

## ANGELA-W-B

~45° wide beam compatible with BJB and B+W connectors

## SPECIFICATION:

Dimensions	Ø 119.5 mm
Height	74.5 mm
Fastening	socket
ROHS compliant	yes ⓘ

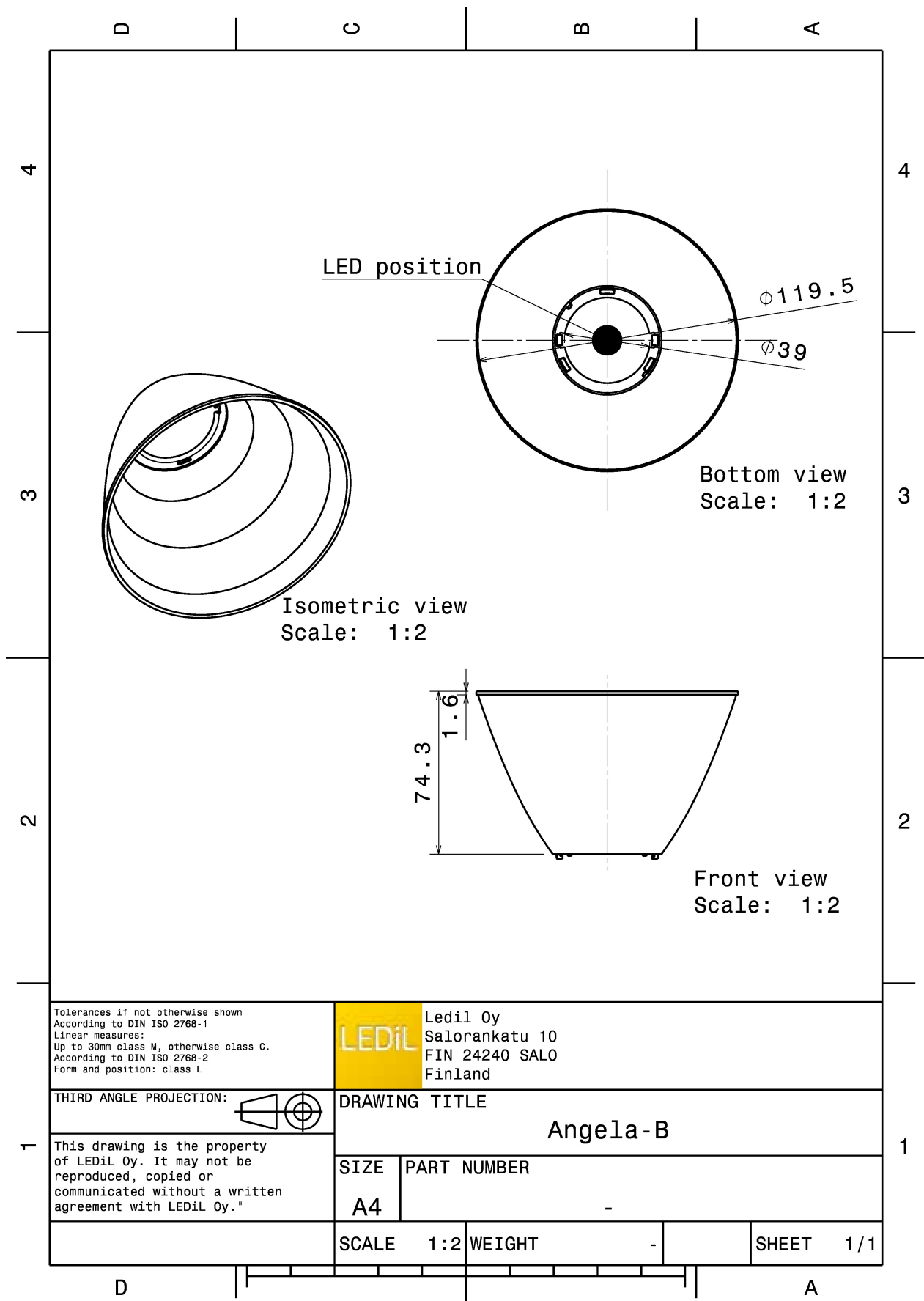
## MATERIALS:

Component	Type	Material	Colour	Finish	Coating
ANGELA-W-B	Reflector	PC	metal		HMDS

## ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F13664_ANGLEA-W-B » Box size: 398 x 298 x 265 mm	180	90	45	9.1



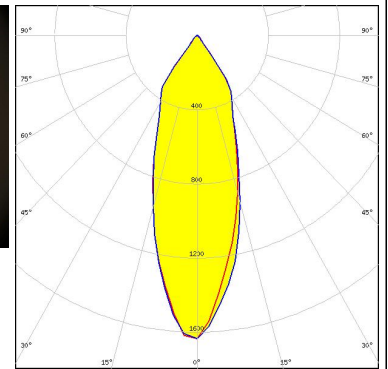
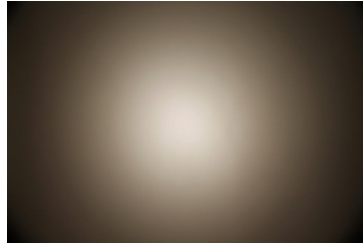


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

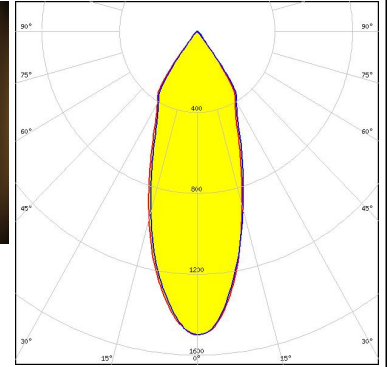
#### OPTICAL RESULTS (MEASURED):



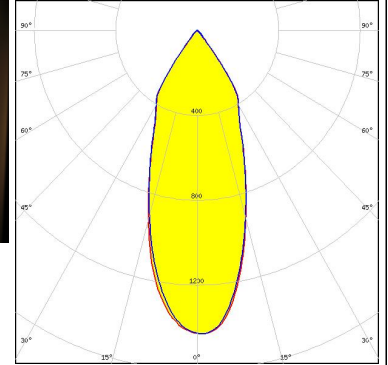
LED BXRA ES Rectangle  
FWHM / FWTM 34.0° / 75.0°  
Efficiency 83 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2040



