

## BARBARA-G2-M

~25° wide beam compatible with LEDiL HEKLA

### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 70.0 mm
Height	41.9 mm
Fastening	socket
ROHS compliant	yes ⓘ

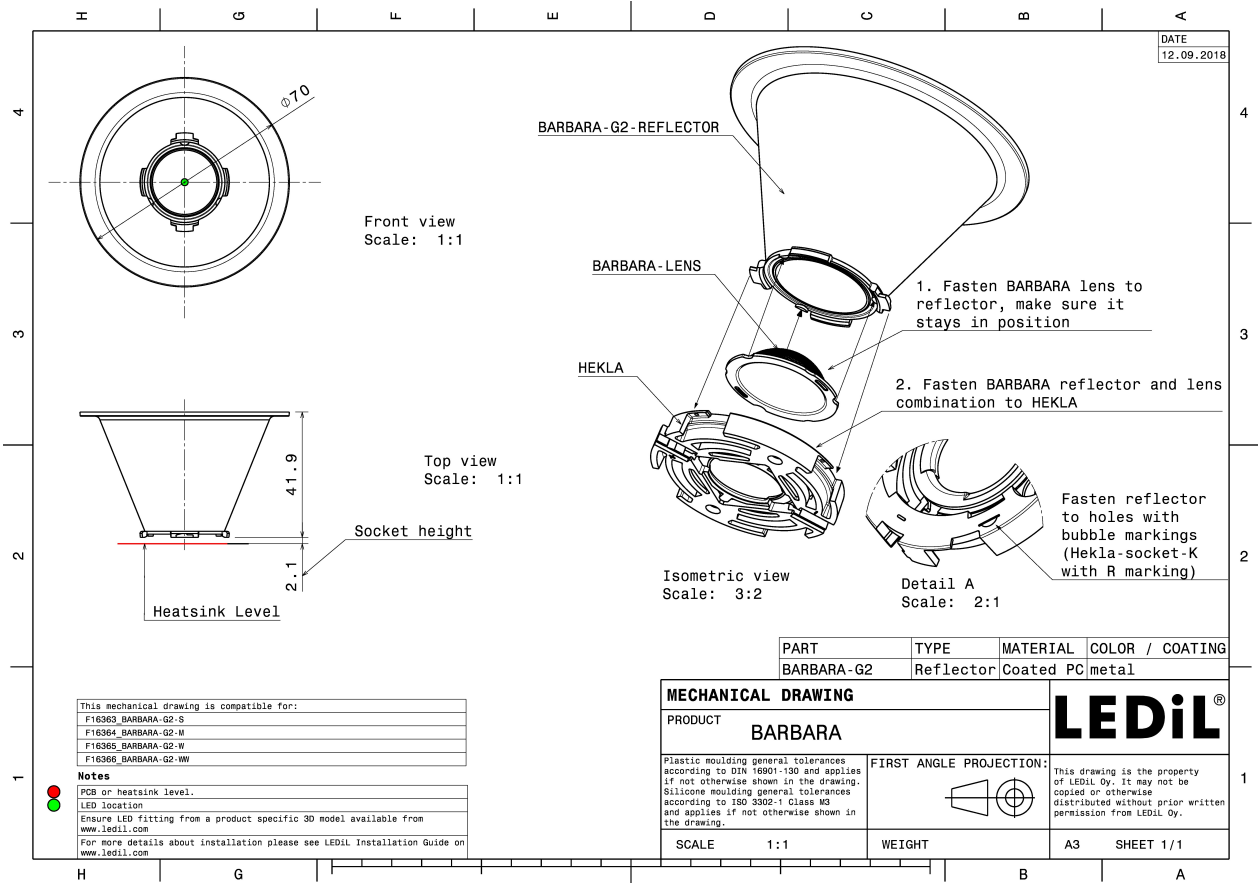
### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish	Coating
BARBARA-G2-M	Reflector	PC	metal		


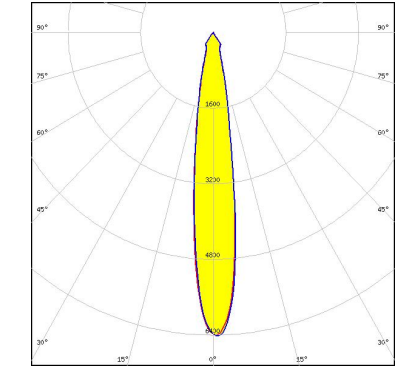
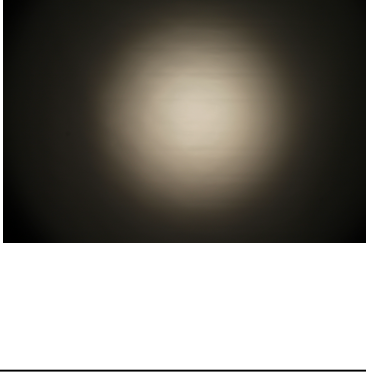
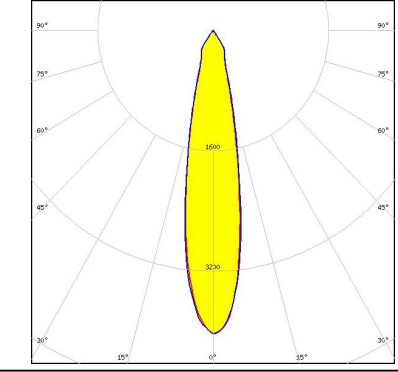
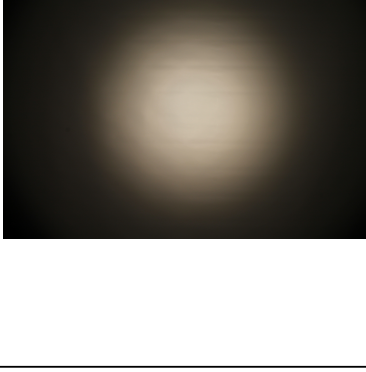
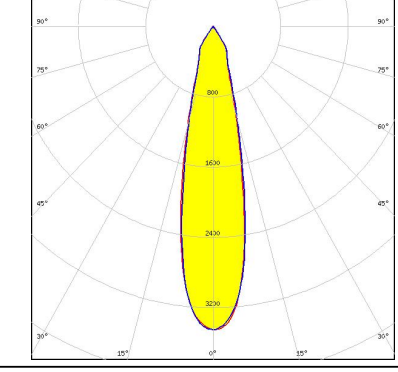

