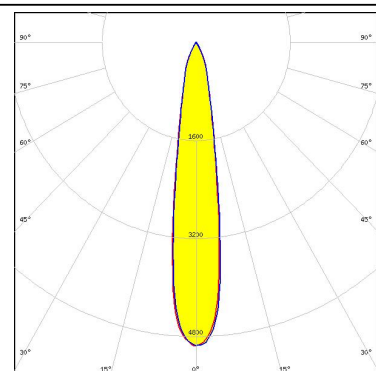
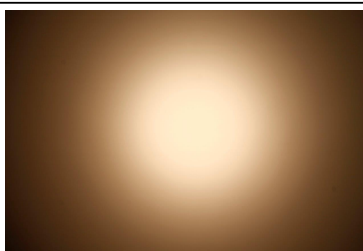
LED LUXEON CoB 1208
FWHM 12.0°
Efficiency 84 %
Peak intensity 9.9 cd/Im
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ



LED LUXEON CoB 1211
FWHM 16.0°
Efficiency 85 %
Peak intensity 6.6 cd/Im
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
Bender Wirth: 431 Typ L3



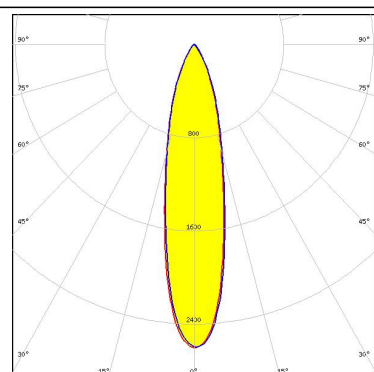
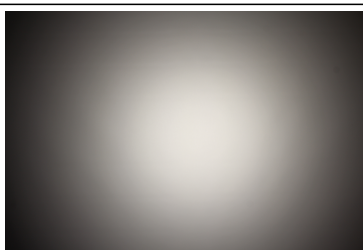
LED LUXEON CoB 1211
FWHM 17.0°
Efficiency 80 %
Peak intensity 5 cd/Im
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
Bender Wirth: 431 Typ L3



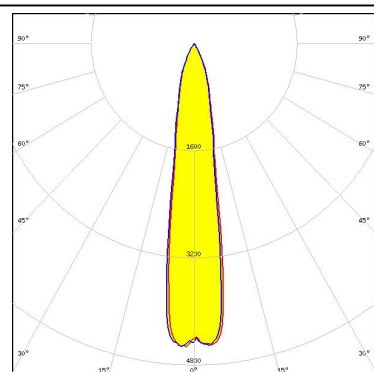
PHOTOMETRIC DATA (MEASURED):



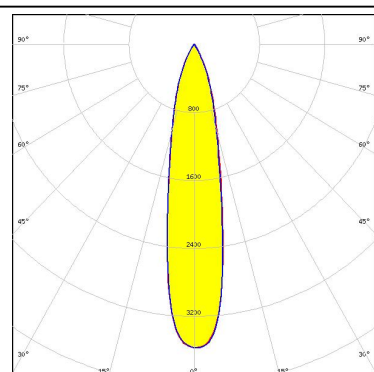
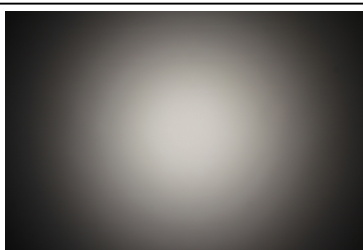
LED LUXEON CoB 1216/1812
FWHM 23.0°
Efficiency 74 %
Peak intensity 2.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
A.A.G. STUCCHI: 8102/G2 + S-8000/12



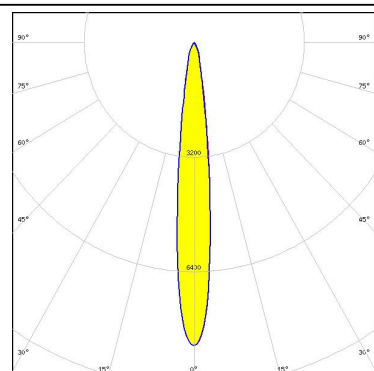
LED LUXEON CoB 1216/1812
FWHM 18.0°
Efficiency 79 %
Peak intensity 4.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
A.A.G. STUCCHI: 8102/G2 + S-8000/12



LED LUXEON CoB 1216/1812
FWHM 21.0°
Efficiency 80 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS



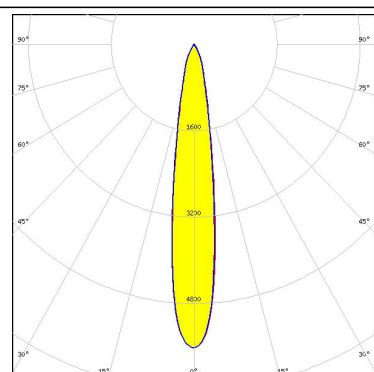
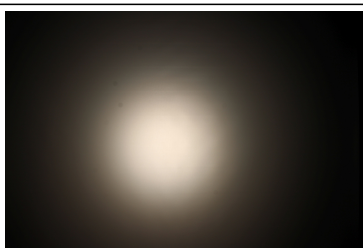
LED CDM-14 (Dim-To-Warm)
FWHM 13.0°
Efficiency 82 %
Peak intensity 8.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 491 Typ L2



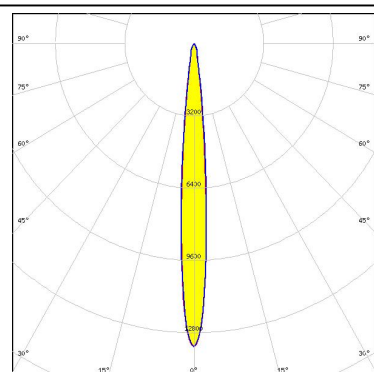
PHOTOMETRIC DATA (MEASURED):



