

WINNIE-O-C

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

SPECIFICATION:

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



MATERIALS:

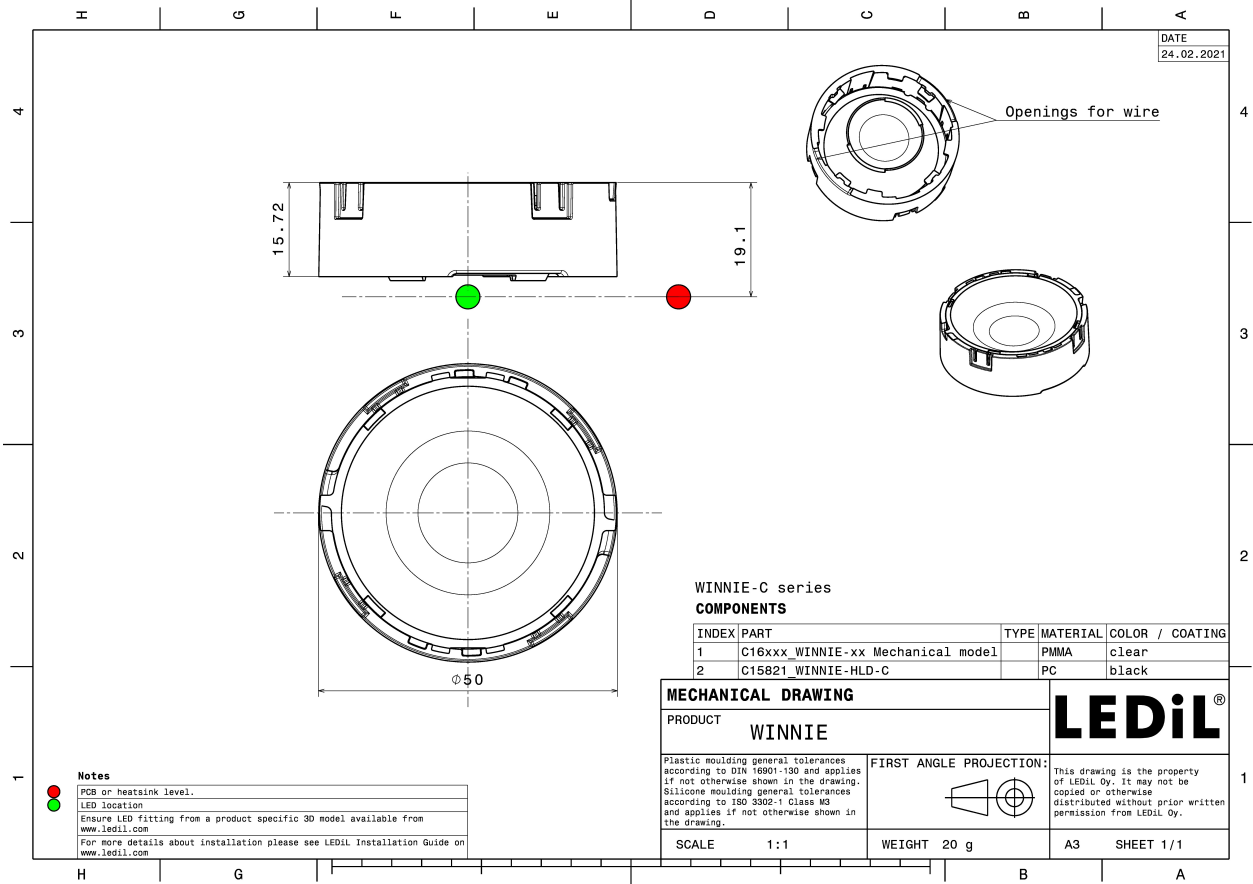
Component	Type	Material	Colour	Finish
C14760_WINNIE-O	Single lens	PMMA	clear	
C15821_WINNIE-HLD-C	Holder	PC	black	

ORDERING INFORMATION:

Quantities for one set:

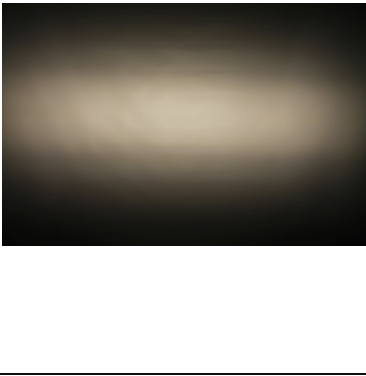
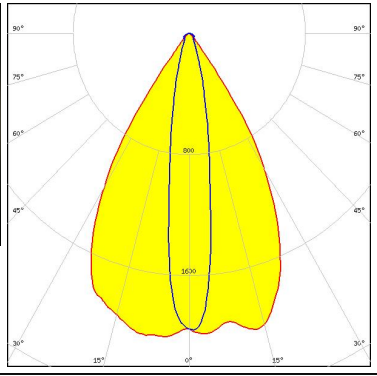

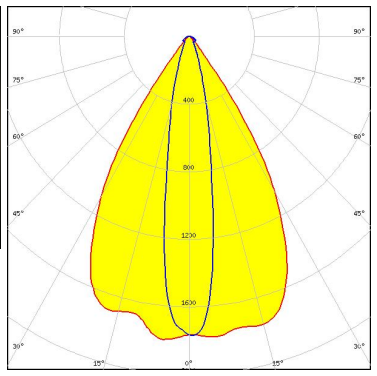

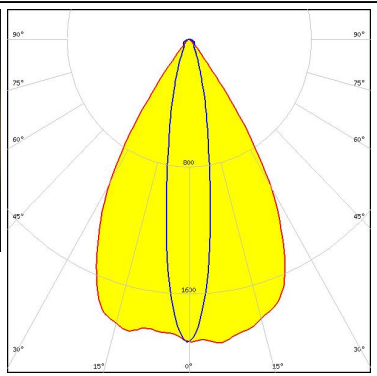

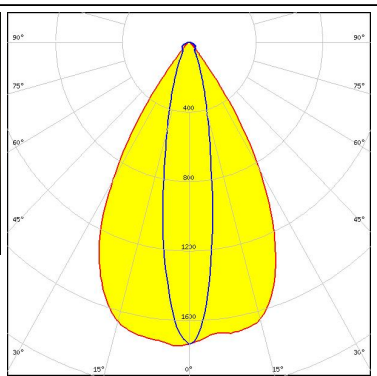
Single lens	1
Holder	1

Component		Qty in box	MOQ	MPQ	Box weight (kg)
C14760_WINNIE-O	Single lens	364	84	28	7.0
» Box size: 480 x 280 x 300 mm					
C15821_WINNIE-HLD-C	Holder	420		28	4.1
» Box size: 400 x 300 x 300 mm					



