

LENA-SS

~18° smooth spot beam

TECHNICAL SPECIFICATIONS:

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

MATERIAL SPECIFICATIONS:

Component	Type	Material
LENA-SS	Reflector	PC



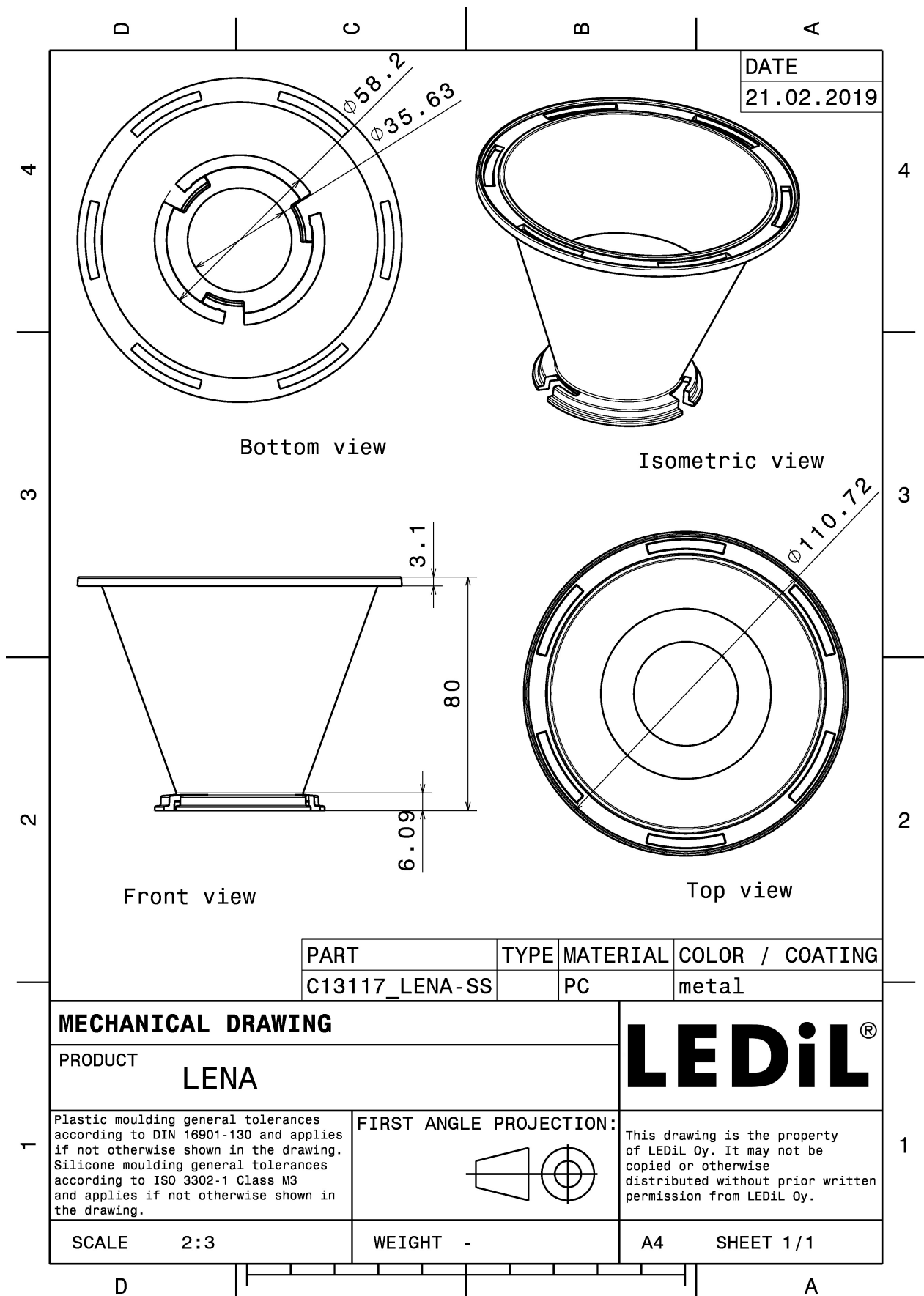
ORDERING INFORMATION:

Component

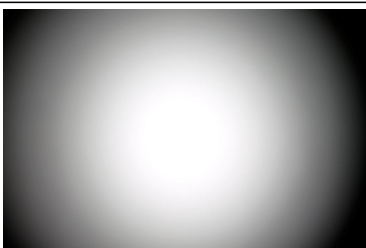
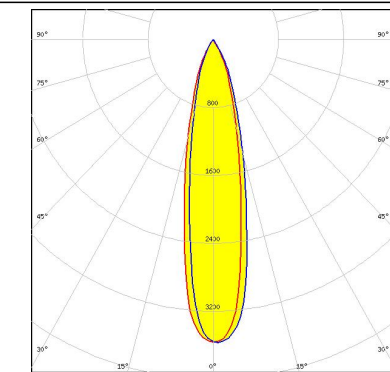
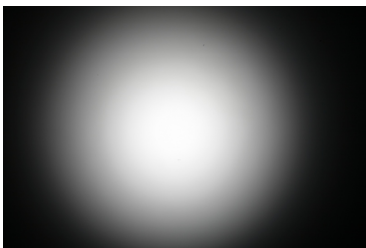
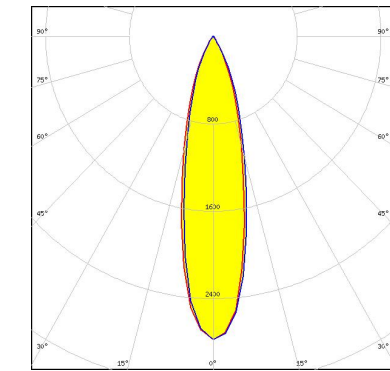
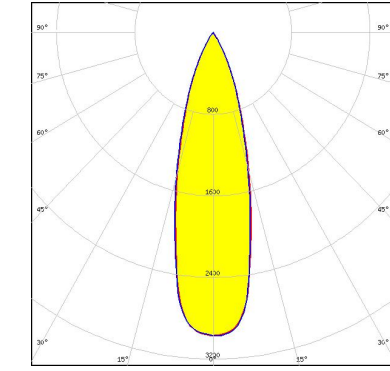
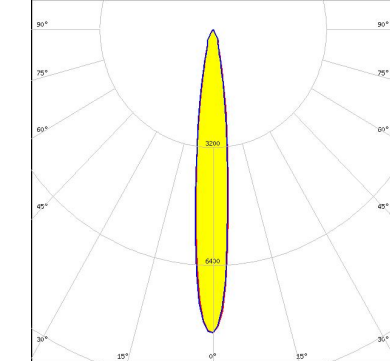
C13117_LENA-SS

» Box size: 400 x 280 x 380 mm

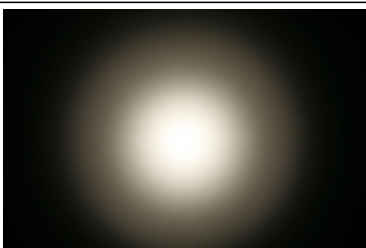
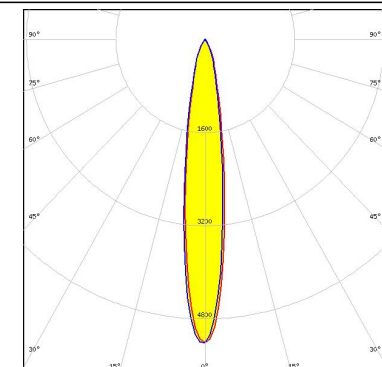
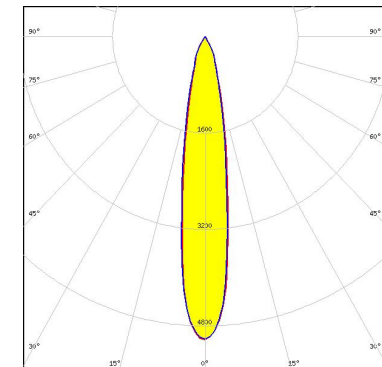
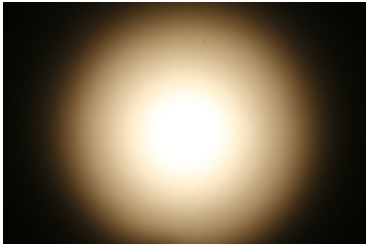
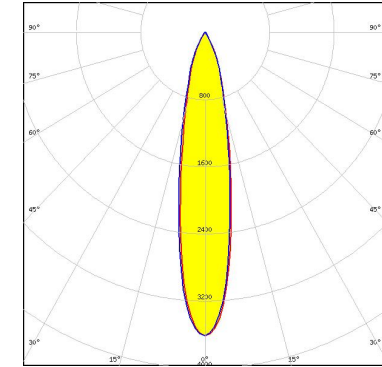
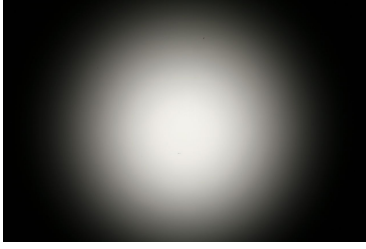
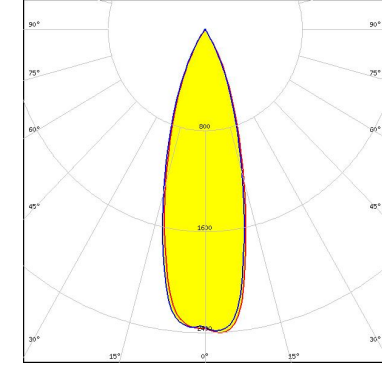
Qty in box	MOQ	MPQ	Box weight (kg)
60	60	60	4.1



