

LENA-X-WAS

White version with asymmetric beam for wall-washing

TECHNICAL SPECIFICATIONS:


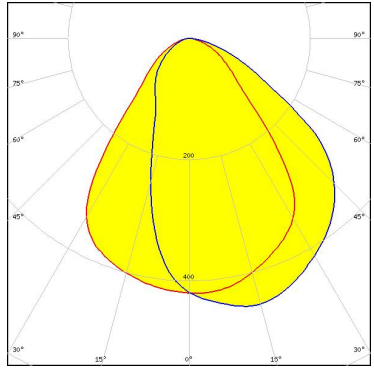

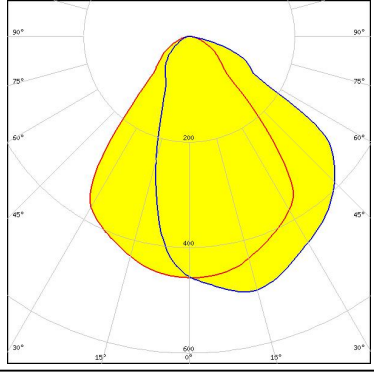

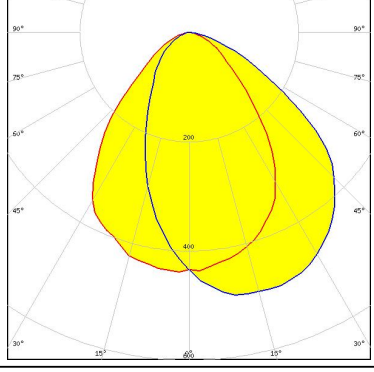

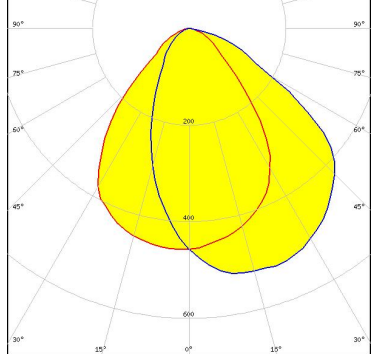
Dimensions	Ø 111.0 mm
Height	32.6 mm
Fastening	glue
Colour	white
Box size	480 x 280 x 300 mm
Box weight	3.2 kg
Quantity in Box	56 pcs
ROHS compliant	yes ⓘ




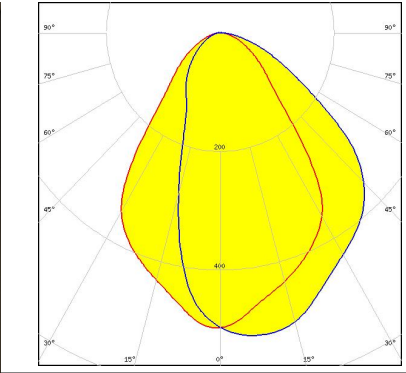
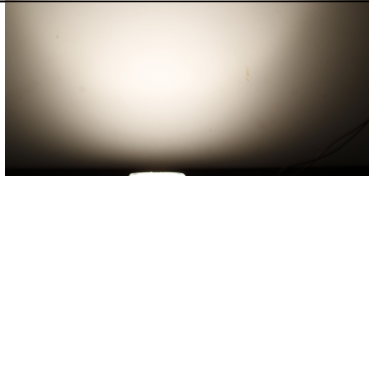
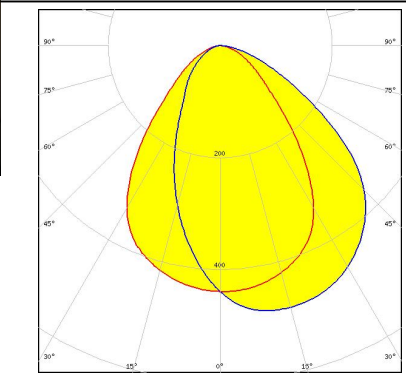

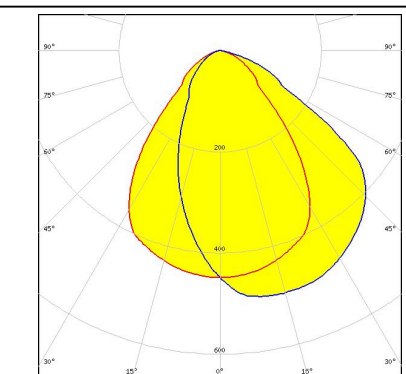

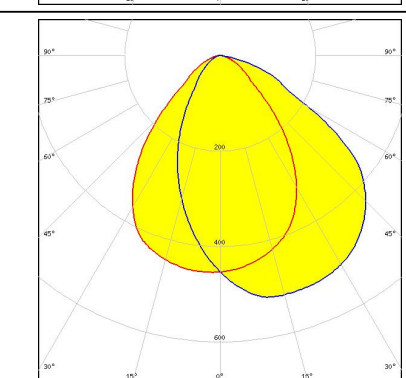
MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Coating
LENA-X-WAS	Reflector	HRPC	white	

PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED BXRA ES Rectangle</p> <p>FWHM Asymmetric</p> <p>Efficiency 77 %</p> <p>Peak intensity 0.460 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12153_LENA-STD-BASE-BXRA C11996_LENA-LENS</p>		
<p>bridgelux.</p> <p>LED BXRA ES Rectangle</p> <p>FWHM Asymmetric</p> <p>Efficiency 81 %</p> <p>Peak intensity 0.500 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12153_LENA-STD-BASE-BXRA</p>		
<p>bridgelux.</p> <p>LED BXRA RS</p> <p>FWHM Asymmetric</p> <p>Efficiency 83 %</p> <p>Peak intensity 0.500 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12229_LENA-STD-BASE-RS C11996_LENA-LENS</p>		
<p>bridgelux.</p> <p>LED BXRA RS</p> <p>FWHM Asymmetric</p> <p>Efficiency 87 %</p> <p>Peak intensity 0.500 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12229_LENA-STD-BASE-RS</p>		

PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V10 Gen6 FWHM Asymmetric Efficiency 82 % Peak intensity 0.520 cd/lm LEDs/each optic 1 Light colour White Required components: C13186_LENA-STD-BASE-CXA15 C11996_LENA-LENS</p>		
<p>bridgelux.</p> <p>LED V22 Gen7 FWHM Asymmetric Efficiency 83 % Peak intensity 0.500 cd/lm LEDs/each optic 1 Light colour White Required components: C13867_LENA-STD-BASE-VERO29 C11996_LENA-LENS Bender Wirth: 431 Typ L3</p>		
<p>bridgelux.</p> <p>LED V22 Gen7 FWHM Asymmetric Efficiency 86 % Peak intensity 0.500 cd/lm LEDs/each optic 1 Light colour White Required components: C13867_LENA-STD-BASE-VERO29 C14169_LENA-CLEAR-LENS Bender Wirth: 431 Typ L3</p>		
<p>bridgelux.</p> <p>LED Vero SE 29 FWHM Asymmetric Efficiency 90 % Peak intensity 0.500 cd/lm LEDs/each optic 1 Light colour White Required components: C15083_LENA-STD-BASE-VERO29</p>		

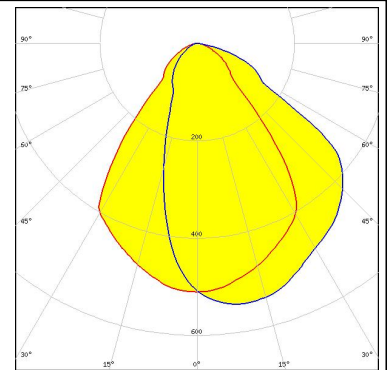
PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM Asymmetric</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.550 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENA-STD-BASE-VERO13-18</p>	
<p>bridgelux.</p> <p>LED VERO18</p> <p>FWHM Asymmetric</p> <p>Efficiency 91 %</p> <p>Peak intensity 0.550 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13868_LENA-STD-BASE-VERO13-18</p>	
<p>bridgelux.</p> <p>LED VERO29</p> <p>FWHM Asymmetric</p> <p>Efficiency 89 %</p> <p>Peak intensity 0.510 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13867_LENA-STD-BASE-VERO29</p>	
<p>bridgelux.</p> <p>LED VERO29</p> <p>FWHM Asymmetric</p> <p>Efficiency 84 %</p> <p>Peak intensity 0.480 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13867_LENA-STD-BASE-VERO29 C11996_LENA-LENS</p>	

PHOTOMETRIC DATA (MEASURED):

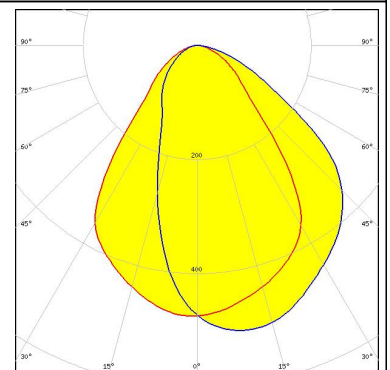
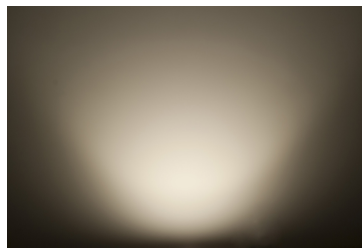
CITIZEN

LED CL-L340
 FWHM Asymmetric
 Efficiency 84 %
 Peak intensity 1.170 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C11995_LENA-STD-BASE-CL340



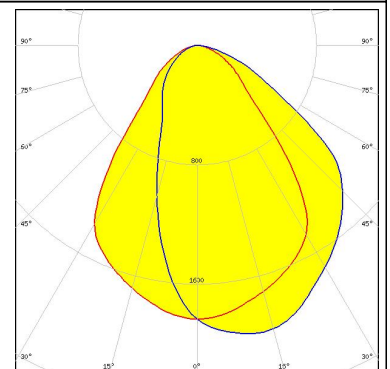
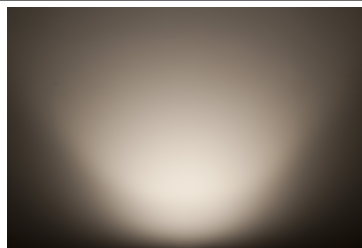
CITIZEN

