

## WINNIE-W-C

~50° 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 ⓘ     |

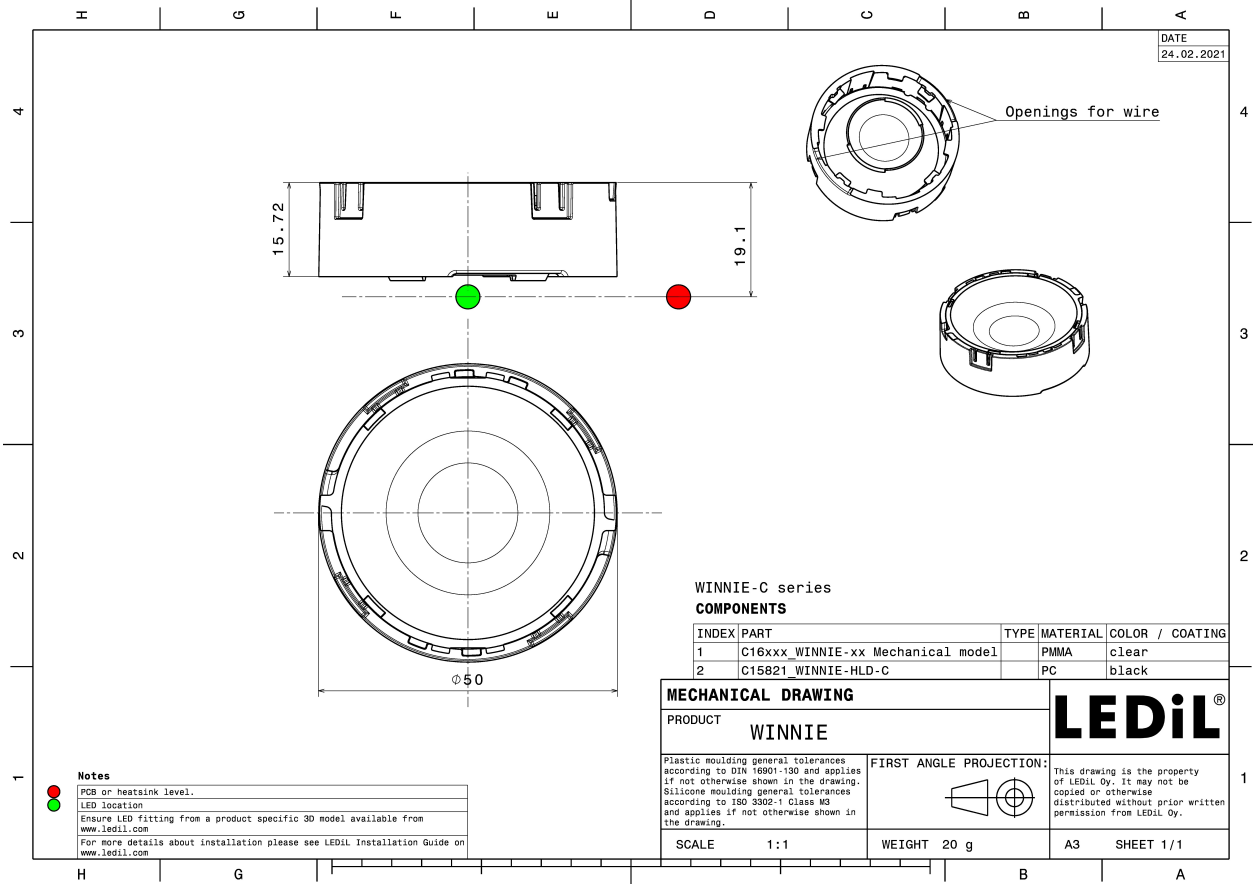


### MATERIAL SPECIFICATIONS:

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

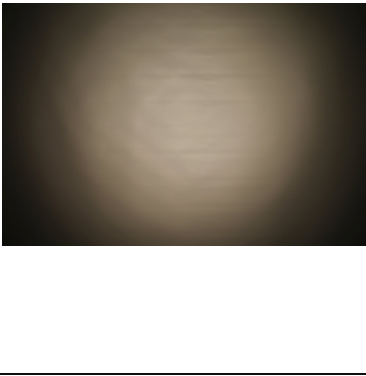
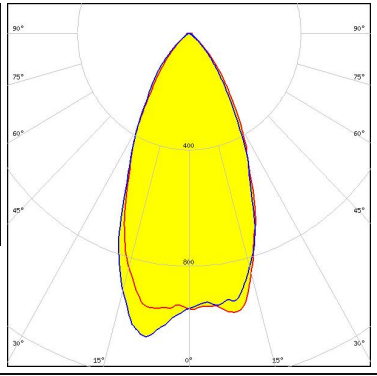

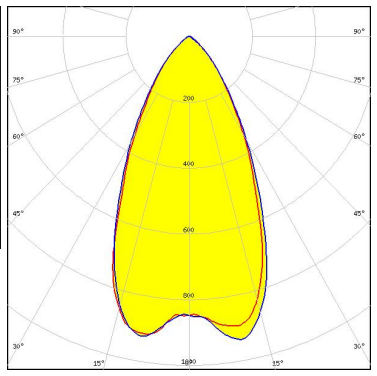

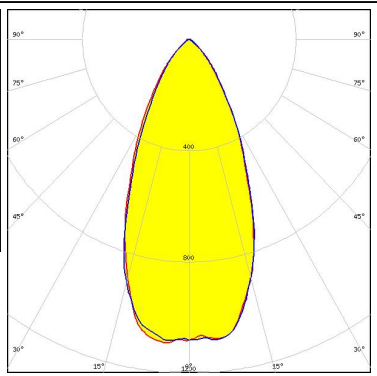

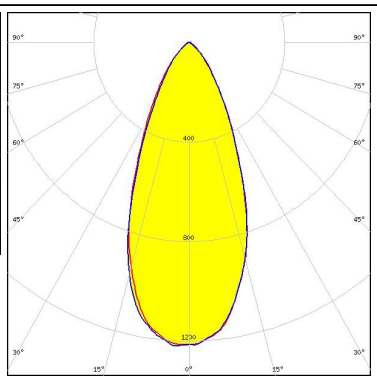
### ORDERING INFORMATION:

| Component          |             | Qty in box | MOQ | MPQ | Box weight (kg) |
|--------------------|-------------|------------|-----|-----|-----------------|
| CN15825_WINNIE-W-C | Single lens | 364        | 84  | 28  | 0.0             |
| » Box size:        |             |            |     |     |                 |