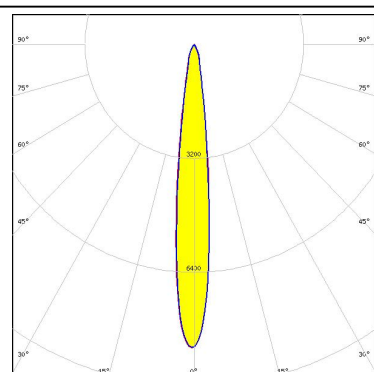
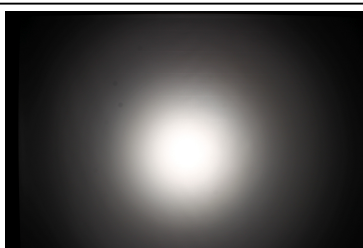
LED CDM-18 (Dim-To-Warm)
FWHM 16.0°
Efficiency 82 %
Peak intensity 5.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 491 Typ L2



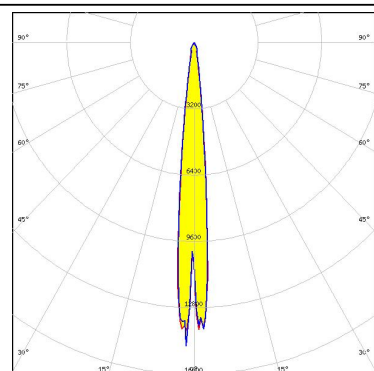
LED CDM-9 (Dim-To-Warm)
FWHM 10.0°
Efficiency 81 %
Peak intensity 13.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 490 Typ L1



LED CTM-14 (Tunable White)
FWHM 13.0°
Efficiency 81 %
Peak intensity 8.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
C12606_LENINA-DL
Bender Wirth: 442 Typ L3



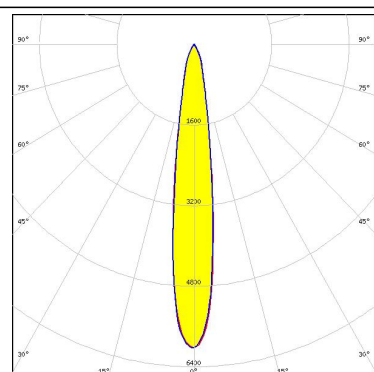
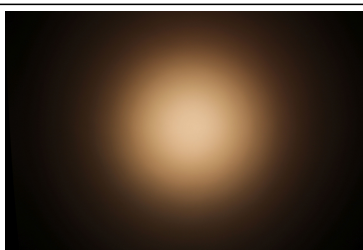
LED CTM-14 (Tunable White)
FWHM 10.0°
Efficiency 86 %
Peak intensity 14.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
Bender Wirth: 442 Typ L3



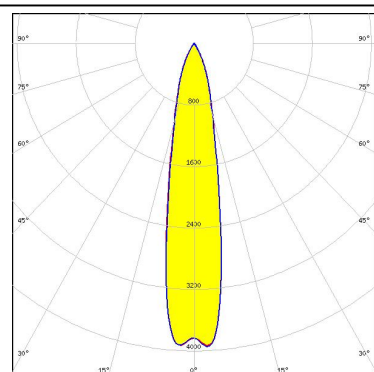
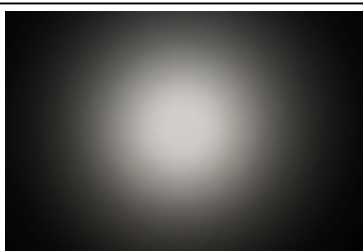
PHOTOMETRIC DATA (MEASURED):



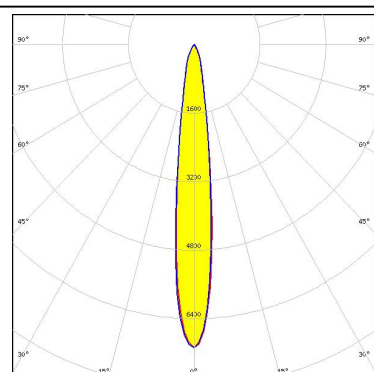
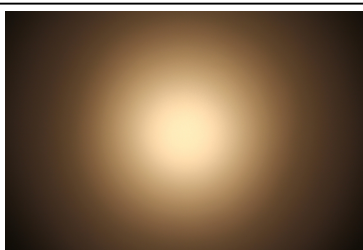
LED CTM-18 (Tunable White)
FWHM 15.0°
Efficiency 81 %
Peak intensity 6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
C11996_LENA-LENS
Bender Wirth: 442 Typ L3



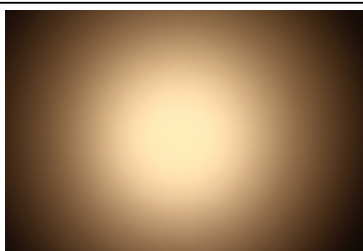
LED CTM-22 (Tunable White)
FWHM 20.0°
Efficiency 81 %
Peak intensity 4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
C11996_LENA-LENS
Bender Wirth: 494 Typ L3



LED CxM-14 (19x19)
FWHM 14.0°
Efficiency 80 %
Peak intensity 7.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030
C11996_LENA-LENS



LED CxM-22 (28x28)
FWHM 21.0°
Efficiency 80 %
Peak intensity 3.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS



PHOTOMETRIC DATA (MEASURED):



