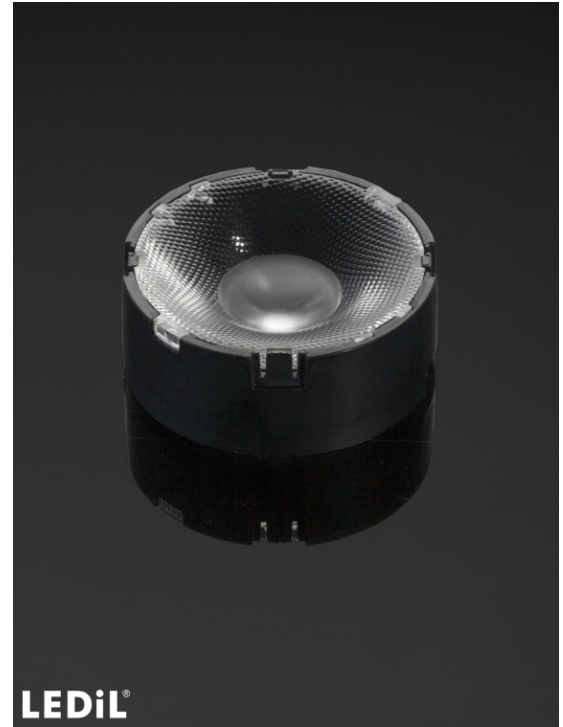


WINNIE-M-C

~35° spot beam with holder C compatible with LEDiL HEKLA

TECHNICAL SPECIFICATIONS:

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

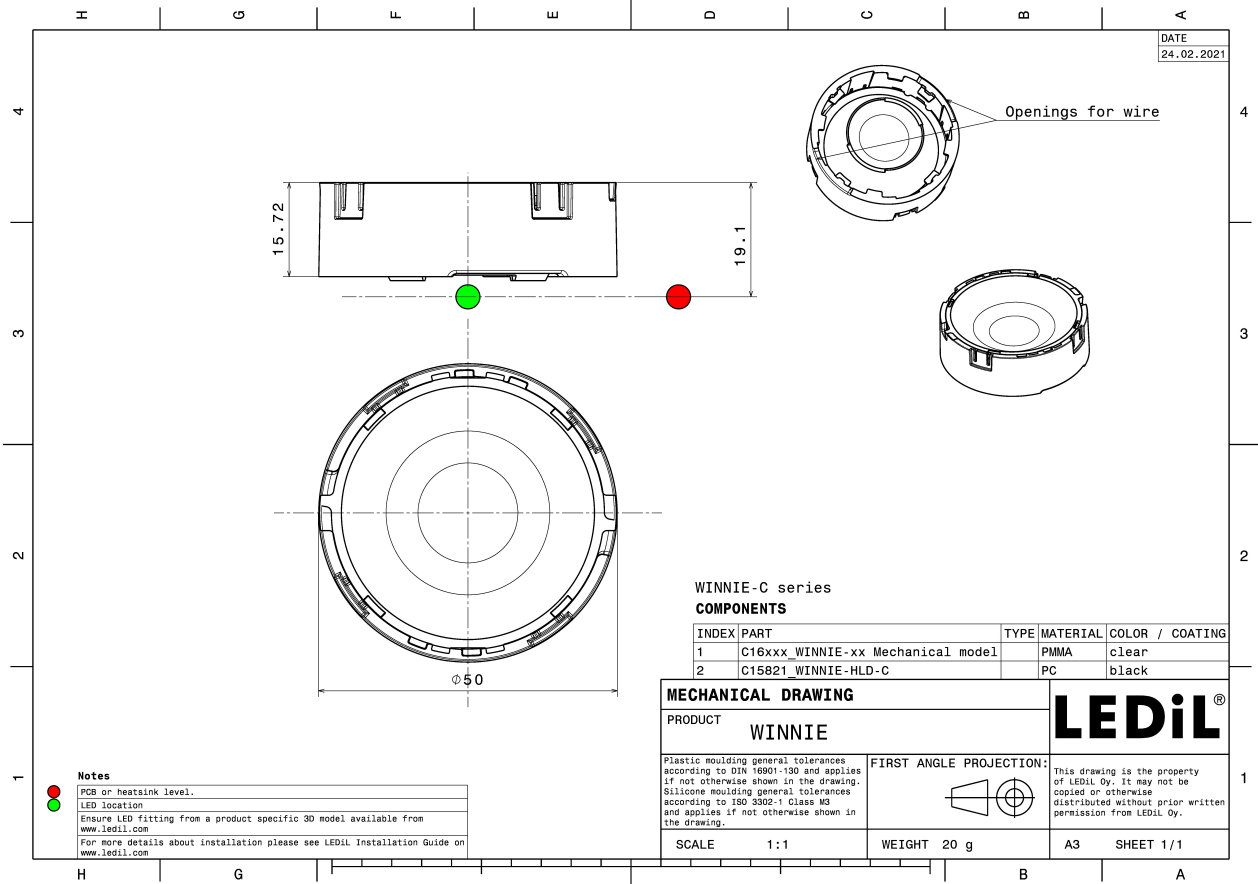


MATERIAL SPECIFICATIONS:

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

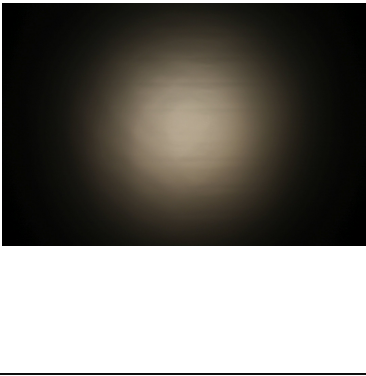
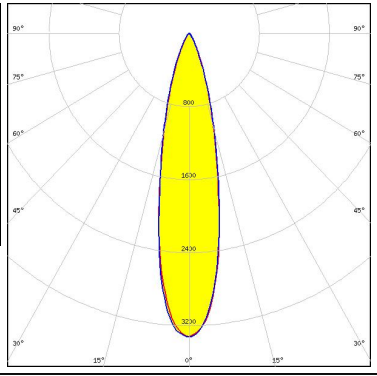

