

LENINA-S

~19° spot beam

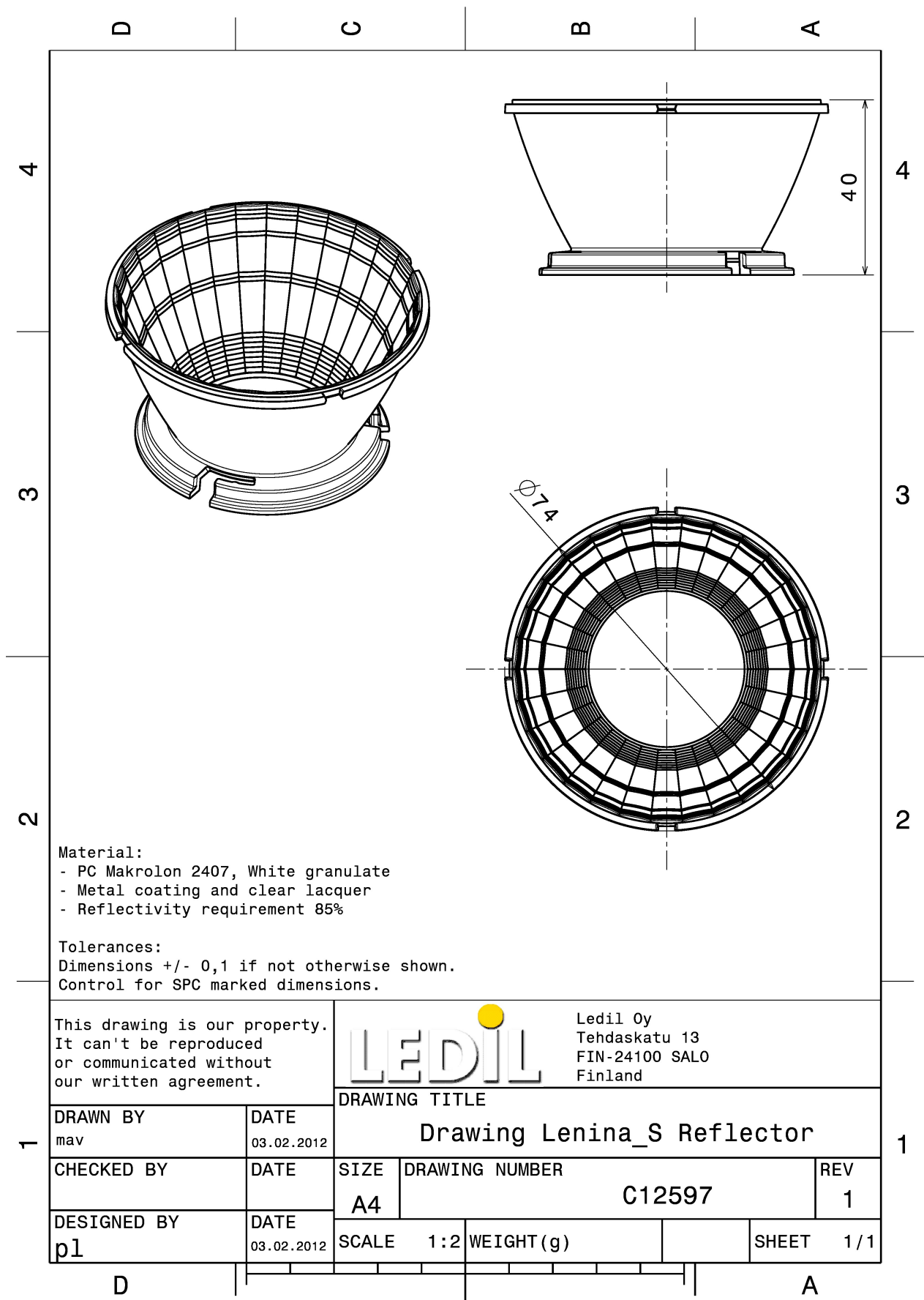
TECHNICAL SPECIFICATIONS:

Dimensions	Ø 74.0 mm
Height	40 mm
Fastening	
Colour	metal
Box size	476 x 273 x 197 mm
Box weight	2 kg
Quantity in Box	60 pcs
ROHS compliant	yes ⓘ



MATERIAL SPECIFICATIONS:

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



Material:
 - PC Makrolon 2407, White granulate
 - Metal coating and clear lacquer
 - Reflectivity requirement 85%

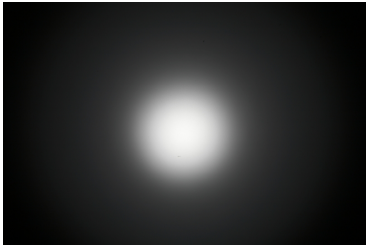
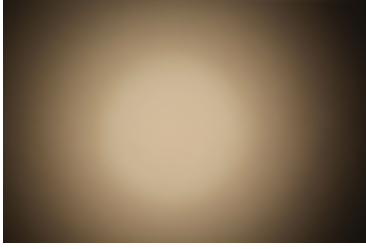
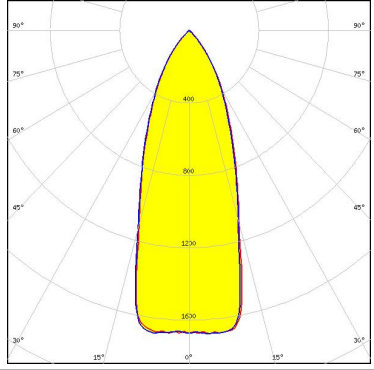

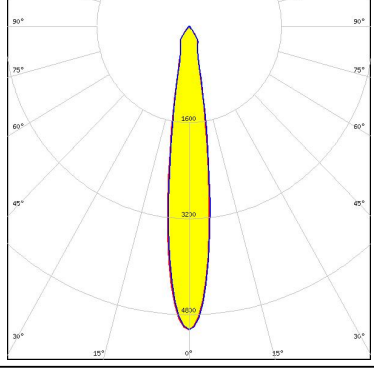

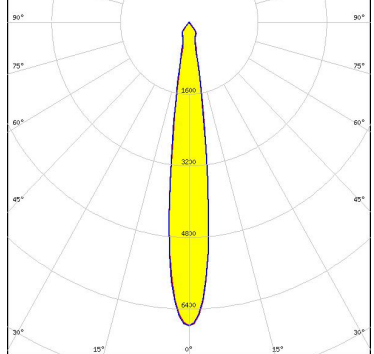
Tolerances:
 Dimensions +/- 0,1 if not otherwise shown.
 Control for SPC marked dimensions.

This drawing is our property. It can't be reproduced or communicated without our written agreement.		LEDiL		Ledil Oy Tehdaskatu 13 FIN-24100 SALO Finland	
DRAWING TITLE		Drawing Lenina_S Reflector			
DRAWN BY mav	DATE 03.02.2012	SIZE A4	DRAWING NUMBER C12597		REV 1
CHECKED BY	DATE	SCALE 1:2	WEIGHT (g)	SHEET 1/1	
DESIGNED BY pl	DATE 03.02.2012				


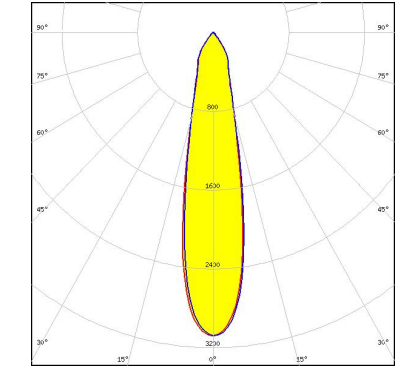

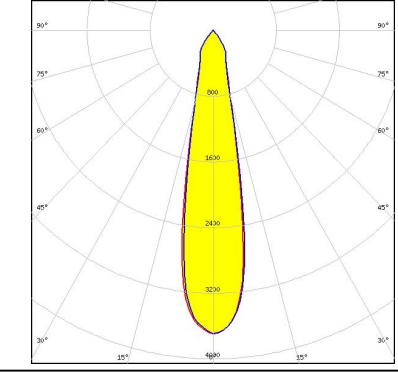

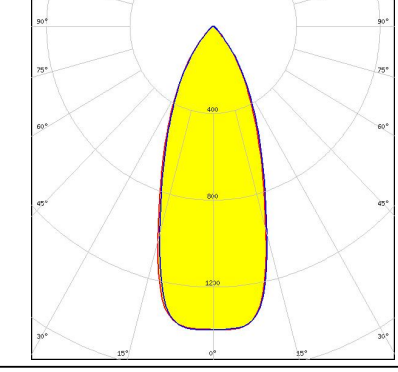

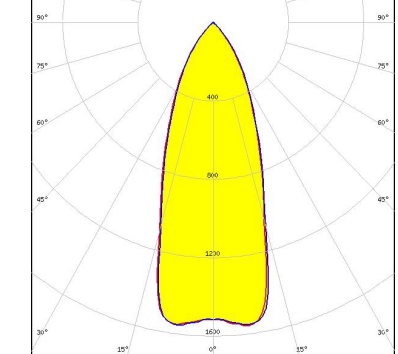
PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED BXRA ES Rectangle</p> <p>FWHM 15.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity cd/lm</p> <p>Required components: C12153_LENINA-STD-BASE-BXRA</p>	
<p>bridgelux.</p> <p>LED BXRA ES Rectangle</p> <p>FWHM 20.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity cd/lm</p> <p>Required components: C12153_LENINA-STD-BASE-BXRA C12606_LENINA-DL</p>	
<p>bridgelux.</p> <p>LED BXRA RS</p> <p>FWHM 28.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 2.292 cd/lm</p> <p>Required components: C12229_LENINA-STD-BASE-RS</p>	
<p>bridgelux.</p> <p>LED BXRA RS</p> <p>FWHM 32.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 2.000 cd/lm</p> <p>Required components: C12229_LENINA-STD-BASE-RS C12606_LENINA-DL</p>	

PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V10 Gen6</p> <p>FWHM 13.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 7.200 cd/lm</p> <p>Required components: C13186_LENINA-STD-BASE-CXA15 C12606_LENINA-DL</p>		
<p>bridgelux.</p> <p>LED Vero SE 29</p> <p>FWHM 38.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.700 cd/lm</p> <p>Required components: C15083_LENINA-STD-BASE-VERO29</p>		
<p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM 16.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 5.050 cd/lm</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL</p>		
<p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM 15.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 6.780 cd/lm</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18</p>		

PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED VERO18 FWHM 22.0° Efficiency 86 % Peak intensity 3.060 cd/lm Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL</p>		
<p>bridgelux.</p> <p>LED VERO18 FWHM 21.0° Efficiency 90 % Peak intensity 3.700 cd/lm Required components: C13868_LENINA-STD-BASE-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO29 FWHM 40.0° Efficiency 85 % Peak intensity 1.500 cd/lm Required components: C13867_LENINA-STD-BASE-VERO29 C12606_LENINA-DL</p>		
<p>bridgelux.</p> <p>LED VERO29 FWHM 40.0° Efficiency 89 % Peak intensity 1.560 cd/lm Required components: C13867_LENINA-STD-BASE-VERO29</p>		

PHOTOMETRIC DATA (MEASURED):

CITIZEN

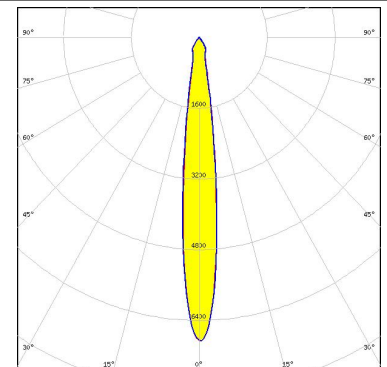
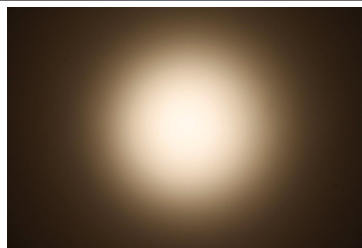
LED CL-L340
FWHM 17.0°
Efficiency 88 %
Peak intensity cd/lm
Required components:
C11995_LENINA-STD-BASE-CL340

CITIZEN

LED CL-L340
FWHM 22.0°
Efficiency 80 %
Peak intensity cd/lm
Required components:
C11995_LENINA-STD-BASE-CL340
C12606_LENINA-DL

