

## MIRELLA-50-S-PF

~15° spot beam

### SPECIFICATION:

Dimensions	Ø 49.9
Height	24 mm
Fastening	socket
ROHS compliant	yes ⓘ

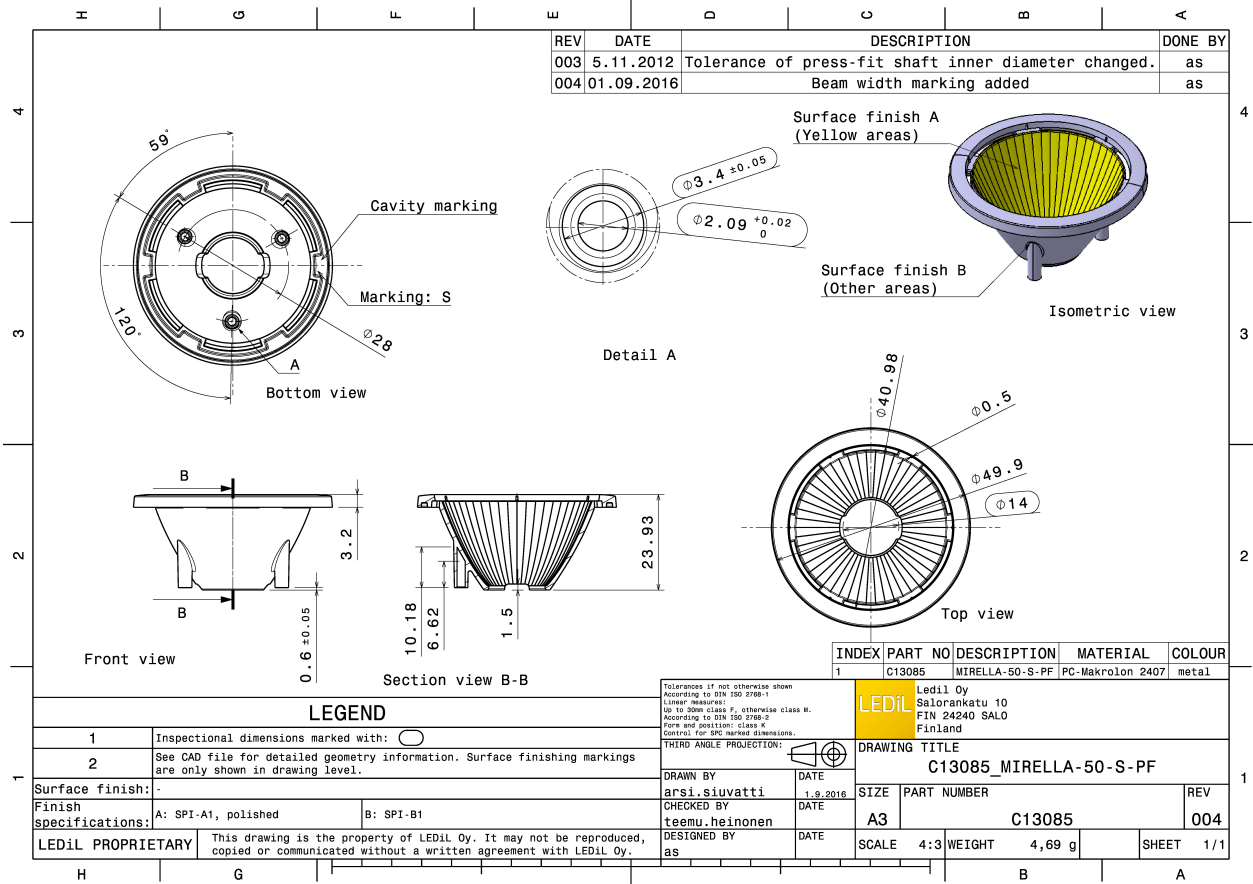
### MATERIALS:

Component	Type	Material	Colour	Finish	Coating
MIRELLA-50-S-PF	Reflector	PC	metal		lacquer



### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C13085_MIRELLA-50-S-PF » Box size: 480 x 280 x 300 mm	336	112	28	3.0



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

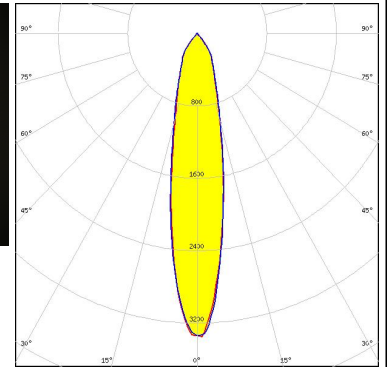
#### OPTICAL RESULTS (MEASURED):

bridgelux

LED V10 Gen7  
 FWHM / FWTM 21.0° / 61.0°  
 Efficiency 91 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 486 Typ L1



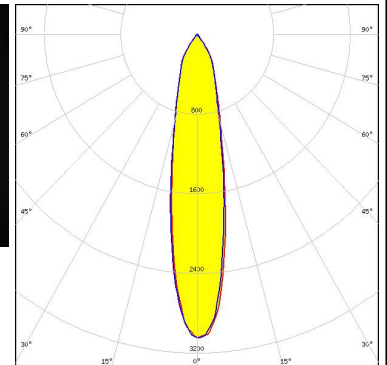
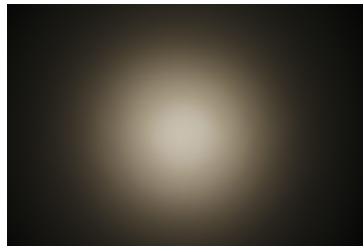
Light distribution files

bridgelux

LED V10 Gen7  
 FWHM / FWTM 21.0° / 61.0°  
 Efficiency 81 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18  
 C13333\_MIRELLA-CL



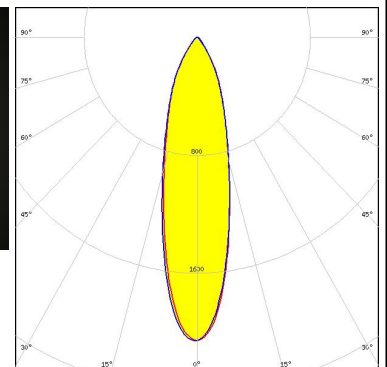
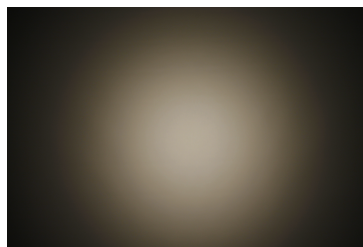
Light distribution files

bridgelux

LED V10 Gen7  
 FWHM / FWTM 26.0° / 66.0°  
 Efficiency 79 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

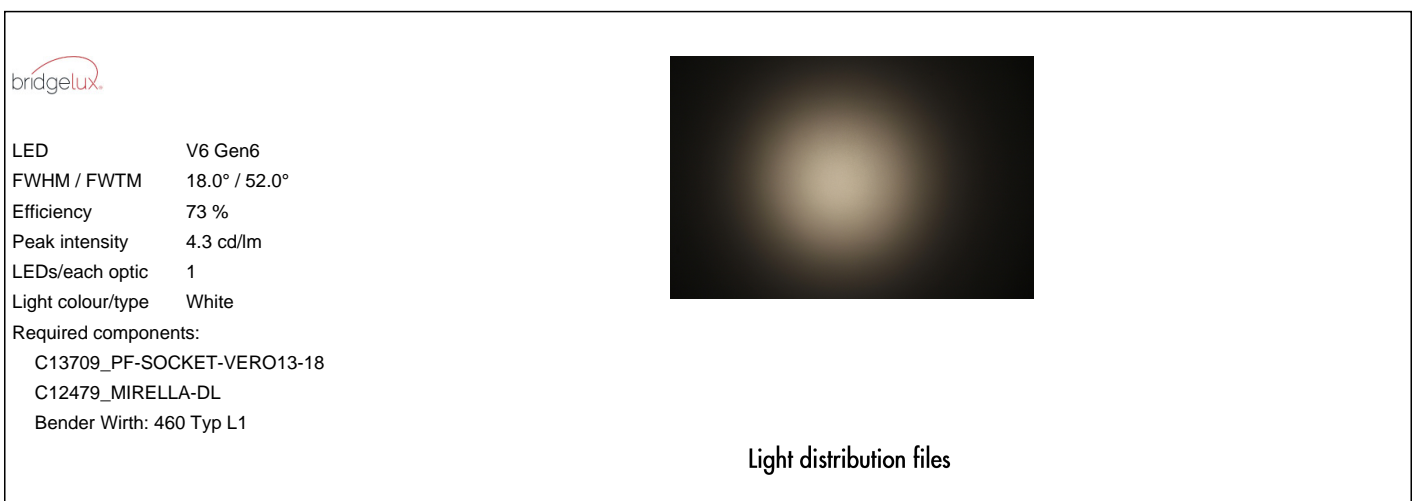
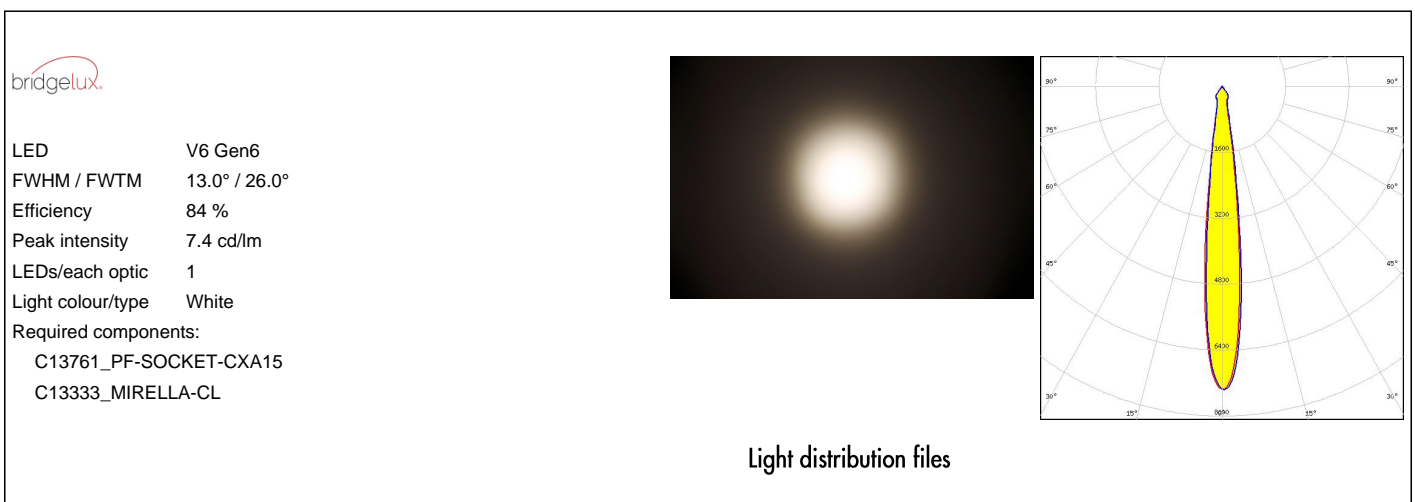
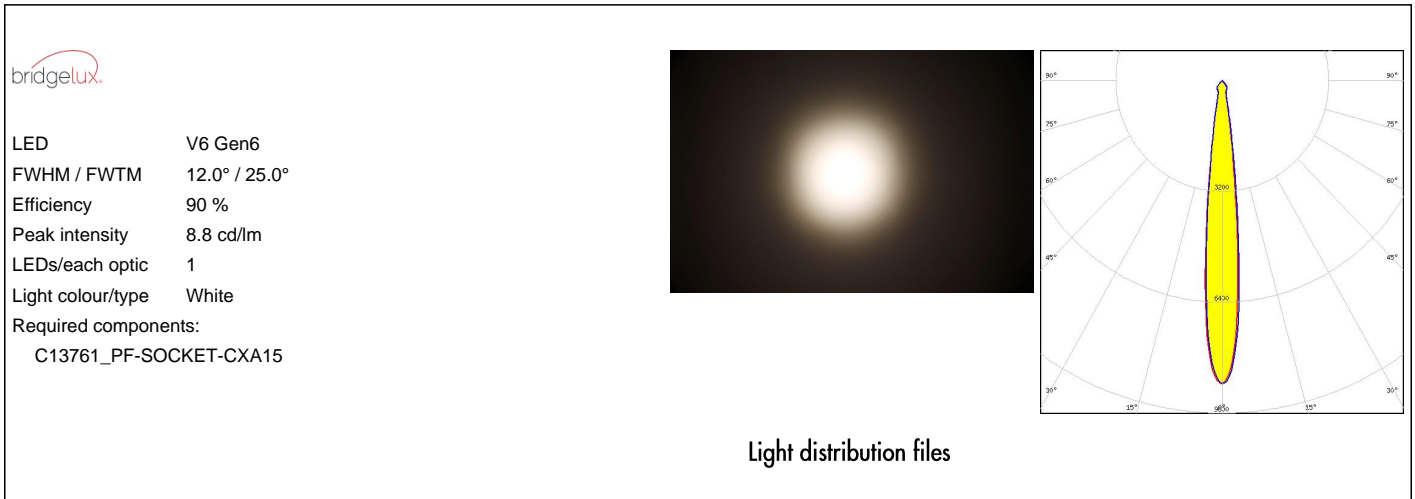
Required components:

C13709\_PF-SOCKET-VERO13-18  
 C12479\_MIRELLA-DL

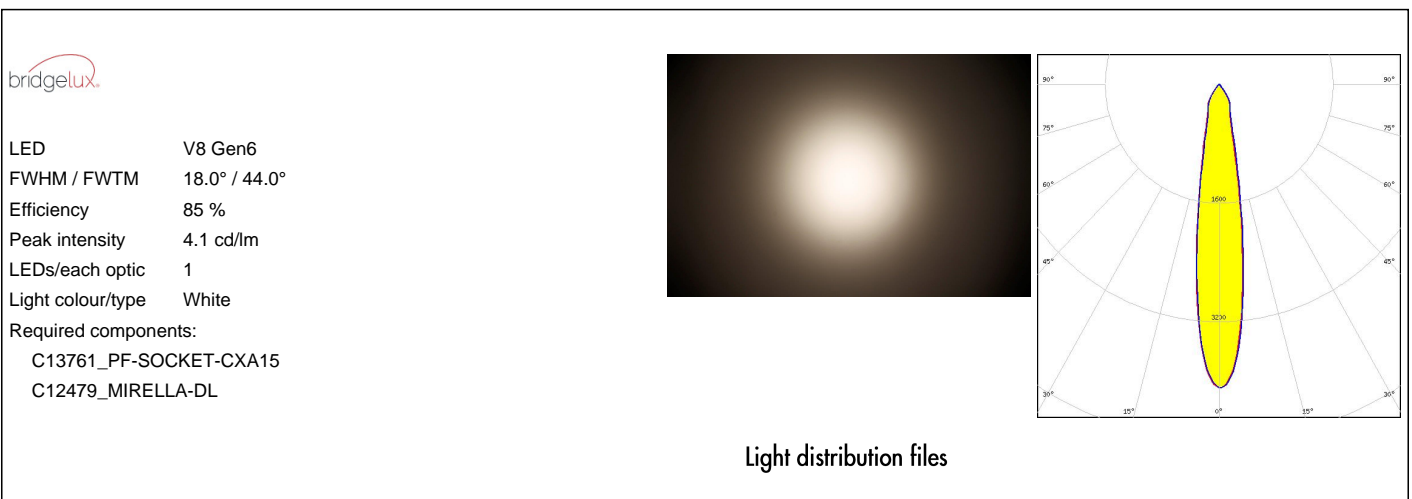
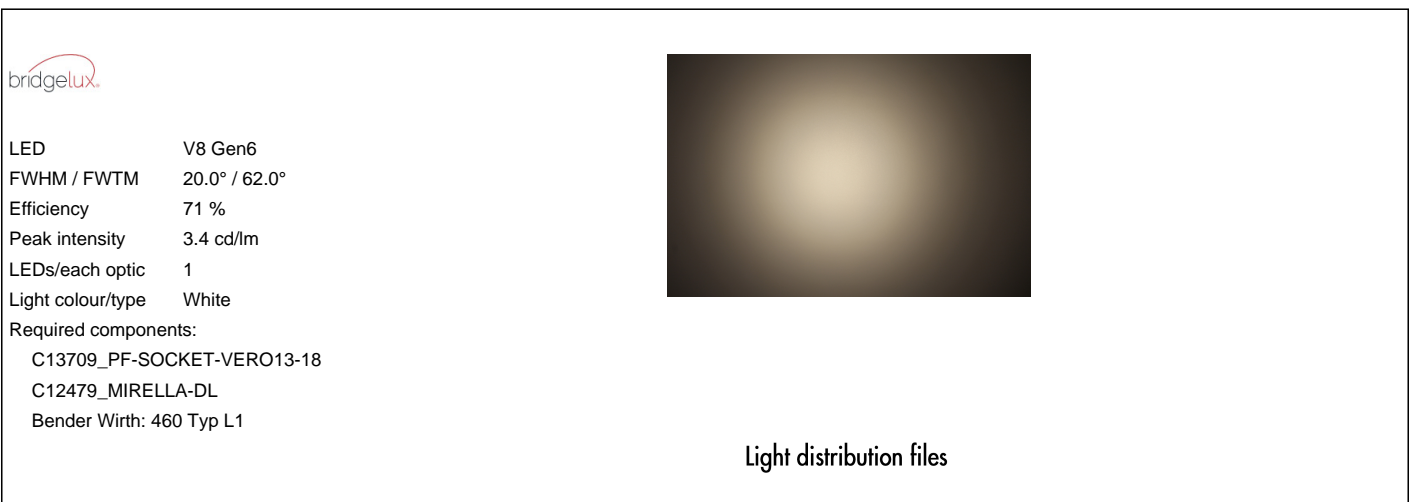
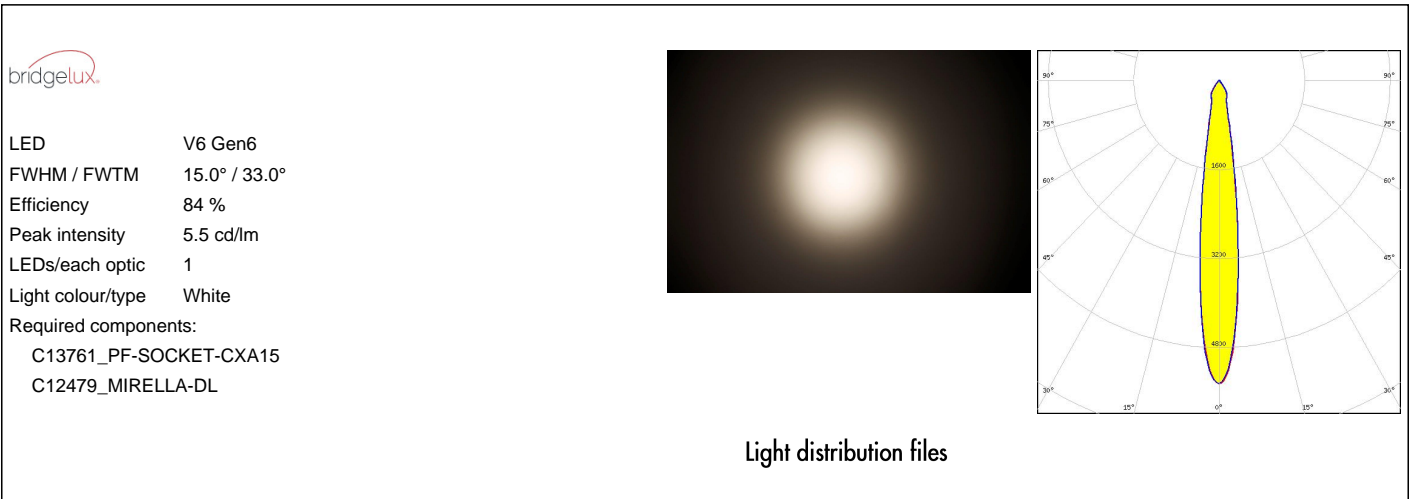


Light distribution files

#### OPTICAL RESULTS (MEASURED):



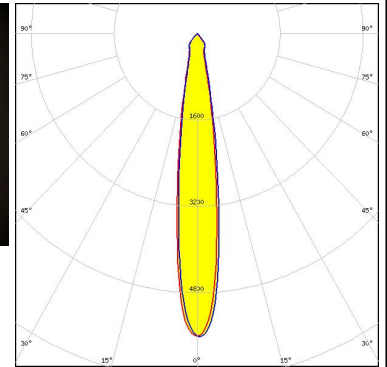
#### OPTICAL RESULTS (MEASURED):



#### OPTICAL RESULTS (MEASURED):



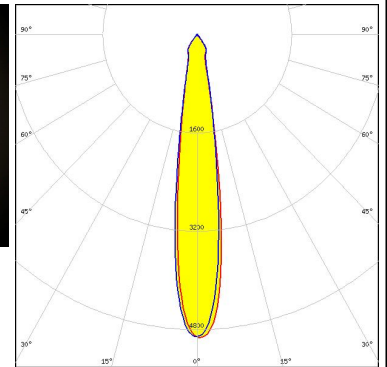
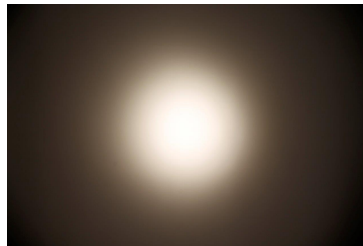
LED V8 Gen6  
 FWHM / FWTM 15.0° / 34.0°  
 Efficiency 90 %  
 Peak intensity 5.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13761\_PF-SOCKET-CXA15



Light distribution files



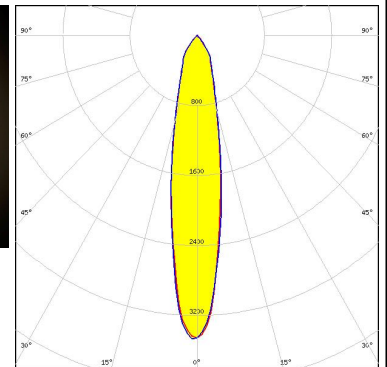
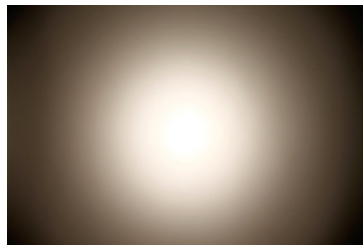
LED V8 Gen6  
 FWHM / FWTM 16.0° / 36.0°  
 Efficiency 84 %  
 Peak intensity 4.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13761\_PF-SOCKET-CXA15  
 C13333\_MIRELLA-CL



Light distribution files



LED VERO10  
 FWHM / FWTM 20.0° / 57.0°  
 Efficiency 88 %  
 Peak intensity 3.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13708\_PF-SOCKET-VERO10



Light distribution files

#### OPTICAL RESULTS (MEASURED):

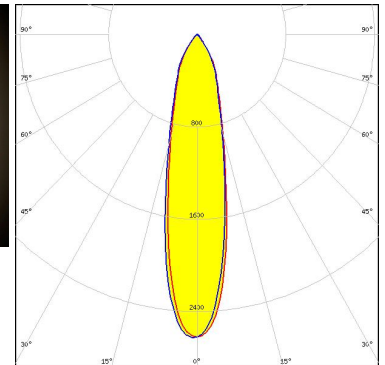
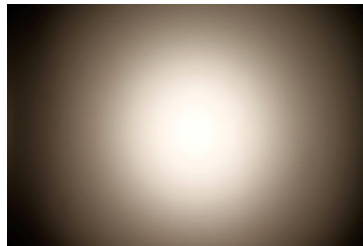


**LED** VERO10  
**FWHM / FWTM** 23.0° / 63.0°  
**Efficiency** 83 %  
**Peak intensity** 2.6 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13708\_PF-SOCKET-VERO10  
 C13333\_MIRELLA-CL

Light distribution files



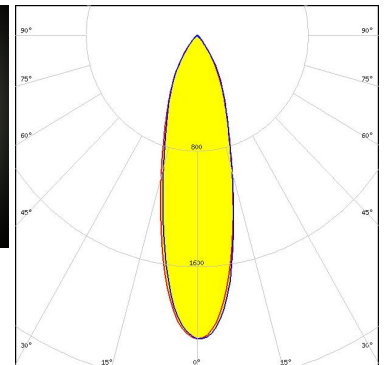
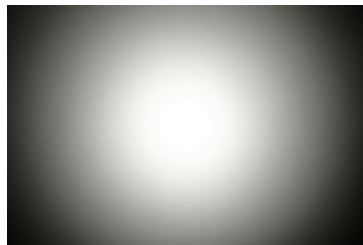
**LED** VERO10  
**FWHM / FWTM** 23.0° / 63.0°  
**Efficiency** 83 %  
**Peak intensity** 2.6 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13708\_PF-SOCKET-VERO10  
 C12479\_MIRELLA-DL



Light distribution files



**LED** VERO13  
**FWHM / FWTM** 28.0° / 68.0°  
**Efficiency** 84 %  
**Peak intensity** 2.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13709\_PF-SOCKET-VERO13-18  
 C12479\_MIRELLA-DL

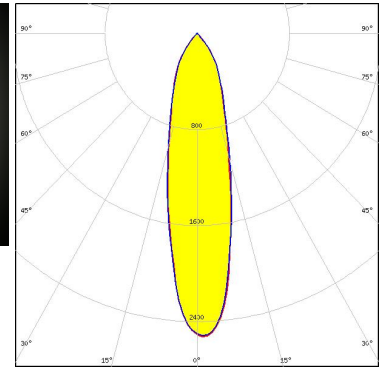
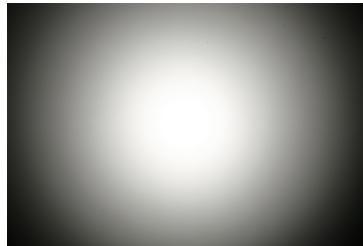


Light distribution files

#### OPTICAL RESULTS (MEASURED):



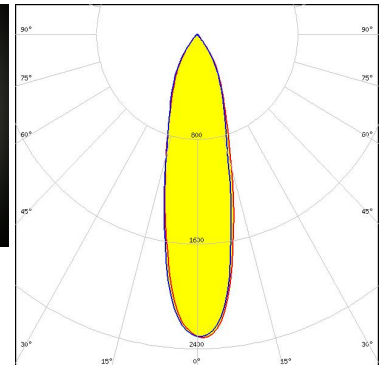
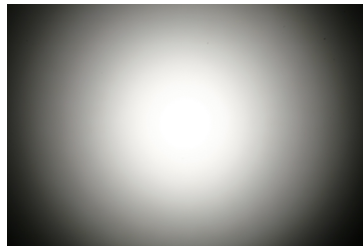
**LED** VERO13  
**FWHM / FWTM** 25.0° / 69.0°  
**Efficiency** 89 %  
**Peak intensity** 2.5 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13709\_PF-SOCKET-VERO13-18



Light distribution files



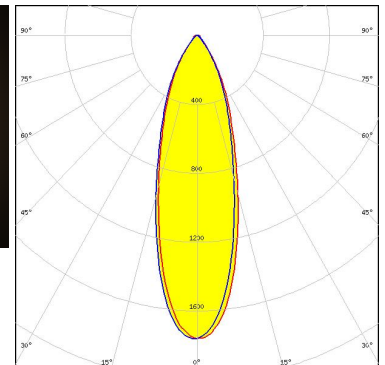
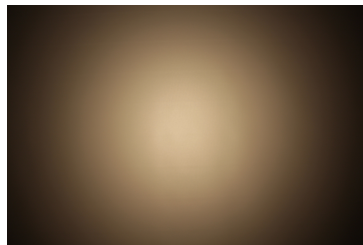
**LED** VERO13  
**FWHM / FWTM** 26.0° / 67.0°  
**Efficiency** 83 %  
**Peak intensity** 2.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13709\_PF-SOCKET-VERO13-18  
 C13333\_MIRELLA-CL



Light distribution files



**LED** Xenio Point 13mm  
**FWHM / FWTM** 31.0° / 70.0°  
**Efficiency** 81 %  
**Peak intensity** 1.8 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13709\_PF-SOCKET-VERO13-18  
 C12479\_MIRELLA-DL



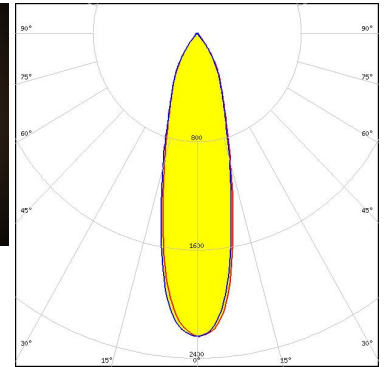
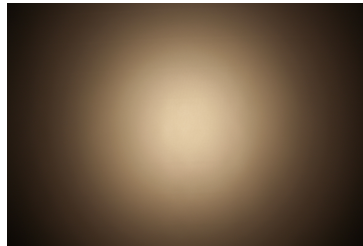
Light distribution files



#### OPTICAL RESULTS (MEASURED):



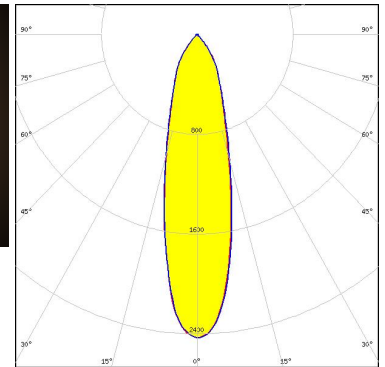
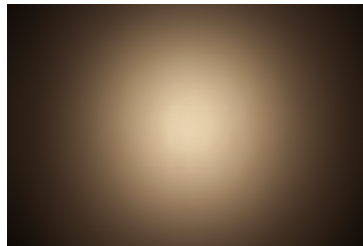
**LED** Xenio Point 13mm  
**FWHM / FWTM** 27.0° / 67.0°  
**Efficiency** 83 %  
**Peak intensity** 2.2 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13709\_PF-SOCKET-VERO13-18  
 C13333\_MIRELLA-CL



Light distribution files



**LED** Xenio Point 13mm  
**FWHM / FWTM** 26.0° / 69.0°  
**Efficiency** 87 %  
**Peak intensity** 2.4 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13709\_PF-SOCKET-VERO13-18



Light distribution files

## CITIZEN

**LED** CLL01x  
**FWHM / FWTM** 13.0° / 27.0°  
**Efficiency** 84 %  
**Peak intensity** 7.6 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13083\_PF-SOCKET  
 C13333\_MIRELLA-CL



