

## BARBARA-WW-PF

~60° wide beam

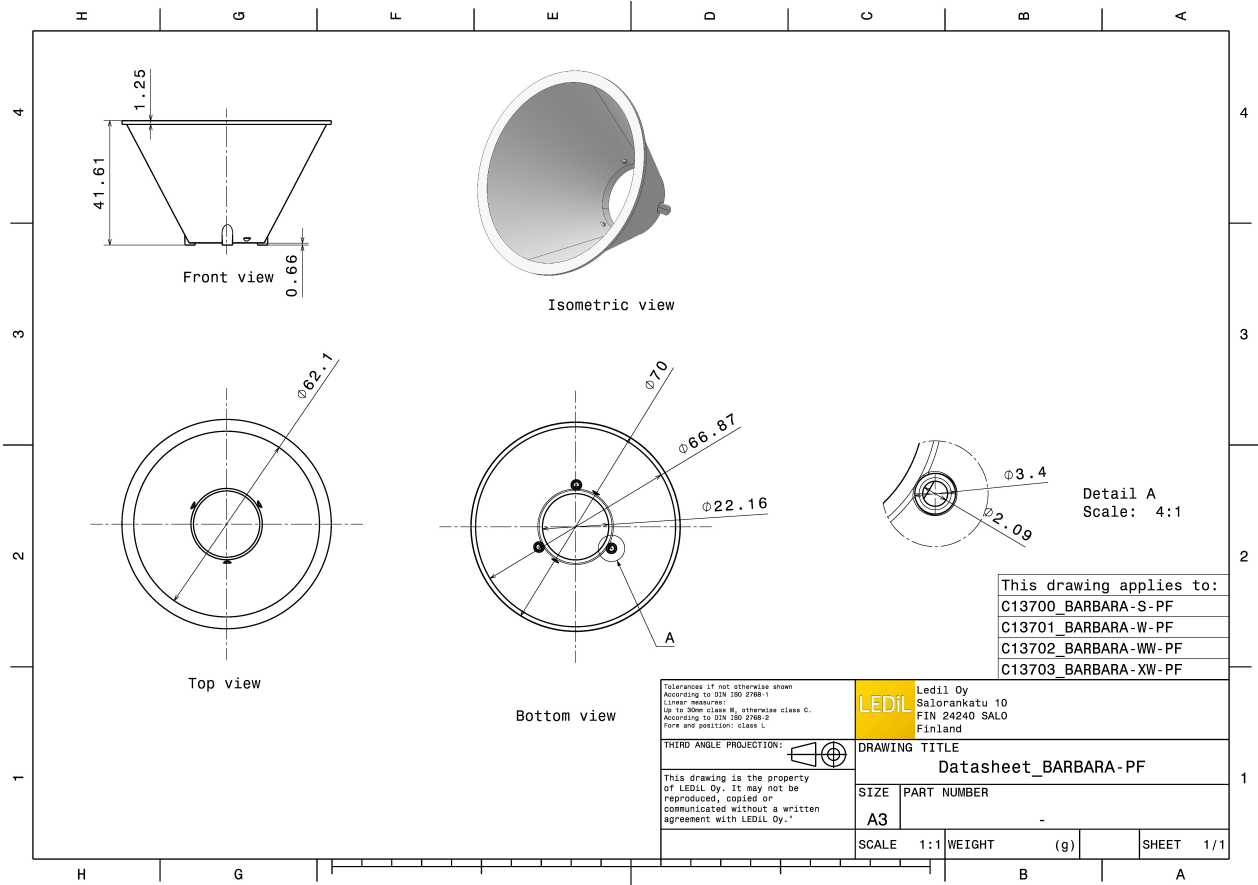
### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 70 mm
Height	41.7 mm
Fastening	socket
Colour	metal
Box size	480 x 280 x 300 mm
Box weight	6.3 kg
Quantity in Box	288 pcs
ROHS compliant	yes ⓘ



