



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

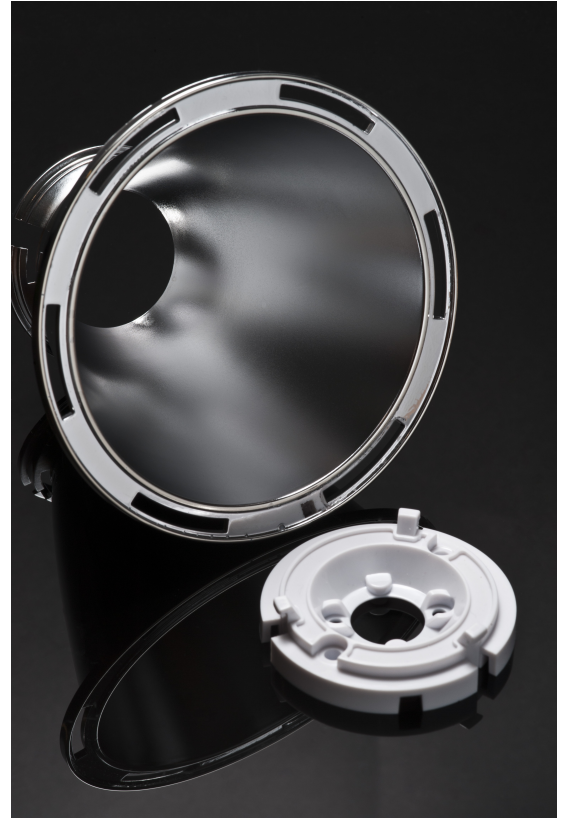


## LENA-SS

~18° smooth spot beam

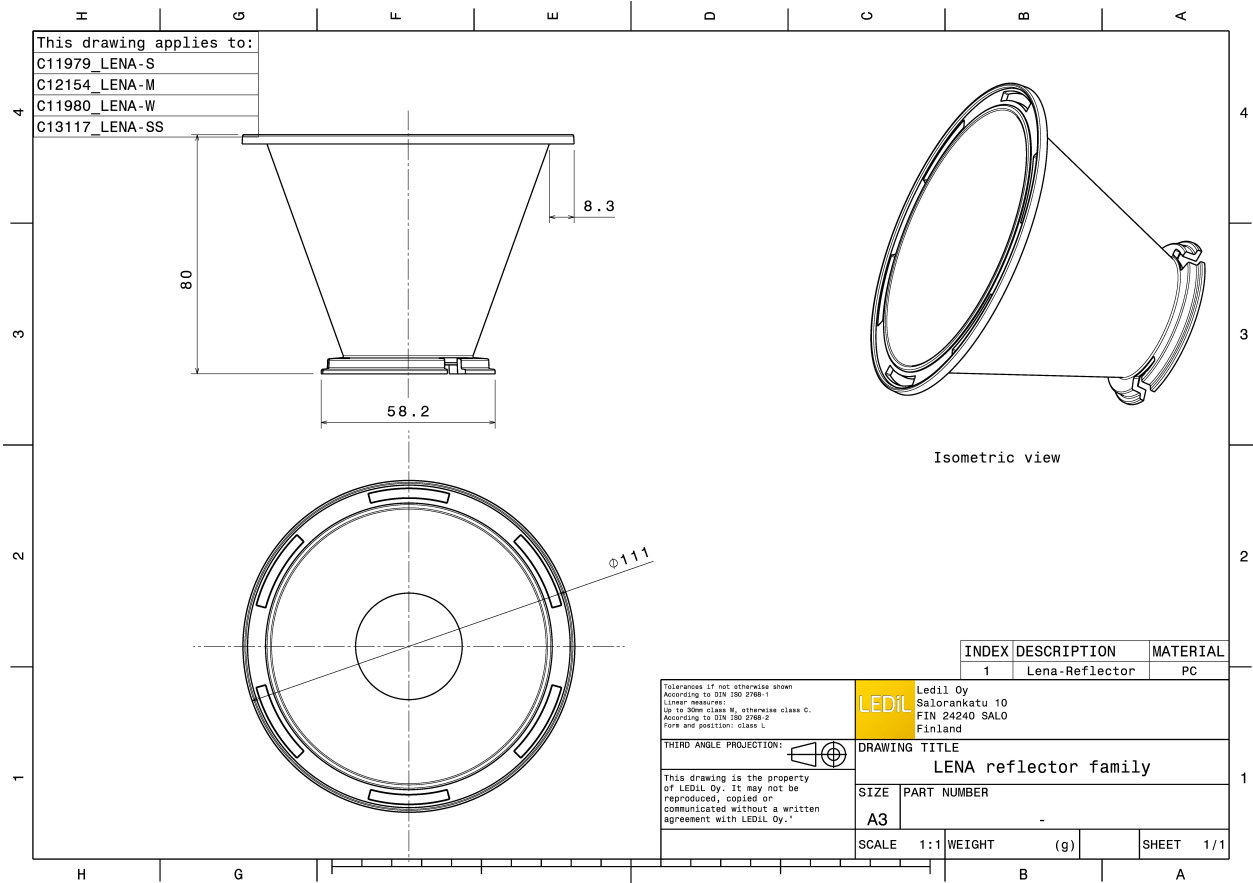
### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 111.0 mm
Height	80 mm
Fastening	socket
Colour	metal
Box size	400 x 280 x 380 mm
Box weight	4.1 kg
Quantity in Box	60 pcs
ROHS compliant	yes ⓘ

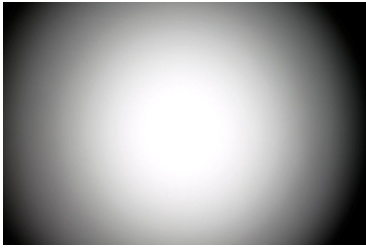
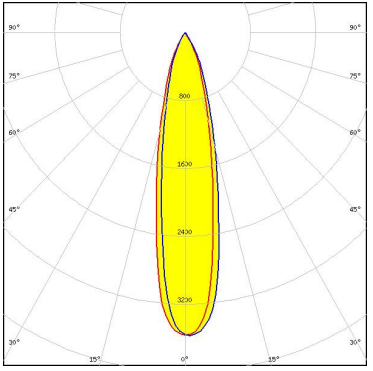
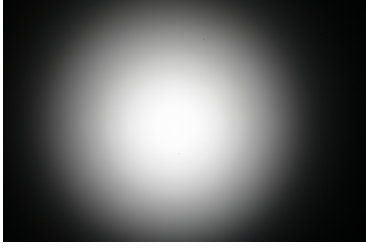
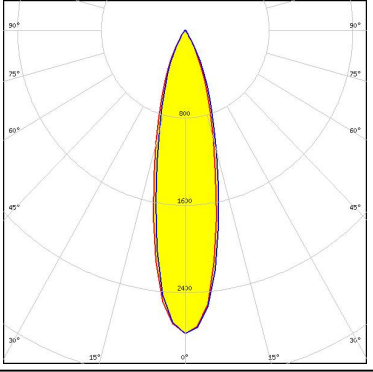
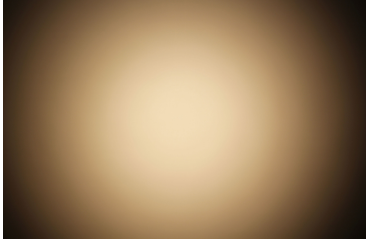
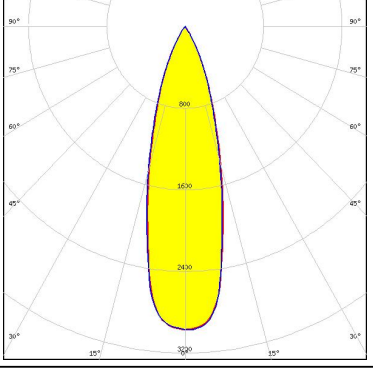

