

## WINNIE-O-C

~60° + 20° oval beam with holder C compatible  
with LEDiL HEKLA

### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 50.0 mm
Height	19.5 mm
Fastening	socket
ROHS compliant	yes ⓘ

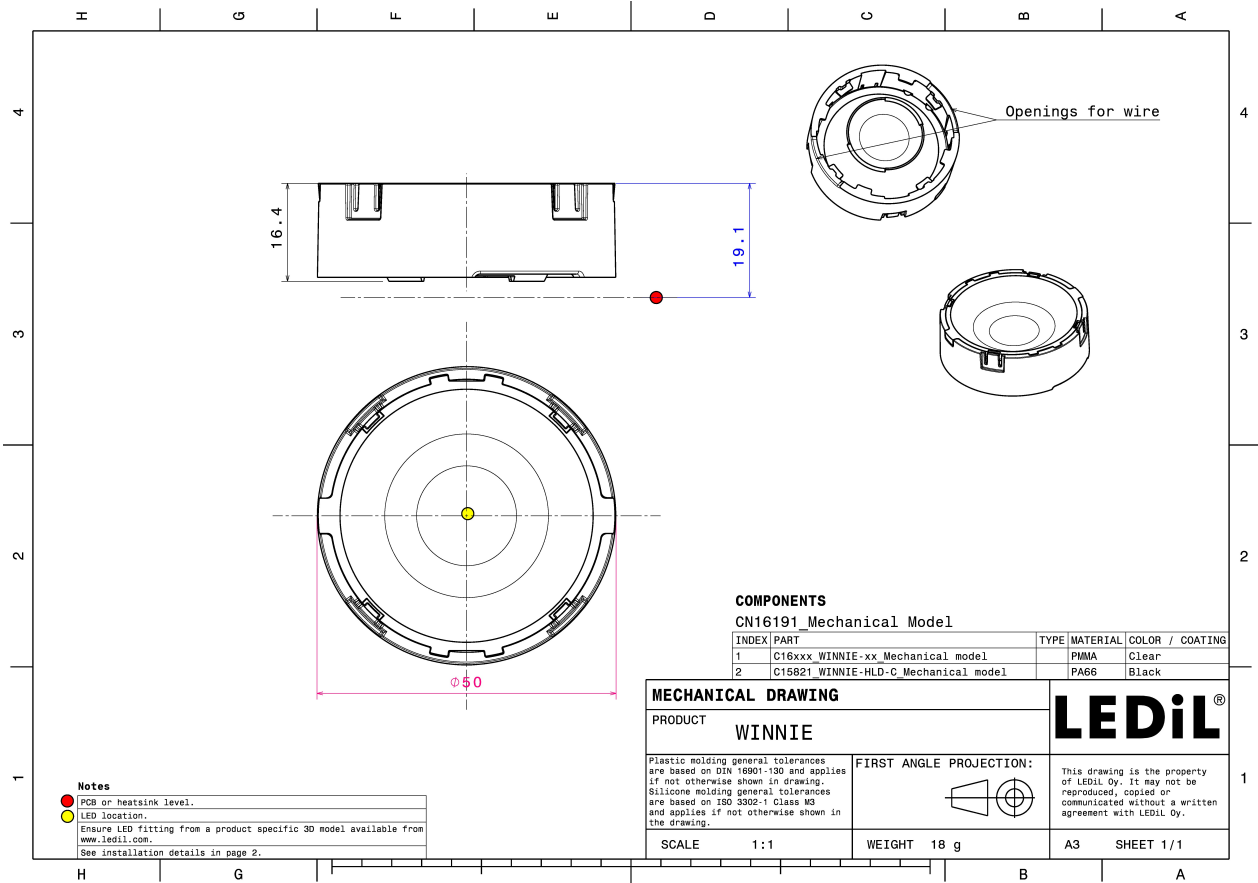
### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
WINNIE-O	Single lens	PMMA	clear	
WINNIE-HLD-C	Holder	PC	black	