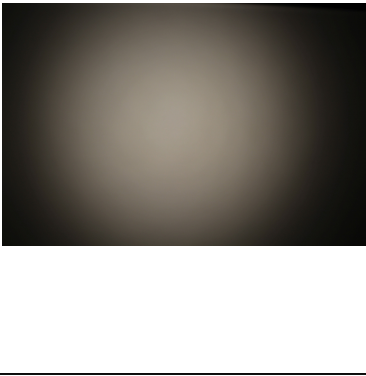
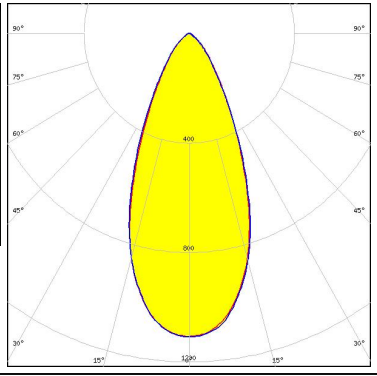


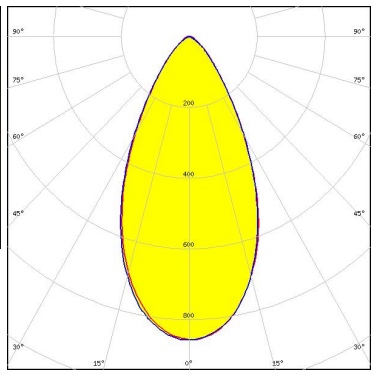


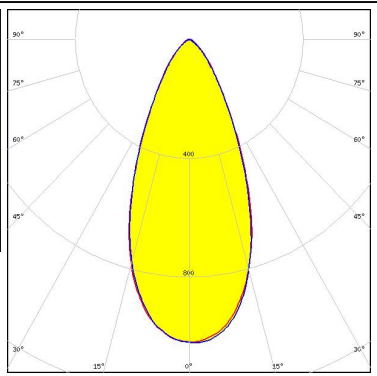

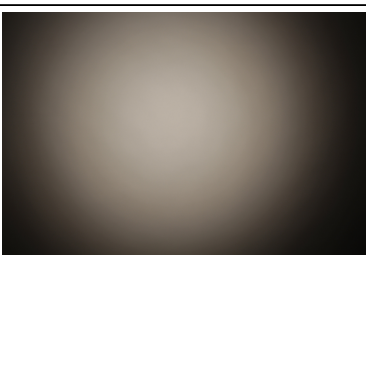
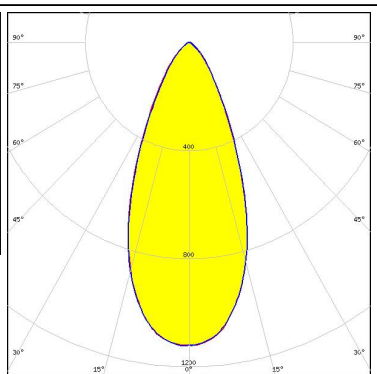


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### PHOTOMETRIC DATA (MEASURED):

|  |  |   |
|--|--|---|
| <p>bridgelux.</p> <p>LED V4 HD</p> <p>FWHM / FWTM 50.0° / 89.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 1.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>F15253_HEKLA-SOCKET-A</p>   |    |    |
| <p>bridgelux.</p> <p>LED V6 Gen6</p> <p>FWHM / FWTM 53.0° / 91.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 0.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>F15253_HEKLA-SOCKET-A</p> |   |   |
| <p>bridgelux.</p> <p>LED V6 HD</p> <p>FWHM / FWTM 47.0° / 87.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 1.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>F15255_HEKLA-SOCKET-C</p>   |  |  |
| <p>bridgelux.</p> <p>LED V9 HD</p> <p>FWHM / FWTM 44.0° / 82.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>F15859_HEKLA-SOCKET-I</p>   |  |  |

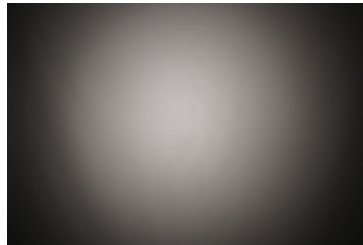
#### PHOTOMETRIC DATA (MEASURED):

|   |  |   |
|---|--|---|
| <p></p> <p>LED VERO13<br/>           FWHM / FWTM 45.0° / 83.0°<br/>           Efficiency 78 %<br/>           Peak intensity 1.1 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C16142_HEKLA-SOCKET-K</p>   |    |    |
| <p></p> <p>LED VERO18<br/>           FWHM / FWTM 52.0° / 92.0°<br/>           Efficiency 76 %<br/>           Peak intensity 0.9 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C16142_HEKLA-SOCKET-K</p>   |   |   |
| <p></p> <p>LED Vesta DTW 13mm (21W)<br/>           FWHM / FWTM 46.0° / 84.0°<br/>           Efficiency 75 %<br/>           Peak intensity 1 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour Tunable White<br/>           Required components:<br/>           C16142_HEKLA-SOCKET-K<br/>           Bender Wirth: 491 Typ L8</p> |  |  |
| <p></p> <p>LED Vesta TW 13mm (25W) CSP<br/>           FWHM / FWTM 44.0° / 81.0°<br/>           Efficiency 78 %<br/>           Peak intensity 1.1 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C16142_HEKLA-SOCKET-K<br/>           Bender Wirth: 492 Typ L8</p>    |  |  |

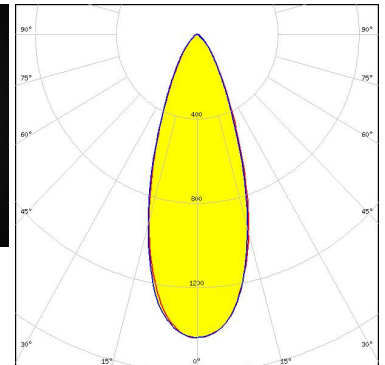
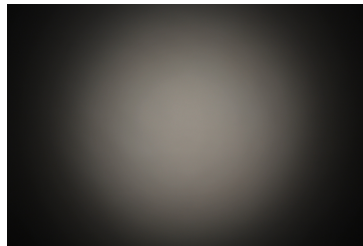
#### PHOTOMETRIC DATA (MEASURED):