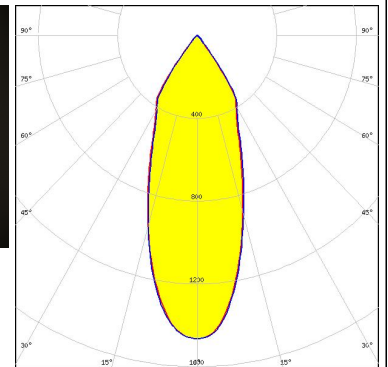
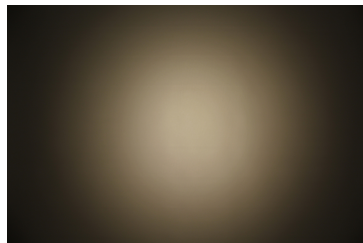
LED V15 Gen6  
FWHM / FWTM 37.0° / 75.0°  
Efficiency 81 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2224



LED V18 Gen6  
FWHM / FWTM 38.0° / 76.0°  
Efficiency 81 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



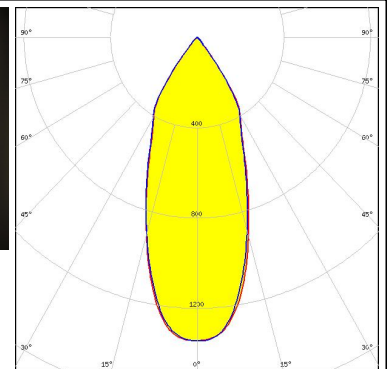
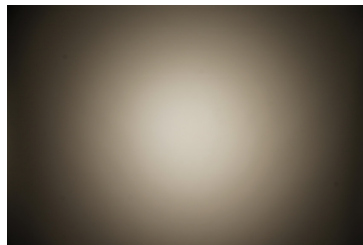
LED V18 Gen7  
FWHM / FWTM 38.0° / 76.0°  
Efficiency 82 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2350



#### OPTICAL RESULTS (MEASURED):

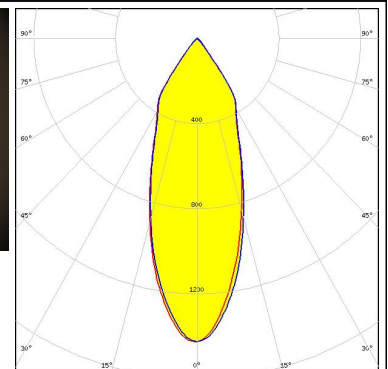
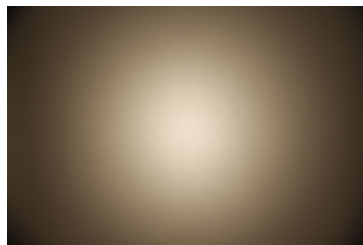


LED V22 Gen6  
FWHM / FWTM 40.0° / 76.0°  
Efficiency 80 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



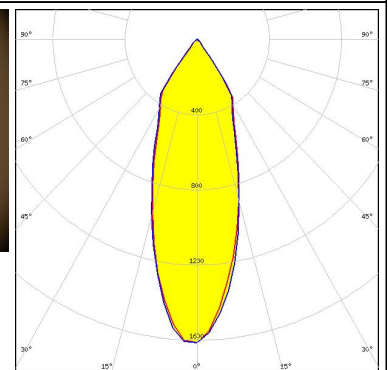
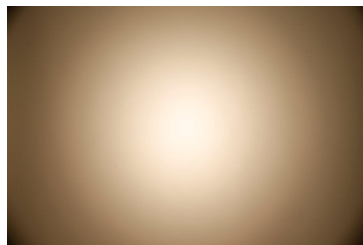
#### CITIZEN

LED CLL03x/CLU03x  
FWHM / FWTM 37.0° / 76.0°  
Efficiency 78 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F13671\_ANGE-RZ-LENS  
A.A.G. STUCCHI: 8101-G2



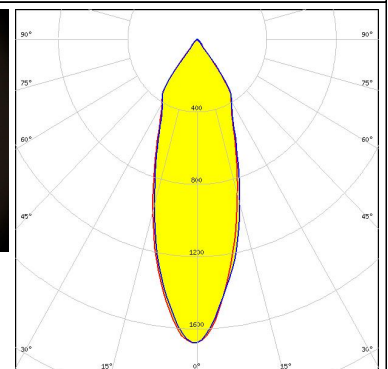
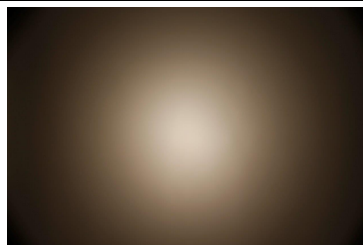
#### CITIZEN

LED CLL03x/CLU03x  
FWHM / FWTM 34.0° / 75.0°  
Efficiency 83 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8101-G2



#### CITIZEN

LED CLL03x/CLU03x  
FWHM / FWTM 33.0° / 75.0°  
Efficiency 83 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2021

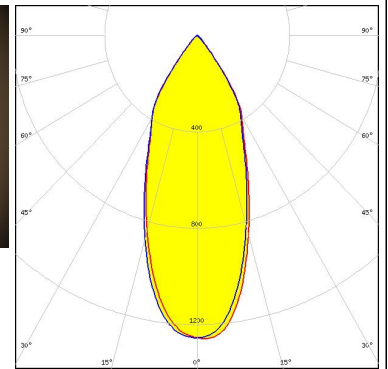
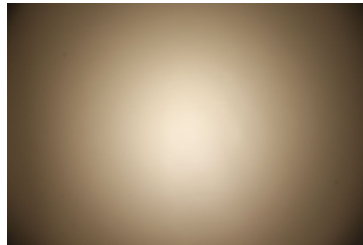