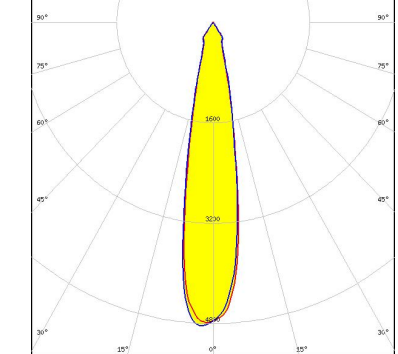


### ORDERING INFORMATION:


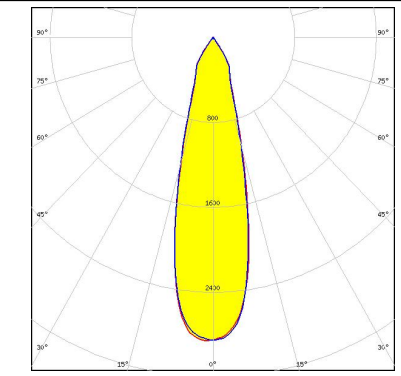
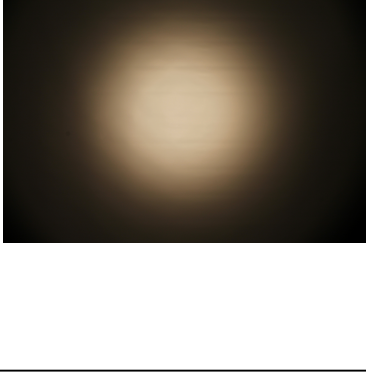
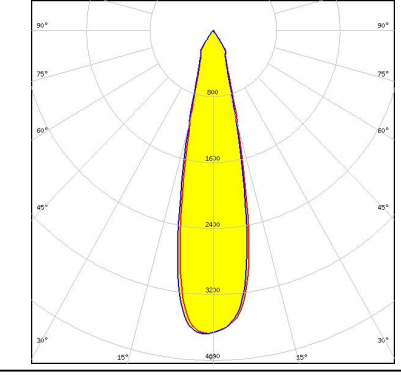

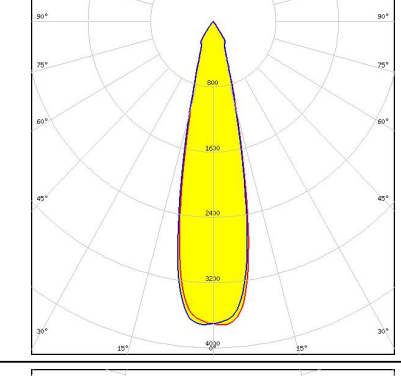

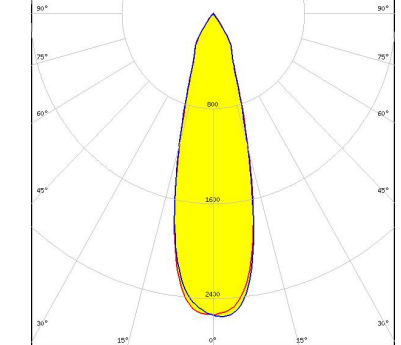
Component	Qty in box	MOQ	MPQ	Box weight (kg)
F16364_BARBARA-G2-M » Box size: 480 x 280 x 300 mm	252	90	18	4.5



#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V4 HD FWHM 16.0° Efficiency 92 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: F15253_HEKLA-SOCKET-A</p>		
<p>bridgelux.</p> <p>LED V4 HD FWHM 21.0° Efficiency 87 % Peak intensity 4 cd/lm LEDs/each optic 1 Light colour White Required components: F15253_HEKLA-SOCKET-A C14658_BARBARA-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED V6 HD FWHM 24.0° Efficiency 87 % Peak intensity 3.5 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C C14658_BARBARA-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED V6 HD FWHM 20.0° Efficiency 92 % Peak intensity 4.8 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C</p>		

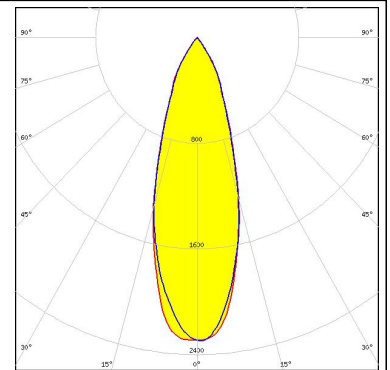
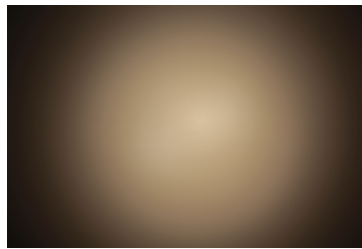
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V9 HD            FWHM 27.0°            Efficiency 86 %            Peak intensity 2.9 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            F15859_HEKLA-SOCKET-I            C14658_BARBARA-RZ-LENS</p>		
<p>bridgelux.</p> <p>LED V9 HD            FWHM 24.0°            Efficiency 92 %            Peak intensity 3.7 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            F15859_HEKLA-SOCKET-I</p>		
<p>bridgelux.</p> <p>LED V9 HD            FWHM 24.0°            Efficiency 91 %            Peak intensity 3.7 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            F15859_HEKLA-SOCKET-I</p>		
<p>bridgelux.</p> <p>LED Vesta TW 9mm (12W) CSP            FWHM 29.0°            Efficiency 83 %            Peak intensity 2.6 cd/lm            LEDs/each optic 1            Light colour White</p> <p>Required components:            C16142_HEKLA-SOCKET-K            C14658_BARBARA-RZ-LENS</p>		

