

## LENINA-XW

White version with ~75° wide beam

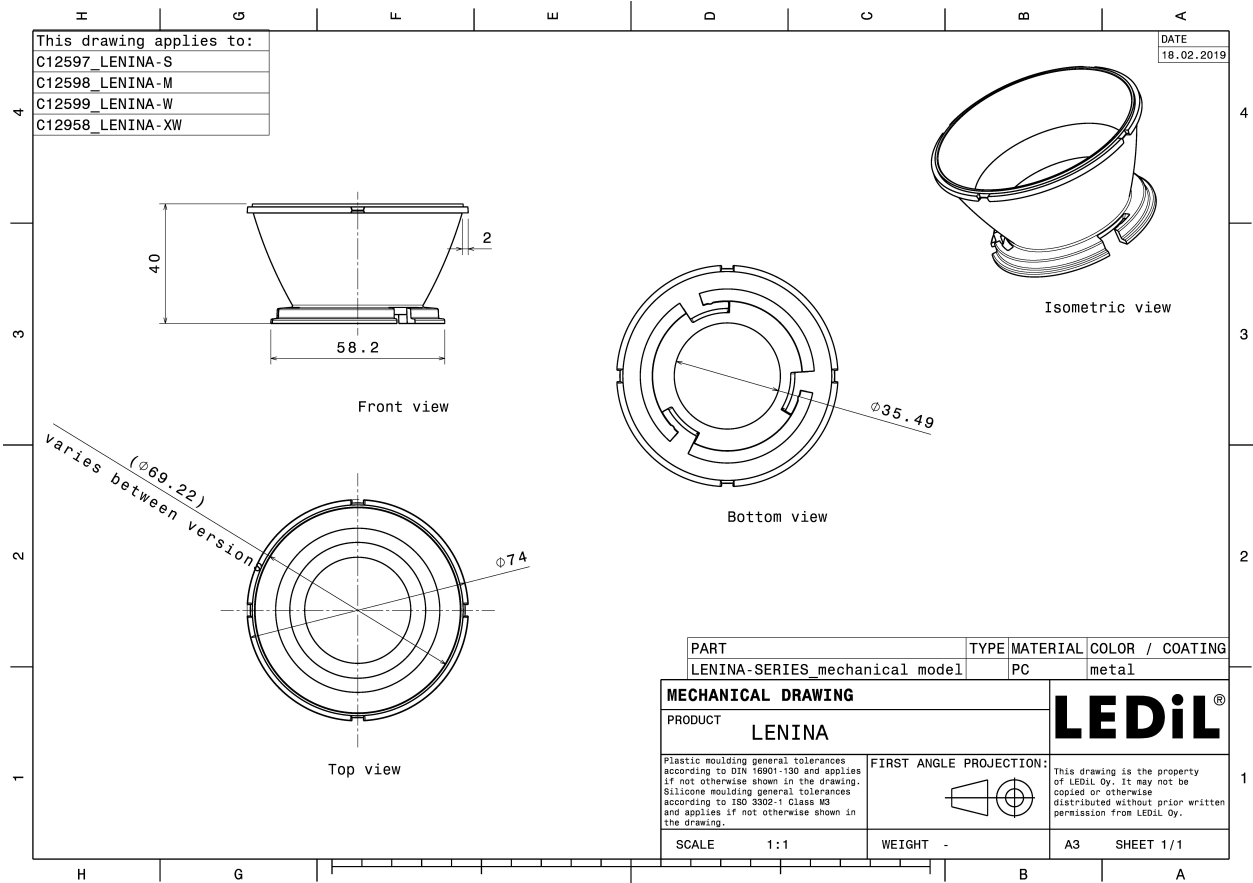
### TECHNICAL SPECIFICATIONS:

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



### MATERIAL SPECIFICATIONS:


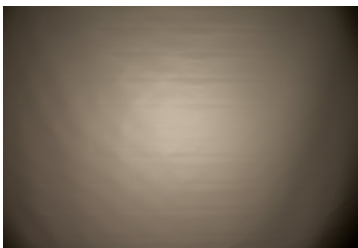
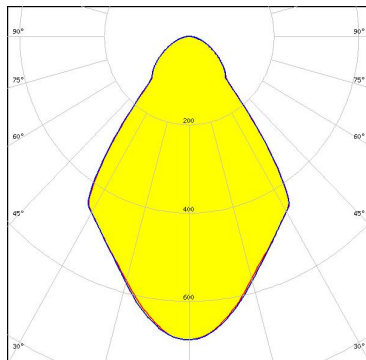

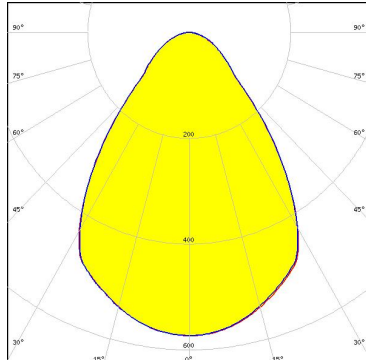
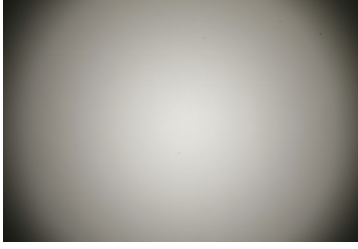
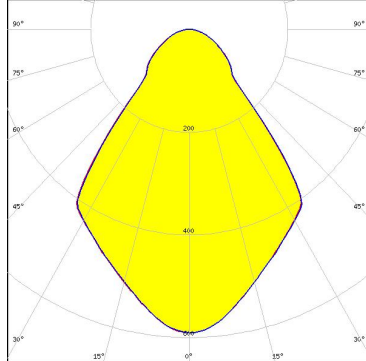
Component	Type	Material	Colour	Coating
LENINA-XW	Reflector	HRPC	white	



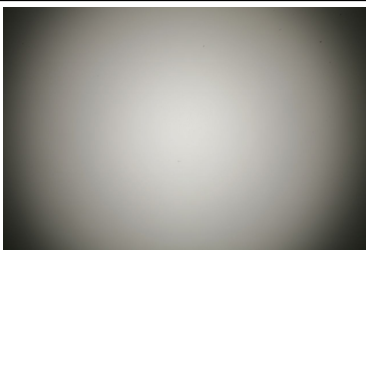
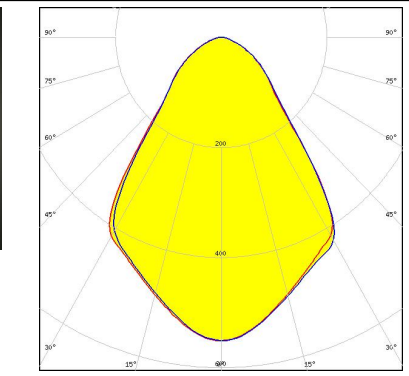

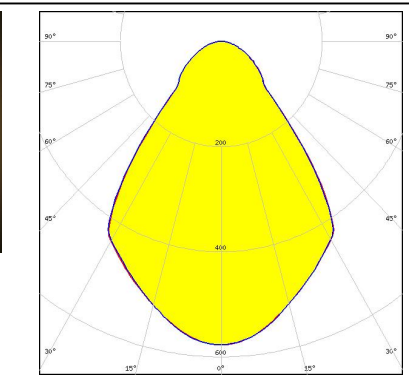
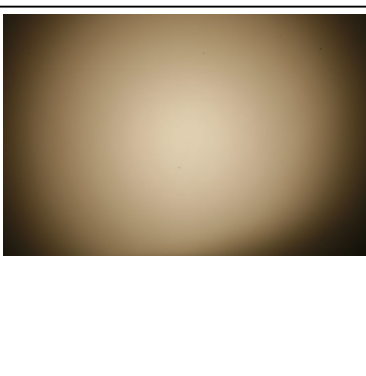
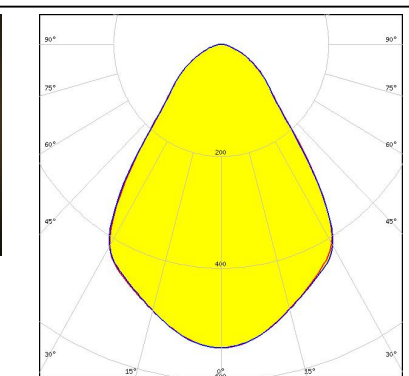
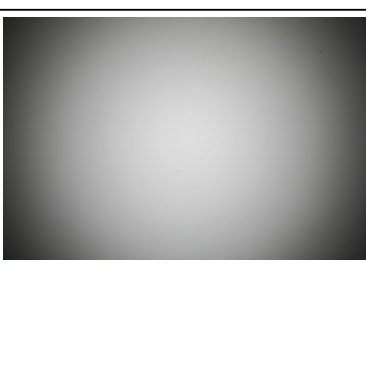
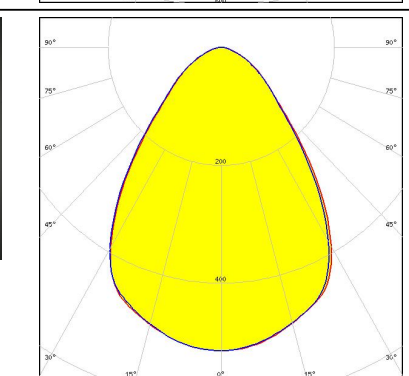
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED BXRA ES Rectangle</p> <p>FWHM 73.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 0.570 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C12153_LENINA-STD-BASE-BXRA</p> <p>C12606_LENINA-DL</p>	
<p>bridgelux.</p> <p>LED BXRA ES Rectangle</p> <p>FWHM 74.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 0.610 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C12153_LENINA-STD-BASE-BXRA</p>	
<p>bridgelux.</p> <p>LED BXRA RS</p> <p>FWHM 76.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 0.570 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C12229_LENINA-STD-BASE-RS</p>	
<p>bridgelux.</p> <p>LED BXRA RS</p> <p>FWHM 87.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 0.539 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C12229_LENINA-STD-BASE-RS</p> <p>C12606_LENINA-DL</p>	

**PHOTOMETRIC DATA (MEASURED):**

<p>bridgelux.</p> <p>LED V10 Gen6 FWHM 69.0° Efficiency 86 % Peak intensity 0.700 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13186_LENINA-STD-BASE-CXA15 C12606_LENINA-DL</p>		
<p>bridgelux.</p> <p>LED V4 HD FWHM 71.0° Efficiency 93 % Peak intensity 0.690 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C14146_LENINA-STD-BASE-CXA18</p>		
<p>bridgelux.</p> <p>LED Vero SE 29 FWHM 76.0° Efficiency 93 % Peak intensity 0.600 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C15083_LENINA-STD-BASE-VERO29</p>		
<p>bridgelux.</p> <p>LED VERO13 FWHM 76.0° Efficiency 91 % Peak intensity 0.590 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18</p>		

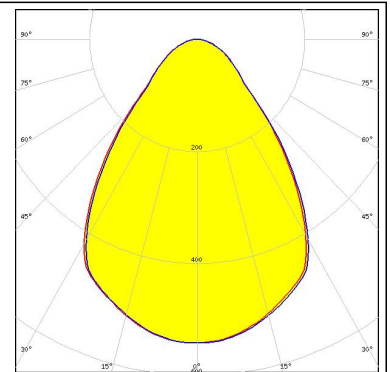
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED VERO13            FWHM 75.0°            Efficiency 87 %            Peak intensity 0.550 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13868_LENINA-STD-BASE-VERO13-18            C12606_LENINA-DL</p>		
<p>bridgelux.</p> <p>LED VERO18            FWHM 76.0°            Efficiency 91 %            Peak intensity 0.580 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13868_LENINA-STD-BASE-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO18            FWHM 75.0°            Efficiency 87 %            Peak intensity 0.540 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13868_LENINA-STD-BASE-VERO13-18            C12606_LENINA-DL</p>		
<p>bridgelux.</p> <p>LED VERO29            FWHM 77.0°            Efficiency 87 %            Peak intensity 0.520 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13867_LENINA-STD-BASE-VERO29            C12606_LENINA-DL</p>		

#### PHOTOMETRIC DATA (MEASURED):

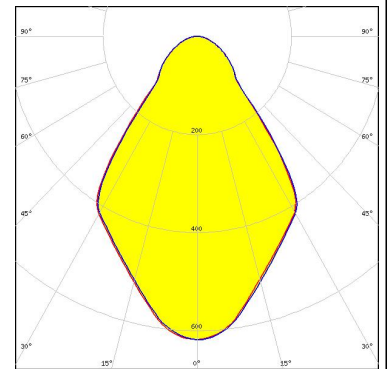
bridgelux

LED VERO29  
 FWHM 77.0°  
 Efficiency 91 %  
 Peak intensity 0.540 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13867\_LENINA-STD-BASE-VERO29



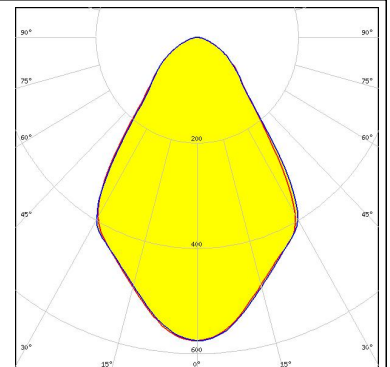
#### CITIZEN

LED CL-L340  
 FWHM 72.0°  
 Efficiency 86 %  
 Peak intensity 0.619 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C11995\_LENINA-STD-BASE-CL340



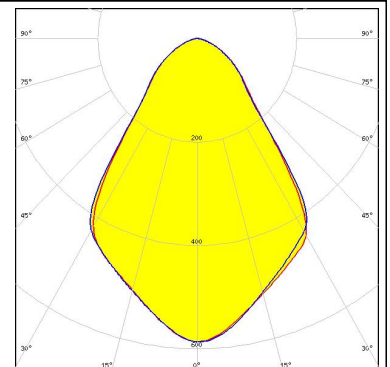
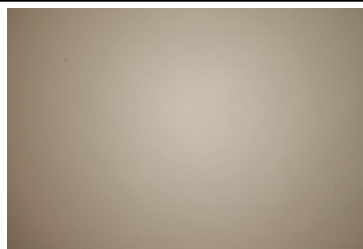
#### CITIZEN

LED CL-L340  
 FWHM 71.0°  
 Efficiency 82 %  
 Peak intensity 0.575 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C11995\_LENINA-STD-BASE-CL340  
 C12606\_LENINA-DL



#### CITIZEN

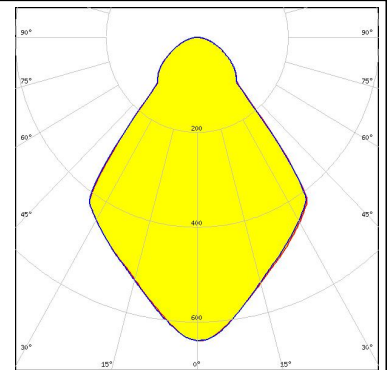
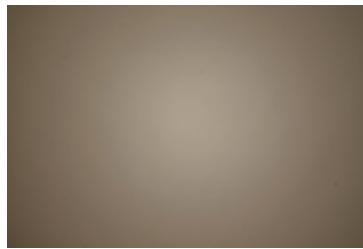
LED CLL02x/CLU02x (LES10)  
 FWHM 73.0°  
 Efficiency 89 %  
 Peak intensity 0.590 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENINA-STD-BASE-VERO13-18  
 C12606\_LENINA-DL  
 Bender Wirth: 434 Typ L1