#### OPTICAL RESULTS (MEASURED):

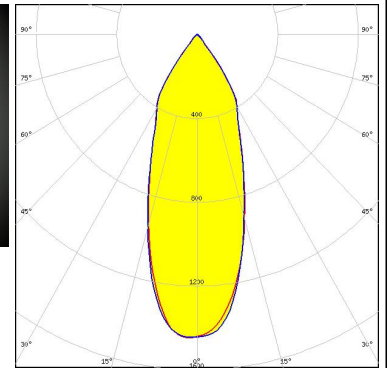
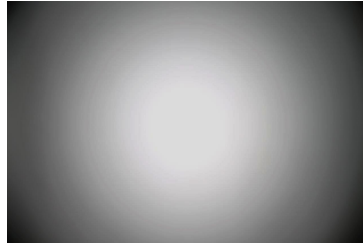
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM / FWTM 41.0° / 78.0°  
 Efficiency 77 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGLE-RZ-LENS  
 A.A.G. STUCCHI: 8102-G2



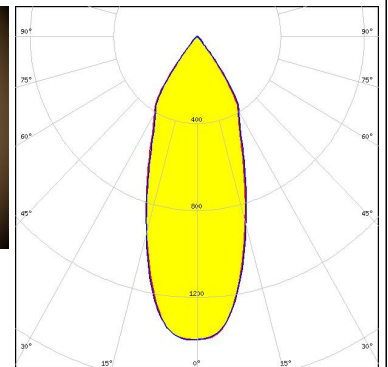
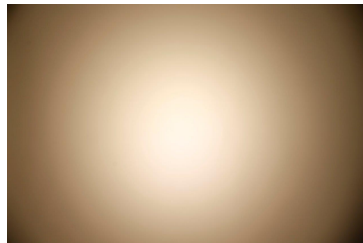
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM / FWTM 38.0° / 76.0°  
 Efficiency 82 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2030



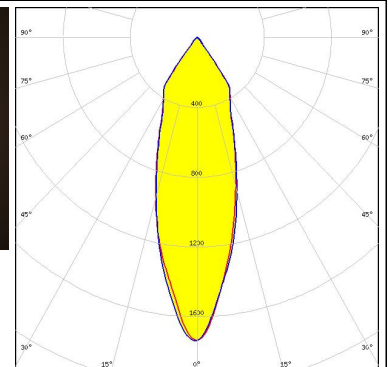
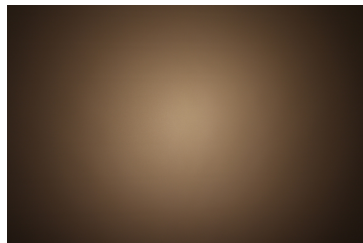
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM / FWTM 39.0° / 77.0°  
 Efficiency 82 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8102-G2



#### CITIZEN

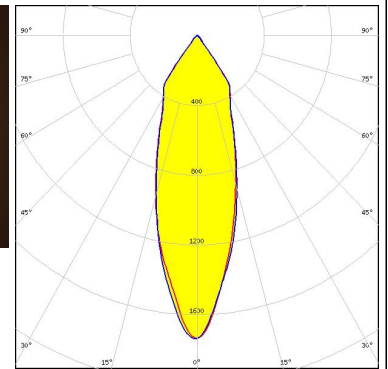
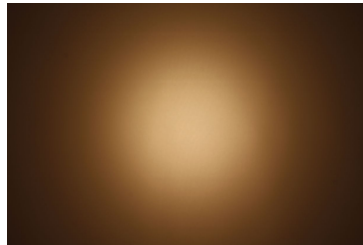
LED CLU720/721/723  
 FWHM / FWTM 32.0° / 74.0°  
 Efficiency 84 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8101-G2



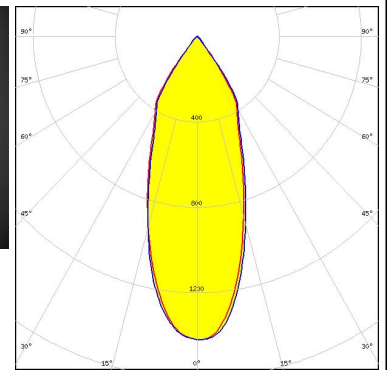
#### OPTICAL RESULTS (MEASURED):

#### CITIZEN

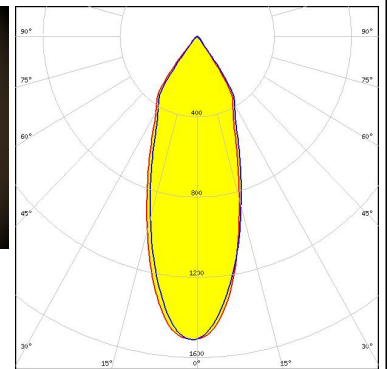
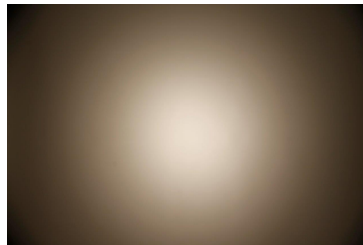
LED CLU720/721/723  
 FWHM / FWTM 32.0° / 75.0°  
 Efficiency 83 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2021



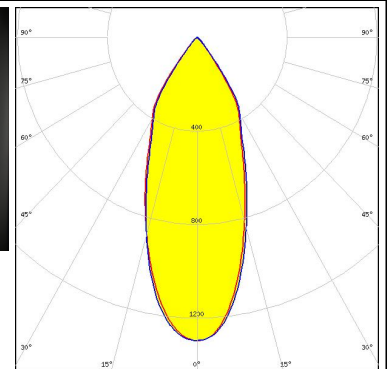
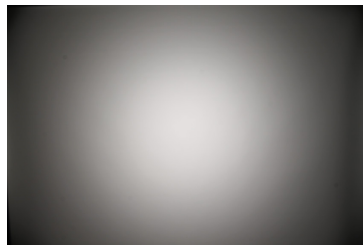
LED CXA/B 25xx  
 FWHM / FWTM 38.0° / 76.0°  
 Efficiency 80 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED CXA/B 25xx  
 FWHM / FWTM 37.0° / 76.0°  
 Efficiency 82 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8401-G2



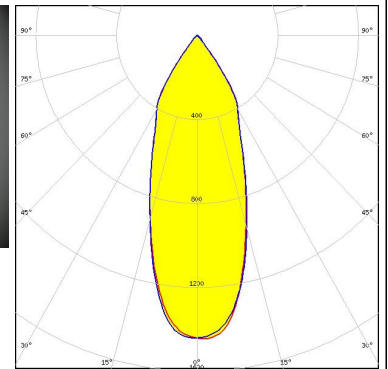
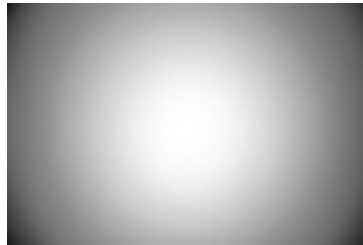
LED CXA/B 25xx  
 FWHM / FWTM 40.0° / 77.0°  
 Efficiency 77 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGLE-RZ-LENS  
 BJB: 47.319.2141



