

## ANGELETTE-M

~50° medium beam

### SPECIFICATION:

Dimensions	Ø 110.0 mm
Height	57.3 mm
Fastening	socket
ROHS compliant	yes ⓘ

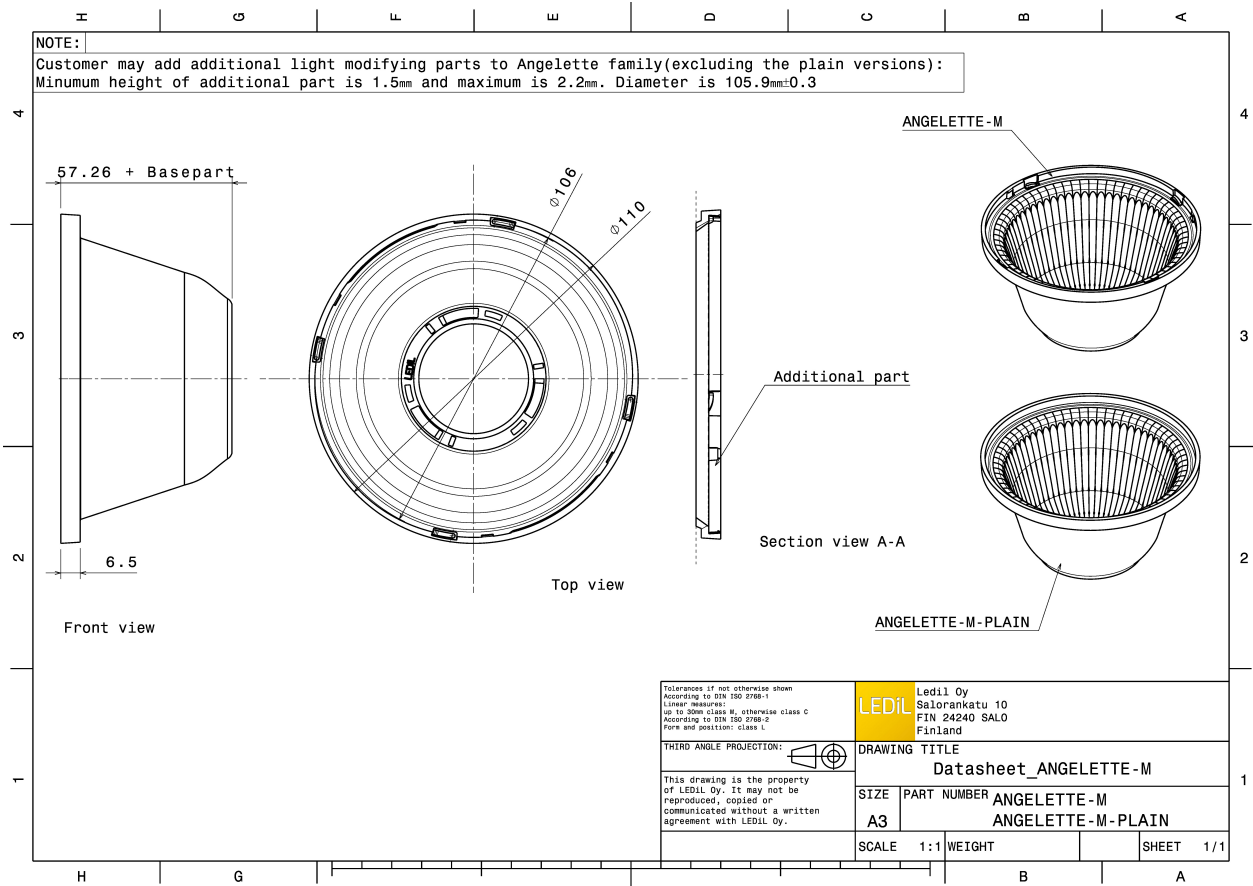
### MATERIALS:

Component	Type	Material	Colour	Finish	Coating
ANGELETTE-M	Reflector	PC	metal		HMDS



### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F14533_ANGELETTE-M » Box size: 398 x 298 x 265 mm	160	80	40	7.0



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



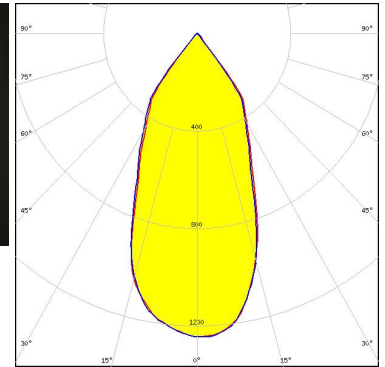
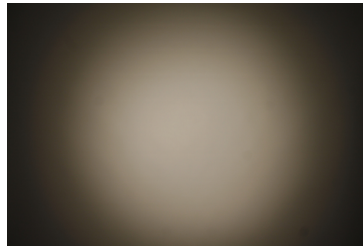
### OPTICAL RESULTS (MEASURED):

bridgelux

LED V10 Gen7  
FWHM / FWTM 46.0° / 79.0°  
Efficiency 88 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13658\_CLAMP-VERO13-18  
Bender Wirth: 434 Typ L1



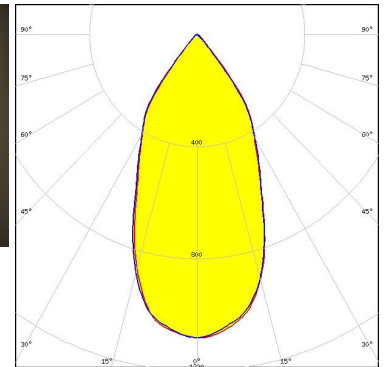
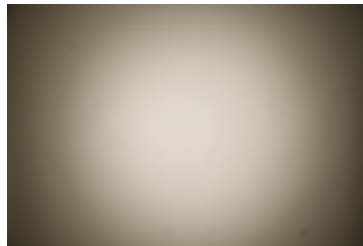
Light distribution files

bridgelux

LED V10 Gen7  
FWHM / FWTM 49.0° / 82.0°  
Efficiency 83 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

C13658\_CLAMP-VERO13-18  
F13671\_ANGE-RZ-LENS  
Bender Wirth: 434 Typ L1



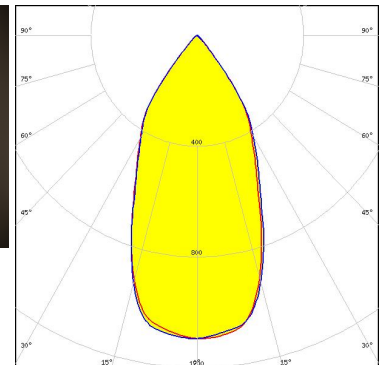
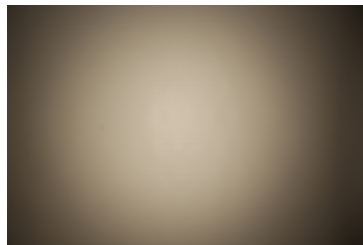
Light distribution files

bridgelux

LED V13 Gen7  
FWHM / FWTM 49.0° / 82.0°  
Efficiency 84 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

F13671\_ANGE-RZ-LENS  
TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

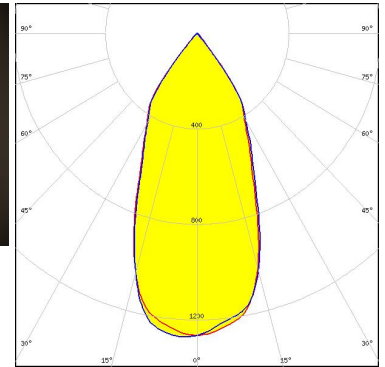
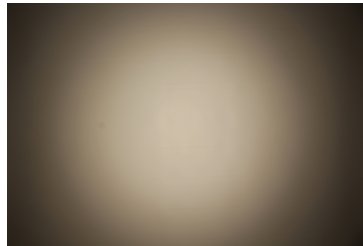
#### OPTICAL RESULTS (MEASURED):



LED V13 Gen7  
 FWHM / FWTM 46.0° / 79.0°  
 Efficiency 89 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



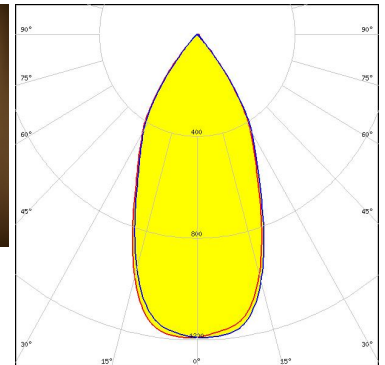
Light distribution files



LED V22 Gen6  
 FWHM / FWTM 49.0° / 80.0°  
 Efficiency 88 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

IDEAL: 50-2204-CT + 50-2100AN



Light distribution files

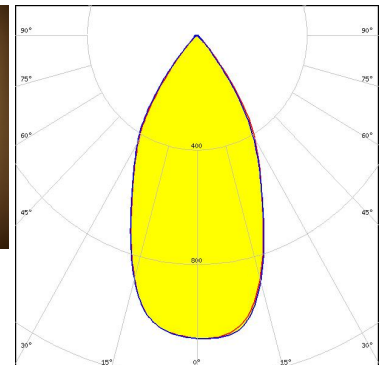
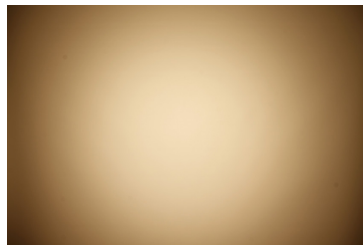


LED V22 Gen6  
 FWHM / FWTM 51.0° / 82.0°  
 Efficiency 84 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

F13671\_ANGE-RZ-LENS

IDEAL: 50-2204-CT + 50-2100AN

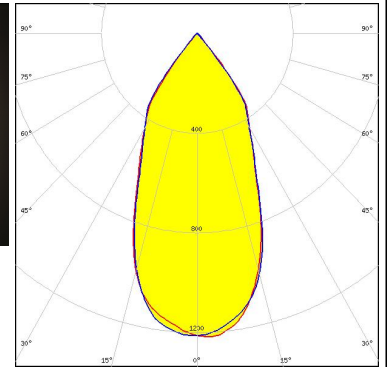
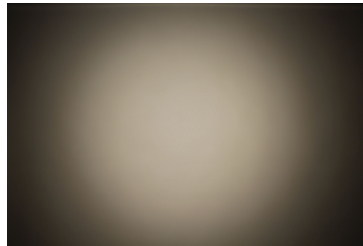


Light distribution files

### OPTICAL RESULTS (MEASURED):



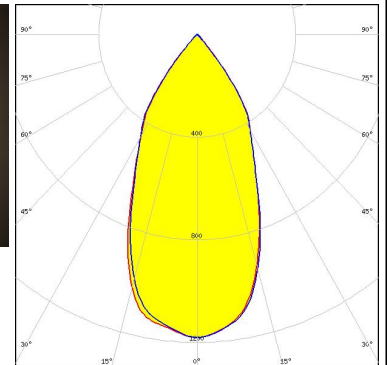
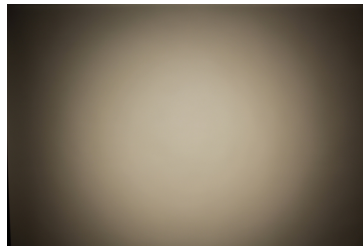
**LED** Vero SE 13  
**FWHM / FWTM** 47.0° / 80.0°  
**Efficiency** 88 %  
**Peak intensity** 1.2 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C16402\_CLAMP-VEROSE-13-18



Light distribution files



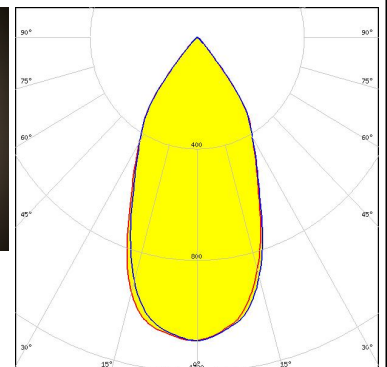
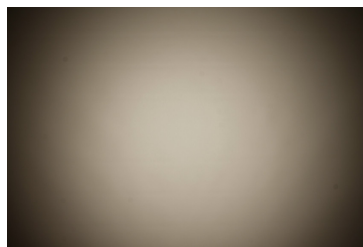
**LED** Vero SE 18  
**FWHM / FWTM** 49.0° / 81.0°  
**Efficiency** 88 %  
**Peak intensity** 1.2 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C16402\_CLAMP-VEROSE-13-18



Light distribution files



**LED** VERO13  
**FWHM / FWTM** 50.0° / 82.0°  
**Efficiency** 84 %  
**Peak intensity** 1.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS

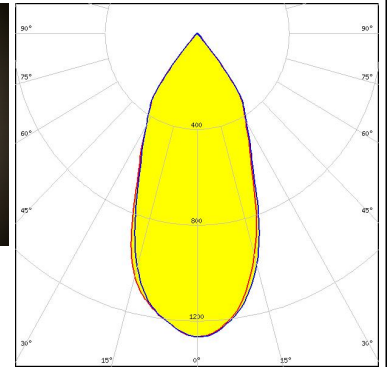
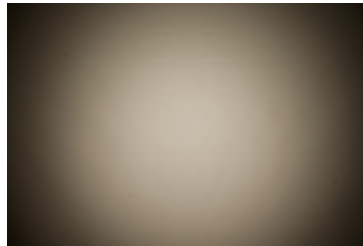