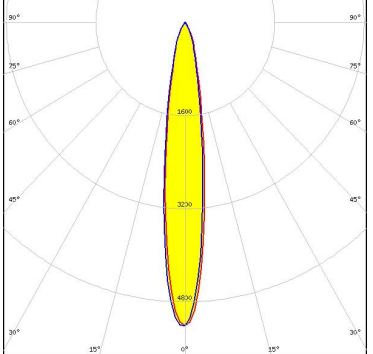


### MATERIAL SPECIFICATIONS:


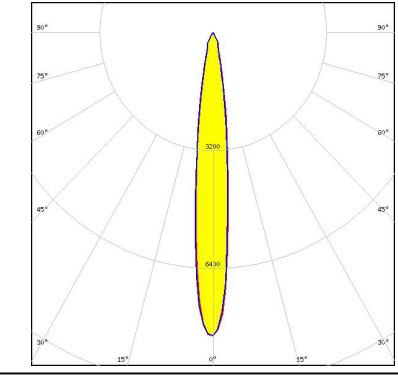

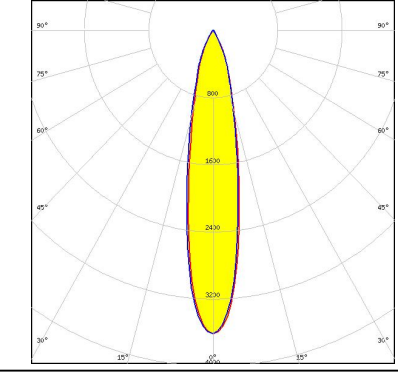
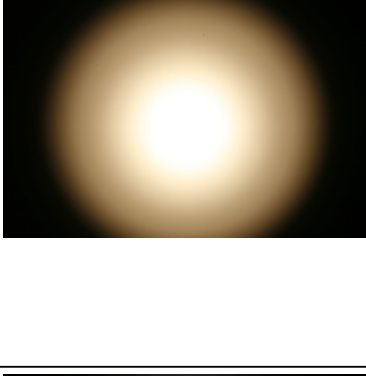
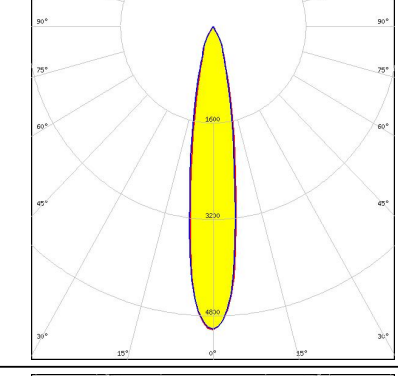

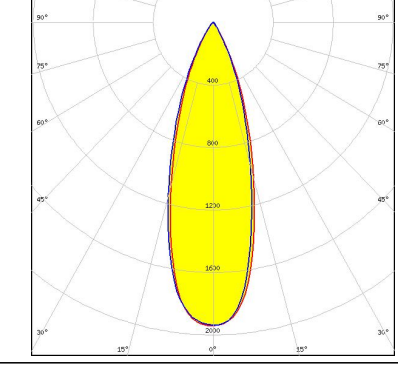
Component	Type	Material	Colour	Coating
LENA-SS	Reflector	PC	metal	lacquer




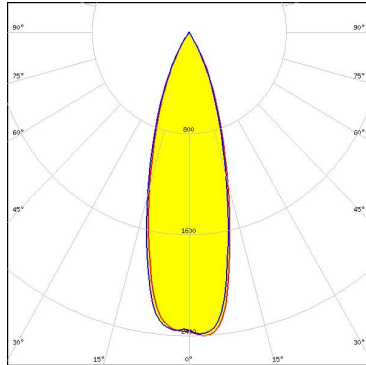

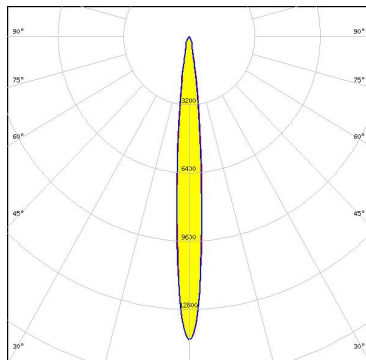

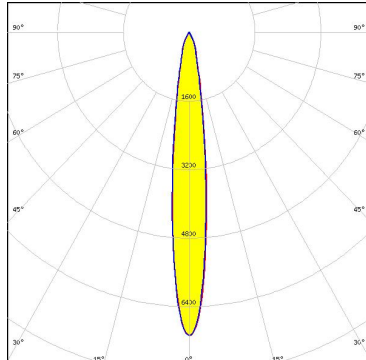

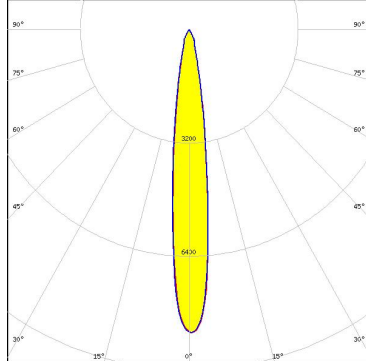
### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED BXRA RS FWHM 22.0° Efficiency 83 % Peak intensity 3.600 cd/lm Required components: C12229_LENA-STD-BASE-RS</p>		
<p>bridgelux.</p> <p>LED BXRA RS FWHM 25.0° Efficiency 76 % Peak intensity 2.780 cd/lm Required components: C12229_LENA-STD-BASE-RS C11996_LENA-LENS</p>		
<p>bridgelux.</p> <p>LED Vero SE 29 FWHM 29.0° Efficiency 89 % Peak intensity 3.000 cd/lm Required components: C15083_LENA-STD-BASE-VERO29</p>		
<p>bridgelux.</p> <p>LED VERO13 FWHM 15.0° Efficiency 76 % Peak intensity 5.250 cd/lm Required components: C13868_LENA-STD-BASE-VERO13-18 C11996_LENA-LENS</p>		

### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED VERO13 FWHM 13.0° Efficiency 82 % Peak intensity 8.250 cd/lm Required components: C13868_LENA-STD-BASE-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO18 FWHM 20.0° Efficiency 76 % Peak intensity 3.620 cd/lm Required components: C13868_LENA-STD-BASE-VERO13-18 C11996_LENA-LENS</p>		
<p>bridgelux.</p> <p>LED VERO18 FWHM 18.0° Efficiency 82 % Peak intensity 5.000 cd/lm Required components: C13868_LENA-STD-BASE-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO29 FWHM 32.0° Efficiency 74 % Peak intensity 1.940 cd/lm Required components: C13867_LENA-STD-BASE-VERO29 C11996_LENA-LENS</p>		

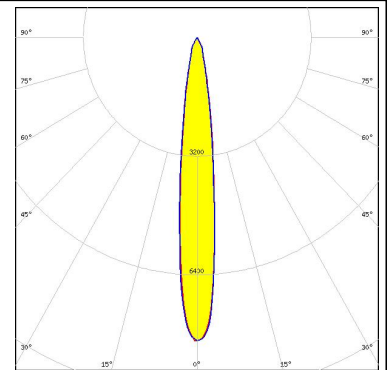
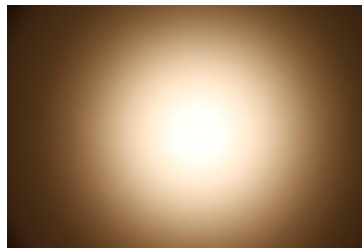
**PHOTOMETRIC DATA (MEASURED):**

<p>bridgelux</p> <p>LED VERO29 FWHM 31.0° Efficiency 80 % Peak intensity 2.400 cd/lm Required components: C13867_LENA-STD-BASE-VERO29</p>		
<p><b>CITIZEN</b></p> <p>LED CLL02x/CLU02x (LES10) FWHM 10.0° Efficiency 87 % Peak intensity 14.200 cd/lm Required components: C13868_LENA-STD-BASE-VERO13-18 Bender Wirth: 434 Typ L1</p>		
<p><b>CITIZEN</b></p> <p>LED CLL02x/CLU02x (LES10) FWHM 13.0° Efficiency 82 % Peak intensity 7.100 cd/lm Required components: C13868_LENA-STD-BASE-VERO13-18 C11996_LENA-LENS Bender Wirth: 434 Typ L1</p>		
<p><b>CITIZEN</b></p> <p>LED CLL03x/CLU03x FWHM 14.0° Efficiency 87 % Peak intensity 8.600 cd/lm Required components: C13868_LENA-STD-BASE-VERO13-18 Bender Wirth: 433 Typ L1</p>		