#### PHOTOMETRIC DATA (MEASURED):

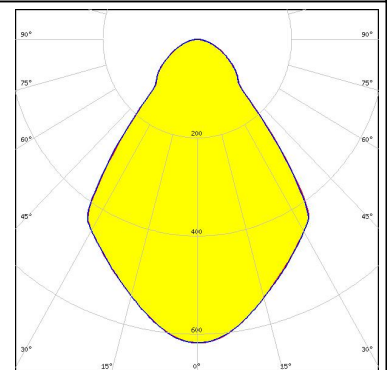
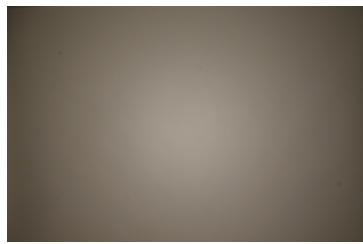
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
FWHM 75.0°  
Efficiency 93 %  
Peak intensity 0.640 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENASTD-BASE-VERO13-18  
Bender Wirth: 434 Typ L1



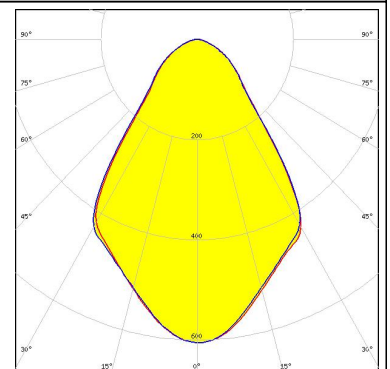
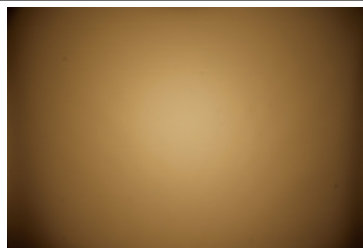
#### CITIZEN

LED CLL03x/CLU03x  
FWHM 75.0°  
Efficiency 94 %  
Peak intensity 0.620 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENASTD-BASE-VERO13-18  
Bender Wirth: 433 Typ L1



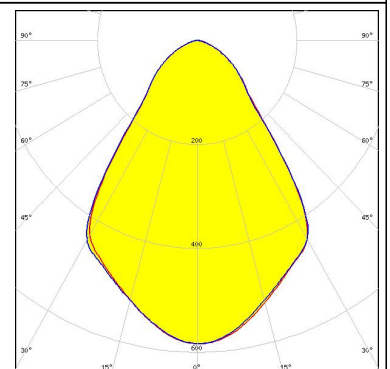
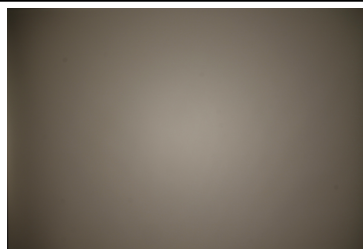
#### CITIZEN

LED CLL03x/CLU03x  
FWHM 72.0°  
Efficiency 88 %  
Peak intensity 0.610 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12691\_LENASTD-BASE-CLL030  
C12606\_LENINA-DL



#### CITIZEN

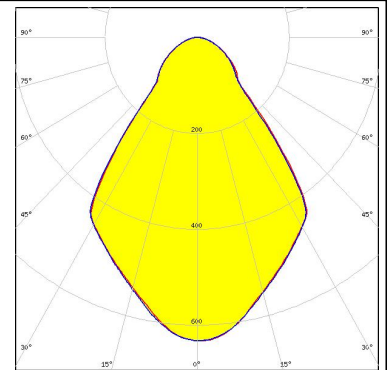
LED CLL03x/CLU03x  
FWHM 74.0°  
Efficiency 89 %  
Peak intensity 0.580 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENASTD-BASE-VERO13-18  
C12606\_LENINA-DL  
Bender Wirth: 433 Typ L1



#### PHOTOMETRIC DATA (MEASURED):

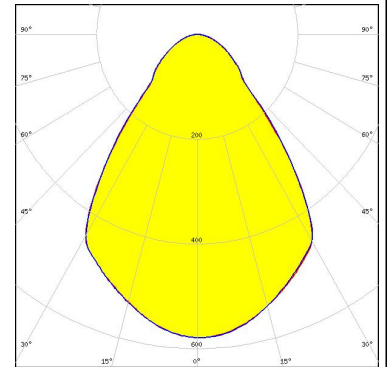
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 74.0°  
 Efficiency 93 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12691\_LENINA-STD-BASE-CLL030



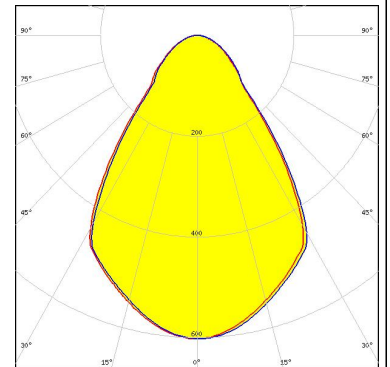
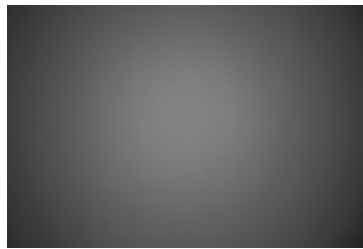
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 75.0°  
 Efficiency 93 %  
 Peak intensity 0.580 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13867\_LENINA-STD-BASE-VERO29  
 Bender Wirth: 431 Typ L3



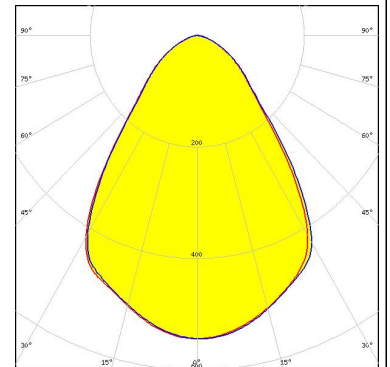
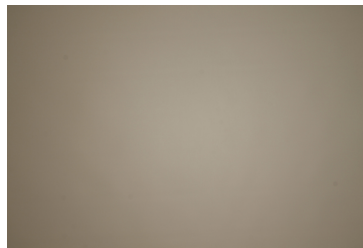
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 72.0°  
 Efficiency 91 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204CT + 50-2100LN



#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 75.0°  
 Efficiency 89 %  
 Peak intensity 0.540 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13867\_LENINA-STD-BASE-VERO29  
 C12606\_LENINA-DL  
 Bender Wirth: 431 Typ L3





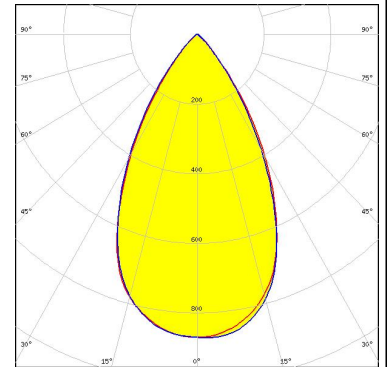
#### PHOTOMETRIC DATA (MEASURED):

#### CITIZEN

LED CLL04x/CLU04x  
FWHM 71.0°  
Efficiency 84 %  
Peak intensity 0.600 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12692\_LENINA-STD-BASE-CLL040  
C12606\_LENINA-DL

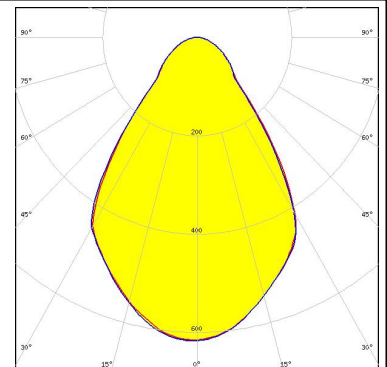
#### CITIZEN

LED CLL04x/CLU04x  
FWHM 73.0°  
Efficiency 81 %  
Peak intensity 0.500 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12606\_LENINA-DL  
A.A.G. STUCCHI: 8102/G2 + S-8000/12



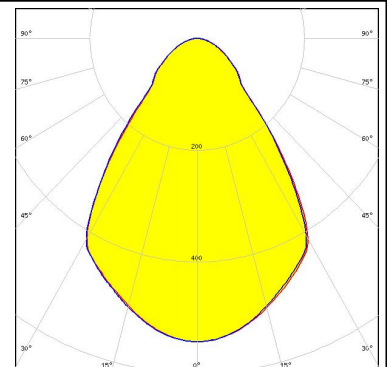
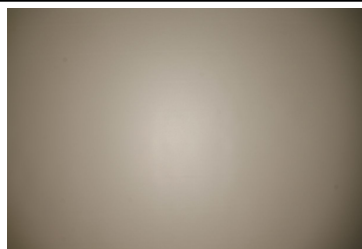
#### CITIZEN

LED CLL04x/CLU04x  
FWHM 71.0°  
Efficiency 89 %  
Peak intensity 0.600 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12692\_LENINA-STD-BASE-CLL040



#### CITIZEN

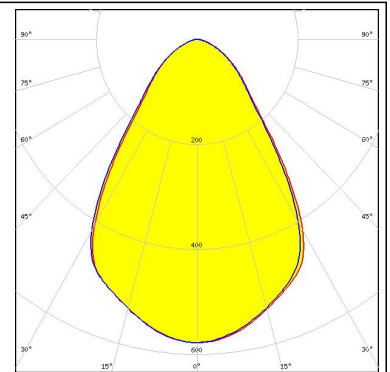
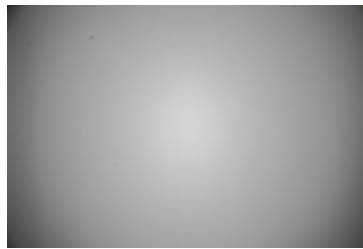
LED CLL04x/CLU04x  
FWHM 74.0°  
Efficiency 84 %  
Peak intensity 0.500 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8102/G2 + S-8000/12



#### PHOTOMETRIC DATA (MEASURED):

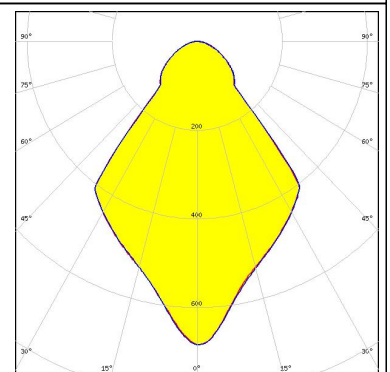
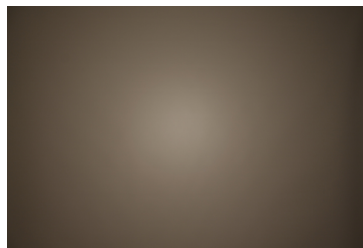
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 71.0°  
 Efficiency 88 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12606\_LENINA-DL  
 IDEAL: 50-2204CT + 50-2100LN



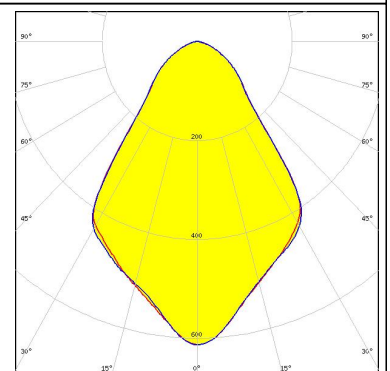
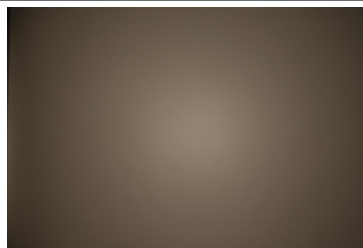
#### CITIZEN

LED CLU700/701  
 FWHM 75.0°  
 Efficiency 93 %  
 Peak intensity 0.680 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENINA-STD-BASE-VERO13-18  
 Bender Wirth: 434 Typ L1



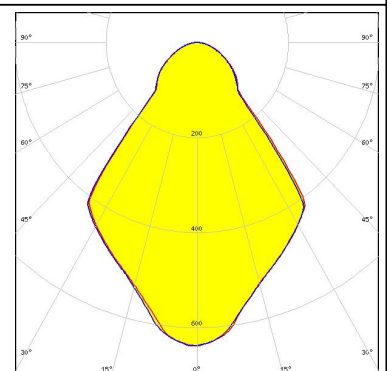
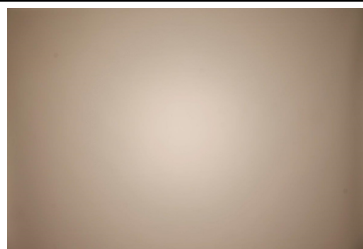
#### CITIZEN

LED CLU700/701  
 FWHM 73.0°  
 Efficiency 89 %  
 Peak intensity 0.610 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

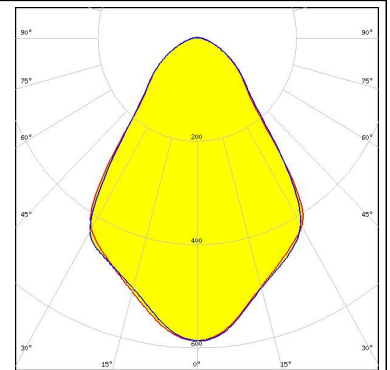
LED CLU710/711  
 FWHM 75.0°  
 Efficiency 94 %  
 Peak intensity 0.640 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12691\_LENINA-STD-BASE-CLL030



**PHOTOMETRIC DATA (MEASURED):**

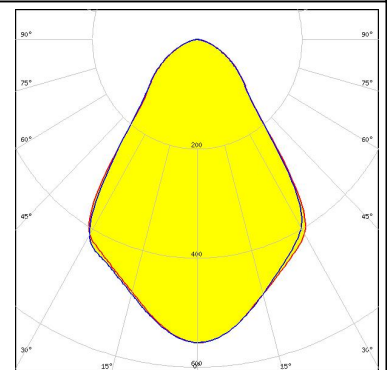
**CITIZEN**

LED CLU710/711  
 FWHM 73.0°  
 Efficiency 90 %  
 Peak intensity 0.590 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12691\_LENINA-STD-BASE-CLL030  
 C12606\_LENINA-DL



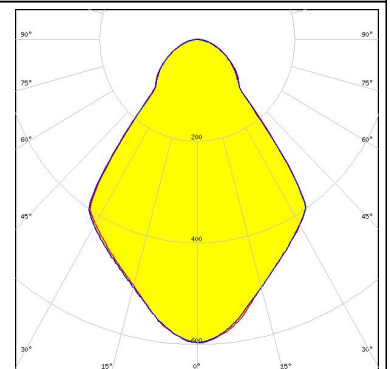
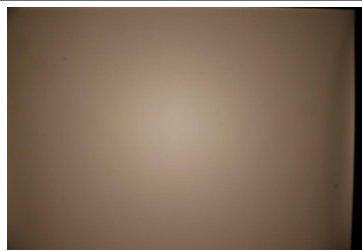
**CITIZEN**

LED CLU720/721  
 FWHM 73.0°  
 Efficiency 85 %  
 Peak intensity 0.560 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12691\_LENINA-STD-BASE-CLL030  
 C12606\_LENINA-DL