Light distribution files

### OPTICAL RESULTS (MEASURED):



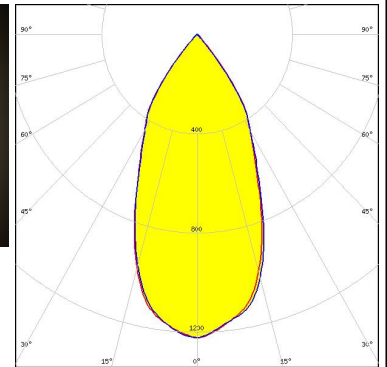
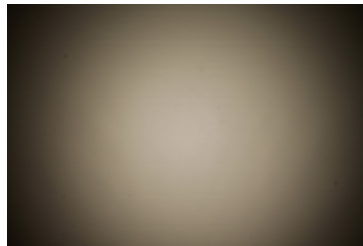
**LED** VERO13  
**FWHM / FWTM** 46.0° / 80.0°  
**Efficiency** 88 %  
**Peak intensity** 1.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13658\_CLAMP-VERO13-18



Light distribution files



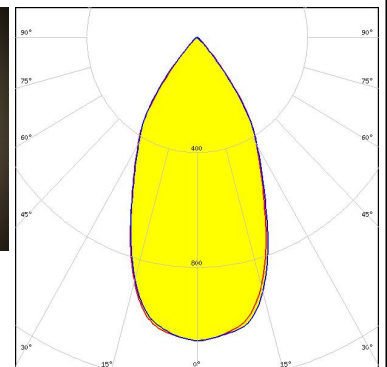
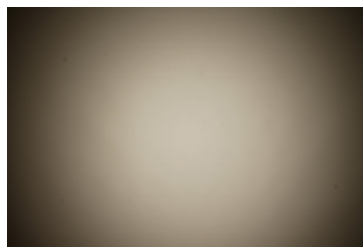
**LED** VERO18  
**FWHM / FWTM** 48.0° / 81.0°  
**Efficiency** 88 %  
**Peak intensity** 1.2 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13658\_CLAMP-VERO13-18



Light distribution files



**LED** VERO18  
**FWHM / FWTM** 52.0° / 83.0°  
**Efficiency** 84 %  
**Peak intensity** 1.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS

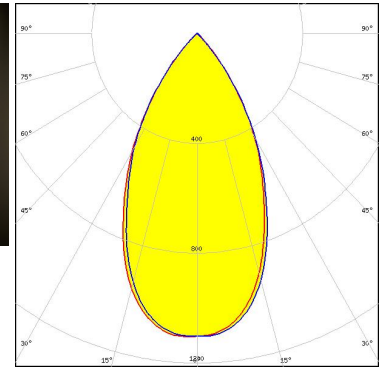


Light distribution files

#### OPTICAL RESULTS (MEASURED):



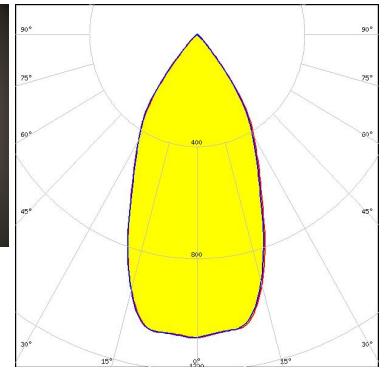
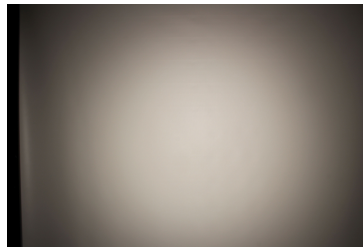
**LED** VERO29  
**FWHM / FWTM** 54.0° / 84.0°  
**Efficiency** 89 %  
**Peak intensity** 1.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13584\_CLAMP-VERO29



Light distribution files



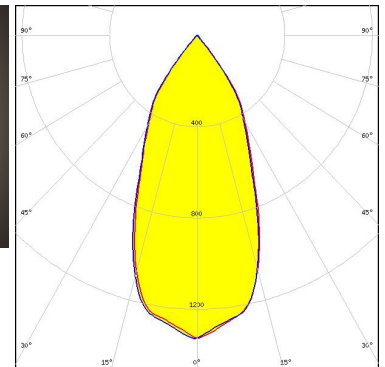
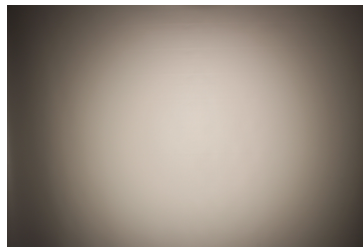
**LED** Vesta TW 15mm DP  
**FWHM / FWTM** 51.0° / 83.0°  
**Efficiency** 85 %  
**Peak intensity** 1.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** Tunable White  
**Required components:**  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 482 Typ L2



Light distribution files



**LED** Vesta TW 15mm DP  
**FWHM / FWTM** 46.0° / 80.0°  
**Efficiency** 90 %  
**Peak intensity** 1.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** Tunable White  
**Required components:**  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 482 Typ L2



Light distribution files

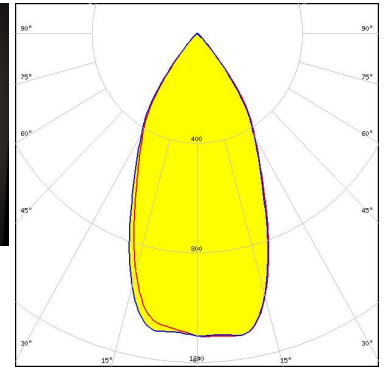
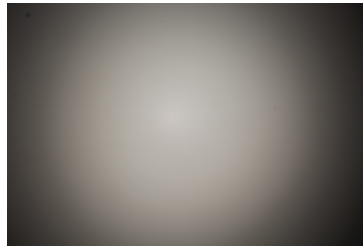
### OPTICAL RESULTS (MEASURED):



LED Vesta TW 18mm (31W) DP  
 FWHM / FWTM 50.0° / 82.0°  
 Efficiency 85 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type Tunable White

Required components:

C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 483 Typ L3



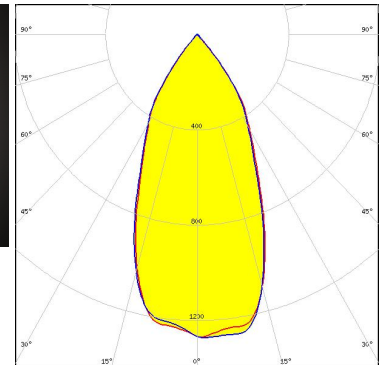
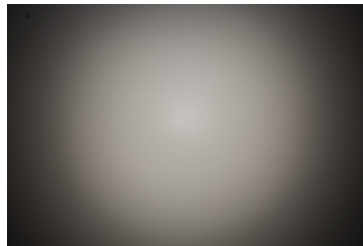
Light distribution files



LED Vesta TW 18mm (31W) DP  
 FWHM / FWTM 47.0° / 80.0°  
 Efficiency 90 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type Tunable White

Required components:

C13584\_CLAMP-VERO29  
 Bender Wirth: 483 Typ L3



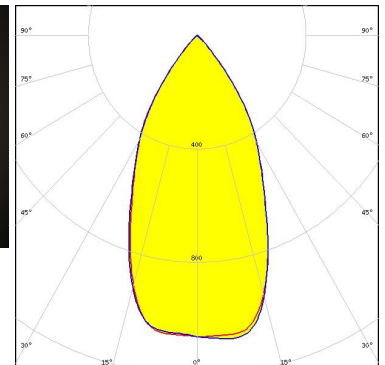
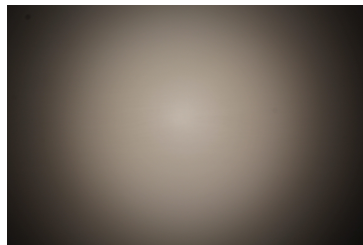
Light distribution files



LED Vesta TW 22mm DP  
 FWHM / FWTM 52.0° / 83.0°  
 Efficiency 85 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type Tunable White

Required components:

C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 494 Typ L3



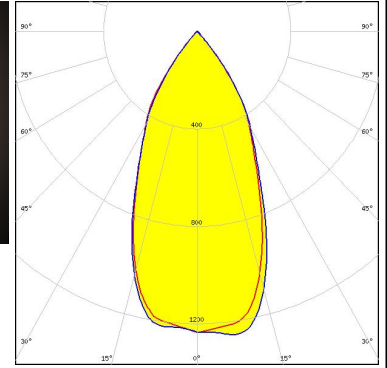
Light distribution files



#### OPTICAL RESULTS (MEASURED):



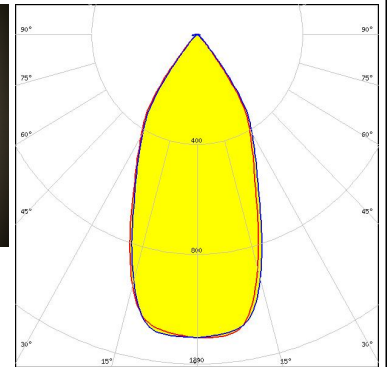
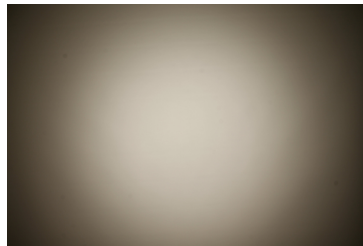
LED Vesta TW 22mm DP  
 FWHM / FWTM 48.0° / 80.0°  
 Efficiency 90 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type Tunable White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 494 Typ L3



Light distribution files

#### CITIZEN

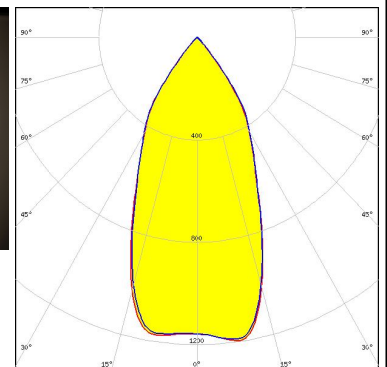
LED CLL03x/CLU03x  
 FWHM / FWTM 49.0° / 80.0°  
 Efficiency 83 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2103CT + 50-2100AN



Light distribution files

#### CITIZEN

LED CLL03x/CLU03x  
 FWHM / FWTM 48.0° / 80.0°  
 Efficiency 87 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C16791\_CLAMP-Z45-A  
 F13671\_ANGE-RZ-LENS  
 TE Connectivity: 2325807-3



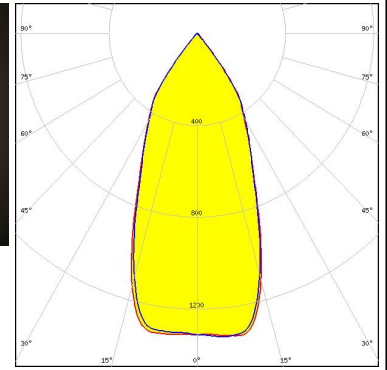
Light distribution files



### OPTICAL RESULTS (MEASURED):

#### CITIZEN

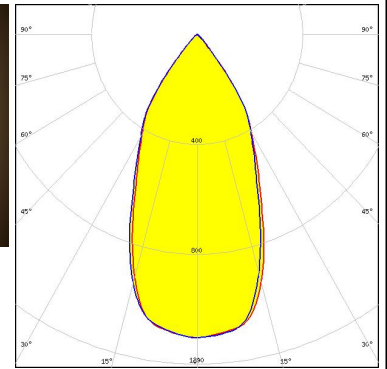
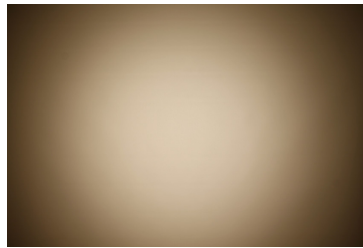
LED CLL03x/CLU03x  
 FWHM / FWTM 46.0° / 79.0°  
 Efficiency 91 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C16791\_CLAMP-Z45-A  
 TE Connectivity: 2325807-3



Light distribution files

#### CITIZEN

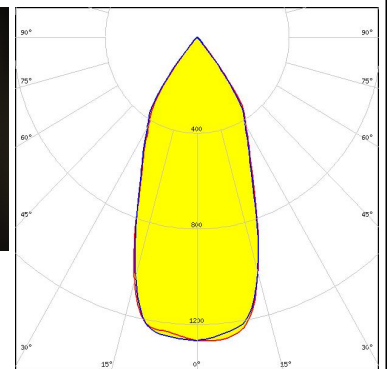
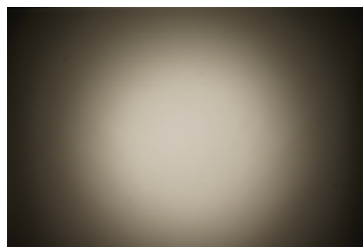
LED CLL03x/CLU03x  
 FWHM / FWTM 49.0° / 81.0°  
 Efficiency 83 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