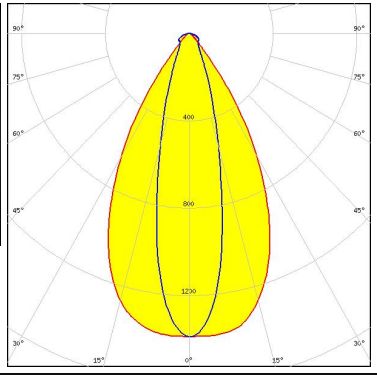


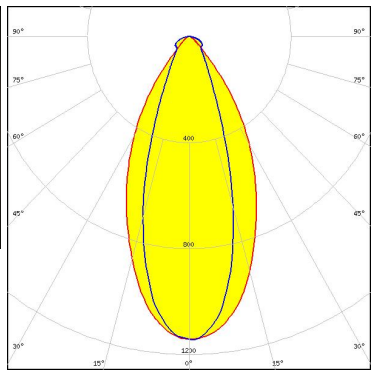


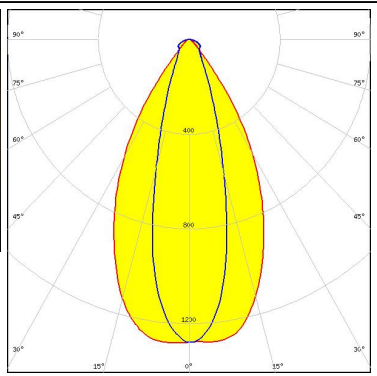


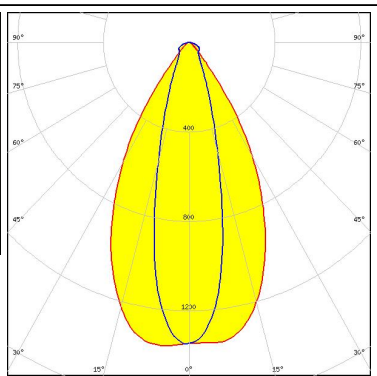


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

<p>bridgelux.</p> <p>LED V4 HD Gen 7</p> <p>FWHM / FWTM 62.0 + 16.0° / 77.0 + 40.0°</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 / FWTM 64.0 + 18.0° / 79.0 + 43.0°</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 Gen 7</p> <p>FWHM / FWTM 62.0 + 17.0° / 78.0 + 43.0°</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 Gen7</p> <p>FWHM / FWTM 60.0 + 19.0° / 79.0 + 48.0°</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>		

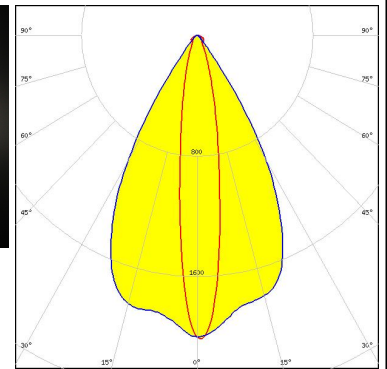
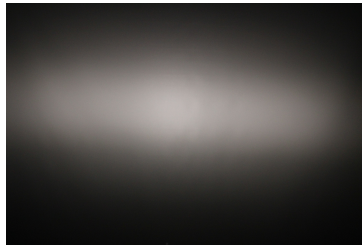
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED VERO13</p> <p>FWHM / FWTM 58.0 + 25.0° / 82.0 + 56.0°</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></p> <p>LED VERO18</p> <p>FWHM / FWTM 52.0 + 34.0° / 85.0 + 69.0°</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></p> <p>LED Vesta DTW 13mm (21W)</p> <p>FWHM / FWTM 56.0 + 28.0° / 82.0 + 59.0°</p> <p>Efficiency 79 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components: C16142_HEKLA-SOCKET-K Bender Wirth: 491 Typ L8</p>		
<p></p> <p>LED Vesta TW 13mm (25W) CSP</p> <p>FWHM / FWTM 57.0 + 26.0° / 81.0 + 57.0°</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>		

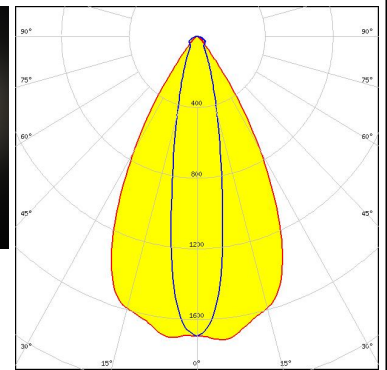
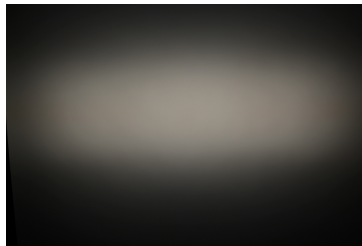
OPTICAL RESULTS (MEASURED):



LED Vesta TW 6mm DP
 FWHM / FWTM 59.0 + 16.0° / 77.0 + 42.0°
 Efficiency 80 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 504 Typ L8

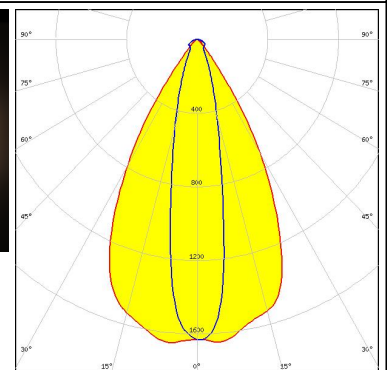
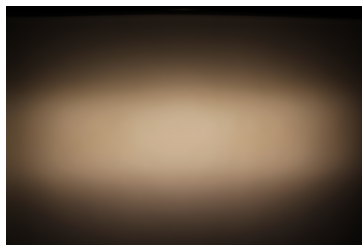


LED Vesta TW 9mm (12W) CSP
 FWHM / FWTM 57.0 + 20.0° / 78.0 + 49.0°
 Efficiency 81 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K



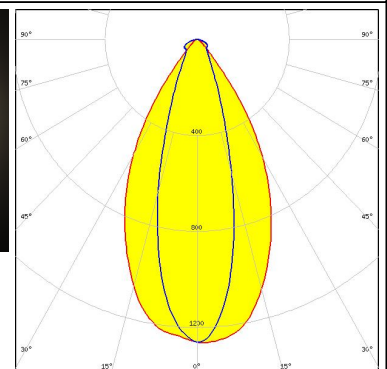
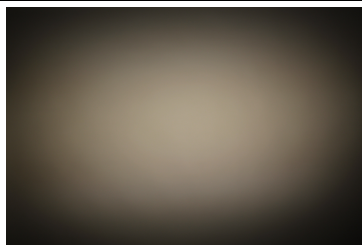
CITIZEN

LED CLC020 Series (Dim-To-Warm)
 FWHM / FWTM 58.0 + 20.0° / 78.0 + 49.0°
 Efficiency 81 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K



