

SAGA-HB-IP-WHT

~60° high bay beam

TECHNICAL SPECIFICATIONS:

Dimensions	Ø 50.0 mm
Height	12 mm
Fastening	screw
Ingress protection classes	IP67
ROHS compliant	yes ⓘ

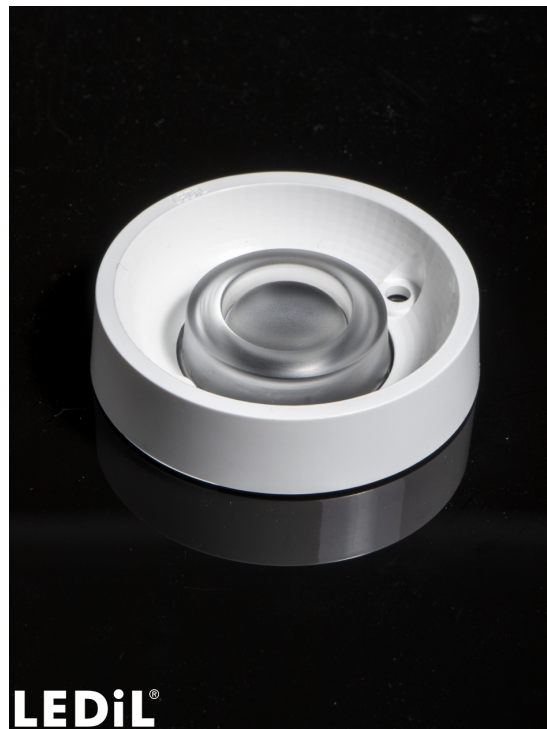
MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
C13586_SAGA-HB-IP	Single lens	Silicone	clear	
C13591_SAGA-FRAME-WHT	Holder	HRPC	white	

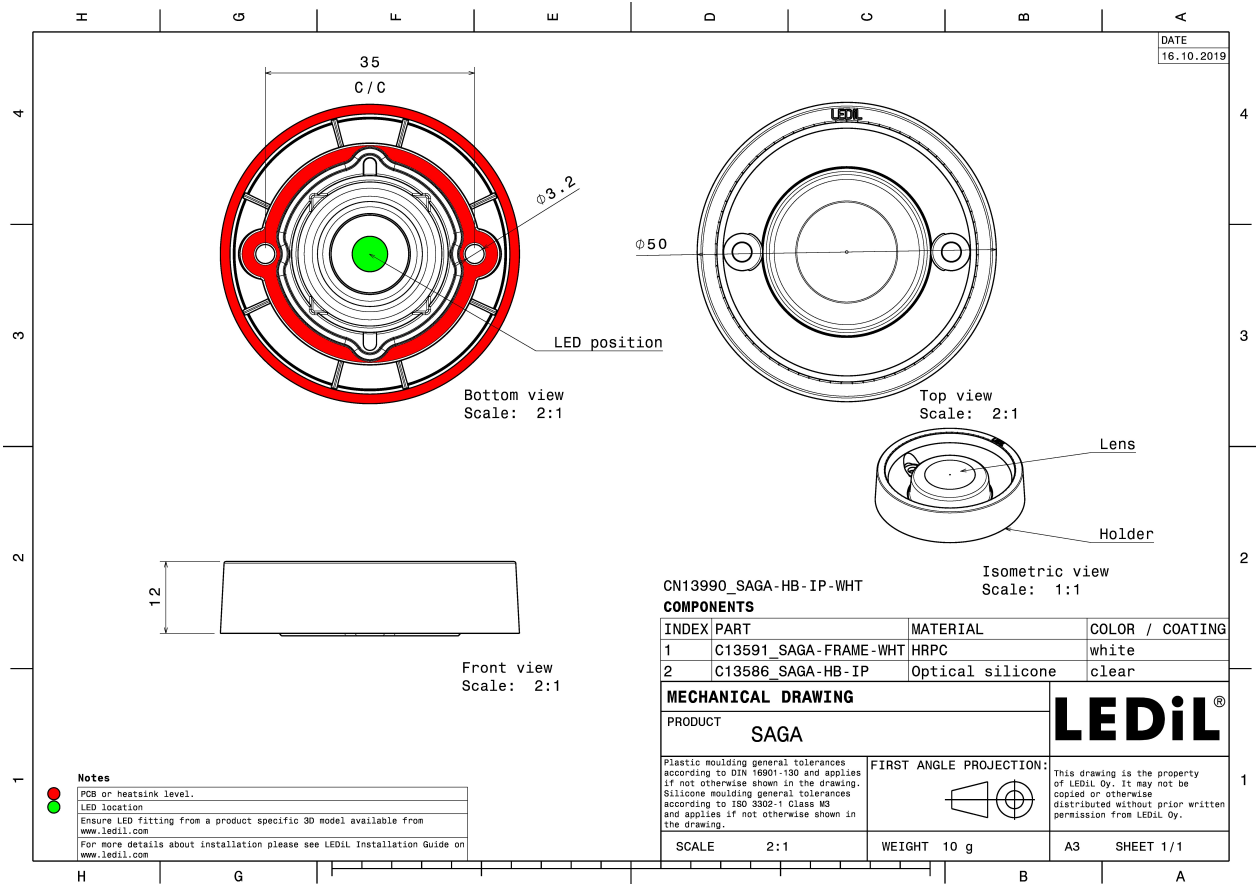
ORDERING INFORMATION:

Quantities for one set:

Single lens	1
Holder	1



Component		Qty in box	MOQ	MPQ	Box weight (kg)
C13586_SAGA-HB-IP » Box size: 480 x 280 x 300 mm	Single lens	650		26	4.9
C13591_SAGA-FRAME-WHT » Box size: 480 x 280 x 300 mm	Holder	900		10	6.3

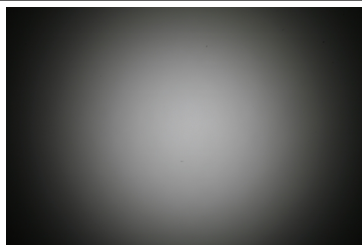


See also our general installation guide: www.ledil.com/installation_guide

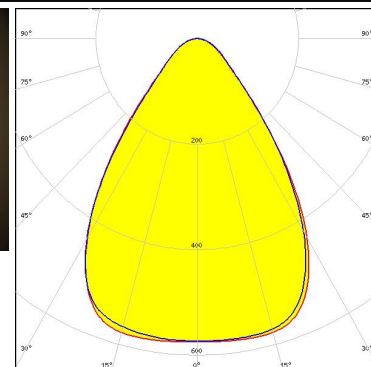
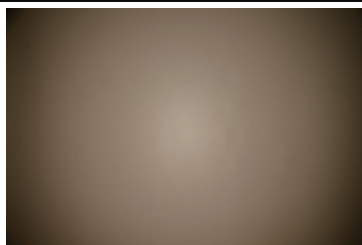
PHOTOMETRIC DATA (MEASURED):



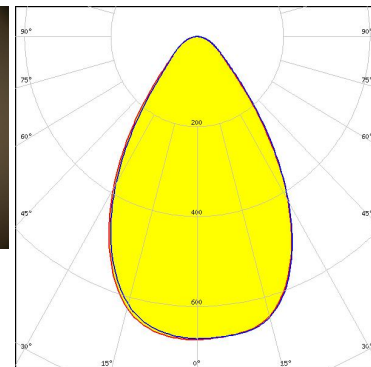
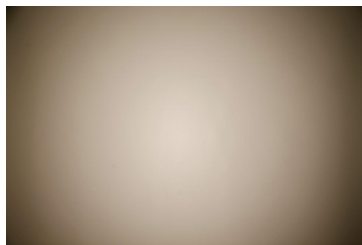
LED V10 Gen6
FWHM / FWTM 58.0° / 106.0°
Efficiency 89 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:



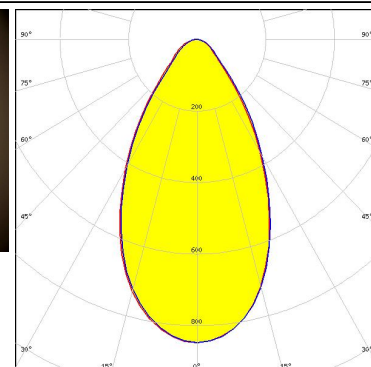
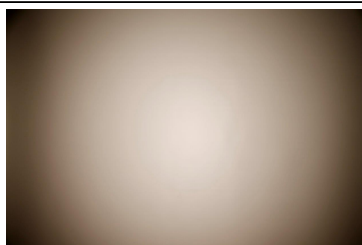
LED V6 Gen6
FWHM / FWTM 73.0° / 115.0°
Efficiency 88 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:



LED V8 Gen6
FWHM / FWTM 66.0° / 109.0°
Efficiency 88 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



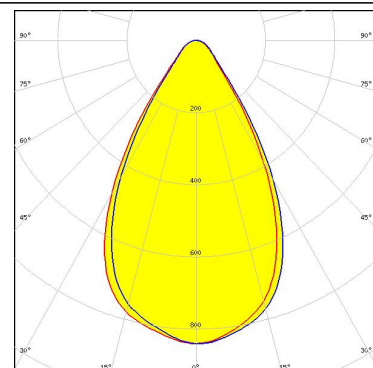
LED VERO10
FWHM / FWTM 58.0° / 101.0°
Efficiency 92 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:



PHOTOMETRIC DATA (MEASURED):

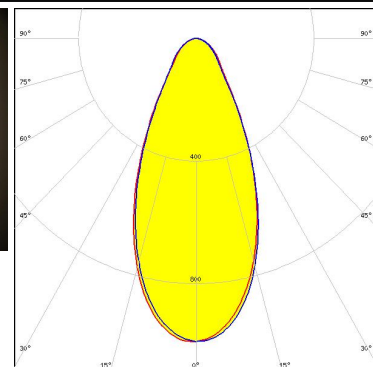
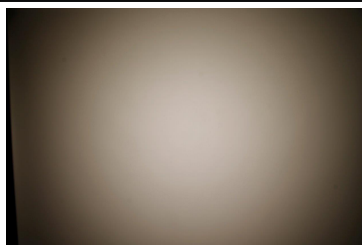
CITIZEN

LED CLL01x
FWHM / FWTM 61.0° / 93.0°
Efficiency 92 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:



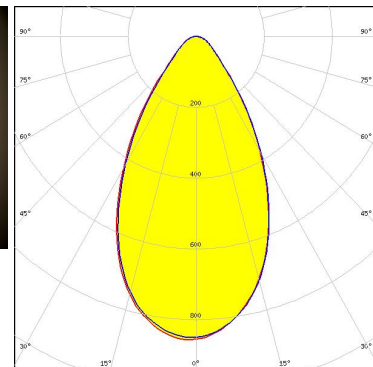
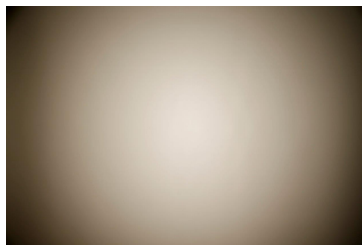
CITIZEN

LED CLL02x/CLU02x (LES10)
FWHM / FWTM 47.0° / 95.0°
Efficiency 86 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
Bender Wirth: 434 Typ L6



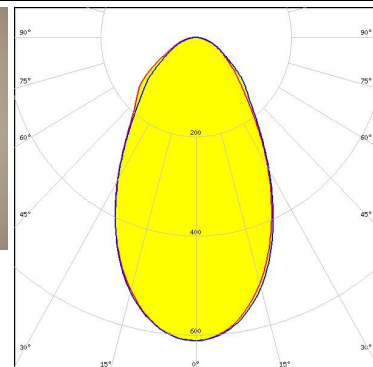
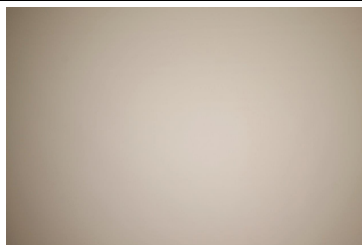
CITIZEN

LED CLL02x/CLU02x (LES10)
FWHM / FWTM 58.0° / 98.0°
Efficiency 91 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:



CITIZEN

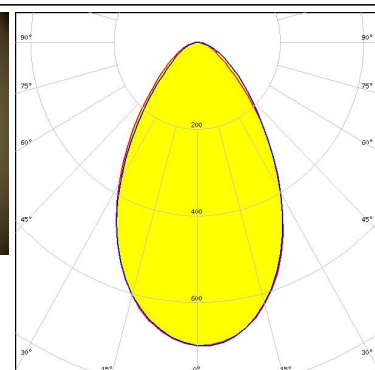
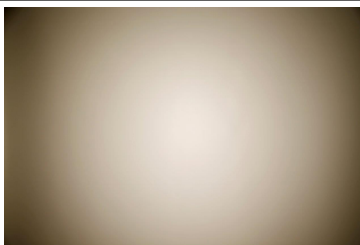
LED CLL03x/CLU03x
FWHM / FWTM 61.0° / 125.0°
Efficiency 84 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
Bender Wirth: 433 Typ L6



