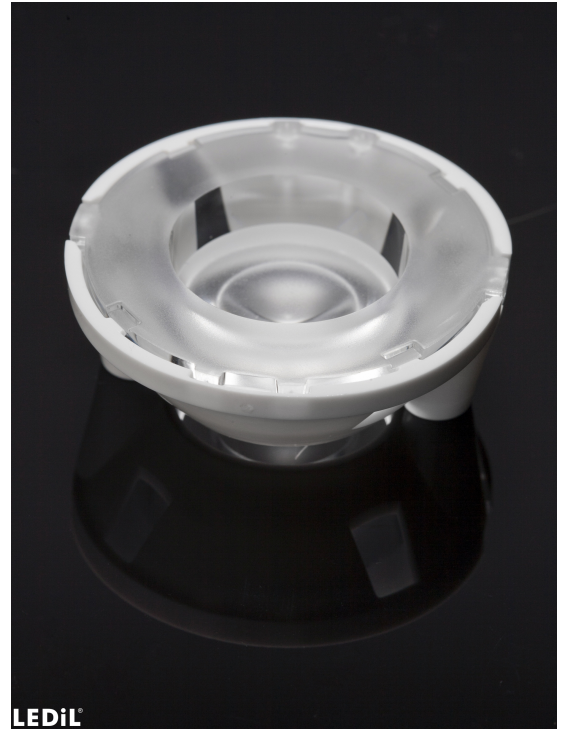


WINNIE-S

~20° spot beam. Holder with 35 mm screw hole distance according to Zhaga standard. Compatible with Bender+Wirth 4xx Typ L5 connector.

SPECIFICATION:

Dimensions	Ø 49.8 mm
Height	19.3 mm
Fastening	screw
ROHS compliant	yes ⓘ



MATERIALS:

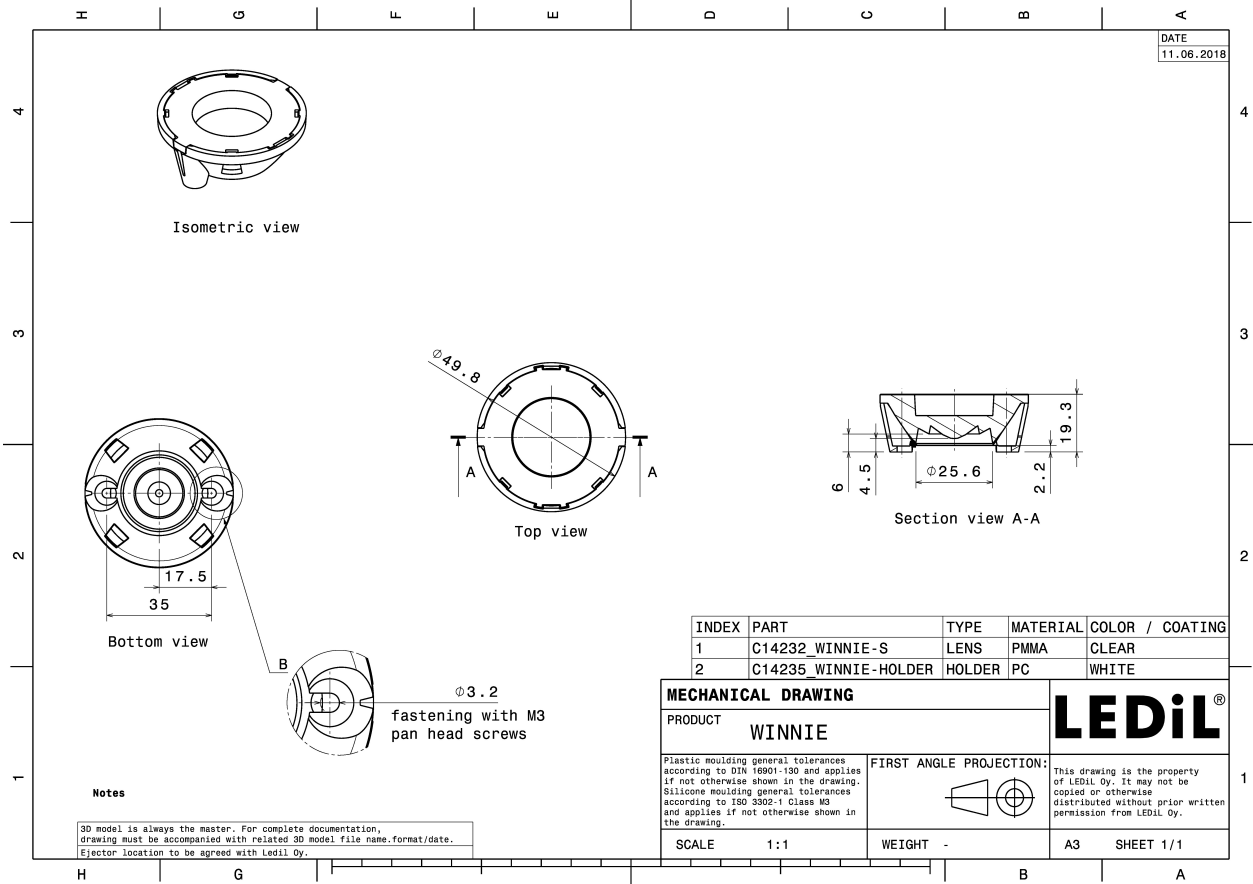
Component	Type	Material	Colour	Finish	Length
C14232_WINNIE-S	Single lens	PMMA	clear		49.6
C14235_WINNIE-HOLDER	Holder	PC	white		49.8