LED CL-L340
 FWHM Asymmetric
 Efficiency 82 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C11995_LENA-STD-BASE-CL340
 C11996_LENA-LENS



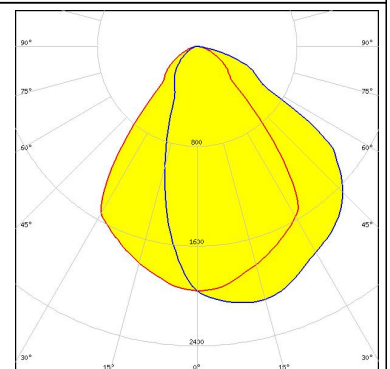
CITIZEN

LED CLL03x/CLU03x
 FWHM Asymmetric
 Efficiency 80 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENA-STD-BASE-CLL030
 C11996_LENA-LENS



CITIZEN

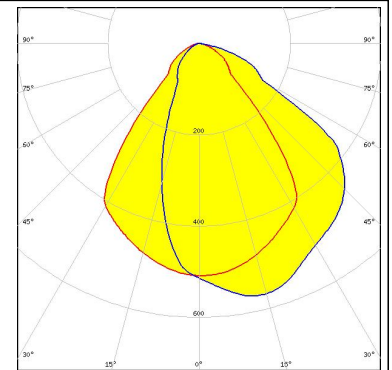
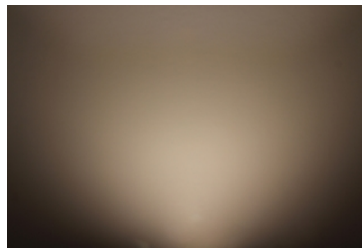
LED CLL03x/CLU03x
 FWHM Asymmetric
 Efficiency 81 %
 Peak intensity 1.160 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENA-STD-BASE-CLL030



PHOTOMETRIC DATA (MEASURED):

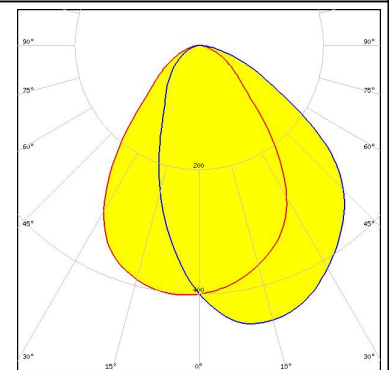
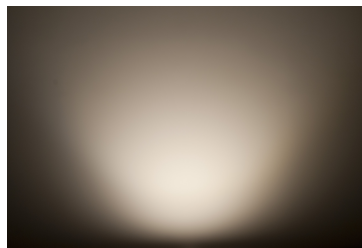
CITIZEN

LED CLL03x/CLU03x
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.570 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 433 Typ L1



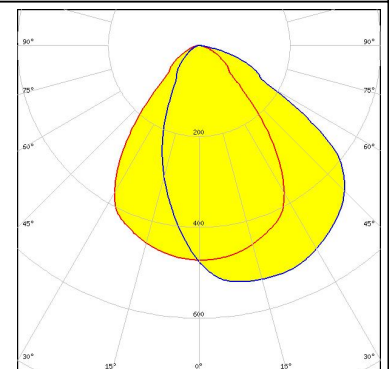
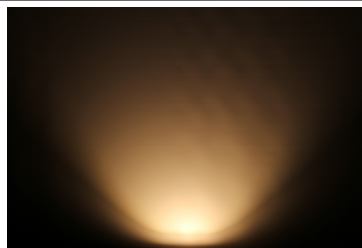
CITIZEN

LED CLL04x/CLU04x
 FWHM Asymmetric
 Efficiency 74 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



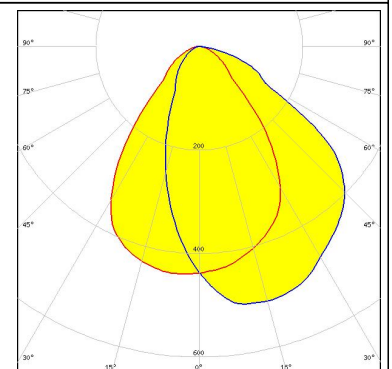
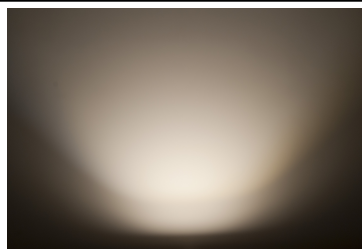
CITIZEN

LED CLL04x/CLU04x
 FWHM Asymmetric
 Efficiency 90 %
 Peak intensity 0.530 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 431 Typ L3



CITIZEN

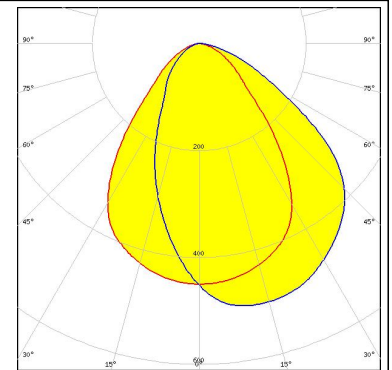
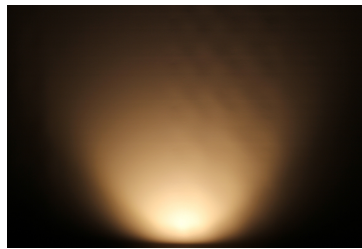
LED CLL04x/CLU04x
 FWHM Asymmetric
 Efficiency 82 %
 Peak intensity 0.950 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENA-STD-BASE-CLL040



PHOTOMETRIC DATA (MEASURED):

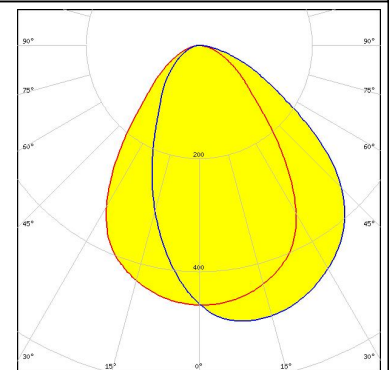
CITIZEN

LED CLL04x/CLU04x
 FWHM Asymmetric
 Efficiency 85 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS
 Bender Wirth: 431 Typ L3



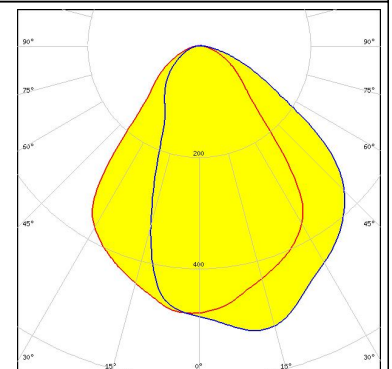
CITIZEN

LED CLL04x/CLU04x
 FWHM Asymmetric
 Efficiency 84 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C11996_LENA-LENS
 IDEAL: 50-2204CT + 50-2100LN



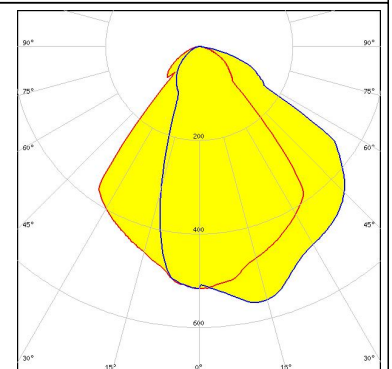
CITIZEN

LED CLU710/711
 FWHM Asymmetric
 Efficiency 86 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENA-STD-BASE-CLL030
 C11996_LENA-LENS



CITIZEN

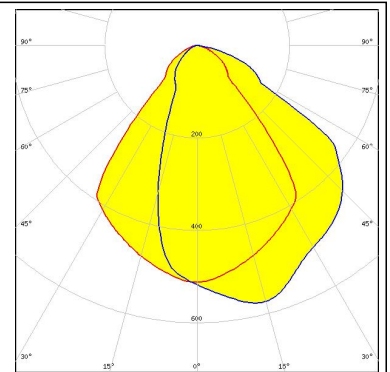
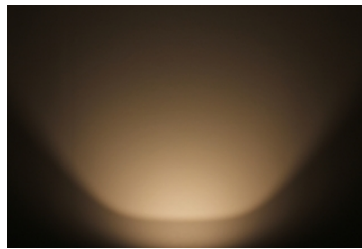
LED CLU710/711
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.560 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENA-STD-BASE-CLL030



PHOTOMETRIC DATA (MEASURED):

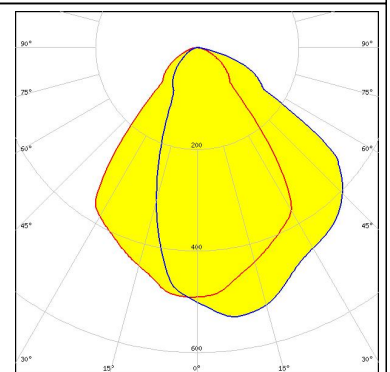
CITIZEN

LED CLU720/721
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.570 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 433 Typ L1



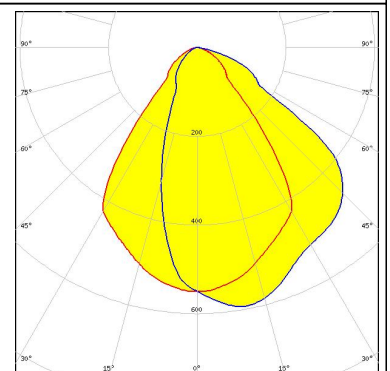
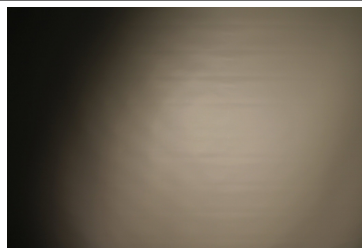
CITIZEN