LED Vesta TW 6mm DP  
 FWHM / FWTM 38.0° / 77.0°  
 Efficiency 79 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 504 Typ L8

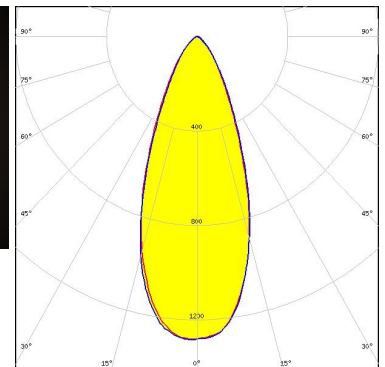
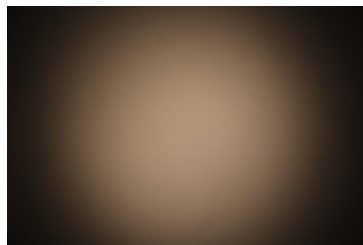


LED Vesta TW 9mm (12W) CSP  
 FWHM / FWTM 38.0° / 72.0°  
 Efficiency 78 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K



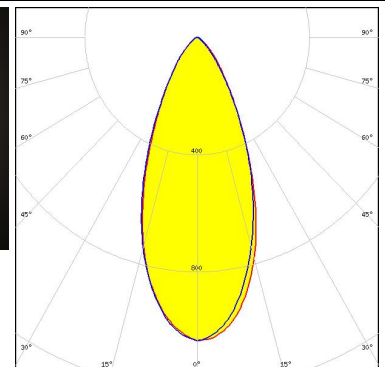
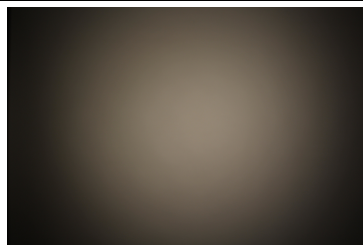
### CITIZEN

LED CLC020 Series (Dim-To-Warm)  
 FWHM / FWTM 41.0° / 78.0°  
 Efficiency 79 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K



### CITIZEN

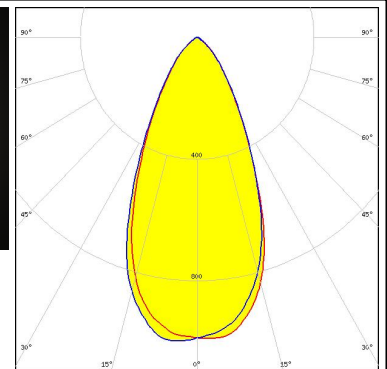
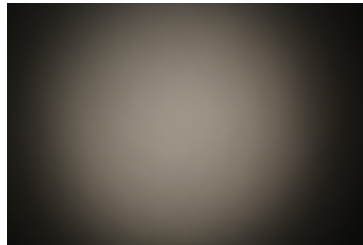
LED CLC030 Series (Dim-To-Warm)  
 FWHM / FWTM 43.0° / 82.0°  
 Efficiency 70 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K



#### PHOTOMETRIC DATA (MEASURED):

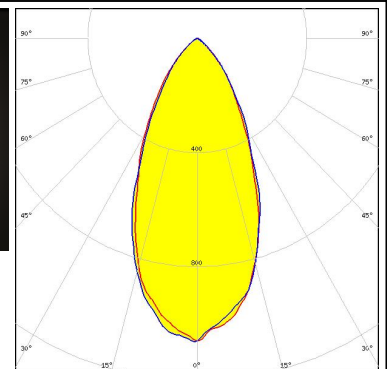
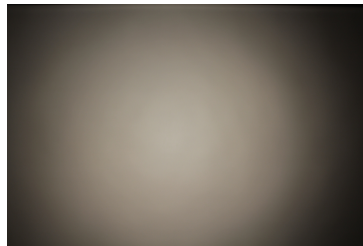
### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 48.0° / 88.0°  
 Efficiency 79 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



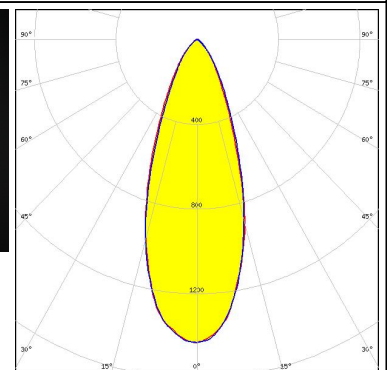
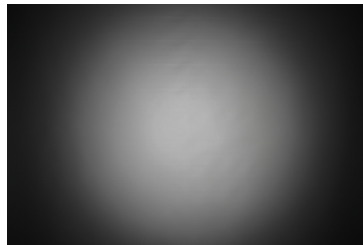
### CITIZEN

LED CLU7A2 (LES 4.2mm)  
 FWHM / FWTM 48.0° / 90.0°  
 Efficiency 84 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



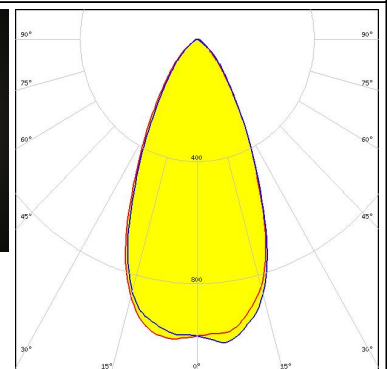
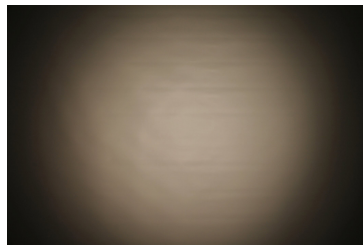
### CITIZEN

LED LCN-C01B (Tunable White)  
 FWHM / FWTM 38.0° / 74.0°  
 Efficiency 78 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 481 Typ L8



