

BARBARA-S-PF

~15° spot beam

TECHNICAL SPECIFICATIONS:

| | |
|----------------|-----------|
| Dimensions | Ø 70.0 mm |
| Height | 41.7 mm |
| Fastening | socket |
| ROHS compliant | yes ⓘ |

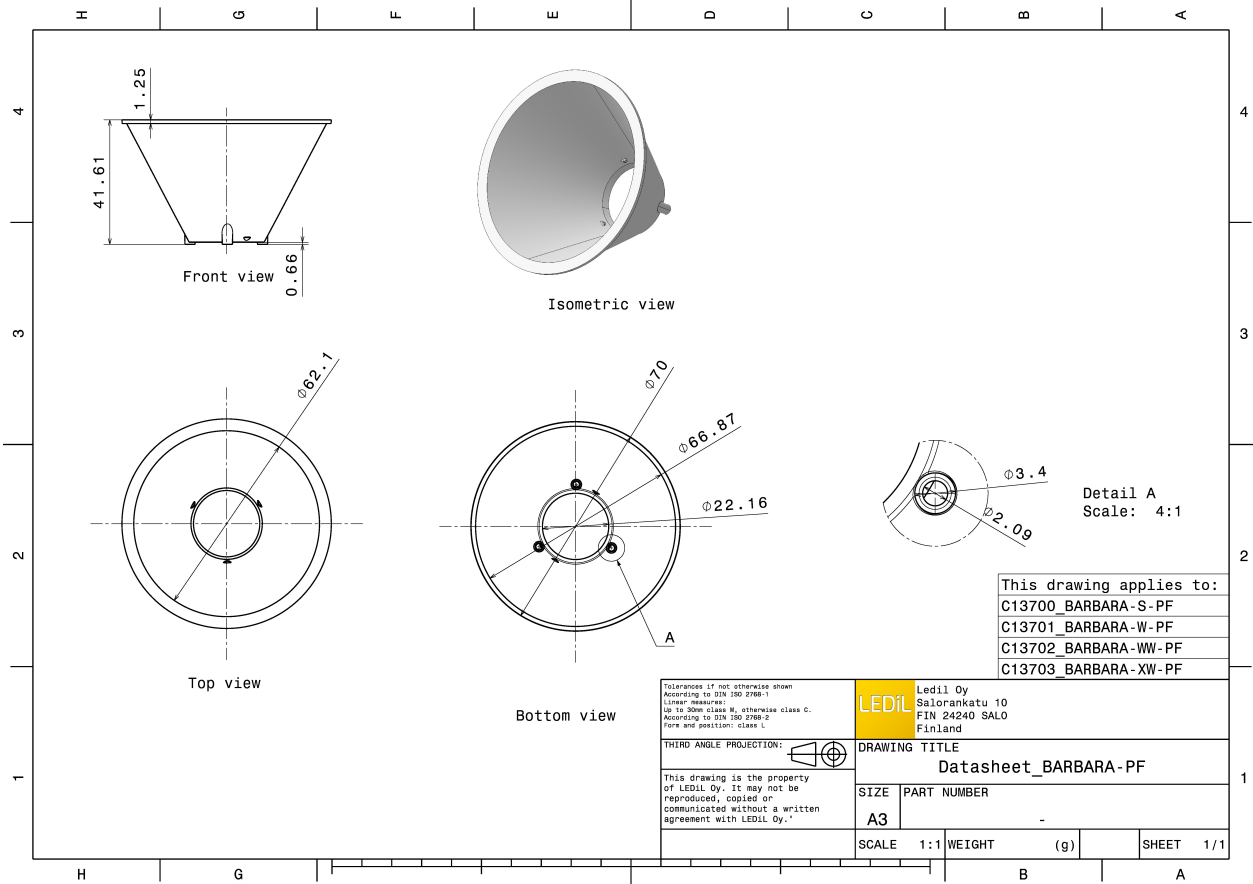
MATERIAL SPECIFICATIONS:

| Component | Type | Material | Colour | Finish | Coating |
|--------------|-----------|----------|--------|--------|---------|
| BARBARA-S-PF | Reflector | PC | metal | | HMDS |