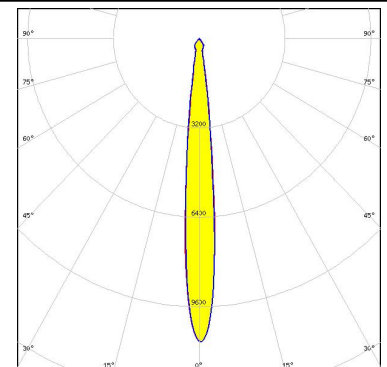
CITIZEN

LED CLL02x/CLU02x (LES10)
FWHM 13.0°
Efficiency 86 %
Peak intensity 6.900 cd/lm
Required components:
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 434 Typ L1



CITIZEN

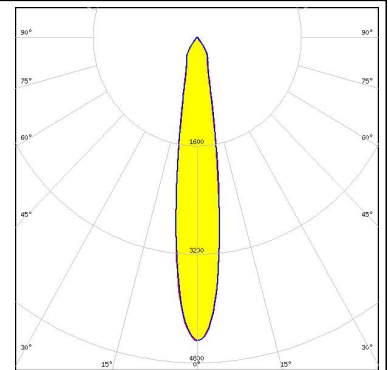
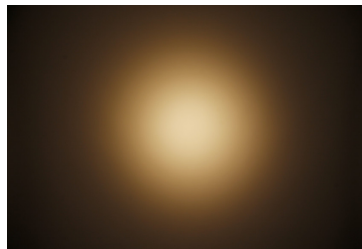
LED CLL02x/CLU02x (LES10)
FWHM 11.0°
Efficiency 91 %
Peak intensity 10.900 cd/lm
Required components:
C13868_LENINA-STD-BASE-VERO13-18
Bender Wirth: 434 Typ L1



PHOTOMETRIC DATA (MEASURED):

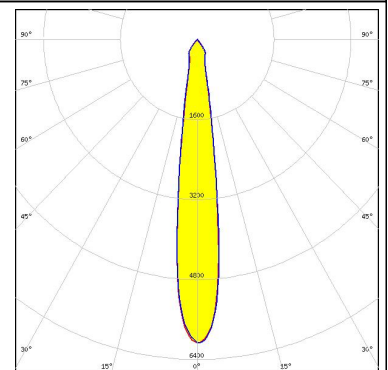
CITIZEN

LED CLL03x/CLU03x
 FWHM 17.0°
 Efficiency 87 %
 Peak intensity 4.500 cd/lm
 Required components:
 C12691_LENINA-STD-BASE-CLL030
 C12606_LENINA-DL



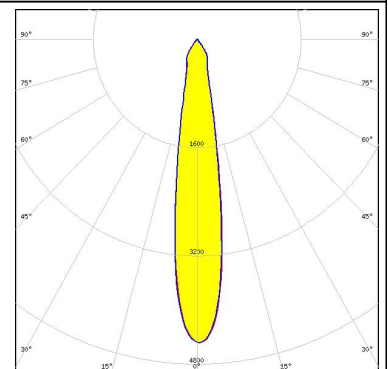
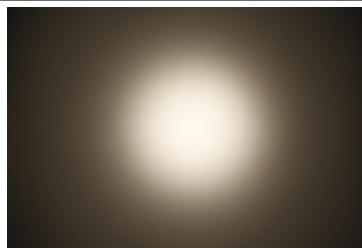
CITIZEN

LED CLL03x/CLU03x
 FWHM 15.0°
 Efficiency 91 %
 Peak intensity 6.100 cd/lm
 Required components:
 C12691_LENINA-STD-BASE-CLL030



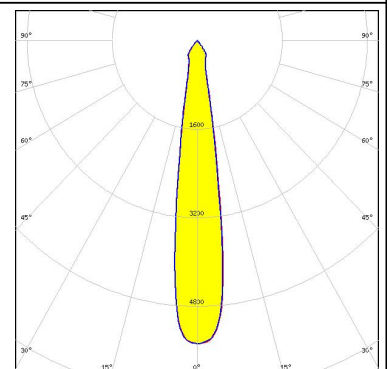
CITIZEN

LED CLL03x/CLU03x
 FWHM 17.0°
 Efficiency 87 %
 Peak intensity 4.500 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 433 Typ L1



CITIZEN

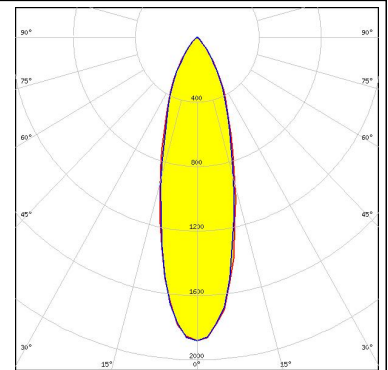
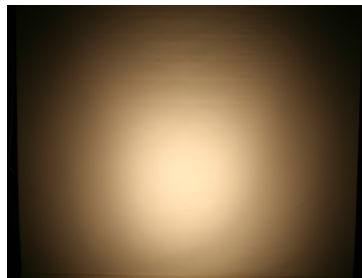
LED CLL03x/CLU03x
 FWHM 17.0°
 Efficiency 91 %
 Peak intensity 5.500 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 433 Typ L1



PHOTOMETRIC DATA (MEASURED):

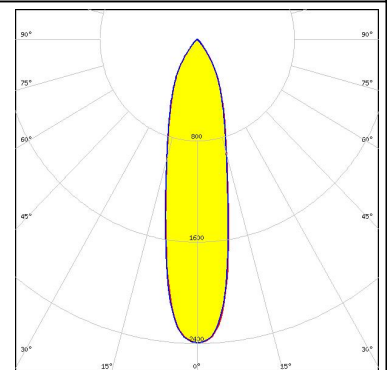
CITIZEN

LED CLL04x/CLU04x
 FWHM 30.0°
 Efficiency 78 %
 Peak intensity 1.900 cd/lm
 Required components:
 C12692_LENINA-STD-BASE-CLL040
 C12606_LENINA-DL



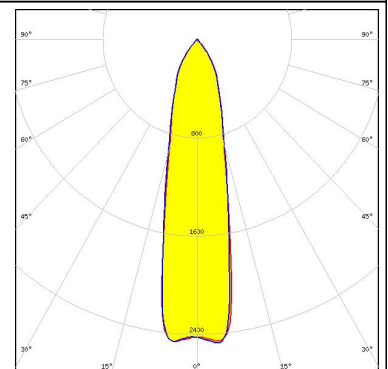
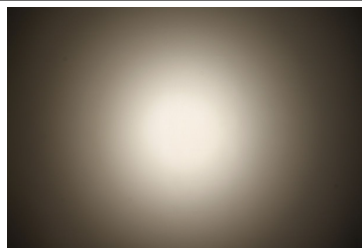
CITIZEN

LED CLL04x/CLU04x
 FWHM 25.0°
 Efficiency 87 %
 Peak intensity 2.400 cd/lm
 Required components:
 C12606_LENINA-DL
 IDEAL: 50-2204CT + 50-2100LN



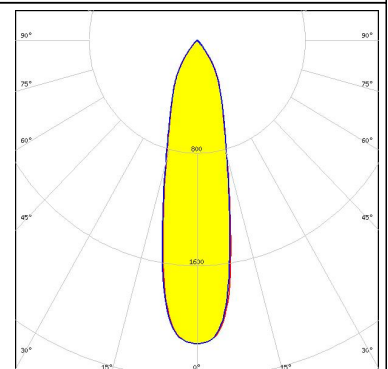
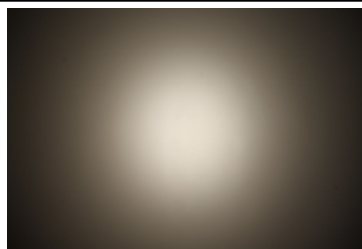
CITIZEN

LED CLL04x/CLU04x
 FWHM 24.0°
 Efficiency 83 %
 Peak intensity 2.500 cd/lm
 Required components:
 A.A.G. STUCCHI: 8102/G2 + S-8000/12



CITIZEN

LED CLL04x/CLU04x
 FWHM 26.0°
 Efficiency 79 %
 Peak intensity 2.200 cd/lm
 Required components:
 C12606_LENINA-DL
 A.A.G. STUCCHI: 8102/G2 + S-8000/12



PHOTOMETRIC DATA (MEASURED):

CITIZEN

LED CLL04x/CLU04x

FWHM 26.0°

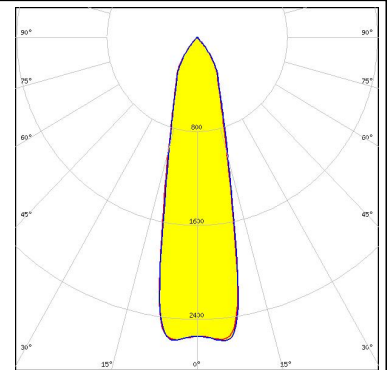
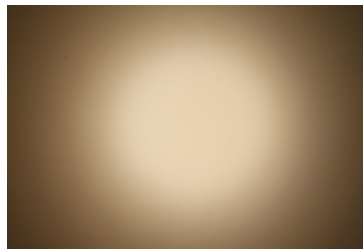
Efficiency 91 %

Peak intensity 2.600 cd/lm

Required components:

C13867_LENINA-STD-BASE-VERO29

Bender Wirth: 431 Typ L3



CITIZEN

LED CLL04x/CLU04x

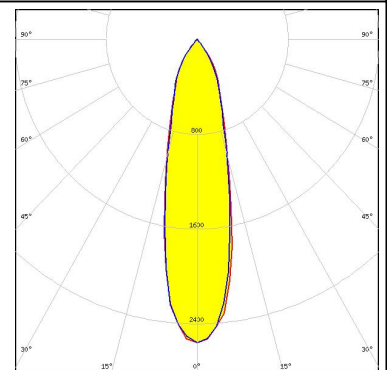
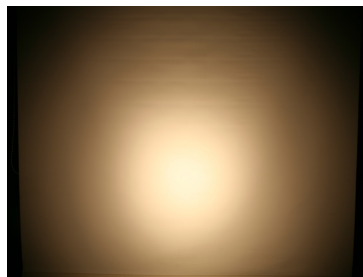
FWHM 26.0°

Efficiency 86 %

Peak intensity 2.600 cd/lm

Required components:

C12692_LENINA-STD-BASE-CLL040



CITIZEN

LED CLL04x/CLU04x

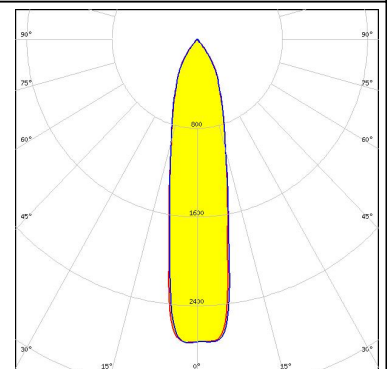
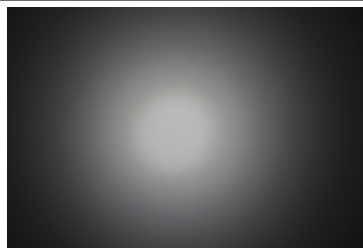
FWHM 23.0°

Efficiency 90 %

Peak intensity 2.700 cd/lm

Required components:

IDEAL: 50-2204CT + 50-2100LN



CITIZEN

LED CLL04x/CLU04x

FWHM 27.0°

Efficiency 86 %

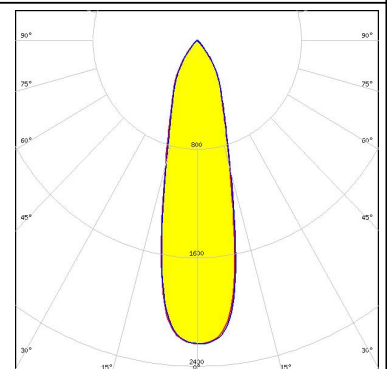
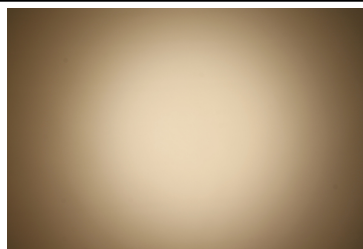
Peak intensity 2.200 cd/lm