#### PHOTOMETRIC DATA (MEASURED):

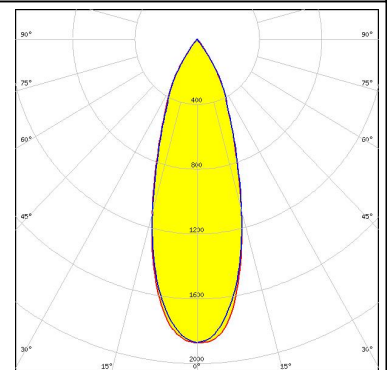
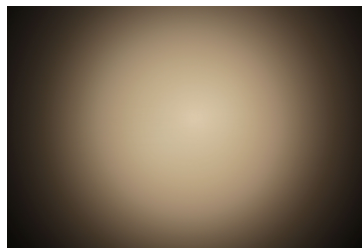
#### CITIZEN

LED CLC030 Series (Dim-To-Warm)  
 FWHM 33.0°  
 Efficiency 87 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 436 Typ L8



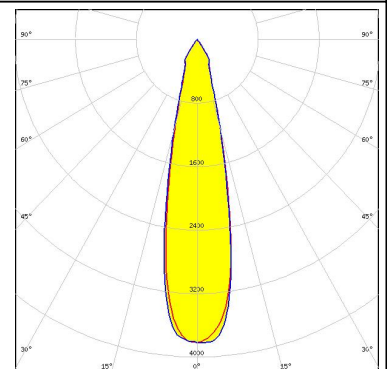
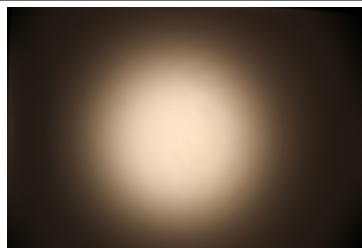
#### CITIZEN

LED CLC030 Series (Dim-To-Warm)  
 FWHM 34.0°  
 Efficiency 80 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 C14658\_BARBARA-RZ-LENS  
 Bender Wirth: 436 Typ L8



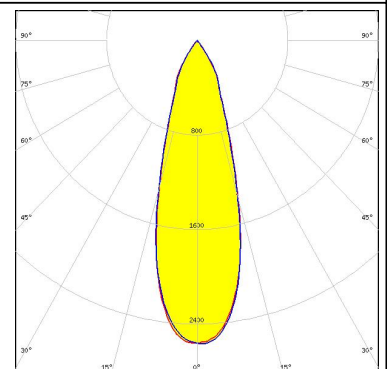
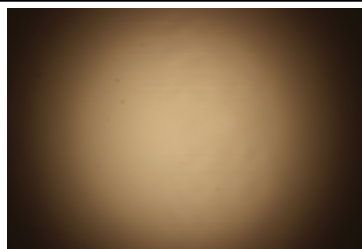
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM 24.0°  
 Efficiency 92 %  
 Peak intensity 3.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### CITIZEN

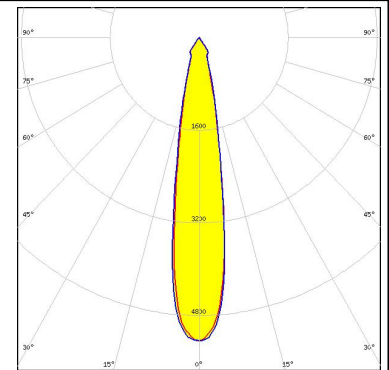
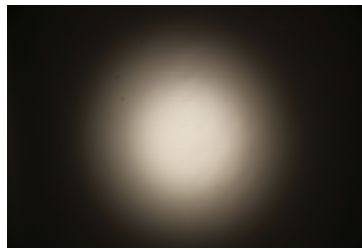
LED CLL03x/CLU03x  
 FWHM 31.0°  
 Efficiency 91 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



#### PHOTOMETRIC DATA (MEASURED):

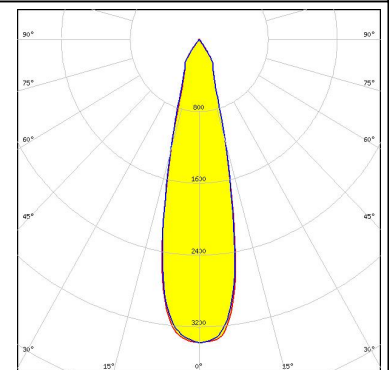
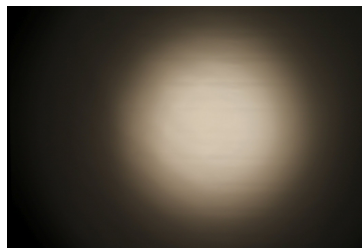
#### CITIZEN

LED CLU700/701/702  
 FWHM 19.0°  
 Efficiency 92 %  
 Peak intensity 5.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



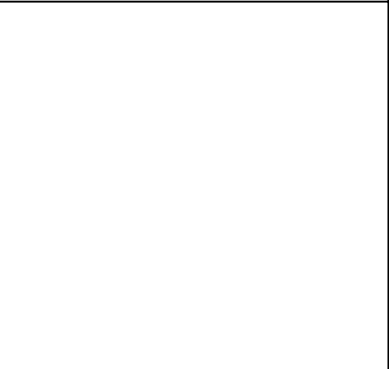
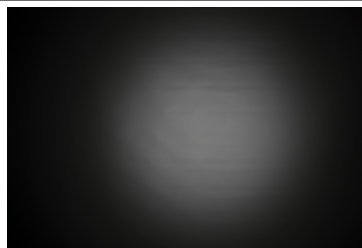
#### CREE