LED CLU730/731
 FWHM Asymmetric
 Efficiency 84 %
 Peak intensity 0.540 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENA-STD-BASE-CLL040



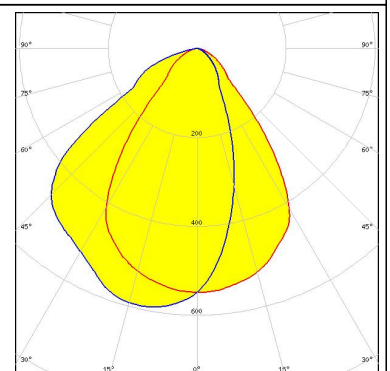
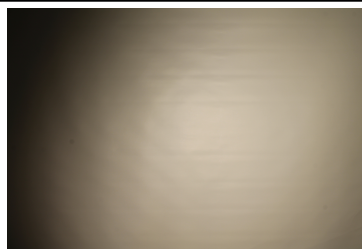
CREE

LED CMA1840
 FWHM Asymmetric
 Efficiency 90 %
 Peak intensity 0.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14146_LENA-STD-BASE-CXA18



CREE

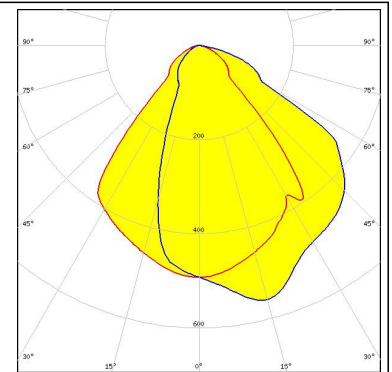
LED CMA2550
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13324_LENA-STD-BASE-CXA25



PHOTOMETRIC DATA (MEASURED):

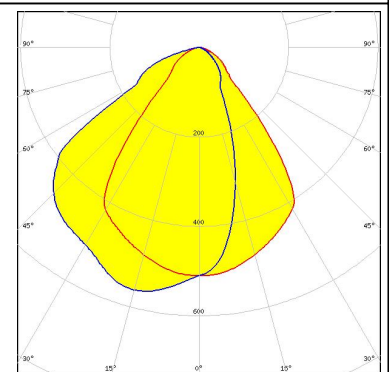
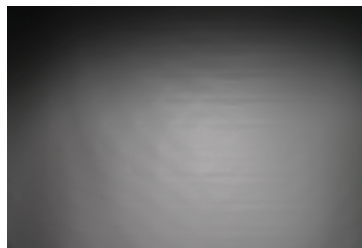
CREE 

LED CMT14xx
 FWHM Asymmetric
 Efficiency 90 %
 Peak intensity 0.550 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 434 Typ L1



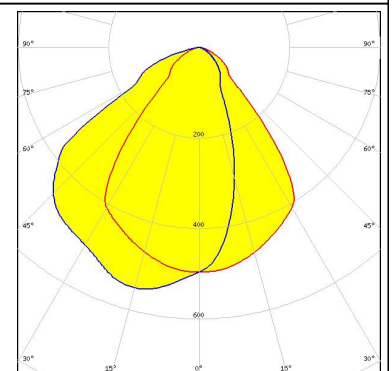
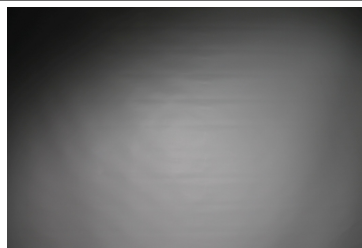
CREE 

LED CMT19xx
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.562 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12691_LENA-STD-BASE-CLL030



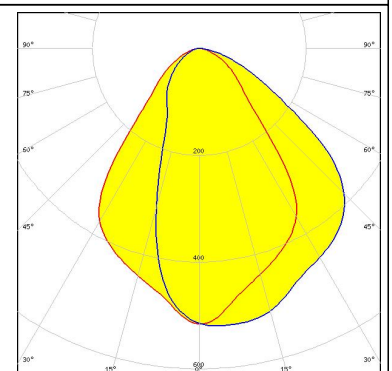
CREE 

LED CMT19xx
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.551 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 477 Typ L1



CREE 

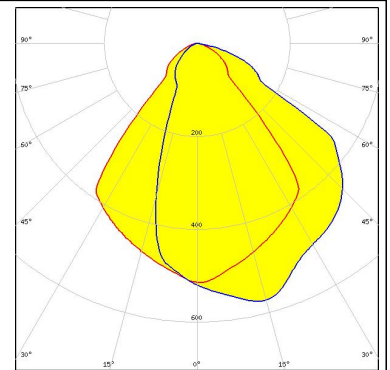
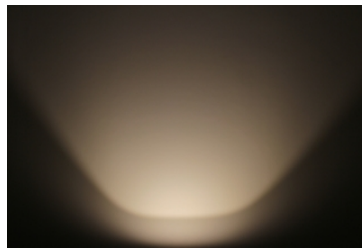
LED CXA/B 15xx
 FWHM Asymmetric
 Efficiency 84 %
 Peak intensity 0.520 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13186_LENA-STD-BASE-CXA15
 C11996_LENA-LENS



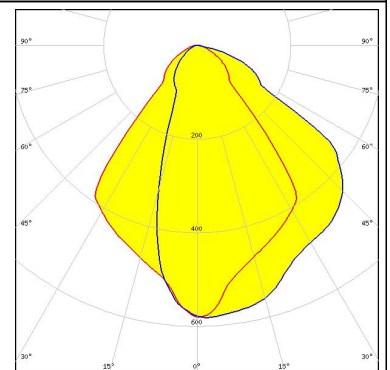
PHOTOMETRIC DATA (MEASURED):



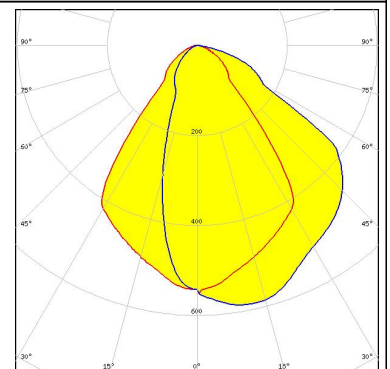
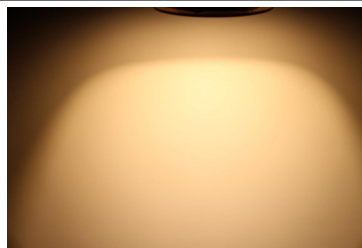
LED CXA/B 15xx
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.570 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 441 Typ L1



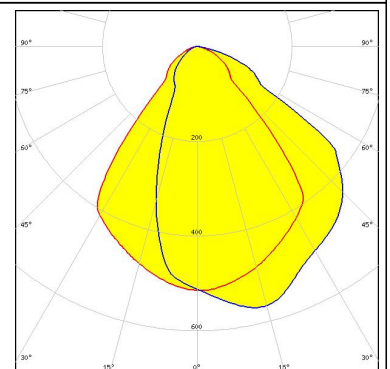
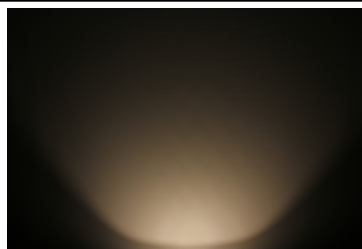
LED CXA/B 15xx
 FWHM Asymmetric
 Efficiency 88 %
 Peak intensity 0.580 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13186_LENA-STD-BASE-CXA15



LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.590 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14146_LENA-STD-BASE-CXA18



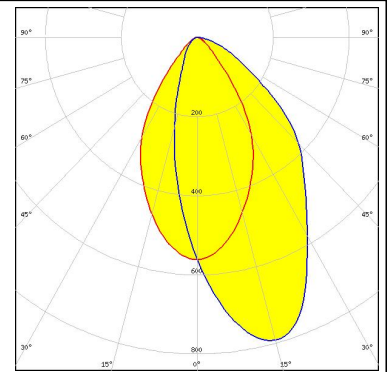
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM Asymmetric
 Efficiency 90 %
 Peak intensity 0.570 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 437 Typ L1



PHOTOMETRIC DATA (MEASURED):

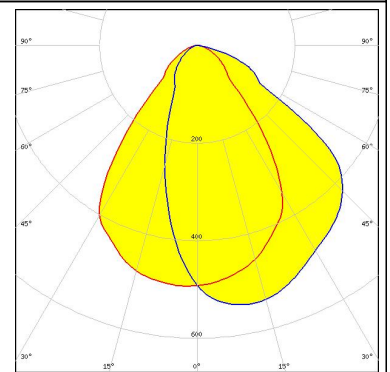
CREE

LED CXA/B 25xx
 FWHM Asymmetric
 Efficiency 73 %
 Peak intensity 0.900 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13324_LENA-STD-BASE-CXA25
 C11996_LENA-LENS



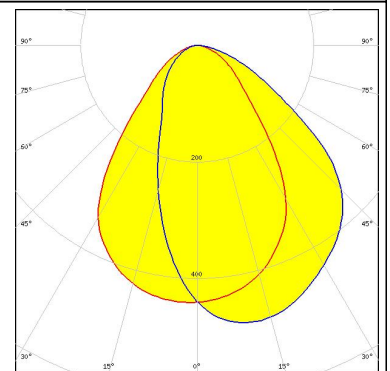
CREE

LED CXA/B 25xx
 FWHM Asymmetric
 Efficiency 82 %
 Peak intensity 0.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13324_LENA-STD-BASE-CXA25



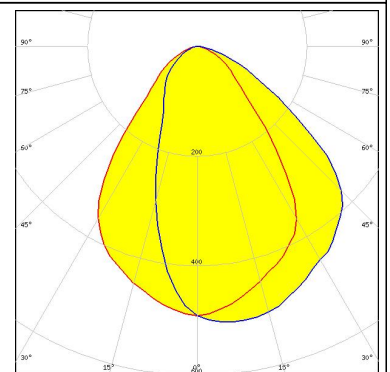
CREE

LED CXA/B 25xx
 FWHM Asymmetric
 Efficiency 78 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13324_LENA-STD-BASE-CXA25
 C11996_LENA-LENS