ORDERING INFORMATION:

Quantities for one set:

Single lens	1
Holder	1

Component		Qty in box	MOQ	MPQ	Box weight (kg)
C14232_WINNIE-S	Single lens	364	84	28	7.0
» Box size: 480 x 280 x 300 mm					
C14235_WINNIE-HOLDER	Holder	1820	84	28	7.2
» Box size: 480 x 280 x 300 mm					

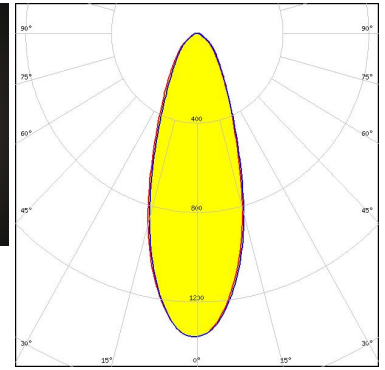


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

bridgelux

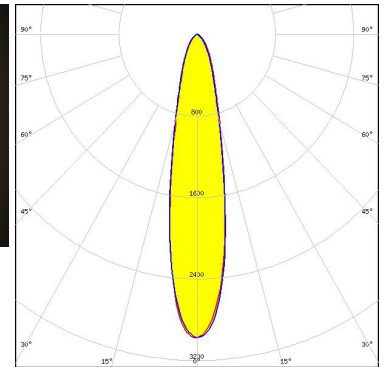
LED V18 Gen6
 FWHM / FWTM 36.0° / 84.0°
 Efficiency 88 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

bridgelux

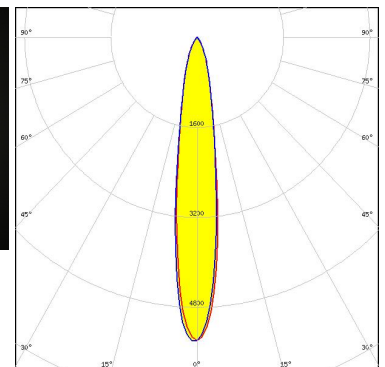
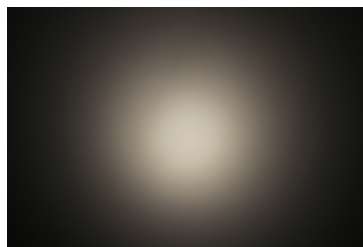
LED VERO10
 FWHM / FWTM 21.0° / 55.0°
 Efficiency 89 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

CITIZEN

LED CLL01x
 FWHM / FWTM 16.0° / 42.0°
 Efficiency 87 %
 Peak intensity 5.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

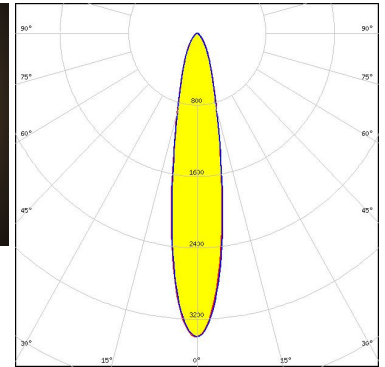


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

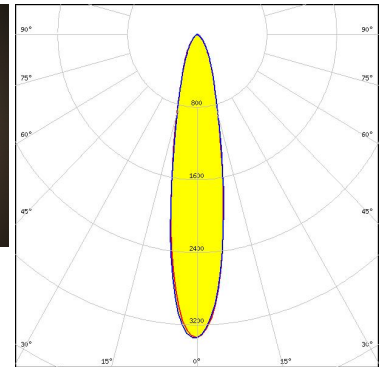
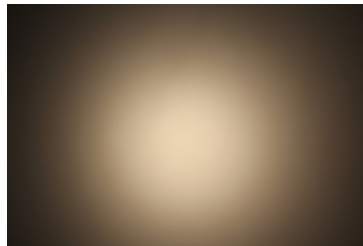
LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 20.0° / 50.0°
 Efficiency 88 %
 Peak intensity 3.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 434 Typ L5



Light distribution files

CITIZEN

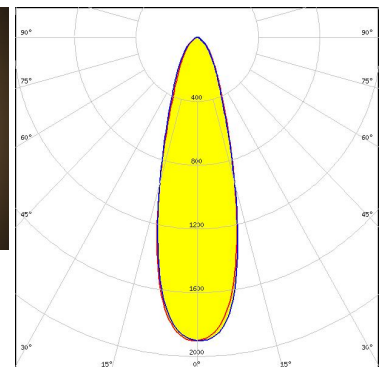
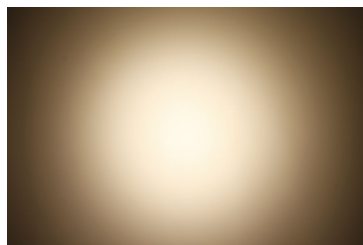
LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 21.0° / 52.0°
 Efficiency 87 %
 Peak intensity 3.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 30.0° / 68.0°
 Efficiency 88 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 433 Typ L5

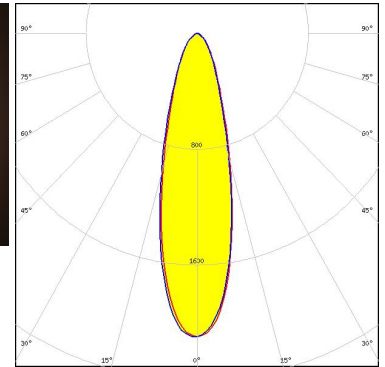
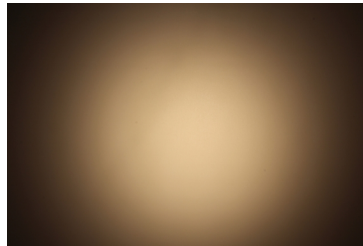


