

LENINA-S

~19° spot beam

SPECIFICATION:

Dimensions	Ø 74.0 mm
Height	40 mm
ROHS compliant	yes ⓘ

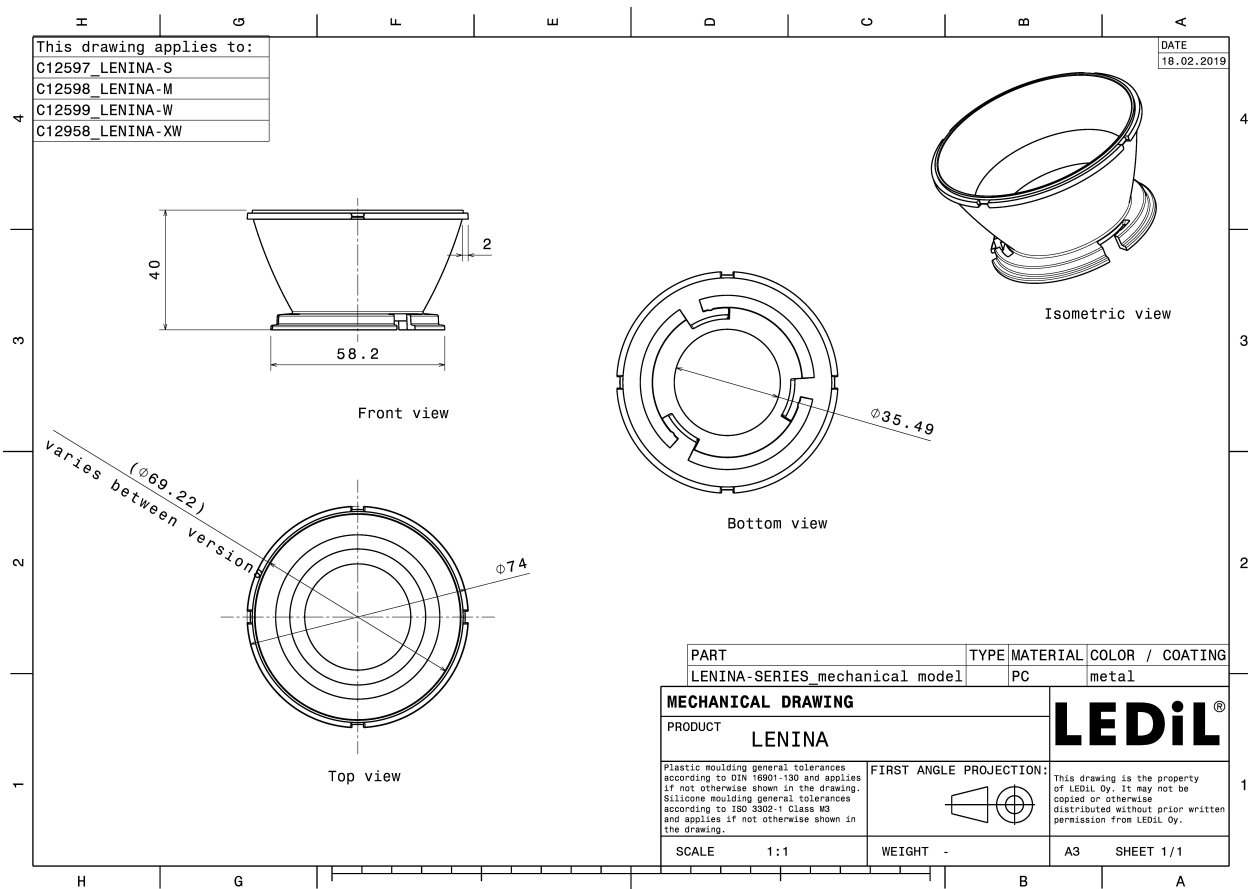
MATERIALS:

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



ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C12597_LENINA-S » Box size: 476 x 273 x 197 mm	60	120	60	2.0

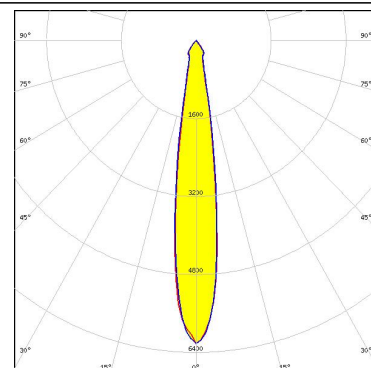


See also our general installation guide: www.ledil.com/installation_guide

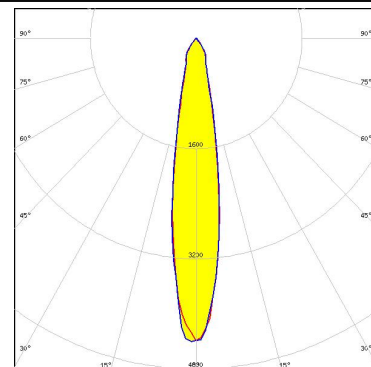
OPTICAL RESULTS (MEASURED):



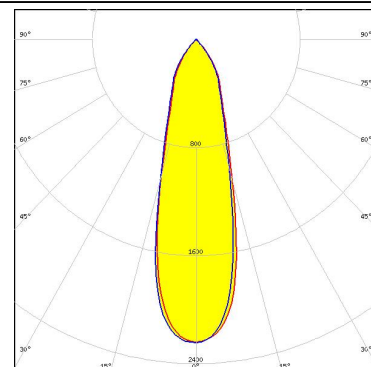
LED BXRA ES Rectangle
 FWHM / FWTM 15.0° / 36.0°
 Efficiency 88 %
 LEDs/each optic 1
 Light colour White
 Required components:
 C12153_LENINA-STD-BASE-BXRA



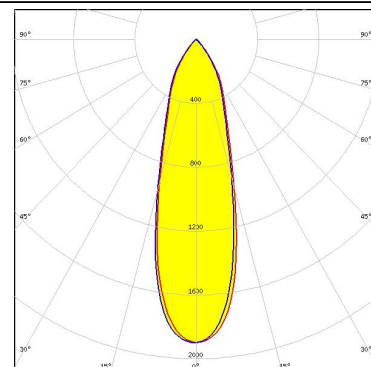
LED BXRA ES Rectangle
 FWHM / FWTM 20.0° / 60.0°
 Efficiency 80 %
 LEDs/each optic 1
 Light colour White
 Required components:
 C12153_LENINA-STD-BASE-BXRA
 C12606_LENINA-DL



LED BXRA RS
 FWHM / FWTM 28.0° / 70.0°
 Efficiency 89 %
 Peak intensity 2.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12229_LENINA-STD-BASE-RS



LED BXRA RS
 FWHM / FWTM 32.0° / 72.0°
 Efficiency 81 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12229_LENINA-STD-BASE-RS
 C12606_LENINA-DL



OPTICAL RESULTS (MEASURED):



LED V10 Gen6
FWHM / FWTM 13.0° / 30.0°
Efficiency 83 %
Peak intensity 7.2 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13186_LENINA-STD-BASE-CXA15

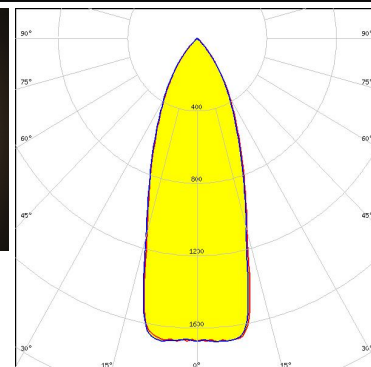
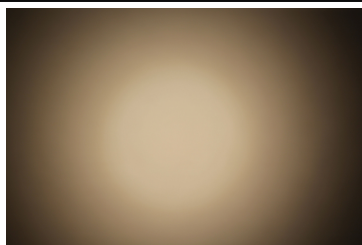
C12606_LENINA-DL



LED Vero SE 29
FWHM / FWTM 38.0° / 76.0°
Efficiency 92 %
Peak intensity 1.7 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C15083_LENINA-STD-BASE-VERO29

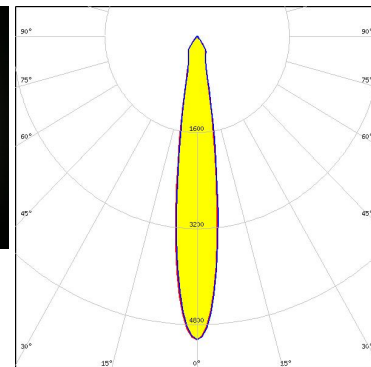


LED VERO13
FWHM / FWTM 16.0° / 35.0°
Efficiency 86 %
Peak intensity 5.1 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENINA-STD-BASE-VERO13-18

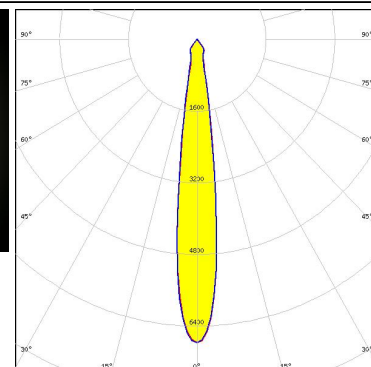
C12606_LENINA-DL



LED VERO13
FWHM / FWTM 15.0° / 29.0°
Efficiency 91 %
Peak intensity 6.8 cd/lm
LEDs/each optic 1
Light colour White

Required components:

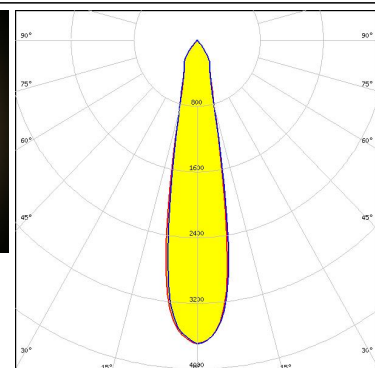
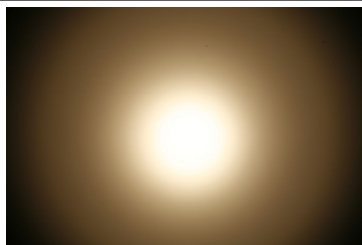
C13868_LENINA-STD-BASE-VERO13-18



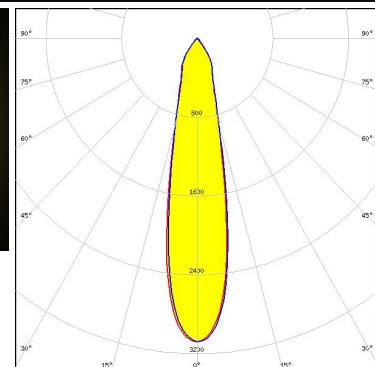
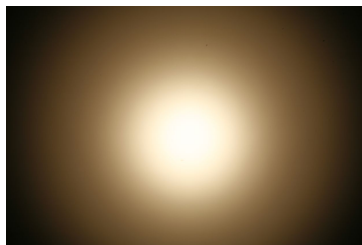
OPTICAL RESULTS (MEASURED):



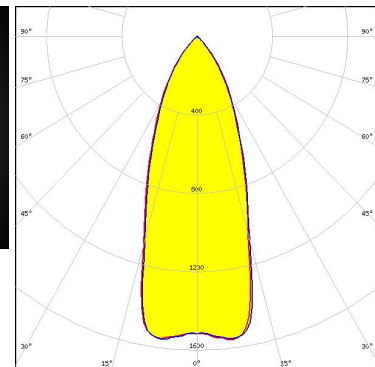
LED VERO18
FWHM / FWTM 21.0° / 52.0°
Efficiency 90 %
Peak intensity 3.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18



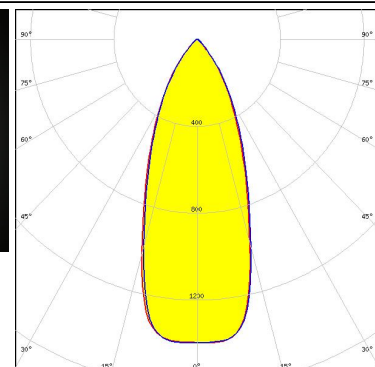
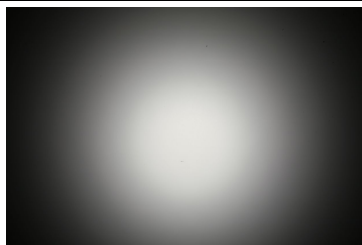
LED VERO18
FWHM / FWTM 22.0° / 60.0°
Efficiency 86 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL



LED VERO29
FWHM / FWTM 40.0° / 78.0°
Efficiency 89 %
Peak intensity 1.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENINA-STD-BASE-VERO29



LED VERO29
FWHM / FWTM 40.0° / 78.0°
Efficiency 85 %
Peak intensity 1.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENINA-STD-BASE-VERO29
C12606_LENINA-DL



OPTICAL RESULTS (MEASURED):

CITIZEN

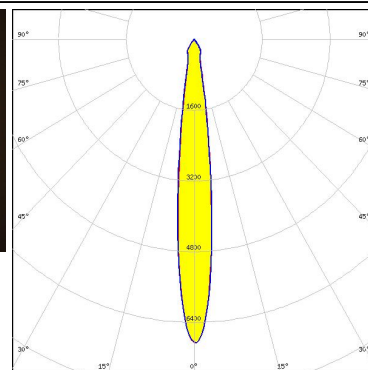
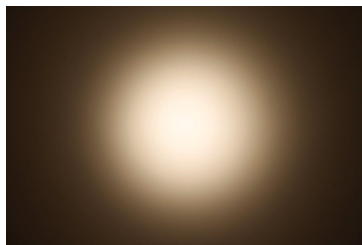
LED CL-L340
FWHM / FWTM 17.0° / 44.0°
Efficiency 88 %
LEDs/each optic 1
Light colour White
Required components:
C11995_LENINA-STD-BASE-CL340

CITIZEN

LED CL-L340
FWHM / FWTM 22.0° / 62.0°
Efficiency 80 %
LEDs/each optic 1
Light colour White
Required components:
C11995_LENINA-STD-BASE-CL340
C12606_LENINA-DL

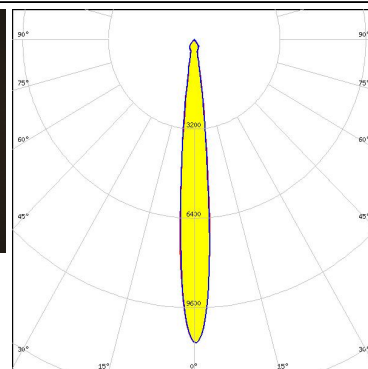
CITIZEN

LED CLL02x/CLU02x (LES10)
FWHM / FWTM 13.0° / 28.0°
Efficiency 86 %
Peak intensity 6.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 434 Typ L1