CITIZEN

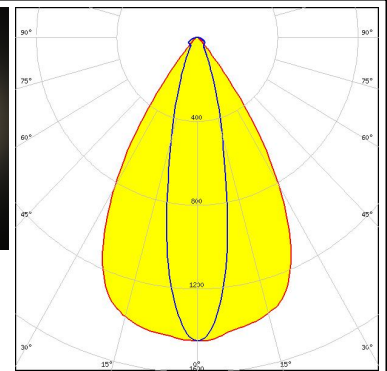
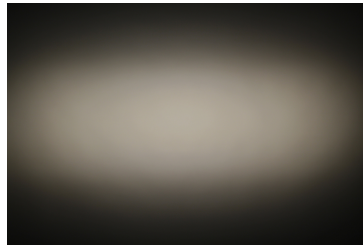
LED CLC030 Series (Dim-To-Warm)
 FWHM / FWTM 56.0 + 30.0° / 83.0 + 61.0°
 Efficiency 79 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K



OPTICAL RESULTS (MEASURED):

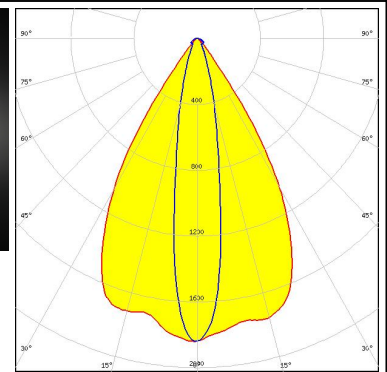
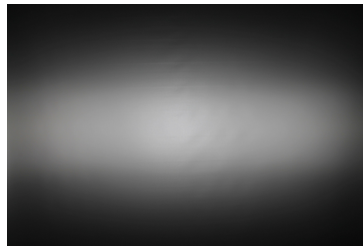
CITIZEN

LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 63.0 + 23.0° / 81.0 + 52.0°
 Efficiency 80 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



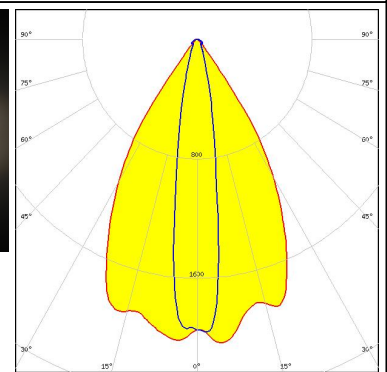
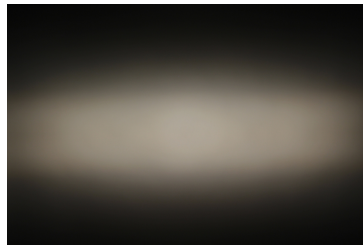
CITIZEN

LED CLU700/701/702/703
 FWHM / FWTM 63.0 + 18.0° / 79.0 + 43.0°
 Efficiency 82 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



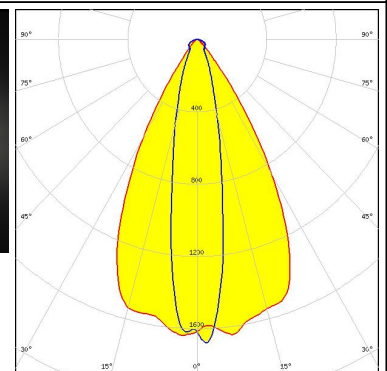
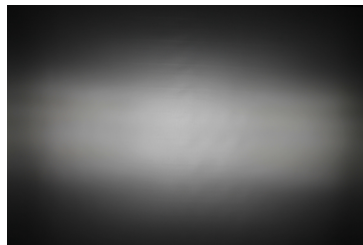
CITIZEN

LED CLU7A2/7A3
 FWHM / FWTM 62.0 + 17.0° / 78.0 + 37.0°
 Efficiency 83 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



CITIZEN

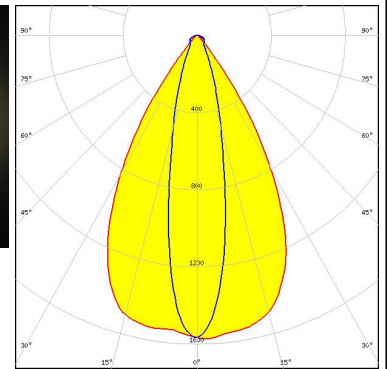
LED LCN-C01B (Tunable White)
 FWHM / FWTM 58.0 + 20.0° / 77.0 + 50.0°
 Efficiency 81 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 481 Typ L8



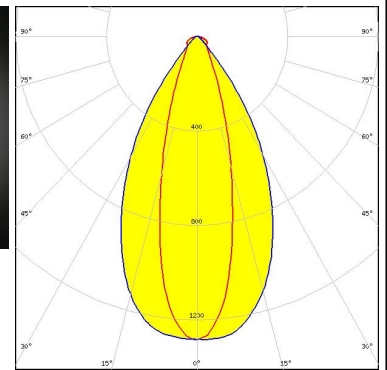
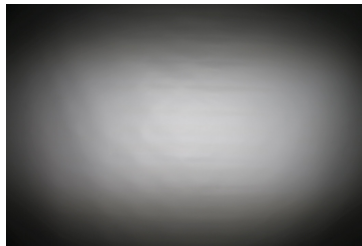
OPTICAL RESULTS (MEASURED):



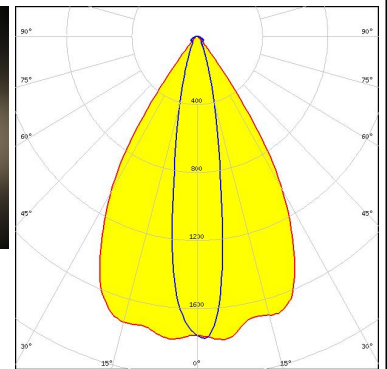
LED CMT14xx
 FWHM / FWTM 61.0 + 22.0° / 81.0 + 52.0°
 Efficiency 83 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



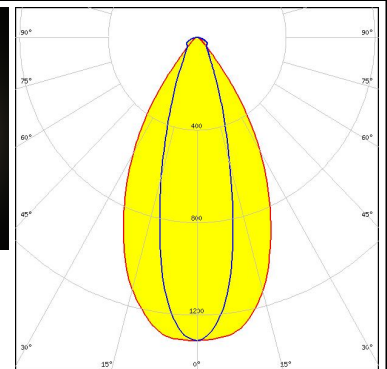
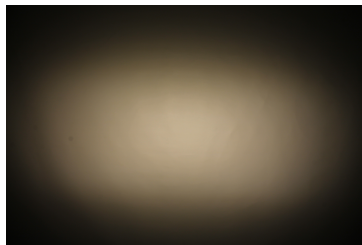
LED CMT19xx
 FWHM / FWTM 57.0 + 28.5° / 84.0 + 61.0°
 Efficiency 81 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