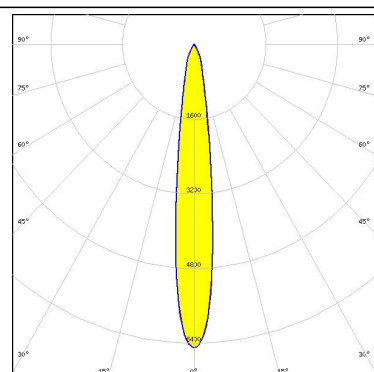
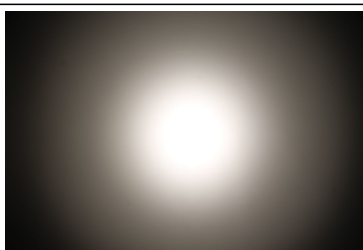
LED COB J-Type
FWHM 14.0°
Efficiency 82 %
Peak intensity 6.5 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 463 Typ L2

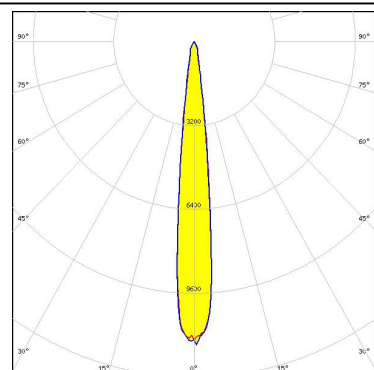


LED COB J-Type
FWHM 12.0°
Efficiency 87 %
Peak intensity 11.6 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

Bender Wirth: 463 Typ L2



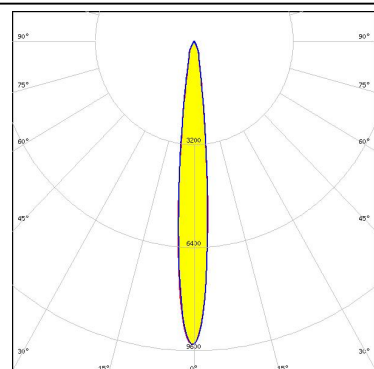
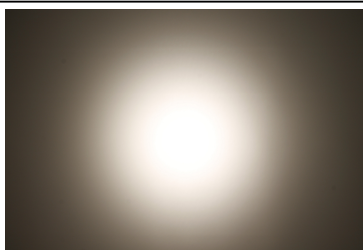
LED COB L-Type (LES 11)
FWHM 11.0°
Efficiency 82 %
Peak intensity 9.4 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 438 Typ L1

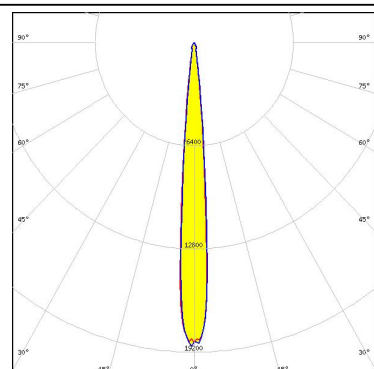


LED COB L-Type (LES 11)
FWHM 9.0°
Efficiency 87 %
Peak intensity 18.8 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

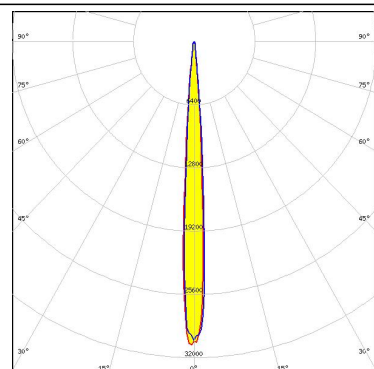
Bender Wirth: 438 Typ L1



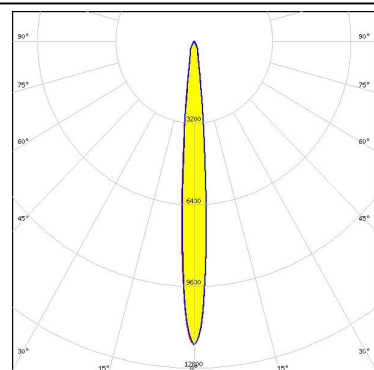
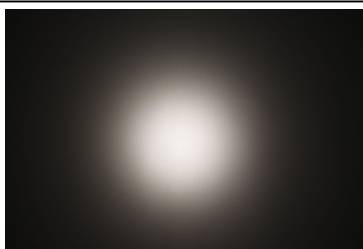
PHOTOMETRIC DATA (MEASURED):



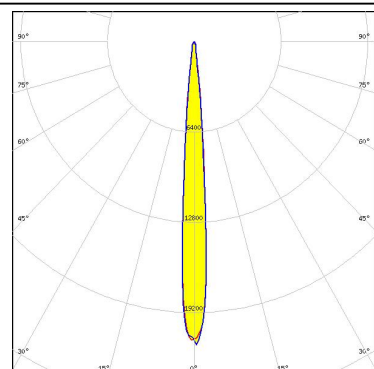
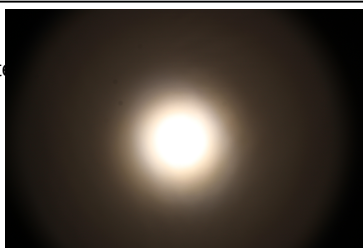
LED COB L-Type (LES 9)
FWHM 7.0°
Efficiency 89 %
Peak intensity 30.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 438 Typ L1



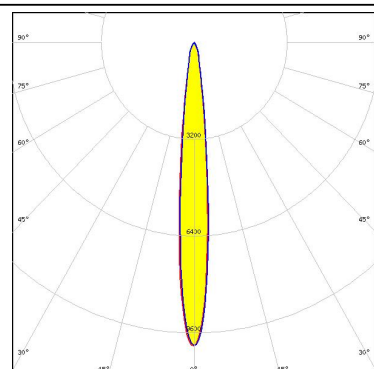
LED COB L-Type (LES 9)
FWHM 9.0°
Efficiency 83 %
Peak intensity 11.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 438 Typ L1