Required components:

C13867_LENINA-STD-BASE-VERO29

C12606_LENINA-DL

Bender Wirth: 431 Typ L3



PHOTOMETRIC DATA (MEASURED):

CITIZEN

LED CLU700/701

FWHM 11.0°

Efficiency 86 %

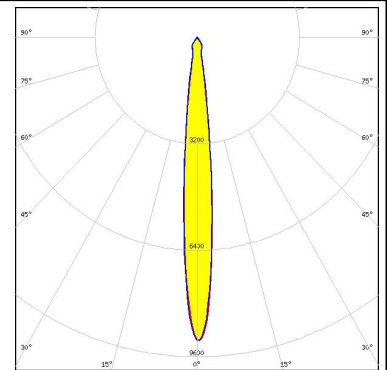
Peak intensity 9.100 cd/lm

Required components:

C13868_LENINA-STD-BASE-VERO13-18

C12606_LENINA-DL

Bender Wirth: 434 Typ L1



CITIZEN

LED CLU700/701

FWHM 8.0°

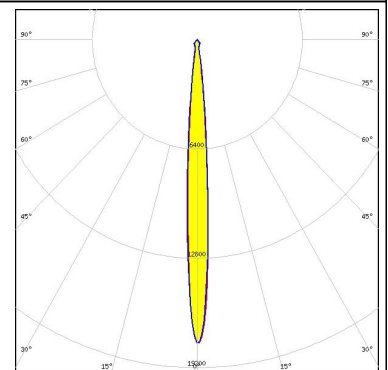
Efficiency 91 %

Peak intensity 17.800 cd/lm

Required components:

C13868_LENINA-STD-BASE-VERO13-18

Bender Wirth: 434 Typ L1



CITIZEN

LED CLU710/711

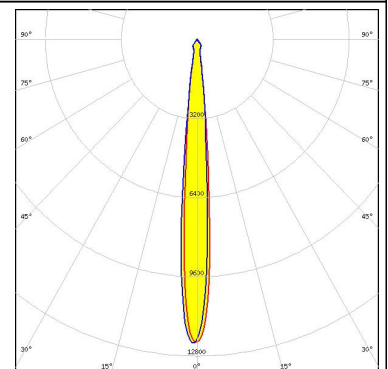
FWHM 10.0°

Efficiency 94 %

Peak intensity 12.300 cd/lm

Required components:

C12691_LENINA-STD-BASE-CLL030



CITIZEN

LED CLU710/711

FWHM 12.0°

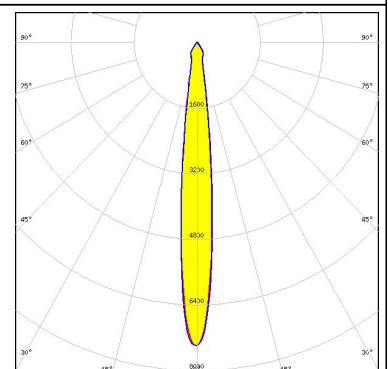
Efficiency 89 %

Peak intensity 7.400 cd/lm

Required components:

C12691_LENINA-STD-BASE-CLL030

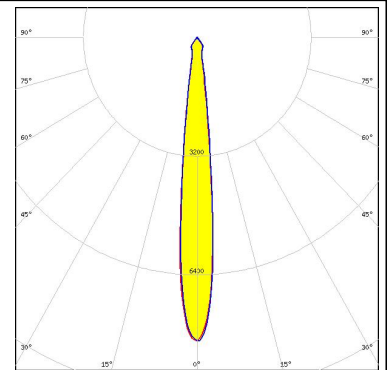
C12606_LENINA-DL



PHOTOMETRIC DATA (MEASURED):

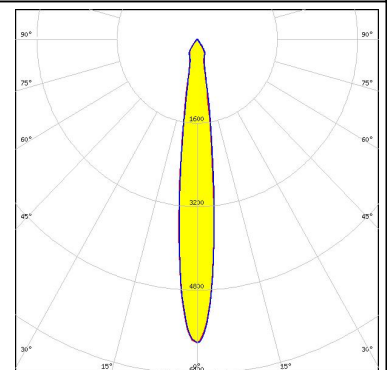
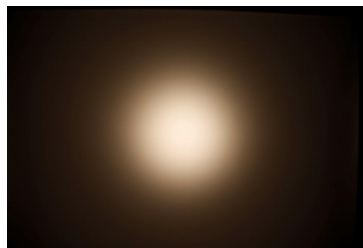
CITIZEN

LED CLU720/721
FWHM 12.0°
Efficiency 89 %
Peak intensity 8.200 cd/lm
Required components:
C12691_LENINA-STD-BASE-CLL030



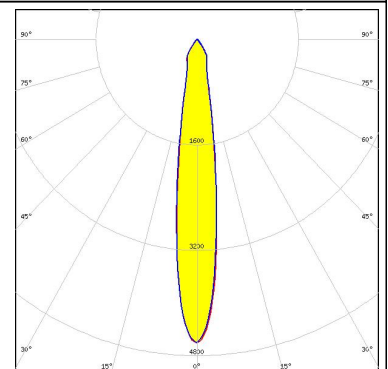
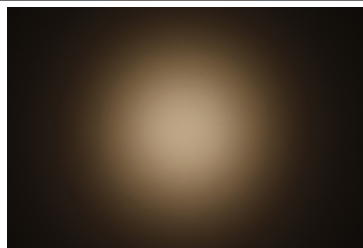
CITIZEN

LED CLU720/721
FWHM 13.0°
Efficiency 84 %
Peak intensity 5.800 cd/lm
Required components:
C12691_LENINA-STD-BASE-CLL030
C12606_LENINA-DL



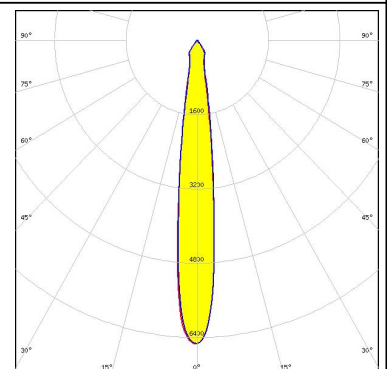
CITIZEN

LED CLU730/731
FWHM 15.0°
Efficiency 85 %
Peak intensity 4.600 cd/lm
Required components:
C12692_LENINA-STD-BASE-CLL040
C12606_LENINA-DL



CITIZEN

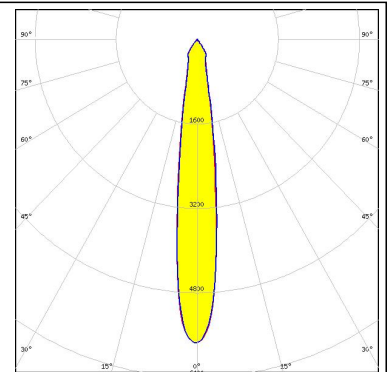
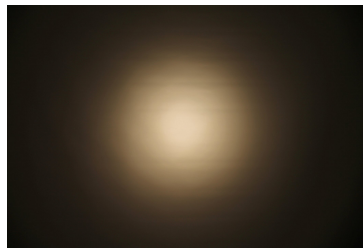
LED CLU730/731
FWHM 14.0°
Efficiency 94 %
Peak intensity 6.500 cd/lm
Required components:
C12692_LENINA-STD-BASE-CLL040



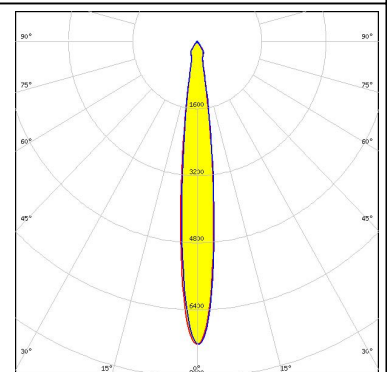
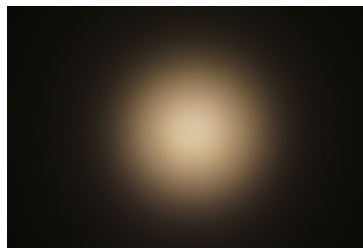
PHOTOMETRIC DATA (MEASURED):



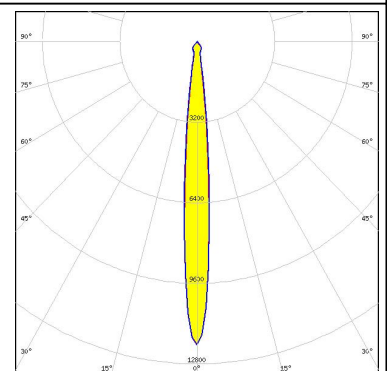
LED CMA1840
 FWHM 15.0°
 Efficiency 92 %
 Peak intensity 5.700 cd/lm
 Required components:
 C14146_LENINA-STD-BASE-CXA18



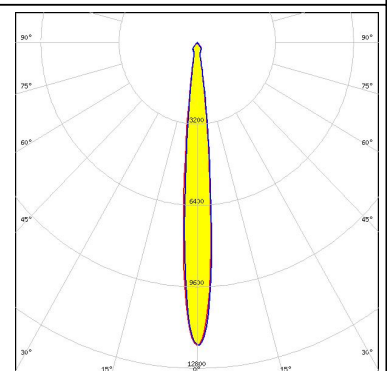
LED CXA/B 15xx
 FWHM 13.0°
 Efficiency 87 %
 Peak intensity 7.200 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 441 Typ L1



LED CXA/B 15xx
 FWHM 10.0°
 Efficiency 91 %
 Peak intensity 12.050 cd/lm
 Required components:
 C13186_LENINA-STD-BASE-CXA15



LED CXA/B 15xx
 FWHM 10.0°
 Efficiency 91 %
 Peak intensity 11.900 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 441 Typ L1



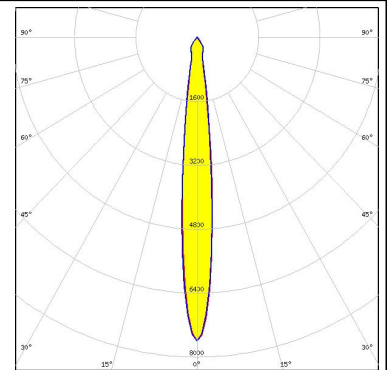
PHOTOMETRIC DATA (MEASURED):



LED CXA/B 15xx
FWHM 12.0°
Efficiency 86 %
Peak intensity 7.600 cd/lm

Required components:

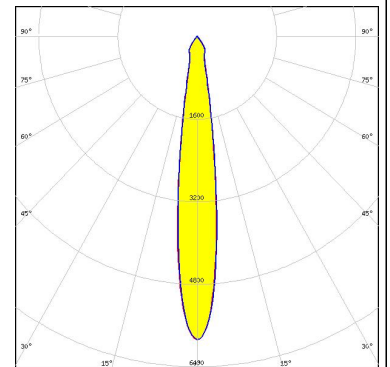
C13186_LENINA-STD-BASE-CXA15
C12606_LENINA-DL



LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM 15.0°
Efficiency 88 %
Peak intensity 5.900 cd/lm

Required components:

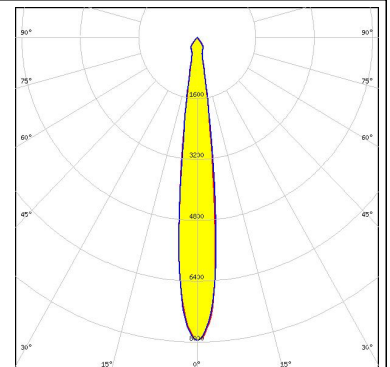
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 437 Typ L1



LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM 13.0°
Efficiency 92 %
Peak intensity 8.000 cd/lm

Required components:

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



LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM 12.0°
Efficiency 92 %
Peak intensity 9.600 cd/lm

Required components:

C14146_LENINA-STD-BASE-CXA18



PHOTOMETRIC DATA (MEASURED):