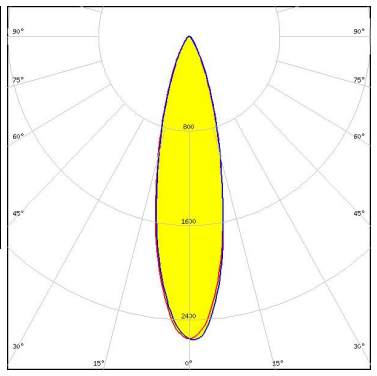

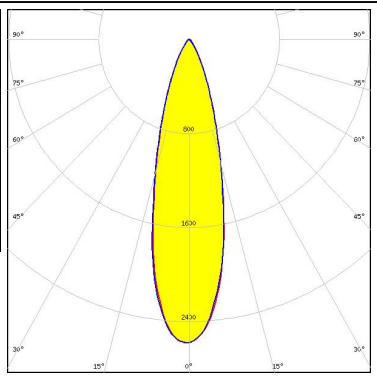

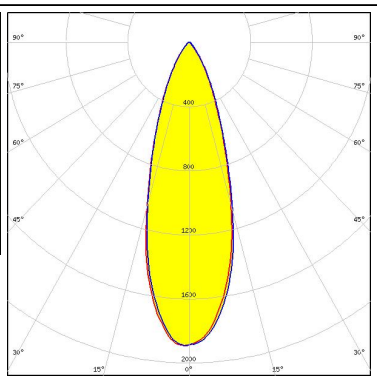
ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CN15824_WINNIE-M-C	Single lens	364	84	28	0.0
» Box size:					


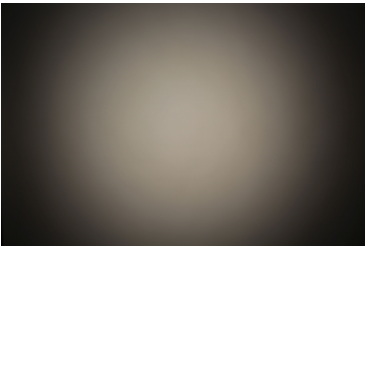
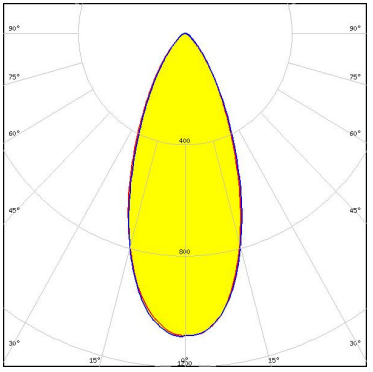

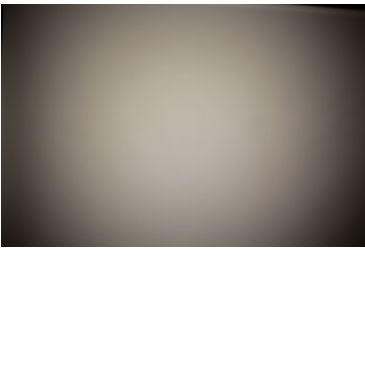
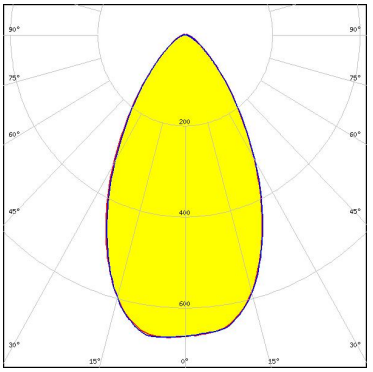


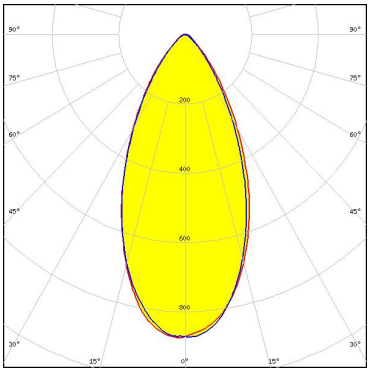


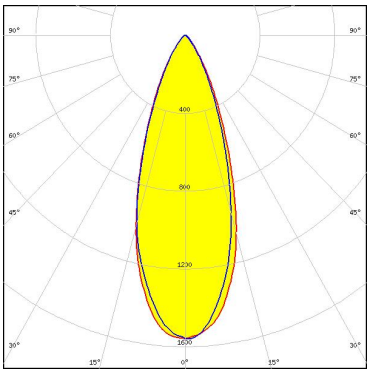


See also our general installation guide: www.ledil.com/installation_guide



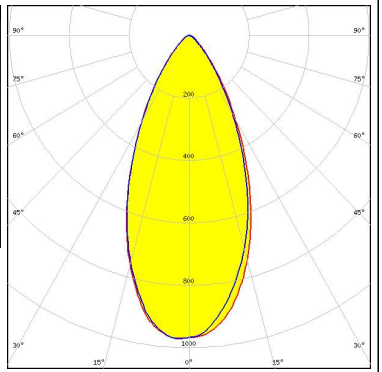




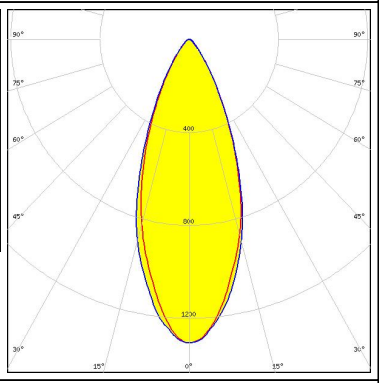

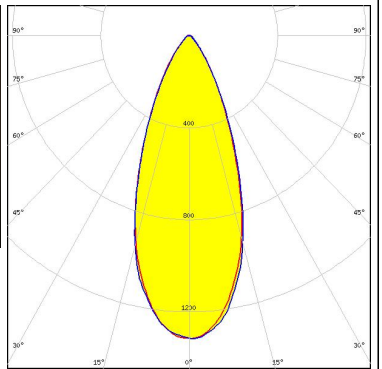
PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V4 HD</p> <p>FWHM / FWTM 23.0° / 48.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 3.3 cd/m</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 / FWTM 26.0° / 55.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity 2.6 cd/m</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 / FWTM 27.0° / 56.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 2.6 cd/m</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 / FWTM 33.0° / 65.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15859_HEKLA-SOCKET-I</p>		