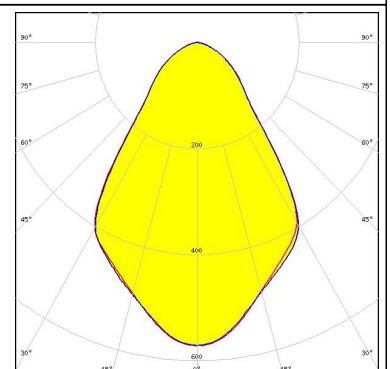
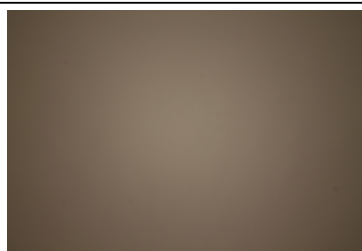
**CITIZEN**

LED CLU720/721  
 FWHM 74.0°  
 Efficiency 89 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12691\_LENINA-STD-BASE-CLL030



**CITIZEN**

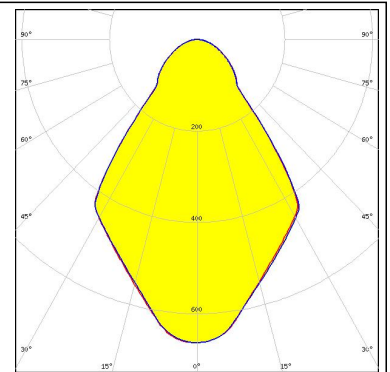
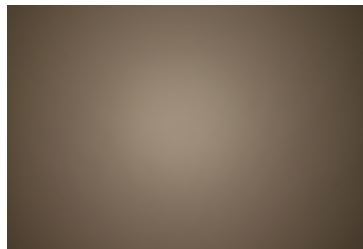
LED CLU730/731  
 FWHM 71.0°  
 Efficiency 84 %  
 Peak intensity 0.570 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12692\_LENINA-STD-BASE-CLL040  
 C12606\_LENINA-DL



#### PHOTOMETRIC DATA (MEASURED):

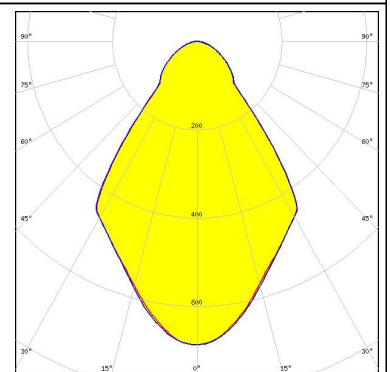
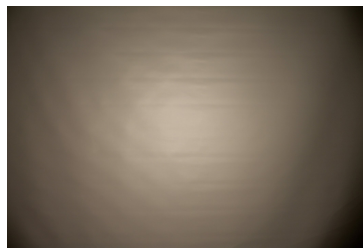
#### CITIZEN

LED CLU730/731  
 FWHM 72.0°  
 Efficiency 94 %  
 Peak intensity 0.660 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12692\_LENINA-STD-BASE-CLL040



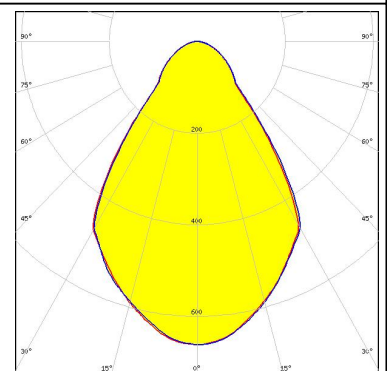
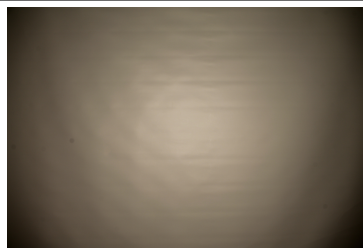
#### CREE

LED CMA1840  
 FWHM 71.0°  
 Efficiency 93 %  
 Peak intensity 0.700 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14146\_LENINA-STD-BASE-CXA18



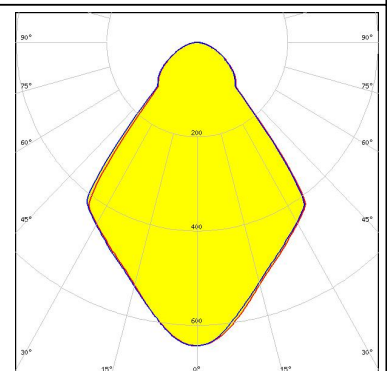
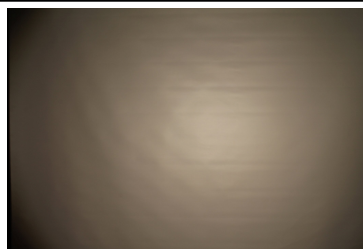
#### CREE

LED CMA2550  
 FWHM 71.0°  
 Efficiency 94 %  
 Peak intensity 0.650 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13324\_LENINA-STD-BASE-CXA25



#### CREE

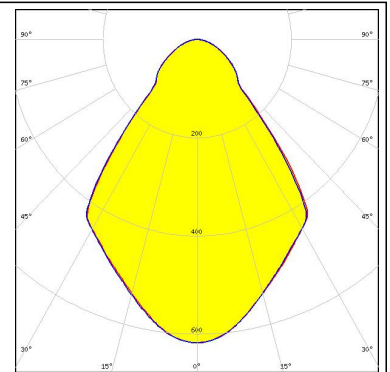
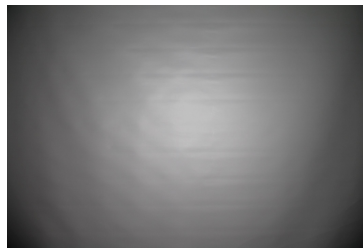
LED CMT14xx  
 FWHM 75.0°  
 Efficiency 94 %  
 Peak intensity 0.650 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENINA-STD-BASE-VERO13-18  
 Bender Wirth: 434 Typ L1



#### PHOTOMETRIC DATA (MEASURED):

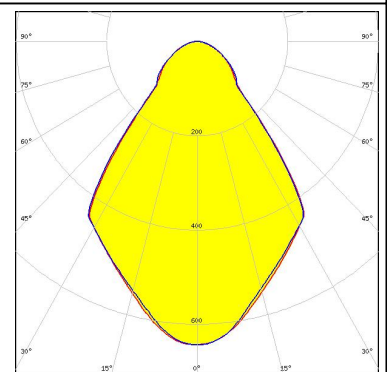
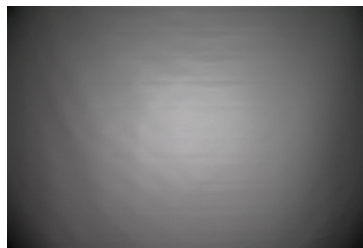
**CREE** 

LED CMT19xx  
 FWHM 75.0°  
 Efficiency 94 %  
 Peak intensity 0.618 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENASTD-BASE-VERO13-18  
 Bender Wirth: 477 Typ L1



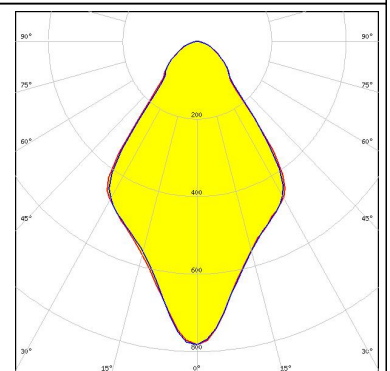
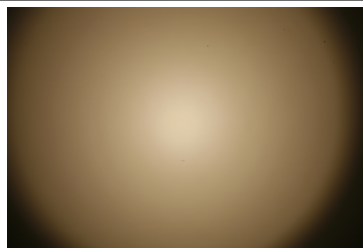
**CREE** 

LED CMT19xx  
 FWHM 74.0°  
 Efficiency 94 %  
 Peak intensity 0.644 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12691\_LENASTD-BASE-CLL030



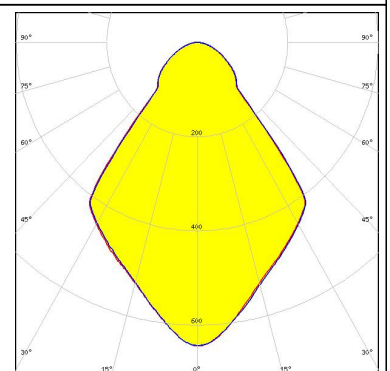
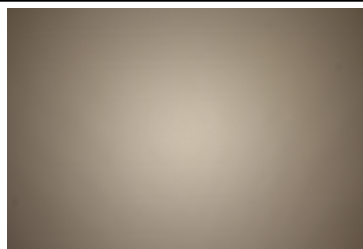
**CREE** 

LED CXA/B 15xx  
 FWHM 70.0°  
 Efficiency 91 %  
 Peak intensity 0.800 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13186\_LENASTD-BASE-CXA15



**CREE** 

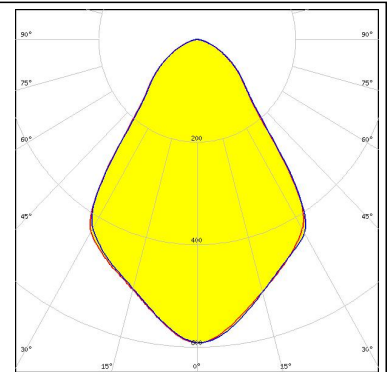
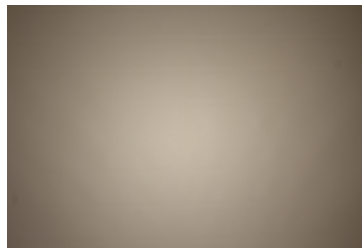
LED CXA/B 15xx  
 FWHM 75.0°  
 Efficiency 93 %  
 Peak intensity 0.640 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENASTD-BASE-VERO13-18  
 Bender Wirth: 441 Typ L1



#### PHOTOMETRIC DATA (MEASURED):

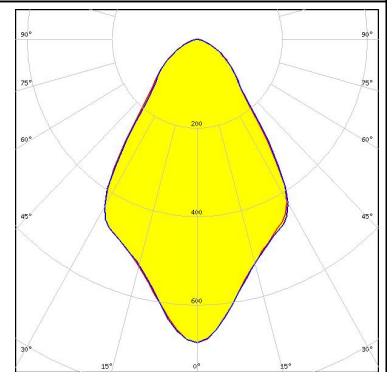
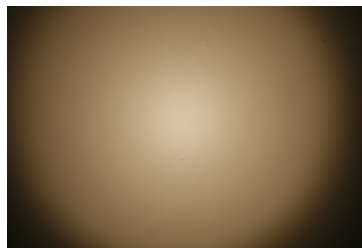
#### CREE

LED CXA/B 15xx  
 FWHM 73.0°  
 Efficiency 89 %  
 Peak intensity 0.590 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENINA-STD-BASE-VERO13-18  
 C12606\_LENINA-DL  
 Bender Wirth: 441 Typ L1



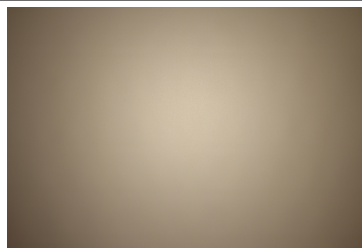
#### CREE

LED CXA/B 15xx  
 FWHM 69.0°  
 Efficiency 86 %  
 Peak intensity 0.700 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13186\_LENINA-STD-BASE-CXA15  
 C12606\_LENINA-DL



#### CREE

LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 73.0°  
 Efficiency 94 %  
 Peak intensity 0.790 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14146\_LENINA-STD-BASE-CXA18



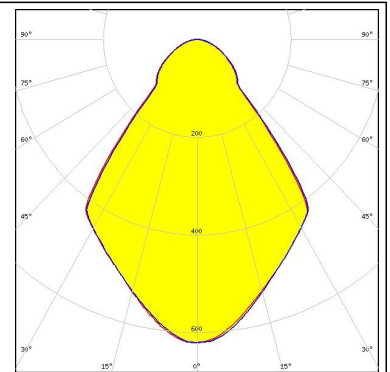
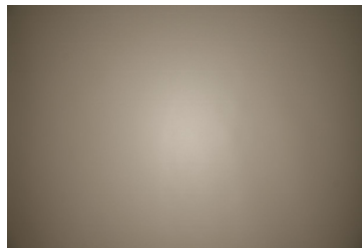
#### CREE

LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 73.0°  
 Efficiency 94 %  
 Peak intensity 0.790 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14146\_LENINA-STD-BASE-CXA18  
 C12606\_LENINA-DL

#### PHOTOMETRIC DATA (MEASURED):

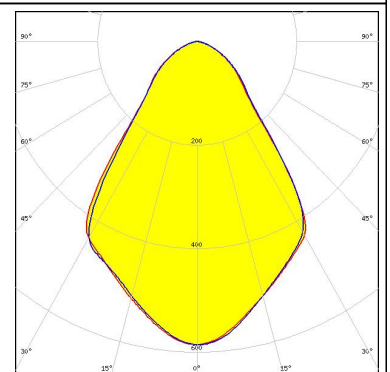
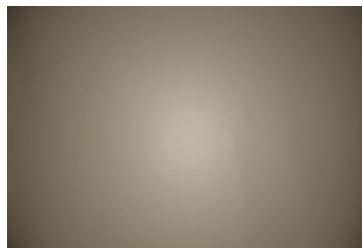
**CREE** 

LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 75.0°  
 Efficiency 93 %  
 Peak intensity 0.620 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENINA-STD-BASE-VERO13-18  
 Bender Wirth: 437 Typ L1



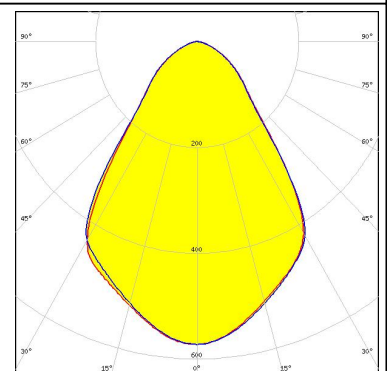
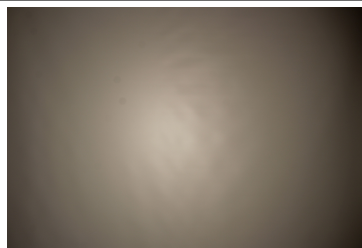
**CREE** 

LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 74.0°  
 Efficiency 89 %  
 Peak intensity 0.590 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENINA-STD-BASE-VERO13-18  
 C12606\_LENINA-DL  
 Bender Wirth: 437 Typ L1



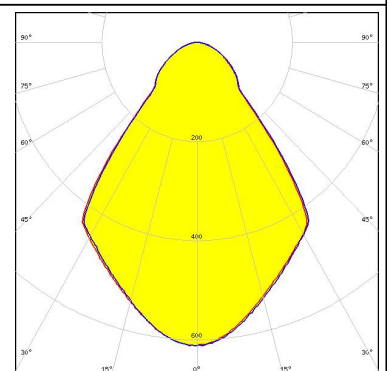
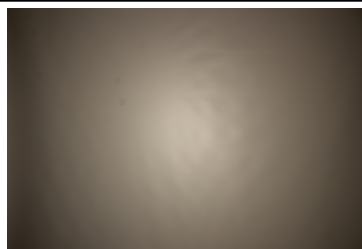
**CREE** 

LED CXA/B 1830  
 FWHM 74.0°  
 Efficiency 89 %  
 Peak intensity 0.570 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENINA-STD-BASE-VERO13-18  
 C12606\_LENINA-DL  
 Bender Wirth: 437 Typ L1



