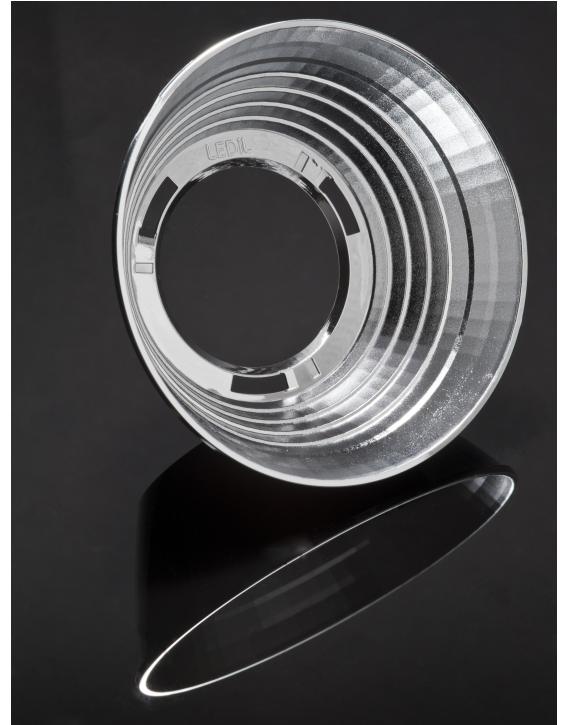


## ANGELINA-W-B

~50° wide beam compatible with BJB connectors

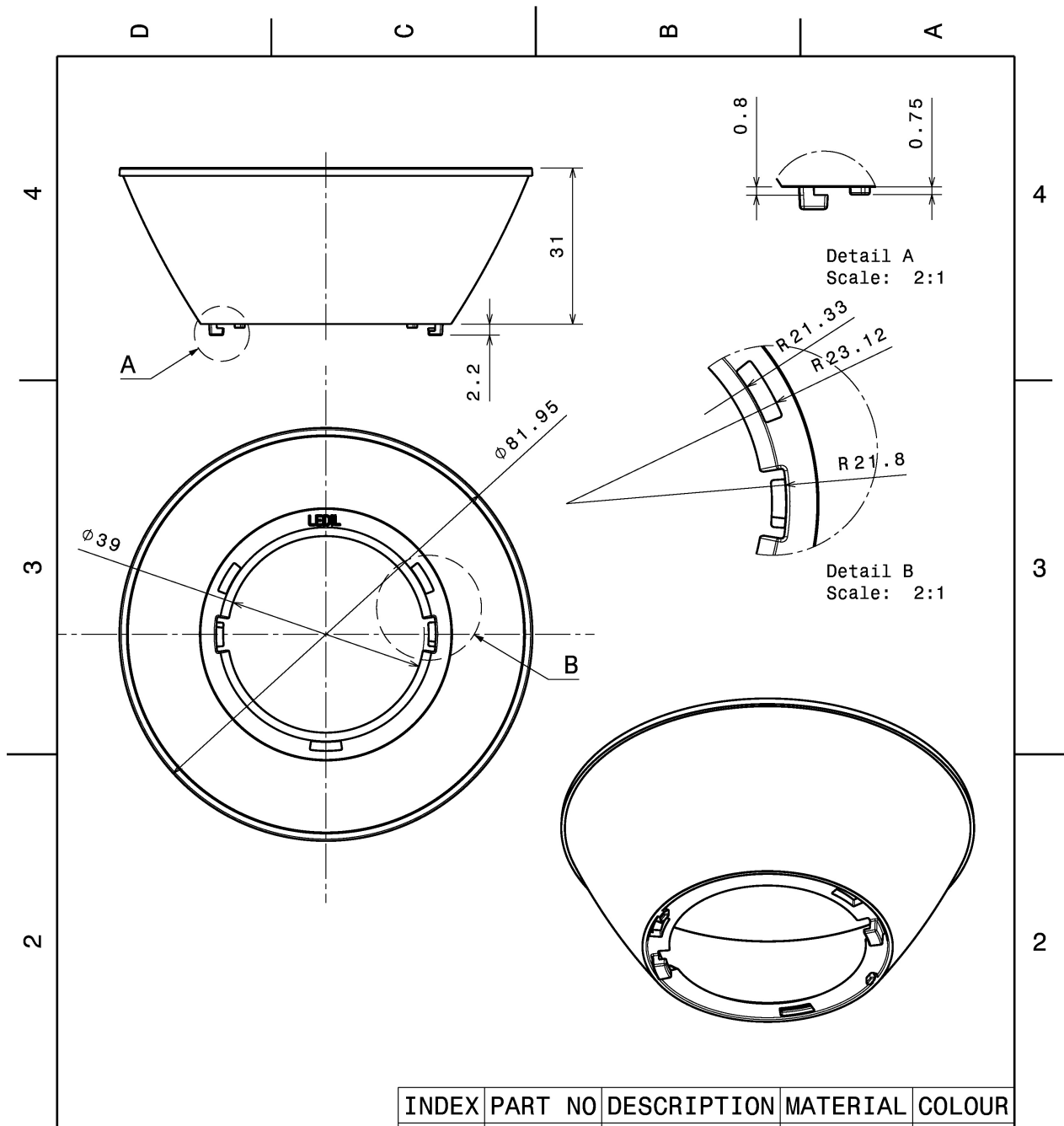
### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 82.0 mm
Height	31 mm
Fastening	socket
Colour	metal
Box size	480 x 280 x 300 mm
Box weight	10.6 kg
Quantity in Box	825 pcs
ROHS compliant	yes ⓘ



