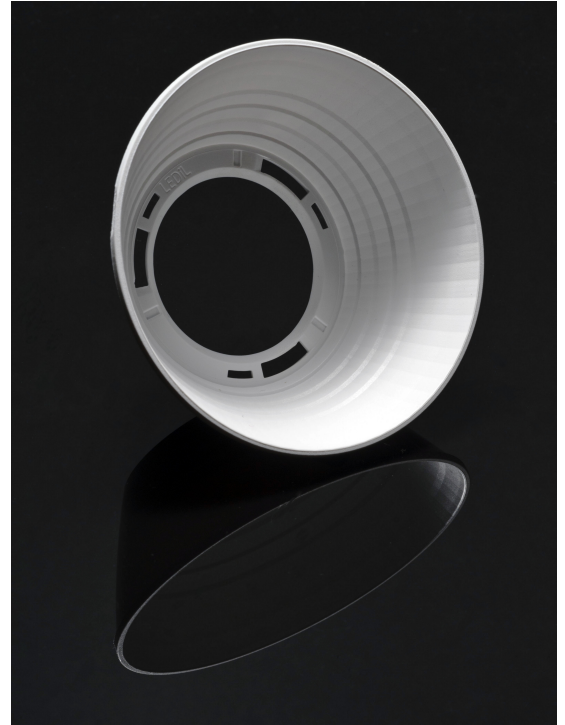


ANGELINA-XW

White version with ~91° wide beam

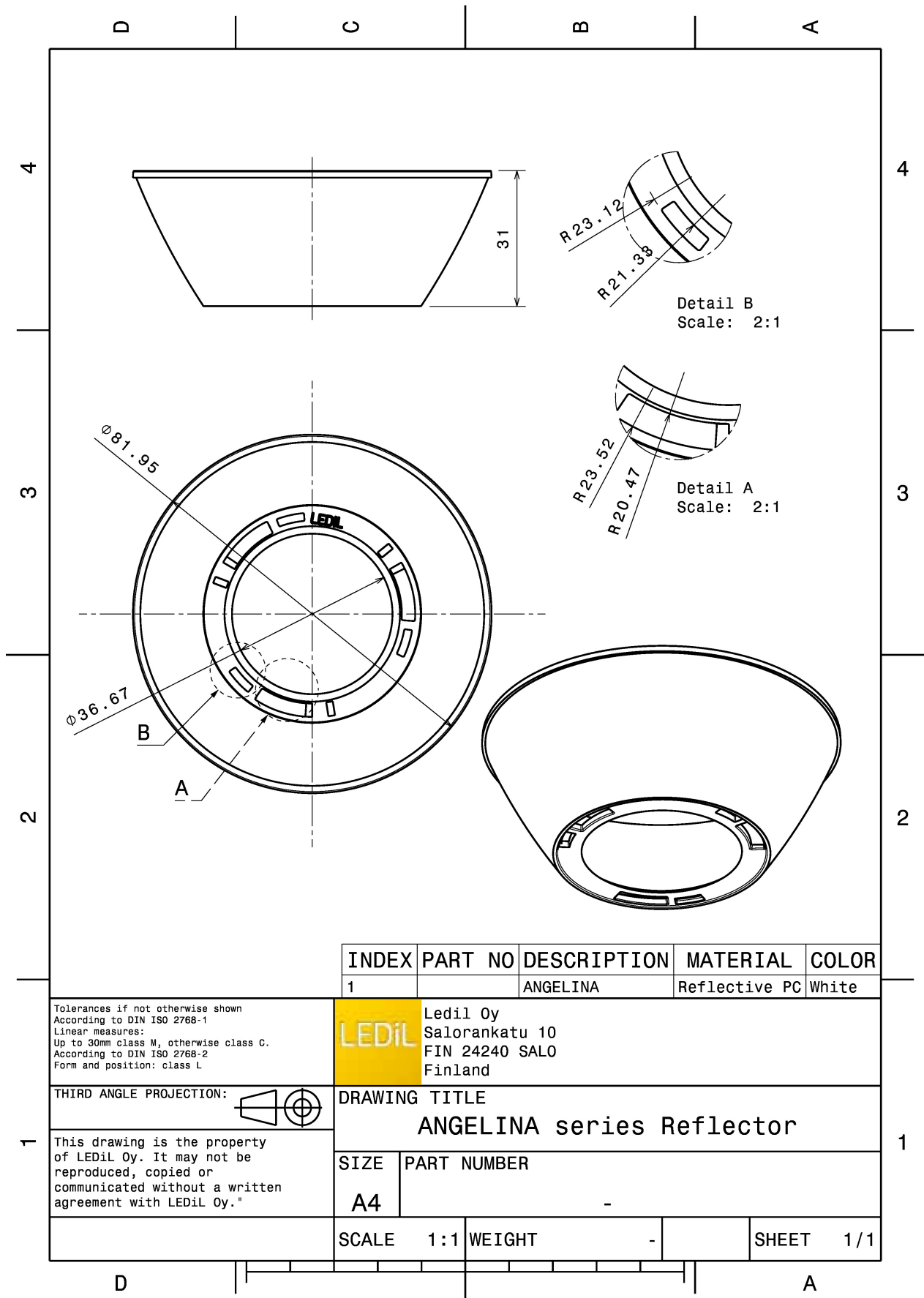
TECHNICAL SPECIFICATIONS:

Dimensions	Ø 82.0 mm
Height	31 mm
Fastening	socket
Colour	white
Box size	480 x 280 x 300 mm
Box weight	12.3 kg
Quantity in Box	900 pcs
ROHS compliant	yes ⓘ



MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Coating
ANGELINA-XW	Reflector	HRPC	white	



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOR
1		ANGELINA	Reflective PC	White

Tolerances if not otherwise shown
According to DIN ISO 2768-1
Linear measures:
Up to 30mm class M, otherwise class C.
According to DIN ISO 2768-2
Form and position: class L

LEDiL Oy
Salorankatu 10
FIN 24240 SALO
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE
ANGELINA series Reflector

This drawing is the property of LEDiL Oy. It may not be reproduced, copied or communicated without a written agreement with LEDiL Oy."

SIZE	PART NUMBER
A4	-

SCALE	1:1	WEIGHT	-	SHEET	1/1
-------	-----	--------	---	-------	-----

PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V13 Gen7</p> <p>FWHM 92.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.500 cd/lm</p> <p>Required components: TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>bridgelux.</p> <p>LED Vero SE 13</p> <p>FWHM 94.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.500 cd/lm</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		
<p>bridgelux.</p> <p>LED Vero SE 18</p> <p>FWHM 93.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.490 cd/lm</p> <p>Required components: C16402_CLAMP-VEROSE-13-18</p>		
<p>bridgelux.</p> <p>LED VERO18</p> <p>FWHM 90.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.580 cd/lm</p> <p>Required components: C13658_CLAMP-VERO13-18</p>		

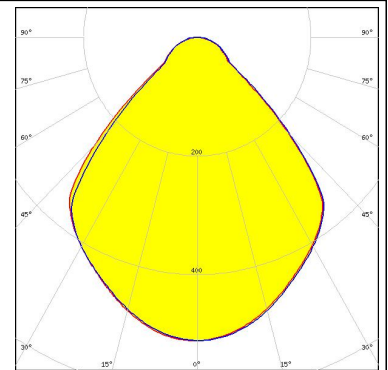
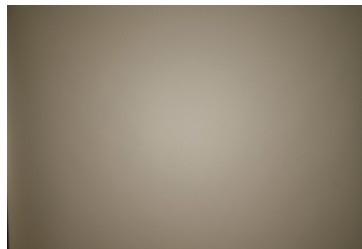
PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED VERO29</p> <p>FWHM 91.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.460 cd/lm</p> <p>Required components: C13584_CLAMP-VERO29</p>		
<p>bridgelux.</p> <p>LED VERO29</p> <p>FWHM 90.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 0.450 cd/lm</p> <p>Required components: C13584_CLAMP-VERO29 F13671_ANGE-RZ-LENS</p>		
<p>CITIZEN</p> <p>LED CLL02x/CLU02x (LES10)</p> <p>FWHM 94.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 0.500 cd/lm</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>		
<p>CITIZEN</p> <p>LED CLL03x/CLU03x</p> <p>FWHM 89.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.500 cd/lm</p> <p>Required components: IDEAL: 50-2103CT + 50-2100AN</p>		