Light distribution files

#### OPTICAL RESULTS (MEASURED):

### CITIZEN

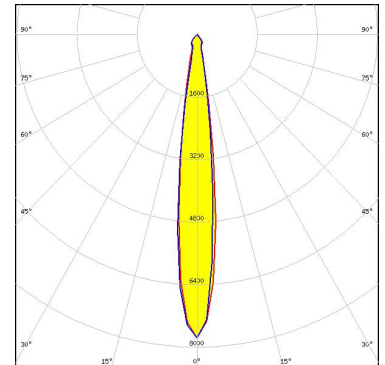
LED CLL01x  
 FWHM / FWTM 15.0° / 32.0°  
 Efficiency 84 %  
 Peak intensity 5.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET  
 C12479\_MIRELLA-DL



Light distribution files

### CITIZEN

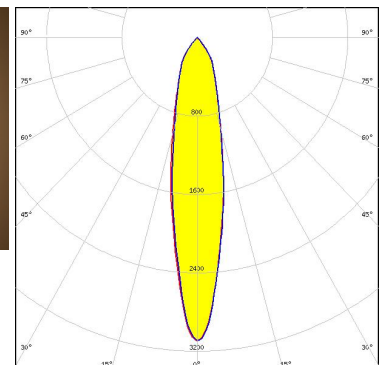
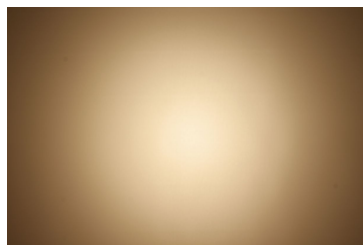
LED LLL01x  
 FWHM / FWTM 14.0° / 27.0°  
 Efficiency 88 %  
 Peak intensity 7.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET



Light distribution files

### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 21.0° / 63.0°  
 Efficiency 84 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 434 Typ L1



Light distribution files

#### OPTICAL RESULTS (MEASURED):

### CITIZEN

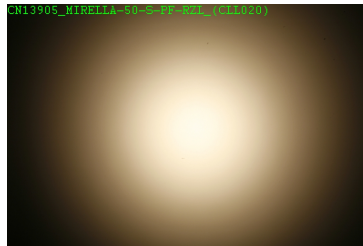
LED CLL02x/CLU02x (LES10)  
FWHM / FWTM 18.0° / 43.0°  
Efficiency 83 %  
Peak intensity 5.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET  
C13333\_MIRELLA-CL



Light distribution files

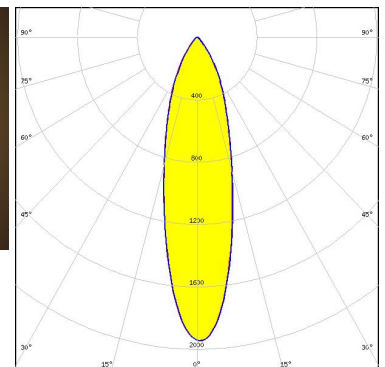
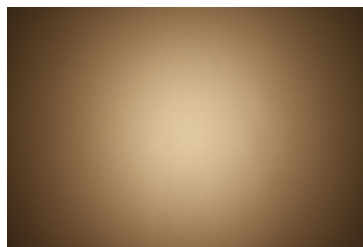
### CITIZEN

LED CLL02x/CLU02x (LES10)  
FWHM / FWTM 25.0° / 64.0°  
Efficiency %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET  
C13723\_MIRELLA-RZL



### CITIZEN

LED CLL02x/CLU02x (LES10)  
FWHM / FWTM 27.0° / 67.0°  
Efficiency 77 %  
Peak intensity 2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13709\_PF-SOCKET-VERO13-18  
C12479\_MIRELLA-DL  
Bender Wirth: 434 Typ L1



Light distribution files

#### OPTICAL RESULTS (MEASURED):

### CITIZEN

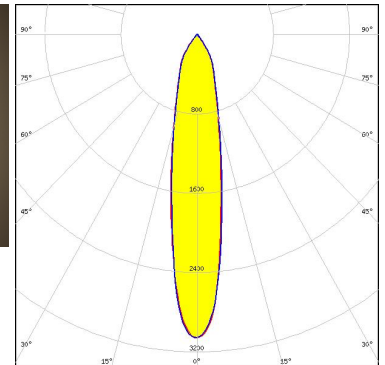
LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 20.0° / 54.0°  
 Efficiency 83 %  
 Peak intensity 4.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET  
 C12479\_MIRELLA-DL



Light distribution files

### CITIZEN

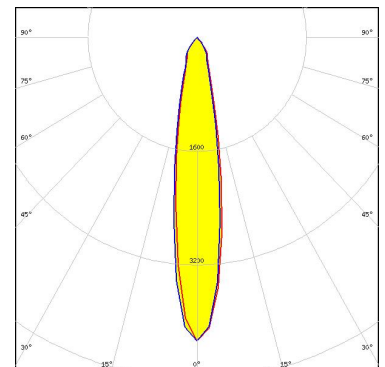
LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 20.0° / 61.0°  
 Efficiency 80 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C13333\_MIRELLA-CL  
 Bender Wirth: 434 Typ L1



Light distribution files

### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 19.0° / 46.0°  
 Efficiency 87 %  
 Peak intensity 4.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET

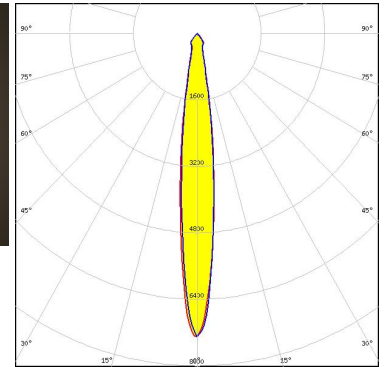
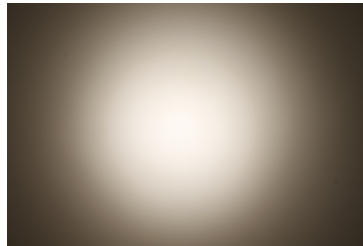


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### CITIZEN

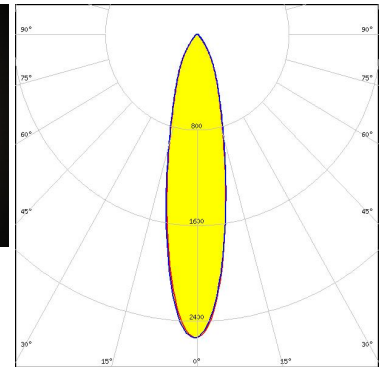
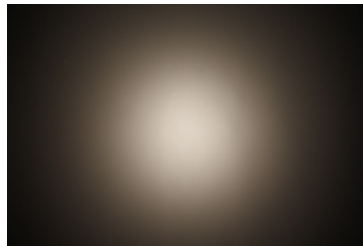
LED CLU700/701/702/703  
 FWHM / FWTM 13.0° / 29.0°  
 Efficiency 89 %  
 Peak intensity 7.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET



Light distribution files

### CITIZEN

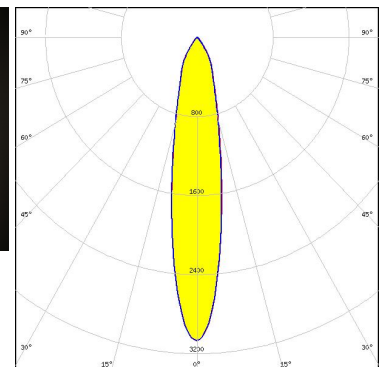
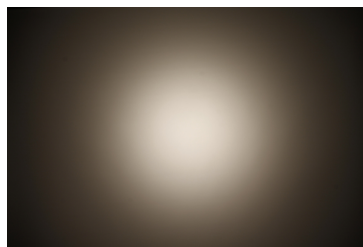
LED CLU700/701/702/703  
 FWHM / FWTM 23.0° / 61.0°  
 Efficiency 82 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL



Light distribution files

### CITIZEN

LED CLU700/701/702/703  
 FWHM / FWTM 20.0° / 58.0°  
 Efficiency 79 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C12479\_MIRELLA-DL  
 Bender Wirth: 434 Typ L1

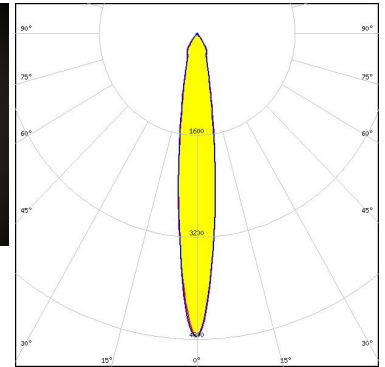


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### CITIZEN

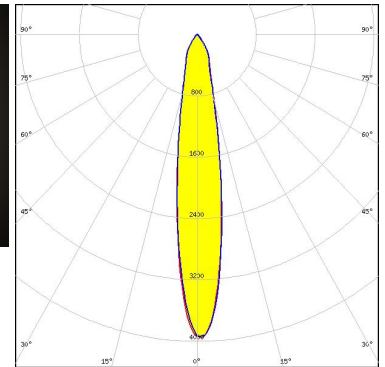
LED CLU700/701/702/703  
 FWHM / FWTM 14.0° / 40.0°  
 Efficiency 79 %  
 Peak intensity 4.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C13333\_MIRELLA-CL  
 Bender Wirth: 434 Typ L1



Light distribution files

### CITIZEN

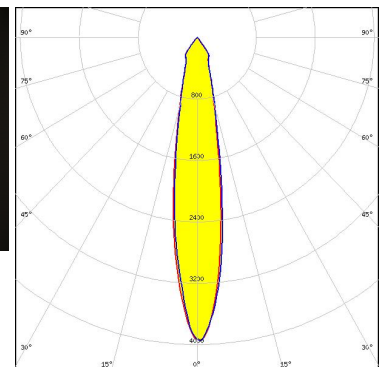
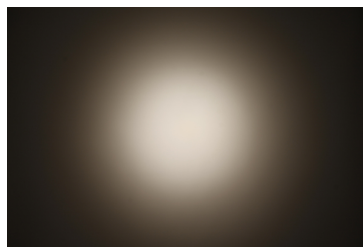
LED CLU700/701/702/703  
 FWHM / FWTM 17.0° / 47.0°  
 Efficiency 82 %  
 Peak intensity 4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET  
 C12479\_MIRELLA-DL



Light distribution files

### CITIZEN

LED CLU700/701/702/703  
 FWHM / FWTM 19.0° / 47.0°  
 Efficiency 84 %  
 Peak intensity 4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 434 Typ L1

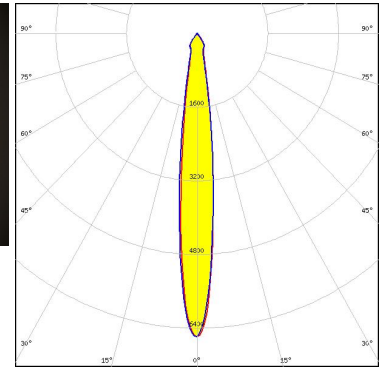


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### CITIZEN

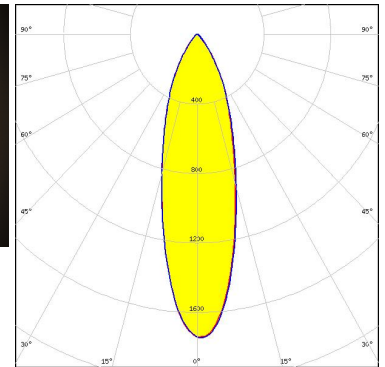
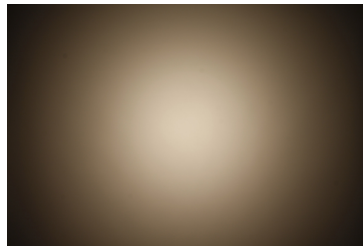
LED CLU700/701/702/703  
 FWHM / FWTM 13.0° / 30.0°  
 Efficiency 83 %  
 Peak intensity 6.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET  
 C13333\_MIRELLA-CL



Light distribution files

### CITIZEN

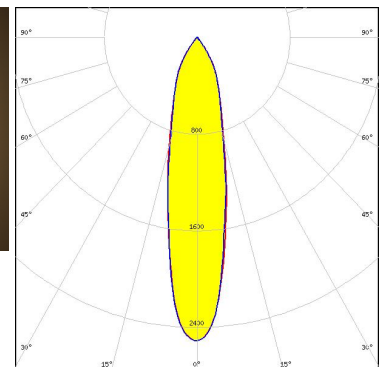
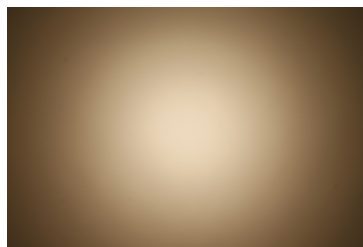
LED CLU720/721/723  
 FWHM / FWTM 29.0° / 69.0°  
 Efficiency 75 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C12479\_MIRELLA-DL  
 Bender Wirth: 433 Typ L1



Light distribution files

### CITIZEN

LED CLU720/721/723  
 FWHM / FWTM 23.0° / 64.0°  
 Efficiency 77 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C13333\_MIRELLA-CL  
 Bender Wirth: 433 Typ L1

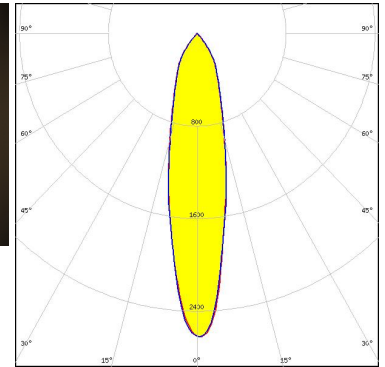
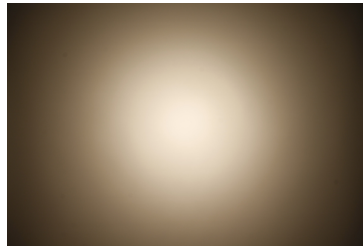


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### CITIZEN

LED CLU720/721/723  
 FWHM / FWTM 23.0° / 67.0°  
 Efficiency 82 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 433 Typ L1



Light distribution files



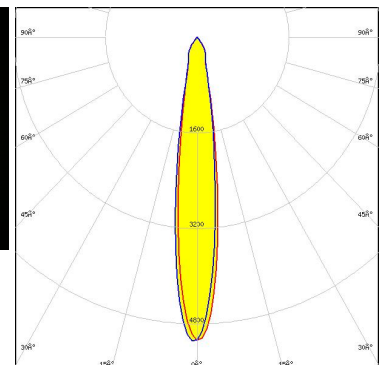
LED CXA/B 13xx  
 FWHM / FWTM 12.0° / 25.0°  
 Efficiency 82 %  
 Peak intensity 8.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13761\_PF-SOCKET-CXA15  
 C13333\_MIRELLA-CL



Light distribution files



LED CXA/B 13xx  
 FWHM / FWTM 15.0° / 36.0°  
 Efficiency 81 %  
 Peak intensity 5.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13761\_PF-SOCKET-CXA15  
 C12479\_MIRELLA-DL