PHOTOMETRIC DATA (MEASURED):

bridgelux. LED BXRA RS FWHM 22.0° Efficiency 83 % Peak intensity 3.6 cd/lm LEDs/each optic 1 Light colour White Required components: C12229_LENA-STD-BASE-RS		
bridgelux. LED BXRA RS FWHM 25.0° Efficiency 76 % Peak intensity 2.8 cd/lm LEDs/each optic 1 Light colour White Required components: C12229_LENA-STD-BASE-RS C11996_LENA-LENS		
bridgelux. LED Vero SE 29 FWHM 29.0° Efficiency 89 % Peak intensity 3 cd/lm LEDs/each optic 1 Light colour White Required components: C15083_LENA-STD-BASE-VERO29		
bridgelux. LED VERO13 FWHM 13.0° Efficiency 82 % Peak intensity 8.3 cd/lm LEDs/each optic 1 Light colour White Required components: C13868_LENA-STD-BASE-VERO13-18		

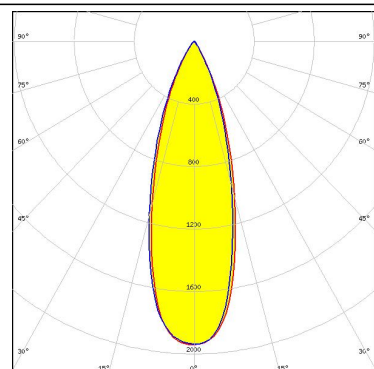
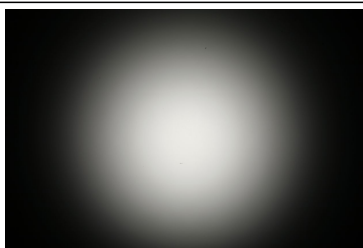
PHOTOMETRIC DATA (MEASURED):

bridgelux. LED VERO13 FWHM 15.0° Efficiency 76 % Peak intensity 5.3 cd/lm LEDs/each optic 1 Light colour White Required components: C13868_LENA-STD-BASE-VERO13-18 C11996_LENA-LENS		
bridgelux. LED VERO18 FWHM 18.0° Efficiency 82 % Peak intensity 5 cd/lm LEDs/each optic 1 Light colour White Required components: C13868_LENA-STD-BASE-VERO13-18		
bridgelux. LED VERO18 FWHM 20.0° Efficiency 76 % Peak intensity 3.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13868_LENA-STD-BASE-VERO13-18 C11996_LENA-LENS		
bridgelux. LED VERO29 FWHM 31.0° Efficiency 80 % Peak intensity 2.4 cd/lm LEDs/each optic 1 Light colour White Required components: C13867_LENA-STD-BASE-VERO29		

PHOTOMETRIC DATA (MEASURED):

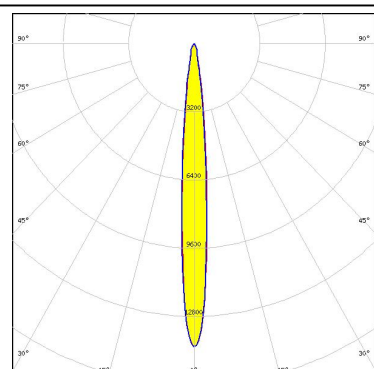


LED VERO29
FWHM 32.0°
Efficiency 74 %
Peak intensity 1.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
C11996_LENA-LENS



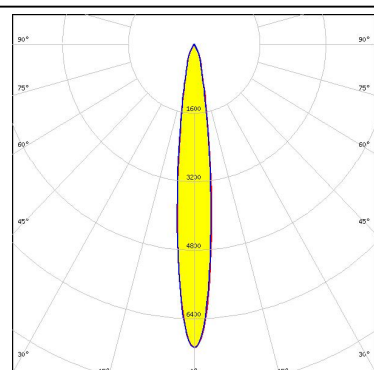
CITIZEN

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



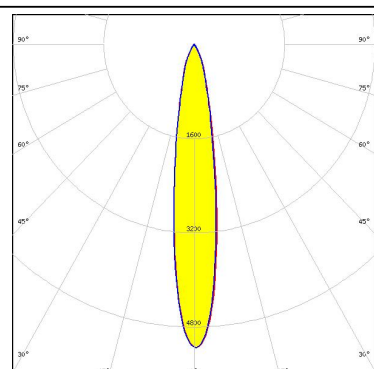
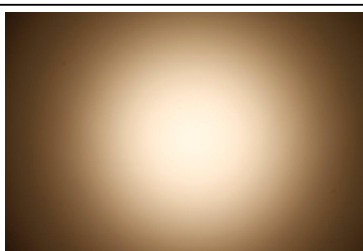
CITIZEN

LED CLL02x/CLU02x (LES10)
FWHM 13.0°
Efficiency 82 %
Peak intensity 7.1 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



CITIZEN

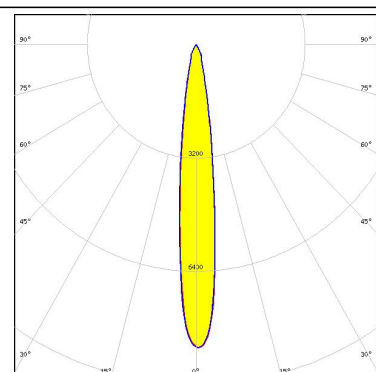
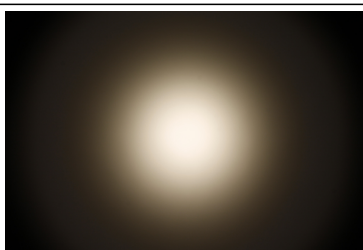
LED CLL03x/CLU03x
FWHM 17.0°
Efficiency 82 %
Peak intensity 5.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 433 Typ L1



PHOTOMETRIC DATA (MEASURED):

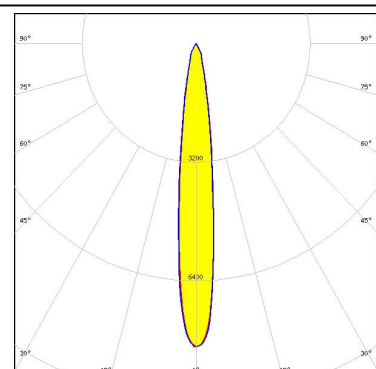
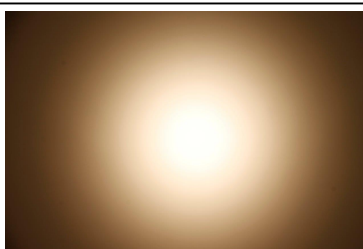
CITIZEN

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



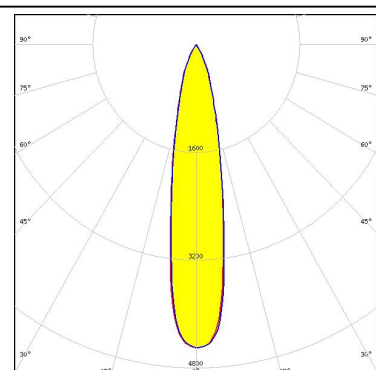
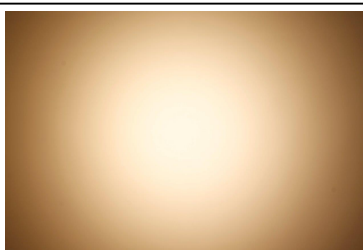
CITIZEN

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



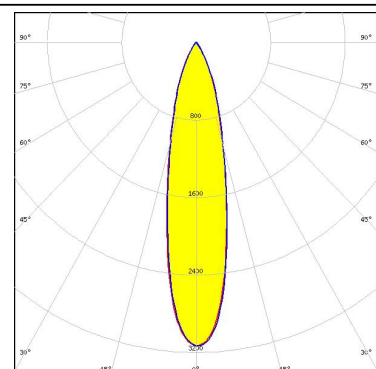
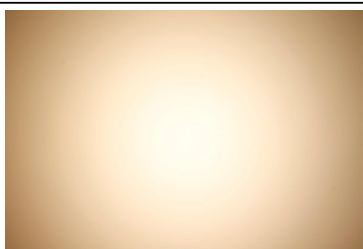
CITIZEN

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



CITIZEN

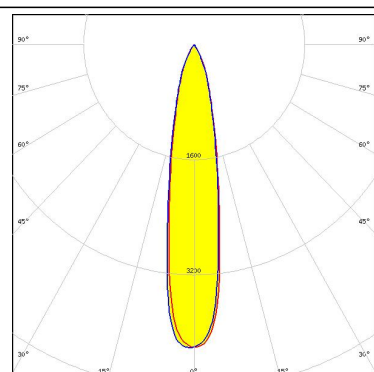
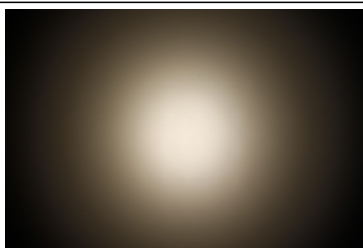
LED CLL04x/CLU04x
FWHM 23.0°
Efficiency 82 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
C11996_LENA-LENS
Bender Wirth: 431 Typ L3



PHOTOMETRIC DATA (MEASURED):