PHOTOMETRIC DATA (MEASURED):

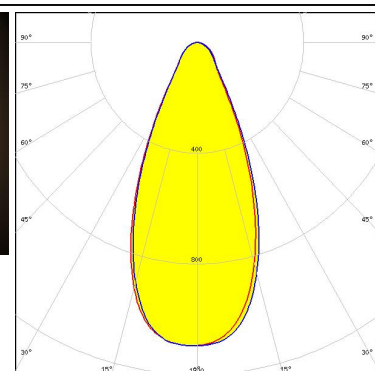
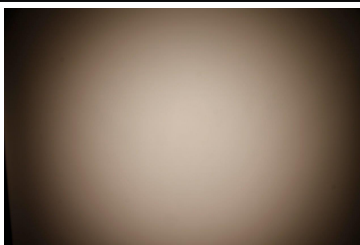
CITIZEN

LED CLL03x/CLU03x
FWHM / FWTM 64.0° / 116.0°
Efficiency 92 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



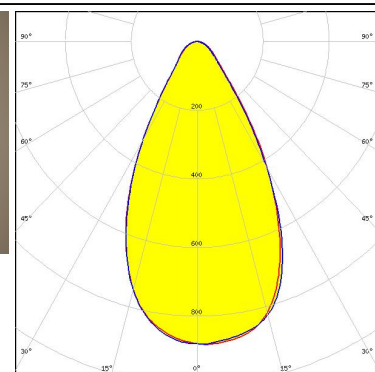
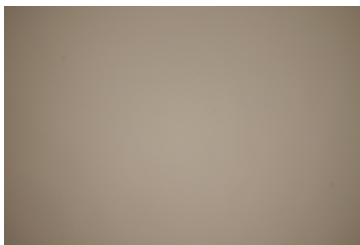
CITIZEN

LED CLU700/701/702
FWHM / FWTM 46.0° / 82.0°
Efficiency 86 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
Bender Wirth: 434 Typ L6



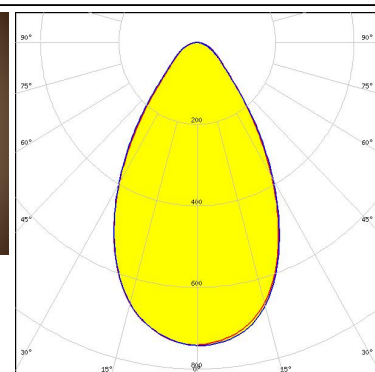
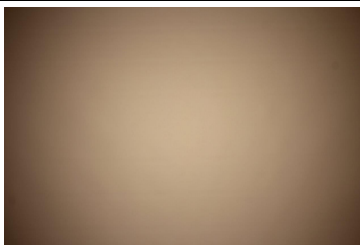
CITIZEN

LED CLU700/701/702
FWHM / FWTM 56.0° / 90.0°
Efficiency 87 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:



CITIZEN

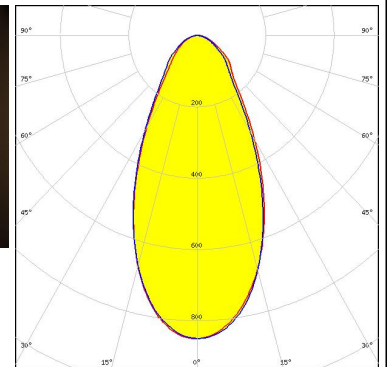
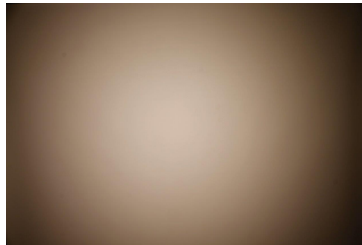
LED CLU710/711
FWHM / FWTM 62.0° / 107.0°
Efficiency 90 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



PHOTOMETRIC DATA (MEASURED):