### CREE

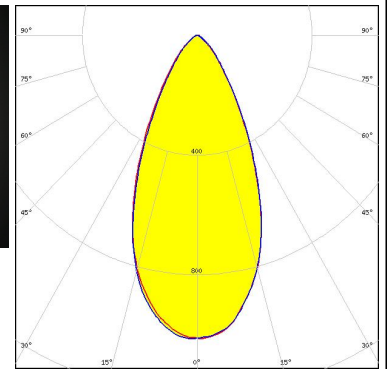
LED CMT14xx  
 FWHM / FWTM 49.0° / 89.0°  
 Efficiency 82 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



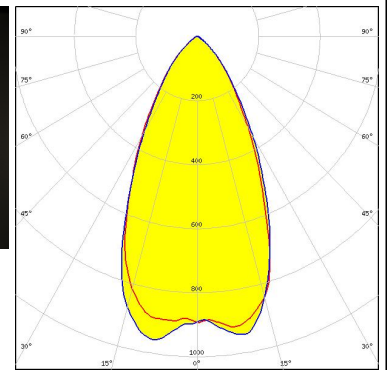
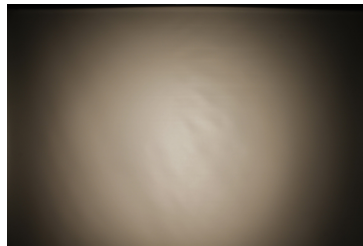
#### PHOTOMETRIC DATA (MEASURED):



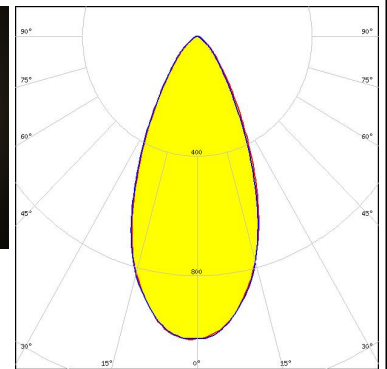
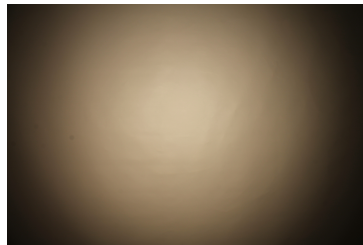
LED CMT19xx  
 FWHM / FWTM 48.0° / 86.0°  
 Efficiency 79 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



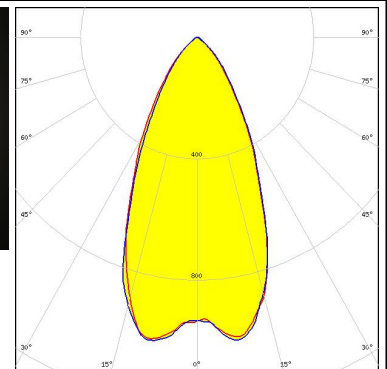
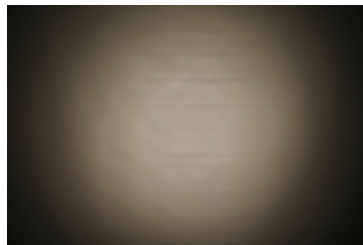
LED CXA/B 13xx  
 FWHM / FWTM 52.0° / 92.0°  
 Efficiency 83 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15956\_HEKLA-SOCKET-J



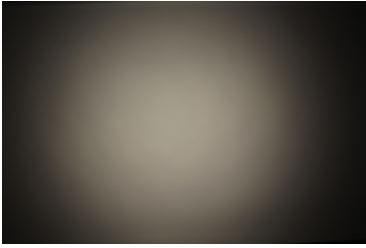
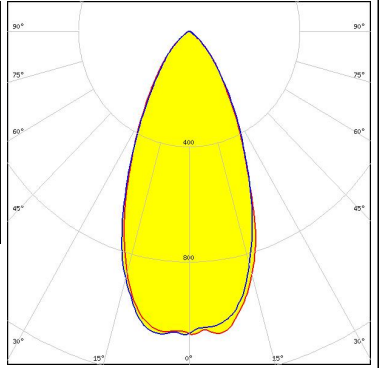
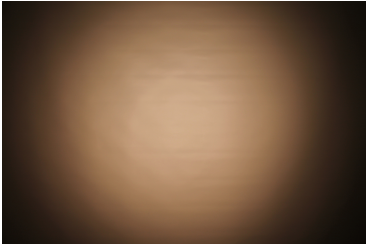
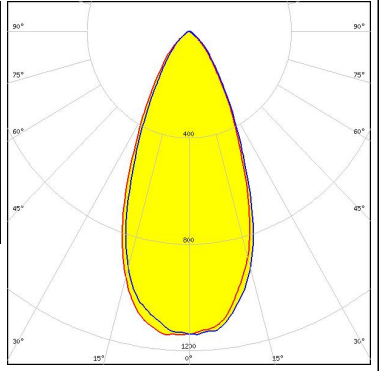
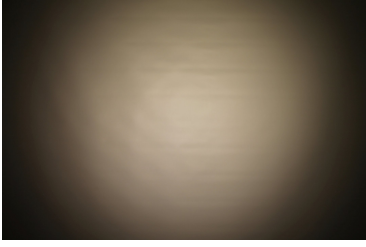
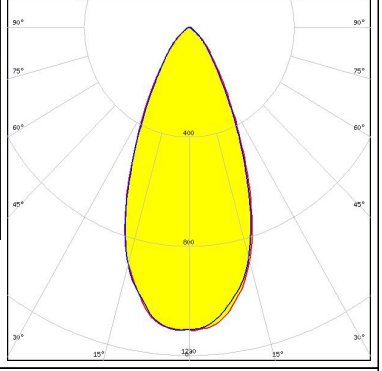
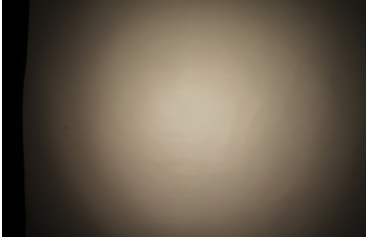

LED LUXEON CX Plus CoB L08 (Gen2)  
 FWHM / FWTM 48.0° / 86.0°  
 Efficiency 79 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 637a Hekla