### MATERIAL SPECIFICATIONS:

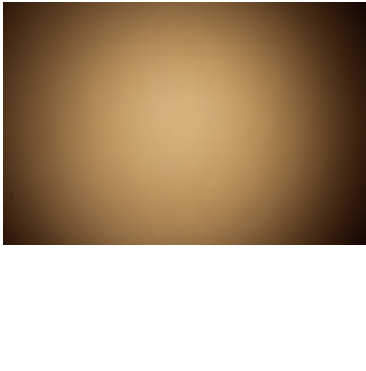

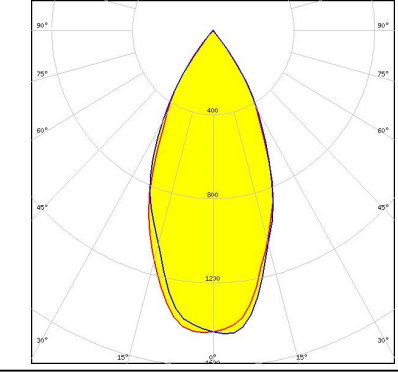

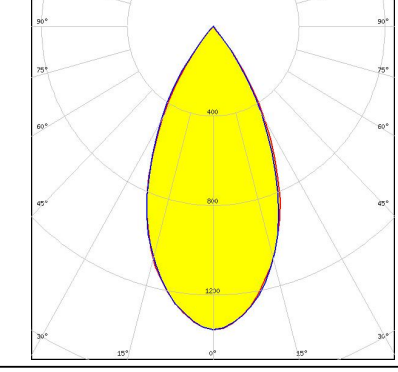

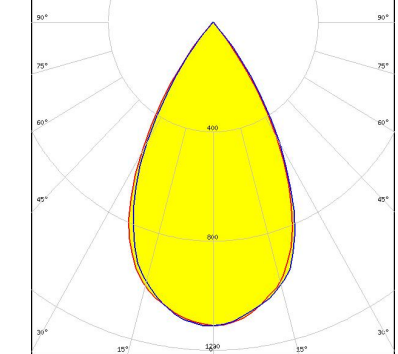
Component	Type	Material	Colour	Coating
BARBARA-WW-PF	Reflector	PC	metal	HMDS



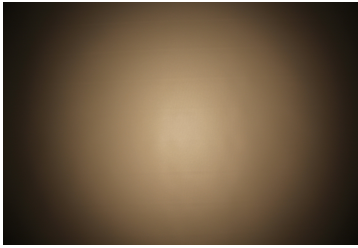
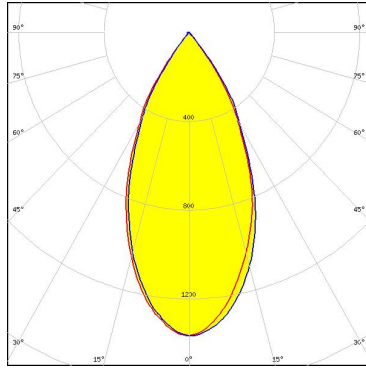
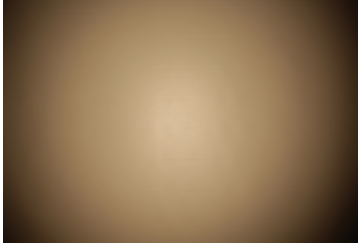
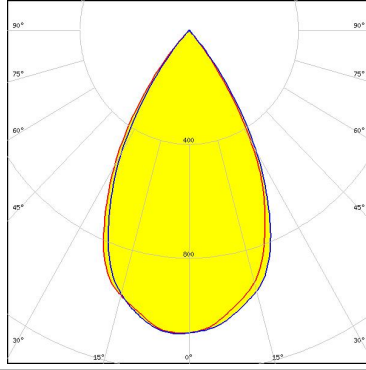
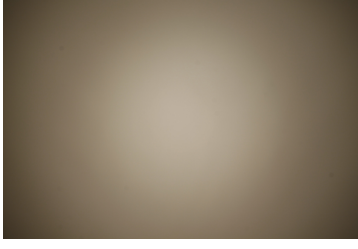
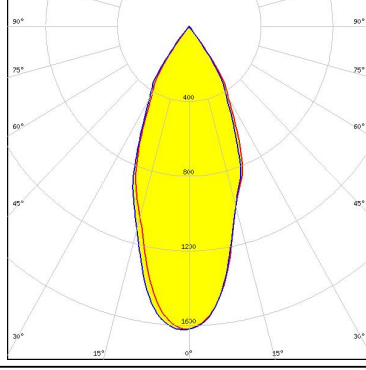
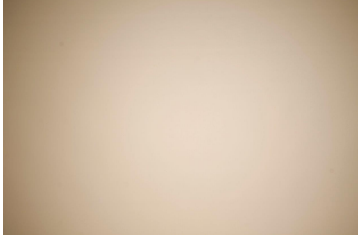
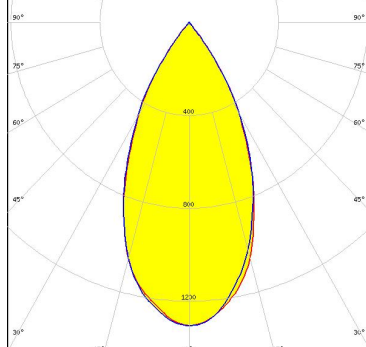
This drawing applies to:	
C13700	BARBARA-S-PF
C13701	BARBARA-W-PF
C13702	BARBARA-WW-PF
C13703	BARBARA-XW-PF