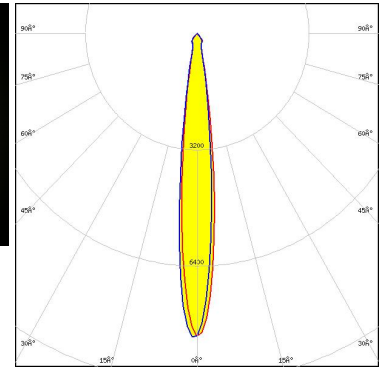
Light distribution files



#### OPTICAL RESULTS (MEASURED):



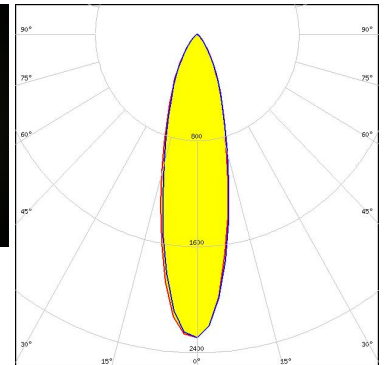
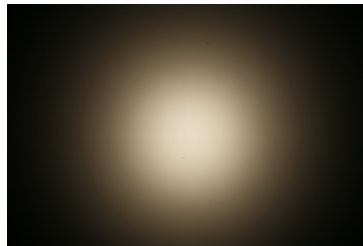
LED CXA/B 13xx  
 FWHM / FWTM 12.0° / 25.0°  
 Efficiency 87 %  
 Peak intensity 9.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13761\_PF-SOCKET-CXA15



Light distribution files



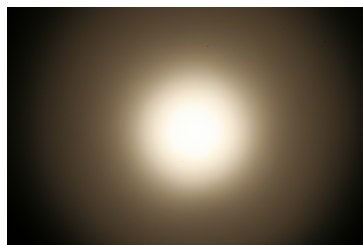
LED CXA/B 15xx  
 FWHM / FWTM 27.0° / 65.0°  
 Efficiency 82 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13761\_PF-SOCKET-CXA15  
 C13723\_MIRELLA-RZL



Light distribution files



LED CXA/B 15xx  
 FWHM / FWTM 19.0° / 47.0°  
 Efficiency 84 %  
 Peak intensity 4.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13761\_PF-SOCKET-CXA15  
 C13333\_MIRELLA-CL



Light distribution files

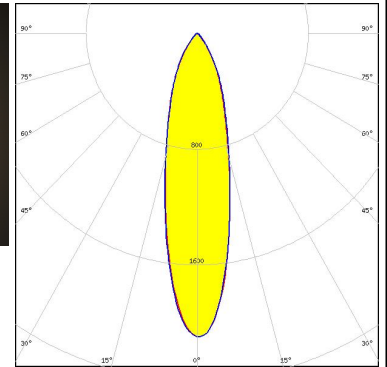
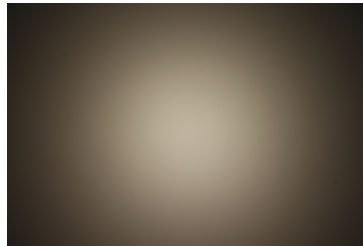
#### OPTICAL RESULTS (MEASURED):



LED CXA/B 15xx  
 FWHM / FWTM 26.0° / 66.0°  
 Efficiency 77 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18  
 C12479\_MIRELLA-DL  
 Bender Wirth: 441 Typ L1



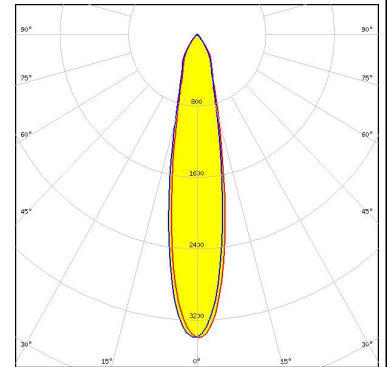
Light distribution files



LED CXA/B 15xx  
 FWHM / FWTM 21.0° / 56.0°  
 Efficiency 87 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

C13761\_PF-SOCKET-CXA15  
 C12479\_MIRELLA-DL



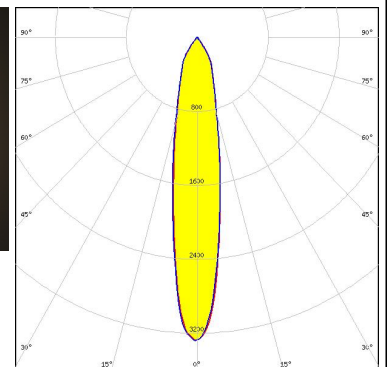
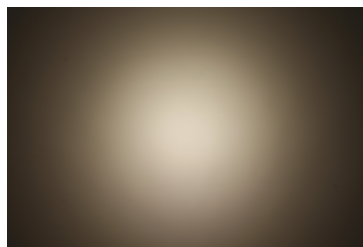
Light distribution files



LED CXA/B 15xx  
 FWHM / FWTM 19.0° / 59.0°  
 Efficiency 79 %  
 Peak intensity 3.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18  
 C13333\_MIRELLA-CL  
 Bender Wirth: 441 Typ L1



Light distribution files

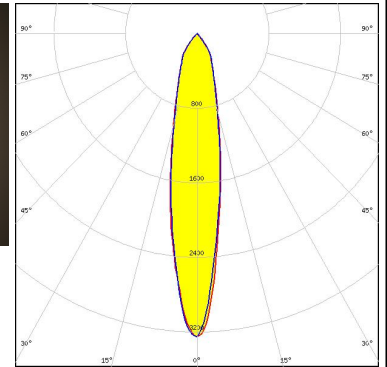
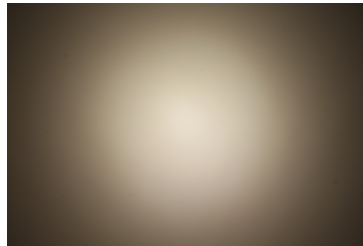
#### OPTICAL RESULTS (MEASURED):



LED CXA/B 15xx  
 FWHM / FWTM 20.0° / 60.0°  
 Efficiency 84 %  
 Peak intensity 3.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 441 Typ L1



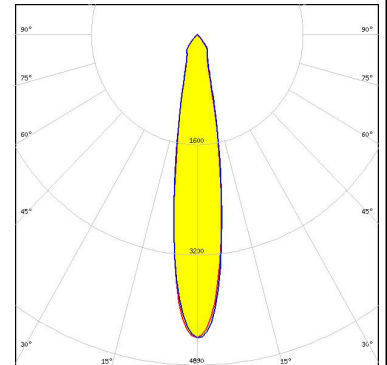
Light distribution files



LED CXA/B 15xx  
 FWHM / FWTM 18.0° / 43.0°  
 Efficiency 91 %  
 Peak intensity 4.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

C13761\_PF-SOCKET-CXA15



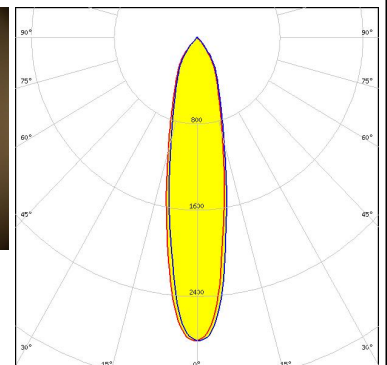
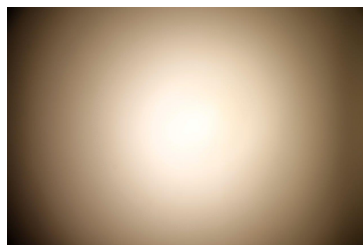
Light distribution files



LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM / FWTM 23.0° / 67.0°  
 Efficiency 89 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

IDEAL: 50-2101CR + 50-2100MR

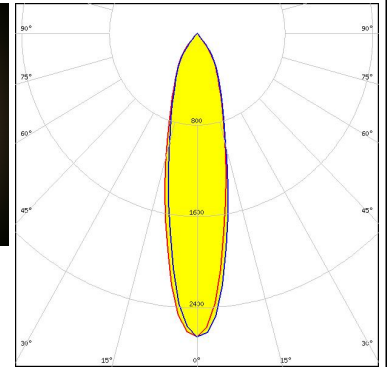
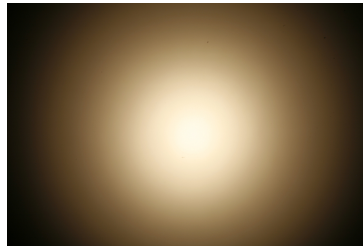


Light distribution files

#### OPTICAL RESULTS (MEASURED):



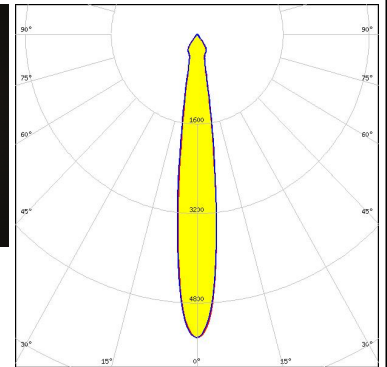
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM / FWTM 25.0° / 68.0°  
 Efficiency 85 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C14115\_PF-SOCKET-CXA15-18



Light distribution files



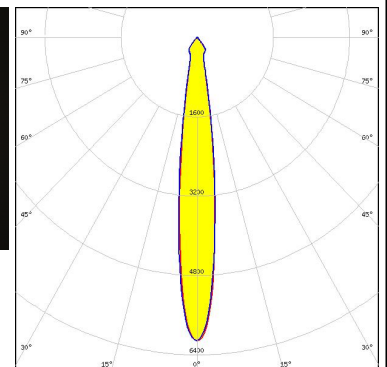
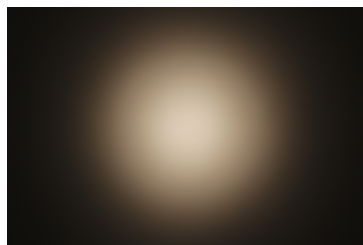
LED MHD-E/G  
 FWHM / FWTM 15.0° / 32.0°  
 Efficiency 87 %  
 Peak intensity 5.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET  
 C13333\_MIRELLA-CL



Light distribution files



LED MHD-E/G  
 FWHM / FWTM 14.0° / 31.0°  
 Efficiency 93 %  
 Peak intensity 6.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET

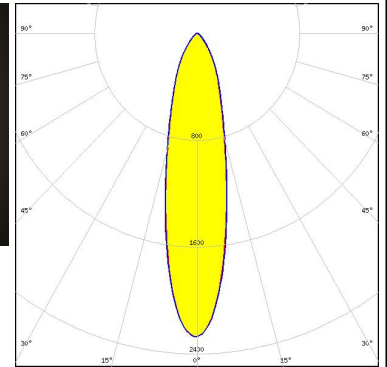


Light distribution files

#### OPTICAL RESULTS (MEASURED):



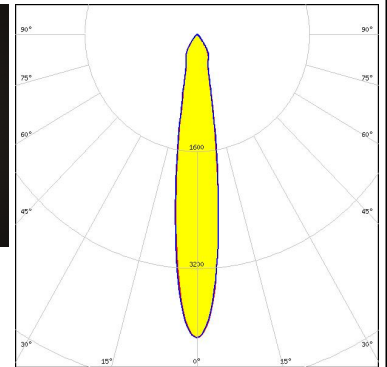
LED MHD-E/G  
FWHM / FWTM 24.0° / 65.0°  
Efficiency 84 %  
Peak intensity 2.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET  
C13723\_MIRELLA-RZL



Light distribution files



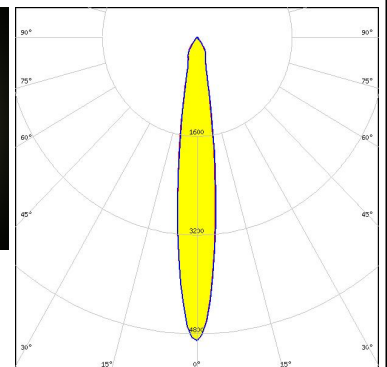
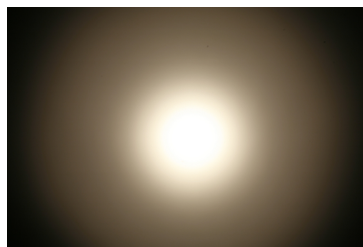
LED MHD-E/G  
FWHM / FWTM 17.0° / 44.0°  
Efficiency 87 %  
Peak intensity 4.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET  
C12479\_MIRELLA-DL



Light distribution files



LED MK-R  
FWHM / FWTM 15.0° / 37.0°  
Efficiency 82 %  
Peak intensity 4.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET  
C12479\_MIRELLA-DL

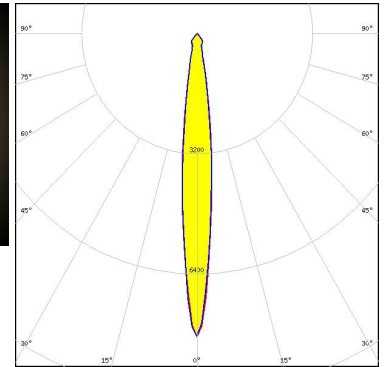


Light distribution files

#### OPTICAL RESULTS (MEASURED):



LED MK-R  
FWHM / FWTM 12.0° / 27.0°  
Efficiency 87 %  
Peak intensity 8.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET



Light distribution files



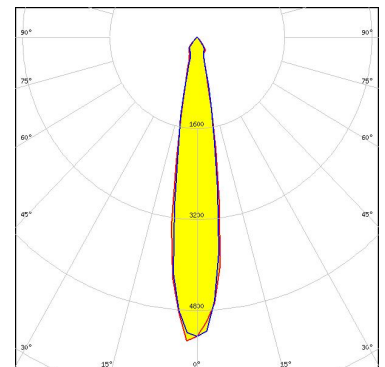
LED MT-G  
FWHM / FWTM 19.0° / 46.0°  
Efficiency 85 %  
Peak intensity 4.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET  
C12479\_MIRELLA-DL



Light distribution files



LED MT-G  
FWHM / FWTM 17.0° / 34.0°  
Efficiency 90 %  
Peak intensity 5.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET



Light distribution files

#### OPTICAL RESULTS (MEASURED):



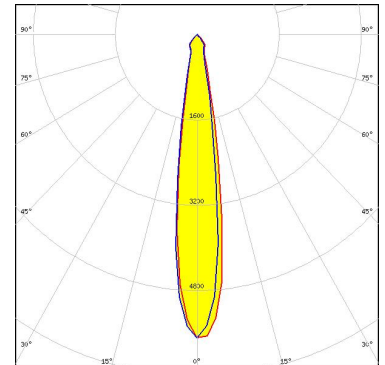
LED MT-G  
FWHM / FWTM 18.0° / 34.0°  
Efficiency 86 %  
Peak intensity 5.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET  
C13333\_MIRELLA-CL



Light distribution files



LED MT-G2  
FWHM / FWTM 18.0° / 35.0°  
Efficiency 88 %  
Peak intensity 4.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET



Light distribution files



LED MT-G2  
FWHM / FWTM 16.0° / 33.0°  
Efficiency 84 %  
Peak intensity 5.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET  
C13333\_MIRELLA-CL



Light distribution files

#### OPTICAL RESULTS (MEASURED):



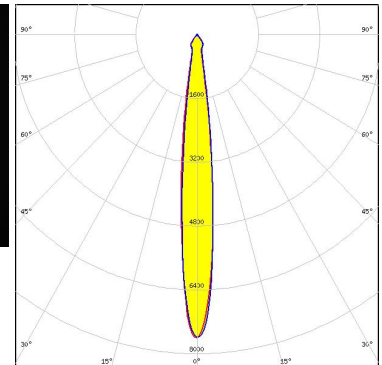
**LED** MT-G2  
**FWHM / FWTM** 18.0° / 43.0°  
**Efficiency** 85 %  
**Peak intensity** 4.6 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13083\_PF-SOCKET  
 C12479\_MIRELLA-DL