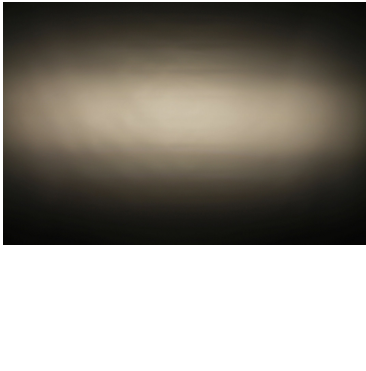
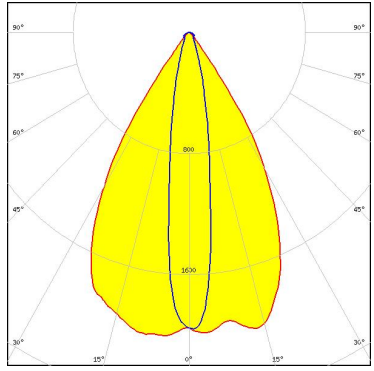
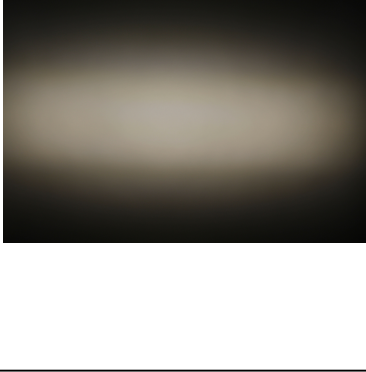
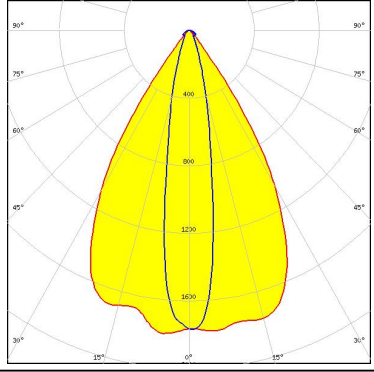
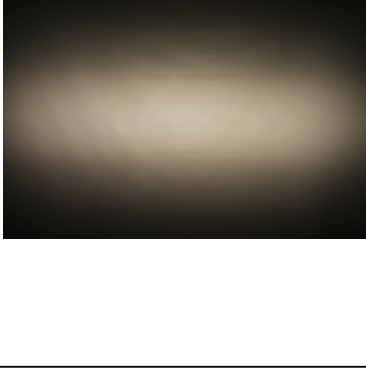
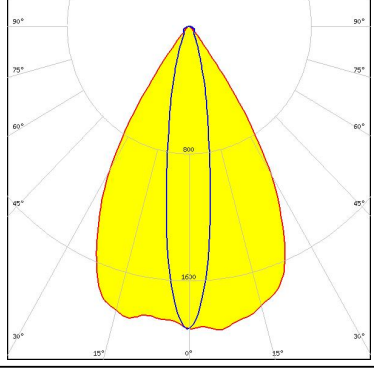
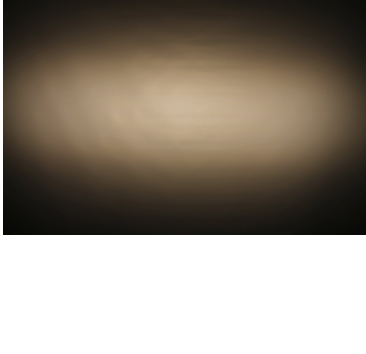
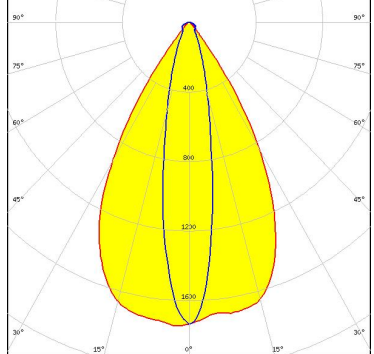


### ORDERING INFORMATION:


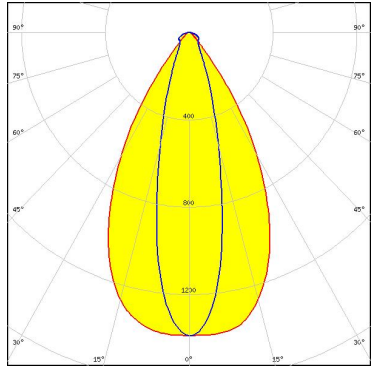
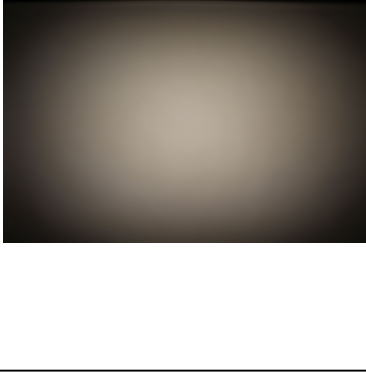
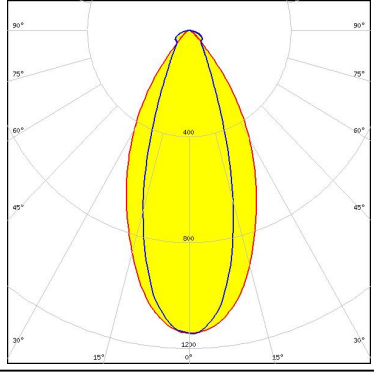

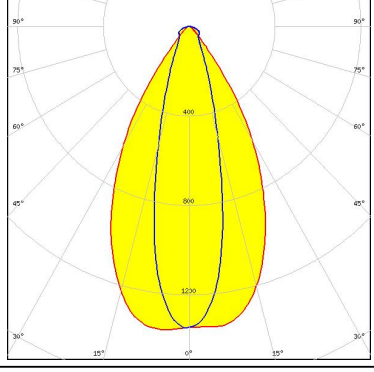

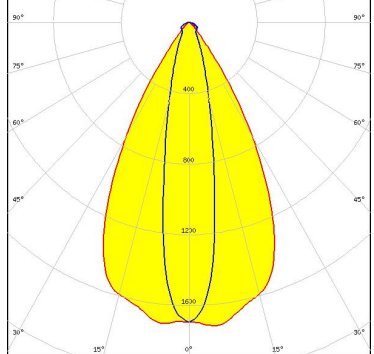
Component		Qty in box	MOQ	MPQ	Box weight (kg)
CN15826_WINNIE-O-C	Single lens	364	84	28	0.0
» Box size:					



#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V4 HD</p> <p>FWHM 62.0 + 16.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15253_HEKLA-SOCKET-A</p>		
<p>bridgelux.</p> <p>LED V6 Gen6</p> <p>FWHM 64.0 + 18.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15253_HEKLA-SOCKET-A</p>		
<p>bridgelux.</p> <p>LED V6 HD</p> <p>FWHM 62.0 + 17.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		
<p>bridgelux.</p> <p>LED V9 HD</p> <p>FWHM 60.0 + 19.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15859_HEKLA-SOCKET-I</p>		

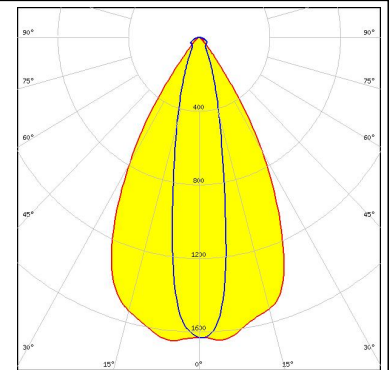
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM 58.0 + 25.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K</p>		
<p>bridgelux.</p> <p>LED VERO18</p> <p>FWHM 52.0 + 34.0°</p> <p>Efficiency 79 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K</p>		
<p>bridgelux.</p> <p>LED Vesta TW 13mm (25W) CSP</p> <p>FWHM 57.0 + 26.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K Bender Wirth: 492 Typ L8</p>		
<p>bridgelux.</p> <p>LED Vesta TW 9mm (12W) CSP</p> <p>FWHM 57.0 + 20.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K</p>		

