

## ANGELA-W-B

~45° wide beam compatible with BJB connectors

### TECHNICAL SPECIFICATIONS:

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

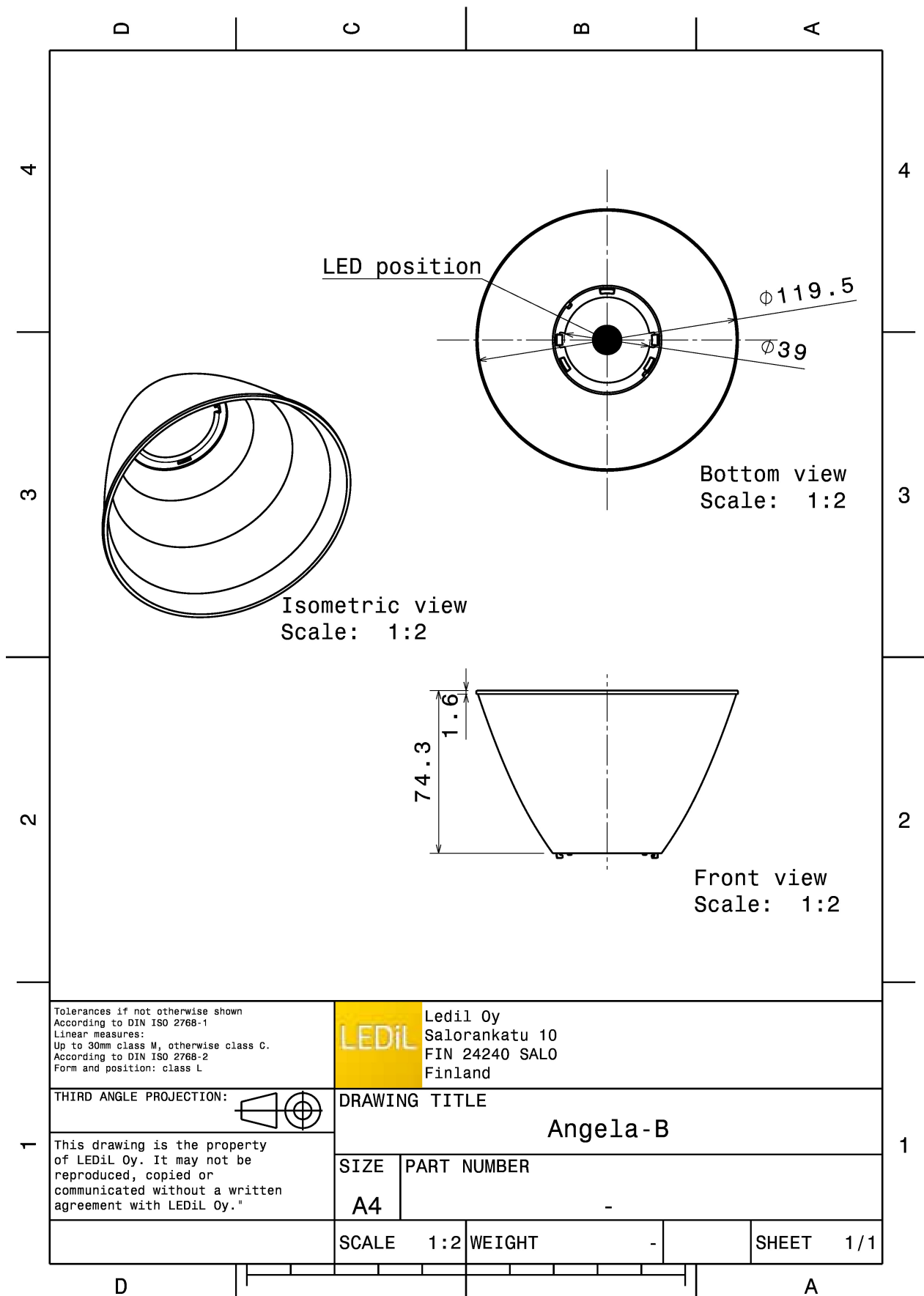
### MATERIAL SPECIFICATIONS:

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_ANGLE-W-B » Box size: 398 x 298 x 265 mm	180	90	45	9.1

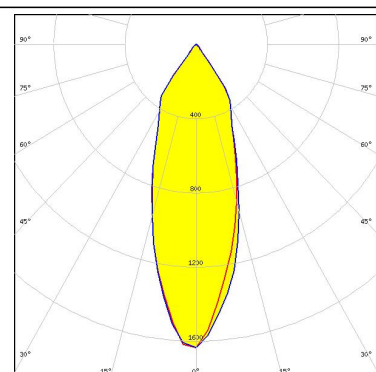
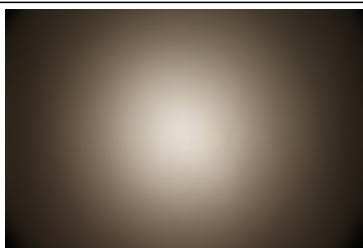




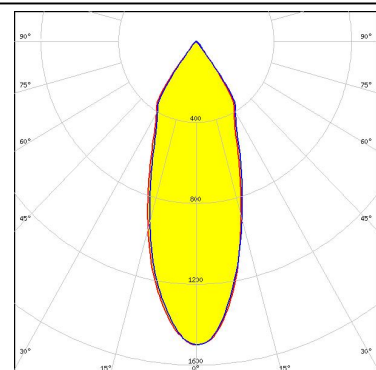
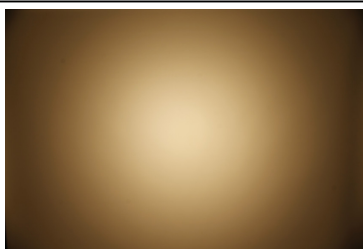
#### PHOTOMETRIC DATA (MEASURED):