LED CMT14xx  
 FWHM 26.0°  
 Efficiency 92 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



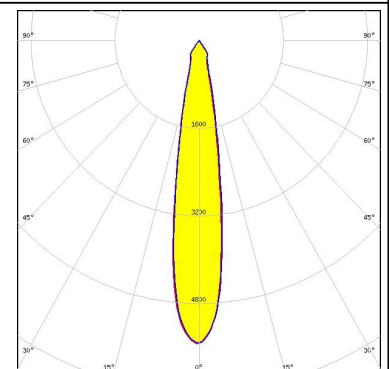
#### CREE

LED CMT19xx  
 FWHM 32.0°  
 Efficiency 92 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



#### CREE

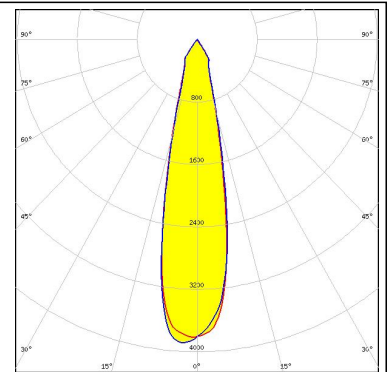
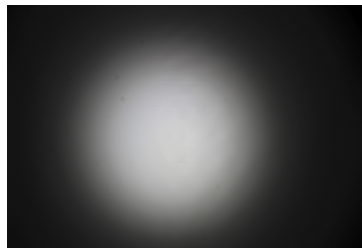
LED CXA/B 13xx  
 FWHM 18.0°  
 Efficiency 92 %  
 Peak intensity 5.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15956\_HEKLA-SOCKET-J



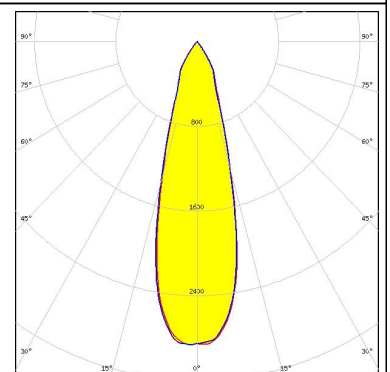
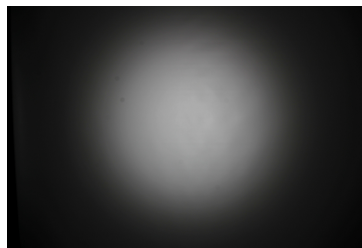
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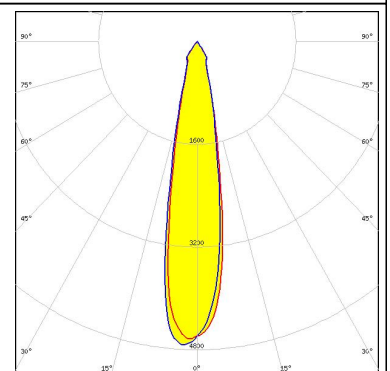
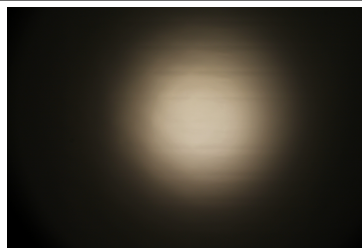
LED CXA/B 15xx  
 FWHM 23.0°  
 Efficiency 92 %  
 Peak intensity 3.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15256\_HEKLA-SOCKET-D



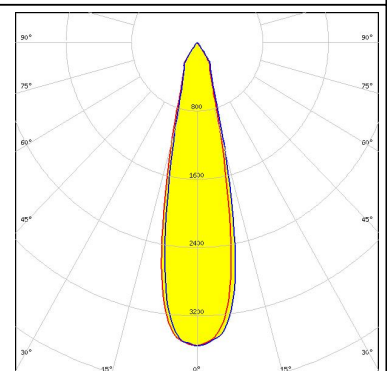
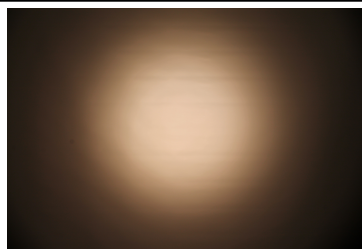
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 29.0°  
 Efficiency 91 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15254\_HEKLA-SOCKET-B



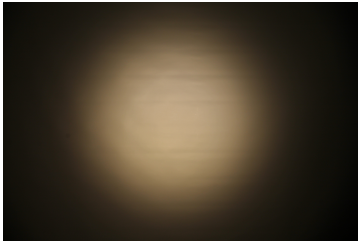
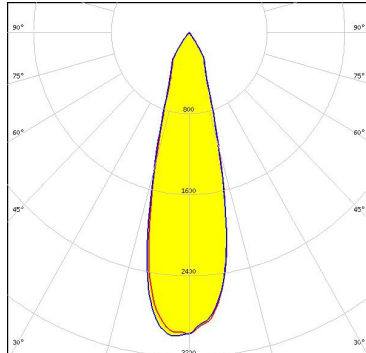
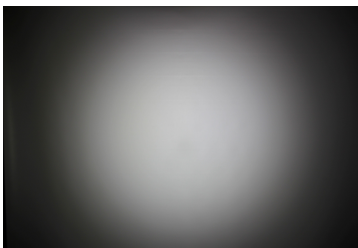
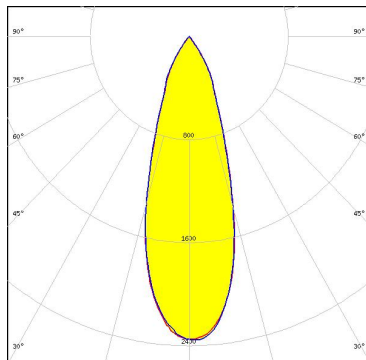