#### PHOTOMETRIC DATA (MEASURED):

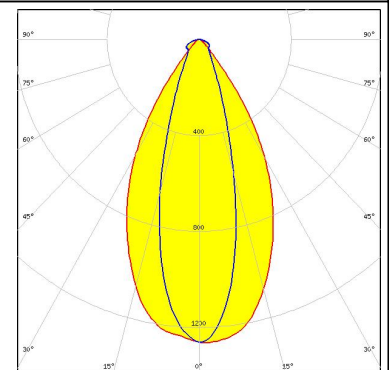
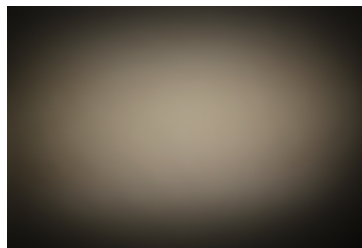
#### CITIZEN

LED CLC020 Series (Dim-To-Warm)  
 FWHM 58.0 + 20.0°  
 Efficiency 81 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K



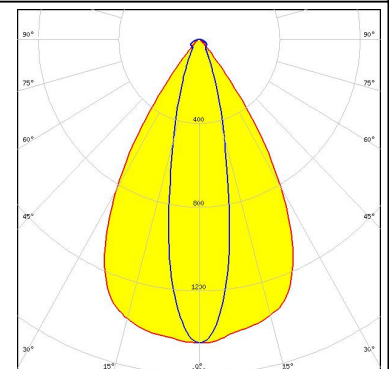
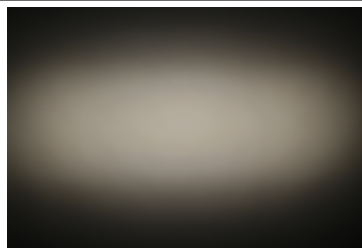
#### CITIZEN

LED CLC030 Series (Dim-To-Warm)  
 FWHM 56.0 + 30.0°  
 Efficiency 79 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K



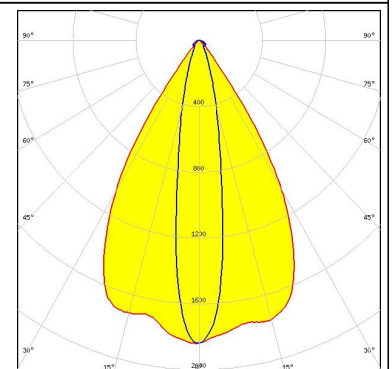
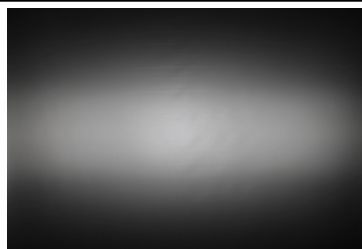
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM 63.0 + 23.0°  
 Efficiency 80 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### CITIZEN

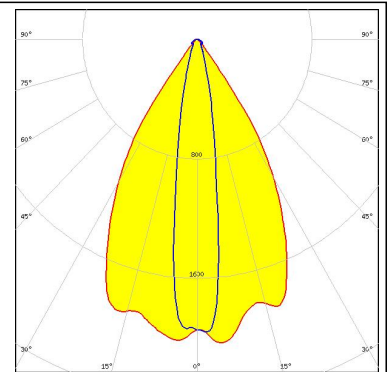
LED CLU700/701/702  
 FWHM 63.0 + 18.0°  
 Efficiency 82 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### PHOTOMETRIC DATA (MEASURED):

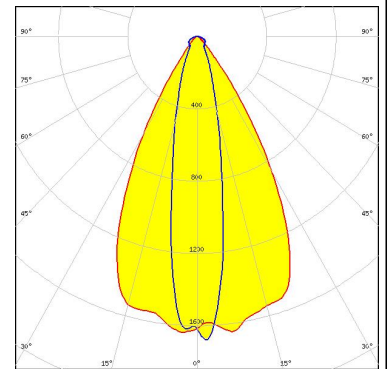
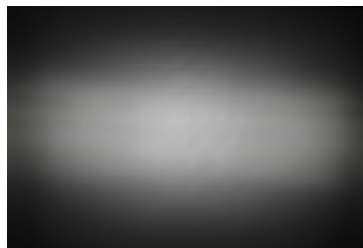
#### CITIZEN

LED CLU7A2 (LES 4.2mm)  
 FWHM 62.0 + 17.0°  
 Efficiency 83 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



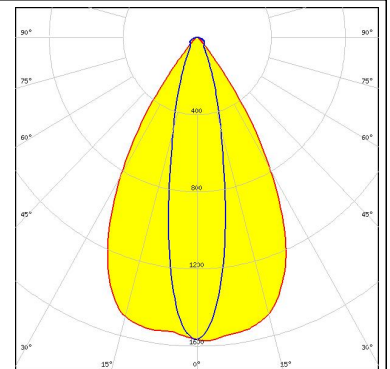
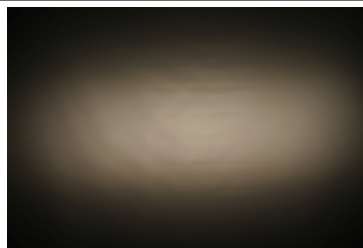
#### CITIZEN

LED LCN-C01B (Tunable White)  
 FWHM 58.0 + 20.0°  
 Efficiency 81 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 481 Typ L8