### MATERIAL SPECIFICATIONS:

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



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1		ANGELINA-B	PC	metal

Tolerances if not otherwise shown  
According to DIN ISO 2768-1  
Linear measures:  
Up to 30mm class M, otherwise class C.  
According to DIN ISO 2768-2  
Form and position: class L

**LEDiL** Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

THIRD ANGLE PROJECTION:


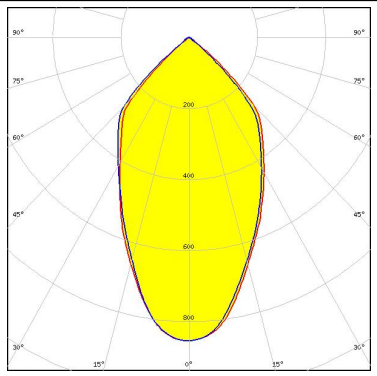
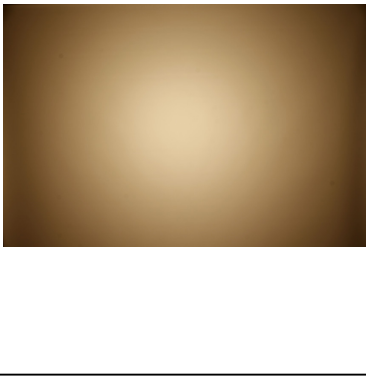
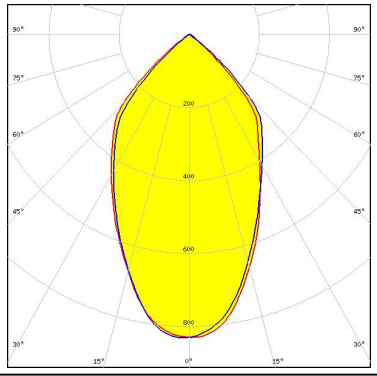
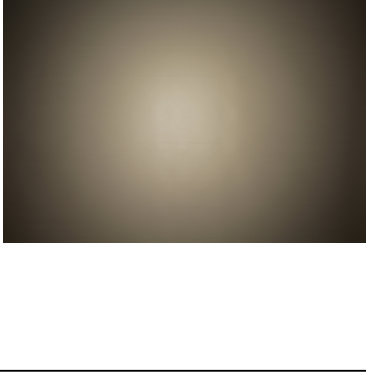
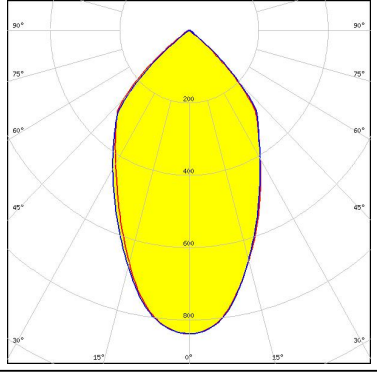
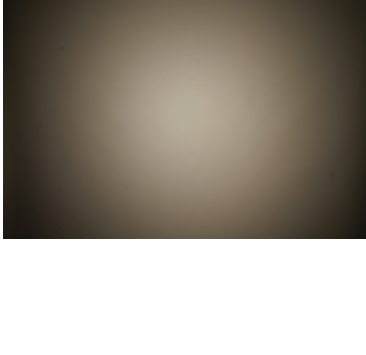
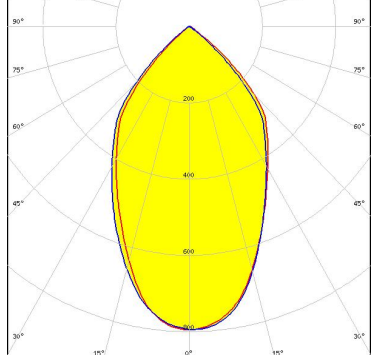
DRAWING TITLE  
**ANGELINA-B series Reflector**

This drawing is the property of LEDiL Oy. It may not be reproduced, copied or communicated without a written agreement with LEDiL Oy."


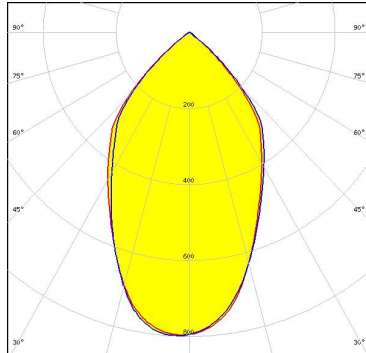
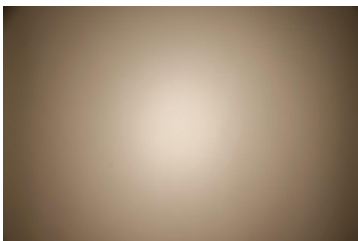
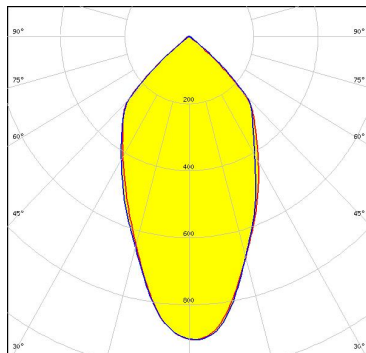
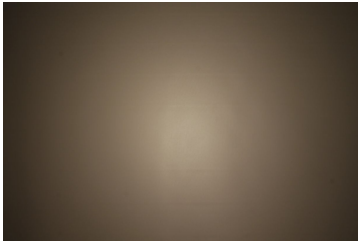
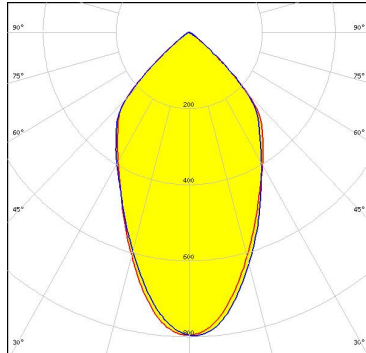