PHOTOMETRIC DATA (MEASURED):

<p></p> <p>LED VERO13 FWHM / FWTM 43.0° / 82.0° Efficiency 75 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components: C16142_HEKLA-SOCKET-K</p>		
<p></p> <p>LED VERO18 FWHM / FWTM 59.0° / 101.0° Efficiency 73 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components: C16142_HEKLA-SOCKET-K</p>		
<p></p> <p>LED Vesta DTW 13mm (21W) FWHM / FWTM 49.0° / 89.0° Efficiency 72 % Peak intensity 0.9 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K Bender Wirth: 491 Typ L8</p>		
<p></p> <p>LED Vesta DTW 9mm (4W/6W/12W) FWHM / FWTM 37.0° / 68.0° Efficiency 79 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: C16142_HEKLA-SOCKET-K Bender Wirth: 490 Typ L8</p>		

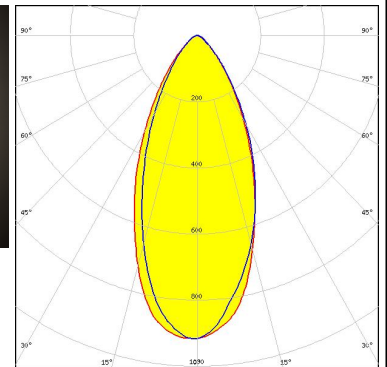
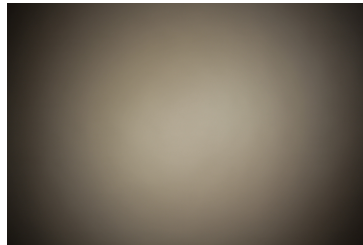
PHOTOMETRIC DATA (MEASURED):

<p></p> <p>LED Vesta TW 13mm (25W) CSP</p> <p>FWHM / FWTM 47.0° / 85.0°</p> <p>Efficiency 75 %</p> <p>Peak intensity 1 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></p> <p>LED Vesta TW 6mm DP</p> <p>FWHM / FWTM 31.0° / 61.0°</p> <p>Efficiency 76 %</p> <p>Peak intensity 2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K Bender Wirth: 504 Typ L8</p>		
<p></p> <p>LED Vesta TW 9mm (12W) CSP</p> <p>FWHM / FWTM 40.0° / 73.0°</p> <p>Efficiency 75 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K</p>		
<p>CITIZEN</p> <p>LED CLC020 Series (Dim-To-Warm)</p> <p>FWHM / FWTM 41.0° / 75.0°</p> <p>Efficiency 76 %</p> <p>Peak intensity 1.3 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):

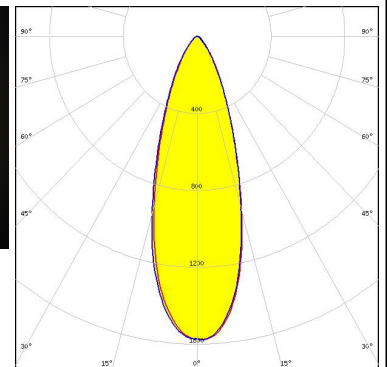
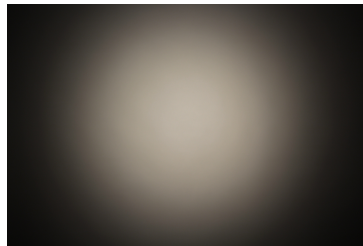
CITIZEN

LED CLC030 Series (Dim-To-Warm)
 FWHM / FWTM 47.0° / 90.0°
 Efficiency 73 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K



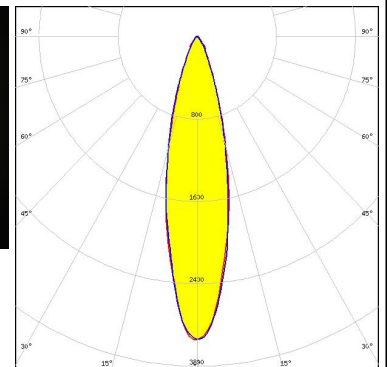
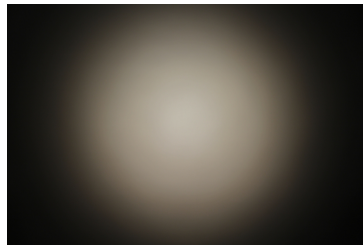
CITIZEN

LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 34.0° / 69.0°
 Efficiency 77 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



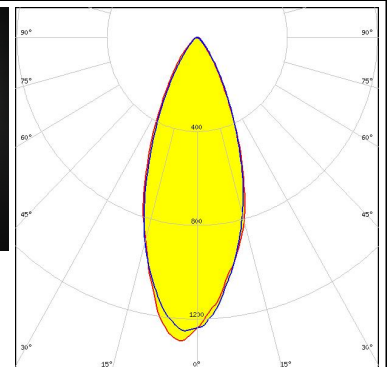
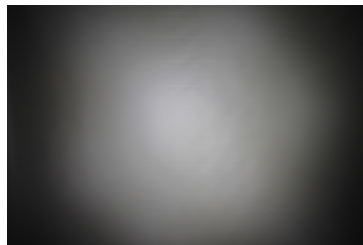
CITIZEN

LED CLU7A2 (LES 4.2mm)
 FWHM / FWTM 25.0° / 51.0°
 Efficiency 82 %
 Peak intensity 2.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C