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

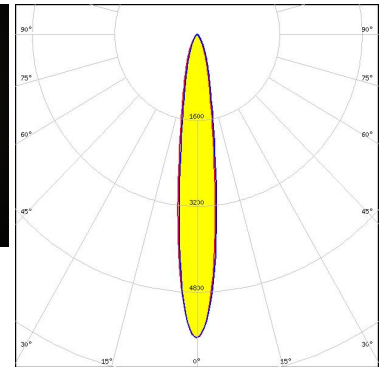
LED CLL03x/CLU03x
 FWHM / FWTM 28.0° / 66.0°
 Efficiency 87 %
 Peak intensity 2.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

CITIZEN

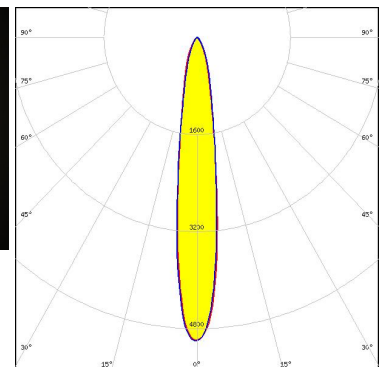
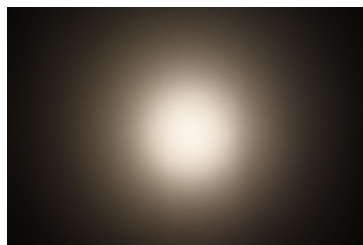
LED CLU700/701/702/703
 FWHM / FWTM 15.0° / 39.0°
 Efficiency 90 %
 Peak intensity 5.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 434 Typ L5



Light distribution files

CITIZEN

LED CLU700/701/702/703
 FWHM / FWTM 15.0° / 41.0°
 Efficiency 89 %
 Peak intensity 5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

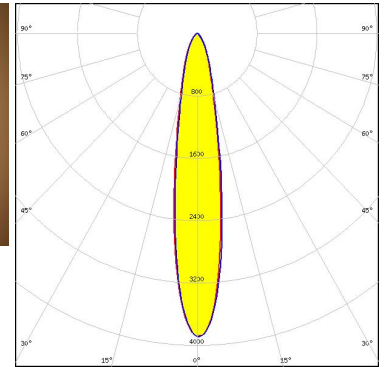
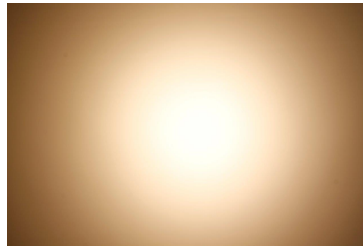


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

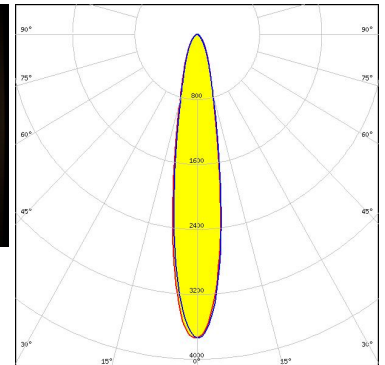
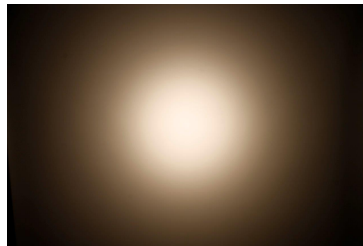
LED CLU710/711
FWHM / FWTM 18.0° / 47.0°
Efficiency 88 %
Peak intensity 3.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
Bender Wirth: 470 Typ L5



Light distribution files

CITIZEN

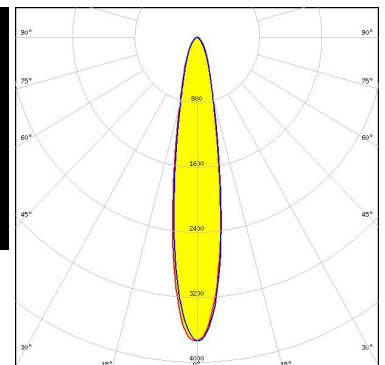
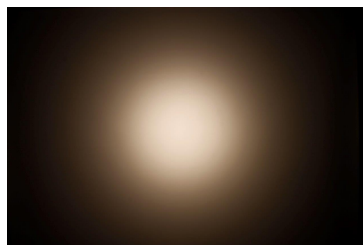
LED CLU710/711
FWHM / FWTM 18.0° / 47.0°
Efficiency 90 %
Peak intensity 3.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

CITIZEN

LED CLU710/711
FWHM / FWTM 18.0° / 47.0°
Efficiency 90 %
Peak intensity 3.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

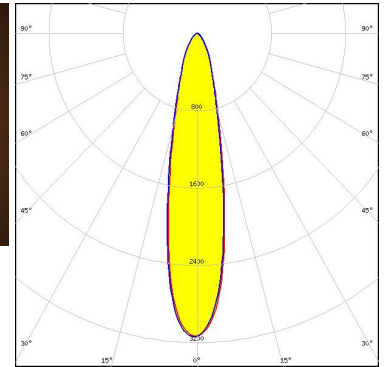
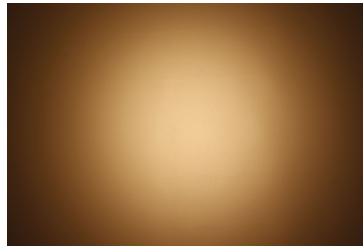