LED CXA/B 1830

FWHM 16.0°

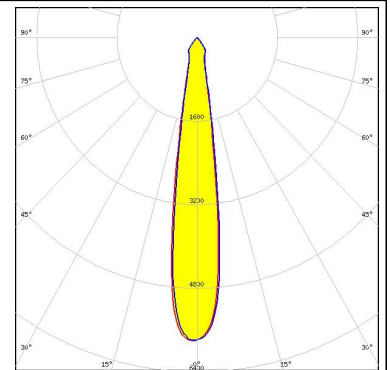
Efficiency 93 %

Peak intensity 5.800 cd/lm

Required components:

C13868_LENINA-STD-BASE-VERO13-18

Bender Wirth: 437 Typ L1



LED CXA/B 1830

FWHM 18.0°

Efficiency 88 %

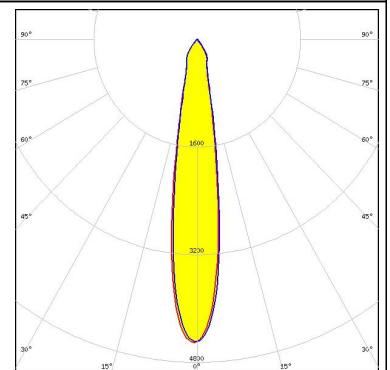
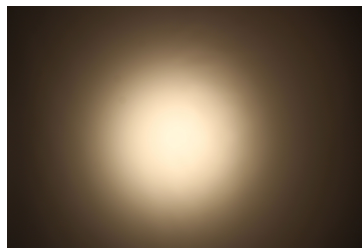
Peak intensity 4.500 cd/lm

Required components:

C13868_LENINA-STD-BASE-VERO13-18

C12606_LENINA-DL

Bender Wirth: 437 Typ L1



LED CXA/B 25xx

FWHM 23.0°

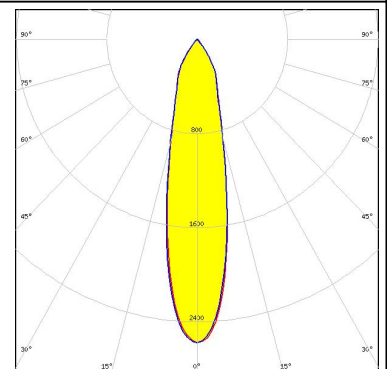
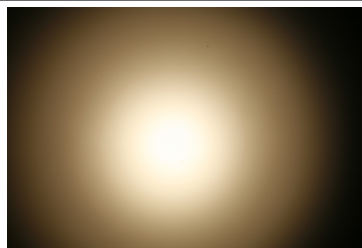
Efficiency 78 %

Peak intensity 2.700 cd/lm

Required components:

C13324_LENINA-STD-BASE-CXA25

C12606_LENINA-DL



LED CXA/B 25xx

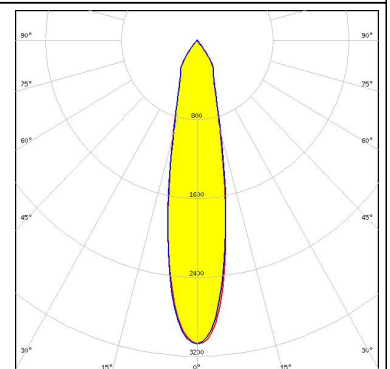
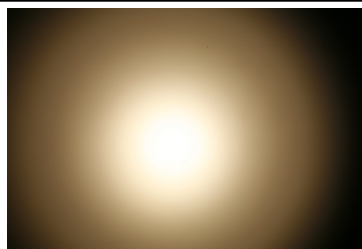
FWHM 22.0°

Efficiency 86 %

Peak intensity 3.200 cd/lm

Required components:

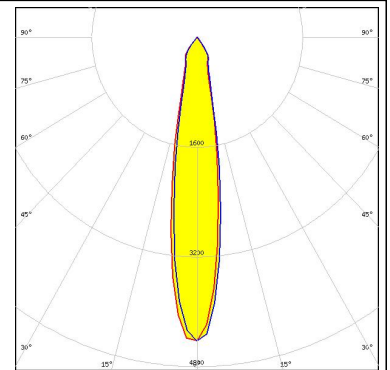
C13324_LENINA-STD-BASE-CXA25



PHOTOMETRIC DATA (MEASURED):

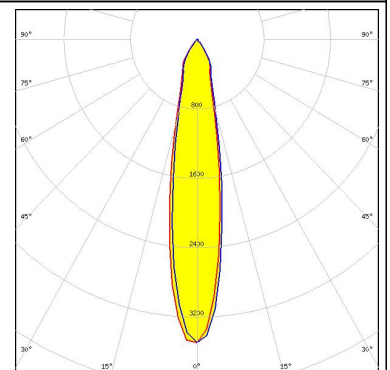
CREE

LED CXA2011
 FWHM 16.0°
 Efficiency 88 %
 Peak intensity 4.400 cd/lm
 Required components:
 C12105_LENINA-STD-BASE-CXA20



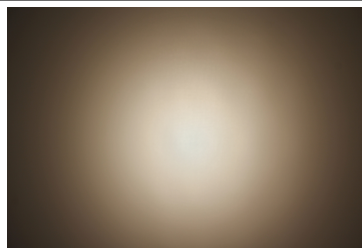
CREE

LED CXA2011
 FWHM 20.0°
 Efficiency 80 %
 Peak intensity 3.500 cd/lm
 Required components:
 C12105_LENINA-STD-BASE-CXA20
 C12606_LENINA-DL



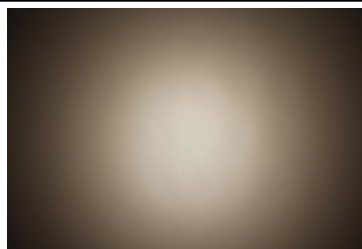
EVERLIGHT

LED CHI3030 19W
 FWHM 25.0°
 Efficiency 91 %
 Peak intensity 2.600 cd/lm
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 468 Typ L3



EVERLIGHT

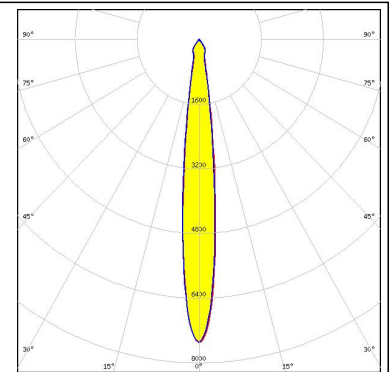
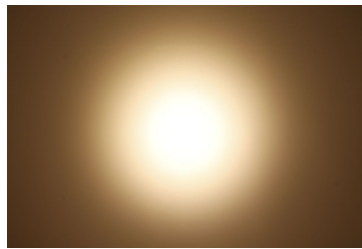
LED CHI3030 29W
 FWHM 33.0°
 Efficiency 87 %
 Peak intensity 1.700 cd/lm
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 468 Typ L3



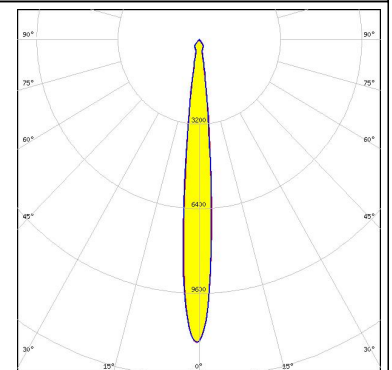
PHOTOMETRIC DATA (MEASURED):



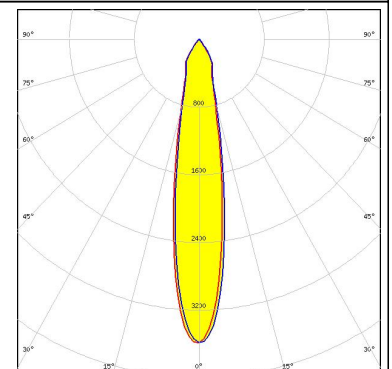
LED LUXEON CoB 1202/1203
 FWHM 13.0°
 Efficiency 88 %
 Peak intensity 7.500 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 438 Typ L1



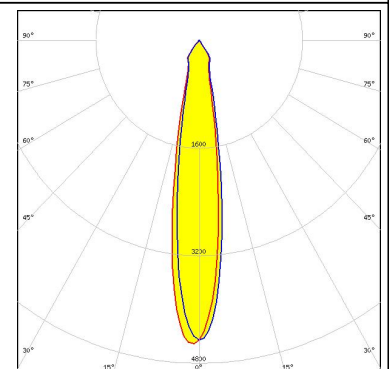
LED LUXEON CoB 1202/1203
 FWHM 11.0°
 Efficiency 92 %
 Peak intensity 11.500 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 438 Typ L1



LED LUXEON CoB 1204/1205
 FWHM 19.0°
 Efficiency 84 %
 Peak intensity 3.600 cd/lm
 Required components:
 C12292_LENINA-STD-BASE-MEZ
 C12606_LENINA-DL



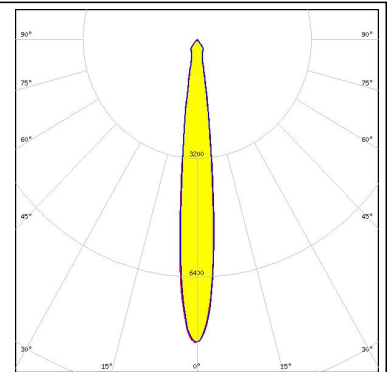
LED LUXEON CoB 1204/1205
 FWHM 18.0°
 Efficiency 88 %
 Peak intensity 4.500 cd/lm
 Required components:
 C12292_LENINA-STD-BASE-MEZ



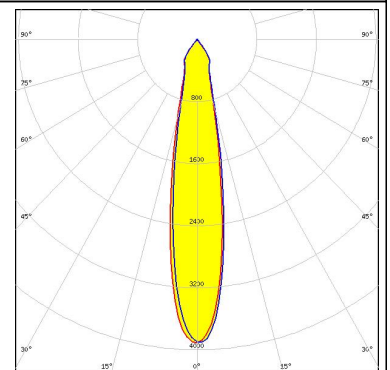
PHOTOMETRIC DATA (MEASURED):



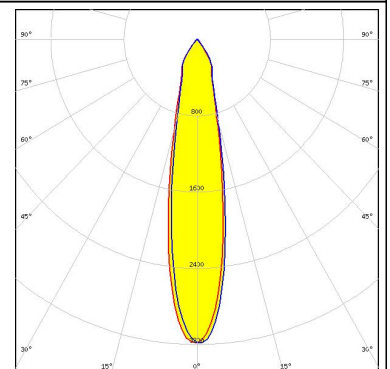
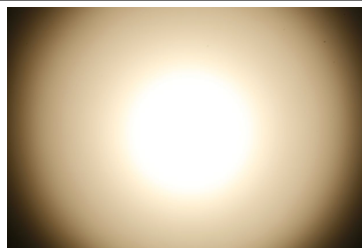
LED LUXEON CoB 1205HD
 FWHM 12.0°
 Efficiency 92 %
 Peak intensity 8.200 cd/lm
 Required components:
 C11981_LENINA-STD-BASE-COB-L110



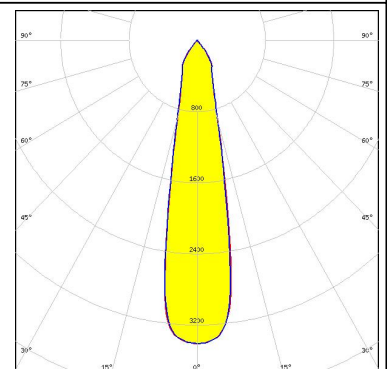
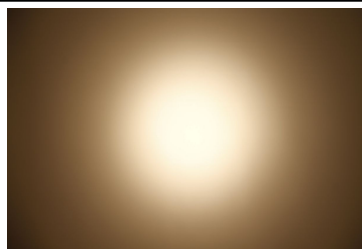
LED LUXEON CoB 1208
 FWHM 20.0°
 Efficiency 89 %
 Peak intensity 3.900 cd/lm
 Required components:
 C12292_LENINA-STD-BASE-MEZ



LED LUXEON CoB 1208
 FWHM 21.0°
 Efficiency 85 %
 Peak intensity 3.200 cd/lm
 Required components:
 C12292_LENINA-STD-BASE-MEZ
 C12606_LENINA-DL



LED LUXEON CoB 1211
 FWHM 22.0°
 Efficiency 92 %
 Peak intensity 3.400 cd/lm
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 Bender Wirth: 431 Typ L3