PHOTOMETRIC DATA (MEASURED):

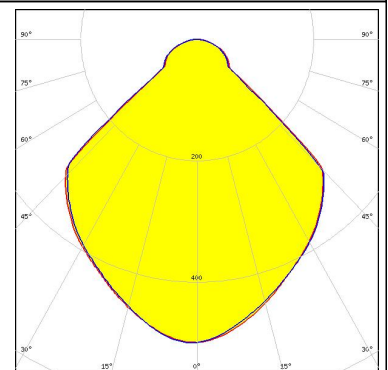
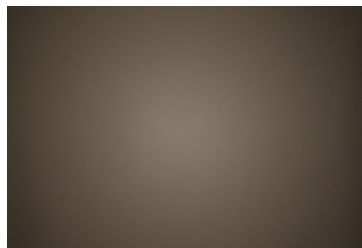
CITIZEN

LED CLL04x/CLU04x
 FWHM 88.0°
 Efficiency 95 %
 Peak intensity 0.510 cd/lm
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 431 Typ L3



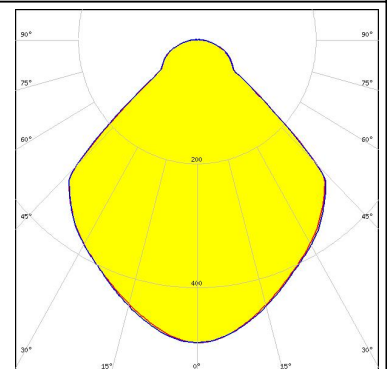
CITIZEN

LED CLU700/701
 FWHM 95.0°
 Efficiency 95 %
 Peak intensity 0.500 cd/lm
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 434 Typ L1



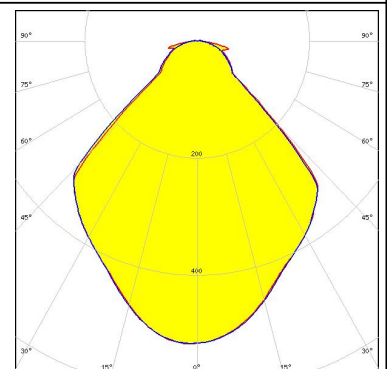
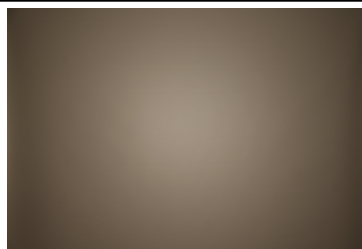
CITIZEN

LED CLU720/721
 FWHM 93.0°
 Efficiency 94 %
 Peak intensity 0.500 cd/lm
 Required components:
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



CITIZEN

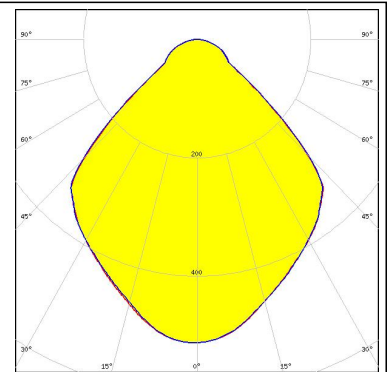
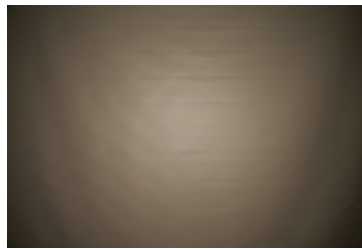
LED CLU720/721
 FWHM 89.0°
 Efficiency 94 %
 Peak intensity 0.540 cd/lm
 Required components:
 IDEAL: 50-2103CT + 50-2100AN



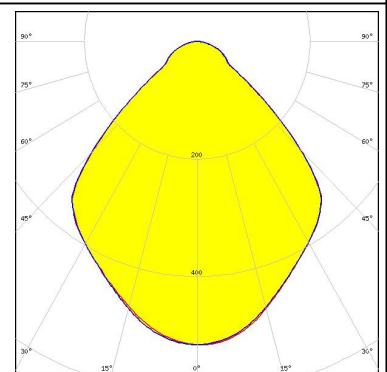
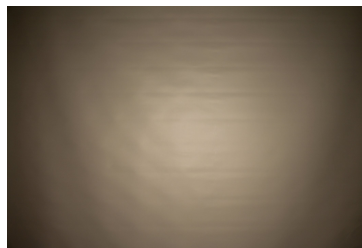
PHOTOMETRIC DATA (MEASURED):



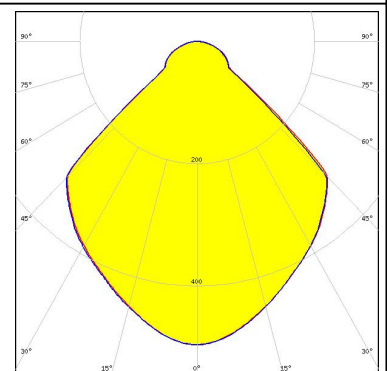
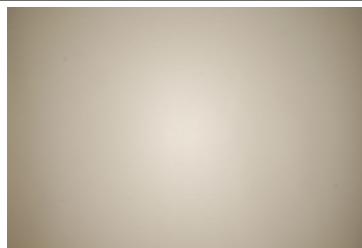
LED CMA2550
 FWHM 92.0°
 Efficiency 94 %
 Peak intensity 0.510 cd/lm
 Required components:
 C14036_CLAMP_CXA25-30



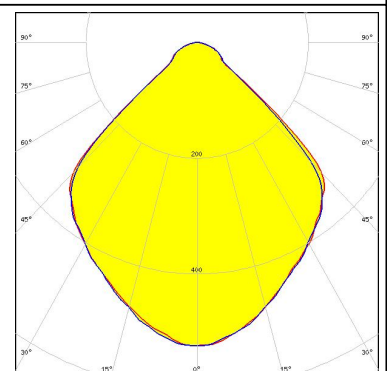
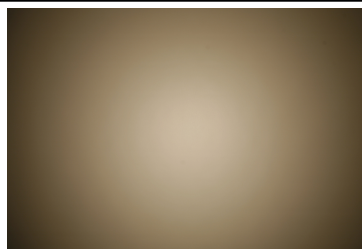
LED CMA3090
 FWHM 90.0°
 Efficiency 97 %
 Peak intensity 0.500 cd/lm
 Required components:
 C14036_CLAMP_CXA25-30



LED CXA/B 15xx
 FWHM 94.0°
 Efficiency 94 %
 Peak intensity 0.500 cd/lm
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 441 Typ L1



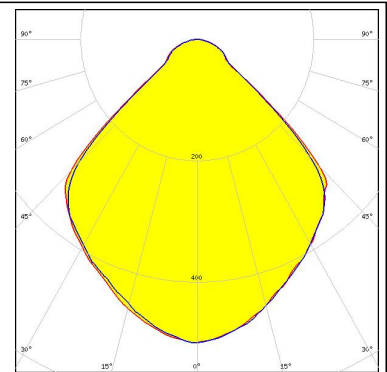
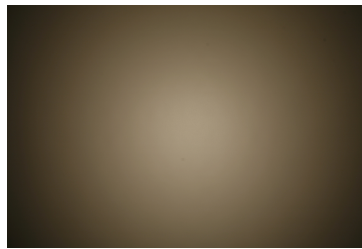
LED CXA/B 15xx
 FWHM 94.0°
 Efficiency 94 %
 Peak intensity 0.530 cd/lm
 Required components:
 C14123_CLAMP-CXA15-18