#### PHOTOMETRIC DATA (MEASURED):

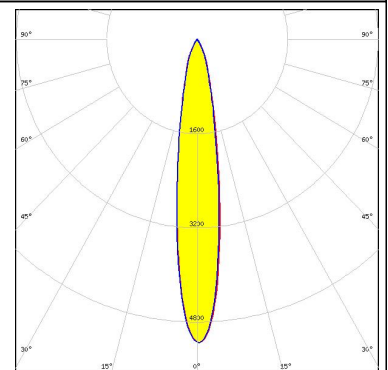
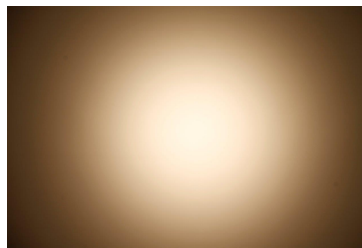
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 13.0°  
 Efficiency 85 %  
 Peak intensity 8.200 cd/lm  
 Required components:  
 A.A.G. STUCCHI: 8101/G2 + S-8000/11



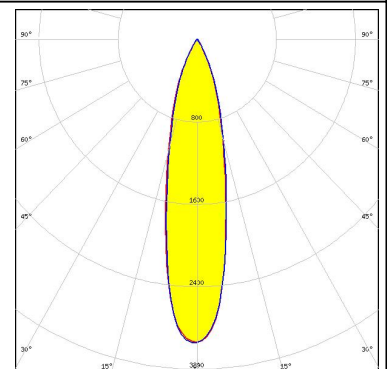
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM 17.0°  
 Efficiency 82 %  
 Peak intensity 5.200 cd/lm  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 433 Typ L1



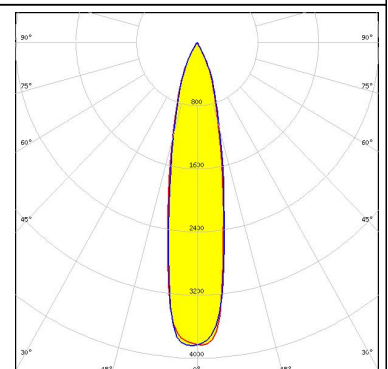
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 24.0°  
 Efficiency 77 %  
 Peak intensity 2.950 cd/lm  
 Required components:  
 C12692\_LENA-STD-BASE-CLL040  
 C11996\_LENA-LENS



#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 22.0°  
 Efficiency 82 %  
 Peak intensity 3.850 cd/lm  
 Required components:  
 C12692\_LENA-STD-BASE-CLL040



### PHOTOMETRIC DATA (MEASURED):

#### CITIZEN

LED CLL04x/CLU04x

FWHM 23.0°

Efficiency 82 %

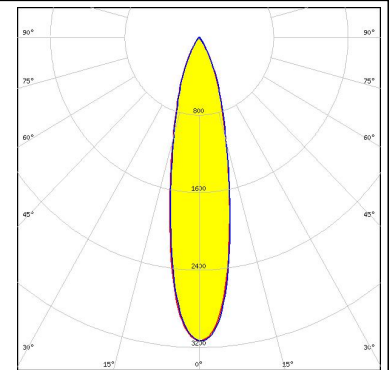
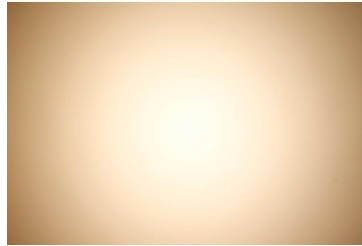
Peak intensity 3.100 cd/lm

Required components:

C13867\_LENA-STD-BASE-VERO29

C11996\_LENA-LENS

Bender Wirth: 431 Typ L3



#### CITIZEN

LED CLL04x/CLU04x

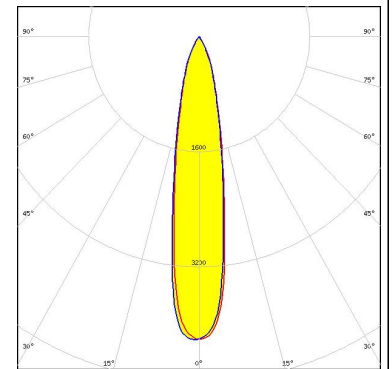
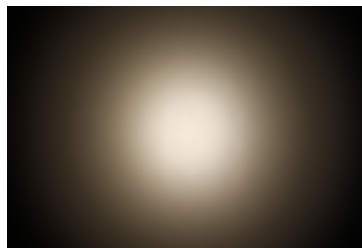
FWHM 20.0°

Efficiency 79 %

Peak intensity 4.200 cd/lm

Required components:

A.A.G. STUCCHI: 8102/G2 + S-8000/12



#### CITIZEN

LED CLL04x/CLU04x

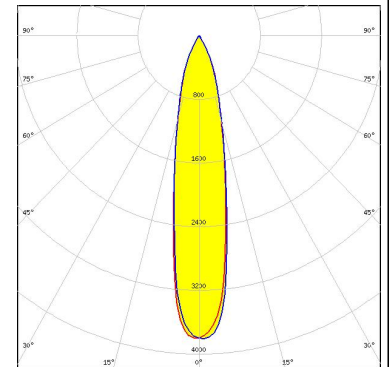
FWHM 20.0°

Efficiency 80 %

Peak intensity 3.800 cd/lm

Required components:

IDEAL: 50-2204CT + 50-2100LN



#### CITIZEN

LED CLL04x/CLU04x

FWHM 20.0°

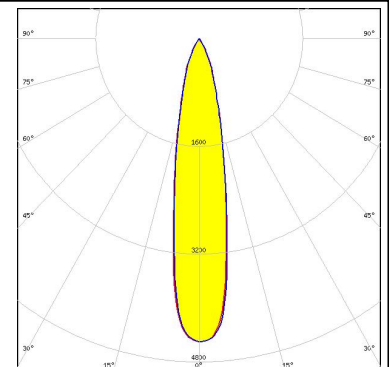
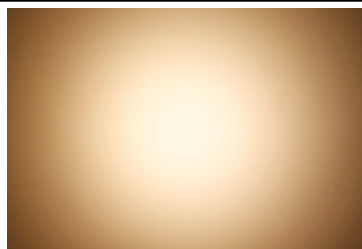
Efficiency 87 %

Peak intensity 4.500 cd/lm

Required components:

C13867\_LENA-STD-BASE-VERO29

Bender Wirth: 431 Typ L3





#### PHOTOMETRIC DATA (MEASURED):

#### CITIZEN

LED CLU700/701

FWHM 11.0°

Efficiency 82 %

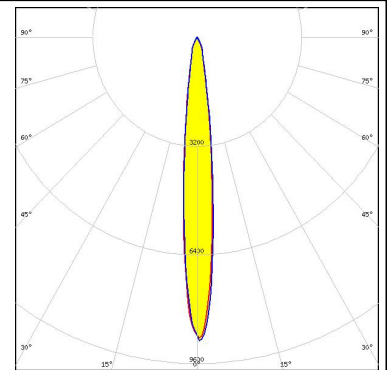
Peak intensity 8.900 cd/lm

Required components:

C13868\_LENA-STD-BASE-VERO13-18

C11996\_LENA-LENS

Bender Wirth: 434 Typ L1



#### CITIZEN

LED CLU700/701

FWHM 7.0°

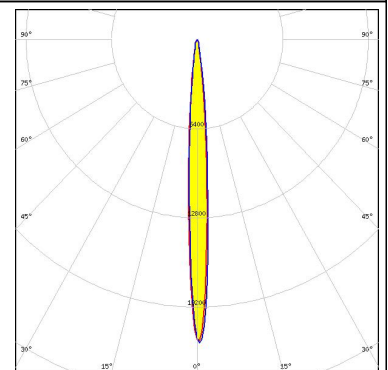
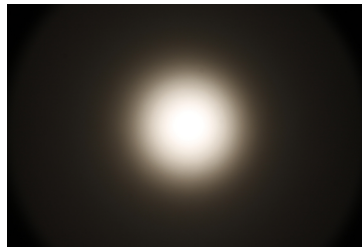
Efficiency 87 %

Peak intensity 21.800 cd/lm

Required components:

C13868\_LENA-STD-BASE-VERO13-18

Bender Wirth: 434 Typ L1



#### CITIZEN

LED CLU730/731

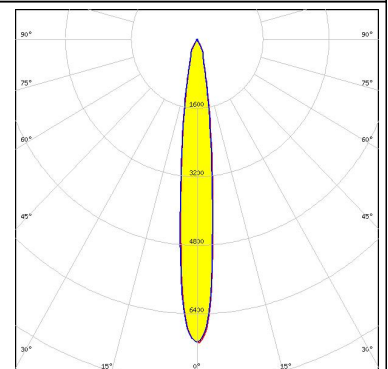
FWHM 13.0°

Efficiency 78 %

Peak intensity 7.100 cd/lm

Required components:

C12692\_LENA-STD-BASE-CLL040



#### CREE

LED CMA1840

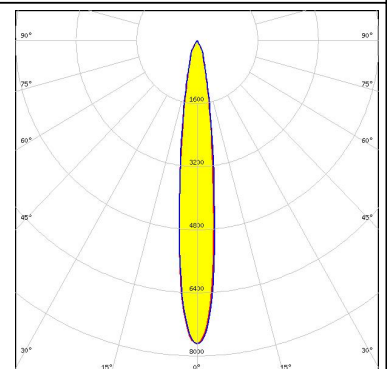
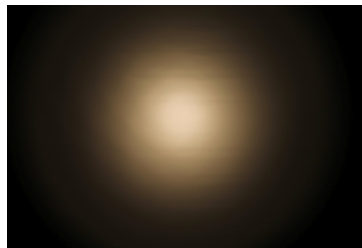
FWHM 13.0°

Efficiency 85 %

Peak intensity 7.700 cd/lm

Required components:

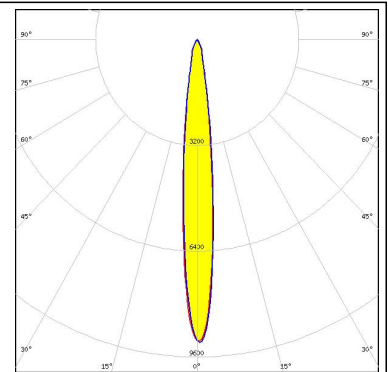
C14146\_LENA-STD-BASE-CXA18



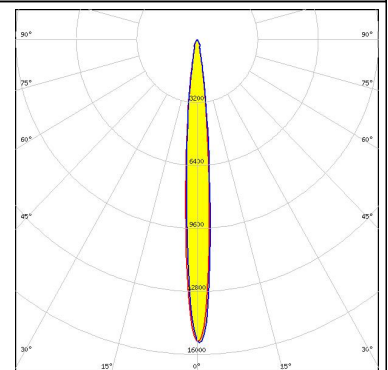
#### PHOTOMETRIC DATA (MEASURED):



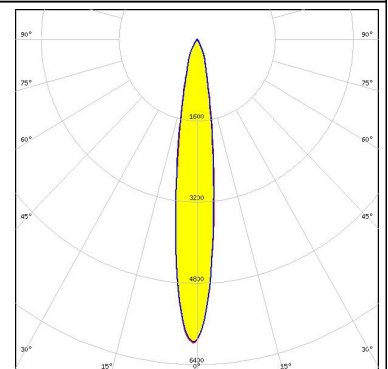
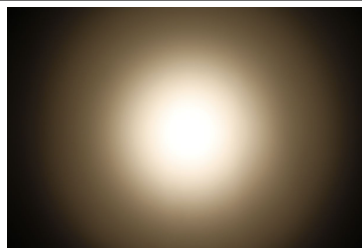
LED CXA/B 15xx  
 FWHM 12.0°  
 Efficiency 82 %  
 Peak intensity 9.200 cd/lm  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 441 Typ L1



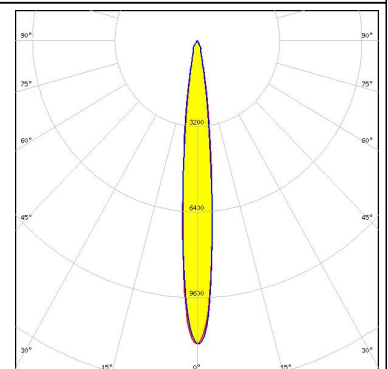
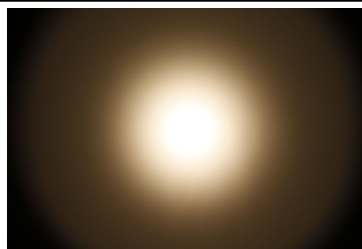
LED CXA/B 15xx  
 FWHM 9.0°  
 Efficiency 87 %  
 Peak intensity 15.400 cd/lm  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 441 Typ L1



LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 15.0°  
 Efficiency 84 %  
 Peak intensity 6.000 cd/lm  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 437 Typ L1



LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 11.0°  
 Efficiency 89 %  
 Peak intensity 11.300 cd/lm  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 437 Typ L1



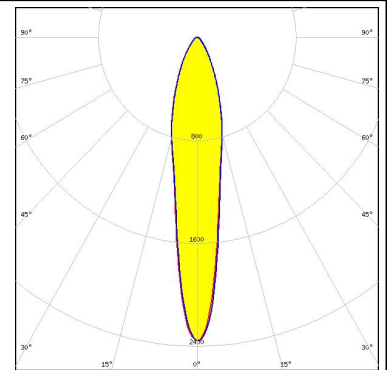
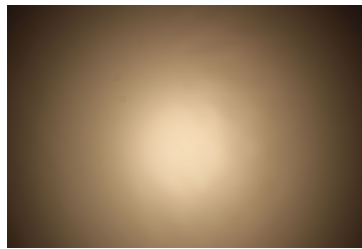
#### PHOTOMETRIC DATA (MEASURED):



LED CXA/B 1830  
 FWHM 18.0°  
 Efficiency 77 %  
 Peak intensity 2.400 cd/lm

Required components:

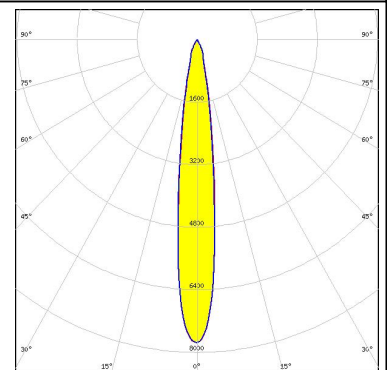
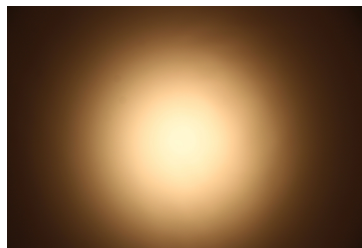
- C13868\_LENA-STD-BASE-VERO13-18
- C12231\_LENA-FRESNEL-LENS
- Bender Wirth: 437 Typ L1



LED CXA/B 1830  
 FWHM 14.0°  
 Efficiency 84 %  
 Peak intensity 7.800 cd/lm

Required components:

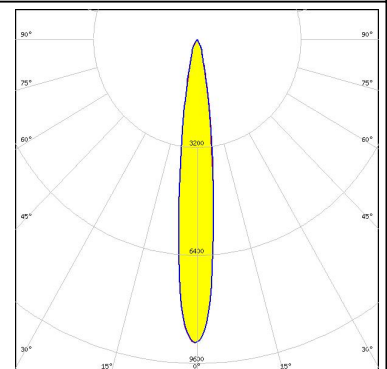
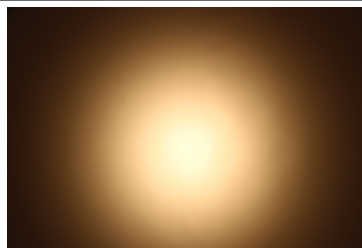
- C13868\_LENA-STD-BASE-VERO13-18
- C14169\_LENA-CLEAR-LENS
- Bender Wirth: 437 Typ L1



LED CXA/B 1830  
 FWHM 13.0°  
 Efficiency 89 %  
 Peak intensity 8.900 cd/lm

Required components:

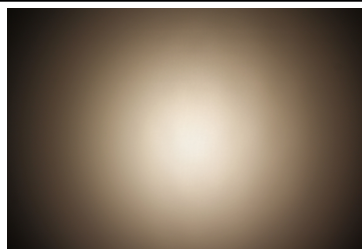
- C13868\_LENA-STD-BASE-VERO13-18
- Bender Wirth: 437 Typ L1



LED CHI3030 19W  
 FWHM 21.0°  
 Efficiency 83 %  
 Peak intensity 3.500 cd/lm

Required components:

- C13867\_LENA-STD-BASE-VERO29
- C11996\_LENA-LENS
- Bender Wirth: 468 Typ L3



#### PHOTOMETRIC DATA (MEASURED):

#### EVERLIGHT

LED CHI3030 29W

FWHM 28.0°

Efficiency 82 %

Peak intensity 2.500 cd/lm

Required components:

C13867\_LENA-STD-BASE-VERO29

C11996\_LENA-LENS

Bender Wirth: 468 Typ L3



#### LITEON

LED LTPL-M036

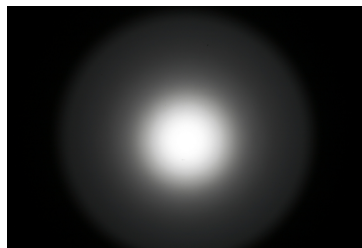
FWHM 9.0°

Efficiency 77 %

Peak intensity 13.450 cd/lm

Required components:

C13186\_LENA-STD-BASE-CXA15



#### LUMILEDS

LED LUXEON CoB 1205HD

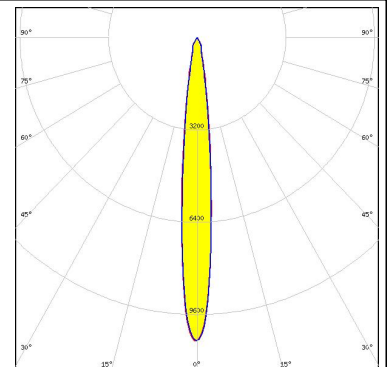
FWHM Asymmetric

Efficiency 85 %

Peak intensity 10.500 cd/lm

Required components:

C11981\_LENA-STD-BASE-COB-L110



#### LUMILEDS

LED LUXEON CoB 1211

FWHM 19.0°

Efficiency 82 %

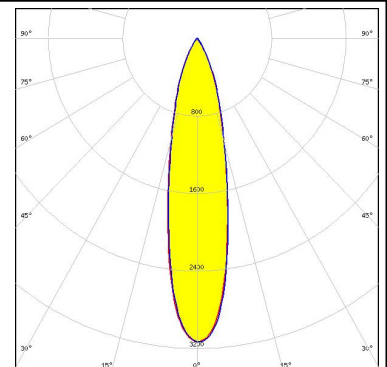
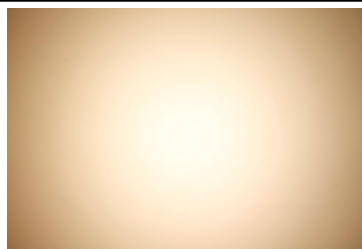
Peak intensity 4.200 cd/lm

Required components:

C13867\_LENA-STD-BASE-VERO29

C11996\_LENA-LENS

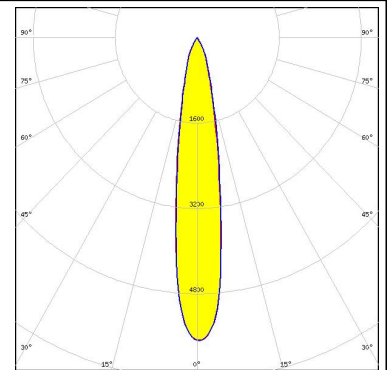
Bender Wirth: 431 Typ L3



#### PHOTOMETRIC DATA (MEASURED):

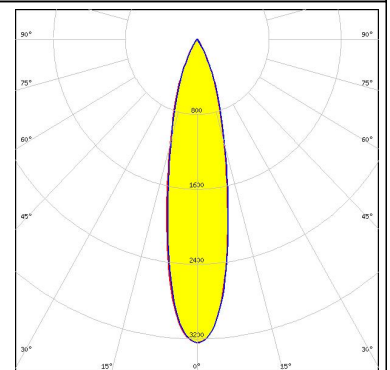
#### LUMILEDS

LED LUXEON CoB 1211  
 FWHM 17.0°  
 Efficiency 87 %  
 Peak intensity 6.600 cd/lm  
 Required components:  
 C13867\_LENA-STD-BASE-VERO29  
 Bender Wirth: 431 Typ L3



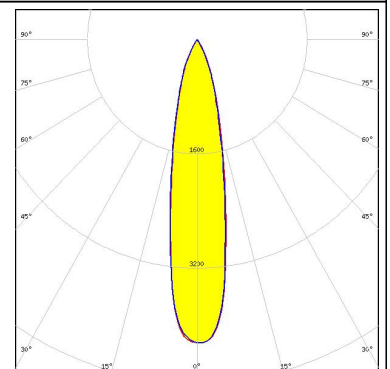
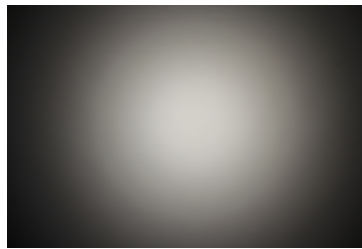
#### LUMILEDS

LED LUXEON CoB 1216/1812  
 FWHM 24.0°  
 Efficiency 82 %  
 Peak intensity 3.200 cd/lm  
 Required components:  
 C12692\_LENA-STD-BASE-CLL040  
 C11996\_LENA-LENS



#### LUMILEDS

LED LUXEON CoB 1216/1812  
 FWHM 21.0°  
 Efficiency 87 %  
 Peak intensity 4.250 cd/lm  
 Required components:  
 C12692\_LENA-STD-BASE-CLL040



#### LUMILEDS

LED LUXEON K12  
 FWHM 14.0°  
 Efficiency 75 %  
 Peak intensity 6.150 cd/lm  
 Required components:  
 C12924\_LENA-STD-BASE-LUXEON-K  
 C11996\_LENA-LENS



#### PHOTOMETRIC DATA (MEASURED):



LED LUXEON K16

FWHM 15.0°

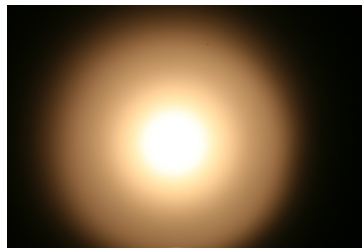
Efficiency 73 %

Peak intensity 5.000 cd/lm

Required components:

C12924\_LENA-STD-BASE-LUXEON-K

C11996\_LENA-LENS



LED CDM-14 (Dim-To-Warm)

FWHM 13.0°

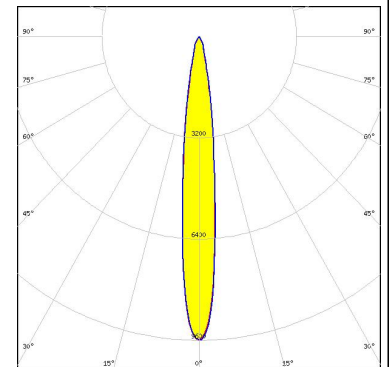
Efficiency 89 %

Peak intensity 9.600 cd/lm

Required components:

C13868\_LENA-STD-BASE-VERO13-18

Bender Wirth: 491 Typ L2



LED CDM-14 (Dim-To-Warm)

FWHM 16.0°

Efficiency 84 %

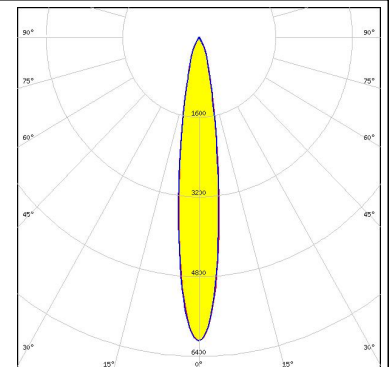
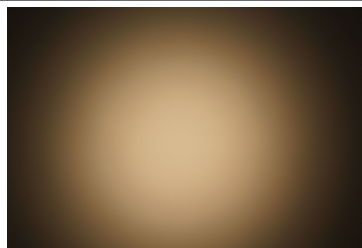
Peak intensity 6.100 cd/lm

Required components:

C13868\_LENA-STD-BASE-VERO13-18

C11996\_LENA-LENS

Bender Wirth: 491 Typ L2



LED CDM-18 (Dim-To-Warm)