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

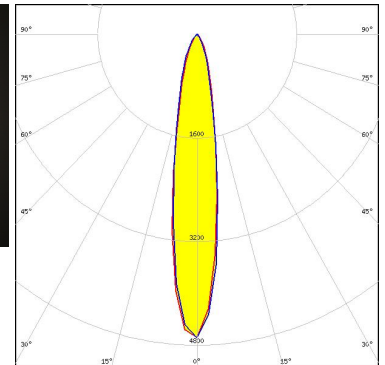
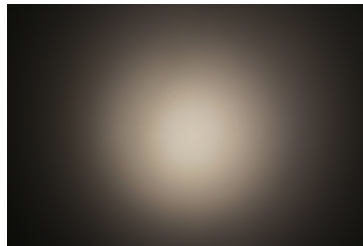
LED CLU720/721/723
 FWHM / FWTM 22.0° / 54.0°
 Efficiency 93 %
 Peak intensity 3.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 433 Typ L5



Light distribution files



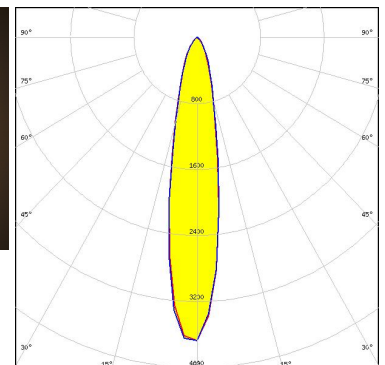
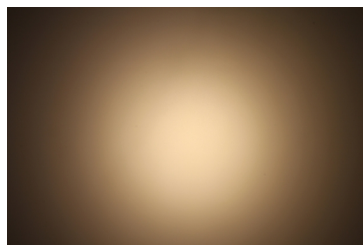
LED CXA/B 13xx
 FWHM / FWTM 18.0° / 46.0°
 Efficiency 89 %
 Peak intensity 4.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED CXA/B 15xx
 FWHM / FWTM 20.0° / 49.0°
 Efficiency 87 %
 Peak intensity 3.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

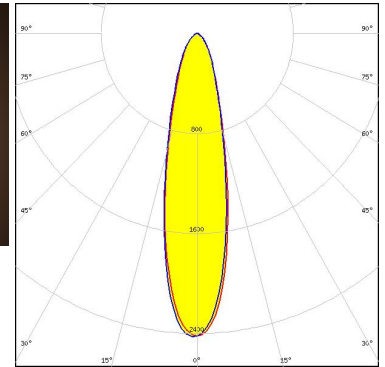
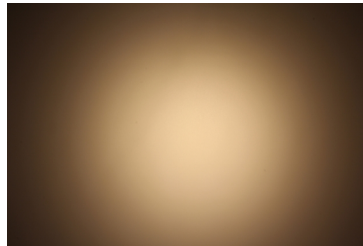


Light distribution files

OPTICAL RESULTS (MEASURED):



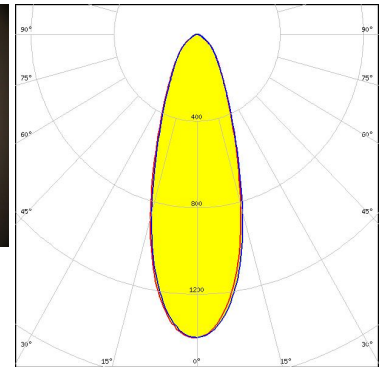
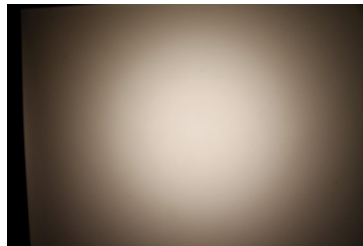
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 25.0° / 61.0°
 Efficiency 86 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



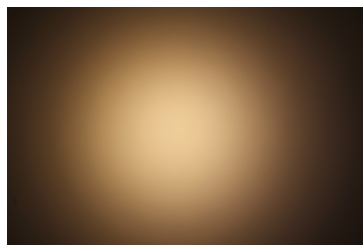
LED CXA/B 25xx
 FWHM / FWTM 35.0° / 83.0°
 Efficiency 85 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



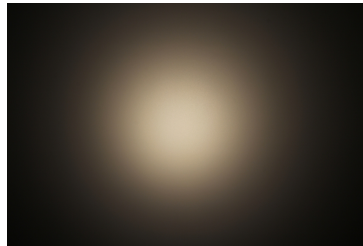
LED LUXEON CoB 1202/1203
 FWHM / FWTM 20.0° / 54.0°
 Efficiency 87 %
 Peak intensity 3.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



OPTICAL RESULTS (MEASURED):



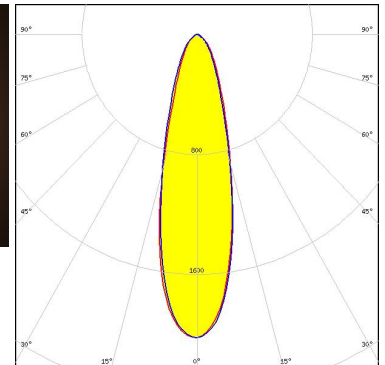
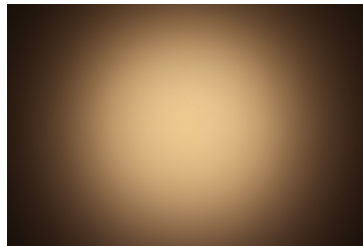
LED LUXEON CoB 1202s
 FWHM / FWTM 15.0° / 42.0°
 Efficiency 89 %
 Peak intensity 5.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