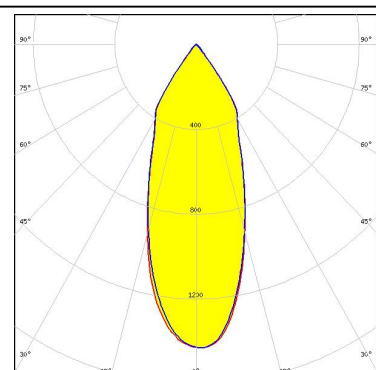
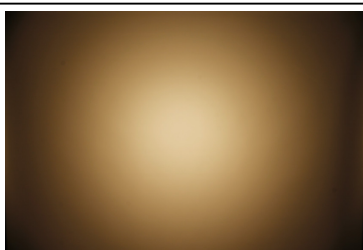
LED BXRA ES Rectangle  
FWHM 34.0°  
Efficiency 83 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2040



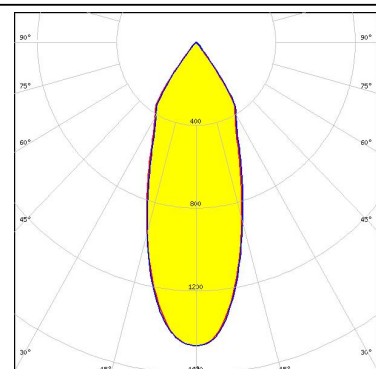
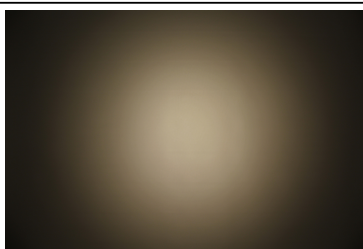
LED V15 Gen6  
FWHM 37.0°  
Efficiency 81 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2224



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



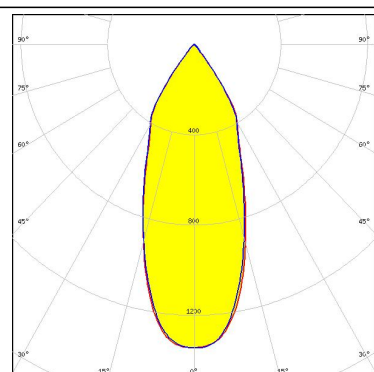
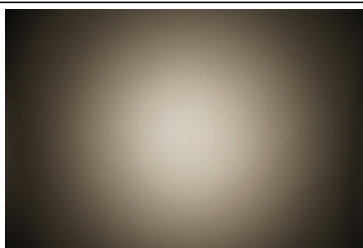
LED V18 Gen7  
FWHM 38.0°  
Efficiency 82 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2350



### PHOTOMETRIC DATA (MEASURED):

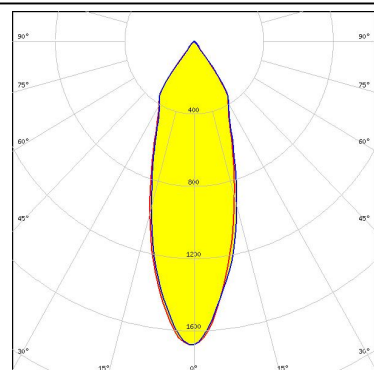
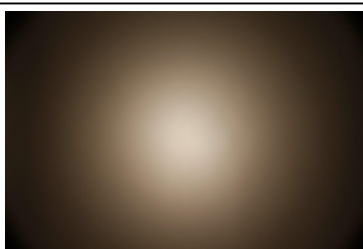


LED V22 Gen6  
FWHM 40.0°  
Efficiency 80 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



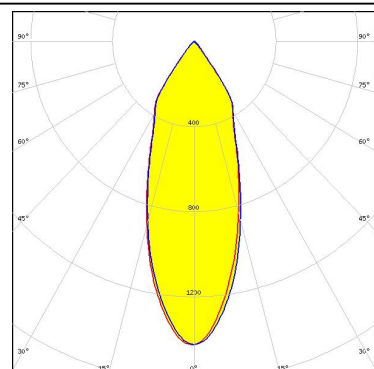
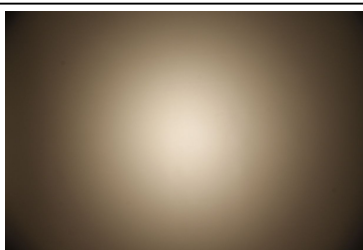
### CITIZEN

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



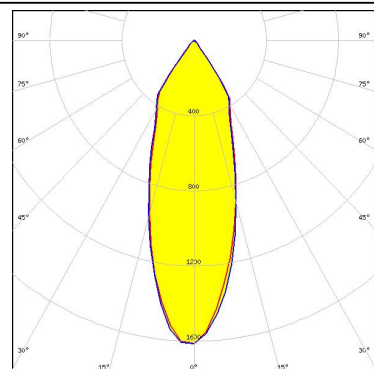
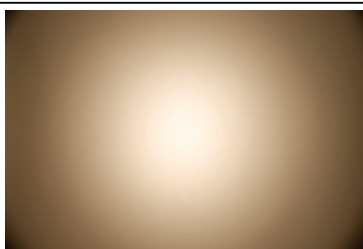
### CITIZEN

LED CLL03x/CLU03x  
FWHM 37.0°  
Efficiency 78 %  
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



### CITIZEN

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

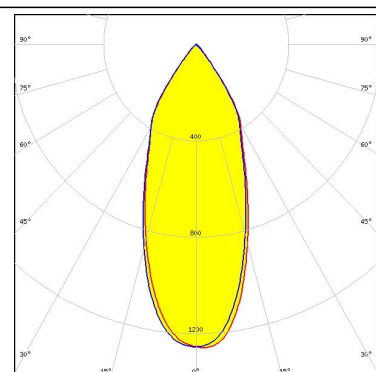
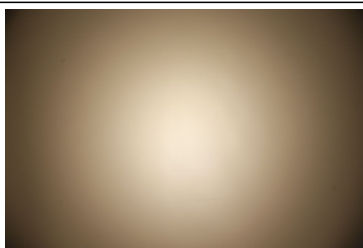