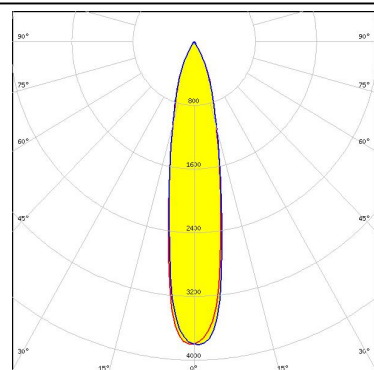
CITIZEN

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



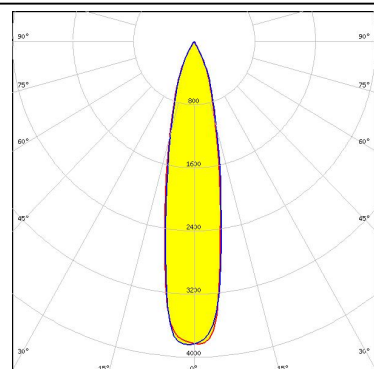
CITIZEN

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



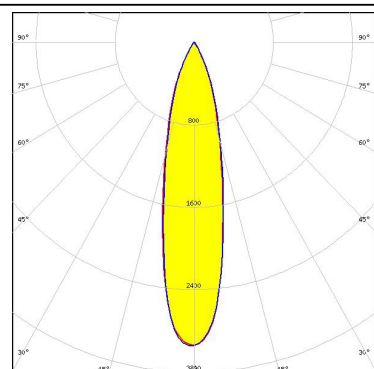
CITIZEN

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



CITIZEN

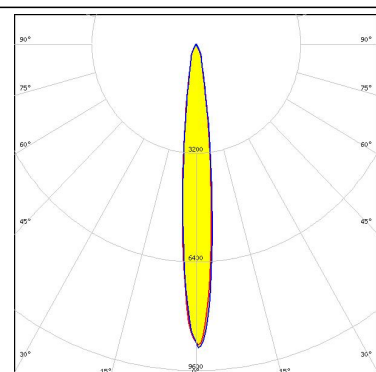
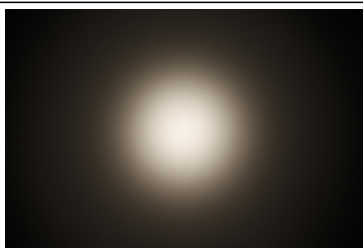
LED CLL04x/CLU04x
FWHM 24.0°
Efficiency 77 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS



PHOTOMETRIC DATA (MEASURED):

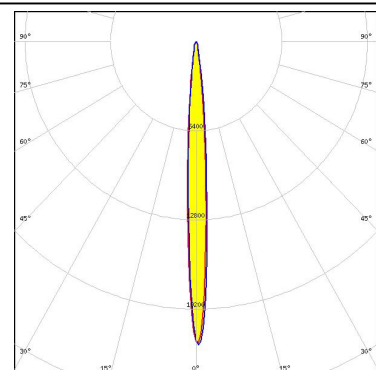
CITIZEN

LED CLU700/701/702
FWHM 11.0°
Efficiency 82 %
Peak intensity 8.9 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



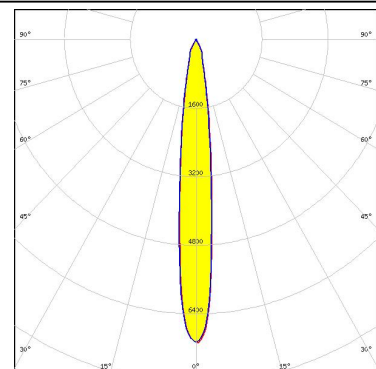
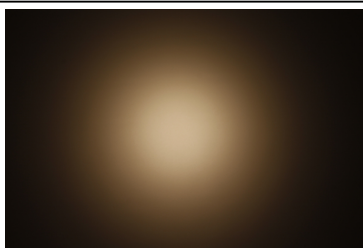
CITIZEN

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



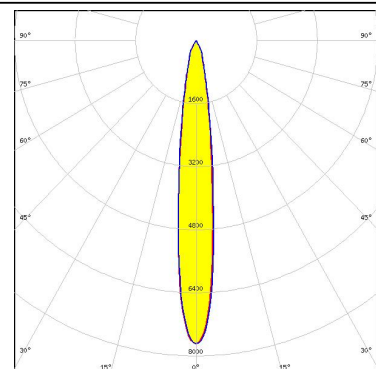
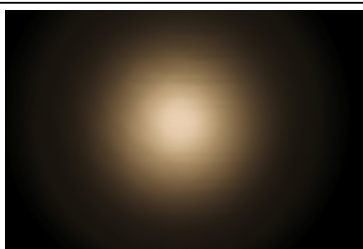
CITIZEN

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



CREE

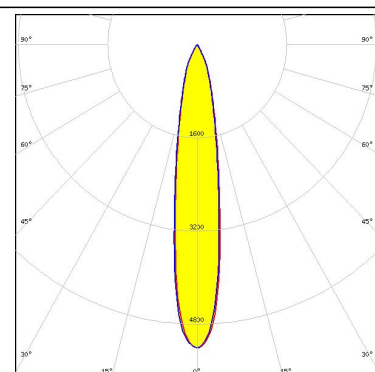
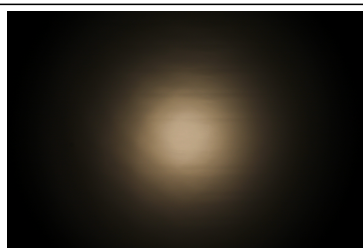
LED CMA1840
FWHM 13.0°
Efficiency 85 %
Peak intensity 7.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14146_LENA-STD-BASE-CXA18



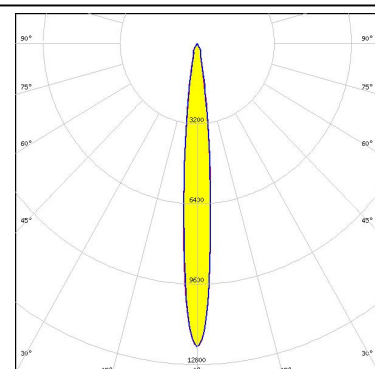
PHOTOMETRIC DATA (MEASURED):



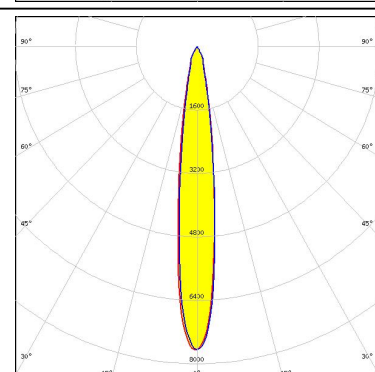
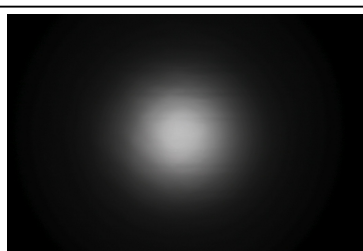
LED CMA2550
FWHM 17.0°
Efficiency 86 %
Peak intensity 5.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13324_LENA-STD-BASE-CXA25



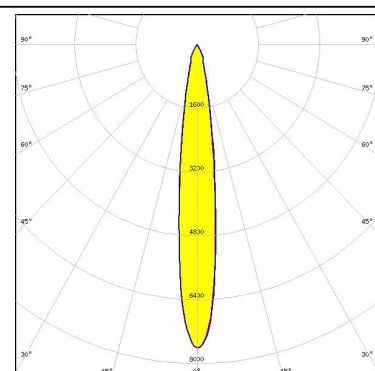
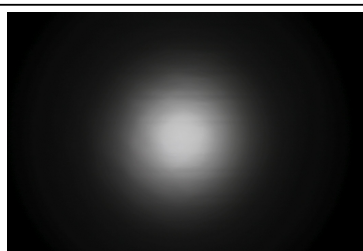
LED CMT14xx
FWHM 10.0°
Efficiency 86 %
Peak intensity 12.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 434 Typ L1



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



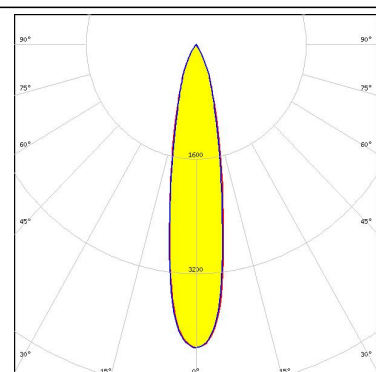
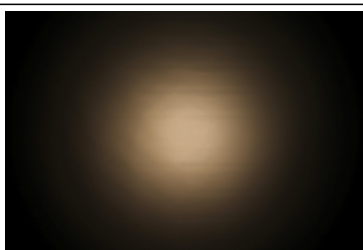
LED CMT19xx
FWHM 14.0°
Efficiency 85 %
Peak intensity 7.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 477 Typ L1



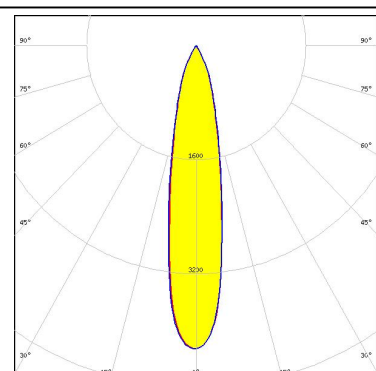
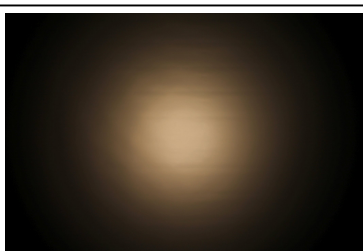
PHOTOMETRIC DATA (MEASURED):