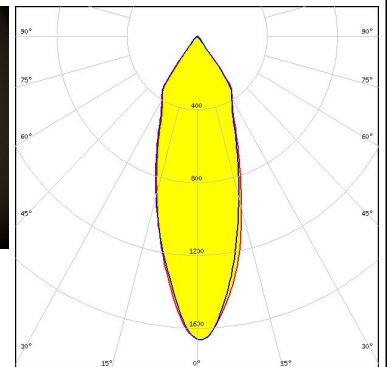
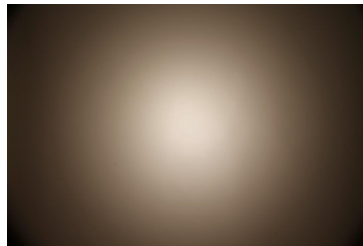
#### OPTICAL RESULTS (MEASURED):



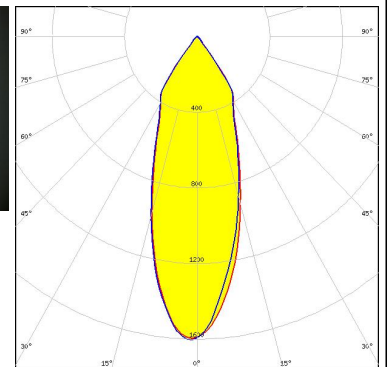
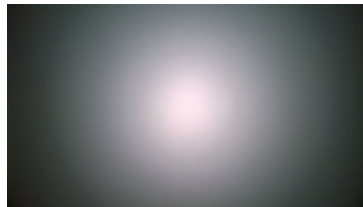
LED CXA/B 30xx  
FWHM / FWTM 38.0° / 75.0°  
Efficiency 81 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8404-G2



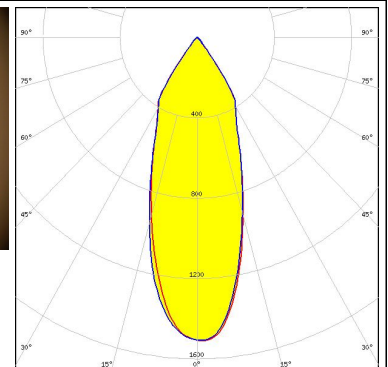
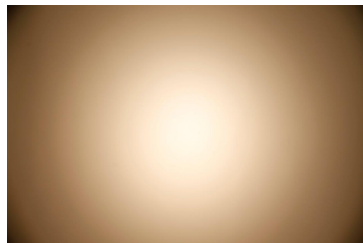
LED LUXEON CoB 1204/1205  
FWHM / FWTM 33.0° / 75.0°  
Efficiency 83 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8301-G2



LED LUXEON CoB 1208  
FWHM / FWTM 35.0° / 75.0°  
Efficiency 84 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8301-G2



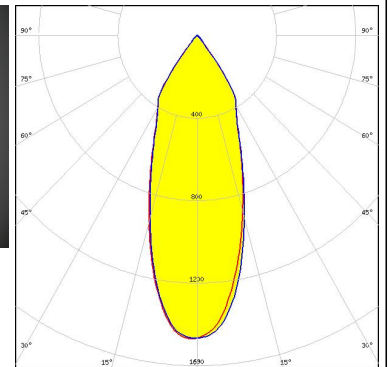
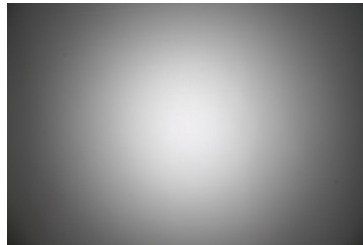
LED LUXEON CoB 1211  
FWHM / FWTM 37.0° / 75.0°  
Efficiency 82 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8102-G2



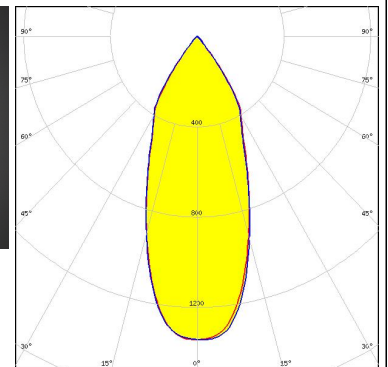
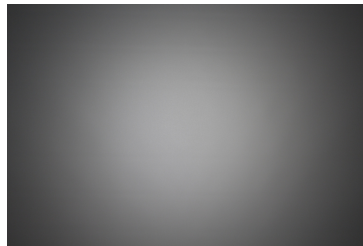
#### OPTICAL RESULTS (MEASURED):



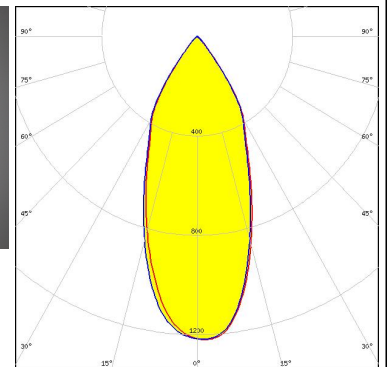
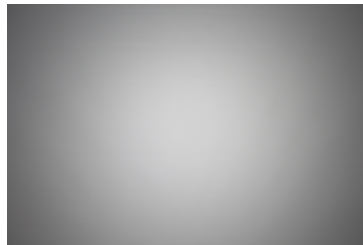
LED LUXEON CoB 1211  
 FWHM / FWTM 37.0° / 76.0°  
 Efficiency 81 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2030