LED LUXEON CoB 1202HD  
 FWHM / FWTM 50.0° / 89.0°  
 Efficiency 84 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G


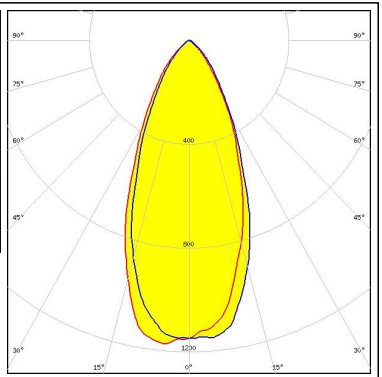

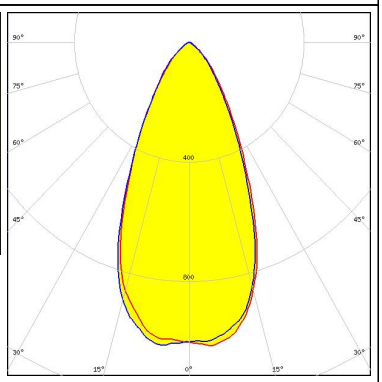

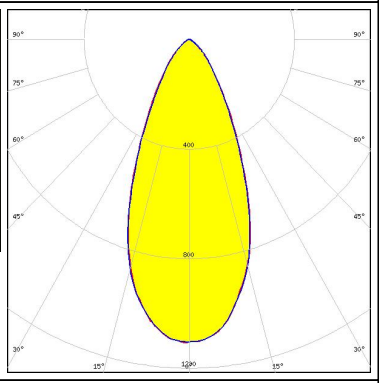

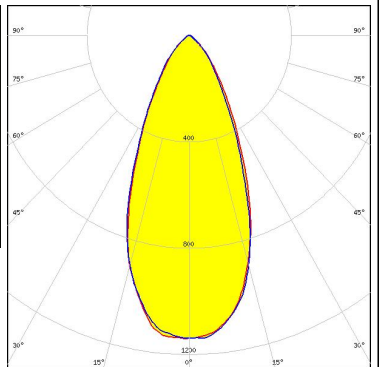


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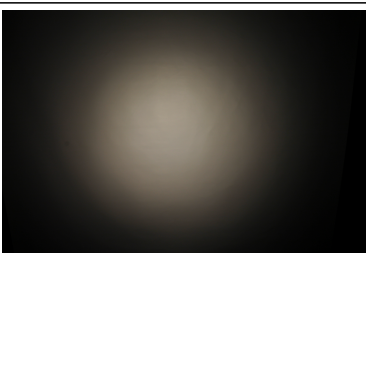
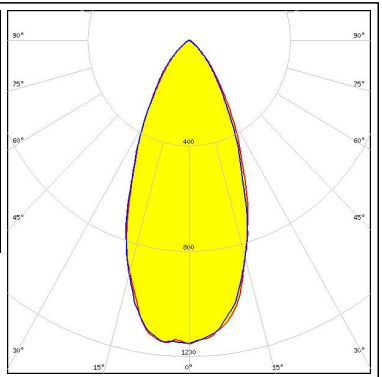

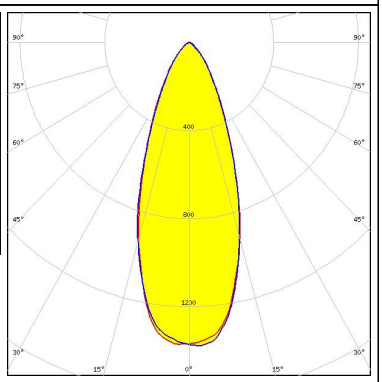

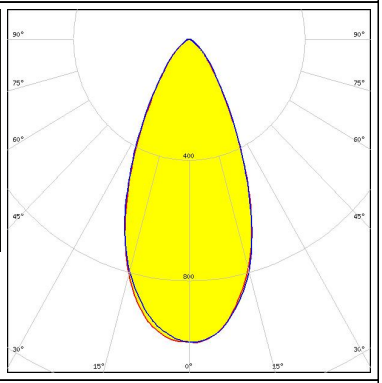

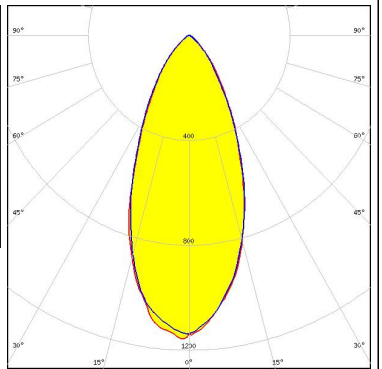
|  |  |   |
|--|--|---|
| <p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1202s</p> <p>FWHM / FWTM 48.0° / 88.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>F15848_HEKLA-SOCKET-G</p>                 |    |    |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1204HD</p> <p>FWHM / FWTM 46.0° / 85.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 1.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>F15858_HEKLA-SOCKET-H</p>                |   |   |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1205HD</p> <p>FWHM / FWTM 46.0° / 84.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>F15858_HEKLA-SOCKET-H</p>                |  |  |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S01H4</p> <p>FWHM / FWTM 46.0° / 87.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>Bender Wirth: 634c Hekla</p> |  |  |