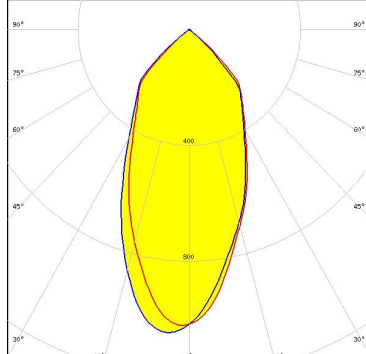
SIZE	PART NUMBER
A4	-

SCALE	1:1	WEIGHT	-	SHEET	1/1
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#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V15 Gen6</p> <p>FWHM 59.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.850 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: BJB: 47.319.2224</p>		
<p>bridgelux.</p> <p>LED V18 Gen6</p> <p>FWHM 61.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.830 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: BJB: 47.319.2274</p>		
<p>bridgelux.</p> <p>LED V18 Gen7</p> <p>FWHM 60.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 0.840 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: BJB: 47.319.2350</p>		
<p>bridgelux.</p> <p>LED V22 Gen6</p> <p>FWHM 63.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 0.800 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: A.A.G. STUCCHI: 8102/G2</p>		

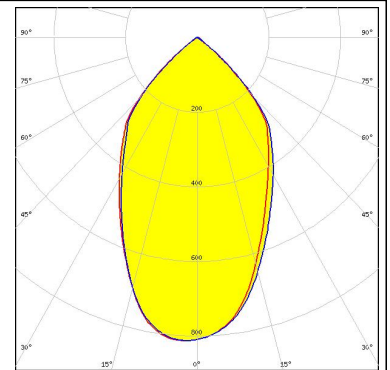
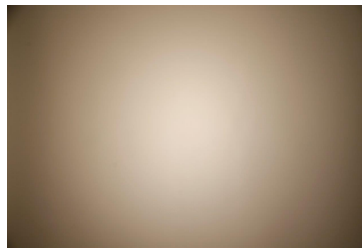
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux</p> <p>LED V22 Gen7            FWHM 63.0°            Efficiency 90 %            Peak intensity 0.800 cd/lm            LEDs/each optic 1            Light colour White            Required components:            BJB: 47.319.2030</p>		
<p><b>CITIZEN</b></p> <p>LED CLL03x/CLU03x            FWHM 55.0°            Efficiency 94 %            Peak intensity 0.900 cd/lm            LEDs/each optic 1            Light colour White            Required components:            A.A.G. STUCCHI: 8101/G2</p>		
<p><b>CITIZEN</b></p> <p>LED CLL03x/CLU03x            FWHM 60.0°            Efficiency 89 %            Peak intensity 0.800 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F13671_ANGLE-RZ-LENS            A.A.G. STUCCHI: 8101/G2</p>		
<p><b>CITIZEN</b></p> <p>LED CLL03x/CLU03x            FWHM 49.0°            Efficiency 92 %            Peak intensity 1.000 cd/lm            LEDs/each optic 1            Light colour White            Required components:            BJB: 47.319.2021</p>		

#### PHOTOMETRIC DATA (MEASURED):

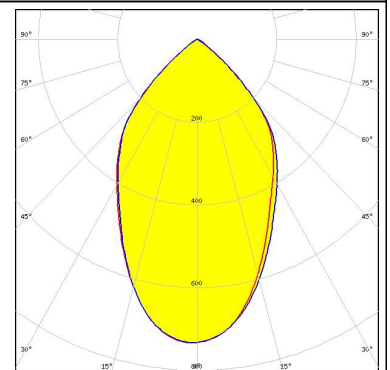
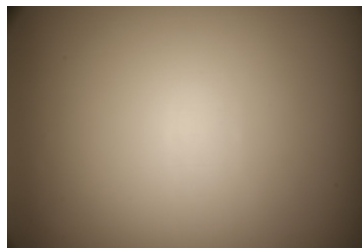
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 62.0°  
 Efficiency 92 %  
 Peak intensity 0.820 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8102/G2