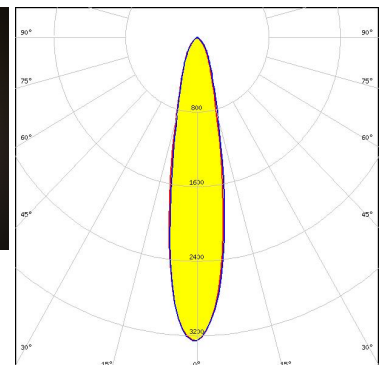
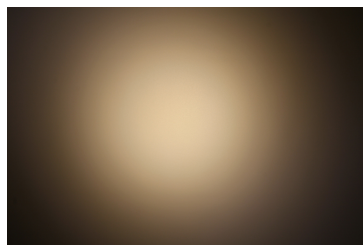
LED CxM-14 (19x19)
 FWHM / FWTM 29.0° / 67.0°
 Efficiency 86 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED CxM-9 (13.5x13.5)
 FWHM / FWTM 22.0° / 53.0°
 Efficiency 87 %
 Peak intensity 3.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

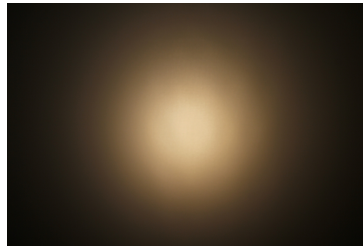


Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

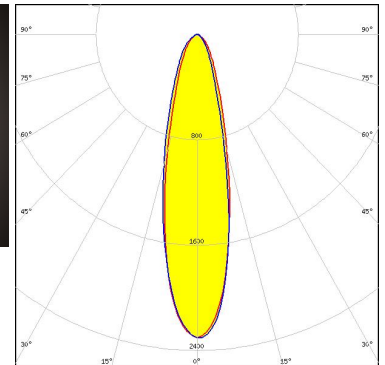
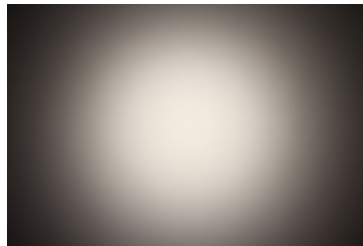
LED Duris S10
FWHM / FWTM 18.0° / 51.0°
Efficiency 88 %
Peak intensity 4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

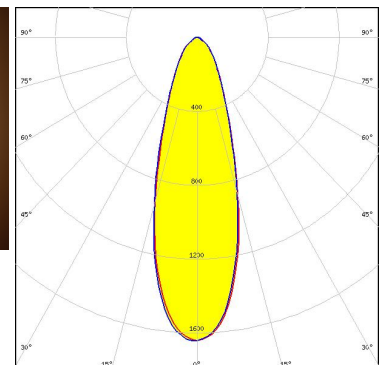
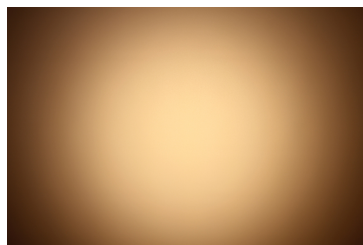
LED Soleriq S13
FWHM / FWTM 26.0° / 64.0°
Efficiency 88 %
Peak intensity 2.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED Soleriq S19
FWHM / FWTM 33.0° / 77.0°
Efficiency 88 %
Peak intensity 1.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

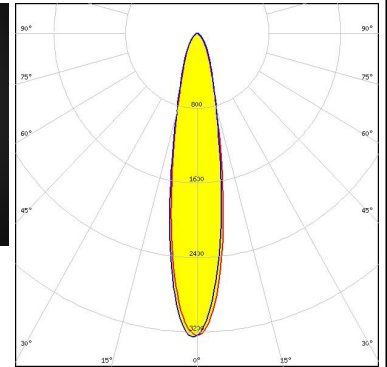


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

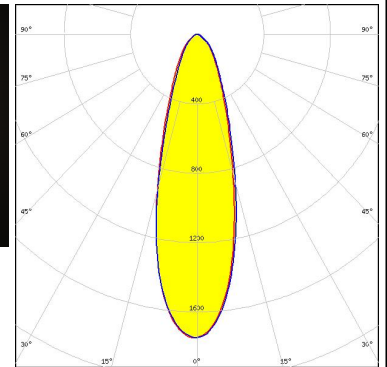
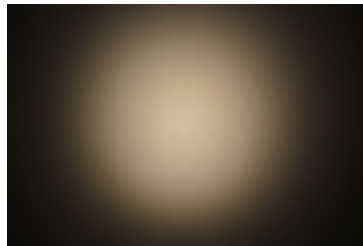
LED LC003D / LC006D / LC009D / LC013D
 FWHM / FWTM 20.0° / 51.0°
 Efficiency 87 %
 Peak intensity 3.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

SAMSUNG

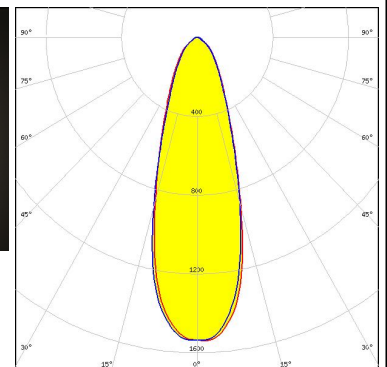
LED LC016D / LC019D / LC026D / LC033D
 FWHM / FWTM 30.0° / 72.0°
 Efficiency 86 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