FWHM 19.0°

Efficiency 84 %

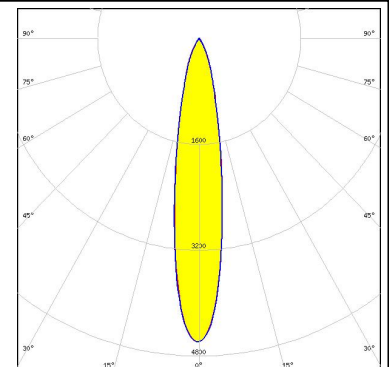
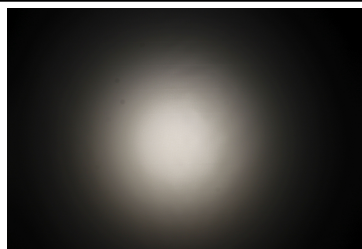
Peak intensity 4.600 cd/lm

Required components:

C13868\_LENA-STD-BASE-VERO13-18

C11996\_LENA-LENS

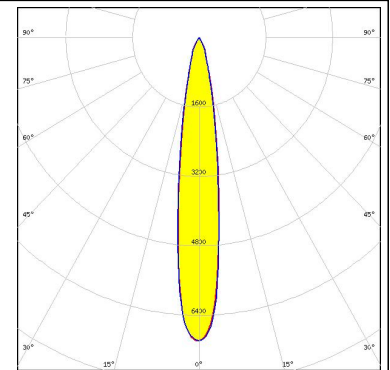
Bender Wirth: 491 Typ L2



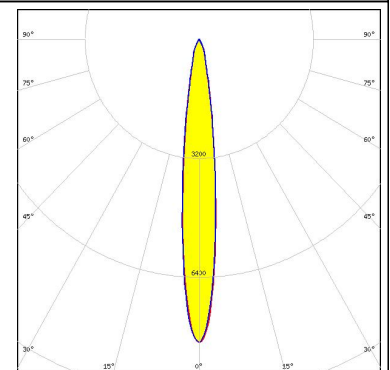
### PHOTOMETRIC DATA (MEASURED):



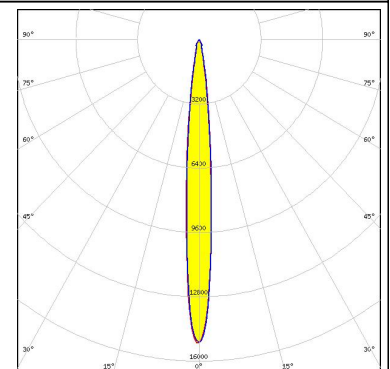
LED CDM-18 (Dim-To-Warm)  
 FWHM 16.0°  
 Efficiency 89 %  
 Peak intensity 7.000 cd/lm  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 491 Typ L2



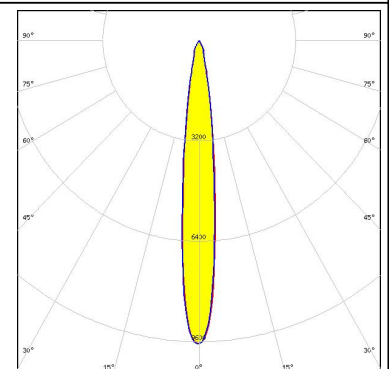
LED CDM-9 (Dim-To-Warm)  
 FWHM 13.0°  
 Efficiency 84 %  
 Peak intensity 8.200 cd/lm  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 490 Typ L1



LED CDM-9 (Dim-To-Warm)  
 FWHM 10.0°  
 Efficiency 89 %  
 Peak intensity 15.200 cd/lm  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 490 Typ L1



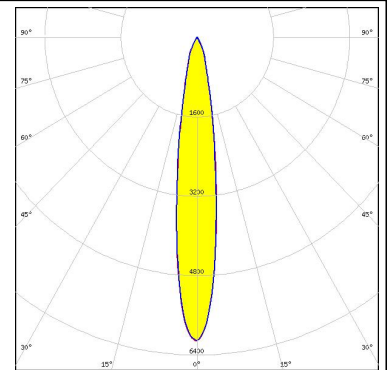
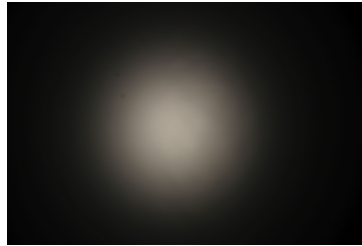
LED CTM-14 (Tunable White)  
 FWHM 13.0°  
 Efficiency 89 %  
 Peak intensity 9.700 cd/lm  
 Required components:  
 C13867\_LENA-STD-BASE-VERO29  
 Bender Wirth: 442 Typ L3



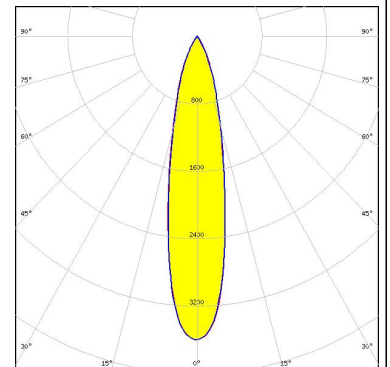
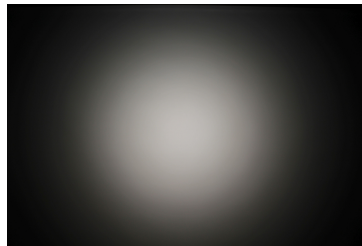
#### PHOTOMETRIC DATA (MEASURED):



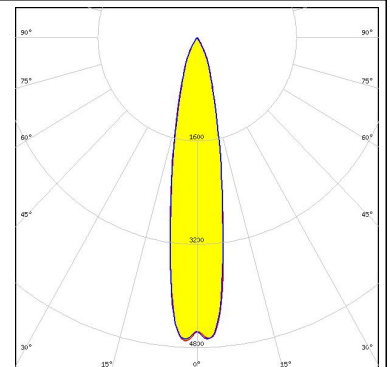
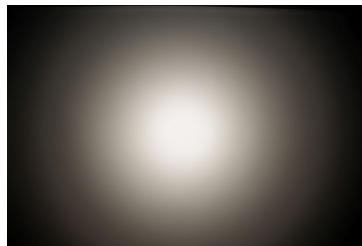
LED CTM-14 (Tunable White)  
 FWHM 15.0°  
 Efficiency 83 %  
 Peak intensity 6.100 cd/lm  
 Required components:  
 C13867\_LENA-STD-BASE-VERO29  
 C12606\_LENINA-DL  
 Bender Wirth: 442 Typ L3



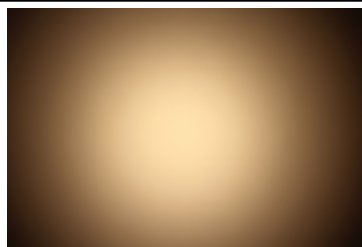
LED CTM-22 (Tunable White)  
 FWHM 22.0°  
 Efficiency 84 %  
 Peak intensity 3.600 cd/lm  
 Required components:  
 C13867\_LENA-STD-BASE-VERO29  
 C11996\_LENA-LENS  
 Bender Wirth: 494 Typ L3



LED CTM-22 (Tunable White)  
 FWHM 20.0°  
 Efficiency 89 %  
 Peak intensity 4.700 cd/lm  
 Required components:  
 C13867\_LENA-STD-BASE-VERO29  
 Bender Wirth: 494 Typ L3



LED CXM-22  
 FWHM 25.0°  
 Efficiency 76 %  
 Peak intensity 3.000 cd/lm  
 Required components:  
 C12692\_LENA-STD-BASE-CLL040  
 C11996\_LENA-LENS

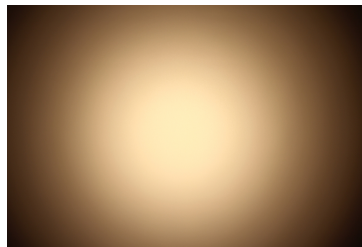




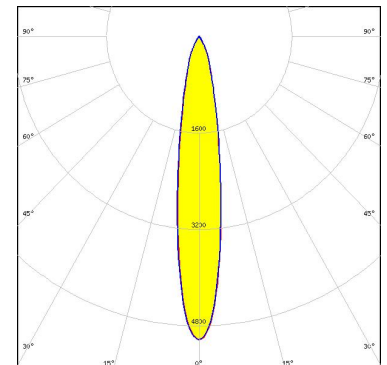
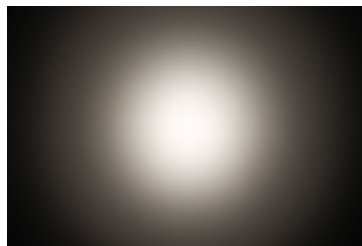
#### PHOTOMETRIC DATA (MEASURED):



