

## LENA-WAS

Asymmetric beam for wall-washing

## SPECIFICATION:

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

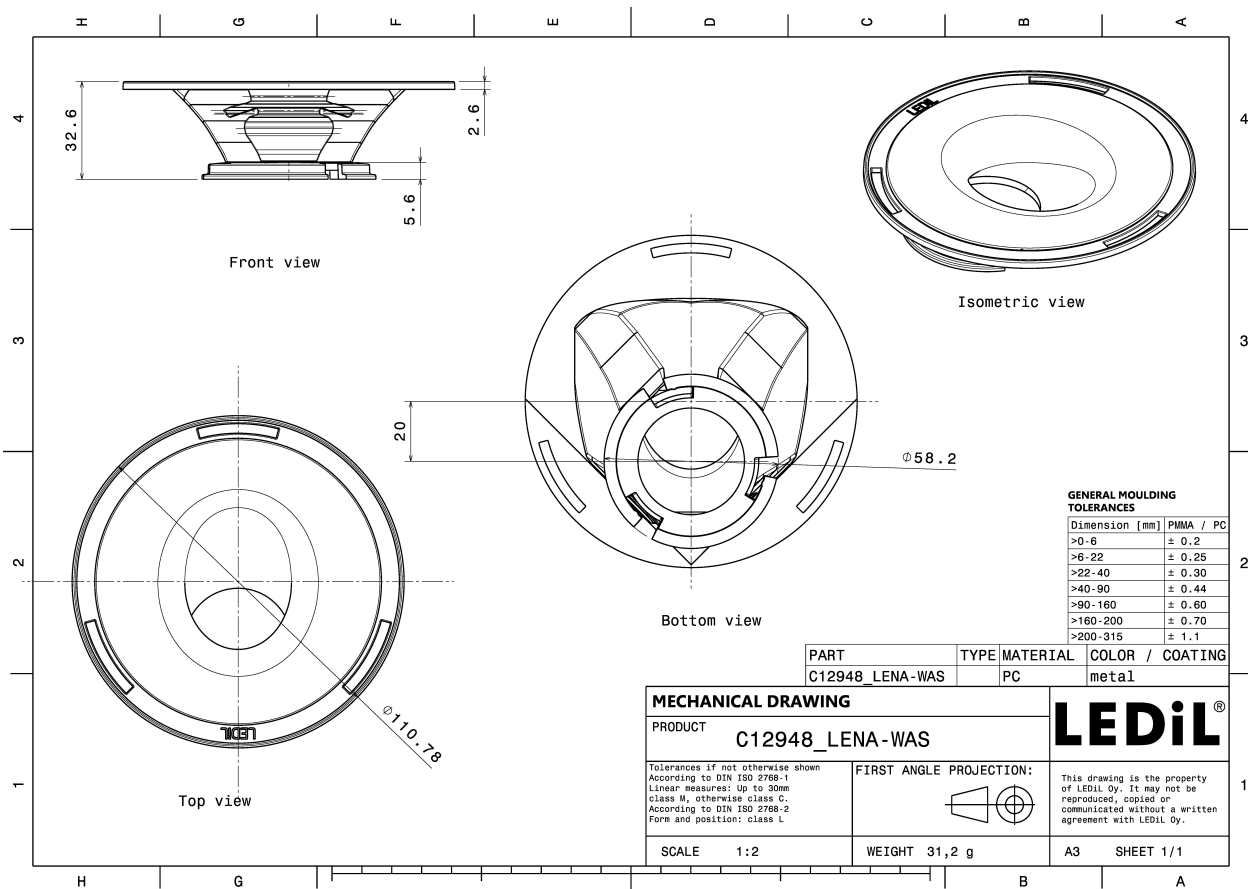
## MATERIALS:

| 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             |



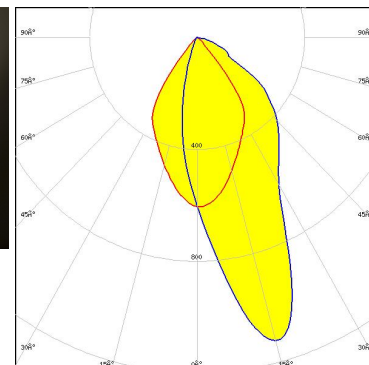
See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)



### OPTICAL RESULTS (MEASURED):



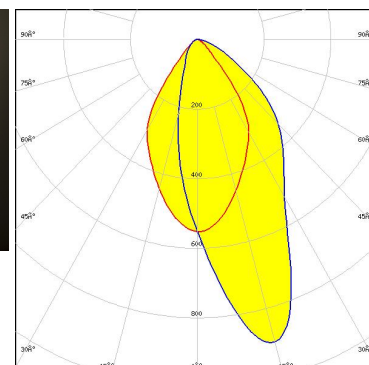
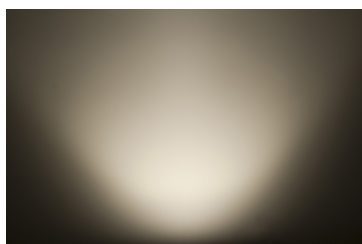
LED BXRA ES Rectangle  
FWHM / FWTM Asymmetric  
Efficiency 80 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12153\_LENA-STD-BASE-BXRA



Light distribution files



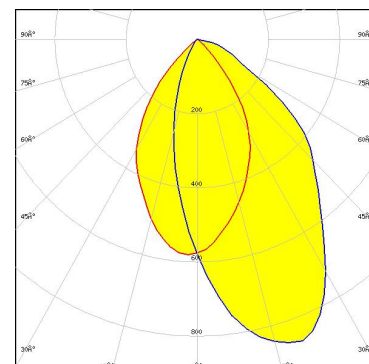
LED BXRA ES Rectangle  
FWHM / FWTM Asymmetric  
Efficiency 77 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12153\_LENA-STD-BASE-BXRA  
C11996\_LENA-LENS



Light distribution files



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

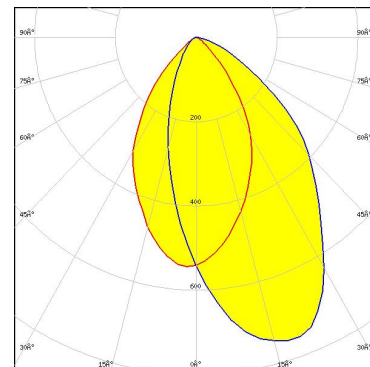


Light distribution files

### OPTICAL RESULTS (MEASURED):



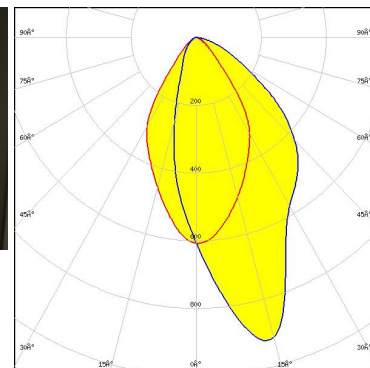
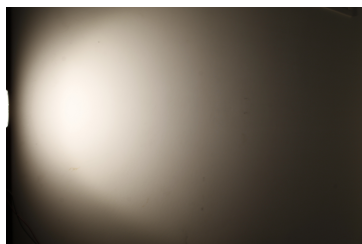
LED BXRA RS  
FWHM / FWTM Asymmetric  
Efficiency 75 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12229\_LENA-STD-BASE-RS  
C11996\_LENA-LENS



Light distribution files



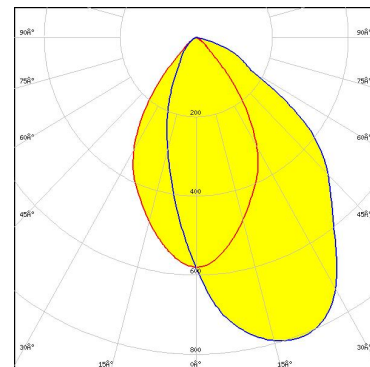
LED V10 Gen6  
FWHM / FWTM Asymmetric  
Efficiency 83 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13186\_LENA-STD-BASE-CXA15  
C11996\_LENA-LENS



Light distribution files



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

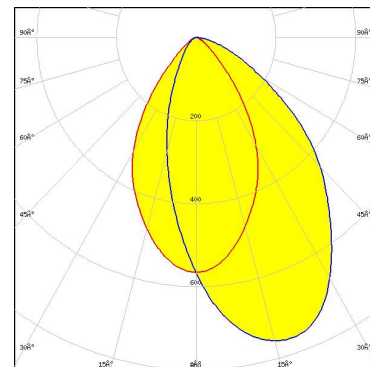


Light distribution files

### OPTICAL RESULTS (MEASURED):



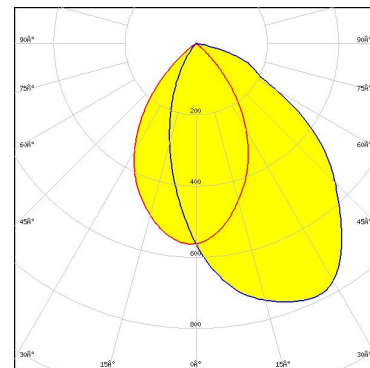
LED V22 Gen7  
FWHM / FWTM Asymmetric  
Efficiency 82 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
C11996\_LENA-LENS  
Bender Wirth: 431 Typ L3



Light distribution files



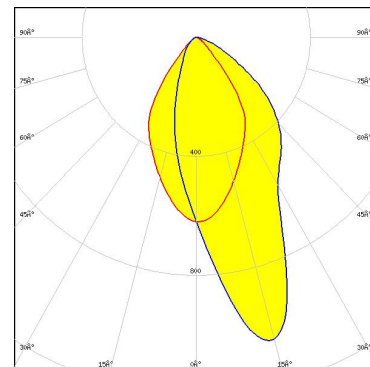
LED Vero SE 29  
FWHM / FWTM Asymmetric  
Efficiency 87 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C15083\_LENA-STD-BASE-VERO29



Light distribution files



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

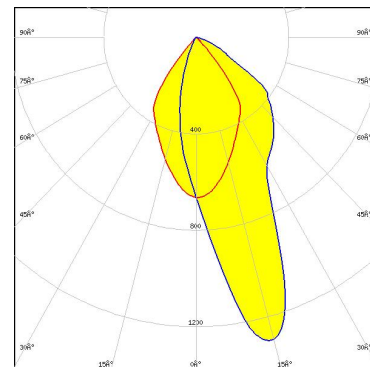


Light distribution files

### OPTICAL RESULTS (MEASURED):



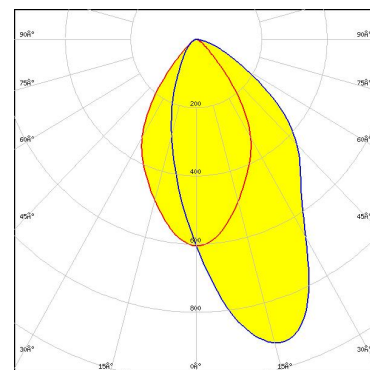
LED VERO13  
FWHM / FWTM Asymmetric  
Efficiency 91 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18



Light distribution files



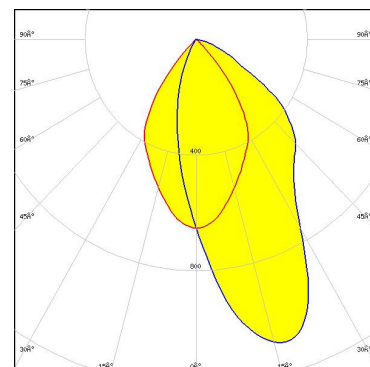
LED VERO18  
FWHM / FWTM Asymmetric  
Efficiency 86 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS



Light distribution files



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

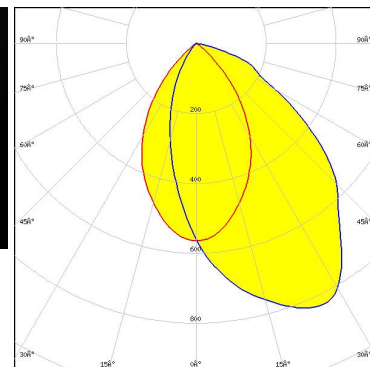
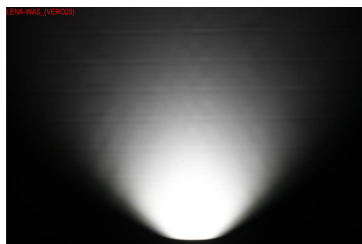


Light distribution files

### OPTICAL RESULTS (MEASURED):



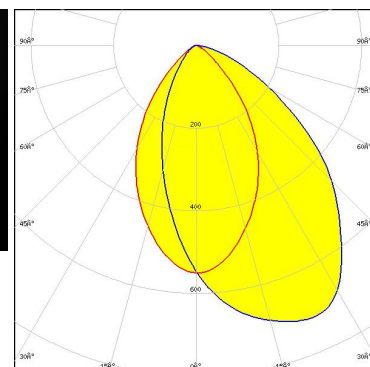
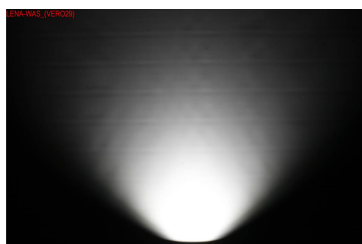
LED VERO29  
FWHM / FWTM Asymmetric  
Efficiency 87 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13867\_LENA-STD-BASE-VERO29



Light distribution files



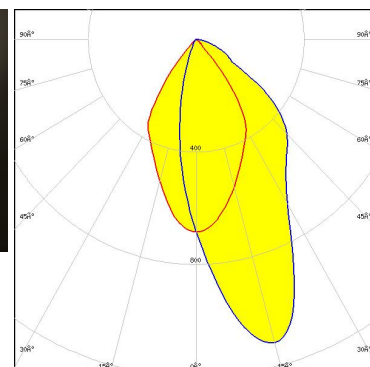
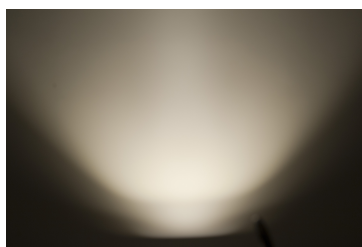
LED VERO29  
FWHM / FWTM Asymmetric  
Efficiency 82 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
C11996\_LENA-LENS