Tolerances if not otherwise shown According to DIN ISO 2768-1 Linear measures: Use to show class M, otherwise class C. According to DIN ISO 2768-2 Form and position: class L		<b>LEDiL</b> Ledil Oy Salorankatu 10 FIN 24240 SALO Finland
THIRD ANGLE PROJECTION:		
This drawing is the property of LEDiL Oy. It may not be reproduced, copied or communicated without a written agreement with LEDiL Oy.		
DRAWING TITLE		
SIZE	PART NUMBER	
A3	-	
SCALE	1:1	WEIGHT (g)
		SHEET 1/1

#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V15 Gen6</p> <p>FWHM 51.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.390 cd/lm</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 456 Typ L2</p>		
<p>bridgelux.</p> <p>LED VERO10</p> <p>FWHM 49.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.500 cd/lm</p> <p>Required components: C13708_PF-SOCKET-VERO10</p>		
<p>bridgelux.</p> <p>LED VERO13</p> <p>FWHM 51.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 1.400 cd/lm</p> <p>Required components: C13709_PF-SOCKET-VERO13-18</p>		
<p>bridgelux.</p> <p>LED VERO18</p> <p>FWHM 58.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.170 cd/lm</p> <p>Required components: C13709_PF-SOCKET-VERO13-18</p>		

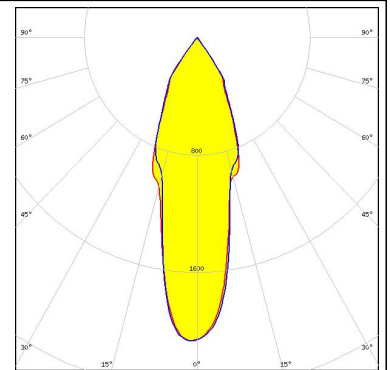
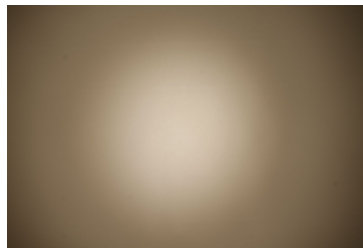
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux</p> <p>LED Xenio Point 13mm</p> <p>FWHM 49.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.370 cd/lm</p> <p>Required components: C13709_PF-SOCKET-VERO13-18</p>		
<p>bridgelux</p> <p>LED Xenio Point 18mm</p> <p>FWHM 59.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.070 cd/lm</p> <p>Required components: C13709_PF-SOCKET-VERO13-18</p>		
<p><b>CITIZEN</b></p> <p>LED CLL02x/CLU02x (LES10)</p> <p>FWHM 43.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.600 cd/lm</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 434 Typ L1</p>		
<p><b>CITIZEN</b></p> <p>LED CLL03x/CLU03x</p> <p>FWHM 50.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.300 cd/lm</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 433 Typ L1</p>		

#### PHOTOMETRIC DATA (MEASURED):

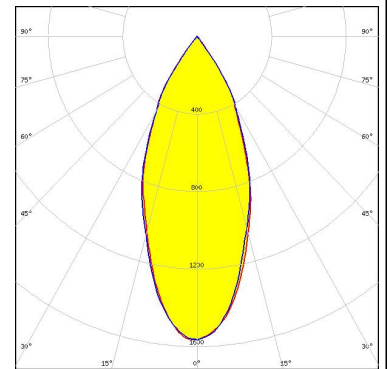
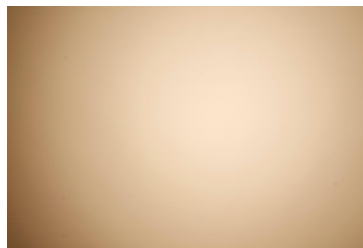
#### CITIZEN

LED CLU700/701  
 FWHM 28.0°  
 Efficiency 88 %  
 Peak intensity 2.100 cd/lm  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 434 Typ L1