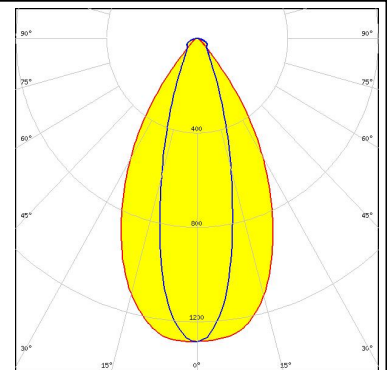
#### CREE

LED CMT14xx  
 FWHM 61.0 + 22.0°  
 Efficiency 83 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### CREE

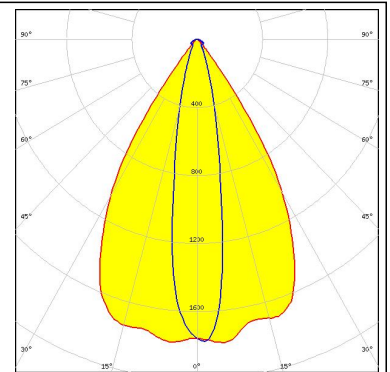
LED CMT19xx  
 FWHM 57.0 + 28.5°  
 Efficiency 81 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



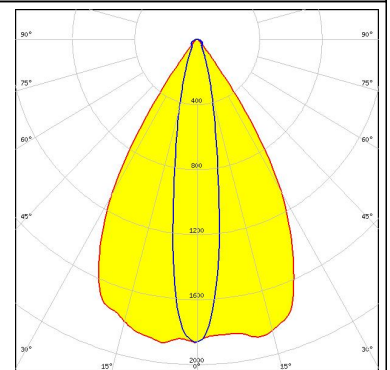
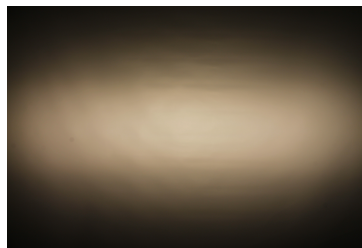
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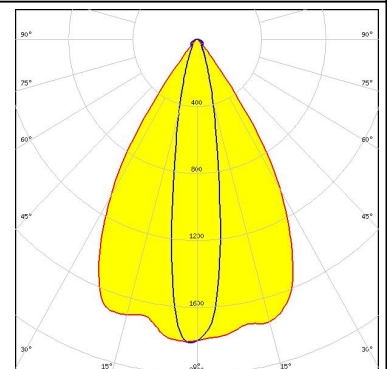
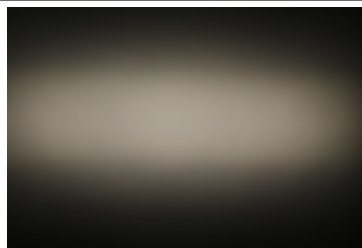
LED CXA/B 13xx  
 FWHM 64.0 + 19.0°  
 Efficiency 83 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15956\_HEKLA-SOCKET-J



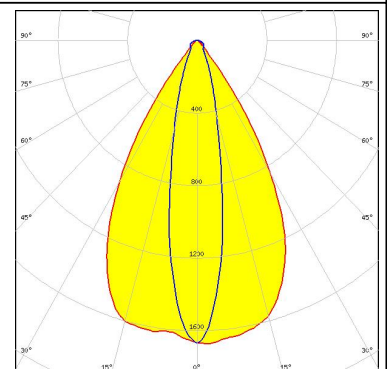
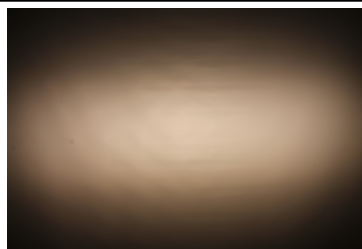
LED LUXEON CoB 1202HD  
 FWHM 63.0 + 18.0°  
 Efficiency 83 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G



LED LUXEON CoB 1202s  
 FWHM 64.0 + 18.0°  
 Efficiency 83 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G



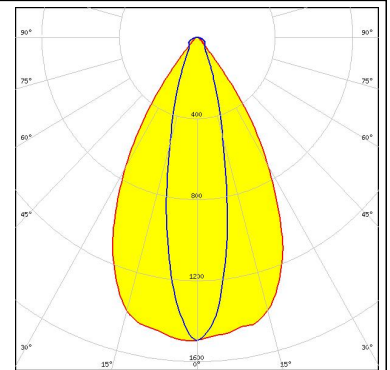
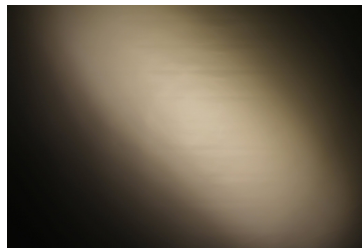
LED LUXEON CoB 1204HD  
 FWHM 61.0 + 21.0°  
 Efficiency 83 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15858\_HEKLA-SOCKET-H



#### PHOTOMETRIC DATA (MEASURED):

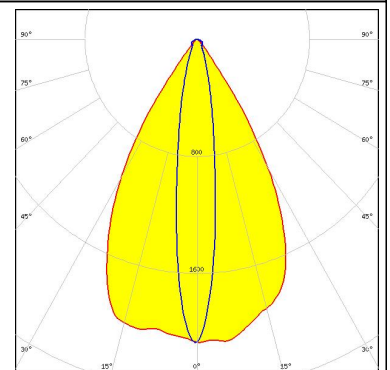
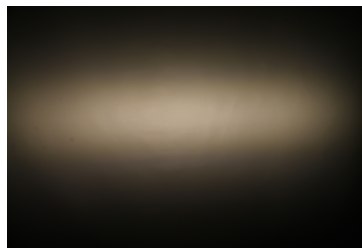
#### LUMILEDS

LED LUXEON CoB 1205HD  
 FWHM 59.0 + 24.0°  
 Efficiency 83 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15858\_HEKLA-SOCKET-H