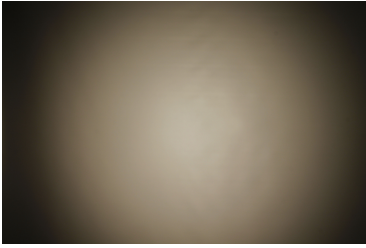
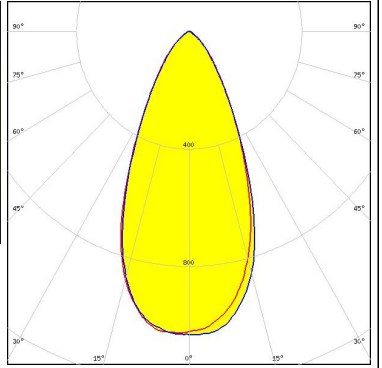
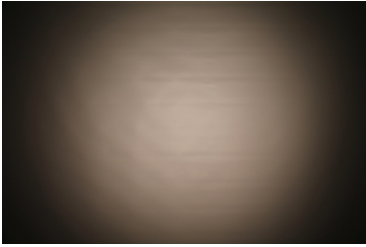
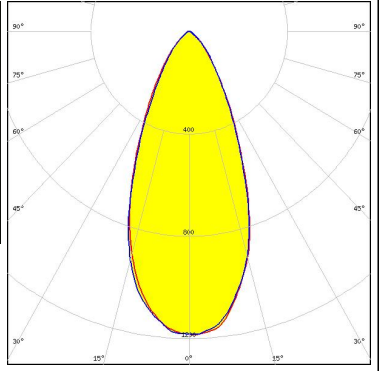
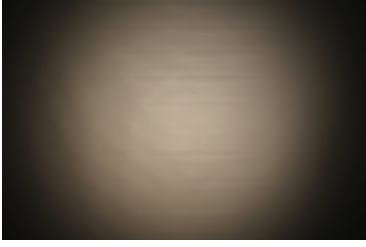
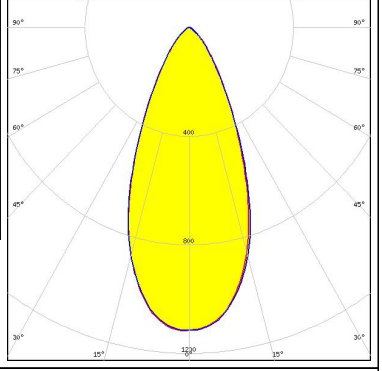
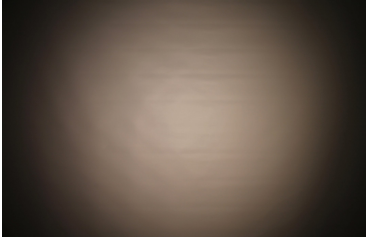
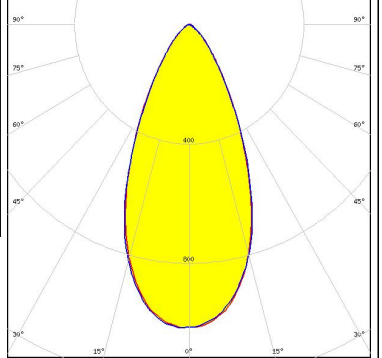
#### PHOTOMETRIC DATA (MEASURED):

|  |  |   |
|--|--|---|
| <p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S01H6 / HD S02H6</p> <p>FWHM / FWTM 44.0° / 86.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>Bender Wirth: 634c Hekla</p> |    |    |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB - HD S04H9</p> <p>FWHM / FWTM 48.0° / 88.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>Bender Wirth: 634c Hekla</p>              |   |   |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB L04 / L05 (Gen2)</p> <p>FWHM / FWTM 46.0° / 85.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>Bender Wirth: 637a Hekla</p>      |  |  |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB M02 / M03 (Gen2)</p> <p>FWHM / FWTM 45.0° / 85.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>Bender Wirth: 641a Hekla</p>      |  |  |

#### PHOTOMETRIC DATA (MEASURED):

|   |  |   |
|---|--|---|
| <p><b>LUMILEDS</b></p> <p>LED LUXEON CX Plus CoB S01 (Gen2)</p> <p>FWHM / FWTM 45.0° / 86.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>Bender Wirth: 634c Hekla</p>                                 |    |    |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON Fusion 12-up (20x24)</p> <p>FWHM / FWTM 39.0° / 77.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Tunable White</p> <p>Required components:<br/>C16142_HEKLA-SOCKET-K<br/>Bender Wirth: 442 Typ L8</p> |   |   |
| <p><b>LUMINUS</b></p> <p>LED CxM-14 (19x19)</p> <p>FWHM / FWTM 48.0° / 86.0°</p> <p>Efficiency 78 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>F15859_HEKLA-SOCKET-I</p>  |  |  |
| <p><b>LUMINUS</b></p> <p>LED CXM-4</p> <p>FWHM / FWTM 45.0° / 86.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>F15255_HEKLA-SOCKET-C</p>   |  |  |

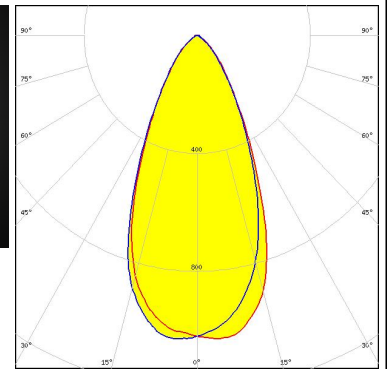
#### PHOTOMETRIC DATA (MEASURED):

|  |  |   |
|--|--|---|
| <p><b>LUMINUS</b></p> <p>LED CxM-9 (13.5x13.5)<br/>           FWHM / FWTM 48.0° / 88.0°<br/>           Efficiency 81 %<br/>           Peak intensity 1 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           F15255_HEKLA-SOCKET-C</p>   |    |    |
| <p><b>PHILIPS</b></p> <p>LED Fortimo SLM L09 CoB<br/>           FWHM / FWTM 45.0° / 83.0°<br/>           Efficiency 83 %<br/>           Peak intensity 1.2 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           F15858_HEKLA-SOCKET-H</p>   |   |   |
| <p><b>PHILIPS</b></p> <p>LED Fortimo SLM L13 CoB<br/>           FWHM / FWTM 45.0° / 82.0°<br/>           Efficiency 79 %<br/>           Peak intensity 1.1 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C16142_HEKLA-SOCKET-K<br/>           Bender Wirth: 432 Typ L8</p> |  |  |
| <p><b>PHILIPS</b></p> <p>LED Fortimo SLM L15 CoB<br/>           FWHM / FWTM 47.0° / 85.0°<br/>           Efficiency 77 %<br/>           Peak intensity 1 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C16142_HEKLA-SOCKET-K<br/>           Bender Wirth: 432 Typ L8</p>   |  |  |