CREE

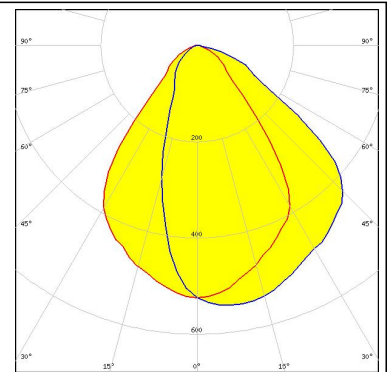
LED CXA2011
 FWHM Asymmetric
 Efficiency 80 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12105_LENA-STD-BASE-CXA20
 C11996_LENA-LENS



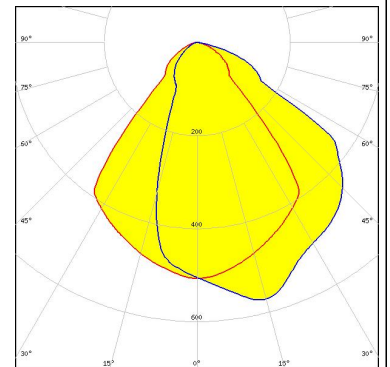
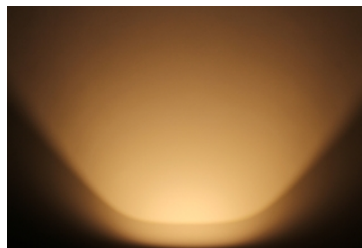
PHOTOMETRIC DATA (MEASURED):



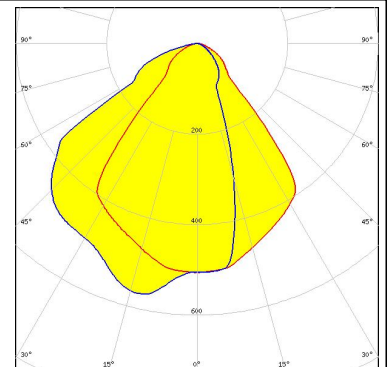
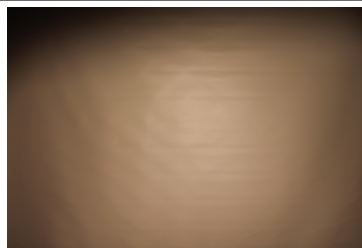
LED CXA2011
 FWHM Asymmetric
 Efficiency 83 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12105_LENA-STD-BASE-CXA20



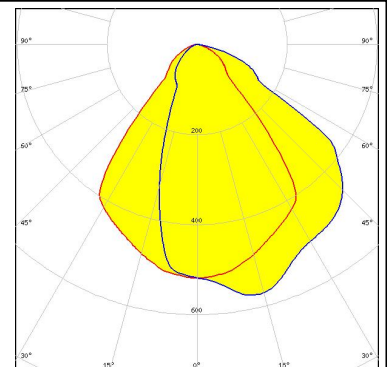
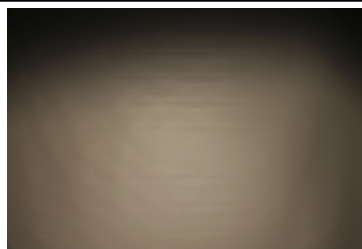
LED LUXEON CoB 1202/1203
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 438 Typ L1



LED LUXEON CoB 1204HD
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.570 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C11981_LENA-STD-BASE-COB-L110



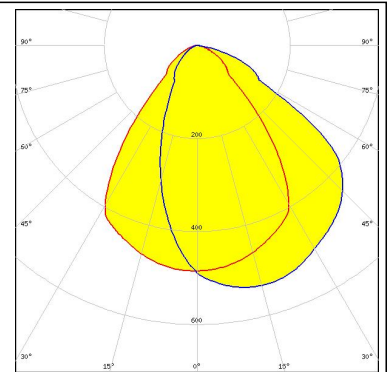
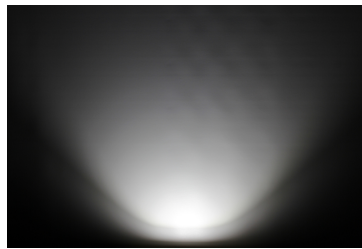
LED LUXEON CoB 1205HD
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.570 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C11981_LENA-STD-BASE-COB-L110



PHOTOMETRIC DATA (MEASURED):

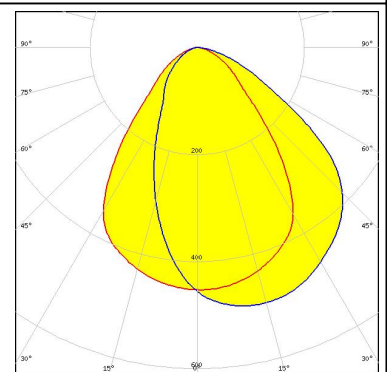
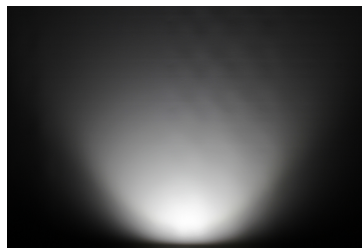
LUMILEDS

LED LUXEON CoB 1211
 FWHM Asymmetric
 Efficiency 89 %
 Peak intensity 0.530 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 431 Typ L3



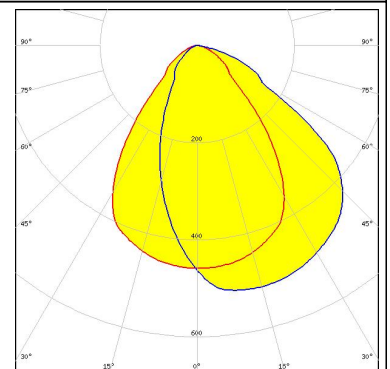
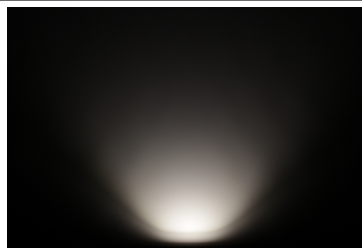
LUMILEDS

LED LUXEON CoB 1211
 FWHM Asymmetric
 Efficiency 85 %
 Peak intensity 0.490 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS
 Bender Wirth: 431 Typ L3



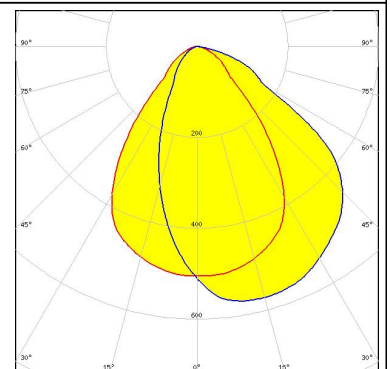
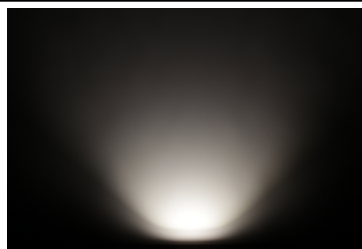
LUMILEDS

LED LUXEON CoB 1216/1812
 FWHM 75.0°
 Efficiency 85 %
 Peak intensity 0.510 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 A.A.G. STUCCHI: 8102/G2 + S-8000/12



LUMILEDS

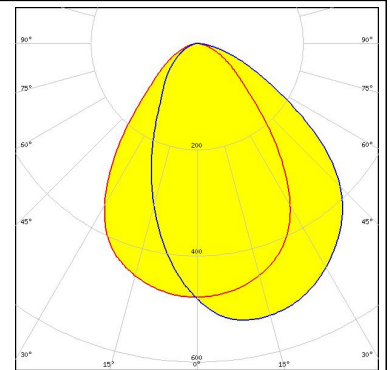
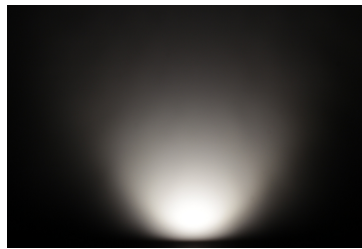
LED LUXEON CoB 1216/1812
 FWHM Asymmetric
 Efficiency 92 %
 Peak intensity 0.570 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENA-STD-BASE-CLL040



PHOTOMETRIC DATA (MEASURED):

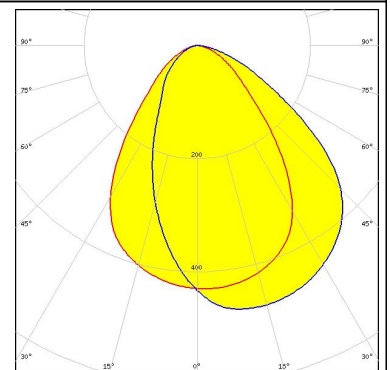
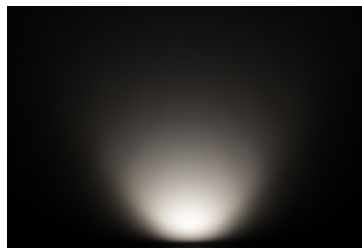
LUMILEDS

LED LUXEON CoB 1216/1812
 FWHM Asymmetric
 Efficiency 87 %
 Peak intensity 0.530 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



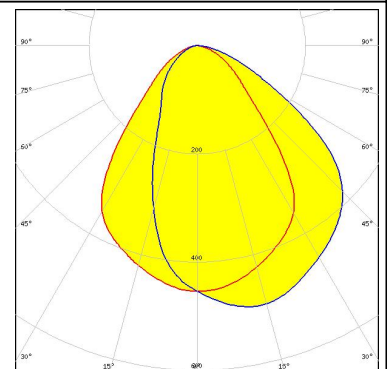
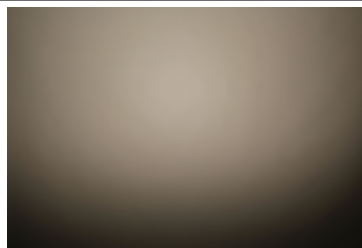
LUMILEDS