CITIZEN

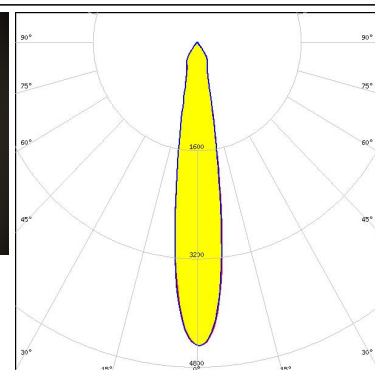
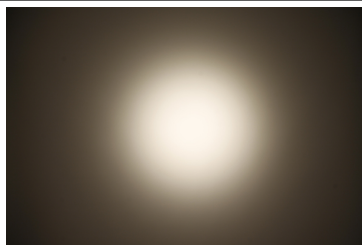
LED CLL02x/CLU02x (LES10)
FWHM / FWTM 11.0° / 22.0°
Efficiency 91 %
Peak intensity 10.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
Bender Wirth: 434 Typ L1



OPTICAL RESULTS (MEASURED):

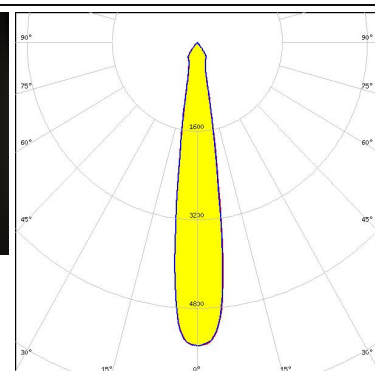
CITIZEN

LED CLL03x/CLU03x
FWHM / FWTM 17.0° / 41.0°
Efficiency 87 %
Peak intensity 4.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 433 Typ L1



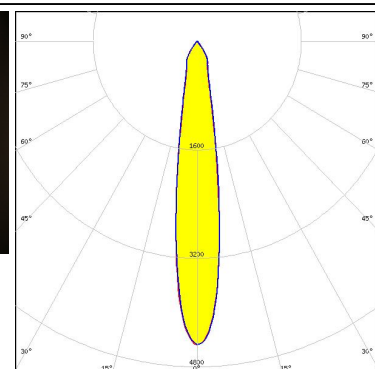
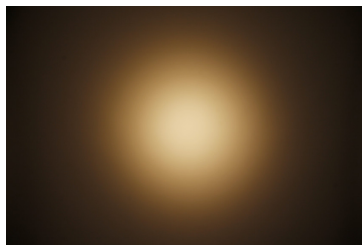
CITIZEN

LED CLL03x/CLU03x
FWHM / FWTM 17.0° / 34.0°
Efficiency 91 %
Peak intensity 5.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
Bender Wirth: 433 Typ L1



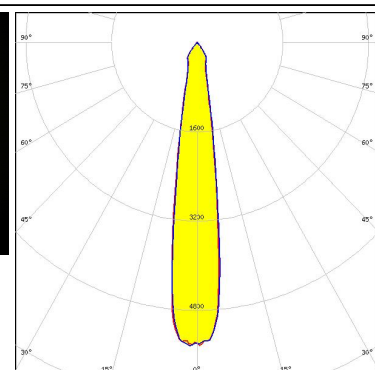
CITIZEN

LED CLL03x/CLU03x
FWHM / FWTM 17.0° / 43.0°
Efficiency 87 %
Peak intensity 4.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENINA-STD-BASE-CLL030
C12606_LENINA-DL



CITIZEN

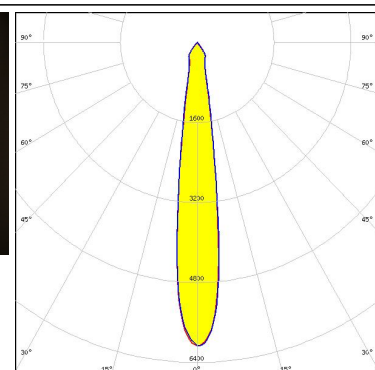
LED CLL03x/CLU03x
FWHM / FWTM 16.0° / 36.0°
Efficiency 93 %
Peak intensity 5.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENINA-STD-BASE-CLL030



OPTICAL RESULTS (MEASURED):

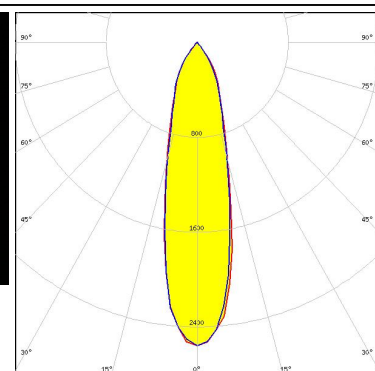
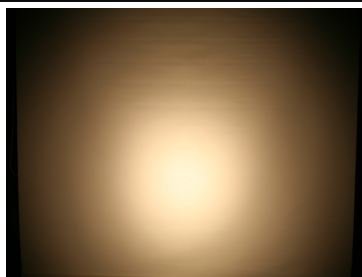
CITIZEN

LED CLL03x/CLU03x
FWHM / FWTM 15.0° / 33.0°
Efficiency 91 %
Peak intensity 6.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENINA-STD-BASE-CLL030



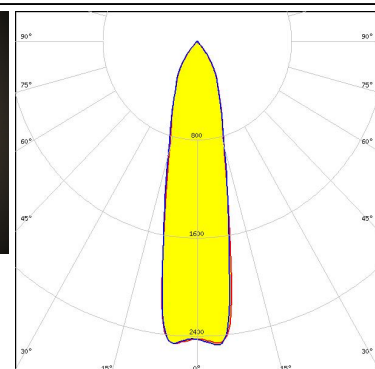
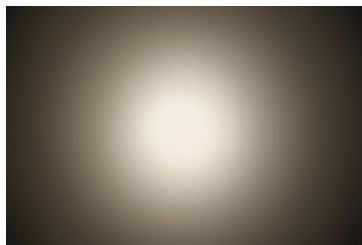
CITIZEN

LED CLL04x/CLU04x
FWHM / FWTM 26.0° / 68.0°
Efficiency 86 %
Peak intensity 2.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENINA-STD-BASE-CLL040



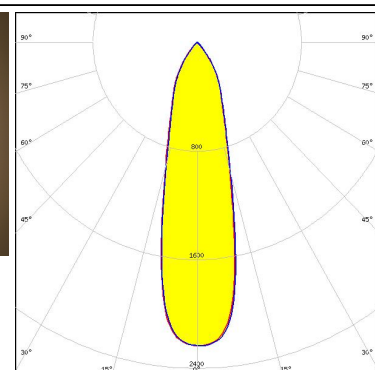
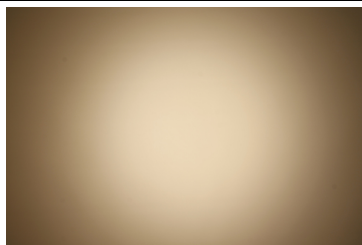
CITIZEN

LED CLL04x/CLU04x
FWHM / FWTM 24.0° / 67.0°
Efficiency 83 %
Peak intensity 2.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
A.A.G. STUCCHI: 8102-G2 + S-8000-12



CITIZEN

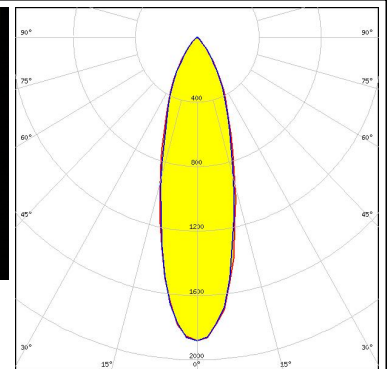
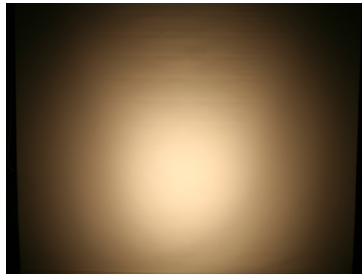
LED CLL04x/CLU04x
FWHM / FWTM 27.0° / 69.0°
Efficiency 86 %
Peak intensity 2.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENINA-STD-BASE-VERO29
C12606_LENINA-DL
Bender Wirth: 431 Typ L3



OPTICAL RESULTS (MEASURED):

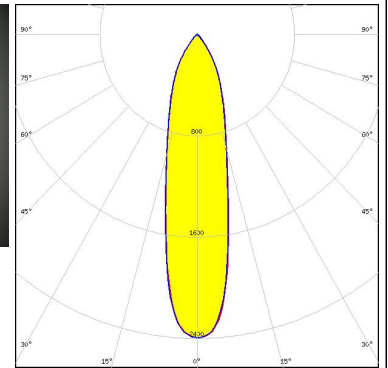
CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 30.0° / 70.0°
 Efficiency 78 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040
 C12606_LENINA-DL



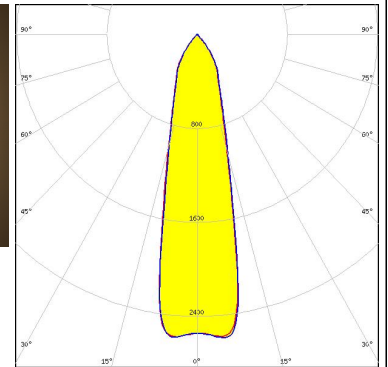
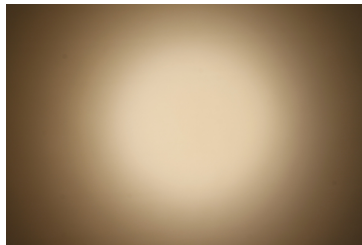
CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 25.0° / 67.0°
 Efficiency 87 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12606_LENINA-DL
 IDEAL: 50-2204CT + 50-2100LN



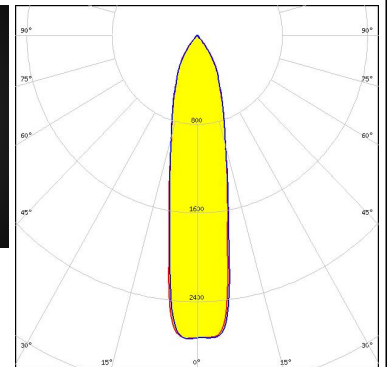
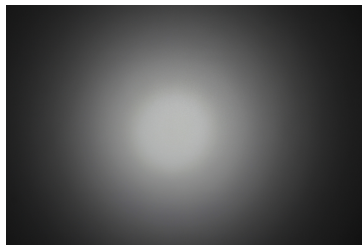
CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 26.0° / 68.0°
 Efficiency 91 %
 Peak intensity 2.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 Bender Wirth: 431 Typ L3



CITIZEN

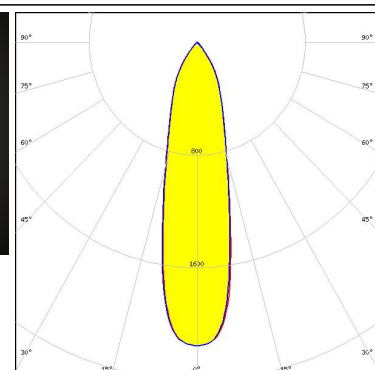
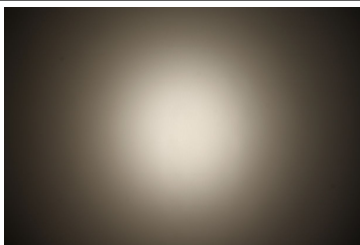
LED CLL04x/CLU04x
 FWHM / FWTM 23.0° / 66.0°
 Efficiency 90 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2204CT + 50-2100LN



OPTICAL RESULTS (MEASURED):

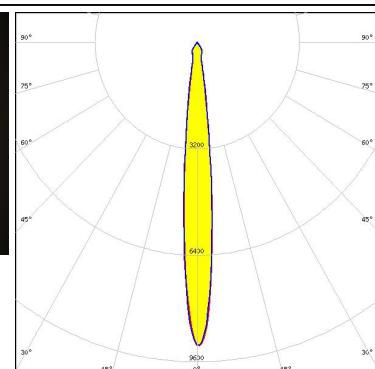
CITIZEN

LED CLL04x/CLU04x
FWHM / FWTM 26.0° / 68.0°
Efficiency 79 %
Peak intensity 2.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12606_LENINA-DL
A.A.G. STUCCHI: 8102-G2 + S-8000-12



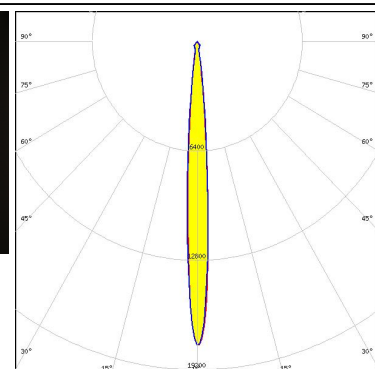
CITIZEN

LED CLU700/701/702/703
FWHM / FWTM 11.0° / 23.0°
Efficiency 86 %
Peak intensity 9.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENASTD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 434 Typ L1



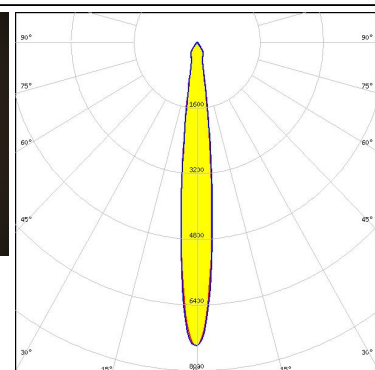
CITIZEN

LED CLU700/701/702/703
FWHM / FWTM 8.0° / 17.0°
Efficiency 91 %
Peak intensity 17.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENASTD-BASE-VERO13-18
Bender Wirth: 434 Typ L1



CITIZEN

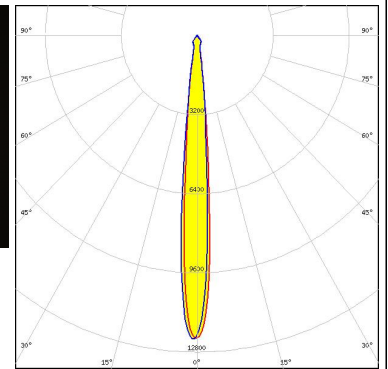
LED CLU710/711
FWHM / FWTM 12.0° / 26.0°
Efficiency 89 %
Peak intensity 7.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENASTD-BASE-CLL030
C12606_LENINA-DL



OPTICAL RESULTS (MEASURED):

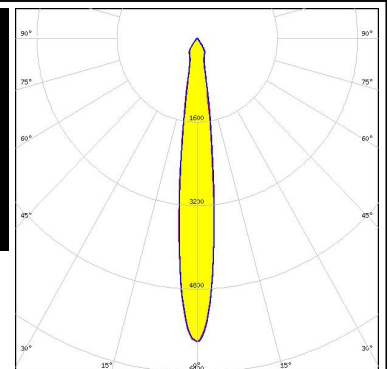
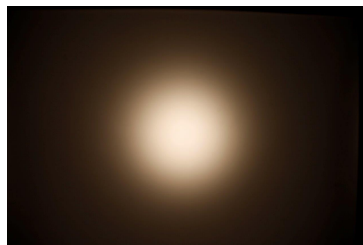
CITIZEN