#### PHOTOMETRIC DATA (MEASURED):

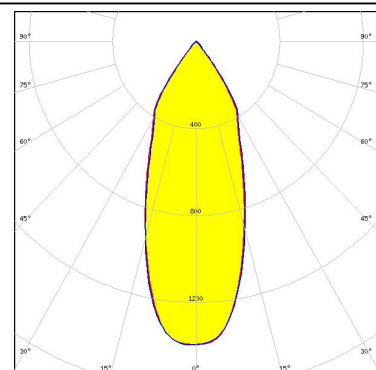
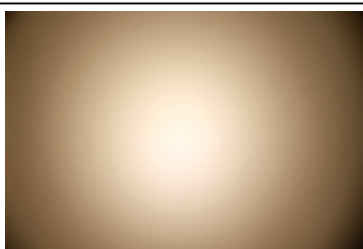
#### CITIZEN

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



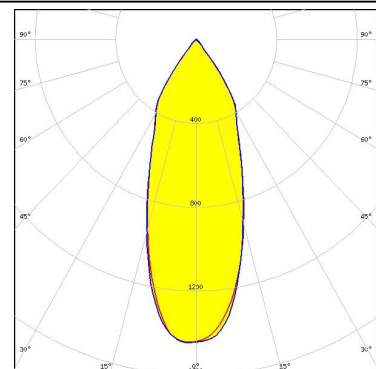
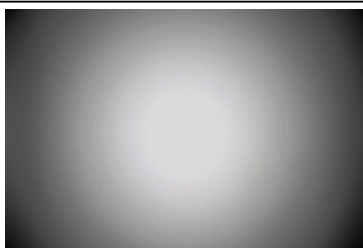
#### CITIZEN

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



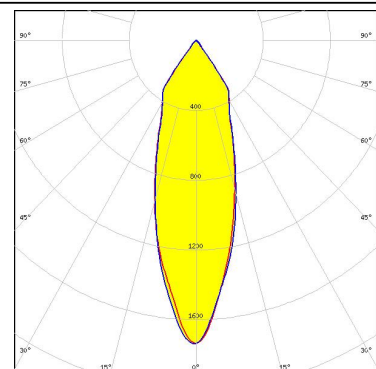
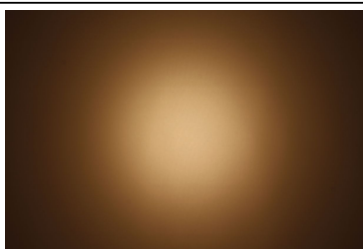
#### CITIZEN

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



#### CITIZEN

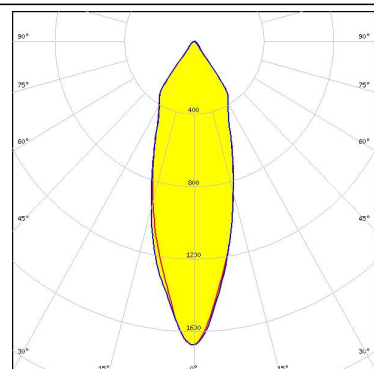
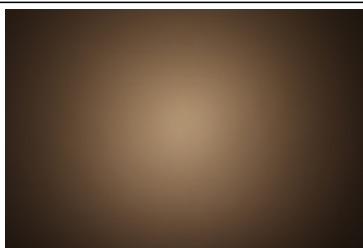
LED CLU720/721  
FWHM 32.0°  
Efficiency 83 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2021



#### PHOTOMETRIC DATA (MEASURED):

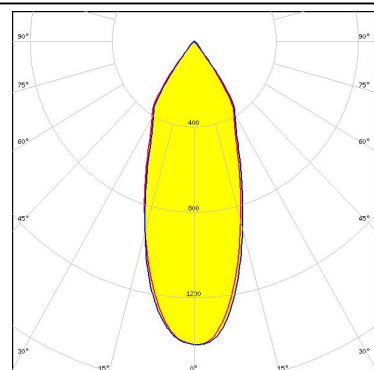
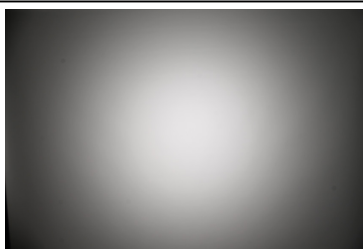
#### CITIZEN

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



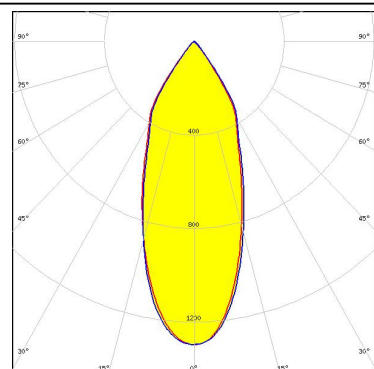
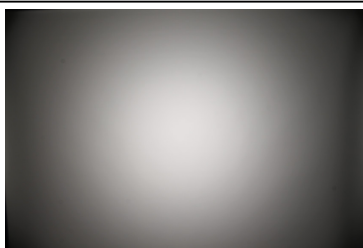
#### CREE

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



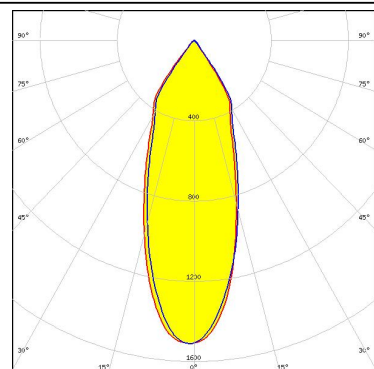
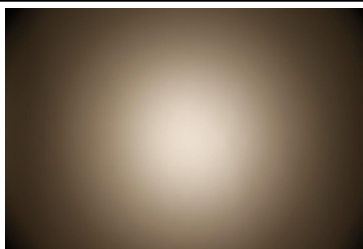
#### CREE

LED CXA/B 25xx  
FWHM 40.0°  
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