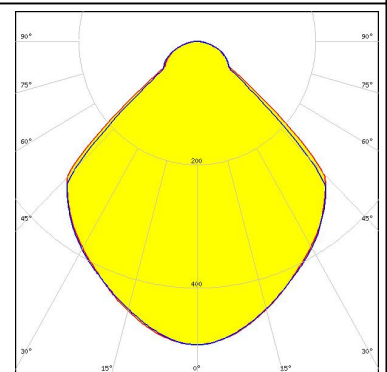
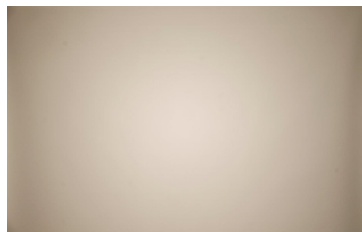
PHOTOMETRIC DATA (MEASURED):



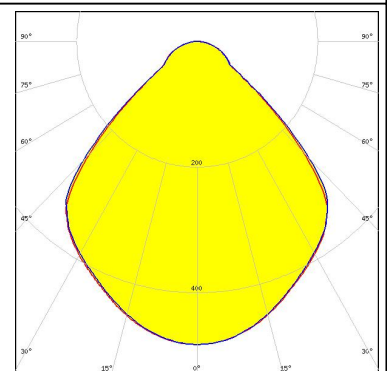
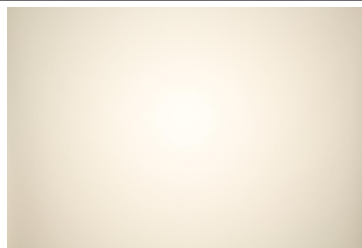
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM 94.0°
 Efficiency 94 %
 Peak intensity 0.500 cd/lm
 Required components:
 C14123_CLAMP-CXA15-18



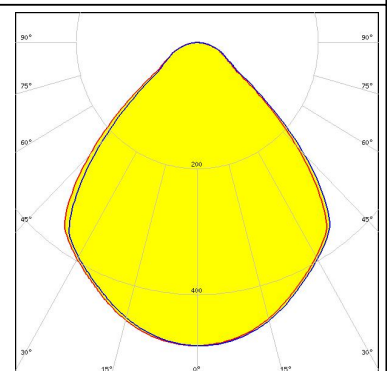
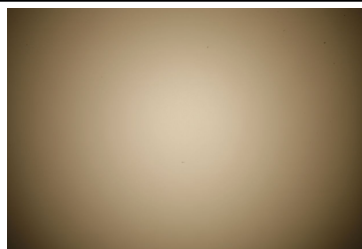
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM 94.0°
 Efficiency 94 %
 Peak intensity 0.500 cd/lm
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 437 Typ L1



LED CXA/B 30xx
 FWHM 91.0°
 Efficiency 94 %
 Peak intensity 0.480 cd/lm
 Required components:
 C14036_CLAMP_CXA25-30



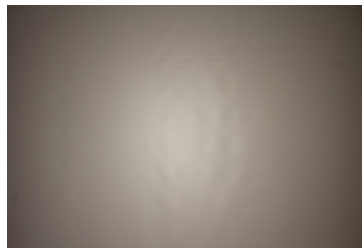
LED CXA/B 3590
 FWHM 90.0°
 Efficiency 94 %
 Peak intensity 0.480 cd/lm
 Required components:
 IDEAL: 50-2303CR + 50-2300AN



PHOTOMETRIC DATA (MEASURED):

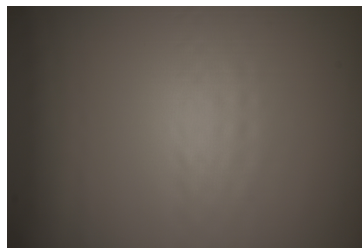
EVERLIGHT

LED CHI3030 19W
FWHM 88.0°
Efficiency 91 %
Peak intensity 0.500 cd/lm
Required components:
C13584_CLAMP-VERO29
F13671_ANGE-RZ-LENS
Bender Wirth: 468 Typ L3



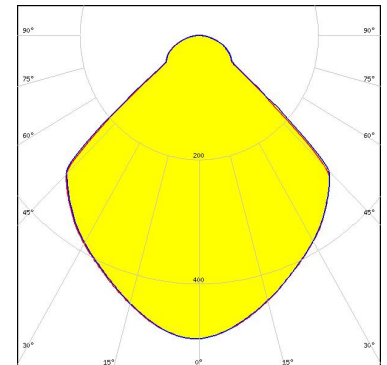
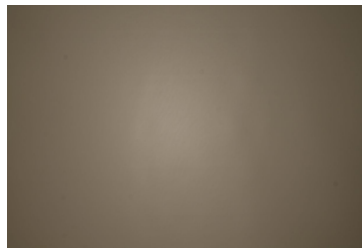
EVERLIGHT

LED CHI3030 29W
FWHM 89.0°
Efficiency 91 %
Peak intensity 0.500 cd/lm
Required components:
C13584_CLAMP-VERO29
F13671_ANGE-RZ-LENS
Bender Wirth: 468 Typ L3



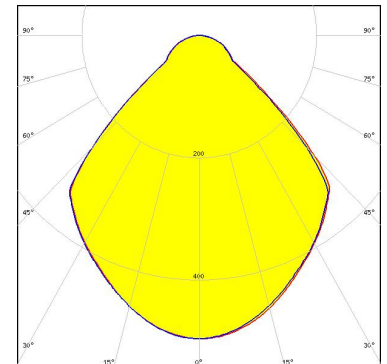
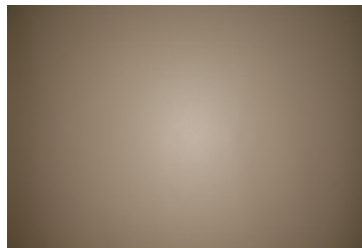
LUMILEDS

LED LUXEON CoB 1202/1203
FWHM 95.0°
Efficiency 94 %
Peak intensity 0.500 cd/lm
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 438 Typ L1



LUMILEDS

LED LUXEON CoB 1211
FWHM 91.0°
Efficiency 94 %
Peak intensity 0.500 cd/lm
Required components:
C13584_CLAMP-VERO29
Bender Wirth: 431 Typ L3



PHOTOMETRIC DATA (MEASURED):



LED LUXEON K12

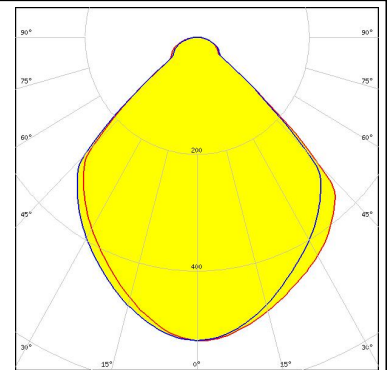
FWHM 92.0°

Efficiency 94 %

Peak intensity 0.520 cd/lm

Required components:

TE: 2213134-2 + OPTIC CLIP Z50 TYPE1 2213194-1



LED LUXEON K16

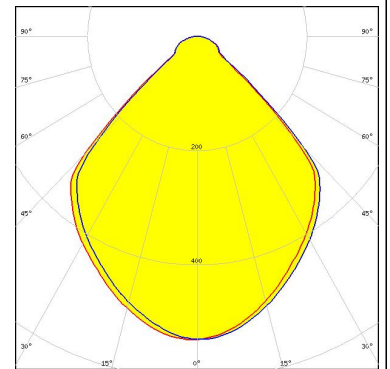
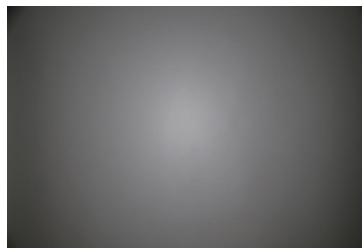
FWHM 90.0°

Efficiency 94 %

Peak intensity 0.530 cd/lm

Required components:

BJB: 47.319.2070



LED CDM-14 (Dim-To-Warm)

