

## LENA-WAS

Asymmetric beam for wall-washing

### TECHNICAL SPECIFICATIONS:

|                |                                                                                       |
|----------------|---------------------------------------------------------------------------------------|
| Dimensions     | Ø 111.0 mm                                                                            |
| Height         | 37 mm                                                                                 |
| Fastening      | glue                                                                                  |
| ROHS compliant | yes  |

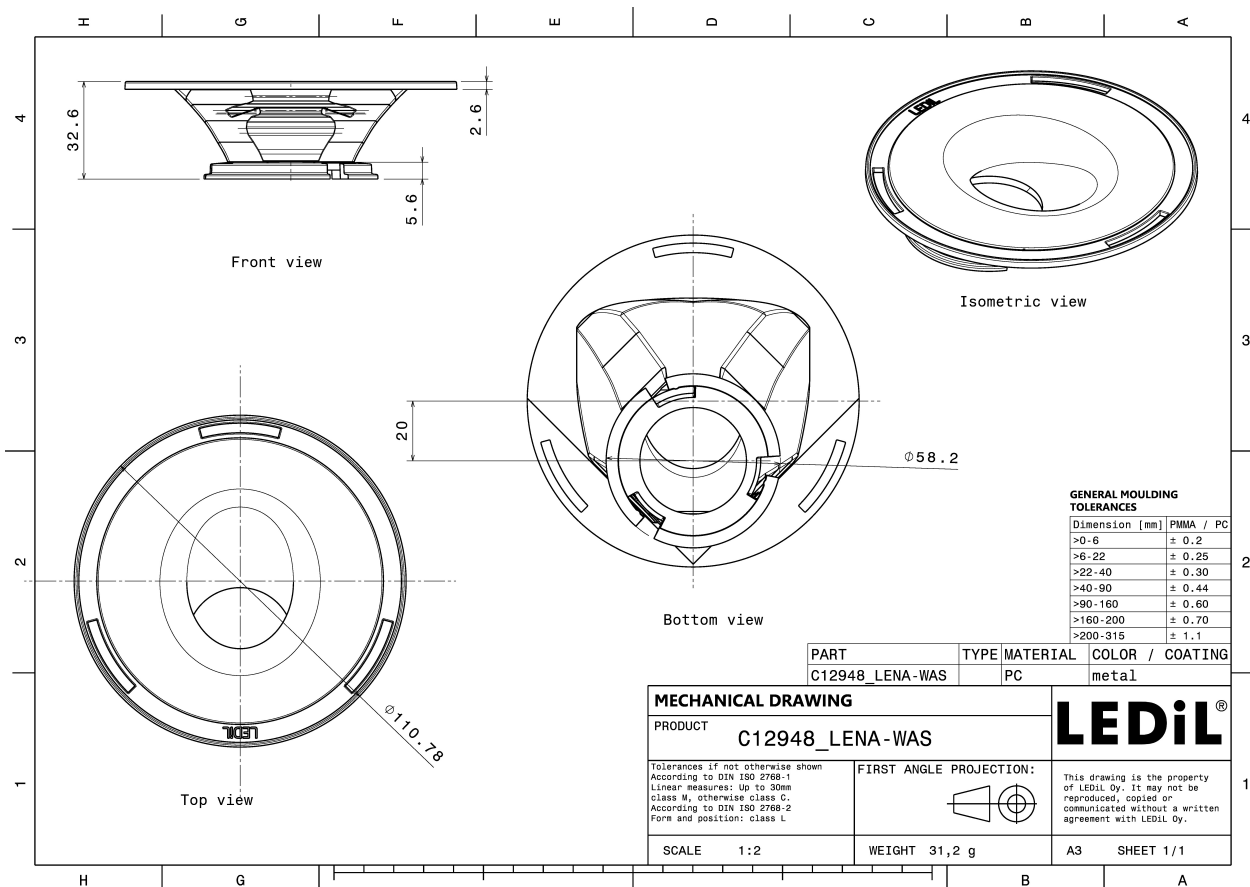
### MATERIAL SPECIFICATIONS:

| Component | Type      | Material | Colour | Finish | Coating |
|-----------|-----------|----------|--------|--------|---------|
| LENA-WAS  | Reflector | PC       | metal  |        | lacquer |



### ORDERING INFORMATION:

| Component                                         | Qty in box | MOQ | MPQ | Box weight (kg) |
|---------------------------------------------------|------------|-----|-----|-----------------|
| C12948_LENA-WAS<br>» Box size: 480 x 280 x 300 mm | 56         | 56  | 56  | 3.1             |

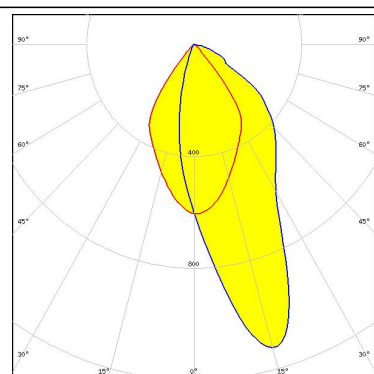




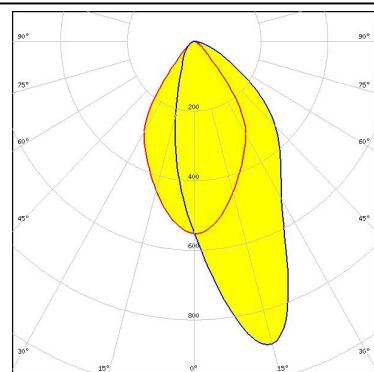
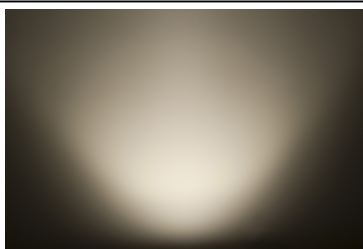
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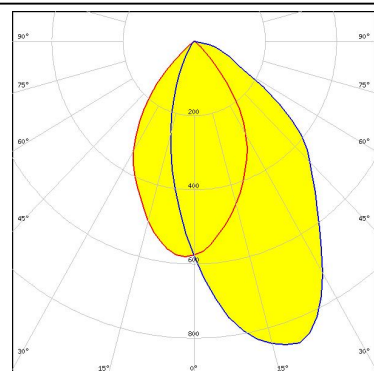
LED BXRA ES Rectangle  
FWHM Asymmetric  
Efficiency 80 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12153\_LENA-STD-BASE-BXRA



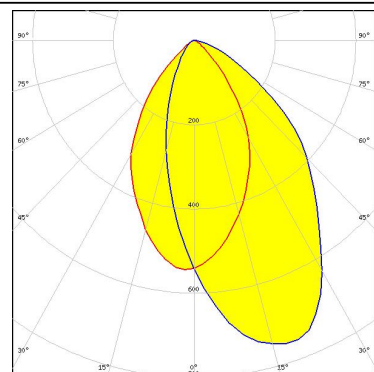
LED BXRA ES Rectangle  
FWHM Asymmetric  
Efficiency 77 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12153\_LENA-STD-BASE-BXRA  
C11996\_LENA-LENS



LED BXRA RS  
FWHM Asymmetric  
Efficiency 80 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12229\_LENA-STD-BASE-RS



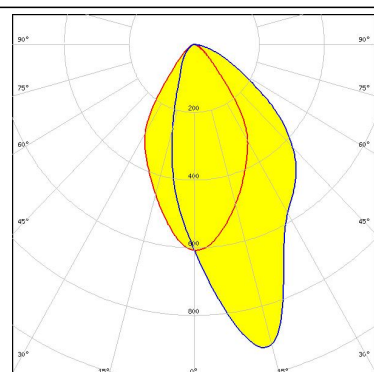
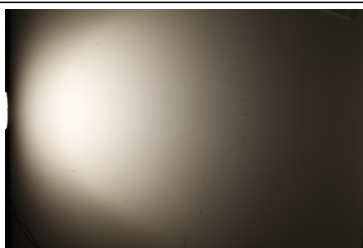
LED BXRA RS  
FWHM Asymmetric  
Efficiency 75 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12229\_LENA-STD-BASE-RS  
C11996\_LENA-LENS



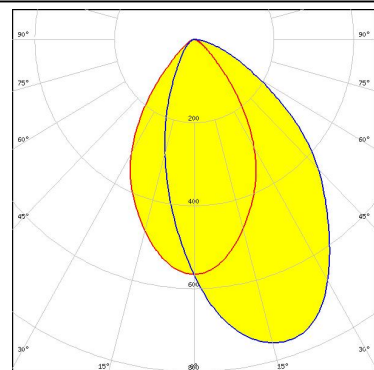
### PHOTOMETRIC DATA (MEASURED):



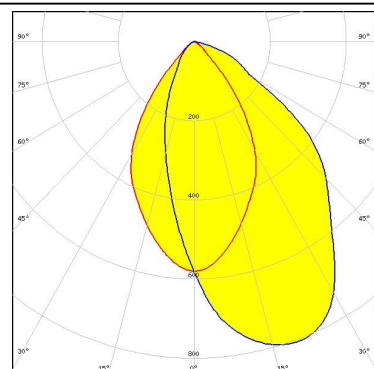
LED V10 Gen6  
FWHM Asymmetric  
Efficiency 83 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13186\_LENA-STD-BASE-CXA15  
C11996\_LENA-LENS



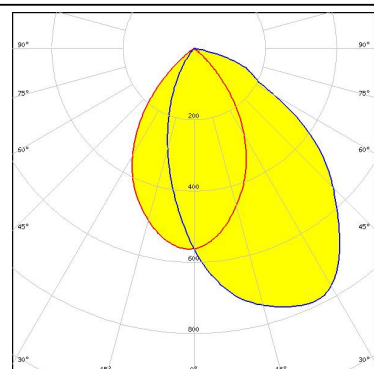
LED V22 Gen7  
FWHM Asymmetric  
Efficiency 82 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
C11996\_LENA-LENS  
Bender Wirth: 431 Typ L3



LED V22 Gen7  
FWHM Asymmetric  
Efficiency 84 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
C14169\_LENA-CLEAR-LENS  
Bender Wirth: 431 Typ L3



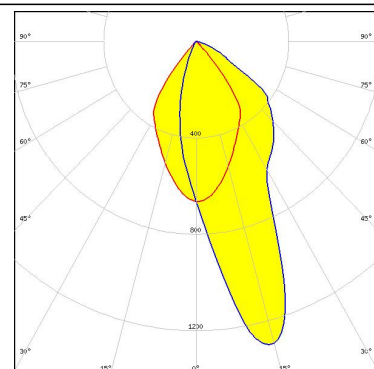
LED Vero SE 29  
FWHM Asymmetric  
Efficiency 87 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C15083\_LENA-STD-BASE-VERO29



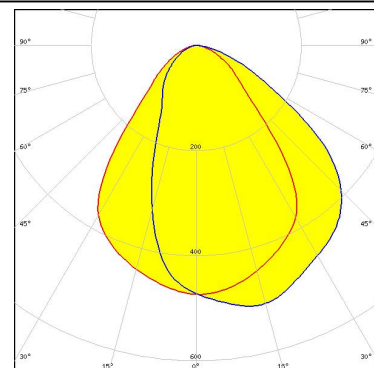
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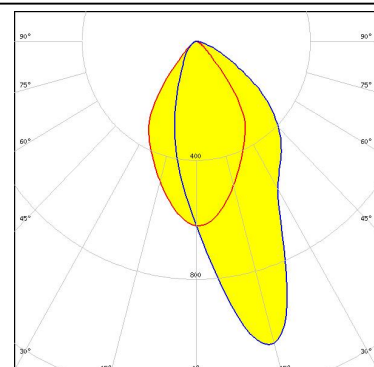
LED VERO13  
FWHM Asymmetric  
Efficiency 91 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18



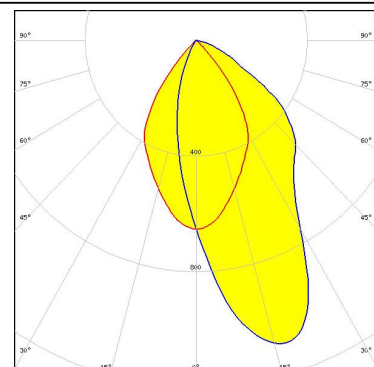
LED VERO13  
FWHM Asymmetric  
Efficiency 87 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS



LED VERO13  
FWHM Asymmetric  
Efficiency 87 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS



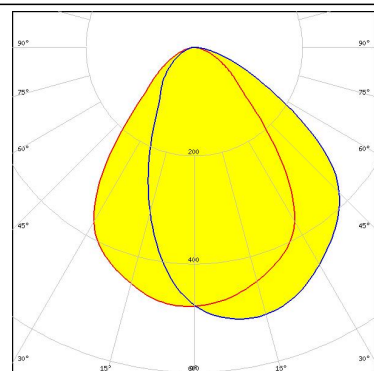
LED VERO18  
FWHM Asymmetric  
Efficiency 90 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18



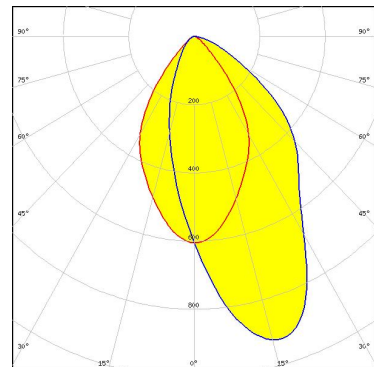
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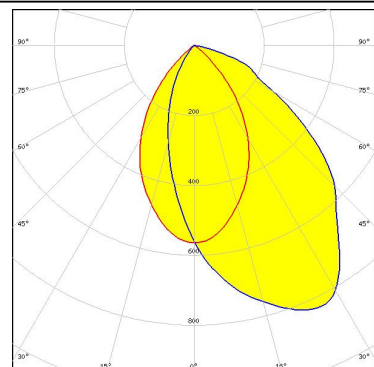
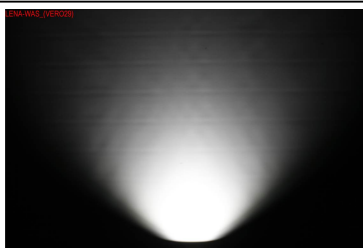
LED VERO18  
FWHM Asymmetric  
Efficiency 87 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS



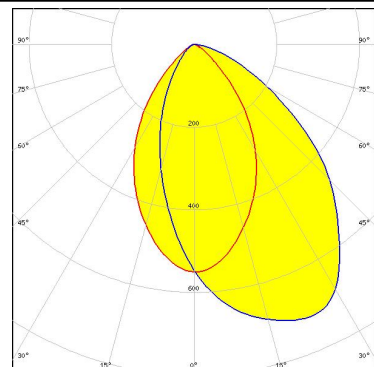
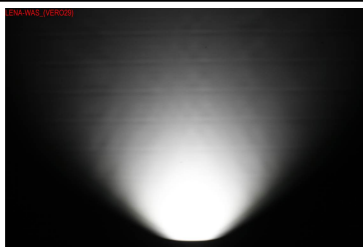
LED VERO18  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS



LED VERO29  
FWHM Asymmetric  
Efficiency 87 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29