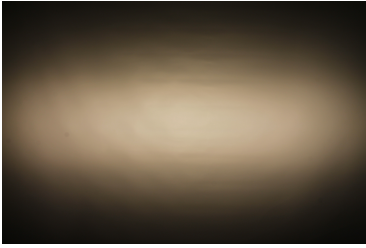
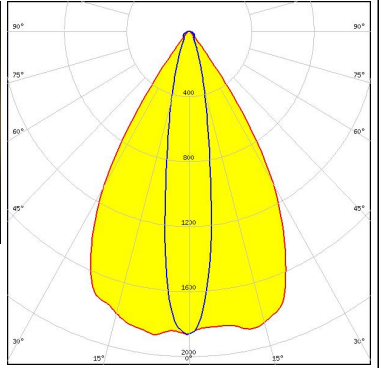
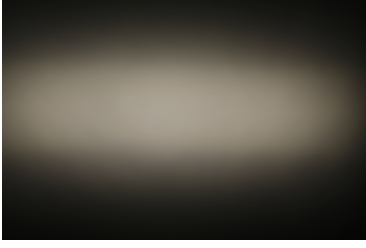
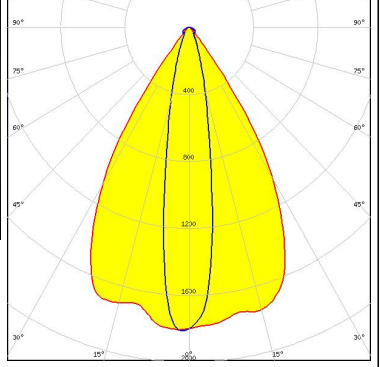
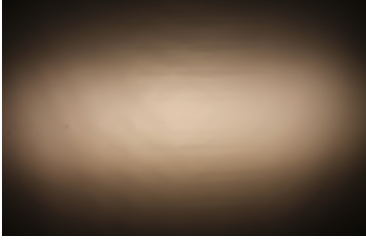
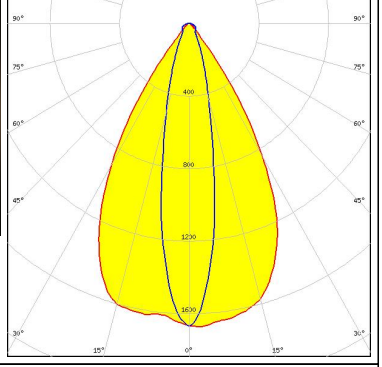
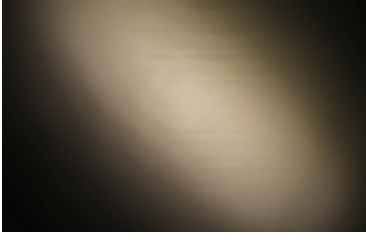
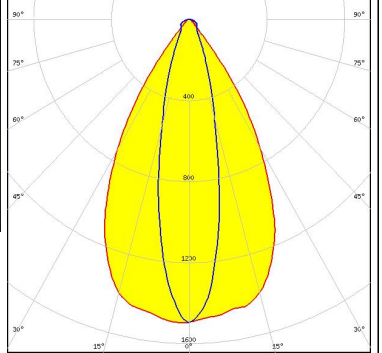
LED CXA/B 13xx
 FWHM / FWTM 64.0 + 19.0° / 79.0 + 43.0°
 Efficiency 83 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15956_HEKLA-SOCKET-J




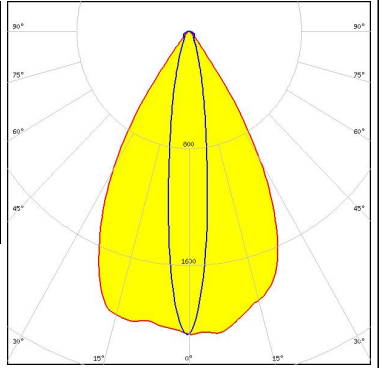

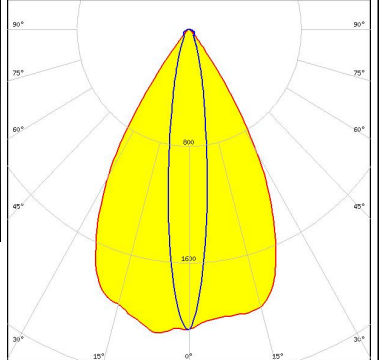
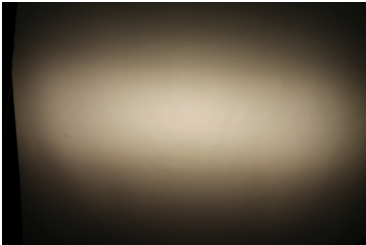
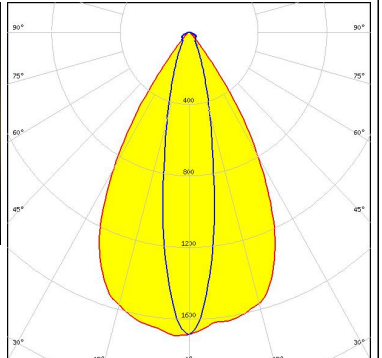
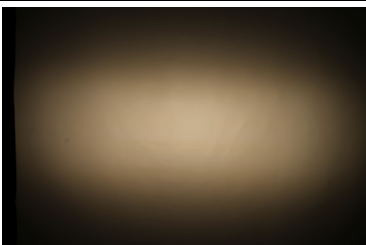
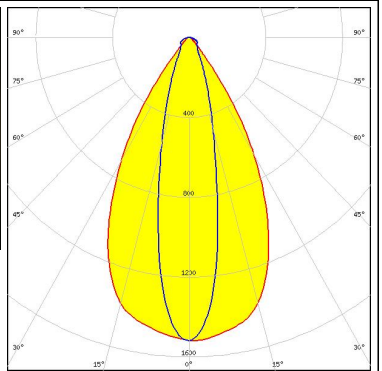
LED LUXEON CX Plus CoB L08 (Gen2)
 FWHM / FWTM 56.0 + 28.0° / 83.0 + 61.0°
 Efficiency 82 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 Bender Wirth: 637a Hekla