**CREE** 

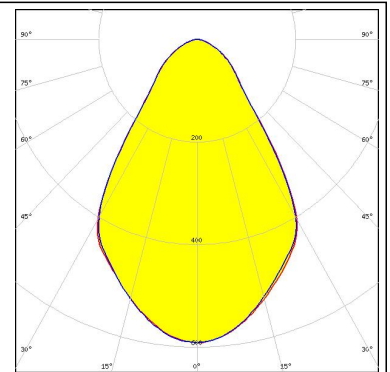
LED CXA/B 1830  
 FWHM 75.0°  
 Efficiency 94 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENINA-STD-BASE-VERO13-18  
 Bender Wirth: 437 Typ L1



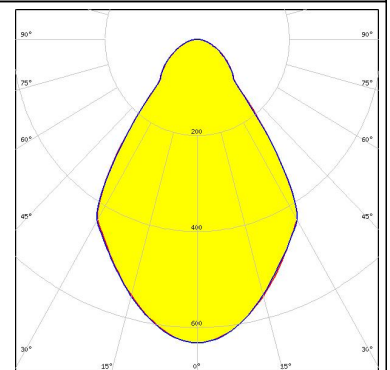
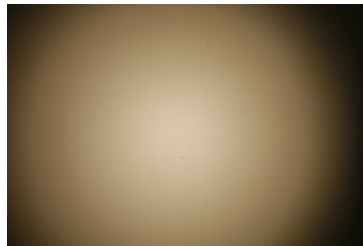
#### PHOTOMETRIC DATA (MEASURED):



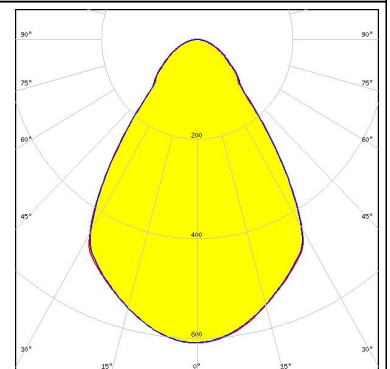
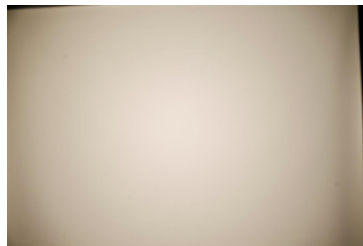
LED CXA/B 25xx  
 FWHM 70.0°  
 Efficiency 84 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13324\_LENINA-STD-BASE-CXA25  
 C12606\_LENINA-DL



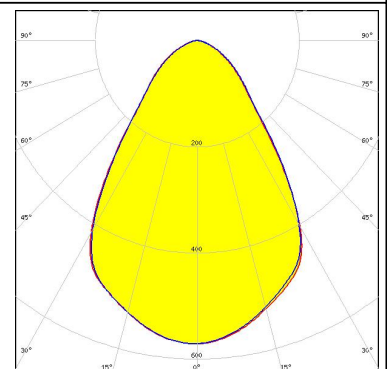
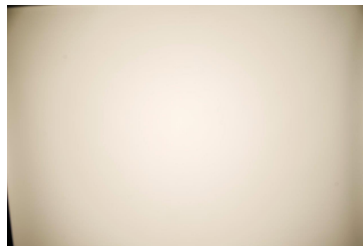
LED CXA/B 25xx  
 FWHM 70.0°  
 Efficiency 89 %  
 Peak intensity 0.700 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13324\_LENINA-STD-BASE-CXA25



LED CXA/B 30xx  
 FWHM 72.0°  
 Efficiency 91 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2234C + 50-2100LN



LED CXA/B 30xx  
 FWHM 77.0°  
 Efficiency 87 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12606\_LENINA-DL  
 IDEAL: 50-2234C + 50-2100LN

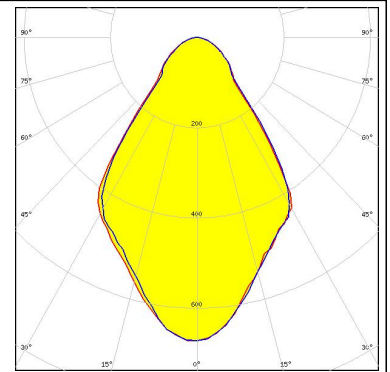




#### PHOTOMETRIC DATA (MEASURED):

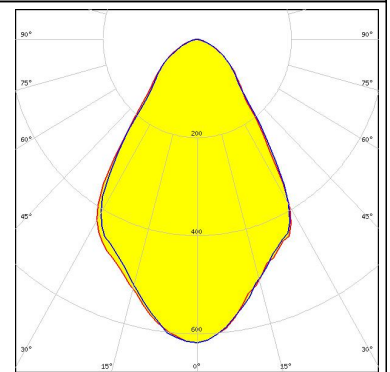
#### CREE

LED CXA2011  
FWHM 72.0°  
Efficiency 87 %  
Peak intensity 0.700 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12105\_LENINA-STD-BASE-CXA20



#### CREE

LED CXA2011  
FWHM 70.0°  
Efficiency 82 %  
Peak intensity 0.600 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12105\_LENINA-STD-BASE-CXA20  
C12606\_LENINA-DL



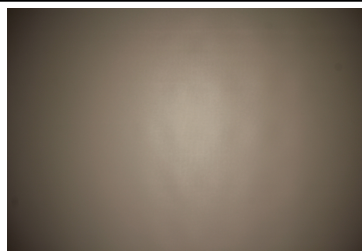
#### EVERLIGHT

LED CHI3030 19W  
FWHM 75.0°  
Efficiency 94 %  
Peak intensity 0.550 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENINA-STD-BASE-VERO29  
C12606\_LENINA-DL  
Bender Wirth: 468 Typ L3



#### EVERLIGHT

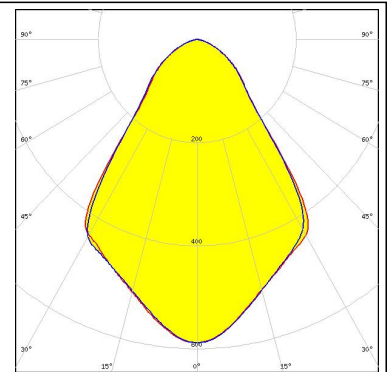
LED CHI3030 29W  
FWHM 75.0°  
Efficiency 90 %  
Peak intensity 0.520 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENINA-STD-BASE-VERO29  
C12606\_LENINA-DL  
Bender Wirth: 468 Typ L3



#### PHOTOMETRIC DATA (MEASURED):

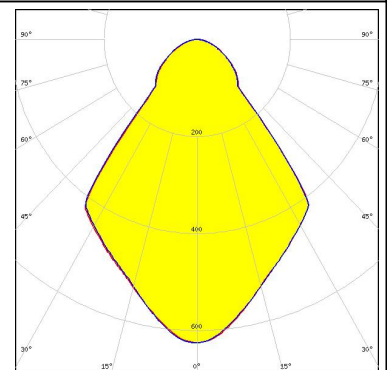
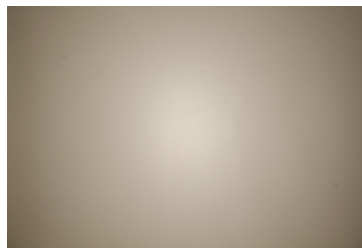
#### LUMILEDS

LED LUXEON CoB 1202/1203  
 FWHM 74.0°  
 Efficiency 89 %  
 Peak intensity 0.590 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENINA-STD-BASE-VERO13-18  
 C12606\_LENINA-DL  
 Bender Wirth: 438 Typ L1



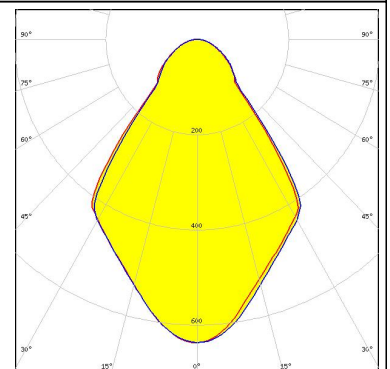
#### LUMILEDS

LED LUXEON CoB 1202/1203  
 FWHM 76.0°  
 Efficiency 93 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENINA-STD-BASE-VERO13-18  
 Bender Wirth: 438 Typ L1



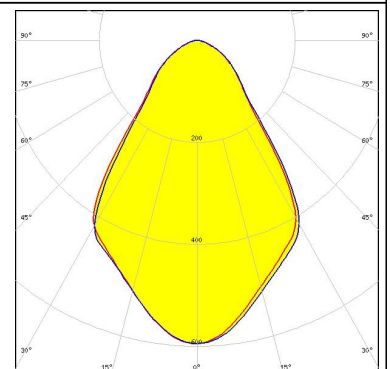
#### LUMILEDS

LED LUXEON CoB 1204/1205  
 FWHM 73.0°  
 Efficiency 90 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12292\_LENINA-STD-BASE-MEZ



#### LUMILEDS

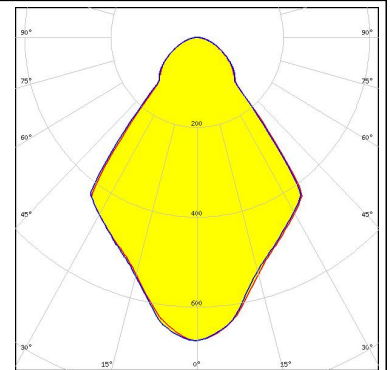
LED LUXEON CoB 1204/1205  
 FWHM 71.0°  
 Efficiency 86 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12292\_LENINA-STD-BASE-MEZ  
 C12606\_LENINA-DL



#### PHOTOMETRIC DATA (MEASURED):

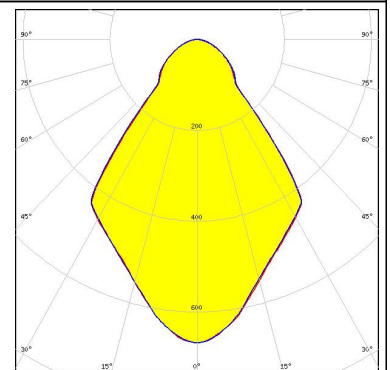
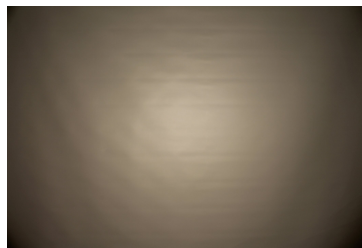
#### LUMILEDS

LED LUXEON CoB 1204HD  
 FWHM 74.0°  
 Efficiency 94 %  
 Peak intensity 0.680 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C11981\_LENASTD-BASE-COB-L110



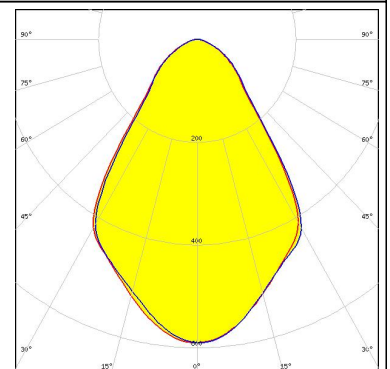
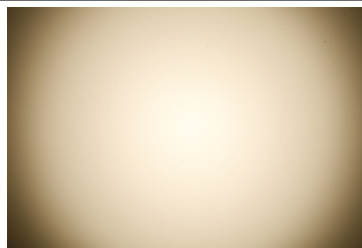
#### LUMILEDS

LED LUXEON CoB 1205HD  
 FWHM 74.0°  
 Efficiency 94 %  
 Peak intensity 0.670 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C11981\_LENASTD-BASE-COB-L110



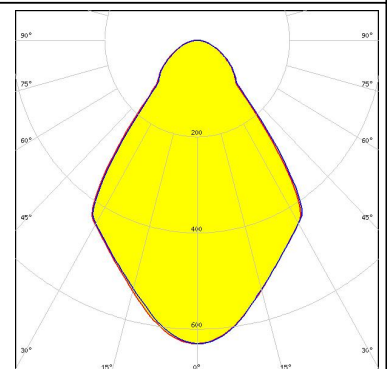
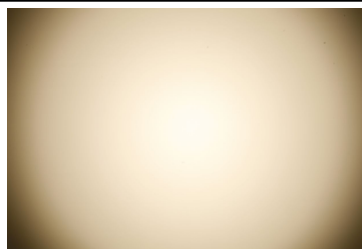
#### LUMILEDS

LED LUXEON CoB 1208  
 FWHM 72.0°  
 Efficiency 86 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12292\_LENASTD-BASE-MEZ  
 C12606\_LENINA-DL

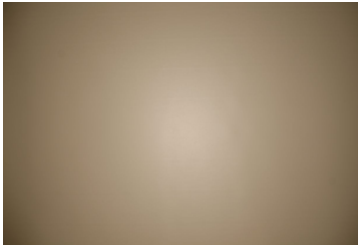
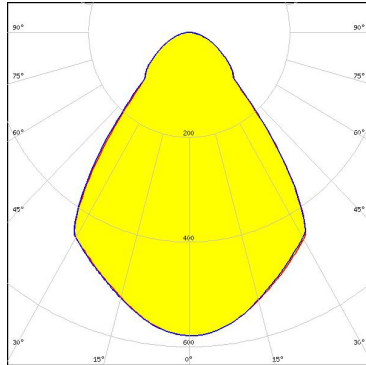
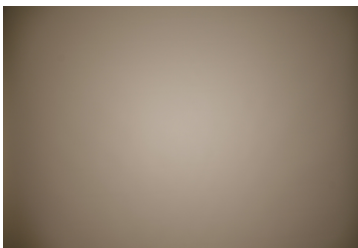
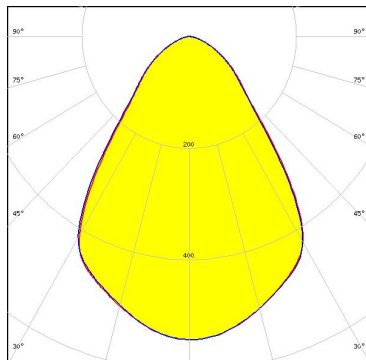

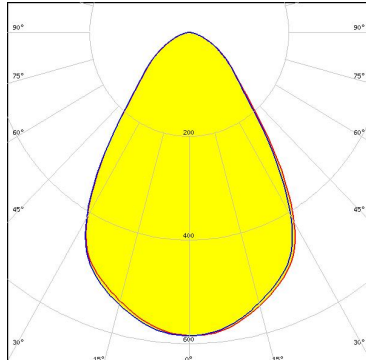
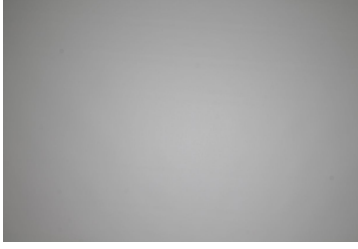
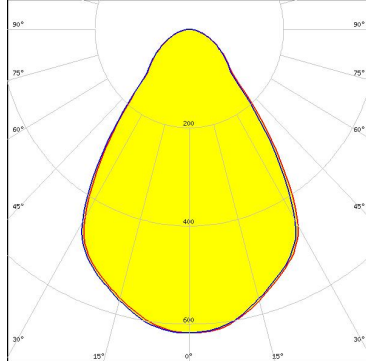