LED NVCWJ024Z-V1MT: COB J-Type Tunable White
FWHM 9.0°
Efficiency 87 %
Peak intensity 21.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 498 Typ L2



LED NVCWJ024Z-V1MT: COB J-Type Tunable White
FWHM 11.0°
Efficiency 81 %
Peak intensity 10 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 498 Typ L2



PHOTOMETRIC DATA (MEASURED):

OSRAM

Opto Semiconductors

LED Soleriq S13

FWHM 12.0°

Efficiency 80 %

Peak intensity 8 cd/lm

LEDs/each optic 1

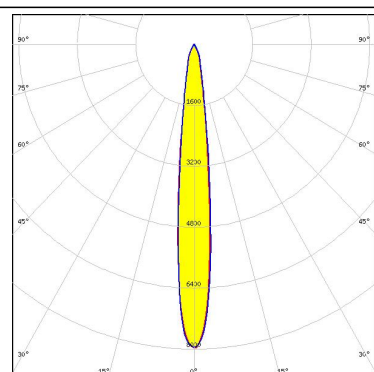
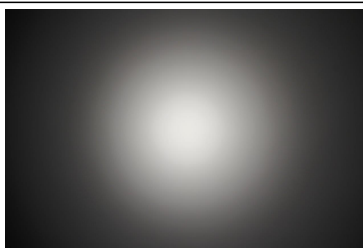
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 437 Typ L1



OSRAM

Opto Semiconductors

LED Soleriq S19

FWHM 15.0°

Efficiency 80 %

Peak intensity 6.1 cd/lm

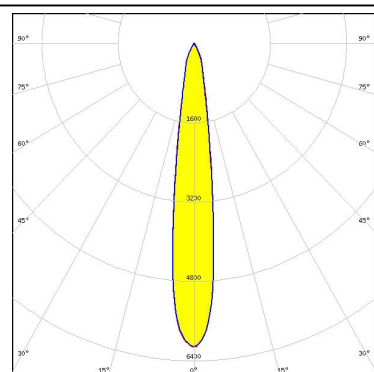
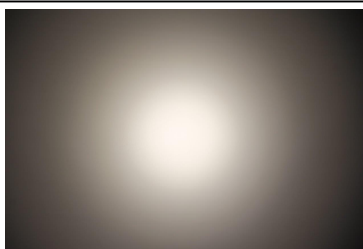
LEDs/each optic 1

Light colour White

Required components:

C13867_LENA-STD-BASE-VERO29

Bender Wirth: 462 Typ L3



PHILIPS

LED Fortimo SLM L13 CoB

FWHM 11.0°

Efficiency 81 %

Peak intensity 9.9 cd/lm

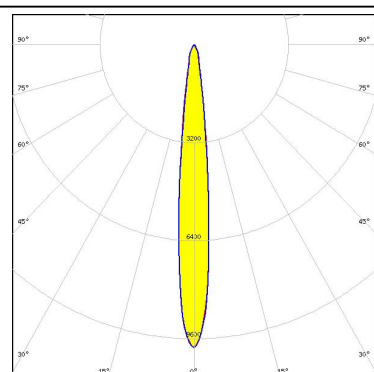
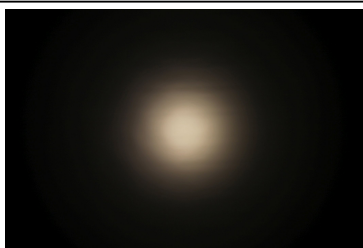
LEDs/each optic 1

Light colour White

Required components:

C12292_LENA-STD-BASE-MEZ

C11996_LENA-LENS



PHILIPS

LED Fortimo SLM L13 CoB

FWHM 10.0°

Efficiency 87 %

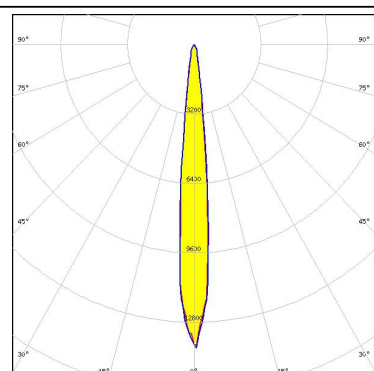
Peak intensity 14.4 cd/lm

LEDs/each optic 1

Light colour White

Required components:

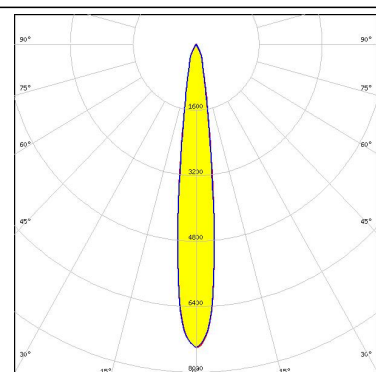
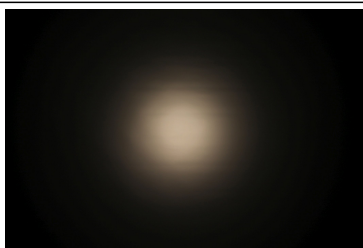
C12292_LENA-STD-BASE-MEZ



PHOTOMETRIC DATA (MEASURED):