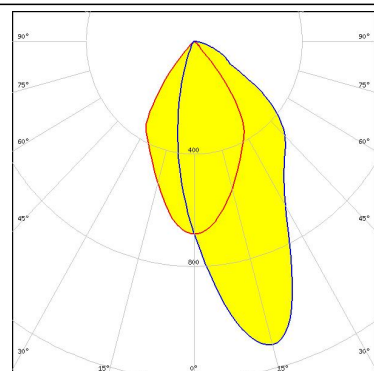
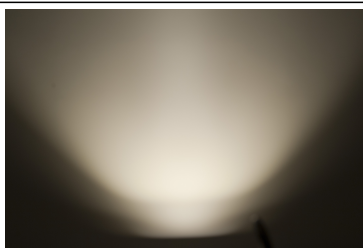
LED VERO29  
FWHM Asymmetric  
Efficiency 82 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
C11996\_LENA-LENS



### PHOTOMETRIC DATA (MEASURED):

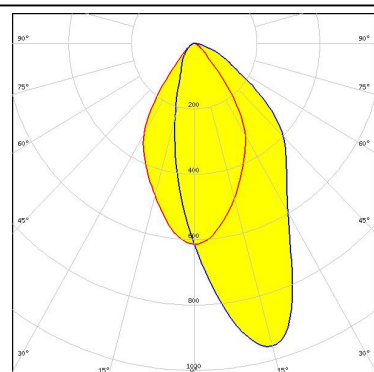
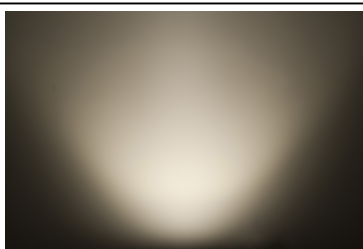
#### CITIZEN

LED CL-L340  
FWHM Asymmetric  
Efficiency 84 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C11995\_LENA-STD-BASE-CL340



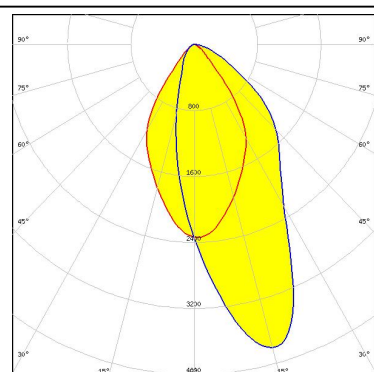
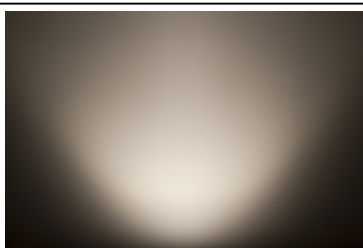
#### CITIZEN

LED CL-L340  
FWHM Asymmetric  
Efficiency 73 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C11995\_LENA-STD-BASE-CL340  
C11996\_LENA-LENS



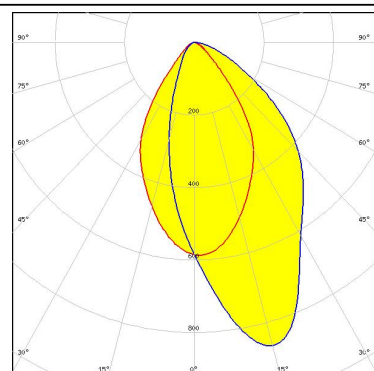
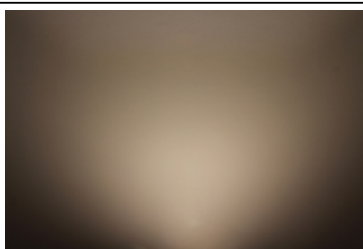
#### CITIZEN

LED CLL03x/CLU03x  
FWHM Asymmetric  
Efficiency 76 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12691\_LENA-STD-BASE-CLL030  
C11996\_LENA-LENS



#### CITIZEN

LED CLL03x/CLU03x  
FWHM Asymmetric  
Efficiency 85 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 433 Typ L1

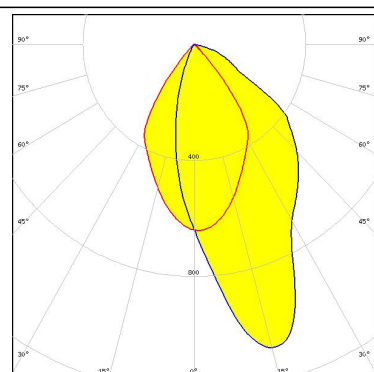
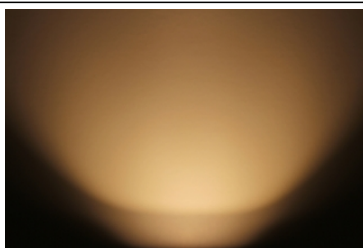




### PHOTOMETRIC DATA (MEASURED):

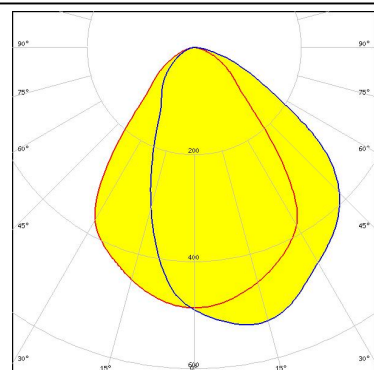
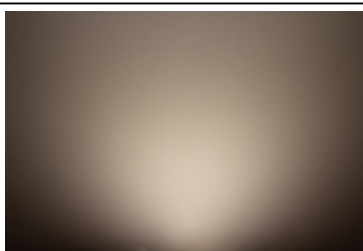
#### CITIZEN

LED CLL03x/CLU03x  
FWHM Asymmetric  
Efficiency 90 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 433 Typ L1



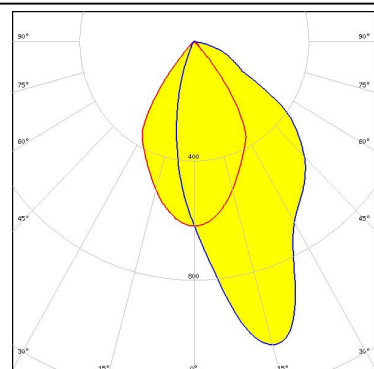
#### CITIZEN

LED CLL03x/CLU03x  
FWHM Asymmetric  
Efficiency 87 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 433 Typ L1



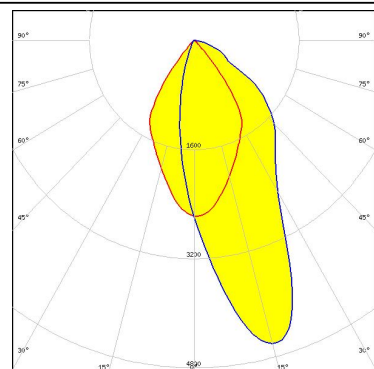
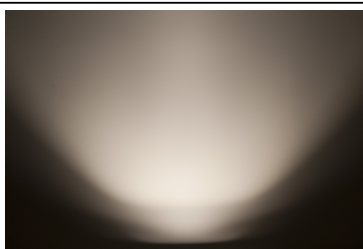
#### CITIZEN

LED CLL03x/CLU03x  
FWHM Asymmetric  
Efficiency 87 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8101/G2 + S-8000/11



#### CITIZEN

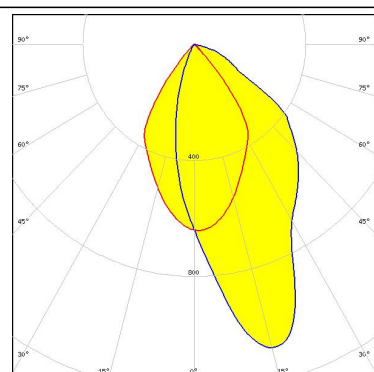
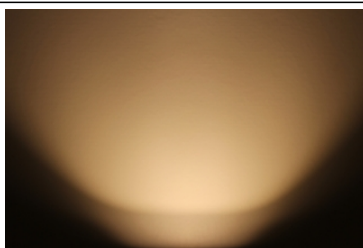
LED CLL03x/CLU03x  
FWHM Asymmetric  
Efficiency 81 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12691\_LENA-STD-BASE-CLL030



### PHOTOMETRIC DATA (MEASURED):

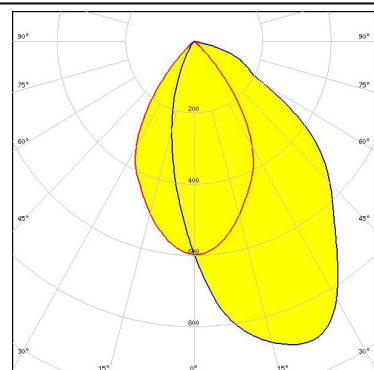
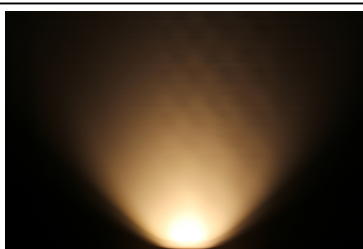
#### CITIZEN

LED CLL03x/CLU03x  
FWHM Asymmetric  
Efficiency 90 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
Bender Wirth: 433 Typ L1



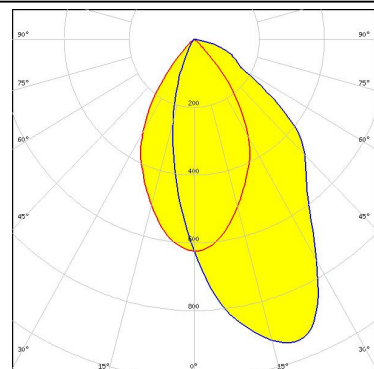
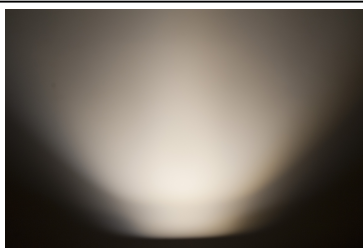
#### CITIZEN

LED CLL04x/CLU04x  
FWHM Asymmetric  
Efficiency 89 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
Bender Wirth: 431 Typ L3



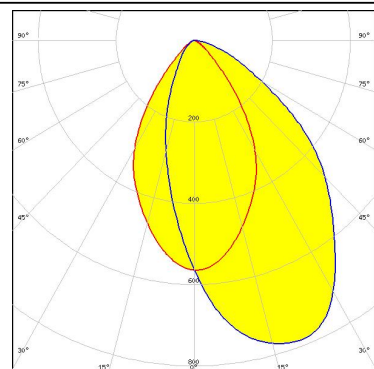
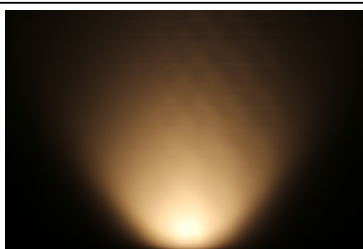
#### CITIZEN

LED CLL04x/CLU04x  
FWHM Asymmetric  
Efficiency 82 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12692\_LENA-STD-BASE-CLL040



#### CITIZEN

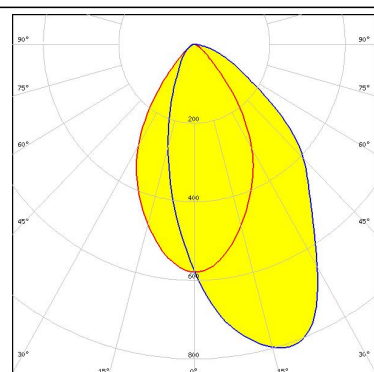
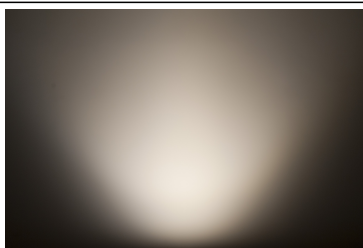
LED CLL04x/CLU04x  
FWHM Asymmetric  
Efficiency 84 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
C11996\_LENA-LENS  
Bender Wirth: 431 Typ L3



### PHOTOMETRIC DATA (MEASURED):

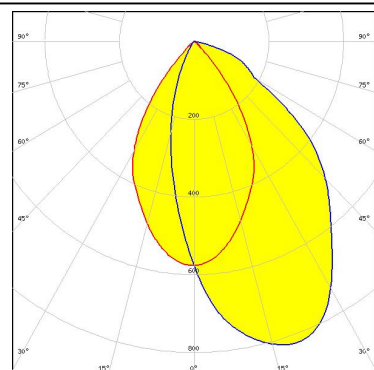
#### CITIZEN

LED CLL04x/CLU04x  
FWHM Asymmetric  
Efficiency 78 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12692\_LENA-STD-BASE-CLL040  
C11996\_LENA-LENS



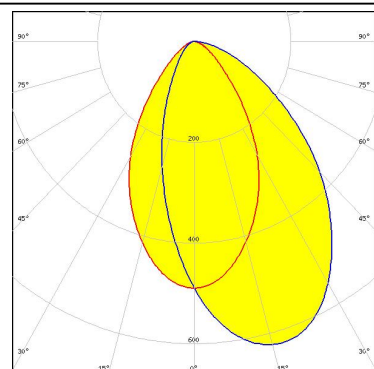
#### CITIZEN

LED CLL04x/CLU04x  
FWHM Asymmetric  
Efficiency 80 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8102/G2 + S-8000/12



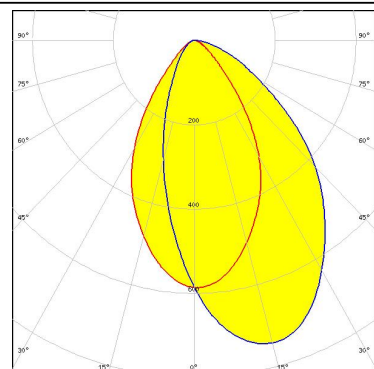
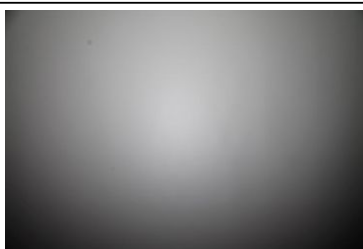
#### CITIZEN

LED CLL04x/CLU04x  
FWHM Asymmetric  
Efficiency 74 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C11996\_LENA-LENS  
A.A.G. STUCCHI: 8102/G2 + S-8000/12



#### CITIZEN

LED CLL04x/CLU04x  
FWHM Asymmetric  
Efficiency 82 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C11996\_LENA-LENS  
IDEAL: 50-2204CT + 50-2100LN

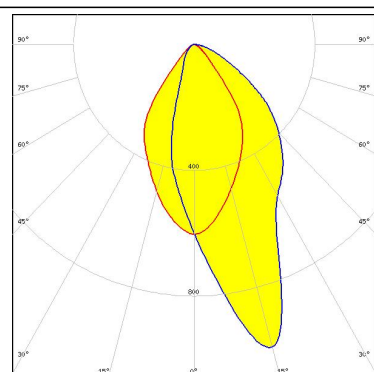
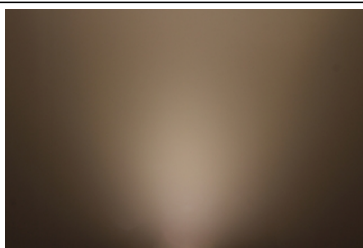