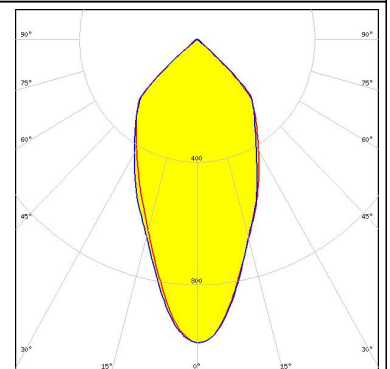
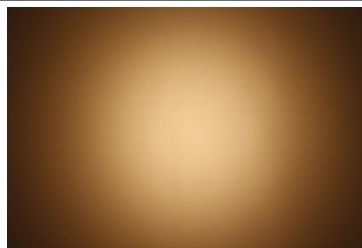
#### CITIZEN

LED CLL04x/CLU04x  
 FWHM 66.0°  
 Efficiency 87 %  
 Peak intensity 0.730 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 A.A.G. STUCCHI: 8102/G2



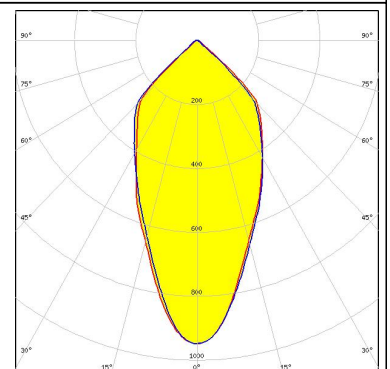
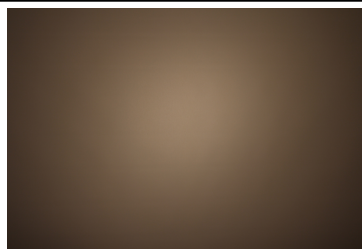
#### CITIZEN

LED CLU720/721  
 FWHM 49.0°  
 Efficiency 93 %  
 Peak intensity 1.000 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2021



#### CITIZEN

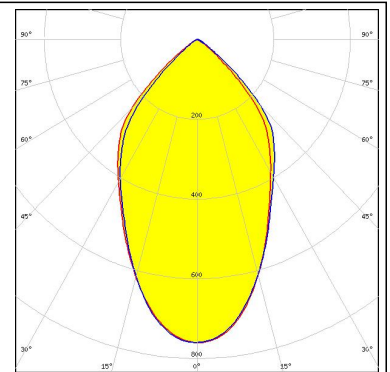
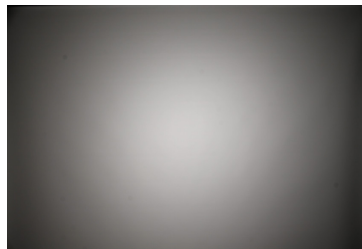
LED CLU720/721  
 FWHM 51.0°  
 Efficiency 94 %  
 Peak intensity 0.950 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8101/G2



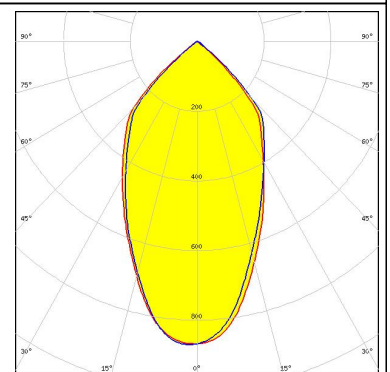
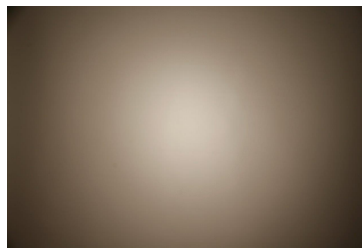
#### PHOTOMETRIC DATA (MEASURED):



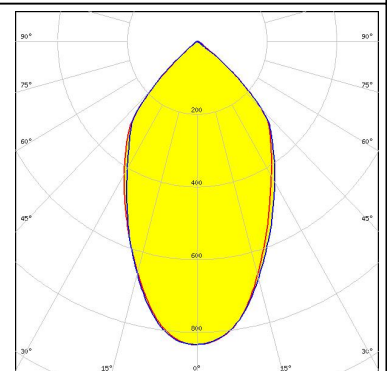
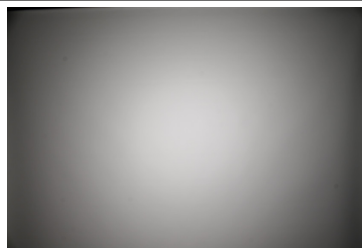
LED CXA/B 25xx  
 FWHM 64.0°  
 Efficiency 88 %  
 Peak intensity 0.760 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 BJB: 47.319.2141



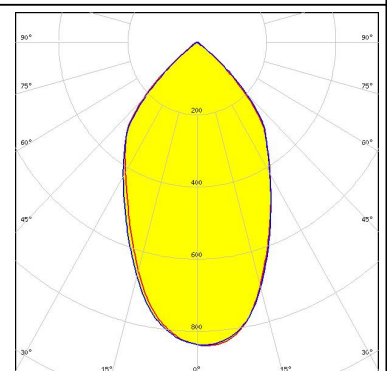
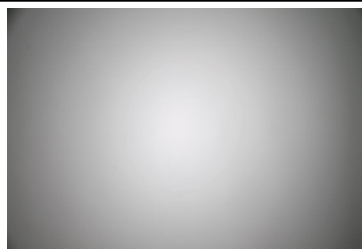
LED CXA/B 25xx  
 FWHM 57.0°  
 Efficiency 93 %  
 Peak intensity 0.870 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8401/G2



