

LENINA-M

~30° medium beam

SPECIFICATION:

Dimensions	Ø 74.0 mm
Height	40 mm
Fastening	socket
ROHS compliant	yes ⓘ

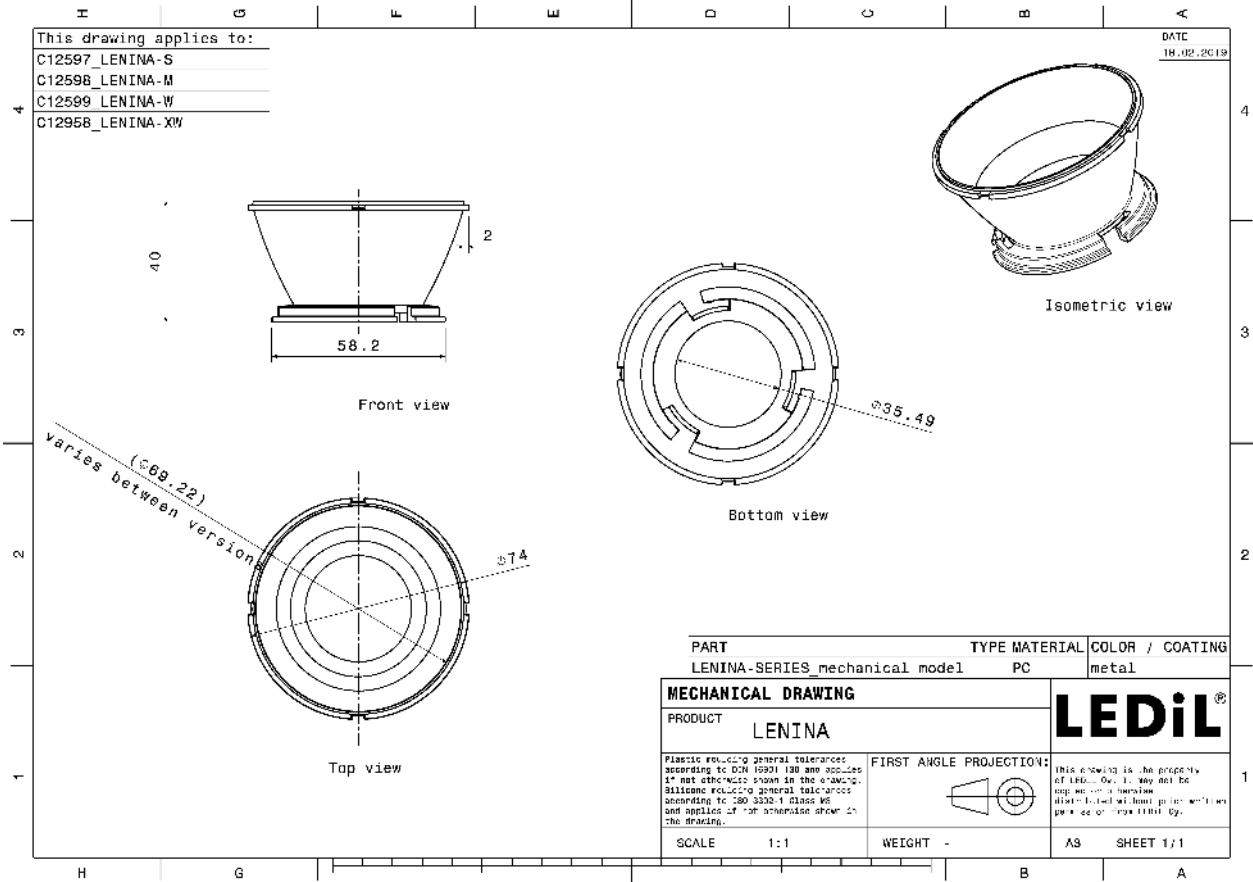
MATERIALS:

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




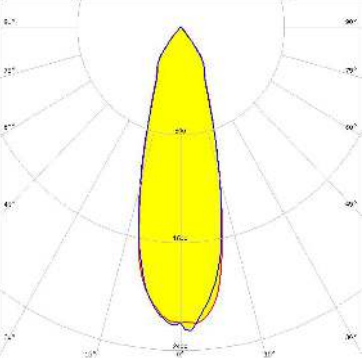

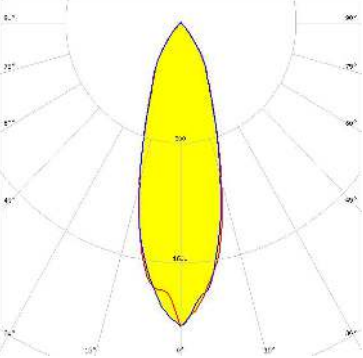

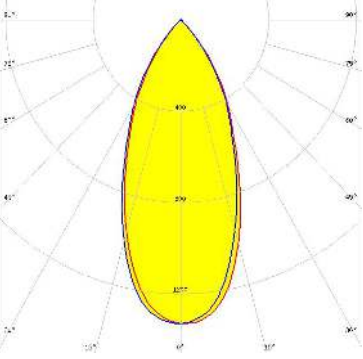

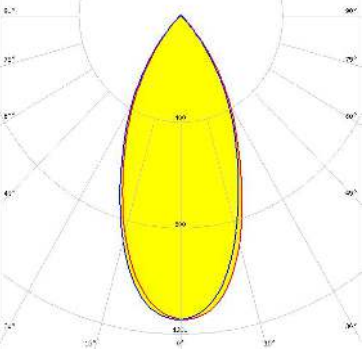
ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C12598_LENINA-M » Box size: 476 x 273 x 197 mm	60	120	60	2.0




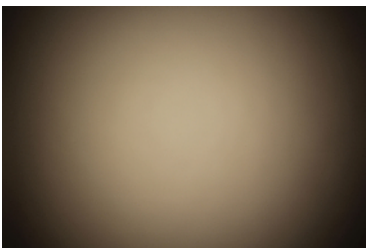
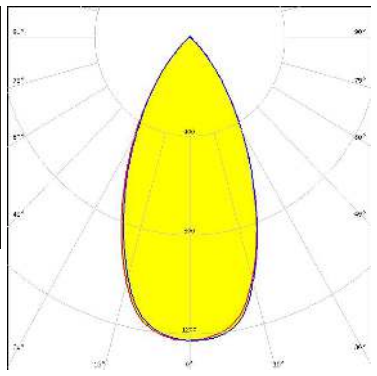

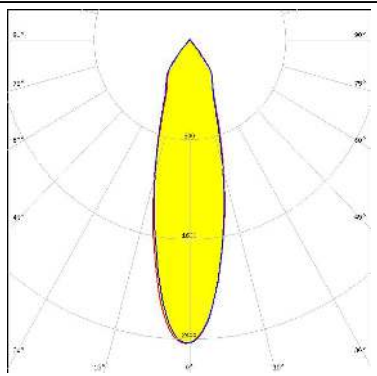

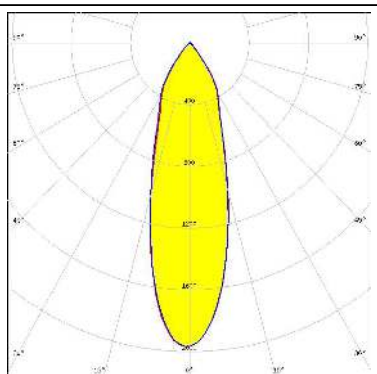


See also our general installation guide: www.ledil.com/installation_guide


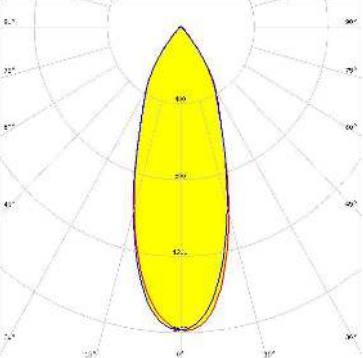

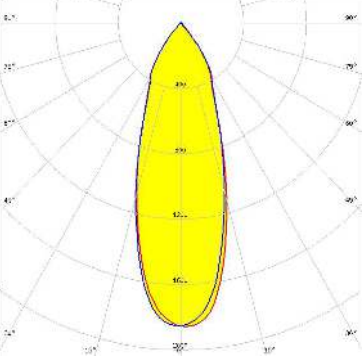

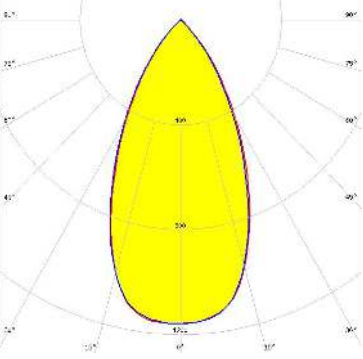

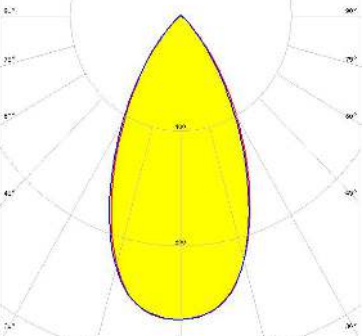
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED BXRA ES Rectangle FWHM / FWTM 29.0° / 75.0° Efficiency 86 % LEDs/each optic 1 Light colour White Required components: C12153_LENINA-STD-BASE-BXRA</p>	
<p></p> <p>LED BXRA ES Rectangle FWHM / FWTM 36.0° / 76.0° Efficiency 78 % LEDs/each optic 1 Light colour White Required components: C12153_LENINA-STD-BASE-BXRA C12606_LENINA-DL</p>	
<p></p> <p>LED BXRA RS FWHM / FWTM 44.0° / 82.0° Efficiency 88 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components: C12229_LENINA-STD-BASE-RS</p>	
<p></p> <p>LED BXRA RS FWHM / FWTM 47.0° / 89.0° Efficiency 80 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components: C12229_LENINA-STD-BASE-RS C12606_LENINA-DL</p>	

OPTICAL RESULTS (MEASURED):

<p></p> <p>LED V10 Gen6 FWHM / FWTM 21.0° / 68.0° Efficiency 84 % Peak intensity 3.2 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13186_LENINA-STD-BASE-CXA15 C12606_LENINA-DL</p>	
<p></p> <p>LED Vero SE 29 FWHM / FWTM 51.0° / 84.0° Efficiency 92 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C15083_LENINA-STD-BASE-VERO29</p>	 
<p></p> <p>LED VERO13 FWHM / FWTM 28.0° / 74.0° Efficiency 91 % Peak intensity 2.4 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18</p>	
<p></p> <p>LED VERO13 FWHM / FWTM 31.0° / 74.0° Efficiency 87 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL</p>	

OPTICAL RESULTS (MEASURED):

<p></p> <p>LED VERO18 FWHM / FWTM 37.0° / 77.0° Efficiency 86 % Peak intensity 1.6 cd/m LEDs/each optic 1 Light colour White Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL</p>	
<p></p> <p>LED VERO18 FWHM / FWTM 35.0° / 76.0° Efficiency 90 % Peak intensity 1.9 cd/m LEDs/each optic 1 Light colour White Required components: C13868_LENINA-STD-BASE-VERO13-18</p>	
<p></p> <p>LED VERO29 FWHM / FWTM 52.0° / 84.0° Efficiency 89 % Peak intensity 1.2 cd/m LEDs/each optic 1 Light colour White Required components: C13867_LENINA-STD-BASE-VERO29</p>	
<p></p> <p>LED VERO29 FWHM / FWTM 52.0° / 85.0° Efficiency 85 % Peak intensity 1.1 cd/m LEDs/each optic 1 Light colour White Required components: C13867_LENINA-STD-BASE-VERO29 C12606_LENINA-DL</p>	

OPTICAL RESULTS (MEASURED):

CITIZEN

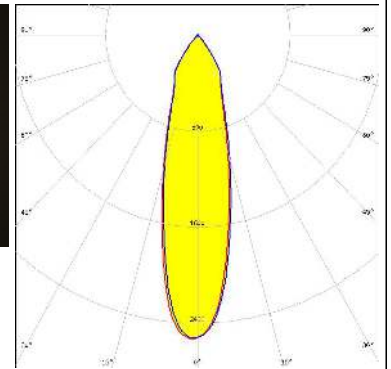
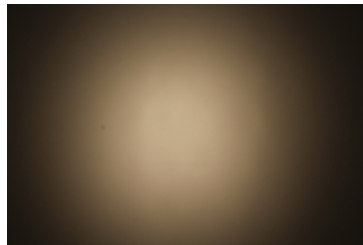
LED CL-L340
FWHM / FWTM 30.0° / 74.0°
Efficiency 86 %
LEDs/each optic 1
Light colour White
Required components:
C11995_LENINA-STD-BASE-CL340

CITIZEN

LED CL-L340
FWHM / FWTM 35.0° / 76.0°
Efficiency 78 %
LEDs/each optic 1
Light colour White
Required components:
C11995_LENINA-STD-BASE-CL340
C12606_LENINA-DL

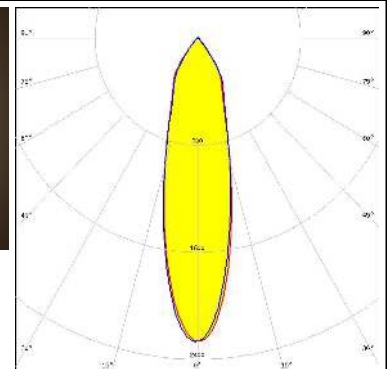
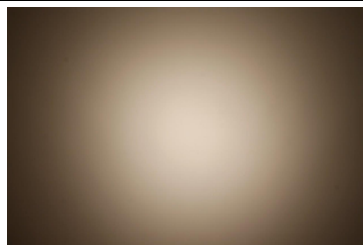
CITIZEN

LED CL-L340
FWHM / FWTM 26.0° / 71.0°
Efficiency 92 %
Peak intensity 2.5 cd/m
LEDs/each optic 1
Light colour White
Required components:
C11995_LENINA-STD-BASE-CL340



CITIZEN

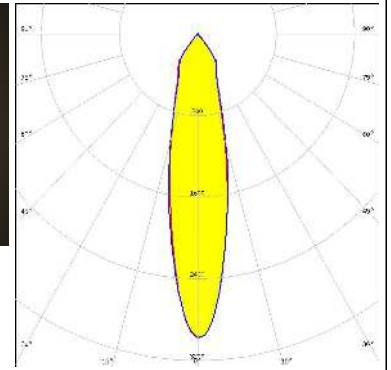
LED CLL02x/CLU02x (LES10)
FWHM / FWTM 26.0° / 71.0°
Efficiency 87 %
Peak intensity 2.3 cd/m
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 434 Typ L1



OPTICAL RESULTS (MEASURED):

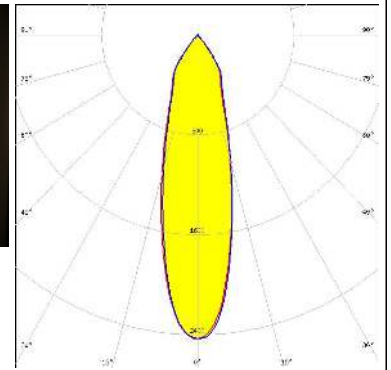
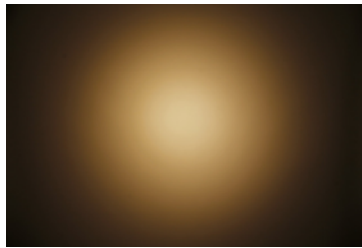
CITIZEN

LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 23.0° / 71.0°
 Efficiency 91 %
 Peak intensity 3 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 434 Typ L1



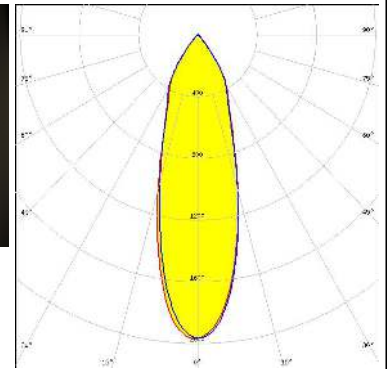
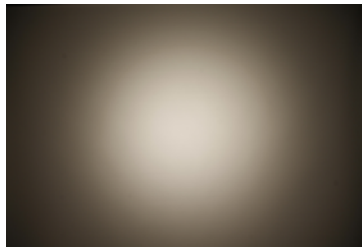
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 28.0° / 73.0°
 Efficiency 91 %
 Peak intensity 2.4 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENINA-STD-BASE-CLL030