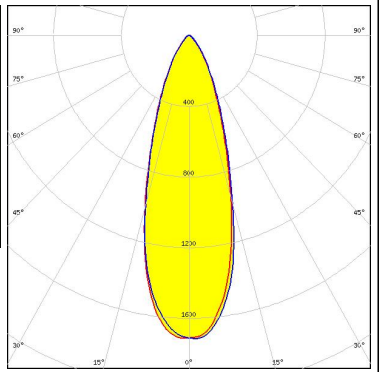

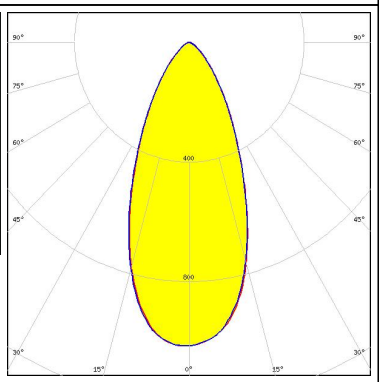

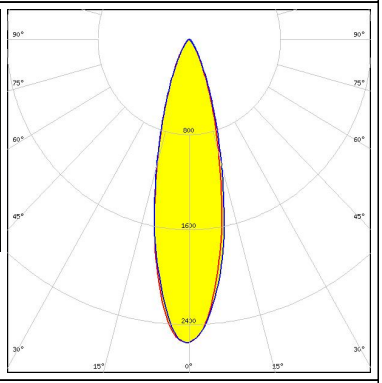




CITIZEN


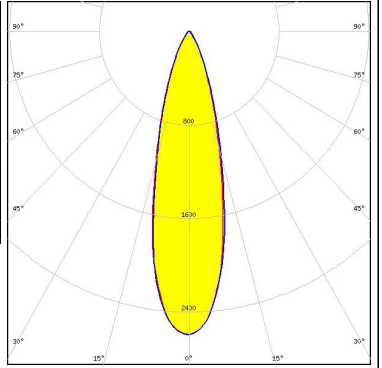

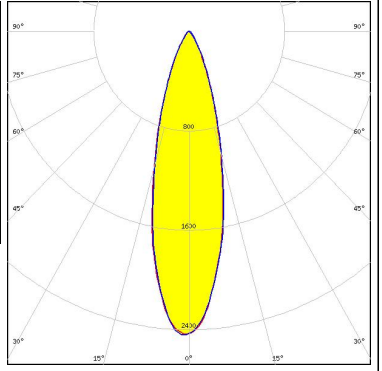
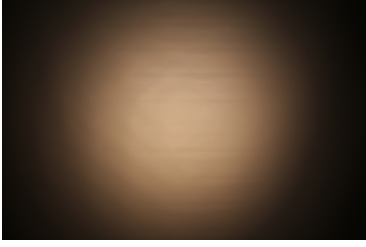
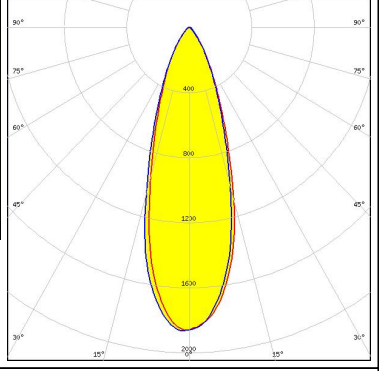
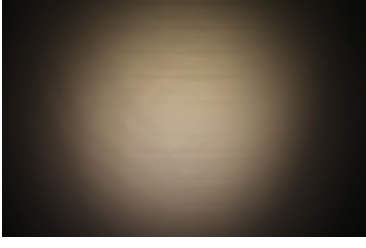
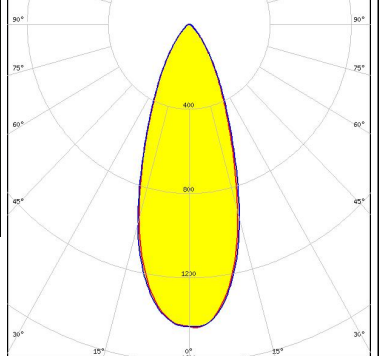
LED LCN-C01B (Tunable White)
 FWHM / FWTM 40.0° / 74.0°
 Efficiency 75 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 481 Typ L8




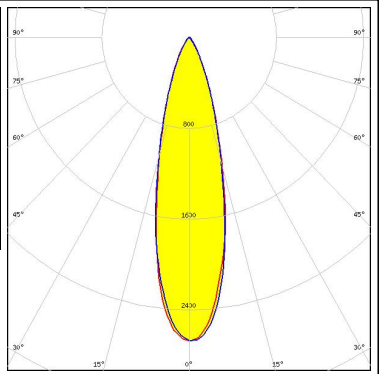
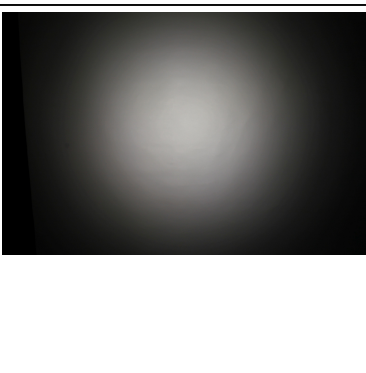
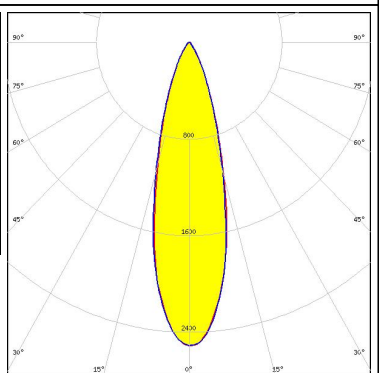

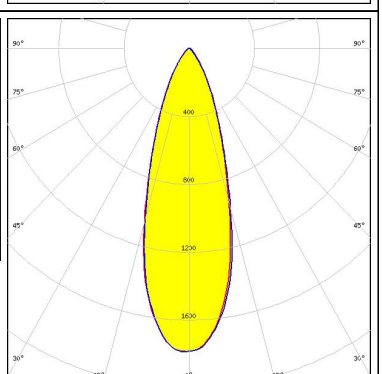

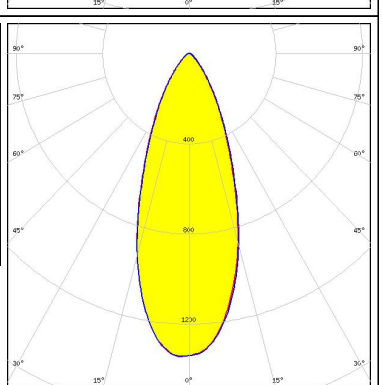
PHOTOMETRIC DATA (MEASURED):