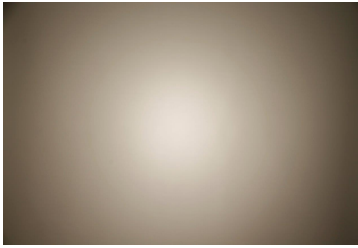
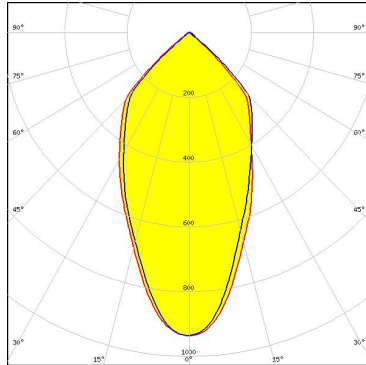

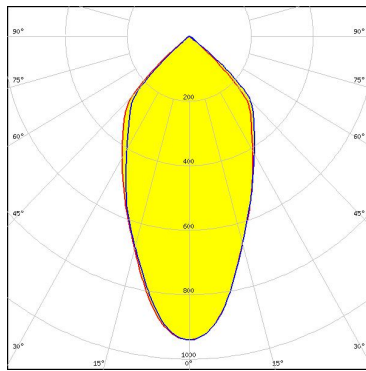
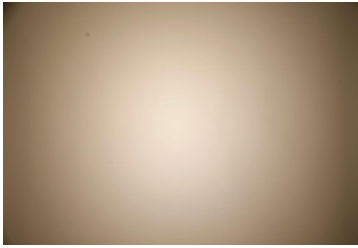
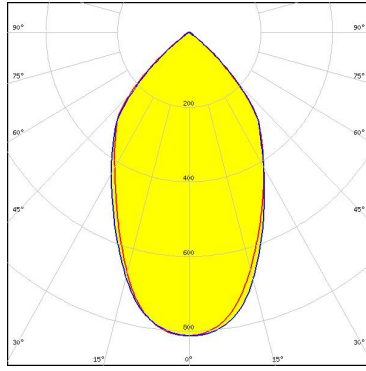
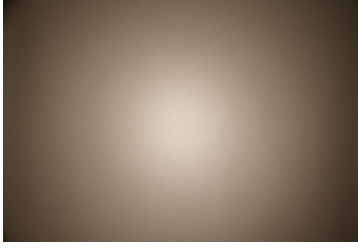
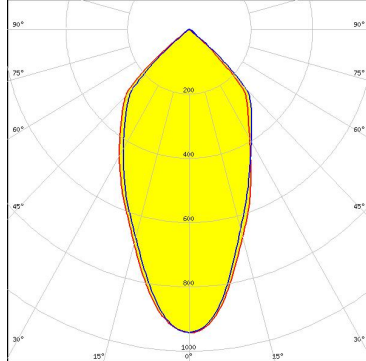
LED CXA/B 25xx  
 FWHM 61.0°  
 Efficiency 92 %  
 Peak intensity 0.800 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2141



LED CXA/B 30xx  
 FWHM 63.0°  
 Efficiency 91 %  
 Peak intensity 0.840 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8404/G2



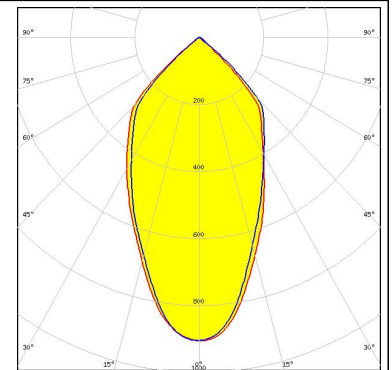
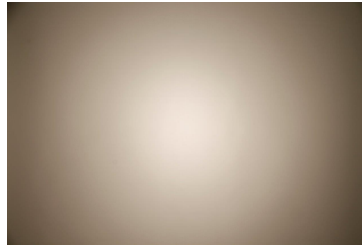
#### PHOTOMETRIC DATA (MEASURED):

<p><b>LG Innotek</b></p> <p>LED COB 10W/13W/17W/24W            FWHM 52.0°            Efficiency 94 %            Peak intensity 0.940 cd/lm            LEDs/each optic 1            Light colour White            Required components:            A.A.G. STUCCHI: 8600/G2</p>		
<p><b>LG Innotek</b></p> <p>LED COB 10W/13W/17W/24W            FWHM 53.0°            Efficiency 93 %            Peak intensity 0.940 cd/lm            LEDs/each optic 1            Light colour White            Required components:            BJB: 47.319.2080</p>		
<p><b>LG Innotek</b></p> <p>LED COB 40W/60W            FWHM 62.0°            Efficiency 92 %            Peak intensity 0.810 cd/lm            LEDs/each optic 1            Light colour White            Required components:            A.A.G. STUCCHI: 8102/G2</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1204/1205            FWHM 53.0°            Efficiency 94 %            Peak intensity 0.940 cd/lm            LEDs/each optic 1            Light colour White            Required components:            A.A.G. STUCCHI: 8301/G2</p>		