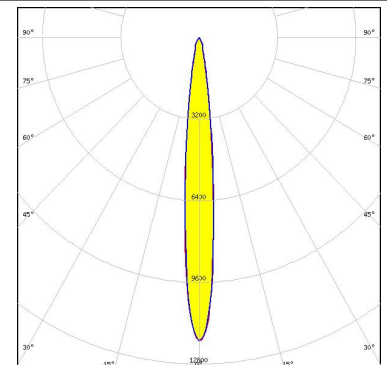
LED CXM-22  
 FWHM 23.0°  
 Efficiency 81 %  
 Peak intensity 3.800 cd/lm  
 Required components:  
 C12692\_LENA-STD-BASE-CLL040



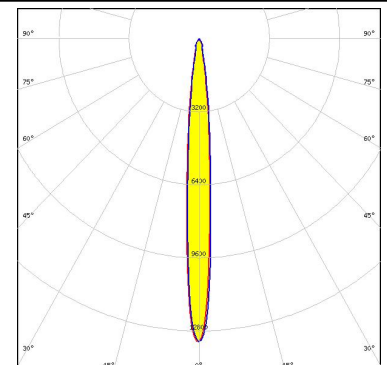
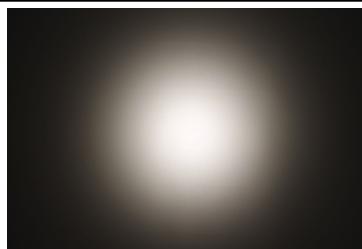
LED COB J-Type  
 FWHM 17.0°  
 Efficiency 84 %  
 Peak intensity 5.000 cd/lm  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 463 Typ L2



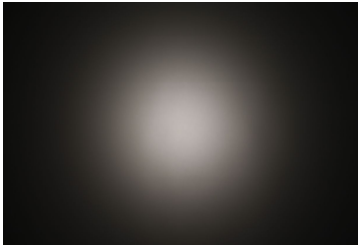
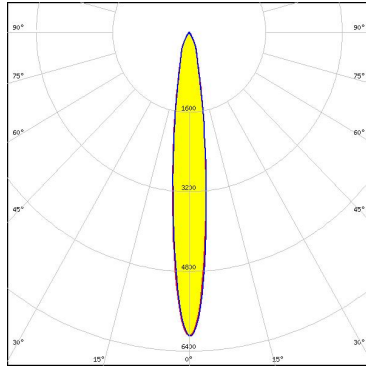

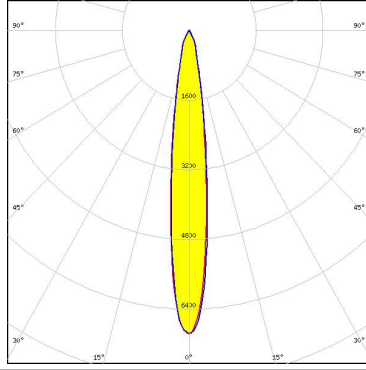
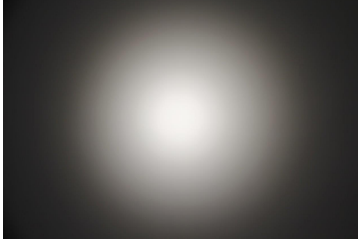
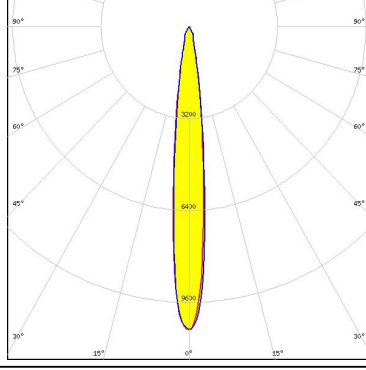
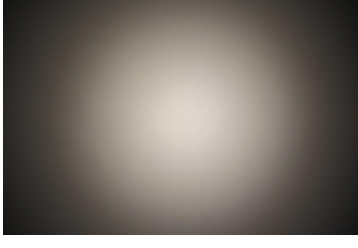
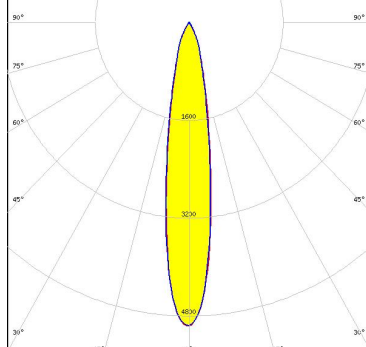
LED COB L-Type (LES 11)  
 FWHM 11.0°  
 Efficiency 89 %  
 Peak intensity 11.900 cd/lm  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 438 Typ L1



LED COB L-Type (LES 9)  
 FWHM 9.0°  
 Efficiency 84 %  
 Peak intensity 13.200 cd/lm  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 438 Typ L1



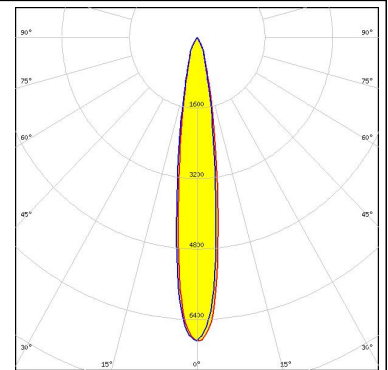
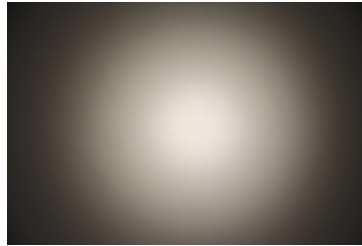
#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 9)</p> <p>FWHM 13.0°</p> <p>Efficiency 78 %</p> <p>Peak intensity 6.100 cd/lm</p> <p>Required components:            C13868_LENA-STD-BASE-VERO13-18            C11996_LENA-LENS            Bender Wirth: 438 Typ L1</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S13</p> <p>FWHM 14.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 7.000 cd/lm</p> <p>Required components:            C13868_LENA-STD-BASE-VERO13-18            C11996_LENA-LENS            Bender Wirth: 437 Typ L1</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S13</p> <p>FWHM 12.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 11.000 cd/lm</p> <p>Required components:            C13868_LENA-STD-BASE-VERO13-18            Bender Wirth: 437 Typ L1</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S19</p> <p>FWHM 17.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 5.000 cd/lm</p> <p>Required components:            C13867_LENA-STD-BASE-VERO29            C11996_LENA-LENS            Bender Wirth: 462 Typ L3</p>		

#### PHOTOMETRIC DATA (MEASURED):

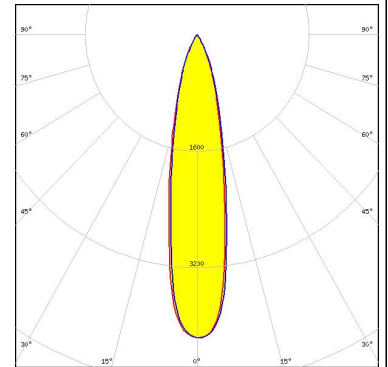
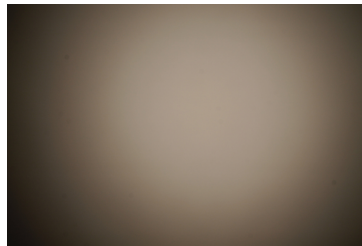
**OSRAM**  
Opto Semiconductors

LED Soleriq S19  
FWHM 15.0°  
Efficiency 87 %  
Peak intensity 6.900 cd/lm  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
Bender Wirth: 462 Typ L3