### PHOTOMETRIC DATA (MEASURED):

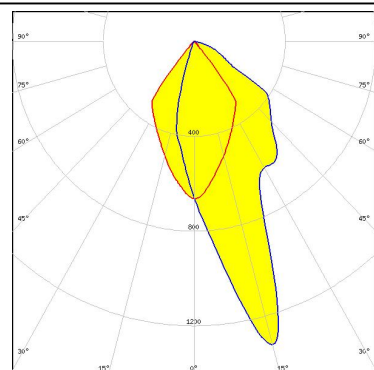
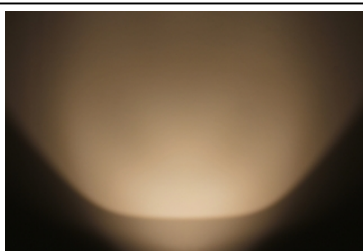
#### CITIZEN

LED CLU700/701/702  
FWHM Asymmetric  
Efficiency 84 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 434 Typ L1



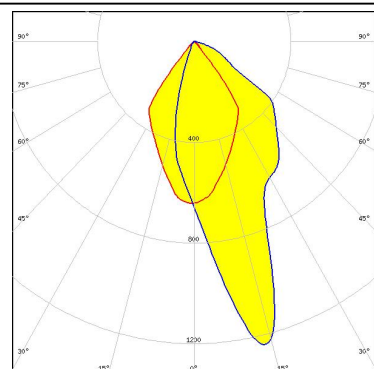
#### CITIZEN

LED CLU700/701/702  
FWHM Asymmetric  
Efficiency 89 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 434 Typ L1



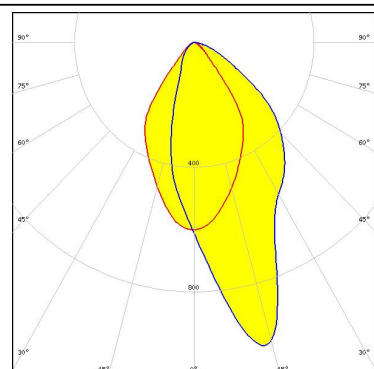
#### CITIZEN

LED CLU710/711  
FWHM Asymmetric  
Efficiency 89 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12691\_LENA-STD-BASE-CLL030



#### CITIZEN

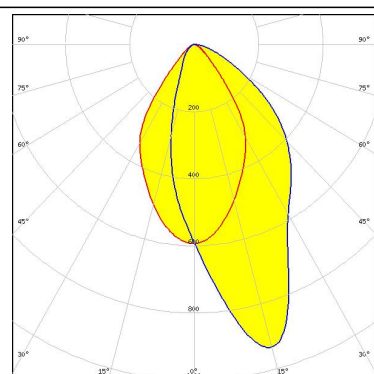
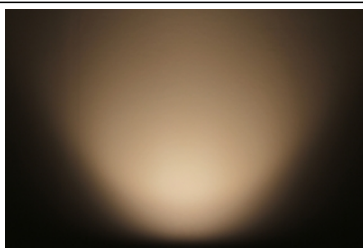
LED CLU710/711  
FWHM Asymmetric  
Efficiency 84 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12691\_LENA-STD-BASE-CLL030  
C11996\_LENA-LENS



#### PHOTOMETRIC DATA (MEASURED):

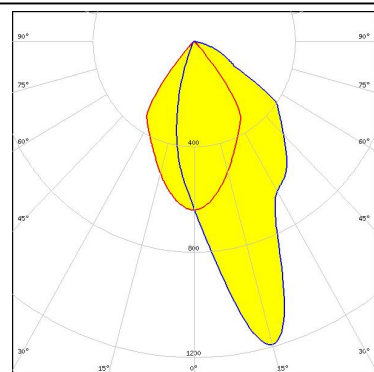
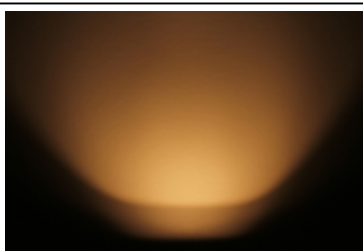
#### CITIZEN

LED CLU720/721  
 FWHM Asymmetric  
 Efficiency 85 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 433 Typ L1



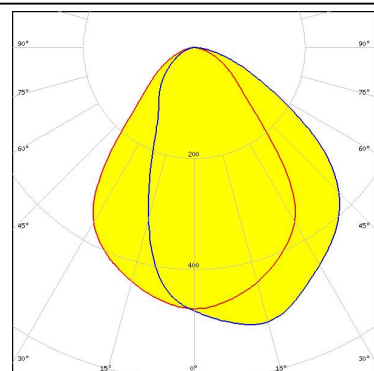
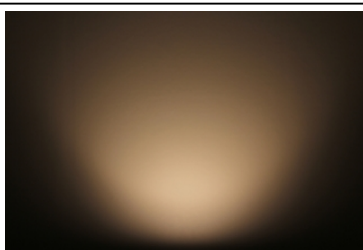
#### CITIZEN

LED CLU720/721  
 FWHM Asymmetric  
 Efficiency 90 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 433 Typ L1



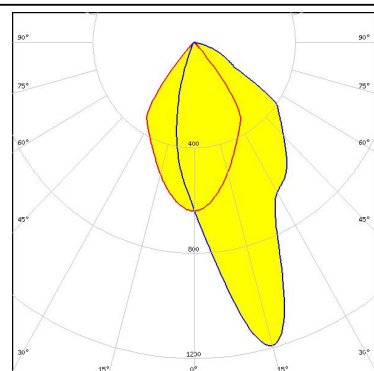
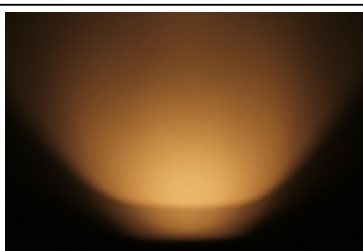
#### CITIZEN

LED CLU720/721  
 FWHM Asymmetric  
 Efficiency 86 %  
 Peak intensity 0.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 433 Typ L1



#### CITIZEN

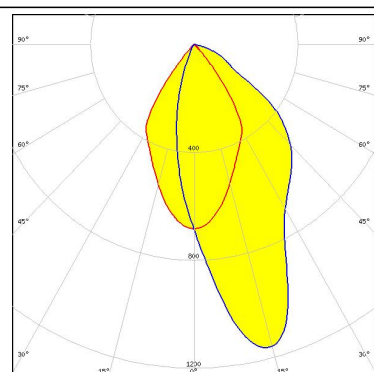
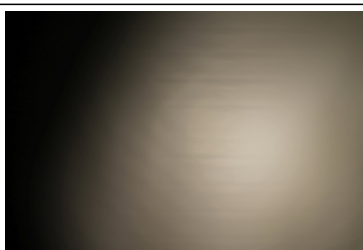
LED CLU720/721  
 FWHM Asymmetric  
 Efficiency 90 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13867\_LENA-STD-BASE-VERO29  
 Bender Wirth: 433 Typ L1



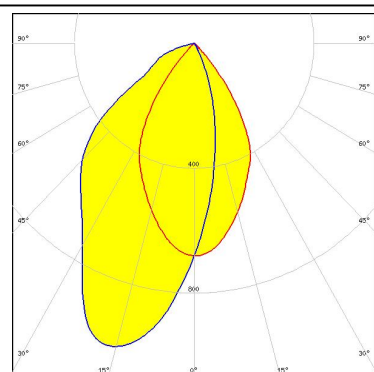
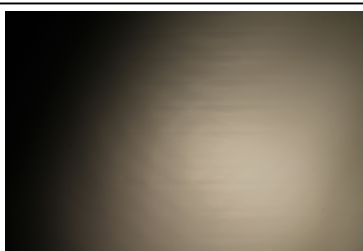
### PHOTOMETRIC DATA (MEASURED):



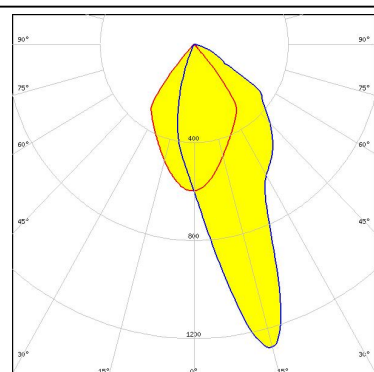
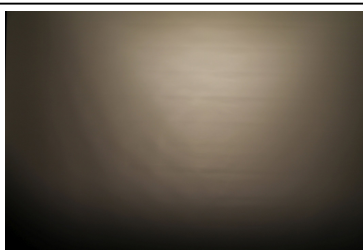
LED CMA1840  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C14146\_LENA-STD-BASE-CXA18



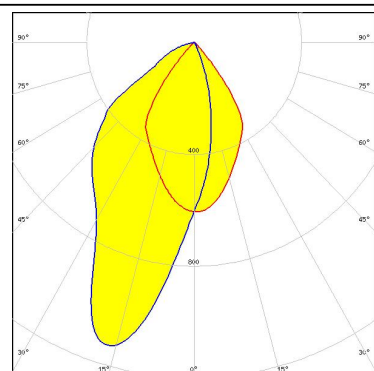
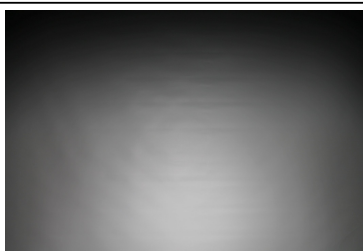
LED CMA2550  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13324\_LENA-STD-BASE-CXA25



LED CMT14xx  
FWHM Asymmetric  
Efficiency 85 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 434 Typ L1



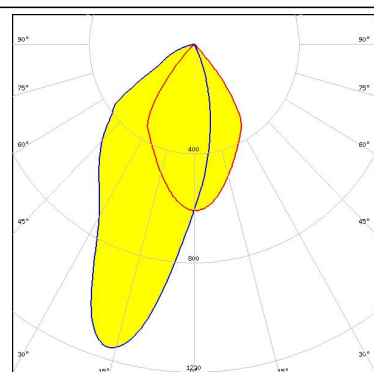
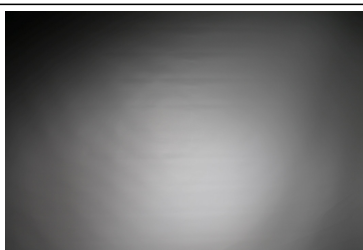
LED CMT19xx  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12691\_LENA-STD-BASE-CLL030



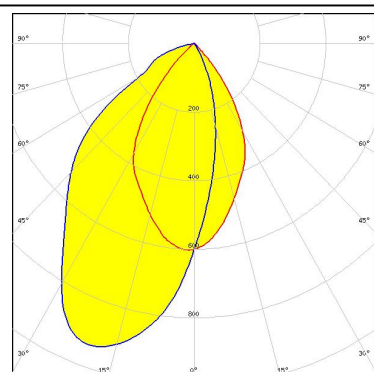
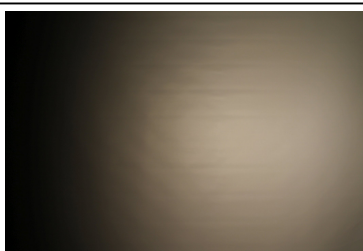
#### PHOTOMETRIC DATA (MEASURED):



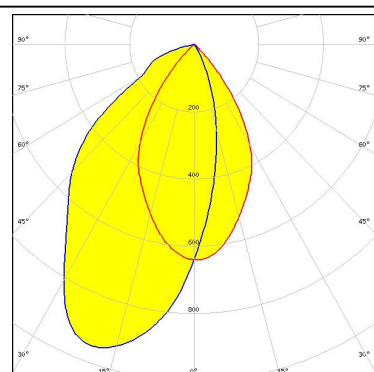
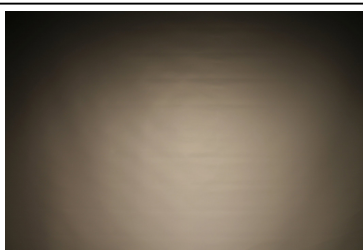
LED CMT19xx  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 477 Typ L1



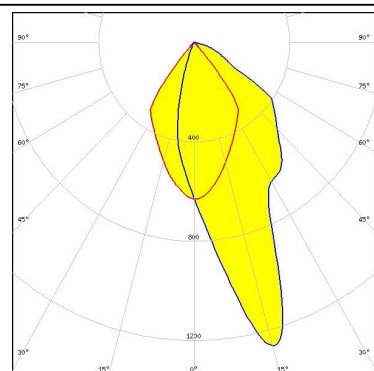
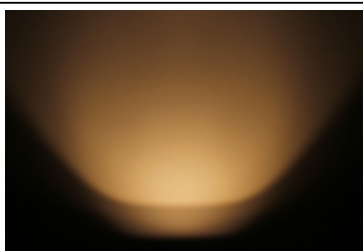
LED CMT28xx  
FWHM Asymmetric  
Efficiency 85 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
Bender Wirth: 471 Typ L3



LED CMT28xx  
FWHM Asymmetric  
Efficiency 85 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12692\_LENA-STD-BASE-CLL040



LED CXA/B 15xx  
FWHM Asymmetric  
Efficiency 89 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 441 Typ L1

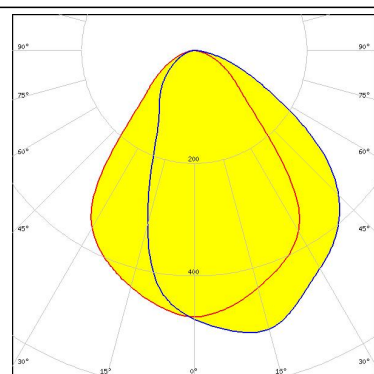
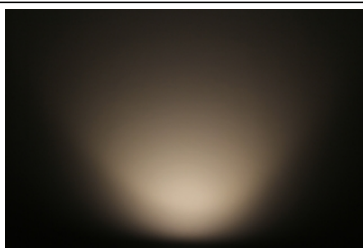




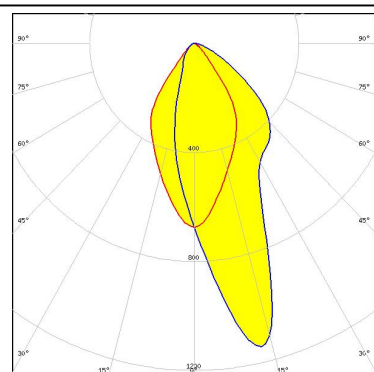
### PHOTOMETRIC DATA (MEASURED):



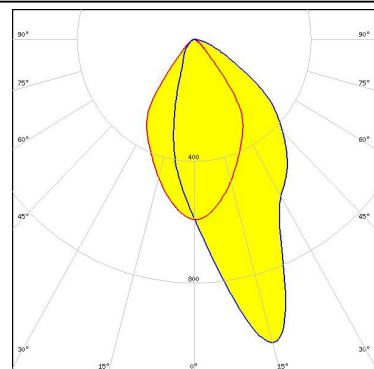
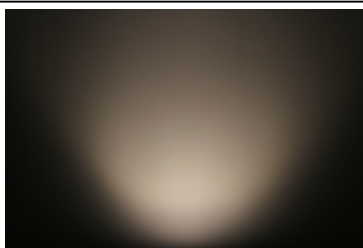
LED CXA/B 15xx  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 441 Typ L1