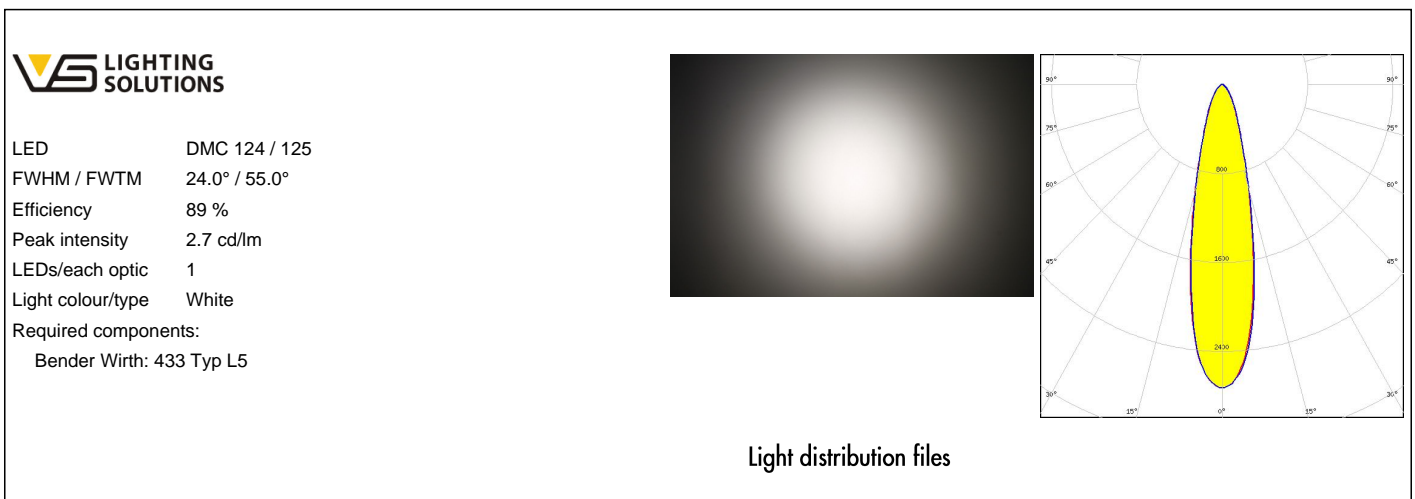
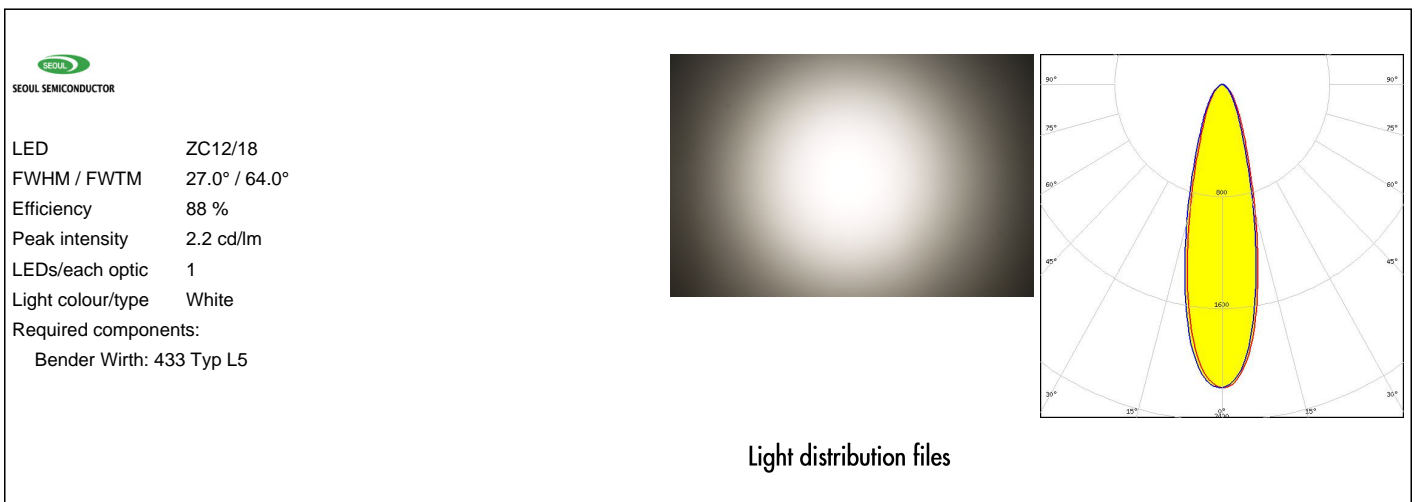
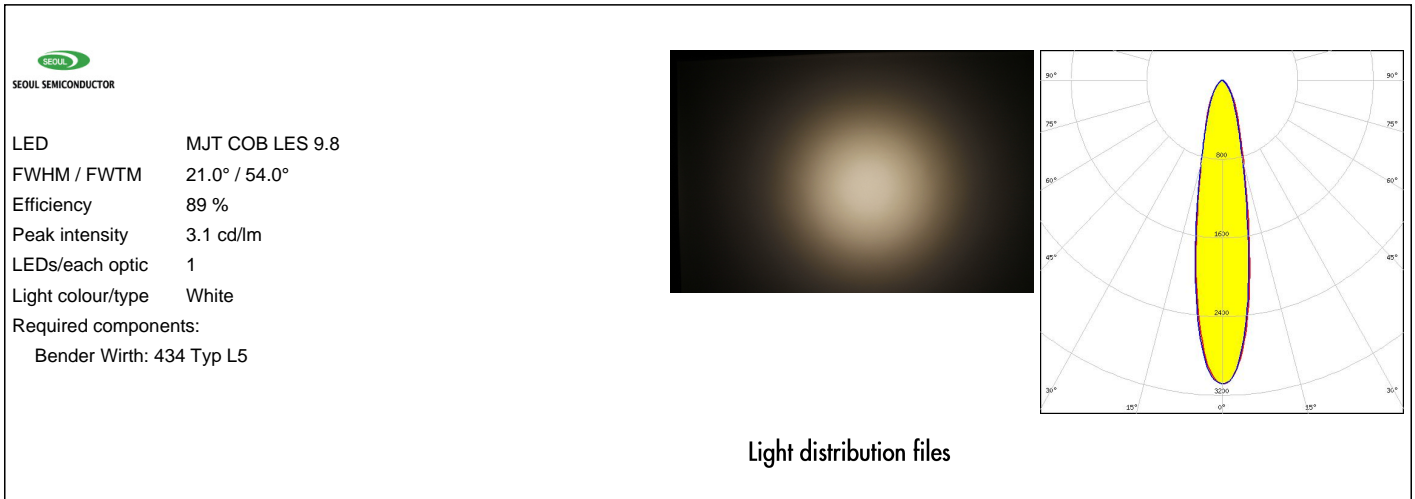