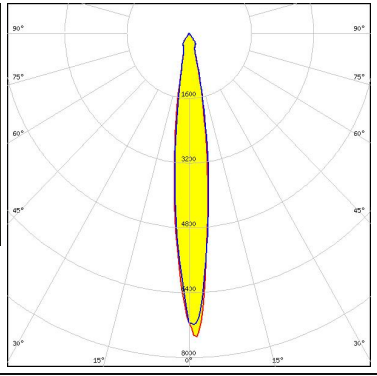





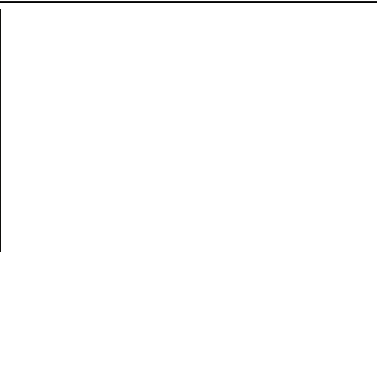


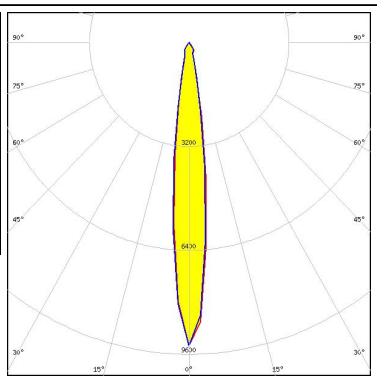
ORDERING INFORMATION:

| Component | Qty in box | MOQ | MPQ | Box weight (kg) |
|---|------------|-----|-----|-----------------|
| F13700_BARBARA-S-PF » Box size: 480 x 280 x 300 mm | 288 | 90 | 18 | 6.1 |


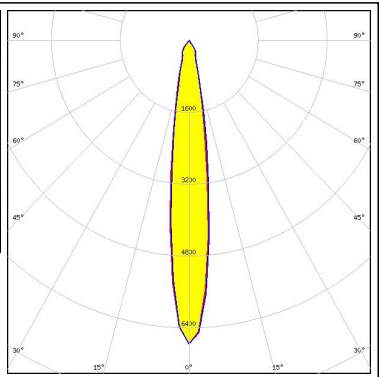

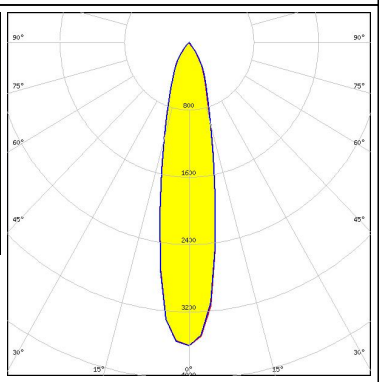

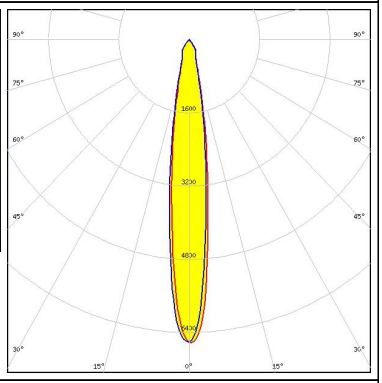

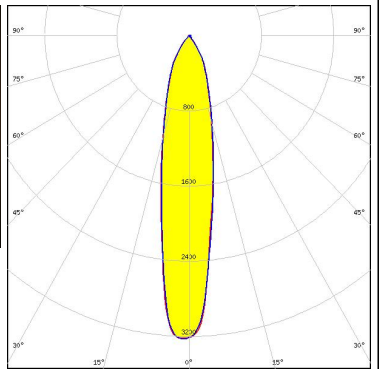


See also our general installation guide: www.ledil.com/installation_guide

PHOTOMETRIC DATA (MEASURED):