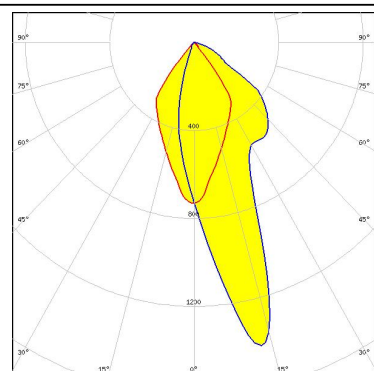
LED CXA/B 15xx  
FWHM Asymmetric  
Efficiency 84 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13186\_LENA-STD-BASE-CXA15  
C11996\_LENA-LENS



LED CXA/B 15xx  
FWHM Asymmetric  
Efficiency 85 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 441 Typ L1



LED CXA/B 15xx  
FWHM Asymmetric  
Efficiency 88 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13186\_LENA-STD-BASE-CXA15

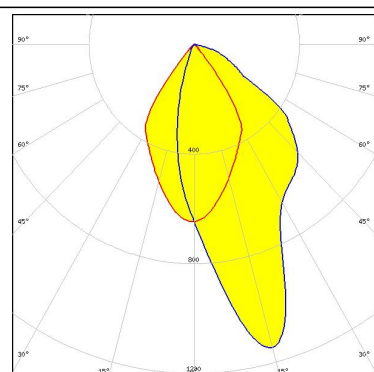
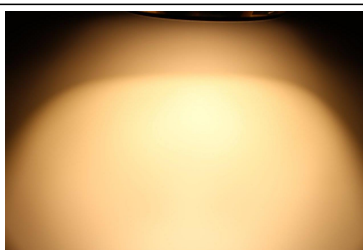




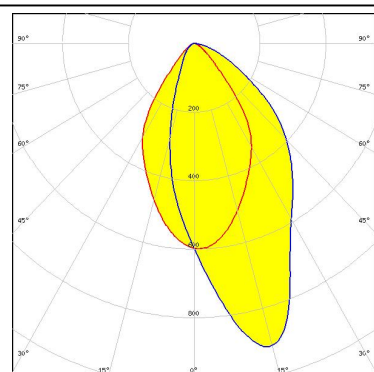
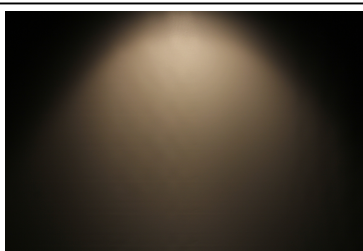
#### PHOTOMETRIC DATA (MEASURED):



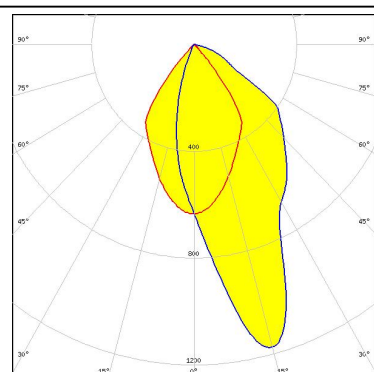
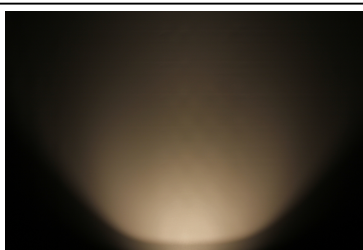
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM Asymmetric  
 Efficiency 88 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14146\_LENA-STD-BASE-CXA18



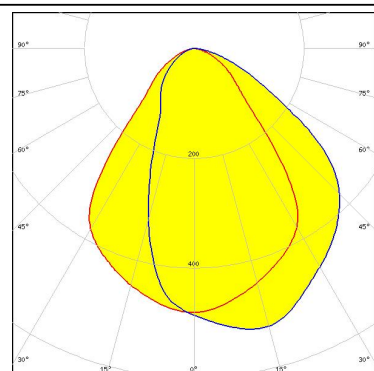
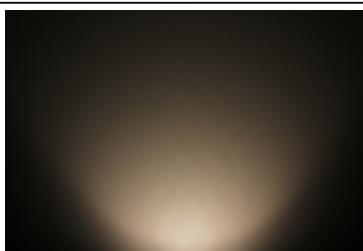
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM Asymmetric  
 Efficiency 84 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 437 Typ L1



LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM Asymmetric  
 Efficiency 87 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 437 Typ L1



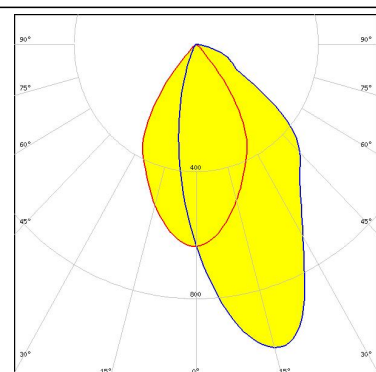
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM Asymmetric  
 Efficiency 86 %  
 Peak intensity 0.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 437 Typ L1



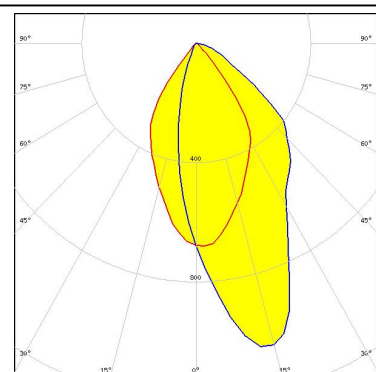
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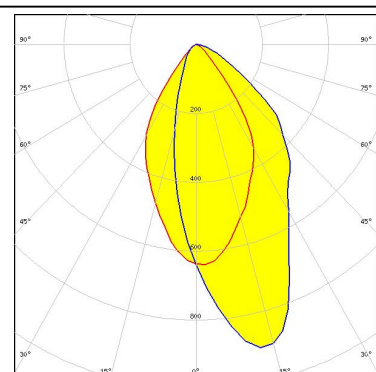
LED CXA/B 25xx  
FWHM Asymmetric  
Efficiency 75 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13324\_LENA-STD-BASE-CXA25



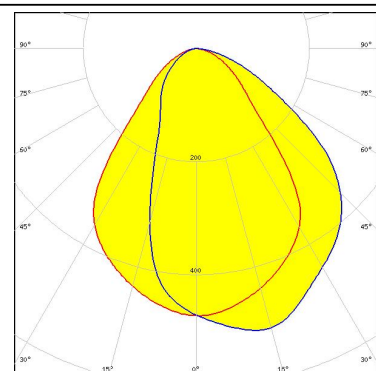
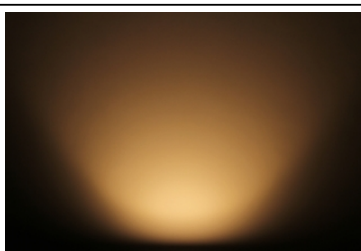
LED CXA2011  
FWHM Asymmetric  
Efficiency 79 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12105\_LENA-STD-BASE-CXA20



LED CXA2011  
FWHM Asymmetric  
Efficiency 75 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12105\_LENA-STD-BASE-CXA20  
C11996\_LENA-LENS



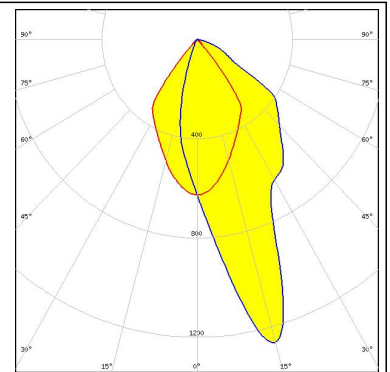
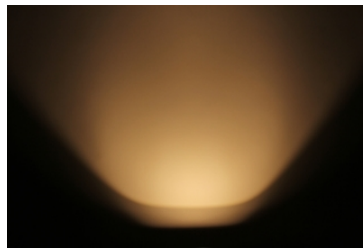
LED LUXEON CoB 1202/1203  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 438 Typ L1



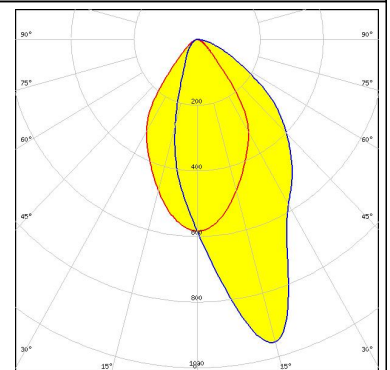
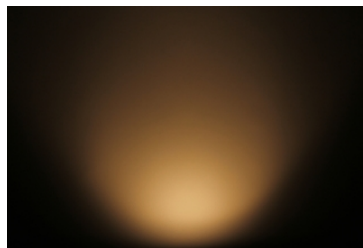
### PHOTOMETRIC DATA (MEASURED):



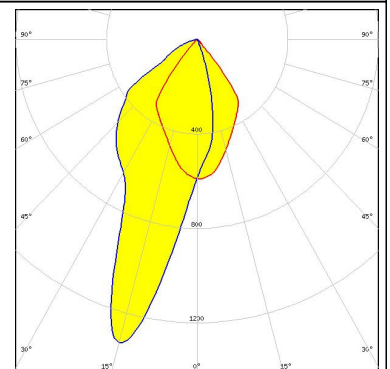
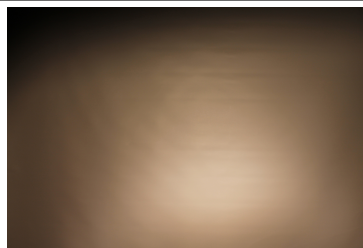
LED LUXEON CoB 1202/1203  
FWHM Asymmetric  
Efficiency 89 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 438 Typ L1



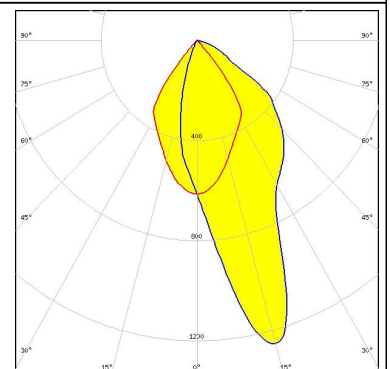
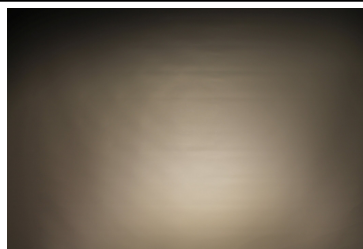
LED LUXEON CoB 1202/1203  
FWHM Asymmetric  
Efficiency 84 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 438 Typ L1



LED LUXEON CoB 1204HD  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C11981\_LENA-STD-BASE-COB-L110



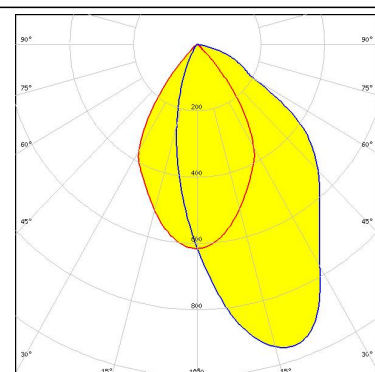
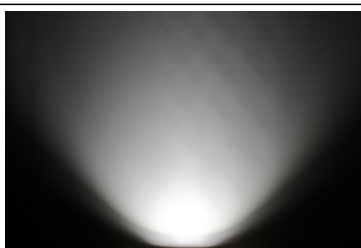
LED LUXEON CoB 1205HD  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C11981\_LENA-STD-BASE-COB-L110



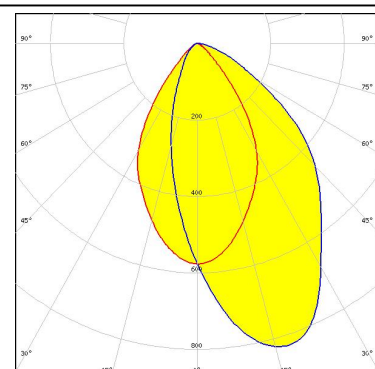
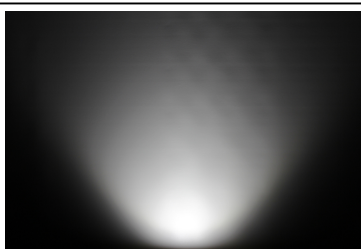
#### PHOTOMETRIC DATA (MEASURED):



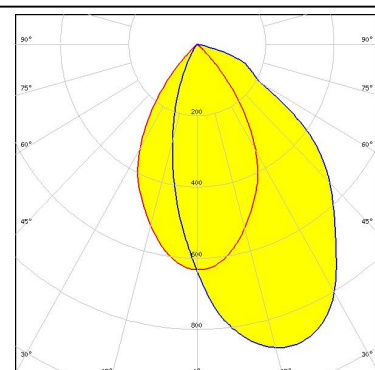
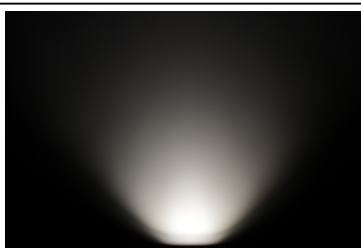
LED LUXEON CoB 1211  
 FWHM Asymmetric  
 Efficiency 89 %  
 Peak intensity 1 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13867\_LENA-STD-BASE-VERO29  
 Bender Wirth: 431 Typ L3



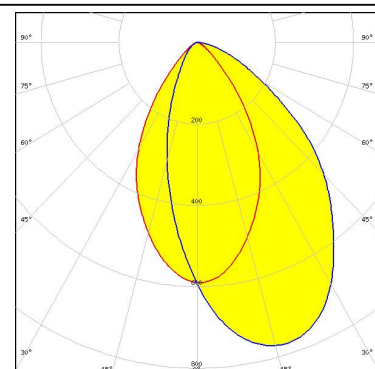
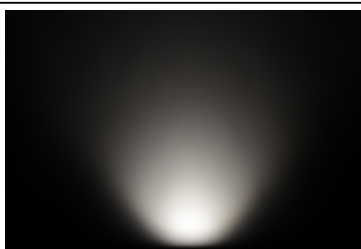
LED LUXEON CoB 1211  
 FWHM Asymmetric  
 Efficiency 84 %  
 Peak intensity 0.8 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13867\_LENA-STD-BASE-VERO29  
 C11996\_LENA-LENS  
 Bender Wirth: 431 Typ L3



LED LUXEON CoB 1216/1812  
 FWHM Asymmetric  
 Efficiency 88 %  
 Peak intensity 0.9 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12692\_LENA-STD-BASE-CLL040



LED LUXEON CoB 1216/1812  
 FWHM Asymmetric  
 Efficiency 84 %  
 Peak intensity 0.8 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12692\_LENA-STD-BASE-CLL040  
 C11996\_LENA-LENS