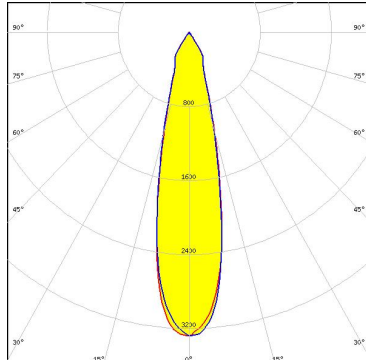

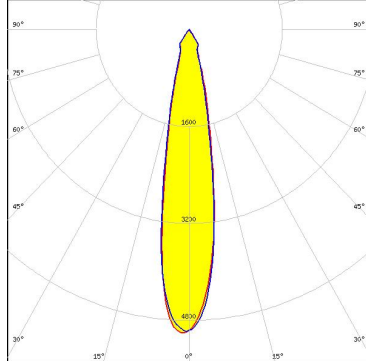
LED LUXEON CoB 1202HD  
 FWHM 20.0°  
 Efficiency 91 %  
 Peak intensity 4.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G



LED LUXEON CoB 1204HD  
 FWHM 25.0°  
 Efficiency 92 %  
 Peak intensity 3.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15858\_HEKLA-SOCKET-H


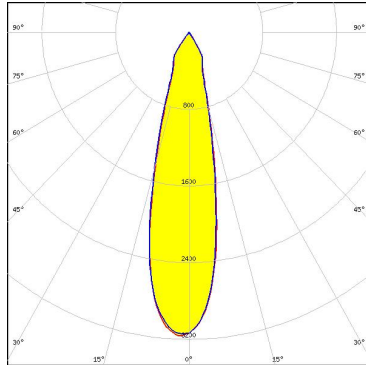
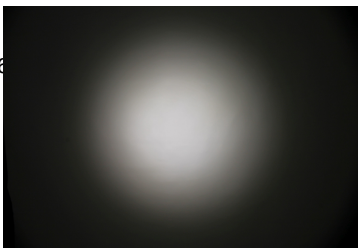
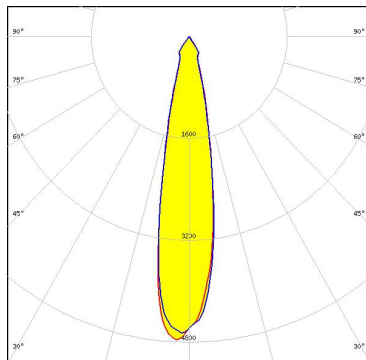

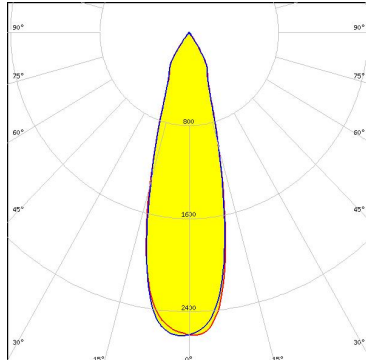

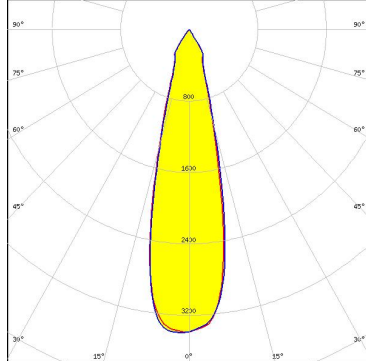


#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1205HD            FWHM 28.0°            Efficiency 91 %            Peak intensity 3 cd/Im            LEDs/each optic 1            Light colour White            Required components:            F15858_HEKLA-SOCKET-H</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1208            FWHM 33.0°            Efficiency 90 %            Peak intensity 2.4 cd/Im            LEDs/each optic 1            Light colour White            Required components:            Bender Wirth: 632a Hekla XL</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S01H4            FWHM 24.0°            Efficiency 84 %            Peak intensity 3.3 cd/Im            LEDs/each optic 1            Light colour White            Required components:            C14658_BARBARA-RZ-LENS            Bender Wirth: 634c Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S01H4            FWHM 20.0°            Efficiency 91 %            Peak intensity 5 cd/Im            LEDs/each optic 1            Light colour White            Required components:            Bender Wirth: 634c Hekla</p>		



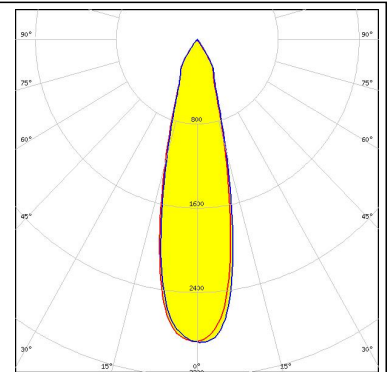
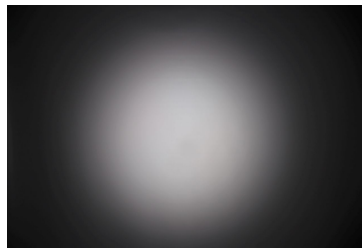
#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S01H6 / HD S02H6</p> <p>FWHM 25.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 3.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C14658_BARBARA-RZ-LENS Bender Wirth: 634c Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S01H6 / HD S02H6</p> <p>FWHM 21.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 4.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 634c Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S04H9</p> <p>FWHM 28.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 2.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C14658_BARBARA-RZ-LENS Bender Wirth: 634c Hekla</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S04H9</p> <p>FWHM 26.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 3.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 634c Hekla</p>		