| | | |
|--|--|---|
| <p></p> <p>LED V10 Gen7 FWHM / FWTM 14.0° / 30.0° Efficiency 88 % Peak intensity 7.5 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 434 Typ L1</p> |  |  |
| <p></p> <p>LED V15 Gen6 FWHM / FWTM 18.0° / 52.0° Efficiency 92 % Peak intensity 4.8 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 456 Typ L2</p> |  |  |
| <p></p> <p>LED V8 Gen6 FWHM / FWTM 13.0° / 28.0° Efficiency 86 % Peak intensity 10.6 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 460 Typ L1</p> |  |  |
| <p></p> <p>LED VERO10 FWHM / FWTM 13.0° / 27.0° Efficiency 90 % Peak intensity 9.3 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13708_PF-SOCKET-VERO10</p> |  |  |

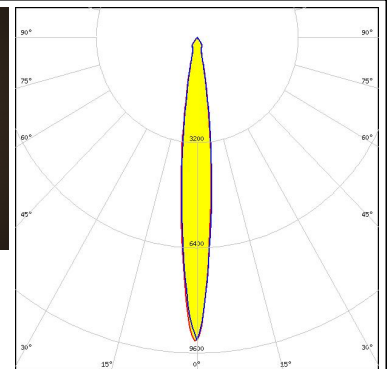
PHOTOMETRIC DATA (MEASURED):

| | | |
|--|--|---|
| <p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM / FWTM 15.0° / 35.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 6.8 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18</p> |  |  |
| <p>bridgelux.</p> <p>LED VERO18</p> <p>FWHM / FWTM 22.0° / 58.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 3.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18</p> |  |  |
| <p>bridgelux.</p> <p>LED Xenio Point 13mm</p> <p>FWHM / FWTM 14.0° / 33.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 6.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18</p> |  |  |
| <p>bridgelux.</p> <p>LED Xenio Point 18mm</p> <p>FWHM / FWTM 21.0° / 60.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 3.2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18</p> |  |  |

PHOTOMETRIC DATA (MEASURED):

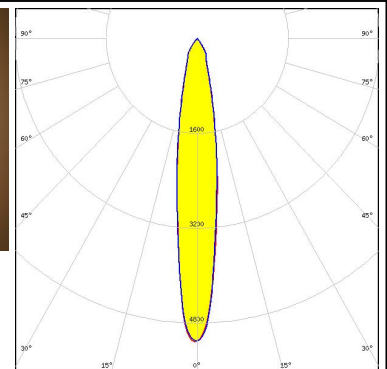
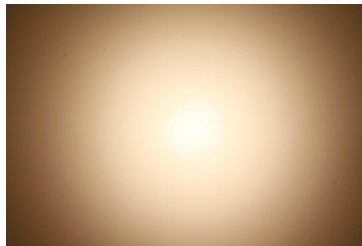
CITIZEN

LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 12.0° / 27.0°
 Efficiency 89 %
 Peak intensity 9.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13709_PF-SOCKET-VERO13-18
 Bender Wirth: 434 Typ L1



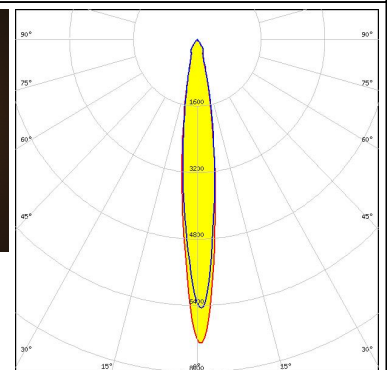
CITIZEN

LED CLL03x/CLU03x
 FWHM / FWTM 16.0° / 42.0°
 Efficiency 88 %
 Peak intensity 5.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13709_PF-SOCKET-VERO13-18
 Bender Wirth: 433 Typ L1