LED CLU710/711
FWHM / FWTM 10.0° / 20.0°
Efficiency 94 %
Peak intensity 12.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENINA-STD-BASE-CLL030



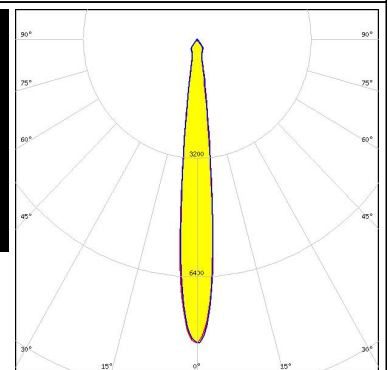
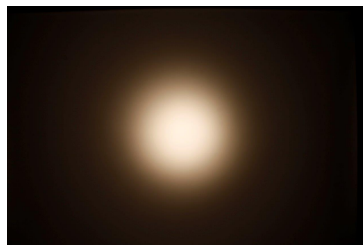
CITIZEN

LED CLU720/721/723
FWHM / FWTM 13.0° / 30.0°
Efficiency 84 %
Peak intensity 5.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENINA-STD-BASE-CLL030
C12606_LENINA-DL



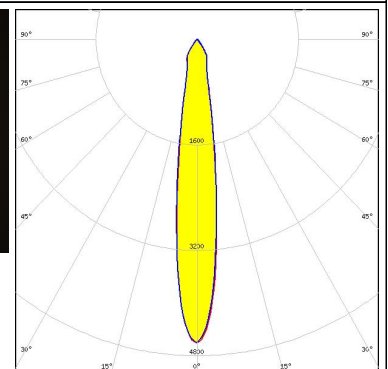
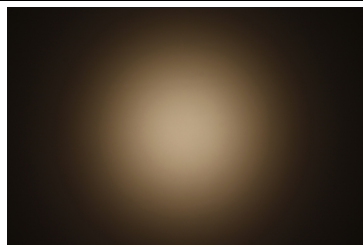
CITIZEN

LED CLU720/721/723
FWHM / FWTM 12.0° / 24.0°
Efficiency 89 %
Peak intensity 8.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENINA-STD-BASE-CLL030



CITIZEN

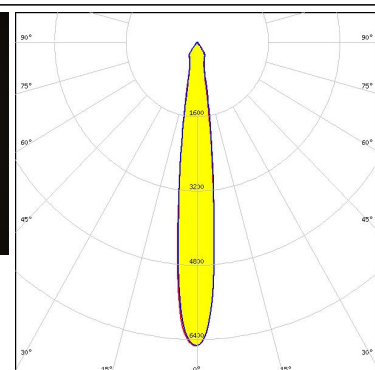
LED CLU730/731/733
FWHM / FWTM 15.0° / 39.0°
Efficiency 85 %
Peak intensity 4.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENINA-STD-BASE-CLL040
C12606_LENINA-DL



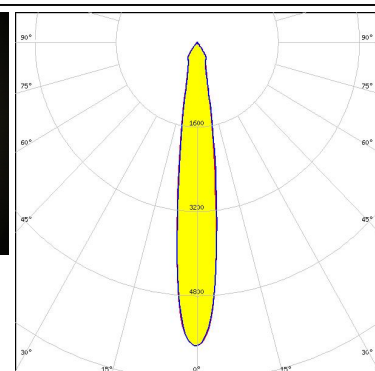
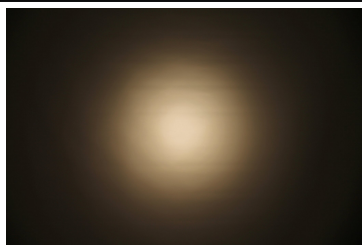
OPTICAL RESULTS (MEASURED):

CITIZEN

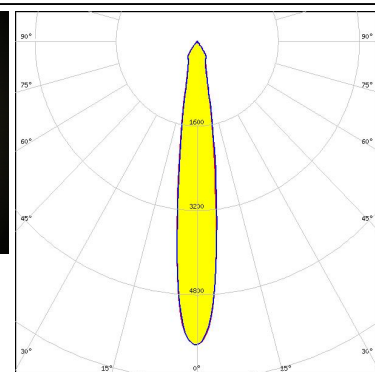
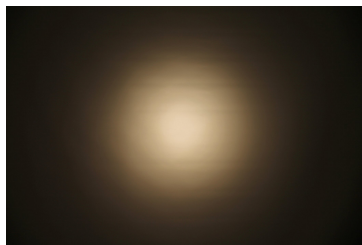
LED CLU730/731/733
 FWHM / FWTM 14.0° / 30.0°
 Efficiency 94 %
 Peak intensity 6.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040



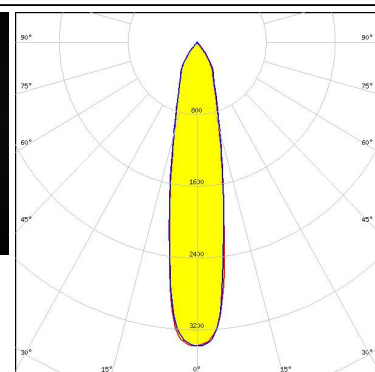
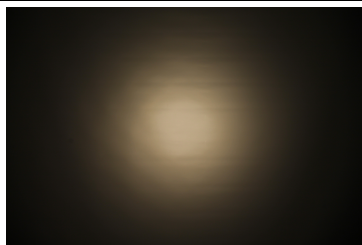
LED CMA1840
 FWHM / FWTM 25.0° / 70.0°
 Efficiency 92 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14146_LENINA-STD-BASE-CXA18



LED CMA1840
 FWHM / FWTM 15.0° / 37.0°
 Efficiency 92 %
 Peak intensity 5.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14146_LENINA-STD-BASE-CXA18



LED CMA2550
 FWHM / FWTM 21.0° / 63.0°
 Efficiency 92 %
 Peak intensity 3.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13324_LENINA-STD-BASE-CXA25



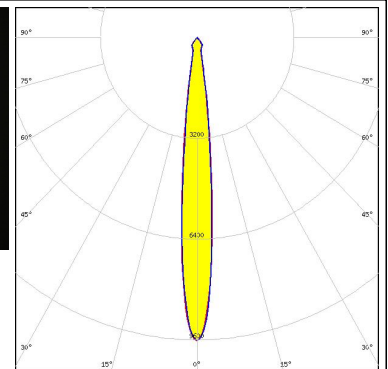
OPTICAL RESULTS (MEASURED):



LED CMT14xx
FWHM / FWTM 11.0° / 24.0°
Efficiency 92 %
Peak intensity 9.7 cd/lm
LEDs/each optic 1
Light colour White

Required components:

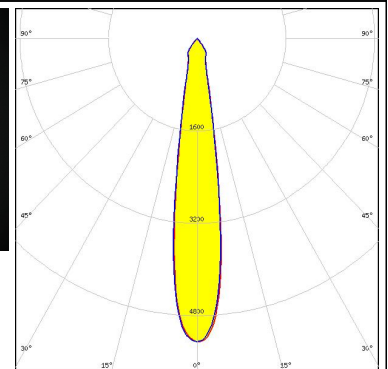
C13868_LENINA-STD-BASE-VERO13-18
Bender Wirth: 434 Typ L1



LED CMT19xx
FWHM / FWTM 17.0° / 37.0°
Efficiency 92 %
Peak intensity 5.3 cd/lm
LEDs/each optic 1
Light colour White

Required components:

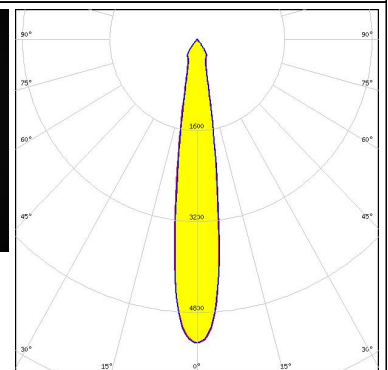
C13868_LENINA-STD-BASE-VERO13-18
Bender Wirth: 477 Typ L1



LED CMT19xx
FWHM / FWTM 16.0° / 37.0°
Efficiency 92 %
Peak intensity 5.3 cd/lm
LEDs/each optic 1
Light colour White

Required components:

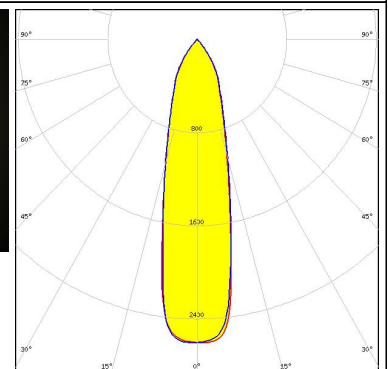
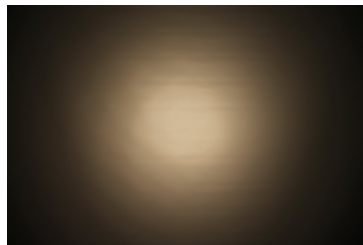
C12691_LENINA-STD-BASE-CLL030



LED CMT28xx
FWHM / FWTM 26.0° / 68.0°
Efficiency 92 %
Peak intensity 2.6 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C12692_LENINA-STD-BASE-CLL040



OPTICAL RESULTS (MEASURED):

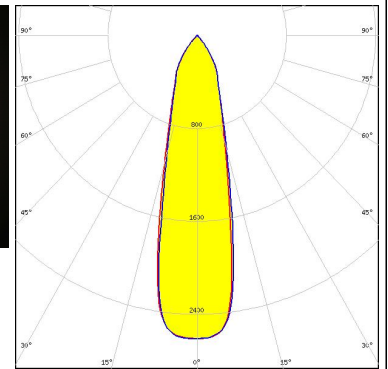
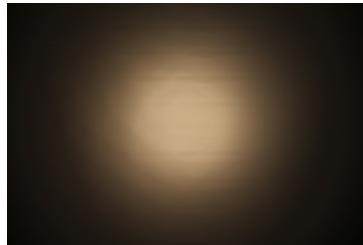


LED CMT28xx
FWHM / FWTM 26.0° / 68.0°
Efficiency 92 %
Peak intensity 2.6 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13867_LENINA-STD-BASE-VERO29

Bender Wirth: 471 Typ L3

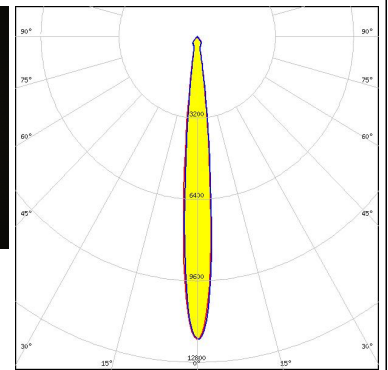


LED CXA/B 15xx
FWHM / FWTM 10.0° / 21.0°
Efficiency 91 %
Peak intensity 11.9 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENINA-STD-BASE-VERO13-18

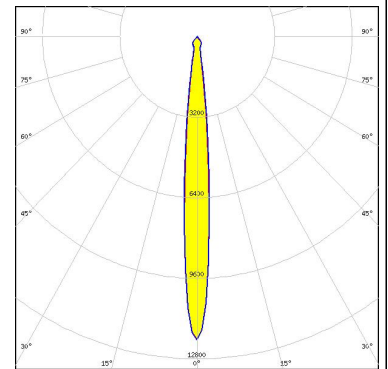
Bender Wirth: 441 Typ L1



LED CXA/B 15xx
FWHM / FWTM 10.0° / 20.0°
Efficiency 91 %
Peak intensity 12.1 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13186_LENINA-STD-BASE-CXA15



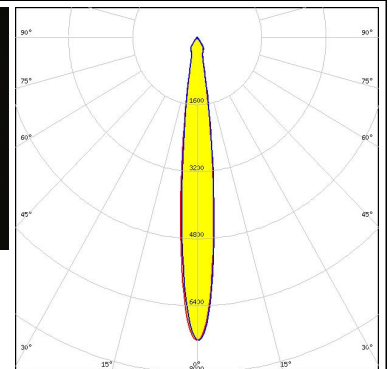
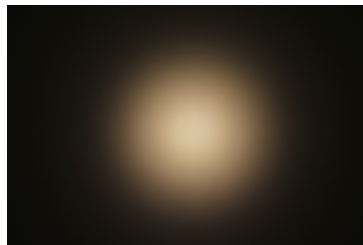
LED CXA/B 15xx
FWHM / FWTM 13.0° / 27.0°
Efficiency 87 %
Peak intensity 7.2 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENINA-STD-BASE-VERO13-18

C12606_LENINA-DL

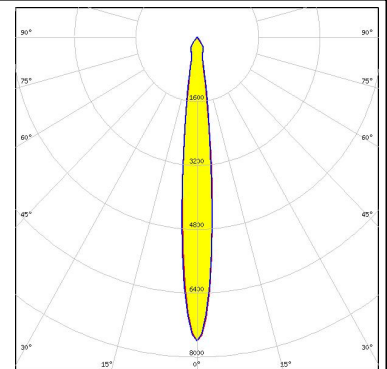
Bender Wirth: 441 Typ L1



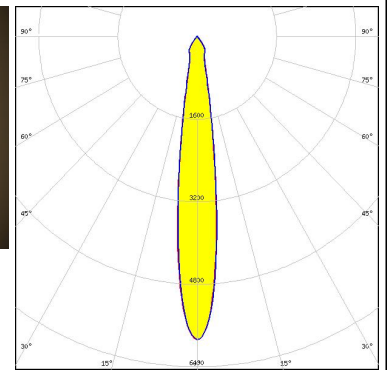
OPTICAL RESULTS (MEASURED):



LED CXA/B 15xx
 FWHM / FWTM 12.0° / 26.0°
 Efficiency 86 %
 Peak intensity 7.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13186_LENINA-STD-BASE-CXA15
 C12606_LENINA-DL



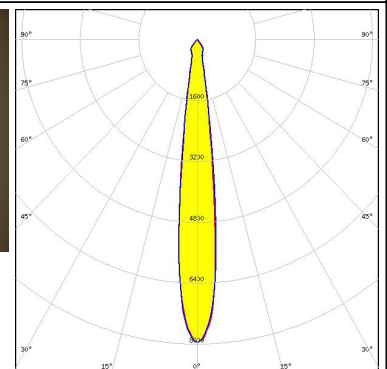
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 15.0° / 32.0°
 Efficiency 88 %
 Peak intensity 5.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 437 Typ L1



LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 12.0° / 28.0°
 Efficiency 92 %
 Peak intensity 9.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14146_LENINA-STD-BASE-CXA18



LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 13.0° / 26.0°
 Efficiency 92 %
 Peak intensity 8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 437 Typ L1



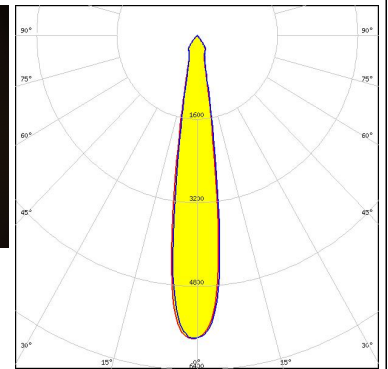
OPTICAL RESULTS (MEASURED):