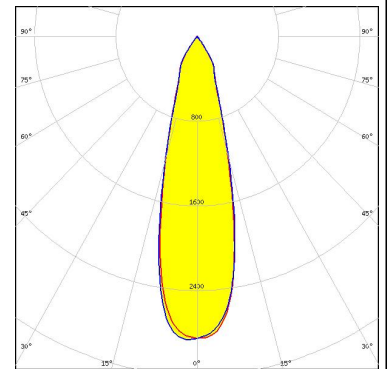
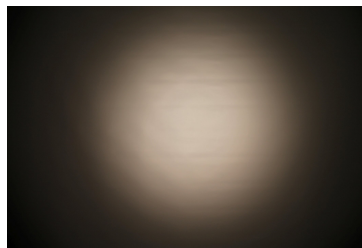
#### PHOTOMETRIC DATA (MEASURED):



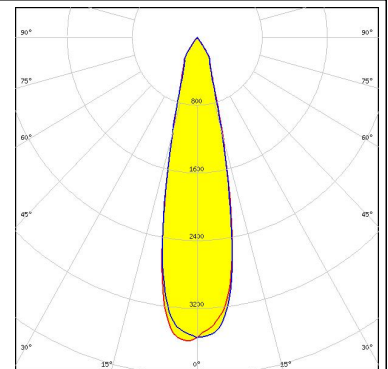
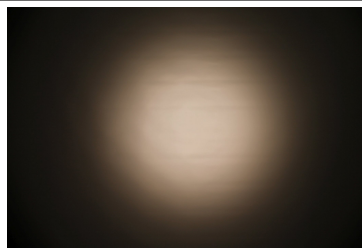
LED LUXEON Fusion 21-up (20x24)  
 FWHM 27.0°  
 Efficiency 84 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 C14658\_BARBARA-RZ-LENS  
 Bender Wirth: 442 Typ L8



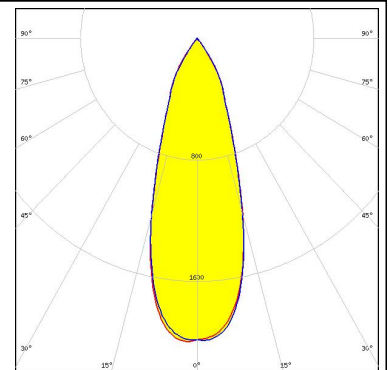
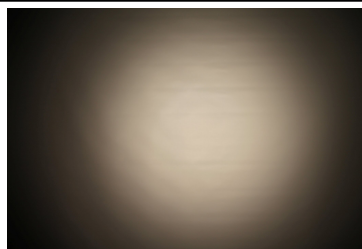
LED Fortimo SLM L09 CoB  
 FWHM 27.0°  
 Efficiency 88 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15858\_HEKLA-SOCKET-H  
 C14658\_BARBARA-RZ-LENS



LED Fortimo SLM L09 CoB  
 FWHM 25.0°  
 Efficiency 92 %  
 Peak intensity 3.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15858\_HEKLA-SOCKET-H



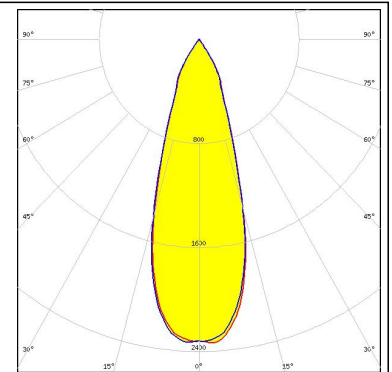
LED Fortimo SLM L13 CoB  
 FWHM 34.0°  
 Efficiency 83 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 C14658\_BARBARA-RZ-LENS  
 Bender Wirth: 432 Typ L8



#### PHOTOMETRIC DATA (MEASURED):

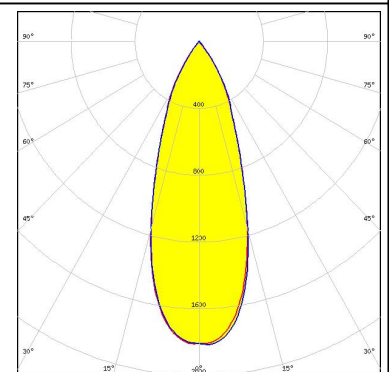
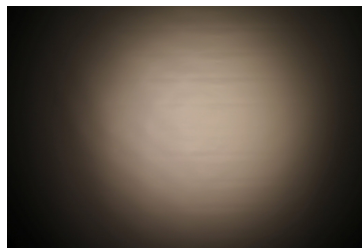
#### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM 33.0°  
 Efficiency 89 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 432 Typ L8



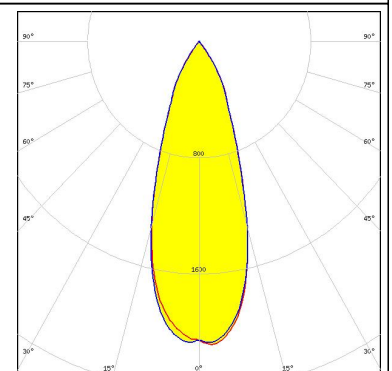
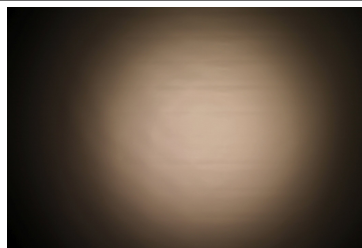
#### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM 36.0°  
 Efficiency 83 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 C14658\_BARBARA-RZ-LENS  
 Bender Wirth: 432 Typ L8



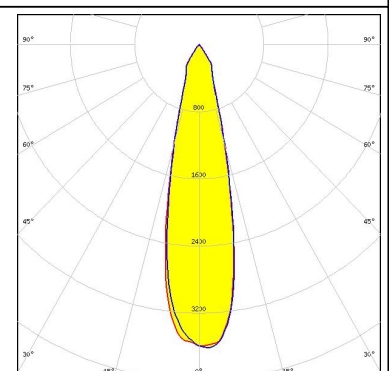
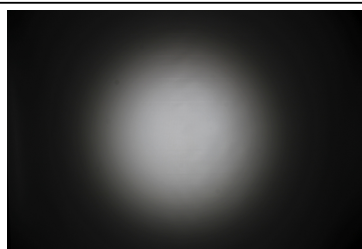
#### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM 35.0°  
 Efficiency 88 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 432 Typ L8