#### CITIZEN

LED CLL03x/CLU03x  
 FWHM / FWTM 45.0° / 78.0°  
 Efficiency 87 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 IDEAL: 50-2103CT + 50-2100AN



Light distribution files

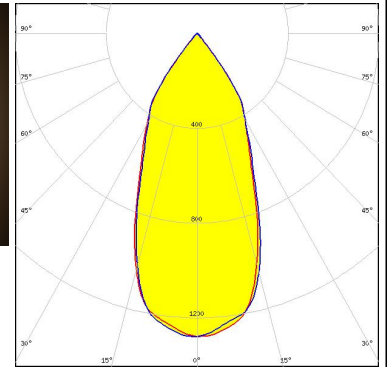
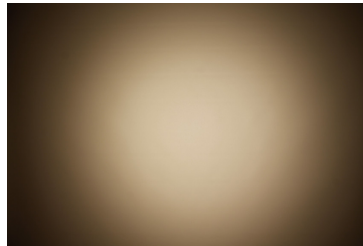
#### OPTICAL RESULTS (MEASURED):

### CITIZEN

LED CLL03x/CLU03x  
 FWHM / FWTM 45.0° / 79.0°  
 Efficiency 88 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



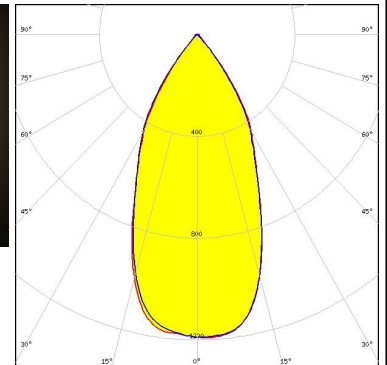
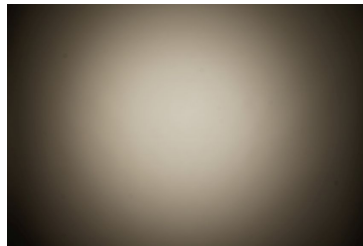
Light distribution files

### CITIZEN

LED CLL04x/CLU04x  
 FWHM / FWTM 49.0° / 80.0°  
 Efficiency 88 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

IDEAL: 50-2204-CT + 50-2100AN



Light distribution files

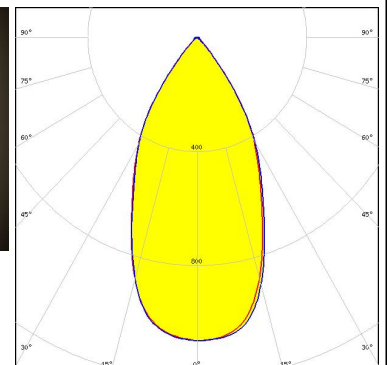
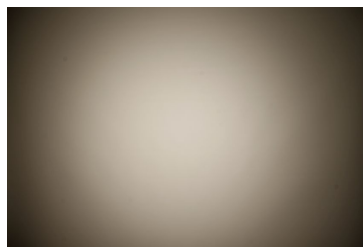
### CITIZEN

LED CLL04x/CLU04x  
 FWHM / FWTM 51.0° / 82.0°  
 Efficiency 84 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

F13671\_ANGE-RZ-LENS

IDEAL: 50-2204-CT + 50-2100AN

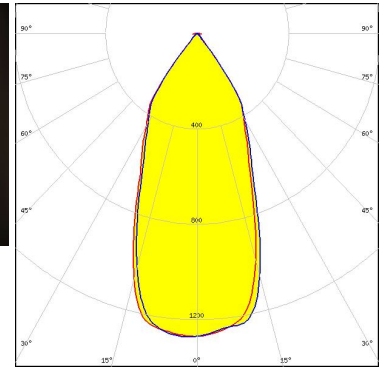
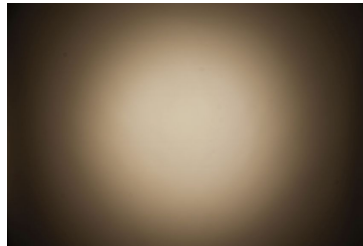


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### CITIZEN

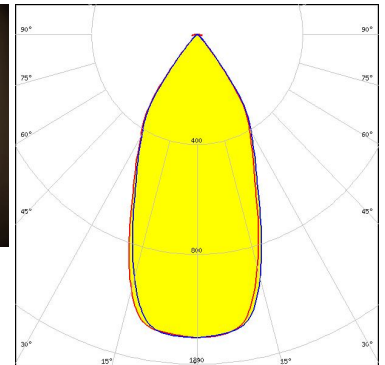
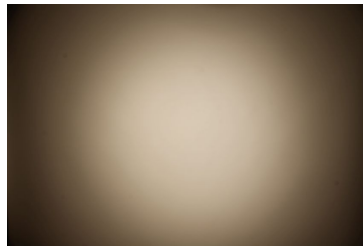
LED CLU730/731/733  
 FWHM / FWTM 45.0° / 78.0°  
 Efficiency 87 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 IDEAL: 50-2204-CT + 50-2100AN



Light distribution files

### CITIZEN

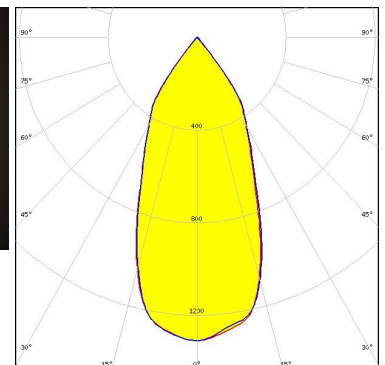
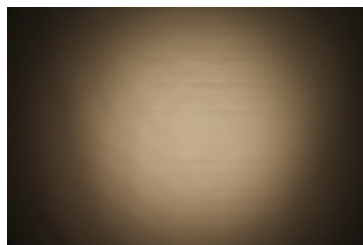
LED CLU730/731/733  
 FWHM / FWTM 48.0° / 80.0°  
 Efficiency 83 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2204-CT + 50-2100AN



Light distribution files



LED CMA1840  
 FWHM / FWTM 46.0° / 80.0°  
 Efficiency 90 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C14123\_CLAMP-CXA15-18

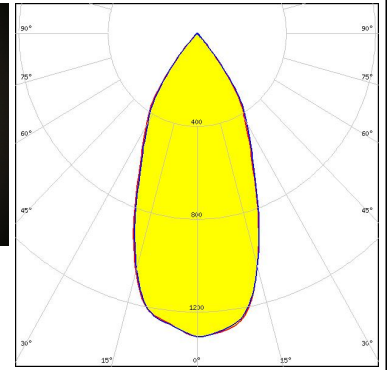


Light distribution files

### OPTICAL RESULTS (MEASURED):



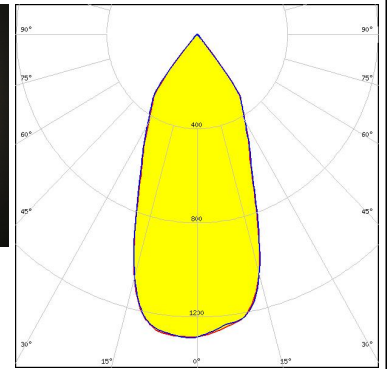
LED CMA2550  
FWHM / FWTM 46.0° / 80.0°  
Efficiency 90 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14036\_CLAMP\_CXA25-30



Light distribution files



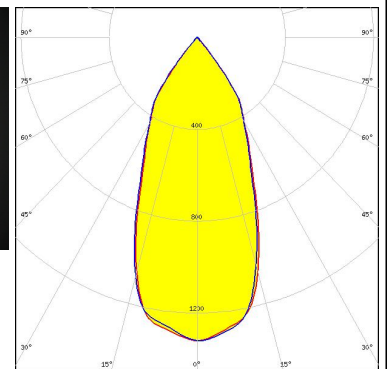
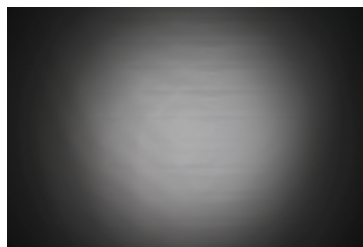
LED CMT14xx  
FWHM / FWTM 45.0° / 80.0°  
Efficiency 89 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 434 Typ L1



Light distribution files



LED CMT19xx  
FWHM / FWTM 44.0° / 79.0°  
Efficiency 90 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 477 Typ L1

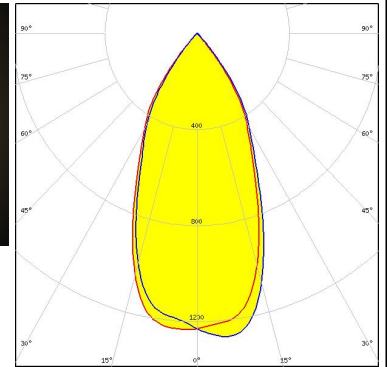
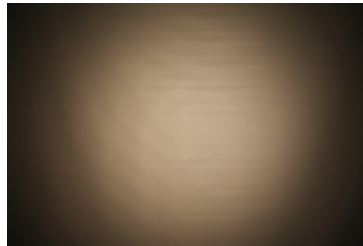


Light distribution files

#### OPTICAL RESULTS (MEASURED):



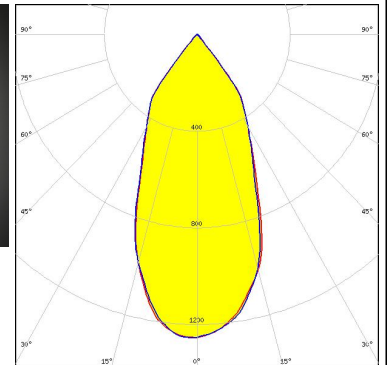
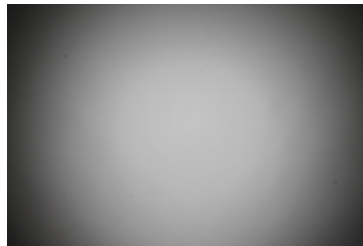
LED CMT28xx  
 FWHM / FWTM 48.0° / 81.0°  
 Efficiency 89 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 471 Typ L3



Light distribution files



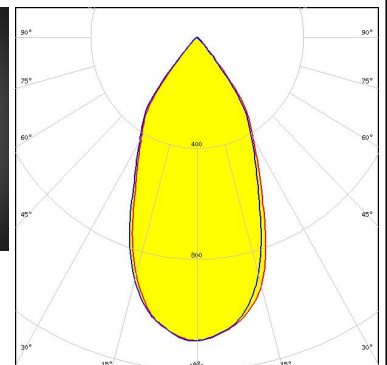
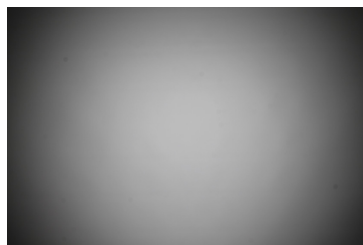
LED CXA/B 15xx  
 FWHM / FWTM 46.0° / 80.0°  
 Efficiency 89 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C14123\_CLAMP-CXA15-18



Light distribution files



LED CXA/B 15xx  
 FWHM / FWTM 50.0° / 82.0°  
 Efficiency 85 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C14123\_CLAMP-CXA15-18  
 F13671\_ANGE-RZ-LENS

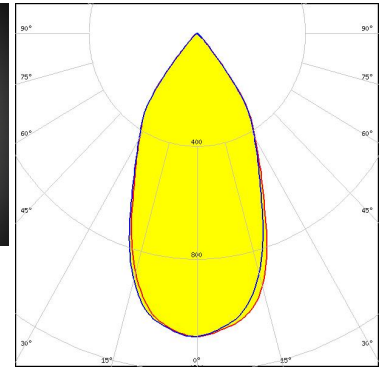
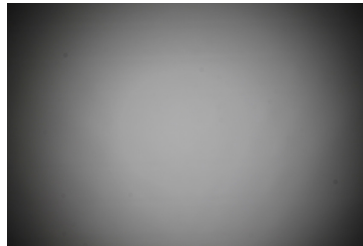


Light distribution files

#### OPTICAL RESULTS (MEASURED):



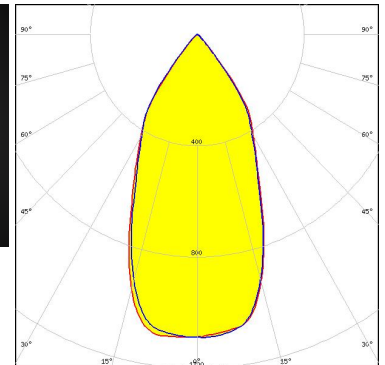
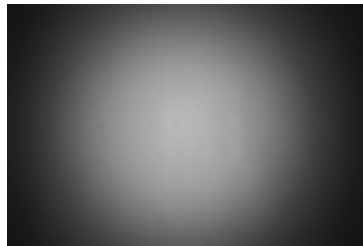
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM / FWTM 51.0° / 83.0°  
 Efficiency 85 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C14123\_CLAMP-CXA15-18  
 F13671\_ANGE-RZ-LENS