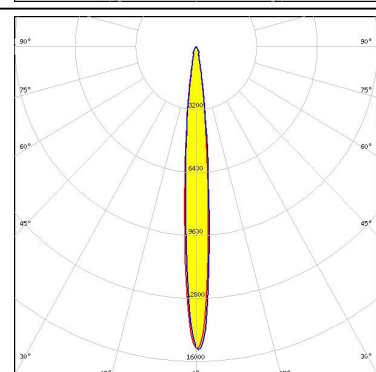
LED CMT28xx
FWHM 20.0°
Efficiency 85 %
Peak intensity 4.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
Bender Wirth: 471 Typ L3



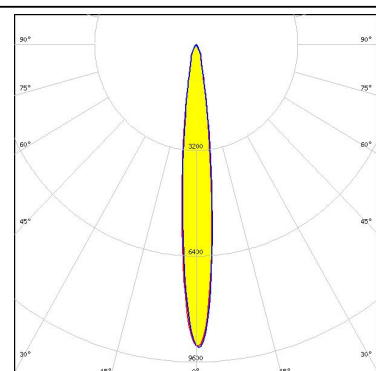
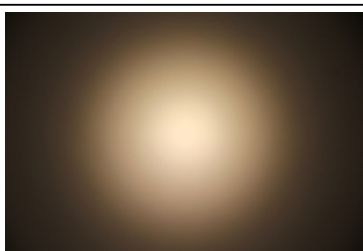
LED CMT28xx
FWHM 20.0°
Efficiency 85 %
Peak intensity 4.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040



LED CXA/B 15xx
FWHM 9.0°
Efficiency 87 %
Peak intensity 15.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 441 Typ L1



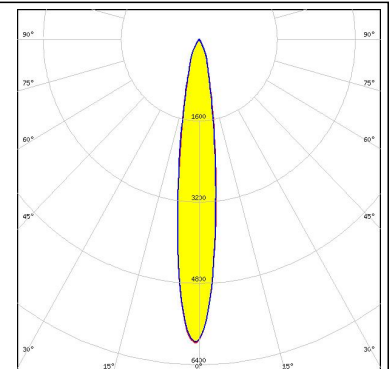
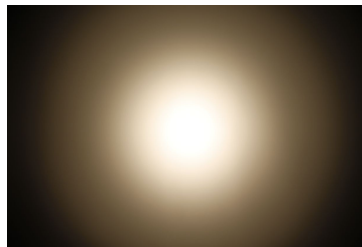
LED CXA/B 15xx
FWHM 12.0°
Efficiency 82 %
Peak intensity 9.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 441 Typ L1



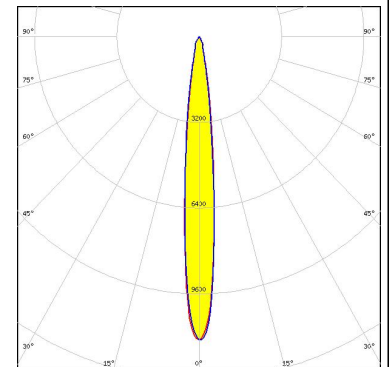
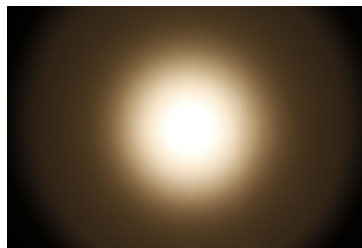
PHOTOMETRIC DATA (MEASURED):



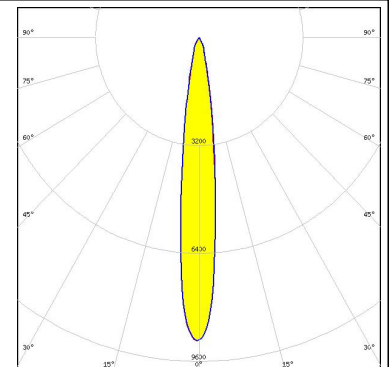
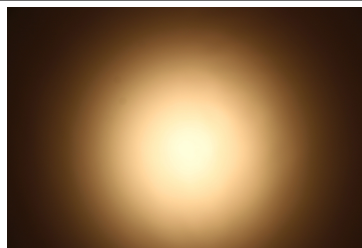
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM 15.0°
Efficiency 84 %
Peak intensity 6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 437 Typ L1



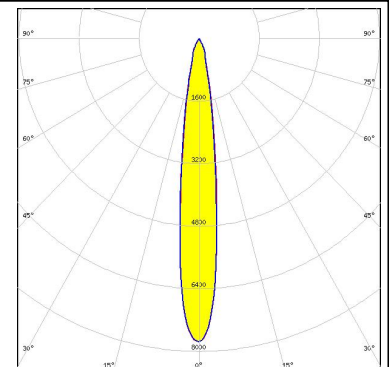
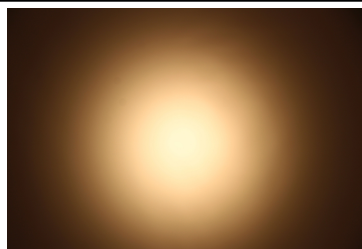
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM 11.0°
Efficiency 89 %
Peak intensity 11.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 437 Typ L1



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



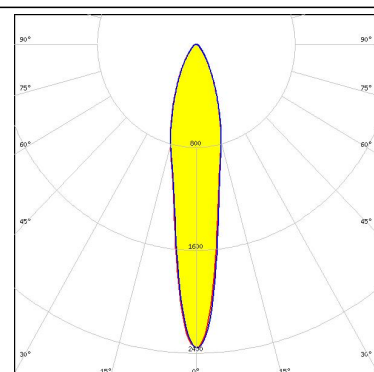
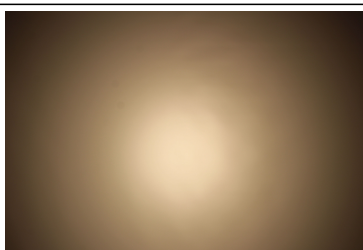
LED CXA/B 1830
FWHM 14.0°
Efficiency 84 %
Peak intensity 7.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C14169_LENA-CLEAR-LENS
Bender Wirth: 437 Typ L1



PHOTOMETRIC DATA (MEASURED):

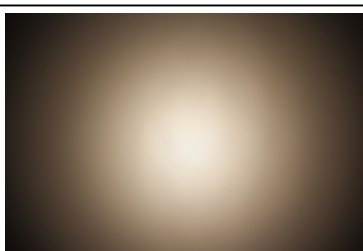
CREE

LED CXA/B 1830
FWHM 18.0°
Efficiency 77 %
Peak intensity 2.4 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



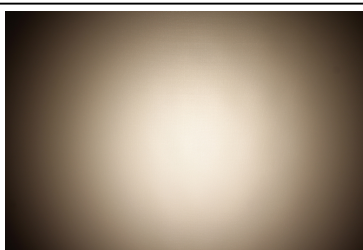
EVERLIGHT

LED CHI3030 19W
FWHM 21.0°
Efficiency 83 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
C11996_LENA-LENS
Bender Wirth: 468 Typ L3



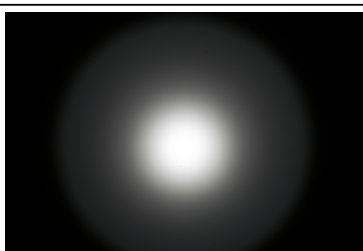
EVERLIGHT

LED CHI3030 29W
FWHM 28.0°
Efficiency 82 %
Peak intensity 2.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
C11996_LENA-LENS
Bender Wirth: 468 Typ L3



LITEON

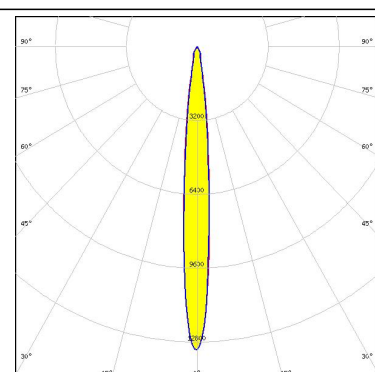
LED LTPL-M036
FWHM 9.0°
Efficiency 77 %
Peak intensity 13.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13186_LENA-STD-BASE-CXA15



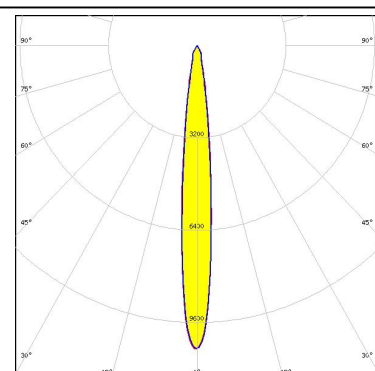
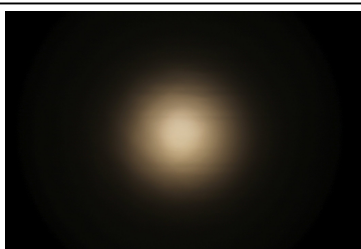
PHOTOMETRIC DATA (MEASURED):



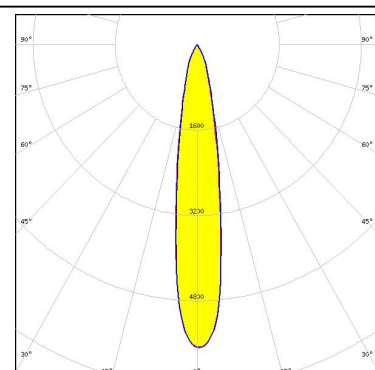
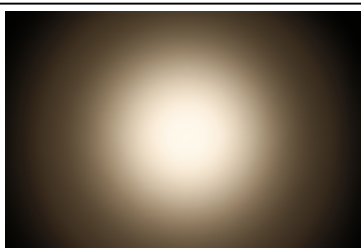
LED LUXEON CoB 1204HD
FWHM 10.0°
Efficiency 85 %
Peak intensity 13.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C11981_LENA-STD-BASE-COB-L110



