

## BARBARA-W-PF

~35° wide beam

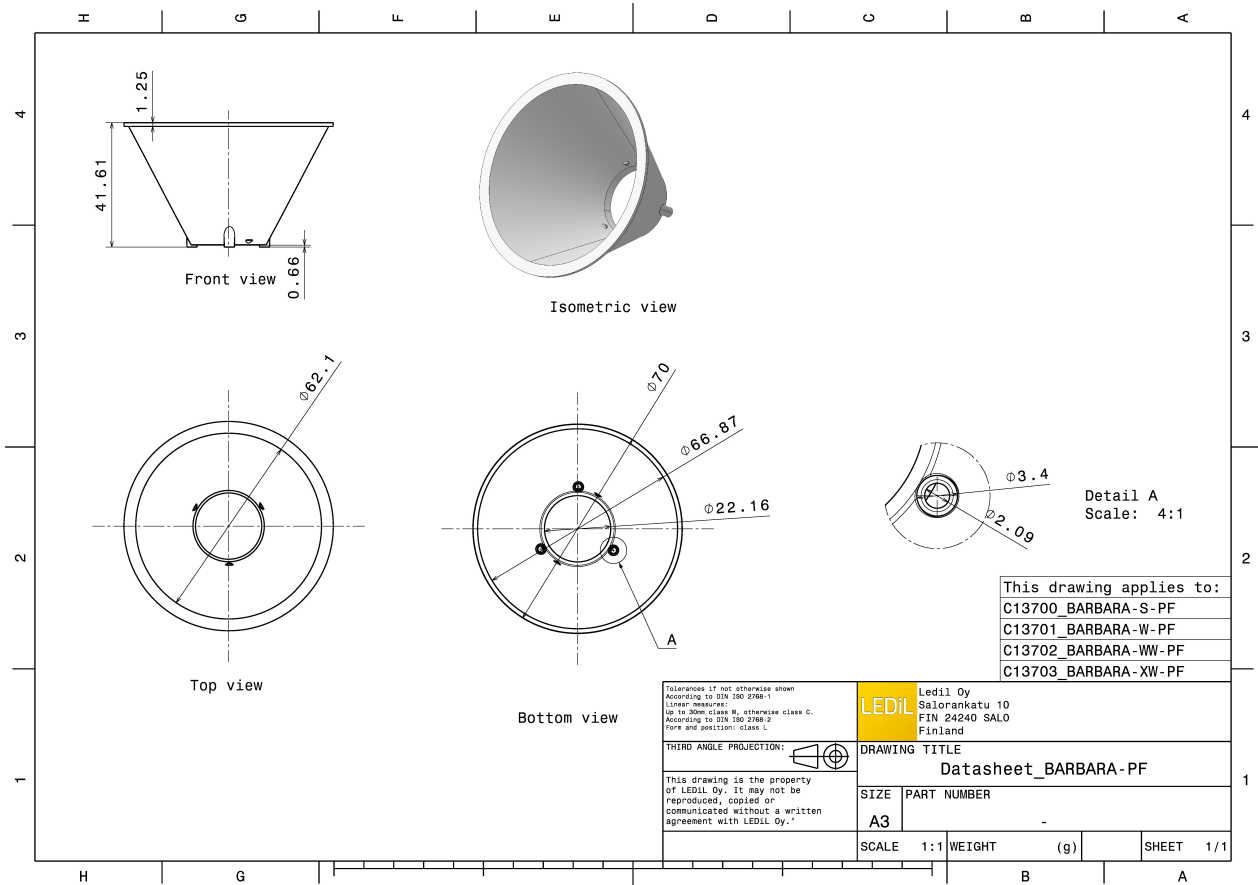
### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 70.0 mm
Height	41.7 mm
Fastening	socket
Colour	metal
Box size	480 x 280 x 300 mm
Box weight	7.7 kg
Quantity in Box	288 pcs
ROHS compliant	yes ⓘ