LED CXA/B 1830
FWHM / FWTM 16.0° / 33.0°
Efficiency 93 %
Peak intensity 5.8 cd/Im
LEDs/each optic 1
Light colour White

Required components:

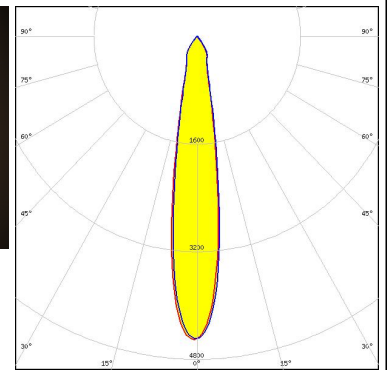
C13868_LENINA-STD-BASE-VERO13-18
Bender Wirth: 437 Typ L1



LED CXA/B 1830
FWHM / FWTM 18.0° / 41.0°
Efficiency 88 %
Peak intensity 4.5 cd/Im
LEDs/each optic 1
Light colour White

Required components:

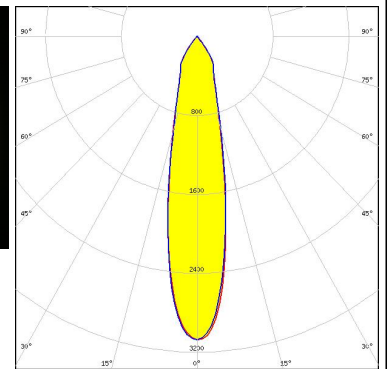
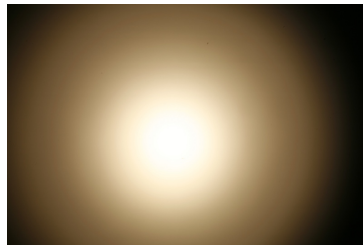
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 437 Typ L1



LED CXA/B 25xx
FWHM / FWTM 22.0° / 63.0°
Efficiency 86 %
Peak intensity 3.2 cd/Im
LEDs/each optic 1
Light colour White

Required components:

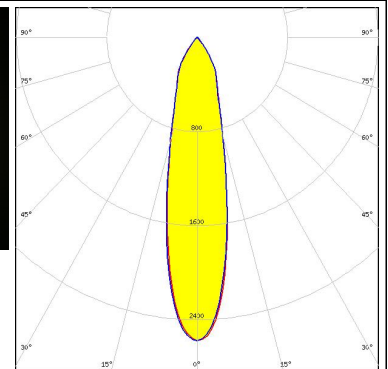
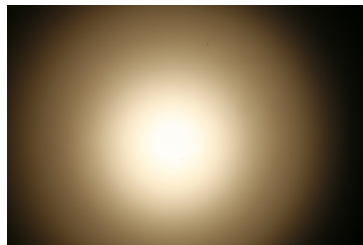
C13324_LENINA-STD-BASE-CXA25



LED CXA/B 25xx
FWHM / FWTM 23.0° / 65.0°
Efficiency 78 %
Peak intensity 2.7 cd/Im
LEDs/each optic 1
Light colour White

Required components:

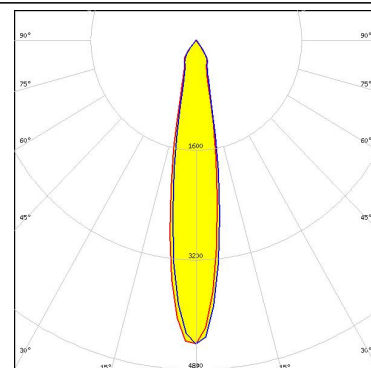
C13324_LENINA-STD-BASE-CXA25
C12606_LENINA-DL



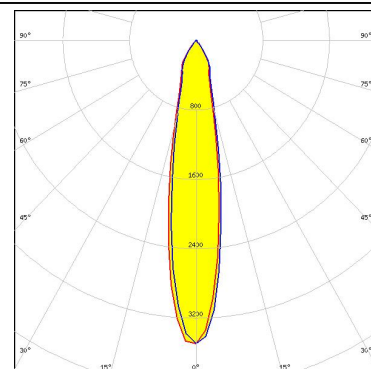
OPTICAL RESULTS (MEASURED):



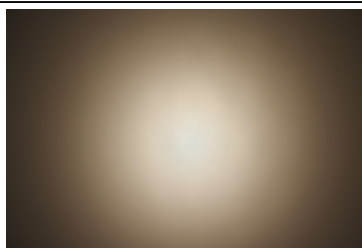
LED CXA2011
 FWHM / FWTM 16.0° / 38.0°
 Efficiency 88 %
 Peak intensity 4.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12105_LENINA-STD-BASE-CXA20



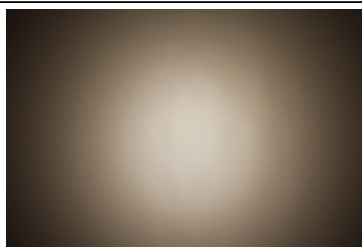
LED CXA2011
 FWHM / FWTM 20.0° / 60.0°
 Efficiency 80 %
 Peak intensity 3.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12105_LENINA-STD-BASE-CXA20
 C12606_LENINA-DL



LED CHI3030 19W
 FWHM / FWTM 25.0° / 68.0°
 Efficiency 91 %
 Peak intensity 2.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 468 Typ L3



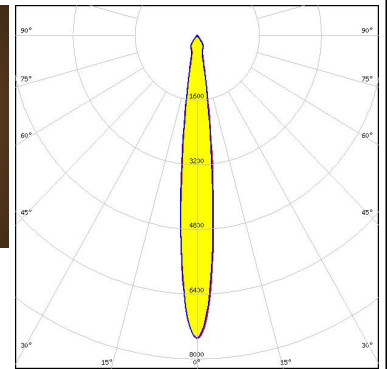
LED CHI3030 29W
 FWHM / FWTM 33.0° / 76.0°
 Efficiency 87 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 468 Typ L3



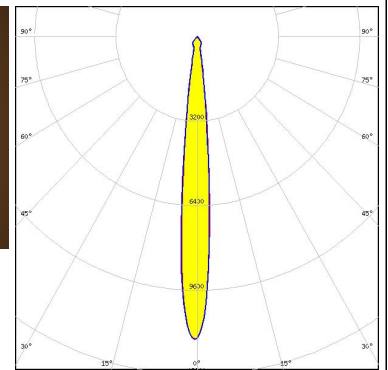
OPTICAL RESULTS (MEASURED):



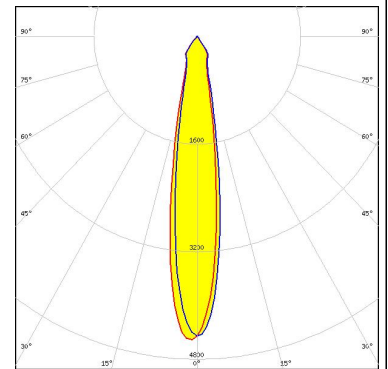
LED LUXEON CoB 1202/1203
 FWHM / FWTM 13.0° / 27.0°
 Efficiency 88 %
 Peak intensity 7.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 438 Typ L1



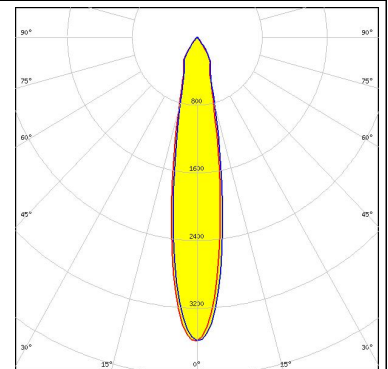
LED LUXEON CoB 1202/1203
 FWHM / FWTM 11.0° / 21.0°
 Efficiency 92 %
 Peak intensity 11.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 438 Typ L1



LED LUXEON CoB 1204/1205
 FWHM / FWTM 18.0° / 42.0°
 Efficiency 88 %
 Peak intensity 4.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENINA-STD-BASE-MEZ



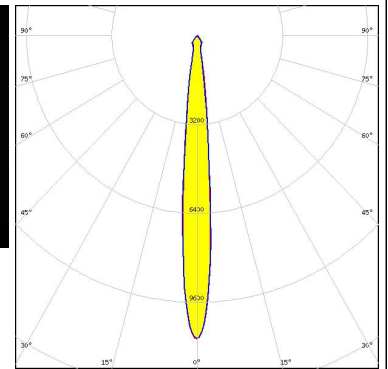
LED LUXEON CoB 1204/1205
 FWHM / FWTM 19.0° / 53.0°
 Efficiency 84 %
 Peak intensity 3.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENINA-STD-BASE-MEZ
 C12606_LENINA-DL



OPTICAL RESULTS (MEASURED):

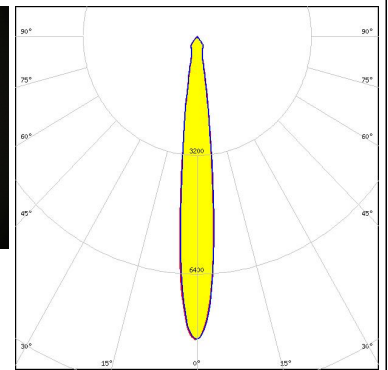
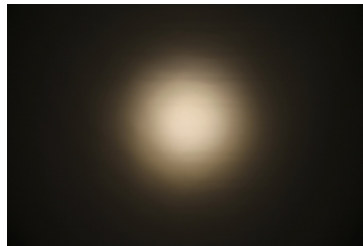
LUMILEDS

LED LUXEON CoB 1204HD
FWHM / FWTM 10.0° / 22.0°
Efficiency 92 %
Peak intensity 10.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C11981_LENINA-STD-BASE-COB-L110



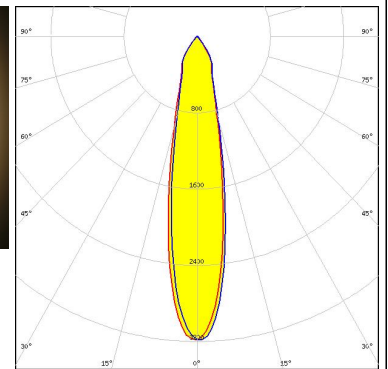
LUMILEDS

LED LUXEON CoB 1205HD
FWHM / FWTM 12.0° / 27.0°
Efficiency 92 %
Peak intensity 8.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C11981_LENINA-STD-BASE-COB-L110



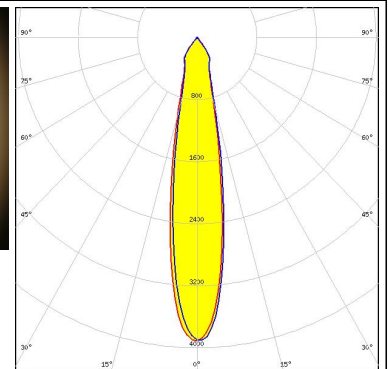
LUMILEDS

LED LUXEON CoB 1208
FWHM / FWTM 21.0° / 61.0°
Efficiency 85 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12292_LENINA-STD-BASE-MEZ
C12606_LENINA-DL



LUMILEDS

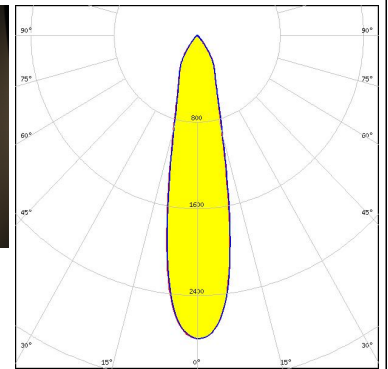
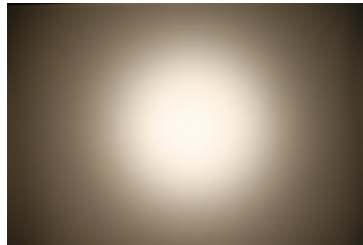
LED LUXEON CoB 1208
FWHM / FWTM 20.0° / 50.0°
Efficiency 89 %
Peak intensity 3.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12292_LENINA-STD-BASE-MEZ



OPTICAL RESULTS (MEASURED):

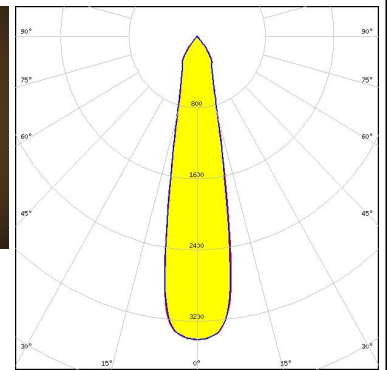
LUMILEDS

LED LUXEON CoB 1211
 FWHM / FWTM 23.0° / 64.0°
 Efficiency 86 %
 Peak intensity 2.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 431 Typ L3



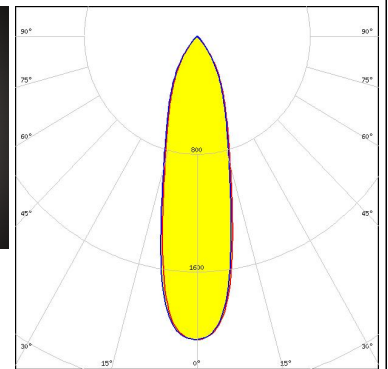
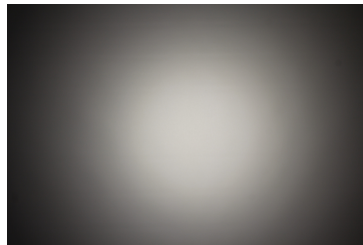
LUMILEDS

LED LUXEON CoB 1211
 FWHM / FWTM 22.0° / 61.0°
 Efficiency 92 %
 Peak intensity 3.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 Bender Wirth: 431 Typ L3



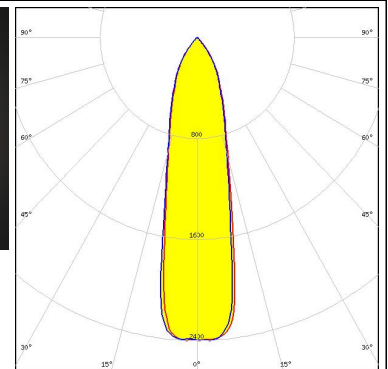
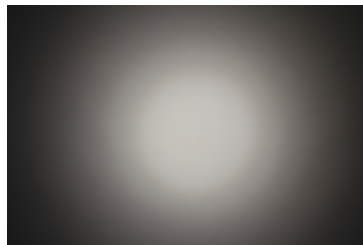
LUMILEDS

LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM 27.0° / 69.0°
 Efficiency 81 %
 Peak intensity 2.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12606_LENINA-DL
 A.A.G. STUCCHI: 8102-G2 + S-8000-12