PHOTOMETRIC DATA (MEASURED):

LUMILEDS

LED LUXEON CoB 1211

FWHM 23.0°

Efficiency 86 %

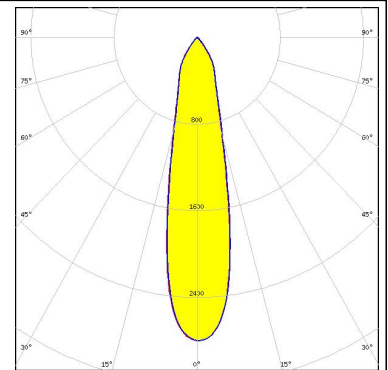
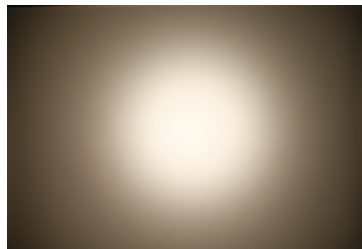
Peak intensity 2.800 cd/lm

Required components:

C13867_LENINA-STD-BASE-VERO29

C12606_LENINA-DL

Bender Wirth: 431 Typ L3



LUMILEDS

LED LUXEON CoB 1216/1812

FWHM 27.0°

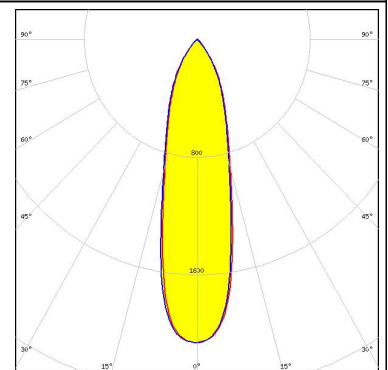
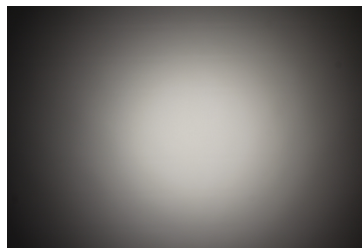
Efficiency 81 %

Peak intensity 2.060 cd/lm

Required components:

C12606_LENINA-DL

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



LUMILEDS

LED LUXEON CoB 1216/1812

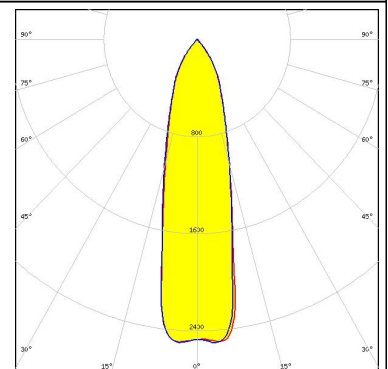
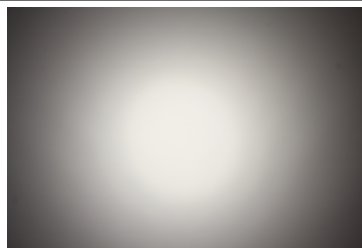
FWHM 27.0°

Efficiency 91 %

Peak intensity 2.500 cd/lm

Required components:

C12692_LENINA-STD-BASE-CLL040



LUMILEDS

LED LUXEON CoB 1216/1812

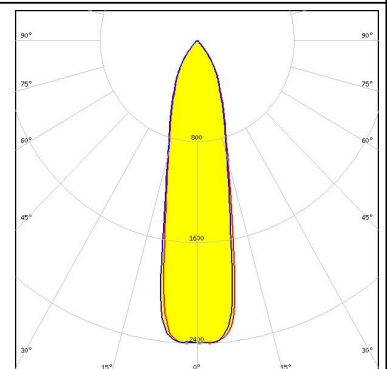
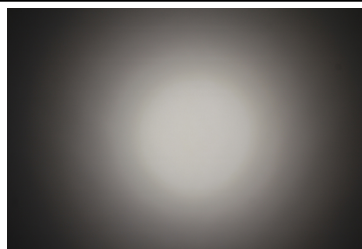
FWHM 25.0°

Efficiency 85 %

Peak intensity 2.410 cd/lm

Required components:

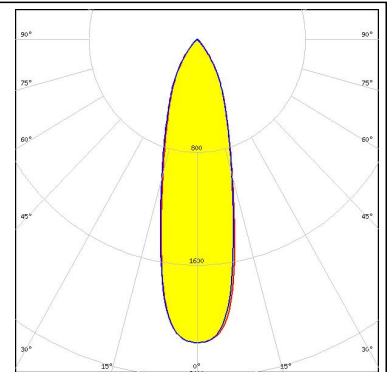
A.A.G. STUCCHI: 8102/G2 + S-8000/12



PHOTOMETRIC DATA (MEASURED):

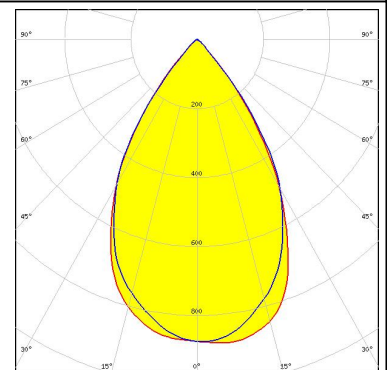
LUMILEDS

LED LUXEON CoB 1216/1812
 FWHM 28.0°
 Efficiency 87 %
 Peak intensity 2.200 cd/lm
 Required components:
 C12692_LENINA-STD-BASE-CLL040
 C12606_LENINA-DL



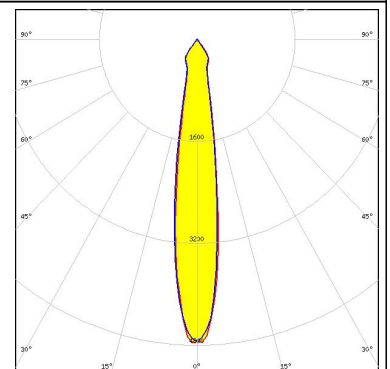
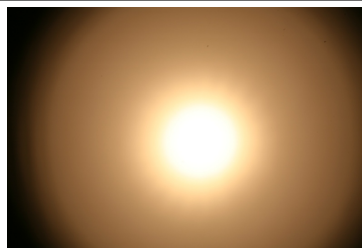
LUMILEDS

LED LUXEON K12
 FWHM 17.5°
 Efficiency 83 %
 Peak intensity 3.700 cd/lm
 Required components:
 C12924_LENINA-STD-BASE-LUXEON-K
 C12606_LENINA-DL



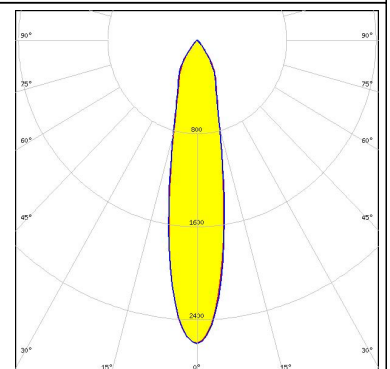
LUMILEDS

LED LUXEON K12
 FWHM 16.0°
 Efficiency 89 %
 Peak intensity 4.800 cd/lm
 Required components:
 C12924_LENINA-STD-BASE-LUXEON-K



LUMILEDS

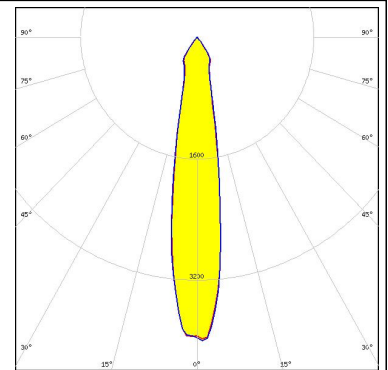
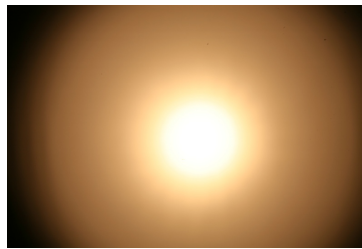
LED LUXEON K16
 FWHM 22.0°
 Efficiency 80 %
 Peak intensity 2.600 cd/lm
 Required components:
 C12924_LENINA-STD-BASE-LUXEON-K
 C12606_LENINA-DL



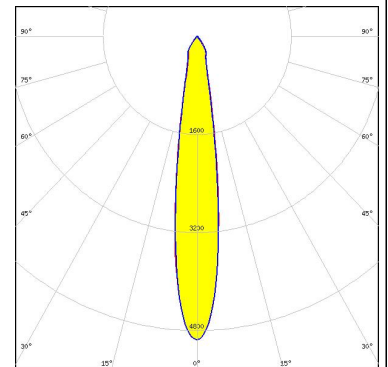
PHOTOMETRIC DATA (MEASURED):



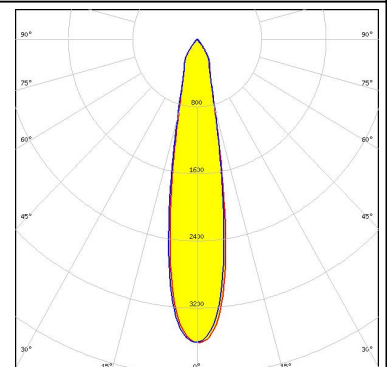
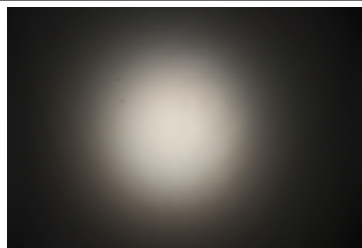
LED LUXEON K16
 FWHM 18.0°
 Efficiency 87 %
 Peak intensity 4.000 cd/lm
 Required components:
 C12924_LENINA-STD-BASE-LUXEON-K



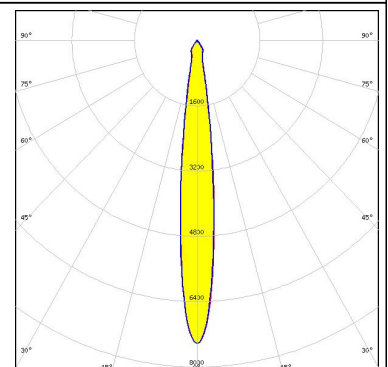
LED CDM-14 (Dim-To-Warm)
 FWHM 16.0°
 Efficiency 88 %
 Peak intensity 4.900 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 491 Typ L2



LED CDM-18 (Dim-To-Warm)
 FWHM 21.0°
 Efficiency 88 %
 Peak intensity 3.600 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 491 Typ L2



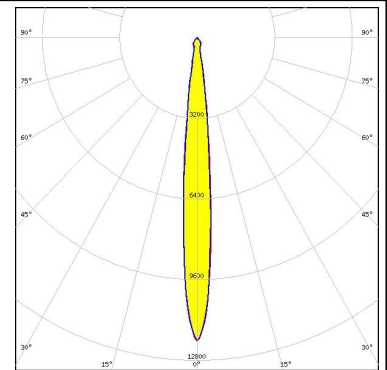
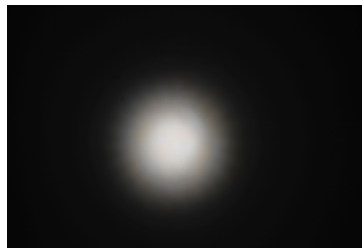
LED CDM-9 (Dim-To-Warm)
 FWHM 13.0°
 Efficiency 87 %
 Peak intensity 7.400 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 490 Typ L1



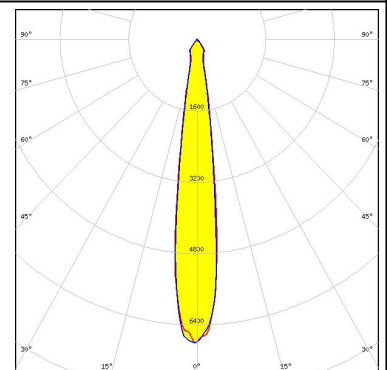
PHOTOMETRIC DATA (MEASURED):