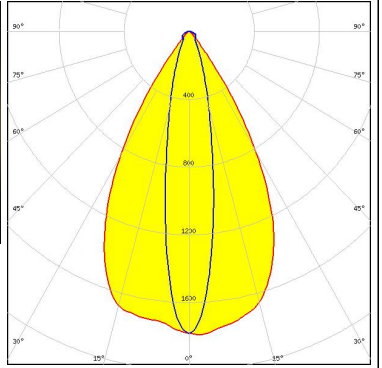

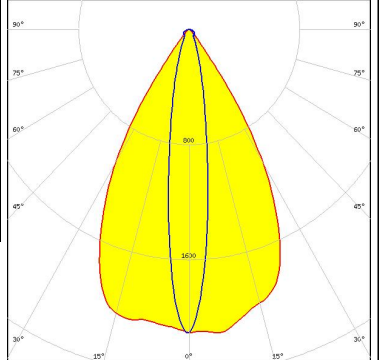

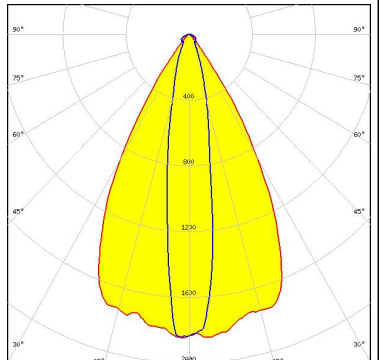
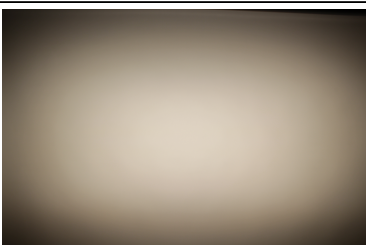
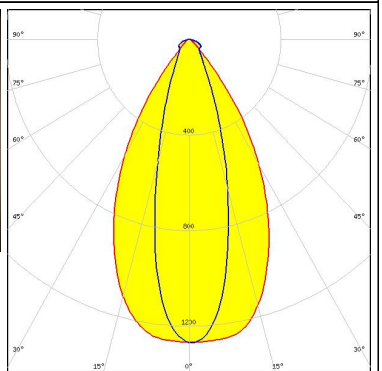
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1202HD</p> <p>FWHM / FWTM 63.0 + 18.0° / 78.0 + 43.0°</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: F15848_HEKLA-SOCKET-G</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1202s</p> <p>FWHM / FWTM 64.0 + 18.0° / 79.0 + 43.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.8 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 61.0 + 21.0° / 80.0 + 49.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.7 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 59.0 + 24.0° / 81.0 + 54.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.5 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15858_HEKLA-SOCKET-H</p>		

OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB - HD S01H4</p> <p>FWHM / FWTM 61.0 + 16.0° / 77.0 + 40.0°</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: Bender Wirth: 634c Hekla</p>		
<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB - HD S02H6</p> <p>FWHM / FWTM 61.0 + 16.0° / 77.0 + 41.0°</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: Bender Wirth: 634c Hekla</p>		
<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB - HD S04H9</p> <p>FWHM / FWTM 60.0 + 20.0° / 80.0 + 50.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.7 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 CX Plus CoB L04 / L05 (Gen2)</p> <p>FWHM / FWTM 58.0 + 23.0° / 81.0 + 54.0°</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: Bender Wirth: 637a Hekla</p>		

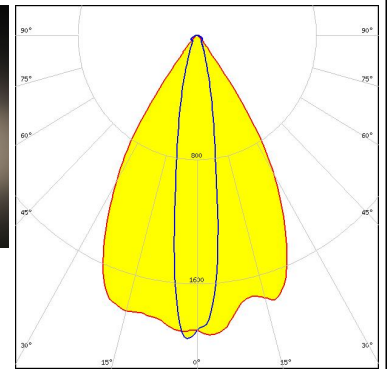
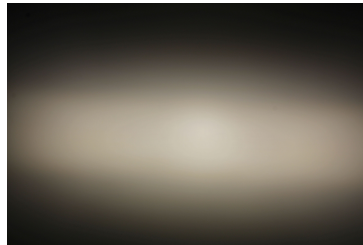
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB M02 / M03 (Gen2)</p> <p>FWHM / FWTM 58.0 + 19.0° / 78.0 + 48.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.8 cd/m</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 60.0 + 16.0° / 77.0 + 40.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 2.1 cd/m</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 59.0 + 17.0° / 77.0 + 45.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.9 cd/m</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 58.0 + 29.0° / 84.0 + 60.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15859_HEKLA-SOCKET-I</p>		

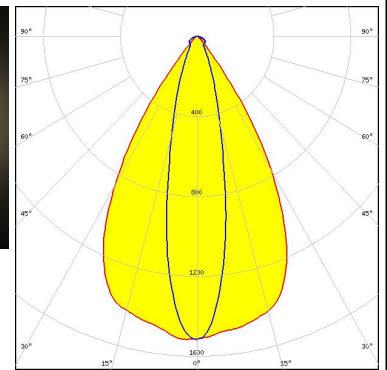
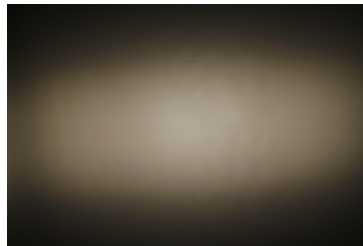
OPTICAL RESULTS (MEASURED):



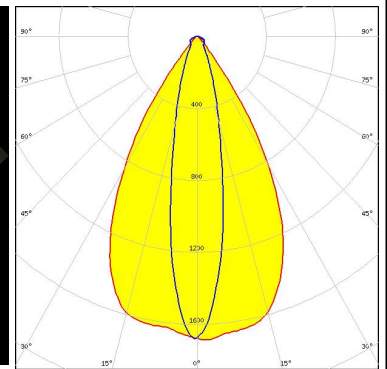
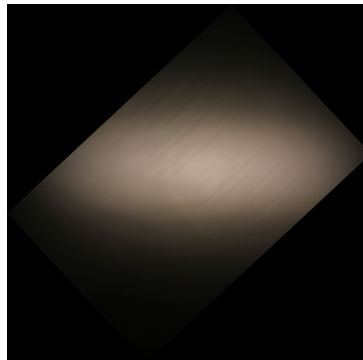
LED CXM-4
 FWHM / FWTM 62.0 + 16.0° / 78.0 + 39.0°
 Efficiency 82 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



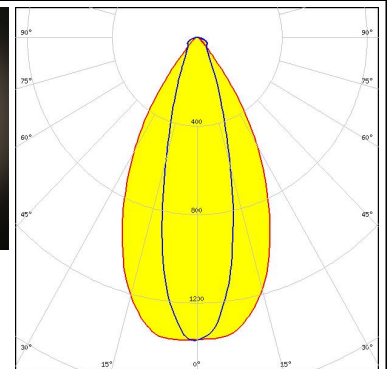
LED CxM-9 (13.5x13.5)
 FWHM / FWTM 62.0 + 23.0° / 81.0 + 52.0°
 Efficiency 82 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



LED Fortimo SLM L09 CoB
 FWHM / FWTM 60.0 + 20.0° / 80.0 + 50.0°
 Efficiency 83 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15858_HEKLA-SOCKET-H