Light distribution files

### CITIZEN

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

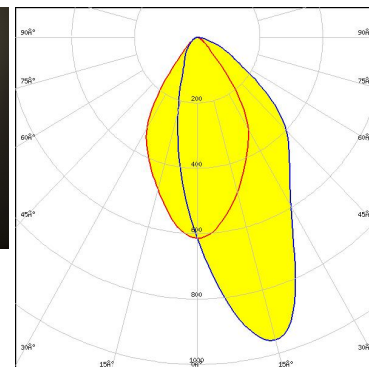
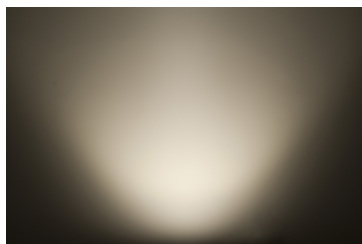


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### CITIZEN

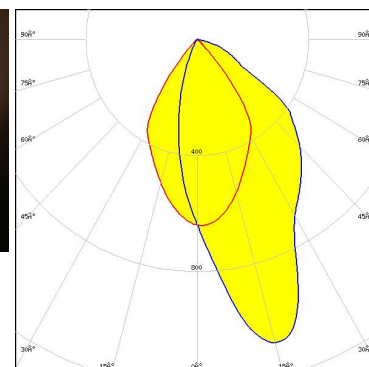
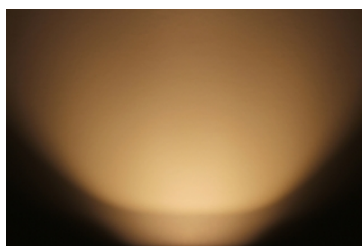
LED CL-L340  
FWHM / FWTM Asymmetric  
Efficiency 73 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C11995\_LENA-STD-BASE-CL340  
C11996\_LENA-LENS



Light distribution files

#### CITIZEN

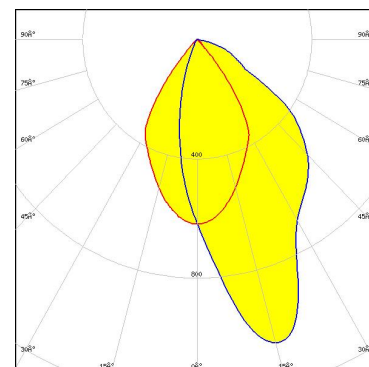
LED CLU03x  
FWHM / FWTM Asymmetric  
Efficiency 90 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 433 Typ L1



Light distribution files

#### CITIZEN

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



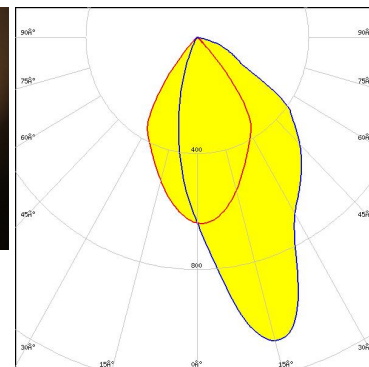
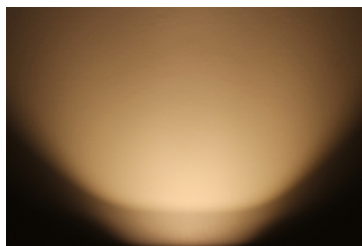
Light distribution files



### OPTICAL RESULTS (MEASURED):

#### CITIZEN

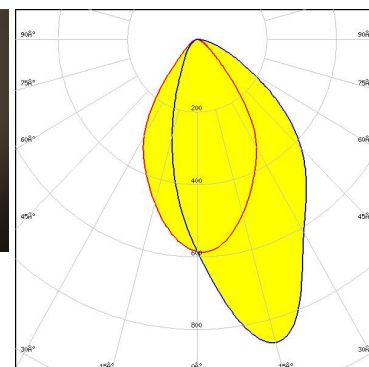
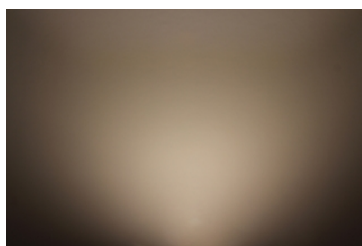
LED CLU03x  
FWHM / FWTM Asymmetric  
Efficiency 90 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
Bender Wirth: 433 Typ L1



Light distribution files

#### CITIZEN

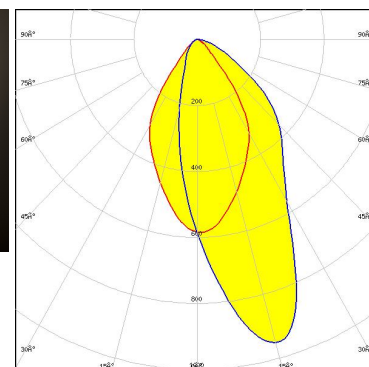
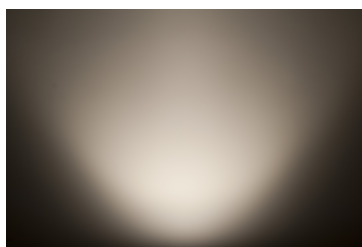
LED CLU03x  
FWHM / FWTM Asymmetric  
Efficiency 85 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 433 Typ L1



Light distribution files

#### CITIZEN

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

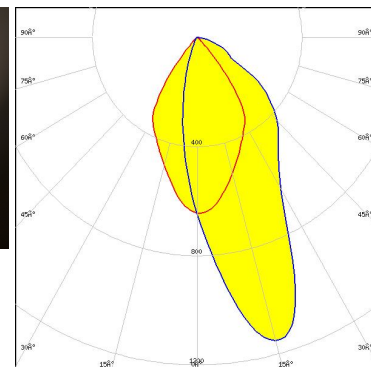
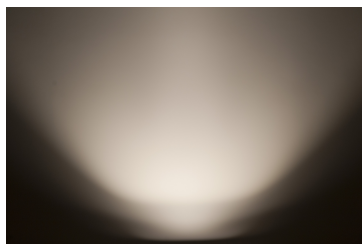


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### CITIZEN

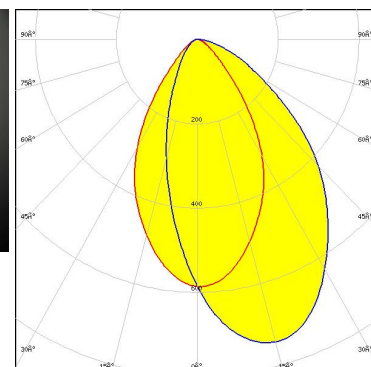
LED CLU03x  
FWHM / FWTM Asymmetric  
Efficiency 81 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12691\_LENA-STD-BASE-CLL030



Light distribution files

#### CITIZEN

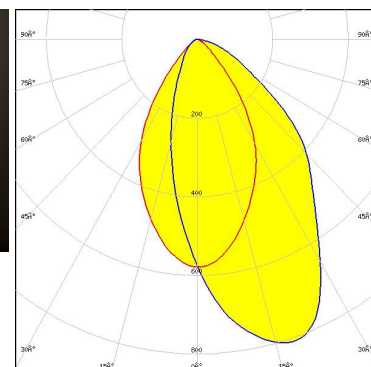
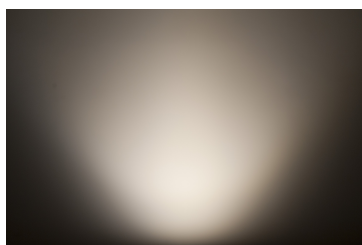
LED CLU04x  
FWHM / FWTM Asymmetric  
Efficiency 82 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C11996\_LENA-LENS  
IDEAL: 50-2204CT + 50-2100LN



Light distribution files

#### CITIZEN

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



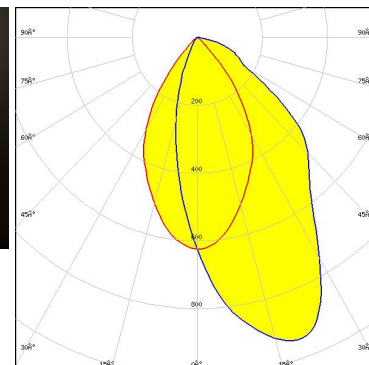
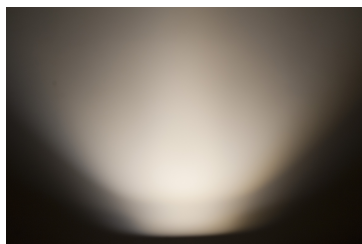
Light distribution files



### OPTICAL RESULTS (MEASURED):

#### CITIZEN

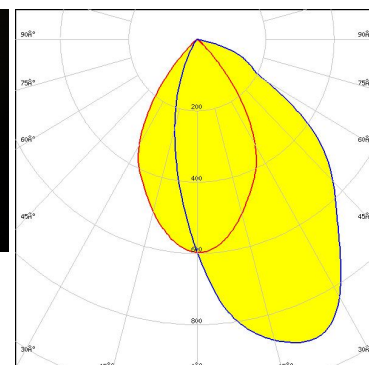
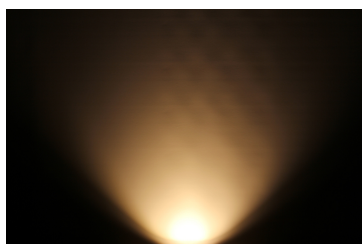
LED CLU04x  
FWHM / FWTM Asymmetric  
Efficiency 82 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12692\_LENA-STD-BASE-CLL040



Light distribution files

#### CITIZEN

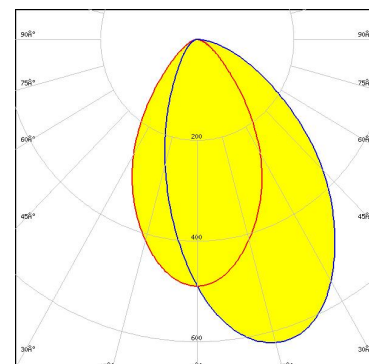
LED CLU04x  
FWHM / FWTM Asymmetric  
Efficiency 89 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
Bender Wirth: 431 Typ L3



Light distribution files

#### CITIZEN

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

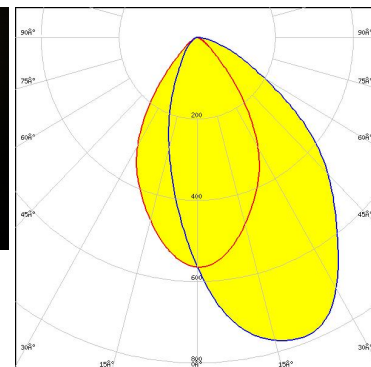
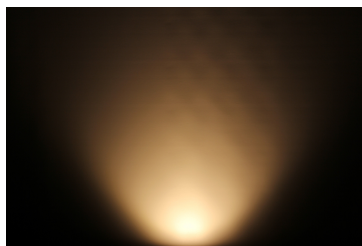


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### CITIZEN

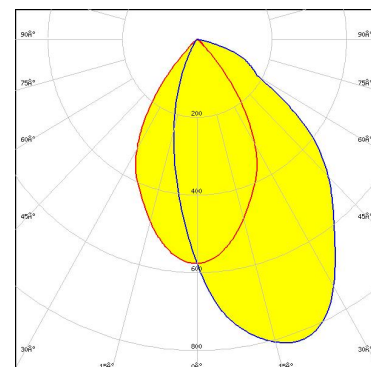
LED CLU04x  
FWHM / FWTM Asymmetric  
Efficiency 84 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
C11996\_LENA-LENS  
Bender Wirth: 431 Typ L3



Light distribution files

#### CITIZEN

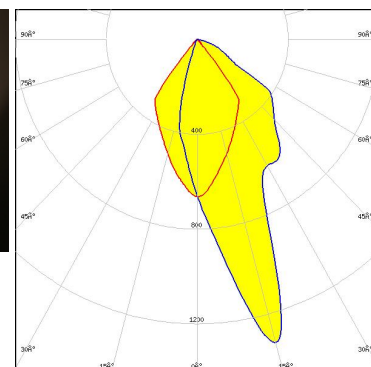
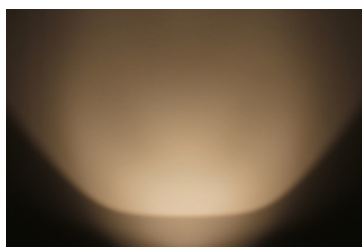
LED CLU04x  
FWHM / FWTM Asymmetric  
Efficiency 80 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
A.A.G. STUCCHI: 8102-G2 + S-8000-12



Light distribution files

#### CITIZEN

LED CLU700/701/702/703  
FWHM / FWTM Asymmetric  
Efficiency 89 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 434 Typ L1

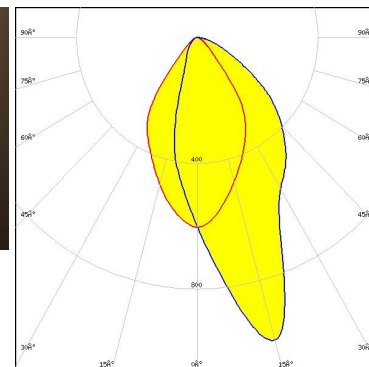
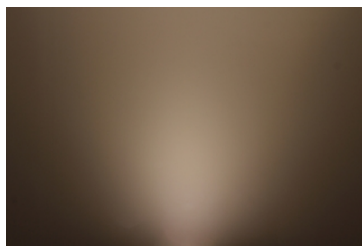