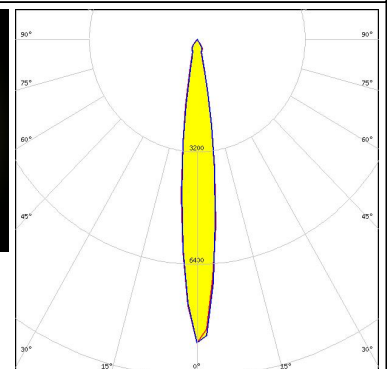
CITIZEN

LED CLU720/721
 FWHM / FWTM 14.0° / 33.0°
 Efficiency 87 %
 Peak intensity 7.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13709_PF-SOCKET-VERO13-18
 Bender Wirth: 433 Typ L1



CREE

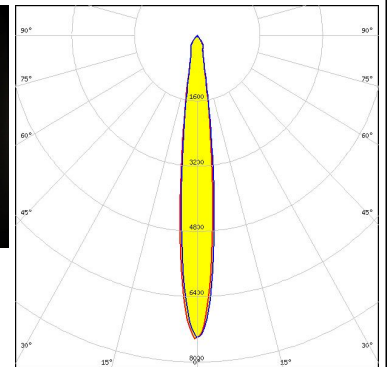
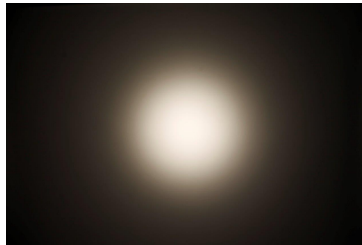
LED CXA/B 15xx
 FWHM / FWTM 14.0° / 29.0°
 Efficiency 91 %
 Peak intensity 8.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C14115_PF-SOCKET-CXA15-18



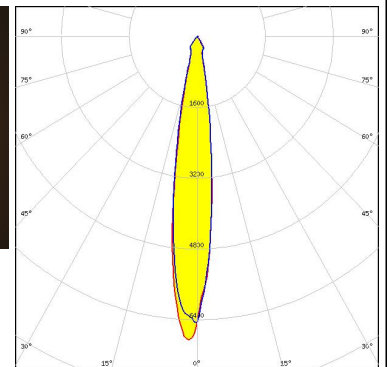
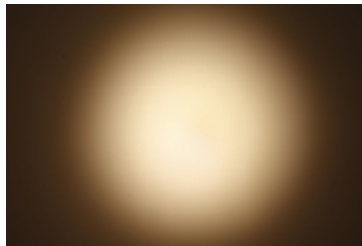
PHOTOMETRIC DATA (MEASURED):



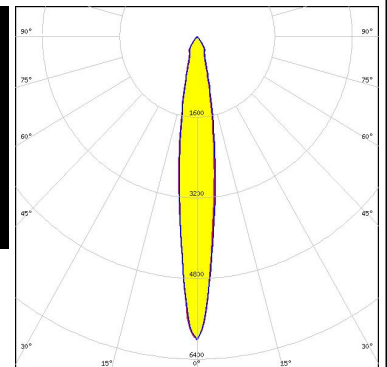
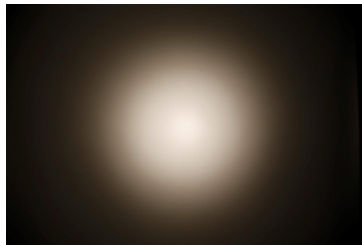
LED CXA/B 15xx
 FWHM / FWTM 13.0° / 29.0°
 Efficiency 85 %
 Peak intensity 7.4 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13083_PF-SOCKET
 C14658_BARBARA-RZ-LENS



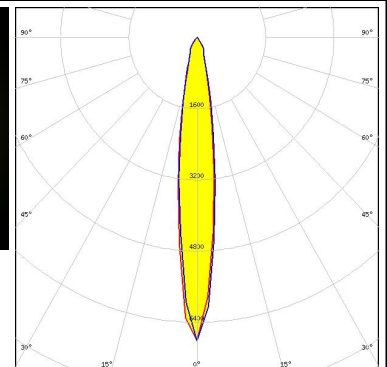
LED CXA/B 15xx
 FWHM / FWTM 15.0° / 30.0°
 Efficiency 89 %
 Peak intensity 6.9 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13709_PF-SOCKET-VERO13-18
 Bender Wirth: 441 Typ L1