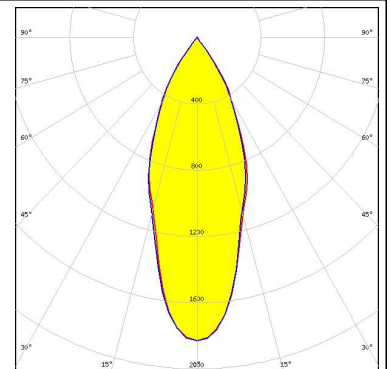
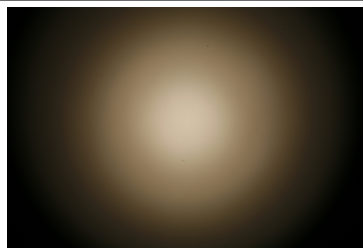
#### CITIZEN

LED CLU720/721  
 FWHM 43.0°  
 Efficiency 86 %  
 Peak intensity cd/lm  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 433 Typ L1



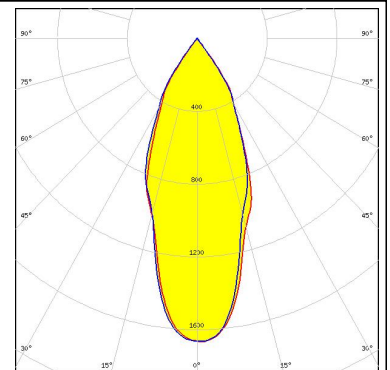
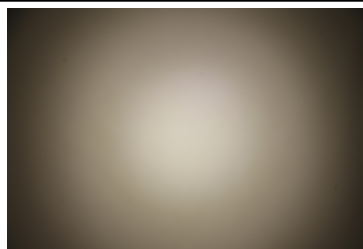
#### CREE

LED CXA/B 15xx  
 FWHM 40.0°  
 Efficiency 89 %  
 Peak intensity 1.800 cd/lm  
 Required components:  
 C14115\_PF-SOCKET-CXA15-18



#### CREE

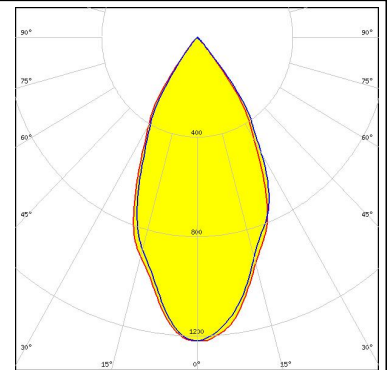
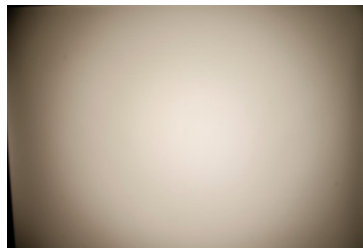
LED CXA/B 15xx  
 FWHM 41.0°  
 Efficiency 87 %  
 Peak intensity 1.700 cd/lm  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 441 Typ L1



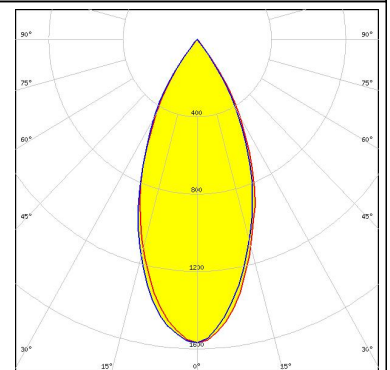
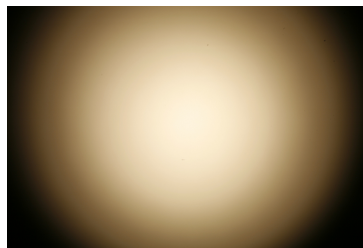
#### PHOTOMETRIC DATA (MEASURED):



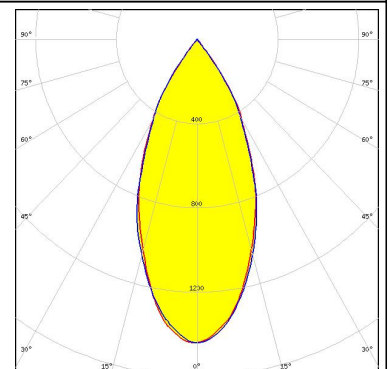
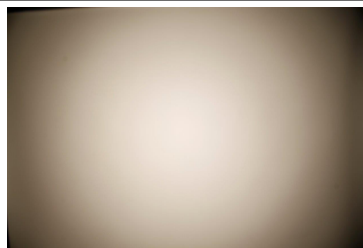
LED CXA/B 15xx  
 FWHM 51.0°  
 Efficiency 85 %  
 Peak intensity 1.200 cd/lm  
 Required components:  
 C13083\_PF-SOCKET  
 C14658\_BARBARA-RZ-LENS