FWHM 94.0°

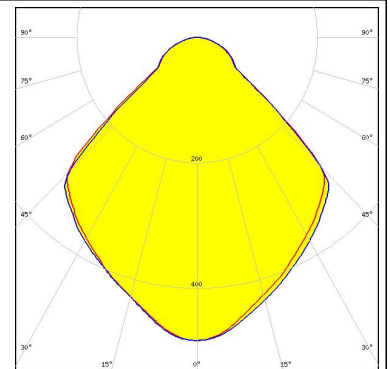
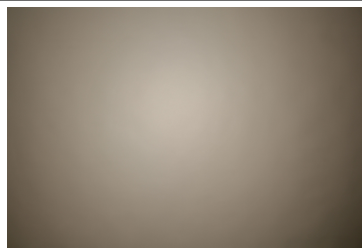
Efficiency 95 %

Peak intensity 0.480 cd/lm

Required components:

C13658_CLAMP-VERO13-18

Bender Wirth: 491 Typ L2



LED CDM-14 (Dim-To-Warm)

FWHM 94.0°

Efficiency 90 %

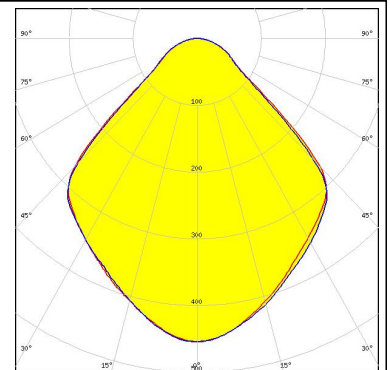
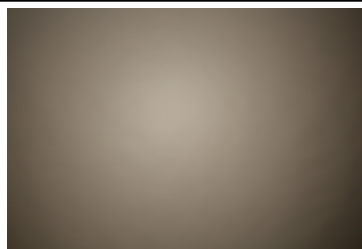
Peak intensity 0.450 cd/lm

Required components:

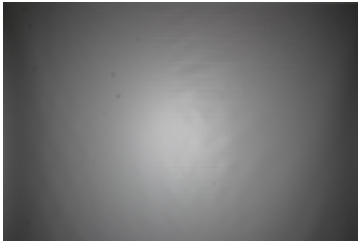
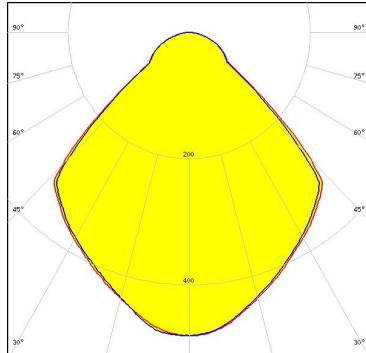
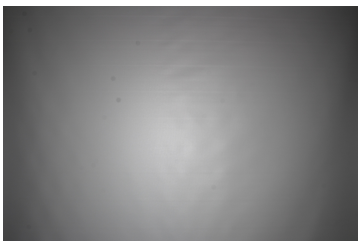
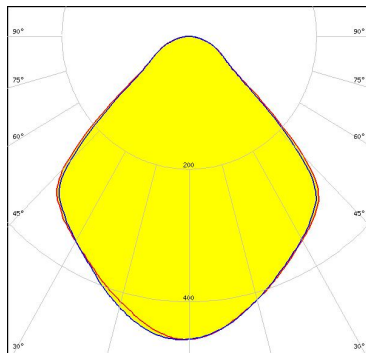
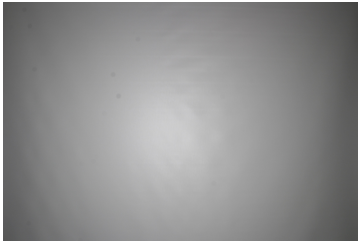
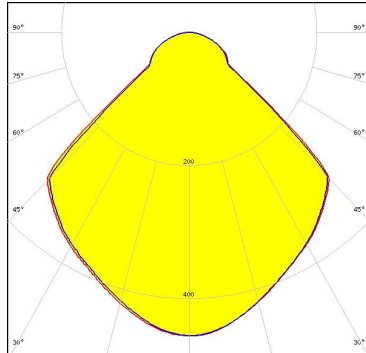

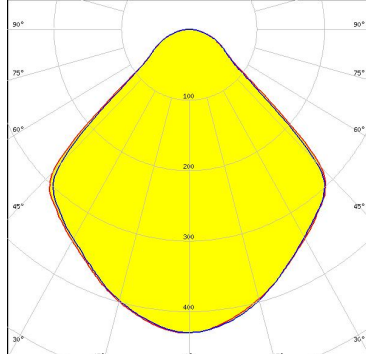
C13658_CLAMP-VERO13-18

F13671_ANGE-RZ-LENS

Bender Wirth: 491 Typ L2



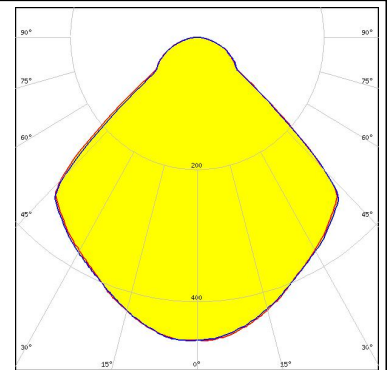
PHOTOMETRIC DATA (MEASURED):

<p>LUMINUS</p> <p>LED CDM-18 (Dim-To-Warm)</p> <p>FWHM 93.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.400 cd/lm</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 491 Typ L2</p>		
<p>LUMINUS</p> <p>LED CDM-18 (Dim-To-Warm)</p> <p>FWHM 93.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 0.460 cd/lm</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 491 Typ L2</p>		
<p>LUMINUS</p> <p>LED CDM-9 (Dim-To-Warm)</p> <p>FWHM 95.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.460 cd/lm</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 490 Typ L1</p>		
<p>LUMINUS</p> <p>LED CDM-9 (Dim-To-Warm)</p> <p>FWHM 95.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 0.430 cd/lm</p> <p>Required components: C13658_CLAMP-VERO13-18 F13671_ANGE-RZ-LENS Bender Wirth: 490 Typ L1</p>		

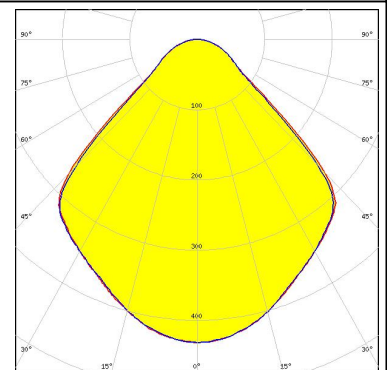
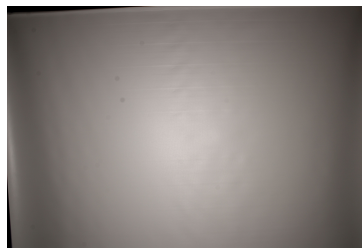
PHOTOMETRIC DATA (MEASURED):



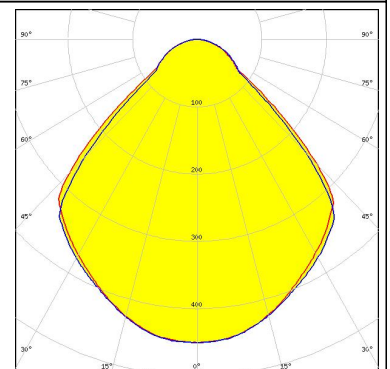
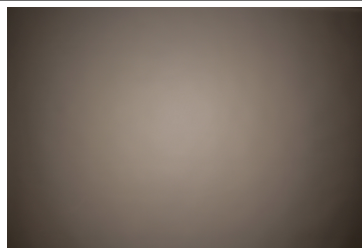
LED CTM-14 (Tunable White)
 FWHM 94.0°
 Efficiency 94 %
 Peak intensity 0.460 cd/lm
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 442 Typ L3