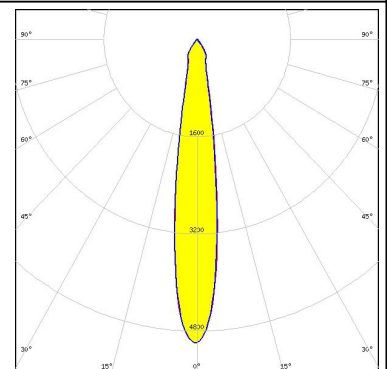
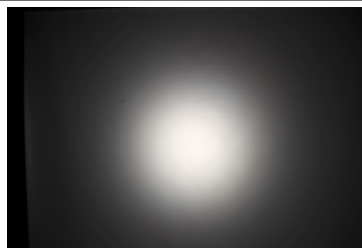
LED CDM-9 (Dim-To-Warm)
 FWHM 11.0°
 Efficiency 92 %
 Peak intensity 12.000 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 490 Typ L1



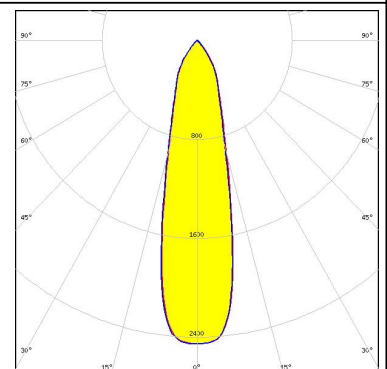
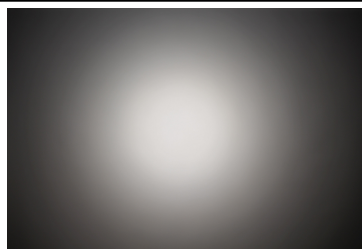
LED CTM-14 (Tunable White)
 FWHM 15.0°
 Efficiency 92 %
 Peak intensity 6.800 cd/lm
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 Bender Wirth: 442 Typ L3



LED CTM-14 (Tunable White)
 FWHM 16.0°
 Efficiency 87 %
 Peak intensity 5.000 cd/lm
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 442 Typ L3



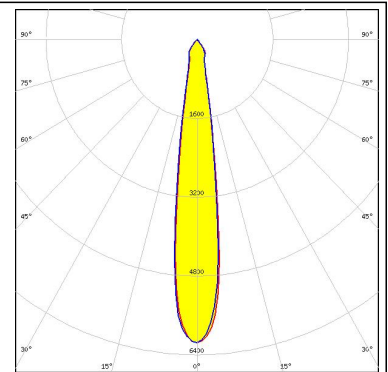
LED CTM-22 (Tunable White)
 FWHM 26.0°
 Efficiency 87 %
 Peak intensity 2.400 cd/lm
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 494 Typ L3



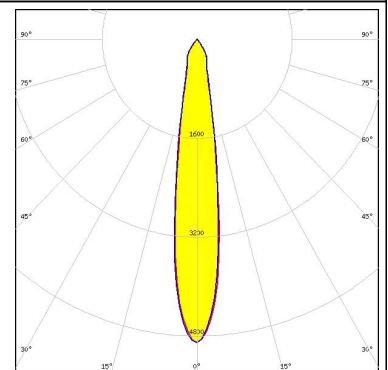
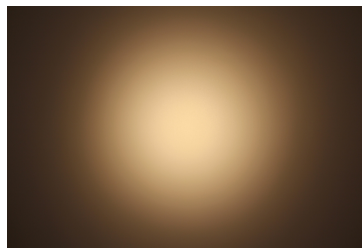
PHOTOMETRIC DATA (MEASURED):



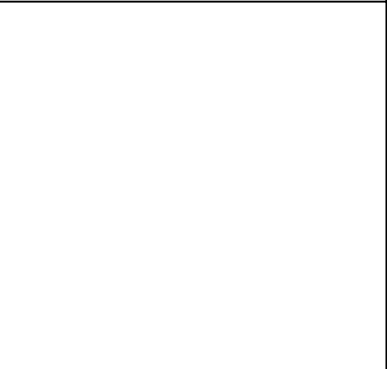
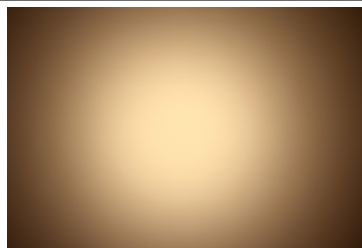
LED CXM-14
 FWHM 16.0°
 Efficiency 93 %
 Peak intensity 6.200 cd/lm
 Required components:
 C12691_LENINA-STD-BASE-CLL030



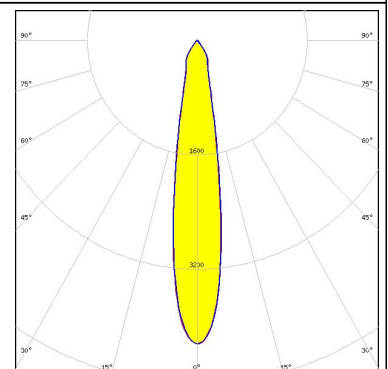
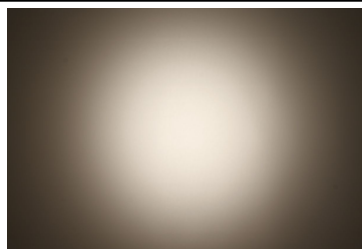
LED CXM-14
 FWHM 17.0°
 Efficiency 88 %
 Peak intensity 4.900 cd/lm
 Required components:
 C12691_LENINA-STD-BASE-CLL030
 C12606_LENINA-DL



LED CXM-22
 FWHM 28.0°
 Efficiency 88 %
 Peak intensity 2.300 cd/lm
 Required components:
 C12692_LENINA-STD-BASE-CLL040
 C12606_LENINA-DL



LED COB J-Type
 FWHM 18.0°
 Efficiency 88 %
 Peak intensity 4.200 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 463 Typ L2



PHOTOMETRIC DATA (MEASURED):



LED COB J-Type

FWHM 17.0°

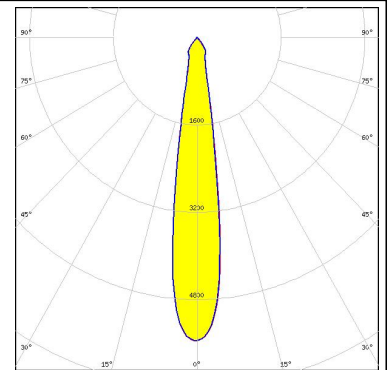
Efficiency 92 %

Peak intensity 5.600 cd/lm

Required components:

C13868_LENINA-STD-BASE-VERO13-18

Bender Wirth: 463 Typ L2



LED COB J-Type

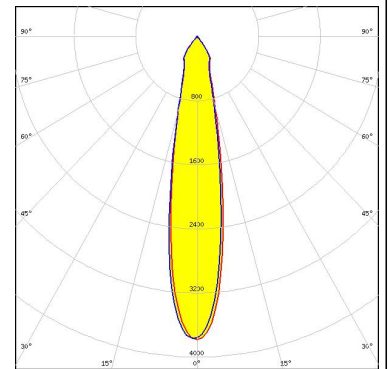
FWHM 20.0°

Efficiency 88 %

Peak intensity 3.790 cd/lm

Required components:

C12292_LENINA-STD-BASE-MEZ



LED COB J-Type

FWHM 21.0°

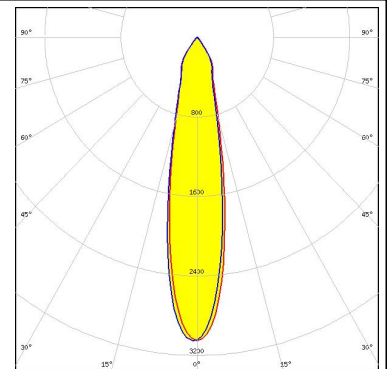
Efficiency 83 %

Peak intensity 3.060 cd/lm

Required components:

C12292_LENINA-STD-BASE-MEZ

C12606_LENINA-DL



LED COB L-Type (LES 11)

FWHM 13.0°

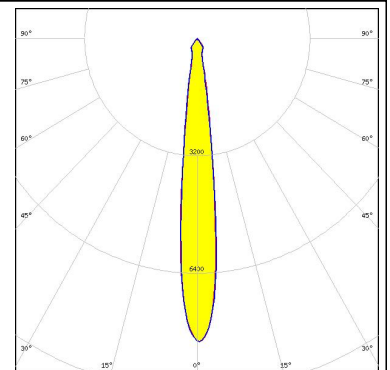
Efficiency 91 %

Peak intensity 8.300 cd/lm

Required components:

C13868_LENINA-STD-BASE-VERO13-18

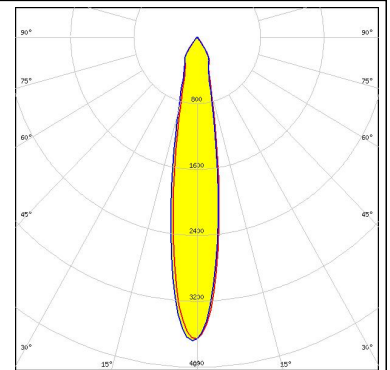
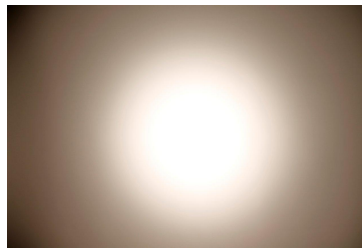
Bender Wirth: 438 Typ L1



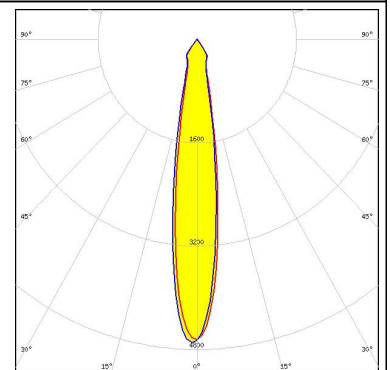
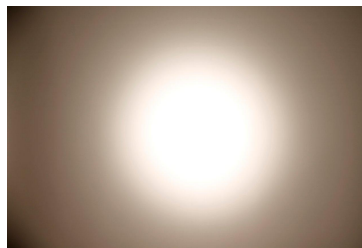
PHOTOMETRIC DATA (MEASURED):



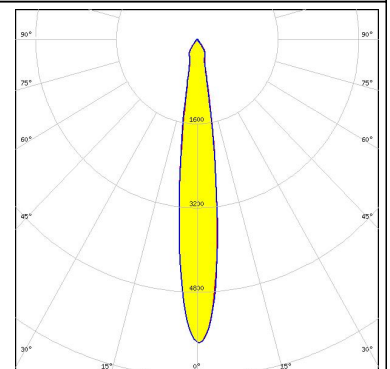
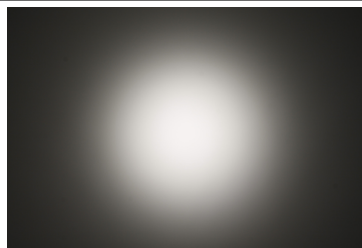
LED COB L-Type (LES 11)
 FWHM 18.0°
 Efficiency 81 %
 Peak intensity 3.700 cd/lm
 Required components:
 C11981_LENINA-STD-BASE-COB-L110
 C12606_LENINA-DL



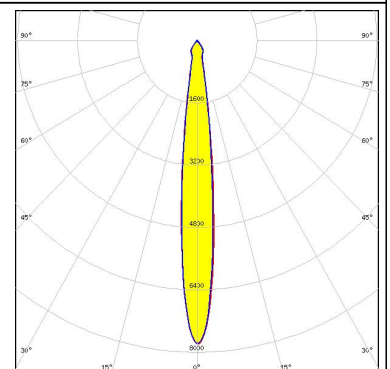
LED COB L-Type (LES 11)
 FWHM 17.0°
 Efficiency 85 %
 Peak intensity 4.700 cd/lm
 Required components:
 C11981_LENINA-STD-BASE-COB-L110



LED COB L-Type (LES 11)
 FWHM 15.0°
 Efficiency 87 %
 Peak intensity 5.800 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 438 Typ L1



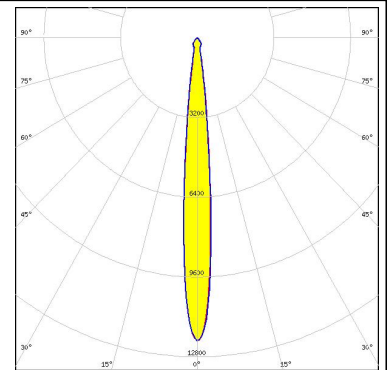
LED COB L-Type (LES 9)
 FWHM 12.0°
 Efficiency 90 %
 Peak intensity 7.800 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 438 Typ L1