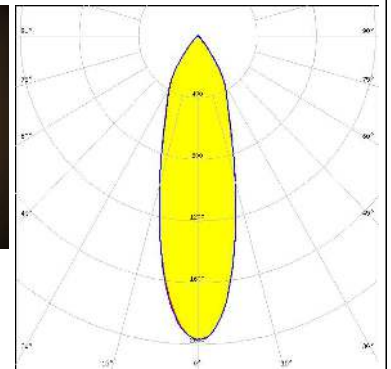
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 31.0° / 73.0°
 Efficiency 88 %
 Peak intensity 2 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 433 Typ L1



CITIZEN

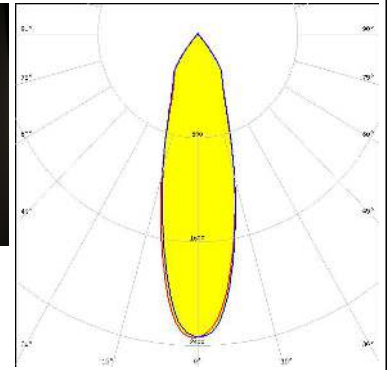
LED CLL03x/CLU03x
 FWHM / FWTM 30.0° / 73.0°
 Efficiency 87 %
 Peak intensity 2 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENINA-STD-BASE-CLL030
 C12606_LENINA-DL



OPTICAL RESULTS (MEASURED):

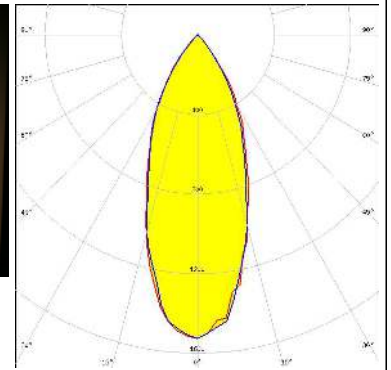
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 29.0° / 73.0°
 Efficiency 91 %
 Peak intensity 2.3 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 433 Typ L1



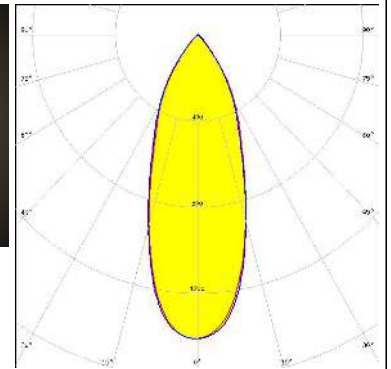
CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 40.0° / 77.0°
 Efficiency 86 %
 Peak intensity 1.5 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040



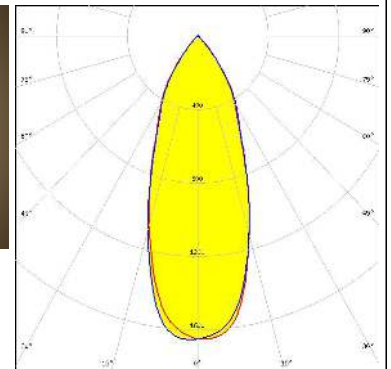
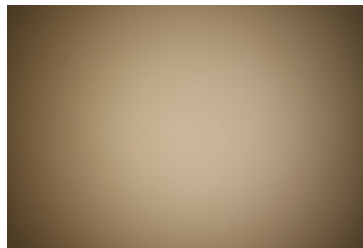
CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 38.0° / 77.0°
 Efficiency 76 %
 Peak intensity 1.4 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C12606_LENINA-DL
 A.A.G. STUCCHI: 8102-G2 + S-8000-12



CITIZEN

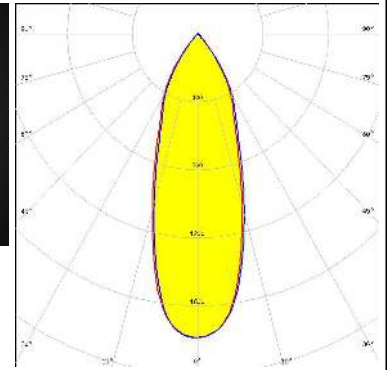
LED CLL04x/CLU04x
 FWHM / FWTM 39.0° / 78.0°
 Efficiency 92 %
 Peak intensity 1.7 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 Bender Wirth: 431 Typ L3



OPTICAL RESULTS (MEASURED):

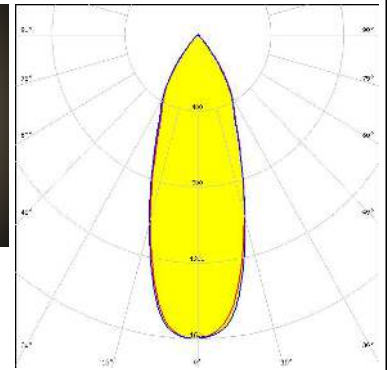
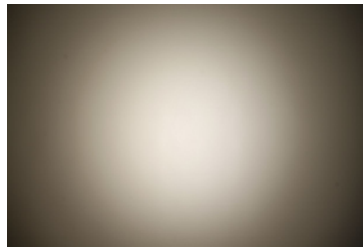
CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 35.0° / 75.0°
 Efficiency 90 %
 Peak intensity 1.8 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 IDEAL: 50-2204CT + 50-2100LN



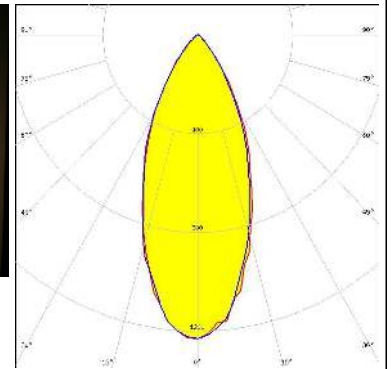
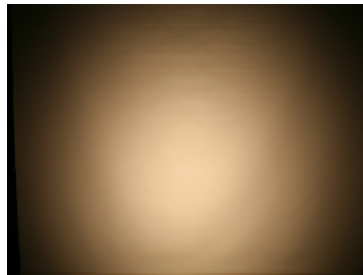
CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 36.0° / 76.0°
 Efficiency 83 %
 Peak intensity 1.6 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 A.A.G. STUCCHI: 8102-G2 + S-8000-12



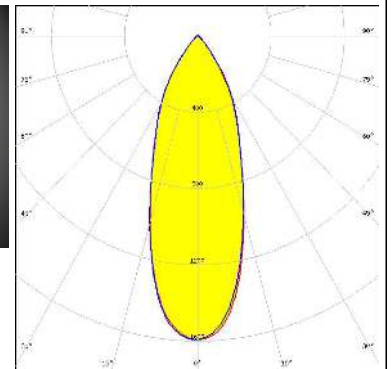
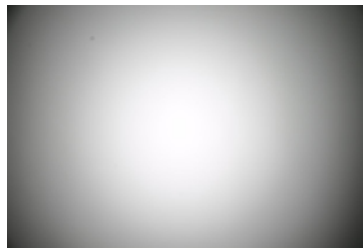
CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 43.0° / 80.0°
 Efficiency 78 %
 Peak intensity 1.2 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040
 C12606_LENINA-DL



CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 37.0° / 76.0°
 Efficiency 87 %
 Peak intensity 1.6 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C12606_LENINA-DL
 IDEAL: 50-2204CT + 50-2100LN



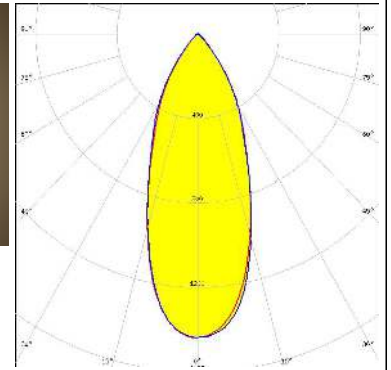
OPTICAL RESULTS (MEASURED):

CITIZEN

LED CLL04x/CLU04x
 FWHM / FWTM 40.0° / 78.0°
 Efficiency 87 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

C13867_LENINA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 431 Typ L3

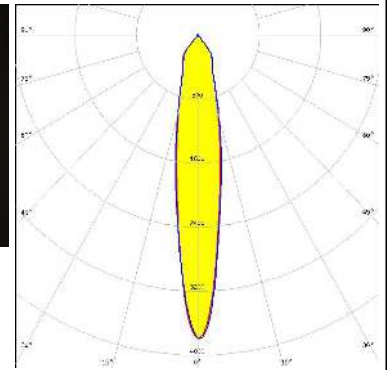


CITIZEN

LED CLU700/701/702/703
 FWHM / FWTM 17.0° / 60.0°
 Efficiency 91 %
 Peak intensity 3.8 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

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

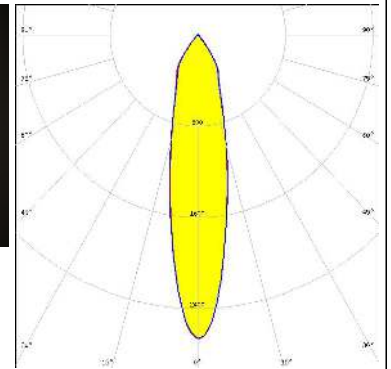
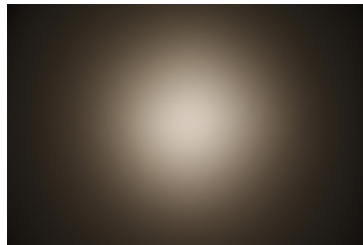


CITIZEN

LED CLU700/701/702/703
 FWHM / FWTM 23.0° / 70.0°
 Efficiency 87 %
 Peak intensity 2.7 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

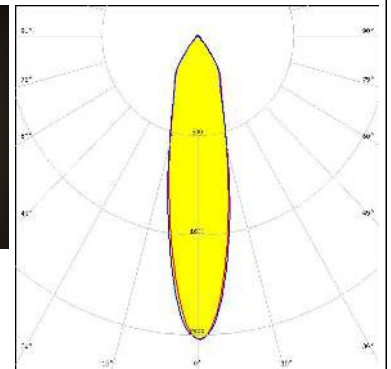
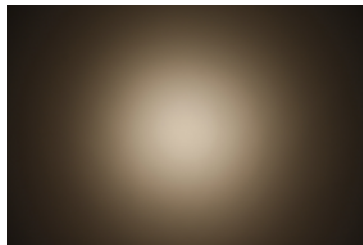


CITIZEN

LED CLU710/711
 FWHM / FWTM 24.0° / 71.0°
 Efficiency 89 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

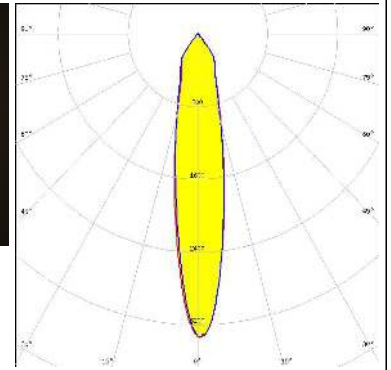
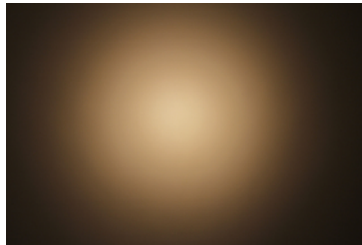
C12691_LENINA-STD-BASE-CLL030
 C12606_LENINA-DL



OPTICAL RESULTS (MEASURED):

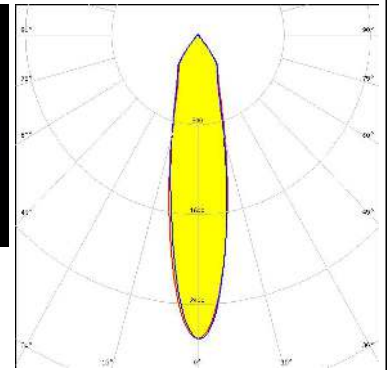
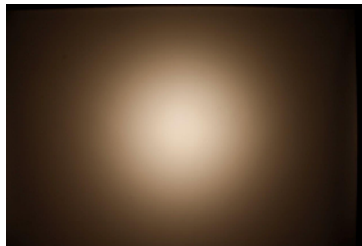
CITIZEN

LED CLU710/711
 FWHM / FWTM 19.0° / 68.0°
 Efficiency 93 %
 Peak intensity 3.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENINA-STD-BASE-CLL030



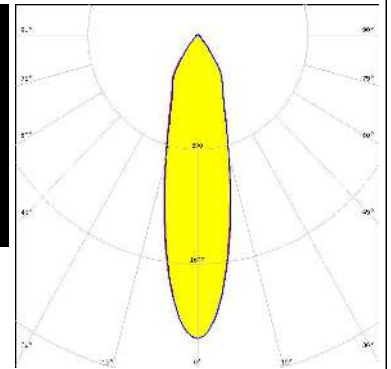
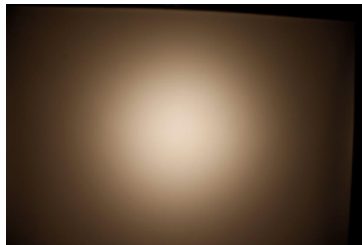
CITIZEN

LED CLU720/721/723
 FWHM / FWTM 23.0° / 71.0°
 Efficiency 88 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENINA-STD-BASE-CLL030



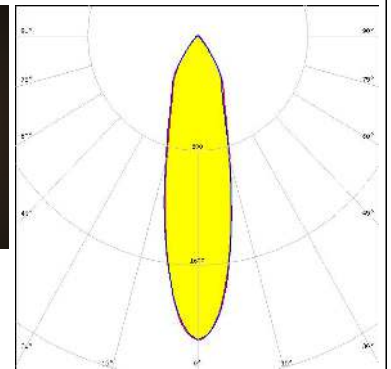
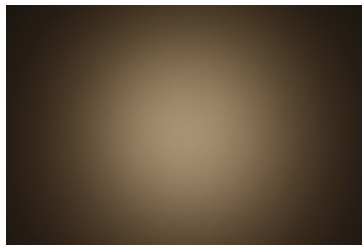
CITIZEN

LED CLU720/721/723
 FWHM / FWTM 26.0° / 72.0°
 Efficiency 84 %
 Peak intensity 2.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENINA-STD-BASE-CLL030
 C12606_LENINA-DL



CITIZEN

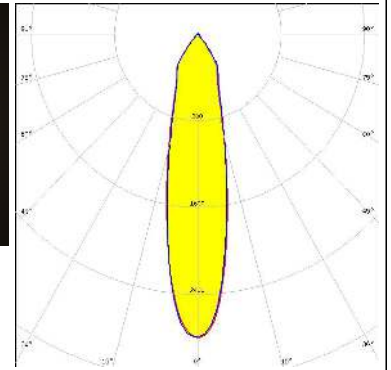
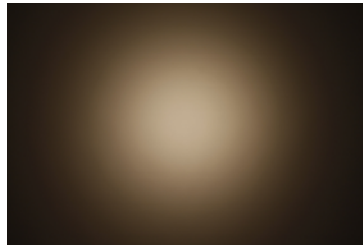
LED CLU730/731/733
 FWHM / FWTM 26.0° / 71.0°
 Efficiency 84 %
 Peak intensity 2.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040
 C12606_LENINA-DL



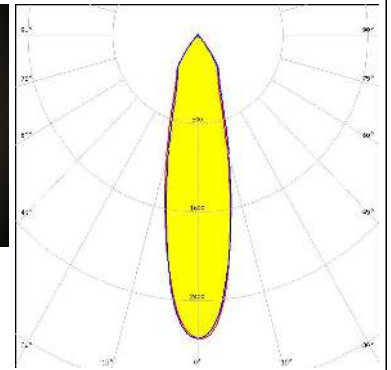
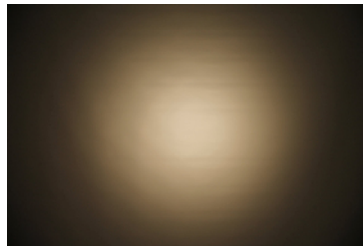
OPTICAL RESULTS (MEASURED):