<p>CREE LED</p> <p>LED CMT14xx FWHM / FWTM 33.0° / 69.0° Efficiency 81 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C</p>		
<p>CREE LED</p> <p>LED CMT19xx FWHM / FWTM 45.0 + ° / 87.0° Efficiency 77 % Peak intensity 1 cd/lm LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I</p>		
<p>CREE LED</p> <p>LED CXA/B 13xx FWHM / FWTM 27.0° / 55.0° Efficiency 81 % Peak intensity 2.6 cd/lm LEDs/each optic 1 Light colour White Required components: F15956_HEKLA-SOCKET-J</p>		
<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB L08 (Gen2) FWHM / FWTM 46.0° / 87.0° Efficiency 77 % Peak intensity 1 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla</p>		


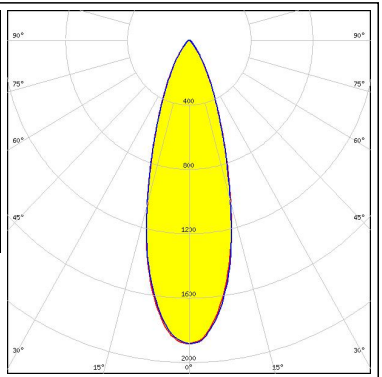

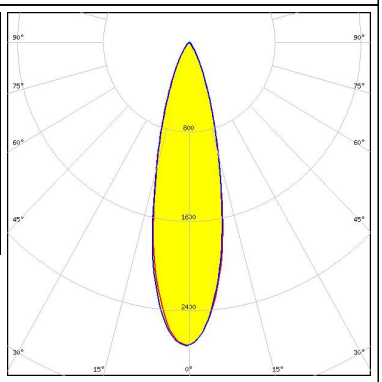
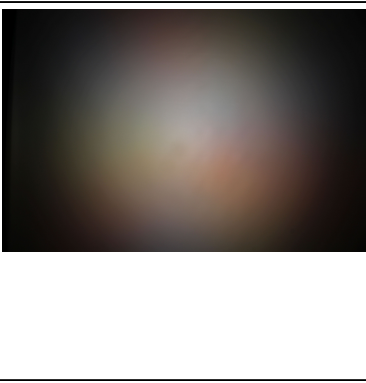
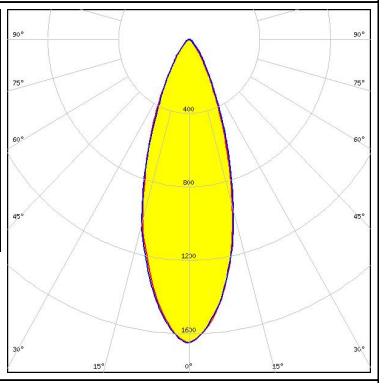

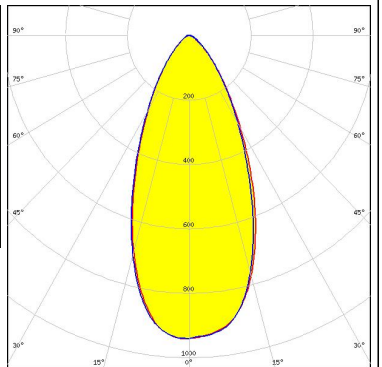
PHOTOMETRIC DATA (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1202HD</p> <p>FWHM / FWTM 27.0° / 55.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 2.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15848_HEKLA-SOCKET-G</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1202s</p> <p>FWHM / FWTM 27.0° / 57.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 2.4 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15848_HEKLA-SOCKET-G</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1204HD</p> <p>FWHM / FWTM 32.0° / 66.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15858_HEKLA-SOCKET-H</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1205HD</p> <p>FWHM / FWTM 38.0° / 75.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.4 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15858_HEKLA-SOCKET-H</p>		

PHOTOMETRIC DATA (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB - HD S01H4</p> <p>FWHM / FWTM 27.0° / 54.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 2.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 634c Lena</p>		
<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB - HD S01H6 / HD S02H6</p> <p>FWHM / FWTM 28.0° / 56.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 2.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 634c Hekla</p>		
<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB - HD S04H9</p> <p>FWHM / FWTM 33.0° / 67.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 634c Hekla</p>		
<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB L04 / L05 (Gen2)</p> <p>FWHM / FWTM 39.0° / 76.0°</p> <p>Efficiency 79 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 637a Hekla</p>		

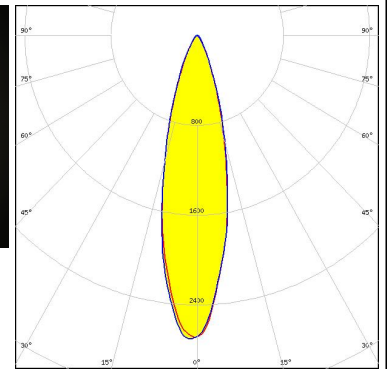
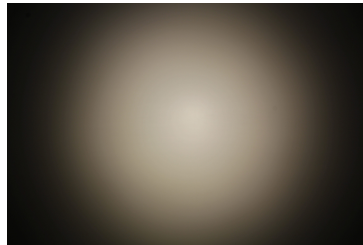
PHOTOMETRIC DATA (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB M02 / M03 (Gen2)</p> <p>FWHM / FWTM 32.0° / 65.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 641a Hekla</p>		
<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB S01 (Gen2)</p> <p>FWHM / FWTM 27.0° / 54.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 2.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 634c Hekla</p>		
<p>LUMILEDS</p> <p>LED LUXEON Fusion 12-up (20x24)</p> <p>FWHM / FWTM 35.0° / 67.0°</p> <p>Efficiency 77 %</p> <p>Peak intensity 1.6 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>LUMINUS</p> <p>LED CxM-14 (19x19)</p> <p>FWHM / FWTM 47.0° / 89.0°</p> <p>Efficiency 75 %</p> <p>Peak intensity 0.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15859_HEKLA-SOCKET-I</p>		