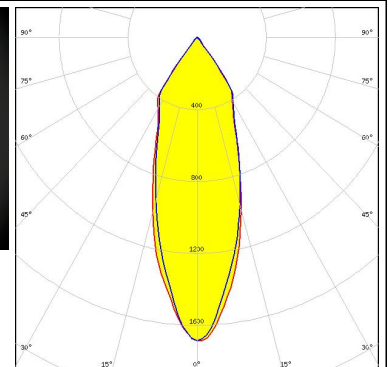
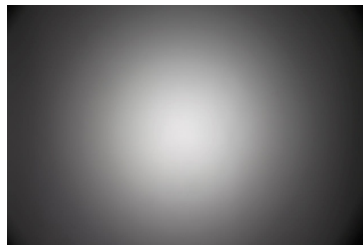
LED LUXEON CoB 1213/1216/1812  
 FWHM / FWTM 40.0° / 76.0°  
 Efficiency 80 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LUXEON CoB 1213/1216/1812  
 FWHM / FWTM 42.0° / 78.0°  
 Efficiency 76 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGLE-RZ-LENS  
 BJB: 47.319.2030



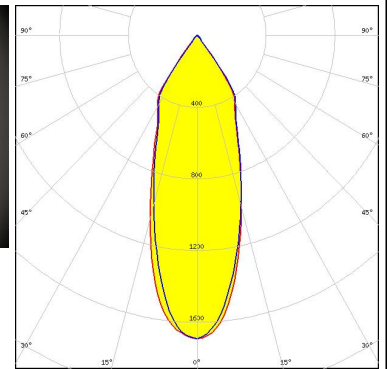
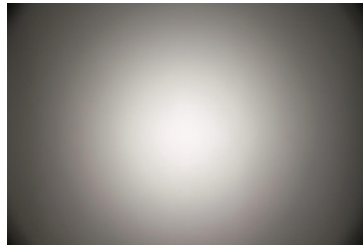
LED LUXEON K12  
 FWHM / FWTM 35.0° / 76.0°  
 Efficiency 87 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2070



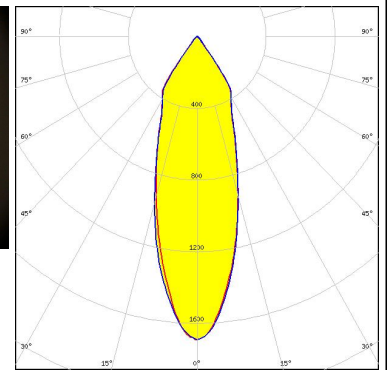
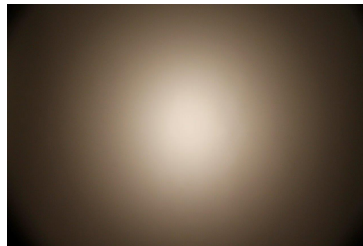
#### OPTICAL RESULTS (MEASURED):



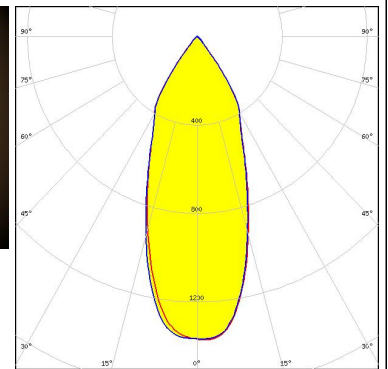
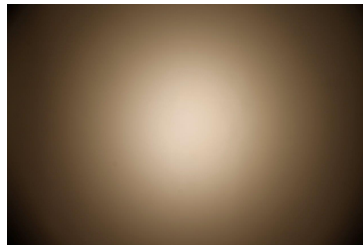
LED LUXEON K16  
FWHM / FWTM 36.0° / 75.0°  
Efficiency 88 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2070



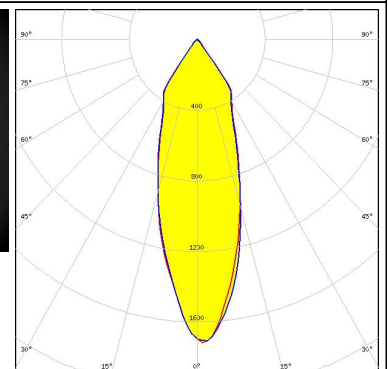
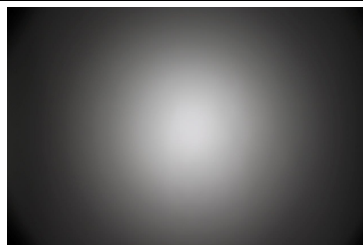
LED CxM-14 (19x19)  
FWHM / FWTM 33.0° / 74.0°  
Efficiency 83 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2021



LED CxM-22 (28x28)  
FWHM / FWTM 40.0° / 77.0°  
Efficiency 81 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2030



LED Soleriq S13  
FWHM / FWTM 33.0° / 75.0°  
Efficiency 84 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8502-G2



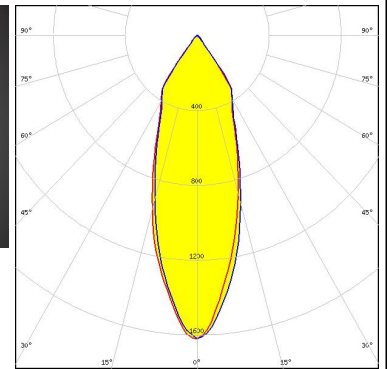
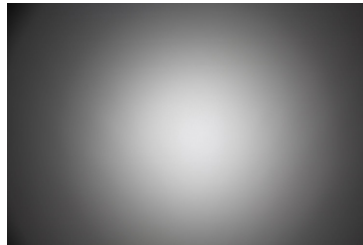


#### OPTICAL RESULTS (MEASURED):

##### OSRAM

Opto Semiconductors

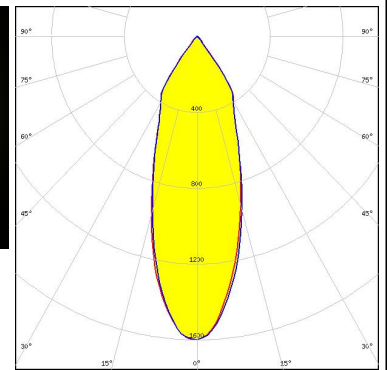
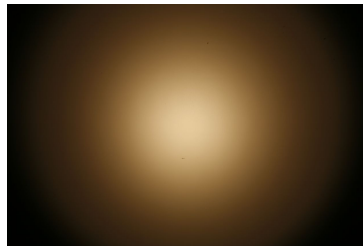
LED Soleriq S13 19x19  
FWHM / FWTM 34.0° / 75.0°  
Efficiency 81 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2021