Light distribution files



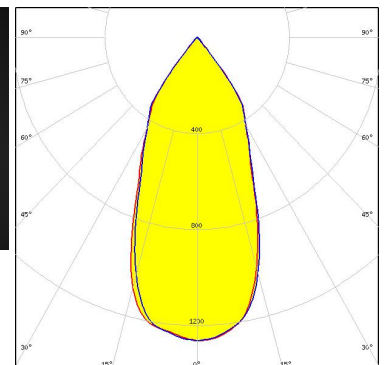
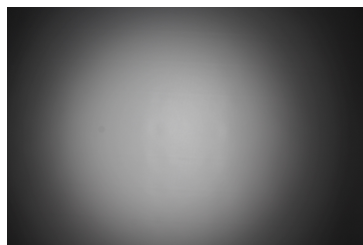
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM / FWTM 49.0° / 82.0°  
 Efficiency 84 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE Connectivity: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files



LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM / FWTM 46.0° / 80.0°  
 Efficiency 88 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 TE Connectivity: 2213401-2 + OPTIC CLIP Z50 TYPE1 2213194-1



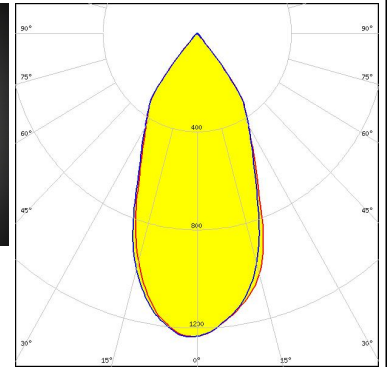
Light distribution files



### OPTICAL RESULTS (MEASURED):



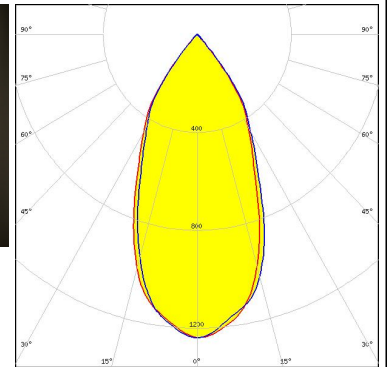
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
FWHM / FWTM 47.0° / 80.0°  
Efficiency 89 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14123\_CLAMP-CXA15-18



Light distribution files



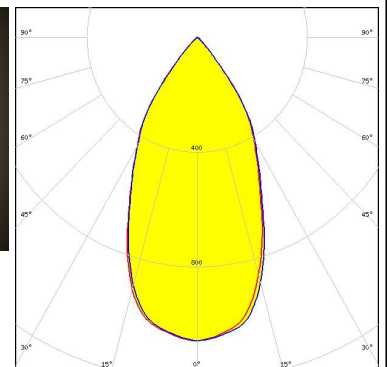
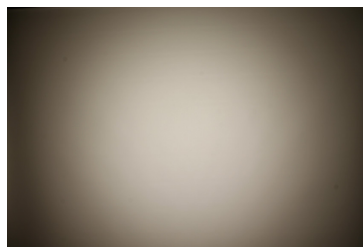
LED CXA/B 25xx  
FWHM / FWTM 47.0° / 81.0°  
Efficiency 88 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14036\_CLAMP\_CXA25-30



Light distribution files



LED CXA/B 25xx  
FWHM / FWTM 52.0° / 83.0°  
Efficiency 84 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14036\_CLAMP\_CXA25-30  
F13671\_ANGE-RZ-LENS



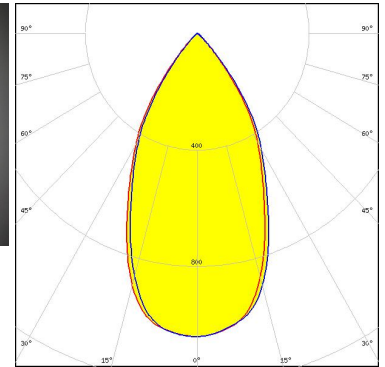
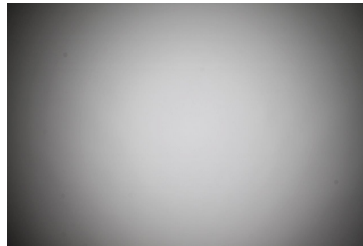
Light distribution files



### OPTICAL RESULTS (MEASURED):



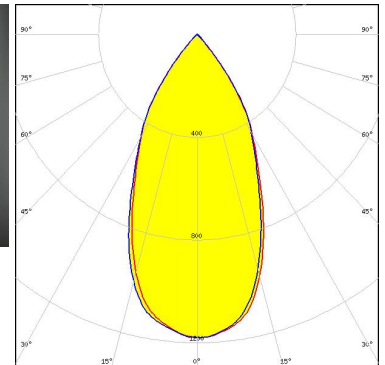
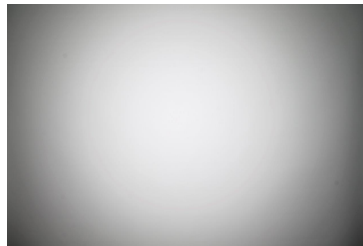
**LED** CXA/B 30xx  
**FWHM / FWTM** 53.0° / 84.0°  
**Efficiency** 85 %  
**Peak intensity** 1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C14036\_CLAMP\_CXA25-30  
 F13671\_ANGE-RZ-LENS



Light distribution files



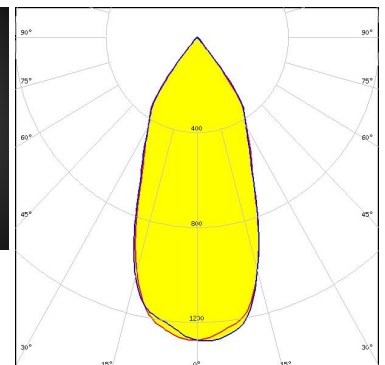
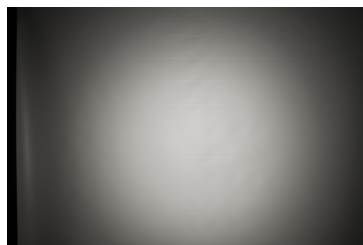
**LED** CXA/B 30xx  
**FWHM / FWTM** 50.0° / 82.0°  
**Efficiency** 89 %  
**Peak intensity** 1.2 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C14036\_CLAMP\_CXA25-30



Light distribution files



**LED** LUXEON CoB 1204/1205  
**FWHM / FWTM** 45.0° / 79.0°  
**Efficiency** 88 %  
**Peak intensity** 1.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

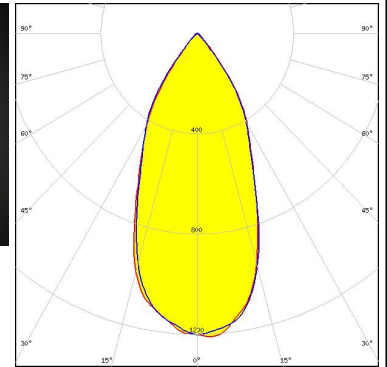
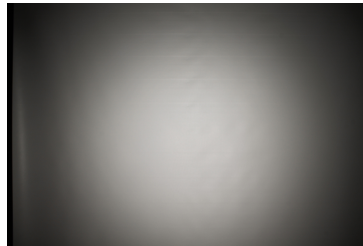
#### OPTICAL RESULTS (MEASURED):



LED LUXEON CoB 1204/1205  
 FWHM / FWTM 46.0° / 80.0°  
 Efficiency 85 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

F15412\_ANGELETTE-DL  
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



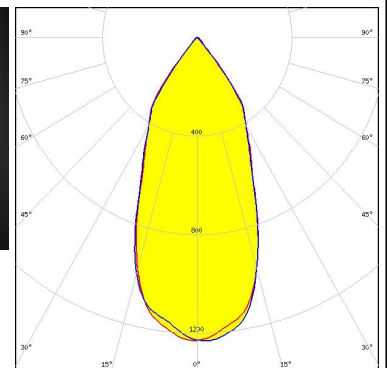
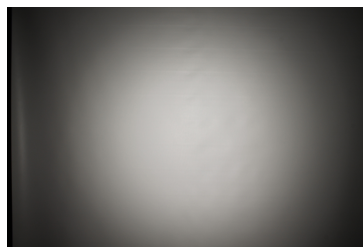
Light distribution files



LED LUXEON CoB 1204/1205  
 FWHM / FWTM 45.0° / 79.0°  
 Efficiency 85 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

F15176\_ANGELETTE-LENS  
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



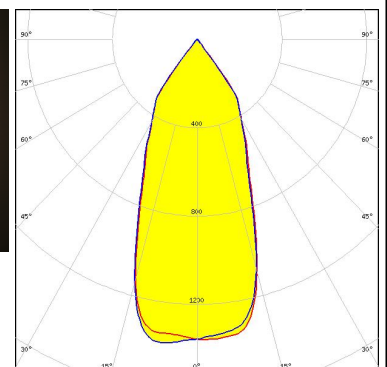
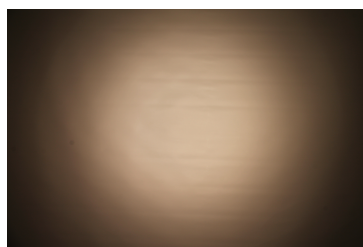
Light distribution files



LED LUXEON CoB 1204HD  
 FWHM / FWTM 43.0° / 78.0°  
 Efficiency 89 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

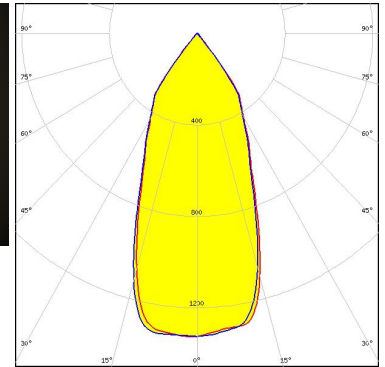
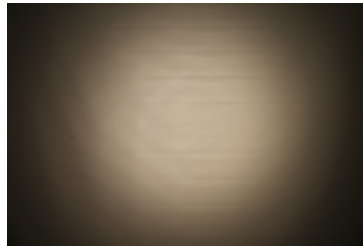
### OPTICAL RESULTS (MEASURED):



LED LUXEON CoB 1205HD  
FWHM / FWTM 44.0° / 79.0°  
Efficiency 89 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

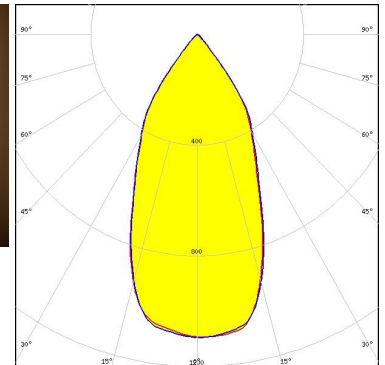
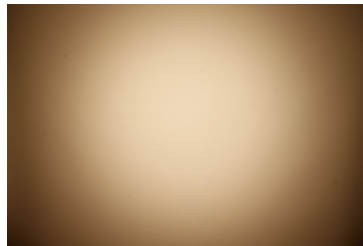


LED LUXEON CoB 1208  
FWHM / FWTM 49.0° / 81.0°  
Efficiency 83 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

F13671\_ANGE-RZ-LENS

TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



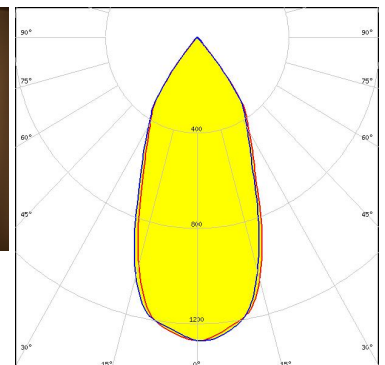
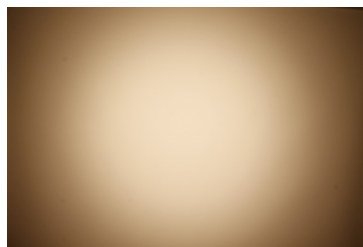
Light distribution files



LED LUXEON CoB 1208  
FWHM / FWTM 46.0° / 79.0°  
Efficiency 88 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1

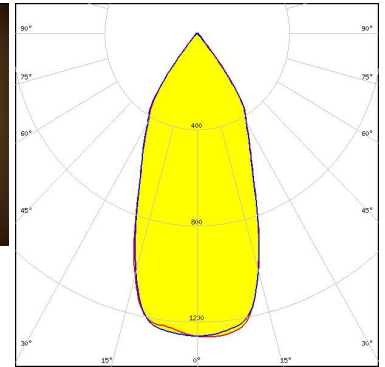
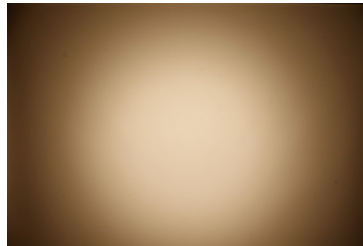


Light distribution files

### OPTICAL RESULTS (MEASURED):



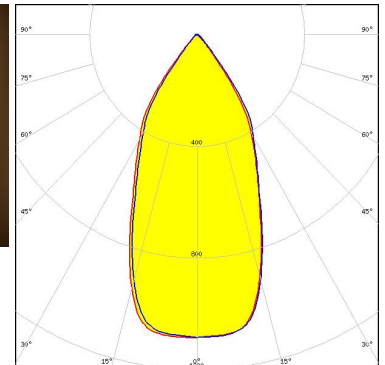
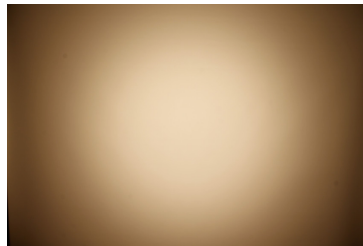
LED LUXEON CoB 1208  
 FWHM / FWTM 45.0° / 78.0°  
 Efficiency 88 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 IDEAL: 50-2100SH + 50-2100AN