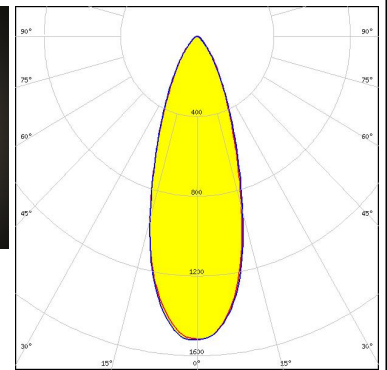
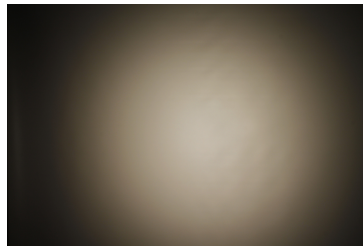
PHOTOMETRIC DATA (MEASURED):



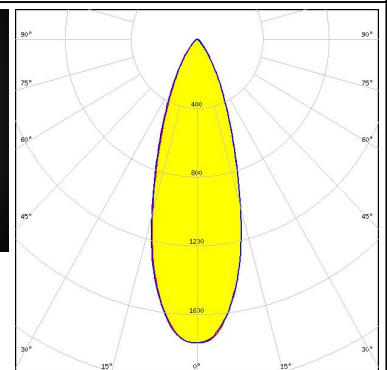
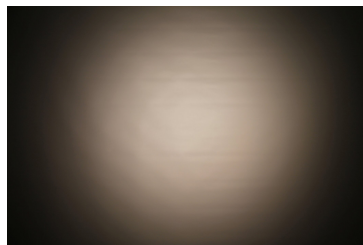
LED CXM-4
 FWHM / FWTM 26.0° / 53.0°
 Efficiency 79 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



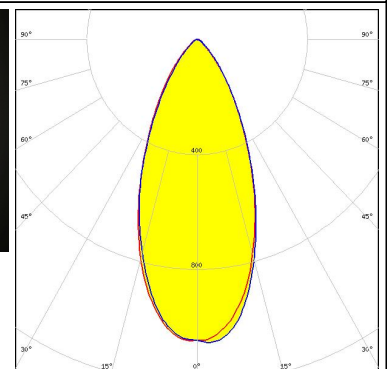
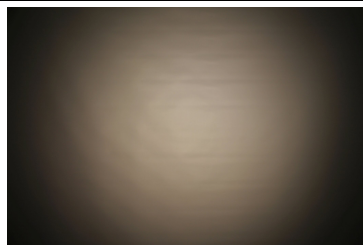
LED CxM-9 (13.5x13.5)
 FWHM / FWTM 35.0° / 72.0°
 Efficiency 78 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



LED Fortimo SLM L09 CoB
 FWHM / FWTM 34.0° / 67.0°
 Efficiency 82 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15858_HEKLA-SOCKET-H



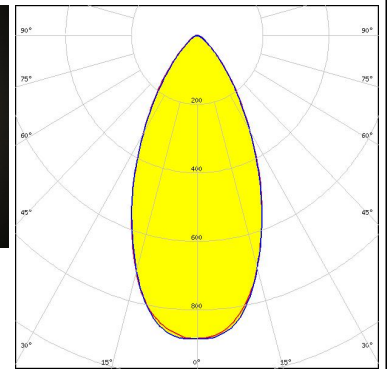
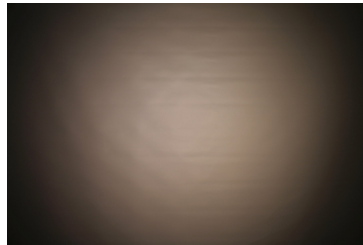
LED Fortimo SLM L13 CoB
 FWHM / FWTM 45.0° / 84.0°
 Efficiency 77 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 432 Typ L8



PHOTOMETRIC DATA (MEASURED):

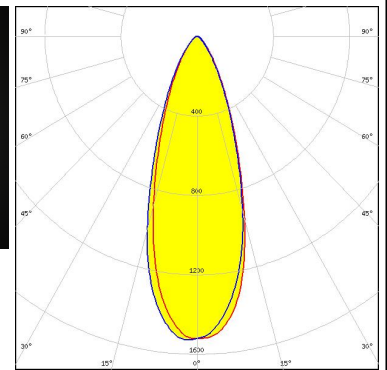
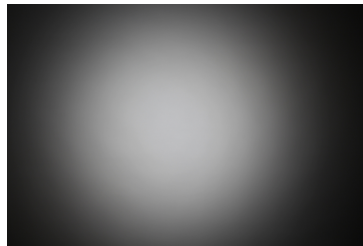
PHILIPS

LED Fortimo SLM L15 CoB
 FWHM / FWTM 50.0° / 91.0°
 Efficiency 76 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 499 Typ L8



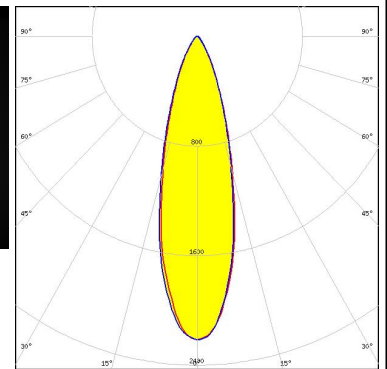
SAMSUNG

LED LC003D / LC006D / LC009D / LC013D
 FWHM / FWTM 35.0° / 71.0°
 Efficiency 79 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