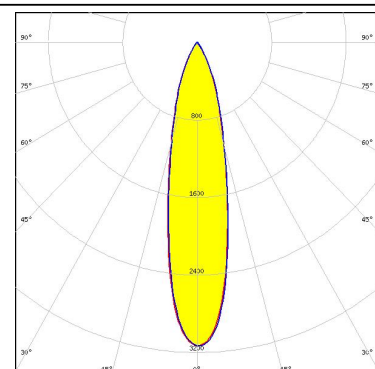
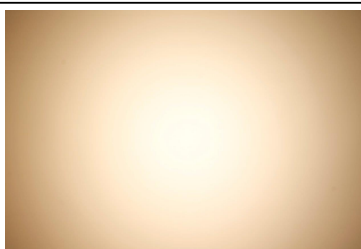
LED LUXEON CoB 1205HD
FWHM Asymmetric
Efficiency 85 %
Peak intensity 10.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C11981_LENA-STD-BASE-COB-L110



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



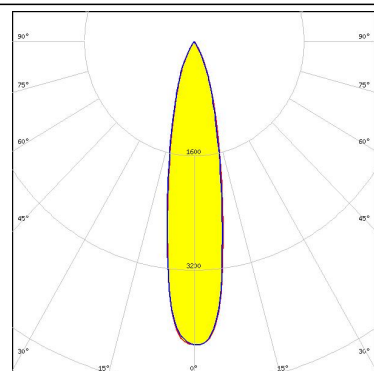
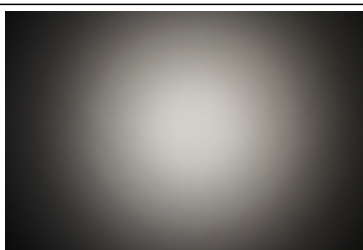
LED LUXEON CoB 1211
FWHM 19.0°
Efficiency 82 %
Peak intensity 4.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
C11996_LENA-LENS
Bender Wirth: 431 Typ L3



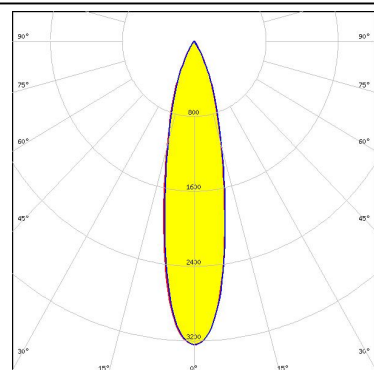
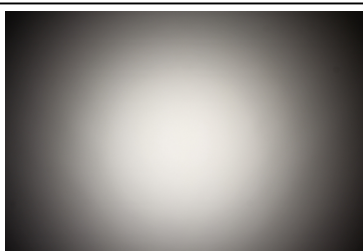
PHOTOMETRIC DATA (MEASURED):



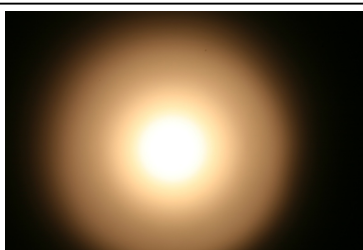
LED LUXEON CoB 1216/1812
 FWHM 21.0°
 Efficiency 87 %
 Peak intensity 4.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENA-STD-BASE-CLL040



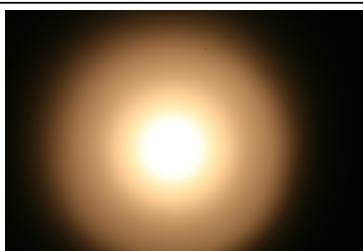
LED LUXEON CoB 1216/1812
 FWHM 24.0°
 Efficiency 82 %
 Peak intensity 3.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



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



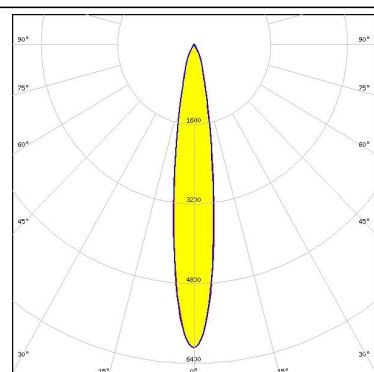
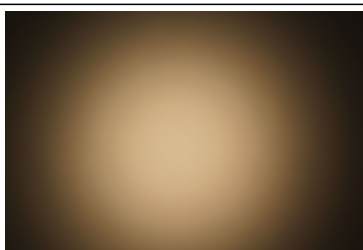
LED LUXEON K16
 FWHM 15.0°
 Efficiency 73 %
 Peak intensity 5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12924_LENA-STD-BASE-LUXEON-K
 C11996_LENA-LENS



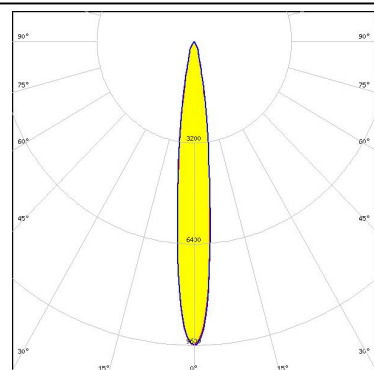
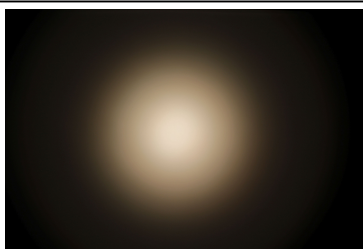
PHOTOMETRIC DATA (MEASURED):



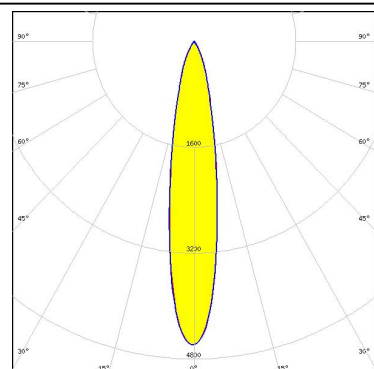
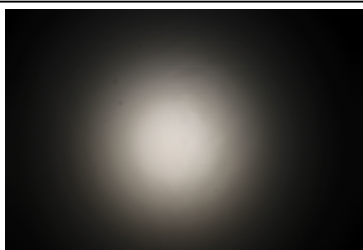
LED CDM-14 (Dim-To-Warm)
FWHM 16.0°
Efficiency 84 %
Peak intensity 6.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 491 Typ L2



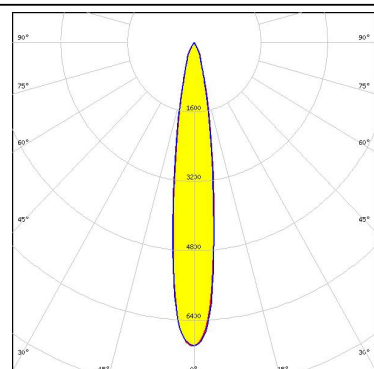
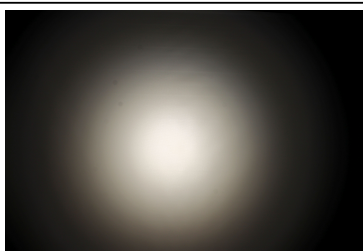
LED CDM-14 (Dim-To-Warm)
FWHM 13.0°
Efficiency 89 %
Peak intensity 9.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 491 Typ L2



LED CDM-18 (Dim-To-Warm)
FWHM 19.0°
Efficiency 84 %
Peak intensity 4.6 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



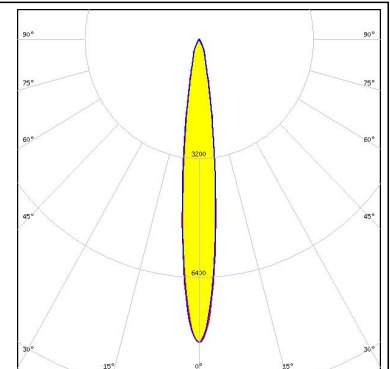
LED CDM-18 (Dim-To-Warm)
FWHM 16.0°
Efficiency 89 %
Peak intensity 7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 491 Typ L2



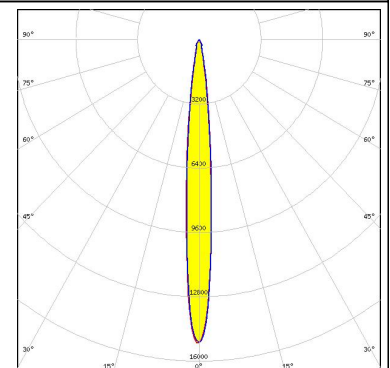
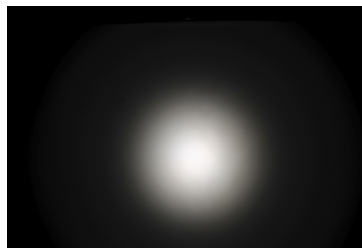
PHOTOMETRIC DATA (MEASURED):



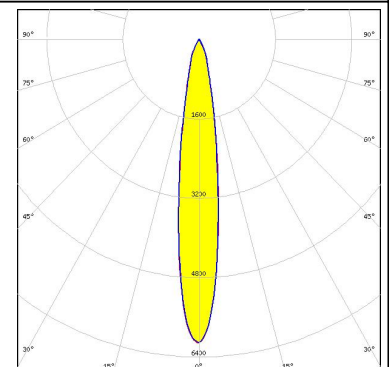
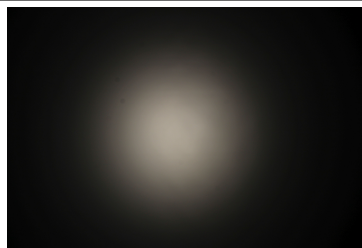
LED CDM-9 (Dim-To-Warm)
FWHM 13.0°
Efficiency 84 %
Peak intensity 8.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
C11996_LENA-LENS
Bender Wirth: 490 Typ L1