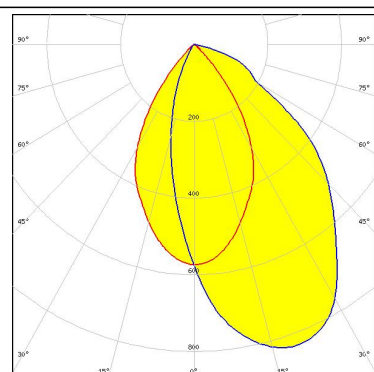
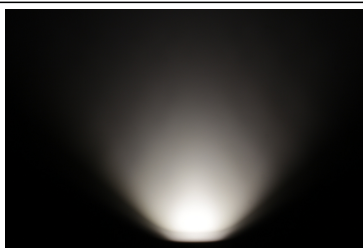




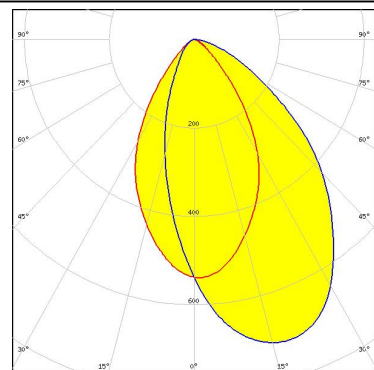
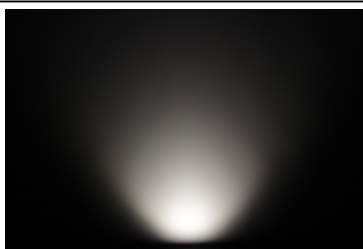
#### PHOTOMETRIC DATA (MEASURED):



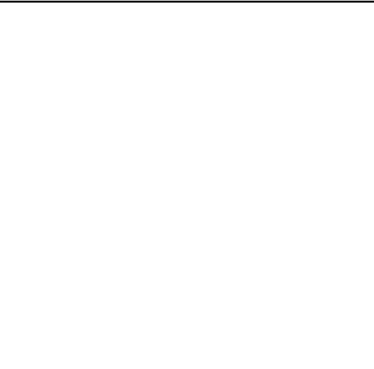
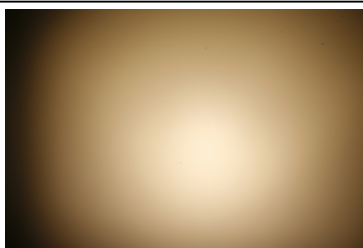
LED LUXEON CoB 1216/1812  
 FWHM 60.0°  
 Efficiency 81 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8102/G2 + S-8000/12



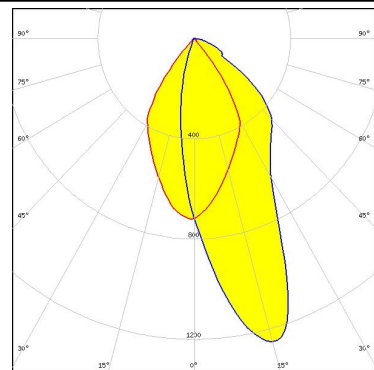
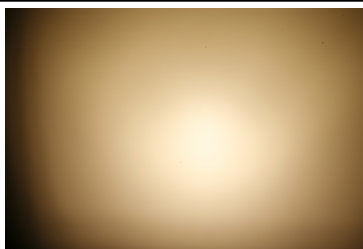
LED LUXEON CoB 1216/1812  
 FWHM Asymmetric  
 Efficiency 77 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C11996\_LENA-LENS  
 A.A.G. STUCCHI: 8102/G2 + S-8000/12



LED LUXEON K12  
 FWHM Asymmetric  
 Efficiency 77 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12924\_LENA-STD-BASE-LUXEON-K  
 C11996\_LENA-LENS



LED LUXEON K12  
 FWHM Asymmetric  
 Efficiency 82 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12924\_LENA-STD-BASE-LUXEON-K

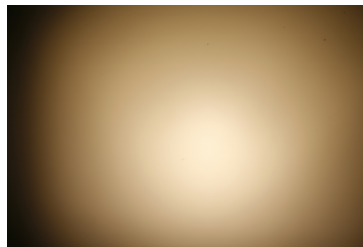




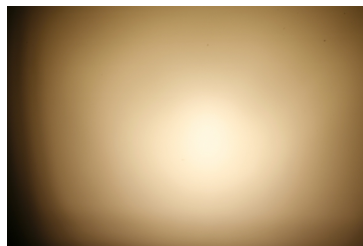
### PHOTOMETRIC DATA (MEASURED):



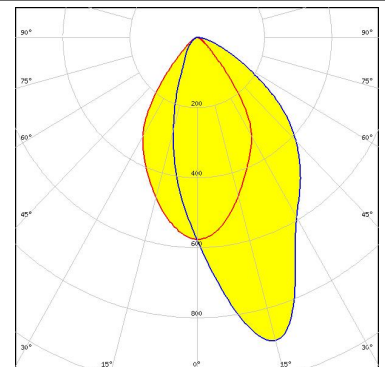
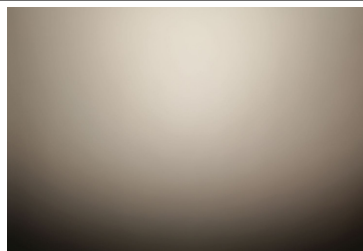
**LED** LUXEON K16  
**FWHM** Asymmetric  
**Efficiency** 76 %  
**Peak intensity** 1 cd/Im  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 C12924\_LENA-STD-BASE-LUXEON-K  
 C11996\_LENA-LENS



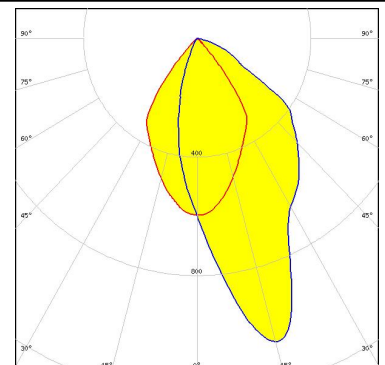
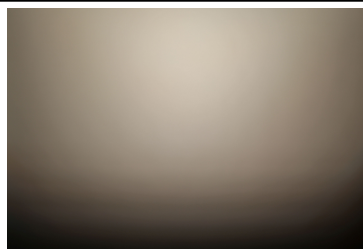
**LED** LUXEON K16  
**FWHM** Asymmetric  
**Efficiency** 81 %  
**Peak intensity** 1.1 cd/Im  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 C12924\_LENA-STD-BASE-LUXEON-K



**LED** CDM-14 (Dim-To-Warm)  
**FWHM** Asymmetric  
**Efficiency** 83 %  
**Peak intensity** 0.9 cd/Im  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 491 Typ L2



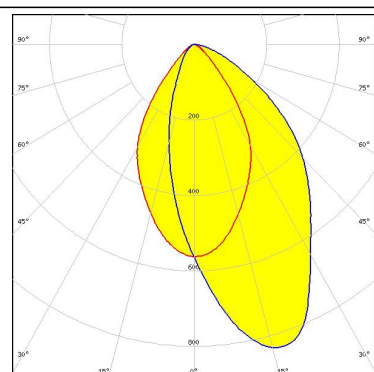
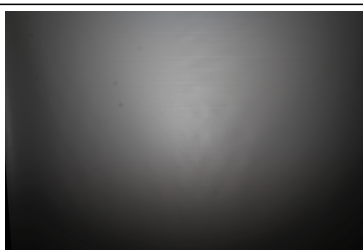
**LED** CDM-14 (Dim-To-Warm)  
**FWHM** 59.0°  
**Efficiency** 88 %  
**Peak intensity** 1.1 cd/Im  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 491 Typ L2



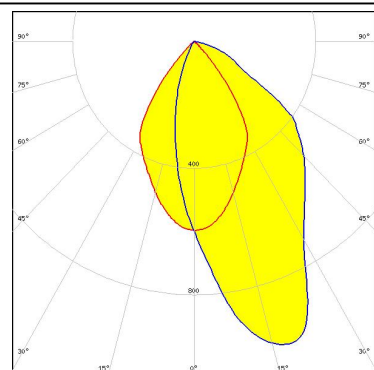
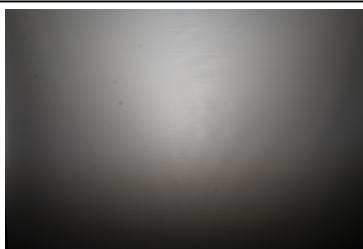
### PHOTOMETRIC DATA (MEASURED):



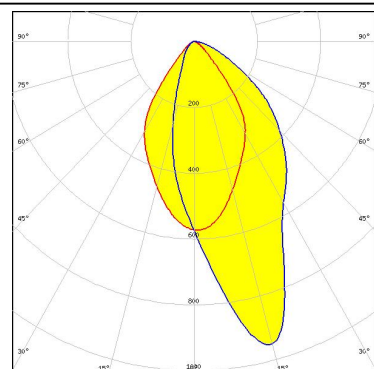
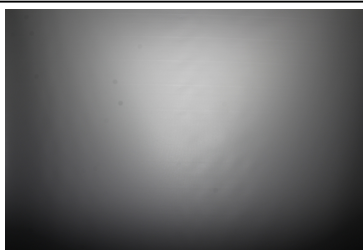
LED CDM-18 (Dim-To-Warm)  
FWHM Asymmetric  
Efficiency 83 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 491 Typ L2



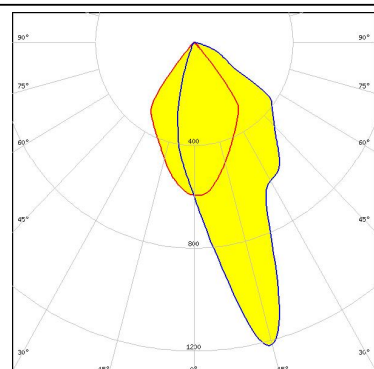
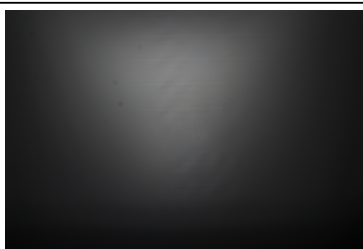
LED CDM-18 (Dim-To-Warm)  
FWHM Asymmetric  
Efficiency 88 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 491 Typ L2



LED CDM-9 (Dim-To-Warm)  
FWHM Asymmetric  
Efficiency 83 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 490 Typ L1



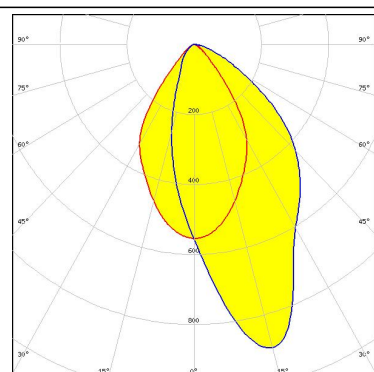
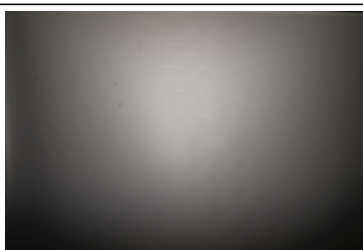
LED CDM-9 (Dim-To-Warm)  
FWHM Asymmetric  
Efficiency 88 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 490 Typ L1



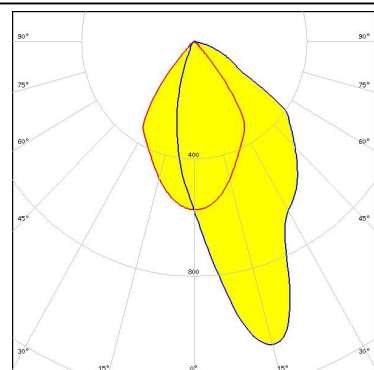
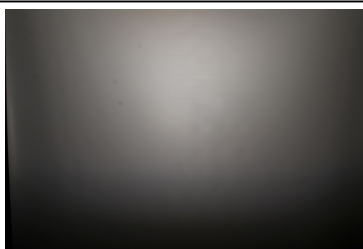
### PHOTOMETRIC DATA (MEASURED):



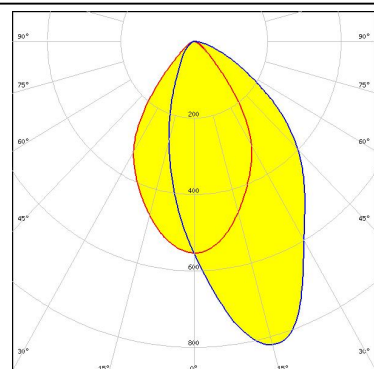
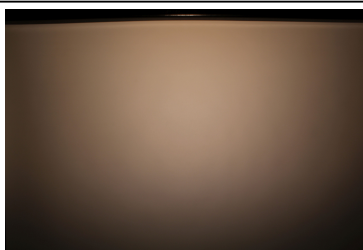
LED CTM-14 (Tunable White)  
FWHM Asymmetric  
Efficiency 87 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
C12606\_LENINA-DL  
Bender Wirth: 442 Typ L3



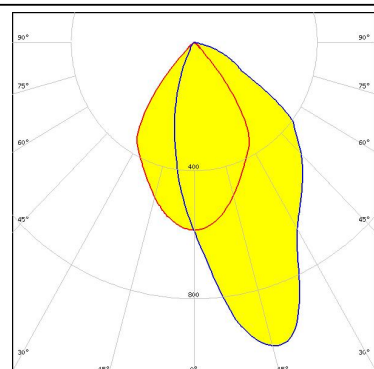
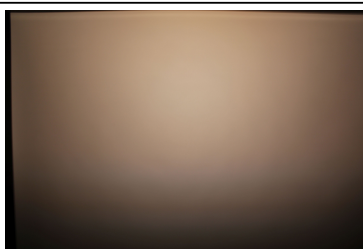
LED CTM-14 (Tunable White)  
FWHM Asymmetric  
Efficiency 87 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
Bender Wirth: 442 Typ L3



LED CTM-18 (Tunable White)  
FWHM Asymmetric  
Efficiency 82 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
C11996\_LENA-LENS  
Bender Wirth: 442 Typ L3



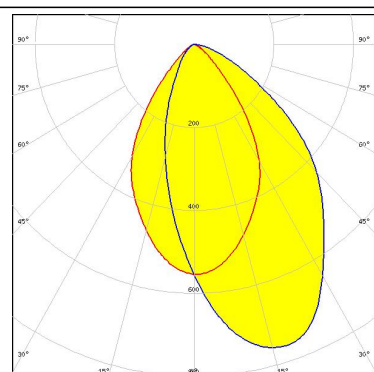
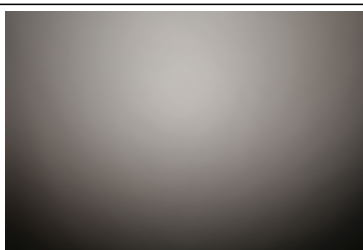
LED CTM-18 (Tunable White)  
FWHM Asymmetric  
Efficiency 88 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
Bender Wirth: 442 Typ L3