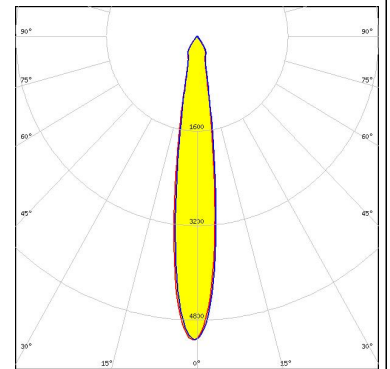
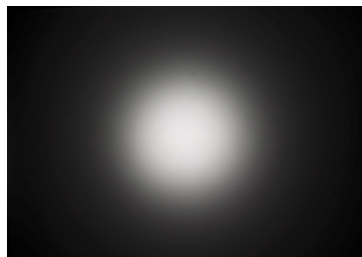
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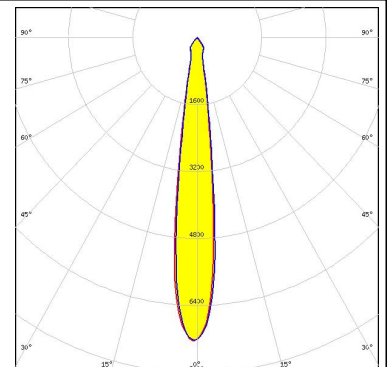
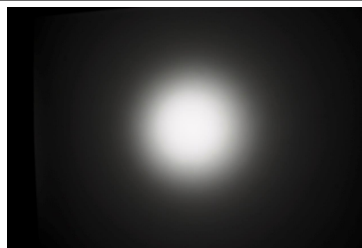
LED COB L-Type (LES 9)
 FWHM 10.0°
 Efficiency 94 %
 Peak intensity 12.100 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 438 Typ L1



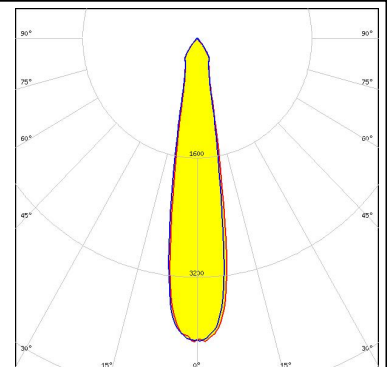
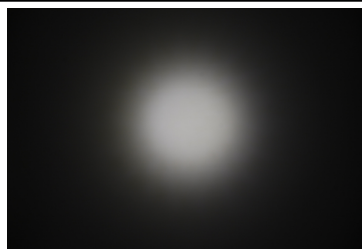
LED Soleriq S13
 FWHM 16.0°
 Efficiency 86 %
 Peak intensity 5.100 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 437 Typ L1



LED Soleriq S13
 FWHM 14.0°
 Efficiency 91 %
 Peak intensity 7.200 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 437 Typ L1



LED Soleriq S19
 FWHM 19.0°
 Efficiency 92 %
 Peak intensity 4.100 cd/lm
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 Bender Wirth: 462 Typ L3



PHOTOMETRIC DATA (MEASURED):

OSRAM
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LED Soleriq S19

FWHM 20.0°

Efficiency 88 %

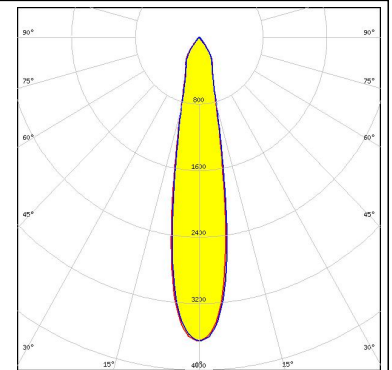
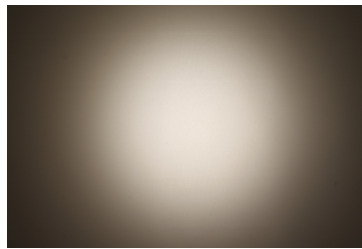
Peak intensity 3.700 cd/lm

Required components:

C13867_LENINA-STD-BASE-VERO29

C12606_LENINA-DL

Bender Wirth: 462 Typ L3



SAMSUNG

LED COB D Series LES 14.5 mm

FWHM 18.0°

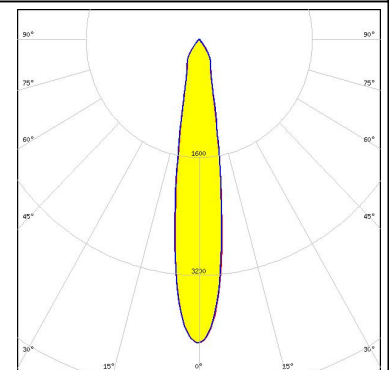
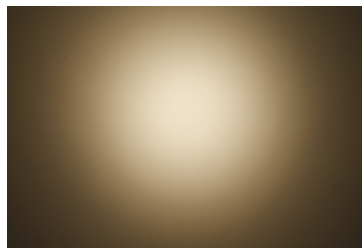
Efficiency 87 %

Peak intensity 4.100 cd/lm

Required components:

C12691_LENINA-STD-BASE-CLL030

C12606_LENINA-DL



SAMSUNG

LED COB D Series LES 14.5 mm

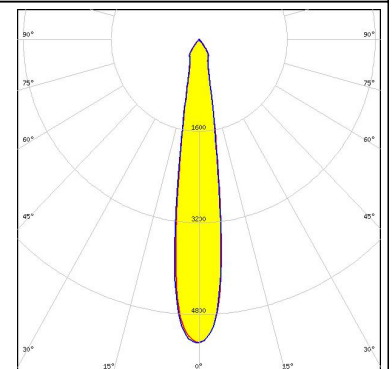
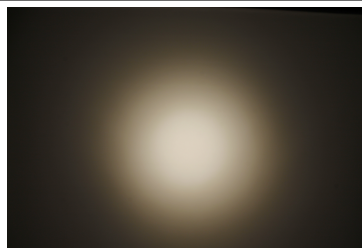
FWHM 16.0°

Efficiency 91 %

Peak intensity 5.300 cd/lm

Required components:

C12691_LENINA-STD-BASE-CLL030



SAMSUNG

LED COB D Series LES 22 mm

FWHM 29.0°

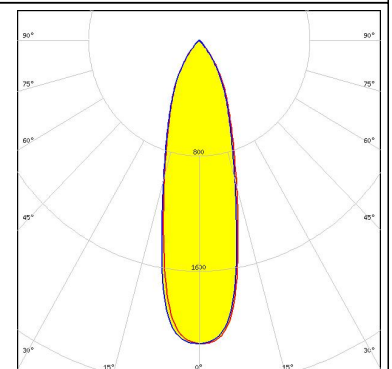
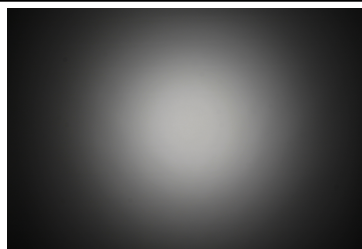
Efficiency 87 %

Peak intensity 2.100 cd/lm

Required components:

C12692_LENINA-STD-BASE-CLL040

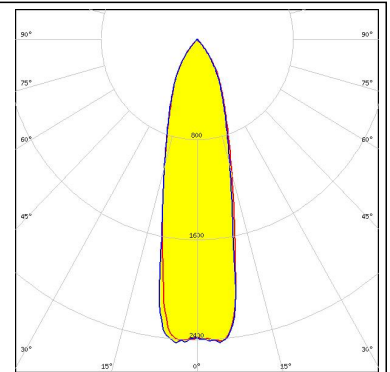
C12606_LENINA-DL



PHOTOMETRIC DATA (MEASURED):

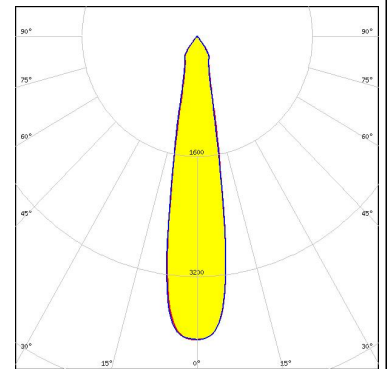
SAMSUNG

LED COB D Series LES 22 mm
 FWHM 28.0°
 Efficiency 91 %
 Peak intensity 2.400 cd/lm
 Required components:
 C12692_LENINA-STD-BASE-CLL040



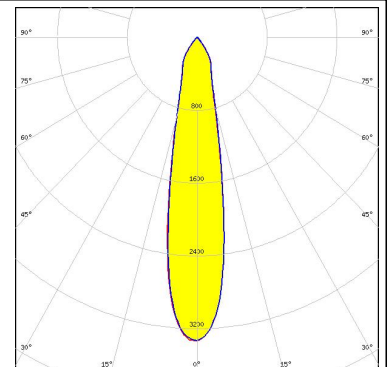
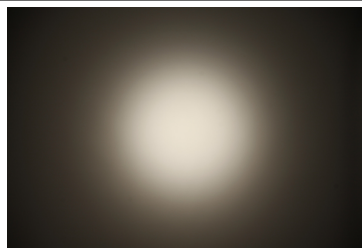
SAMSUNG

LED LC026B / 033B / 040B
 FWHM 20.0°
 Efficiency 91 %
 Peak intensity 4.000 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 450 Typ L2

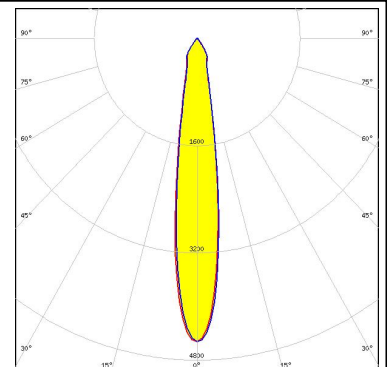
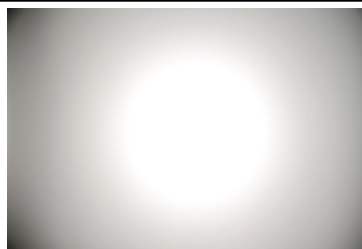


SAMSUNG


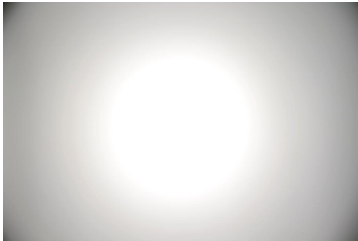
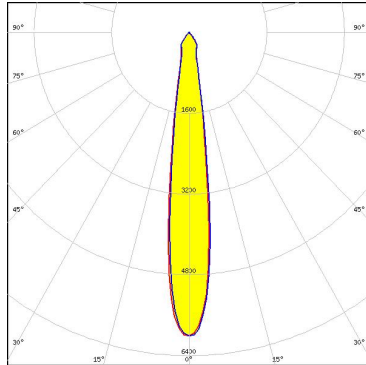


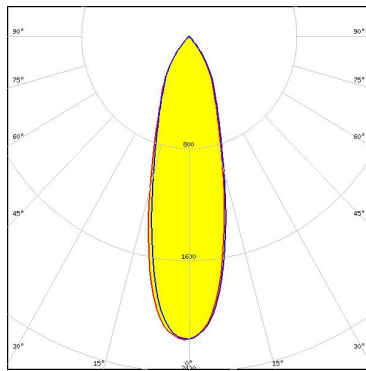


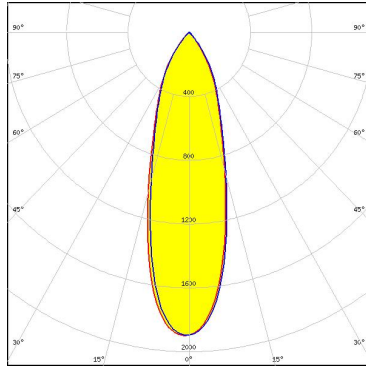
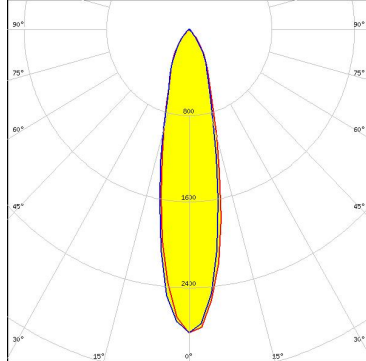
LED LC026B / 033B / 040B
 FWHM 21.0°
 Efficiency 87 %
 Peak intensity 3.300 cd/lm
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 450 Typ L2