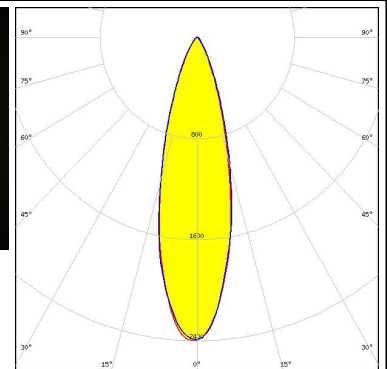
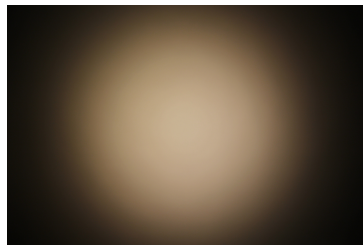
SAMSUNG

LED LC010C
 FWHM / FWTM 28.0° / 59.0°
 Efficiency 79 %
 Peak intensity 2.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15848_HEKLA-SOCKET-G



SAMSUNG

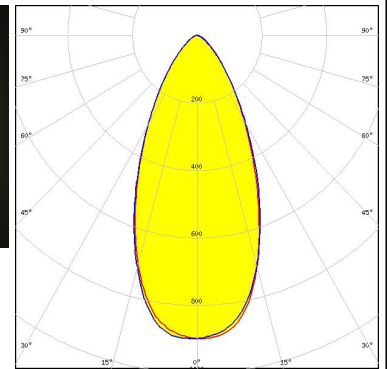
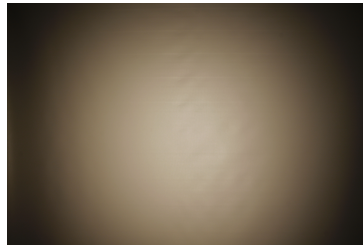
LED LC010C G2
 FWHM / FWTM 28.0° / 56.0°
 Efficiency 80 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



PHOTOMETRIC DATA (MEASURED):

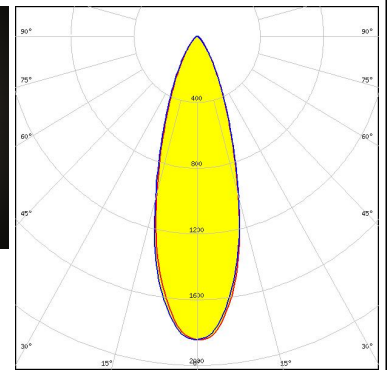
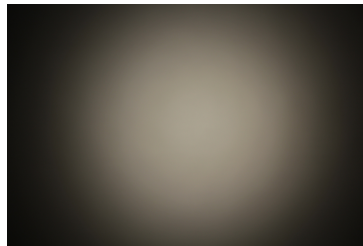
SAMSUNG

LED LC016D / LC019D / LC026D / LC033D
 FWHM / FWTM 48.0° / 91.0°
 Efficiency 75 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



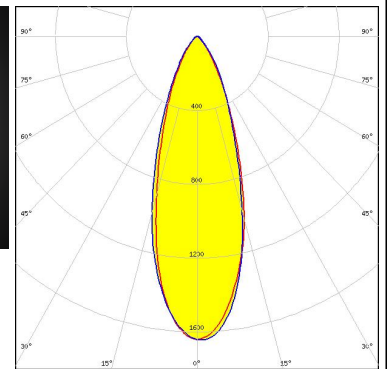
SAMSUNG

LED LC020C
 FWHM / FWTM 32.0° / 64.0°
 Efficiency 80 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



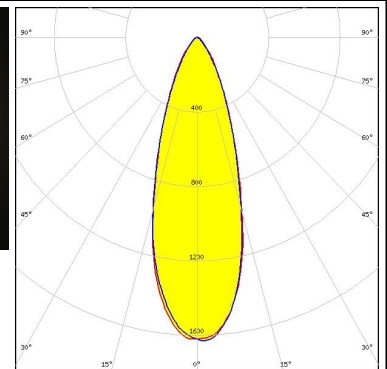
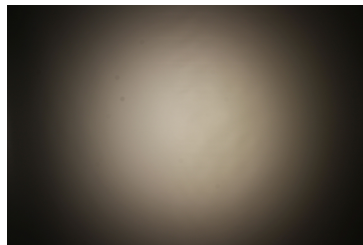
SAMSUNG

LED LC020C G2
 FWHM / FWTM 34.0° / 68.0°
 Efficiency 79 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



TRIDONIC

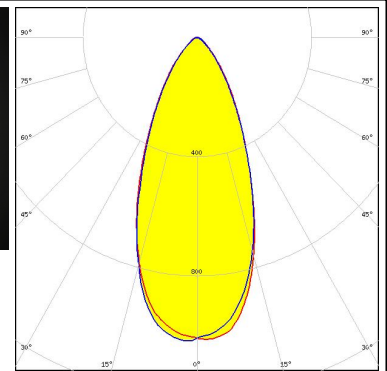
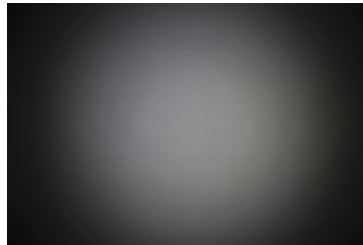
LED SLE G7 LES09
 FWHM / FWTM 34.0° / 69.0°
 Efficiency 78 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



PHOTOMETRIC DATA (MEASURED):

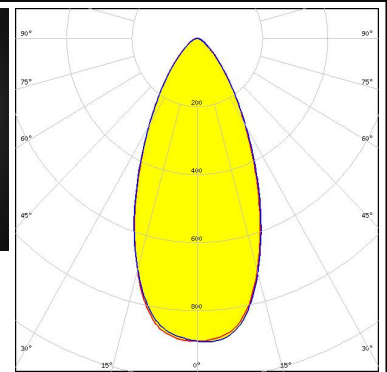
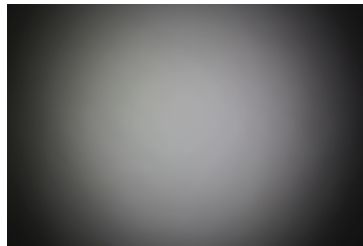
TRIDONIC

LED SLE G7 LES13
 FWHM / FWTM 45.0° / 86.0°
 Efficiency 75 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