Light distribution files



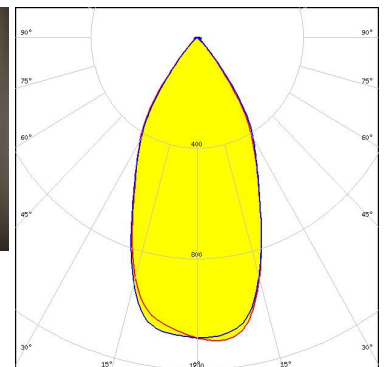
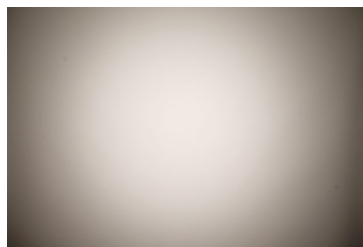
LED LUXEON CoB 1208  
 FWHM / FWTM 49.0° / 80.0°  
 Efficiency 83 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2100SH + 50-2100AN



Light distribution files



LED LUXEON CoB 1211  
 FWHM / FWTM 50.0° / 81.0°  
 Efficiency 84 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2204-CT + 50-2100AN

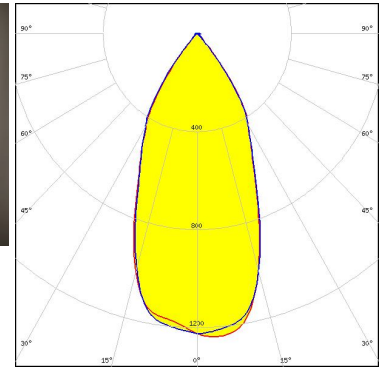
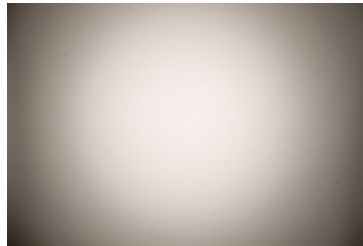


Light distribution files

### OPTICAL RESULTS (MEASURED):



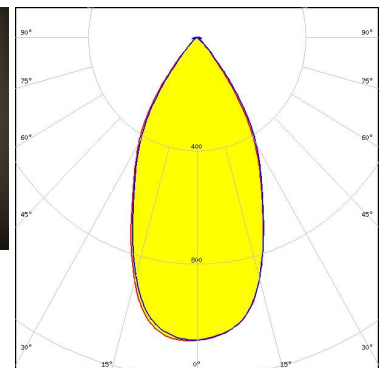
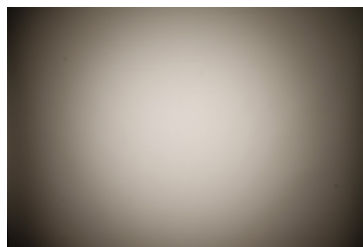
LED LUXEON CoB 1211  
FWHM / FWTM 47.0° / 79.0°  
Efficiency 88 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
IDEAL: 50-2204-CT + 50-2100AN



Light distribution files



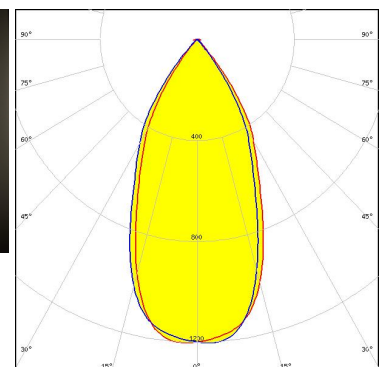
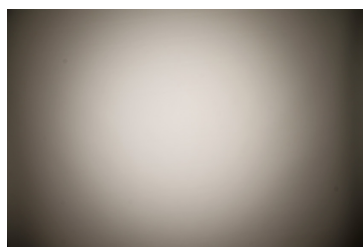
LED LUXEON CoB 1213/1216/1812  
FWHM / FWTM 51.0° / 82.0°  
Efficiency 84 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
F13671\_ANGE-RZ-LENS  
IDEAL: 50-2204-CT + 50-2100AN



Light distribution files



LED LUXEON CoB 1213/1216/1812  
FWHM / FWTM 48.0° / 80.0°  
Efficiency 88 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
IDEAL: 50-2204-CT + 50-2100AN

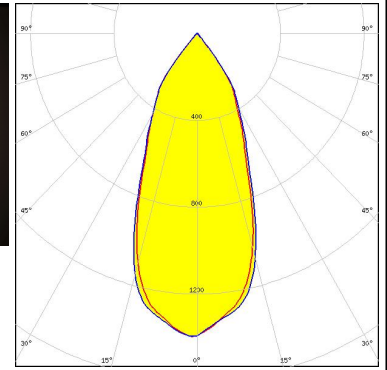


Light distribution files

### OPTICAL RESULTS (MEASURED):



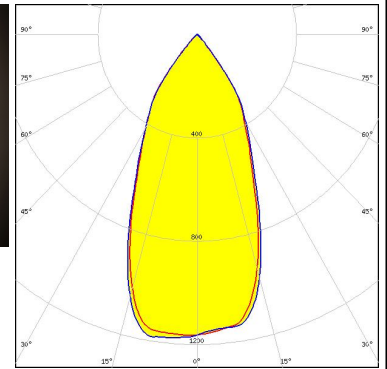
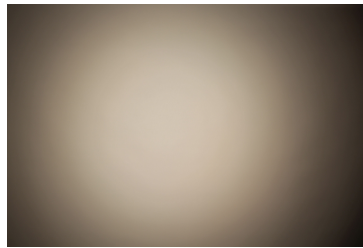
LED CDM-14 (Dim-To-Warm)  
FWHM / FWTM 43.0° / 79.0°  
Efficiency 89 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 491 Typ L2



Light distribution files



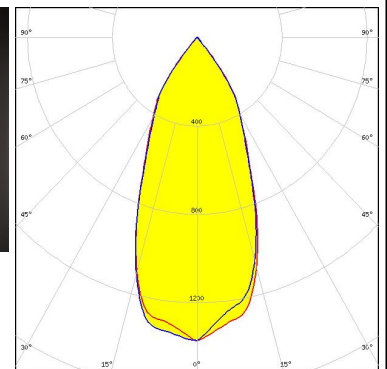
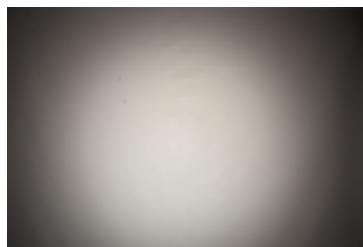
LED CDM-14 (Dim-To-Warm)  
FWHM / FWTM 47.0° / 80.0°  
Efficiency 85 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13658\_CLAMP-VERO13-18  
F13671\_ANGE-RZ-LENS  
Bender Wirth: 491 Typ L2



Light distribution files



LED CDM-18 (Dim-To-Warm)  
FWHM / FWTM 44.0° / 78.0°  
Efficiency 88 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 491 Typ L2



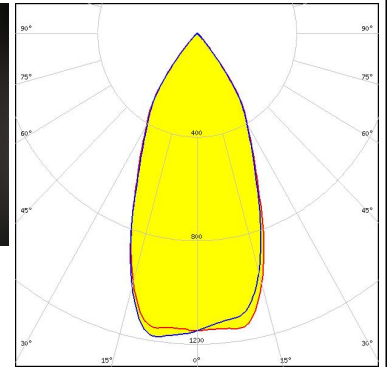
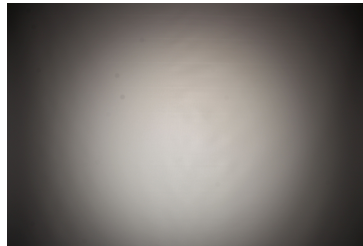
Light distribution files



#### OPTICAL RESULTS (MEASURED):



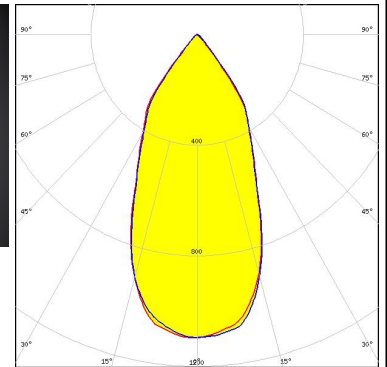
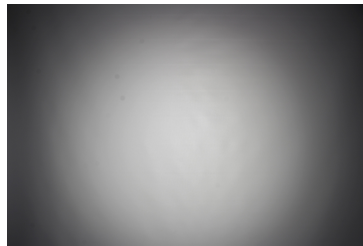
**LED** CDM-18 (Dim-To-Warm)  
**FWHM / FWTM** 48.0° / 80.0°  
**Efficiency** 85 %  
**Peak intensity** 1.2 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 491 Typ L2



Light distribution files



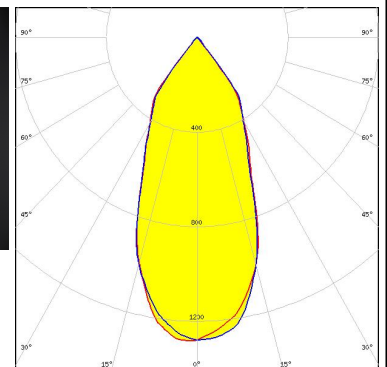
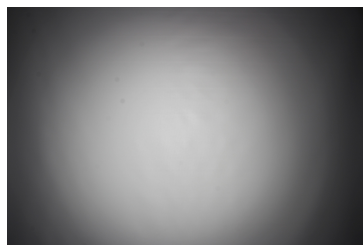
**LED** CDM-9 (Dim-To-Warm)  
**FWHM / FWTM** 48.0° / 81.0°  
**Efficiency** 82 %  
**Peak intensity** 1.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 490 Typ L1



Light distribution files



**LED** CDM-9 (Dim-To-Warm)  
**FWHM / FWTM** 44.0° / 79.0°  
**Efficiency** 87 %  
**Peak intensity** 1.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13658\_CLAMP-VERO13-18  
 Bender Wirth: 490 Typ L1



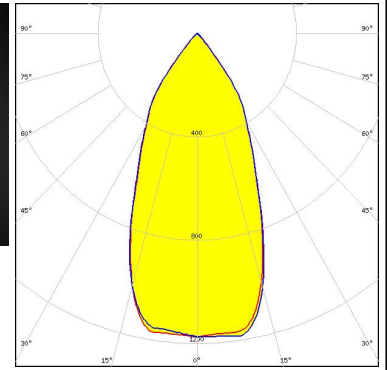
Light distribution files



### OPTICAL RESULTS (MEASURED):



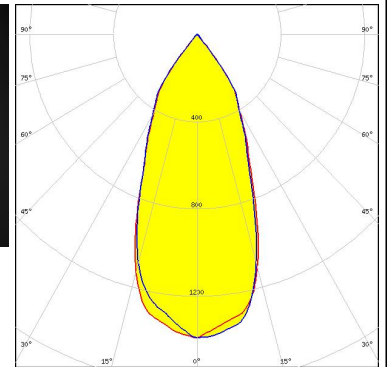
**LED** CTM-14 (Tunable White)  
**FWHM / FWTM** 48.0° / 80.0°  
**Efficiency** 85 %  
**Peak intensity** 1.2 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 442 Typ L3



Light distribution files



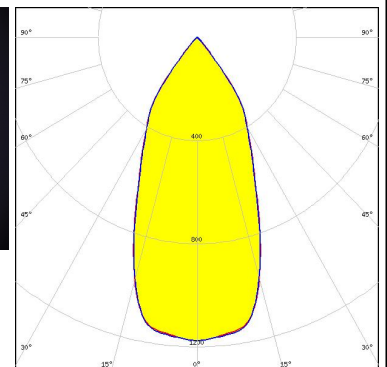
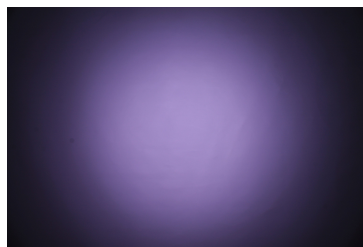
**LED** CTM-14 (Tunable White)  
**FWHM / FWTM** 44.0° / 78.0°  
**Efficiency** 89 %  
**Peak intensity** 1.4 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 442 Typ L3



Light distribution files



**LED** CTM-14 RGBW  
**FWHM / FWTM** 46.0° / 80.0°  
**Efficiency** 85 %  
**Peak intensity** 1.2 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** RGBW  
**Required components:**  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 500 Typ L3-1