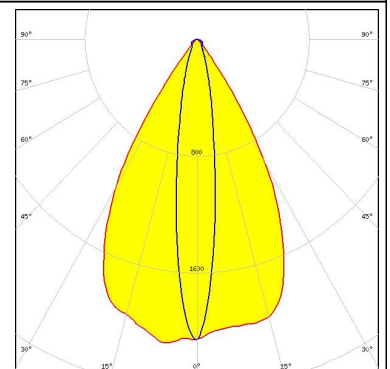
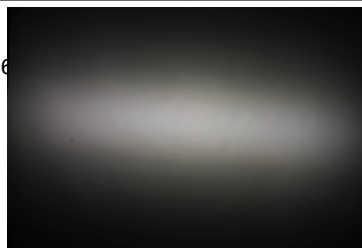
#### LUMILEDS

LED LUXEON CX Plus CoB - HD S01H4  
 FWHM 61.0 + 16.0°  
 Efficiency 83 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 634c Hekla



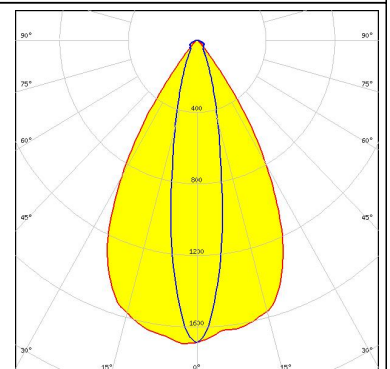
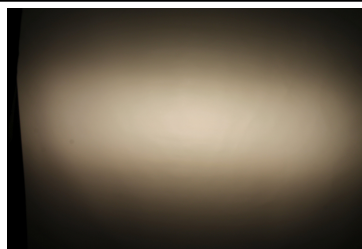
#### LUMILEDS

LED LUXEON CX Plus CoB - HD S01H6 / HD S02H6  
 FWHM 61.0 + 16.0°  
 Efficiency 83 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 634c Hekla



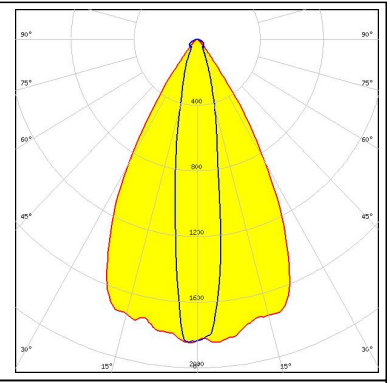

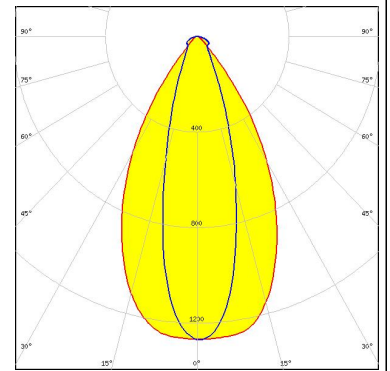
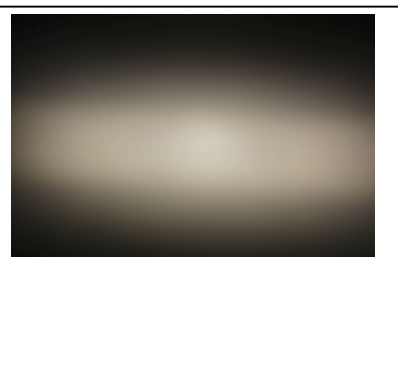
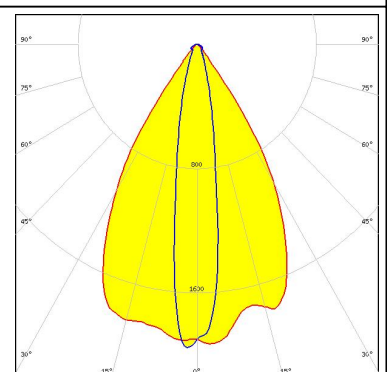

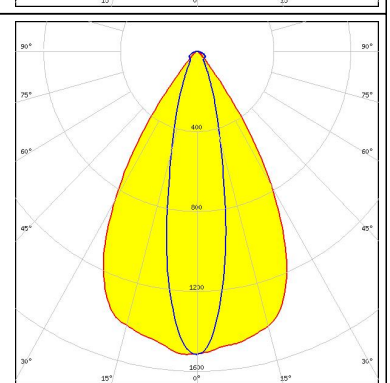
#### LUMILEDS

LED LUXEON CX Plus CoB - HD S04H9  
 FWHM 60.0 + 20.0°  
 Efficiency 83 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 634c Hekla





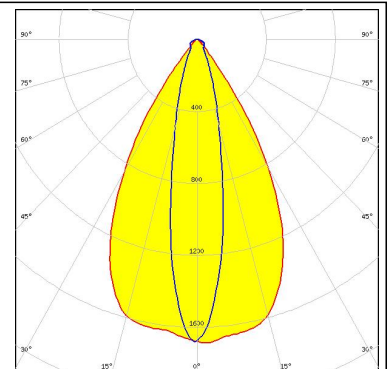
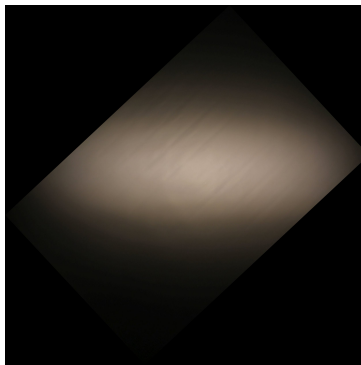
#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON Fusion 12-up (20x24)</p> <p>FWHM 59.0 + 17.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components: C16142_HEKLA-SOCKET-K Bender Wirth: 442 Typ L8</p>		
<p><b>LUMINUS</b></p> <p>LED CxM-14 (19x19)</p> <p>FWHM 58.0 + 29.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15859_HEKLA-SOCKET-I</p>		
<p><b>LUMINUS</b></p> <p>LED CXM-4</p> <p>FWHM 62.0 + 16.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		
<p><b>LUMINUS</b></p> <p>LED CxM-9 (13.5x13.5)</p> <p>FWHM 62.0 + 23.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		