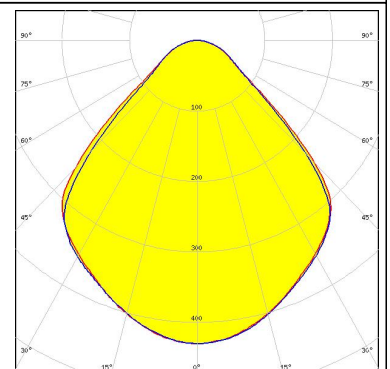
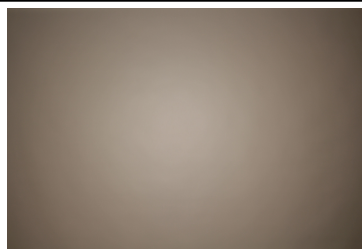
LED CTM-14 (Tunable White)
 FWHM 94.0°
 Efficiency 88 %
 Peak intensity 0.430 cd/lm
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 442 Typ L3



LED CTM-22 (Tunable White)
 FWHM 93.0°
 Efficiency 93 %
 Peak intensity 0.450 cd/lm
 Required components:
 C13584_CLAMP-VERO29
 Bender Wirth: 494 Typ L3



LED CTM-22 (Tunable White)
 FWHM 92.0°
 Efficiency 88 %
 Peak intensity 0.430 cd/lm
 Required components:
 C13584_CLAMP-VERO29
 F13671_ANGE-RZ-LENS
 Bender Wirth: 494 Typ L3

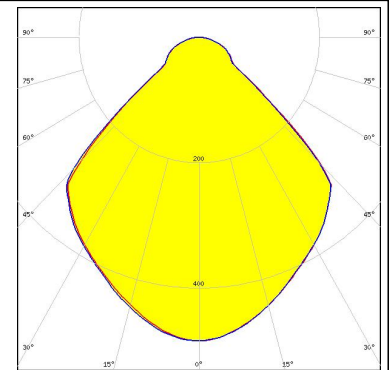
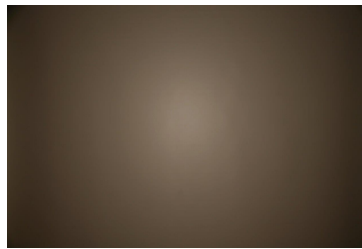


PHOTOMETRIC DATA (MEASURED):



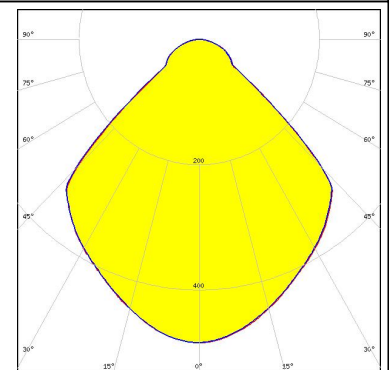
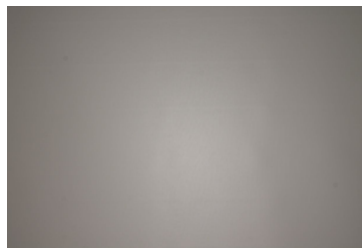
LED CXM-14
FWHM 93.0°
Efficiency 94 %
Peak intensity 0.480 cd/lm
Required components:

TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



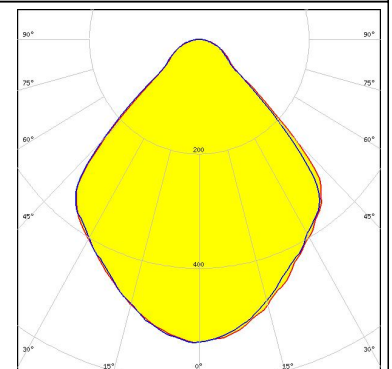
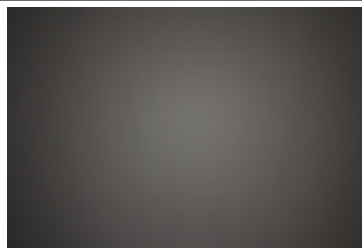
LED COB J-Type
FWHM 93.0°
Efficiency 95 %
Peak intensity 0.480 cd/lm
Required components:

C13658_CLAMP-VERO13-18
Bender Wirth: 463 Typ L2



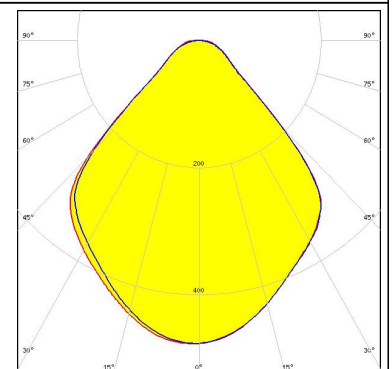
LED COB J-Type
FWHM 88.0°
Efficiency 92 %
Peak intensity 0.530 cd/lm
Required components:

IDEAL: 50-2103NC + 50-2100AN



LED COB J-Type
FWHM 89.0°
Efficiency 90 %
Peak intensity 0.480 cd/lm
Required components:

F13671_ANGE-RZ-LENS
IDEAL: 50-2103NC + 50-2100AN



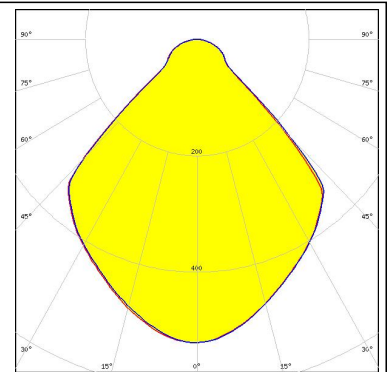
PHOTOMETRIC DATA (MEASURED):

<p>NICHIA</p> <p>LED COB L-Type (LES 11)</p> <p>FWHM 94.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.490 cd/lm</p> <p>Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 438 Typ L1</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 11)</p> <p>FWHM 94.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.480 cd/lm</p> <p>Required components: Molex: 180580-0005</p>		
<p>NICHIA</p> <p>LED COB L-Type (LES 11)</p> <p>FWHM 92.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.520 cd/lm</p> <p>Required components: TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>OSRAM</p> <p>LED PrevaLED Core AC (LEP-2000)</p> <p>FWHM 89.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.510 cd/lm</p> <p>Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

PHOTOMETRIC DATA (MEASURED):

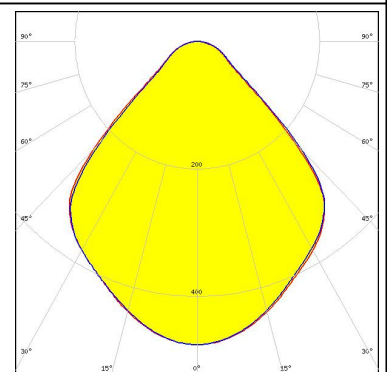
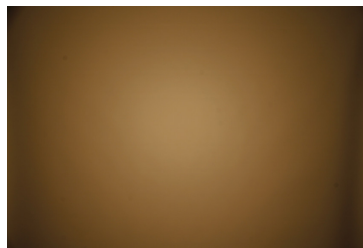
OSRAM

LED PrevaLED Core AC (LEP-800)
FWHM 90.0°
Efficiency 94 %
Peak intensity 0.520 cd/lm
Required components:
TE: OPTIC CLIP Z50 TYPE1 2213194-1



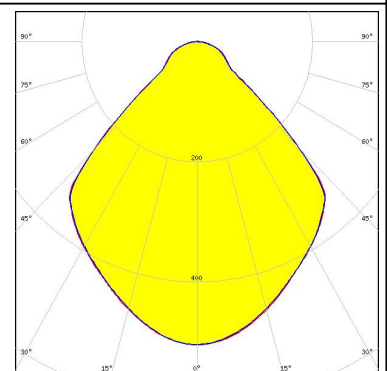
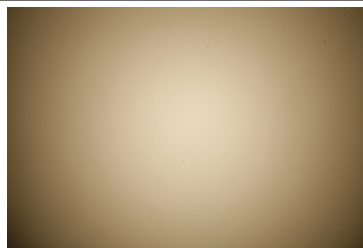
OSRAM

LED PrevaLED Core Z4 LES19
FWHM 90.0°
Efficiency 90 %
Peak intensity 0.480 cd/lm
Required components:
F13671_ANGE-RZ-LENS
TE: OPTIC CLIP Z50 TYPE1 2213194-1