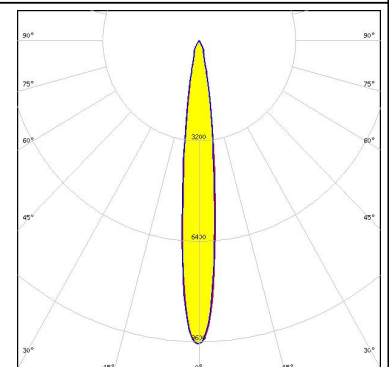
LED CDM-9 (Dim-To-Warm)
FWHM 10.0°
Efficiency 89 %
Peak intensity 15.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 490 Typ L1



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



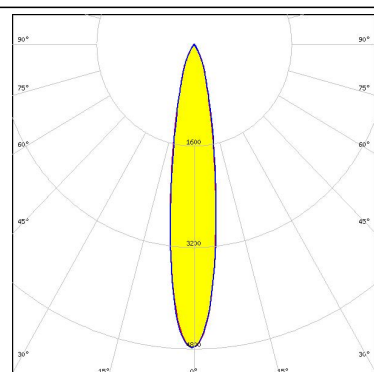
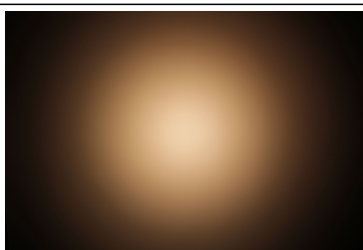
LED CTM-14 (Tunable White)
FWHM 13.0°
Efficiency 89 %
Peak intensity 9.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
Bender Wirth: 442 Typ L3



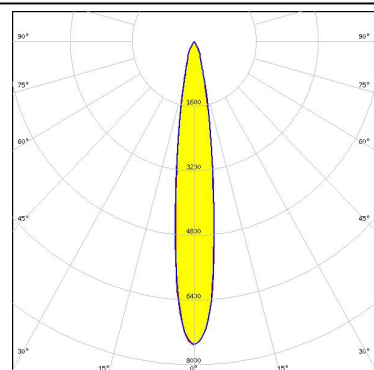
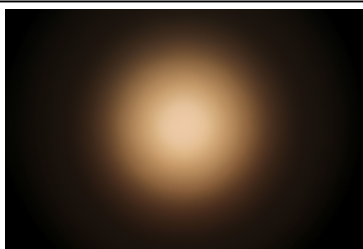
PHOTOMETRIC DATA (MEASURED):



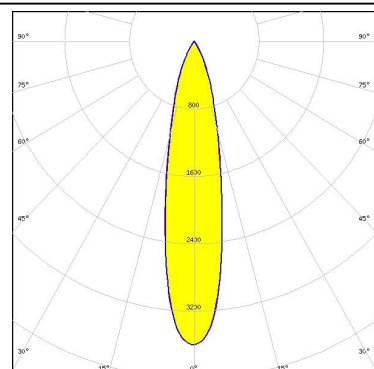
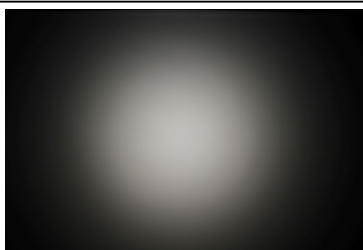
LED CTM-18 (Tunable White)
 FWHM 18.0°
 Efficiency 84 %
 Peak intensity 4.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS
 Bender Wirth: 442 Typ L3



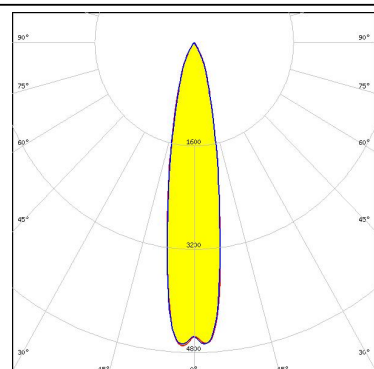
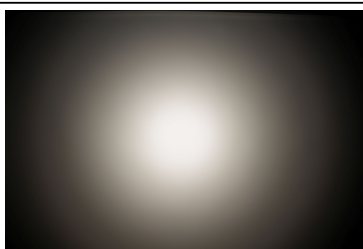
LED CTM-18 (Tunable White)
 FWHM 15.0°
 Efficiency 89 %
 Peak intensity 7.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 442 Typ L3



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



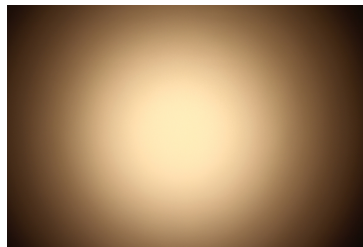
LED CTM-22 (Tunable White)
 FWHM 20.0°
 Efficiency 89 %
 Peak intensity 4.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 494 Typ L3



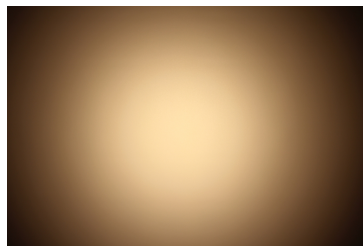
PHOTOMETRIC DATA (MEASURED):



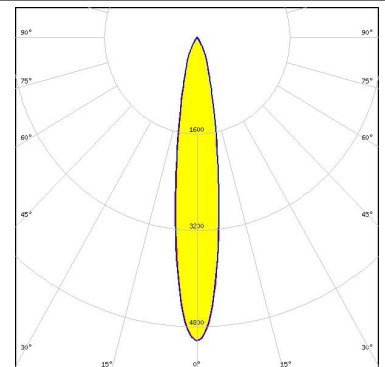
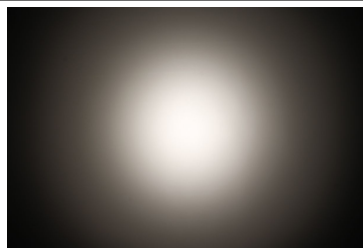
LED CxM-22 (28x28)
FWHM 23.0°
Efficiency 81 %
Peak intensity 3.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040



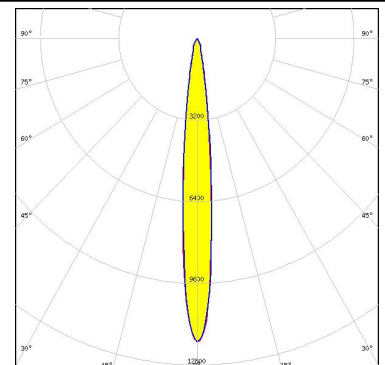
LED CxM-22 (28x28)
FWHM 25.0°
Efficiency 76 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS



LED COB J-Type
FWHM 17.0°
Efficiency 84 %
Peak intensity 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 L-Type (LES 11)
FWHM 11.0°
Efficiency 89 %
Peak intensity 11.9 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):



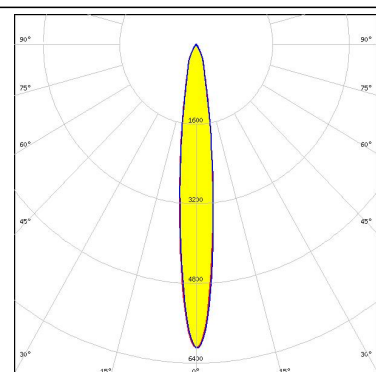
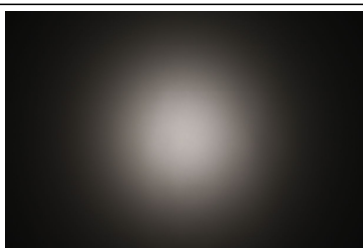
LED COB L-Type (LES 9)
FWHM 13.0°
Efficiency 78 %
Peak intensity 6.1 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 438 Typ L1

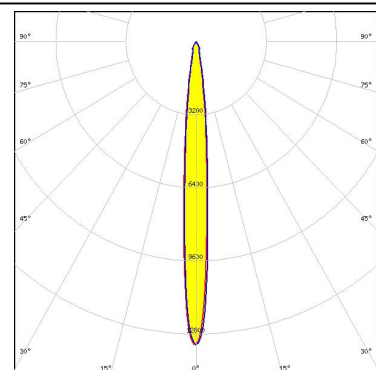
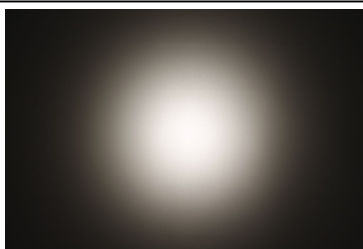


LED COB L-Type (LES 9)
FWHM 9.0°
Efficiency 84 %
Peak intensity 13.2 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

Bender Wirth: 438 Typ L1



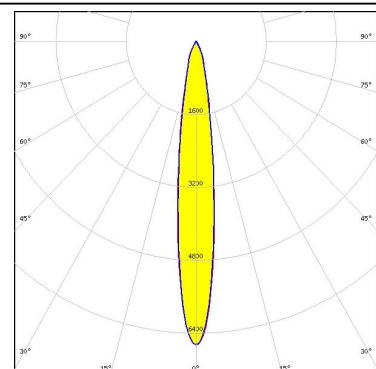
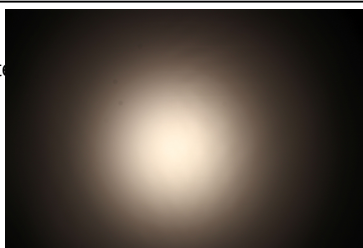
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
FWHM 14.0°
Efficiency 84 %
Peak intensity 6.7 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