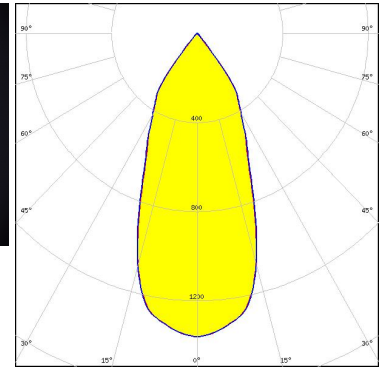
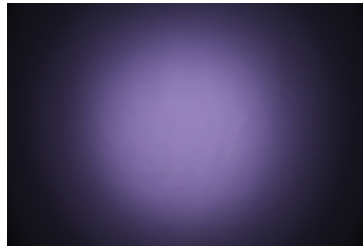


Light distribution files

#### OPTICAL RESULTS (MEASURED):



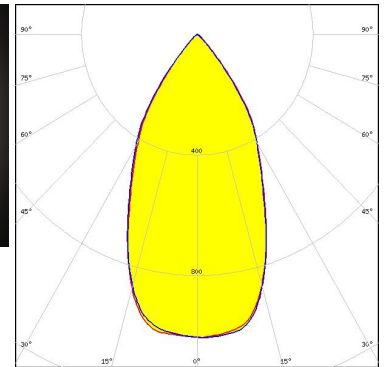
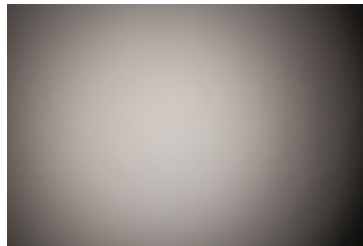
LED CTM-14 RGBW  
 FWHM / FWTM 43.0° / 78.0°  
 Efficiency 88 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type RGBW  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 500 Typ L3-1



Light distribution files



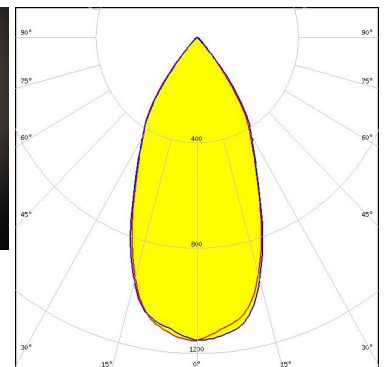
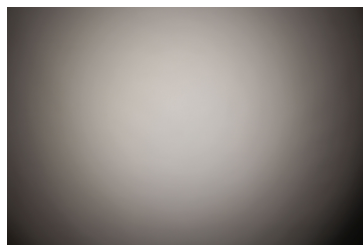
LED CTM-22 (Tunable White)  
 FWHM / FWTM 52.0° / 83.0°  
 Efficiency 82 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13584\_CLAMP-VERO29  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 494 Typ L3



Light distribution files



LED CTM-22 (Tunable White)  
 FWHM / FWTM 49.0° / 81.0°  
 Efficiency 86 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 C13584\_CLAMP-VERO29  
 Bender Wirth: 494 Typ L3

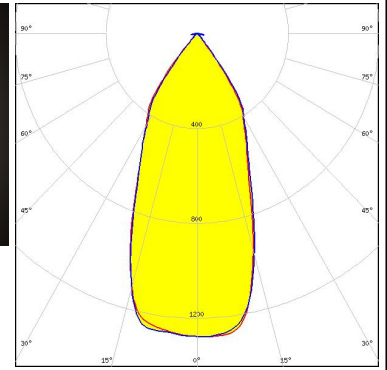


Light distribution files

### OPTICAL RESULTS (MEASURED):



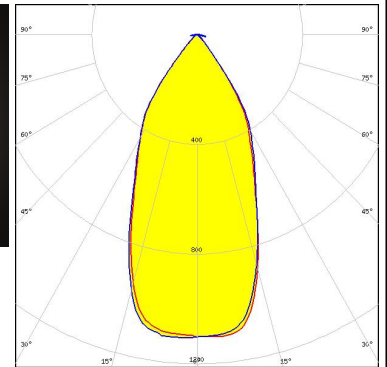
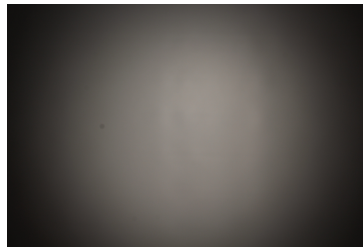
**LED** COB J-Type  
**FWHM / FWTM** 44.0° / 78.0°  
**Efficiency** 89 %  
**Peak intensity** 1.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 IDEAL: 50-2103NC + 50-2100AN



Light distribution files



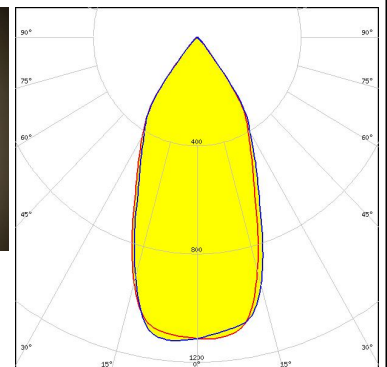
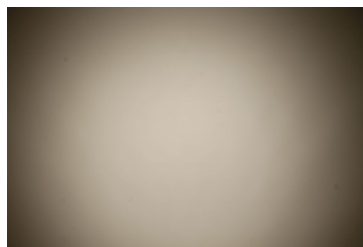
**LED** COB J-Type  
**FWHM / FWTM** 48.0° / 81.0°  
**Efficiency** 84 %  
**Peak intensity** 1.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2103NC + 50-2100AN



Light distribution files



**LED** COB L-Type (LES 11)  
**FWHM / FWTM** 47.0° / 80.0°  
**Efficiency** 83 %  
**Peak intensity** 1.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 F13671\_ANGE-RZ-LENS  
 IDEAL: 50-2100NC + 50-2100AN

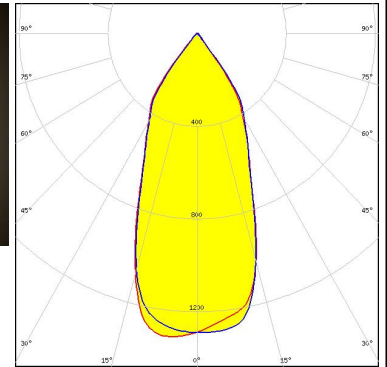
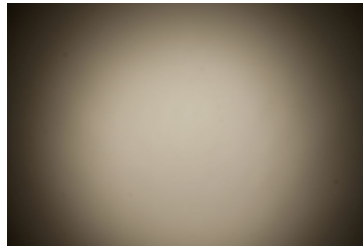


Light distribution files

### OPTICAL RESULTS (MEASURED):



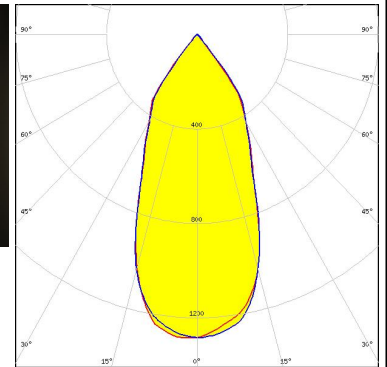
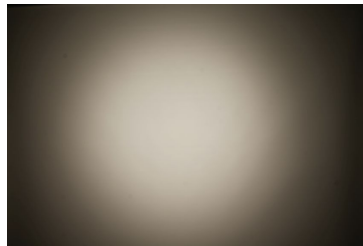
**LED** COB L-Type (LES 11)  
**FWHM / FWTM** 44.0° / 78.0°  
**Efficiency** 87 %  
**Peak intensity** 1.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 IDEAL: 50-2100NC + 50-2100AN



Light distribution files



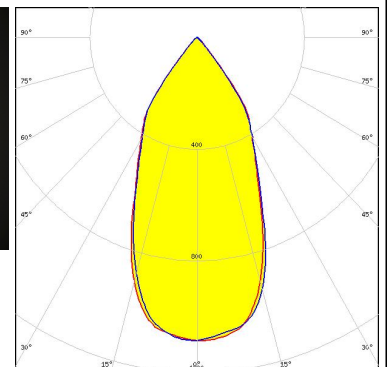
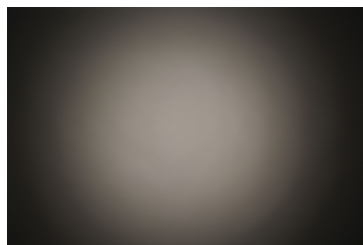
**LED** COB L-Type (LES 11)  
**FWHM / FWTM** 45.0° / 79.0°  
**Efficiency** 88 %  
**Peak intensity** 1.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files



**LED** NVCWJ024Z-V1MT: COB J-Type Tunable White  
**FWHM / FWTM** 49.0° / 81.0°  
**Efficiency** 83 %  
**Peak intensity** 1.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 C13658\_CLAMP-VERO13-18  
 F13671\_ANGE-RZ-LENS  
 Bender Wirth: 498 Typ L2

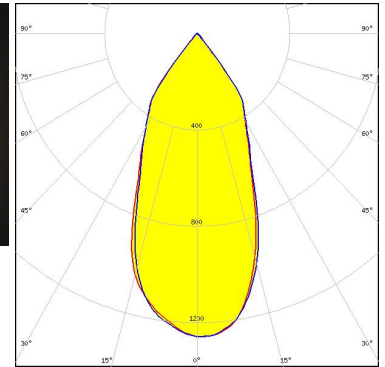


Light distribution files

### OPTICAL RESULTS (MEASURED):



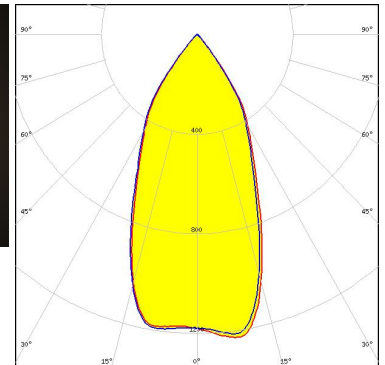
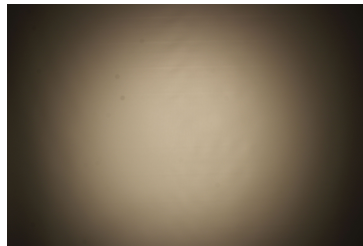
LED NVCWJ024Z-V1MT: COB J-Type Tunable White  
FWHM / FWTM 46.0° / 80.0°  
Efficiency 88 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13658\_CLAMP-VERO13-18  
Bender Wirth: 498 Typ L2



Light distribution files



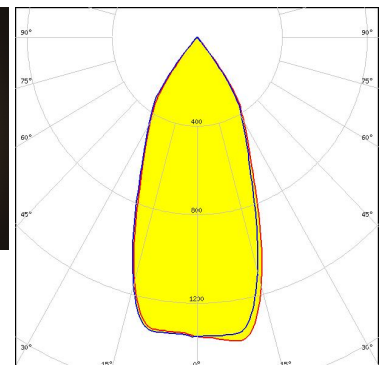
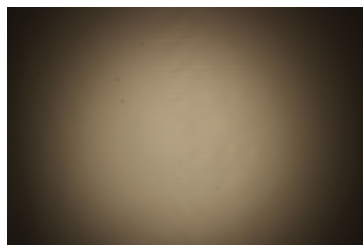
LED PrevaLED Core G7 L15 H1  
FWHM / FWTM 47.0° / 80.0°  
Efficiency 88 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C16685\_CLAMP-PRV-A  
F13671\_ANGE-RZ-LENS



Light distribution files



LED PrevaLED Core G7 L15 H1  
FWHM / FWTM 45.0° / 78.0°  
Efficiency 91 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C16685\_CLAMP-PRV-A



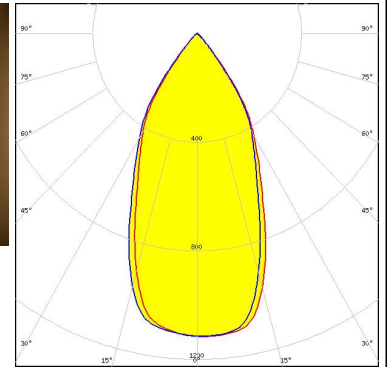
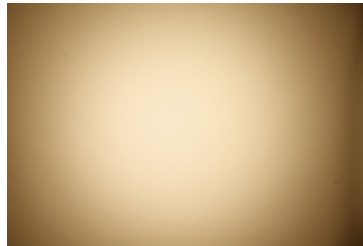
Light distribution files



#### OPTICAL RESULTS (MEASURED):

### OSRAM

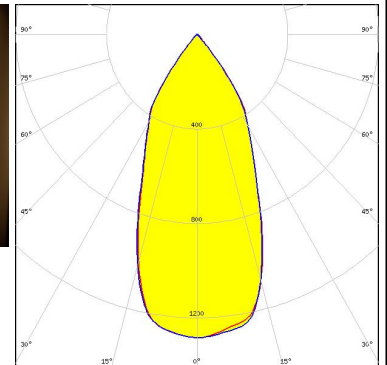
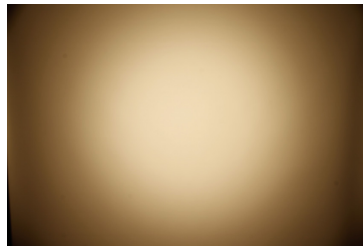
LED PrevaLED Core Z4 LES19  
 FWHM / FWTM 49.0° / 81.0°  
 Efficiency 84 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE Connectivity: 2213130-2