LED LUXEON CoB 1216/1812
 FWHM Asymmetric
 Efficiency 81 %
 Peak intensity 0.480 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C11996_LENA-LENS
 A.A.G. STUCCHI: 8102/G2 + S-8000/12



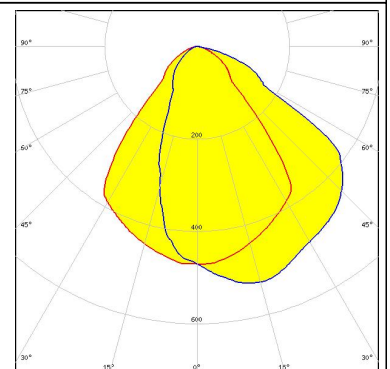
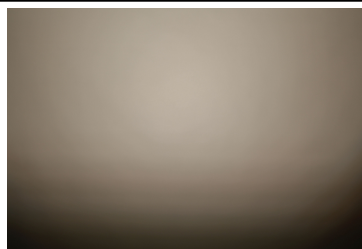
LUMINUS

LED CDM-14 (Dim-To-Warm)
 FWHM Asymmetric
 Efficiency 86 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 491 Typ L2


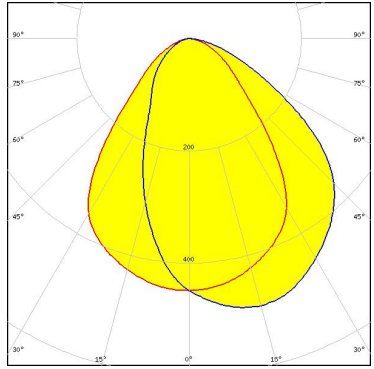
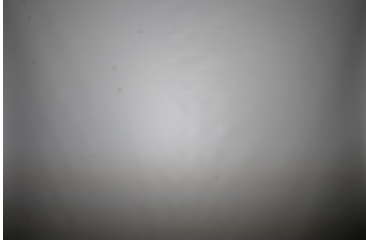
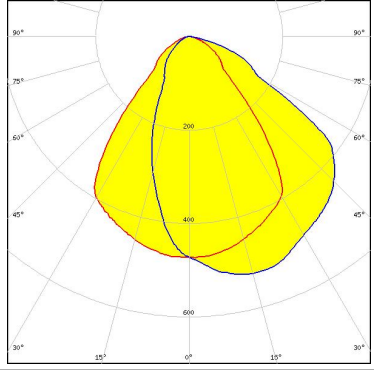

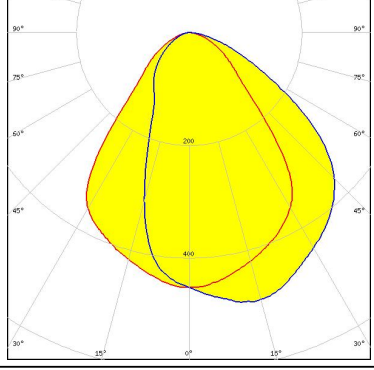

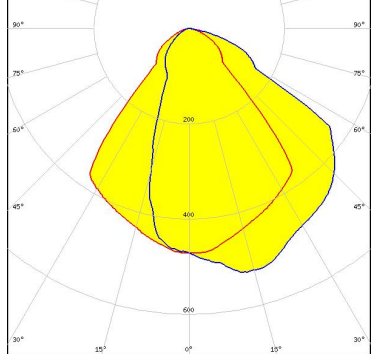


LUMINUS

LED CDM-14 (Dim-To-Warm)
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 491 Typ L2



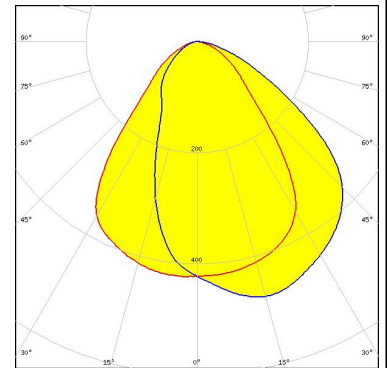
PHOTOMETRIC DATA (MEASURED):

<p>LUMINUS</p> <p>LED CDM-18 (Dim-To-Warm) FWHM Asymmetric Efficiency 86 % Peak intensity 0.490 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENA-STD-BASE-VERO13-18 C11996_LENA-LENS Bender Wirth: 491 Typ L2</p>		
<p>LUMINUS</p> <p>LED CDM-18 (Dim-To-Warm) FWHM Asymmetric Efficiency 91 % Peak intensity 0.500 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENA-STD-BASE-VERO13-18 Bender Wirth: 491 Typ L2</p>		
<p>LUMINUS</p> <p>LED CDM-9 (Dim-To-Warm) FWHM Asymmetric Efficiency 85 % Peak intensity 0.490 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENA-STD-BASE-VERO13-18 C11996_LENA-LENS Bender Wirth: 490 Typ L1</p>		
<p>LUMINUS</p> <p>LED CDM-9 (Dim-To-Warm) FWHM Asymmetric Efficiency 89 % Peak intensity 0.530 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13868_LENA-STD-BASE-VERO13-18 Bender Wirth: 490 Typ L1</p>		

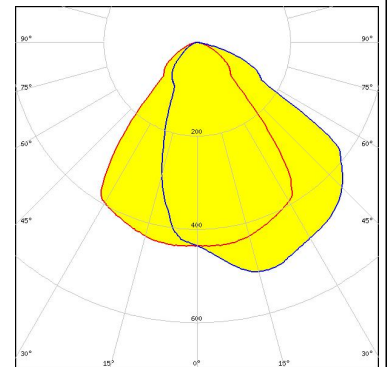
PHOTOMETRIC DATA (MEASURED):



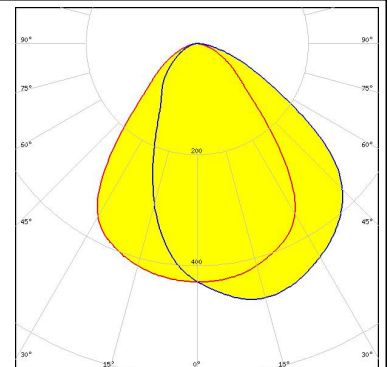
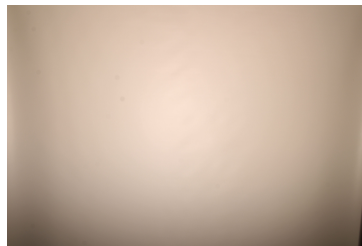
LED CTM-14 (Tunable White)
 FWHM Asymmetric
 Efficiency 84 %
 Peak intensity 0.480 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 C12606_LENINA-DL
 Bender Wirth: 442 Typ L3



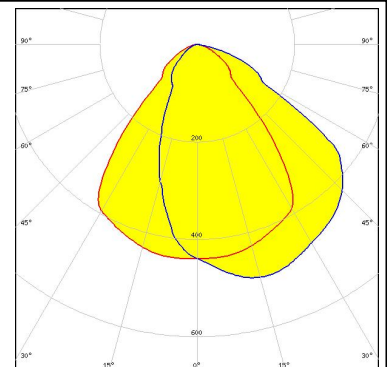
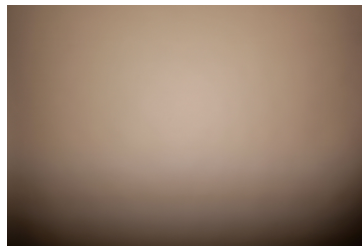
LED CTM-14 (Tunable White)
 FWHM Asymmetric
 Efficiency 88 %
 Peak intensity 0.510 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 442 Typ L3




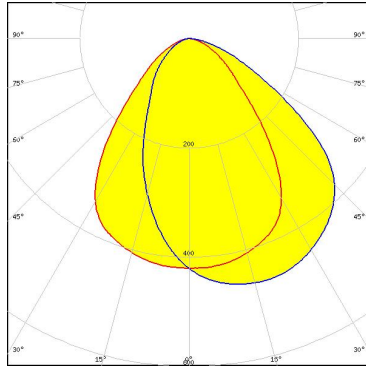
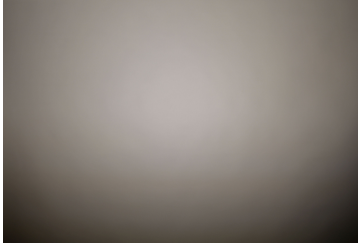
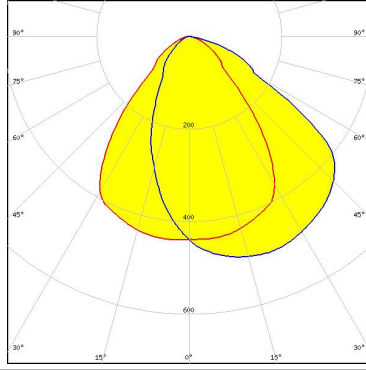
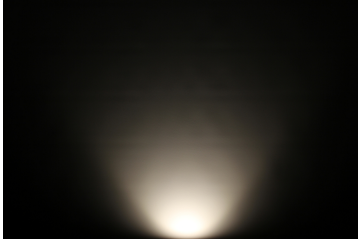
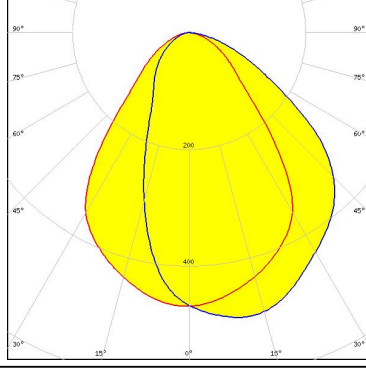
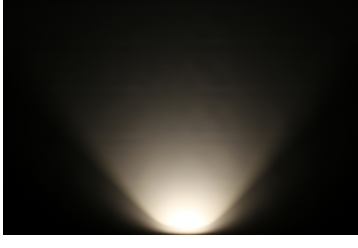
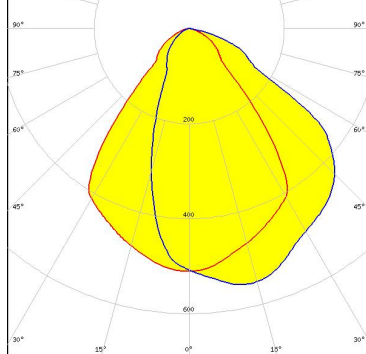
LED CTM-18 (Tunable White)
 FWHM Asymmetric
 Efficiency 84 %
 Peak intensity 0.480 cd/lm
 LEDs/each optic 1
 Light colour Tunable White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS
 Bender Wirth: 442 Typ L3