LUMILEDS

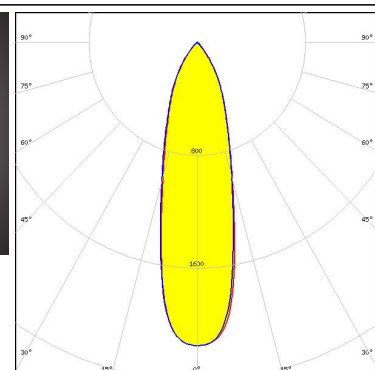
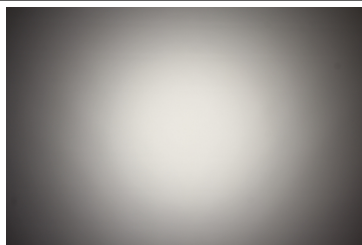
LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM 25.0° / 68.0°
 Efficiency 85 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 A.A.G. STUCCHI: 8102-G2 + S-8000-12



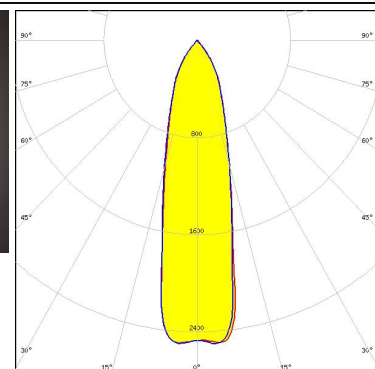
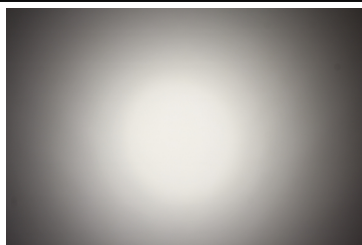
OPTICAL RESULTS (MEASURED):



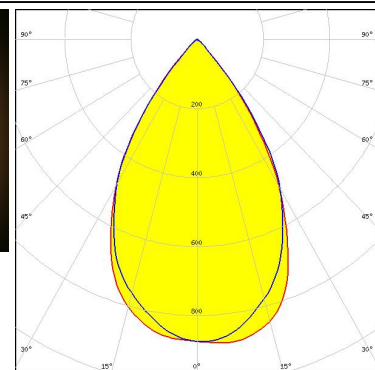
LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM 28.0° / 69.0°
 Efficiency 87 %
 Peak intensity 2.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040
 C12606_LENINA-DL



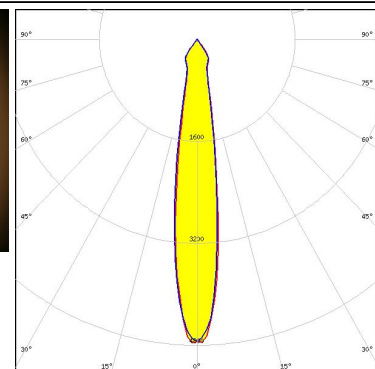
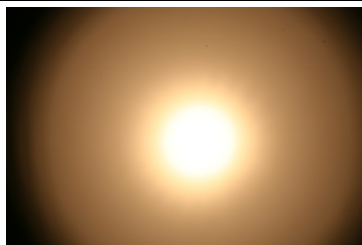
LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM 27.0° / 68.0°
 Efficiency 91 %
 Peak intensity 2.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040



LED LUXEON K12
 FWHM / FWTM 17.5° / 57.0°
 Efficiency 83 %
 Peak intensity 3.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12924_LENINA-STD-BASE-LUXEON-K
 C12606_LENINA-DL



LED LUXEON K12
 FWHM / FWTM 16.0° / 41.0°
 Efficiency 89 %
 Peak intensity 4.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12924_LENINA-STD-BASE-LUXEON-K



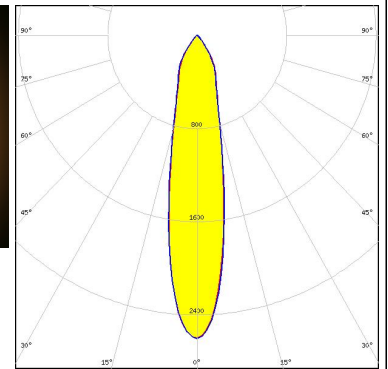
OPTICAL RESULTS (MEASURED):



LED LUXEON K16
FWHM / FWTM 22.0° / 64.0°
Efficiency 80 %
Peak intensity 2.6 cd/lm
LEDs/each optic 1
Light colour White

Required components:

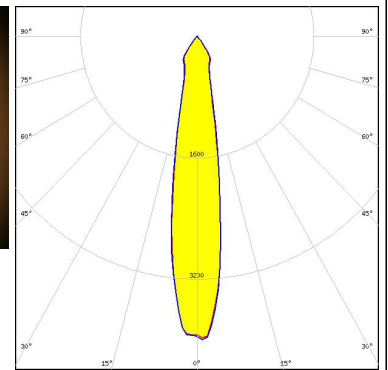
C12924_LENINA-STD-BASE-LUXEON-K
C12606_LENINA-DL



LED LUXEON K16
FWHM / FWTM 18.0° / 50.0°
Efficiency 87 %
Peak intensity 4 cd/lm
LEDs/each optic 1
Light colour White

Required components:

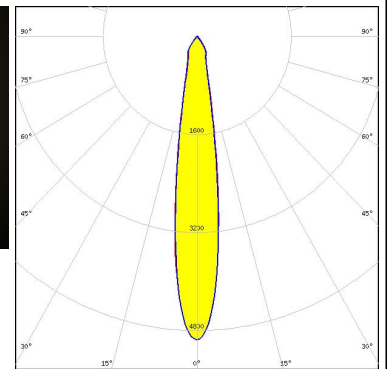
C12924_LENINA-STD-BASE-LUXEON-K



LED CDM-14 (Dim-To-Warm)
FWHM / FWTM 16.0° / 38.0°
Efficiency 88 %
Peak intensity 4.9 cd/lm
LEDs/each optic 1
Light colour White

Required components:

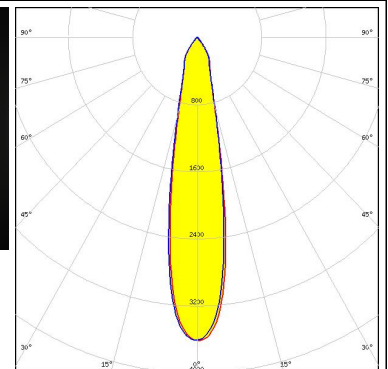
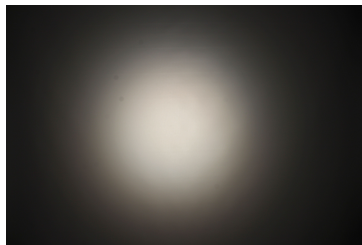
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 491 Typ L2



LED CDM-18 (Dim-To-Warm)
FWHM / FWTM 21.0° / 51.0°
Efficiency 88 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour White

Required components:

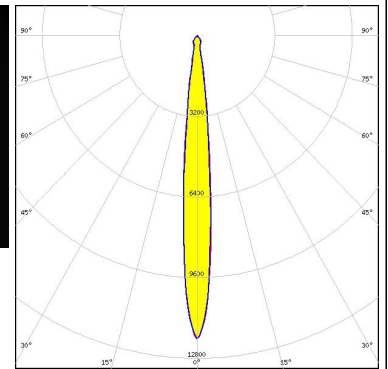
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 491 Typ L2



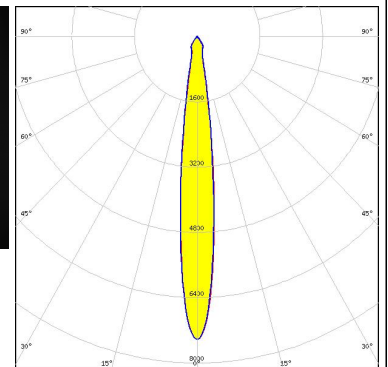
OPTICAL RESULTS (MEASURED):



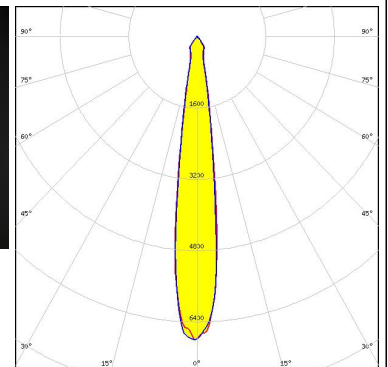
LED CDM-9 (Dim-To-Warm)
 FWHM / FWTM 11.0° / 21.0°
 Efficiency 92 %
 Peak intensity 12 cd/Im
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 490 Typ L1



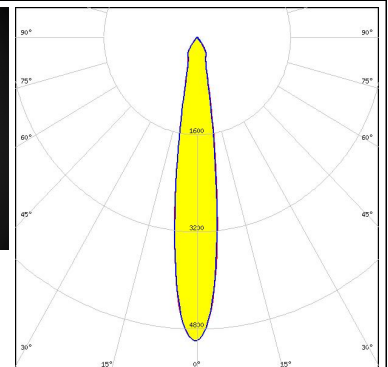
LED CDM-9 (Dim-To-Warm)
 FWHM / FWTM 13.0° / 27.0°
 Efficiency 87 %
 Peak intensity 7.4 cd/Im
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 490 Typ L1



LED CTM-14 (Tunable White)
 FWHM / FWTM 15.0° / 29.0°
 Efficiency 92 %
 Peak intensity 6.8 cd/Im
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 Bender Wirth: 442 Typ L3



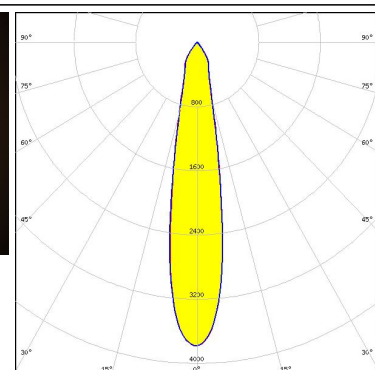
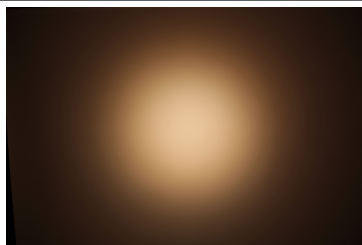
LED CTM-14 (Tunable White)
 FWHM / FWTM 16.0° / 37.0°
 Efficiency 87 %
 Peak intensity 5 cd/Im
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 442 Typ L3



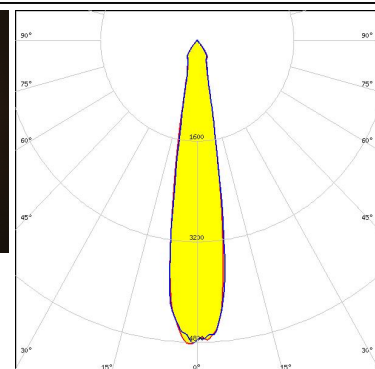
OPTICAL RESULTS (MEASURED):



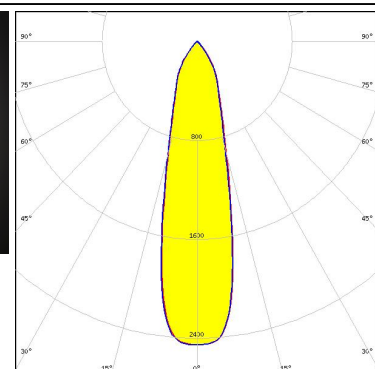
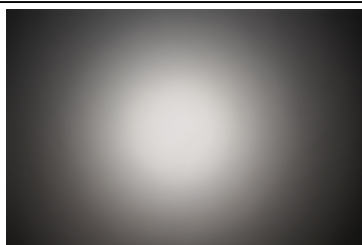
LED CTM-18 (Tunable White)
 FWHM / FWTM 19.0° / 48.0°
 Efficiency 87 %
 Peak intensity 3.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 442 Typ L3



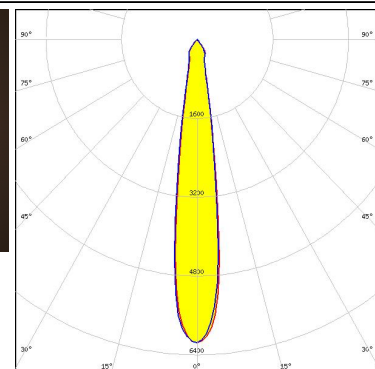
LED CTM-18 (Tunable White)
 FWHM / FWTM 18.0° / 39.0°
 Efficiency 92 %
 Peak intensity 4.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 Bender Wirth: 442 Typ L3



LED CTM-22 (Tunable White)
 FWHM / FWTM 26.0° / 67.0°
 Efficiency 87 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 494 Typ L3



LED CxM-14 (19x19)
 FWHM / FWTM 16.0° / 32.0°
 Efficiency 93 %
 Peak intensity 6.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENINA-STD-BASE-CLL030



OPTICAL RESULTS (MEASURED):

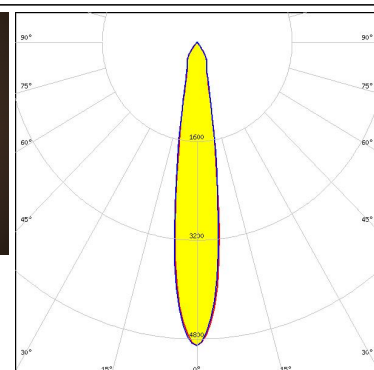
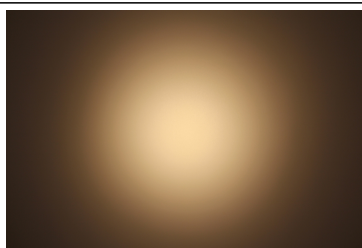


LED CxM-14 (19x19)
FWHM / FWTM 17.0° / 40.0°
Efficiency 88 %
Peak intensity 4.9 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C12691_LENINA-STD-BASE-CLL030

C12606_LENINA-DL

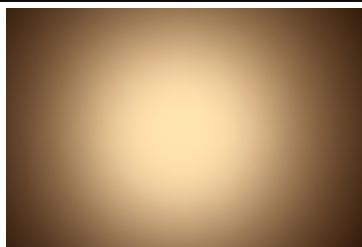


LED CxM-22 (28x28)
FWHM / FWTM 28.0° / 72.0°
Efficiency 88 %
Peak intensity 2.3 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C12692_LENINA-STD-BASE-CLL040

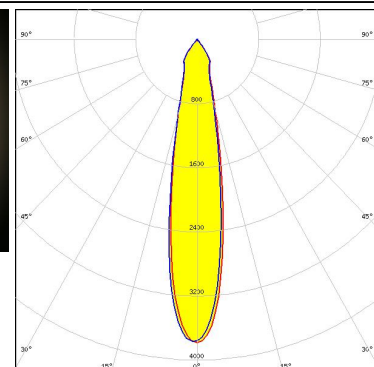
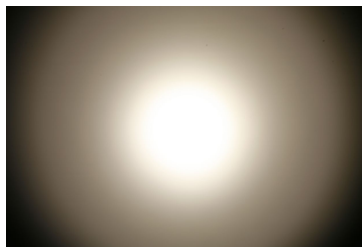
C12606_LENINA-DL