Light distribution files

### OSRAM

LED PrevaLED Core Z4 LES19  
 FWHM / FWTM 46.0° / 79.0°  
 Efficiency 88 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

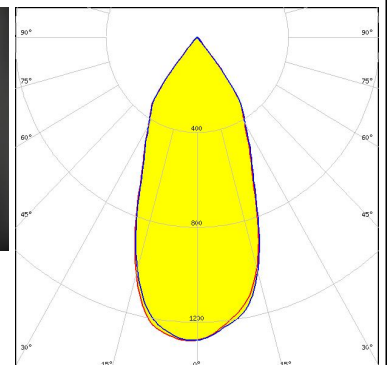
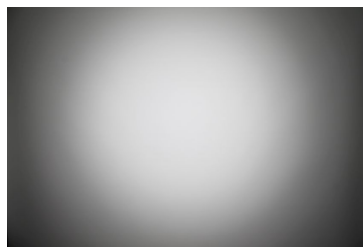


Light distribution files

### OSRAM

Opto Semiconductors

LED Soleriq S13 19x19  
 FWHM / FWTM 45.0° / 79.0°  
 Efficiency 87 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

#### OPTICAL RESULTS (MEASURED):

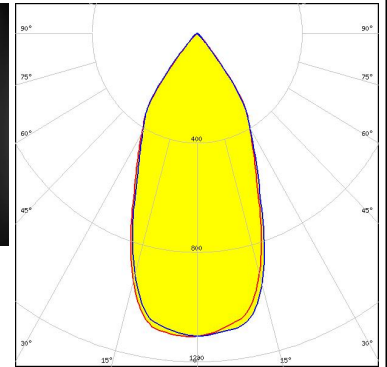
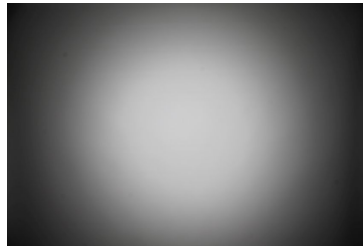
**OSRAM**  
Opto Semiconductors

LED Soleriq S13 19x19  
FWHM / FWTM 49.0° / 81.0°  
Efficiency 84 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

F13671\_ANGE-RZ-LENS

TE Connectivity: 2213254-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

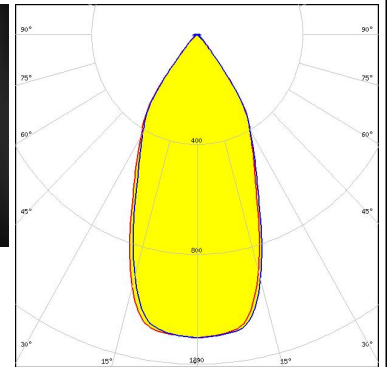
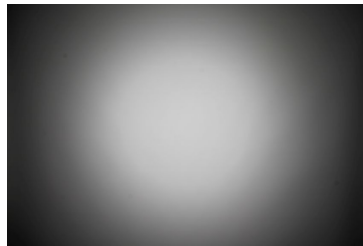
**OSRAM**  
Opto Semiconductors

LED Soleriq S13 19x19  
FWHM / FWTM 48.0° / 80.0°  
Efficiency 83 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

F13671\_ANGE-RZ-LENS

IDEAL: 50-2204-CT + 50-2100AN



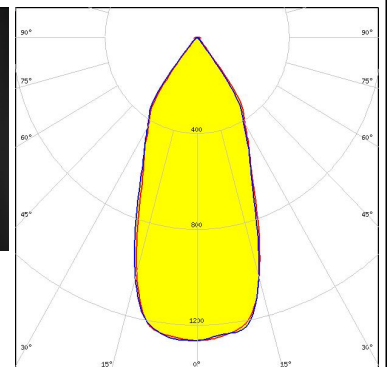
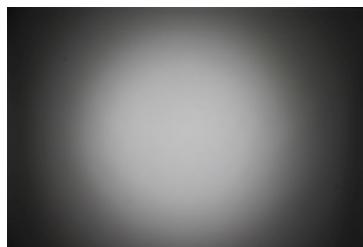
Light distribution files

**OSRAM**  
Opto Semiconductors

LED Soleriq S13 19x19  
FWHM / FWTM 45.0° / 78.0°  
Efficiency 87 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White

Required components:

IDEAL: 50-2103CT + 50-2100AN



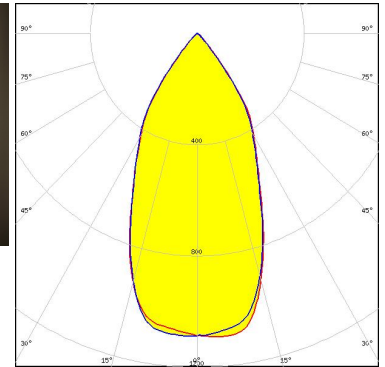
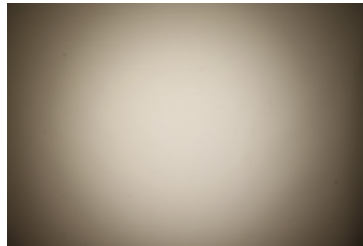
Light distribution files



#### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

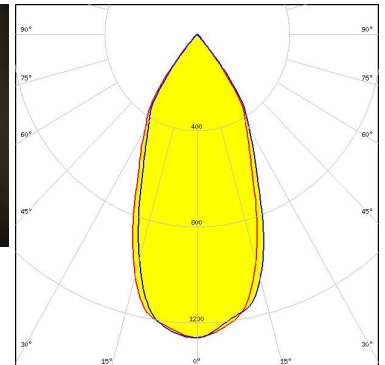
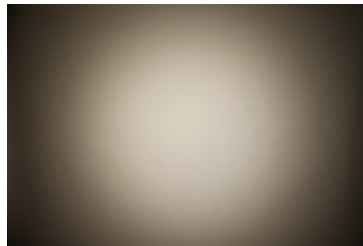
LED Soleriq S19  
 FWHM / FWTM 50.0° / 82.0°  
 Efficiency 84 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 TE Connectivity: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

**OSRAM**  
Opto Semiconductors

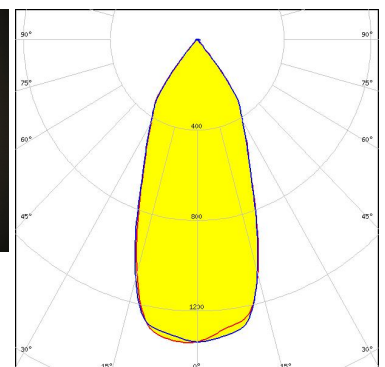
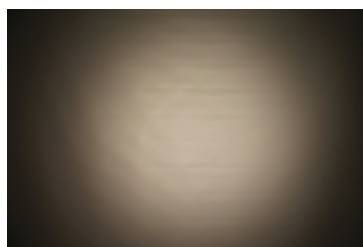
LED Soleriq S19  
 FWHM / FWTM 46.0° / 80.0°  
 Efficiency 88 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 TE Connectivity: 2213407-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

**PHILIPS**

LED Fortimo SLM L13 CoB  
 FWHM / FWTM 44.0° / 79.0°  
 Efficiency 90 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

#### OPTICAL RESULTS (MEASURED):

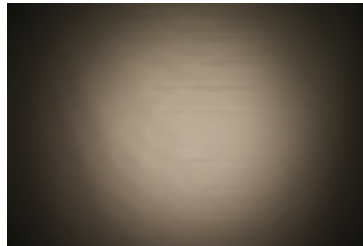
### PHILIPS

LED Fortimo SLM L13 CoB  
 FWHM / FWTM 47.0° / 81.0°  
 Efficiency 84 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

F13671\_ANGE-RZ-LENS

TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



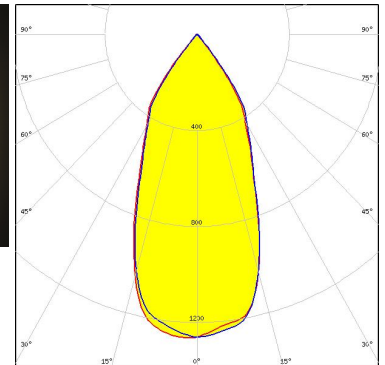
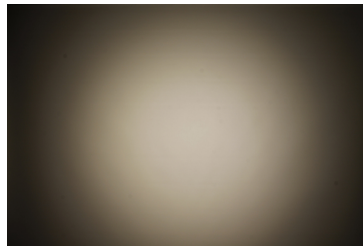
Light distribution files

### PHILIPS

LED Fortimo SLM L15 + SLM holder  
 FWHM / FWTM 46.0° / 79.0°  
 Efficiency 88 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

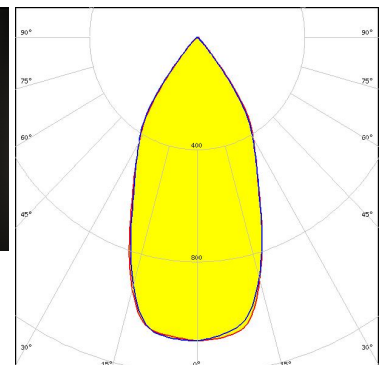
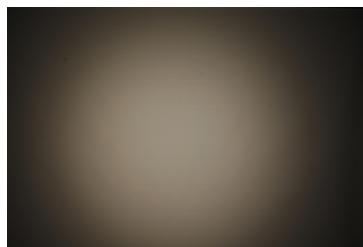
### PHILIPS

LED Fortimo SLM L15 + SLM holder  
 FWHM / FWTM 50.0° / 82.0°  
 Efficiency 83 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White

Required components:

F13671\_ANGE-RZ-LENS

TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1

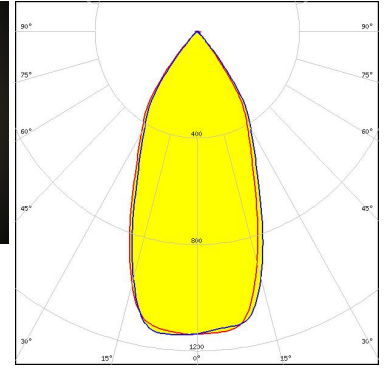


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### PHILIPS

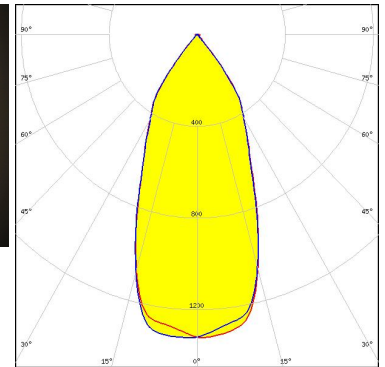
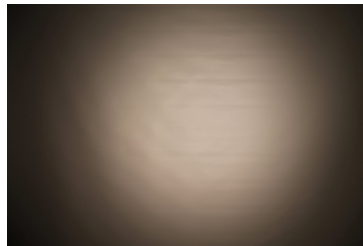
LED Fortimo SLM L15 CoB  
FWHM / FWTM 48.0° / 81.0°  
Efficiency 84 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
F13671\_ANGE-RZ-LENS  
TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

#### PHILIPS

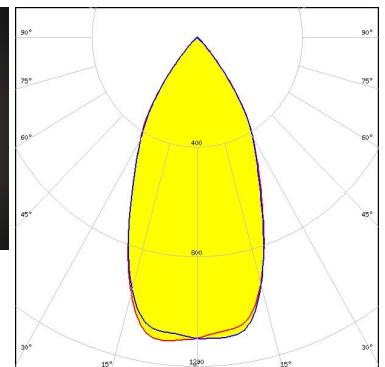
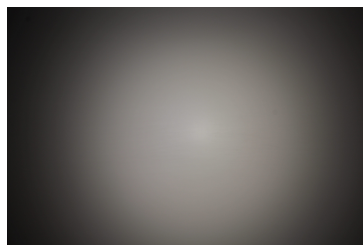
LED Fortimo SLM L15 CoB  
FWHM / FWTM 45.0° / 79.0°  
Efficiency 89 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
TE Connectivity: 2213130-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

#### SAMSUNG

LED LC035T (Tunable white)  
FWHM / FWTM 51.0° / 82.0°  
Efficiency 85 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type Tunable White  
Required components:  
C13584\_CLAMP-VERO29  
F13671\_ANGE-RZ-LENS  
Bender Wirth: 502 Typ L3

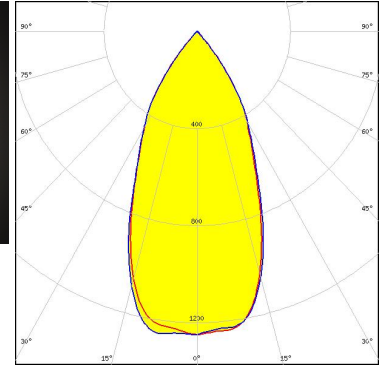


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### SAMSUNG

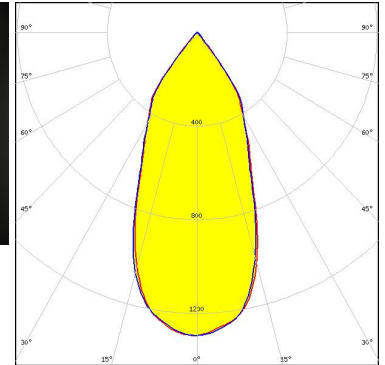
LED LC035T (Tunable white)  
FWHM / FWTM 48.0° / 81.0°  
Efficiency 90 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type Tunable White  
Required components:  
C13584\_CLAMP-VERO29  
Bender Wirth: 502 Typ L3