### MATERIAL SPECIFICATIONS:

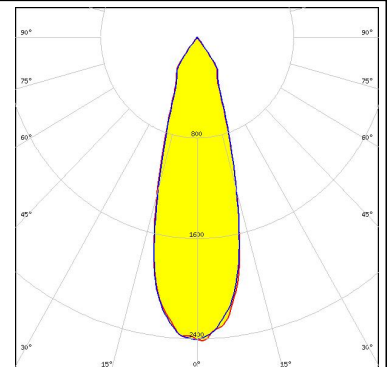
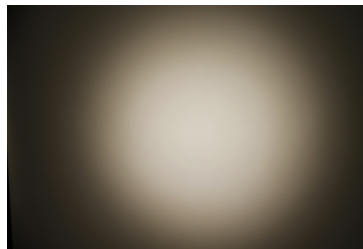
Component	Type	Material	Colour	Coating
BARBARA-W-PF	Reflector	PC	metal	HMDS



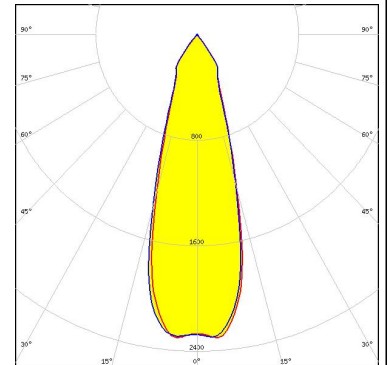
#### PHOTOMETRIC DATA (MEASURED):



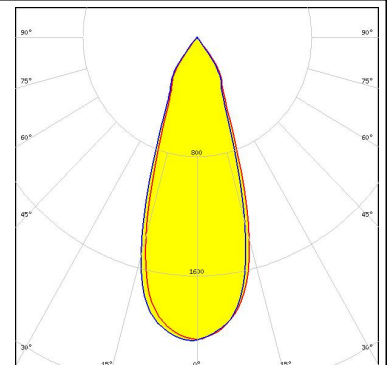
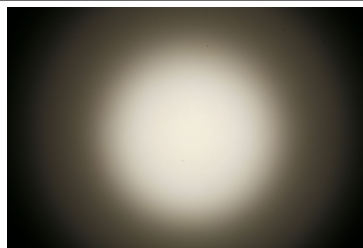
LED V10 Gen7  
 FWHM 31.0°  
 Efficiency 90 %  
 Peak intensity 2.400 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 434 Typ L1



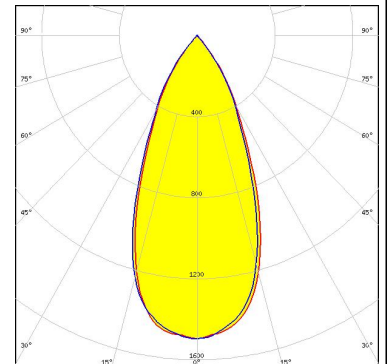
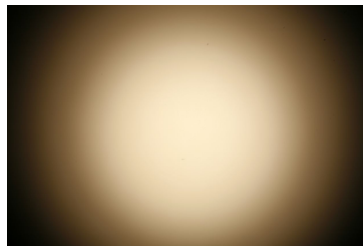
LED VERO10  
 FWHM 31.0°  
 Efficiency 91 %  
 Peak intensity 2.300 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13708\_PF-SOCKET-VERO10



LED VERO13  
 FWHM 36.0°  
 Efficiency 93 %  
 Peak intensity 2.000 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18



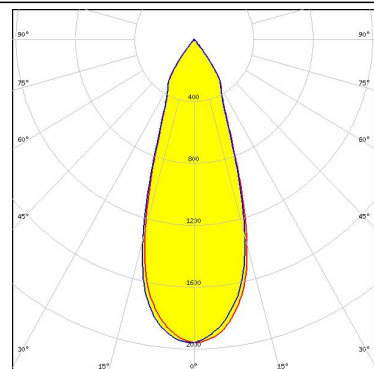
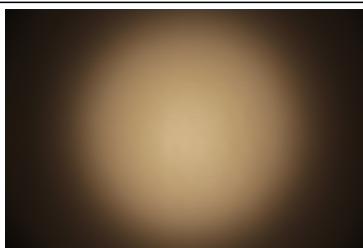
LED VERO18  
 FWHM 45.0°  
 Efficiency 92 %  
 Peak intensity 1.500 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18