LED MJT COB LES 14.5
 FWHM / FWTM 33.0° / 79.0°
 Efficiency 86 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 433 Typ L5



Light distribution files

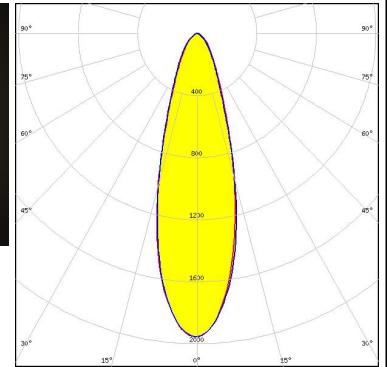
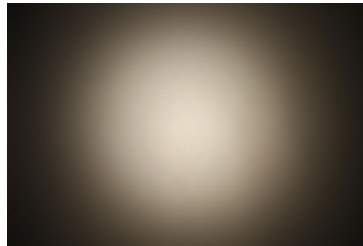
OPTICAL RESULTS (MEASURED):



OPTICAL RESULTS (MEASURED):



LED DMC 128
FWHM / FWTM 30.0° / 67.0°
Efficiency 88 %
Peak intensity 2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
Bender Wirth: 433 Typ L5

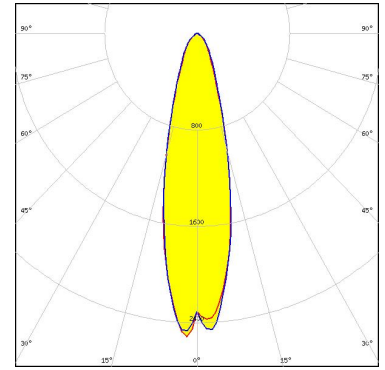


Light distribution files

OPTICAL RESULTS (SIMULATED):



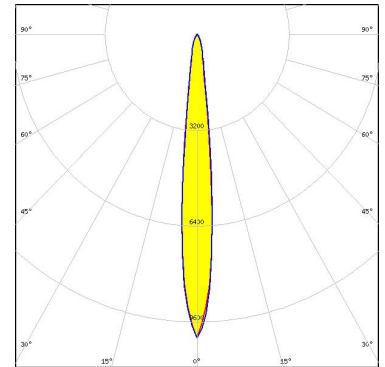
LED V13 Gen7
FWHM / FWTM 26.0° / 60.0°
Efficiency 91 %
Peak intensity 2.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED CXA/B 13xx
FWHM / FWTM 12.0° / 25.0°
Efficiency 88 %
Peak intensity 10.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

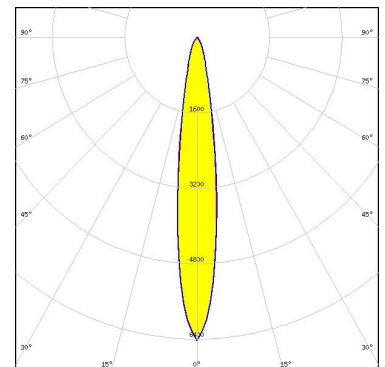


Bender Wirth: 448 Typ L5

Light distribution files



LED MHD-E/G
FWHM / FWTM 16.0° / 36.0°
Efficiency 93 %
Peak intensity 6.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



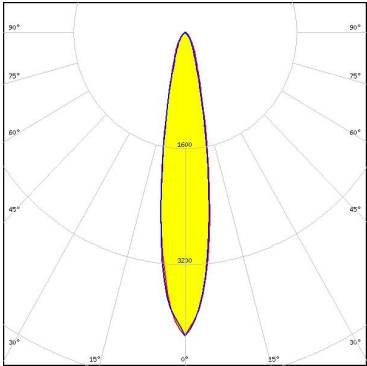
Light distribution files

OPTICAL RESULTS (SIMULATED):