#### SAMSUNG

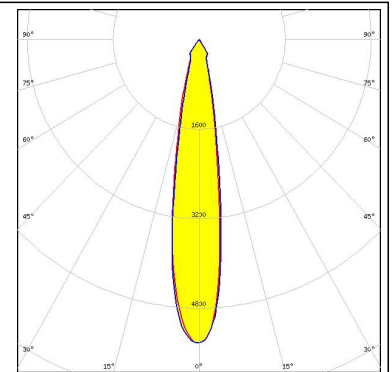
LED LC003D / LC006D / LC009D / LC013D  
 FWHM 25.0°  
 Efficiency 92 %  
 Peak intensity 3.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### PHOTOMETRIC DATA (MEASURED):

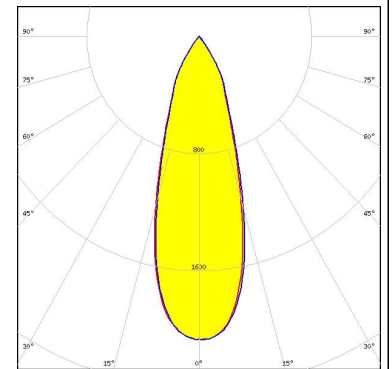
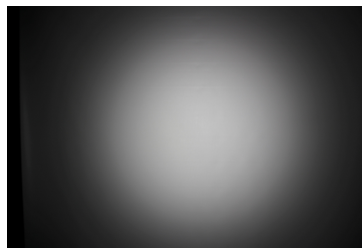
### SAMSUNG

LED LC010C G2  
 FWHM 18.0°  
 Efficiency 92 %  
 Peak intensity 5.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



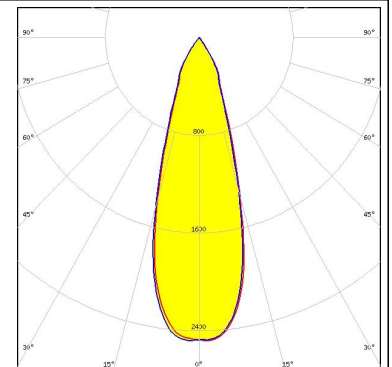
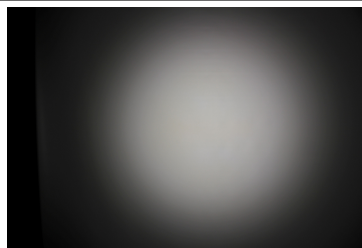
### SAMSUNG

LED LC020T (Tunable white)  
 FWHM 33.0°  
 Efficiency 83 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 C14658\_BARBARA-RZ-LENS  
 Bender Wirth: 501 Typ L8



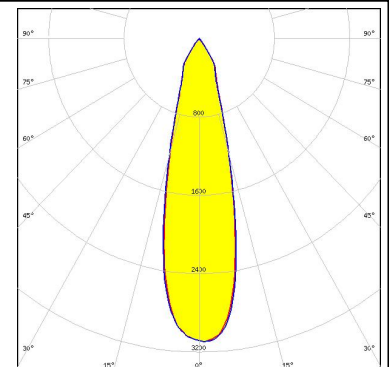
### SAMSUNG

LED LC020T (Tunable white)  
 FWHM 31.0°  
 Efficiency 88 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 501 Typ L8



### TRIDONIC

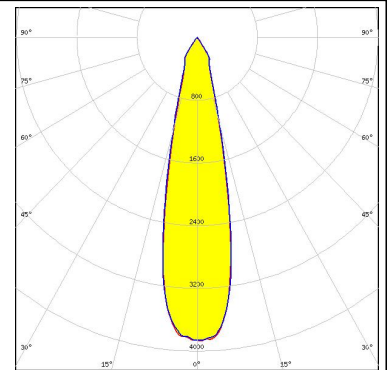
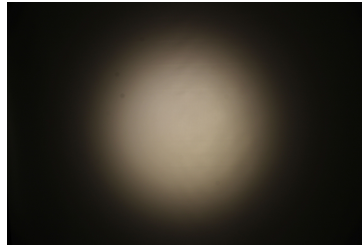
LED SLE G7 LES09  
 FWHM 26.0°  
 Efficiency 90 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C  
 C14658\_BARBARA-RZ-LENS



#### PHOTOMETRIC DATA (MEASURED):

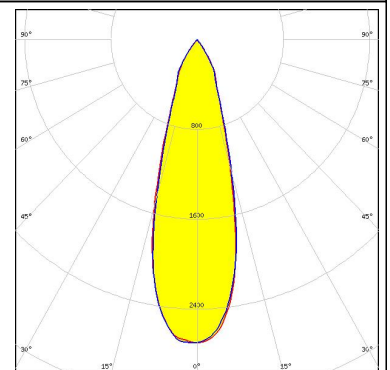
#### TRIDONIC

LED SLE G7 LES09  
FWHM 24.0°  
Efficiency 94 %  
Peak intensity 3.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15255\_HEKLA-SOCKET-C



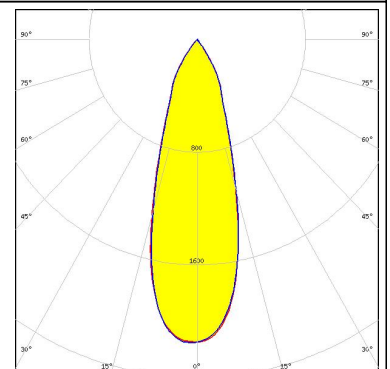
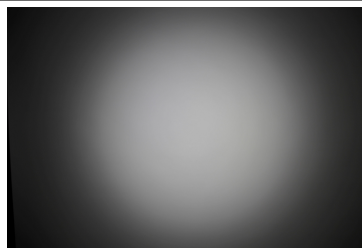
#### TRIDONIC