#### PHOTOMETRIC DATA (MEASURED):

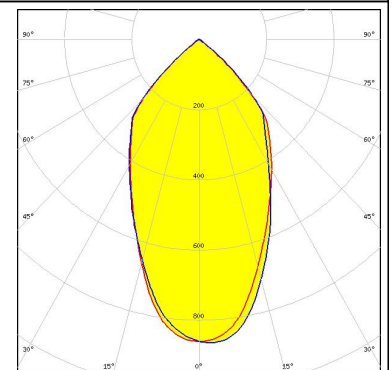
#### LUMILEDS

LED LUXEON CoB 1208  
FWHM 55.0°  
Efficiency 93 %  
Peak intensity 0.900 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8301/G2



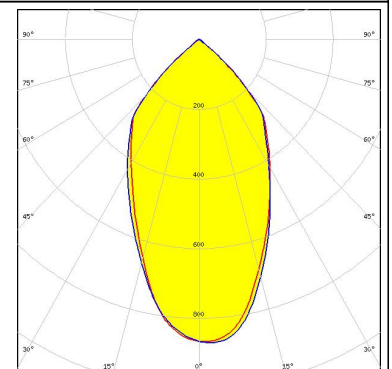
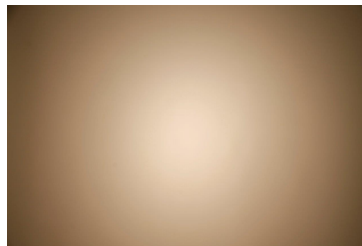
#### LUMILEDS

LED LUXEON CoB 1211  
FWHM 58.0°  
Efficiency 92 %  
Peak intensity 0.870 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2030



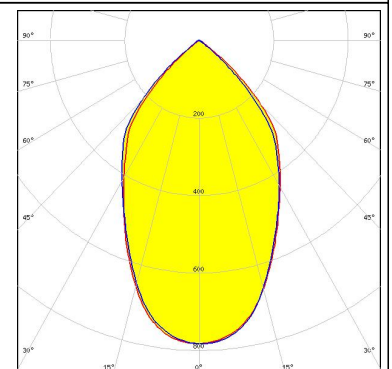
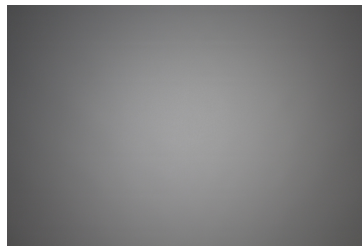
#### LUMILEDS

LED LUXEON CoB 1211  
FWHM 58.0°  
Efficiency 92 %  
Peak intensity 0.870 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8102/G2




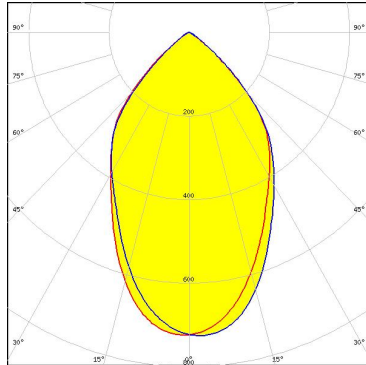
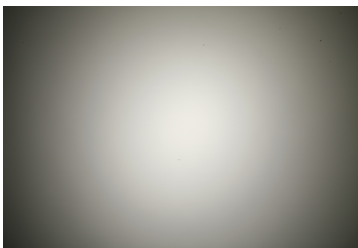
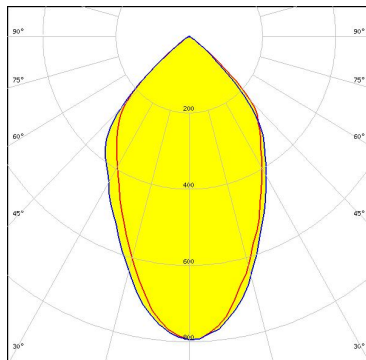

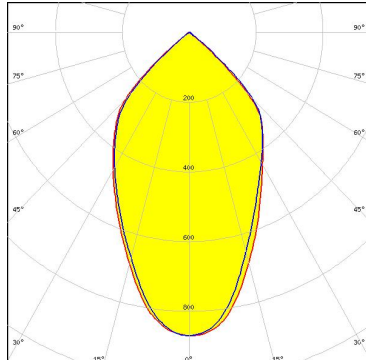
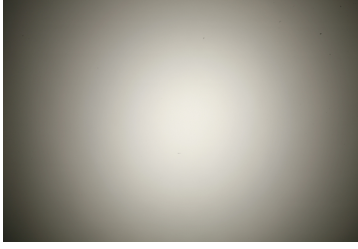
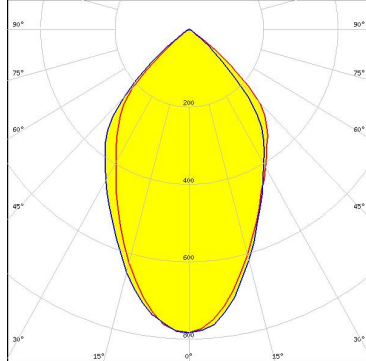
#### LUMILEDS

LED LUXEON CoB 1216/1812  
FWHM 65.0°  
Efficiency 91 %  
Peak intensity 0.780 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2030