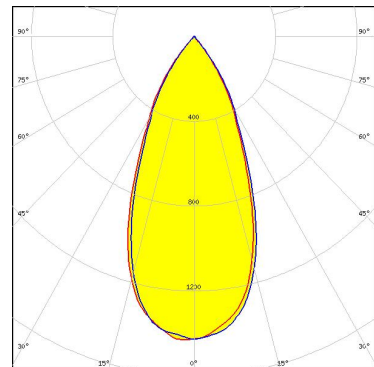
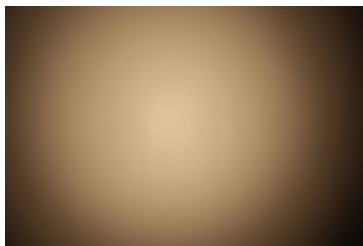
#### PHOTOMETRIC DATA (MEASURED):



LED Xenio Point 13mm  
 FWHM 36.0°  
 Efficiency 91 %  
 Peak intensity 1.960 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18

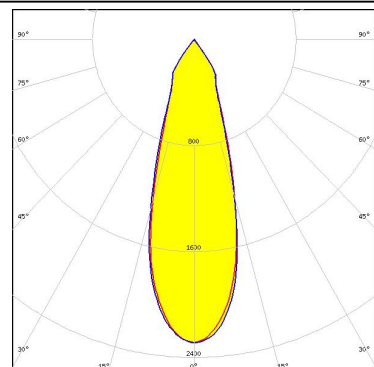
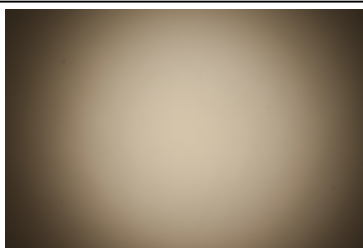


LED Xenio Point 18mm  
 FWHM 46.0°  
 Efficiency 89 %  
 Peak intensity 1.430 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18



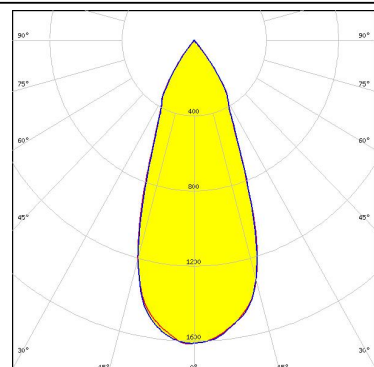
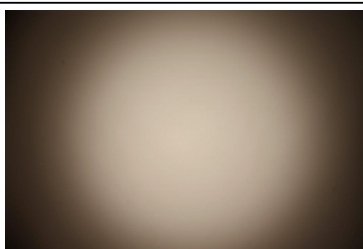
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
 FWHM 32.0°  
 Efficiency 88 %  
 Peak intensity 2.300 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 434 Typ L1



#### CITIZEN

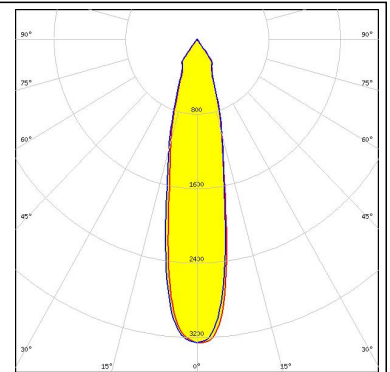
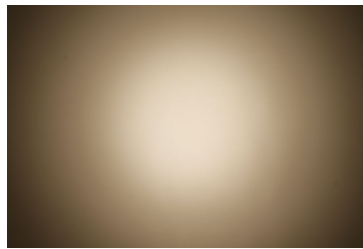
LED CLL03x/CLU03x  
 FWHM 41.0°  
 Efficiency 87 %  
 Peak intensity 1.600 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 433 Typ L1



#### PHOTOMETRIC DATA (MEASURED):

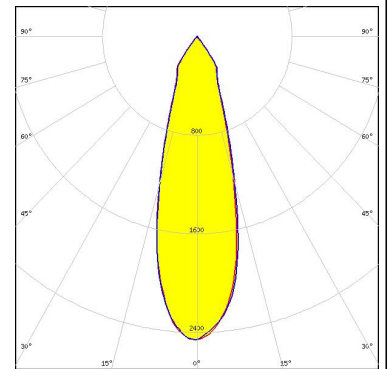
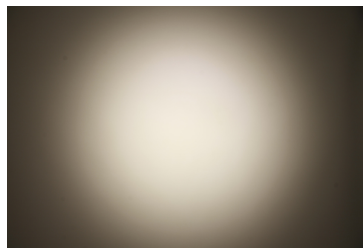
#### CITIZEN