C11996_LENA-LENS

Bender Wirth: 498 Typ L2

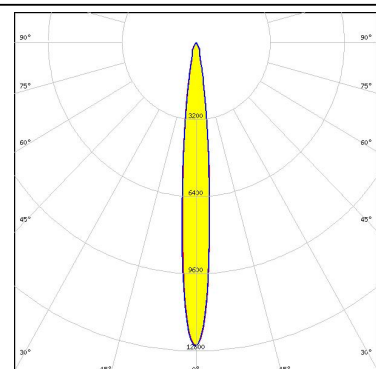


LED NVCWJ024Z-V1MT: COB J-Type Tunable White
FWHM 11.0°
Efficiency 89 %
Peak intensity 12.6 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENA-STD-BASE-VERO13-18

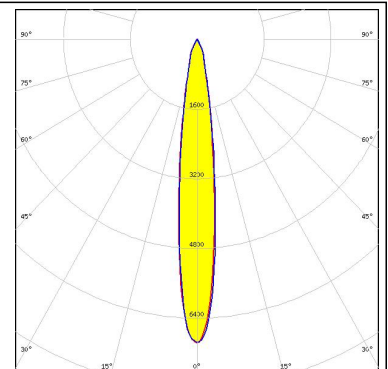
Bender Wirth: 498 Typ L2



PHOTOMETRIC DATA (MEASURED):

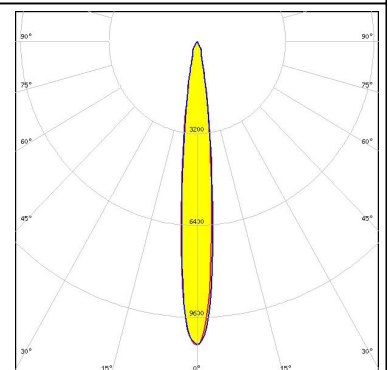
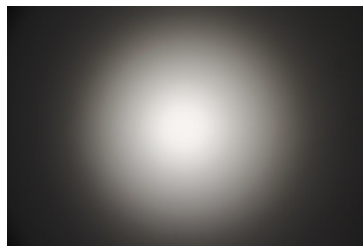
OSRAM
Opto Semiconductors

LED Soleriq S13
FWHM 14.0°
Efficiency 82 %
Peak intensity 7 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



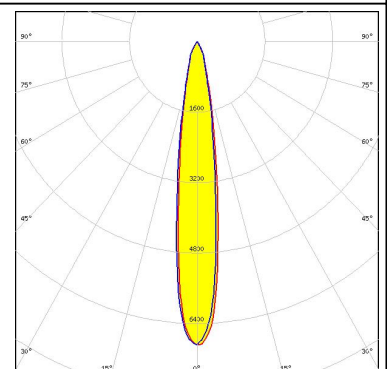
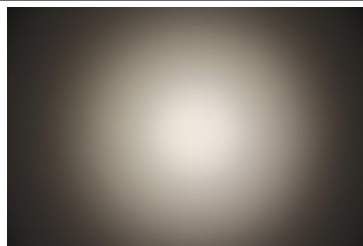
OSRAM
Opto Semiconductors

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



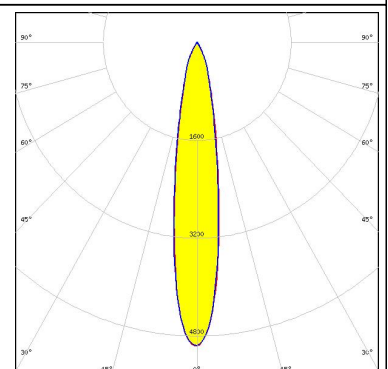
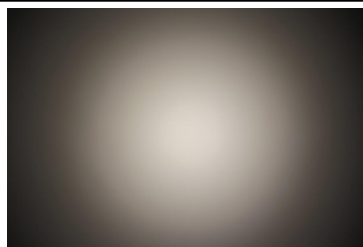
OSRAM
Opto Semiconductors

LED Soleriq S19
FWHM 15.0°
Efficiency 87 %
Peak intensity 6.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
Bender Wirth: 462 Typ L3



OSRAM
Opto Semiconductors

LED Soleriq S19
FWHM 17.0°
Efficiency 82 %
Peak intensity 5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
C11996_LENA-LENS
Bender Wirth: 462 Typ L3



PHOTOMETRIC DATA (MEASURED):

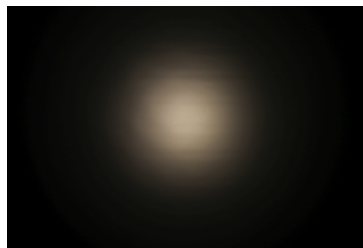
PHILIPS

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



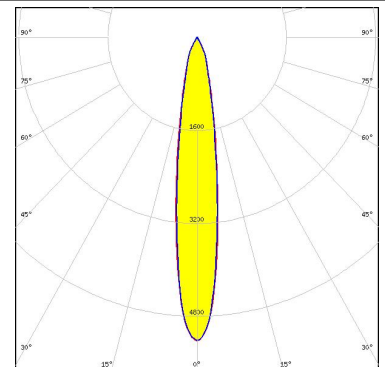
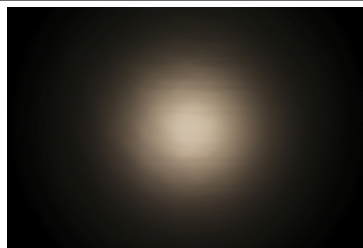
PHILIPS

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



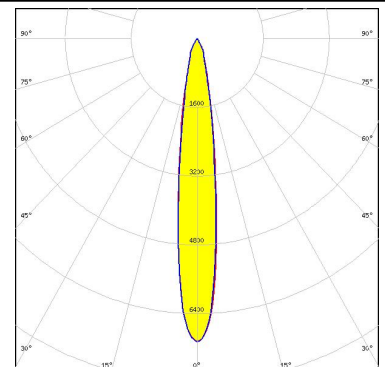
PHILIPS

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



PHILIPS

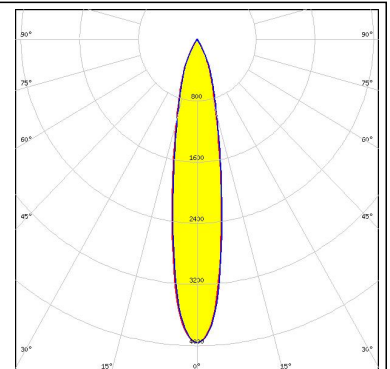
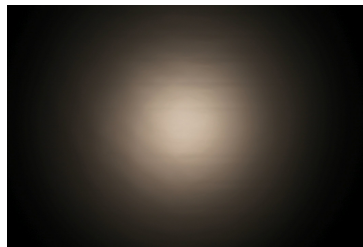
LED Fortimo SLM L15 CoB
FWHM 15.0°
Efficiency 85 %
Peak intensity 7.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ



PHOTOMETRIC DATA (MEASURED):

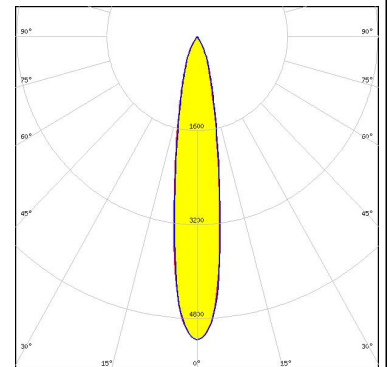
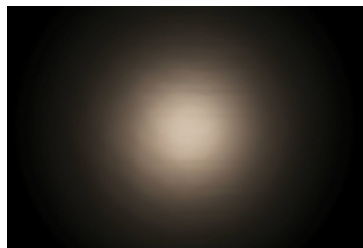
PHILIPS

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



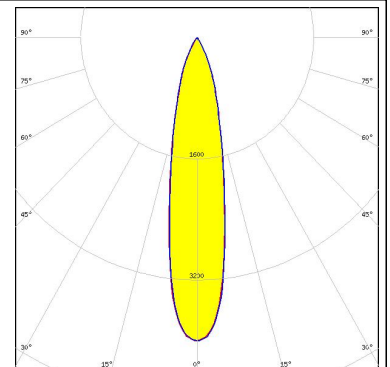
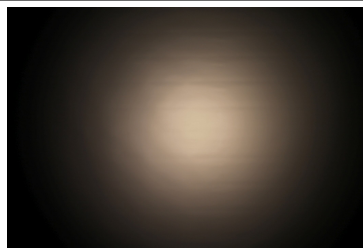
PHILIPS

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



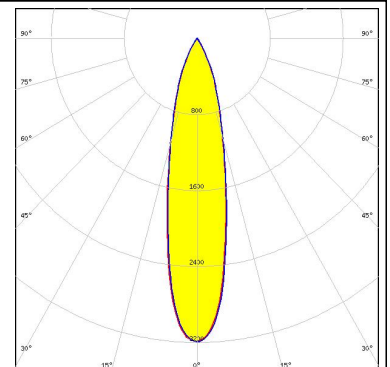
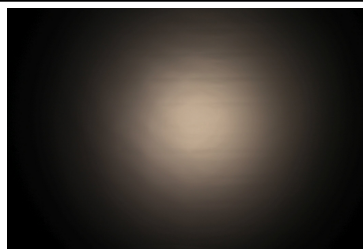
PHILIPS