LED COB J-Type
FWHM / FWTM 20.0° / 51.0°
Efficiency 88 %
Peak intensity 3.8 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C12292_LENINA-STD-BASE-MEZ

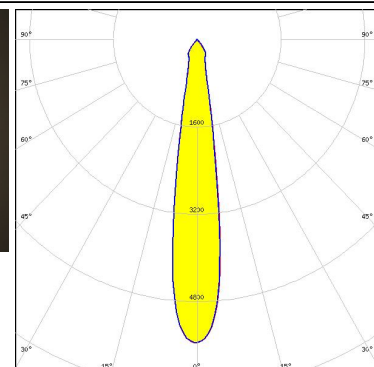
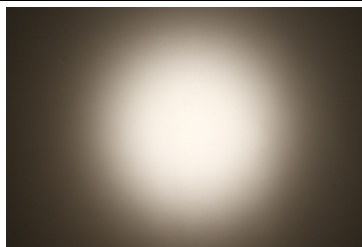


LED COB J-Type
FWHM / FWTM 17.0° / 35.0°
Efficiency 92 %
Peak intensity 5.6 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13868_LENINA-STD-BASE-VERO13-18

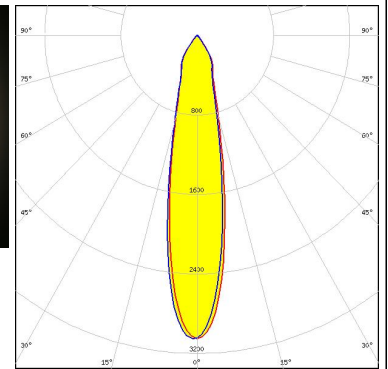
Bender Wirth: 463 Typ L2



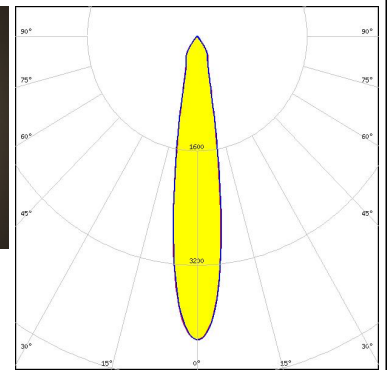
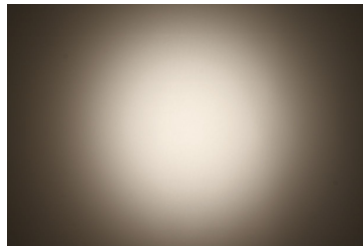
OPTICAL RESULTS (MEASURED):



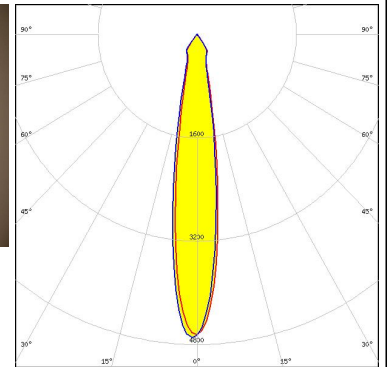
LED COB J-Type
 FWHM / FWTM 21.0° / 61.0°
 Efficiency 83 %
 Peak intensity 3.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENINA-STD-BASE-MEZ
 C12606_LENINA-DL



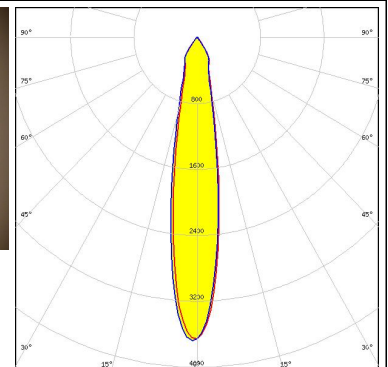
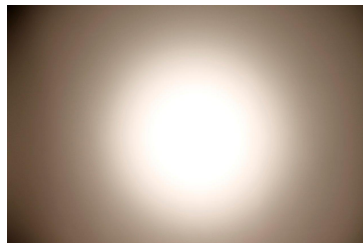
LED COB J-Type
 FWHM / FWTM 18.0° / 44.0°
 Efficiency 88 %
 Peak intensity 4.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 463 Typ L2



LED COB L-Type (LES 11)
 FWHM / FWTM 17.0° / 38.0°
 Efficiency 85 %
 Peak intensity 4.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C11981_LENINA-STD-BASE-COB-L110



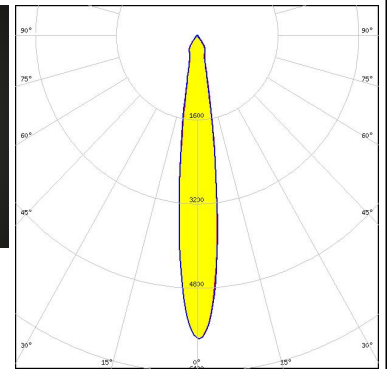
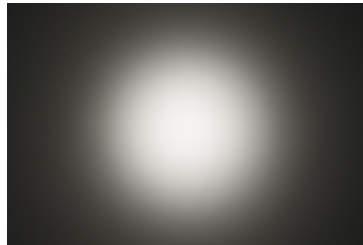
LED COB L-Type (LES 11)
 FWHM / FWTM 18.0° / 49.0°
 Efficiency 81 %
 Peak intensity 3.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C11981_LENINA-STD-BASE-COB-L110
 C12606_LENINA-DL



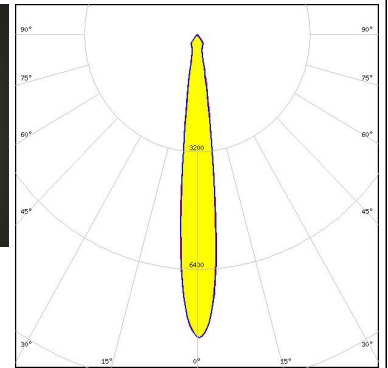
OPTICAL RESULTS (MEASURED):



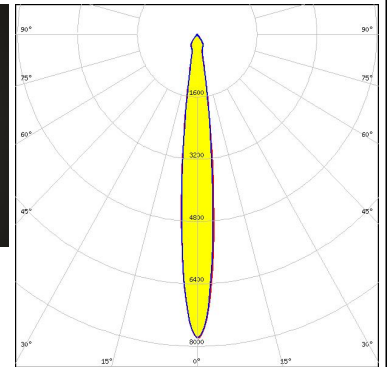
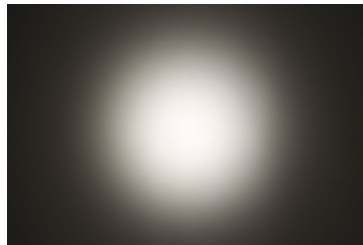
LED COB L-Type (LES 11)
 FWHM / FWTM 15.0° / 32.0°
 Efficiency 87 %
 Peak intensity 5.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 438 Typ L1



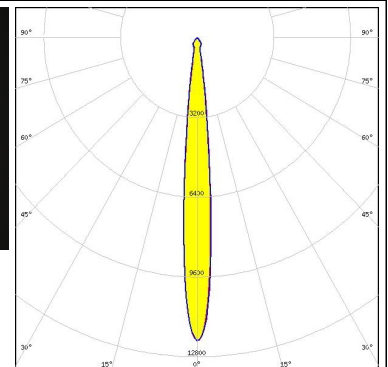
LED COB L-Type (LES 11)
 FWHM / FWTM 13.0° / 26.0°
 Efficiency 91 %
 Peak intensity 8.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 438 Typ L1



LED COB L-Type (LES 9)
 FWHM / FWTM 12.0° / 26.0°
 Efficiency 90 %
 Peak intensity 7.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 438 Typ L1



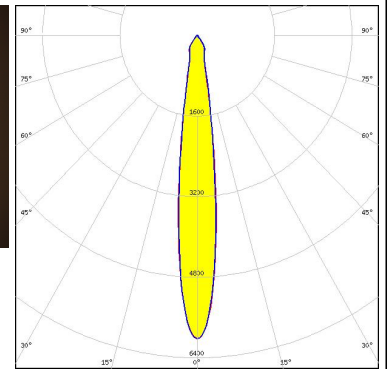
LED COB L-Type (LES 9)
 FWHM / FWTM 10.0° / 21.0°
 Efficiency 94 %
 Peak intensity 12.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 438 Typ L1



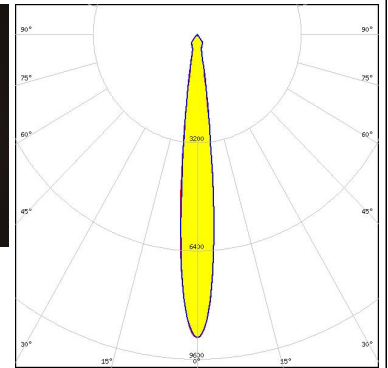
OPTICAL RESULTS (MEASURED):



LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM / FWTM 14.0° / 32.0°
 Efficiency 88 %
 Peak intensity 6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 498 Typ L2

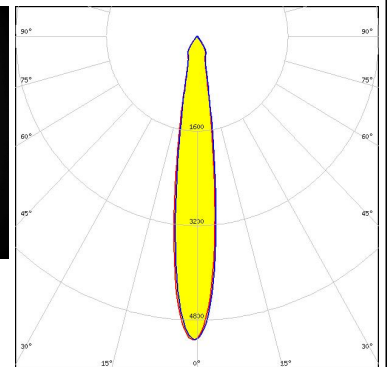
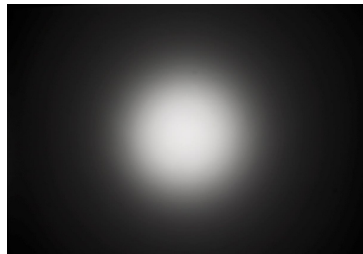


LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM / FWTM 12.0° / 25.0°
 Efficiency 92 %
 Peak intensity 9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 498 Typ L2



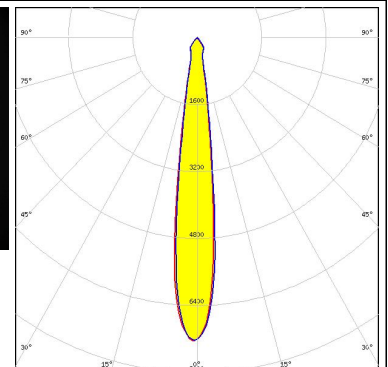
Opto Semiconductors

LED Soleriq S13
 FWHM / FWTM 16.0° / 36.0°
 Efficiency 86 %
 Peak intensity 5.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 437 Typ L1



Opto Semiconductors

LED Soleriq S13
 FWHM / FWTM 14.0° / 28.0°
 Efficiency 91 %
 Peak intensity 7.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 437 Typ L1



OPTICAL RESULTS (MEASURED):

OSRAM

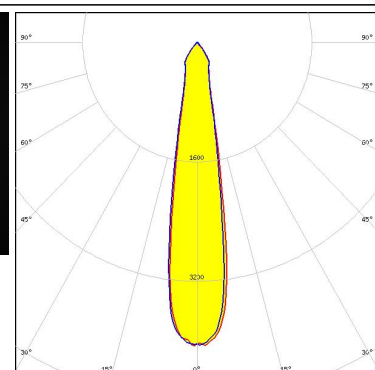
Opto Semiconductors

LED Soleriq S19
FWHM / FWTM 19.0° / 47.0°
Efficiency 92 %
Peak intensity 4.1 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13867_LENINA-STD-BASE-VERO29

Bender Wirth: 462 Typ L3



OSRAM

Opto Semiconductors

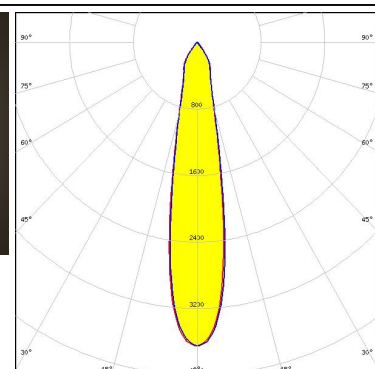
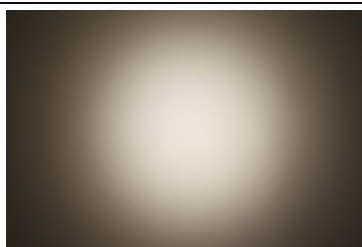
LED Soleriq S19
FWHM / FWTM 20.0° / 53.0°
Efficiency 88 %
Peak intensity 3.7 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C13867_LENINA-STD-BASE-VERO29

C12606_LENINA-DL

Bender Wirth: 462 Typ L3



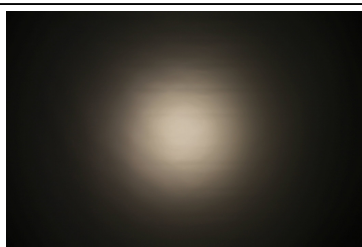
PHILIPS

LED Fortimo SLM L13 CoB
FWHM / FWTM 18.0° / 49.0°
Efficiency 87 %
Peak intensity 4 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C12292_LENINA-STD-BASE-MEZ

C12606_LENINA-DL

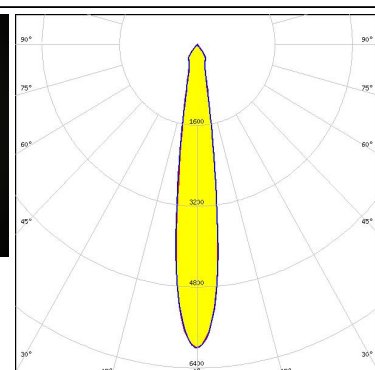
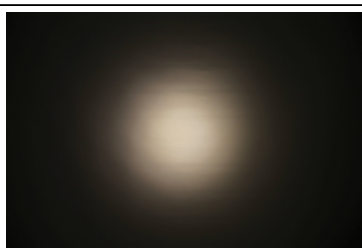


PHILIPS

LED Fortimo SLM L13 CoB
FWHM / FWTM 15.0° / 34.0°
Efficiency 93 %
Peak intensity 6 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C12292_LENINA-STD-BASE-MEZ



OPTICAL RESULTS (MEASURED):

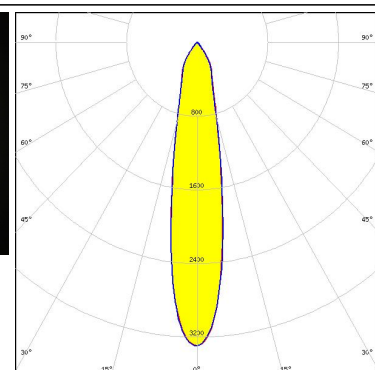
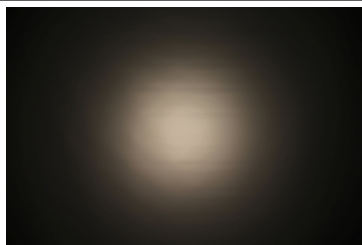
PHILIPS