Light distribution files



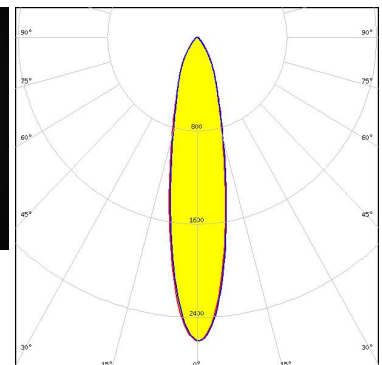
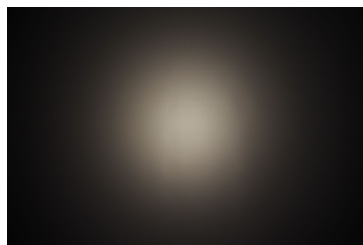
**LED** XHP50  
**FWHM / FWTM** 12.0° / 25.0°  
**Efficiency** 84 %  
**Peak intensity** 7.6 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13083\_PF-SOCKET  
 C13333\_MIRELLA-CL



Light distribution files



**LED** XHP50  
**FWHM / FWTM** 22.0° / 60.0°  
**Efficiency** 81 %  
**Peak intensity** 2.6 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL



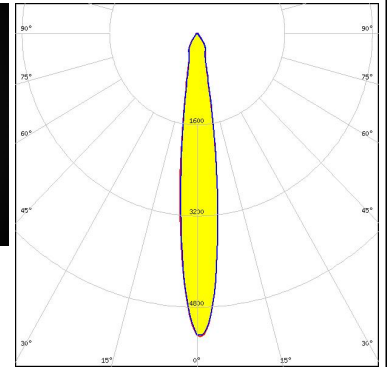
Light distribution files



#### OPTICAL RESULTS (MEASURED):



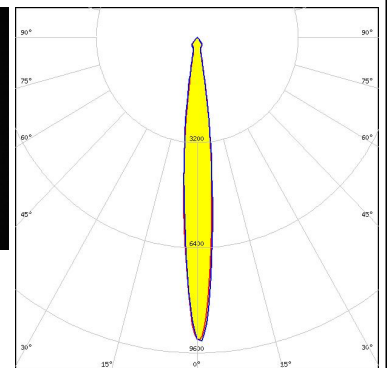
**LED** XHP50  
**FWHM / FWTM** 15.0° / 34.0°  
**Efficiency** 85 %  
**Peak intensity** 5.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13083\_PF-SOCKET  
 C12479\_MIRELLA-DL



Light distribution files



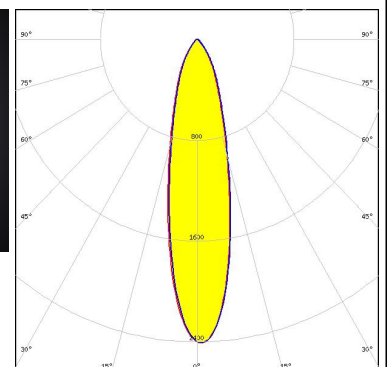
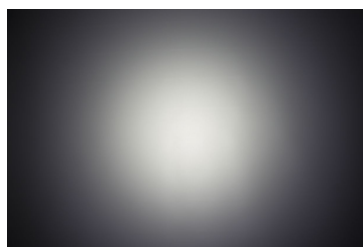
**LED** XHP50  
**FWHM / FWTM** 11.0° / 23.0°  
**Efficiency** 89 %  
**Peak intensity** 9.2 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13083\_PF-SOCKET



Light distribution files



**LED** XHP70  
**FWHM / FWTM** 24.0° / 62.0°  
**Efficiency** 81 %  
**Peak intensity** 2.4 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL

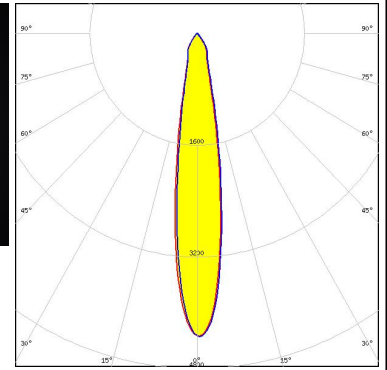


Light distribution files

#### OPTICAL RESULTS (MEASURED):



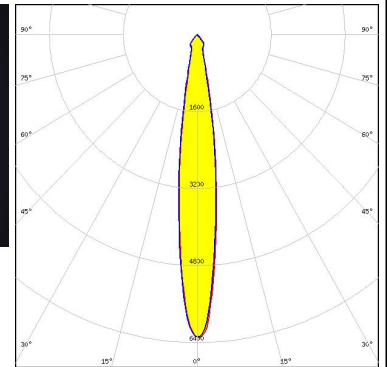
LED XHP70  
 FWHM / FWTM 17.0° / 40.0°  
 Efficiency 84 %  
 Peak intensity 4.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET  
 C12479\_MIRELLA-DL



Light distribution files



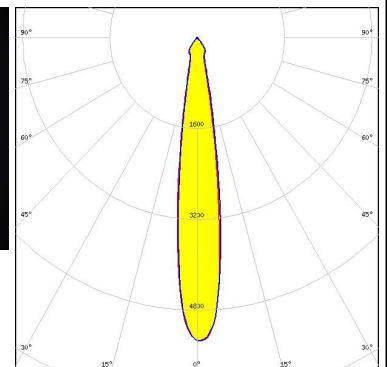
LED XHP70  
 FWHM / FWTM 15.0° / 31.0°  
 Efficiency 89 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET



Light distribution files



LED XHP70  
 FWHM / FWTM 16.0° / 32.0°  
 Efficiency 83 %  
 Peak intensity 5.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET  
 C13333\_MIRELLA-CL

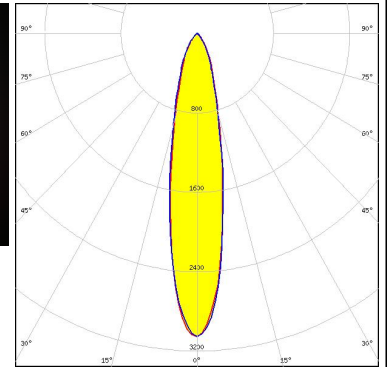
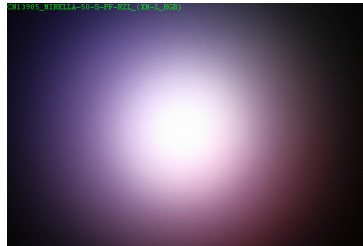


Light distribution files

#### OPTICAL RESULTS (MEASURED):



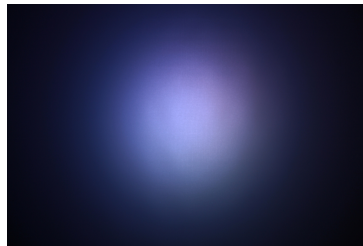
LED XM-L RGBW (XMLCTW)  
 FWHM / FWTM 22.0° / 55.0°  
 Efficiency 80 %  
 Peak intensity 3.1 cd/m  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL



Light distribution files



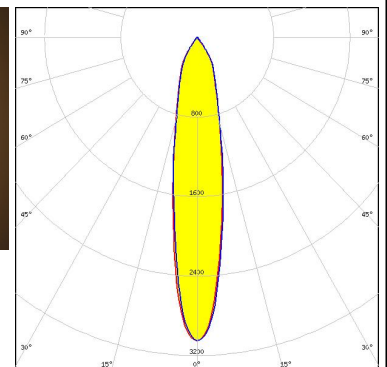
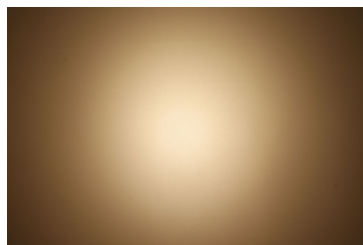
LED XQ-E HI  
 FWHM / FWTM 21.0° / 58.0°  
 Efficiency 86 %  
 Peak intensity 3.1 cd/m  
 LEDs/each optic 4  
 Light colour/type RGBW  
 Required components:  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL



Light distribution files



LED LUXEON CoB 1202/1203  
 FWHM / FWTM 20.0° / 61.0°  
 Efficiency 78 %  
 Peak intensity 3.1 cd/m  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C13333\_MIRELLA-CL  
 Bender Wirth: 438 Typ L1

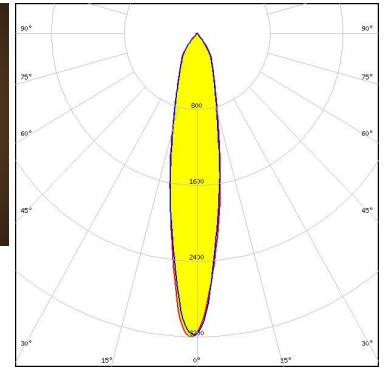
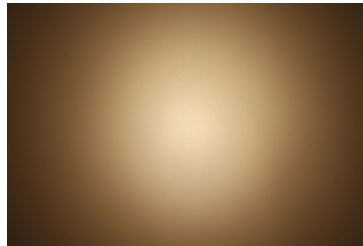


Light distribution files

#### OPTICAL RESULTS (MEASURED):



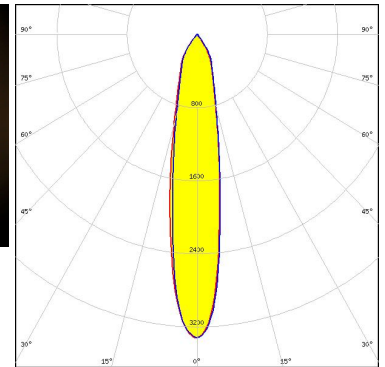
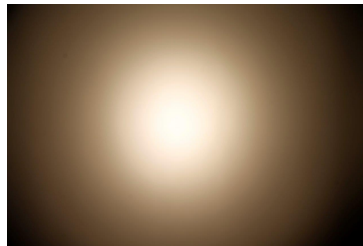
LED LUXEON CoB 1202/1203  
 FWHM / FWTM 20.0° / 61.0°  
 Efficiency 84 %  
 Peak intensity 3.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 438 Typ L1



Light distribution files



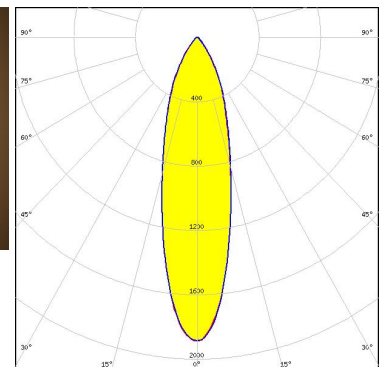
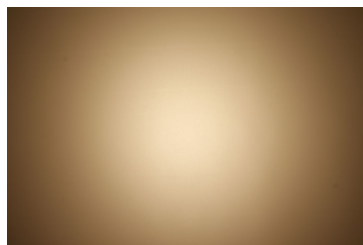
LED LUXEON CoB 1202/1203  
 FWHM / FWTM 19.0° / 59.0°  
 Efficiency 82 %  
 Peak intensity 3.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13333\_MIRELLA-CL  
 IDEAL: 50-2100NC +50-2100MR



Light distribution files



LED LUXEON CoB 1202/1203  
 FWHM / FWTM 27.0° / 67.0°  
 Efficiency 76 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C12479\_MIRELLA-DL  
 Bender Wirth: 438 Typ L1

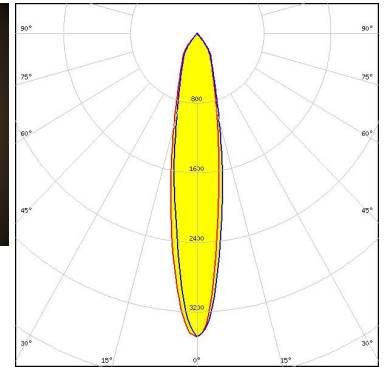
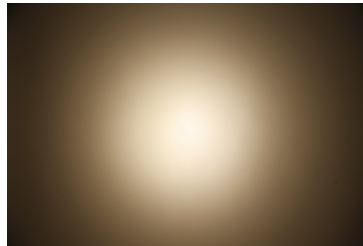


Light distribution files

#### OPTICAL RESULTS (MEASURED):



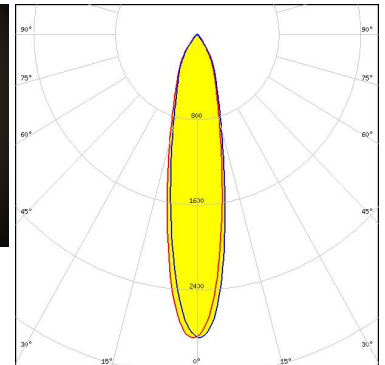
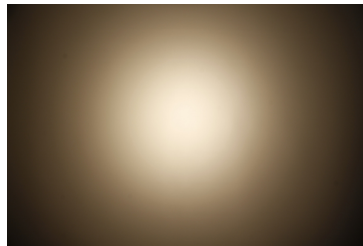
LED LUXEON CoB 1202/1203  
FWHM / FWTM 19.0° / 58.0°  
Efficiency 88 %  
Peak intensity 3.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
IDEAL: 50-2100NC +50-2100MR



Light distribution files



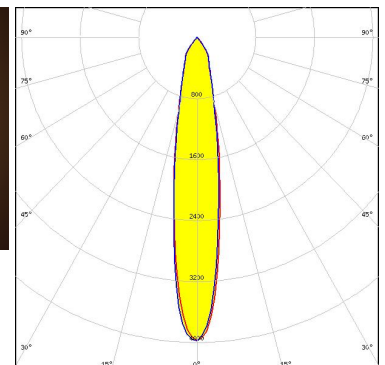
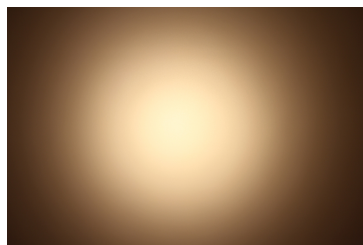
LED LUXEON CoB 1202/1203  
FWHM / FWTM 22.0° / 61.0°  
Efficiency 83 %  
Peak intensity 2.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C12479\_MIRELLA-DL  
IDEAL: 50-2100NC +50-2100MR



Light distribution files



LED LUXEON CoB 1202/1203  
FWHM / FWTM 19.0° / 50.0°  
Efficiency 87 %  
Peak intensity 4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14037\_PF-NSX-SOCKET



Light distribution files

#### OPTICAL RESULTS (MEASURED):



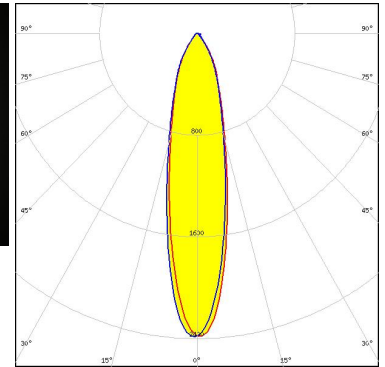
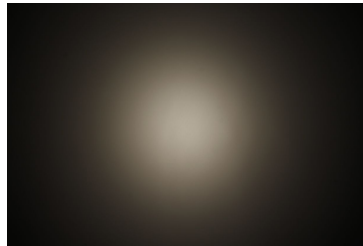
LED LUXEON CoB 1202s  
FWHM / FWTM 23.0° / 63.0°  
Efficiency 79 %  
Peak intensity 2.4 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18

C12479\_MIRELLA-DL

Bender Wirth: 452 Typ L1



Light distribution files



LED LUXEON CoB 1202s  
FWHM / FWTM 13.0° / 30.0°  
Efficiency 89 %  
Peak intensity 7.9 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13761\_PF-SOCKET-CXA15



Light distribution files



LED LUXEON CoB 1202s  
FWHM / FWTM 13.0° / 28.0°  
Efficiency 84 %  
Peak intensity 7.6 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13761\_PF-SOCKET-CXA15