CITIZEN

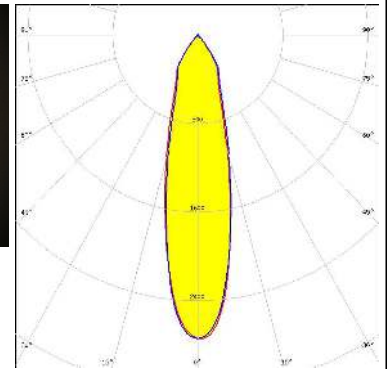
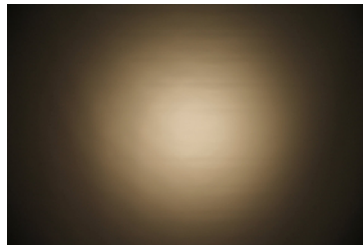
LED CLU730/731/733
 FWHM / FWTM 24.0° / 70.0°
 Efficiency 94 %
 Peak intensity 2.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040



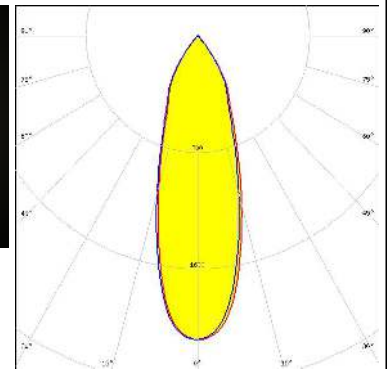
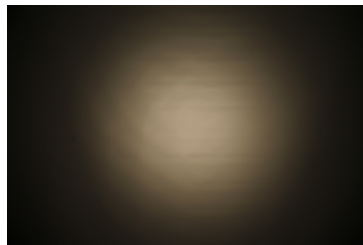
LED CMA1840
 FWHM / FWTM 25.0° / 70.0°
 Efficiency 92 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14146_LENINA-STD-BASE-CXA18



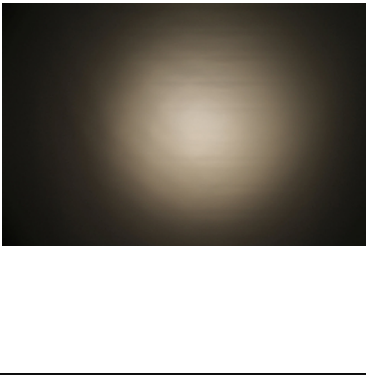
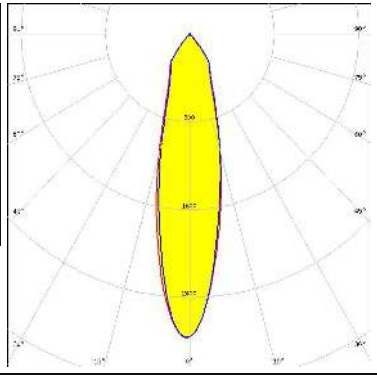

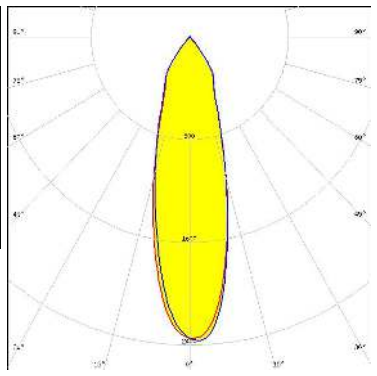

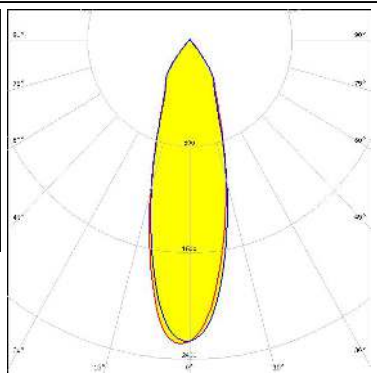
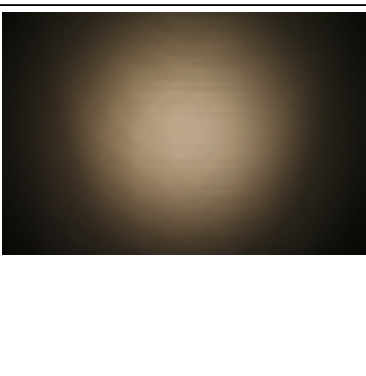
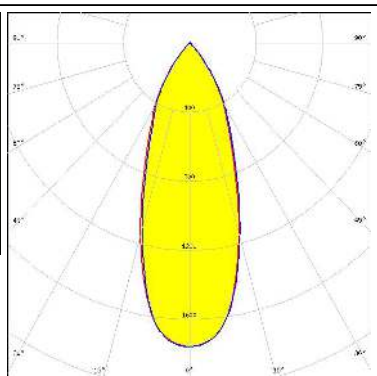
LED CMA1840
 FWHM / FWTM 25.0° / 70.0°
 Efficiency 92 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14146_LENINA-STD-BASE-CXA18



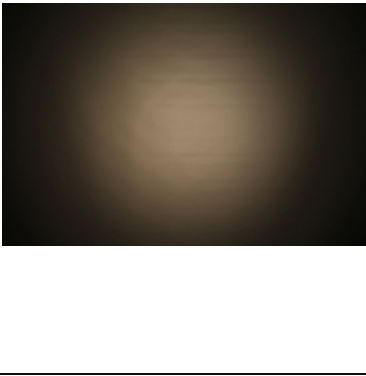
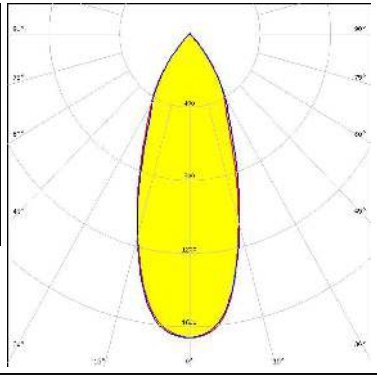
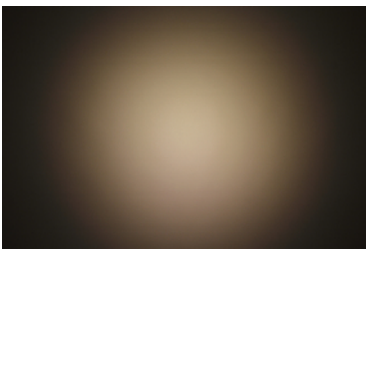
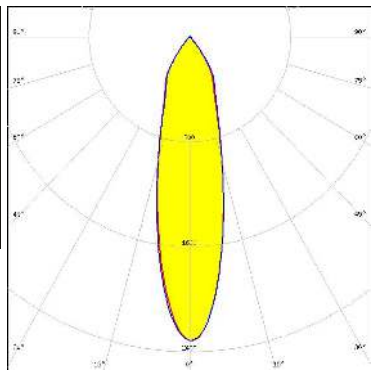

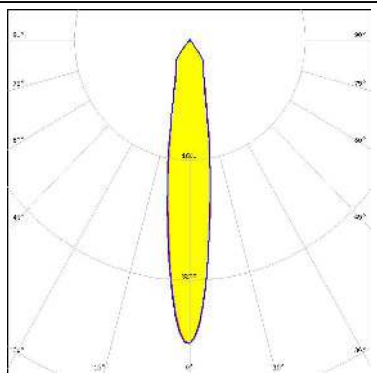

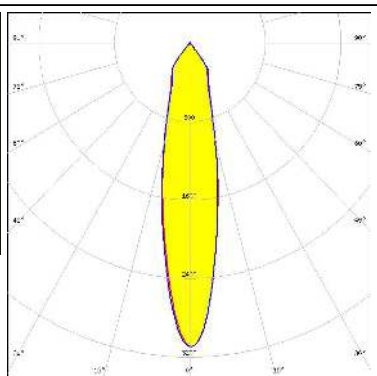
LED CMA2550
 FWHM / FWTM 32.0° / 73.0°
 Efficiency 92 %
 Peak intensity 2.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13324_LENINA-STD-BASE-CXA25




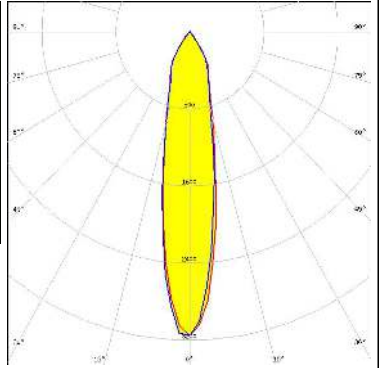
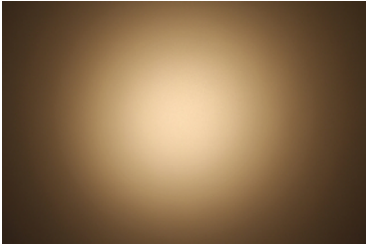
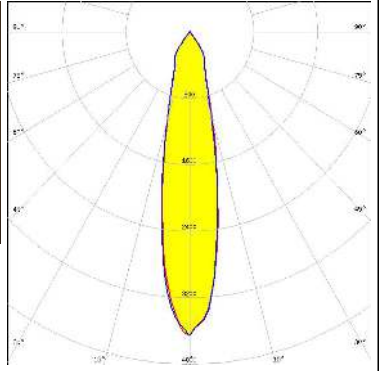
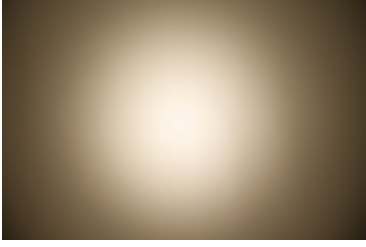
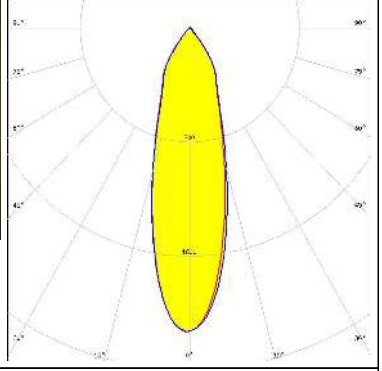
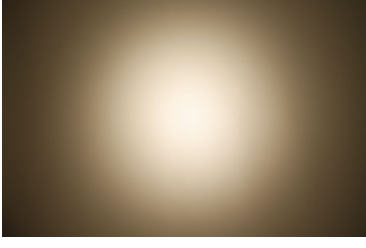
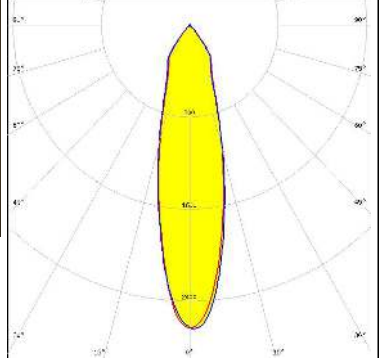
OPTICAL RESULTS (MEASURED):

<p>CREE LEDs</p> <p>LED CMT14xx FWHM / FWTM 25.0° / 73.0° Efficiency 92 % Peak intensity 2.8 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 434 Typ L1</p>		
<p>CREE LEDs</p> <p>LED CMT19xx FWHM / FWTM 29.0° / 73.0° Efficiency 92 % Peak intensity 2.4 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C12691_LENINA-STD-BASE-CLL030</p>		
<p>CREE LEDs</p> <p>LED CMT19xx FWHM / FWTM 30.0° / 74.0° Efficiency 92 % Peak intensity 2.3 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 477 Typ L1</p>		
<p>CREE LEDs</p> <p>LED CMT28xx FWHM / FWTM 37.0° / 76.0° Efficiency 92 % Peak intensity 1.8 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C12692_LENINA-STD-BASE-CLL040</p>		


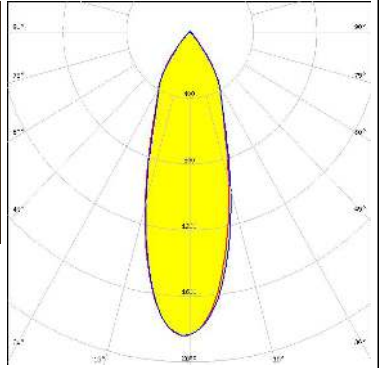
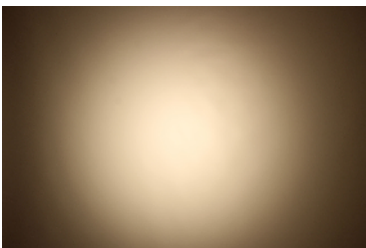
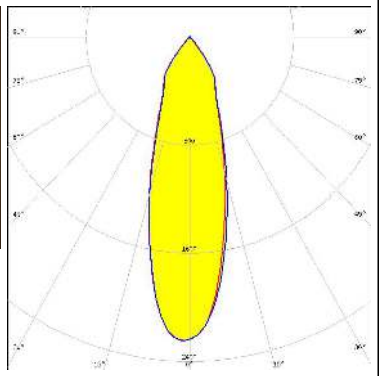

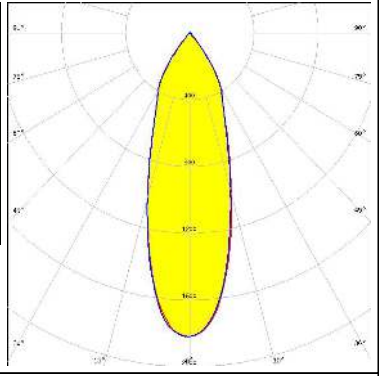
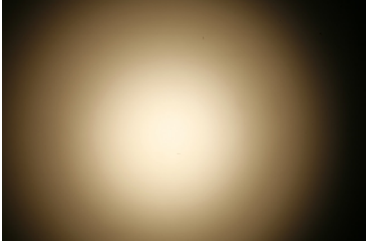
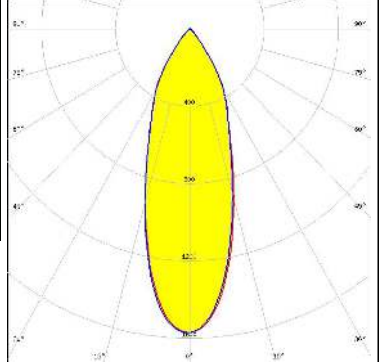
OPTICAL RESULTS (MEASURED):

<p>CREE LEDs</p> <p>LED CMT28xx FWHM / FWTM 39.0° / 77.0° Efficiency 92 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13867_LENINA-STD-BASE-VERO29 Bender Wirth: 471 Typ L3</p>		
<p>CREE LEDs</p> <p>LED CXA/B 15xx FWHM / FWTM 26.0° / 71.0° Efficiency 87 % Peak intensity 2.3 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL Bender Wirth: 441 Typ L1</p>		
<p>CREE LEDs</p> <p>LED CXA/B 15xx FWHM / FWTM 17.0° / 56.0° Efficiency 91 % Peak intensity 4.1 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13186_LENINA-STD-BASE-CXA15</p>		
<p>CREE LEDs</p> <p>LED CXA/B 15xx FWHM / FWTM 22.0° Efficiency % Peak intensity 3.1 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 441 Typ L1</p>		

OPTICAL RESULTS (MEASURED):

<p>CREE LEDs</p> <p>LED CXA/B 15xx FWHM / FWTM 22.0° / 66.0° Efficiency 86 % Peak intensity 3.2 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13186_LENINA-STD-BASE-CXA15 C12606_LENINA-DL</p>		
<p>CREE LEDs</p> <p>LED CXA/B 1816 & CXA/B 1820 & CXA 1850 FWHM / FWTM 21.0° / 72.0° Efficiency 92 % Peak intensity 3.9 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C14146_LENINA-STD-BASE-CXA18</p>		
<p>CREE LEDs</p> <p>LED CXA/B 1816 & CXA/B 1820 & CXA 1850 FWHM / FWTM 29.0° / 73.0° Efficiency 88 % Peak intensity 2.1 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL Bender Wirth: 437 Typ L1</p>		
<p>CREE LEDs</p> <p>LED CXA/B 1816 & CXA/B 1820 & CXA 1850 FWHM / FWTM 26.0° / 73.0° Efficiency 92 % Peak intensity 2.6 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 437 Typ L1</p>		