#### CREE

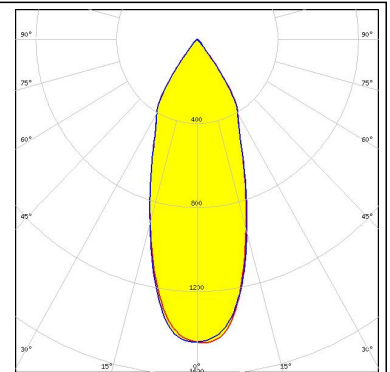
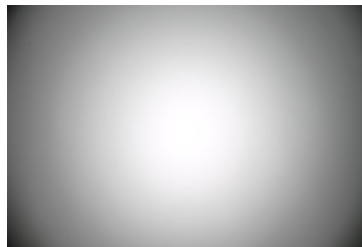
LED CXA/B 25xx  
FWHM 37.0°  
Efficiency 82 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8401/G2



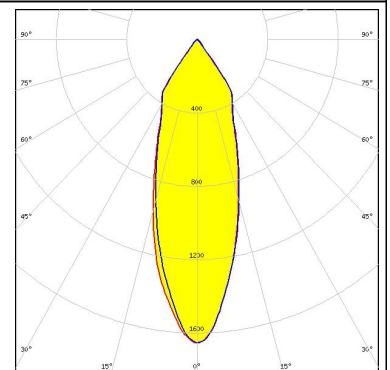
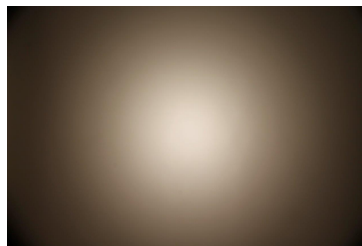
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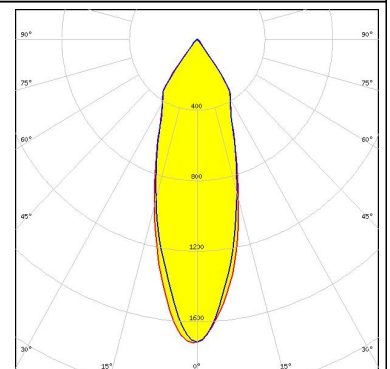
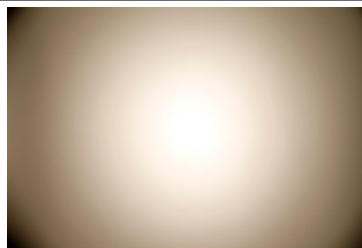
LED CXA/B 30xx  
FWHM 38.0°  
Efficiency 81 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8404/G2



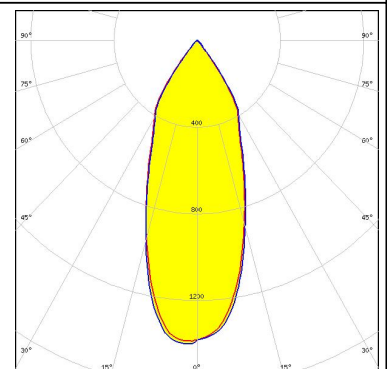
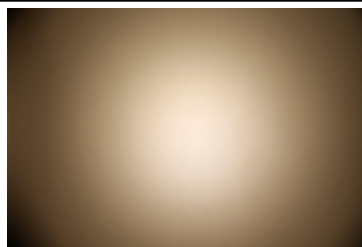
LED COB 10W/13W/17W/24W  
FWHM 34.0°  
Efficiency 83 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8600/G2



LED COB 10W/13W/17W/24W  
FWHM 33.0°  
Efficiency 84 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2080



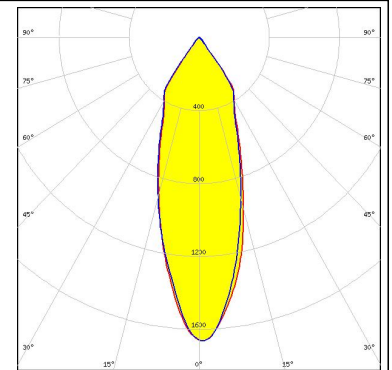
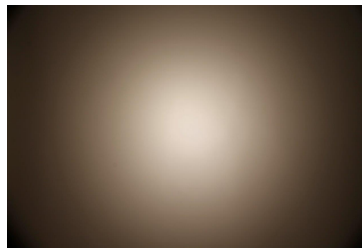
LED COB 40W/60W  
FWHM 39.0°  
Efficiency 81 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8102/G2



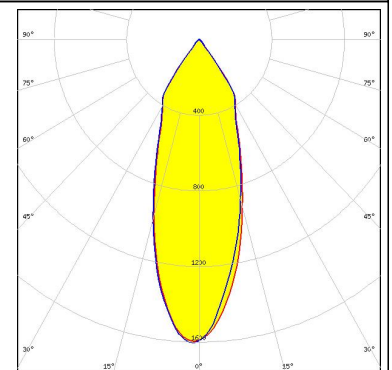
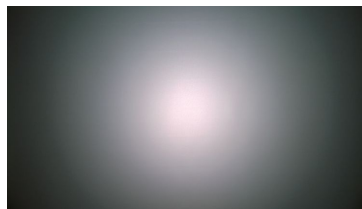
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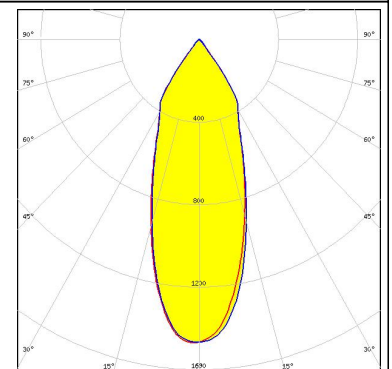
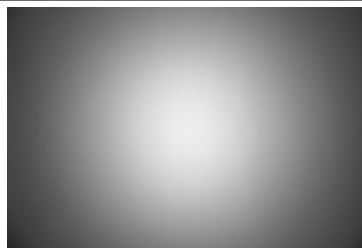
LED LUXEON CoB 1204/1205  
 FWHM 33.0°  
 Efficiency 83 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8301/G2