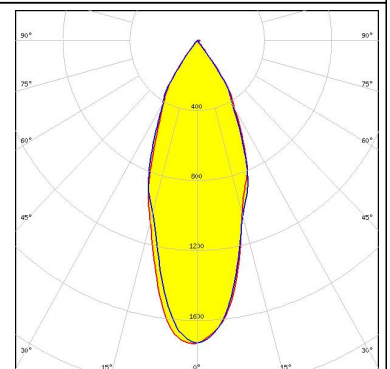
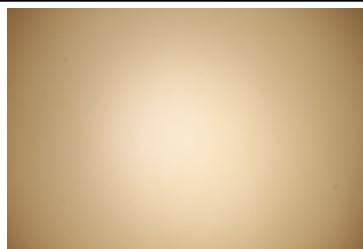
LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 46.0°  
 Efficiency 90 %  
 Peak intensity 1.600 cd/lm  
 Required components:  
 C14115\_PF-SOCKET-CXA15-18



LED CXA/B 1816 & CXA/B 1820 & CXA 1850  
 FWHM 46.0°  
 Efficiency 86 %  
 Peak intensity 1.400 cd/lm  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 437 Typ L1



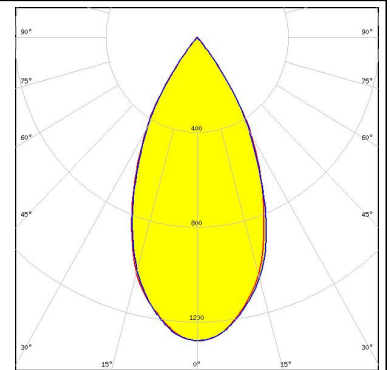
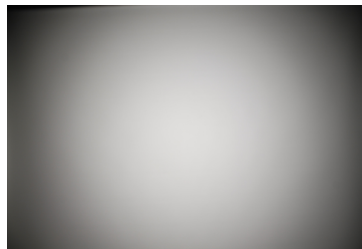
LED LUXEON CoB 1202/1203  
 FWHM 39.0°  
 Efficiency 88 %  
 Peak intensity 1.700 cd/lm  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 438 Typ L1



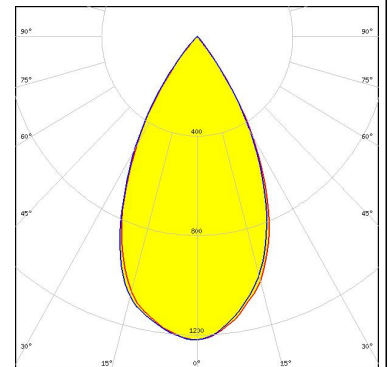
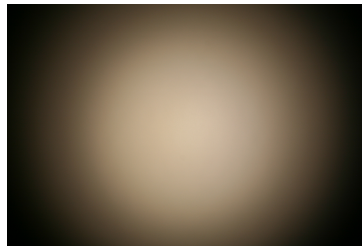
#### PHOTOMETRIC DATA (MEASURED):



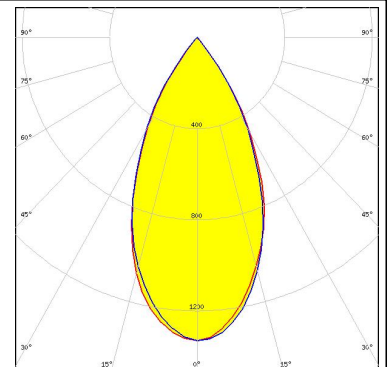
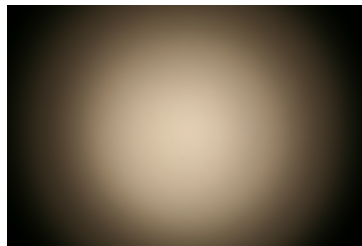
LED COB J-Type  
 FWHM 51.0°  
 Efficiency 86 %  
 Peak intensity 1.300 cd/lm  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 463 Typ L2