##### OSRAM

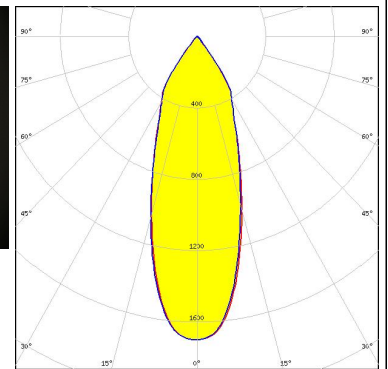
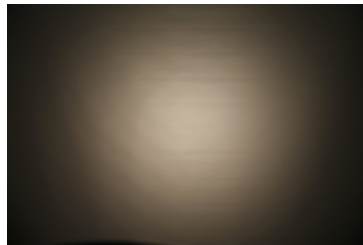
Opto Semiconductors

LED Soleriq S19  
FWHM / FWTM 35.0° / 75.0°  
Efficiency 83 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2170



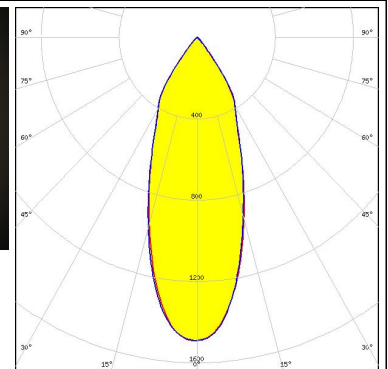
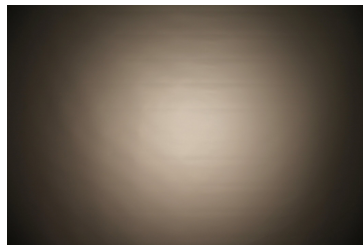
##### PHILIPS

LED Fortimo SLM L19 CoB  
FWHM / FWTM 35.0° / 75.0°  
Efficiency 87 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2030



##### PHILIPS

LED Fortimo SLM L19 CoB  
FWHM / FWTM 38.0° / 76.0°  
Efficiency 82 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F13671\_ANGLE-RZ-LENS  
BJB: 47.319.2030

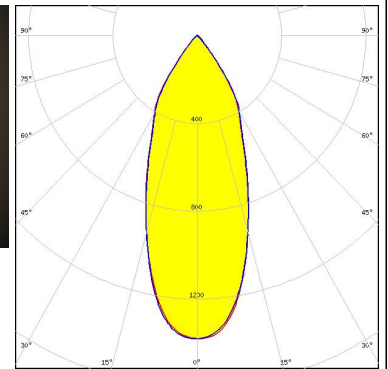
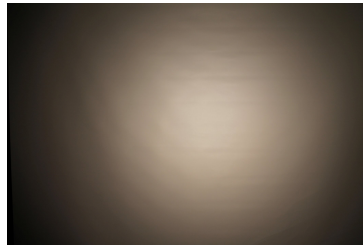




#### OPTICAL RESULTS (MEASURED):

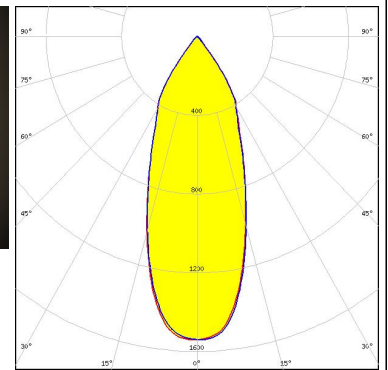
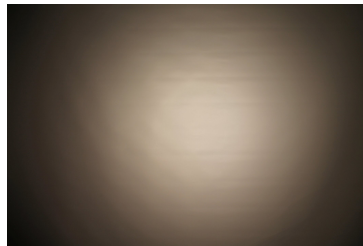
#### PHILIPS

LED Fortimo SLM L23 CoB  
 FWHM / FWTM 40.0° / 77.0°  
 Efficiency 82 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGLE-RZ-LENS  
 BJB: 47.319.2030



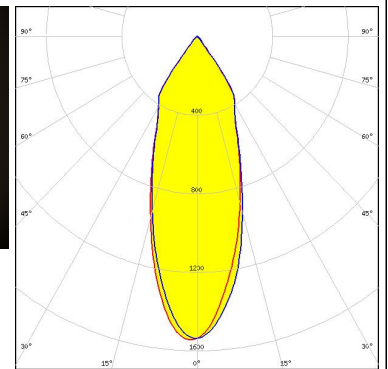
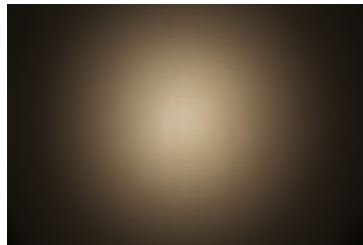
#### PHILIPS

LED Fortimo SLM L23 CoB  
 FWHM / FWTM 39.0° / 76.0°  
 Efficiency 86 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2030



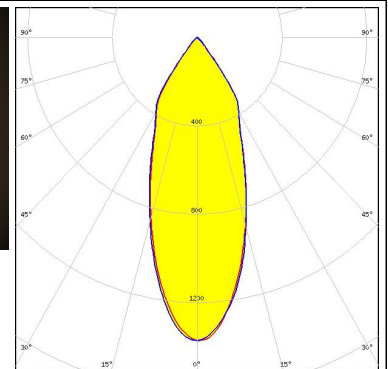
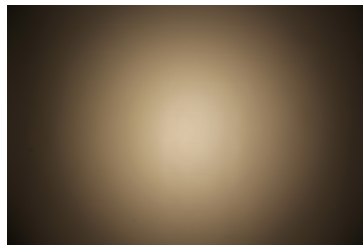
#### SAMSUNG

LED LC016D / LC019D / LC026D / LC033D  
 FWHM / FWTM 36.0° / 76.0°  
 Efficiency 82 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8101-G2