LED ZC12/18
 FWHM 16.0°
 Efficiency 85 %
 Peak intensity 4.530 cd/lm
 Required components:
 C12691_LENINA-STD-BASE-CLL030
 C12606_LENINA-DL



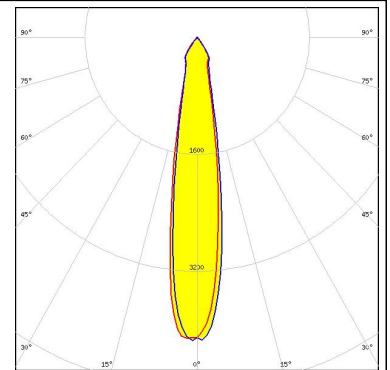
PHOTOMETRIC DATA (MEASURED):

<p> SEOUL SEMICONDUCTOR</p> <p>LED ZC12/18 FWHM 15.0° Efficiency 90 % Peak intensity 6.000 cd/lm Required components: C12691_LENINA-STD-BASE-CLL030</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED ZC25/40/60 FWHM 29.0° Efficiency 86 % Peak intensity 2.200 cd/lm Required components: C12692_LENINA-STD-BASE-CLL040</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED ZC25/40/60 FWHM 30.0° Efficiency 82 % Peak intensity 1.900 cd/lm Required components: C12692_LENINA-STD-BASE-CLL040 C12606_LENINA-DL</p>		
<p>SHARP</p> <p>LED Mega Zenigata (GW5DGC) FWHM 24.0° Efficiency 80 % Peak intensity 2.800 cd/lm Required components: C12292_LENINA-STD-BASE-MEZ C12606_LENINA-DL</p>		

PHOTOMETRIC DATA (MEASURED):

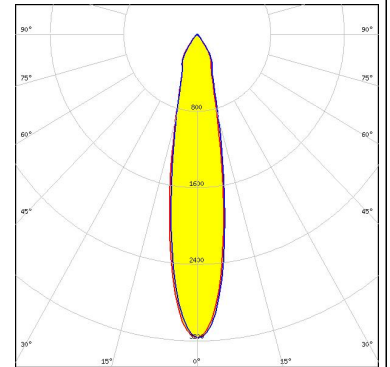
SHARP

LED Mega Zenigata (GW5DGC)
 FWHM 17.0°
 Efficiency 88 %
 Peak intensity cd/lm
 Required components:
 C12292_LENINA-STD-BASE-MEZ



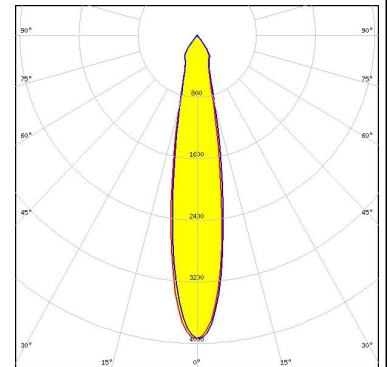
SHARP

LED Mega Zenigata (GW6DME)
 FWHM 21.0°
 Efficiency 83 %
 Peak intensity 3.170 cd/lm
 Required components:
 C12292_LENINA-STD-BASE-MEZ
 C12606_LENINA-DL



SHARP

LED Mega Zenigata (GW6DME)
 FWHM 19.0°
 Efficiency 88 %
 Peak intensity 3.940 cd/lm
 Required components:
 C12292_LENINA-STD-BASE-MEZ



PHOTOMETRIC DATA (SIMULATED):

<p>bridgelux.</p> <p>LED V10 Gen7</p> <p>FWHM 16.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 5.510 cd/lm</p> <p>Required components:</p> <p>C13868_LENINA-STD-BASE-VERO13-18</p> <p>C12606_LENINA-DL</p> <p>Bender Wirth: 434 Typ L1</p>	
<p>bridgelux.</p> <p>LED V10 Gen7</p> <p>FWHM 11.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 10.560 cd/lm</p> <p>Required components:</p> <p>C13868_LENINA-STD-BASE-VERO13-18</p> <p>Bender Wirth: 434 Typ L1</p>	
<p>bridgelux.</p> <p>LED V13 Gen7</p> <p>FWHM 18.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 4.480 cd/lm</p> <p>Required components:</p> <p>C13868_LENINA-STD-BASE-VERO13-18</p> <p>C12606_LENINA-DL</p> <p>Bender Wirth: 477 Typ L1</p>	
<p>bridgelux.</p> <p>LED V13 Gen7</p> <p>FWHM 18.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 4.080 cd/lm</p> <p>Required components:</p> <p>IDEAL: 50-2103CT + 50-2100AN</p>	

PHOTOMETRIC DATA (SIMULATED):

<p>bridgelux.</p> <p>LED V13 Gen7</p> <p>FWHM 16.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 6.070 cd/lm</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 477 Typ L1</p>	
<p>bridgelux.</p> <p>LED V13 Gen7</p> <p>FWHM 22.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 3.000 cd/lm</p> <p>Required components: C12606_LENINA-DL IDEAL: 50-2103CT + 50-2100AN</p>	
<p>bridgelux.</p> <p>LED V22 Gen7</p> <p>FWHM 27.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 2.682 cd/lm</p> <p>Required components: C13867_LENINA-STD-BASE-VERO29 Bender Wirth: 431 Typ L3</p>	
<p>bridgelux.</p> <p>LED V22 Gen7</p> <p>FWHM 26.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 2.528 cd/lm</p> <p>Required components: C13867_LENINA-STD-BASE-VERO29 C12606_LENINA-DL Bender Wirth: 431 Typ L3</p>	

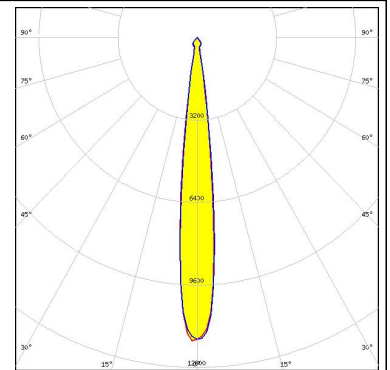
PHOTOMETRIC DATA (SIMULATED):



LED CXA/B 13xx
 FWHM 12.0°
 Efficiency 94 %
 Peak intensity 11.830 cd/lm

Required components:

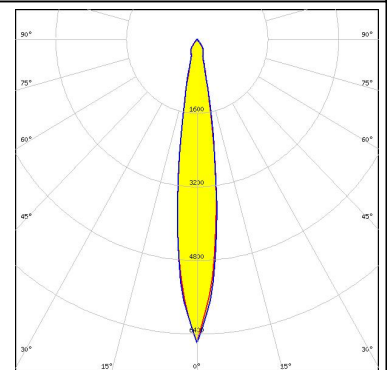
C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 448 Typ L1



LED CXA/B 13xx
 FWHM 15.0°
 Efficiency 91 %
 Peak intensity 6.590 cd/lm

Required components:

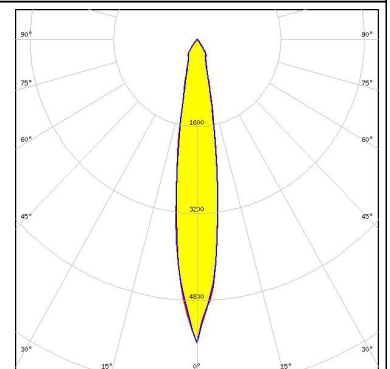
C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 448 Typ L1



LED CXA/B 1830
 FWHM 16.0°
 Efficiency 93 %
 Peak intensity 5.580 cd/lm

Required components:

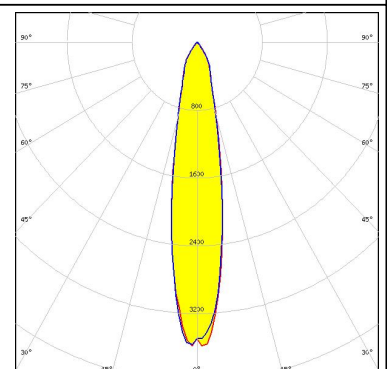
C14146_LENINA-STD-BASE-CXA18



LED CXA/B 1830
 FWHM 19.0°
 Efficiency 84 %
 Peak intensity 3.640 cd/lm

Required components:

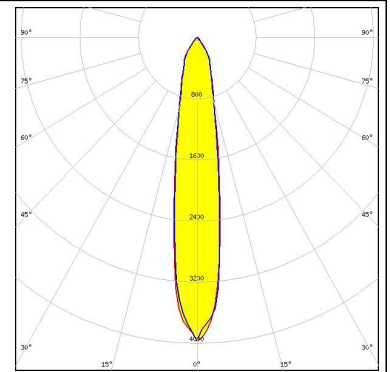
C14146_LENINA-STD-BASE-CXA18
 C12606_LENINA-DL



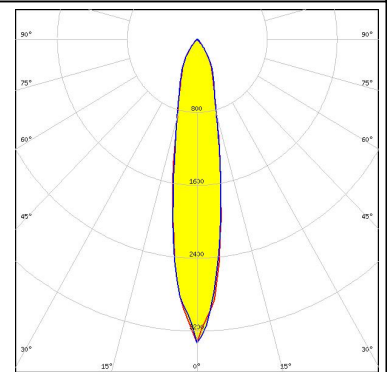
PHOTOMETRIC DATA (SIMULATED):



LED CXA/B 30xx
FWHM 18.0°
Efficiency 90 %
Peak intensity 4.000 cd/lm
Required components:
IDEAL: 50-2234C + 50-2100LN



LED CXA/B 30xx
FWHM 19.0°
Efficiency 84 %
Peak intensity 3.300 cd/lm
Required components:
C12606_LENINA-DL
IDEAL: 50-2234C + 50-2100LN



LED CXM-14
FWHM 17.0°
Efficiency 91 %
Peak intensity 5.500 cd/lm
Required components:
C13868_LENINA-STD-BASE-VERO13-18
Bender Wirth: 433 Typ L1



LED CXM-14
FWHM 17.0°
Efficiency 87 %
Peak intensity 4.500 cd/lm
Required components:
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 433 Typ L1

PHOTOMETRIC DATA (SIMULATED):



LED CXM-9
FWHM 13.0°
Efficiency 86 %
Peak intensity 6.900 cd/lm

Required components:

C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 434 Typ L1



LED CXM-9
FWHM 11.0°
Efficiency 91 %
Peak intensity 10.900 cd/lm

Required components:

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

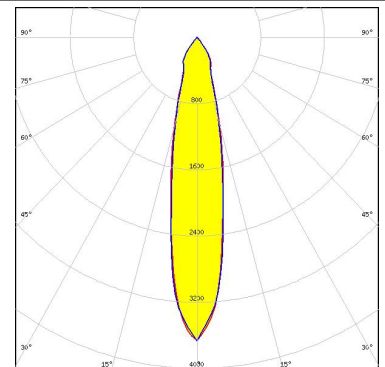


Opto Semiconductors

LED Soleriq S15
FWHM 20.0°
Efficiency 91 %
Peak intensity 3.660 cd/lm

Required components:

C12691_LENINA-STD-BASE-CLL030






LED ZC12/18
FWHM 17.0°
Efficiency 87 %
Peak intensity 4.500 cd/lm

Required components:

C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 433 Typ L1

PHOTOMETRIC DATA (SIMULATED):

 SEOUL SEMICONDUCTOR	
LED	ZC12/18
FWHM	17.0°
Efficiency	91 %
Peak intensity	5.500 cd/lm
Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 433 Typ L1	
 SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM	13.0°
Efficiency	86 %
Peak intensity	6.900 cd/lm
Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL Bender Wirth: 434 Typ L1	
 SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM	11.0°
Efficiency	91 %
Peak intensity	10.900 cd/lm
Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 434 Typ L1	

GENERAL INFORMATION:

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

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

MATERIALS:

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

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

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

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