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### CITIZEN

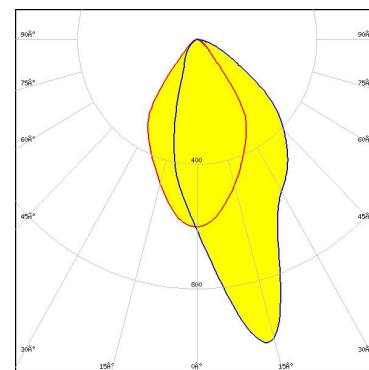
LED CLU700/701/702/703  
FWHM / FWTM Asymmetric  
Efficiency 84 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS  
Bender Wirth: 434 Typ L1



Light distribution files

#### CITIZEN

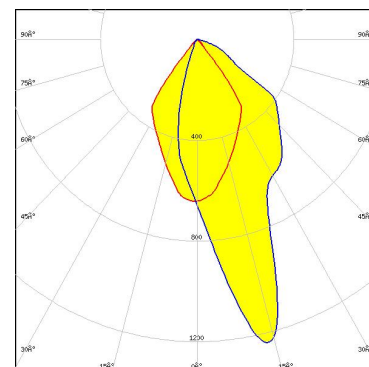
LED CLU710/711  
FWHM / FWTM Asymmetric  
Efficiency 84 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12691\_LENA-STD-BASE-CLL030  
C11996\_LENA-LENS



Light distribution files

#### CITIZEN

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



Light distribution files

### OPTICAL RESULTS (MEASURED):

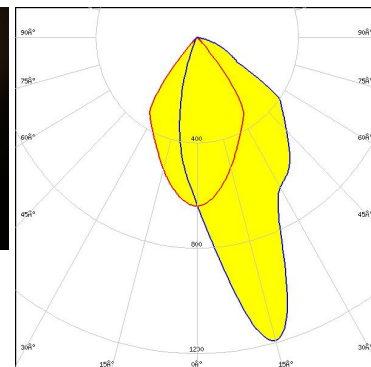
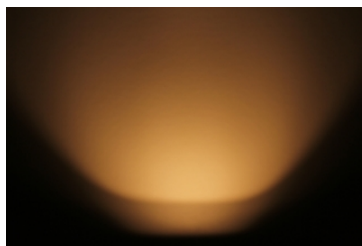
#### CITIZEN

LED CLU720/721/723  
FWHM / FWTM Asymmetric  
Efficiency 90 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13867\_LENA-STD-BASE-VERO29

Bender Wirth: 433 Typ L1



Light distribution files

#### CITIZEN

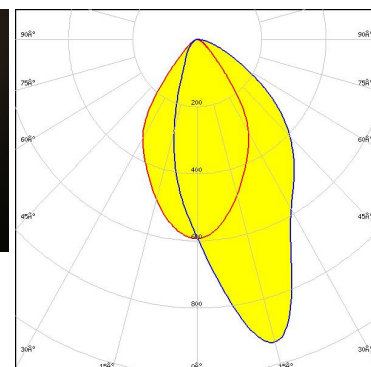
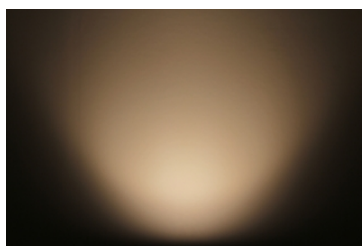
LED CLU720/721/723  
FWHM / FWTM Asymmetric  
Efficiency 85 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13868\_LENA-STD-BASE-VERO13-18

C11996\_LENA-LENS

Bender Wirth: 433 Typ L1



Light distribution files

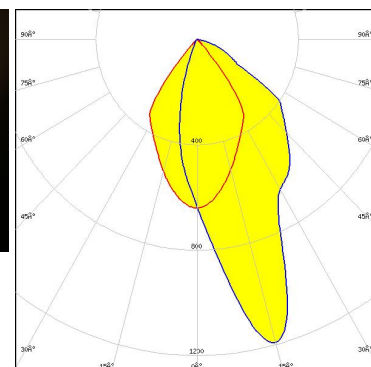
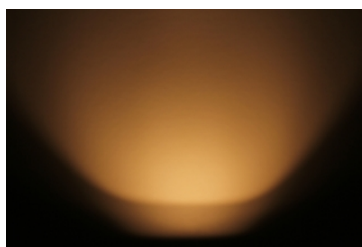
#### CITIZEN

LED CLU720/721/723  
FWHM / FWTM Asymmetric  
Efficiency 90 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13868\_LENA-STD-BASE-VERO13-18

Bender Wirth: 433 Typ L1

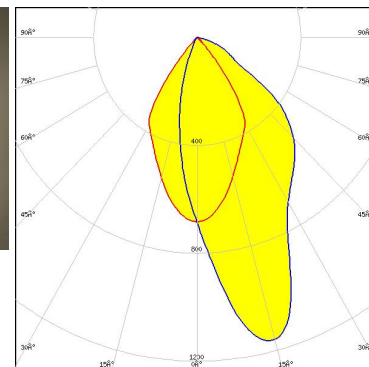
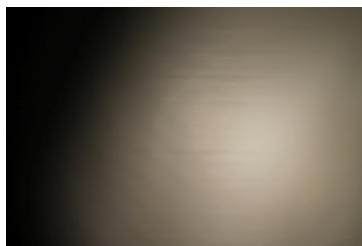


Light distribution files

### OPTICAL RESULTS (MEASURED):



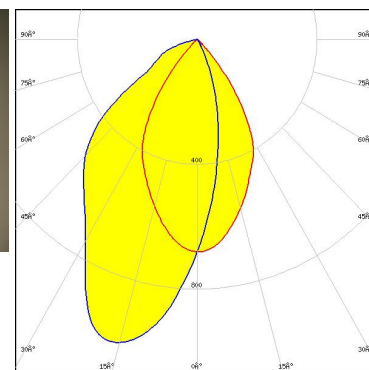
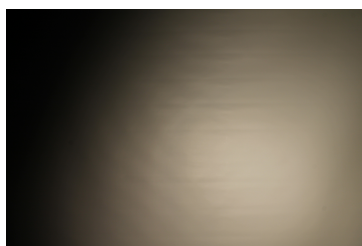
LED CMA1840  
FWHM / FWTM Asymmetric  
Efficiency 86 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14146\_LENA-STD-BASE-CXA18



Light distribution files



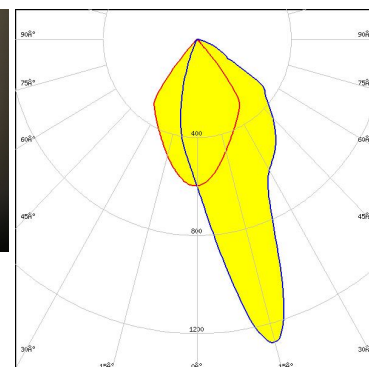
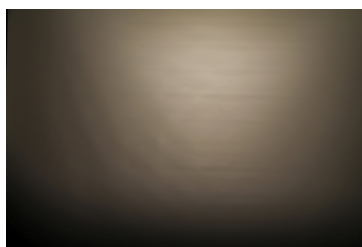
LED CMA2550  
FWHM / FWTM Asymmetric  
Efficiency 86 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13324\_LENA-STD-BASE-CXA25



Light distribution files



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

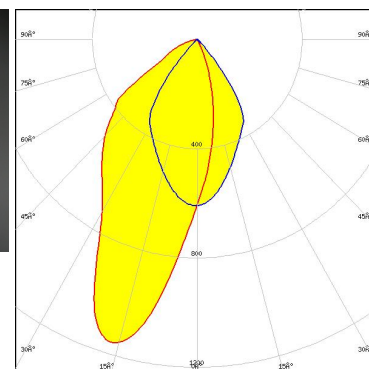
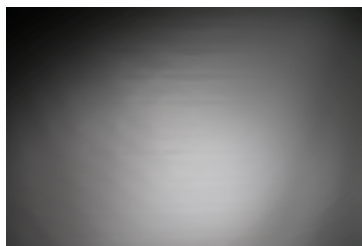


Light distribution files

### OPTICAL RESULTS (MEASURED):



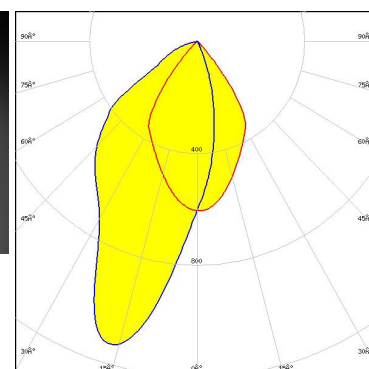
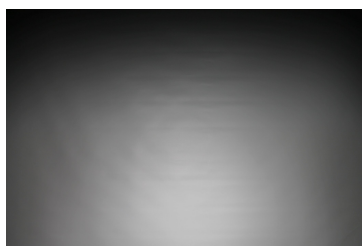
LED CMT19xx  
FWHM / FWTM Asymmetric  
Efficiency 86 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 477 Typ L1



Light distribution files



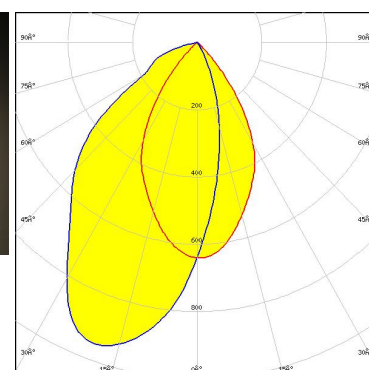
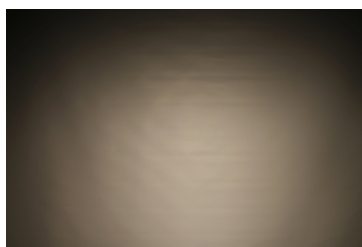
LED CMT19xx  
FWHM / FWTM Asymmetric  
Efficiency 86 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12691\_LENA-STD-BASE-CLL030



Light distribution files



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



Light distribution files



### OPTICAL RESULTS (MEASURED):

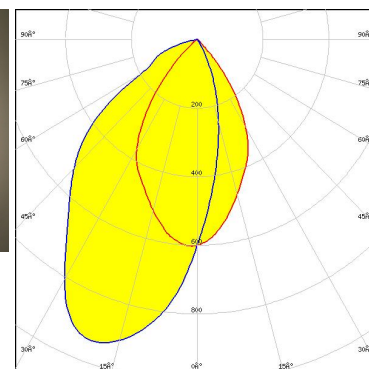
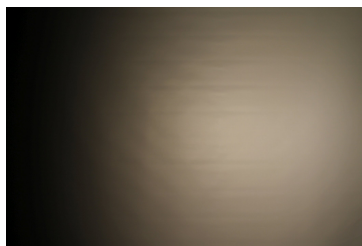


LED CMT28xx  
FWHM / FWTM Asymmetric  
Efficiency 85 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13867\_LENA-STD-BASE-VERO29

Bender Wirth: 471 Typ L3



Light distribution files

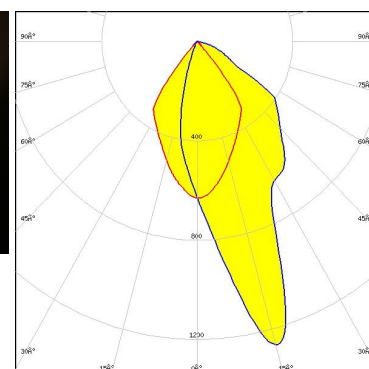
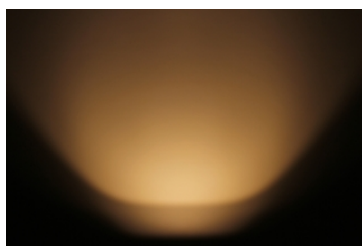


LED CXA/B 15xx  
FWHM / FWTM Asymmetric  
Efficiency 89 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13868\_LENA-STD-BASE-VERO13-18

Bender Wirth: 441 Typ L1



Light distribution files



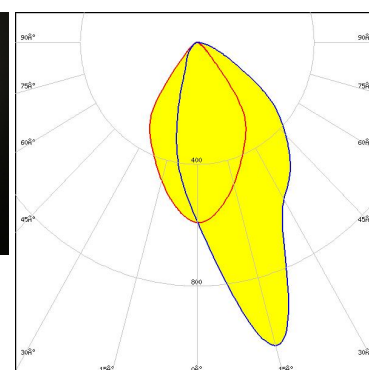
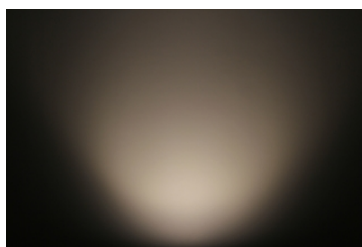
LED CXA/B 15xx  
FWHM / FWTM Asymmetric  
Efficiency 85 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13868\_LENA-STD-BASE-VERO13-18

C11996\_LENA-LENS

Bender Wirth: 441 Typ L1



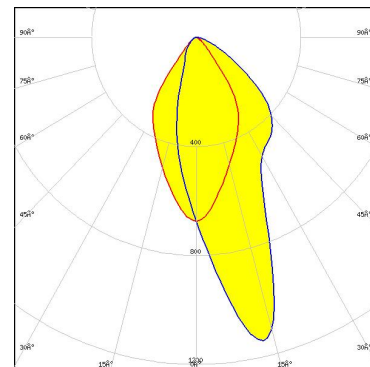
Light distribution files



### OPTICAL RESULTS (MEASURED):



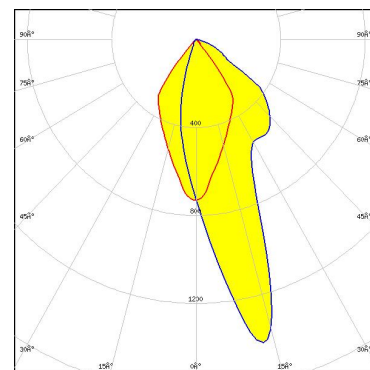
LED CXA/B 15xx  
FWHM / FWTM Asymmetric  
Efficiency 84 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13186\_LENA-STD-BASE-CXA15  
C11996\_LENA-LENS