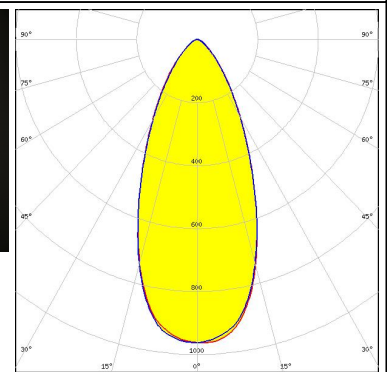
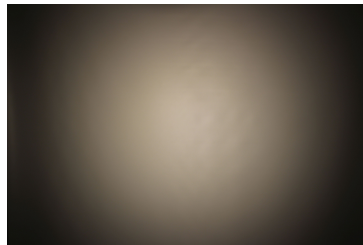
TRIDONIC

LED SLE G7 LES15
 FWHM / FWTM 48.0° / 91.0°
 Efficiency 75 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



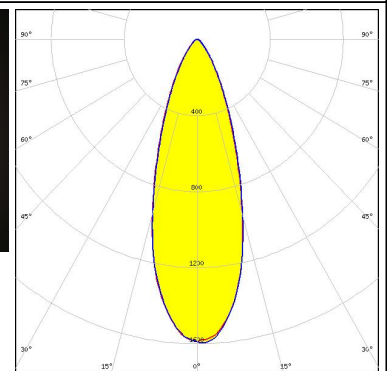
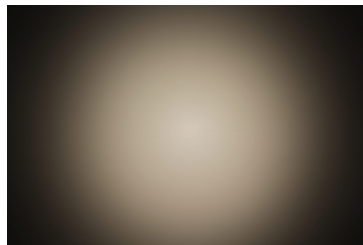
XICATO

LED XOB 14.5 mm
 FWHM / FWTM 45.0° / 88.0°
 Efficiency 75 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I


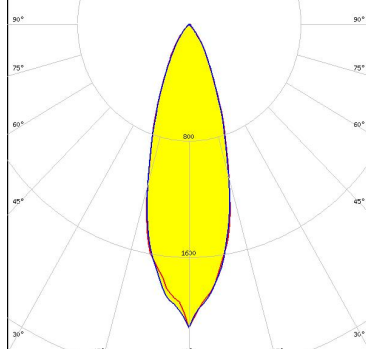
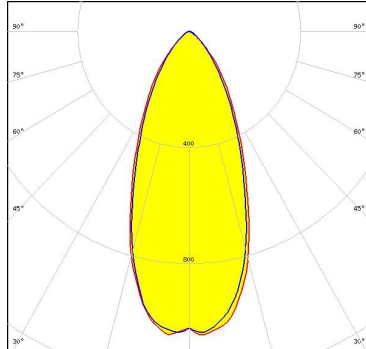

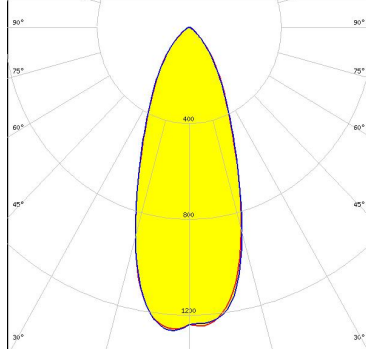

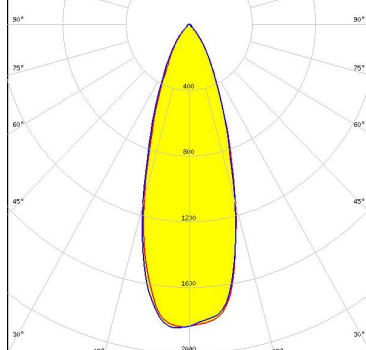


XICATO

LED XOB 9.8 mm
 FWHM / FWTM 35.0° / 69.0°
 Efficiency 78 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



PHOTOMETRIC DATA (SIMULATED):

<p> LED VERO10</p> <p>FWHM / FWTM 32.0° / 65.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 2.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15616_HEKLA-SOCKET-F</p>	
<p>CITIZEN</p> <p>LED CLL03x/CLU03x</p> <p>FWHM / FWTM 45.0° / 89.0°</p> <p>Efficiency 77 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15859_HEKLA-SOCKET-I</p>	
<p> LED</p> <p>LED CMA1825</p> <p>FWHM / FWTM 40.0° / 84.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15254_HEKLA-SOCKET-B</p>	
<p> LED</p> <p>LED CXA/B 15xx</p> <p>FWHM / FWTM 24.0° / 68.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 1.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15256_HEKLA-SOCKET-D</p>	

PHOTOMETRIC DATA (SIMULATED):

<p>CREE LED</p> <p>LED: CXA/B 15xx FWHM / FWTM: 30.0° / 61.0° Efficiency: 83 % Peak intensity: 2.4 cd/lm LEDs/each optic: 1 Light colour: White Required components: F15256_HEKLA-SOCKET-D</p>	
<p>CREE LED</p> <p>LED: CXA/B 1816 & CXA/B 1820 & CXA 1850 FWHM / FWTM: 36.0° / 84.0° Efficiency: 81 % Peak intensity: 1.4 cd/lm LEDs/each optic: 1 Light colour: White Required components: F15254_HEKLA-SOCKET-B</p>	
<p>NICHIA</p> <p>LED: NFSWE11A FWHM / FWTM: 37.0° / 63.0° Efficiency: 72 % Peak intensity: 1.6 cd/lm LEDs/each optic: 30 Light colour: White Required components:</p>	
<p>SEOUL SEMICONDUCTOR</p> <p>LED: MJT COB LES 14.5 FWHM / FWTM: 48.0° / 95.0 + 96.0° Efficiency: 78 % Peak intensity: 0.9 cd/lm LEDs/each optic: 1 Light colour: White Required components: F15859_HEKLA-SOCKET-I</p>	

PHOTOMETRIC DATA (SIMULATED):

	
SEOUL SEMICONDUCTOR	
LED	MJT COB LES 9.8
FWHM / FWTM	36.0° / 73.0°
Efficiency	82 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
F15255_HEKLA-SOCKET-C	



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)