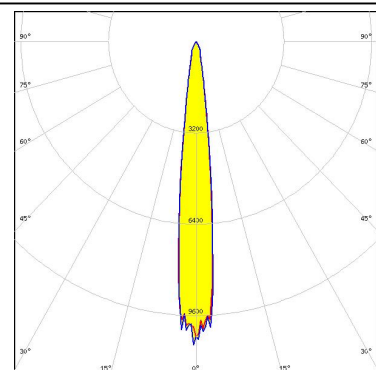
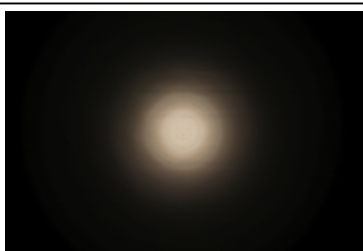
PHILIPS

LED Fortimo SLM L15 CoB
FWHM 14.0°
Efficiency 81 %
Peak intensity 7.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS



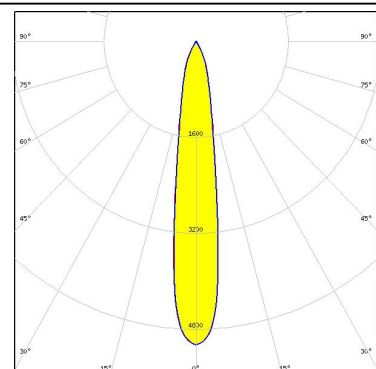
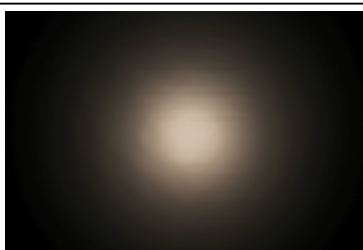
PHILIPS

LED Fortimo SLM L15 CoB
FWHM 13.0°
Efficiency 87 %
Peak intensity 10.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ



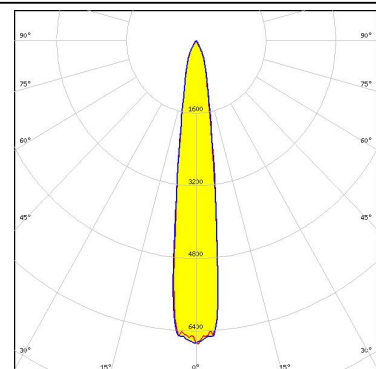
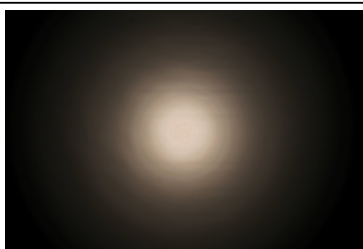
PHILIPS

LED Fortimo SLM L19 CoB
FWHM 16.0°
Efficiency 81 %
Peak intensity 5.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS



PHILIPS

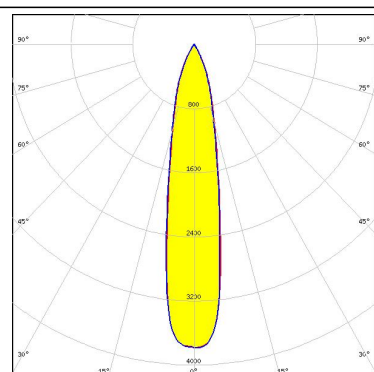
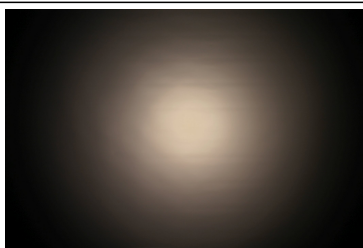
LED Fortimo SLM L19 CoB
FWHM 15.0°
Efficiency 87 %
Peak intensity 6.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040



PHOTOMETRIC DATA (MEASURED):

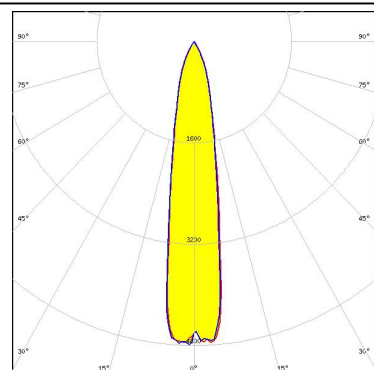
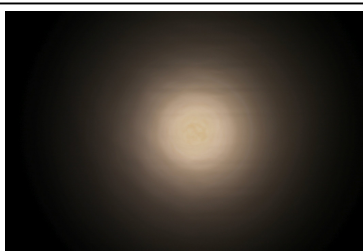
PHILIPS

LED Fortimo SLM L23 CoB
FWHM 20.0°
Efficiency 81 %
Peak intensity 3.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS



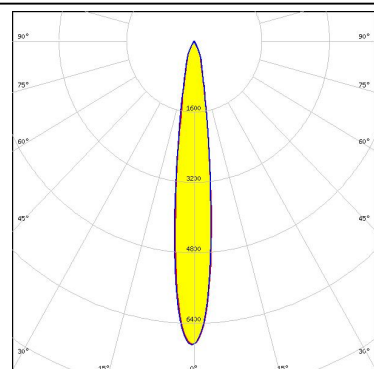
PHILIPS

LED Fortimo SLM L23 CoB
FWHM 19.0°
Efficiency 87 %
Peak intensity 4.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040



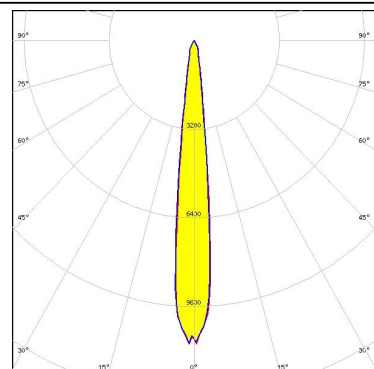
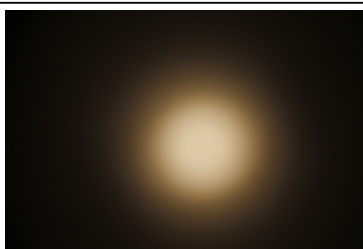
SAMSUNG