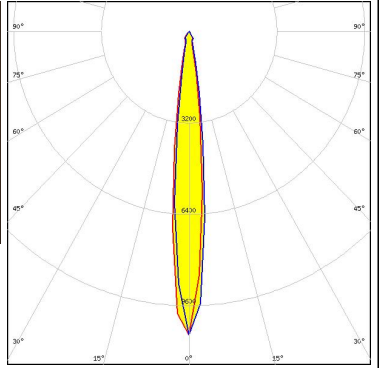

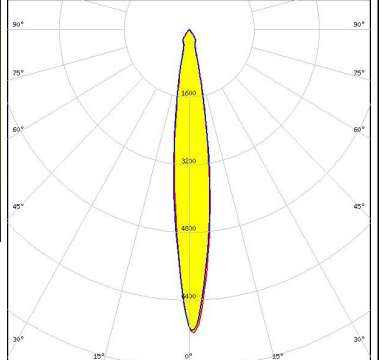



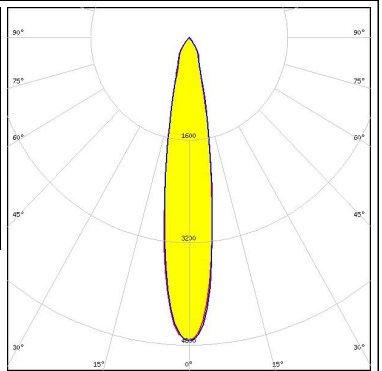
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 14.0° / 36.0°
 Efficiency 86 %
 Peak intensity 6.1 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C13709_PF-SOCKET-VERO13-18
 Bender Wirth: 437 Typ L1




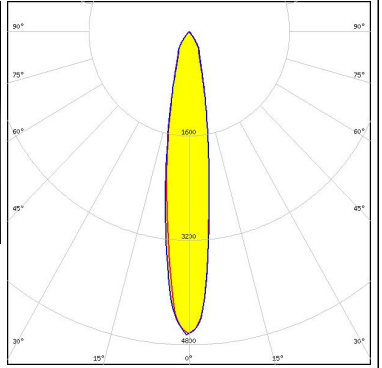

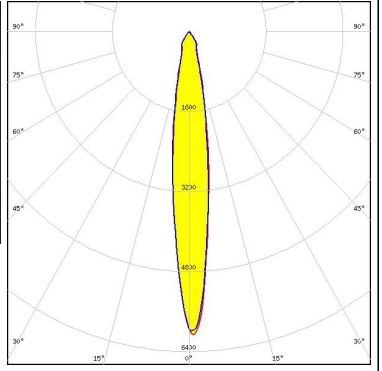

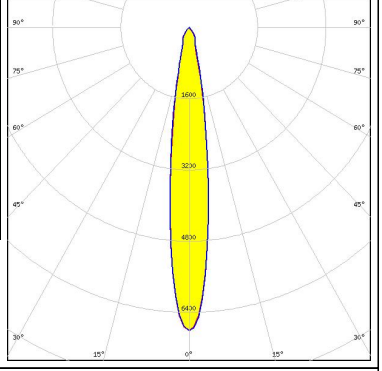

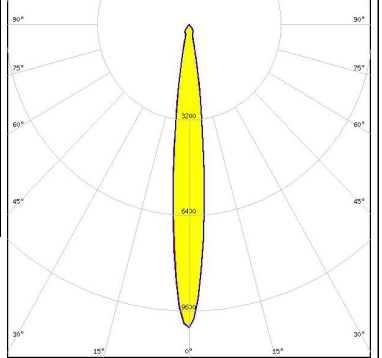
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 15.0° / 36.0°
 Efficiency 92 %
 Peak intensity 6.8 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 C14115_PF-SOCKET-CXA15-18