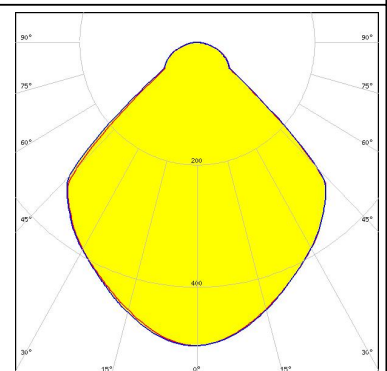
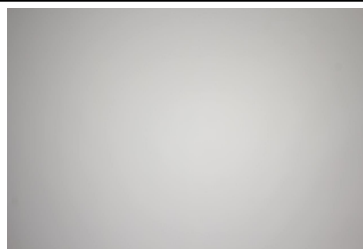
OSRAM

LED PrevaLED Core Z4 LES19
FWHM 90.0°
Efficiency 94 %
Peak intensity 0.510 cd/lm
Required components:
TE: OPTIC CLIP Z50 TYPE1 2213194-1


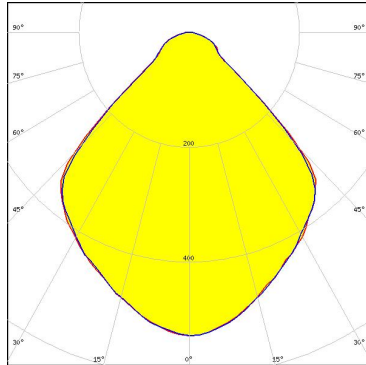
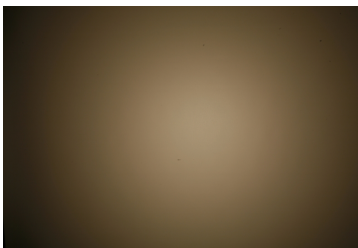
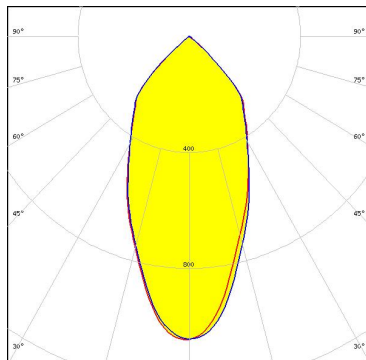
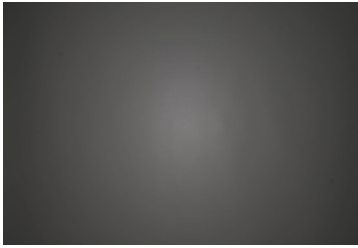
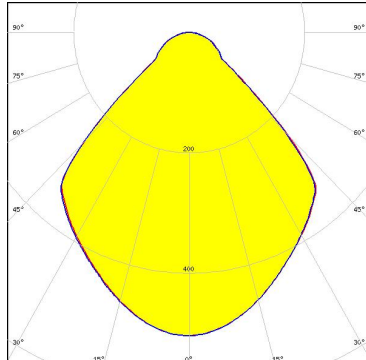
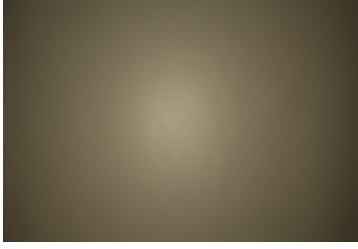
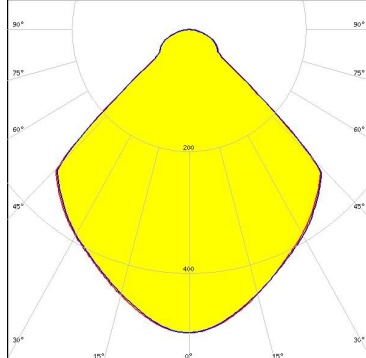


OSRAM

Opto Semiconductors
LED Soleriq S13
FWHM 93.0°
Efficiency 94 %
Peak intensity 0.500 cd/lm
Required components:
C13658_CLAMP-VERO13-18
Bender Wirth: 437 Typ L1



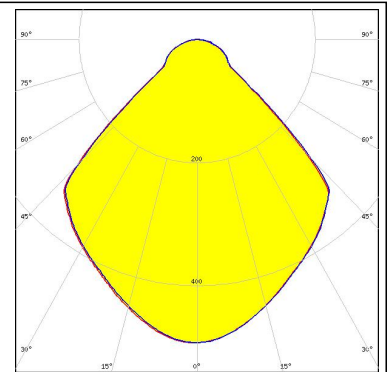
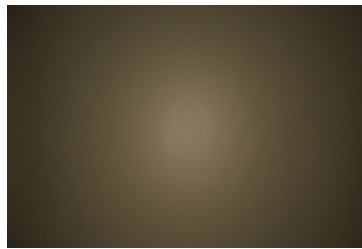
PHOTOMETRIC DATA (MEASURED):

<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13</p> <p>FWHM 92.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.500 cd/lm</p> <p>Required components: TE: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S19</p> <p>FWHM 91.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.500 cd/lm</p> <p>Required components: TE: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S19</p> <p>FWHM 90.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.500 cd/lm</p> <p>Required components: C13584_CLAMP-VERO29 Bender Wirth: 462 Typ L3</p>		
<p>PHILIPS</p> <p>LED Fortimo SLM L09 Standard</p> <p>FWHM 93.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.500 cd/lm</p> <p>Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

PHOTOMETRIC DATA (MEASURED):

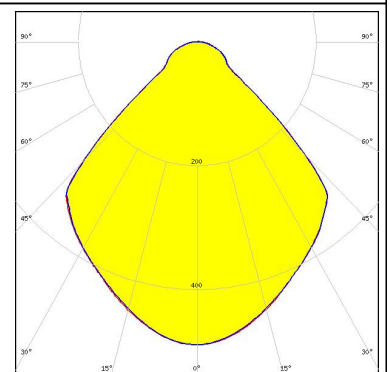
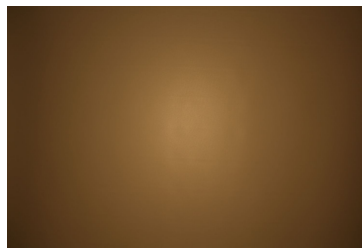
PHILIPS

LED Fortimo SLM L13 Standard
FWHM 92.0°
Efficiency 94 %
Peak intensity 0.500 cd/lm
Required components:
TE: OPTIC CLIP Z50 TYPE1 2213194-1



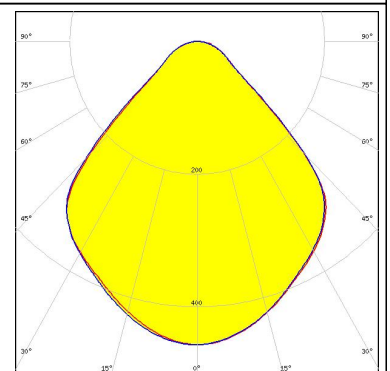
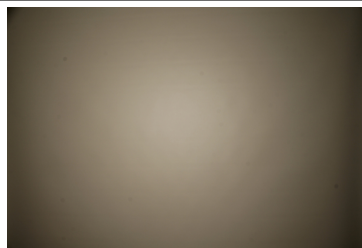
PHILIPS

LED Fortimo SLM L15 Standard
FWHM 91.0°
Efficiency 92 %
Peak intensity 0.490 cd/lm
Required components:
TE: OPTIC CLIP Z50 TYPE1 2213194-1



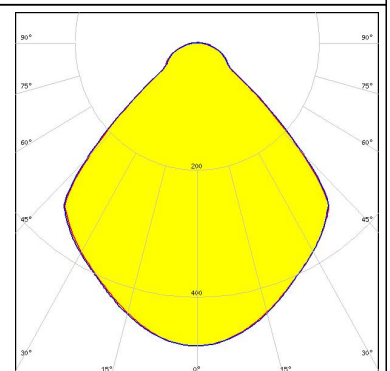
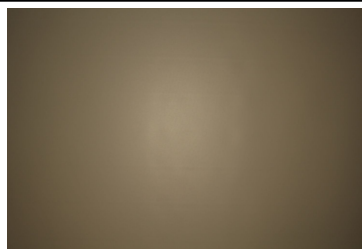
PHILIPS