#### SAMSUNG

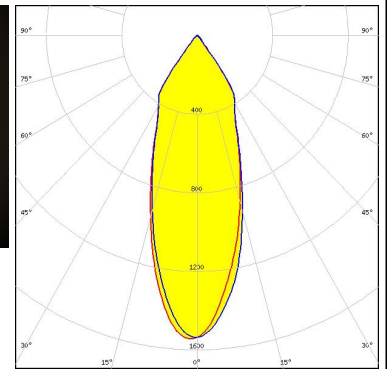
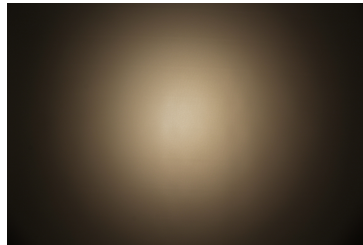
LED LC016D / LC019D / LC026D / LC033D  
 FWHM / FWTM 38.0° / 77.0°  
 Efficiency 79 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGLE-RZ-LENS  
 A.A.G. STUCCHI: 8101-G2



#### OPTICAL RESULTS (MEASURED):

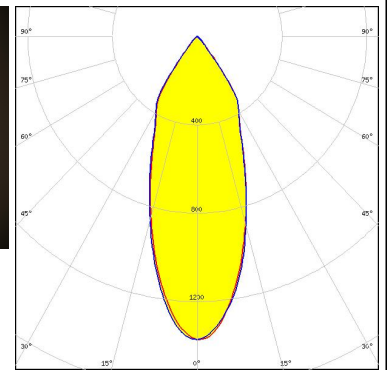
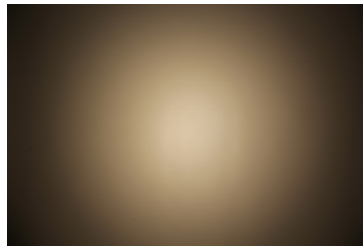
#### SAMSUNG

LED LC016D / LC019D / LC026D / LC033D  
 FWHM / FWTM 36.0° / 76.0°  
 Efficiency 82 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2021

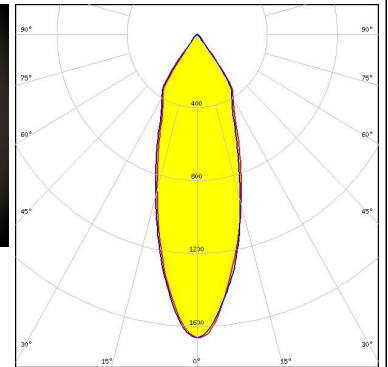
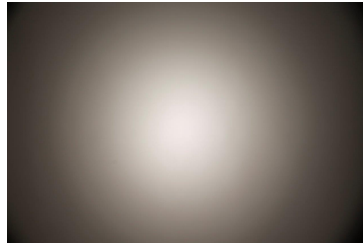


#### SAMSUNG

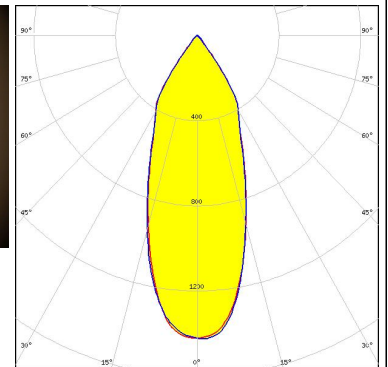
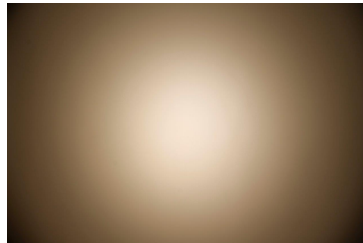
LED LC016D / LC019D / LC026D / LC033D  
 FWHM / FWTM 38.0° / 77.0°  
 Efficiency 79 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 BJB: 47.319.2021




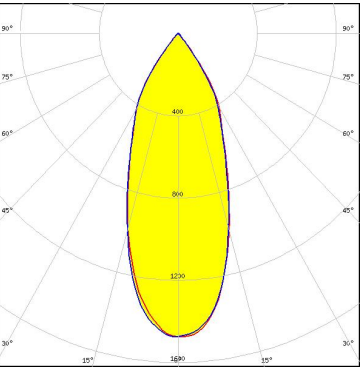

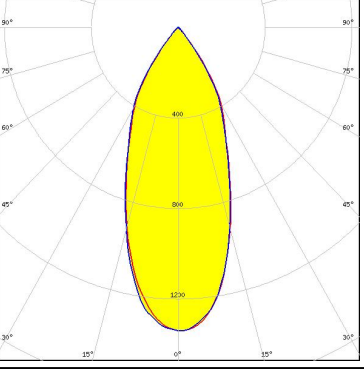
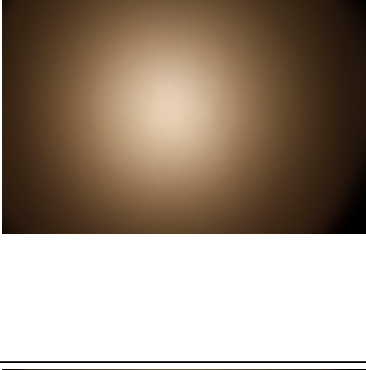
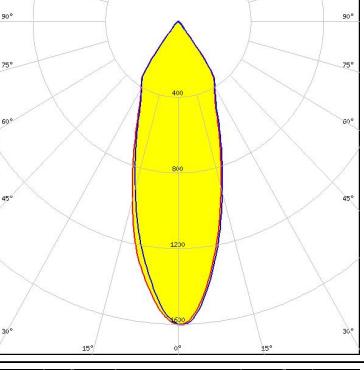

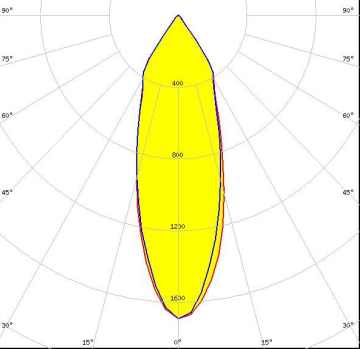
LED ZC12/18  
 FWHM / FWTM 34.0° / 74.0°  
 Efficiency 83 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8101-G2



LED ZC25/40/60  
 FWHM / FWTM 39.0° / 76.0°  
 Efficiency 82 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8102-G2