C13333\_MIRELLA-CL

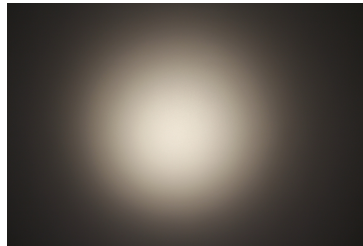


Light distribution files

#### OPTICAL RESULTS (MEASURED):



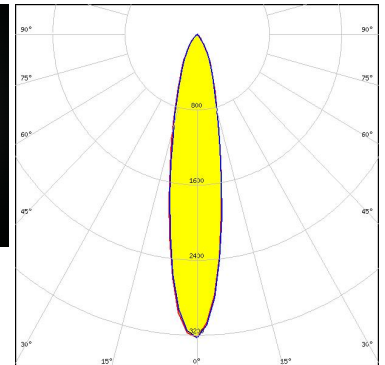
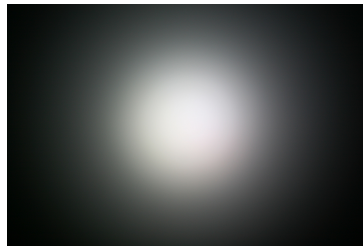
**LED** LUXEON CoB 1202s  
**FWHM / FWTM** 15.0° / 36.0°  
**Efficiency** 84 %  
**Peak intensity** 5.9 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13761\_PF-SOCKET-CXA15  
 C12479\_MIRELLA-DL



Light distribution files



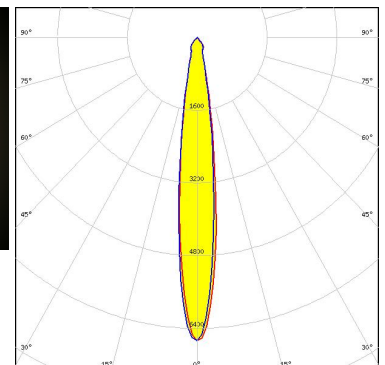
**LED** LUXEON Z  
**FWHM / FWTM** 21.0° / 54.0°  
**Efficiency** 78 %  
**Peak intensity** 3.2 cd/lm  
**LEDs/each optic** 4  
**Light colour/type** RGBW  
**Required components:**  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL



Light distribution files



**LED** CxM-6 (12x13)  
**FWHM / FWTM** 14.0° / 32.0°  
**Efficiency** 86 %  
**Peak intensity** 6.7 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13083\_PF-SOCKET

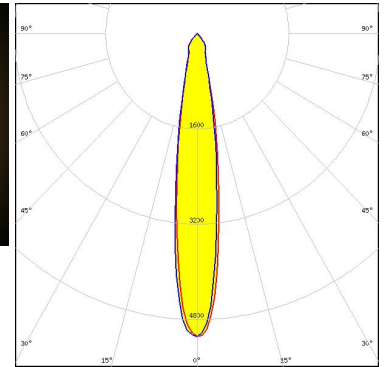


Light distribution files

#### OPTICAL RESULTS (MEASURED):



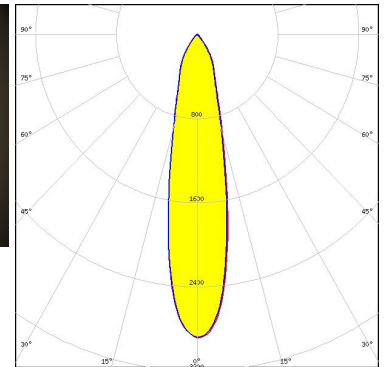
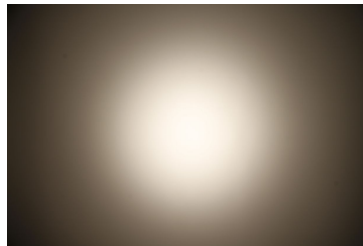
**LED** CXM-7 (13x13)  
**FWHM / FWTM** 17.0° / 38.0°  
**Efficiency** 87 %  
**Peak intensity** 5.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13083\_PF-SOCKET



Light distribution files



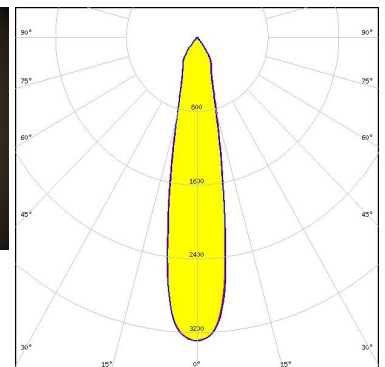
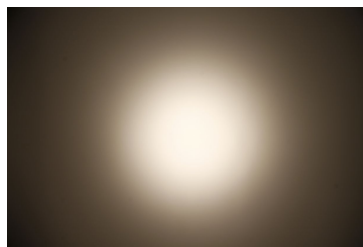
**LED** CxM-9 (13.5x13.5)  
**FWHM / FWTM** 23.0° / 61.0°  
**Efficiency** 86 %  
**Peak intensity** 2.9 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13083\_PF-SOCKET  
 C12479\_MIRELLA-DL



Light distribution files



**LED** CxM-9 (13.5x13.5)  
**FWHM / FWTM** 21.0° / 58.0°  
**Efficiency** 85 %  
**Peak intensity** 3.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13083\_PF-SOCKET  
 C13333\_MIRELLA-CL



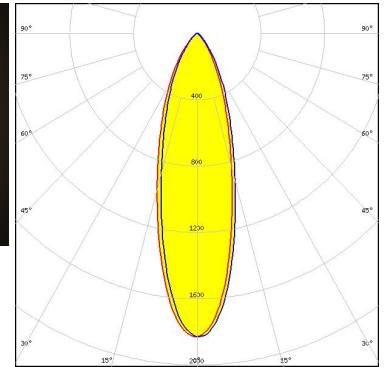
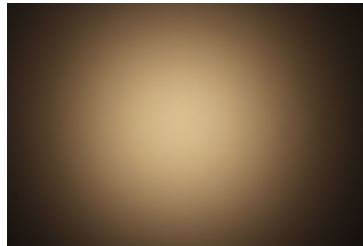
Light distribution files



#### OPTICAL RESULTS (MEASURED):



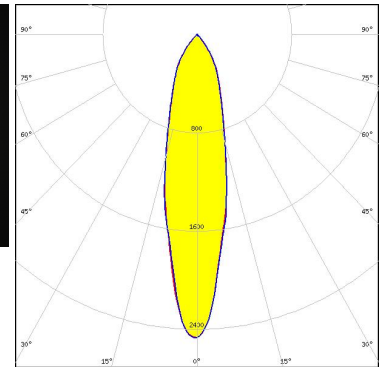
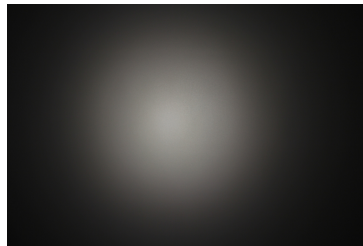
**LED** CxM-9 (13.5x13.5)  
**FWHM / FWTM** 30.0° / 70.0°  
**Efficiency** 81 %  
**Peak intensity** 1.8 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL



Light distribution files



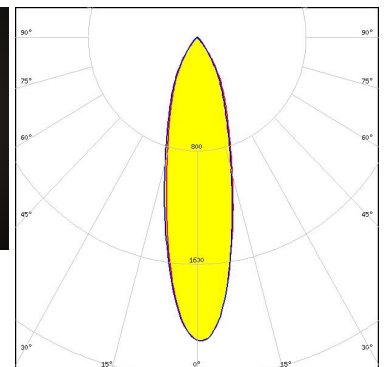
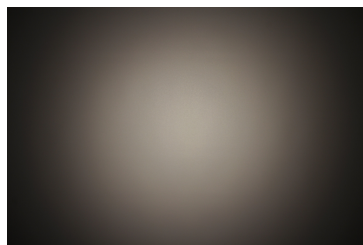
**LED** COB L-Type (LES 11)  
**FWHM / FWTM** 25.0° / 68.0°  
**Efficiency** 83 %  
**Peak intensity** 2.5 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 IDEAL: 50-2100NC +50-2100MR



Light distribution files



**LED** COB L-Type (LES 11)  
**FWHM / FWTM** 26.0° / 67.0°  
**Efficiency** 80 %  
**Peak intensity** 2.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C12479\_MIRELLA-DL  
 IDEAL: 50-2100NC +50-2100MR

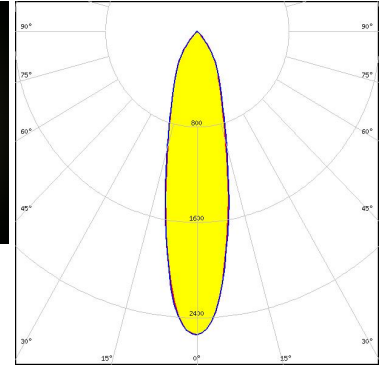


Light distribution files

#### OPTICAL RESULTS (MEASURED):



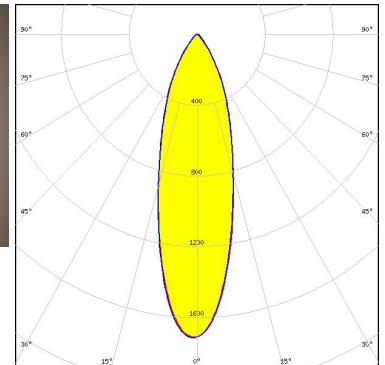
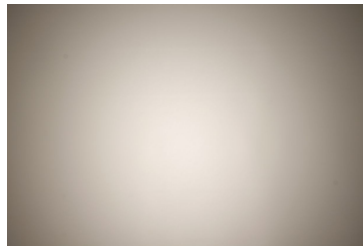
LED COB L-Type (LES 11)  
FWHM / FWMTM 25.0° / 68.0°  
Efficiency 86 %  
Peak intensity 2.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14037\_PF-NSX-SOCKET



Light distribution files



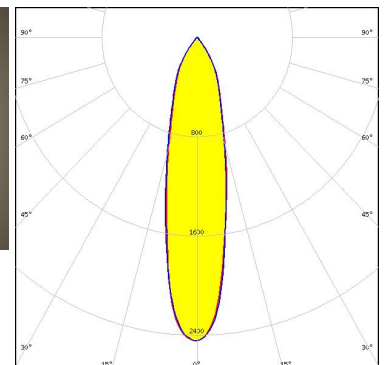
LED COB L-Type (LES 11)  
FWHM / FWMTM 30.0° / 70.0°  
Efficiency 76 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13709\_PF-SOCKET-VERO13-18  
C12479\_MIRELLA-DL  
Bender Wirth: 438 Typ L1



Light distribution files



LED COB L-Type (LES 11)  
FWHM / FWMTM 24.0° / 65.0°  
Efficiency 78 %  
Peak intensity 2.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13709\_PF-SOCKET-VERO13-18  
C13333\_MIRELLA-CL  
Bender Wirth: 438 Typ L1

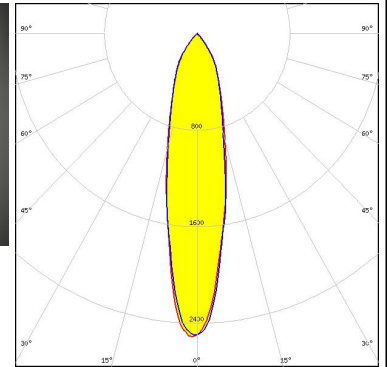


Light distribution files

#### OPTICAL RESULTS (MEASURED):



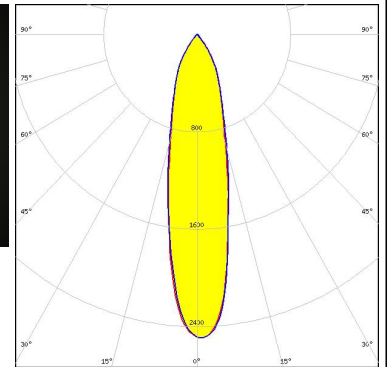
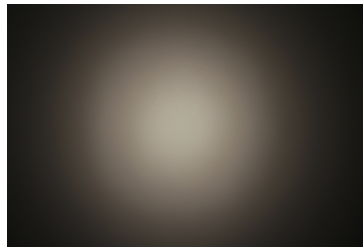
LED COB L-Type (LES 11)  
 FWHM / FWTM 24.0° / 68.0°  
 Efficiency 81 %  
 Peak intensity 2.5 cd/m  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 438 Typ L1



Light distribution files



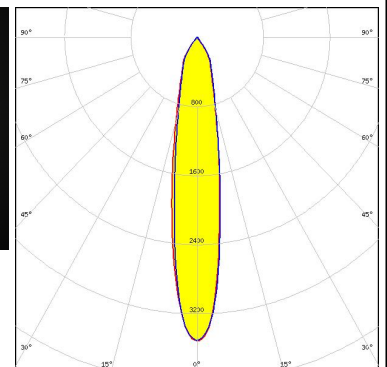
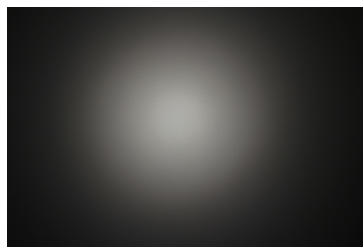
LED COB L-Type (LES 11)  
 FWHM / FWTM 24.0° / 65.0°  
 Efficiency 81 %  
 Peak intensity 2.5 cd/m  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13333\_MIRELLA-CL  
 IDEAL: 50-2100NC +50-2100MR



Light distribution files



LED COB L-Type (LES 9)  
 FWHM / FWTM 18.0° / 56.0°  
 Efficiency 83 %  
 Peak intensity 3.5 cd/m  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13333\_MIRELLA-CL  
 IDEAL: 50-2100NC +50-2100MR



Light distribution files

#### OPTICAL RESULTS (MEASURED):



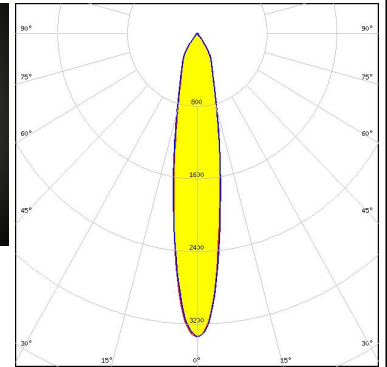
LED COB L-Type (LES 9)  
 FWHM / FWTM 18.0° / 58.0°  
 Efficiency 80 %  
 Peak intensity 3.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18

C13333\_MIRELLA-CL

Bender Wirth: 438 Typ L1



Light distribution files

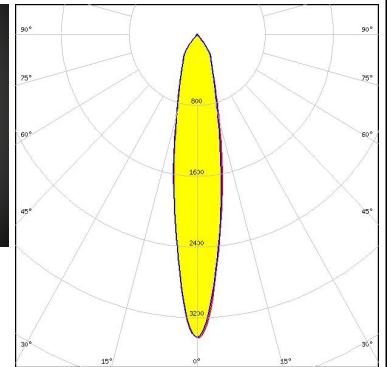


LED COB L-Type (LES 9)  
 FWHM / FWTM 19.0° / 57.0°  
 Efficiency 85 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18