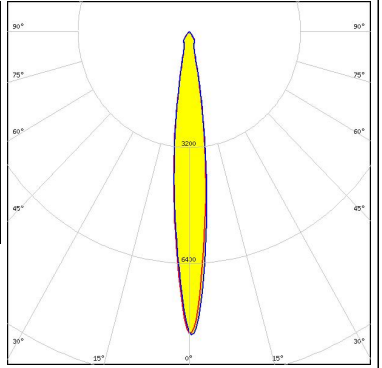

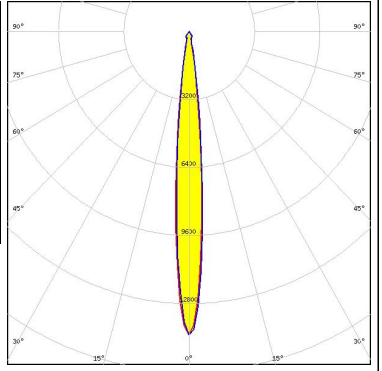

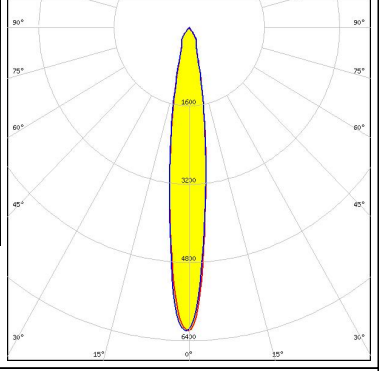

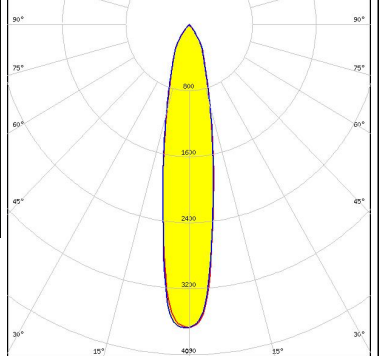
PHOTOMETRIC DATA (MEASURED):

| | | |
|---|--|---|
| <p>LUMILEDS</p> <p>LED LUXEON CoB 1202/1203</p> <p>FWHM / FWTM 12.0° / 25.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 10.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C14037_PF-NSX-SOCKET</p> |  |  |
| <p>LUMILEDS</p> <p>LED LUXEON CoB 1202/1203</p> <p>FWHM / FWTM 14.0° / 30.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 7.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 438 Typ L1</p> |  |  |
| <p>LUMILEDS</p> <p>LED LUXEON CoB 1202s</p> <p>FWHM / FWTM 9.0° / 18.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 19.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13761_PF-SOCKET-CXA15</p> |  |  |
| <p>NICHIA</p> <p>LED COB J-Type</p> <p>FWHM / FWTM 19.0° / 44.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 4.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C14037_PF-NSX-SOCKET</p> |  |  |

PHOTOMETRIC DATA (MEASURED):

| | | |
|--|--|---|
| <p>NICHIA</p> <p>LED COB J-Type FWHM / FWTM 17.0° / 45.0° Efficiency 88 % Peak intensity 4.6 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 463 Typ L2</p> |  |  |
| <p>NICHIA</p> <p>LED COB L-Type (LES 11) FWHM / FWTM 14.0° / 35.0° Efficiency 86 % Peak intensity 6.1 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 438 Typ L1</p> |  |  |
| <p>NICHIA</p> <p>LED COB L-Type (LES 11) FWHM / FWTM 15.0° / 33.0° Efficiency 90 % Peak intensity 6.8 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C14037_PF-NSX-SOCKET</p> |  |  |
| <p>NICHIA</p> <p>LED COB L-Type (LES 9) FWHM / FWTM 13.0° / 26.0° Efficiency 90 % Peak intensity 10.1 cd/lm LEDs/each optic 1 Light colour White</p> <p>Required components: C14037_PF-NSX-SOCKET</p> |  |  |