### PHOTOMETRIC DATA (MEASURED):

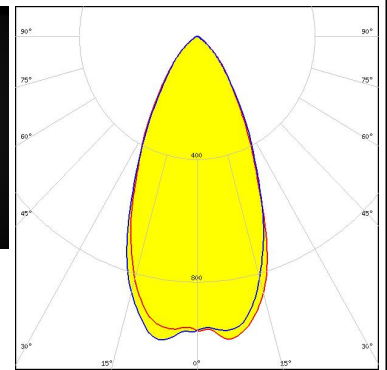
#### SAMSUNG

LED LC003D / LC006D / LC009D / LC013D  
 FWHM / FWTM 48.0° / 88.0°  
 Efficiency 81 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



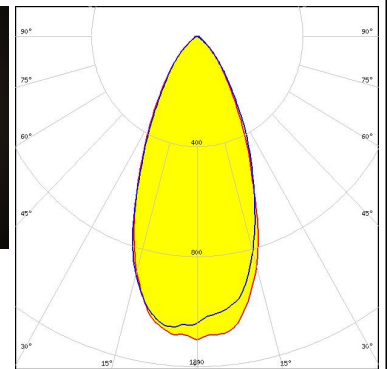
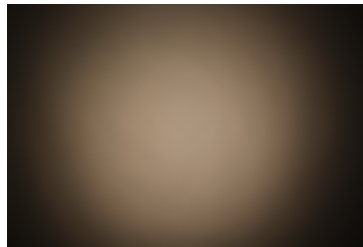
#### SAMSUNG

LED LC010C  
 FWHM / FWTM 49.0° / 90.0°  
 Efficiency 82 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G



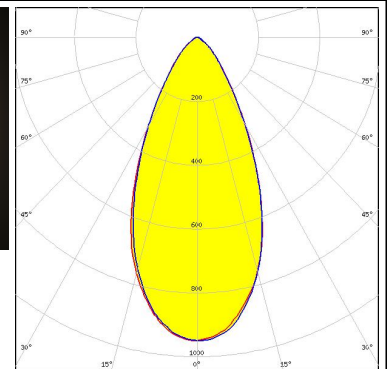
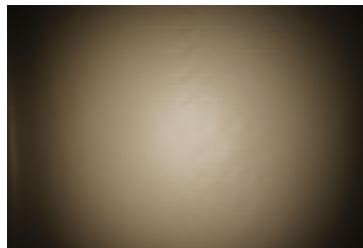
#### SAMSUNG

LED LC010C G2  
 FWHM / FWTM 46.0° / 87.0°  
 Efficiency 82 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### SAMSUNG

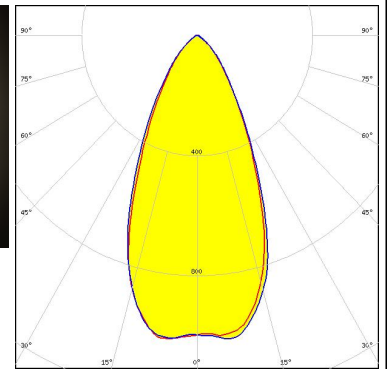
LED LC016D / LC019D / LC026D / LC033D  
 FWHM / FWTM 49.0° / 89.0°  
 Efficiency 77 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



### PHOTOMETRIC DATA (MEASURED):

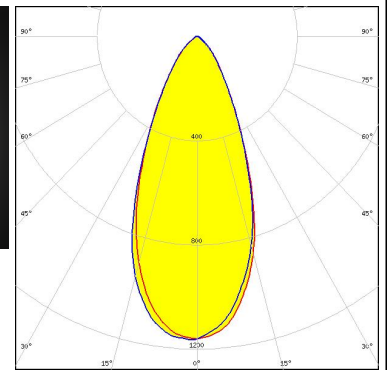
#### SAMSUNG

LED LC020C  
 FWHM / FWTM 48.0° / 88.0°  
 Efficiency 82 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G



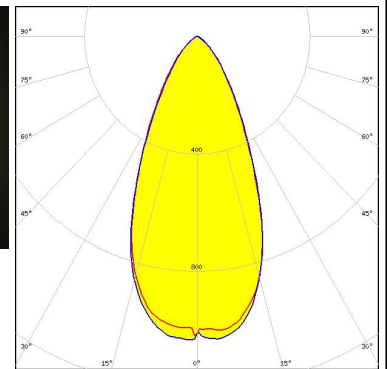
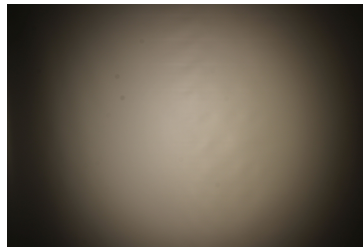
#### SAMSUNG

LED LC020C G2  
 FWHM / FWTM 44.0° / 84.0°  
 Efficiency 82 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



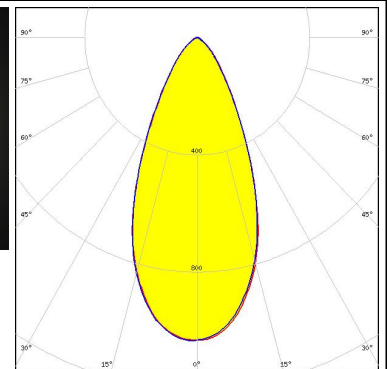
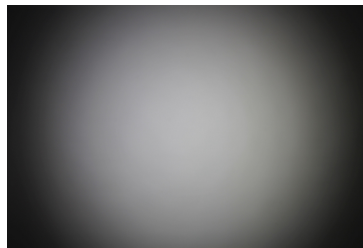
#### TRIDONIC

LED SLE G7 LES09  
 FWHM / FWTM 48.0° / 87.0°  
 Efficiency 80 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### TRIDONIC

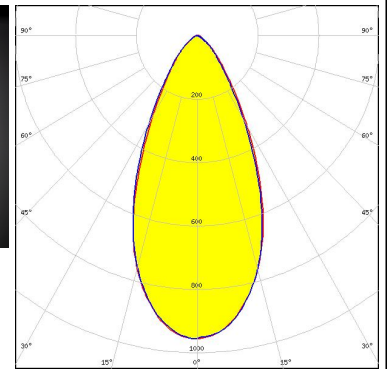
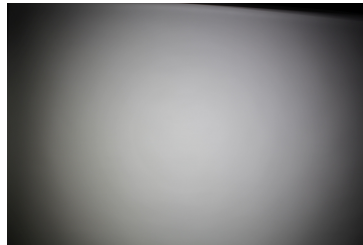
LED SLE G7 LES13  
 FWHM / FWTM 47.0° / 86.0°  
 Efficiency 78 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