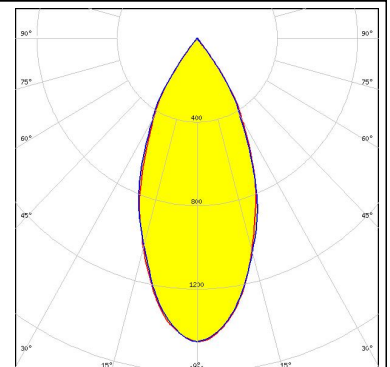
LED COB J-Type  
 FWHM 55.0°  
 Efficiency 90 %  
 Peak intensity 1.220 cd/lm  
 Required components:  
 C14037\_PF-NSX-SOCKET



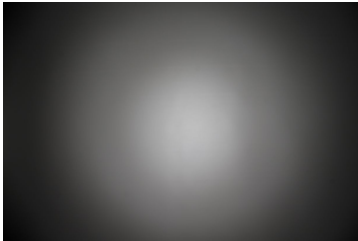
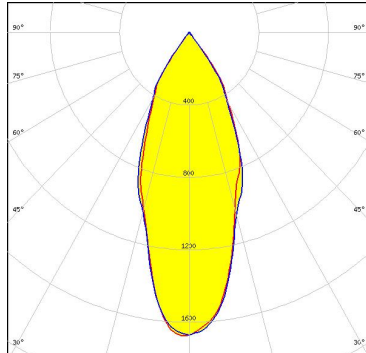
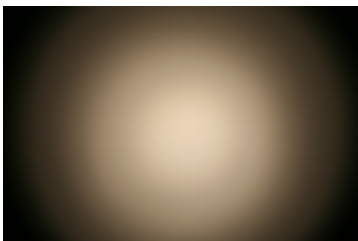
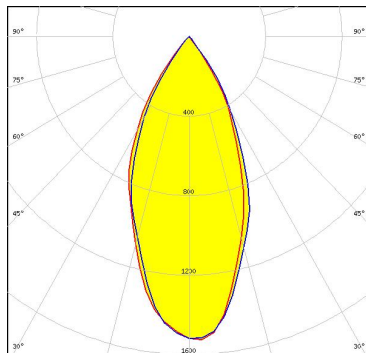
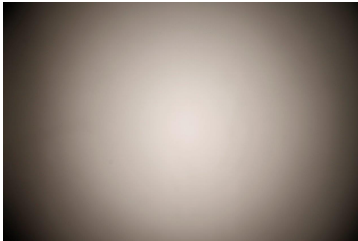
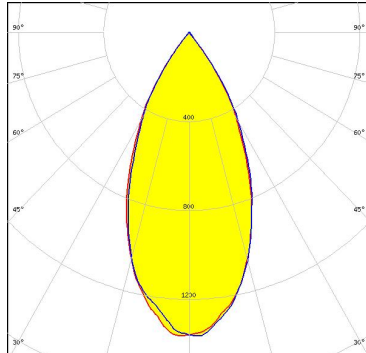

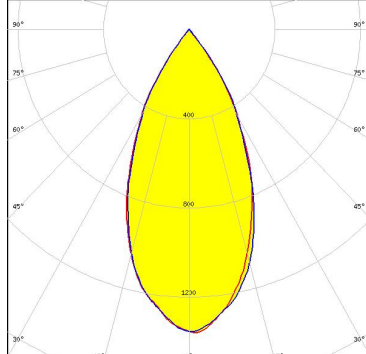
LED COB L-Type (LES 11)  
 FWHM 51.0°  
 Efficiency 90 %  
 Peak intensity 1.330 cd/lm  
 Required components:  
 C14037\_PF-NSX-SOCKET



LED COB L-Type (LES 11)  
 FWHM 46.0°  
 Efficiency 87 %  
 Peak intensity 1.500 cd/lm  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 438 Typ L1



#### PHOTOMETRIC DATA (MEASURED):

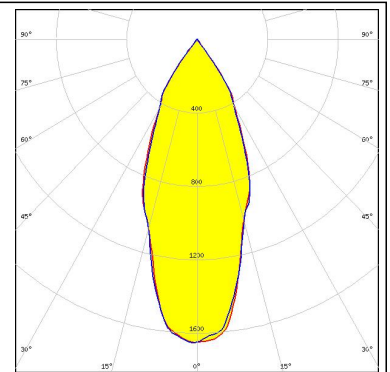
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 9)</p> <p>FWHM 41.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.700 cd/lm</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 438 Typ L1</p>		
<p><b>NICHIA</b></p> <p>LED COB L-Type (LES 9)</p> <p>FWHM 47.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.500 cd/lm</p> <p>Required components: C14037_PF-NSX-SOCKET</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq P13</p> <p>FWHM 48.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.370 cd/lm</p> <p>Required components: C14115_PF-SOCKET-CXA15-18</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq P13</p> <p>FWHM 48.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.400 cd/lm</p> <p>Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 437 Typ L1</p>		