LED CLU700/701  
 FWHM 22.0°  
 Efficiency 89 %  
 Peak intensity 3.300 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 434 Typ L1



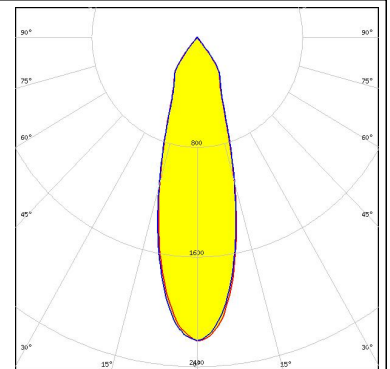
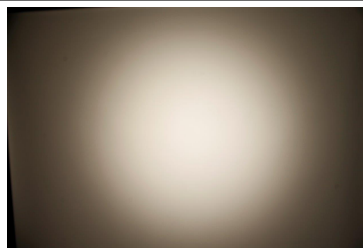
#### CREE

LED CXA/B 15xx  
 FWHM 30.0°  
 Efficiency 88 %  
 Peak intensity 2.500 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 441 Typ L1



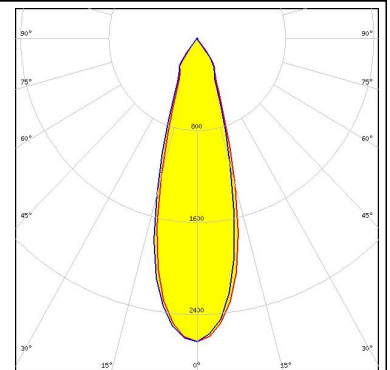
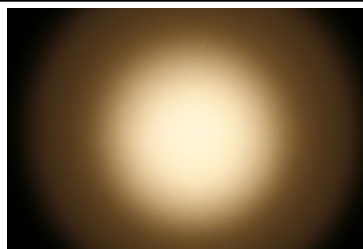
#### CREE

LED CXA/B 15xx  
 FWHM 30.0°  
 Efficiency 85 %  
 Peak intensity 2.200 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13083\_PF-SOCKET  
 C14658\_BARBARA-RZ-LENS



#### CREE

LED CXA/B 15xx  
 FWHM 30.0°  
 Efficiency 91 %  
 Peak intensity 2.640 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14115\_PF-SOCKET-CXA15-18

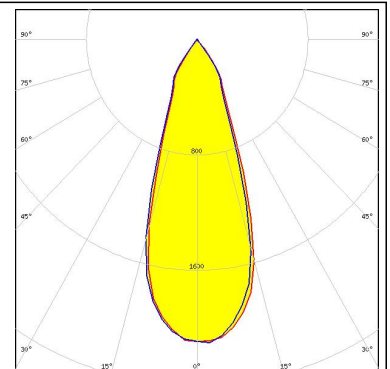




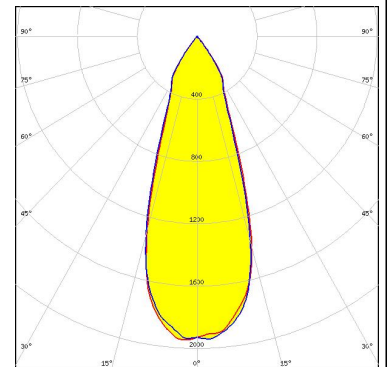
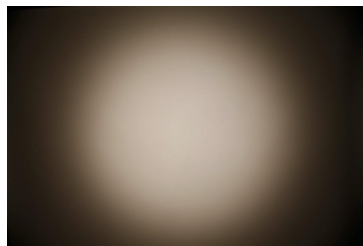
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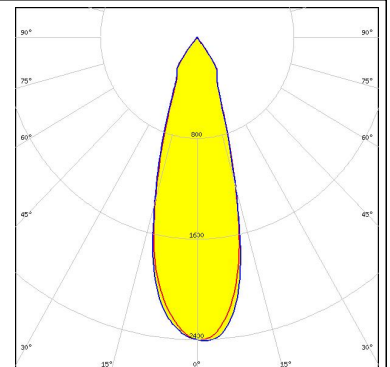
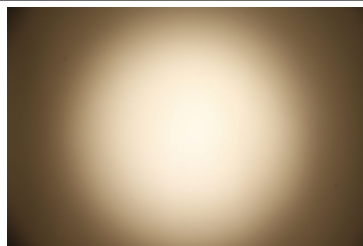
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 36.0°  
 Efficiency 94 %  
 Peak intensity 2.100 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14115\_PF-SOCKET-CXA15-18