#### LUMILEDS


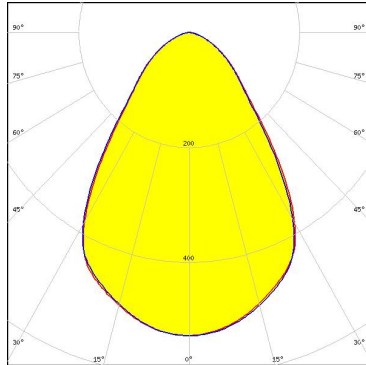
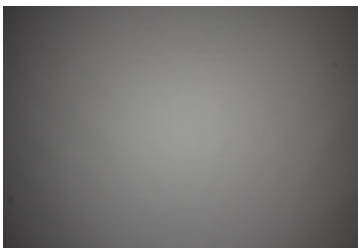
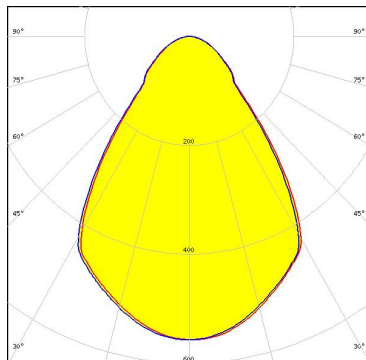
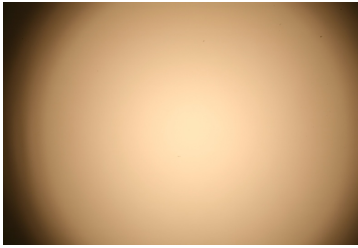
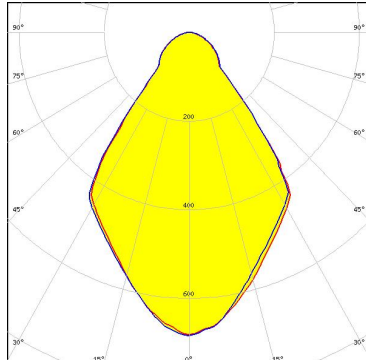
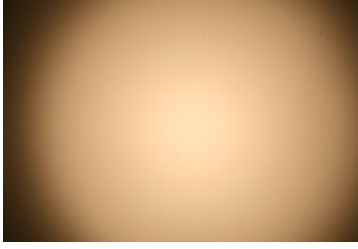
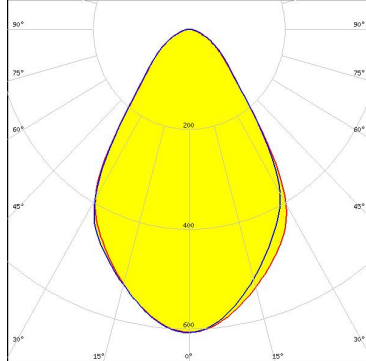
LED LUXEON CoB 1208  
 FWHM 73.0°  
 Efficiency 91 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12292\_LENASTD-BASE-MEZ



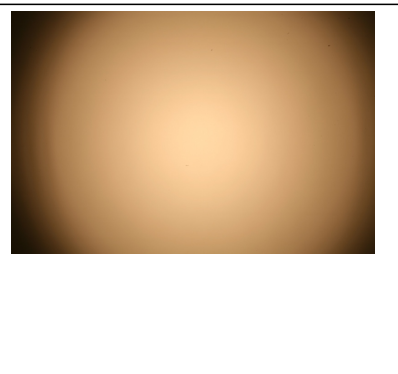
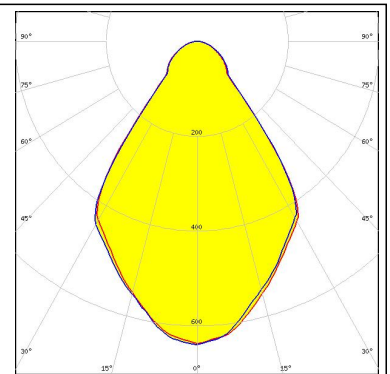
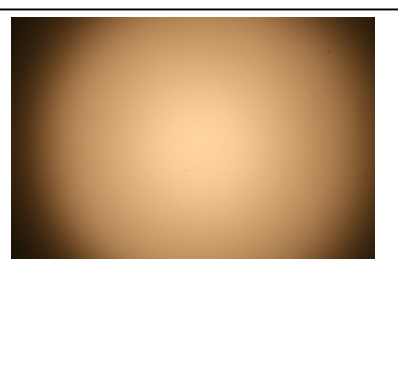
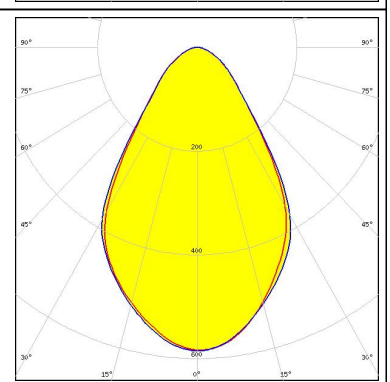

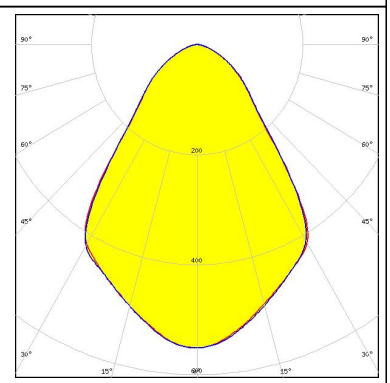
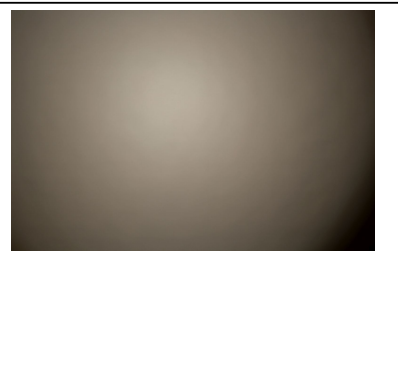
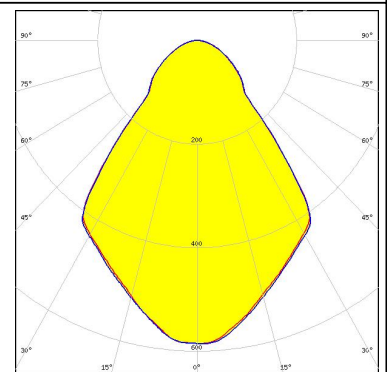
#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1211            FWHM 76.0°            Efficiency 93 %            Peak intensity 0.600 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13867_LENASTD-BASE-VERO29            Bender Wirth: 431 Typ L3</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1211            FWHM 75.0°            Efficiency 88 %            Peak intensity 0.540 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13867_LENASTD-BASE-VERO29            C12606_LENINA-DL            Bender Wirth: 431 Typ L3</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1216/1812            FWHM 72.0°            Efficiency 90 %            Peak intensity 0.590 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C12692_LENASTD-BASE-CLL040            C12606_LENINA-DL</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1216/1812            FWHM 73.0°            Efficiency 94 %            Peak intensity 0.620 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C12692_LENASTD-BASE-CLL040</p>		

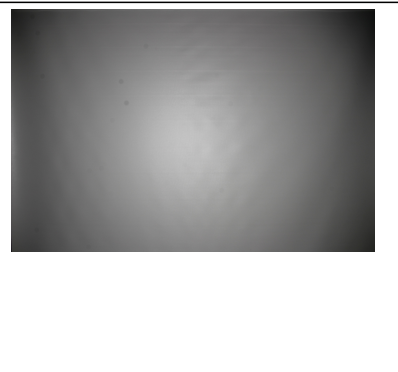
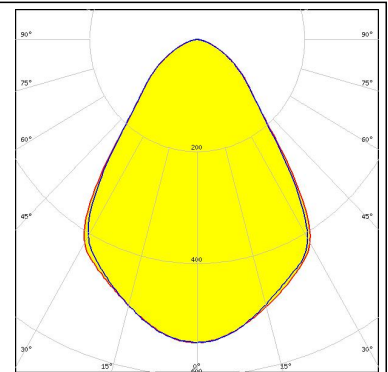
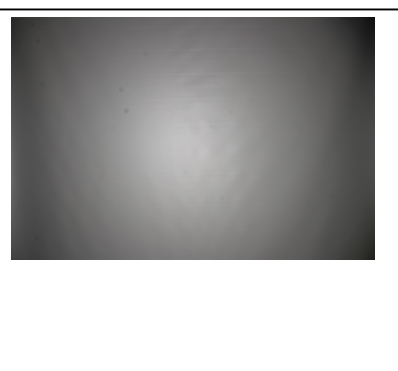
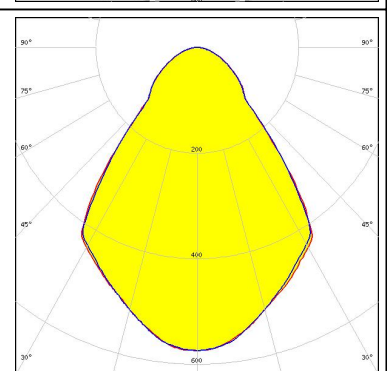
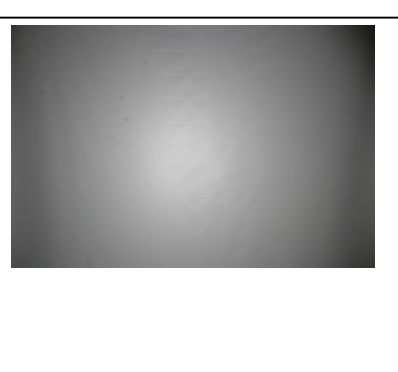
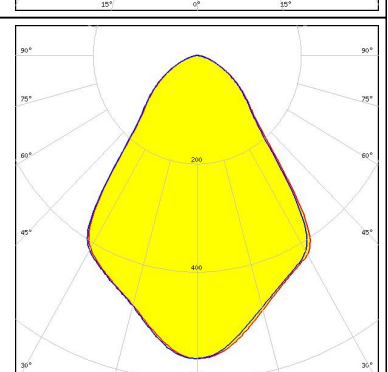
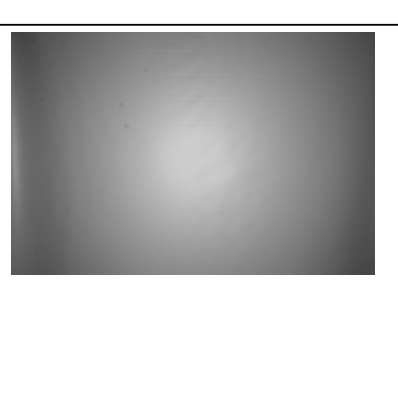
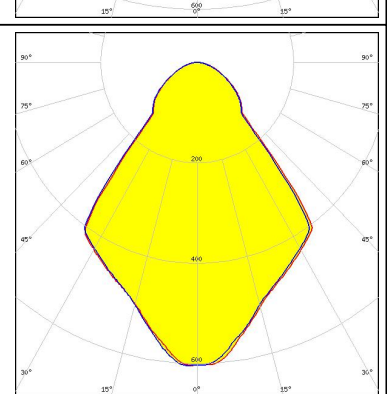
#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1216/1812            FWHM 73.0°            Efficiency 83 %            Peak intensity 0.530 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C12606_LENINA-DL            A.A.G. STUCCHI: 8102/G2 + S-8000/12</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1216/1812            FWHM 74.0°            Efficiency 88 %            Peak intensity 0.560 cd/lm            LEDs/each optic 1            Light colour White            Required components:            A.A.G. STUCCHI: 8102/G2 + S-8000/12</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON K12            FWHM 72.0°            Efficiency 90 %            Peak intensity 0.700 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C12924_LENINA-STD-BASE-LUXEON-K</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON K12            FWHM 68.0°            Efficiency 83 %            Peak intensity 0.600 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C12924_LENINA-STD-BASE-LUXEON-K            C12606_LENINA-DL</p>		

#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON K16            FWHM 72.0°            Efficiency 86 %            Peak intensity 0.640 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C12924_LENASTD-BASE-LUXEON-K</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON K16            FWHM 68.0°            Efficiency 80 %            Peak intensity 0.600 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C12924_LENASTD-BASE-LUXEON-K            C12606_LENINA-DL</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-14 (Dim-To-Warm)            FWHM 75.0°            Efficiency 89 %            Peak intensity 0.550 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13868_LENASTD-BASE-VERO13-18            C12606_LENINA-DL            Bender Wirth: 491 Typ L2</p>		
<p><b>LUMINUS</b></p> <p>LED CDM-14 (Dim-To-Warm)            FWHM 77.0°            Efficiency 93 %            Peak intensity 0.590 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13868_LENASTD-BASE-VERO13-18            Bender Wirth: 491 Typ L2</p>		

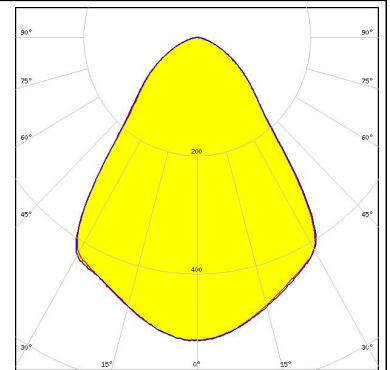
#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMINUS</b></p> <p>LED CDM-18 (Dim-To-Warm)            FWHM 75.0°            Efficiency 89 %            Peak intensity 0.500 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><b>LUMINUS</b></p> <p>LED CDM-18 (Dim-To-Warm)            FWHM 76.0°            Efficiency 93 %            Peak intensity 0.570 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><b>LUMINUS</b></p> <p>LED CDM-9 (Dim-To-Warm)            FWHM 74.0°            Efficiency 88 %            Peak intensity 0.560 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>		
<p><b>LUMINUS</b></p> <p>LED CDM-9 (Dim-To-Warm)            FWHM 76.0°            Efficiency 92 %            Peak intensity 0.610 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>		

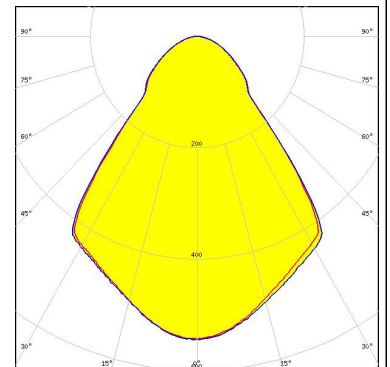
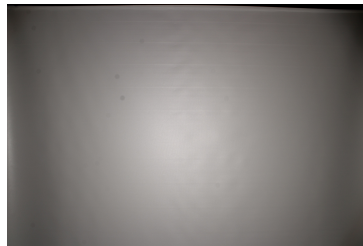
#### PHOTOMETRIC DATA (MEASURED):



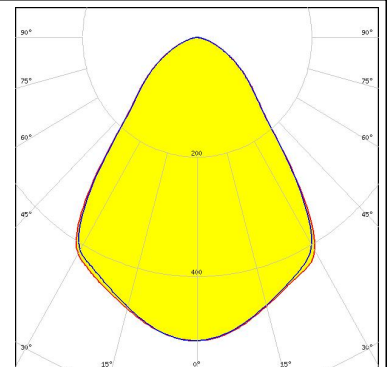
LED CTM-14 (Tunable White)  
 FWHM 76.0°  
 Efficiency 87 %  
 Peak intensity 0.510 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13867\_LENINA-STD-BASE-VERO29  
 C12606\_LENINA-DL  
 Bender Wirth: 442 Typ L3