#### PHOTOMETRIC DATA (MEASURED):

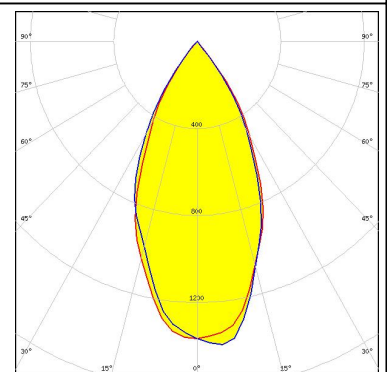
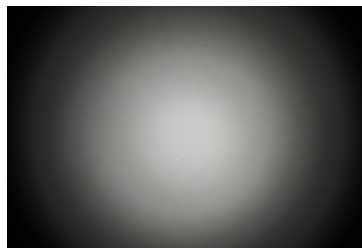
**OSRAM**  
Opto Semiconductors

LED Soleriq P9  
 FWHM 43.0°  
 Efficiency 90 %  
 Peak intensity 1.700 cd/lm  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 461 Typ L1



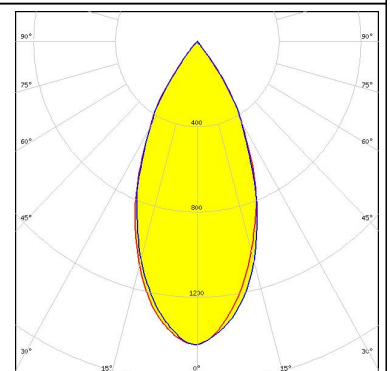
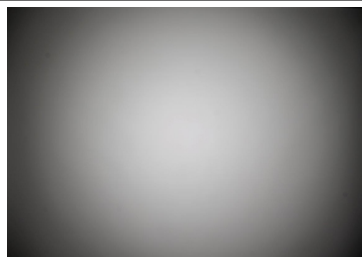
**OSRAM**  
Opto Semiconductors

LED Soleriq P9  
 FWHM 50.0°  
 Efficiency 90 %  
 Peak intensity 1.400 cd/lm  
 Required components:  
 C13761\_PF-SOCKET-CXA15



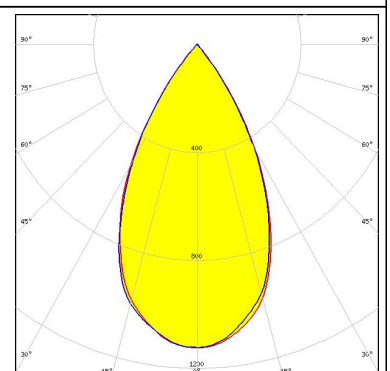
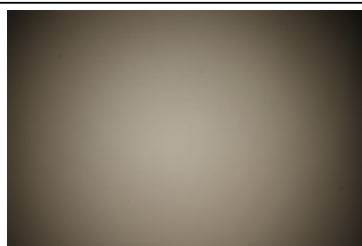
**OSRAM**  
Opto Semiconductors

LED Soleriq S13  
 FWHM 47.0°  
 Efficiency 87 %  
 Peak intensity 1.400 cd/lm  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 437 Typ L1



**SAMSUNG**

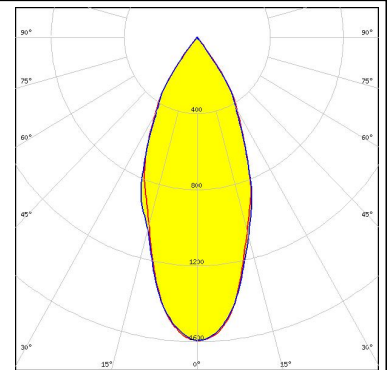
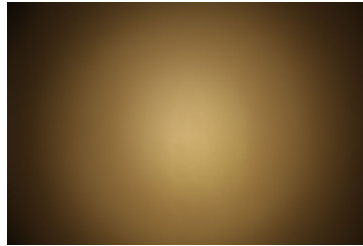
LED LC026B / 033B / 040B  
 FWHM 55.0°  
 Efficiency 86 %  
 Peak intensity 1.100 cd/lm  
 Required components:  
 C13709\_PF-SOCKET-VERO13-18  
 Bender Wirth: 450 Typ L2