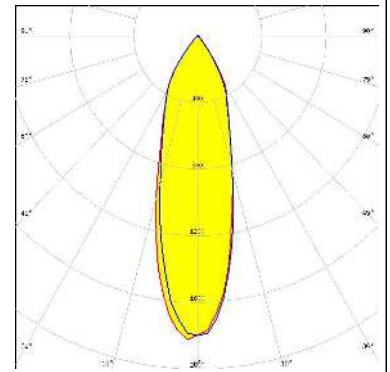
OPTICAL RESULTS (MEASURED):

<p>CREE LEDs</p> <p>LED CXA/B 1830 FWHM / FWTM 33.0° / 74.0° Efficiency 88 % Peak intensity 1.9 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL Bender Wirth: 437 Typ L1</p>		
<p>CREE LEDs</p> <p>LED CXA/B 1830 FWHM / FWTM 30.0° / 74.0° Efficiency 93 % Peak intensity 2.3 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 437 Typ L1</p>		
<p>CREE LEDs</p> <p>LED CXA/B 25xx FWHM / FWTM 33.0° / 74.0° Efficiency 86 % Peak intensity 1.9 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13324_LENINA-STD-BASE-CXA25</p>		
<p>CREE LEDs</p> <p>LED CXA/B 25xx FWHM / FWTM 35.0° / 74.0° Efficiency 78 % Peak intensity 1.6 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13324_LENINA-STD-BASE-CXA25 C12606_LENINA-DL</p>		

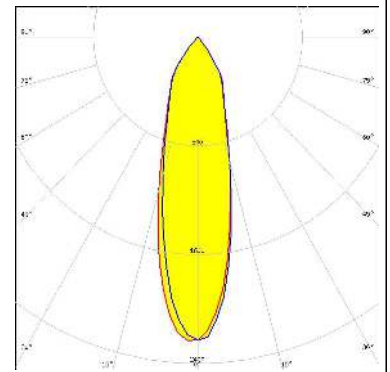
OPTICAL RESULTS (MEASURED):



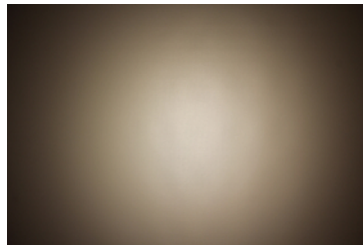
LED CXA2011
 FWHM / FWTM 33.0° / 76.0°
 Efficiency 77 %
 Peak intensity 1.8 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C12105_LENINA-STD-BASE-CXA20
 C12606_LENINA-DL



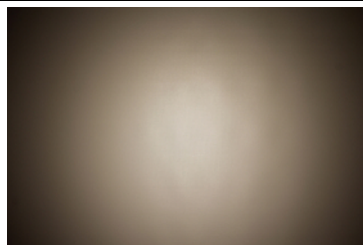
LED CXA2011
 FWHM / FWTM 28.0° / 73.0°
 Efficiency 85 %
 Peak intensity 2.2 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C12105_LENINA-STD-BASE-CXA20



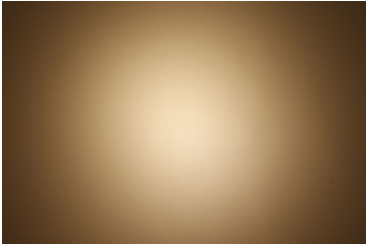
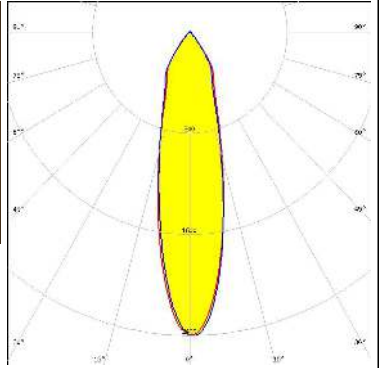
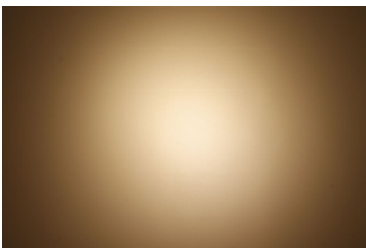
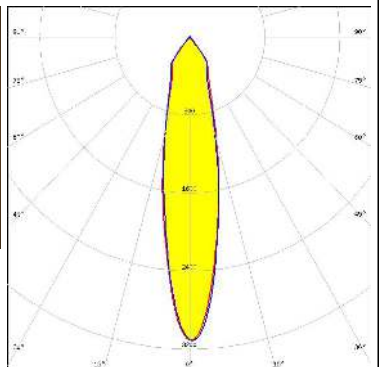
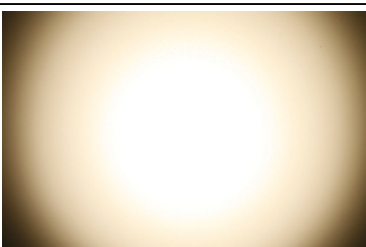
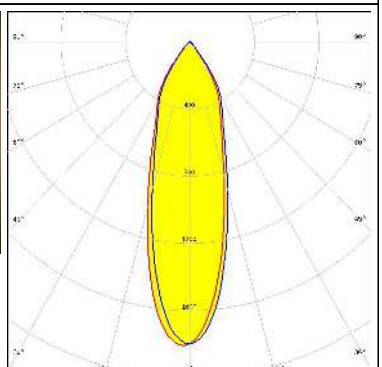
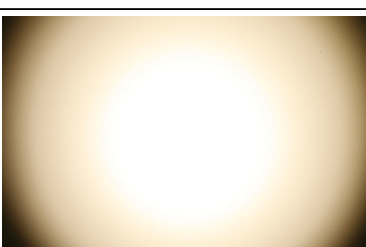
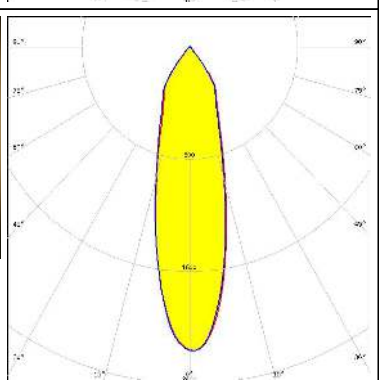
LED CHI3030 19W
 FWHM / FWTM 39.0° / 80.0°
 Efficiency 91 %
 Peak intensity 1.5 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 468 Typ L3



LED CHI3030 29W
 FWHM / FWTM 47.0° / 84.0°
 Efficiency 87 %
 Peak intensity 1.2 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 468 Typ L3



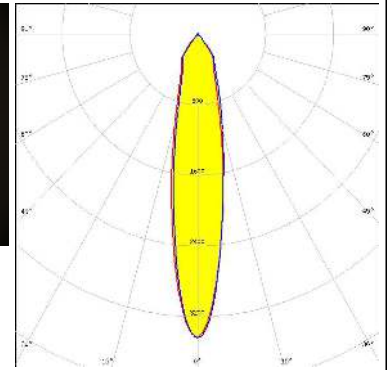
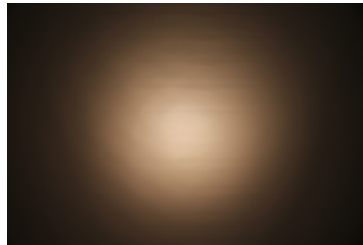
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1202/1203</p> <p>FWHM / FWTM 26.0° / 71.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 2.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL Bender Wirth: 438 Typ L1</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1202/1203</p> <p>FWHM / FWTM 22.0° / 71.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 3.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 438 Typ L1</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1204/1205</p> <p>FWHM / FWTM 30.0° / 74.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12292_LENINA-STD-BASE-MEZ C12606_LENINA-DL</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1204/1205</p> <p>FWHM / FWTM 28.0° / 74.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 2.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12292_LENINA-STD-BASE-MEZ</p>		

OPTICAL RESULTS (MEASURED):

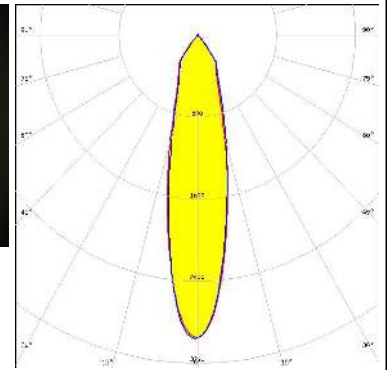
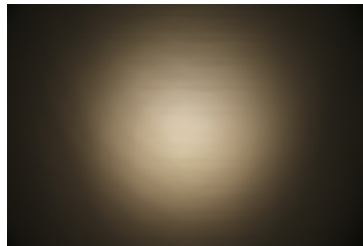
LUMILEDS

LED LUXEON CoB 1204HD
 FWHM / FWTM 20.0° / 65.0°
 Efficiency 92 %
 Peak intensity 3.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C11981_LENINA-STD-BASE-COB-L110



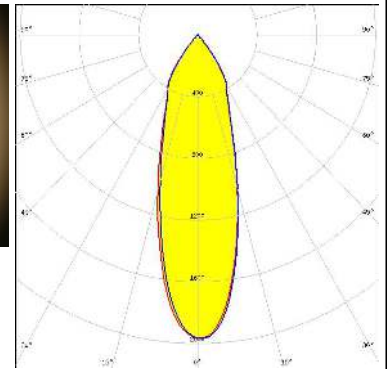
LUMILEDS

LED LUXEON CoB 1205HD
 FWHM / FWTM 23.0° / 70.0°
 Efficiency 92 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C11981_LENINA-STD-BASE-COB-L110



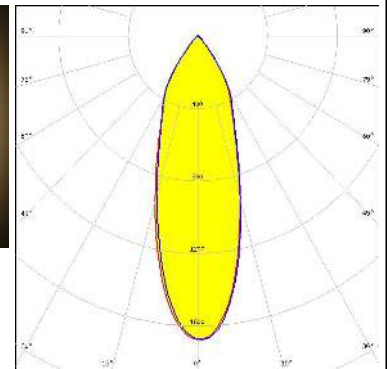
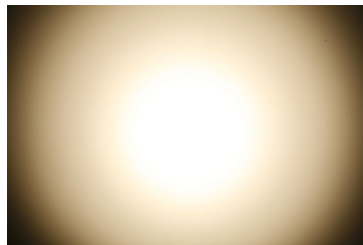
LUMILEDS

LED LUXEON CoB 1208
 FWHM / FWTM 31.0° / 75.0°
 Efficiency 88 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENINA-STD-BASE-MEZ



LUMILEDS

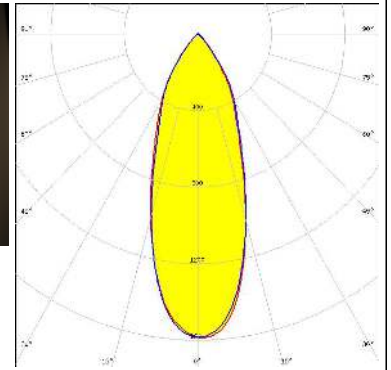
LED LUXEON CoB 1208
 FWHM / FWTM 33.0° / 75.0°
 Efficiency 83 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENINA-STD-BASE-MEZ
 C12606_LENINA-DL



OPTICAL RESULTS (MEASURED):

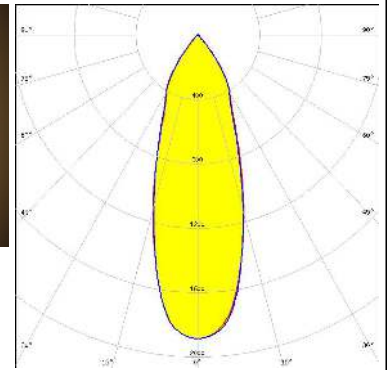
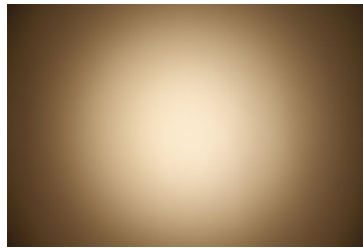
LUMILEDS

LED LUXEON CoB 1211
 FWHM / FWTM 37.0° / 77.0°
 Efficiency 87 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 431 Typ L3



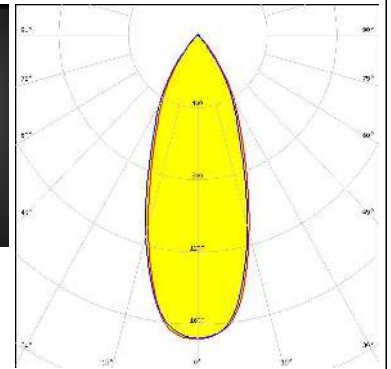
LUMILEDS

LED LUXEON CoB 1211
 FWHM / FWTM 35.0° / 76.0°
 Efficiency 93 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENINA-STD-BASE-VERO29
 Bender Wirth: 431 Typ L3



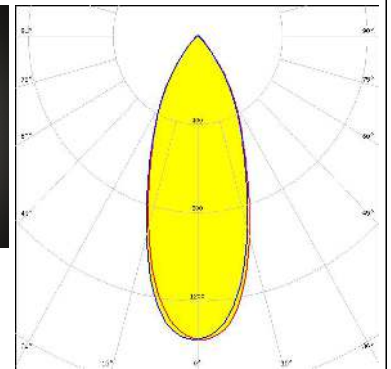
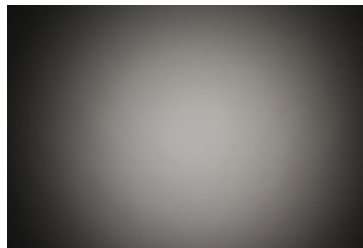
LUMILEDS

LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM 39.0° / 76.0°
 Efficiency 92 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040


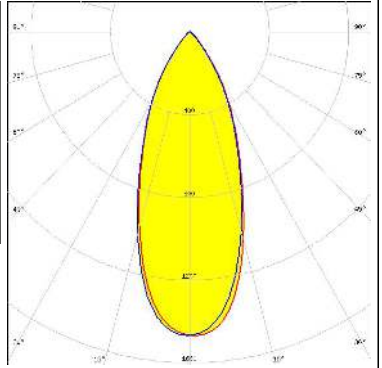
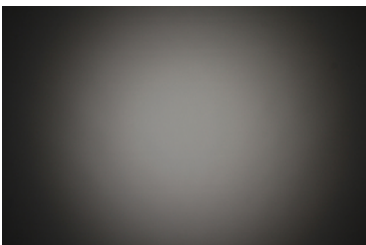
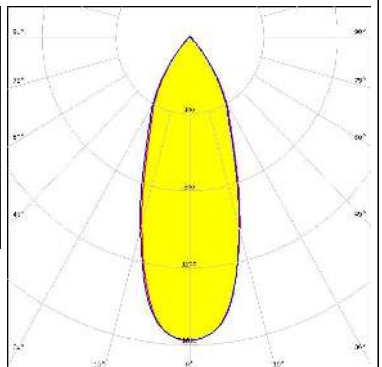

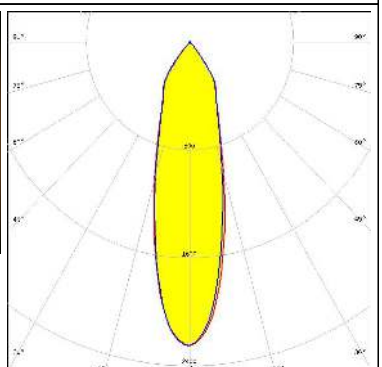
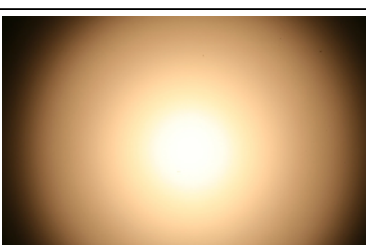
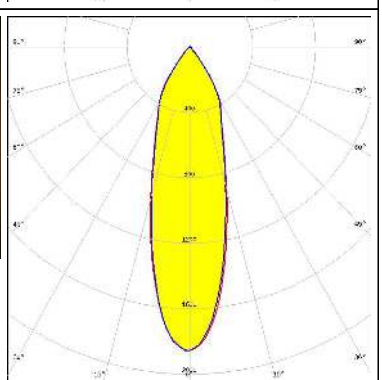