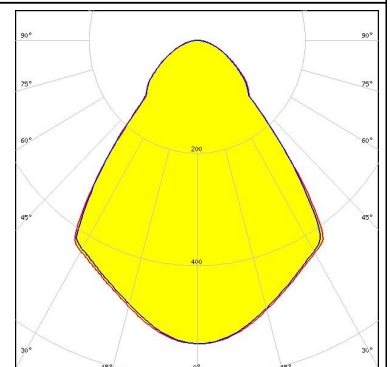
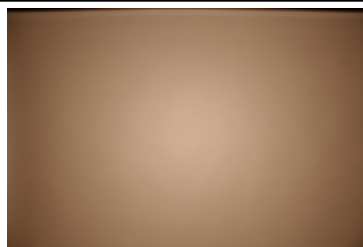
LED CTM-14 (Tunable White)  
 FWHM 77.0°  
 Efficiency 92 %  
 Peak intensity 0.550 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13867\_LENINA-STD-BASE-VERO29  
 Bender Wirth: 442 Typ L3



LED CTM-18 (Tunable White)  
 FWHM 77.0°  
 Efficiency 87 %  
 Peak intensity 0.500 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13867\_LENINA-STD-BASE-VERO29  
 C12606\_LENINA-DL  
 Bender Wirth: 442 Typ L3

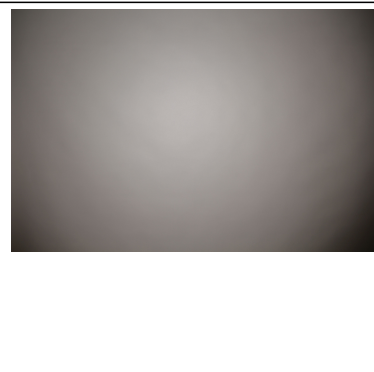
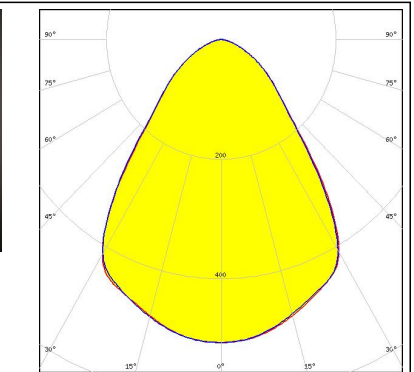
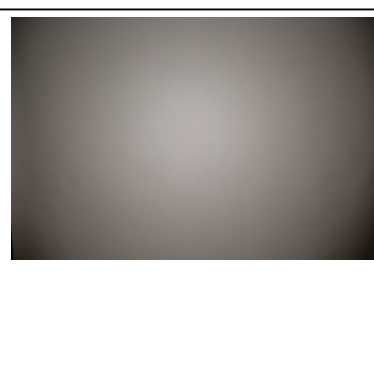
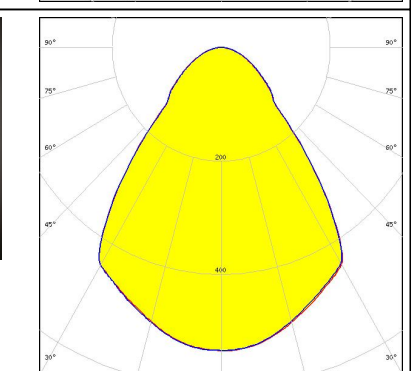

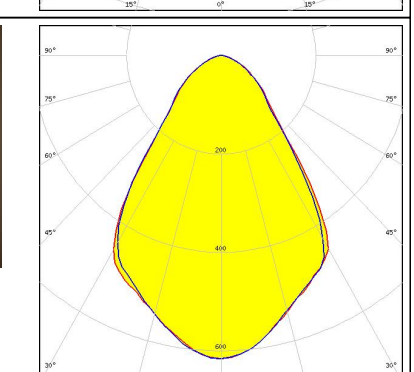
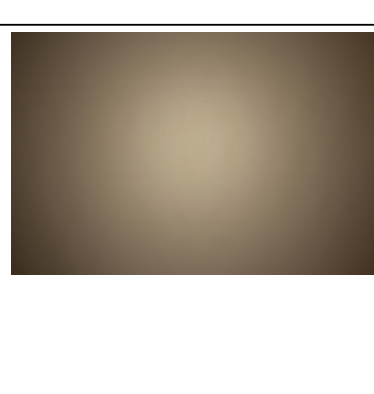
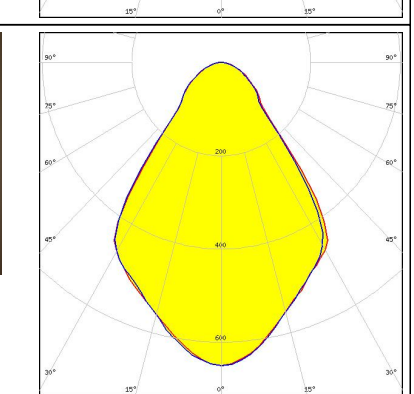


LED CTM-18 (Tunable White)  
 FWHM 78.0°  
 Efficiency 92 %  
 Peak intensity 0.500 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13867\_LENINA-STD-BASE-VERO29  
 Bender Wirth: 442 Typ L3

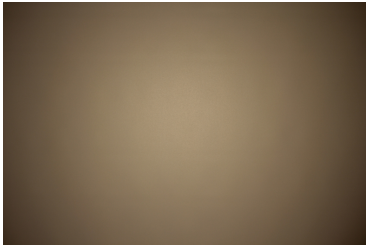
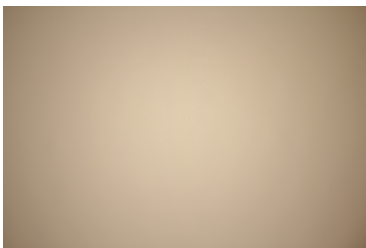

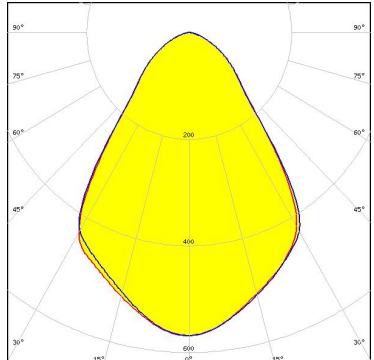
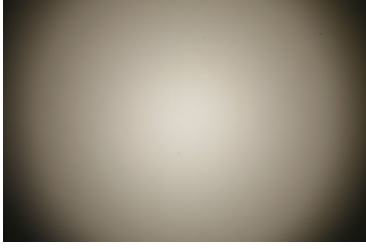
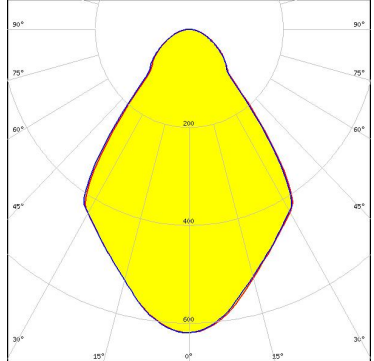




#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMINUS</b></p> <p>LED CTM-22 (Tunable White)            FWHM 77.0°            Efficiency 88 %            Peak intensity 0.500 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13867_LENINA-STD-BASE-VERO29            C12606_LENINA-DL            Bender Wirth: 494 Typ L3</p>		
<p><b>LUMINUS</b></p> <p>LED CTM-22 (Tunable White)            FWHM 78.0°            Efficiency 92 %            Peak intensity 0.500 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C13867_LENINA-STD-BASE-VERO29            Bender Wirth: 494 Typ L3</p>		
<p><b>LUMINUS</b></p> <p>LED CxM-14 (19x19)            FWHM 73.0°            Efficiency 91 %            Peak intensity 0.620 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C12691_LENINA-STD-BASE-CLL030            C12606_LENINA-DL</p>		
<p><b>LUMINUS</b></p> <p>LED CxM-14 (19x19)            FWHM 74.0°            Efficiency 94 %            Peak intensity 0.650 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C12691_LENINA-STD-BASE-CLL030</p>		

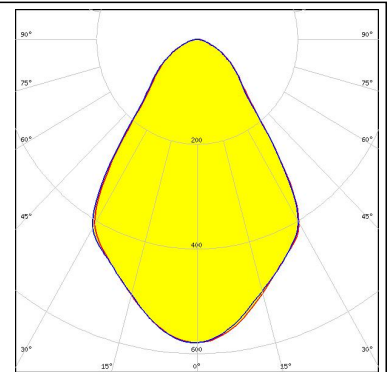
**PHOTOMETRIC DATA (MEASURED):**

<p><b>LUMINUS</b></p> <p>LED CxM-22 (28x28)            FWHM 73.0°            Efficiency 91 %            Peak intensity 0.600 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C12692_LENINA-STD-BASE-CLL040            C12606_LENINA-DL</p>		
<p><b>LUMINUS</b></p> <p>LED CxM-22 (28x28)            FWHM 73.0°            Efficiency 94 %            Peak intensity 0.600 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C12692_LENINA-STD-BASE-CLL040</p>		
<p><b>NICHIA</b></p> <p>LED COB J-Type            FWHM 74.0°            Efficiency 89 %            Peak intensity 0.600 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13868_LENINA-STD-BASE-VERO13-18            C12606_LENINA-DL            Bender Wirth: 463 Typ L2</p>		
<p><b>NICHIA</b></p> <p>LED COB J-Type            FWHM 73.0°            Efficiency 89 %            Peak intensity 0.620 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C12292_LENINA-STD-BASE-MEZ</p>		

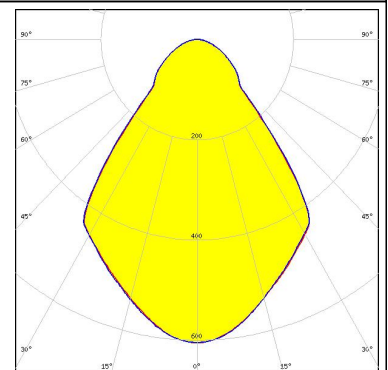
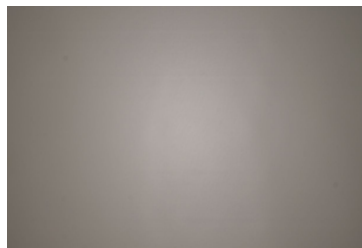
#### PHOTOMETRIC DATA (MEASURED):



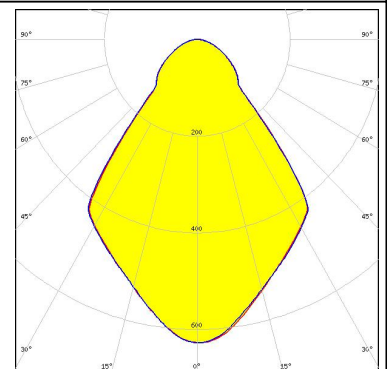
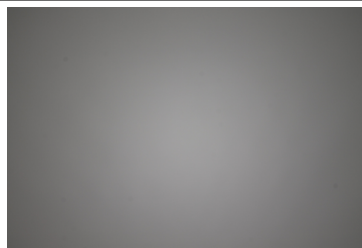
LED COB J-Type  
 FWHM 72.0°  
 Efficiency 84 %  
 Peak intensity 0.580 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12292\_LENASTD-BASE-MEZ  
 C12606\_LENINA-DL



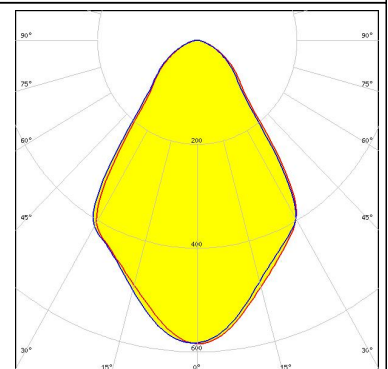
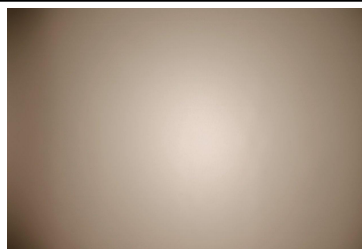
LED COB J-Type  
 FWHM 76.0°  
 Efficiency 94 %  
 Peak intensity 0.610 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENASTD-BASE-VERO13-18  
 Bender Wirth: 463 Typ L2




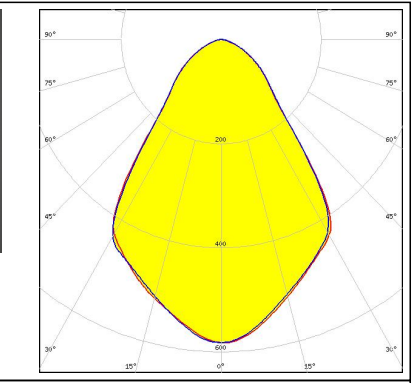
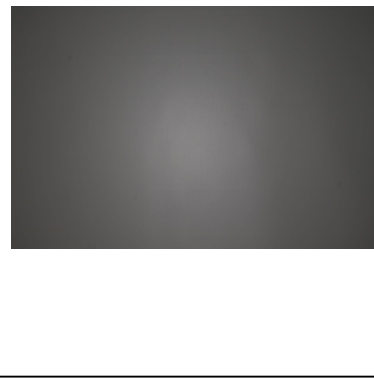
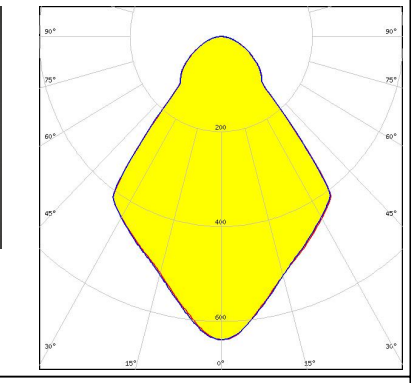
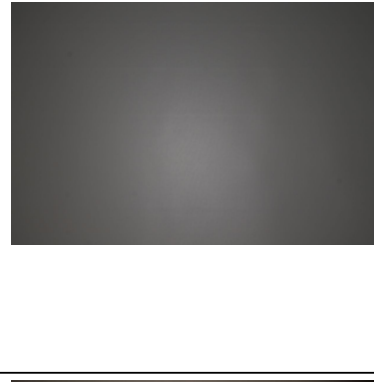
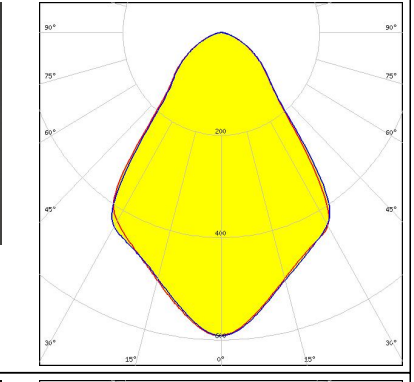
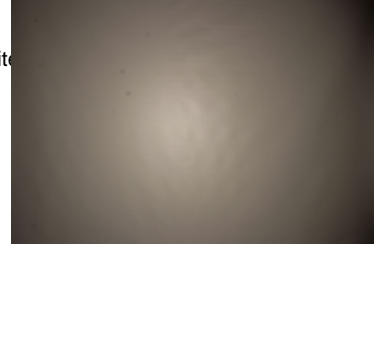
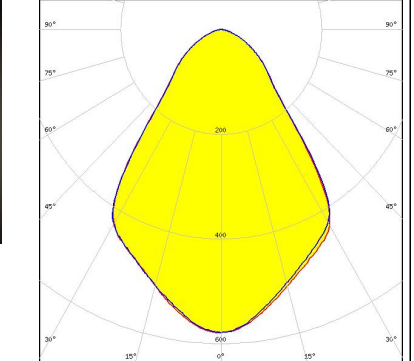
LED COB L-Type (LES 11)  
 FWHM 75.0°  
 Efficiency 93 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENASTD-BASE-VERO13-18  
 Bender Wirth: 438 Typ L1