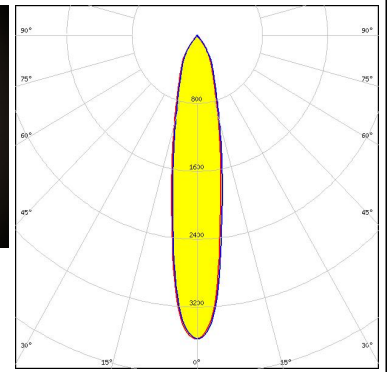
PHOTOMETRIC DATA (MEASURED):

| | | |
|---|--|---|
| <p>NICHIA</p> <p>LED COB L-Type (LES 9)</p> <p>FWHM / FWTM 13.0° / 27.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 8.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 438 Typ L1</p> |  |  |
| <p>NICHIA</p> <p>LED NSCxL036A</p> <p>FWHM / FWTM 11.0° / 21.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 14.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C14037_PF-NSX-SOCKET</p> |  |  |
| <p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13</p> <p>FWHM / FWTM 14.0° / 35.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 6.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 437 Typ L1</p> |  |  |
| <p>SAMSUNG</p> <p>LED LC026B / 033B / 040B</p> <p>FWHM / FWTM 20.0° / 57.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 3.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 450 Typ L2</p> |  |  |

PHOTOMETRIC DATA (MEASURED):

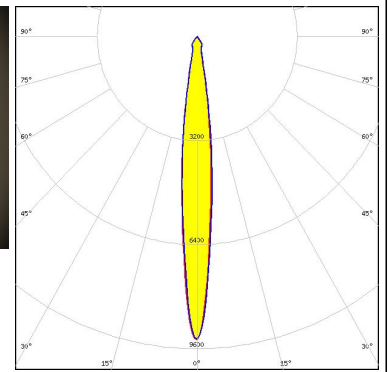
XICATO

LED XTM - 19mm LES
FWHM / FWTM 20.0° / 58.0°
Efficiency 88 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14636_XTM-PF-ADAPTER


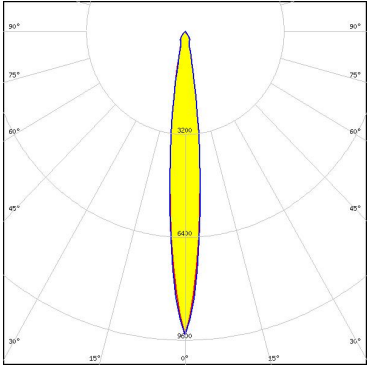





XICATO

LED XTM - 9mm LES
FWHM / FWTM 12.0° / 26.0°
Efficiency 90 %
Peak intensity 9.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C14636_XTM-PF-ADAPTER



PHOTOMETRIC DATA (SIMULATED):

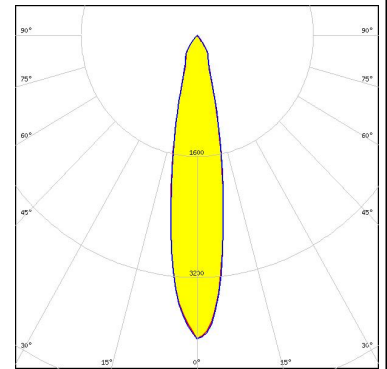
| | | |
|--|--------------------|---|
|  | |  |
| LED | V10 Gen7 | |
| FWHM / FWTM | 12.0° / 27.0° | |
| Efficiency | 91 % | |
| Peak intensity | 9.4 cd/lm | |
| LEDs/each optic | 1 | |
| Light colour | White | |
| Required components: | | |
| C13709_PF-SOCKET-VERO13-18 | | |
| Bender Wirth: 486 Typ L1 | | |
|  | | |
| LED | LUXEON CoB Compact | |
| FWHM / FWTM | 9.0° / 18.0° | |
| Efficiency | 90 % | |
| Peak intensity | 19.6 cd/lm | |
| LEDs/each optic | 1 | |
| Light colour | White | |
| Required components: | | |
| C13761_PF-SOCKET-CXA15 | | |
|  | | |
| LED | CxM-14 (19x19) | |
| FWHM / FWTM | 16.0° / 42.0° | |
| Efficiency | 88 % | |
| Peak intensity | 5.1 cd/lm | |
| LEDs/each optic | 1 | |
| Light colour | White | |
| Required components: | | |
| C13709_PF-SOCKET-VERO13-18 | | |
| Bender Wirth: 433 Typ L1 | | |
|  | | |
| LED | CxM-9 (13.5x13.5) | |
| FWHM / FWTM | 12.0° / 27.0° | |
| Efficiency | 89 % | |
| Peak intensity | 9.2 cd/lm | |
| LEDs/each optic | 1 | |
| Light colour | White | |
| Required components: | | |
| C13709_PF-SOCKET-VERO13-18 | | |
| Bender Wirth: 434 Typ L1 | | |