#### PHOTOMETRIC DATA (MEASURED):

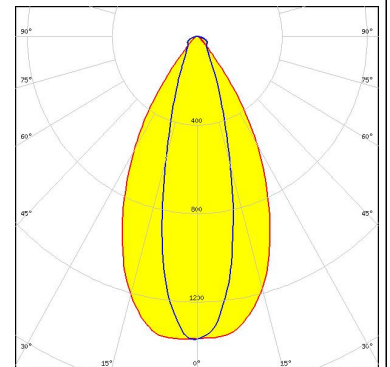
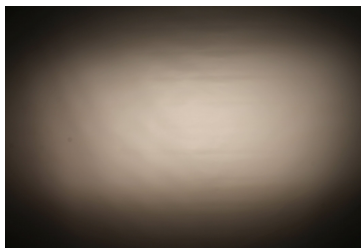
### PHILIPS

LED Fortimo SLM L09 CoB  
 FWHM 60.0 + 20.0°  
 Efficiency 83 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15858\_HEKLA-SOCKET-H



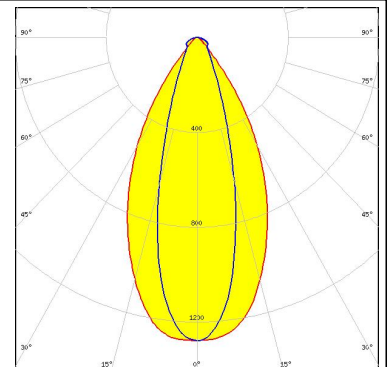
### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM 27.0 + 55.0°  
 Efficiency 81 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 432 Typ L8



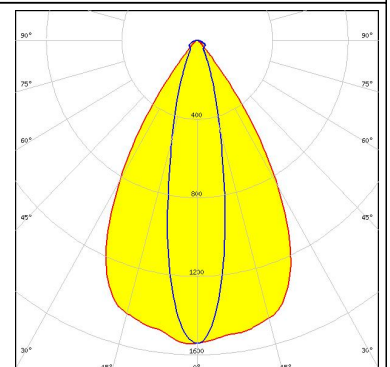
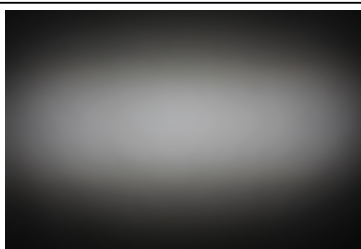
### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM 54.0 + 30.0°  
 Efficiency 80 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 432 Typ L8



### SAMSUNG

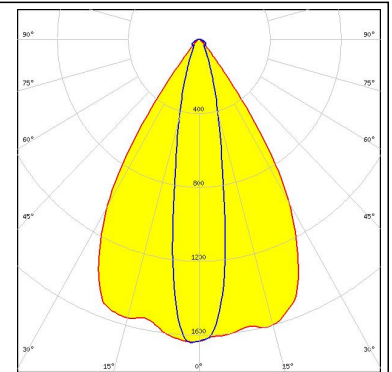
LED LC003D / LC006D / LC009D / LC013D  
 FWHM 62.0 + 22.0°  
 Efficiency 82 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### PHOTOMETRIC DATA (MEASURED):

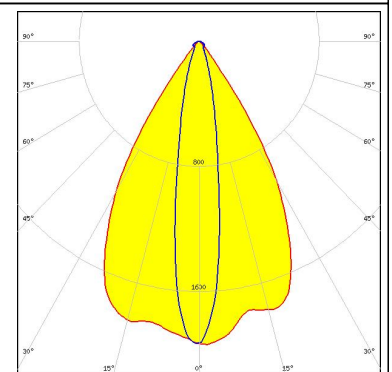
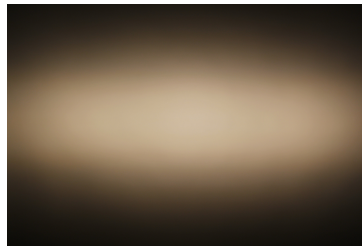
### SAMSUNG

LED LC010C  
 FWHM 65.0 + 20.0°  
 Efficiency 81 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G



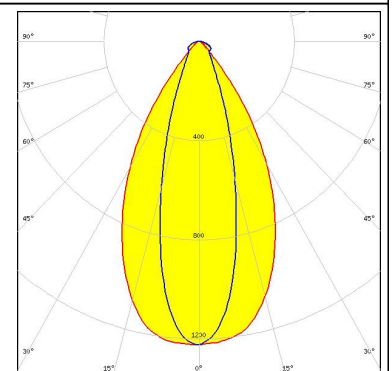
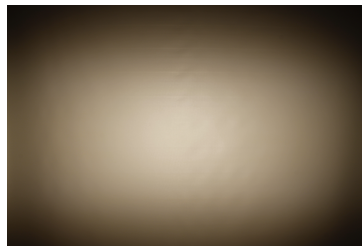
### SAMSUNG

LED LC010C G2  
 FWHM 62.0 + 17.0°  
 Efficiency 82 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



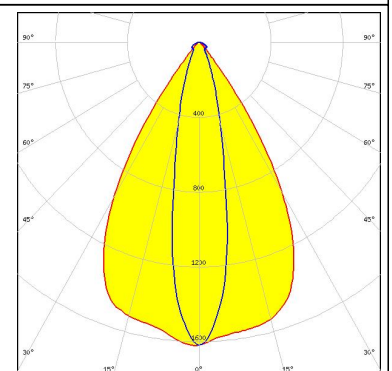
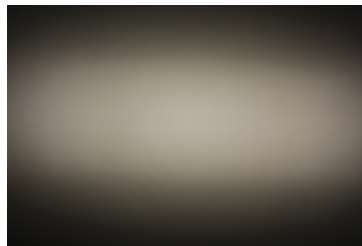
### SAMSUNG