Light distribution files



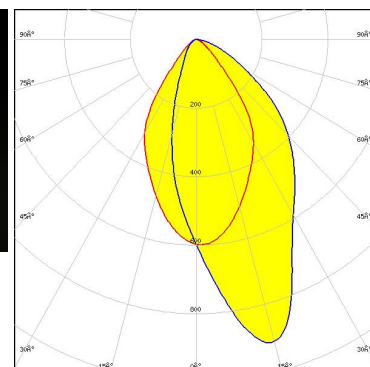
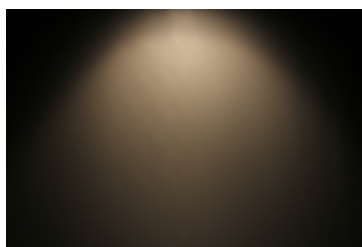
LED CXA/B 15xx  
FWHM / FWTM Asymmetric  
Efficiency 88 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13186\_LENA-STD-BASE-CXA15



Light distribution files



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

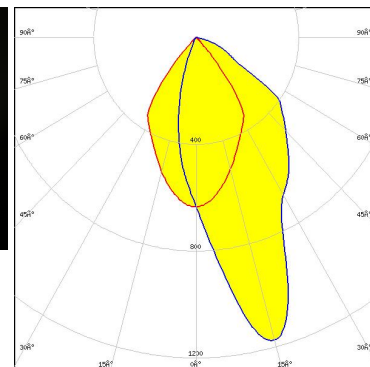
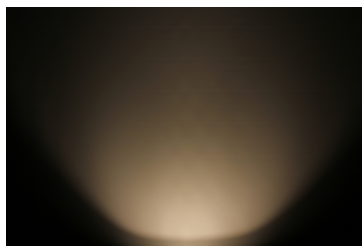


Light distribution files

### OPTICAL RESULTS (MEASURED):



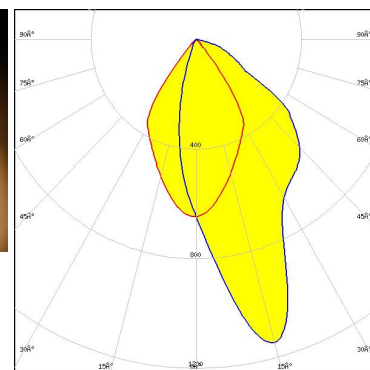
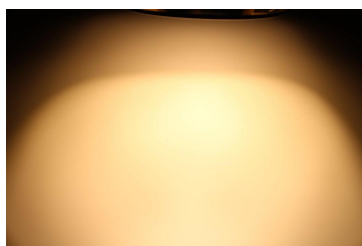
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM / FWTM Asymmetric  
 Efficiency 87 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 437 Typ L1



Light distribution files



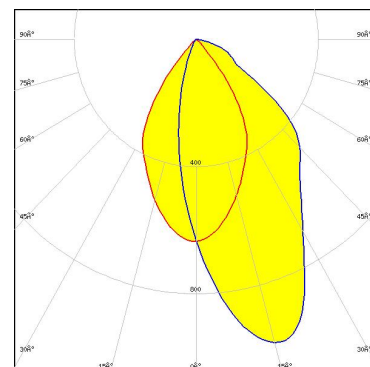
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C14146\_LENA-STD-BASE-CXA18



Light distribution files



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

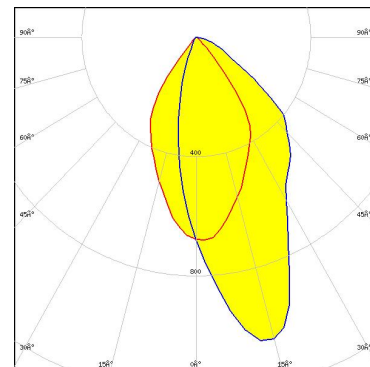


Light distribution files

### OPTICAL RESULTS (MEASURED):



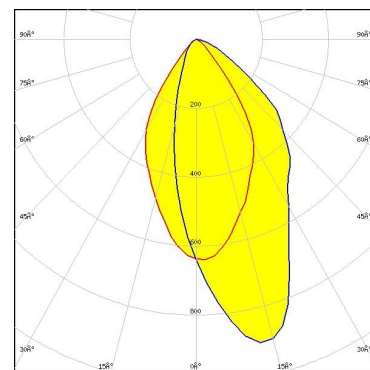
LED CXA2011  
FWHM / FWTM Asymmetric  
Efficiency 79 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12105\_LENA-STD-BASE-CXA20



Light distribution files



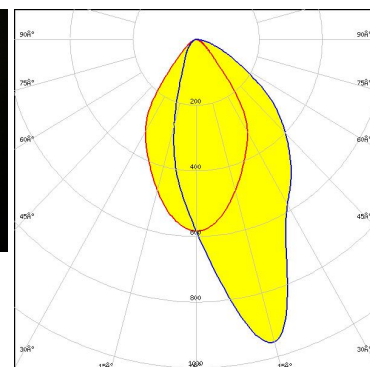
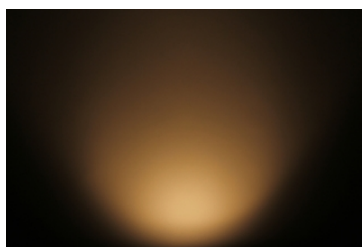
LED CXA2011  
FWHM / FWTM Asymmetric  
Efficiency 75 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12105\_LENA-STD-BASE-CXA20  
C11996\_LENA-LENS



Light distribution files



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

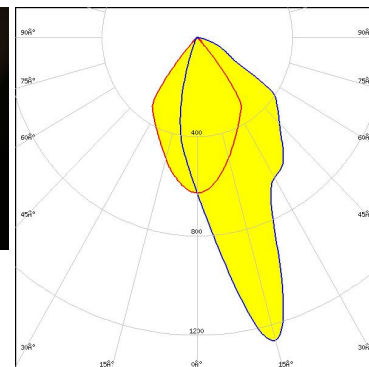
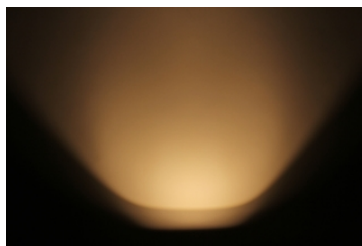


Light distribution files

### OPTICAL RESULTS (MEASURED):



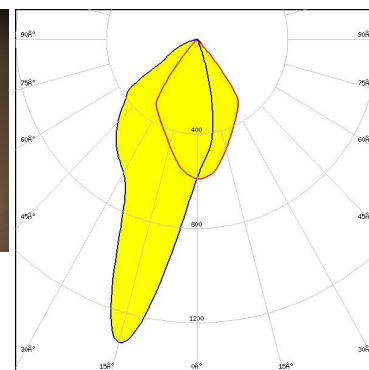
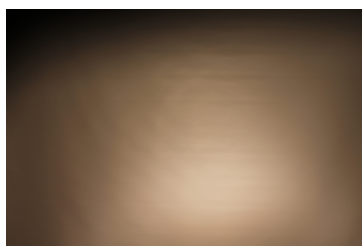
LED LUXEON CoB 1202/1203  
FWHM / FWTM Asymmetric  
Efficiency 89 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 438 Typ L1



Light distribution files



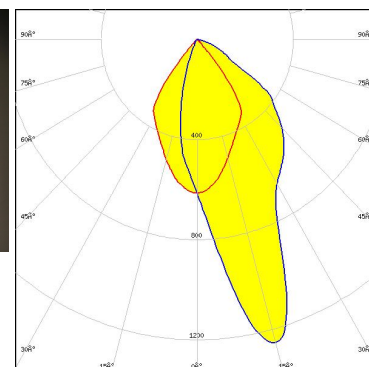
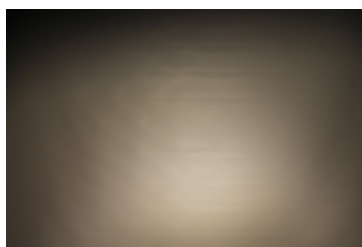
LED LUXEON CoB 1204HD  
FWHM / FWTM Asymmetric  
Efficiency 86 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C11981\_LENA-STD-BASE-COB-L110



Light distribution files



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

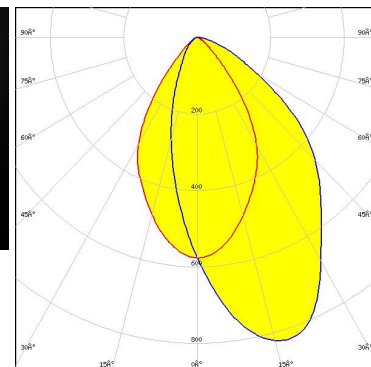
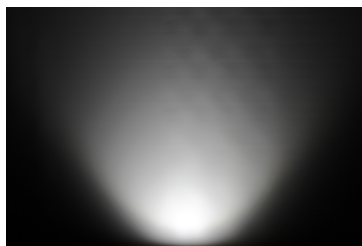


Light distribution files

### OPTICAL RESULTS (MEASURED):



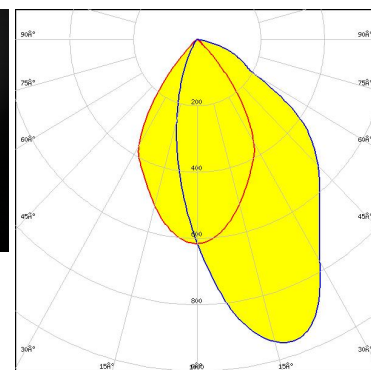
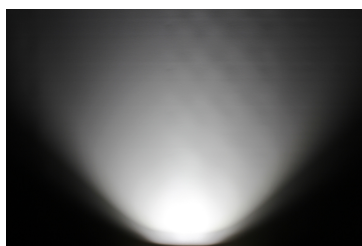
LED LUXEON CoB 1211  
FWHM / FWTM Asymmetric  
Efficiency 84 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
C11996\_LENA-LENS  
Bender Wirth: 431 Typ L3



Light distribution files



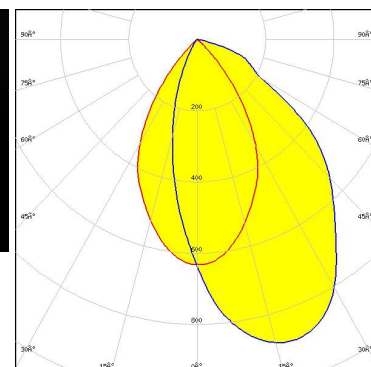
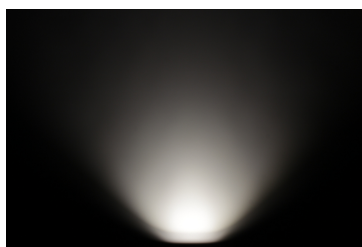
LED LUXEON CoB 1211  
FWHM / FWTM Asymmetric  
Efficiency 89 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13867\_LENA-STD-BASE-VERO29  
Bender Wirth: 431 Typ L3



Light distribution files



LED LUXEON CoB 1213/1216/1812  
FWHM / FWTM Asymmetric  
Efficiency 88 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12692\_LENA-STD-BASE-CLL040

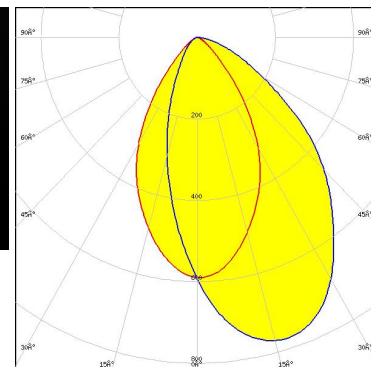
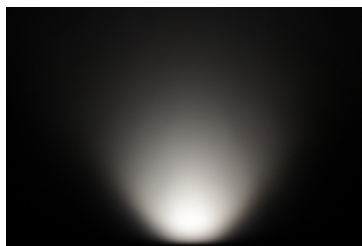


Light distribution files

### OPTICAL RESULTS (MEASURED):



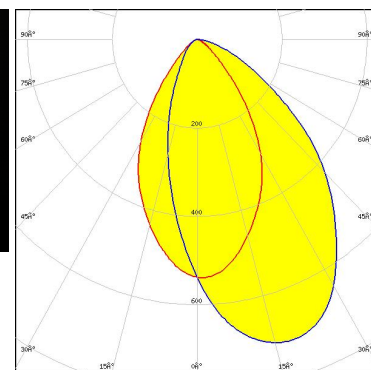
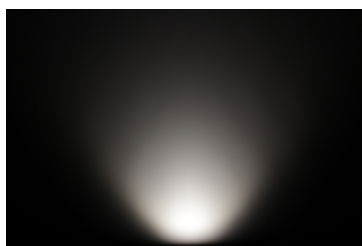
LED LUXEON CoB 1213/1216/1812  
 FWHM / FWTM Asymmetric  
 Efficiency 84 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C12692\_LENA-STD-BASE-CLL040  
 C11996\_LENA-LENS



Light distribution files



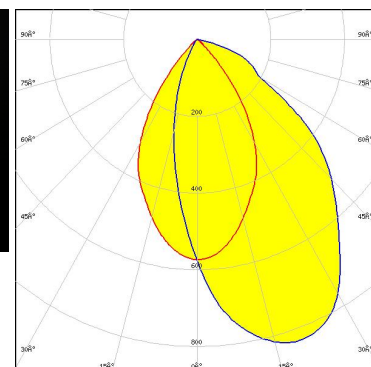
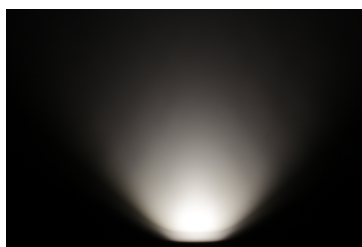
LED LUXEON CoB 1213/1216/1812  
 FWHM / FWTM Asymmetric  
 Efficiency 77 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C11996\_LENA-LENS  
 A.A.G. STUCCHI: 8102-G2 + S-8000-12