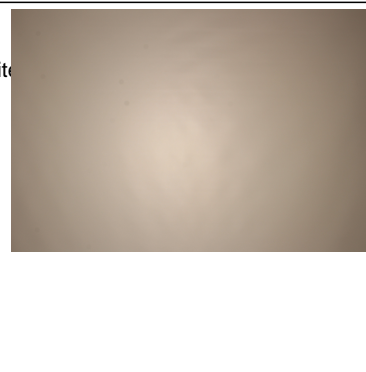
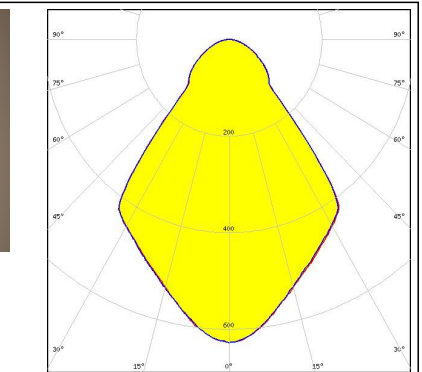
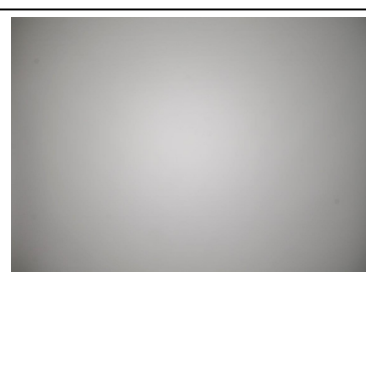
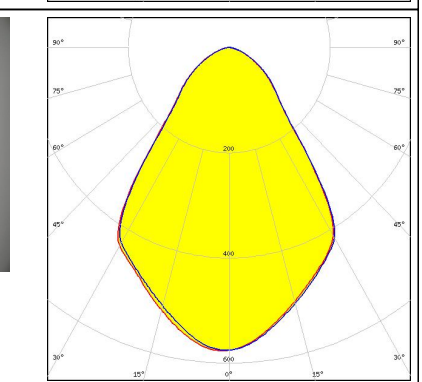
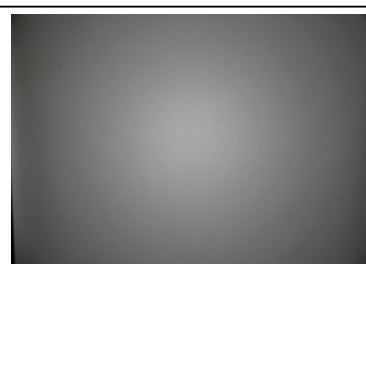
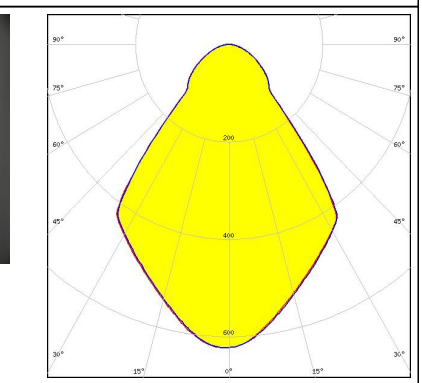
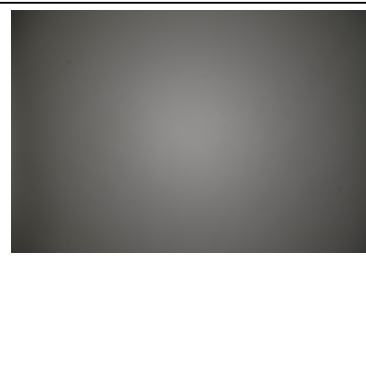
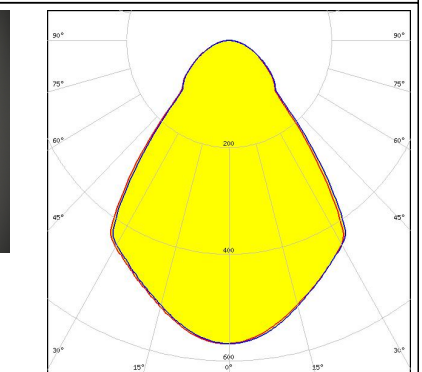
LED COB L-Type (LES 11)  
 FWHM 71.0°  
 Efficiency 82 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C11981\_LENASTD-BASE-COB-L110  
 C12606\_LENINA-DL



#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM 73.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 0.580 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <ul style="list-style-type: none"> <li>C13868_LENINA-STD-BASE-VERO13-18</li> <li>C12606_LENINA-DL</li> <li>Bender Wirth: 438 Typ L1</li> </ul>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 9)</p> <p>FWHM 76.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.640 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <ul style="list-style-type: none"> <li>C13868_LENINA-STD-BASE-VERO13-18</li> <li>Bender Wirth: 438 Typ L1</li> </ul>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 9)</p> <p>FWHM 74.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 0.590 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <ul style="list-style-type: none"> <li>C13868_LENINA-STD-BASE-VERO13-18</li> <li>C12606_LENINA-DL</li> <li>Bender Wirth: 438 Typ L1</li> </ul>		
<p><b>NICHIA</b></p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM 74.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 0.600 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <ul style="list-style-type: none"> <li>C13868_LENINA-STD-BASE-VERO13-18</li> <li>C12606_LENINA-DL</li> <li>Bender Wirth: 498 Typ L2</li> </ul>		

#### PHOTOMETRIC DATA (MEASURED):

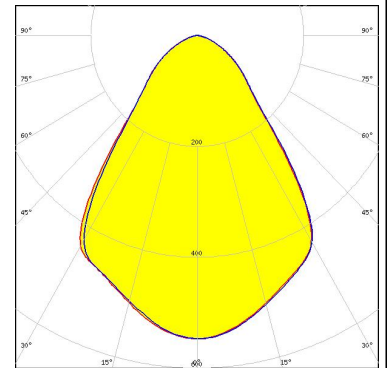
<p><b>NICHIA</b></p> <p>LED NVCWJ024Z-V1MT: COB J-Type Tunable White</p> <p>FWHM 75.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.600 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENINA-STD-BASE-VERO13-18 Bender Wirth: 498 Typ L2</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S13</p> <p>FWHM 73.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 0.580 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: 437 Typ L1</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S13</p> <p>FWHM 75.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.620 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: 437 Typ L1</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S19</p> <p>FWHM 76.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.600 cd/lm</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>		

#### PHOTOMETRIC DATA (MEASURED):

**OSRAM**  
Opto Semiconductors

LED Soleriq S19  
FWHM 75.0°  
Efficiency 88 %  
Peak intensity 0.550 cd/lm  
LEDs/each optic 1  
Light colour White

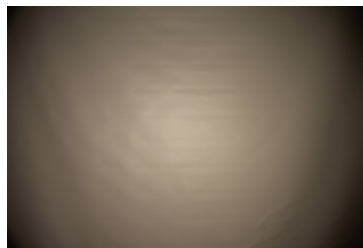
Required components:  
C13867\_LENINA-STD-BASE-VERO29  
C12606\_LENINA-DL  
Bender Wirth: 462 Typ L3



**PHILIPS**

LED Fortimo SLM L13 CoB  
FWHM 71.0°  
Efficiency 88 %  
Peak intensity 0.600 cd/lm  
LEDs/each optic 1  
Light colour White

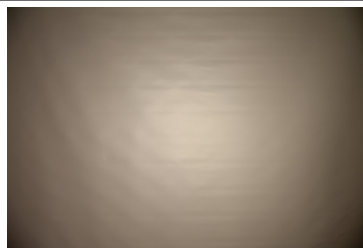
Required components:  
C12292\_LENINA-STD-BASE-MEZ  
C12606\_LENINA-DL



**PHILIPS**

LED Fortimo SLM L13 CoB  
FWHM 74.0°  
Efficiency 94 %  
Peak intensity 0.700 cd/lm  
LEDs/each optic 1  
Light colour White

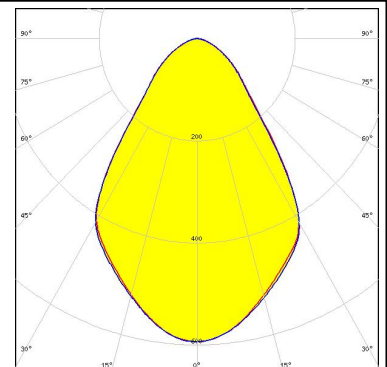
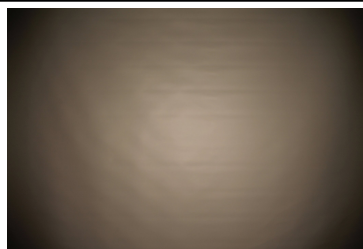
Required components:  
C12292\_LENINA-STD-BASE-MEZ



**PHILIPS**

LED Fortimo SLM L15 CoB  
FWHM 72.0°  
Efficiency 88 %  
Peak intensity 0.600 cd/lm  
LEDs/each optic 1  
Light colour White

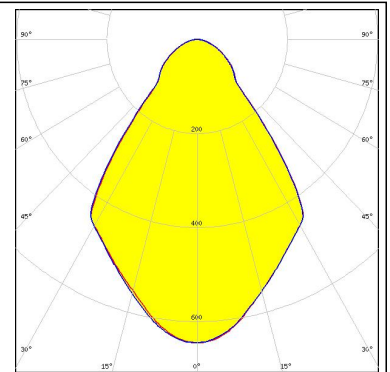
Required components:  
C12292\_LENINA-STD-BASE-MEZ  
C12606\_LENINA-DL



#### PHOTOMETRIC DATA (MEASURED):

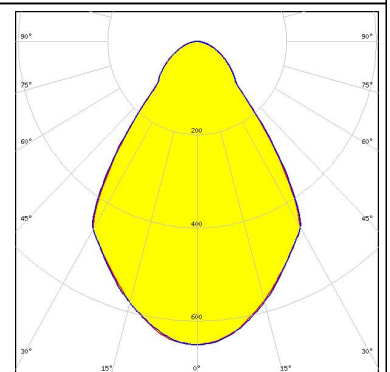
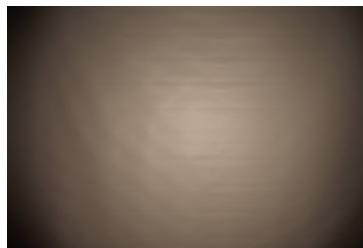
### PHILIPS

LED Fortimo SLM L15 CoB  
FWHM 73.0°  
Efficiency 93 %  
Peak intensity 0.650 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12292\_LENINA-STD-BASE-MEZ



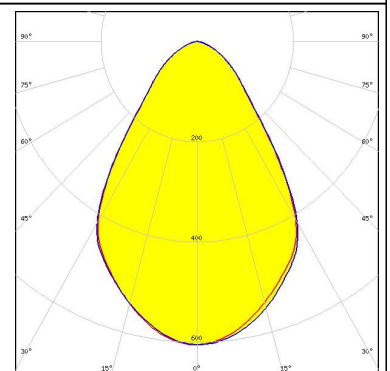
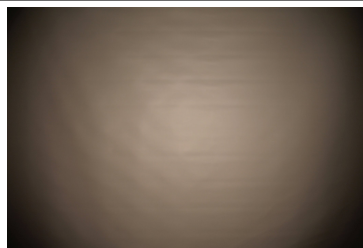
### PHILIPS

LED Fortimo SLM L19 CoB  
FWHM 72.0°  
Efficiency 94 %  
Peak intensity 0.650 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12692\_LENINA-STD-BASE-CLL040



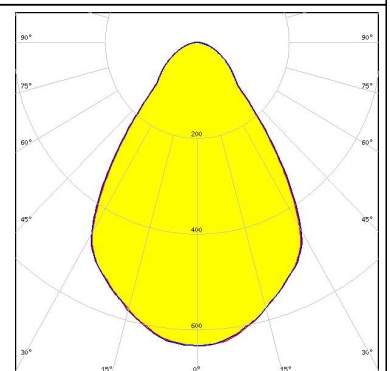
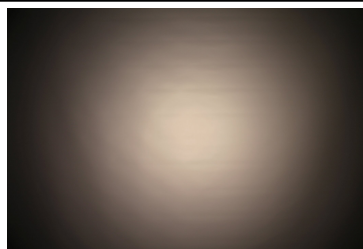
### PHILIPS

LED Fortimo SLM L19 CoB  
FWHM 71.0°  
Efficiency 88 %  
Peak intensity 0.600 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12692\_LENINA-STD-BASE-CLL040  
C12606\_LENINA-DL



### PHILIPS

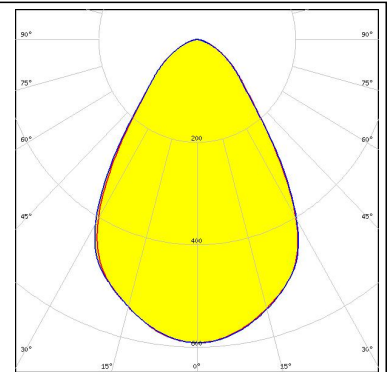
LED Fortimo SLM L23 CoB  
FWHM 72.0°  
Efficiency 94 %  
Peak intensity 0.600 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12692\_LENINA-STD-BASE-CLL040



#### PHOTOMETRIC DATA (MEASURED):

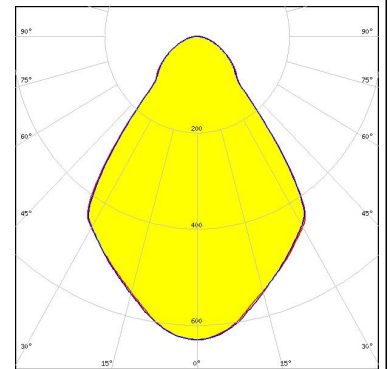
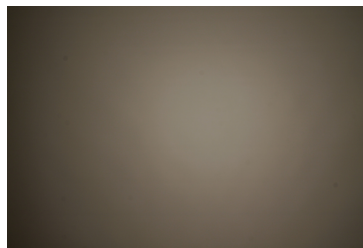
#### PHILIPS

LED Fortimo SLM L23 CoB  
 FWHM 71.0°  
 Efficiency 88 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12692\_LENINA-STD-BASE-CLL040  
 C12606\_LENINA-DL



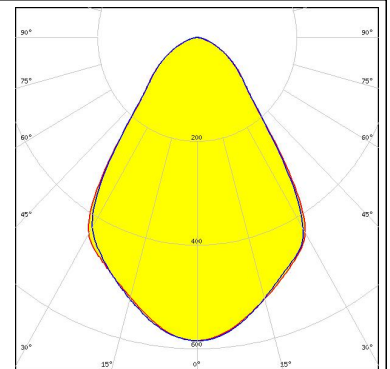
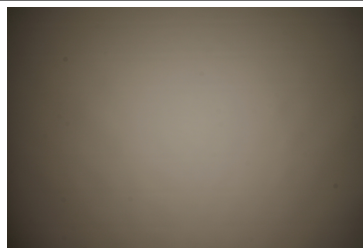
#### SAMSUNG

LED COB D Series LES 14.5 mm  
 FWHM 74.0°  
 Efficiency 94 %  
 Peak intensity 0.630 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12691\_LENINA-STD-BASE-CLL030