#### PHOTOMETRIC DATA (MEASURED):

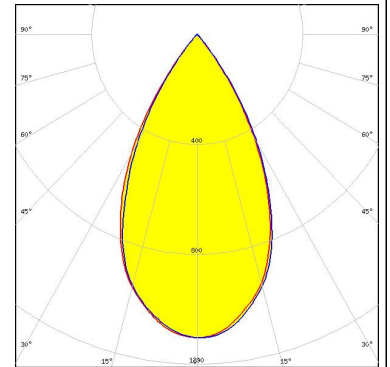
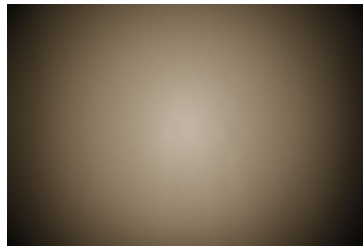
#### TRIDONIC

LED SLE G5 LES11  
FWHM 43.0°  
Efficiency 89 %  
Peak intensity 1.600 cd/lm  
Required components:  
C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 434 Typ L1



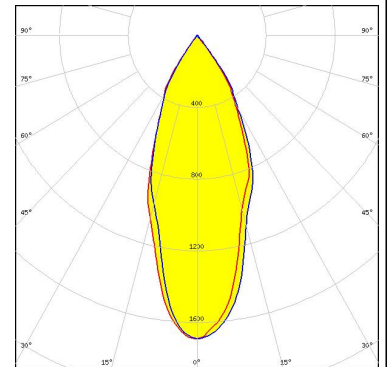
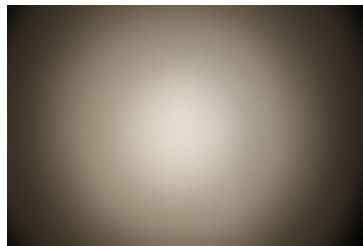
#### XICATO

LED XTM - 19mm LES  
FWHM 55.0°  
Efficiency 84 %  
Peak intensity 1.100 cd/lm  
Required components:  
C14636\_XTM-PF-ADAPTER



#### XICATO

LED XTM - 9mm LES  
FWHM 42.0°  
Efficiency 87 %  
Peak intensity 1.700 cd/lm  
Required components:  
C14636\_XTM-PF-ADAPTER



## PHOTOMETRIC DATA (SIMULATED):

bridgelux

LED VERO10  
FWHM 66.0°  
Efficiency %  
Peak intensity cd/lm  
Required components:

bridgelux

LED VERO13  
FWHM 67.0°  
Efficiency %  
Peak intensity cd/lm  
Required components:

bridgelux

LED VERO18  
FWHM 68.0°  
Efficiency %  
Peak intensity cd/lm  
Required components:

LUMINUS

LED CXM-14  
FWHM 50.0°  
Efficiency 86 %  
Peak intensity 1.300 cd/lm  
Required components:  
C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 433 Typ L1

### PHOTOMETRIC DATA (SIMULATED):



LED CXM-9  
FWHM 43.0°  
Efficiency 88 %  
Peak intensity 1.600 cd/lm

Required components:

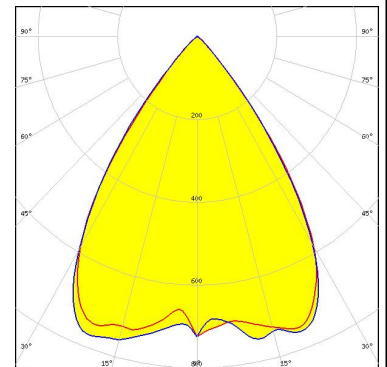
C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 434 Typ L1



LED Soleriq S15  
FWHM 73.0°  
Efficiency 90 %  
Peak intensity 0.770 cd/lm

Required components:

C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 433 Typ L1



SEOUL SEMICONDUCTOR

LED ZC12/18  
FWHM 50.0°  
Efficiency 86 %  
Peak intensity 1.300 cd/lm

Required components:

C13709\_PF-SOCKET-VERO13-18  
Bender Wirth: 433 Typ L1



SEOUL SEMICONDUCTOR

LED ZC4/6  
FWHM 43.0°  
Efficiency 88 %  
Peak intensity 1.600 cd/lm

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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