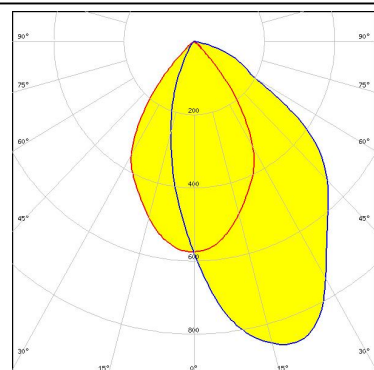
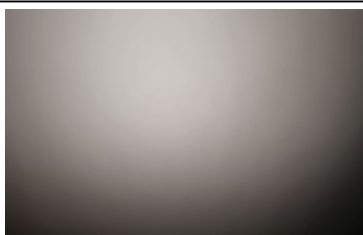
### PHOTOMETRIC DATA (MEASURED):



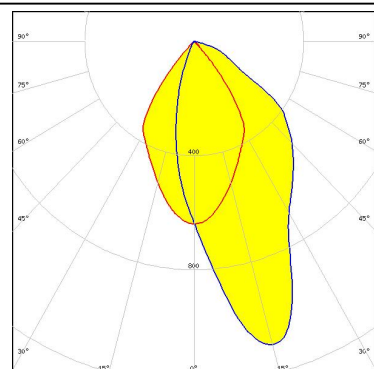
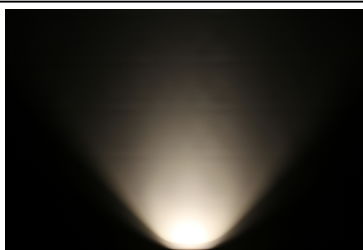
LED CTM-22 (Tunable White)  
FWHM Asymmetric  
Efficiency 83 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
C11996\_LENA-LENS  
Bender Wirth: 494 Typ L3



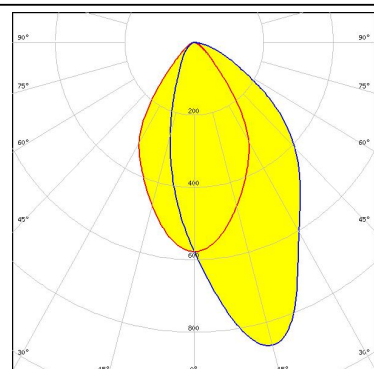
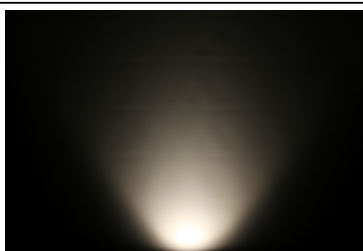
LED CTM-22 (Tunable White)  
FWHM Asymmetric  
Efficiency 87 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
Bender Wirth: 494 Typ L3



LED CxM-14 (19x19)  
FWHM Asymmetric  
Efficiency 87 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12691\_LENA-STD-BASE-CLL030



LED CxM-14 (19x19)  
FWHM Asymmetric  
Efficiency 82 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12691\_LENA-STD-BASE-CLL030  
C11996\_LENA-LENS

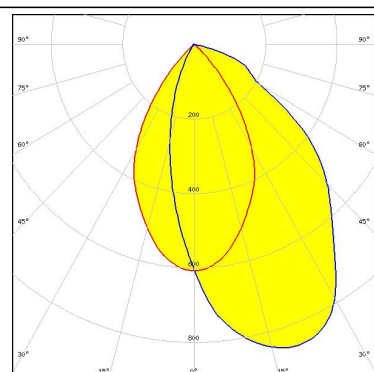
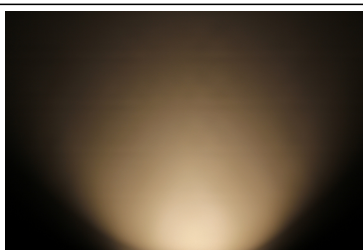




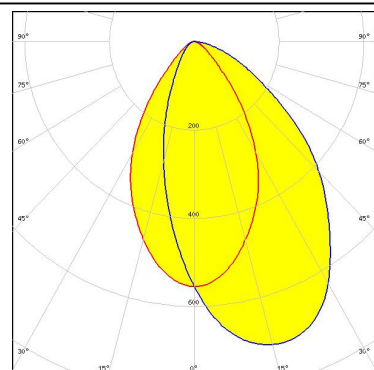
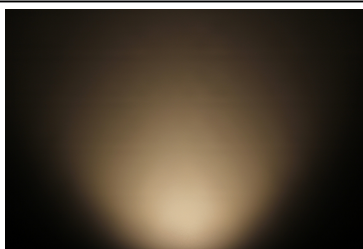
### PHOTOMETRIC DATA (MEASURED):



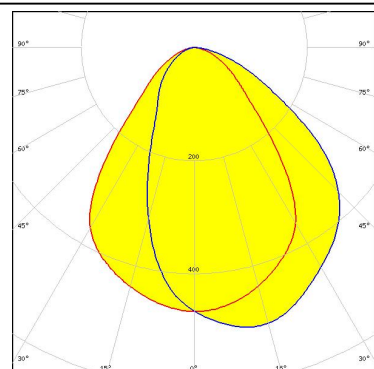
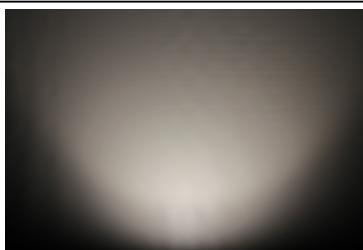
LED CxM-22 (28x28)  
FWHM Asymmetric  
Efficiency 84 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12692\_LENA-STD-BASE-CLL040



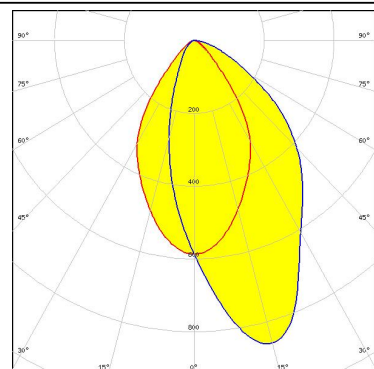
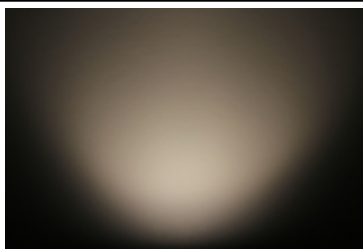
LED CxM-22 (28x28)  
FWHM Asymmetric  
Efficiency 79 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12692\_LENA-STD-BASE-CLL040  
C11996\_LENA-LENS



LED COB J-Type  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 463 Typ L2



LED COB J-Type  
FWHM Asymmetric  
Efficiency 84 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 463 Typ L2

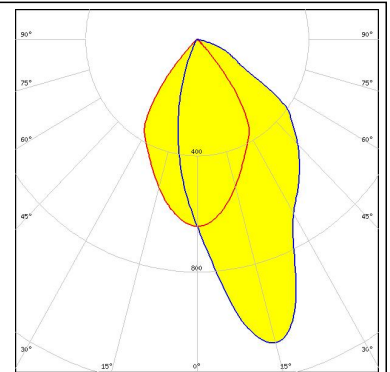




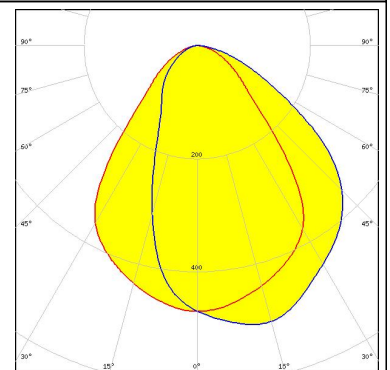
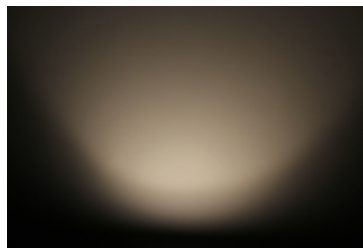
### PHOTOMETRIC DATA (MEASURED):



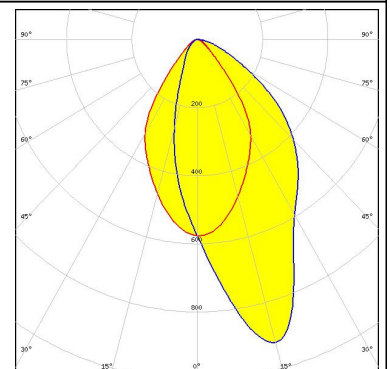
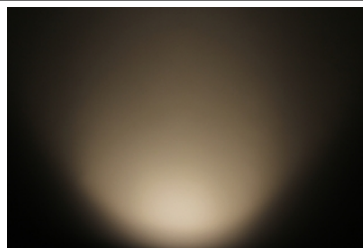
LED COB J-Type  
FWHM Asymmetric  
Efficiency 89 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 463 Typ L2



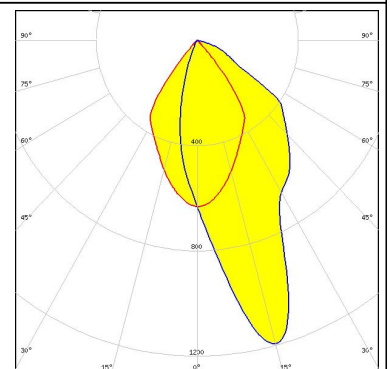
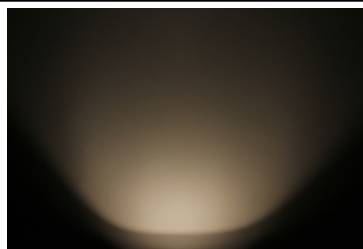
LED COB L-Type (LES 11)  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 438 Typ L1



LED COB L-Type (LES 11)  
FWHM Asymmetric  
Efficiency 84 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 438 Typ L1



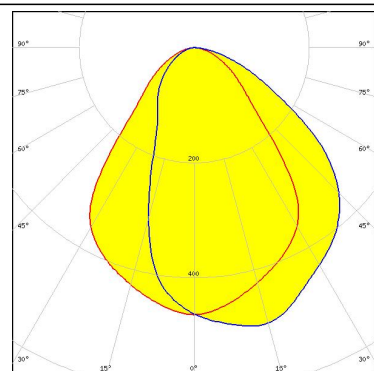
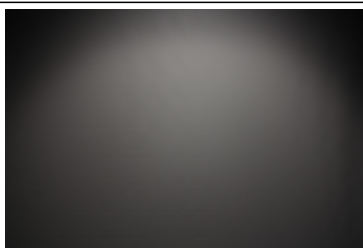
LED COB L-Type (LES 11)  
FWHM Asymmetric  
Efficiency 89 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 438 Typ L1



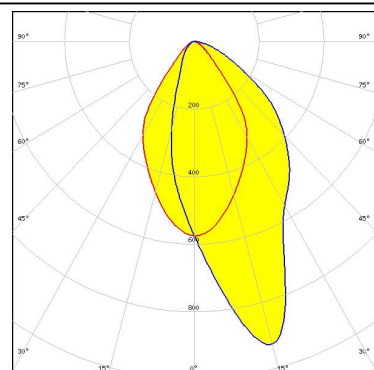
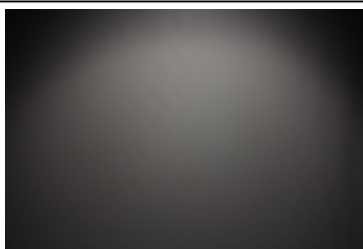
### PHOTOMETRIC DATA (MEASURED):



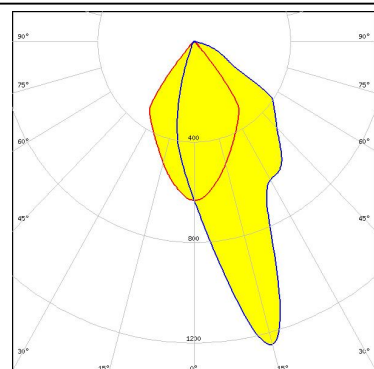
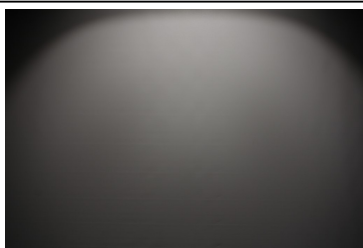
LED COB L-Type (LES 9)  
FWHM Asymmetric  
Efficiency 85 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 438 Typ L1



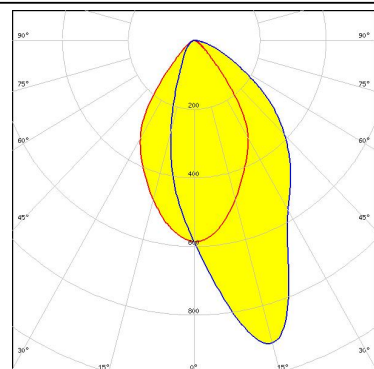
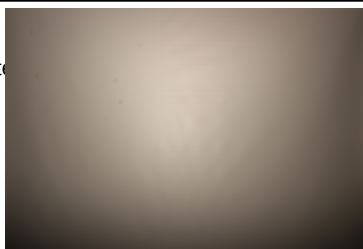
LED COB L-Type (LES 9)  
FWHM Asymmetric  
Efficiency 84 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 438 Typ L1



LED COB L-Type (LES 9)  
FWHM Asymmetric  
Efficiency 90 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 438 Typ L1



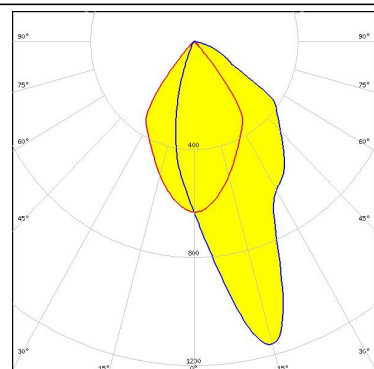
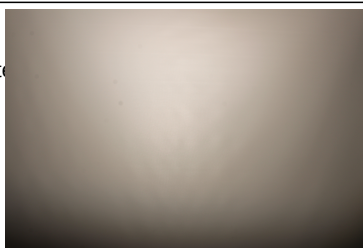
LED NVCWJ024Z-V1MT: COB J-Type Tunable White  
FWHM Asymmetric  
Efficiency 83 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 498 Typ L2



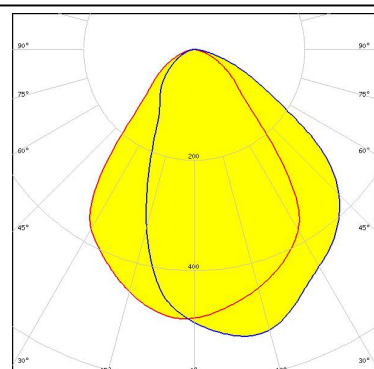
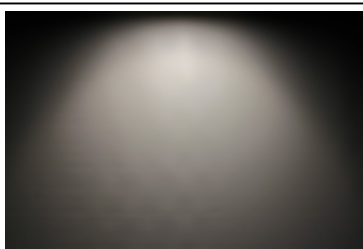
### PHOTOMETRIC DATA (MEASURED):