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



PHILIPS

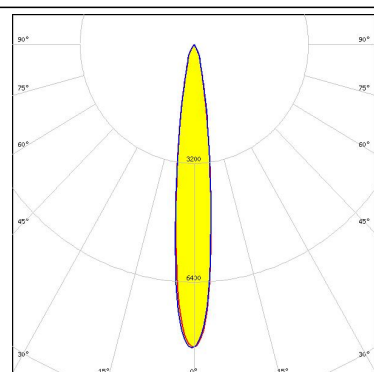
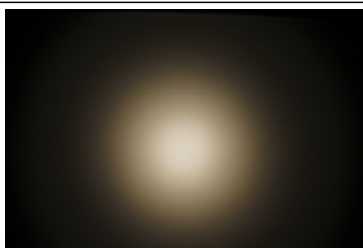
LED Fortimo SLM L23 CoB
FWHM 23.0°
Efficiency 79 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS



PHOTOMETRIC DATA (MEASURED):

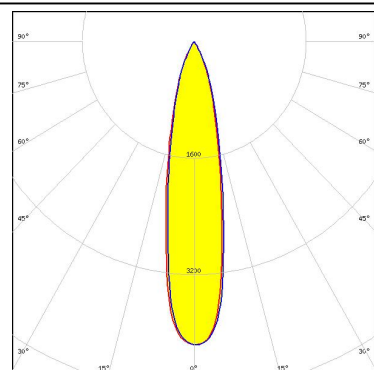
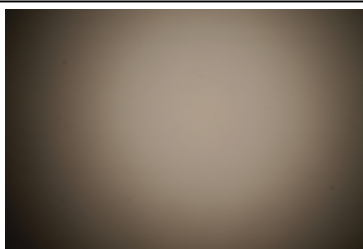
SAMSUNG

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



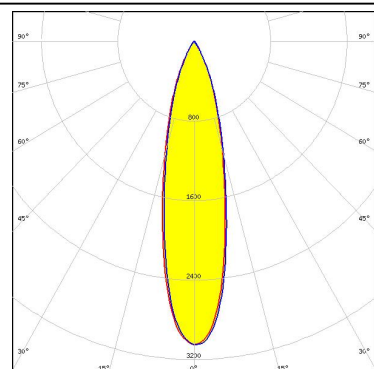
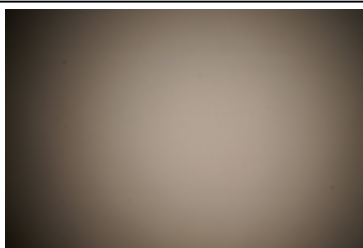
SAMSUNG

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



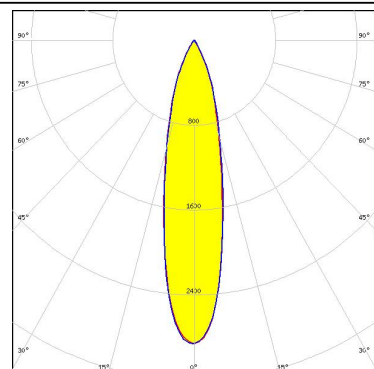
SAMSUNG

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

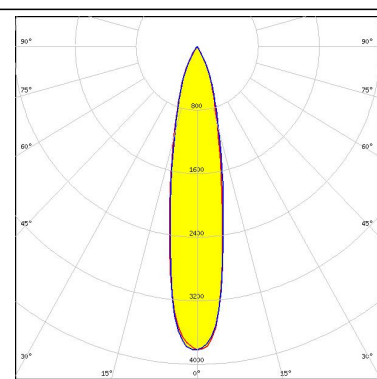
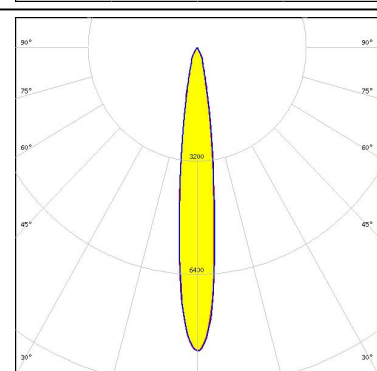
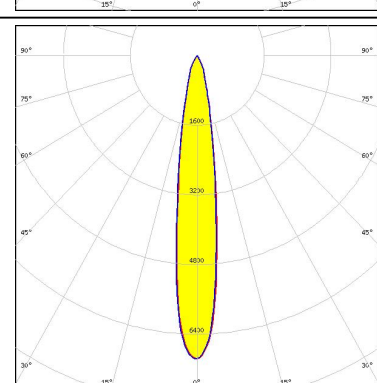
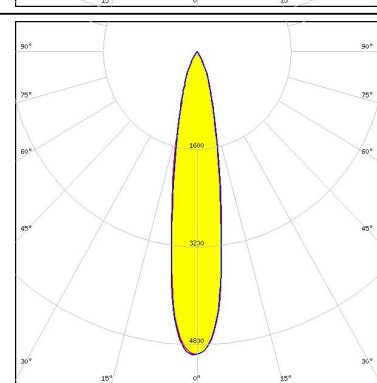


SEOL SEMICONDUCTOR

LED ZC25/40/60
FWHM 23.0°
Efficiency 74 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS



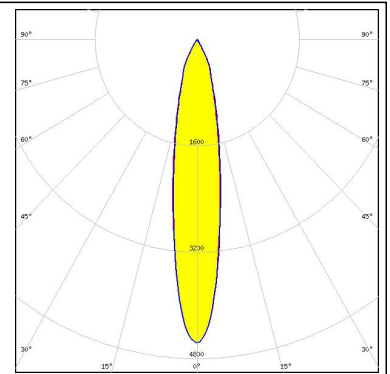
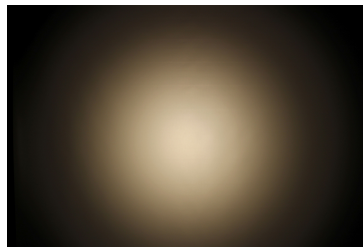
PHOTOMETRIC DATA (MEASURED):

SEOL SEOUL SEMICONDUCTOR LED ZC25/40/60 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		
TRIDONIC LED SLE G7 LES15 FWHM 14.0° Efficiency 90 % Peak intensity 8.6 cd/lm LEDs/each optic 1 Light colour White Required components: C12691_LENA-STD-BASE-CLL030		
TRIDONIC LED SLE G7 LES17 H FWHM 15.0° Efficiency 88 % Peak intensity 7 cd/lm LEDs/each optic 1 Light colour White Required components: C14547_LENA-ADAPTER-B		
TRIDONIC LED SLE G7 LES21 H FWHM 19.0° Efficiency 88 % Peak intensity 5 cd/lm LEDs/each optic 1 Light colour White Required components: C14547_LENA-ADAPTER-B		

PHOTOMETRIC DATA (MEASURED):

XICATO

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



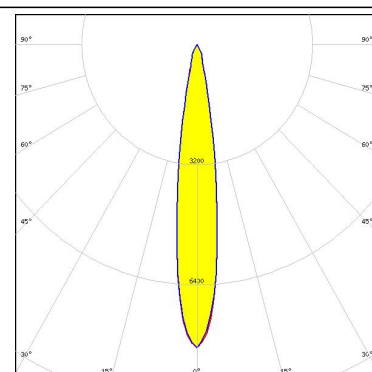
PHOTOMETRIC DATA (SIMULATED):

bridgelux. LED V10 Gen7 FWHM 15.0° Efficiency 79 % Peak intensity 7.7 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	
bridgelux. LED V10 Gen7 FWHM 13.0° Efficiency 89 % Peak intensity 11.5 cd/lm LEDs/each optic 1 Light colour White Required components: C13868_LENA-STD-BASE-VERO13-18 Bender Wirth: 486 Typ L1	
bridgelux. LED V13 Gen7 FWHM 17.0° Efficiency 81 % Peak intensity 6.1 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	
bridgelux. LED V13 Gen7 FWHM 14.0° Efficiency 88 % Peak intensity 8.3 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2103CT + 50-2100LN	

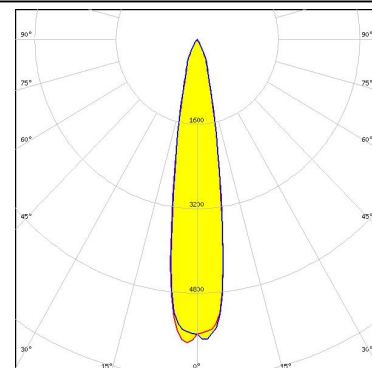
PHOTOMETRIC DATA (SIMULATED):



LED V13 Gen7
FWHM 16.0°
Efficiency 88 %
Peak intensity 8.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 477 Typ L1



LED V22 Gen7
FWHM 18.0°
Efficiency 93 %
Peak intensity 5.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENA-STD-BASE-VERO29
Bender Wirth: 431 Typ L3



LED CxM-14 (19x19)
FWHM 14.0°
Efficiency 87 %
Peak intensity 8.6 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 17.0°
Efficiency 82 %
Peak intensity 5.2 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):



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



LED CxM-9 (13.5x13.5)
FWHM 13.0°
Efficiency 82 %
Peak intensity 7.1 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 ZC12/18
FWHM 14.0°
Efficiency 87 %
Peak intensity 8.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 433 Typ L1



SEOUL SEMICONDUCTOR

LED ZC12/18
FWHM 17.0°
Efficiency 82 %
Peak intensity 5.2 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	87 %
Peak intensity	14.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
C13868_LENA-STD-BASE-VERO13-18	
Bender Wirth: 434 Typ L1	

 SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM	13.0°
Efficiency	82 %
Peak intensity	7.1 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	

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)