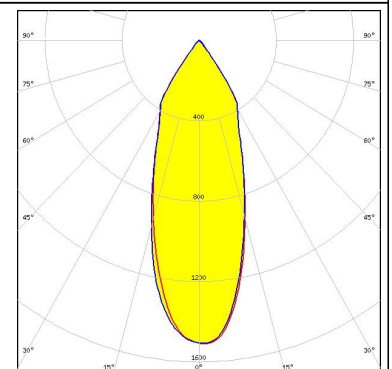
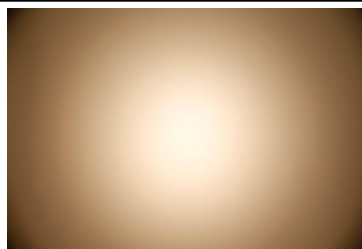
LED LUXEON CoB 1208  
 FWHM 35.0°  
 Efficiency 84 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8301/G2



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



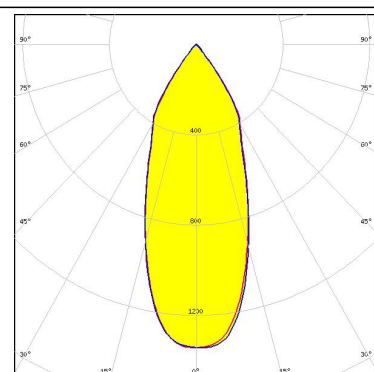
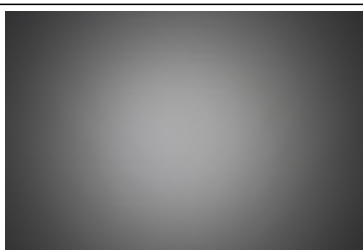
LED LUXEON CoB 1211  
 FWHM 37.0°  
 Efficiency 82 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8102/G2



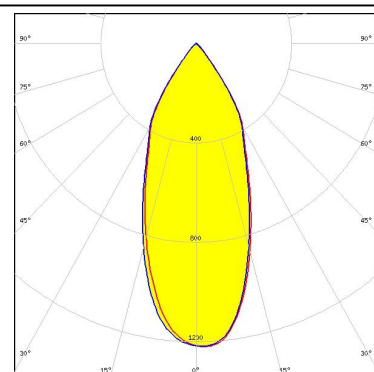
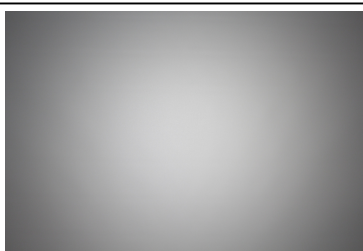
### PHOTOMETRIC DATA (MEASURED):



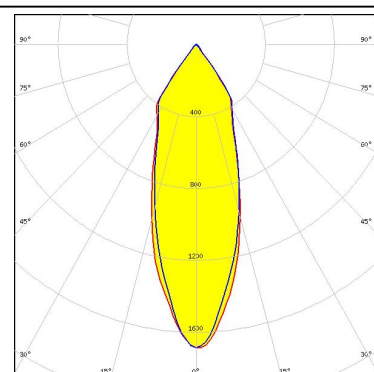
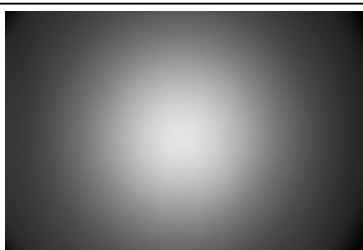
LED LUXEON CoB 1216/1812  
FWHM 40.0°  
Efficiency 80 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



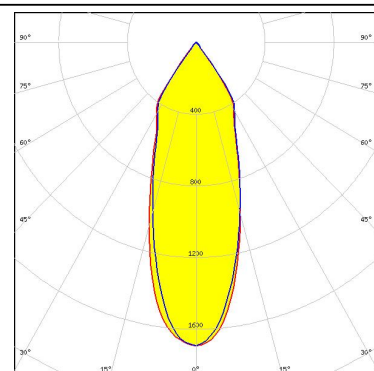
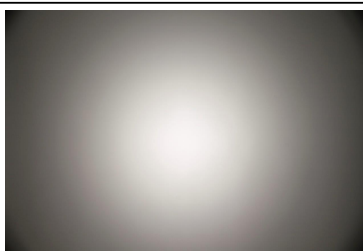
LED LUXEON CoB 1216/1812  
FWHM 42.0°  
Efficiency 76 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F13671\_ANGE-RZ-LENS  
BJB: 47.319.2030



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



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

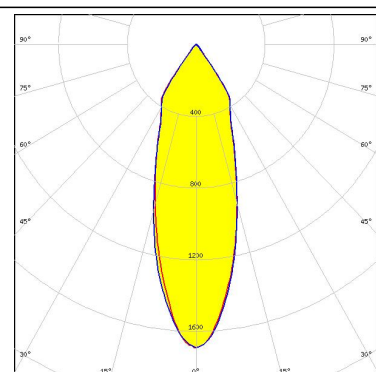
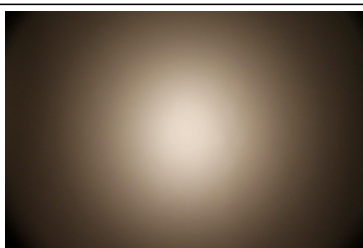




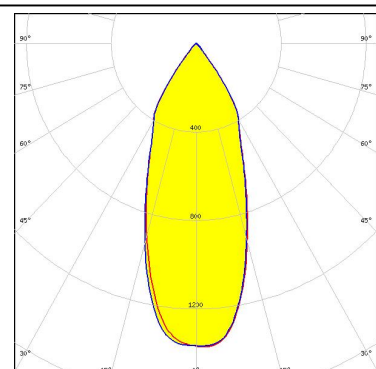
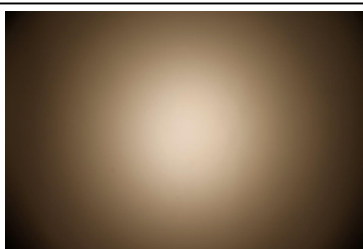
#### PHOTOMETRIC DATA (MEASURED):