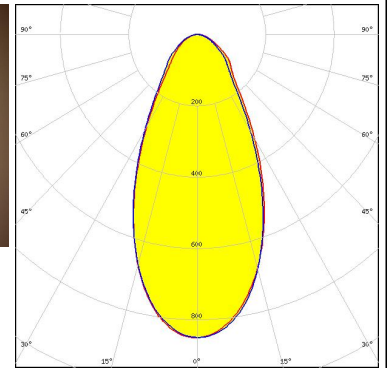
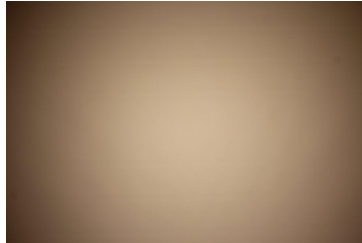
CITIZEN

LED CLU720/721
FWHM / FWTM 50.0° / 109.0°
Efficiency 85 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
Bender Wirth: 433 Typ L6



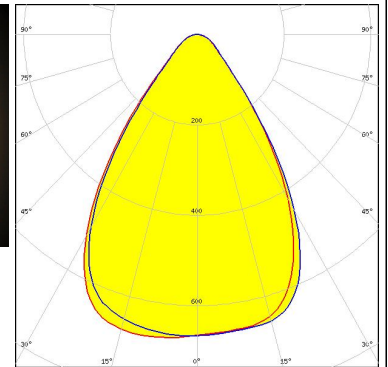
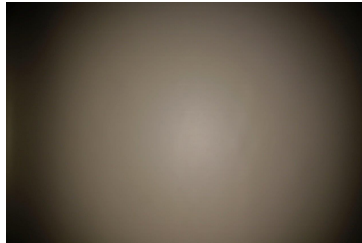
CITIZEN

LED CLU720/721
FWHM / FWTM 61.0° / 113.0°
Efficiency 89 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



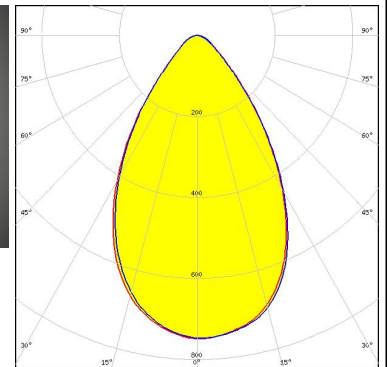
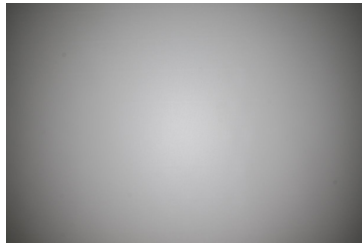
CREE LED

LED CXA/B 13xx
FWHM / FWTM 70.0° / 104.0°
Efficiency 92 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



CREE LED

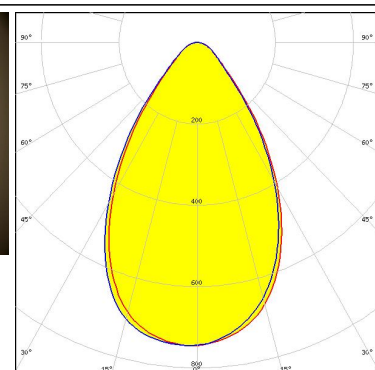
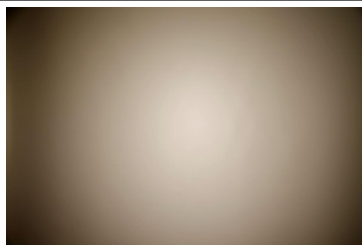
LED CXA/B 15xx
FWHM / FWTM 64.0° / 102.0°
Efficiency 90 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:



PHOTOMETRIC DATA (MEASURED):

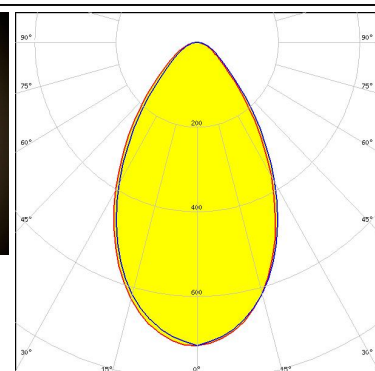
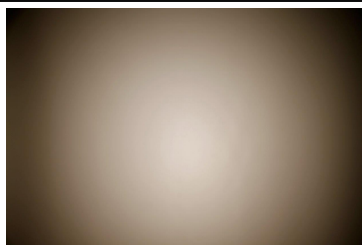
CREE LED