LED LC016D / LC019D / LC026D / LC033D  
 FWHM 58.0 + 29.0°  
 Efficiency 80 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



### SAMSUNG

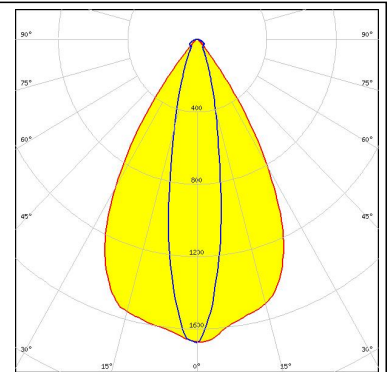
LED LC020C  
 FWHM 63.0 + 21.0°  
 Efficiency 82 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G



#### PHOTOMETRIC DATA (MEASURED):

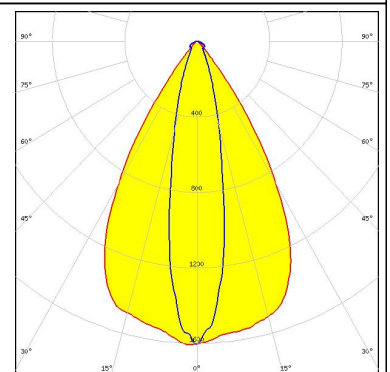
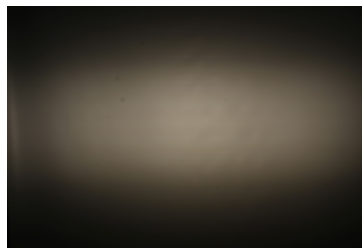
#### SAMSUNG

LED LC020C G2  
 FWHM 61.0 + 20.0°  
 Efficiency 82 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



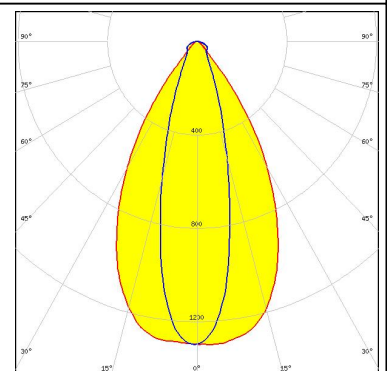
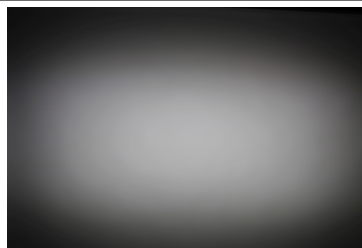
#### TRIDONIC

LED SLE G7 LES09  
 FWHM 62.0 + 21.0°  
 Efficiency 82 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



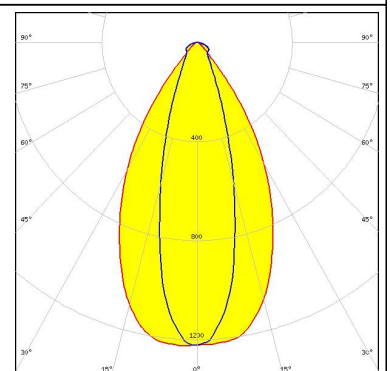
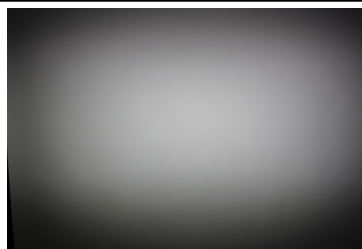
#### TRIDONIC

LED SLE G7 LES13  
 FWHM 59.0 + 27.0°  
 Efficiency 80 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



#### TRIDONIC

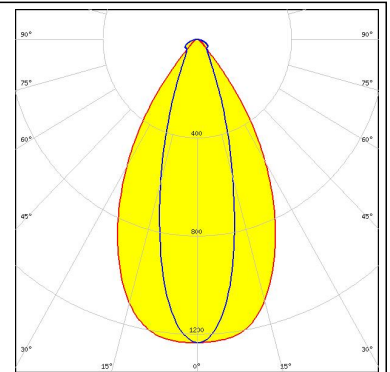
LED SLE G7 LES15  
 FWHM 58.0 + 29.0°  
 Efficiency 80 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



### PHOTOMETRIC DATA (MEASURED):

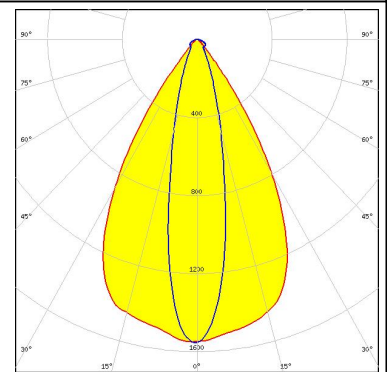
#### XICATO

LED XOB 14.5 mm  
FWHM 58.0 + 29.0°  
Efficiency 80 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15859\_HEKLA-SOCKET-I