LED Fortimo SLM L15 Standard
FWHM 91.0°
Efficiency 89 %
Peak intensity 0.460 cd/lm
Required components:
F13671_ANGE-RZ-LENS
TE: OPTIC CLIP Z50 TYPE1 2213194-1



PHILIPS

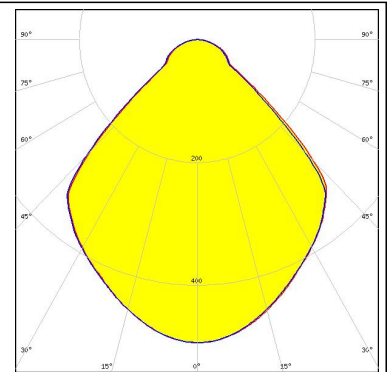
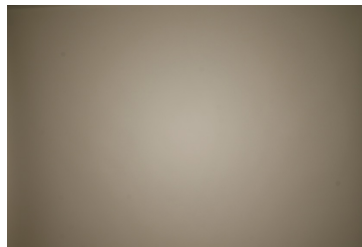
LED Fortimo SLM L19 Standard
FWHM 90.0°
Efficiency 91 %
Peak intensity 0.480 cd/lm
Required components:
TE: OPTIC CLIP Z50 TYPE1 2213194-1



PHOTOMETRIC DATA (MEASURED):

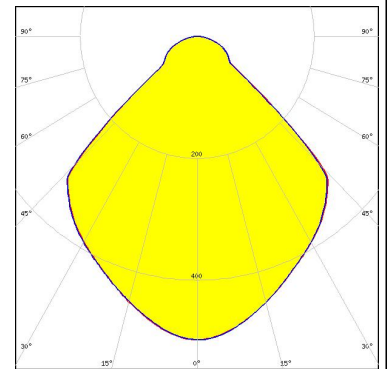
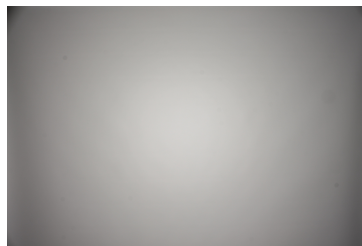
SAMSUNG

LED LC026B / 033B / 040B
 FWHM 91.0°
 Efficiency 94 %
 Peak intensity 0.490 cd/lm
 Required components:
 C13658_CLAMP-VERO13-18
 Bender Wirth: 450 Typ L2



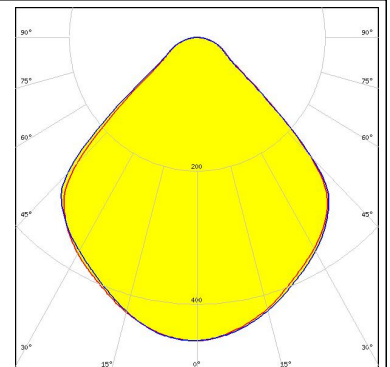
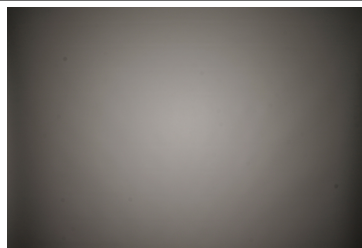
SAMSUNG

LED LC040C
 FWHM 93.0°
 Efficiency 94 %
 Peak intensity 0.500 cd/lm
 Required components:
 TE: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



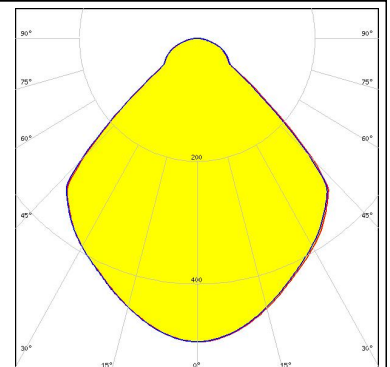
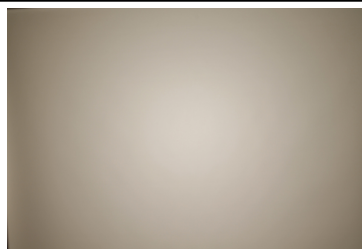
SEOUL SEMICONDUCTOR

LED AC Zhaga COB
 FWHM 93.0°
 Efficiency 91 %
 Peak intensity 0.460 cd/lm
 Required components:
 F13671_ANGE-RZ-LENS


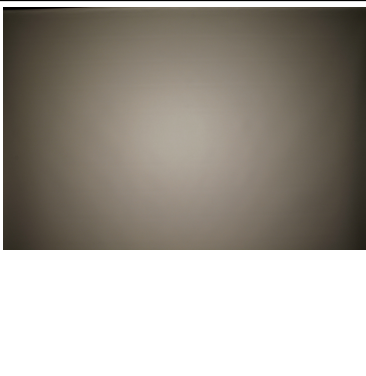
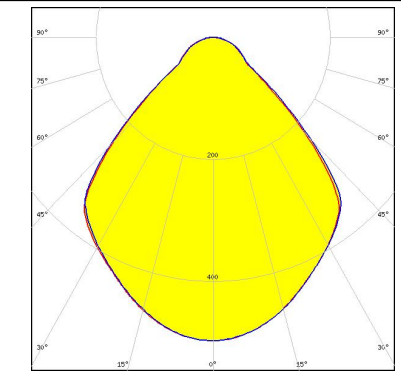
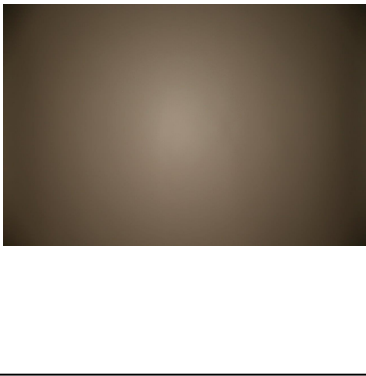
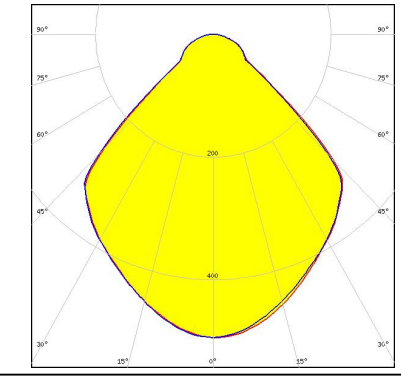
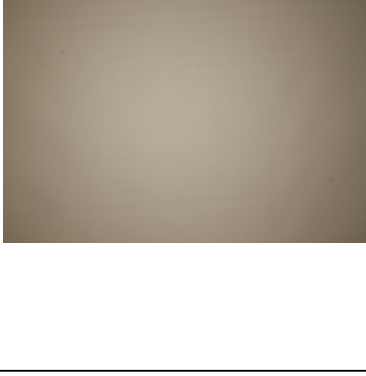
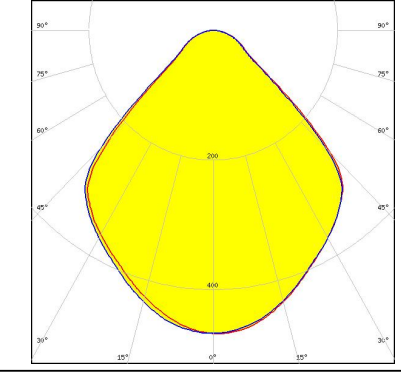