LED Fortimo SLM L15 CoB
FWHM / FWTM 20.0° / 58.0°
Efficiency 86 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C12292_LENINA-STD-BASE-MEZ

C12606_LENINA-DL

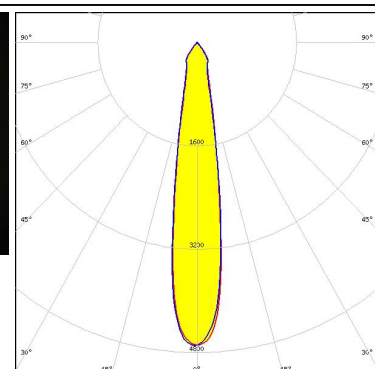


PHILIPS

LED Fortimo SLM L15 CoB
FWHM / FWTM 18.0° / 42.0°
Efficiency 91 %
Peak intensity 4.7 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C12292_LENINA-STD-BASE-MEZ



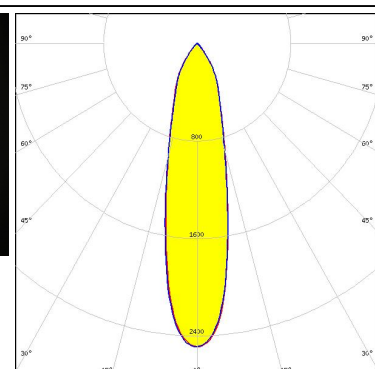
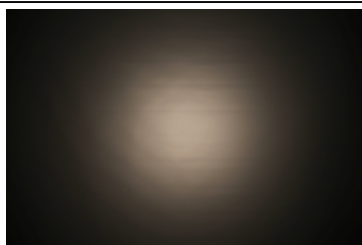
PHILIPS

LED Fortimo SLM L19 CoB
FWHM / FWTM 24.0° / 66.0°
Efficiency 86 %
Peak intensity 2.5 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C12692_LENINA-STD-BASE-CLL040

C12606_LENINA-DL

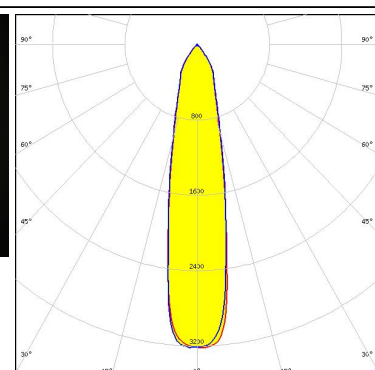
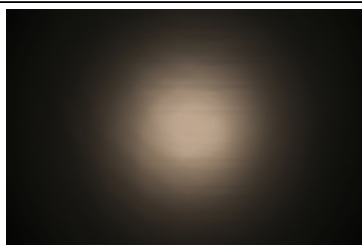


PHILIPS

LED Fortimo SLM L19 CoB
FWHM / FWTM 22.0° / 64.0°
Efficiency 91 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour White

Required components:

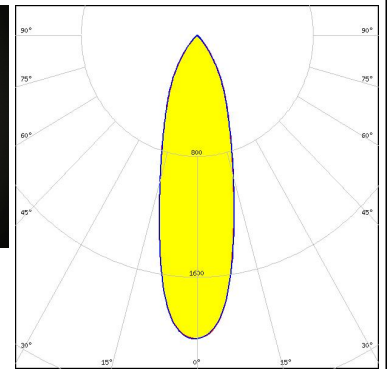
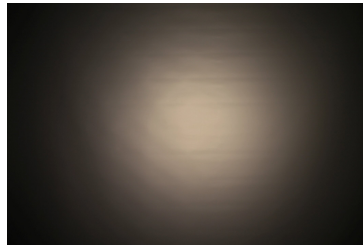
C12692_LENINA-STD-BASE-CLL040



OPTICAL RESULTS (MEASURED):

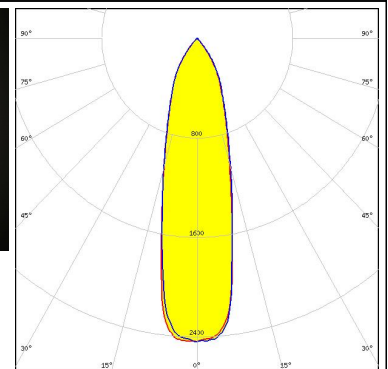
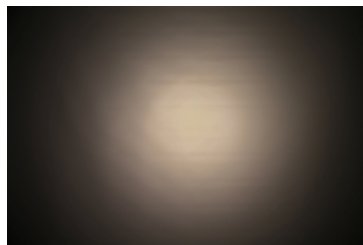
PHILIPS

LED Fortimo SLM L23 CoB
FWHM / FWTM 29.0° / 70.0°
Efficiency 86 %
Peak intensity 2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENINA-STD-BASE-CLL040
C12606_LENINA-DL



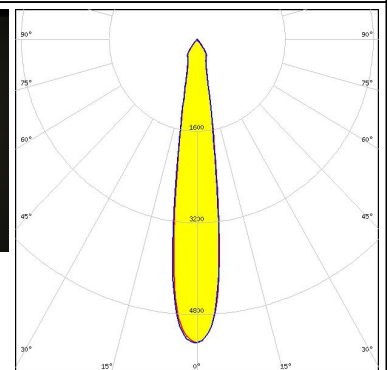
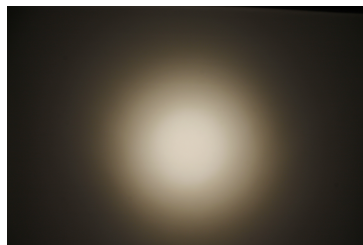
PHILIPS

LED Fortimo SLM L23 CoB
FWHM / FWTM 27.0° / 69.0°
Efficiency 91 %
Peak intensity 2.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENINA-STD-BASE-CLL040



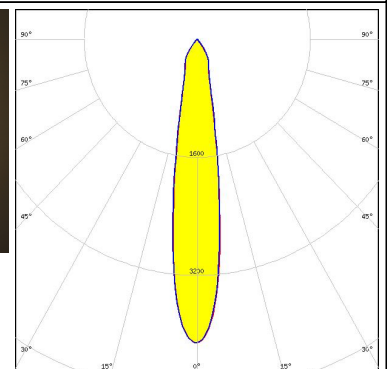
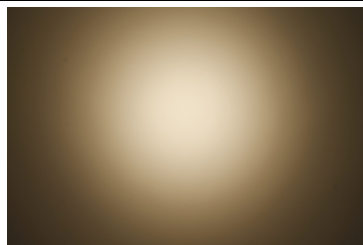
SAMSUNG

LED LC016D / LC019D / LC026D / LC033D
FWHM / FWTM 16.0° / 37.0°
Efficiency 91 %
Peak intensity 5.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENINA-STD-BASE-CLL030



SAMSUNG

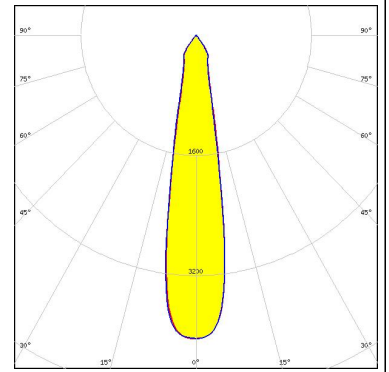
LED LC016D / LC019D / LC026D / LC033D
FWHM / FWTM 18.0° / 47.0°
Efficiency 87 %
Peak intensity 4.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENINA-STD-BASE-CLL030
C12606_LENINA-DL



OPTICAL RESULTS (MEASURED):

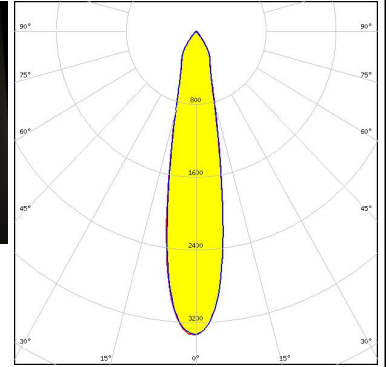
SAMSUNG

LED LC026B / 033B / 040B
FWHM / FWTM 20.0° / 48.0°
Efficiency 91 %
Peak intensity 4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
Bender Wirth: 450 Typ L2



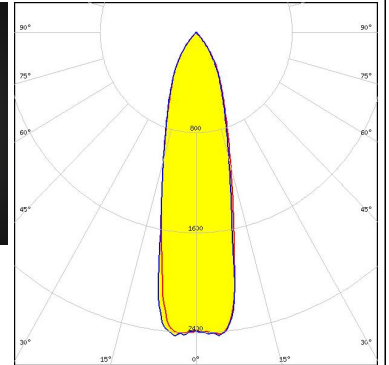
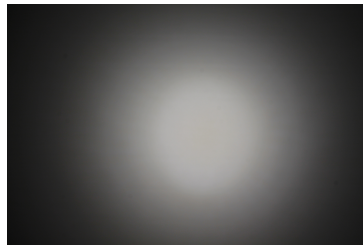
SAMSUNG

LED LC026B / 033B / 040B
FWHM / FWTM 21.0° / 58.0°
Efficiency 87 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 450 Typ L2



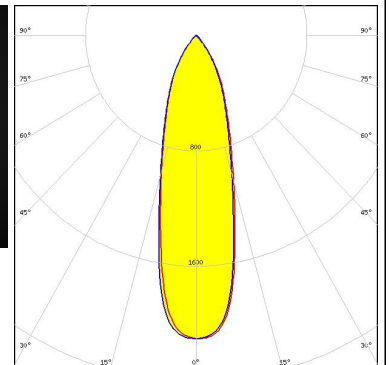
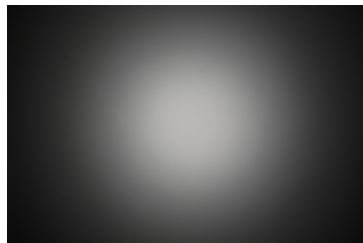
SAMSUNG

LED LC040D / LC060D / LC080D
FWHM / FWTM 28.0° / 69.0°
Efficiency 91 %
Peak intensity 2.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENINA-STD-BASE-CLL040



SAMSUNG

LED LC040D / LC060D / LC080D
FWHM / FWTM 29.0° / 70.0°
Efficiency 87 %
Peak intensity 2.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENINA-STD-BASE-CLL040
C12606_LENINA-DL



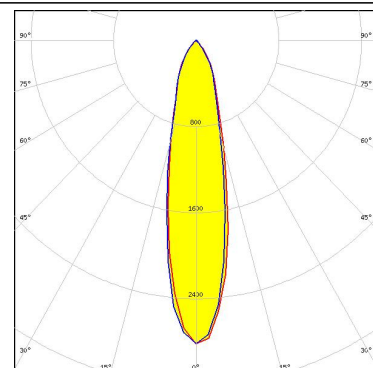
OPTICAL RESULTS (MEASURED):

SEOUL SEMICONDUCTOR LED ZC12/18 FWHM / FWTM 15.0° / 32.0° Efficiency 90 % Peak intensity 6 cd/lm LEDs/each optic 1 Light colour White Required components: C12691_LENINA-STD-BASE-CLL030		
SEOUL SEMICONDUCTOR LED ZC12/18 FWHM / FWTM 16.0° / 41.0° Efficiency 85 % Peak intensity 4.5 cd/lm LEDs/each optic 1 Light colour White Required components: C12691_LENINA-STD-BASE-CLL030 C12606_LENINA-DL		
SEOUL SEMICONDUCTOR LED ZC25/40/60 FWHM / FWTM 29.0° / 70.0° Efficiency 86 % Peak intensity 2.2 cd/lm LEDs/each optic 1 Light colour White Required components: C12692_LENINA-STD-BASE-CLL040		
SEOUL SEMICONDUCTOR LED ZC25/40/60 FWHM / FWTM 30.0° / 71.0° Efficiency 82 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components: C12692_LENINA-STD-BASE-CLL040 C12606_LENINA-DL		

OPTICAL RESULTS (MEASURED):

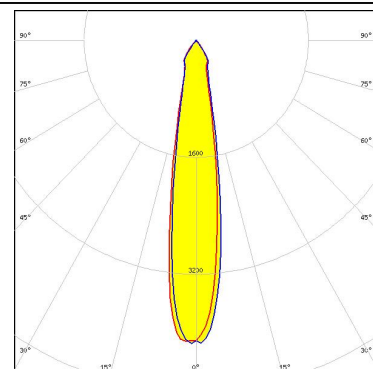
SHARP

LED Mega Zenigata (GW5DGC)
 FWHM / FWTM 24.0° / 62.0°
 Efficiency 80 %
 Peak intensity 2.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENINA-STD-BASE-MEZ
 C12606_LENINA-DL



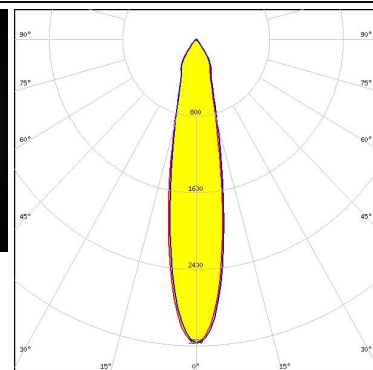
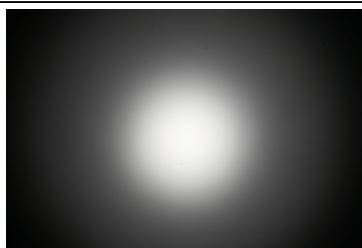
SHARP

LED Mega Zenigata (GW5DGC)
 FWHM / FWTM 17.0° / 46.0°
 Efficiency 88 %
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENINA-STD-BASE-MEZ



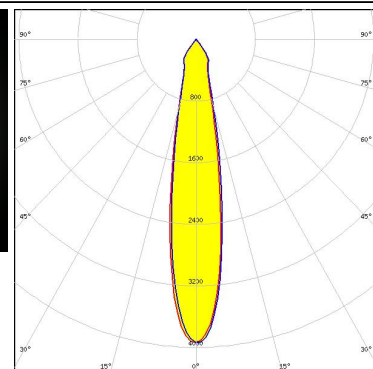
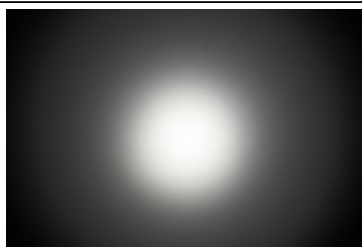
SHARP

LED Mega Zenigata (GW6DME)
 FWHM / FWTM 21.0° / 60.0°
 Efficiency 83 %
 Peak intensity 3.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENINA-STD-BASE-MEZ
 C12606_LENINA-DL