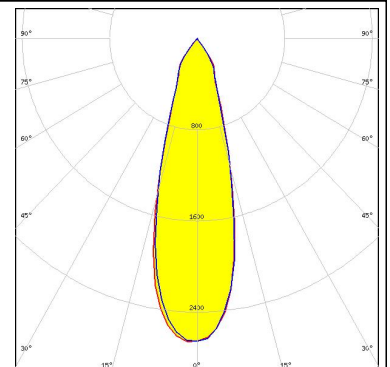
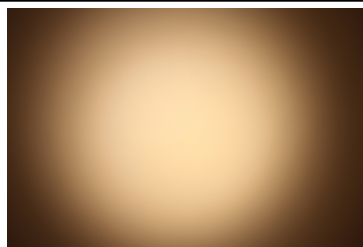
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 36.0°  
 Efficiency 88 %  
 Peak intensity 2.000 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 437 Typ L1



LED LUXEON CoB 1202/1203  
 FWHM 31.0°  
 Efficiency 90 %  
 Peak intensity 2.400 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 438 Typ L1



LED LUXEON CoB 1202/1203  
 FWHM 30.0°  
 Efficiency 91 %  
 Peak intensity 2.700 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14037\_PF-NSX-SOCKET



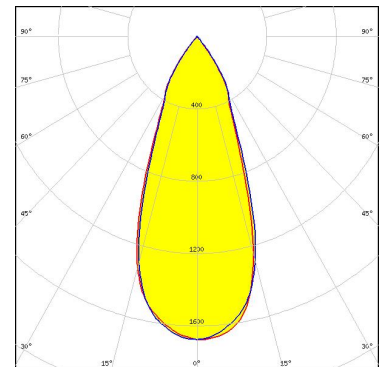
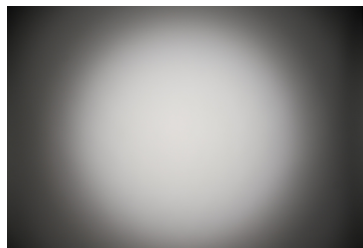
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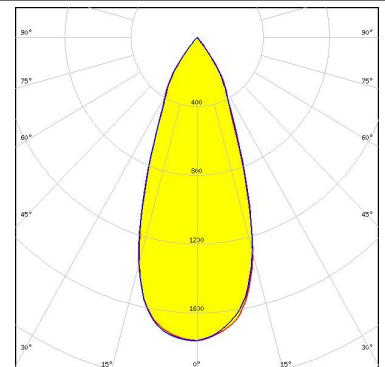
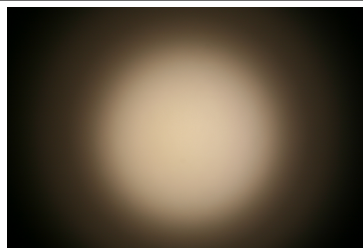
LED LUXEON CoB 1202s  
 FWHM 20.0°  
 Efficiency 92 %  
 Peak intensity 4.100 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13761\_PF-SOCKET-CXA15



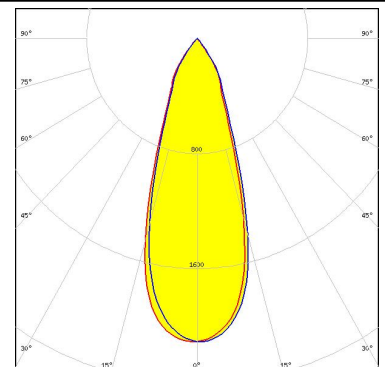
LED COB J-Type  
 FWHM 40.0°  
 Efficiency 88 %  
 Peak intensity 1.700 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 463 Typ L2



LED COB J-Type  
 FWHM 41.0°  
 Efficiency 92 %  
 Peak intensity 1.760 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14037\_PF-NSX-SOCKET