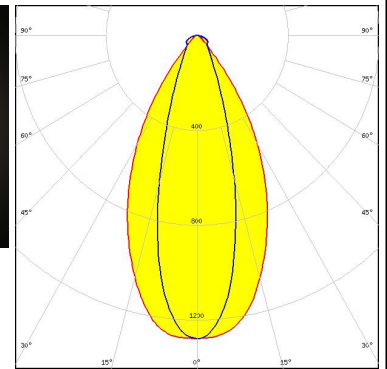
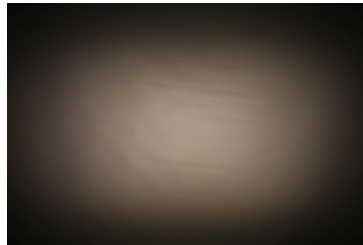
LED Fortimo SLM L13 CoB
 FWHM / FWTM 27.0 + 55.0° / 58.0 + 81.0°
 Efficiency 81 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 432 Typ L8



OPTICAL RESULTS (MEASURED):

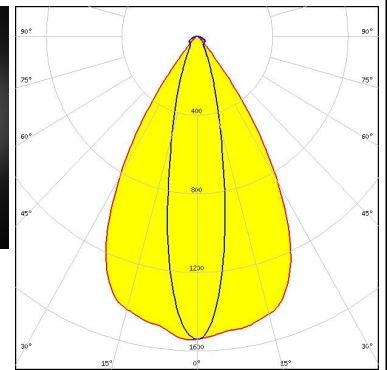
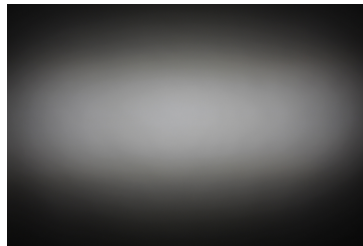
PHILIPS

LED Fortimo SLM L15 CoB
 FWHM / FWTM 54.0 + 30.0° / 83.0 + 63.0°
 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



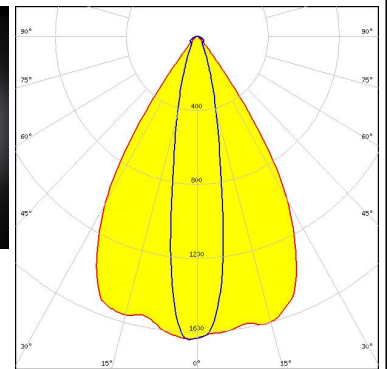
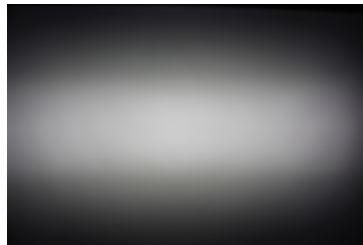
SAMSUNG

LED LC003D / LC006D / LC009D / LC013D
 FWHM / FWTM 62.0 + 22.0° / 81.0 + 51.0°
 Efficiency 82 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



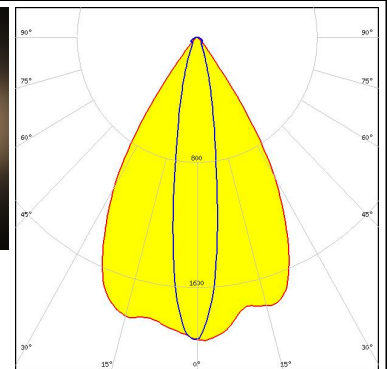
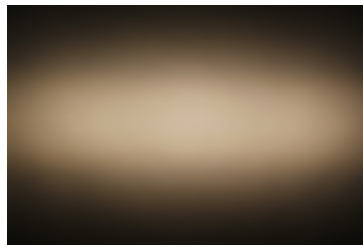
SAMSUNG

LED LC010C
 FWHM / FWTM 65.0 + 20.0° / 80.0 + 46.0°
 Efficiency 81 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15848_HEKLA-SOCKET-G



SAMSUNG

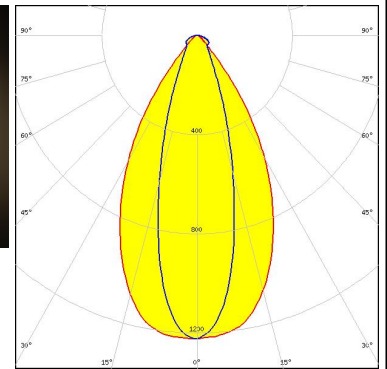
LED LC010C G2
 FWHM / FWTM 62.0 + 17.0° / 78.0 + 41.0°
 Efficiency 82 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



OPTICAL RESULTS (MEASURED):

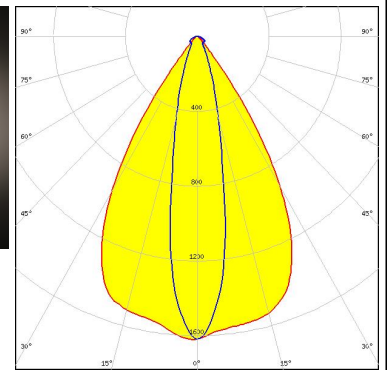
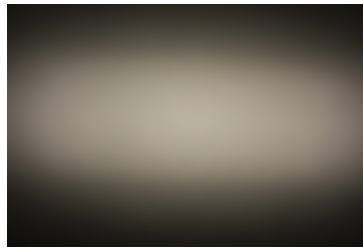
SAMSUNG

LED LC016D / LC019D / LC026D / LC033D
 FWHM / FWTM 58.0 + 29.0° / 85.0 + 62.0°
 Efficiency 80 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



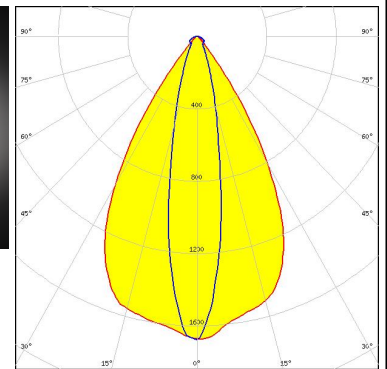
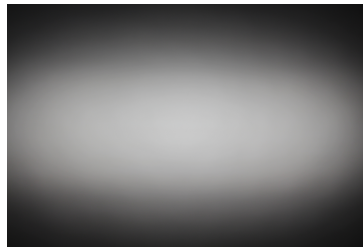
SAMSUNG

LED LC020C
 FWHM / FWTM 63.0 + 21.0° / 81.0 + 48.0°
 Efficiency 82 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15848_HEKLA-SOCKET-G



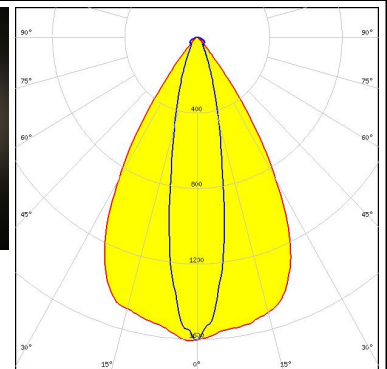
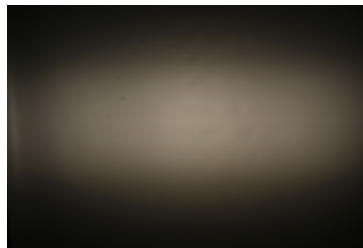
SAMSUNG