PHOTOMETRIC DATA (SIMULATED):

OSRAM

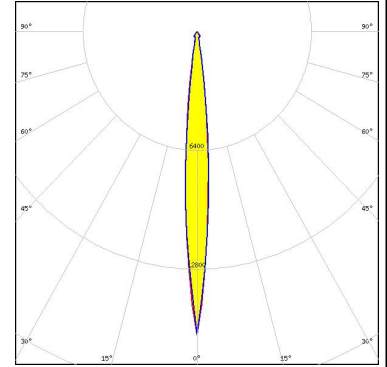
Opto Semiconductors

LED Soleriq S15
 FWHM / FWTM 20.0° / 47.0°
 Efficiency 88 %
 Peak intensity 4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13709_PF-SOCKET-VERO13-18
 Bender Wirth: 433 Typ L1



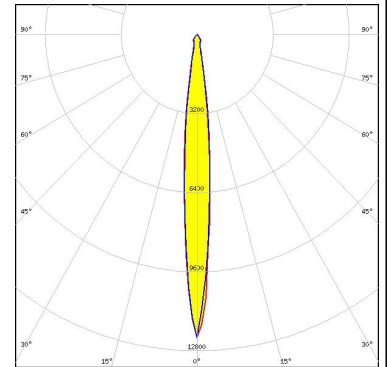
SAMSUNG

LED LC010C
 FWHM / FWTM 9.1° / 19.0°
 Efficiency 89 %
 Peak intensity 16.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13709_PF-SOCKET-VERO13-18
 Bender Wirth: 479 Typ L1



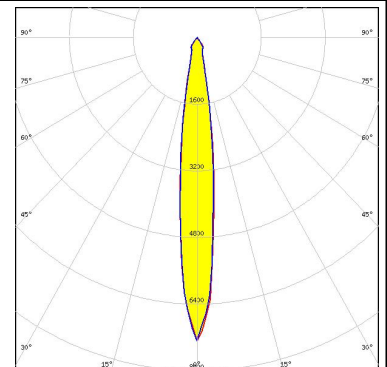
SAMSUNG

LED LC020C
 FWHM / FWTM 10.0° / 23.0°
 Efficiency 89 %
 Peak intensity 12.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13709_PF-SOCKET-VERO13-18
 Bender Wirth: 479 Typ L1





SAMSUNG

LED LC040C
 FWHM / FWTM 13.0° / 30.0°
 Efficiency 85 %
 Peak intensity 7.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C13709_PF-SOCKET-VERO13-18
 Bender Wirth: 480 Typ L1



PHOTOMETRIC DATA (SIMULATED):

| | |
|---|---------------|
|  | |
| SEOUL SEMICONDUCTOR | |
| LED | ZC12/18 |
| FWHM / FWTM | 16.0° / 42.0° |
| Efficiency | 88 % |
| Peak intensity | 5.1 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |
| C13709_PF-SOCKET-VERO13-18 | |
| Bender Wirth: 433 Typ L1 | |
| <hr/> | |
|  | |
| SEOUL SEMICONDUCTOR | |
| LED | ZC4/6 |
| FWHM / FWTM | 12.0° / 27.0° |
| Efficiency | 89 % |
| Peak intensity | 9.2 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |
| C13709_PF-SOCKET-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

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)