LED CTM-18 (Tunable White)
 FWHM Asymmetric
 Efficiency 88 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 442 Typ L3



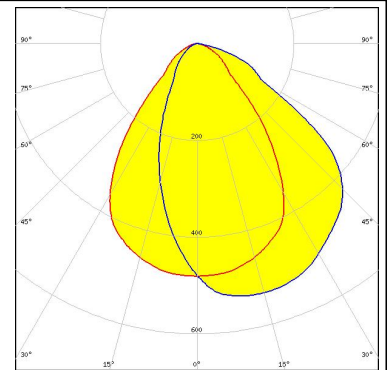
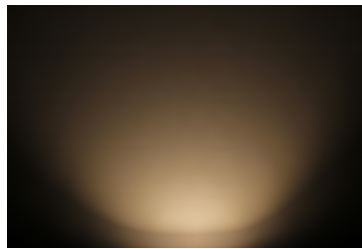
PHOTOMETRIC DATA (MEASURED):

<p>LUMINUS</p> <p>LED CTM-22 (Tunable White) FWHM Asymmetric Efficiency 84 % Peak intensity 0.460 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13867_LENA-STD-BASE-VERO29 C11996_LENA-LENS Bender Wirth: 494 Typ L3</p>		
<p>LUMINUS</p> <p>LED CTM-22 (Tunable White) FWHM Asymmetric Efficiency 89 % Peak intensity 0.500 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13867_LENA-STD-BASE-VERO29 Bender Wirth: 494 Typ L3</p>		
<p>LUMINUS</p> <p>LED CxM-14 (19x19) FWHM Asymmetric Efficiency 83 % Peak intensity 0.500 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C12691_LENA-STD-BASE-CLL030 C11996_LENA-LENS</p>		
<p>LUMINUS</p> <p>LED CxM-14 (19x19) FWHM Asymmetric Efficiency 88 % Peak intensity 0.550 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C12691_LENA-STD-BASE-CLL030</p>		

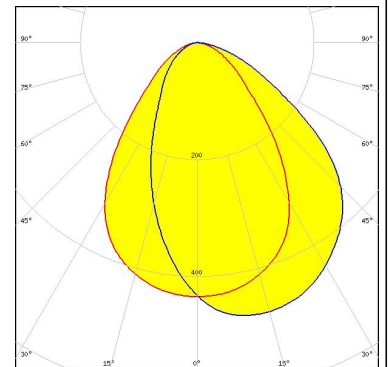
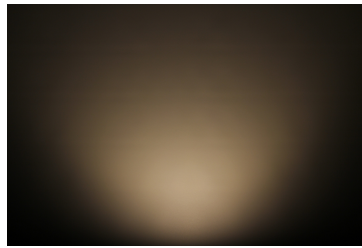
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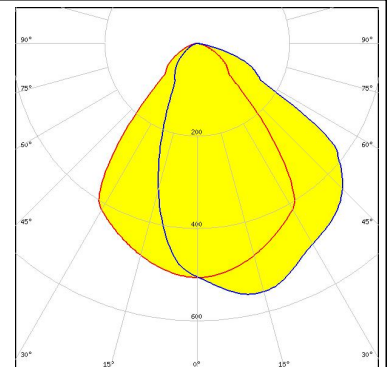
LED CxM-22 (28x28)
 FWHM Asymmetric
 Efficiency 86 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENA-STD-BASE-CLL040



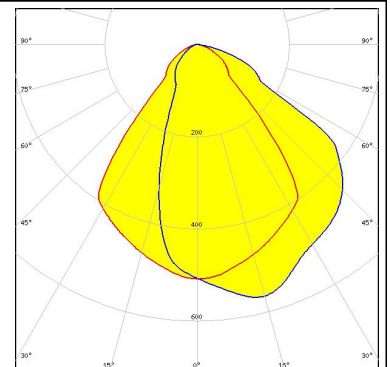
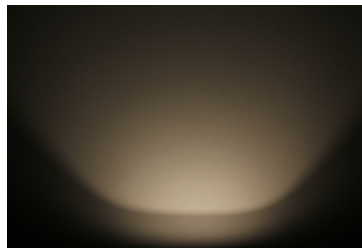
LED CxM-22 (28x28)
 FWHM Asymmetric
 Efficiency 79 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



LED COB J-Type
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 463 Typ L2



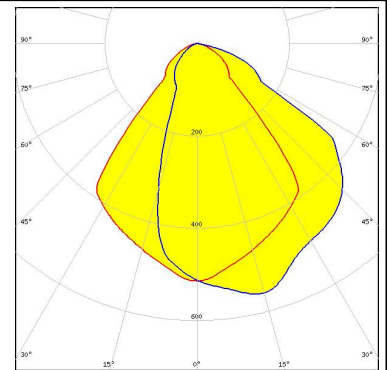
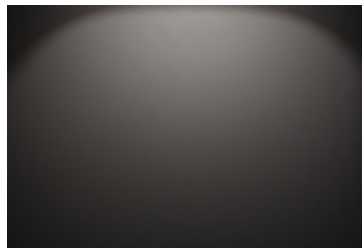
LED COB L-Type (LES 11)
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.570 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 438 Typ L1



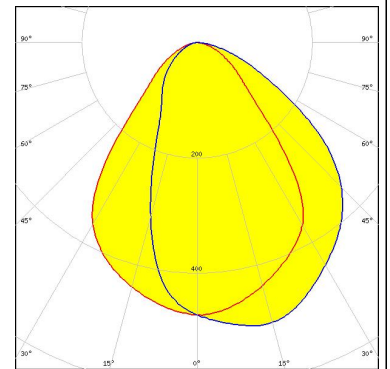
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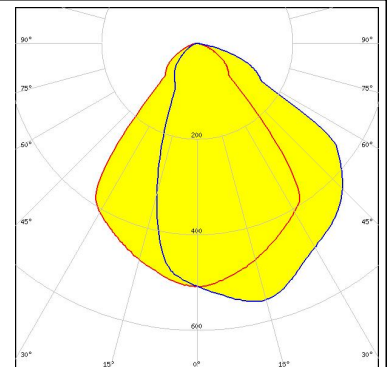
LED COB L-Type (LES 9)
 FWHM Asymmetric
 Efficiency 91 %
 Peak intensity 0.560 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 438 Typ L1



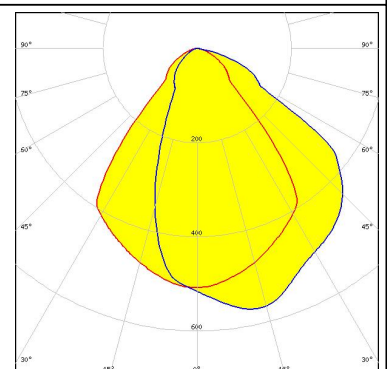
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM Asymmetric
 Efficiency 85 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 C11996_LENA-LENS
 Bender Wirth: 498 Typ L2



LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM Asymmetric
 Efficiency 90 %
 Peak intensity 0.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 498 Typ L2



LED Soleriq S13
 FWHM Asymmetric
 Efficiency 90 %
 Peak intensity 0.570 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13868_LENA-STD-BASE-VERO13-18
 Bender Wirth: 437 Typ L1

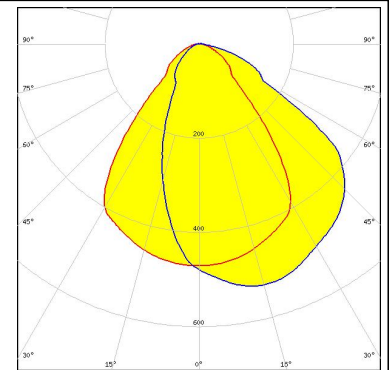
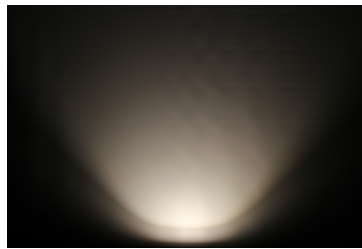


PHOTOMETRIC DATA (MEASURED):

OSRAM

Opto Semiconductors

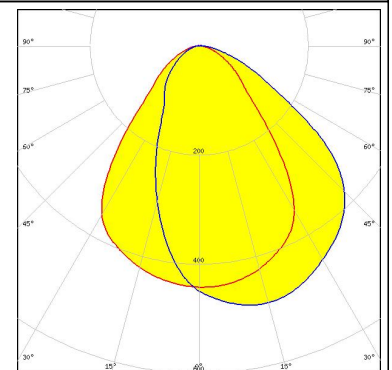
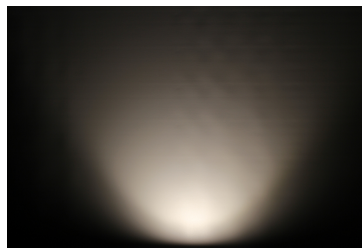
LED Soleriq S19
 FWHM Asymmetric
 Efficiency 89 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 Bender Wirth: 462 Typ L3