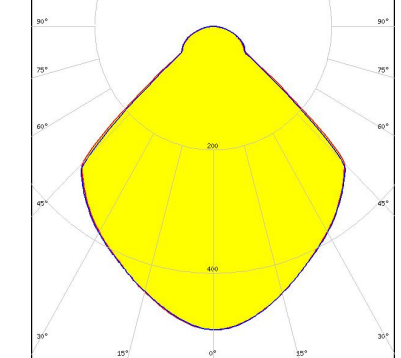


SEOUL SEMICONDUCTOR

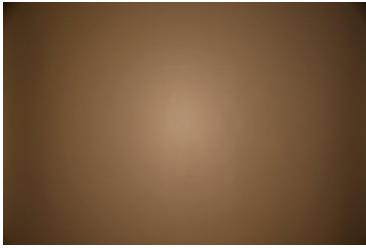
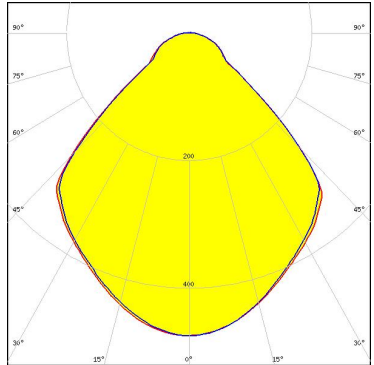
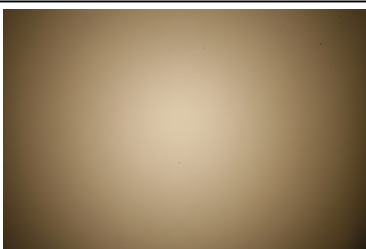
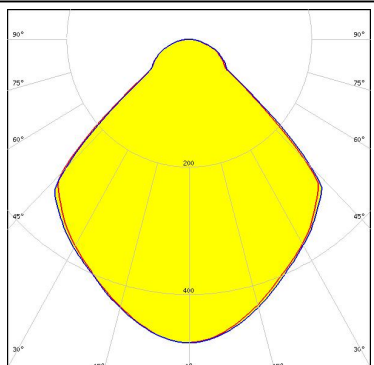
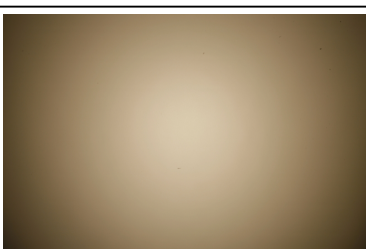
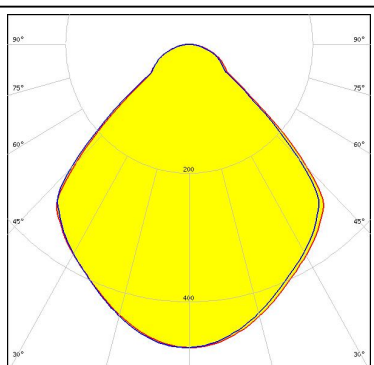
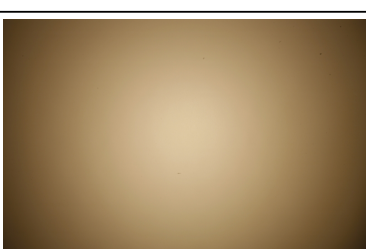
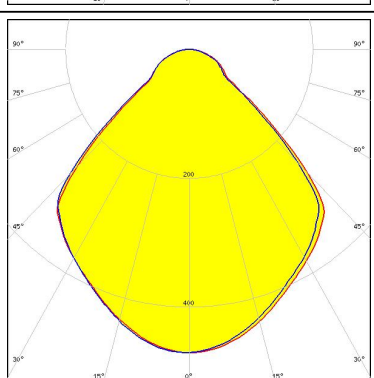
LED MJT COB LES 14.5
 FWHM 92.0°
 Efficiency 94 %
 Peak intensity 0.500 cd/lm
 Required components:
 TE: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1




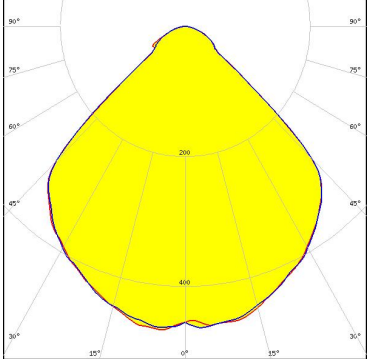
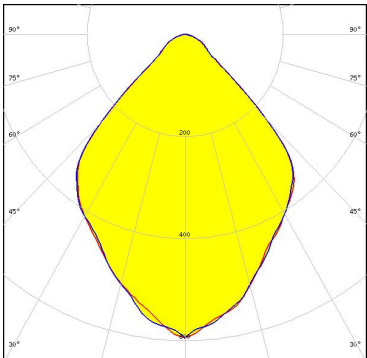

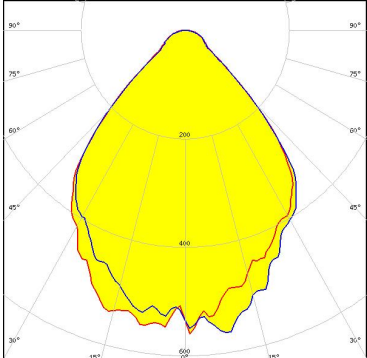

PHOTOMETRIC DATA (MEASURED):

<p> SEUL SEMICONDUCTOR</p> <p>LED MJT COB LES 22 FWHM 89.0° Efficiency 94 % Peak intensity 0.500 cd/lm Required components: C13584_CLAMP-VERO29 Bender Wirth: 431 Typ L3</p>		
<p>SHARP</p> <p>LED Mega Zenigata (GW6DME) FWHM 92.0° Efficiency 94 % Peak intensity 0.500 cd/lm Required components: TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>SHARP</p> <p>LED Mega Zenigata (GW6DME) FWHM 92.0° Efficiency 92 % Peak intensity 0.470 cd/lm Required components: F13671_ANGE-RZ-LENS TE: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>TRIDONIC</p> <p>LED SLE G5 LES11 FWHM 94.0° Efficiency 94 % Peak intensity 0.500 cd/lm Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>		

PHOTOMETRIC DATA (MEASURED):

<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-464 FWHM 93.0° Efficiency 94 % Peak intensity 0.470 cd/lm Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-484 FWHM 93.0° Efficiency 94 % Peak intensity 0.476 cd/lm Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-485 FWHM 93.0° Efficiency 94 % Peak intensity 0.470 cd/lm Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		
<p>VS LIGHTING SOLUTIONS</p> <p>LED WU-M-486 FWHM 92.0° Efficiency 94 % Peak intensity 0.470 cd/lm Required components: TE: OPTIC CLIP Z50 TYPE1 2213194-1</p>		

PHOTOMETRIC DATA (SIMULATED):

<p> bridgelux</p> <p>LED V10 Gen7 FWHM 93.0° Efficiency 92 % Peak intensity 0.490 cd/lm Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>	
<p> bridgelux</p> <p>LED V13 Gen7 FWHM 86.0° Efficiency 92 % Peak intensity 0.595 cd/lm Required components: IDEAL: 50-2103CT + 50-2100AN</p>	
<p> bridgelux</p> <p>LED V22 Gen7 FWHM 82.0° Efficiency 94 % Peak intensity 0.603 cd/lm Required components: IDEAL: 50-2204-CT + 50-2100AN</p>	
<p> LUMINUS</p> <p>LED CXM-9 FWHM 94.0° Efficiency 95 % Peak intensity 0.500 cd/lm Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 434 Typ L1</p>	

PHOTOMETRIC DATA (SIMULATED):

 SEOUL SEMICONDUCTOR	
LED	ZC12/18
FWHM	92.0°
Efficiency	95 %
Peak intensity	0.490 cd/lm
Required components:	
C13658_CLAMP-VERO13-18	
Bender Wirth: 433 Typ L1	
<hr/>	
 SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM	94.0°
Efficiency	95 %
Peak intensity	0.500 cd/lm
Required components:	
C13658_CLAMP-VERO13-18	
Bender Wirth: 434 Typ L1	

GENERAL INFORMATION:

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

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

MATERIALS:

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

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

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

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

LEDiL Oy

Joensuunkatu 13
FI-24240 SALO
Finland

LEDiL Inc.

228 West Page Street
Suite D
Sycamore IL 60178
USA

Local sales and technical support

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

Shipping locations

Salo, Finland
Hong Kong, China

Distribution Partners

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