Light distribution files



LED LUXEON CoB 1213/1216/1812  
 FWHM / FWTM 60.0° / 95.0°  
 Efficiency 81 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 A.A.G. STUCCHI: 8102-G2 + S-8000-12



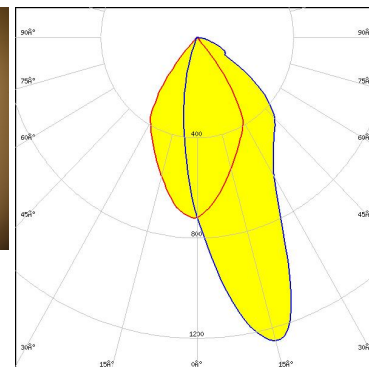
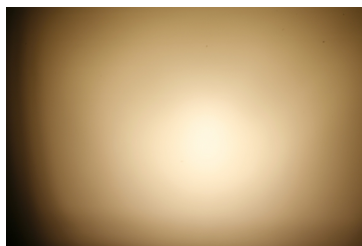
Light distribution files



### OPTICAL RESULTS (MEASURED):



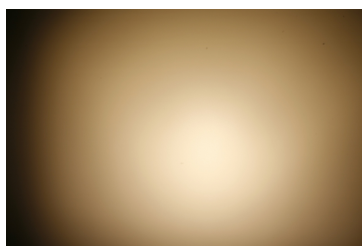
LED LUXEON K12  
FWHM / FWTM Asymmetric  
Efficiency 82 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12924\_LENA-STD-BASE-LUXEON-K



Light distribution files



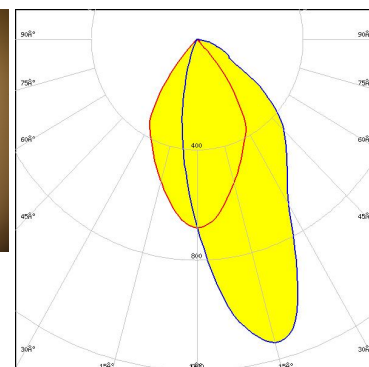
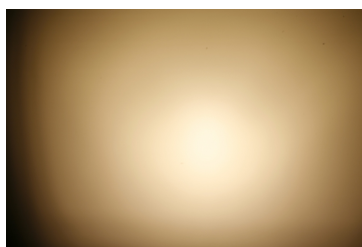
LED LUXEON K12  
FWHM / FWTM Asymmetric  
Efficiency 77 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12924\_LENA-STD-BASE-LUXEON-K  
C11996\_LENA-LENS



Light distribution files



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

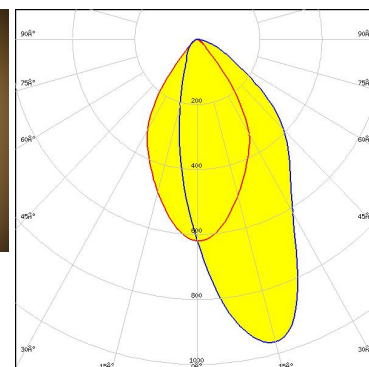
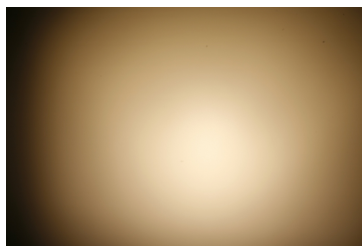


Light distribution files

### OPTICAL RESULTS (MEASURED):



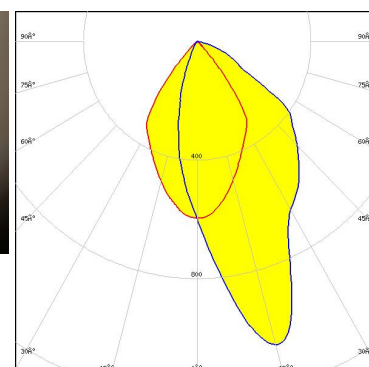
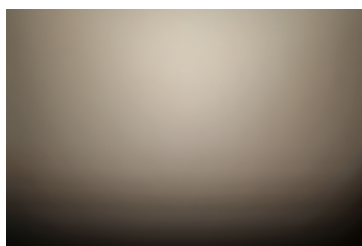
LED LUXEON K16  
FWHM / FWTM Asymmetric  
Efficiency 76 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12924\_LENA-STD-BASE-LUXEON-K  
C11996\_LENA-LENS



Light distribution files



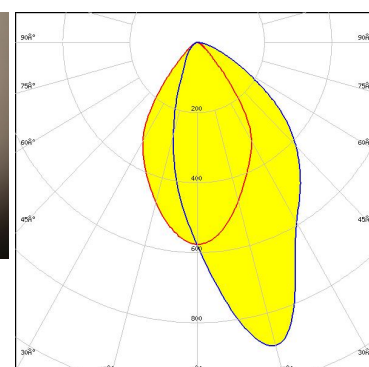
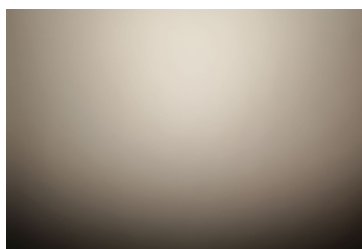
LED CDM-14 (Dim-To-Warm)  
FWHM / FWTM 59.0° / 90.0°  
Efficiency 88 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
Bender Wirth: 491 Typ L2



Light distribution files



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

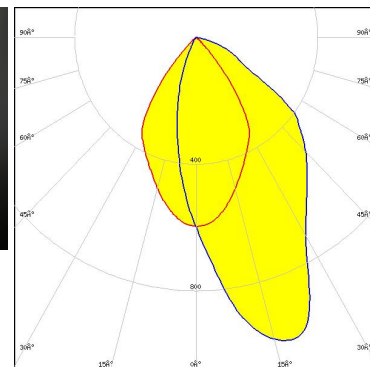
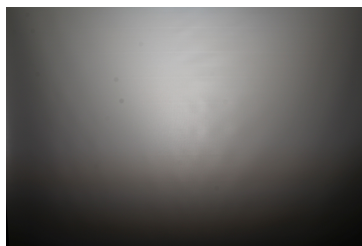


Light distribution files

### OPTICAL RESULTS (MEASURED):



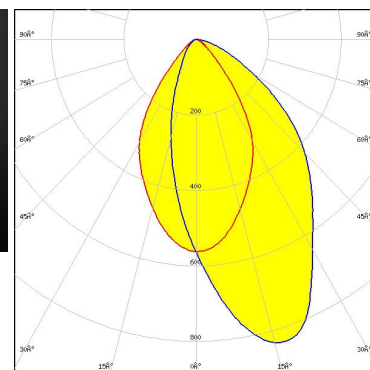
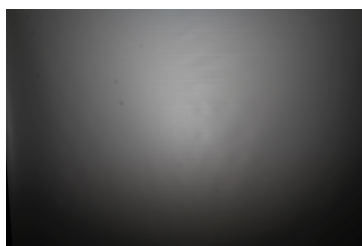
LED CDM-18 (Dim-To-Warm)  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 491 Typ L2



Light distribution files



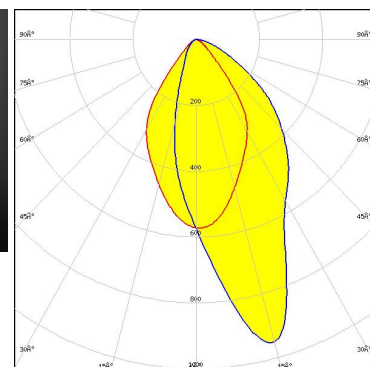
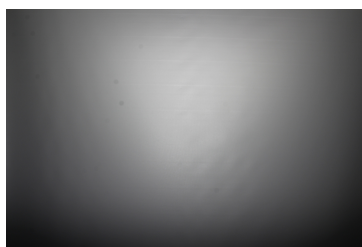
LED CDM-18 (Dim-To-Warm)  
 FWHM / FWTM Asymmetric  
 Efficiency 83 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 491 Typ L2



Light distribution files



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

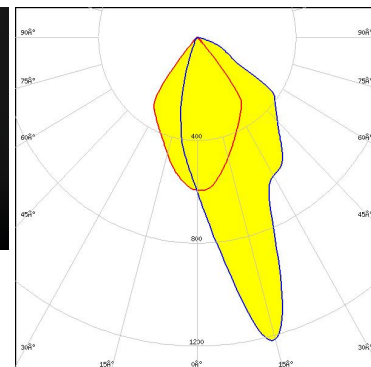
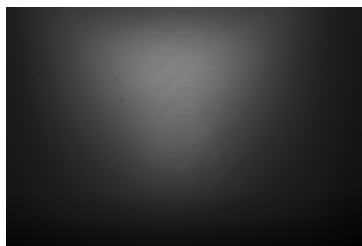


Light distribution files

### OPTICAL RESULTS (MEASURED):



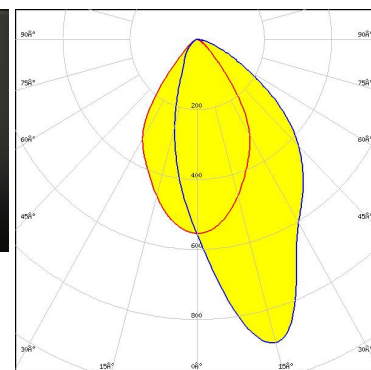
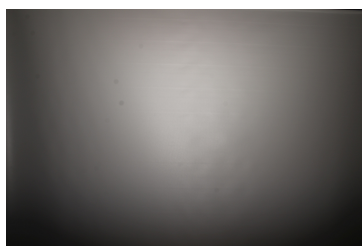
LED CDM-9 (Dim-To-Warm)  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 490 Typ L1



Light distribution files



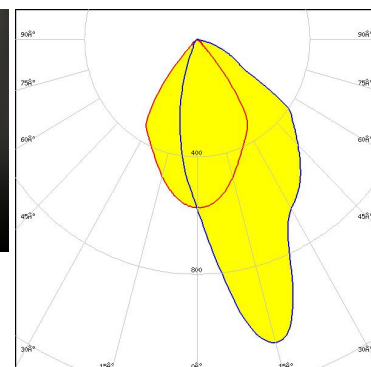
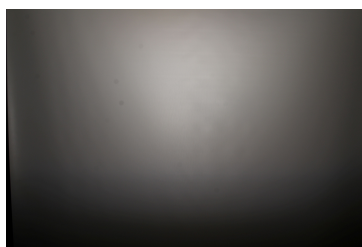
LED CTM-14 (Tunable White)  
 FWHM / FWTM Asymmetric  
 Efficiency 87 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13867\_LENA-STD-BASE-VERO29  
 C12606\_LENINA-DL  
 Bender Wirth: 442 Typ L3



Light distribution files



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

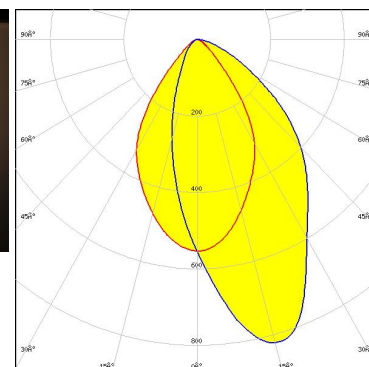


Light distribution files

### OPTICAL RESULTS (MEASURED):



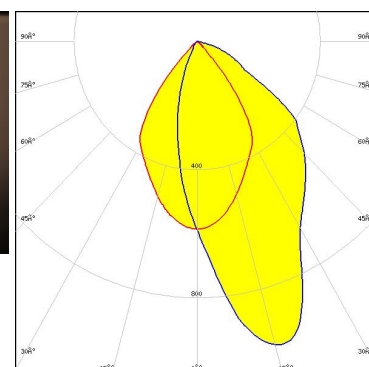
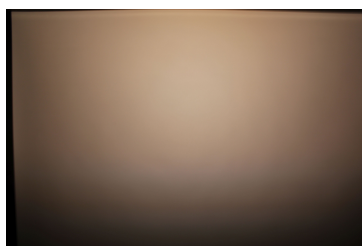
LED CTM-18 (Tunable White)  
 FWHM / FWTM Asymmetric  
 Efficiency 82 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13867\_LENA-STD-BASE-VERO29  
 C11996\_LENA-LENS  
 Bender Wirth: 442 Typ L3



Light distribution files



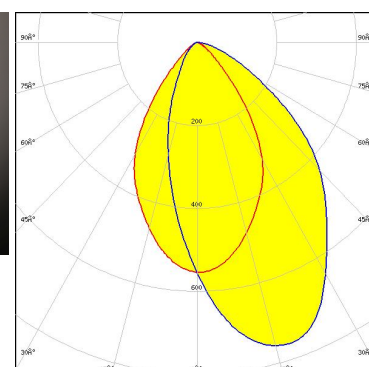
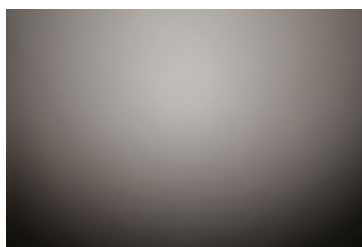
LED CTM-18 (Tunable White)  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13867\_LENA-STD-BASE-VERO29  
 Bender Wirth: 442 Typ L3