LED LC016D / LC019D / LC026D / LC033D
FWHM 14.0°
Efficiency 80 %
Peak intensity 6.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030
C11996_LENA-LENS



SAMSUNG

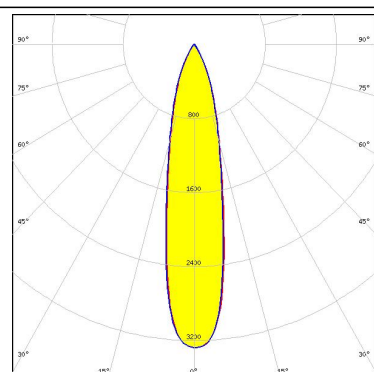
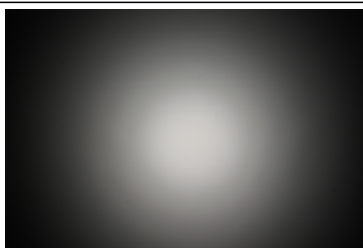
LED LC016D / LC019D / LC026D / LC033D
FWHM 12.0°
Efficiency 85 %
Peak intensity 11 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030



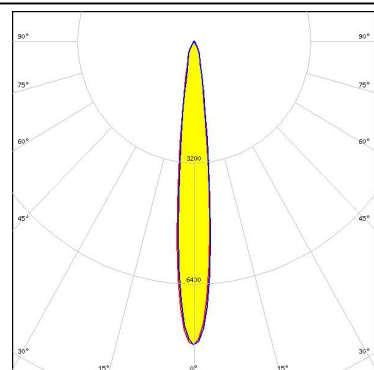
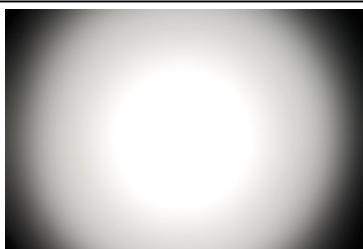
PHOTOMETRIC DATA (MEASURED):

SAMSUNG

LED LC040D / LC060D / LC080D
FWHM 22.0°
Efficiency 80 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS



LED ZC12/18
FWHM 12.0°
Efficiency 80 %
Peak intensity 8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030
C11996_LENA-LENS



SHARP

LED Mega Zenigata (GW5DGC)
FWHM 14.0°
Efficiency 80 %
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS

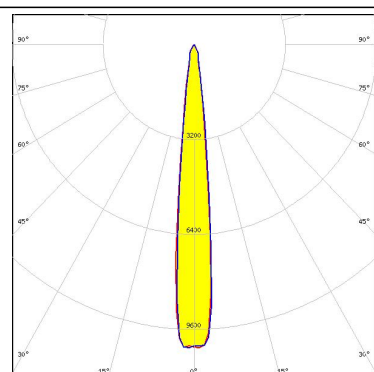
SHARP

LED Mega Zenigata (GW5DGC)
FWHM 13.5°
Efficiency 85 %
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ

PHOTOMETRIC DATA (MEASURED):

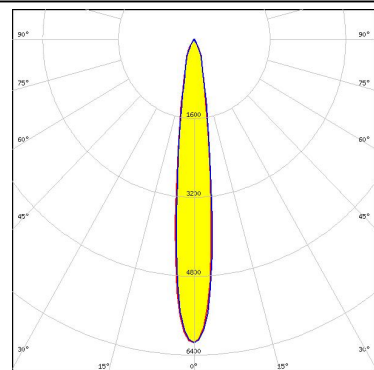
SHARP

LED Mega Zenigata (GW6DME)
FWHM 12.0°
Efficiency 83 %
Peak intensity 10.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ



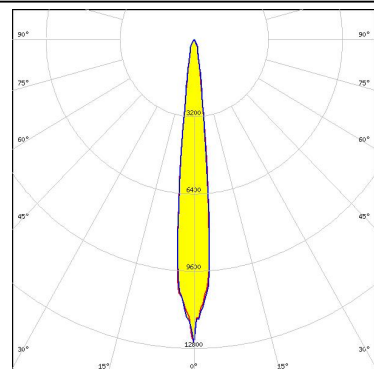
SHARP

LED Mega Zenigata (GW6DME)
FWHM 14.0°
Efficiency 77 %
Peak intensity 6.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS



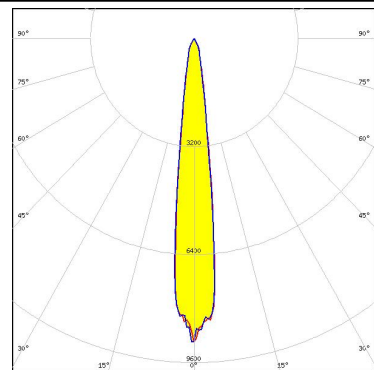
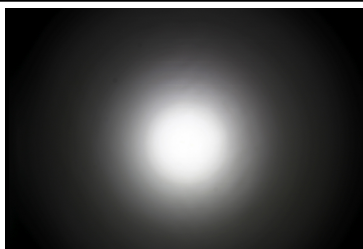
TRIDONIC

LED SLE G7 LES15
FWHM 11.0°
Efficiency 88 %
Peak intensity 12.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030