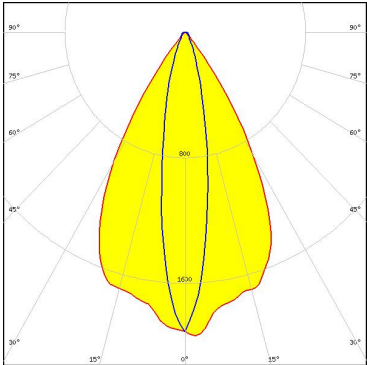
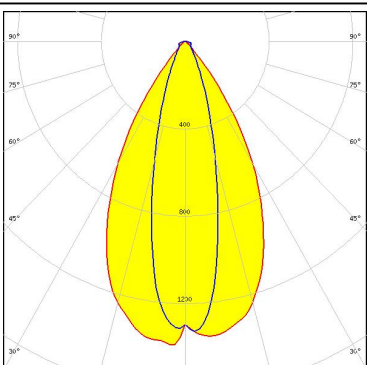
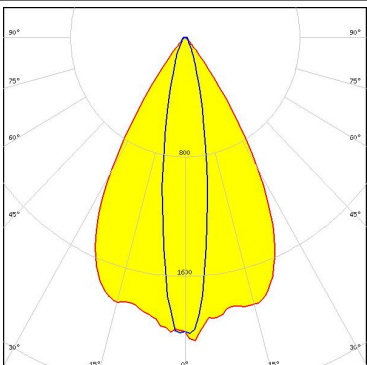

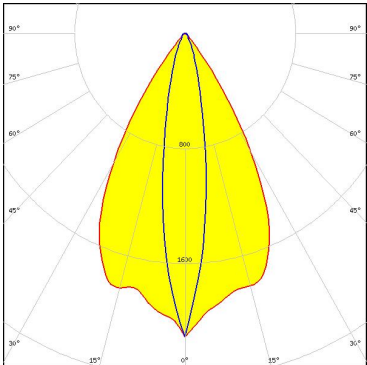


#### XICATO

LED XOB 9.8 mm  
FWHM 62.0 + 22.0°  
Efficiency 82 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15255\_HEKLA-SOCKET-C



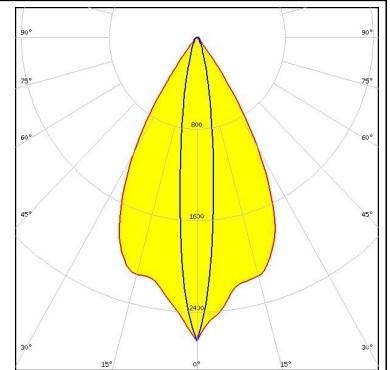
#### PHOTOMETRIC DATA (SIMULATED):

<p> <b>bridgelux</b></p> <p>LED VERO10            FWHM 59.0 + 18.0°            Efficiency 83 %            Peak intensity 1.9 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15616_HEKLA-SOCKET-F</p>	
<p><b>CITIZEN</b></p> <p>LED CLL03x/CLU03x            FWHM 58.0 + 26.0°            Efficiency 77 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15859_HEKLA-SOCKET-I</p>	
<p><b>CITIZEN</b></p> <p>LED CLU710/711            FWHM 61.0 + 18.0°            Efficiency 83 %            Peak intensity 2.1 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15859_HEKLA-SOCKET-I</p>	
<p><b>CREE</b> </p> <p>LED CXA/B 15xx            FWHM 59.0 + 17.0°            Efficiency 84 %            Peak intensity 2.1 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15256_HEKLA-SOCKET-D</p>	

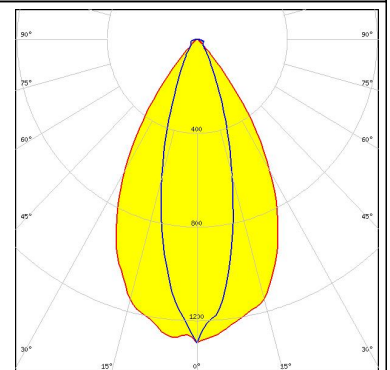
#### PHOTOMETRIC DATA (SIMULATED):



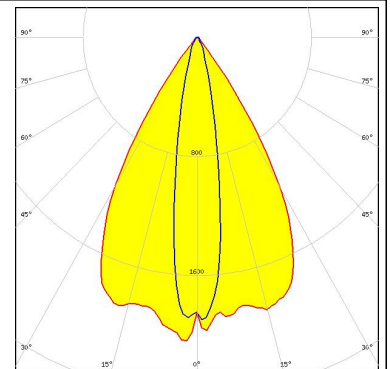
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 56.0 + 13.0°  
 Efficiency 86 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15254\_HEKLA-SOCKET-B



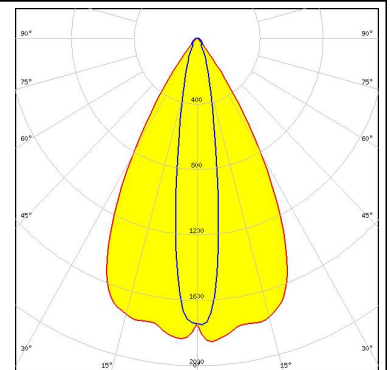
LED CXA/B 1830  
 FWHM 60.0 + 28.0°  
 Efficiency 79 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 457 Typ L8



LED COB T-Type  
 FWHM 62.0 + 18.0°  
 Efficiency 83 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G



LED NFSWE11A  
 FWHM 58.0 + 18.0°  
 Efficiency 74 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 30  
 Light colour White  
 Required components:



#### PHOTOMETRIC DATA (SIMULATED):

<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S13 19x19            FWHM 57.0 + 24.0°            Efficiency 83 %            Peak intensity 1.6 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15859_HEKLA-SOCKET-I</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S9            FWHM 59.0 + 20.0°            Efficiency 85 %            Peak intensity 1.8 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15255_HEKLA-SOCKET-C</p>	
<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED MJT COB LES 14.5            FWHM 58.0 + 30.0°            Efficiency 80 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15859_HEKLA-SOCKET-I</p>	
<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED MJT COB LES 9.8            FWHM 60.0 + 22.0°            Efficiency 83 %            Peak intensity 1.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F15255_HEKLA-SOCKET-C</p>	



### GENERAL INFORMATION:

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

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

### MATERIALS:

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

### PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

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

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#### LEDiL Inc.

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[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)

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

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