LUMILEDS

LED LUXEON CoB 1213/1216/1812
 FWHM / FWTM 39.0° / 77.0°
 Efficiency 81 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12606_LENINA-DL
 A.A.G. STUCCHI: 8102-G2 + S-8000-12



OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1213/1216/1812</p> <p>FWHM / FWTM 40.0° / 77.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.5 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12692_LENINA-STD-BASE-CLL040 C12606_LENINA-DL</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1213/1216/1812</p> <p>FWHM / FWTM 38.0° / 77.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 1.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: A.A.G. STUCCHI: 8102-G2 + S-8000-12</p>		
<p>LUMILEDS</p> <p>LED LUXEON K12</p> <p>FWHM / FWTM 28.0° / 74.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 2.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12924_LENINA-STD-BASE-LUXEON-K</p>		
<p>LUMILEDS</p> <p>LED LUXEON K12</p> <p>FWHM / FWTM 30.0° / 73.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12924_LENINA-STD-BASE-LUXEON-K C12606_LENINA-DL</p>		

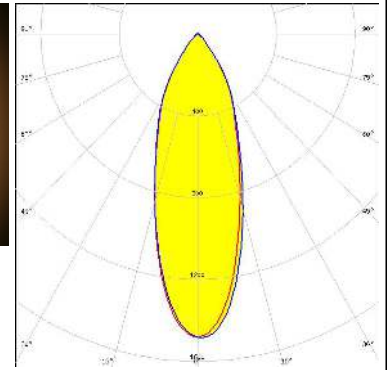
OPTICAL RESULTS (MEASURED):

LUMILEDS

LED LUXEON K16
FWHM / FWTM 34.0° / 75.0°
Efficiency 79 %
Peak intensity 1.5 cd/lm
LEDs/each optic 1
Light colour White

Required components:

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

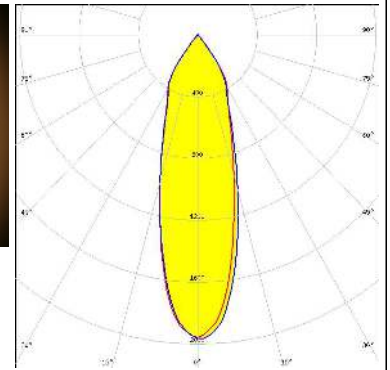


LUMILEDS

LED LUXEON K16
FWHM / FWTM 30.0° / 74.0°
Efficiency 85 %
Peak intensity 2 cd/lm
LEDs/each optic 1
Light colour White

Required components:

C12924_LENINA-STD-BASE-LUXEON-K

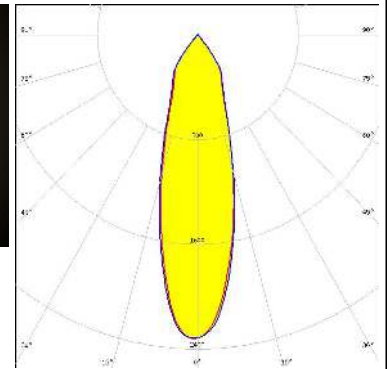
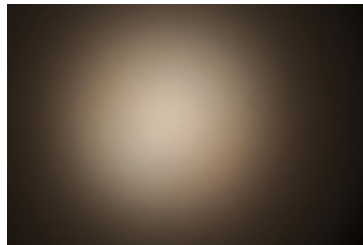


LUMINUS

LED CDM-14 (Dim-To-Warm)
FWHM / FWTM 29.0° / 74.0°
Efficiency 92 %
Peak intensity 2.3 cd/lm
LEDs/each optic 1
Light colour White

Required components:

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

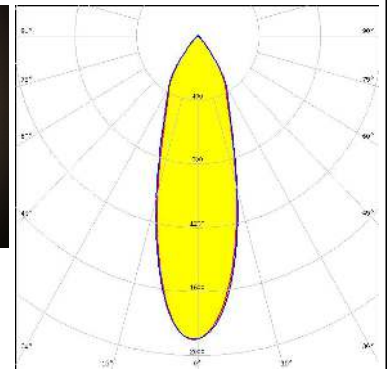
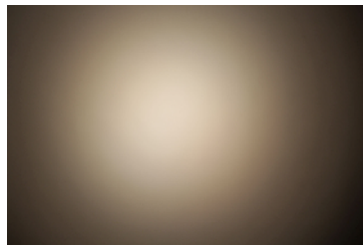


LUMINUS

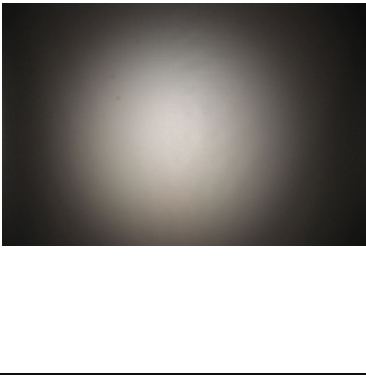
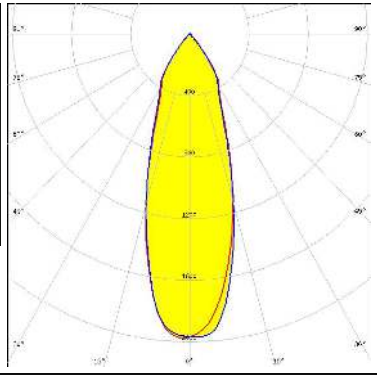
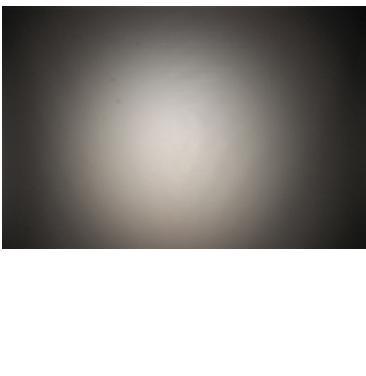
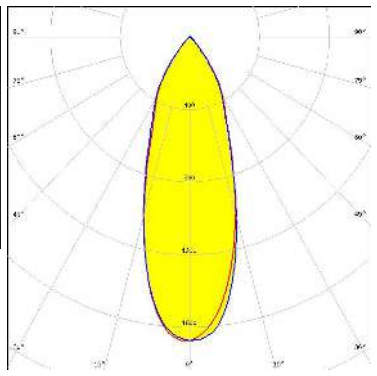

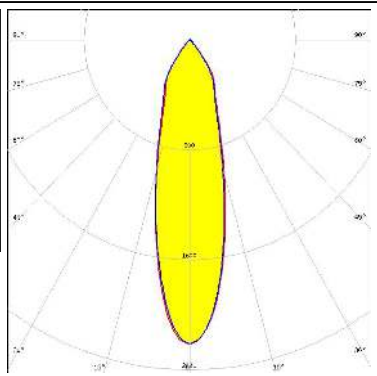

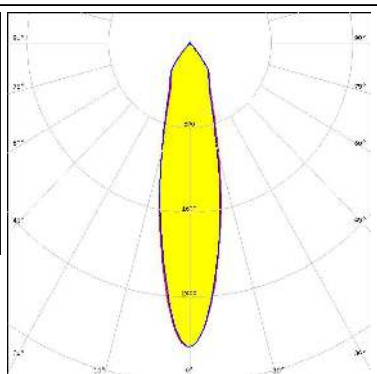
LED CDM-14 (Dim-To-Warm)
FWHM / FWTM 31.0° / 74.0°
Efficiency 88 %
Peak intensity 1.9 cd/lm
LEDs/each optic 1
Light colour White

Required components:


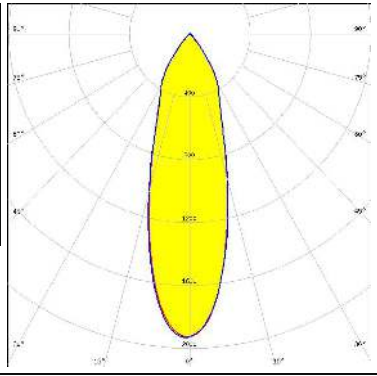

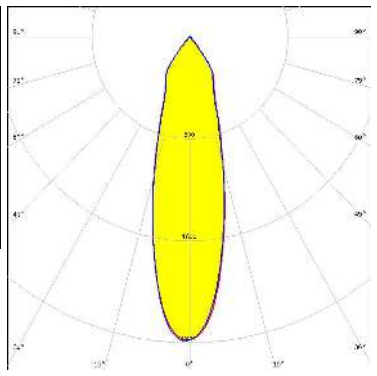

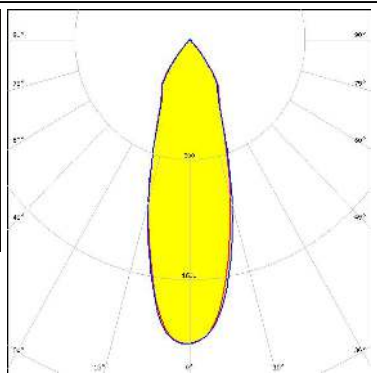
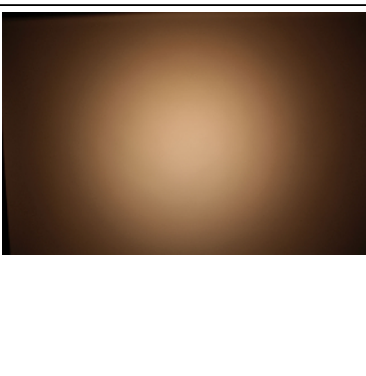
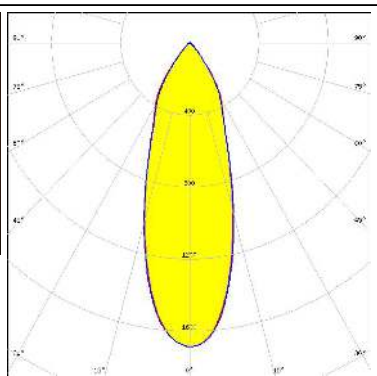
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 491 Typ L2



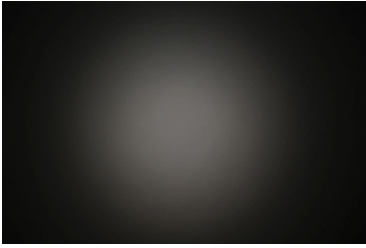
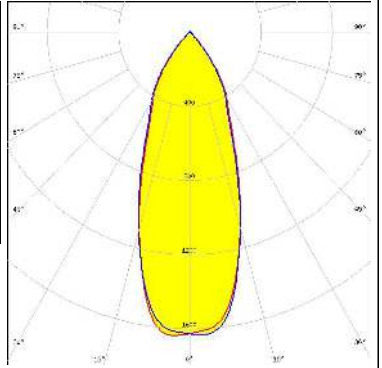

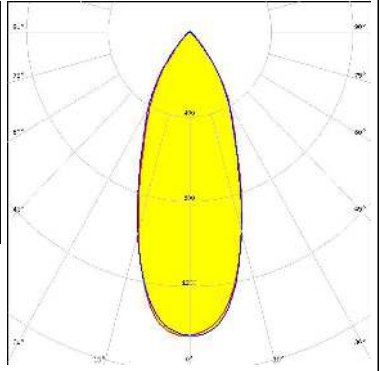
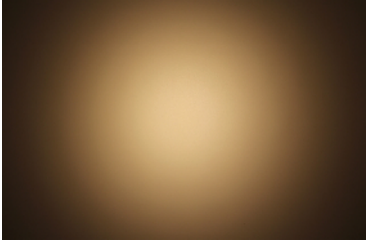
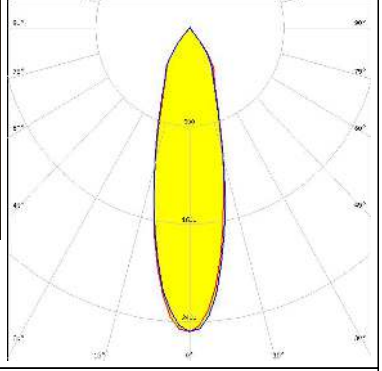
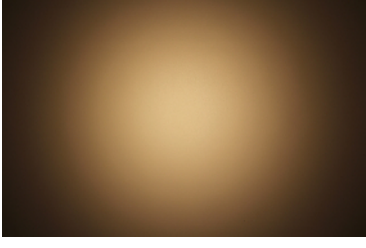
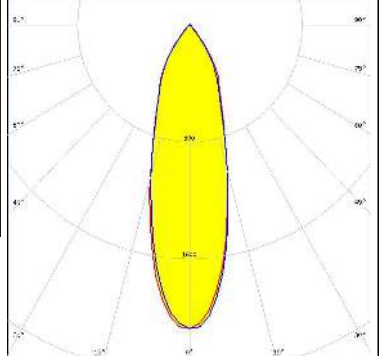
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CDM-18 (Dim-To-Warm) FWHM / FWTM 34.0° / 75.0° Efficiency 92 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 491 Typ L2</p>		
<p>LUMINUS</p> <p>LED CDM-18 (Dim-To-Warm) FWHM / FWTM 36.0° / 76.0° Efficiency 88 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL Bender Wirth: 491 Typ L2</p>		
<p>LUMINUS</p> <p>LED CDM-9 (Dim-To-Warm) FWHM / FWTM 27.0° / 72.0° Efficiency 87 % Peak intensity 2.2 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL Bender Wirth: 490 Typ L1</p>		
<p>LUMINUS</p> <p>LED CDM-9 (Dim-To-Warm) FWHM / FWTM 24.0° / 72.0° Efficiency 92 % Peak intensity 2.9 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 490 Typ L1</p>		

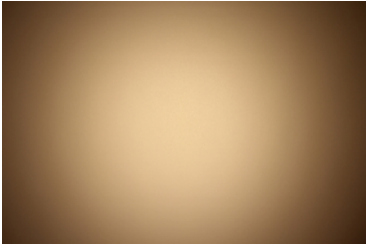
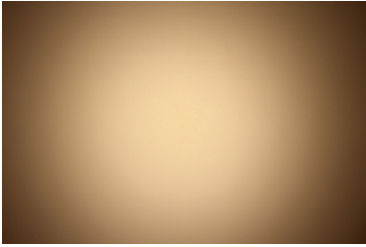
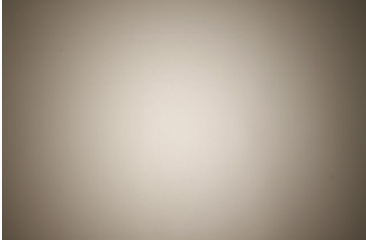
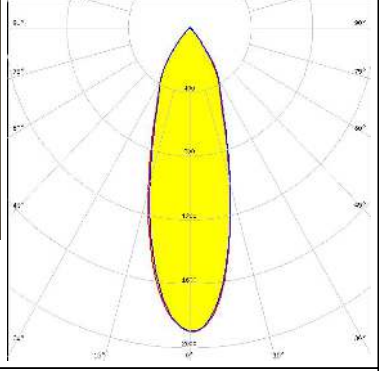
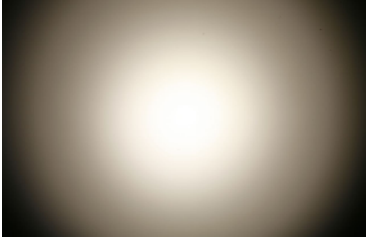
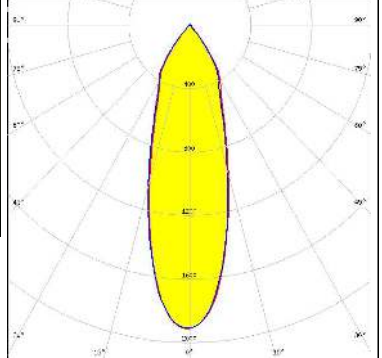
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CTM-14 (Tunable White)</p> <p>FWHM / FWTM 31.0° / 74.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 1.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13867_LENINA-STD-BASE-VERO29</p> <p>C12606_LENINA-DL</p> <p>Bender Wirth: 442 Typ L3</p>		
<p>LUMINUS</p> <p>LED CTM-14 (Tunable White)</p> <p>FWHM / FWTM 28.0° / 74.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 2.4 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13867_LENINA-STD-BASE-VERO29</p> <p>Bender Wirth: 442 Typ L3</p>		
<p>LUMINUS</p> <p>LED CTM-18 (Tunable White)</p> <p>FWHM / FWTM 32.0° / 76.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13867_LENINA-STD-BASE-VERO29</p> <p>Bender Wirth: 442 Typ L3</p>		
<p>LUMINUS</p> <p>LED CTM-18 (Tunable White)</p> <p>FWHM / FWTM 34.0° / 76.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 1.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C13867_LENINA-STD-BASE-VERO29</p> <p>C12606_LENINA-DL</p> <p>Bender Wirth: 442 Typ L3</p>		