#### PHOTOMETRIC DATA (MEASURED):

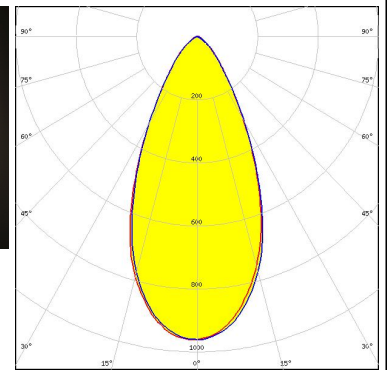
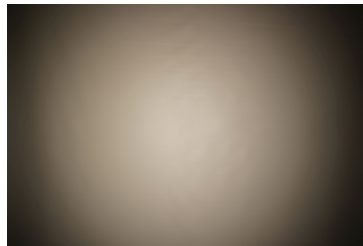
#### TRIDONIC

LED SLE G7 LES15  
 FWHM / FWTM 49.0° / 88.0°  
 Efficiency 77 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



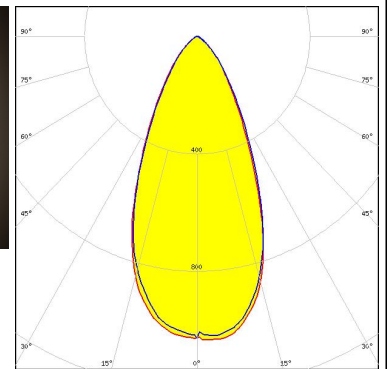
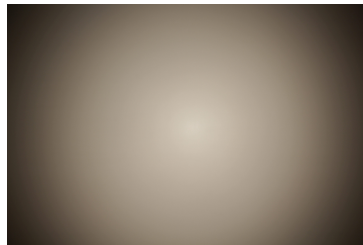
#### XICATO

LED XOB 14.5 mm  
 FWHM / FWTM 49.0° / 88.0°  
 Efficiency 78 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I


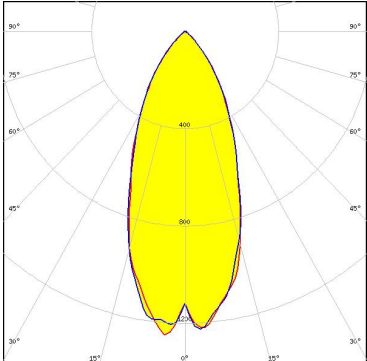
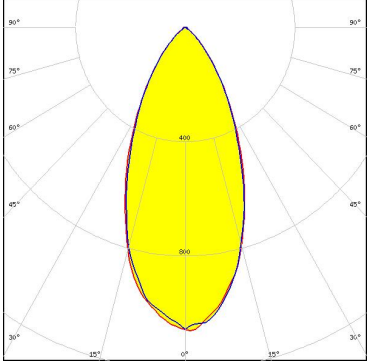

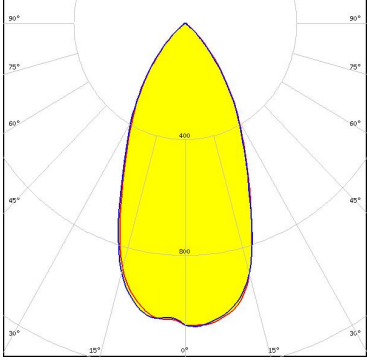

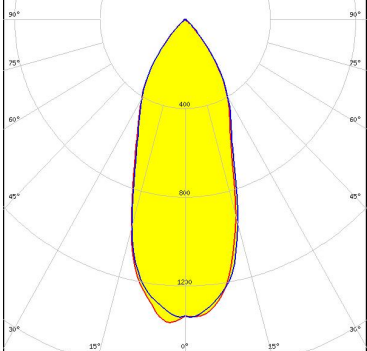


#### XICATO

LED XOB 9.8 mm  
 FWHM / FWTM 47.0° / 88.0°  
 Efficiency 81 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### PHOTOMETRIC DATA (SIMULATED):

|  |   |
|--|---|
| <p> LED VERO10<br/>           FWHM / FWTM 44.0° / 84.0°<br/>           Efficiency 85 %<br/>           Peak intensity 1.3 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           F15616_HEKLA-SOCKET-F</p>   |    |
| <p><b>CITIZEN</b><br/>           LED CLL03x/CLU03x<br/>           FWHM / FWTM 46.0° / 86.0°<br/>           Efficiency 77 %<br/>           Peak intensity 1.1 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           F15859_HEKLA-SOCKET-I</p>   |   |
| <p><b>CREE</b> <br/>           LED CXA/B 15xx<br/>           FWHM / FWTM 49.0° / 89.0°<br/>           Efficiency 85 %<br/>           Peak intensity 1.1 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           F15256_HEKLA-SOCKET-D</p>                                 |  |
| <p><b>CREE</b> <br/>           LED CXA/B 1816 &amp; CXA/B 1820 &amp; CXA 1850<br/>           FWHM / FWTM 39.0° / 83.0°<br/>           Efficiency 88 %<br/>           Peak intensity 1.4 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           F15254_HEKLA-SOCKET-B</p> |  |

#### PHOTOMETRIC DATA (SIMULATED):

|   |  |
|---|--|
| <p><b>NICHIA</b></p> <p>LED NFSWE11A<br/>           FWHM / FWTM 36.0° / 76.0°<br/>           Efficiency 75 %<br/>           Peak intensity 1.4 cd/lm<br/>           LEDs/each optic 30<br/>           Light colour White<br/>           Required components:</p>  |  |
| <p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED MJT COB LES 14.5<br/>           FWHM / FWTM 52.0° / 92.0°<br/>           Efficiency 79 %<br/>           Peak intensity 0.9 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           F15859_HEKLA-SOCKET-I</p> |  |
| <p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED MJT COB LES 9.8<br/>           FWHM / FWTM 49.0° / 90.0°<br/>           Efficiency 83 %<br/>           Peak intensity 1.1 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           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

#### Local sales and technical support

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