Light distribution files

#### SAMSUNG

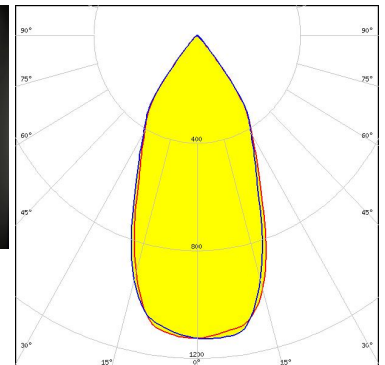
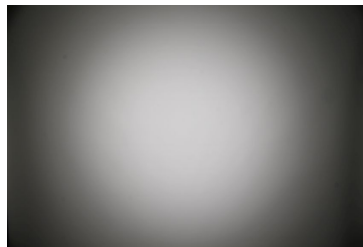
LED LC040C  
FWHM / FWTM 45.0° / 79.0°  
Efficiency 88 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

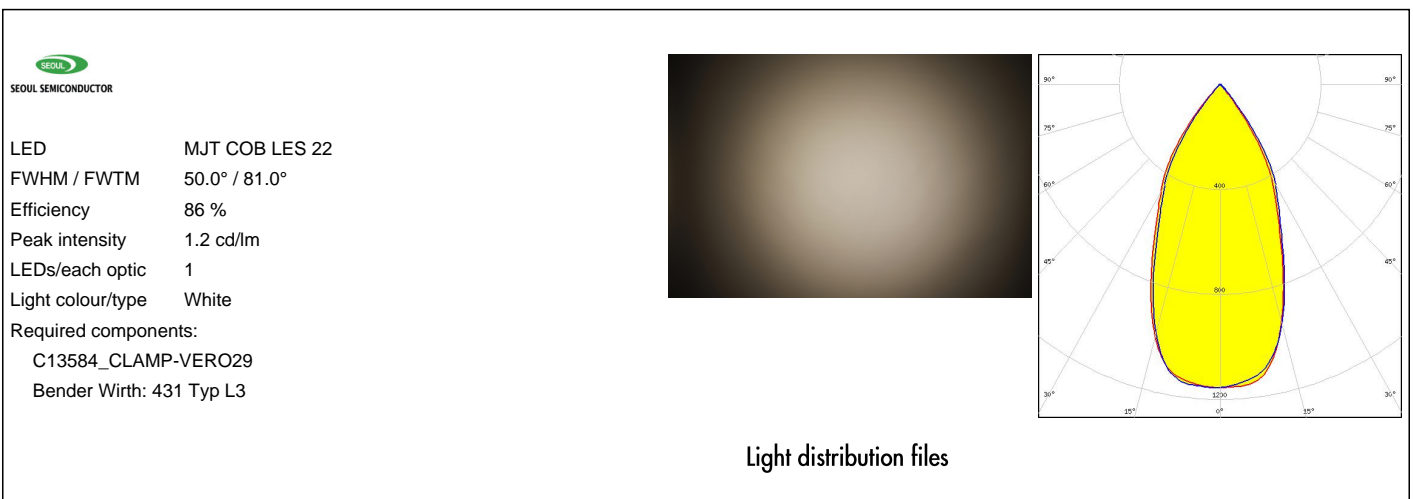
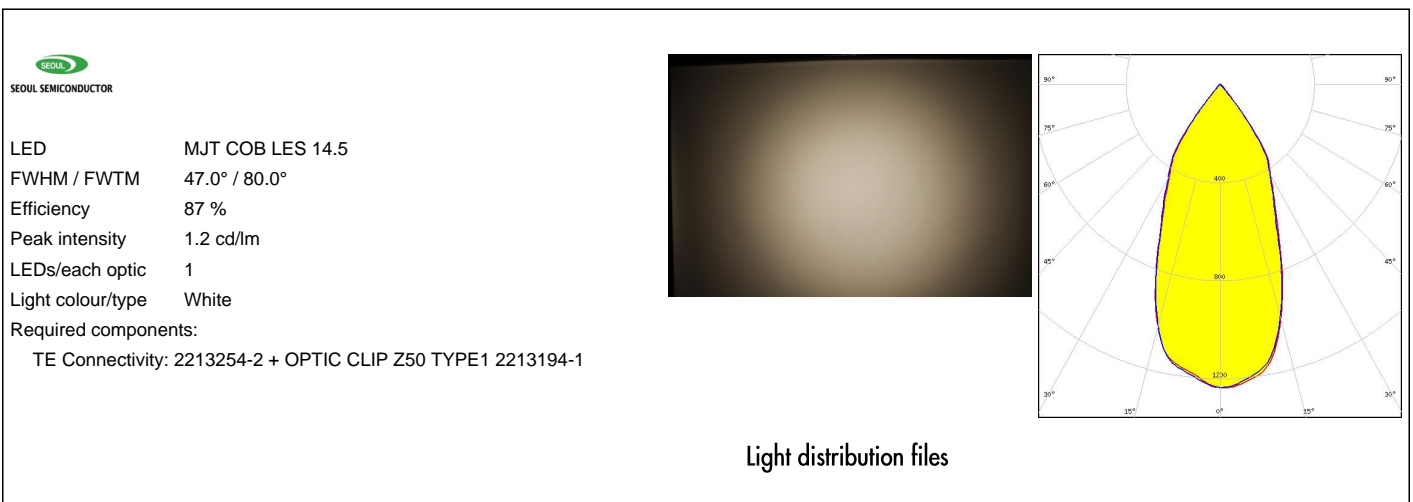
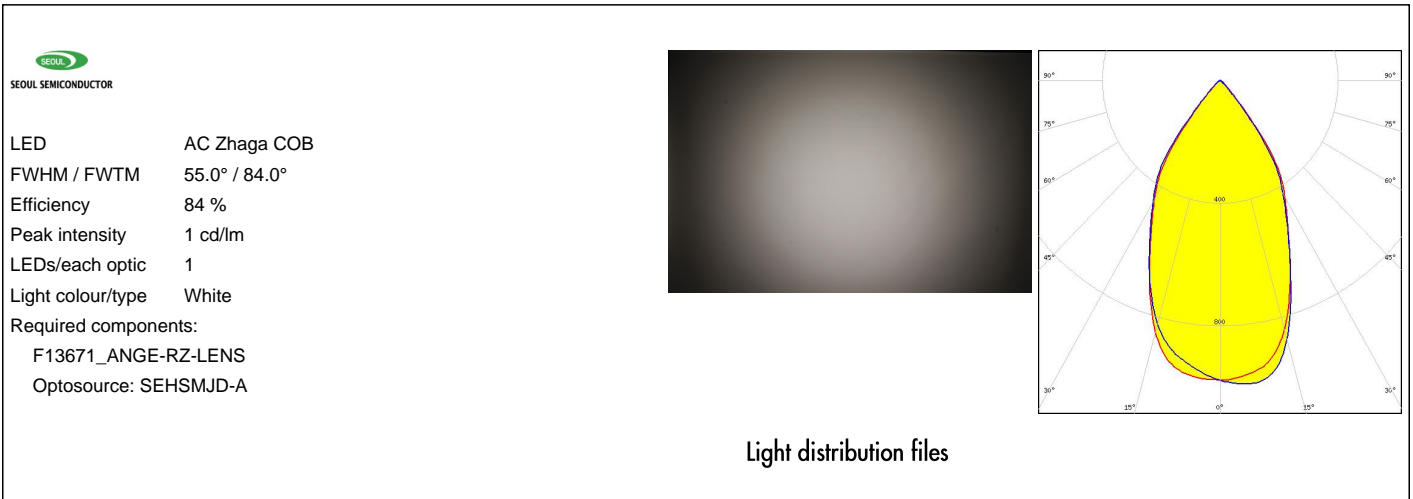
#### SAMSUNG

LED LC040C  
FWHM / FWTM 48.0° / 81.0°  
Efficiency 84 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
F13671\_ANGE-RZ-LENS  
TE Connectivity: 2213382-2 + OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

#### OPTICAL RESULTS (MEASURED):

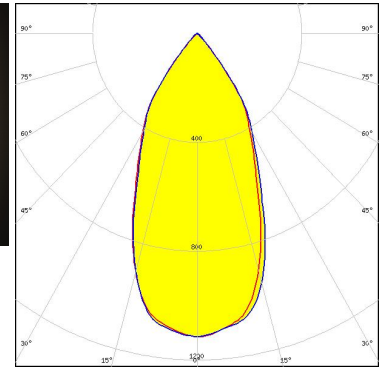
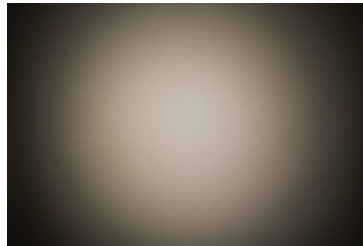




### OPTICAL RESULTS (MEASURED):



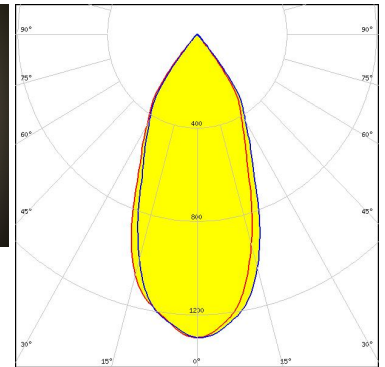
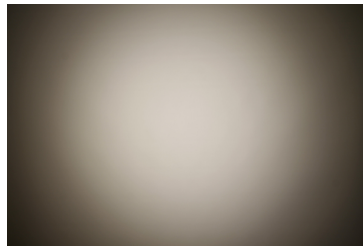
LED WU-M-484  
FWHM / FWMTM 49.0° / 81.0°  
Efficiency 83 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
F13671\_ANGE-RZ-LENS  
TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files



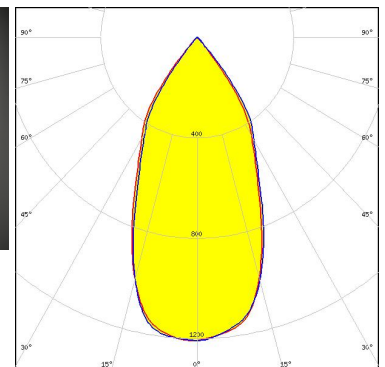
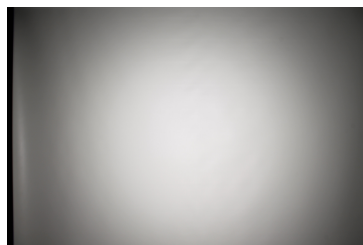
LED WU-M-484  
FWHM / FWMTM 45.0° / 79.0°  
Efficiency 87 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
TE Connectivity: OPTIC CLIP Z50 TYPE1 2213194-1



Light distribution files

### XICATO

LED XTM - 19mm LES  
FWHM / FWMTM 49.0° / 81.0°  
Efficiency 89 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C16491\_XTM-ADAPTER-50-A



Light distribution files

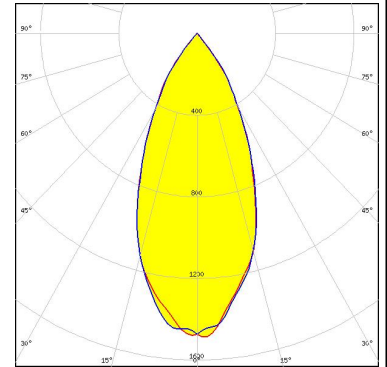


### OPTICAL RESULTS (SIMULATED):

bridgelux

LED V13 Gen7  
FWHM / FWTM 45.0° / 77.0°  
Efficiency 90 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C13658\_CLAMP-VERO13-18

Bender Wirth: 477 Typ L1

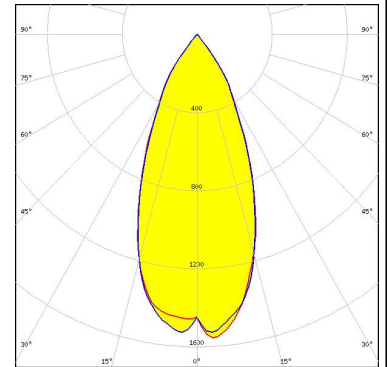


Light distribution files

bridgelux

LED V13 Gen7  
FWHM / FWTM 44.0° / 76.0°  
Efficiency 90 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

IDEAL: 50-2103CT + 50-2100AN

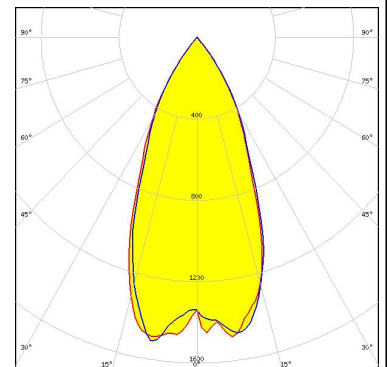


Light distribution files

bridgelux

LED V22 Gen7  
FWHM / FWTM 45.0° / 75.0°  
Efficiency 94 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

IDEAL: 50-2204-CT + 50-2100AN



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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