OSRAM

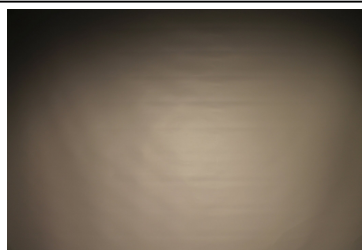
Opto Semiconductors

LED Soleriq S19
 FWHM Asymmetric
 Efficiency 85 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS
 Bender Wirth: 462 Typ L3



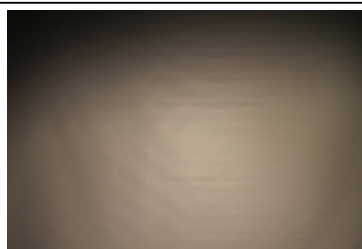
PHILIPS

LED Fortimo SLM L13 CoB
 FWHM Asymmetric
 Efficiency 85 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENA-STD-BASE-MEZ
 C11996_LENA-LENS



PHILIPS

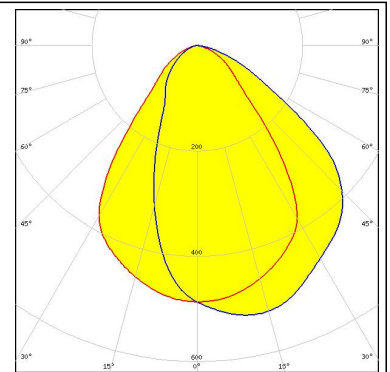
LED Fortimo SLM L13 CoB
 FWHM Asymmetric
 Efficiency 90 %
 Peak intensity 0.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENA-STD-BASE-MEZ



PHOTOMETRIC DATA (MEASURED):

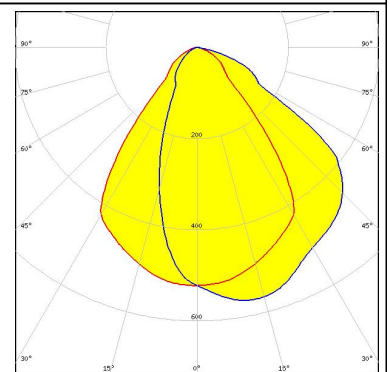
PHILIPS

LED Fortimo SLM L15 CoB
 FWHM Asymmetric
 Efficiency 85 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENA-STD-BASE-MEZ
 C11996_LENA-LENS



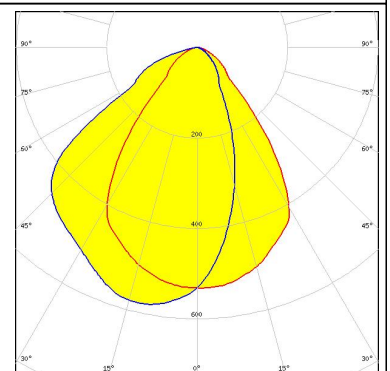
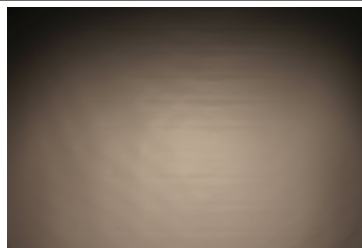
PHILIPS

LED Fortimo SLM L15 CoB
 FWHM Asymmetric
 Efficiency 90 %
 Peak intensity 0.550 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12292_LENA-STD-BASE-MEZ



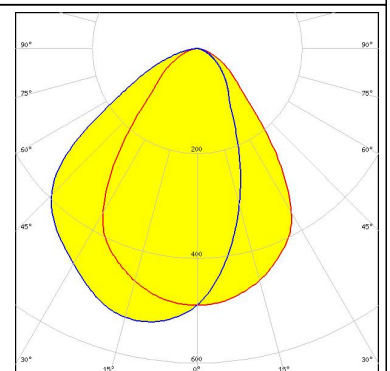
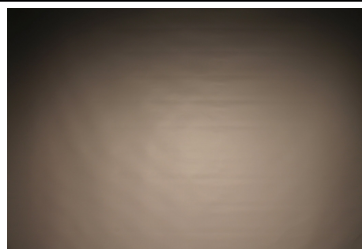
PHILIPS

LED Fortimo SLM L19 CoB
 FWHM Asymmetric
 Efficiency 90 %
 Peak intensity 0.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENA-STD-BASE-CLL040



PHILIPS

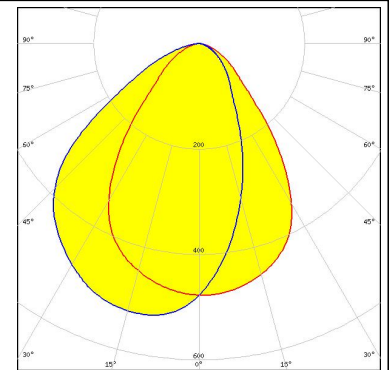
LED Fortimo SLM L19 CoB
 FWHM Asymmetric
 Efficiency 85 %
 Peak intensity 0.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C12692_LENA-STD-BASE-CLL040
 C11996_LENA-LENS



PHOTOMETRIC DATA (MEASURED):

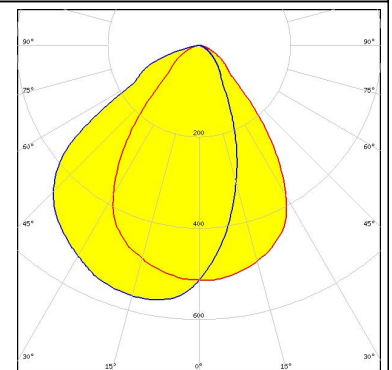
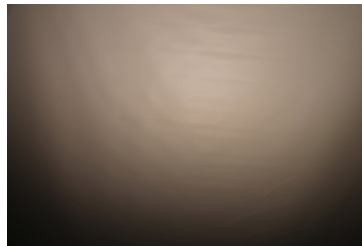
PHILIPS

LED Fortimo SLM L23 CoB
FWHM Asymmetric
Efficiency 85 %
Peak intensity 0.500 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS



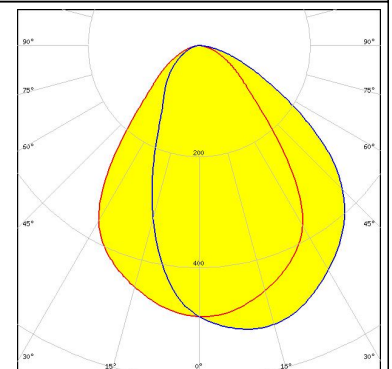
PHILIPS

LED Fortimo SLM L23 CoB
FWHM Asymmetric
Efficiency 90 %
Peak intensity 0.600 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040



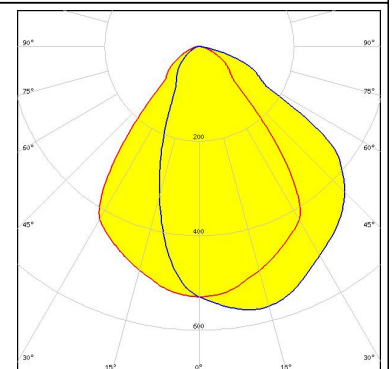
SAMSUNG

LED COB D Series LES 14.5 mm
FWHM Asymmetric
Efficiency 87 %
Peak intensity 0.520 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030
C11996_LENA-LENS



SAMSUNG

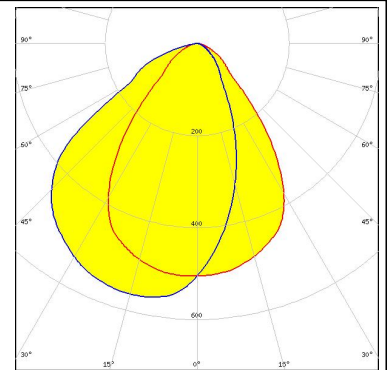
LED COB D Series LES 14.5 mm
FWHM Asymmetric
Efficiency 91 %
Peak intensity 0.570 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030



PHOTOMETRIC DATA (MEASURED):

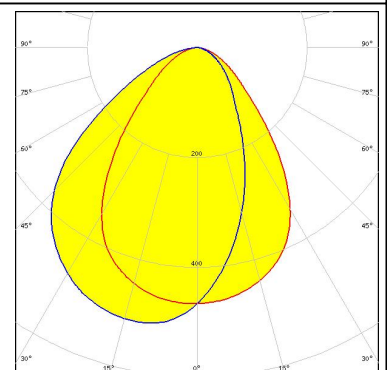
SAMSUNG

LED COB D Series LES 22 mm
FWHM Asymmetric
Efficiency 91 %
Peak intensity 0.560 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040



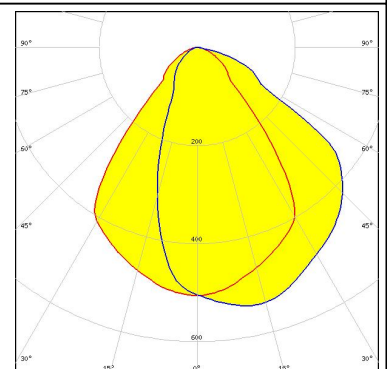
SAMSUNG

LED COB D Series LES 22 mm
FWHM Asymmetric
Efficiency 86 %
Peak intensity 0.510 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12692_LENA-STD-BASE-CLL040
C11996_LENA-LENS



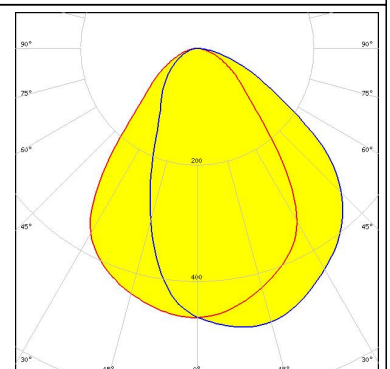
SHARP

LED Mega Zenigata (GW6DME)
FWHM Asymmetric
Efficiency 87 %
Peak intensity 0.540 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ