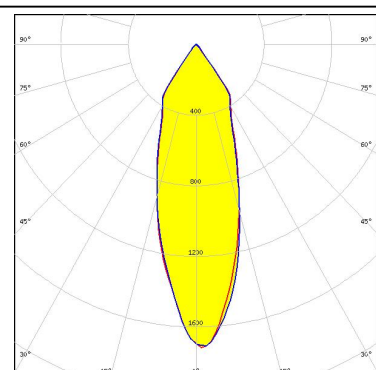
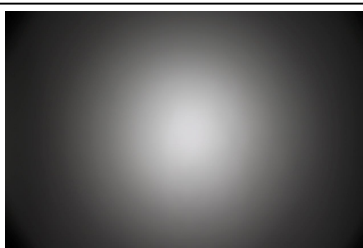
LED CxM-14 (19x19)  
 FWHM 33.0°  
 Efficiency 83 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2021



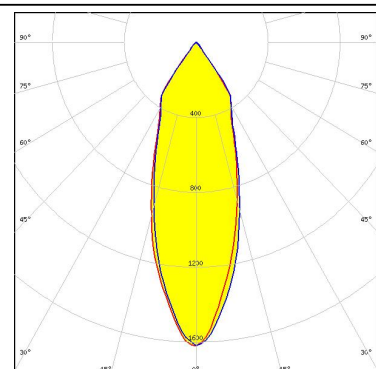
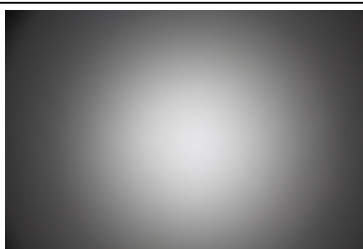
LED CxM-22 (28x28)  
 FWHM 40.0°  
 Efficiency 81 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2030



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



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

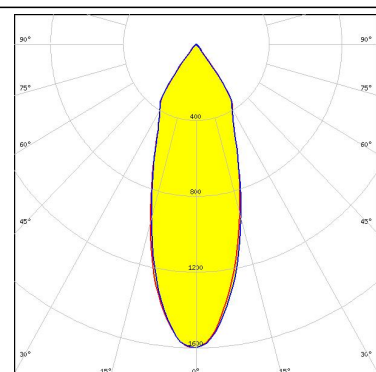
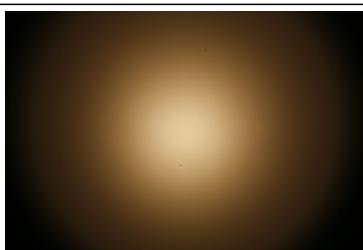




#### PHOTOMETRIC DATA (MEASURED):

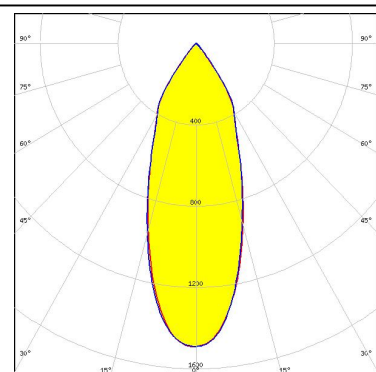
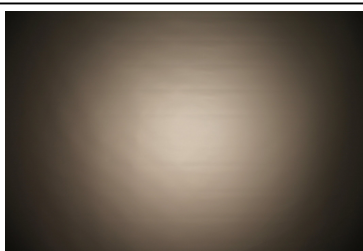
**OSRAM**  
Opto Semiconductors

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



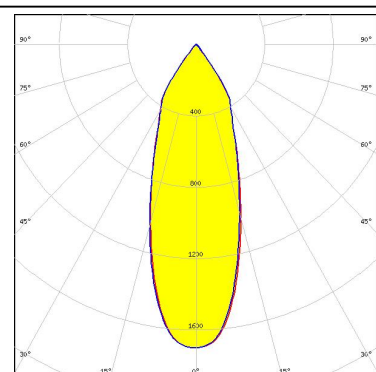
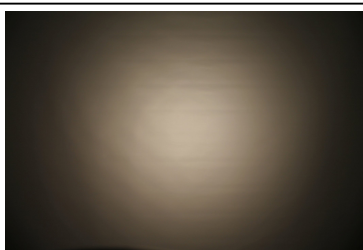
**PHILIPS**

LED Fortimo SLM L19 CoB  
FWHM 38.0°  
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



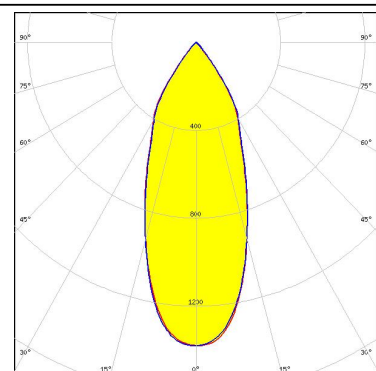
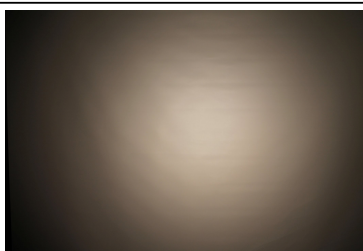
**PHILIPS**

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



**PHILIPS**

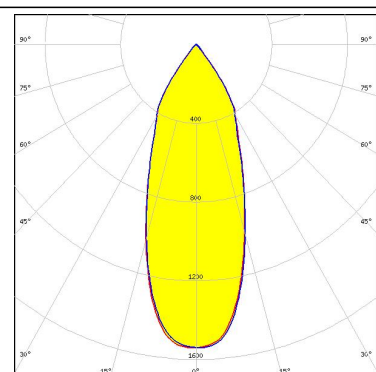
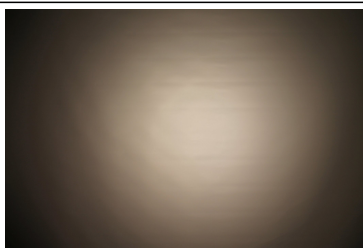
LED Fortimo SLM L23 CoB  
FWHM 40.0°  
Efficiency 82 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F13671\_ANGLE-RZ-LENS  
BJB: 47.319.2030