Light distribution files



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



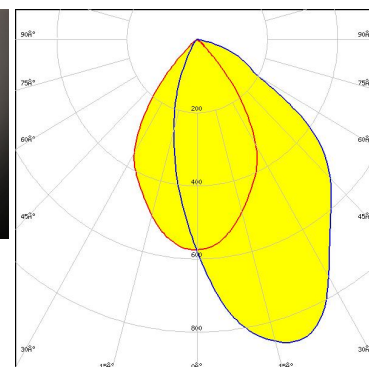
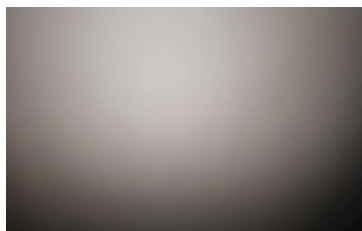
Light distribution files



### OPTICAL RESULTS (MEASURED):



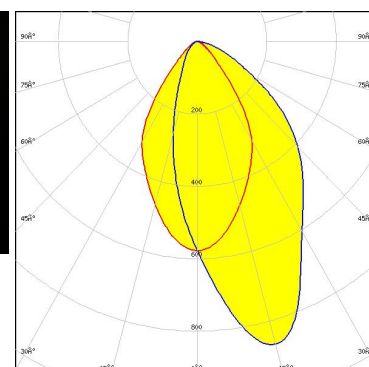
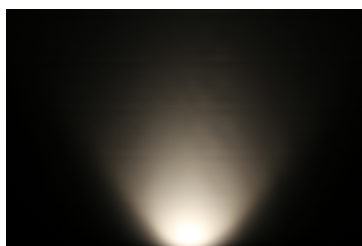
LED CTM-22 (Tunable White)  
 FWHM / FWTM Asymmetric  
 Efficiency 87 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13867\_LENA-STD-BASE-VERO29  
 Bender Wirth: 494 Typ L3



Light distribution files



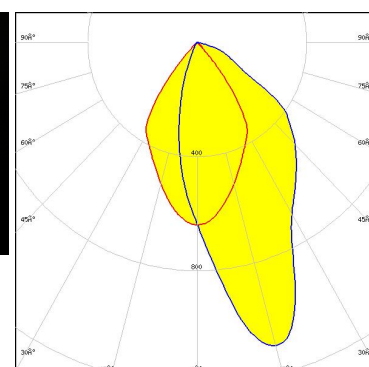
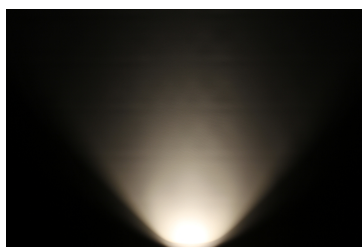
LED CxM-14 (19x19)  
 FWHM / FWTM Asymmetric  
 Efficiency 82 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C12691\_LENA-STD-BASE-CLL030  
 C11996\_LENA-LENS



Light distribution files



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



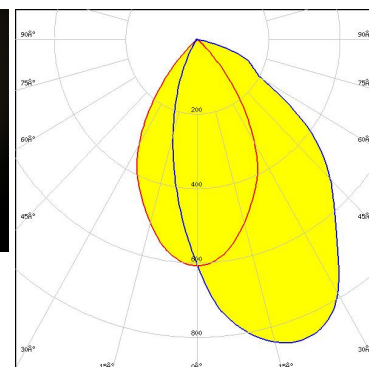
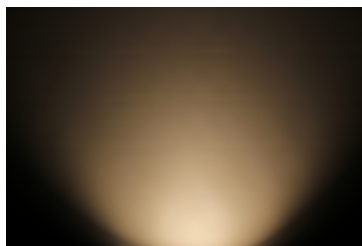
Light distribution files



### OPTICAL RESULTS (MEASURED):



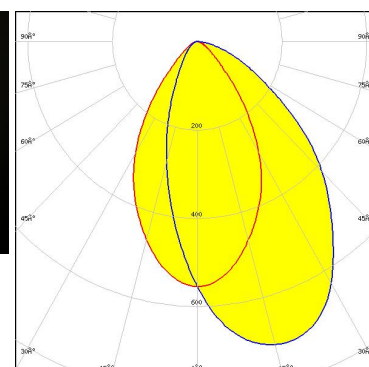
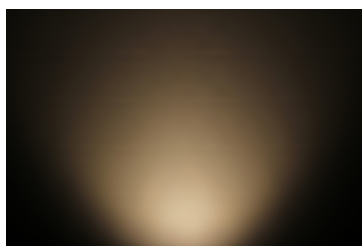
LED CxM-22 (28x28)  
FWHM / FWTM Asymmetric  
Efficiency 84 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12692\_LENA-STD-BASE-CLL040



Light distribution files



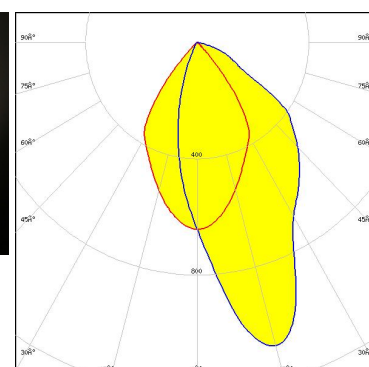
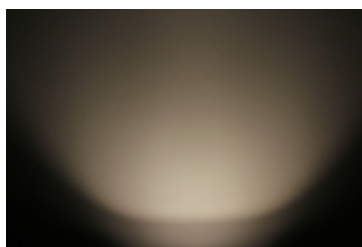
LED CxM-22 (28x28)  
FWHM / FWTM Asymmetric  
Efficiency 79 %  
Peak intensity 0.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12692\_LENA-STD-BASE-CLL040  
C11996\_LENA-LENS



Light distribution files



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



Light distribution files

### OPTICAL RESULTS (MEASURED):



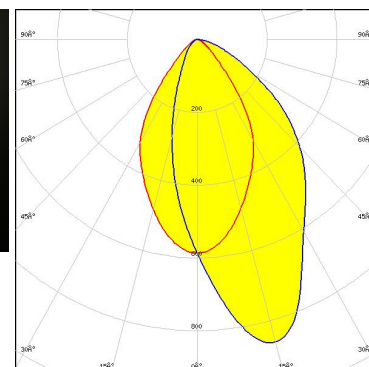
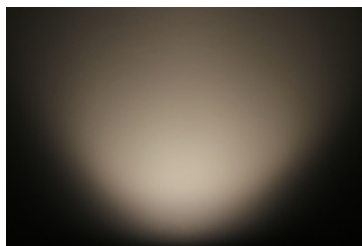
LED COB J-Type  
FWHM / FWTM Asymmetric  
Efficiency 84 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13868\_LENA-STD-BASE-VERO13-18

C11996\_LENA-LENS

Bender Wirth: 463 Typ L2



Light distribution files

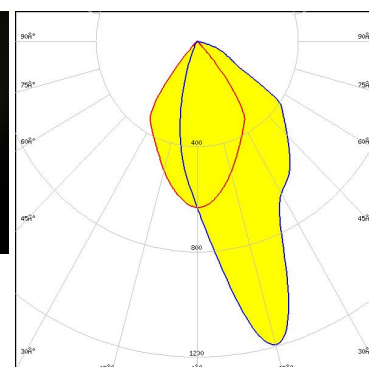
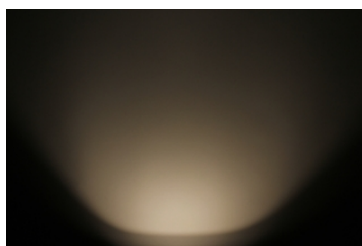


LED COB L-Type (LES 11)  
FWHM / FWTM Asymmetric  
Efficiency 89 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13868\_LENA-STD-BASE-VERO13-18

Bender Wirth: 438 Typ L1



Light distribution files



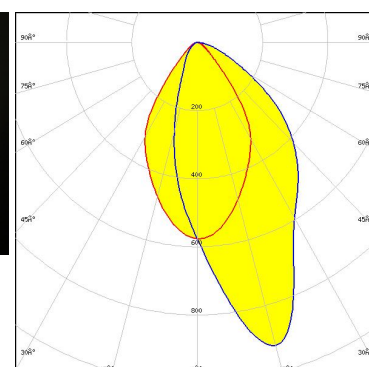
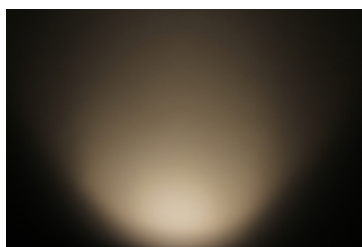
LED COB L-Type (LES 11)  
FWHM / FWTM Asymmetric  
Efficiency 84 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13868\_LENA-STD-BASE-VERO13-18

C11996\_LENA-LENS

Bender Wirth: 438 Typ L1

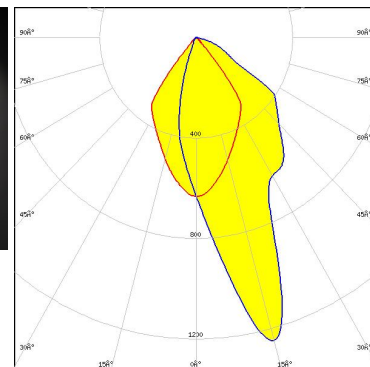
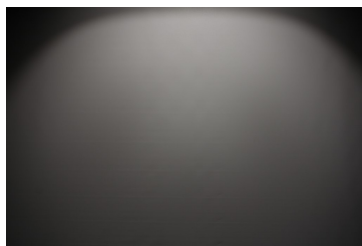


Light distribution files

### OPTICAL RESULTS (MEASURED):



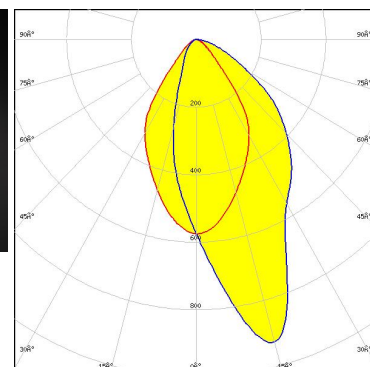
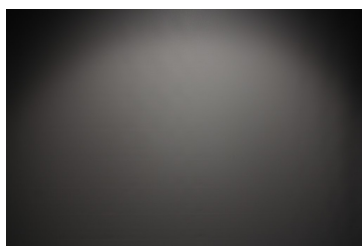
LED COB L-Type (LES 9)  
 FWHM / FWTM Asymmetric  
 Efficiency 90 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 438 Typ L1



Light distribution files



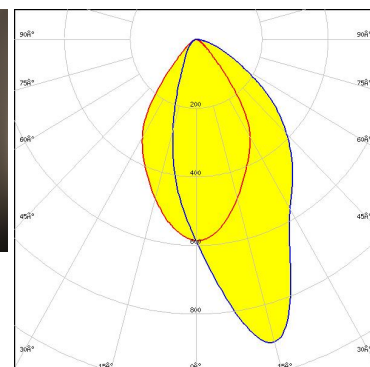
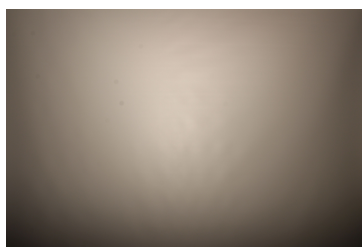
LED COB L-Type (LES 9)  
 FWHM / FWTM Asymmetric  
 Efficiency 84 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 438 Typ L1



Light distribution files



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

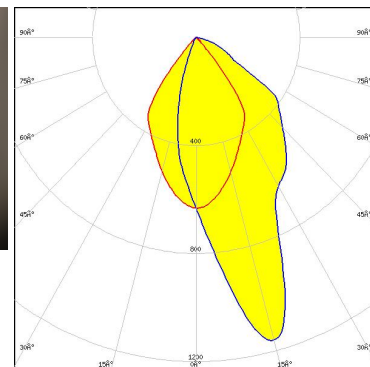
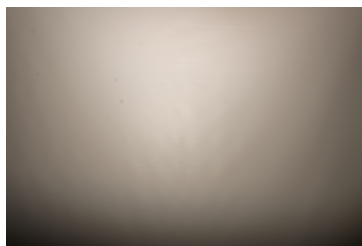


Light distribution files

### OPTICAL RESULTS (MEASURED):



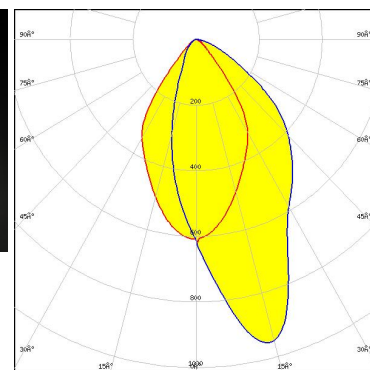
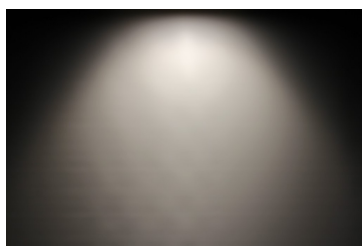
LED NVCWJ024Z-V1MT: COB J-Type Tunable White  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 Bender Wirth: 498 Typ L2



Light distribution files



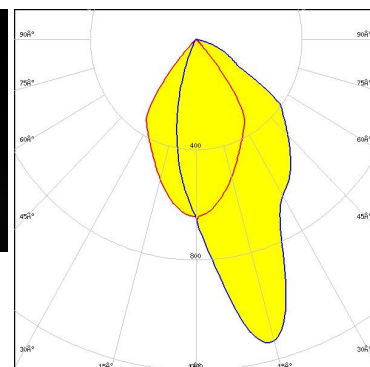
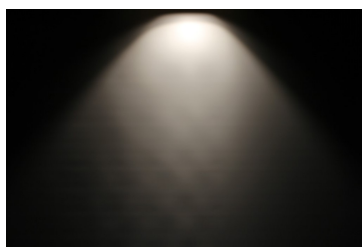
LED Soleriq S13  
 FWHM / FWTM Asymmetric  
 Efficiency 84 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13868\_LENA-STD-BASE-VERO13-18  
 C11996\_LENA-LENS  
 Bender Wirth: 437 Typ L1