LED CXA/B 15xx
FWHM / FWTM 64.0° / 104.0°
Efficiency 92 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:



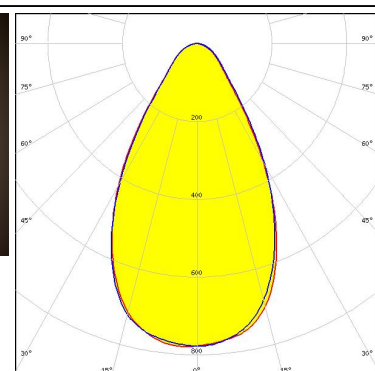
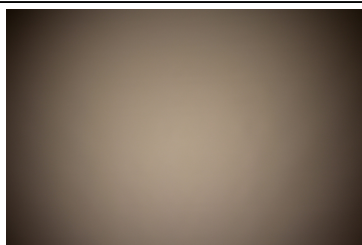
CREE LED

LED CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM / FWTM 63.0° / 111.0°
Efficiency 90 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



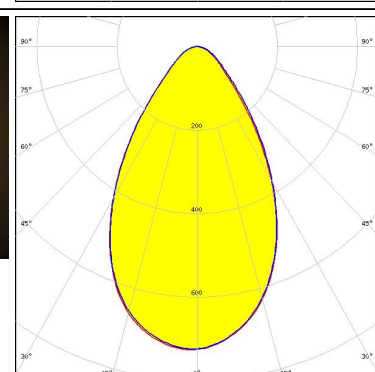
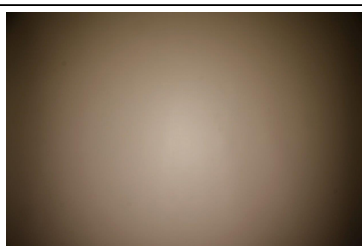
CREE LED

LED MHD-E/G
FWHM / FWTM 60.0° / 105.0°
Efficiency 90 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:



LUMILEDS

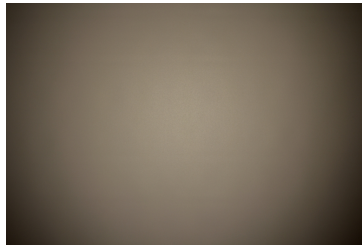
LED LUXEON CoB 1202/1203
FWHM / FWTM 63.0° / 108.0°
Efficiency 89 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



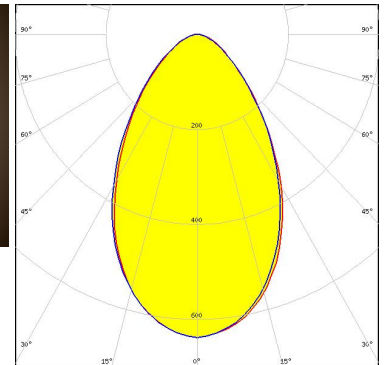
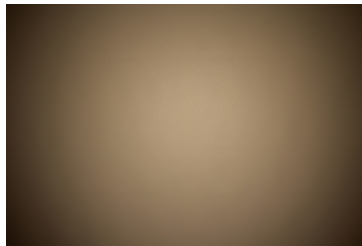
PHOTOMETRIC DATA (MEASURED):



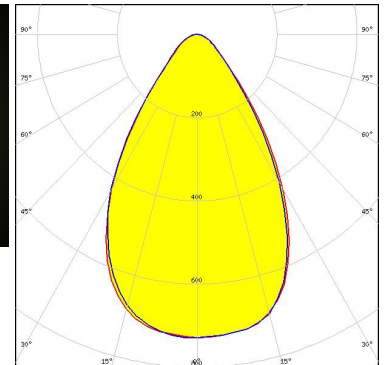
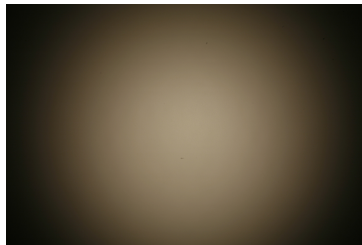
LED LUXEON CoB 1202s
FWHM / FWTM 67.0° / 106.0°
Efficiency 90 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