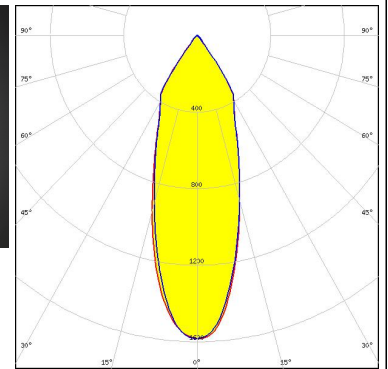
#### OPTICAL RESULTS (MEASURED):

<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED ZC25/40/60</p> <p>FWHM / FWTM 40.0° / 76.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>BJB: 47.319.2030</p>		
<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED ZC25/40/60</p> <p>FWHM / FWTM 42.0° / 78.0°</p> <p>Efficiency 79 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>F13671_ANGE-RZ-LENS</p> <p>BJB: 47.319.2030</p>		
<p><b>SHARP</b></p> <p>LED Mega Zenigata (GW6DME)</p> <p>FWHM / FWTM 35.0° / 75.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 1.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>A.A.G. STUCCHI: 8301-G2</p>		
<p><b>SHARP</b></p> <p>LED Mega Zenigata (GW6DME)</p> <p>FWHM / FWTM 34.0° / 75.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 1.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>BJB: 47.319.2011</p>		

#### OPTICAL RESULTS (MEASURED):

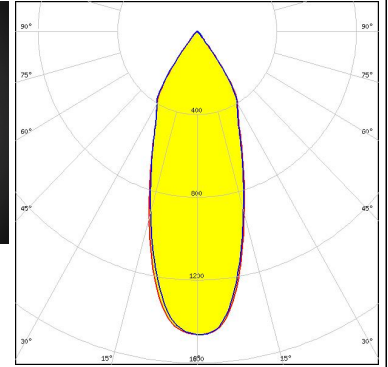
#### TRIDONIC

LED SLE G7 LES17 H  
FWHM / FWTM 34.0° / 74.0°  
Efficiency 81 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



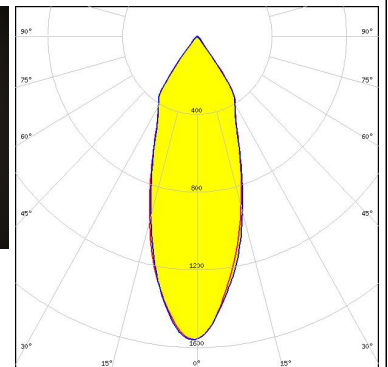
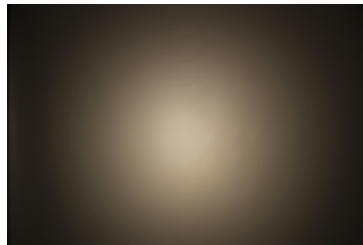
#### TRIDONIC

LED SLE G7 LES21 H  
FWHM / FWTM 37.0° / 75.0°  
Efficiency 81 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



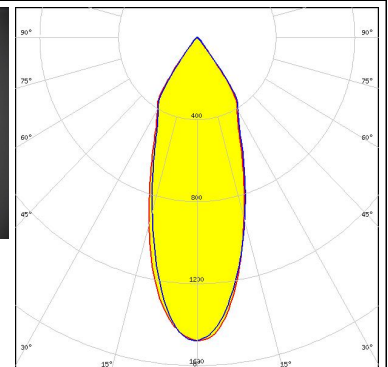
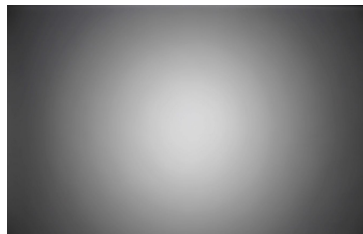
#### XICATO

LED XOB 14.5 mm  
FWHM / FWTM 36.0° / 75.0°  
Efficiency 83 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2021



#### XICATO

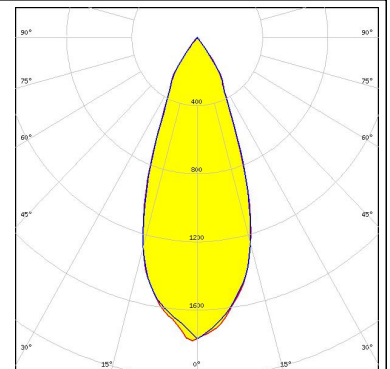
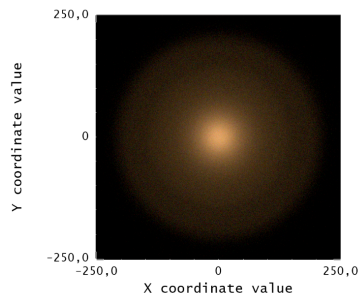
LED XTM - 19mm LES  
FWHM / FWTM 37.0° / 76.0°  
Efficiency 82 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C15743\_XTM-ADAPTER-50-B



#### OPTICAL RESULTS (SIMULATED):

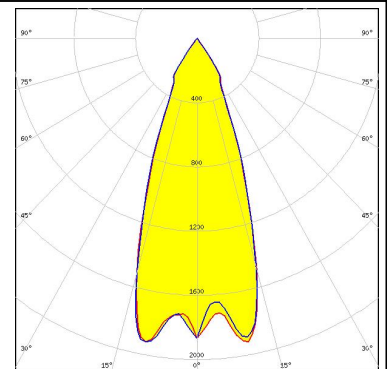
#### CITIZEN

LED CLL03x/CLU03x  
 FWHM / FWTM 40.0° / 70.0°  
 Efficiency 85 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 BJB: 47.319.2021



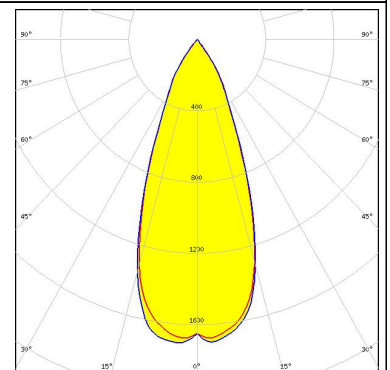
#### CITIZEN

LED CLU730/731/733  
 FWHM / FWTM 35.0° / 69.0°  
 Efficiency 91 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2030



#### SAMSUNG

LED LC040D / LC060D / LC080D  
 FWHM / FWTM 40.0° / 70.0°  
 Efficiency 86 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2030





### GENERAL INFORMATION:

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

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

### MATERIALS:

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

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The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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