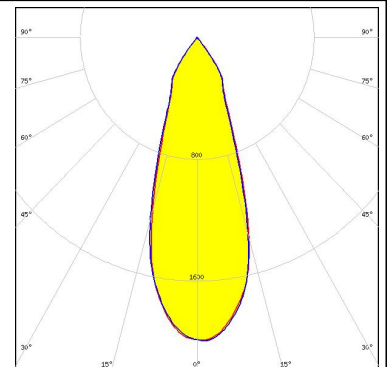
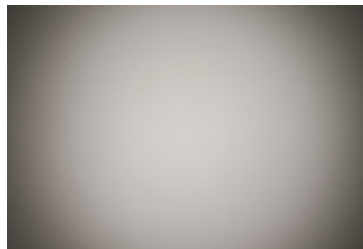
LED COB L-Type (LES 11)  
 FWHM 35.0°  
 Efficiency 91 %  
 Peak intensity 2.100 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14037\_PF-NSX-SOCKET



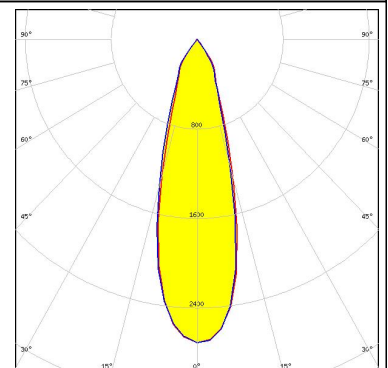
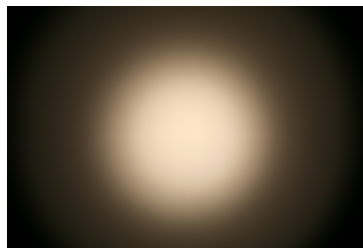
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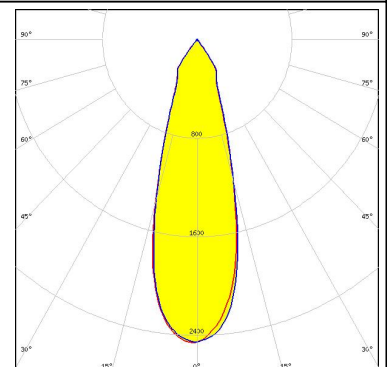
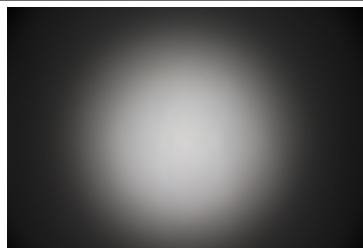
LED COB L-Type (LES 11)  
 FWHM 35.0°  
 Efficiency 88 %  
 Peak intensity 2.000 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 438 Typ L1



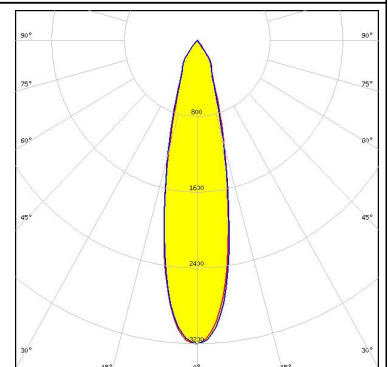
LED COB L-Type (LES 9)  
 FWHM 30.0°  
 Efficiency 92 %  
 Peak intensity 2.710 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14037\_PF-NSX-SOCKET



LED COB L-Type (LES 9)  
 FWHM 30.0°  
 Efficiency 91 %  
 Peak intensity 2.500 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 438 Typ L1



LED NSCxL036A  
 FWHM 25.0°  
 Efficiency 90 %  
 Peak intensity 3.200 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14037\_PF-NSX-SOCKET





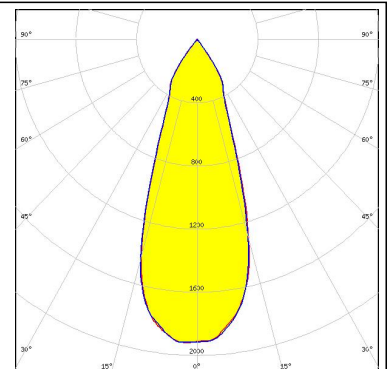
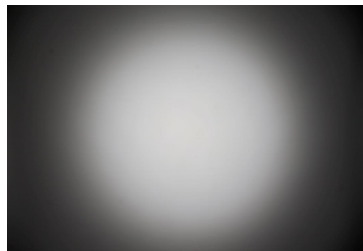
#### PHOTOMETRIC DATA (MEASURED):

##### OSRAM

Opto Semiconductors

LED Soleriq S13  
FWHM 37.0°  
Efficiency 89 %  
Peak intensity 1.900 cd/lm  
LEDs/each optic 1  
Light colour White