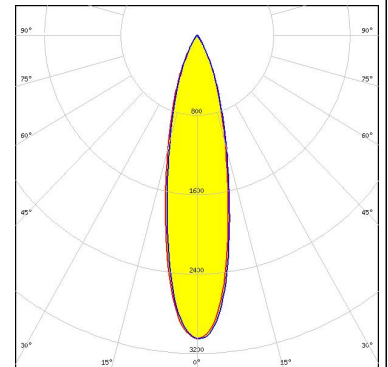
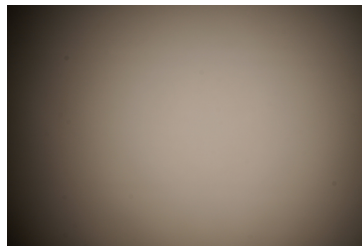
**SAMSUNG**

LED COB D Series LES 22 mm  
FWHM 22.0°  
Efficiency 87 %  
Peak intensity 4.200 cd/lm  
Required components:  
C12692\_LENA-STD-BASE-CLL040



**SAMSUNG**

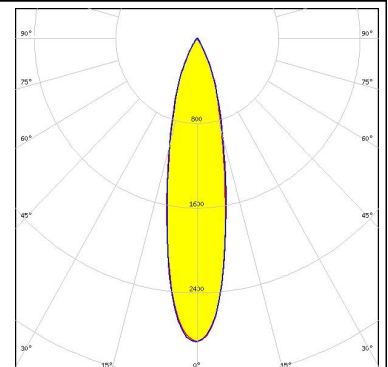
LED COB D Series LES 22 mm  
FWHM 25.0°  
Efficiency 82 %  
Peak intensity 3.100 cd/lm  
Required components:  
C12692\_LENA-STD-BASE-CLL040  
C11996\_LENA-LENS



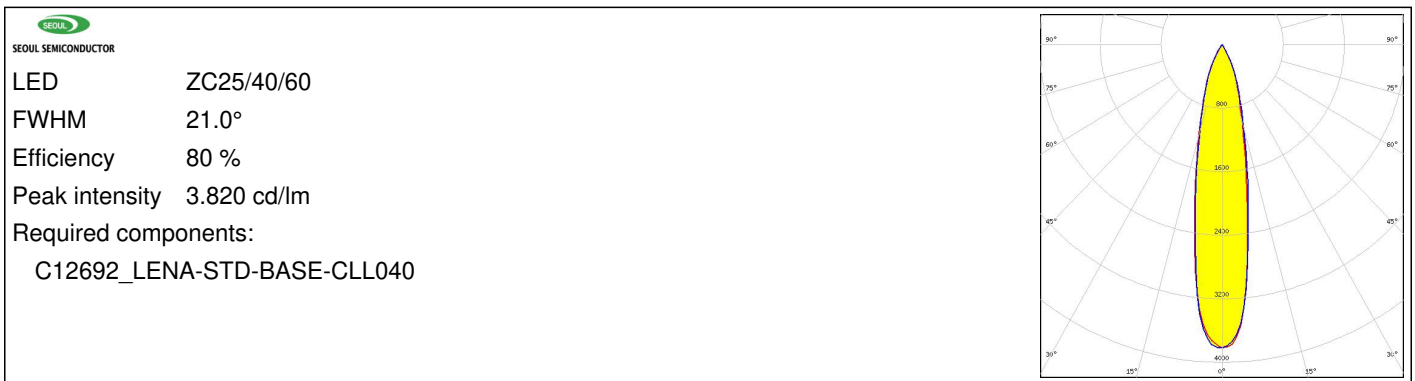
**SECL**

SEOUL SEMICONDUCTOR

LED ZC25/40/60  
FWHM 23.0°  
Efficiency 74 %  
Peak intensity 2.860 cd/lm  
Required components:  
C12692\_LENA-STD-BASE-CLL040  
C11996\_LENA-LENS




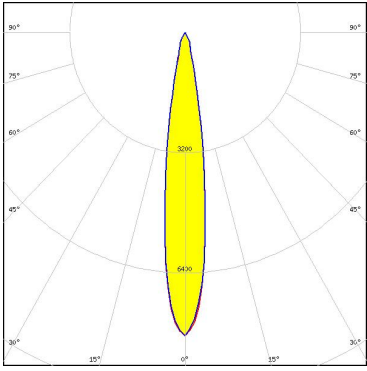

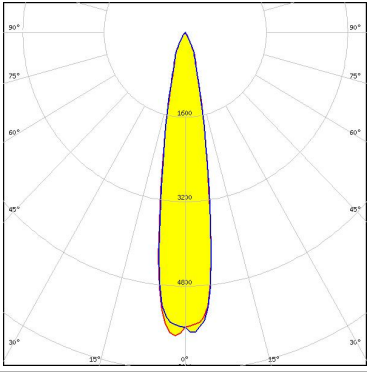


### PHOTOMETRIC DATA (MEASURED):



### PHOTOMETRIC DATA (SIMULATED):

<p>bridgelux.</p> <p>LED V10 Gen7 FWHM 15.0° Efficiency 79 % Peak intensity 7.710 cd/lm</p> <p>Required components: C13868_LENA-STD-BASE-VERO13-18 C11996_LENA-LENS Bender Wirth: 434 Typ L1</p>	
<p>bridgelux.</p> <p>LED V10 Gen7 FWHM 13.0° Efficiency 89 % Peak intensity 11.450 cd/lm</p> <p>Required components: C13868_LENA-STD-BASE-VERO13-18 Bender Wirth: 434 Typ L1</p>	
<p>bridgelux.</p> <p>LED V13 Gen7 FWHM 17.0° Efficiency 81 % Peak intensity 6.120 cd/lm</p> <p>Required components: C13868_LENA-STD-BASE-VERO13-18 C11996_LENA-LENS Bender Wirth: 477 Typ L1</p>	
<p>bridgelux.</p> <p>LED V13 Gen7 FWHM 14.0° Efficiency 88 % Peak intensity 8.330 cd/lm</p> <p>Required components: IDEAL: 50-2103CT + 50-2100LN</p>	

#### PHOTOMETRIC DATA (SIMULATED):

<p> <b>bridgelux</b></p> <p>LED V13 Gen7            FWHM 16.0°            Efficiency 88 %            Peak intensity 8.080 cd/lm</p> <p>Required components:            C13868_LENA-STD-BASE-VERO13-18            Bender Wirth: 477 Typ L1</p>	
<p> <b>bridgelux</b></p> <p>LED V22 Gen7            FWHM 18.0°            Efficiency 93 %            Peak intensity 5.744 cd/lm</p> <p>Required components:            C13867_LENA-STD-BASE-VERO29            Bender Wirth: 431 Typ L3</p>	
<p> <b>LUMINUS</b></p> <p>LED CXM-14            FWHM 17.0°            Efficiency 82 %            Peak intensity 5.200 cd/lm</p> <p>Required components:            C13868_LENA-STD-BASE-VERO13-18            C11996_LENA-LENS            Bender Wirth: 433 Typ L1</p>	
<p> <b>LUMINUS</b></p> <p>LED CXM-14            FWHM 14.0°            Efficiency 87 %            Peak intensity 8.600 cd/lm</p> <p>Required components:            C13868_LENA-STD-BASE-VERO13-18            Bender Wirth: 433 Typ L1</p>	

### PHOTOMETRIC DATA (SIMULATED):



LED CXM-9  
FWHM 13.0°  
Efficiency 82 %  
Peak intensity 7.100 cd/lm

Required components:

C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 434 Typ L1



LED CXM-9  
FWHM 10.0°  
Efficiency 87 %  
Peak intensity 14.200 cd/lm

Required components:

C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 434 Typ L1



SEOUL SEMICONDUCTOR

LED ZC12/18  
FWHM 14.0°  
Efficiency 87 %  
Peak intensity 8.600 cd/lm

Required components:

C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 433 Typ L1



SEOUL SEMICONDUCTOR

LED ZC12/18  
FWHM 17.0°  
Efficiency 82 %  
Peak intensity 5.200 cd/lm

Required components:

C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 433 Typ L1

## PHOTOMETRIC DATA (SIMULATED):

 SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM	10.0°
Efficiency	87 %
Peak intensity	14.200 cd/lm
Required components:	
C13868_LENA-STD-BASE-VERO13-18	
Bender Wirth: 434 Typ L1	
<hr/>	
 SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM	13.0°
Efficiency	82 %
Peak intensity	7.100 cd/lm
Required components:	
C13868_LENA-STD-BASE-VERO13-18	
C11996_LENA-LENS	
Bender Wirth: 434 Typ L1	



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

#### Shipping locations

Salo, Finland  
Hong Kong, China

#### Distribution Partners

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