LED LC020C G2
 FWHM / FWTM 61.0 + 20.0° / 81.0 + 47.0°
 Efficiency 82 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



TRIDONIC

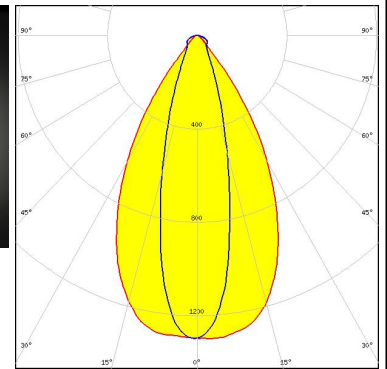
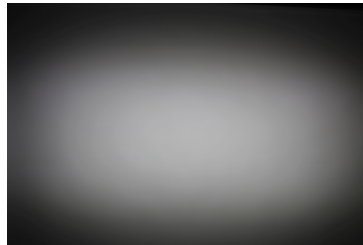
LED SLE G7 LES09
 FWHM / FWTM 62.0 + 21.0° / 81.0 + 49.0°
 Efficiency 82 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



OPTICAL RESULTS (MEASURED):

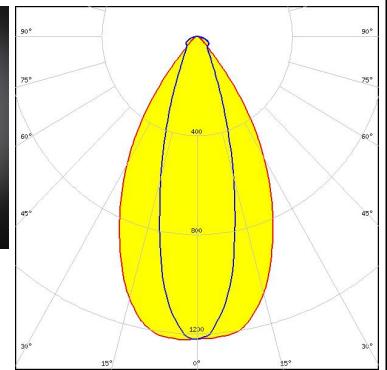
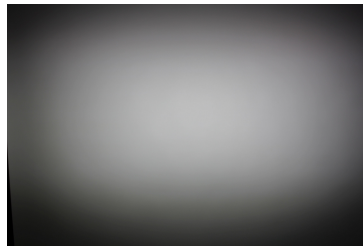
TRIDONIC

LED SLE G7 LES13
 FWHM / FWTM 59.0 + 27.0° / 83.0 + 58.0°
 Efficiency 80 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



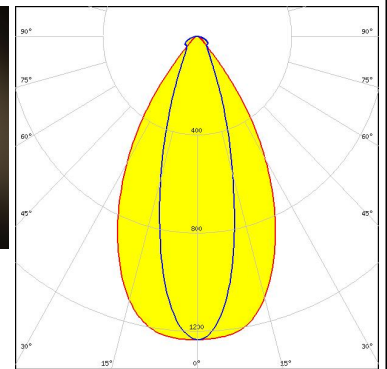
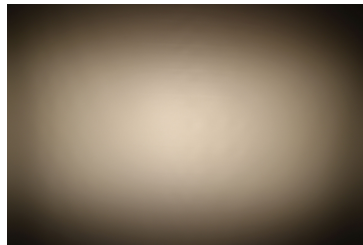
TRIDONIC

LED SLE G7 LES15
 FWHM / FWTM 58.0 + 29.0° / 85.0 + 62.0°
 Efficiency 80 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



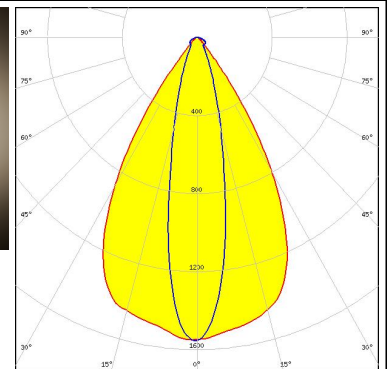
XICATO

LED XOB 14.5 mm
 FWHM / FWTM 58.0 + 29.0° / 84.0 + 61.0°
 Efficiency 80 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I


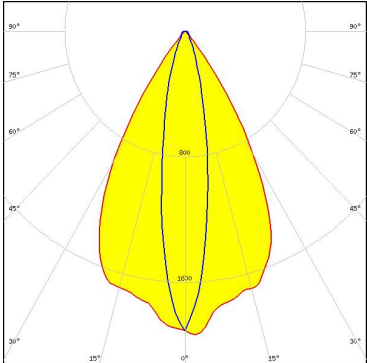
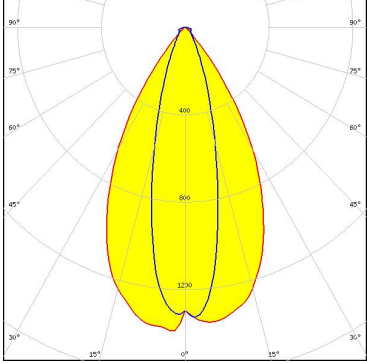
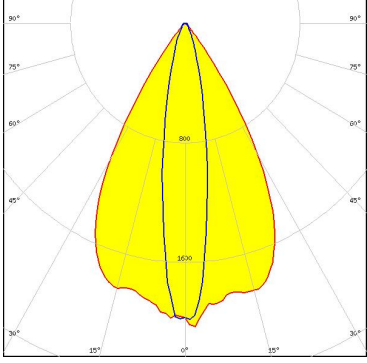

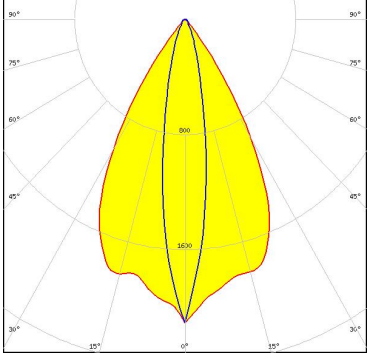


XICATO

LED XOB 9.8 mm
 FWHM / FWTM 62.0 + 22.0° / 81.0 + 51.0°
 Efficiency 82 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



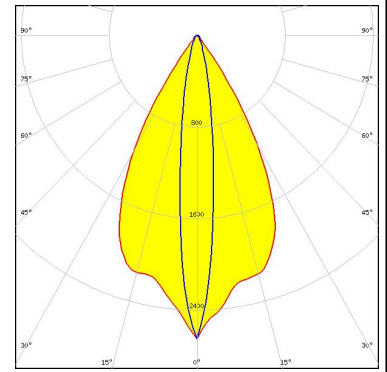
OPTICAL RESULTS (SIMULATED):