#### PHOTOMETRIC DATA (MEASURED):

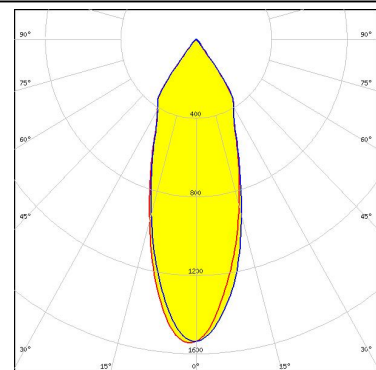
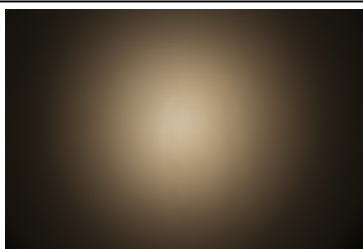
#### PHILIPS

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



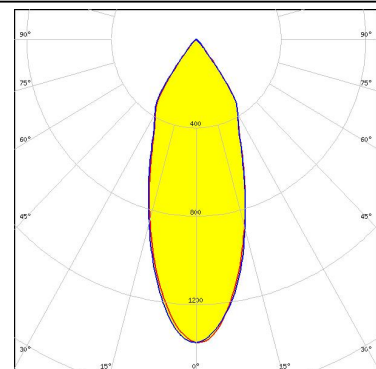
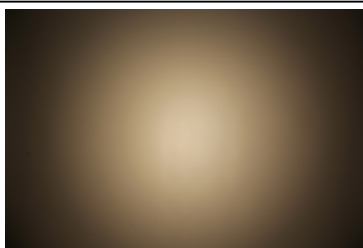
#### SAMSUNG

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



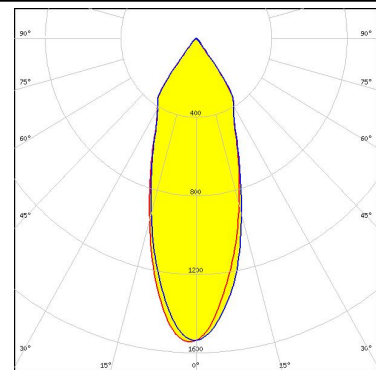
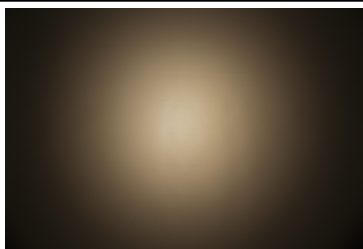
#### SAMSUNG

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

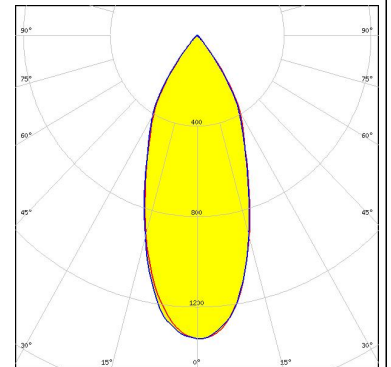
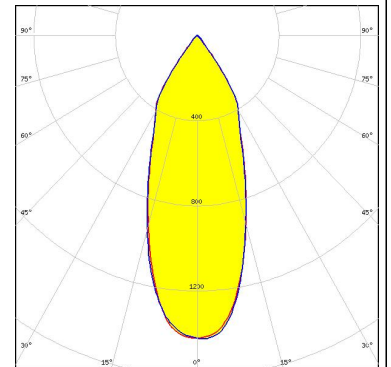
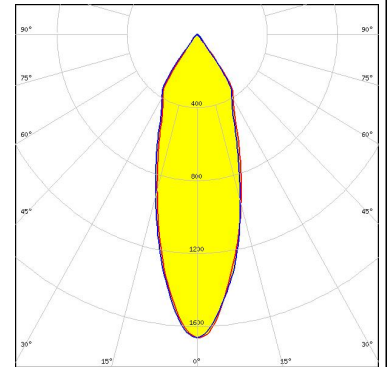
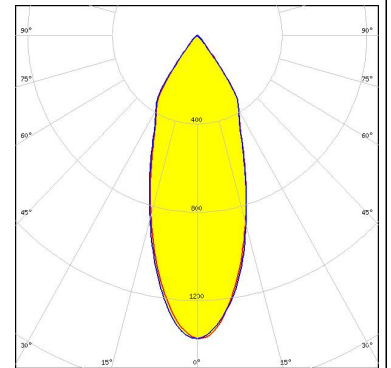