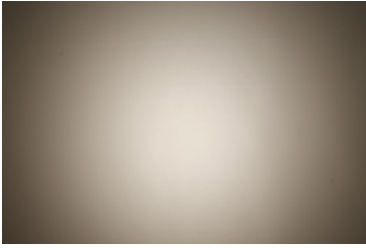
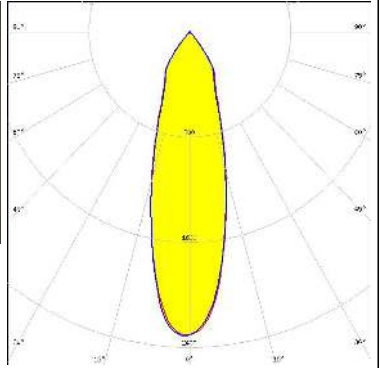
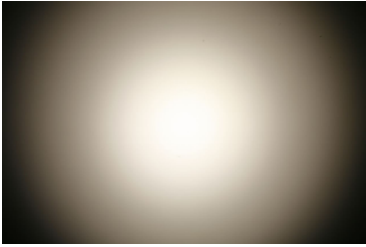
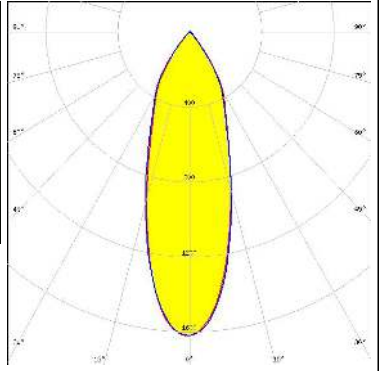
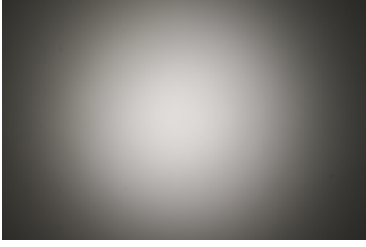
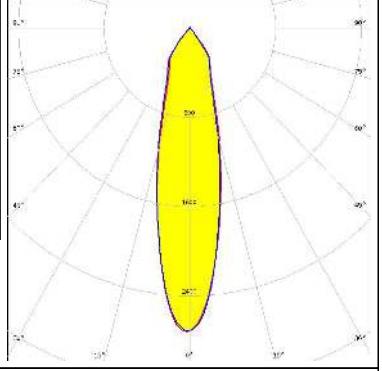
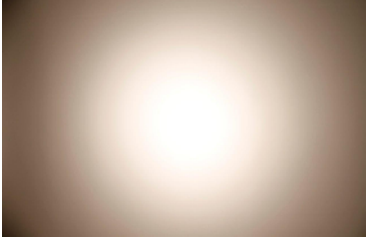
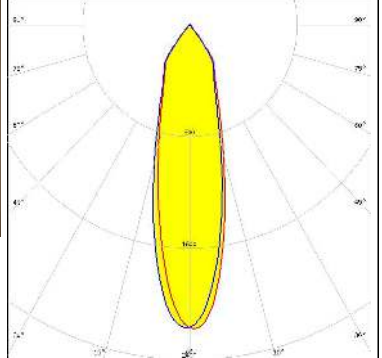
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CTM-22 (Tunable White)</p> <p>FWHM / FWTM 39.0° / 79.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13867_LENINA-STD-BASE-VERO29 Bender Wirth: 494 Typ L3</p>		
<p>LUMINUS</p> <p>LED CTM-22 (Tunable White)</p> <p>FWHM / FWTM 40.0° / 79.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 1.4 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13867_LENINA-STD-BASE-VERO29 C12606_LENINA-DL Bender Wirth: 494 Typ L3</p>		
<p>LUMINUS</p> <p>LED CxM-14 (19x19)</p> <p>FWHM / FWTM 28.0° / 72.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 2.5 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12691_LENINA-STD-BASE-CLL030</p>		
<p>LUMINUS</p> <p>LED CxM-14 (19x19)</p> <p>FWHM / FWTM 31.0° / 73.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 2.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12691_LENINA-STD-BASE-CLL030 C12606_LENINA-DL</p>		

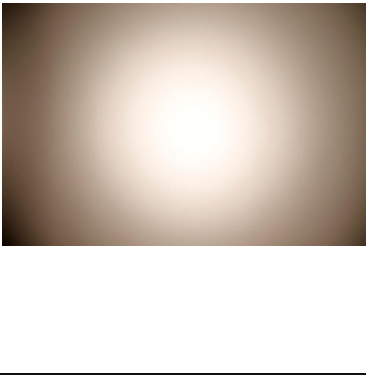
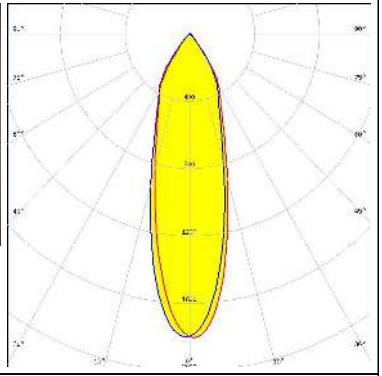
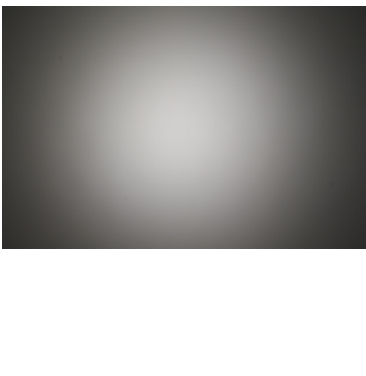
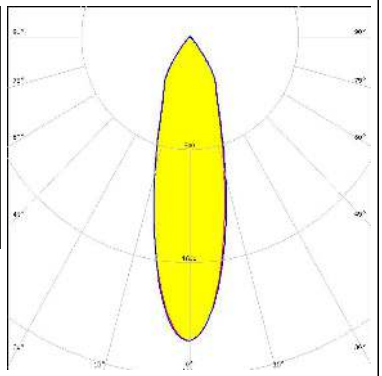
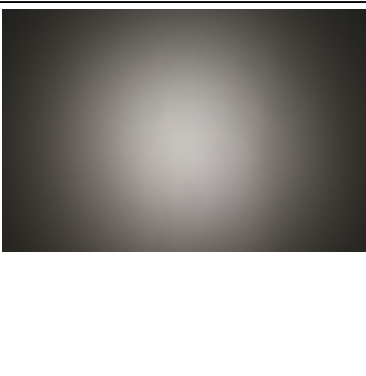
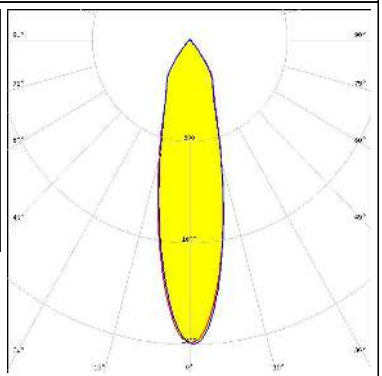
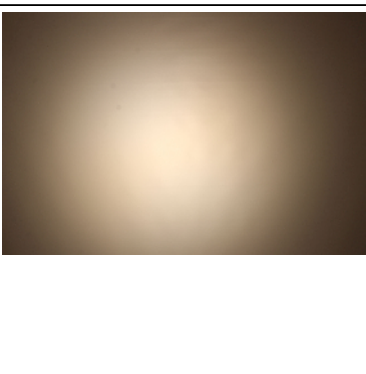
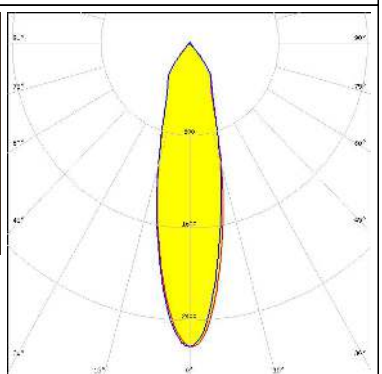
OPTICAL RESULTS (MEASURED):

<p>LUMINUS</p> <p>LED CxM-22 (28x28)</p> <p>FWHM / FWTM 40.0° / 80.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12692_LENINA-STD-BASE-CLL040 C12606_LENINA-DL</p>		
<p>LUMINUS</p> <p>LED CxM-22 (28x28)</p> <p>FWHM / FWTM 39.0° / 80.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 1.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12692_LENINA-STD-BASE-CLL040</p>		
<p>NICHIA</p> <p>LED COB J-Type</p> <p>FWHM / FWTM 32.0° / 74.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL</p>		
<p>NICHIA</p> <p>LED COB J-Type</p> <p>FWHM / FWTM 31.0° / 75.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12292_LENINA-STD-BASE-MEZ</p>		

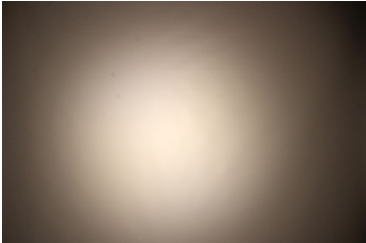
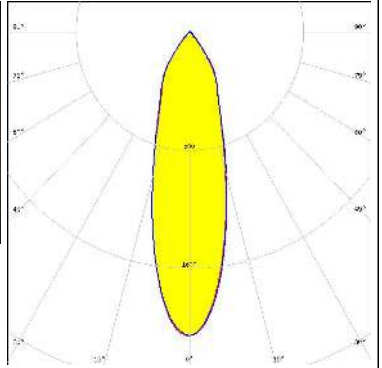
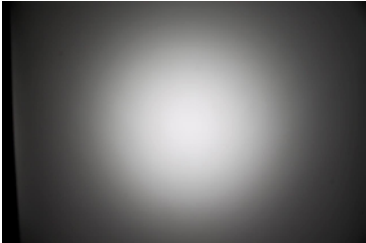
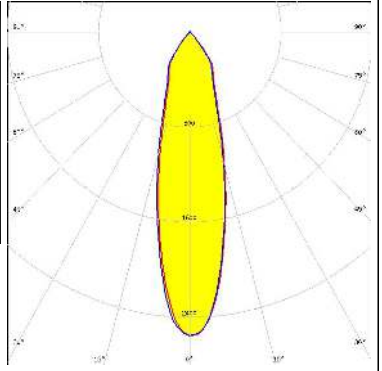
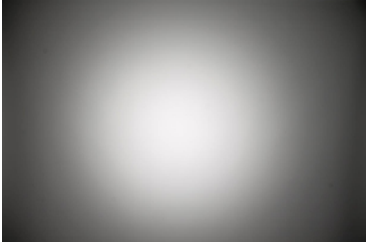
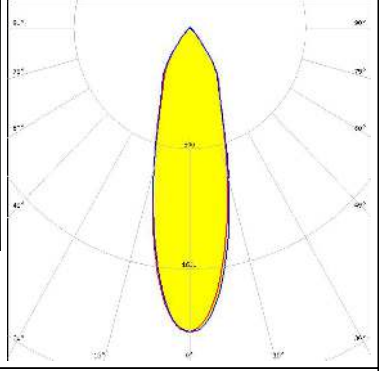
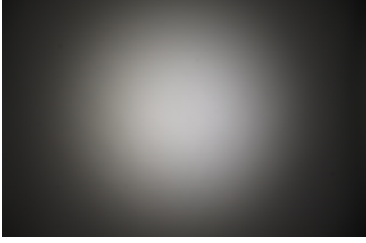
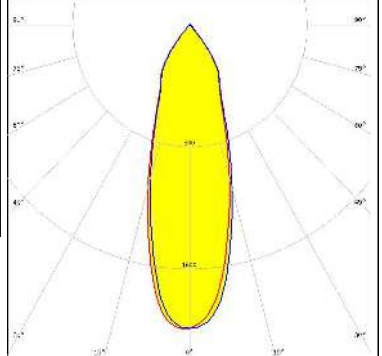
OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED COB J-Type FWHM / FWTM 29.0° / 74.0° Efficiency 93 % Peak intensity 2.3 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 463 Typ L2</p>		
<p>NICHIA</p> <p>LED COB J-Type FWHM / FWTM 33.0° / 75.0° Efficiency 81 % Peak intensity 1.6 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C12292_LENINA-STD-BASE-MEZ C12606_LENINA-DL</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 11) FWHM / FWTM 25.0° / 72.0° Efficiency 91 % Peak intensity 2.7 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 438 Typ L1</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 11) FWHM / FWTM 27.0° / 74.0° Efficiency 84 % Peak intensity 2.2 cd/m LEDs/each optic 1 Light colour White</p> <p>Required components: C11981_LENINA-STD-BASE-COB-L110</p>		

OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 29.0° / 73.0°</p> <p>Efficiency 79 %</p> <p>Peak intensity 1.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C11981_LENINA-STD-BASE-COB-L110 C12606_LENINA-DL</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 11)</p> <p>FWHM / FWTM 28.0° / 72.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 2.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL Bender Wirth: 438 Typ L1</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM 26.0° / 71.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 2.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL Bender Wirth: 438 Typ L1</p>		
<p>NICHIA</p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM / FWTM 26.0° / 73.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 2.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 498 Typ L2</p>		

OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM / FWTM 29.0° / 73.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL Bender Wirth: 498 Typ L2</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13</p> <p>FWHM / FWTM 27.0° / 73.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 2.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 437 Typ L1</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13</p> <p>FWHM / FWTM 30.0° / 73.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL Bender Wirth: 437 Typ L1</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S19</p> <p>FWHM / FWTM 32.0° / 76.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13867_LENINA-STD-BASE-VERO29 Bender Wirth: 462 Typ L3</p>		

OPTICAL RESULTS (MEASURED):

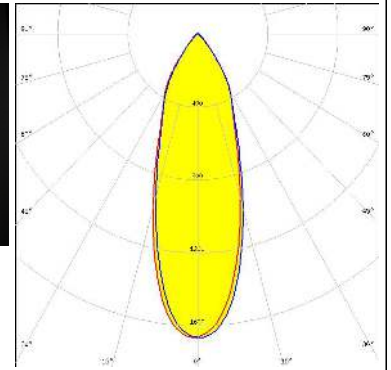
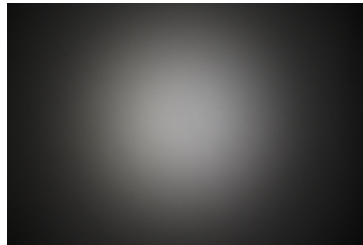
OSRAM

Opto Semiconductors

LED Soleriq S19
 FWHM / FWTM 34.0° / 76.0°
 Efficiency 89 %
 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: 462 Typ L3

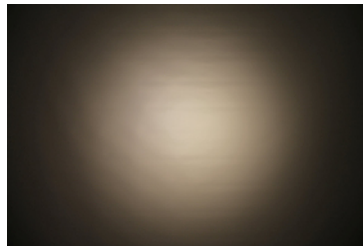


PHILIPS

LED Fortimo SLM L13 CoB
 FWHM / FWTM 27.0° / 72.0°
 Efficiency 93 %
 Peak intensity 2.6 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