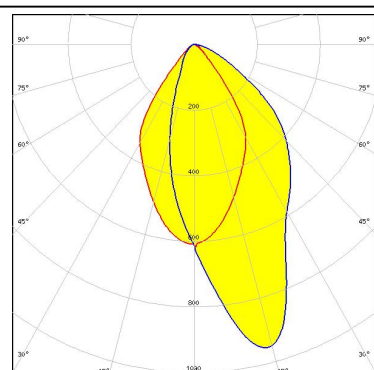
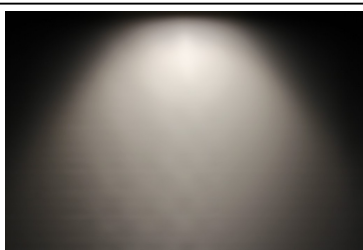
LED NVCWJ024Z-V1MT: COB J-Type Tunable White  
FWHM Asymmetric  
Efficiency 88 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 498 Typ L2



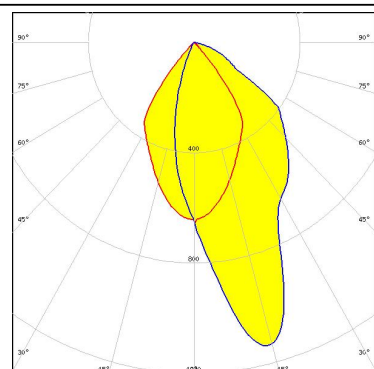
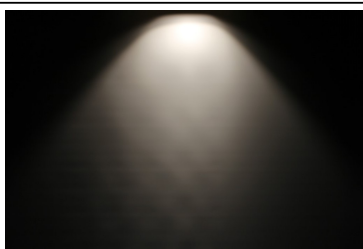
LED Soleriq S13  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 437 Typ L1



LED Soleriq S13  
FWHM Asymmetric  
Efficiency 84 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 437 Typ L1



LED Soleriq S13  
FWHM Asymmetric  
Efficiency 88 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 437 Typ L1

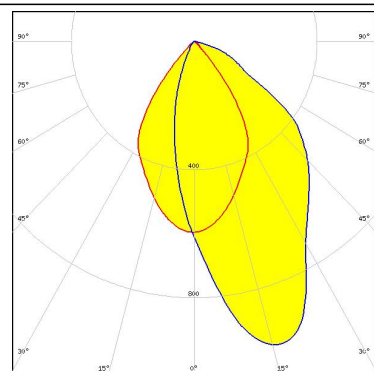
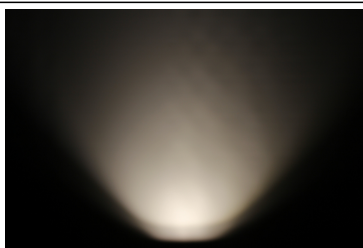


#### PHOTOMETRIC DATA (MEASURED):

#### OSRAM

Opto Semiconductors

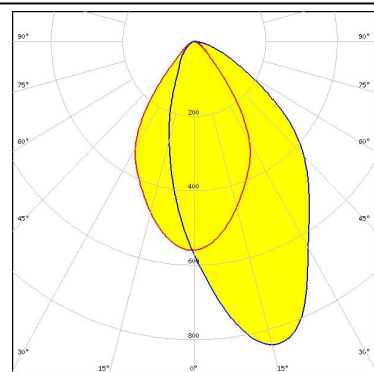
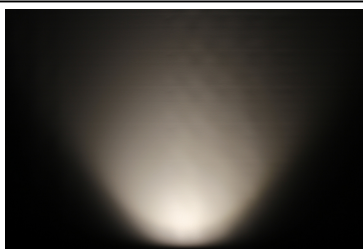
LED Soleriq S19  
FWHM Asymmetric  
Efficiency 89 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
Bender Wirth: 462 Typ L3



#### OSRAM

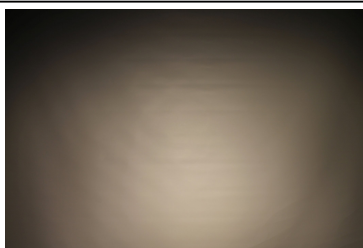
Opto Semiconductors

LED Soleriq S19  
FWHM Asymmetric  
Efficiency 84 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
C11996\_LENA-LENS  
Bender Wirth: 462 Typ L3



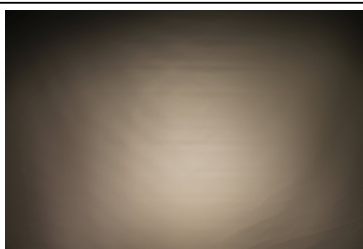
#### PHILIPS

LED Fortimo SLM L13 CoB  
FWHM Asymmetric  
Efficiency 80 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12292\_LENA-STD-BASE-MEZ  
C11996\_LENA-LENS



#### PHILIPS

LED Fortimo SLM L13 CoB  
FWHM Asymmetric  
Efficiency 85 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12292\_LENA-STD-BASE-MEZ

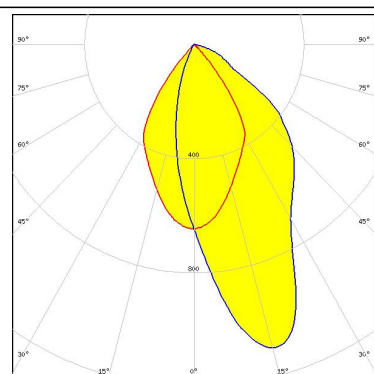
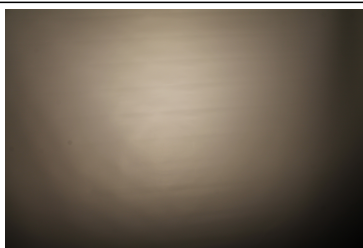




#### PHOTOMETRIC DATA (MEASURED):

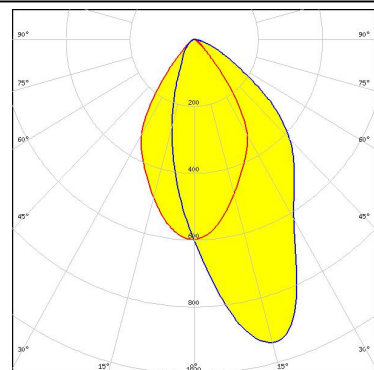
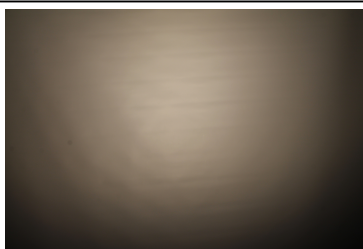
#### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM Asymmetric  
 Efficiency 85 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12292\_LENA-STD-BASE-MEZ



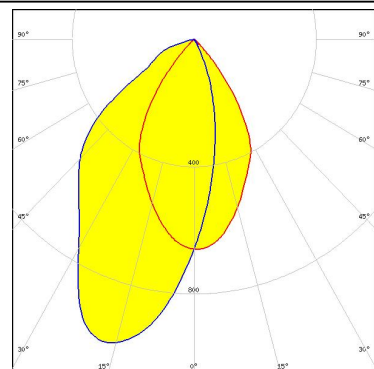
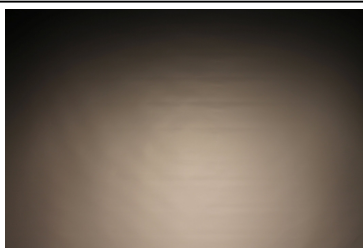
#### PHILIPS

LED Fortimo SLM L15 CoB  
 FWHM Asymmetric  
 Efficiency 80 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12292\_LENA-STD-BASE-MEZ  
 C11996\_LENA-LENS



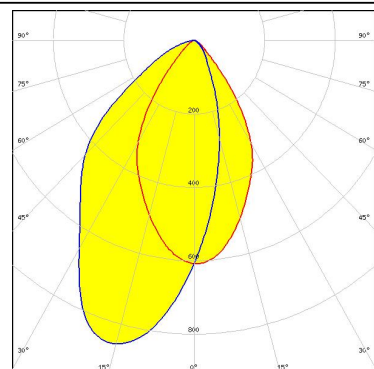
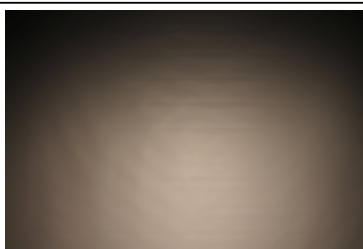
#### PHILIPS

LED Fortimo SLM L19 CoB  
 FWHM Asymmetric  
 Efficiency 85 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12692\_LENA-STD-BASE-CLL040



#### PHILIPS

LED Fortimo SLM L19 CoB  
 FWHM Asymmetric  
 Efficiency 80 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12692\_LENA-STD-BASE-CLL040  
 C11996\_LENA-LENS

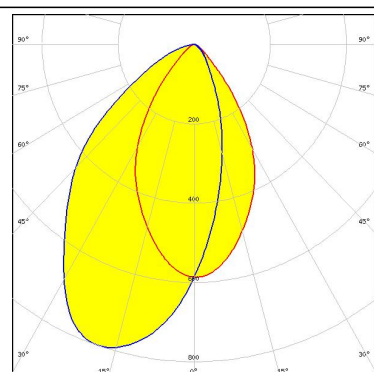
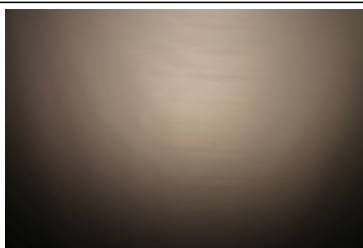




#### PHOTOMETRIC DATA (MEASURED):

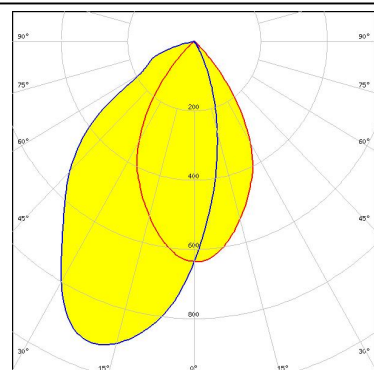
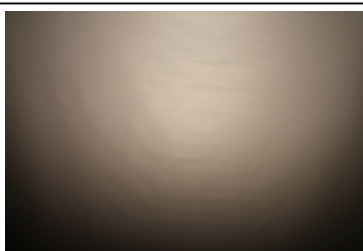
#### PHILIPS

LED Fortimo SLM L23 CoB  
 FWHM Asymmetric  
 Efficiency 80 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12692\_LENA-STD-BASE-CLL040  
 C11996\_LENA-LENS



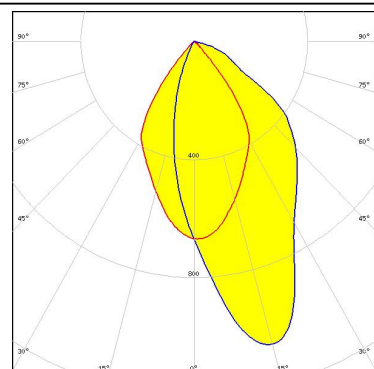
#### PHILIPS

LED Fortimo SLM L23 CoB  
 FWHM Asymmetric  
 Efficiency 85 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12692\_LENA-STD-BASE-CLL040



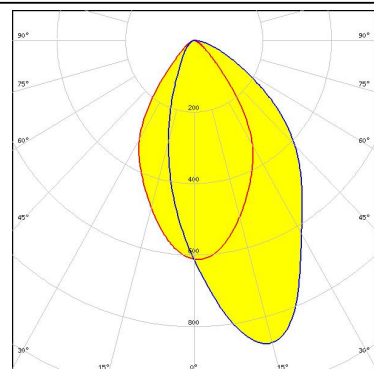
#### SAMSUNG

LED LC016D / LC019D / LC026D / LC033D  
 FWHM Asymmetric  
 Efficiency 89 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12691\_LENA-STD-BASE-CLL030



#### SAMSUNG

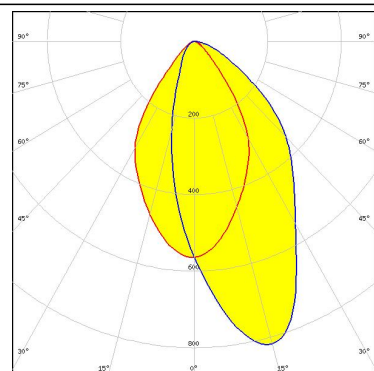
LED LC016D / LC019D / LC026D / LC033D  
 FWHM Asymmetric  
 Efficiency 84 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12691\_LENA-STD-BASE-CLL030  
 C11996\_LENA-LENS



### PHOTOMETRIC DATA (MEASURED):

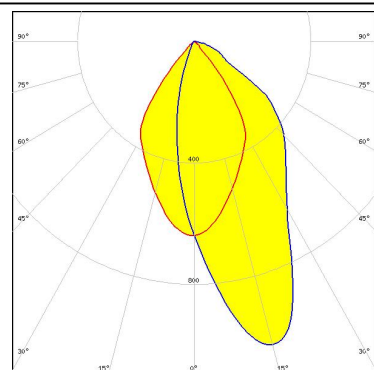
#### SHARP

LED Mega Zenigata (GW6DME)  
FWHM Asymmetric  
Efficiency 75 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12292\_LENA-STD-BASE-MEZ  
C11996\_LENA-LENS



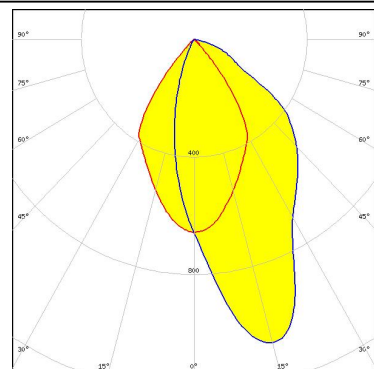
#### SHARP

LED Mega Zenigata (GW6DME)  
FWHM Asymmetric  
Efficiency 80 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12292\_LENA-STD-BASE-MEZ



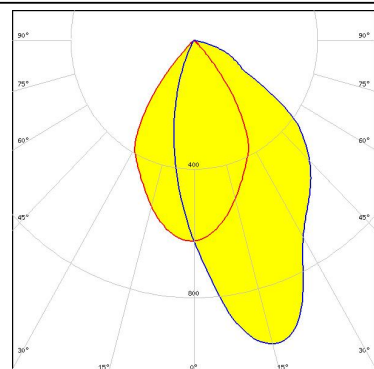
#### TRIDONIC

LED SLE G7 LES15  
FWHM Asymmetric  
Efficiency 89 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12691\_LENA-STD-BASE-CLL030



#### TRIDONIC

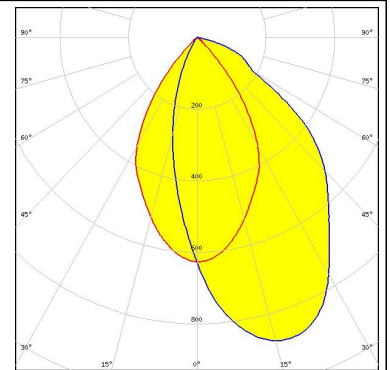
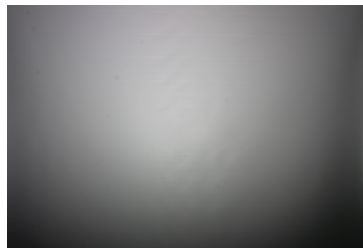
LED SLE G7 LES17 H  
FWHM Asymmetric  
Efficiency 87 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C14547\_LENA-ADAPTER-B