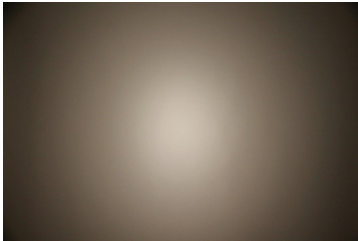
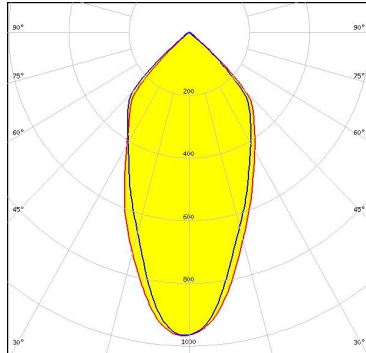
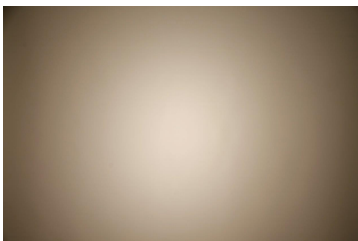
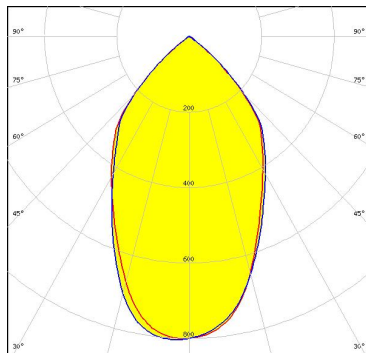
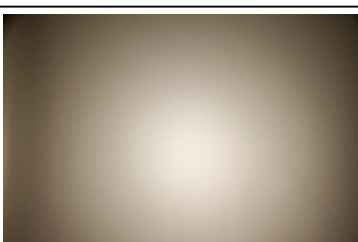
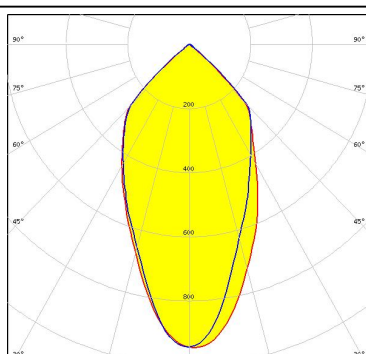
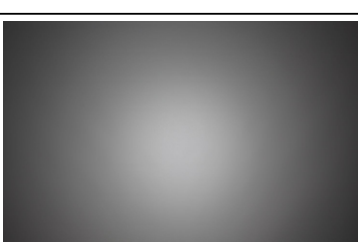
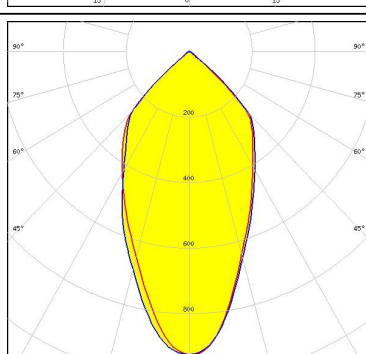




#### PHOTOMETRIC DATA (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1216/1812            FWHM 67.0°            Efficiency 87 %            Peak intensity 0.730 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F13671_ANGE-RZ-LENS            BJB: 47.319.2030</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON K12            FWHM 64.0°            Efficiency 89 %            Peak intensity 0.800 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F13671_ANGE-RZ-LENS            BJB: 47.319.2070</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON K16            FWHM 61.0°            Efficiency %            Peak intensity 0.870 cd/lm            LEDs/each optic 1            Light colour White            Required components:            BJB: 47.319.2070</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON K16            FWHM 65.0°            Efficiency 89 %            Peak intensity 0.800 cd/lm            LEDs/each optic 1            Light colour White            Required components:            F13671_ANGE-RZ-LENS            BJB: 47.319.2070</p>		

#### PHOTOMETRIC DATA (MEASURED):

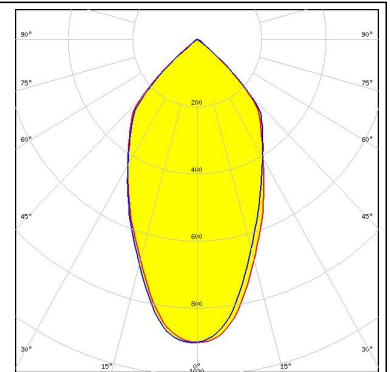
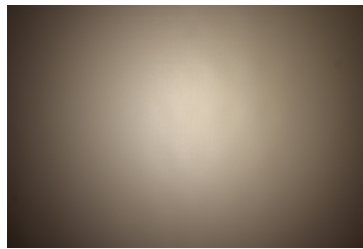
<p><b>LUMINUS</b></p> <p>LED CxM-14 (19x19)            FWHM 51.0°            Efficiency 93 %            Peak intensity 0.970 cd/lm            LEDs/each optic 1            Light colour White            Required components:            BJB: 47.319.2021</p>		
<p><b>LUMINUS</b></p> <p>LED CxM-22 (28x28)            FWHM 63.0°            Efficiency 92 %            Peak intensity 0.800 cd/lm            LEDs/each optic 1            Light colour White            Required components:            BJB: 47.319.2030</p>		
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED Soleriq S13            FWHM 52.0°            Efficiency 94 %            Peak intensity 0.950 cd/lm            LEDs/each optic 1            Light colour White            Required components:            A.A.G. STUCCHI: 8502/G2</p>		
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED Soleriq S13 19x19            FWHM 53.0°            Efficiency 93 %            Peak intensity 0.920 cd/lm            LEDs/each optic 1            Light colour White            Required components:            BJB: 47.319.2021</p>		