TRIDONIC

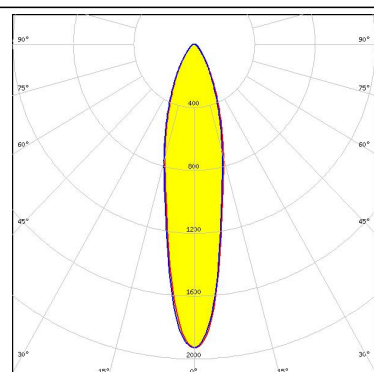
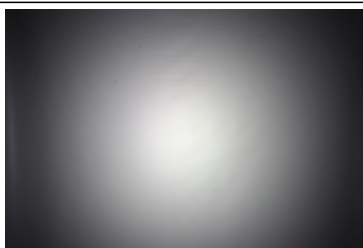
LED SLE G7 LES17 H
FWHM 14.0°
Efficiency 86 %
Peak intensity 9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14547_LENA-ADAPTER-B



PHOTOMETRIC DATA (MEASURED):

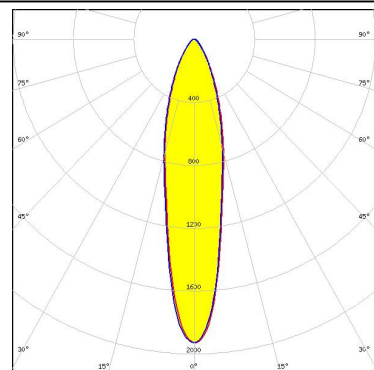
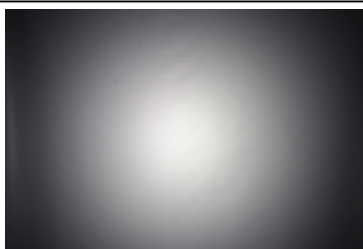
TRIDONIC

LED SLE G7 LES21 H
FWHM 23.0°
Efficiency 73 %
Peak intensity 1.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14547_LENA-ADAPTER-B



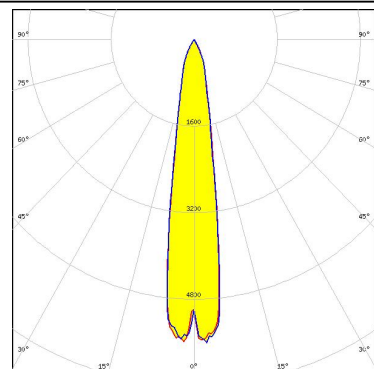
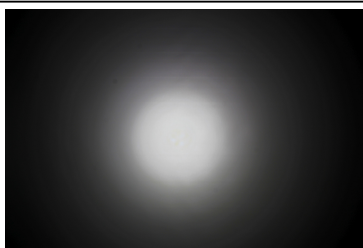
TRIDONIC

LED SLE G7 LES21 H
FWHM 23.0°
Efficiency 73 %
Peak intensity 1.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12231_LENA-FRESNEL



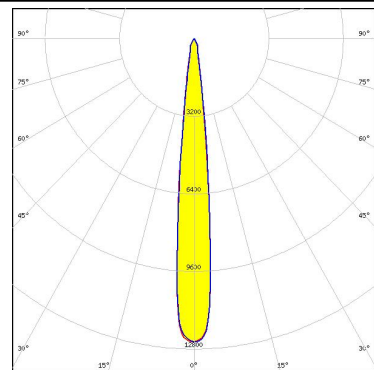
TRIDONIC

LED SLE G7 LES21 H
FWHM 18.0°
Efficiency 86 %
Peak intensity 5.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14547_LENA-ADAPTER-B



XICATO

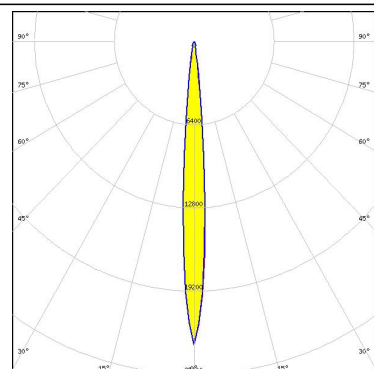
LED XOB 14.5 mm
FWHM 12.0°
Efficiency 89 %
Peak intensity 12.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030



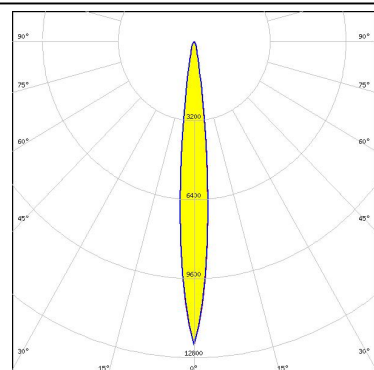
PHOTOMETRIC DATA (SIMULATED):



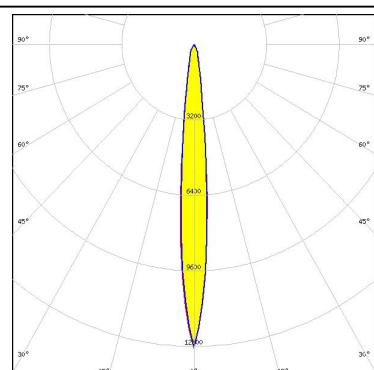
LED V10 Gen7
FWHM 9.0°
Efficiency 90 %
Peak intensity 22.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 486 Typ L1



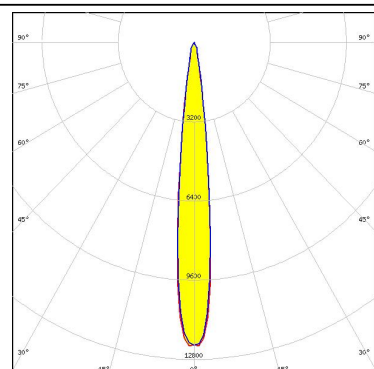
LED V10 Gen7
FWHM 11.0°
Efficiency 79 %
Peak intensity 12.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 486 Typ L1