#### SAMSUNG

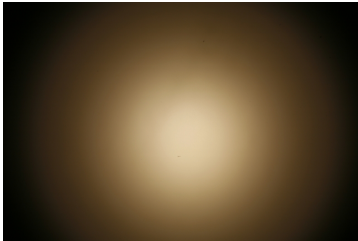
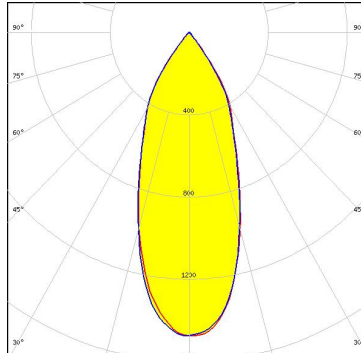
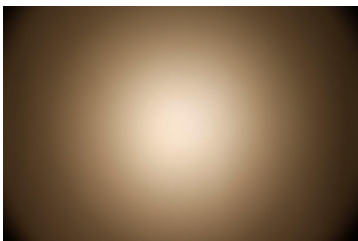
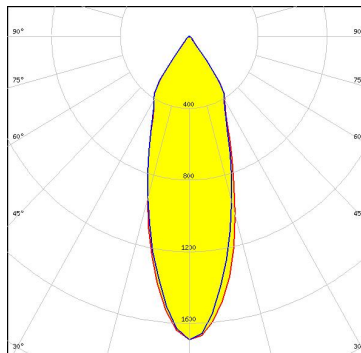
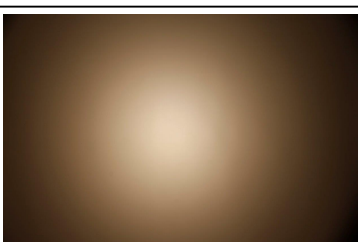
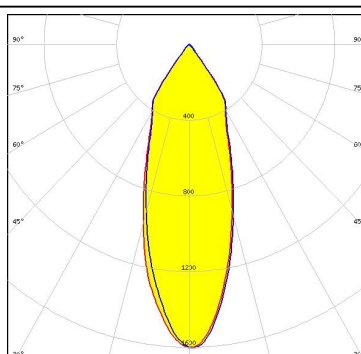
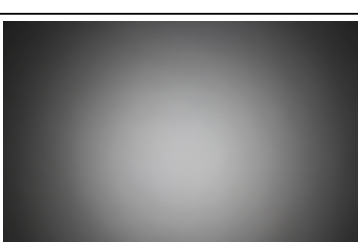
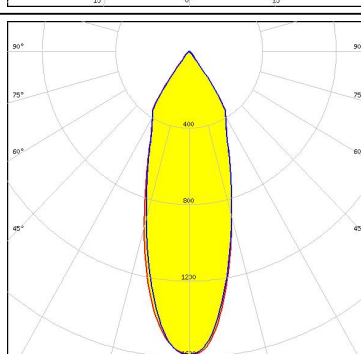
LED LC016D / LC019D / LC026D / LC033D  
 FWHM 36.0°  
 Efficiency 82 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8101/G2



**SAMSUNG**



#### PHOTOMETRIC DATA (MEASURED):

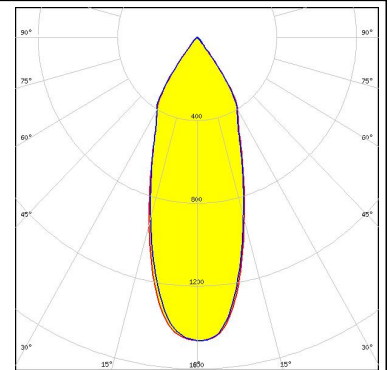
<p><b>SEOL</b> SEOUL SEMICONDUCTOR</p> <p>LED ZC25/40/60 FWHM 40.0° Efficiency 82 % Peak intensity 1.5 cd/lm LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2030</p>		
<p><b>SHARP</b></p> <p>LED Mega Zenigata (GW6DME) FWHM 34.0° Efficiency 85 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2011</p>		
<p><b>SHARP</b></p> <p>LED Mega Zenigata (GW6DME) FWHM 35.0° Efficiency 84 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: A.A.G. STUCCHI: 8301/G2</p>		
<p><b>TRIDONIC</b></p> <p>LED SLE G7 LES17 H FWHM 34.0° Efficiency 81 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		



## PHOTOMETRIC DATA (MEASURED):

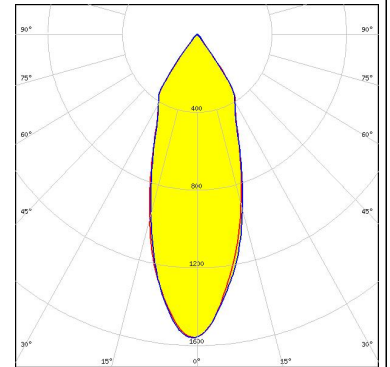
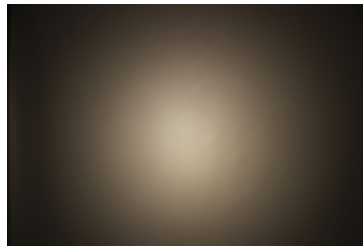
### TRIDONIC

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



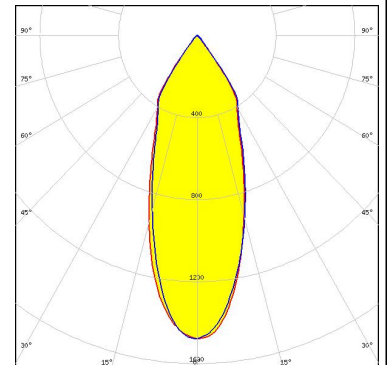
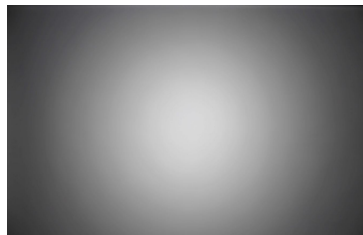
### XICATO

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



### XICATO

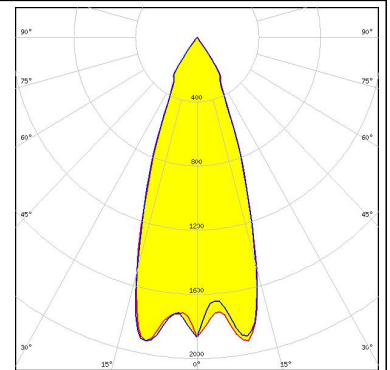
LED XTM - 19mm LES  
FWHM 37.0°  
Efficiency 82 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C15743\_XTM-ADAPTER-50-B



## PHOTOMETRIC DATA (SIMULATED):

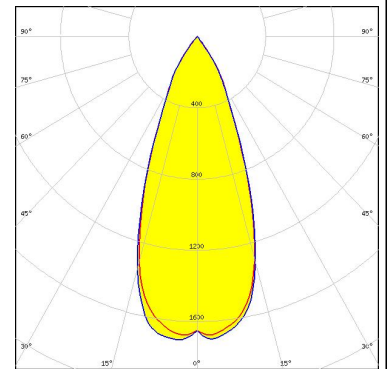
### CITIZEN

LED CLU730/731  
FWHM 35.0°  
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 40.0°  
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.

### 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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Sycamore IL 60178  
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where\\_to\\_buy](http://www.ledil.com/where_to_buy)

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Hong Kong, China

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