Light distribution files



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



Light distribution files

### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

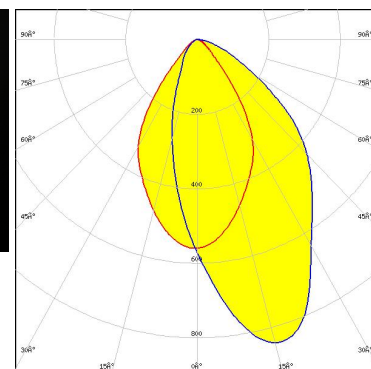
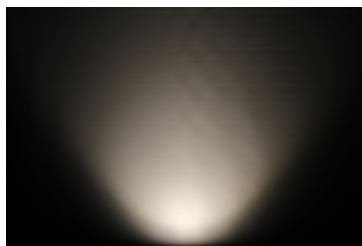
LED Soleriq S19  
FWHM / FWTM Asymmetric  
Efficiency 84 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13867\_LENA-STD-BASE-VERO29

C11996\_LENA-LENS

Bender Wirth: 462 Typ L3



Light distribution files

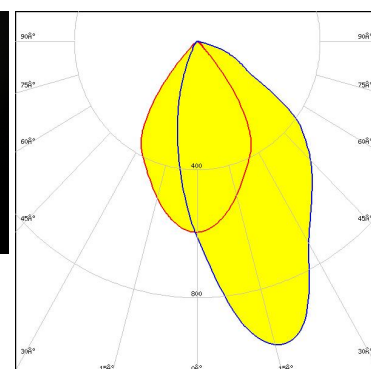
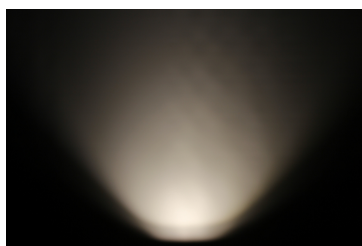
**OSRAM**  
Opto Semiconductors

LED Soleriq S19  
FWHM / FWTM Asymmetric  
Efficiency 89 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13867\_LENA-STD-BASE-VERO29

Bender Wirth: 462 Typ L3



Light distribution files

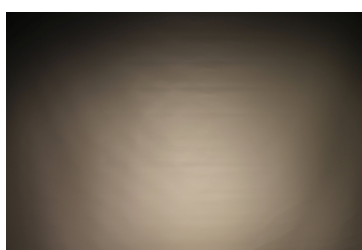
**PHILIPS**

LED Fortimo SLM L13 CoB  
FWHM / FWTM Asymmetric  
Efficiency 80 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C12292\_LENA-STD-BASE-MEZ

C11996\_LENA-LENS



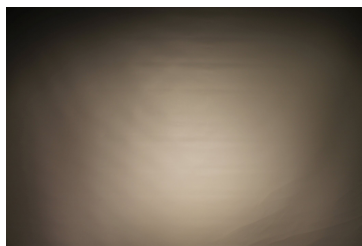
Light distribution files



### OPTICAL RESULTS (MEASURED):

#### PHILIPS

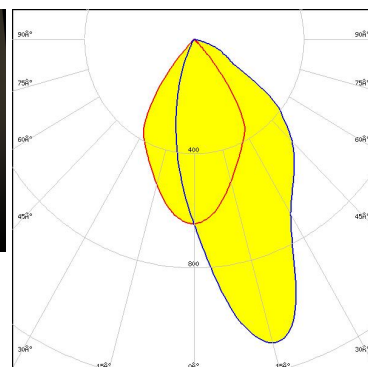
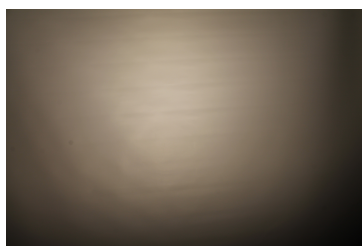
LED Fortimo SLM L13 CoB  
FWHM / FWTM Asymmetric  
Efficiency 85 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12292\_LENA-STD-BASE-MEZ



Light distribution files

#### PHILIPS

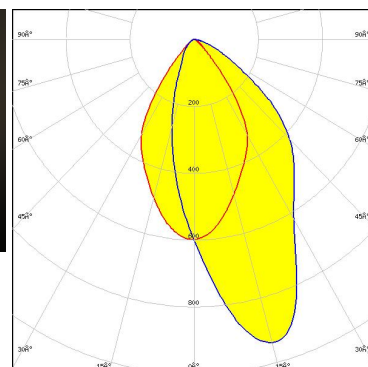
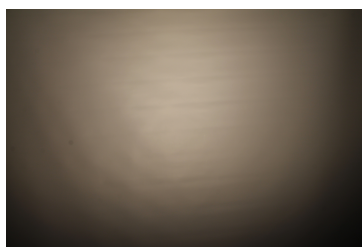
LED Fortimo SLM L15 CoB  
FWHM / FWTM Asymmetric  
Efficiency 85 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12292\_LENA-STD-BASE-MEZ



Light distribution files

#### PHILIPS

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



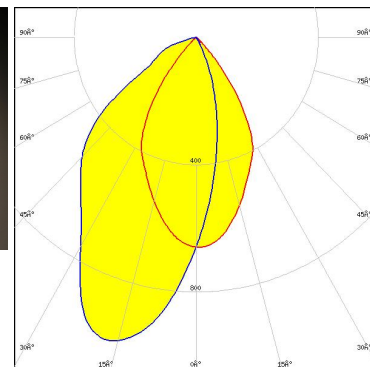
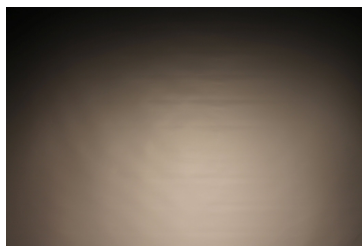
Light distribution files



### OPTICAL RESULTS (MEASURED):

#### PHILIPS

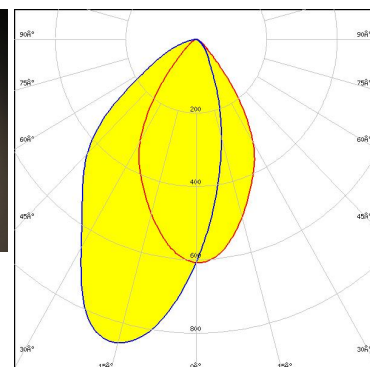
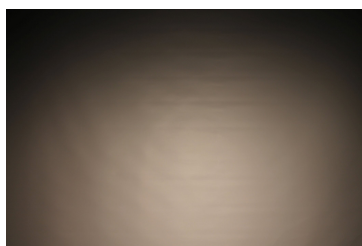
LED Fortimo SLM L19 CoB  
FWHM / FWTM Asymmetric  
Efficiency 85 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12692\_LENA-STD-BASE-CLL040



Light distribution files

#### PHILIPS

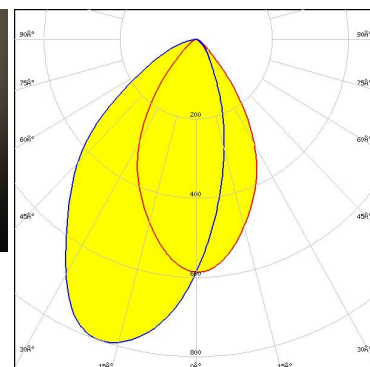
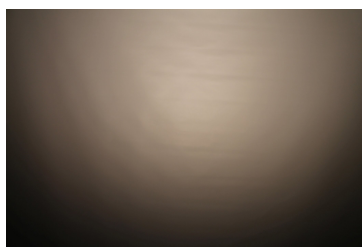
LED Fortimo SLM L19 CoB  
FWHM / FWTM Asymmetric  
Efficiency 80 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12692\_LENA-STD-BASE-CLL040  
C11996\_LENA-LENS



Light distribution files

#### PHILIPS

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

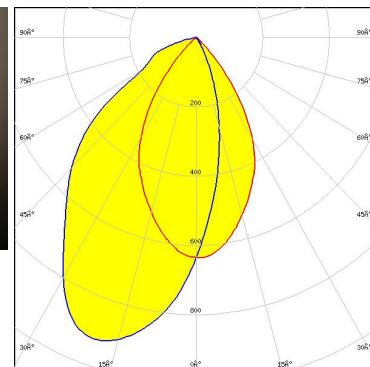
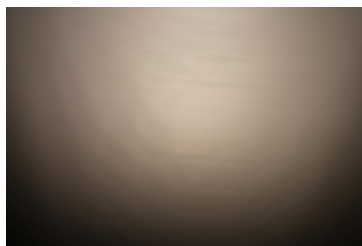


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### PHILIPS

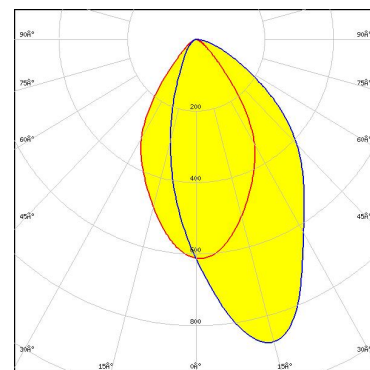
LED Fortimo SLM L23 CoB  
FWHM / FWTM Asymmetric  
Efficiency 85 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12692\_LENA-STD-BASE-CLL040



Light distribution files

#### SAMSUNG

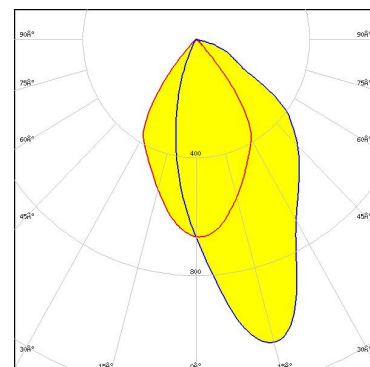
LED LC016D / LC019D / LC026D / LC033D  
FWHM / FWTM Asymmetric  
Efficiency 84 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12691\_LENA-STD-BASE-CLL030  
C11996\_LENA-LENS



Light distribution files

#### SAMSUNG

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

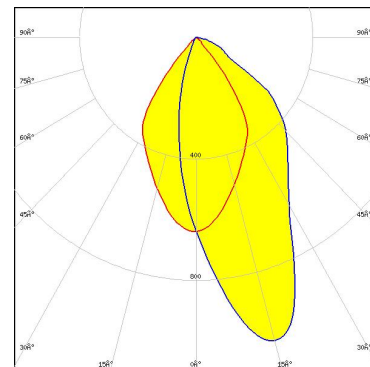


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### SHARP

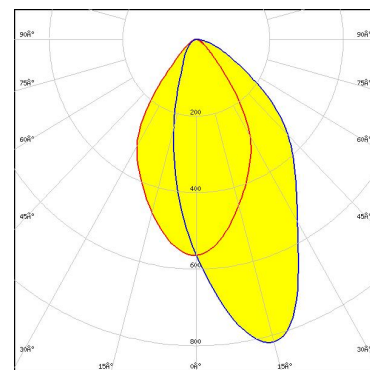
LED Mega Zenigata (GW6DME)  
 FWHM / FWTM Asymmetric  
 Efficiency 80 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C12292\_LENA-STD-BASE-MEZ



Light distribution files

#### SHARP

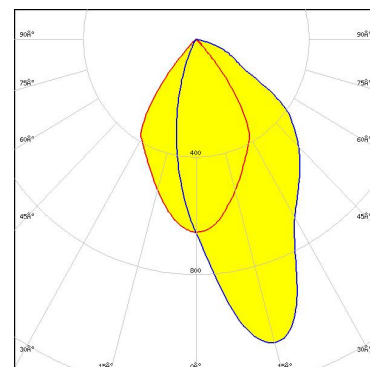
LED Mega Zenigata (GW6DME)  
 FWHM / FWTM Asymmetric  
 Efficiency 75 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C12292\_LENA-STD-BASE-MEZ  
 C11996\_LENA-LENS



Light distribution files

#### TRIDONIC

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

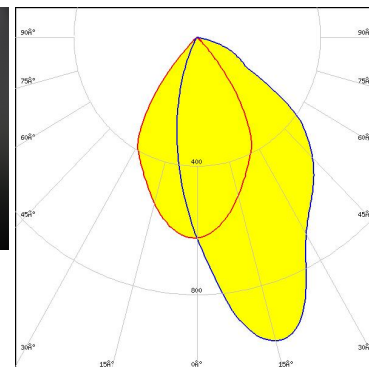
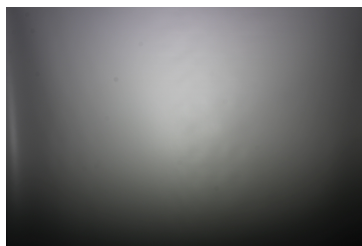


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### TRIDONIC

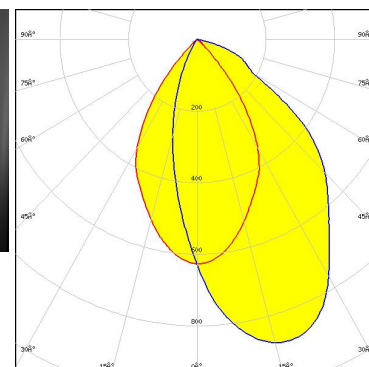
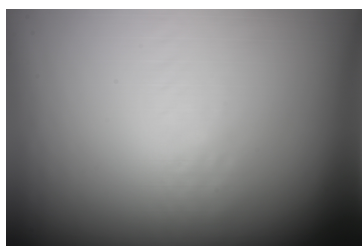
LED SLE G7 LES17 H  
FWHM / FWTM Asymmetric  
Efficiency 87 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14547\_LENA-ADAPTER-B