LUMILEDS

LED	LUXEON CoB 1202/1203
FWHM / FWTM	18.0° / 44.0°
Efficiency	88 %
Peak intensity	4.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Bender Wirth: 441 Typ L5



Light distribution files

LUMILEDS

LED	LUXEON CoB Compact
FWHM / FWTM	15.0° / 42.0°
Efficiency	89 %
Peak intensity	5.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files

LUMINUS

LED	CxM-14 (19x19)
FWHM / FWTM	30.0° / 68.0°
Efficiency	88 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Bender Wirth: 433 Typ L5

Light distribution files

OPTICAL RESULTS (SIMULATED):



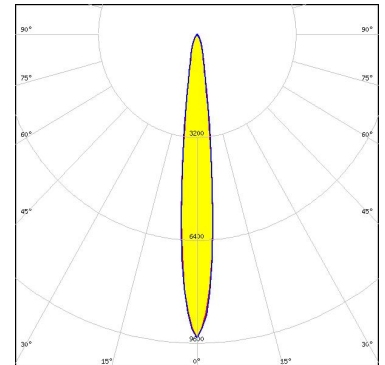
LED CxM-9 (13.5x13.5)
FWHM / FWMTM 20.0° / 50.0°
Efficiency 88 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

Bender Wirth: 434 Typ L5

[Light distribution files](#)



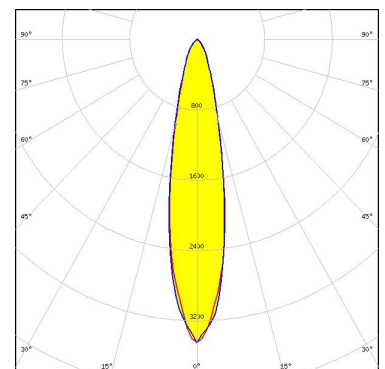
LED COB S-Type (LES 6)
FWHM / FWMTM 12.0° / 28.0°
Efficiency 92 %
Peak intensity 9.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



[Light distribution files](#)



LED Soleriq S9
FWHM / FWMTM 22.0° / 49.0°
Efficiency 89 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



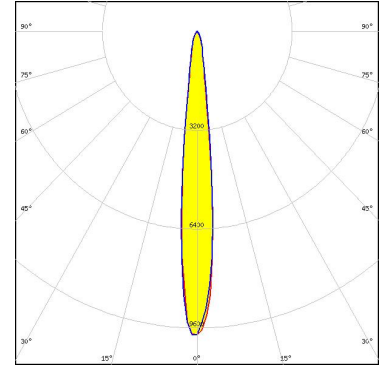
[Light distribution files](#)

OPTICAL RESULTS (SIMULATED):

SAMSUNG

LED LC010C
FWHM / FWTM 12.0° / 25.0°
Efficiency 88 %
Peak intensity 10.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

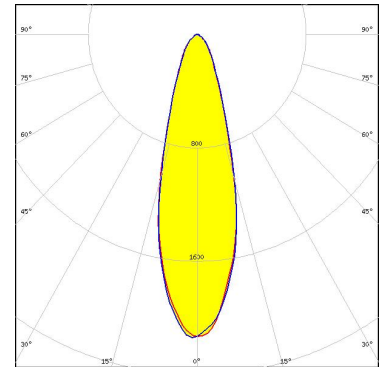
Bender Wirth: 479 Typ L5



Light distribution files

SAMSUNG

LED LC016D / LC019D / LC026D / LC033D
FWHM / FWTM 29.0° / 64.0°
Efficiency 91 %
Peak intensity 2.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

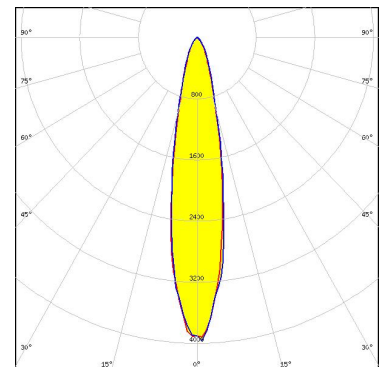


Light distribution files

SAMSUNG

LED LC020C
FWHM / FWTM 20.0° / 46.0°
Efficiency 89 %
Peak intensity 4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

Bender Wirth: 479 Typ L5



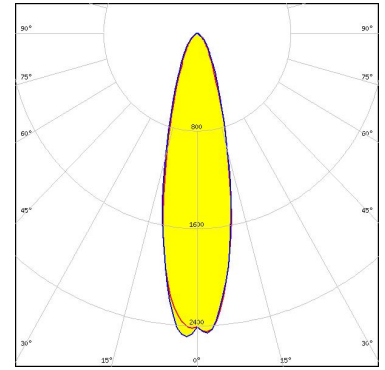
Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

LED LC040C
FWHM / FWTM 26.0° / 59.0°
Efficiency 87 %
Peak intensity 2.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

Bender Wirth: 479 Typ L5



Light distribution files



SEOUL SEMICONDUCTOR

LED ZC4/6
FWHM / FWTM 20.0° / 50.0°
Efficiency 88 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

Bender Wirth: 434 Typ L5

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.

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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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LEDiL Oy

Joensuunkatu 13
FI-24240 SALO
Finland

LEDiL Inc.

228 West Page Street
Suite D
Sycamore IL 60178
USA

Ledil Optics Technology (Shenzhen) Co., Ltd.

405 , Block B
Casic Motor Building
Shenzhen 518057
P.R.CHINA

Local sales and technical support

[www.ledil.com/
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Shipping locations

Poznan, Poland
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