Bender Wirth: 438 Typ L1



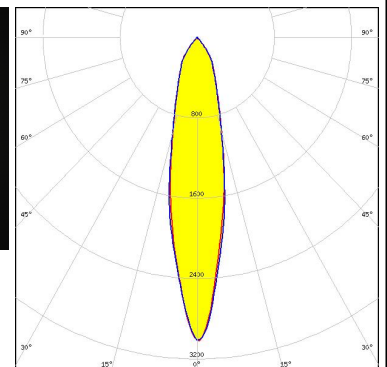
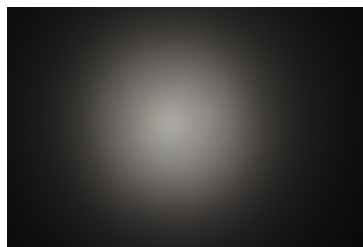
Light distribution files



LED COB L-Type (LES 9)  
 FWHM / FWTM 22.0° / 64.0°  
 Efficiency 84 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

IDEAL: 50-2100NC +50-2100MR

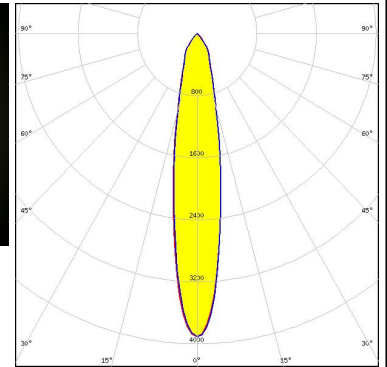


Light distribution files

#### OPTICAL RESULTS (MEASURED):



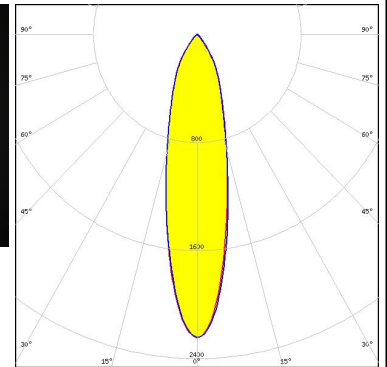
**LED** COB L-Type (LES 9)  
**FWHM / FWTM** 19.0° / 52.0°  
**Efficiency** 88 %  
**Peak intensity** 3.9 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C14037\_PF-NSX-SOCKET



Light distribution files



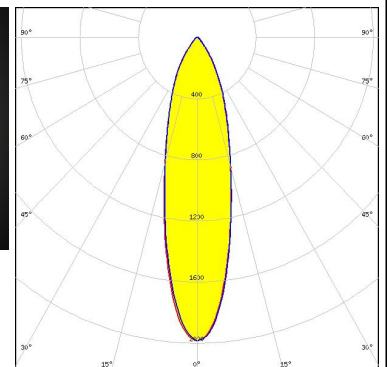
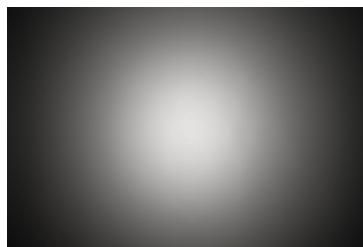
**LED** COB L-Type (LES 9)  
**FWHM / FWTM** 24.0° / 66.0°  
**Efficiency** 78 %  
**Peak intensity** 2.2 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C12479\_MIRELLA-DL  
 IDEAL: 50-2100NC +50-2100MR



Light distribution files



**LED** COB L-Type (LES 9)  
**FWHM / FWTM** 27.0° / 67.0°  
**Efficiency** 77 %  
**Peak intensity** 2 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13709\_PF-SOCKET-VERO13-18  
 C12479\_MIRELLA-DL  
 Bender Wirth: 438 Typ L1



Light distribution files

#### OPTICAL RESULTS (MEASURED):

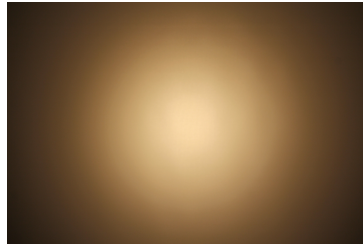


LED NSCxL036A  
FWHM / FWTM 16.0° / 38.0°  
Efficiency 86 %  
Peak intensity 5.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14037\_PF-NSX-SOCKET

Light distribution files



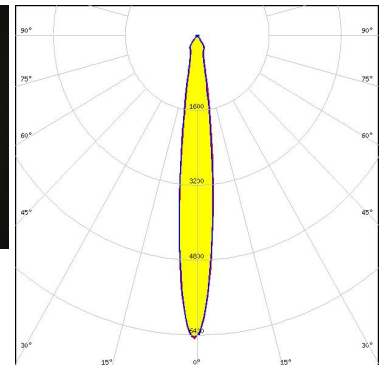
LED Duris S10  
FWHM / FWTM 18.0° / 54.0°  
Efficiency 80 %  
Peak intensity 3.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET  
C12479\_MIRELLA-DL



Light distribution files



LED Duris S10  
FWHM / FWTM 13.0° / 30.0°  
Efficiency 81 %  
Peak intensity 6.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET  
C13333\_MIRELLA-CL

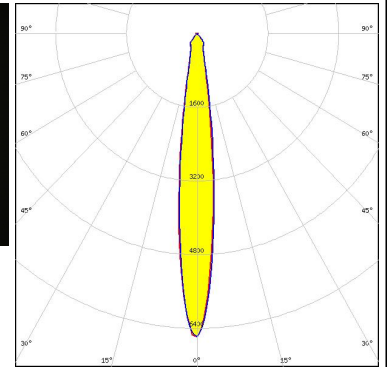


Light distribution files

#### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

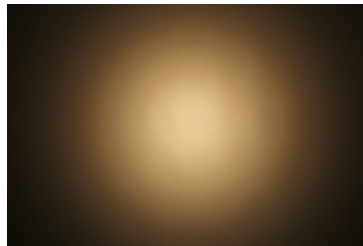
LED Duris S10  
 FWHM / FWTM 13.0° / 31.0°  
 Efficiency 87 %  
 Peak intensity 6.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET



Light distribution files

**OSRAM**  
Opto Semiconductors

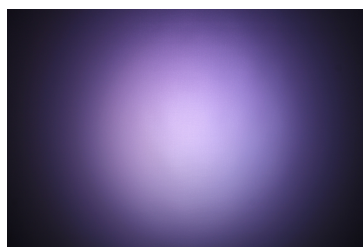
LED Duris S10  
 FWHM / FWTM 22.0° / 61.0°  
 Efficiency 82 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSTAR Stage (S2WP)  
 FWHM / FWTM 21.0° / 58.0°  
 Efficiency 83 %  
 Peak intensity 3.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL

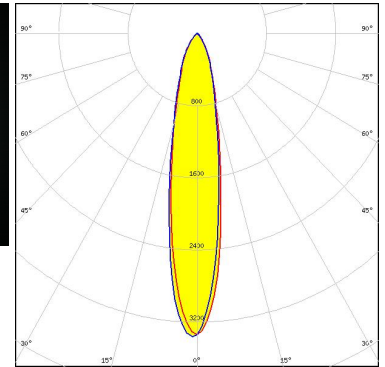
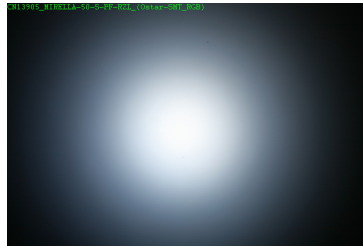


Light distribution files

#### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

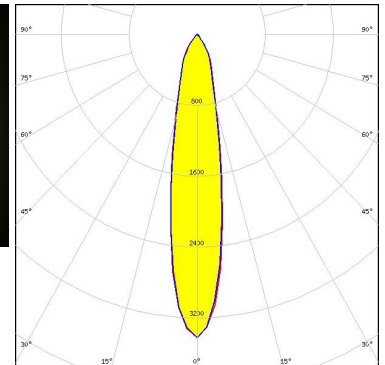
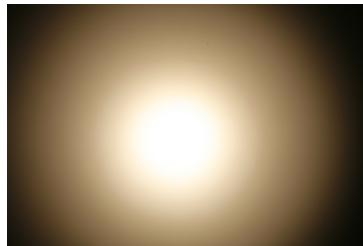
LED Ostar-SMT RGB  
 FWHM / FWTM 20.0° / 55.0°  
 Efficiency 82 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET  
 C13723\_MIRELLA-RZL



Light distribution files

**SEOL**  
SEOUL SEMICONDUCTOR

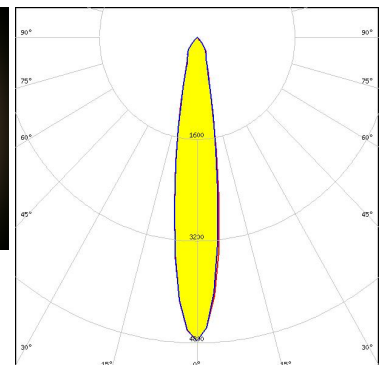
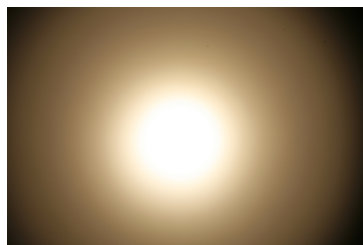
LED ZC4/6  
 FWHM / FWTM 21.0° / 56.0°  
 Efficiency 83 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET  
 C12479\_MIRELLA-DL



Light distribution files

**SEOL**  
SEOUL SEMICONDUCTOR

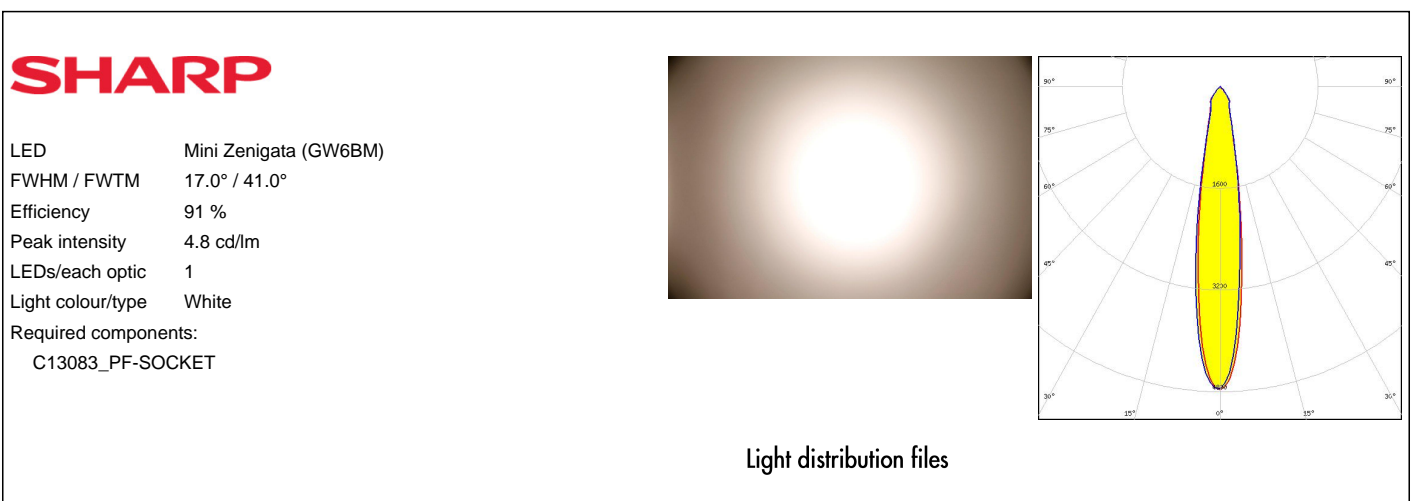
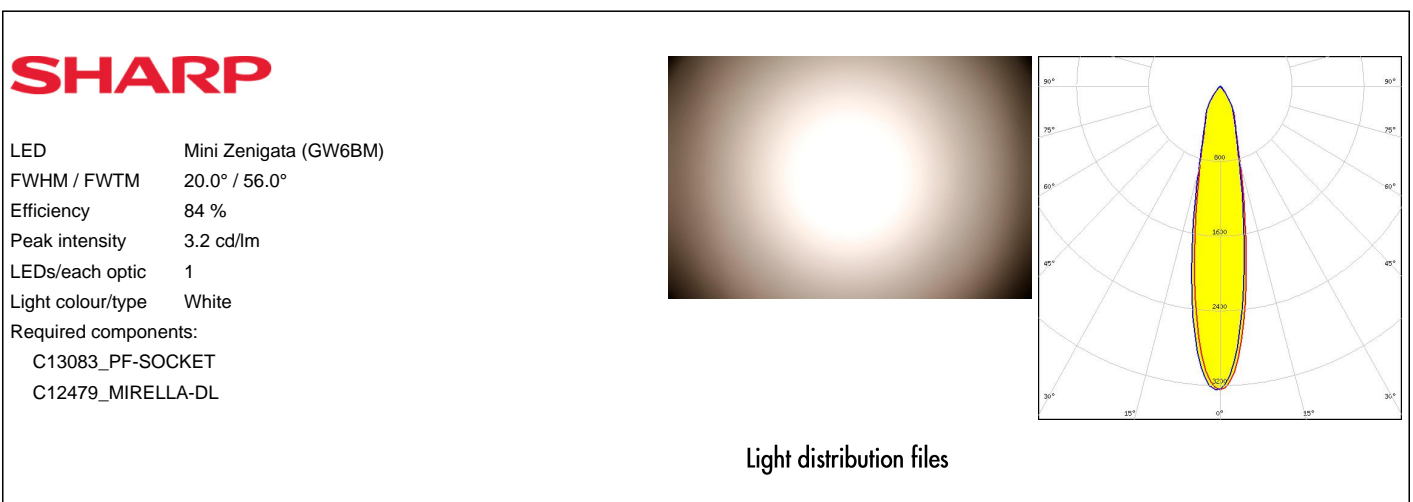
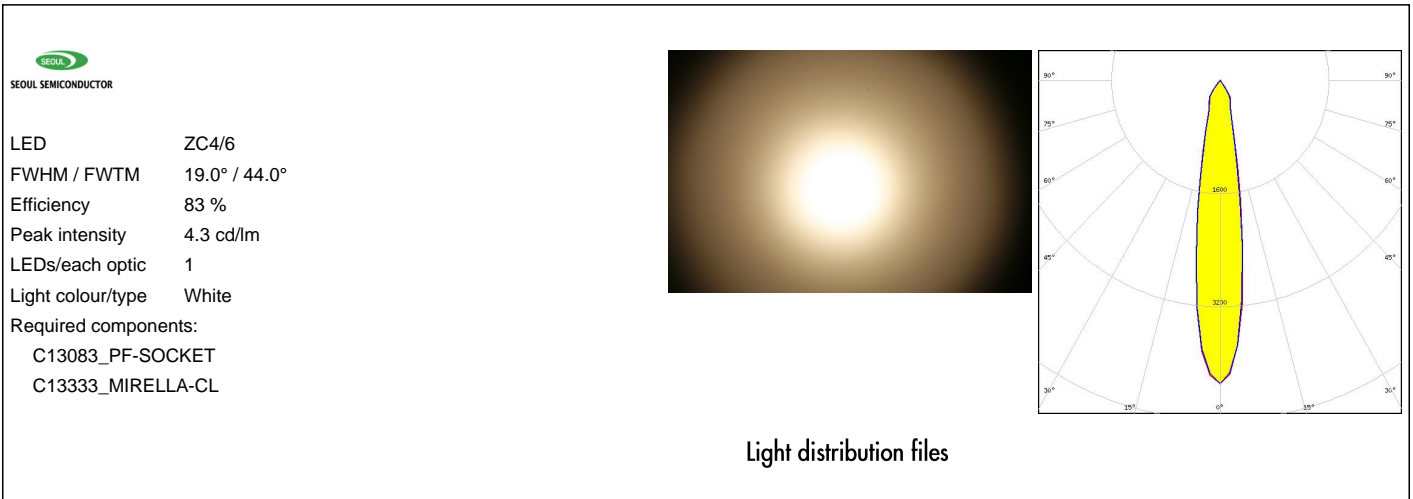
LED ZC4/6  
 FWHM / FWTM 18.0° / 42.0°  
 Efficiency 88 %  
 Peak intensity 4.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13083\_PF-SOCKET