C12292_LENINA-STD-BASE-MEZ

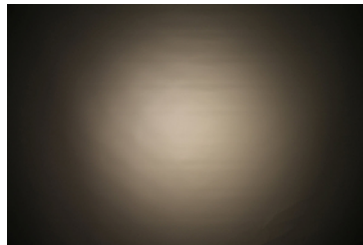


PHILIPS

LED Fortimo SLM L13 CoB
 FWHM / FWTM 30.0° / 72.0°
 Efficiency 86 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

C12292_LENINA-STD-BASE-MEZ
 C12606_LENINA-DL

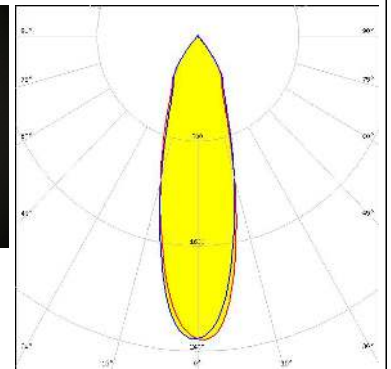
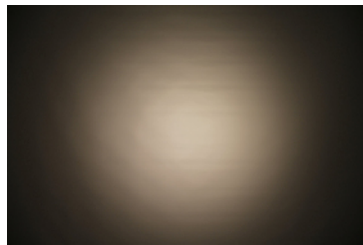


PHILIPS

LED Fortimo SLM L15 CoB
 FWHM / FWTM 29.0° / 73.0°
 Efficiency %
 Peak intensity 2.3 cd/lm
 LEDs/each optic 1
 Light colour White

Required components:

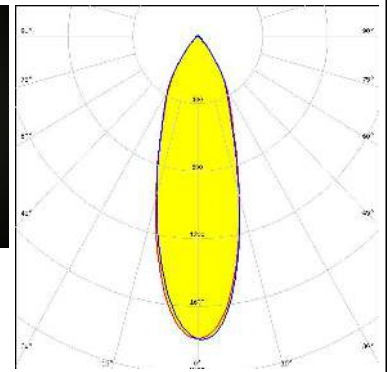
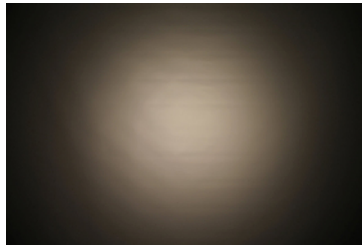
C12292_LENINA-STD-BASE-MEZ



OPTICAL RESULTS (MEASURED):

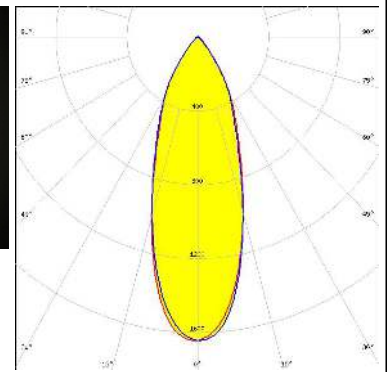
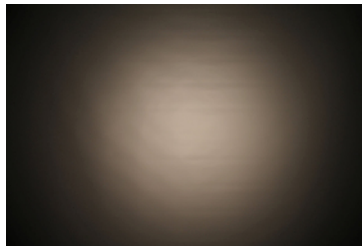
PHILIPS

LED Fortimo SLM L15 CoB
 FWHM / FWTM 32.0° / 74.0°
 Efficiency 86 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENINA-STD-BASE-MEZ
 C12606_LENINA-DL



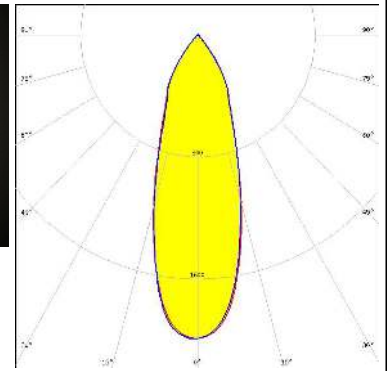
PHILIPS

LED Fortimo SLM L19 CoB
 FWHM / FWTM 35.0° / 75.0°
 Efficiency 86 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040
 C12606_LENINA-DL



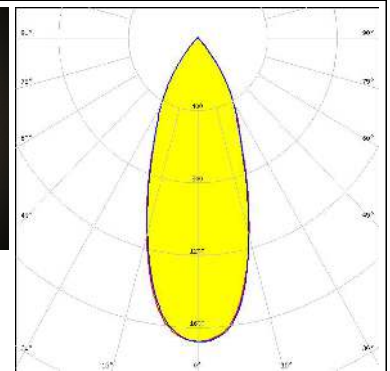
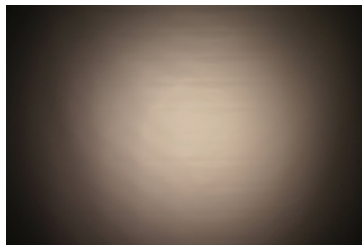
PHILIPS

LED Fortimo SLM L19 CoB
 FWHM / FWTM 33.0° / 74.0°
 Efficiency 92 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040



PHILIPS

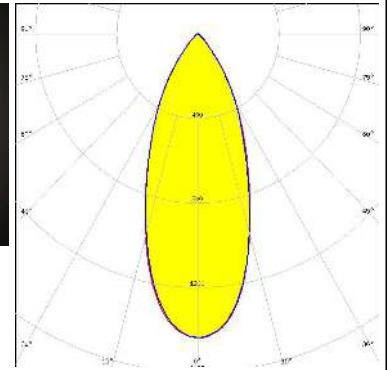
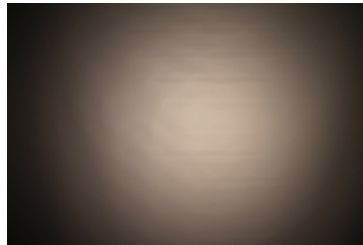
LED Fortimo SLM L23 CoB
 FWHM / FWTM 39.0° / 76.0°
 Efficiency 92 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040



OPTICAL RESULTS (MEASURED):

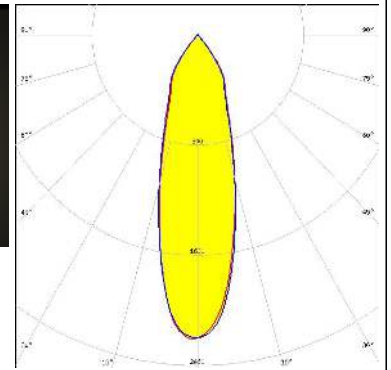
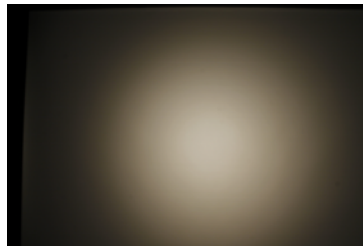
PHILIPS

LED Fortimo SLM L23 CoB
 FWHM / FWTM 40.0° / 77.0°
 Efficiency 86 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040
 C12606_LENINA-DL



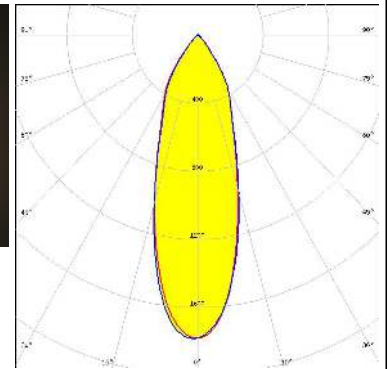
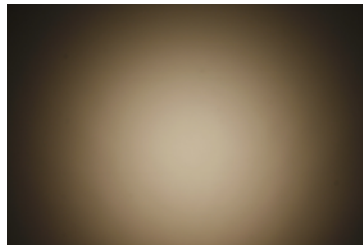
SAMSUNG

LED LC016D / LC019D / LC026D / LC033D
 FWHM / FWTM 30.0° / 74.0°
 Efficiency 92 %
 Peak intensity 2.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENINA-STD-BASE-CLL030



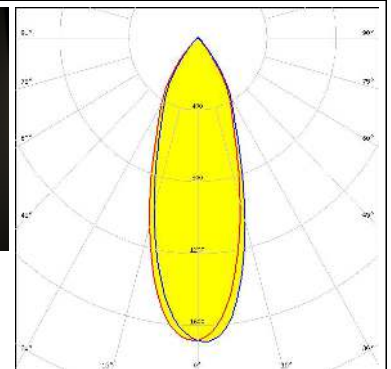
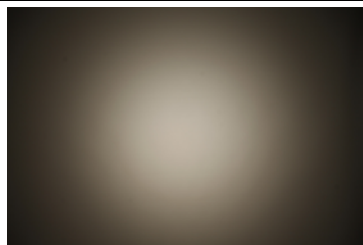
SAMSUNG

LED LC016D / LC019D / LC026D / LC033D
 FWHM / FWTM 33.0° / 75.0°
 Efficiency 87 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENINA-STD-BASE-CLL030
 C12606_LENINA-DL



SAMSUNG

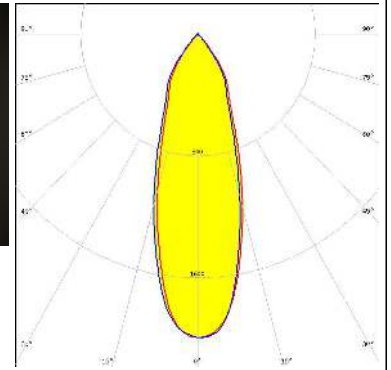
LED LC026B / 033B / 040B
 FWHM / FWTM 35.0° / 76.0°
 Efficiency 88 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 C12606_LENINA-DL
 Bender Wirth: 450 Typ L2



OPTICAL RESULTS (MEASURED):

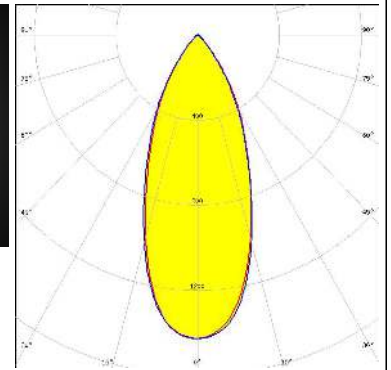
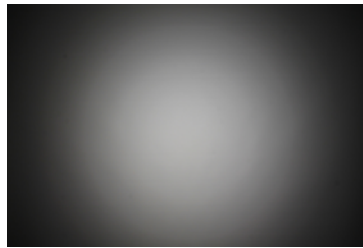
SAMSUNG

LED LC026B / 033B / 040B
 FWHM / FWTM 33.0° / 75.0°
 Efficiency 92 %
 Peak intensity 2 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENINA-STD-BASE-VERO13-18
 Bender Wirth: 450 Typ L2



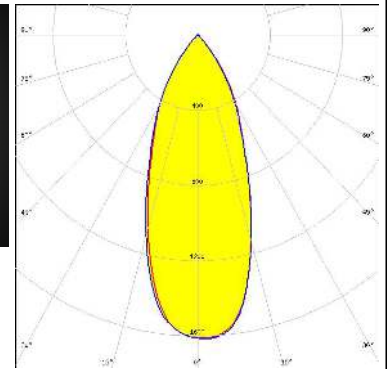
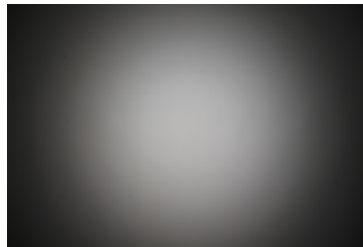
SAMSUNG

LED LC040D / LC060D / LC080D
 FWHM / FWTM 41.0° / 78.0°
 Efficiency 87 %
 Peak intensity 1.4 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040
 C12606_LENINA-DL

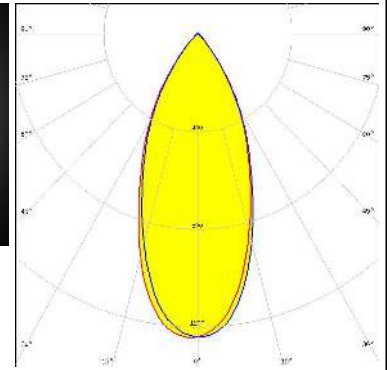


SAMSUNG



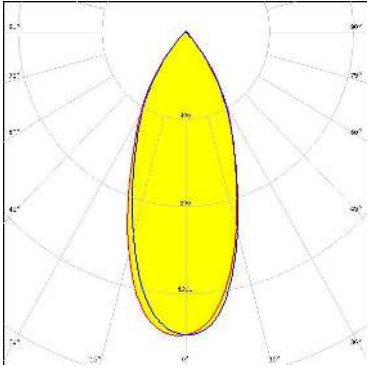
LED LC040D / LC060D / LC080D
 FWHM / FWTM 40.0° / 77.0°
 Efficiency 91 %
 Peak intensity 1.6 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040



SEOUL SEMICONDUCTOR
 LED ZC25/40/60
 FWHM / FWTM 44.0° / 79.0°
 Efficiency 81 %
 Peak intensity 1.2 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040
 C12606_LENINA-DL



OPTICAL RESULTS (MEASURED):

			
<p>SEHIL SEMICONDUCTOR</p> <p>LED ZC25/40/60</p> <p>FWHM / FWTM 42.0° / 79.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12692_LENINA-STD-BASE-CLL040</p>			

SHARP

LED Mega Zenigata (GW5DGC)

FWHM / FWTM 21.0° / 72.0°

Efficiency 86 %

LEDs/each optic 1

Light colour White

Required components:
C12292_LENINA-STD-BASE-MEZ

SHARP

LED Mega Zenigata (GW5DGC)

FWHM / FWTM 22.0° / 73.0°

Efficiency 78 %

LEDs/each optic 1

Light colour White

Required components:
C12292_LENINA-STD-BASE-MEZ
C12606_LENINA-DL

SHARP

LED Mega Zenigata (GW6DME)

FWHM / FWTM 30.0° / 75.0°

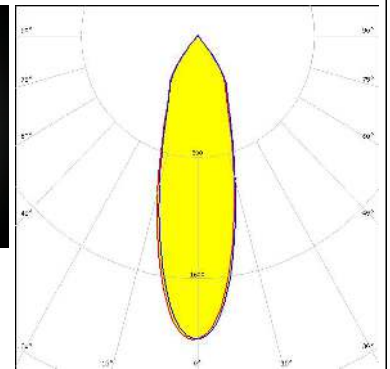
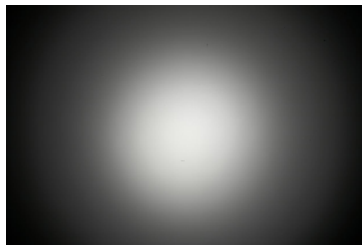
Efficiency 87 %

Peak intensity 2 cd/lm

LEDs/each optic 1

Light colour White

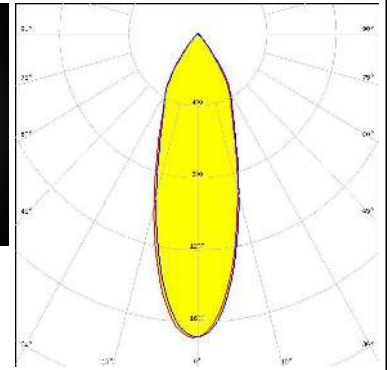
Required components:
C12292_LENINA-STD-BASE-MEZ



OPTICAL RESULTS (MEASURED):

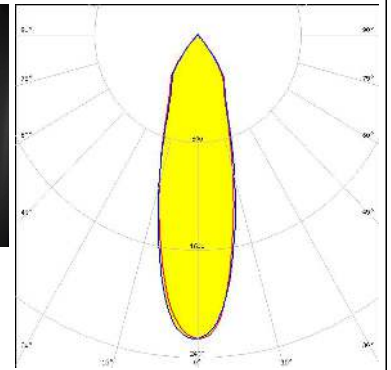
SHARP

LED Mega Zenigata (GW6DME)
 FWHM / FWTM 32.0° / 74.0°
 Efficiency 82 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENASTD-BASE-MEZ
 C12606_LENINA-DL