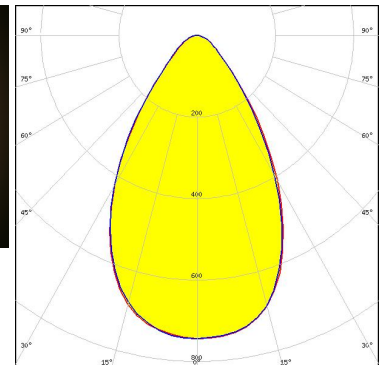
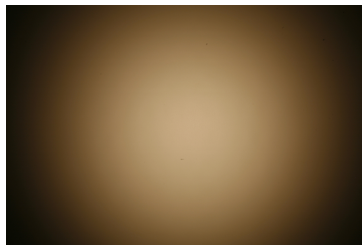
LED CxM-14 (19x19)
FWHM / FWTM 66.0° / 121.0°
Efficiency 88 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:



LED CxM-6 (12x13)
FWHM / FWTM 66.0° / 104.0°
Efficiency 89 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



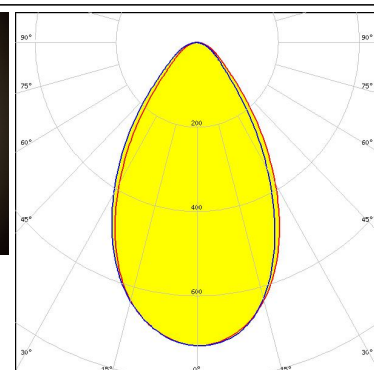
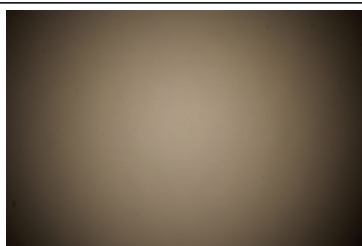
LED CXM-7 (13x13)
FWHM / FWTM 64.0° / 105.0°
Efficiency 89 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:



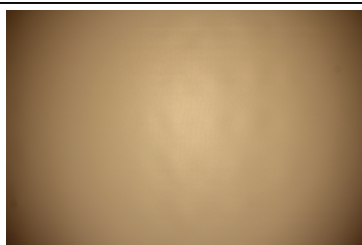
PHOTOMETRIC DATA (MEASURED):



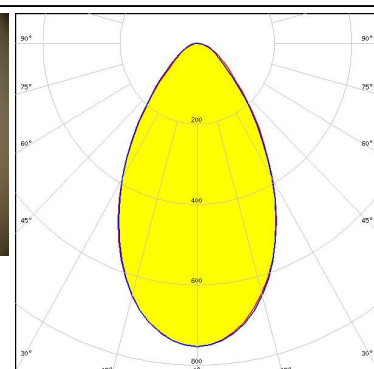
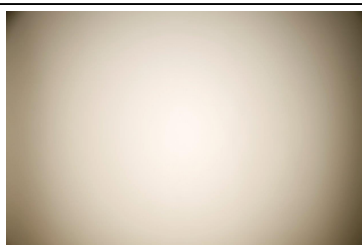
LED CxM-9 (13.5x13.5)
FWHM / FWTM 63.0° / 109.0°
Efficiency 88 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



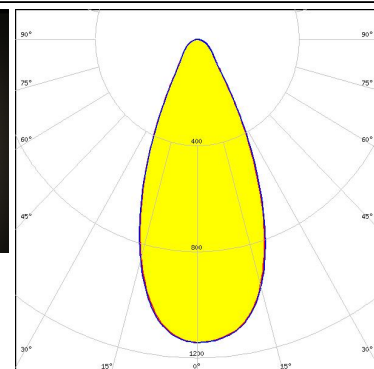
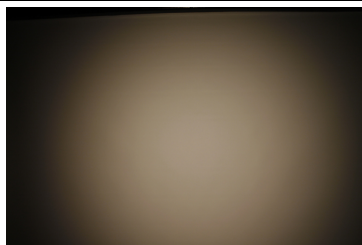
LED Duris S10
FWHM / FWTM 74.0° / 106.0°
Efficiency 91 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



LED Soleriq S13
FWHM / FWTM 61.0° / 110.0°
Efficiency 91 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:



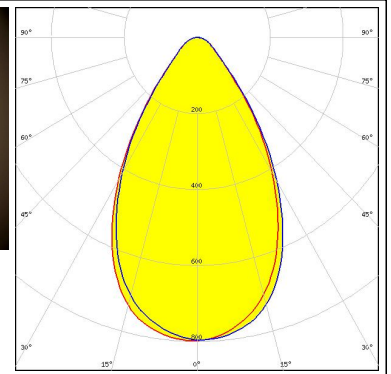
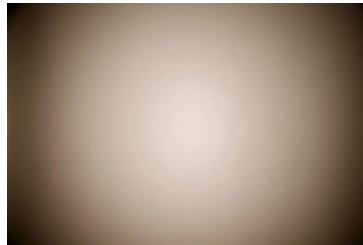
LED MJT COB LES 6
FWHM / FWTM 46.0° / 79.0°
Efficiency 87 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
Bender Wirth: 434 Typ L6



PHOTOMETRIC DATA (MEASURED):

SHARP

LED Mini Zenigata (GW6BM)
FWHM / FWTM 62.0° / 100.0°
Efficiency 92 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:



PHOTOMETRIC DATA (SIMULATED):

LUMILEDS

LED	LUXEON CoB Compact
FWHM / FWTM	67.0° / 106.0°
Efficiency	90 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

LUMINUS

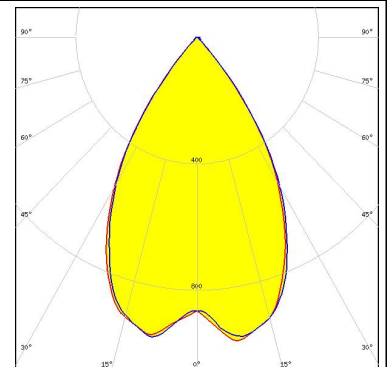
LED	CxM-14 (19x19)
FWHM / FWTM	61.0° / 125.0°
Efficiency	84 %
Peak intensity	0.6 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	Bender Wirth: 433 Typ L6

LUMINUS

LED	CxM-9 (13.5x13.5)
FWHM / FWTM	47.0° / 95.0°
Efficiency	86 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	Bender Wirth: 434 Typ L6

NICHIA

LED	COB S-Type (LES 7)
FWHM / FWTM	64.0° / 84.0°
Efficiency	95 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

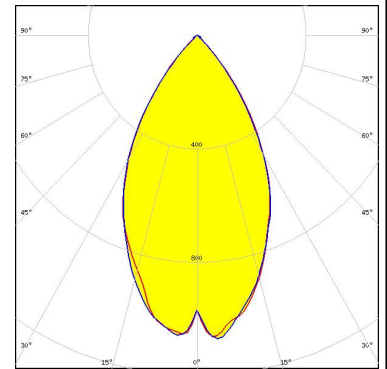


PHOTOMETRIC DATA (SIMULATED):

OSRAM

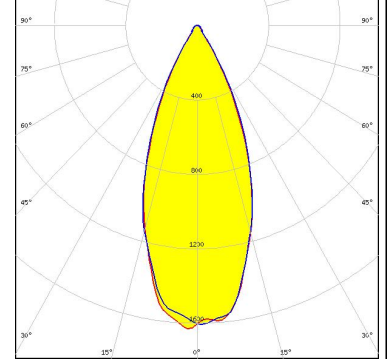
Opto Semiconductors

LED Soleriq S9
FWHM / FWTM 56.0° / 87.0°
Efficiency 93 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:



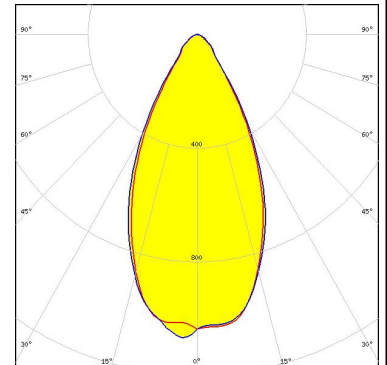
SAMSUNG

LED LC020C
FWHM / FWTM 42.0° / 66.0°
Efficiency 87 %
Peak intensity 1.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
Bender Wirth: 479 Typ L6



SAMSUNG

LED LC040C
FWHM / FWTM 51.0° / 81.0°
Efficiency 87 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
Bender Wirth: 480 Typ L6



SEOUL SEMICONDUCTOR

LED ZC12/18
FWHM / FWTM 61.0° / 125.0°
Efficiency 84 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
Bender Wirth: 433 Typ L6

PHOTOMETRIC DATA (SIMULATED):

 SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM / FWTM	47.0° / 95.0°
Efficiency	86 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
Bender Wirth: 434 Typ L6	

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

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/
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)