Light distribution files



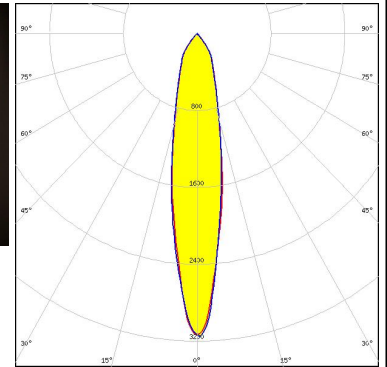
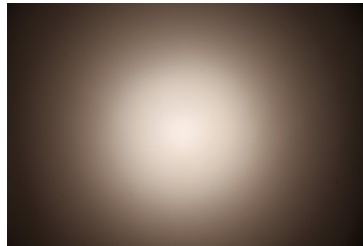
#### OPTICAL RESULTS (MEASURED):



#### OPTICAL RESULTS (MEASURED):

### XICATO

LED XTM - 9mm LES  
FWHM / FWTM 20.0° / 61.0°  
Efficiency 82 %  
Peak intensity 3.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14636\_XTM-PF-ADAPTER

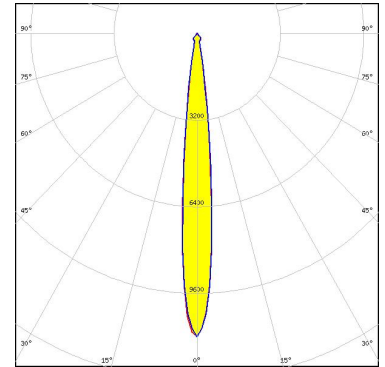


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



LED XHP50.2  
FWHM / FWTM 11.0° / 22.0°  
Efficiency 90 %  
Peak intensity 11.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



[Light distribution files](#)



LED LUXEON CoB Compact  
FWHM / FWTM 13.0° / 30.0°  
Efficiency 89 %  
Peak intensity 7.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13761\_PF-SOCKET-CXA15

[Light distribution files](#)



LED LUXEON CoB Compact  
FWHM / FWTM 15.0° / 36.0°  
Efficiency 84 %  
Peak intensity 4.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13761\_PF-SOCKET-CXA15  
C12479\_MIRELLA-DL

[Light distribution files](#)

#### OPTICAL RESULTS (SIMULATED):



LED LUXEON CoB Compact  
FWHM / FWTM 23.0° / 63.0°  
Efficiency 79 %  
Peak intensity 2.4 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18  
C12479\_MIRELLA-DL

[Light distribution files](#)

Bender Wirth: 452 Typ L1



LED LUXEON CoB Compact  
FWHM / FWTM 13.0° / 28.0°  
Efficiency 84 %  
Peak intensity 7.6 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13761\_PF-SOCKET-CXA15  
C13333\_MIRELLA-CL

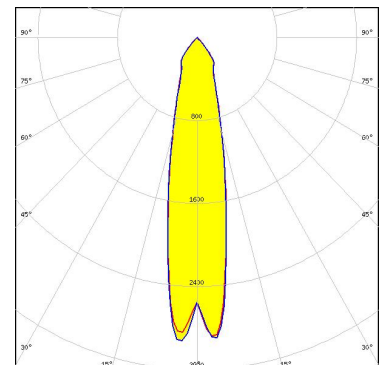
[Light distribution files](#)



LED LUXEON K4  
FWHM / FWTM 24.0° / 72.0°  
Efficiency 88 %  
Peak intensity 2.9 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13761\_PF-SOCKET-CXA15



[Light distribution files](#)

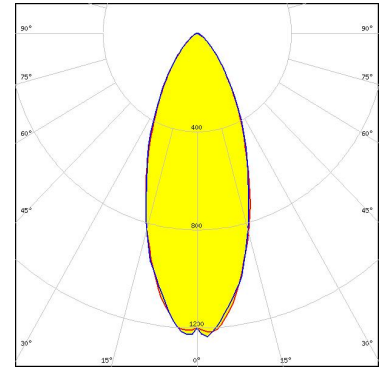
#### OPTICAL RESULTS (SIMULATED):



LED LUXEON K4  
FWHM / FWTM 42.0° / 87.0°  
Efficiency 84 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13761\_PF-SOCKET-CXA15  
C12479\_MIRELLA-DL



Light distribution files



LED CxM-14 (19x19)  
FWHM / FWTM 33.0° / 72.0°  
Efficiency 69 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18  
C12479\_MIRELLA-DL

Light distribution files

Bender Wirth: 433 Typ L1



LED CxM-14 (19x19)  
FWHM / FWTM 31.0° / 70.0°  
Efficiency 72 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18  
C13333\_MIRELLA-CL

Light distribution files

Bender Wirth: 433 Typ L1

#### OPTICAL RESULTS (SIMULATED):



LED CxM-14 (19x19)  
FWHM / FWTM 29.0° / 72.0°  
Efficiency 76 %  
Peak intensity 1.8 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18

[Light distribution files](#)



LED CxM-9 (13.5x13.5)  
FWHM / FWTM 20.0° / 61.0°  
Efficiency 80 %  
Peak intensity 3.1 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18

C13333\_MIRELLA-CL

[Light distribution files](#)

Bender Wirth: 434 Typ L1



LED CxM-9 (13.5x13.5)  
FWHM / FWTM 21.0° / 63.0°  
Efficiency 84 %  
Peak intensity 3.1 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18

[Light distribution files](#)

Bender Wirth: 434 Typ L1

#### OPTICAL RESULTS (SIMULATED):



LED	CxM-9 (13.5x13.5)
FWHM / FWTM	27.0° / 67.0°
Efficiency	77 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

C13709\_PF-SOCKET-VERO13-18  
C12479\_MIRELLA-DL

[Light distribution files](#)

Bender Wirth: 434 Typ L1



LED	COB S-Type (LES 7)
FWHM / FWTM	23.0° / 63.0°
Efficiency	79 %
Peak intensity	2.4 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

C13709\_PF-SOCKET-VERO13-18  
C12479\_MIRELLA-DL

[Light distribution files](#)

Bender Wirth: 452 Typ L1



LED	COB S-Type (LES 7)
FWHM / FWTM	19.0° / 49.0°
Efficiency	87 %
Peak intensity	3.9 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

C13709\_PF-SOCKET-VERO13-18

[Light distribution files](#)

Bender Wirth: 452 Typ L1

#### OPTICAL RESULTS (SIMULATED):

**NICHIA**

LED	COB S-Type (LES 7)
FWHM / FWTM	15.0° / 41.0°
Efficiency	83 %
Peak intensity	4.9 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 C13333\_MIRELLA-CL


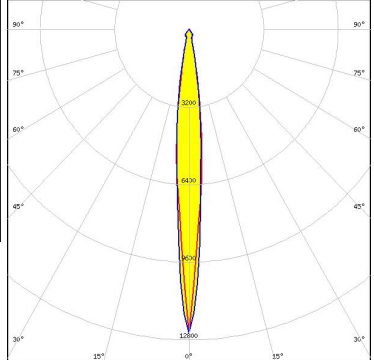
Light distribution files

Bender Wirth: 452 Typ L1

**OSRAM**  
 Opto Semiconductors

LED	Duris S8
FWHM / FWTM	9.5° / 24.0°
Efficiency	94 %
Peak intensity	12.5 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:  
 C13083\_PF-SOCKET

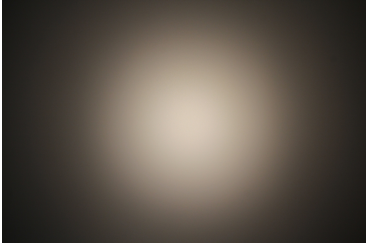
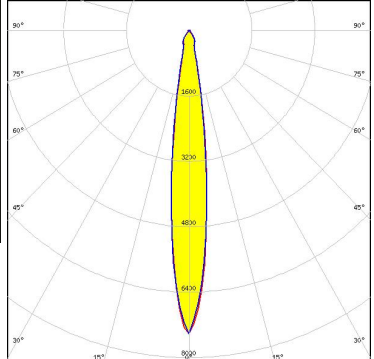



Light distribution files

**OSRAM**  
 Opto Semiconductors

LED	Duris S8
FWHM / FWTM	14.0° / 29.0°
Efficiency	90 %
Peak intensity	7.4 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:  
 C13083\_PF-SOCKET  
 C12479\_MIRELLA-DL

Light distribution files

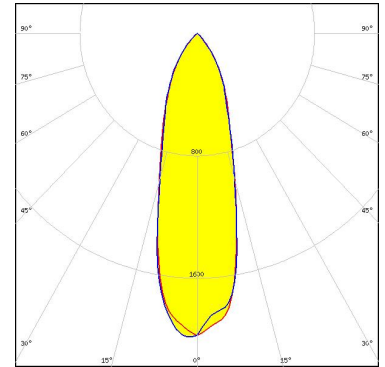


#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

LED Soleriq S15  
FWHM / FWTM 28.0° / 74.0°  
Efficiency 85 %  
Peak intensity 2 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:  
C13709\_PF-SOCKET-VERO13-18



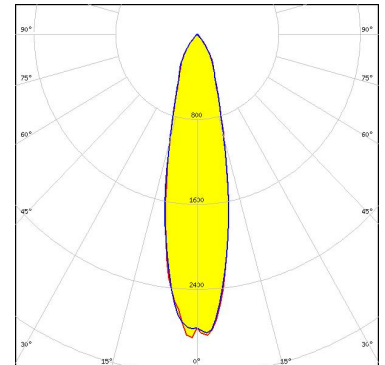
Bender Wirth: 433 Typ L1

Light distribution files

**OSRAM**  
Opto Semiconductors

LED Soleriq S9  
FWHM / FWTM 24.0° / 61.0°  
Efficiency 87 %  
Peak intensity 2.9 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:  
C13083\_PF-SOCKET  
C13333\_MIRELLA-CL

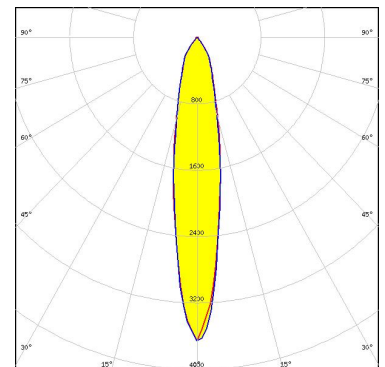


Light distribution files

**OSRAM**  
Opto Semiconductors

LED Soleriq S9  
FWHM / FWTM 19.0° / 56.0°  
Efficiency 87 %  
Peak intensity 3.7 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:  
C13709\_PF-SOCKET-VERO13-18



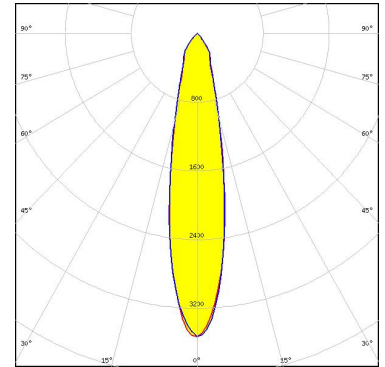
Bender Wirth: 434 Typ L1

Light distribution files

#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

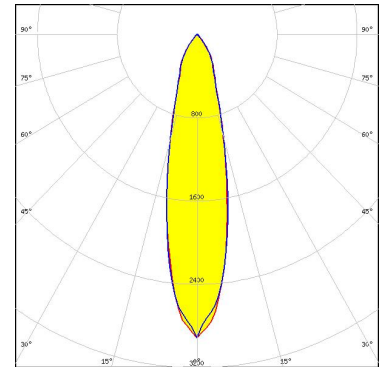
LED Soleriq S9  
FWHM / FWTM 21.0° / 54.0°  
Efficiency 91 %  
Peak intensity 3.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET



Light distribution files

**OSRAM**  
Opto Semiconductors

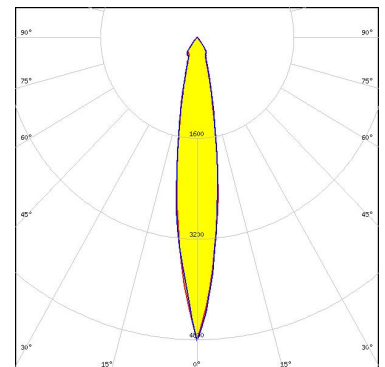
LED Soleriq S9  
FWHM / FWTM 24.0° / 61.0°  
Efficiency 86 %  
Peak intensity 2.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13083\_PF-SOCKET  
C12479\_MIRELLA-DL



Light distribution files

**SAMSUNG**

LED LC010C  
FWHM / FWTM 16.0° / 41.0°  
Efficiency 87 %  
Peak intensity 4.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13709\_PF-SOCKET-VERO13-18



Light distribution files

Bender Wirth: 479 Typ L1

#### OPTICAL RESULTS (SIMULATED):

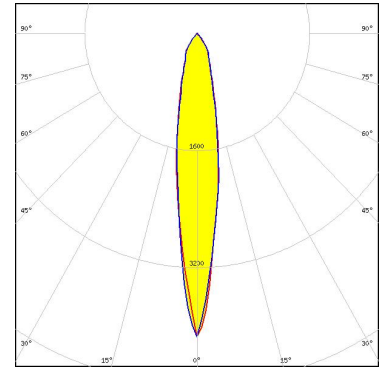
### SAMSUNG

LED LC020C  
FWHM / FWTM 16.0° / 49.0°  
Efficiency 86 %  
Peak intensity 4.1 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18

Bender Wirth: 479 Typ L1



Light distribution files

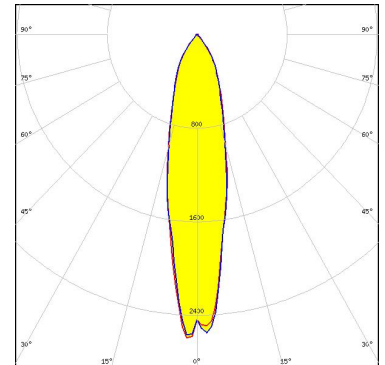
### SAMSUNG

LED LC040C  
FWHM / FWTM 23.0° / 66.0°  
Efficiency 84 %  
Peak intensity 2.6 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13709\_PF-SOCKET-VERO13-18

Bender Wirth: 480 Typ L1



Light distribution files



SEOUL SEMICONDUCTOR


LED ZC4/6  
FWHM / FWTM 21.0° / 63.0°  
Efficiency 84 %  
Peak intensity 3.1 cd/lm  
LEDs/each optic 1  
Light colour/type White


Required components:

C13709\_PF-SOCKET-VERO13-18

Bender Wirth: 434 Typ L1

#### OPTICAL RESULTS (SIMULATED):

 SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM / FWTM	27.0° / 67.0°
Efficiency	77 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C13709_PF-SOCKET-VERO13-18	
C12479_MIRELLA-DL	
Bender Wirth: 434 Typ L1	

 SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM / FWTM	20.0° / 61.0°
Efficiency	80 %
Peak intensity	3.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C13709_PF-SOCKET-VERO13-18	
C13333_MIRELLA-CL	
Bender Wirth: 434 Typ L1	

#### GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.

#### MATERIALS:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

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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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