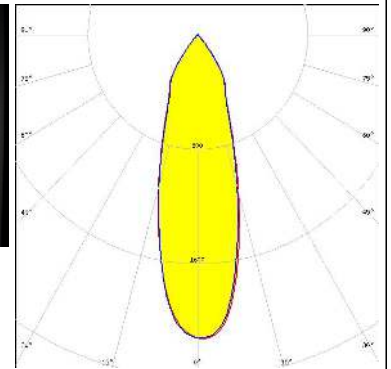
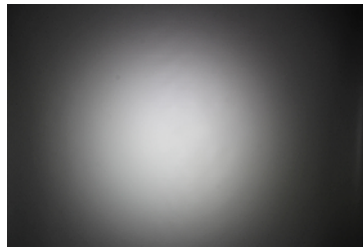
TRIDONIC

LED SLE G7 LES15
 FWHM / FWTM 30.0° / 74.0°
 Efficiency 93 %
 Peak intensity 2.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENASTD-BASE-CLL030



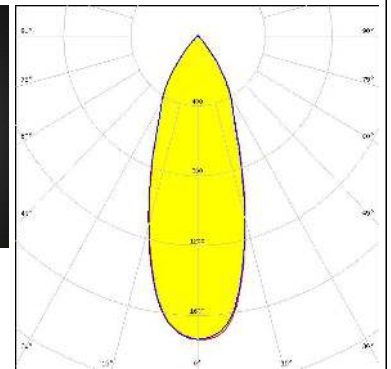
TRIDONIC

LED SLE G7 LES17 H
 FWHM / FWTM 31.0° / 74.0°
 Efficiency 91 %
 Peak intensity 2.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14547_LENASTD-BASE-CLL030



TRIDONIC

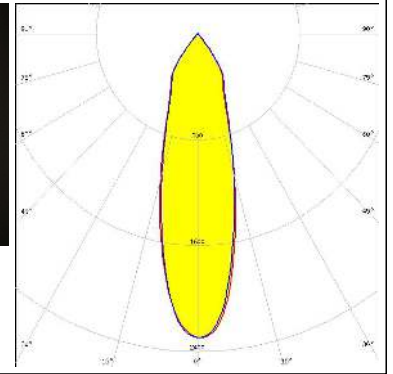
LED SLE G7 LES21 H
 FWHM / FWTM 37.0° / 76.0°
 Efficiency 91 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14547_LENASTD-BASE-CLL030




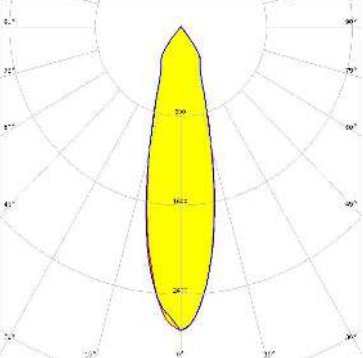

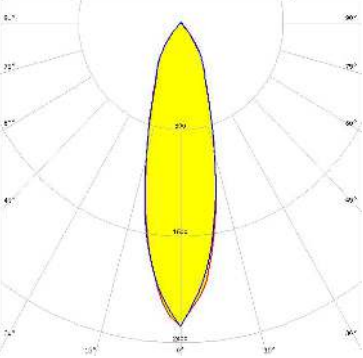

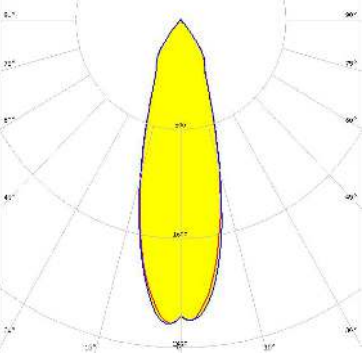

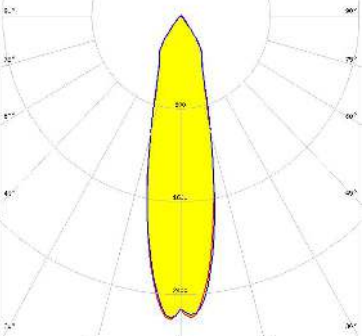
OPTICAL RESULTS (MEASURED):

XICATO


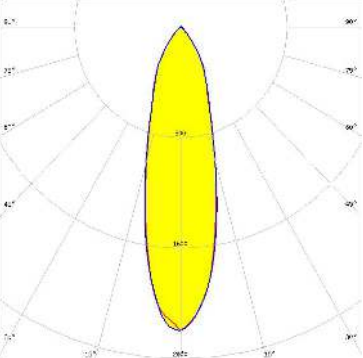

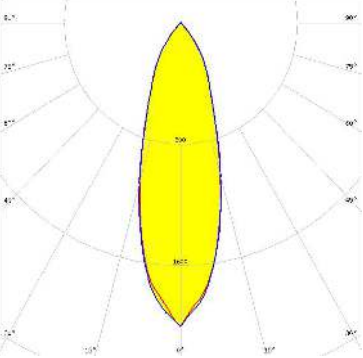

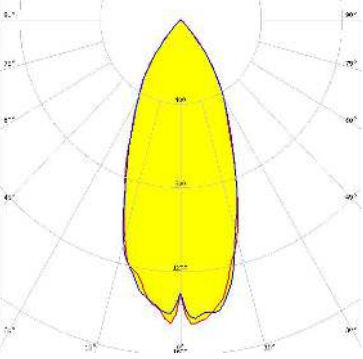

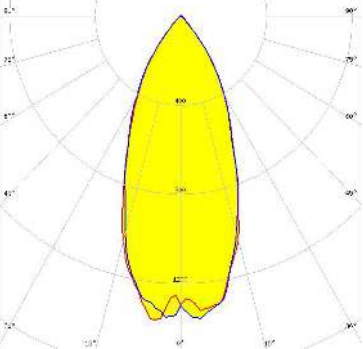
LED XOB 14.5 mm
FWHM / FWTM 29.0° / 74.0°
Efficiency 93 %
Peak intensity 2.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENINA-STD-BASE-CLL030



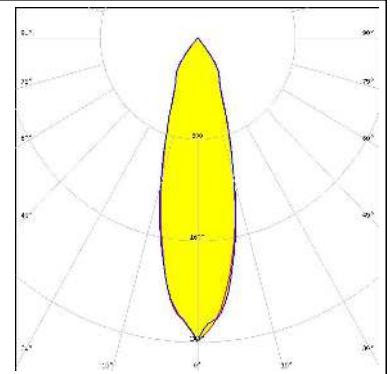
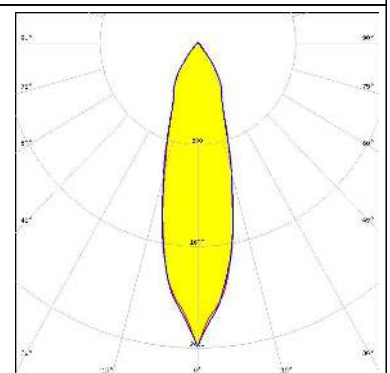
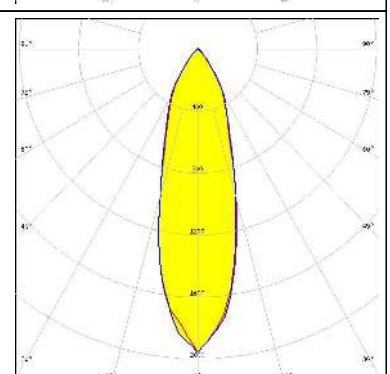
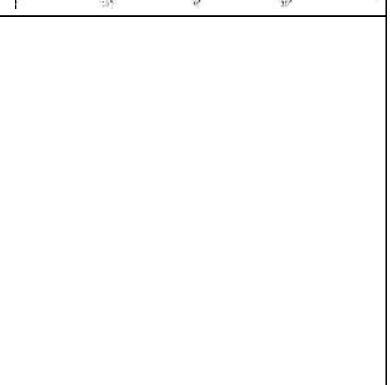
OPTICAL RESULTS (SIMULATED):

<p></p> <p>LED V10 Gen7 FWHM / FWTM 26.0° / 71.0° Efficiency 91 % Peak intensity 2.7 cd/lm LEDs/each optic 1 Light colour White Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 486 Typ L1</p>	
<p></p> <p>LED V10 Gen7 FWHM / FWTM 28.0° / 70.0° Efficiency 86 % Peak intensity 2.3 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</p>	
<p></p> <p>LED V13 Gen7 FWHM / FWTM 31.0° / 73.0° Efficiency 90 % Peak intensity 2.3 cd/lm LEDs/each optic 1 Light colour White Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 477 Typ L1</p>	
<p></p> <p>LED V13 Gen7 FWHM / FWTM 26.0° / 70.0° Efficiency 90 % Peak intensity 2.6 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2103CT + 50-2100AN</p>	

OPTICAL RESULTS (SIMULATED):

<p></p> <p>LED V13 Gen7 FWHM / FWTM 26.0° / 70.0° Efficiency 87 % Peak intensity 2.2 cd/lm LEDs/each optic 1 Light colour White Required components: C12606_LENINA-DL IDEAL: 50-2103CT + 50-2100AN</p>	
<p></p> <p>LED V13 Gen7 FWHM / FWTM 32.0° / 72.0° Efficiency 86 % Peak intensity 2 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</p>	
<p></p> <p>LED V22 Gen7 FWHM / FWTM 42.0° / 80.0° Efficiency 90 % Peak intensity 1.5 cd/lm LEDs/each optic 1 Light colour White Required components: C13867_LENINA-STD-BASE-VERO29 Bender Wirth: 431 Typ L3</p>	
<p></p> <p>LED V22 Gen7 FWHM / FWTM 42.0° / 80.0° Efficiency 87 % Peak intensity 1.5 cd/lm LEDs/each optic 1 Light colour White Required components: C13867_LENINA-STD-BASE-VERO29 C12606_LENINA-DL Bender Wirth: 431 Typ L3</p>	

OPTICAL RESULTS (SIMULATED):

<p>CREE LEDs</p> <p>LED: CXA/B 1830 FWHM / FWTM: 30.0° / 72.0° Efficiency: 89 % Peak intensity: 2.4 cd/lm LEDs/each optic: 1 Light colour: White Required components: Bender Wirth: 637b Lena</p>	
<p>CREE LEDs</p> <p>LED: CXA/B 30xx FWHM / FWTM: 28.0° / 70.0° Efficiency: 89 % Peak intensity: 2.4 cd/lm LEDs/each optic: 1 Light colour: White Required components: IDEAL: 50-2234C + 50-2100LN</p>	
<p>CREE LEDs</p> <p>LED: CXA/B 30xx FWHM / FWTM: 30.0° / 72.0° Efficiency: 84 % Peak intensity: 2 cd/lm LEDs/each optic: 1 Light colour: White Required components: C12606_LENINA-DL IDEAL: 50-2234C + 50-2100LN</p>	
<p>LUMINUS</p> <p>LED: CxM-14 (19x19) FWHM / FWTM: 29.0° / 73.0° Efficiency: 91 % Peak intensity: 2.3 cd/lm LEDs/each optic: 1 Light colour: White Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 433 Typ L1</p>	

OPTICAL RESULTS (SIMULATED):



LED CxM-14 (19x19)
FWHM / FWTM 31.0° / 73.0°
Efficiency 88 %
Peak intensity 2 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



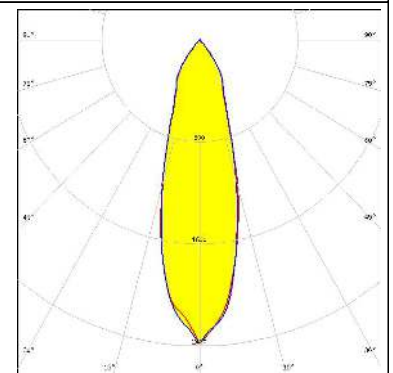
LED CxM-9 (13.5x13.5)
FWHM / FWTM 26.0° / 71.0°
Efficiency 87 %
Peak intensity 2.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
C12606_LENINA-DL
Bender Wirth: 434 Typ L1



LED CxM-9 (13.5x13.5)
FWHM / FWTM 23.0° / 71.0°
Efficiency 91 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENINA-STD-BASE-VERO13-18
Bender Wirth: 434 Typ L1



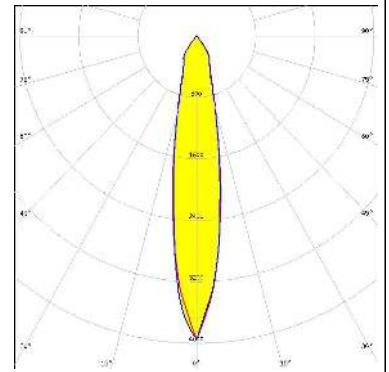
LED Soleriq S15
FWHM / FWTM 30.0° / 71.0°
Efficiency 90 %
Peak intensity 2.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENINA-STD-BASE-CLL030



OPTICAL RESULTS (SIMULATED):

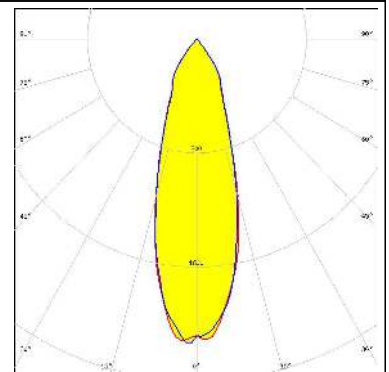
SAMSUNG

LED LC003D / LC006D / LC009D / LC013D
 FWHM / FWTM 18.0° / 53.0°
 Efficiency 88 %
 Peak intensity 4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENINA-STD-BASE-CLL040

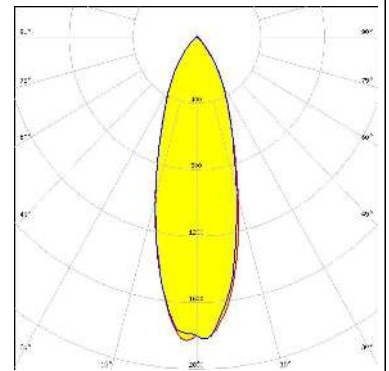


SAMSUNG

LED LC016D / LC019D / LC026D / LC033D
 FWHM / FWTM 32.0° / 72.0°
 Efficiency 87 %
 Peak intensity 2.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 Bender Wirth: 633c Lena


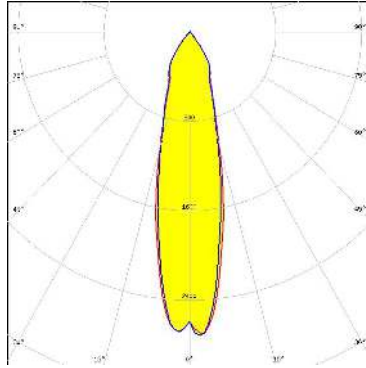





SEOUL SEMICONDUCTOR
 LED ZC12/18
 FWHM / FWTM 32.0° / 72.0°
 Efficiency 84 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENINA-STD-BASE-CLL030
 C12606_LENINA-DL



SEOUL SEMICONDUCTOR
 LED ZC12/18
 FWHM / FWTM 29.0° / 73.0°
 Efficiency 91 %
 Peak intensity 2.3 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):

<p> SEIOUL SEMICONDUCTOR</p> <p>LED ZC12/18</p> <p>FWHM / FWTM 26.0° / 70.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 2.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12691_LENINA-STD-BASE-CLL030</p>	
<p> SEIOUL SEMICONDUCTOR</p> <p>LED ZC12/18</p> <p>FWHM / FWTM 31.0° / 73.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL Bender Wirth: 433 Typ L1</p>	
<p> SEIOUL SEMICONDUCTOR</p> <p>LED ZC4/6</p> <p>FWHM / FWTM 26.0° / 71.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 2.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 C12606_LENINA-DL Bender Wirth: 434 Typ L1</p>	
<p> SEIOUL SEMICONDUCTOR</p> <p>LED ZC4/6</p> <p>FWHM / FWTM 23.0° / 71.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 434 Typ L1</p>	

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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