LED V13 Gen7
FWHM 10.0°
Efficiency 88 %
Peak intensity 12.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
 IDEAL: 50-2103CT + 50-2100LN



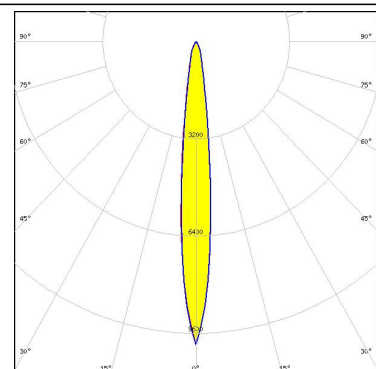
LED V13 Gen7
FWHM 12.0°
Efficiency 89 %
Peak intensity 12.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 477 Typ L1



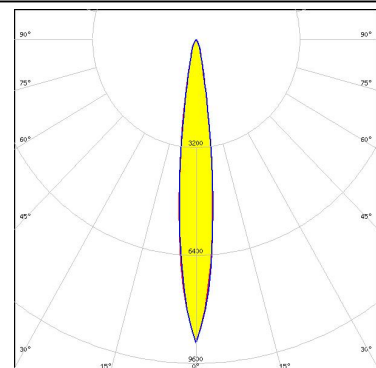
PHOTOMETRIC DATA (SIMULATED):



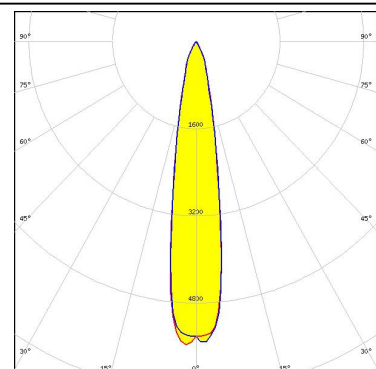
LED V13 Gen7
FWHM 11.0°
Efficiency 85 %
Peak intensity 9.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2103CT + 50-2100LN



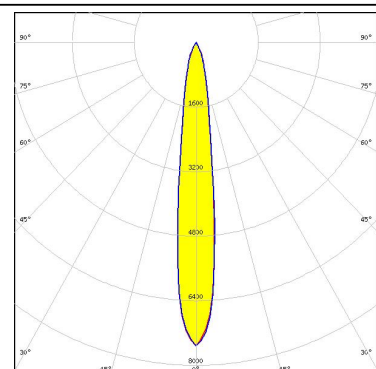
LED V13 Gen7
FWHM 13.0°
Efficiency 81 %
Peak intensity 9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 477 Typ L1



LED V22 Gen7
FWHM 18.0°
Efficiency 90 %
Peak intensity 5.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
Bender Wirth: 431 Typ L3



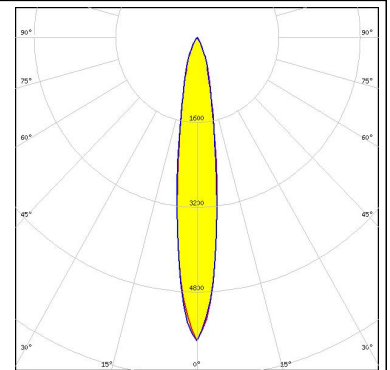
LED CXA/B 30xx
FWHM 14.0°
Efficiency 87 %
Peak intensity 7.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2234C + 50-2100LN



PHOTOMETRIC DATA (SIMULATED):



LED CXA/B 30xx
FWHM 16.0°
Efficiency 80 %
Peak intensity 5.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2234C + 50-2100LN



LED CxM-14 (19x19)
FWHM 12.0°
Efficiency 85 %
Peak intensity 11.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 433 Typ L1



LED CxM-14 (19x19)
FWHM 14.0°
Efficiency 80 %
Peak intensity 6.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 433 Typ L1



LED CxM-9 (13.5x13.5)
FWHM 10.0°
Efficiency 80 %
Peak intensity 11.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 434 Typ L1

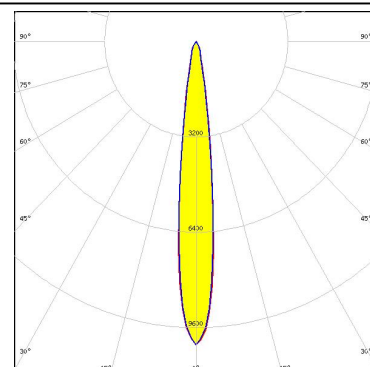
PHOTOMETRIC DATA (SIMULATED):



LED CxM-9 (13.5x13.5)
FWHM 8.0°
Efficiency 85 %
Peak intensity 26.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 434 Typ L1



LED Soleriq S15
FWHM 13.0°
Efficiency 88 %
Peak intensity 10.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030



LED ZC12/18
FWHM 12.0°
Efficiency 85 %
Peak intensity 11.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 433 Typ L1



LED ZC12/18
FWHM 14.0°
Efficiency 80 %
Peak intensity 6.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 433 Typ L1

PHOTOMETRIC DATA (SIMULATED):

 SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM	10.0°
Efficiency	80 %
Peak intensity	11.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
C13868_LENA-STD-BASE-VERO13-18	
C11996_LENA-LENS	
Bender Wirth: 434 Typ L1	

 SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM	8.0°
Efficiency	85 %
Peak intensity	26.5 cd/lm
LEDs/each optic	1
Light colour	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 13
FI-24240 SALO
Finland

LEDiL Inc.

228 West Page Street
Suite D
Sycamore IL 60178
USA

Local sales and technical support

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

Shipping locations

Salo, Finland
Hong Kong, China

Distribution Partners

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