LED SLE G7 LES13  
FWHM 30.0°  
Efficiency 91 %  
Peak intensity 2.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15859\_HEKLA-SOCKET-I



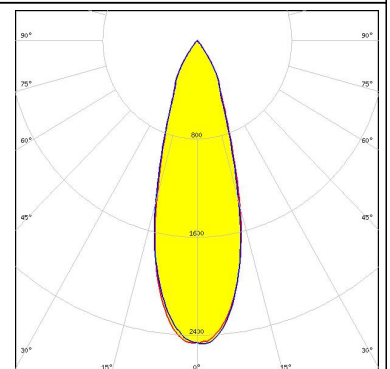
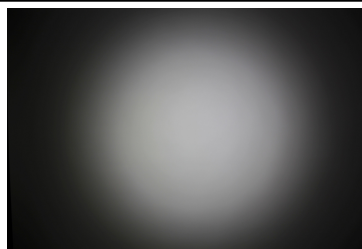
#### TRIDONIC

LED SLE G7 LES13  
FWHM 32.0°  
Efficiency 84 %  
Peak intensity 2.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15859\_HEKLA-SOCKET-I  
C14658\_BARBARA-RZ-LENS



#### TRIDONIC

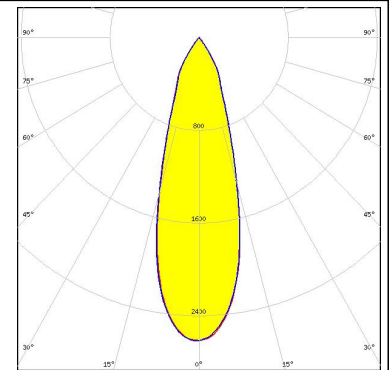
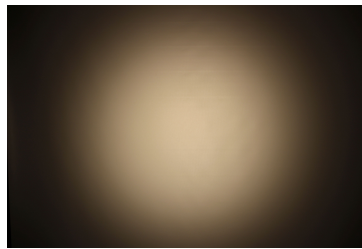
LED SLE G7 LES15  
FWHM 32.0°  
Efficiency 91 %  
Peak intensity 2.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15859\_HEKLA-SOCKET-I



#### PHOTOMETRIC DATA (MEASURED):

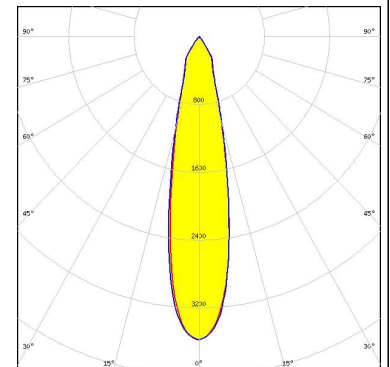
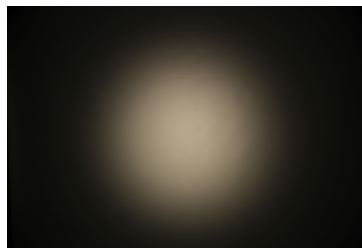
#### XICATO

LED XOB 14.5 mm  
 FWHM 30.0°  
 Efficiency 92 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



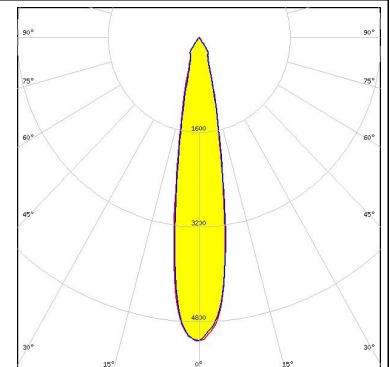
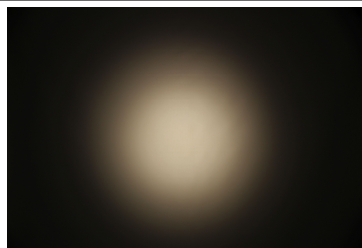
#### XICATO

LED XOB 6 mm  
 FWHM 23.0°  
 Efficiency 86 %  
 Peak intensity 3.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C  
 C14658\_BARBARA-RZ-LENS



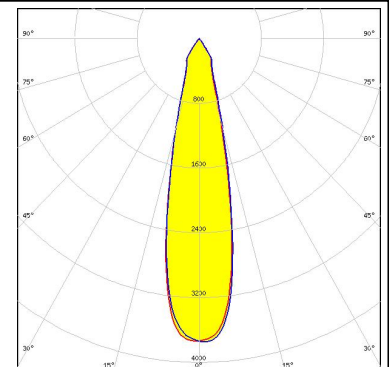
#### XICATO

LED XOB 6 mm  
 FWHM 18.0°  
 Efficiency 90 %  
 Peak intensity 5.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### XICATO

LED XOB 9.8 mm  
 FWHM 24.0°  
 Efficiency 92 %  
 Peak intensity 3.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### PHOTOMETRIC DATA (SIMULATED):

<p>bridgelux.</p> <p>LED VERO10</p> <p>FWHM 24.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 3.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15616_HEKLA-SOCKET-F</p>	
<p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM 31.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 2.4 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 Vesta DTW 15mm (33W)</p> <p>FWHM 30.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 2.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K Bender Wirth: 491 Typ L8</p>	
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 11)</p> <p>FWHM 26.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 3.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15858_HEKLA-SOCKET-H</p>	

## PHOTOMETRIC DATA (SIMULATED):



LED	COB L-Type (LES 9)
FWHM	22.0°
Efficiency	90 %
Peak intensity	4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
F15858_HEKLA-SOCKET-H	



### 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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[www.ledil.com/where\\_to\\_buy](http://www.ledil.com/where_to_buy)

#### Shipping locations

Salo, Finland  
Hong Kong, China

#### Distribution Partners

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

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