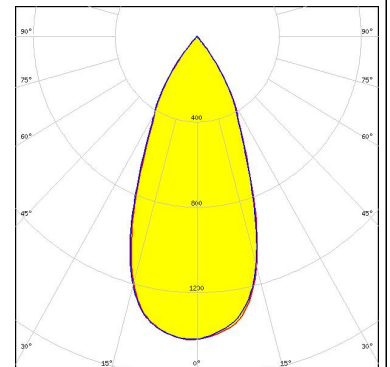
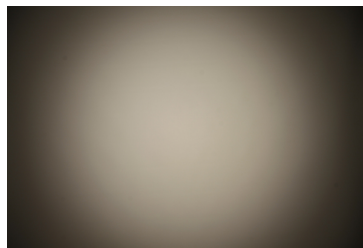
Required components:  
C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 437 Typ L1



##### SAMSUNG

LED LC026B / 033B / 040B  
FWHM 45.0°  
Efficiency 87 %  
Peak intensity 1.400 cd/lm  
LEDs/each optic 1  
Light colour White

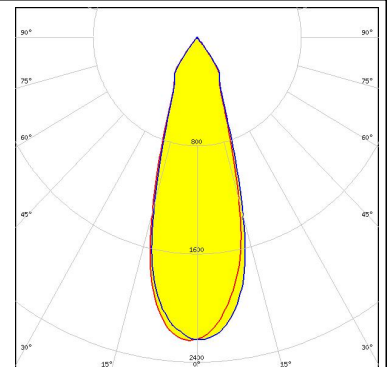
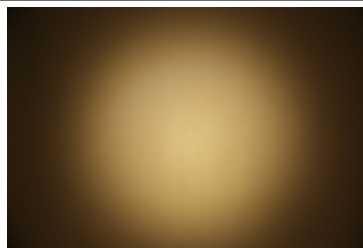
Required components:  
C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 450 Typ L2



##### TRIDONIC

LED SLE G5 LES11  
FWHM 33.0°  
Efficiency 90 %  
Peak intensity 2.200 cd/lm  
LEDs/each optic 1  
Light colour White

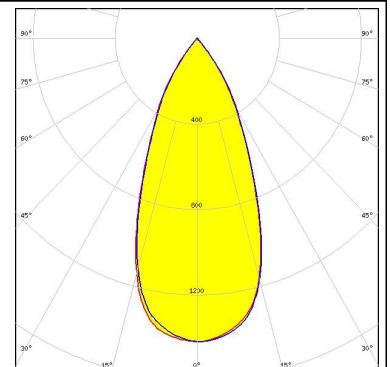
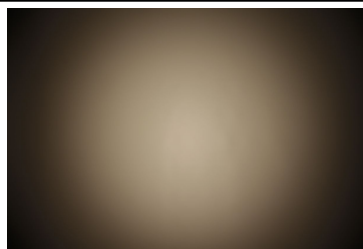
Required components:  
C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 434 Typ L1



##### XICATO

LED XTM - 19mm LES  
FWHM 45.0°  
Efficiency 86 %  
Peak intensity 1.400 cd/lm  
LEDs/each optic 1  
Light colour White

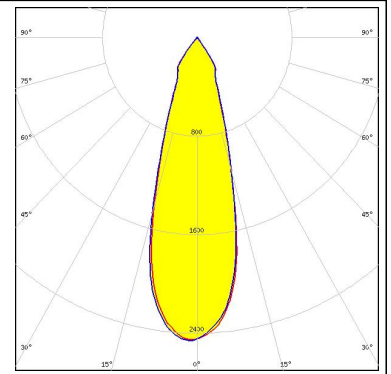
Required components:  
C14636\_XTM-PF-ADAPTER



### PHOTOMETRIC DATA (MEASURED):

#### XICATO

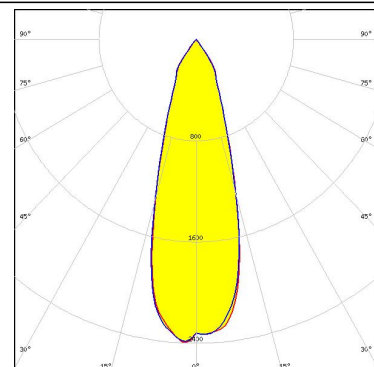
LED XTM - 9mm LES  
FWHM 30.0°  
Efficiency 89 %  
Peak intensity 2.500 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C14636\_XTM-PF-ADAPTER