Light distribution files

#### TRIDONIC

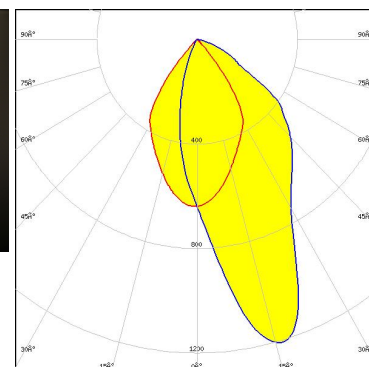
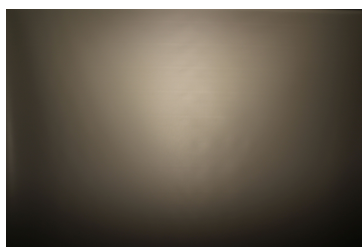
LED SLE G7 LES21 H  
FWHM / FWTM Asymmetric  
Efficiency 86 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14547\_LENA-ADAPTER-B



Light distribution files

#### XICATO

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



Light distribution files

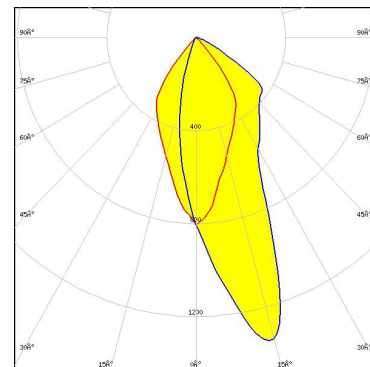
### OPTICAL RESULTS (SIMULATED):



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

Bender Wirth: 486 Typ L1

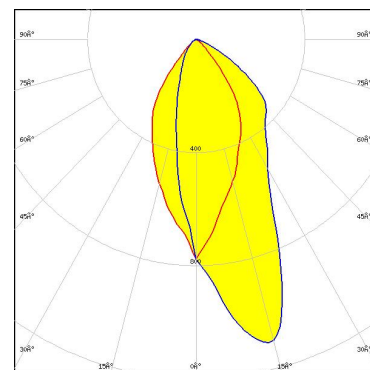
Light distribution files



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

Bender Wirth: 486 Typ L1

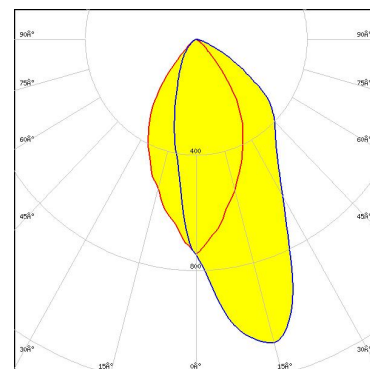
Light distribution files



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

Bender Wirth: 477 Typ L1

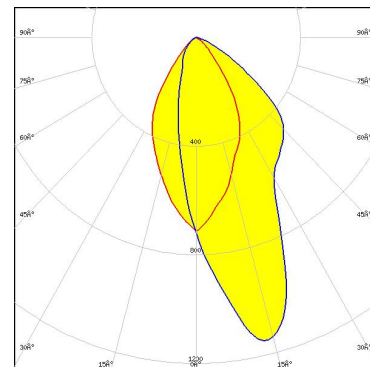
Light distribution files



### OPTICAL RESULTS (SIMULATED):



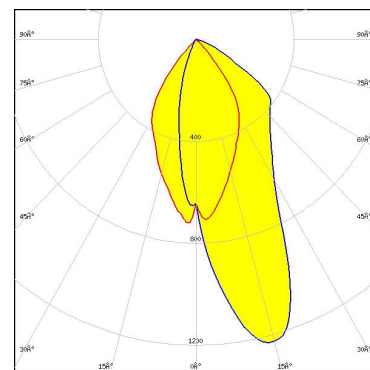
LED V13 Gen7  
FWHM / FWTM Asymmetric  
Efficiency 85 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C11996\_LENA-LENS



Light distribution files



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



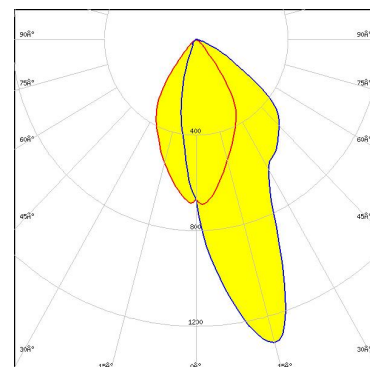
Light distribution files

Bender Wirth: 477 Typ L1



LED V13 Gen7  
FWHM / FWTM Asymmetric  
Efficiency 88 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

IDEAL: 50-2103CT + 50-2100LN



Light distribution files



### OPTICAL RESULTS (SIMULATED):



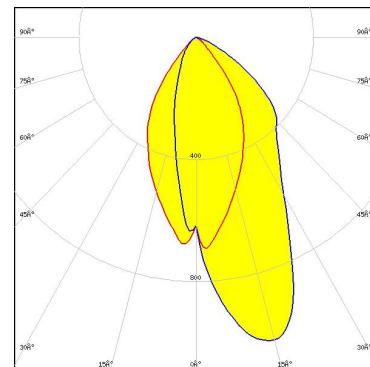
LED V13 Gen7  
FWHM / FWTM Asymmetric  
Efficiency 84 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13868\_LENA-STD-BASE-VERO13-18

C11996\_LENA-LENS

Bender Wirth: 477 Typ L1



Light distribution files

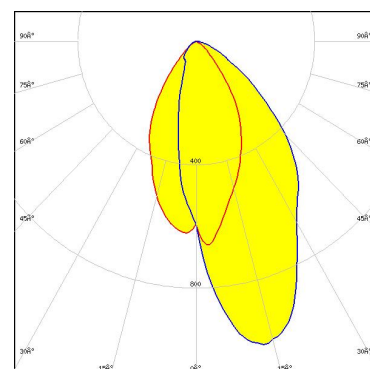


LED CXA/B 30xx  
FWHM / FWTM Asymmetric  
Efficiency 81 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C11996\_LENA-LENS

IDEAL: 50-2234C + 50-2100LN



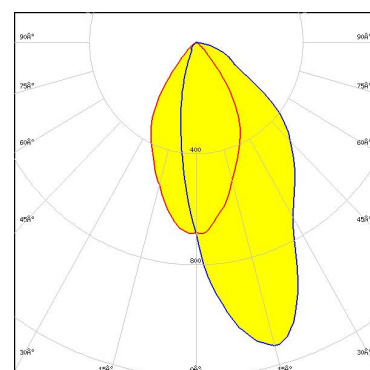
Light distribution files



LED CXA/B 30xx  
FWHM / FWTM Asymmetric  
Efficiency 85 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

IDEAL: 50-2234C + 50-2100LN

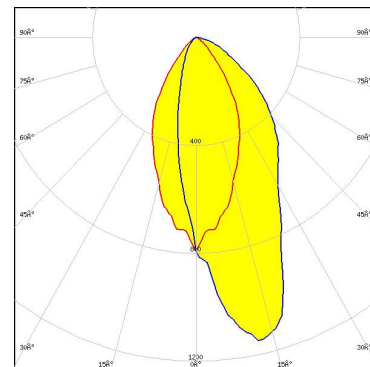


Light distribution files

### OPTICAL RESULTS (SIMULATED):



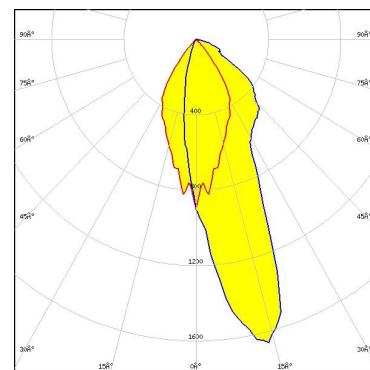
LED LUXEON CoB 1204/1205  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C12292\_LENA-STD-BASE-MEZ  
 C11996\_LENA-LENS



Light distribution files



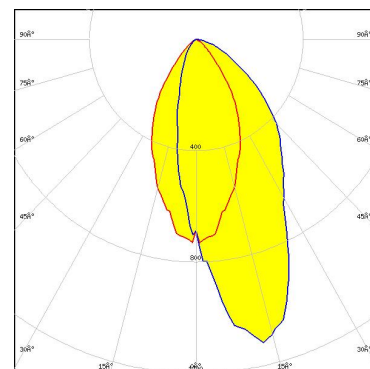
LED LUXEON CoB 1204/1205  
 FWHM / FWTM Asymmetric  
 Efficiency 93 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C12292\_LENA-STD-BASE-MEZ



Light distribution files



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

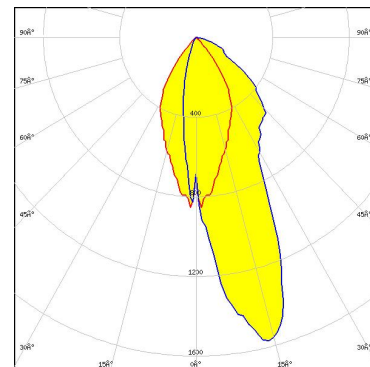


Light distribution files

### OPTICAL RESULTS (SIMULATED):



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



Light distribution files



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

Bender Wirth: 433 Typ L1

Light distribution files



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

Bender Wirth: 433 Typ L1

Light distribution files

### OPTICAL RESULTS (SIMULATED):



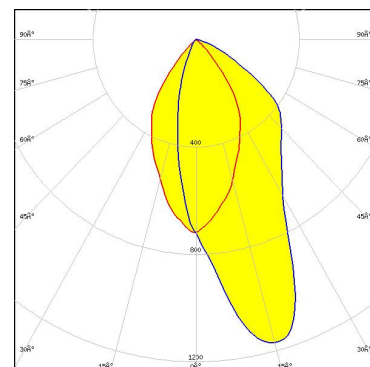
LED CxM-14 (19x19)  
FWHM / FWTM Asymmetric  
Efficiency 87 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS

Light distribution files

Bender Wirth: 433 Typ L1



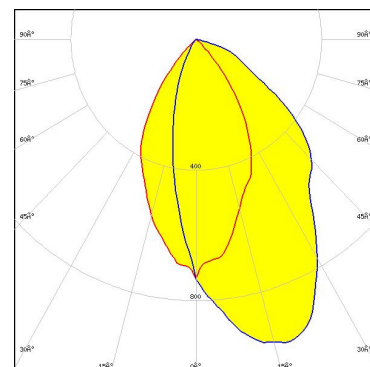
LED Soleriq S15  
FWHM / FWTM Asymmetric  
Efficiency 88 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12691\_LENA-STD-BASE-CLL030



Light distribution files



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

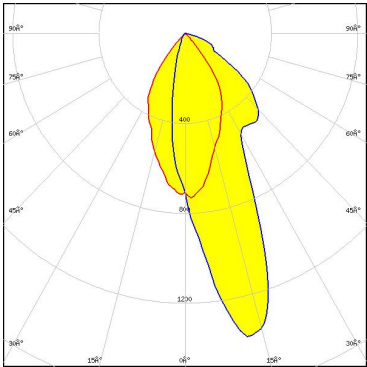


Light distribution files

OPTICAL RESULTS (SIMULATED):



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



Light distribution files

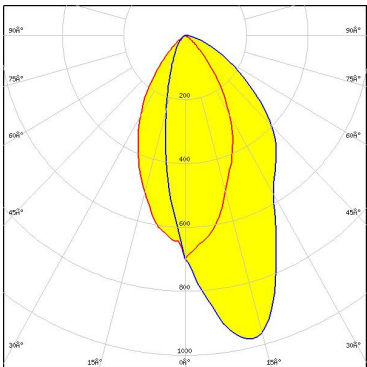


LED ZC12/18  
FWHM / FWTM Asymmetric  
Efficiency 87 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13868\_LENA-STD-BASE-VERO13-18  
C11996\_LENA-LENS

Bender Wirth: 433 Typ L1



LED ZC12/18  
FWHM / FWTM Asymmetric  
Efficiency %  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12691\_LENA-STD-BASE-CLL030  
C11996\_LENA-LENS



Light distribution files

### OPTICAL RESULTS (SIMULATED):

|                                                                                                                         |            |
|-------------------------------------------------------------------------------------------------------------------------|------------|
| <br><small>SEOUL SEMICONDUCTOR</small> |            |
| LED                                                                                                                     | ZC12/18    |
| FWHM / FWTM                                                                                                             | Asymmetric |
| Efficiency                                                                                                              | 90 %       |
| Peak intensity                                                                                                          | 1.1 cd/lm  |
| LEDs/each optic                                                                                                         | 1          |
| Light colour/type                                                                                                       | White      |
| Required components:                                                                                                    |            |
| C13868_LENA-STD-BASE-VERO13-18                                                                                          |            |
| Bender Wirth: 433 Typ L1                                                                                                |            |

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

|                                                                                    |                        |
|------------------------------------------------------------------------------------|------------------------|
|  |                        |
| LED                                                                                | Mega Zenigata (GW5DGC) |
| FWHM / FWTM                                                                        | Asymmetric             |
| Efficiency                                                                         | %                      |
| LEDs/each optic                                                                    | 1                      |
| Light colour/type                                                                  | White                  |
| Required components:                                                               |                        |
| C12292_LENA-STD-BASE-MEZ                                                           |                        |
| C11996_LENA-LENS                                                                   |                        |
| Light distribution files                                                           |                        |



OPTICAL RESULTS (SIMULATED):

SHARP

|                   |                        |
|-------------------|------------------------|
| LED               | Mega Zenigata (GW5DGC) |
| FWHM / FWTM       | Asymmetric             |
| Efficiency        | %                      |
| LEDs/each optic   | 1                      |
| Light colour/type | White                  |

Required components:  
C12292\_LENA-STD-BASE-MEZ

Light distribution files

### 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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Shenzhen 518057  
P.R.CHINA

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

#### Shipping locations

Poznan, Poland  
Hong Kong, China

#### Distribution Partners

[www.ledil.com/  
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