SHARP

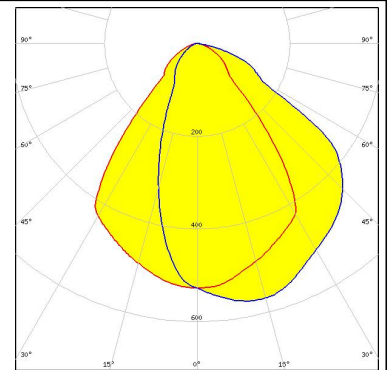
LED Mega Zenigata (GW6DME)
FWHM Asymmetric
Efficiency 83 %
Peak intensity 0.490 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS



PHOTOMETRIC DATA (MEASURED):

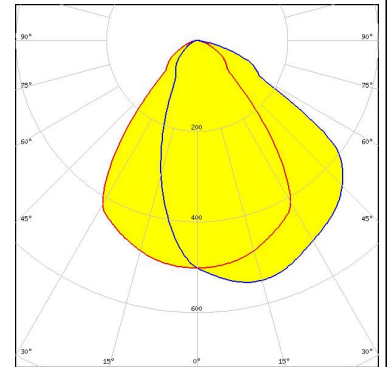
TRIDONIC

LED SLE G7 LES15
FWHM Asymmetric
Efficiency 92 %
Peak intensity 0.570 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030



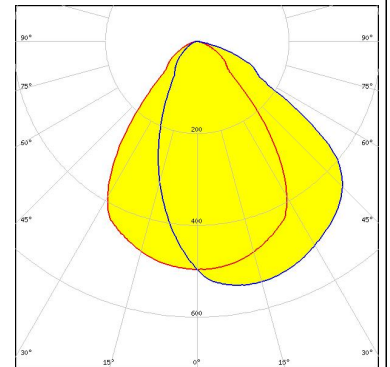
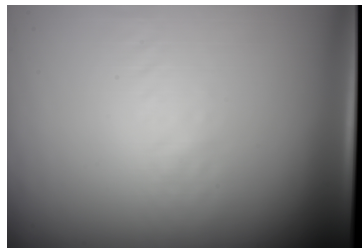
TRIDONIC

LED SLE G7 LES17 H
FWHM 76.0°
Efficiency 91 %
Peak intensity 0.550 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14547_LENA-ADAPTER-B



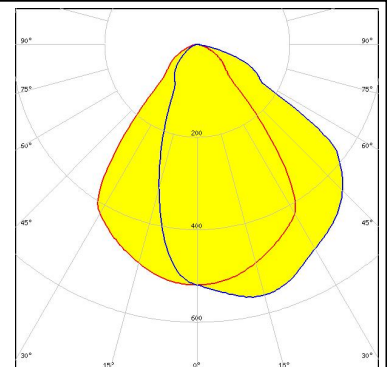
TRIDONIC

LED SLE G7 LES21 H
FWHM Asymmetric
Efficiency 90 %
Peak intensity 0.540 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14547_LENA-ADAPTER-B



XICATO

LED XOB 14.5 mm
FWHM Asymmetric
Efficiency 91 %
Peak intensity 0.562 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030



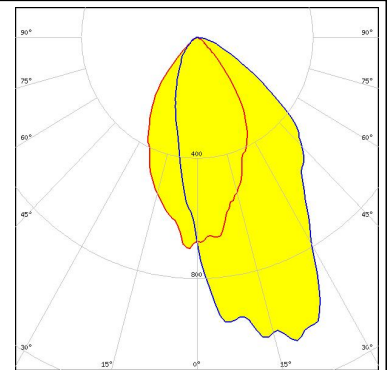
PHOTOMETRIC DATA (SIMULATED):

<p>bridgelux.</p> <p>LED V10 Gen7 FWHM Asymmetric Efficiency 85 % Peak intensity 0.670 cd/lm LEDs/each optic 1 Light colour White Required components: C13868_LENA-STD-BASE-VERO13-18 Bender Wirth: 486 Typ L1</p>	
<p>bridgelux.</p> <p>LED V13 Gen7 FWHM Asymmetric Efficiency 84 % Peak intensity 0.650 cd/lm LEDs/each optic 1 Light colour White Required components: C11996_LENA-LENS IDEAL: 50-2103CT + 50-2100LN</p>	
<p>bridgelux.</p> <p>LED V13 Gen7 FWHM Asymmetric Efficiency 87 % Peak intensity 0.680 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2103CT + 50-2100LN</p>	
<p>bridgelux.</p> <p>LED V13 Gen7 FWHM Asymmetric Efficiency 91 % Peak intensity 1.300 cd/lm LEDs/each optic 1 Light colour White Required components: C13868_LENA-STD-BASE-VERO13-18 Bender Wirth: 477 Typ L1</p>	

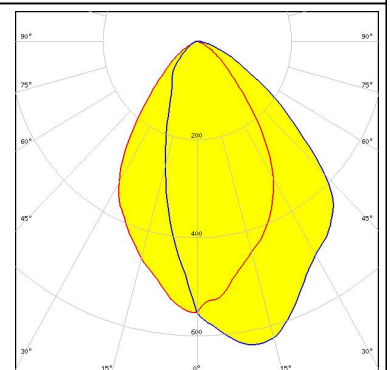
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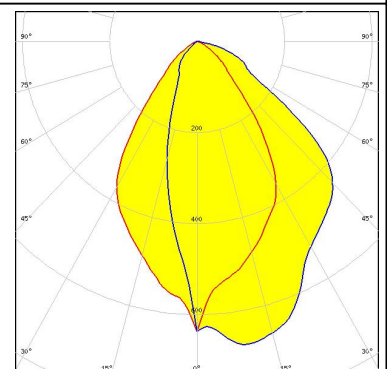
LED V22 Gen7
FWHM Asymmetric
Efficiency 90 %
Peak intensity 1.064 cd/lm
LEDs/each optic 1
Light colour White
Required components:
 C13867_LENA-STD-BASE-VERO29
 C11996_LENA-LENS
 Bender Wirth: 431 Typ L3



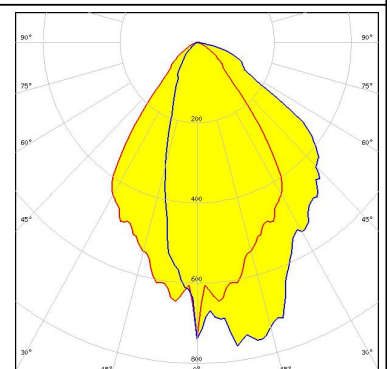
LED CXA/B 30xx
FWHM Asymmetric
Efficiency 78 %
Peak intensity cd/lm
LEDs/each optic 1
Light colour White
Required components:
 C11996_LENA-LENS
 IDEAL: 50-2234C + 50-2100LN



LED CXA/B 30xx
FWHM Asymmetric
Efficiency 82 %
Peak intensity 0.680 cd/lm
LEDs/each optic 1
Light colour White
Required components:
 IDEAL: 50-2234C + 50-2100LN



LED LUXEON CoB 1204/1205
FWHM Asymmetric
Efficiency 90 %
Peak intensity 0.800 cd/lm
LEDs/each optic 1
Light colour White
Required components:
 C12292_LENA-STD-BASE-MEZ



PHOTOMETRIC DATA (SIMULATED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1204/1205</p> <p>FWHM Asymmetric</p> <p>Efficiency 83 %</p> <p>Peak intensity 0.600 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12292_LENA-STD-BASE-MEZ C11996_LENA-LENS</p>	
<p>LUMILEDS</p> <p>LED LUXEON CoB 1208</p> <p>FWHM Asymmetric</p> <p>Efficiency 90 %</p> <p>Peak intensity 0.800 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12292_LENA-STD-BASE-MEZ</p>	
<p>LUMILEDS</p> <p>LED LUXEON CoB 1208</p> <p>FWHM Asymmetric</p> <p>Efficiency 82 %</p> <p>Peak intensity 0.600 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12292_LENA-STD-BASE-MEZ C11996_LENA-LENS</p>	
<p>LUMILEDS</p> <p>LED LUXEON K12</p> <p>FWHM Asymmetric</p> <p>Efficiency %</p> <p>Peak intensity cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C12924_LENA-STD-BASE-LUXEON-K C11996_LENA-LENS</p>	

PHOTOMETRIC DATA (SIMULATED):

LUMILEDS

LED LUXEON K12
FWHM Asymmetric
Efficiency %
Peak intensity cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12924_LENA-STD-BASE-LUXEON-K

LUMILEDS

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

LUMILEDS

LED LUXEON K16
FWHM Asymmetric
Efficiency %
Peak intensity cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12924_LENA-STD-BASE-LUXEON-K

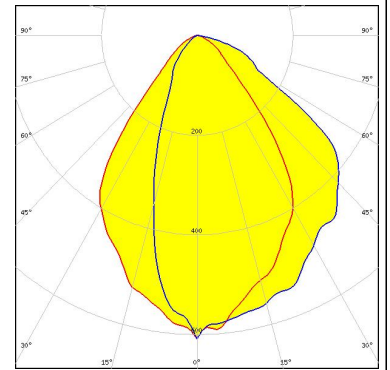
LUMINUS

LED CxM-14 (19x19)
FWHM Asymmetric
Efficiency 91 %
Peak intensity 0.570 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 433 Typ L1

PHOTOMETRIC DATA (SIMULATED):

OSRAM Opto Semiconductors

LED Soleriq S15
FWHM Asymmetric
Efficiency 86 %
Peak intensity 0.600 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12691_LENA-STD-BASE-CLL030



SEAGUL SEOUL SEMICONDUCTOR

LED ZC12/18
FWHM Asymmetric
Efficiency 91 %
Peak intensity 0.570 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C13868_LENA-STD-BASE-VERO13-18
Bender Wirth: 433 Typ L1

SHARP

LED Mega Zenigata (GW5DGC)
FWHM Asymmetric
Efficiency %
Peak intensity cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ

SHARP

LED Mega Zenigata (GW5DGC)
FWHM Asymmetric
Efficiency %
Peak intensity cd/lm
LEDs/each optic 1
Light colour White
Required components:
C12292_LENA-STD-BASE-MEZ
C11996_LENA-LENS

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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