<p> LED VERO10 FWHM / FWTM 59.0 + 18.0° / 78.0 + 45.0° Efficiency 83 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components: F15616_HEKLA-SOCKET-F</p>	
<p>CITIZEN LED CLL03x/CLU03x FWHM / FWTM 58.0 + 26.0° / 82.0 + 57.0° Efficiency 77 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I</p>	
<p>CITIZEN LED CLU710/711 FWHM / FWTM 61.0 + 18.0° / 78.0 + 42.0° Efficiency 83 % Peak intensity 2.1 cd/lm LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I</p>	
<p> LED CXA/B 15xx FWHM / FWTM 59.0 + 17.0° / 79.0 + 42.0° Efficiency 84 % Peak intensity 2.1 cd/lm LEDs/each optic 1 Light colour White Required components: F15256_HEKLA-SOCKET-D</p>	

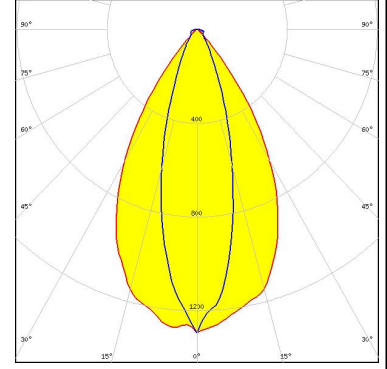
OPTICAL RESULTS (SIMULATED):



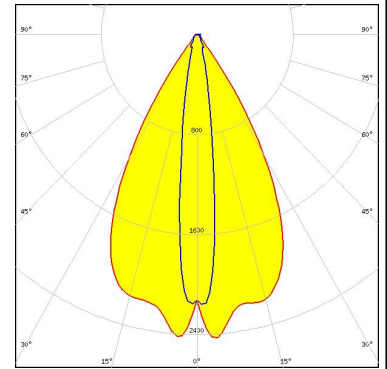
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 56.0 + 13.0° / 75.0 + 35.0°
 Efficiency 86 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15254_HEKLA-SOCKET-B



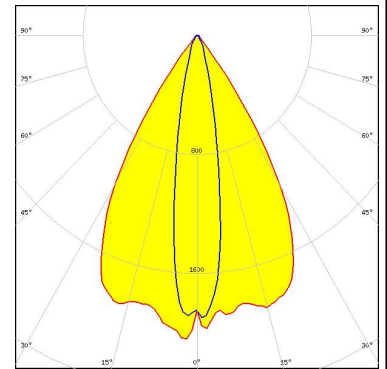
LED CXA/B 1830
 FWHM / FWTM 60.0 + 28.0° / 84.0 + 60.0°
 Efficiency 79 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 457 Typ L8



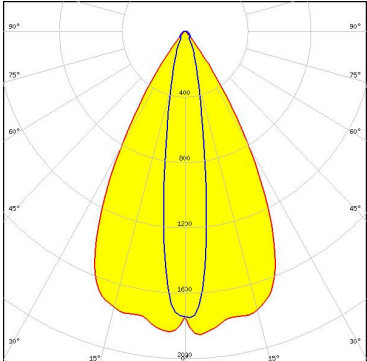
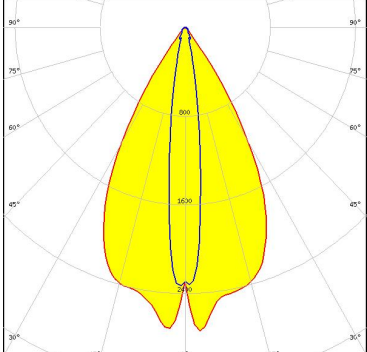
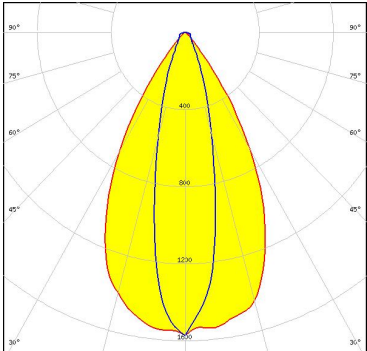
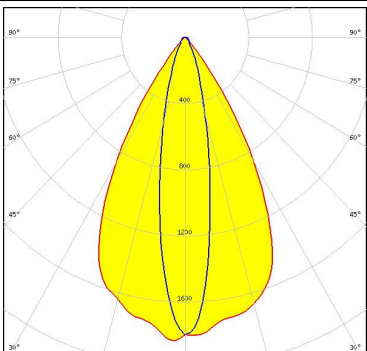
LED XP-G3
 FWHM / FWTM 58.0 + 14.0° / 76.0 + 32.0°
 Efficiency 84 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F17438_HEKLA-G2-I




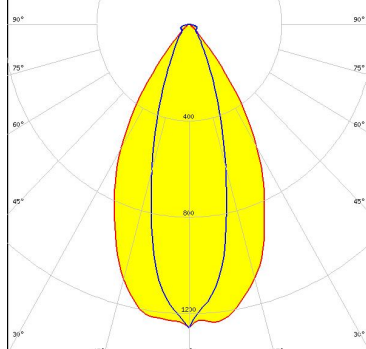

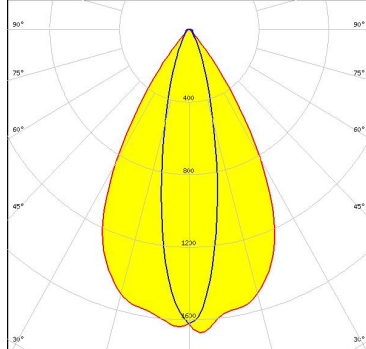
LED COB T-Type
 FWHM / FWTM 62.0 + 18.0° / 78.0 + 38.0°
 Efficiency 83 %
 Peak intensity 2.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15848_HEKLA-SOCKET-G



OPTICAL RESULTS (SIMULATED):

<p>NICHIA</p> <p>LED NFSWE11A FWHM / FWTM 58.0 + 18.0° / 76.0 + 42.0° Efficiency 74 % Peak intensity 1.9 cd/lm LEDs/each optic 30 Light colour White Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSLOM Square CSSRM2/CSSRM3 FWHM / FWTM 58.0 + 14.0° / 74.0 + 30.0° Efficiency 86 % Peak intensity 2.7 cd/lm LEDs/each optic 1 Light colour White Required components: F17438_HEKLA-G2-I</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S13 19x19 FWHM / FWTM 57.0 + 24.0° / 81.0 + 54.0° Efficiency 83 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED Soleriq S9 FWHM / FWTM 59.0 + 20.0° / 80.0 + 48.0° Efficiency 85 % Peak intensity 1.8 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C</p>	

OPTICAL RESULTS (SIMULATED):

<p> SEUL SEMICONDUCTOR</p> <p>LED MJT COB LES 14.5</p> <p>FWHM / FWTM 58.0 + 30.0° / 84.0 + 62.0°</p> <p>Efficiency 80 %</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> SEUL SEMICONDUCTOR</p> <p>LED MJT COB LES 9.8</p> <p>FWHM / FWTM 60.0 + 22.0° / 80.0 + 51.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>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 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

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