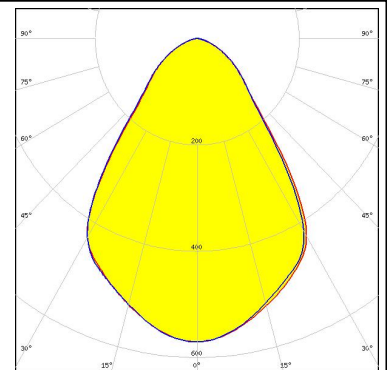
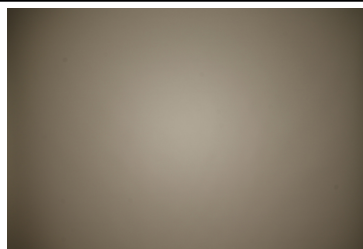
#### SAMSUNG

LED COB D Series LES 14.5 mm  
 FWHM 73.0°  
 Efficiency 89 %  
 Peak intensity 0.600 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 74.0°  
 Efficiency 90 %  
 Peak intensity 0.570 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

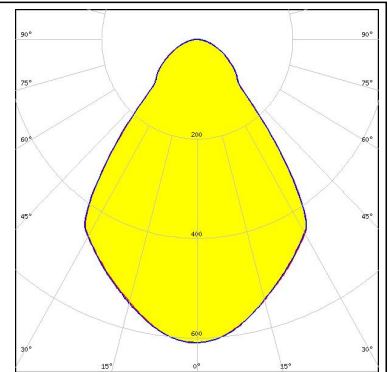
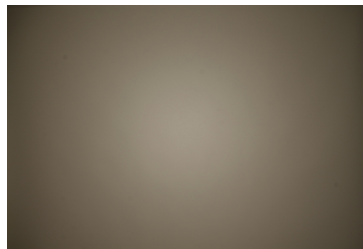




#### PHOTOMETRIC DATA (MEASURED):

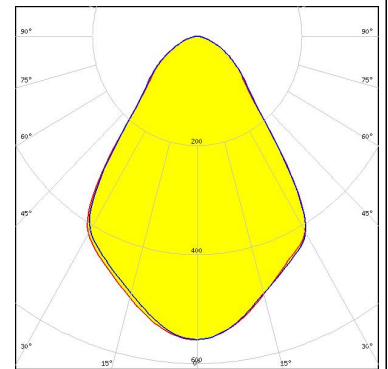
### SAMSUNG

LED LC026B / 033B / 040B  
 FWHM 75.0°  
 Efficiency 94 %  
 Peak intensity 0.610 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENASTD-BASE-VERO13-18  
 Bender Wirth: 450 Typ L2



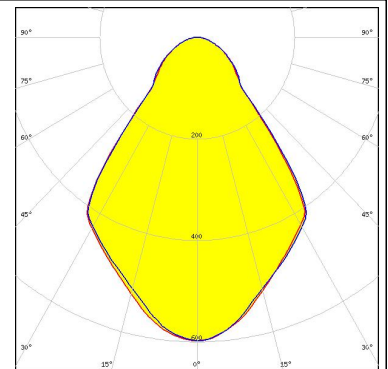
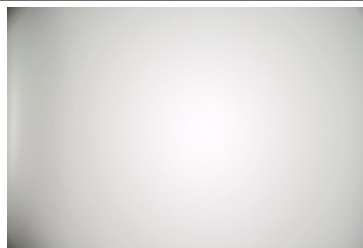
SEOUL SEMICONDUCTOR

LED ZC12/18  
 FWHM 73.0°  
 Efficiency 86 %  
 Peak intensity 0.560 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12691\_LENASTD-BASE-CLL030  
 C12606\_LENINA-DL



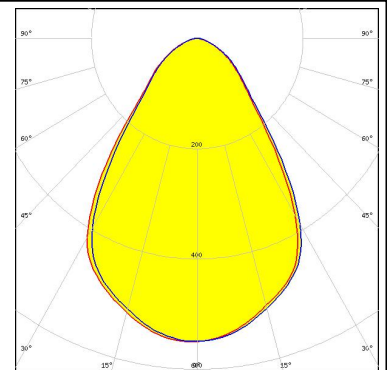
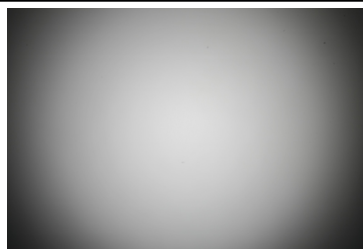
SEOUL SEMICONDUCTOR

LED ZC12/18  
 FWHM 75.0°  
 Efficiency 90 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12691\_LENASTD-BASE-CLL030



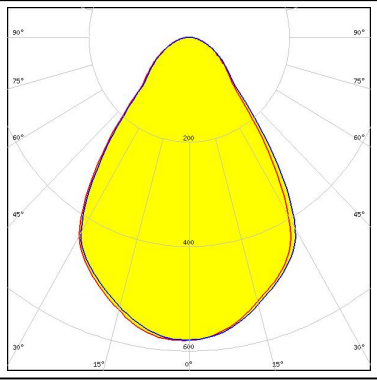
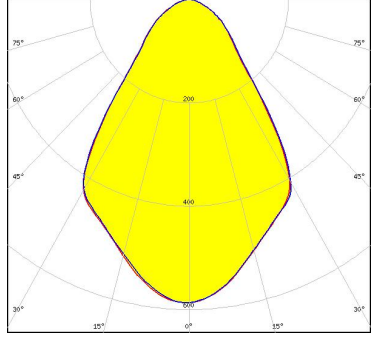
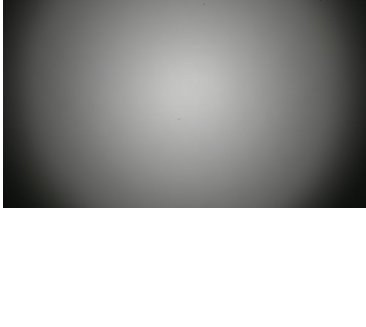
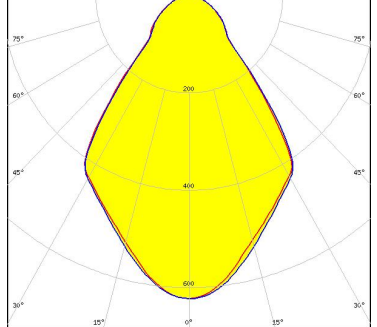


SEOUL SEMICONDUCTOR

LED ZC25/40/60  
 FWHM 72.0°  
 Efficiency 85 %  
 Peak intensity 0.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12692\_LENASTD-BASE-CLL040  
 C12606\_LENINA-DL



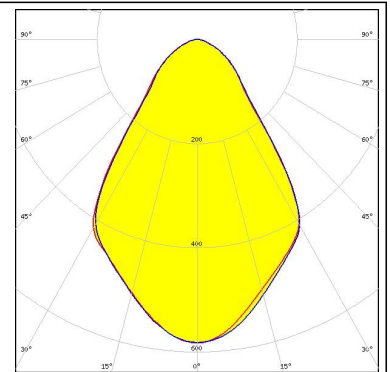
#### PHOTOMETRIC DATA (MEASURED):

<p> SEOL SEMICONDUCTOR</p> <p>LED ZC25/40/60            FWHM 73.0°            Efficiency 89 %            Peak intensity 0.600 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C12692_LENINA-STD-BASE-CLL040</p>		
<h2>SHARP</h2>		
<p>LED Mega Zenigata (GW5DGC)            FWHM 73.0°            Efficiency 90 %            Peak intensity 0.630 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C12292_LENINA-STD-BASE-MEZ</p>		
<h2>SHARP</h2>		
<p>LED Mega Zenigata (GW5DGC)            FWHM 72.0°            Efficiency 86 %            Peak intensity 0.588 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C12292_LENINA-STD-BASE-MEZ            C12606_LENINA-DL</p>		
<h2>SHARP</h2>		
<p>LED Mega Zenigata (GW6DME)            FWHM 73.0°            Efficiency 89 %            Peak intensity 0.620 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C12292_LENINA-STD-BASE-MEZ</p>		

#### PHOTOMETRIC DATA (MEASURED):

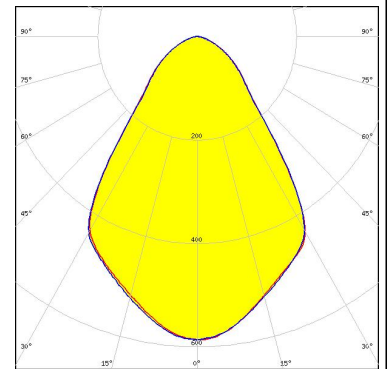
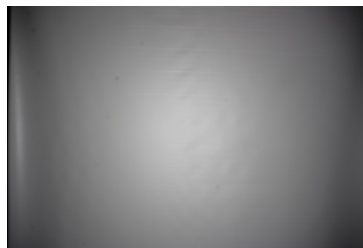
#### SHARP

LED Mega Zenigata (GW6DME)  
 FWHM 72.0°  
 Efficiency 85 %  
 Peak intensity 0.580 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12292\_LENASTD-BASE-MEZ  
 C12606\_LENINA-DL



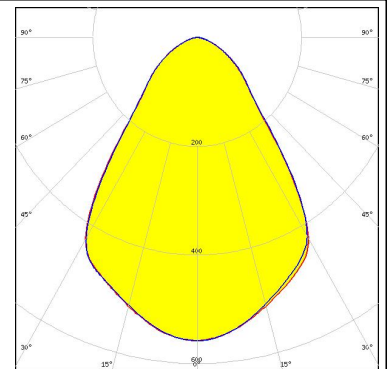
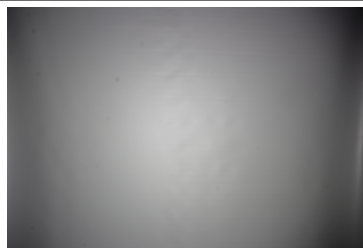
#### TRIDONIC

LED SLE G7 LES15  
 FWHM 73.0°  
 Efficiency 90 %  
 Peak intensity 0.590 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12691\_LENASTD-BASE-CLL030



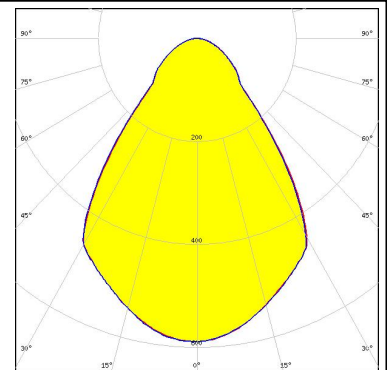
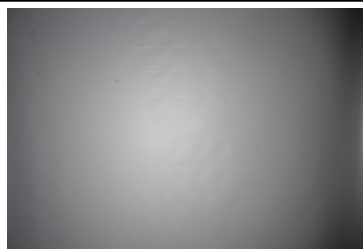
#### TRIDONIC

LED SLE G7 LES17 H  
 FWHM 74.0°  
 Efficiency 89 %  
 Peak intensity 0.560 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14547\_LENASTD-BASE-CLL030



#### TRIDONIC

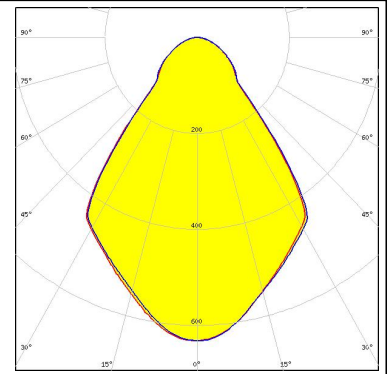
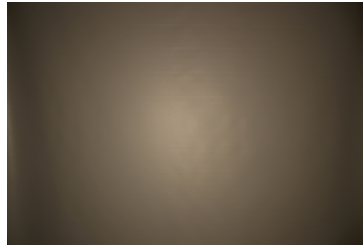
LED SLE G7 LES21 H  
 FWHM 74.0°  
 Efficiency 93 %  
 Peak intensity 0.590 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14547\_LENASTD-BASE-CLL030



## PHOTOMETRIC DATA (MEASURED):

### XICATO

LED XOB 14.5 mm  
FWHM 74.0°  
Efficiency 94 %  
Peak intensity 0.633 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12691\_LENINA-STD-BASE-CLL030



#### PHOTOMETRIC DATA (SIMULATED):

<p>bridgelux.</p> <p>LED V10 Gen7            FWHM 71.0°            Efficiency 86 %            Peak intensity 0.720 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13868_LENINA-STD-BASE-VERO13-18            Bender Wirth: 486 Typ L1</p>	
<p>bridgelux.</p> <p>LED V13 Gen7            FWHM 73.0°            Efficiency 86 %            Peak intensity 0.600 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13868_LENINA-STD-BASE-VERO13-18            Bender Wirth: 477 Typ L1</p>	
<p>bridgelux.</p> <p>LED V13 Gen7            FWHM 70.0°            Efficiency 83 %            Peak intensity 0.603 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C12606_LENINA-DL            IDEAL: 50-2103CT + 50-2100AN</p>	
<p>bridgelux.</p> <p>LED V13 Gen7            FWHM 72.0°            Efficiency 82 %            Peak intensity 0.570 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>	

#### PHOTOMETRIC DATA (SIMULATED):

<p><b>bridgelux.</b></p> <p>LED V22 Gen7            FWHM 60.0°            Efficiency 89 %            Peak intensity 0.000 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13867_LENINA-STD-BASE-VERO29            Bender Wirth: 431 Typ L3</p>	
<p><b>bridgelux.</b></p> <p>LED V22 Gen7            FWHM 60.0°            Efficiency 85 %            Peak intensity 0.894 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>	
<p><b>LUMINUS</b></p> <p>LED CxM-14 (19x19)            FWHM 74.0°            Efficiency 89 %            Peak intensity 0.580 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</p>	
<p><b>LUMINUS</b></p> <p>LED CxM-14 (19x19)            FWHM 75.0°            Efficiency 94 %            Peak intensity 0.620 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C13868_LENINA-STD-BASE-VERO13-18            Bender Wirth: 433 Typ L1</p>	

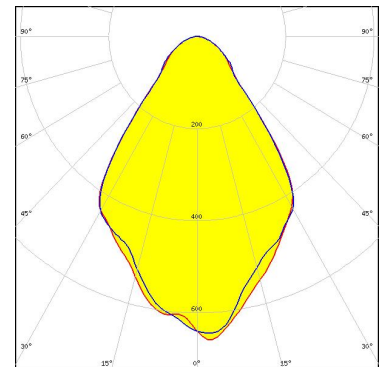
#### PHOTOMETRIC DATA (SIMULATED):



LED CxM-9 (13.5x13.5)  
FWHM 73.0°  
Efficiency 89 %  
Peak intensity 0.590 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 Soleriq S15  
FWHM 72.0°  
Efficiency 87 %  
Peak intensity 0.660 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12691\_LENINA-STD-BASE-CLL030



SEOUL SEMICONDUCTOR


LED ZC12/18  
FWHM 74.0°  
Efficiency 89 %  
Peak intensity 0.580 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



SEOUL SEMICONDUCTOR

LED ZC12/18  
FWHM 75.0°  
Efficiency 94 %  
Peak intensity 0.620 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENINA-STD-BASE-VERO13-18  
Bender Wirth: 433 Typ L1

## PHOTOMETRIC DATA (SIMULATED):

	
SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM	73.0°
Efficiency	89 %
Peak intensity	0.590 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
C13868_LENINA-STD-BASE-VERO13-18	
C12606_LENINA-DL	
Bender Wirth: 434 Typ L1	



### GENERAL INFORMATION:

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

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

### MATERIALS:

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

### PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

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

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