#### PHOTOMETRIC DATA (SIMULATED):



LED V10 Gen7  
 FWHM 31.0°  
 Efficiency 90 %  
 Peak intensity 2.450 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 486 Typ L1



LED VERO10  
 FWHM 30.0°  
 Efficiency %  
 Peak intensity cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED VERO13  
 FWHM 34.0°  
 Efficiency %  
 Peak intensity cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED VERO18  
 FWHM 43.0°  
 Efficiency %  
 Peak intensity cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

### PHOTOMETRIC DATA (SIMULATED):



LED CXA/B 15xx  
FWHM 28.0°  
Efficiency %  
Peak intensity cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



LED LUXEON CoB Compact  
FWHM 20.0°  
Efficiency 92 %  
Peak intensity 4.100 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13761\_PF-SOCKET-CXA15



LED CXM-14  
FWHM 41.0°  
Efficiency 87 %  
Peak intensity 1.600 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 433 Typ L1



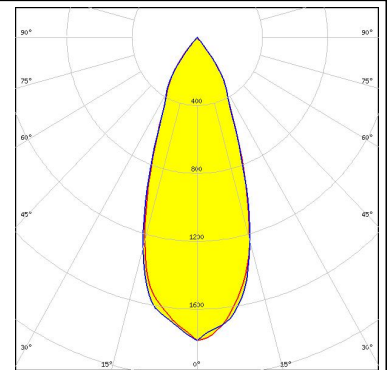
LED CXM-9  
FWHM 32.0°  
Efficiency 88 %  
Peak intensity 2.300 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 434 Typ L1

#### PHOTOMETRIC DATA (SIMULATED):

##### OSRAM

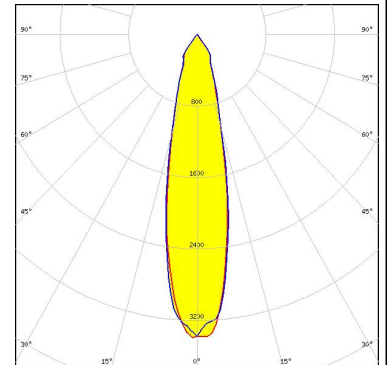
Opto Semiconductors

LED Soleriq S15  
FWHM 39.0°  
Efficiency 90 %  
Peak intensity 1.810 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 433 Typ L1



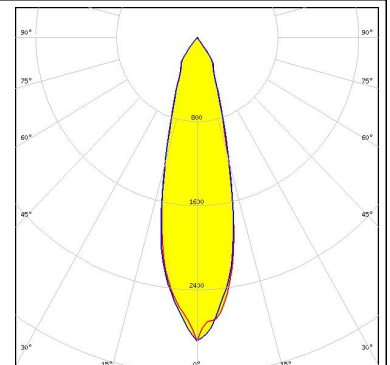
##### SAMSUNG

LED LC010C  
FWHM 23.0°  
Efficiency 90 %  
Peak intensity 3.500 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 479 Typ L1



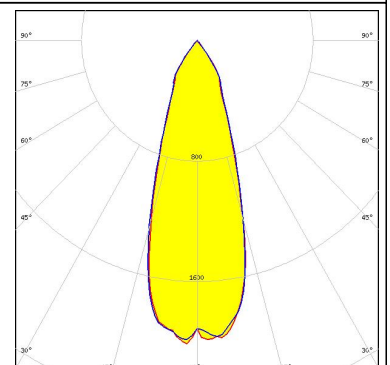
##### SAMSUNG

LED LC020C  
FWHM 27.0°  
Efficiency 89 %  
Peak intensity 2.900 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 479 Typ L1



##### SAMSUNG

LED LC040C  
FWHM 33.0°  
Efficiency 85 %  
Peak intensity 2.100 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 480 Typ L1





### PHOTOMETRIC DATA (SIMULATED):

 SEOUL SEMICONDUCTOR	
LED	ZC12/18
FWHM	41.0°
Efficiency	87 %
Peak intensity	1.600 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
C13709_PF-SOCKET-VERO13-18	
Bender Wirth: 433 Typ L1	

 SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM	32.0°
Efficiency	88 %
Peak intensity	2.300 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
C13709_PF-SOCKET-VERO13-18	
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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