### PHOTOMETRIC DATA (MEASURED):

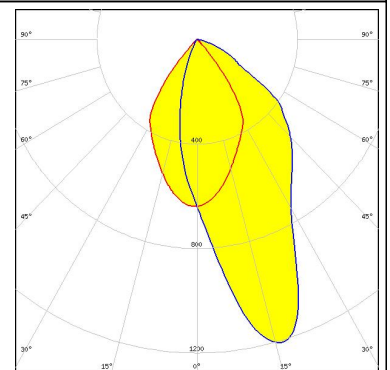
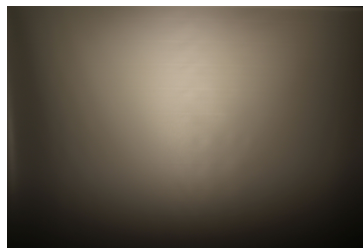
#### TRIDONIC

LED SLE G7 LES21 H  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C14547\_LENA-ADAPTER-B



#### XICATO

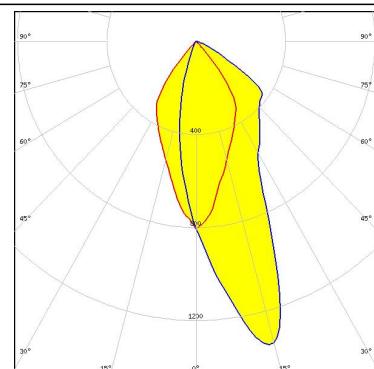
LED XOB 14.5 mm  
FWHM Asymmetric  
Efficiency 91 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12691\_LENA-STD-BASE-CLL030



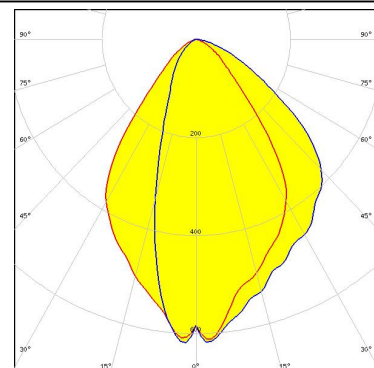
#### PHOTOMETRIC DATA (SIMULATED):



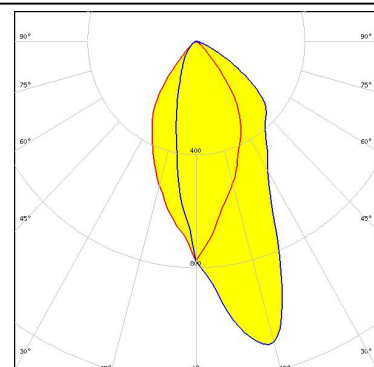
LED V10 Gen7  
 FWHM Asymmetric  
 Efficiency 88 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 486 Typ L1



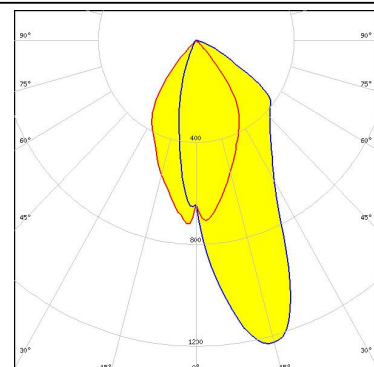
LED V10 Gen7  
 FWHM Asymmetric  
 Efficiency 81 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 486 Typ L1



LED V10 Gen7  
 FWHM Asymmetric  
 Efficiency 84 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 486 Typ L1



LED V13 Gen7  
 FWHM Asymmetric  
 Efficiency 88 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 477 Typ L1

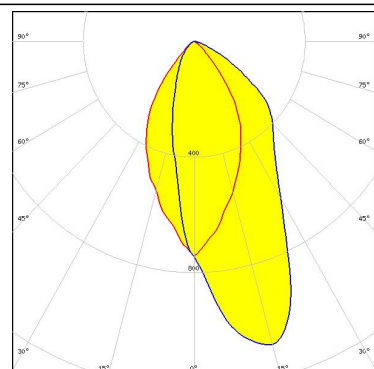




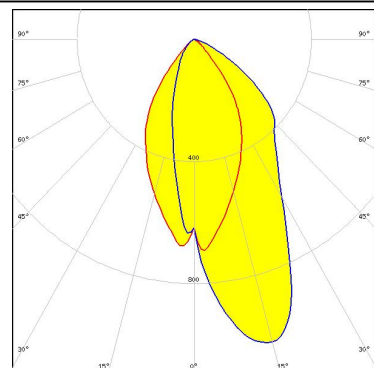
### PHOTOMETRIC DATA (SIMULATED):



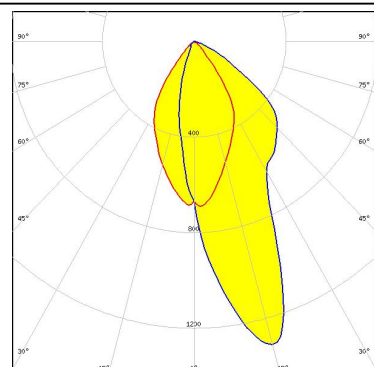
**LED** V13 Gen7  
**FWHM** Asymmetric  
**Efficiency** 88 %  
**Peak intensity** 1.1 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 477 Typ L1



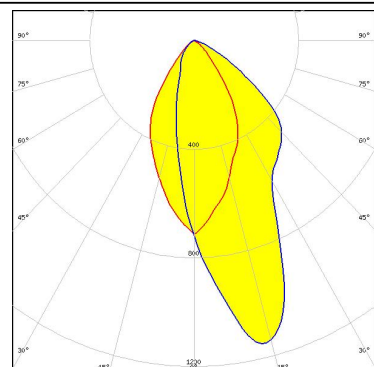
**LED** V13 Gen7  
**FWHM** Asymmetric  
**Efficiency** 84 %  
**Peak intensity** 1 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 477 Typ L1



**LED** V13 Gen7  
**FWHM** Asymmetric  
**Efficiency** 88 %  
**Peak intensity** 1.3 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 IDEAL: 50-2103CT + 50-2100LN



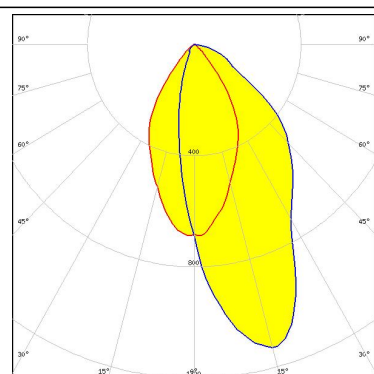
**LED** V13 Gen7  
**FWHM** Asymmetric  
**Efficiency** 85 %  
**Peak intensity** 1.1 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 C11996\_LENA-LENS



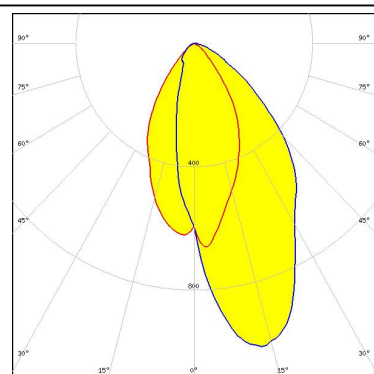
### PHOTOMETRIC DATA (SIMULATED):



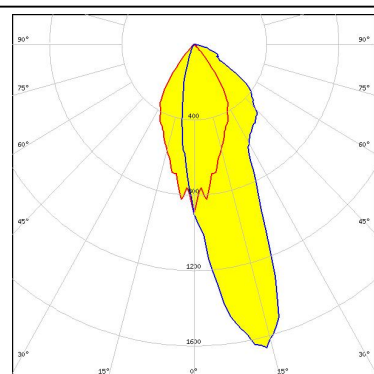
LED CXA/B 30xx  
FWHM Asymmetric  
Efficiency 85 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
IDEAL: 50-2234C + 50-2100LN



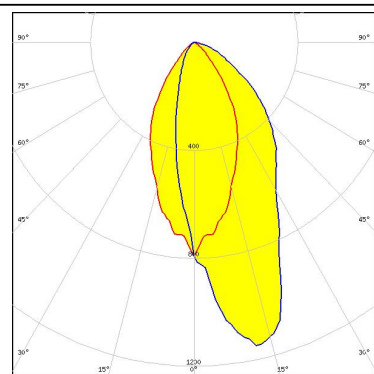
LED CXA/B 30xx  
FWHM Asymmetric  
Efficiency 81 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C11996\_LENA-LENS  
IDEAL: 50-2234C + 50-2100LN



LED LUXEON CoB 1204/1205  
FWHM Asymmetric  
Efficiency 93 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12292\_LENA-STD-BASE-MEZ



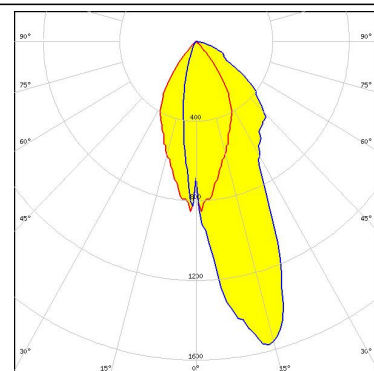
LED LUXEON CoB 1204/1205  
FWHM Asymmetric  
Efficiency 88 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12292\_LENA-STD-BASE-MEZ  
C11996\_LENA-LENS



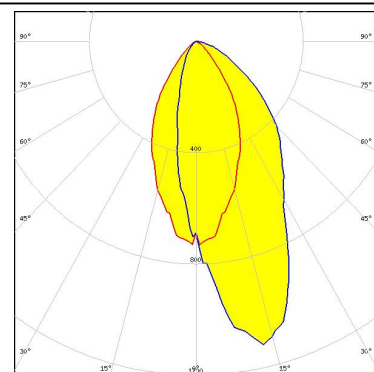
### PHOTOMETRIC DATA (SIMULATED):



LED LUXEON CoB 1208  
FWHM Asymmetric  
Efficiency 92 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12292\_LENA-STD-BASE-MEZ



LED LUXEON CoB 1208  
FWHM Asymmetric  
Efficiency 87 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12292\_LENA-STD-BASE-MEZ  
C11996\_LENA-LENS



LED CxM-14 (19x19)  
FWHM Asymmetric  
Efficiency 87 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 433 Typ L1



LED CxM-14 (19x19)  
FWHM Asymmetric  
Efficiency 90 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 433 Typ L1

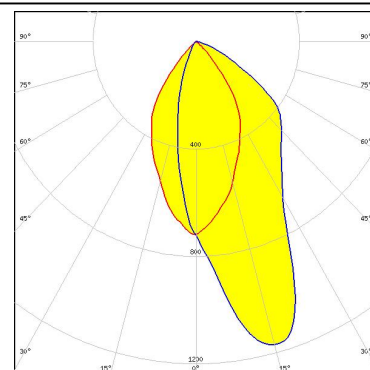
### PHOTOMETRIC DATA (SIMULATED):



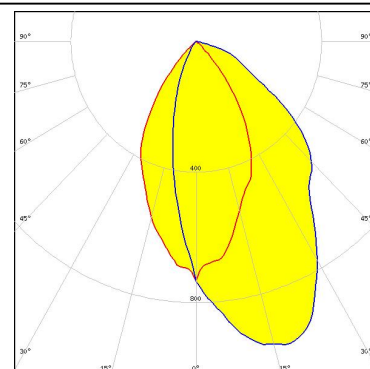
LED CxM-14 (19x19)  
FWHM Asymmetric  
Efficiency 85 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 433 Typ L1



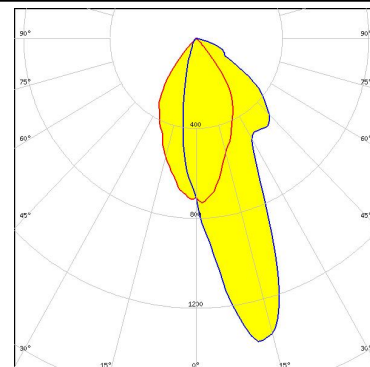
LED Soleriq S15  
FWHM Asymmetric  
Efficiency 88 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12691\_LENA-STD-BASE-CLL030



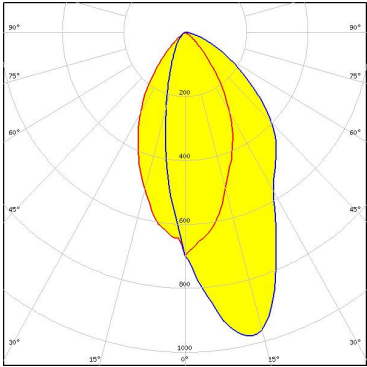
LED LC040D / LC060D / LC080D  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12692\_LENA-STD-BASE-CLL040



LED ZC12/18  
FWHM Asymmetric  
Efficiency 86 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12691\_LENA-STD-BASE-CLL030



### PHOTOMETRIC DATA (SIMULATED):

|                                                                                                                                                                                                                                                                                                                                                                       |                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <p><br/>SEOUL SEMICONDUCTOR</p> <p>LED ZC12/18<br/>FWHM Asymmetric<br/>Efficiency 87 %<br/>Peak intensity 0.5 cd/lm<br/>LEDs/each optic 1<br/>Light colour White<br/>Required components:<br/>C13868_LENA-STD-BASE-VERO13-18<br/>C11996_LENA-LENS<br/>Bender Wirth: 433 Typ L1</p>   |                                                                                       |
| <p><br/>SEOUL SEMICONDUCTOR</p> <p>LED ZC12/18<br/>FWHM Asymmetric<br/>Efficiency 90 %<br/>Peak intensity 1.1 cd/lm<br/>LEDs/each optic 1<br/>Light colour White<br/>Required components:<br/>C13868_LENA-STD-BASE-VERO13-18<br/>Bender Wirth: 433 Typ L1</p>                        |                                                                                       |
| <p><br/>SEOUL SEMICONDUCTOR</p> <p>LED ZC12/18<br/>FWHM Asymmetric<br/>Efficiency %<br/>LEDs/each optic 1<br/>Light colour White<br/>Required components:<br/>C12691_LENA-STD-BASE-CLL030<br/>C11996_LENA-LENS</p>                                                                 |  |
| <p><br/>SEOUL SEMICONDUCTOR</p> <p>LED ZC12/18<br/>FWHM Asymmetric<br/>Efficiency 85 %<br/>Peak intensity 0.9 cd/lm<br/>LEDs/each optic 1<br/>Light colour White<br/>Required components:<br/>C13868_LENA-STD-BASE-VERO13-18<br/>C11996_LENA-LENS<br/>Bender Wirth: 433 Typ L1</p> |                                                                                       |



## PHOTOMETRIC DATA (SIMULATED):

### SHARP

LED Mega Zenigata (GW5DGC)  
FWHM Asymmetric  
Efficiency %  
LEDs/each optic 1  
Light colour White  
Required components:  
C12292\_LENA-STD-BASE-MEZ

### SHARP

LED Mega Zenigata (GW5DGC)  
FWHM Asymmetric  
Efficiency %  
LEDs/each optic 1  
Light colour White  
Required components:  
C12292\_LENA-STD-BASE-MEZ  
C11996\_LENA-LENS

### 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

#### Local sales and technical support

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

#### Shipping locations

Salo, Finland  
Hong Kong, China

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