SHARP

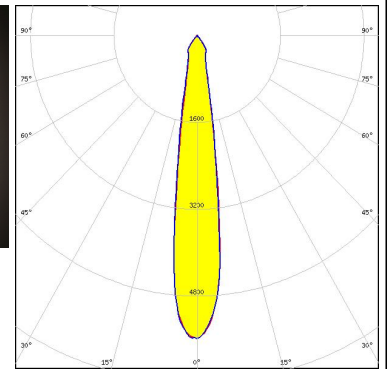
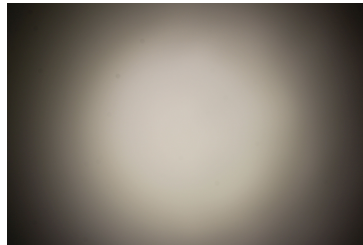
LED Mega Zenigata (GW6DME)
 FWHM / FWTM 19.0° / 47.0°
 Efficiency 88 %
 Peak intensity 3.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENINA-STD-BASE-MEZ



OPTICAL RESULTS (MEASURED):

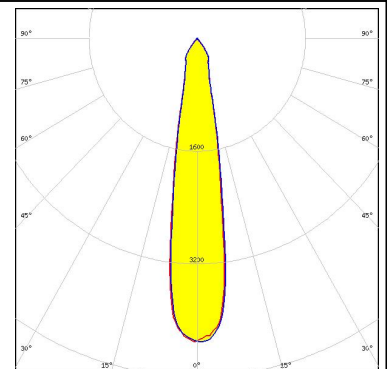
TRIDONIC

LED SLE G7 LES15
FWHM / FWTM 16.0° / 36.0°
Efficiency 93 %
Peak intensity 5.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENINA-STD-BASE-CLL030



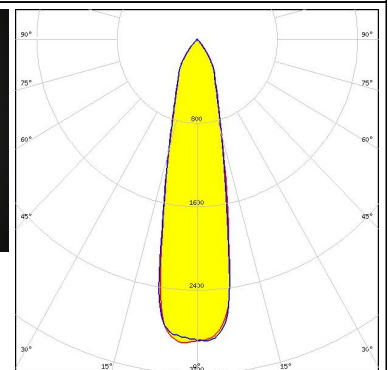
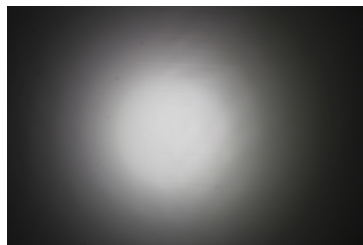
TRIDONIC

LED SLE G7 LES17 H
FWHM / FWTM 19.0° / 46.0°
Efficiency 91 %
Peak intensity 4.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14547_LENINA-ADAPTER-B



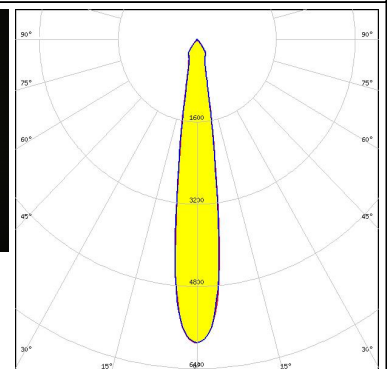
TRIDONIC

LED SLE G7 LES21 H
FWHM / FWTM 24.0° / 65.0°
Efficiency 91 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14547_LENINA-ADAPTER-B



XICATO

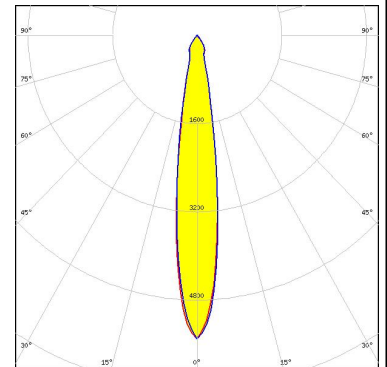
LED XOB 14.5 mm
FWHM / FWTM 16.0° / 34.0°
Efficiency 93 %
Peak intensity 5.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENINA-STD-BASE-CLL030



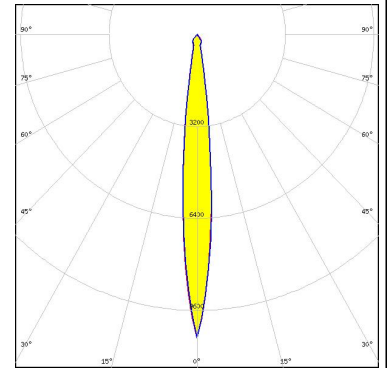
OPTICAL RESULTS (SIMULATED):



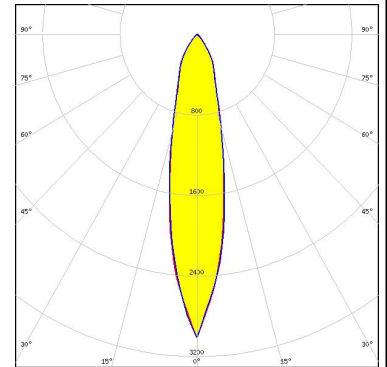
LED V10 Gen7
 FWHM / FWTM 16.0° / 33.0°
 Efficiency 85 %
 Peak intensity 5.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 486 Typ L1



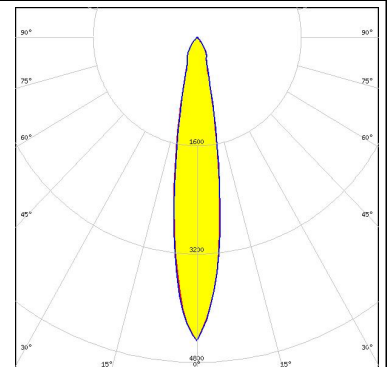
LED V10 Gen7
 FWHM / FWTM 11.0° / 24.0°
 Efficiency 91 %
 Peak intensity 10.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 486 Typ L1



LED V13 Gen7
 FWHM / FWTM 22.0° / 62.0°
 Efficiency 87 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12606_LENINA-DL
 IDEAL: 50-2103CT + 50-2100AN



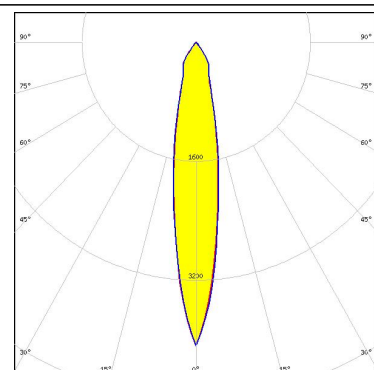
LED V13 Gen7
 FWHM / FWTM 18.0° / 41.0°
 Efficiency 86 %
 Peak intensity 4.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 477 Typ L1



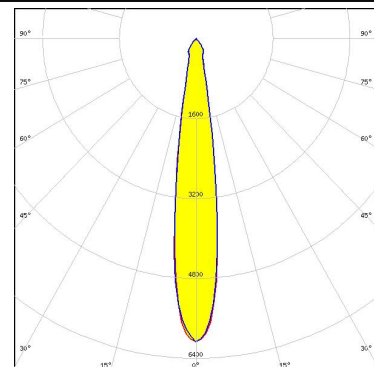
OPTICAL RESULTS (SIMULATED):



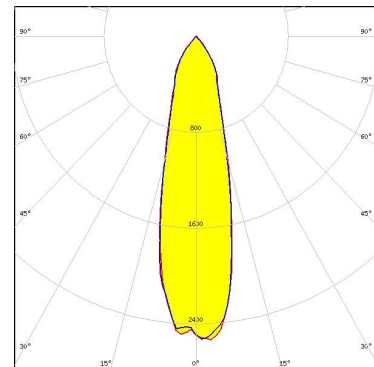
LED V13 Gen7
FWHM / FWTM 18.0° / 52.0°
Efficiency 90 %
Peak intensity 4.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2103CT + 50-2100AN



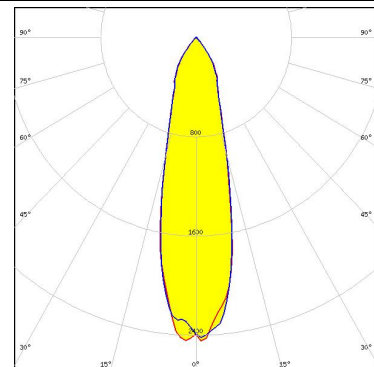
LED V13 Gen7
FWHM / FWTM 16.0° / 32.0°
Efficiency 91 %
Peak intensity 6.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
Bender Wirth: 477 Typ L1



LED V22 Gen7
FWHM / FWTM 27.0° / 70.0°
Efficiency 90 %
Peak intensity 2.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENINA-STD-BASE-VERO29
Bender Wirth: 431 Typ L3



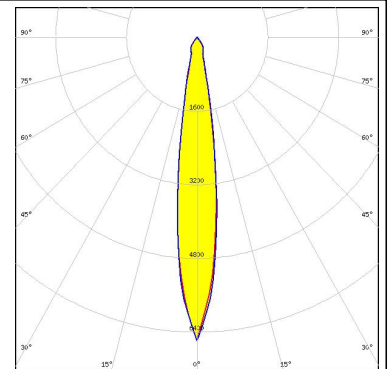
LED V22 Gen7
FWHM / FWTM 26.0° / 68.0°
Efficiency 87 %
Peak intensity 2.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13867_LENINA-STD-BASE-VERO29
C12606_LENINA-DL
Bender Wirth: 431 Typ L3



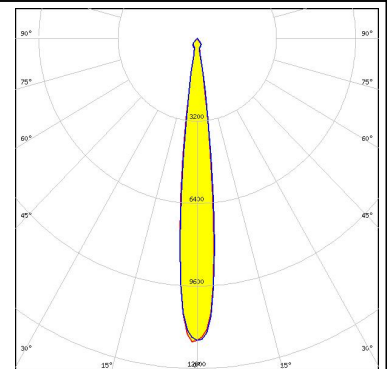
OPTICAL RESULTS (SIMULATED):



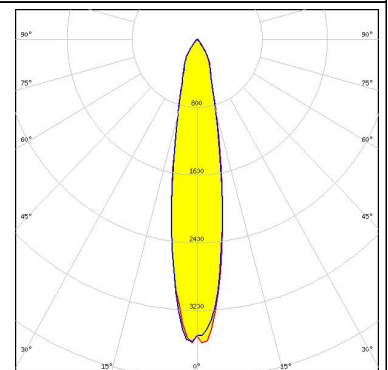
LED CXA/B 13xx
FWHM / FWTM 15.0° / 31.0°
Efficiency 91 %
Peak intensity 6.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 448 Typ L1



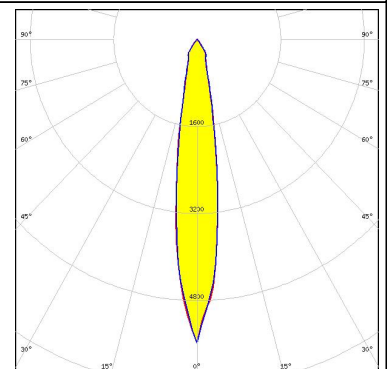
LED CXA/B 13xx
FWHM / FWTM 12.0° / 21.0°
Efficiency 94 %
Peak intensity 11.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
Bender Wirth: 448 Typ L1



LED CXA/B 1830
FWHM / FWTM 19.0° / 52.0°
Efficiency 84 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14146_LENINA-STD-BASE-CXA18
C12606_LENINA-DL



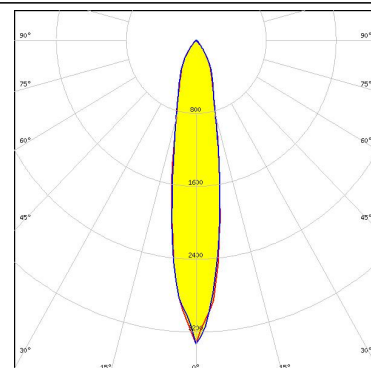
LED CXA/B 1830
FWHM / FWTM 16.0°
Efficiency 93 %
Peak intensity 5.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14146_LENINA-STD-BASE-CXA18



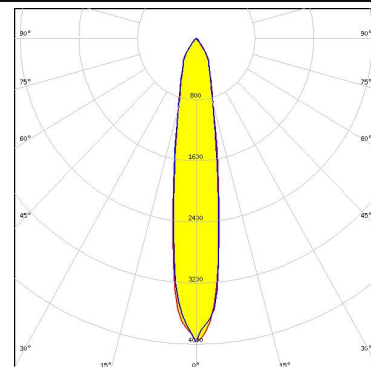
OPTICAL RESULTS (SIMULATED):



LED CXA/B 30xx
FWHM / FWTM 19.0° / 58.0°
Efficiency 84 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12606_LENINA-DL
IDEAL: 50-2234C + 50-2100LN



LED CXA/B 30xx
FWHM / FWTM 18.0° / 53.0°
Efficiency 90 %
Peak intensity 4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
IDEAL: 50-2234C + 50-2100LN



LED CxM-14 (19x19)
FWHM / FWTM 17.0° / 41.0°
Efficiency 87 %
Peak intensity 4.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 433 Typ L1



LED CxM-14 (19x19)
FWHM / FWTM 17.0° / 94.0°
Efficiency 91 %
Peak intensity 5.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
Bender Wirth: 433 Typ L1

OPTICAL RESULTS (SIMULATED):



LED CxM-9 (13.5x13.5)
 FWHM / FWTM 11.0° / 22.0°
 Efficiency 91 %
 Peak intensity 10.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 434 Typ L1

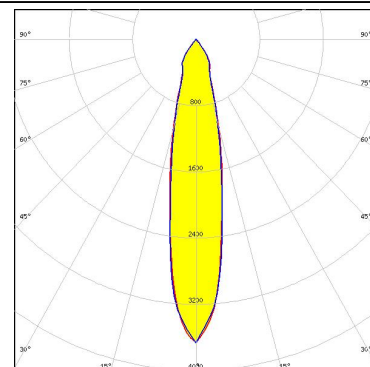


LED CxM-9 (13.5x13.5)
 FWHM / FWTM 13.0° / 28.0°
 Efficiency 86 %
 Peak intensity 6.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 434 Typ L1



Opto Semiconductors

LED Soleriq S15
 FWHM / FWTM 20.0° / 56.0°
 Efficiency 91 %
 Peak intensity 3.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENINA-STD-BASE-CLL030



SEOUL SEMICONDUCTOR

LED ZC12/18
 FWHM / FWTM 17.0° / 41.0°
 Efficiency 87 %
 Peak intensity 4.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 433 Typ L1

OPTICAL RESULTS (SIMULATED):

 SEOUL SEMICONDUCTOR	
LED	ZC12/18
FWHM / FWTM	17.0° / 34.0°
Efficiency	91 %
Peak intensity	5.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
C13868_LENINA-STD-BASE-VERO13-18	
Bender Wirth: 433 Typ L1	

 SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM / FWTM	11.0° / 22.0°
Efficiency	91 %
Peak intensity	10.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
C13868_LENINA-STD-BASE-VERO13-18	
Bender Wirth: 434 Typ L1	

 SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM / FWTM	13.0° / 28.0°
Efficiency	86 %
Peak intensity	6.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
C13868_LENINA-STD-BASE-VERO13-18	
C12606_LENINA-DL	
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.

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

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Distribution Partners

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