#### PHOTOMETRIC DATA (MEASURED):

#### OSRAM

Opto Semiconductors

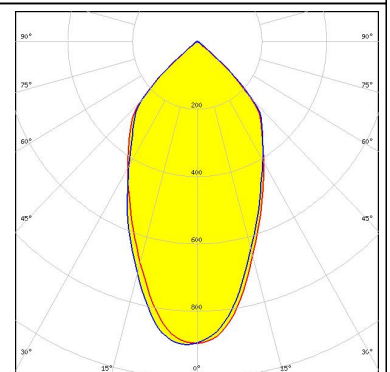
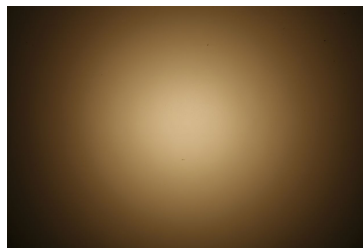
LED Soleriq S19  
 FWHM 55.0°  
 Efficiency 93 %  
 Peak intensity 0.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8503/G2



#### OSRAM

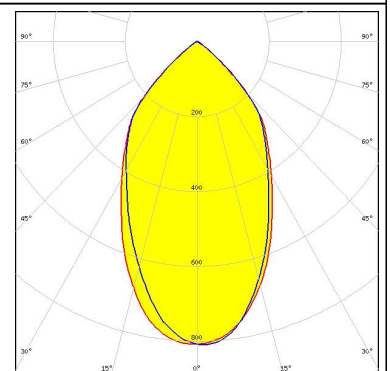
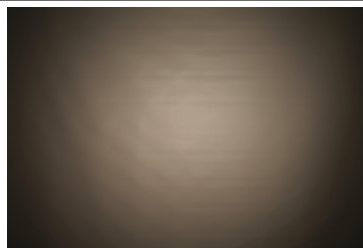
Opto Semiconductors

LED Soleriq S19  
 FWHM 55.0°  
 Efficiency 93 %  
 Peak intensity 0.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2170



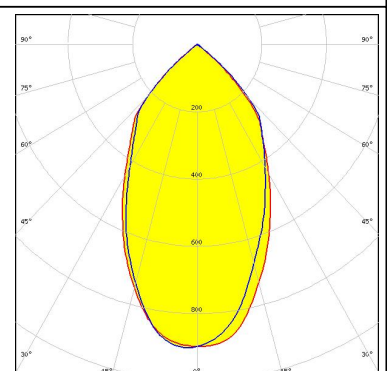
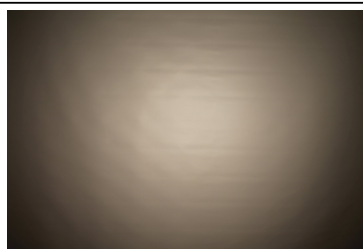
#### PHILIPS

LED Fortimo SLM L19 CoB  
 FWHM 60.0°  
 Efficiency 88 %  
 Peak intensity 0.810 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGLE-RZ-LENS  
 BJB: 47.319.2030



#### PHILIPS

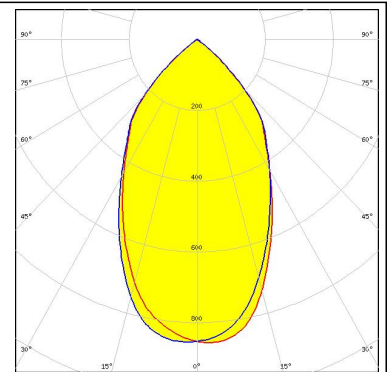
LED Fortimo SLM L19 CoB  
 FWHM 58.0°  
 Efficiency 93 %  
 Peak intensity 0.900 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2030



#### PHOTOMETRIC DATA (MEASURED):

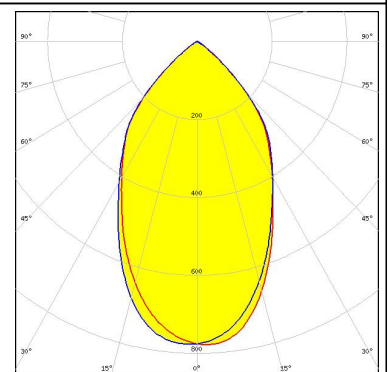
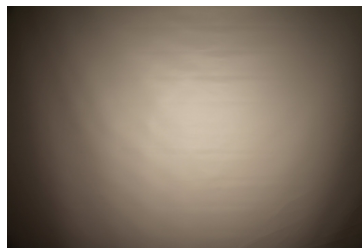
#### PHILIPS

LED Fortimo SLM L23 CoB  
FWHM 60.0°  
Efficiency 93 %  
Peak intensity 0.900 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2030



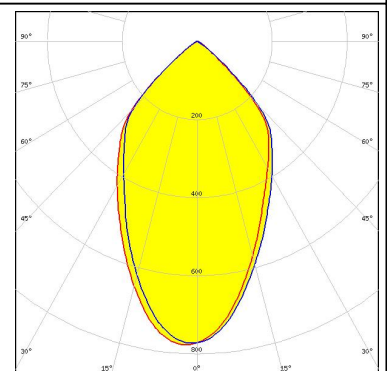
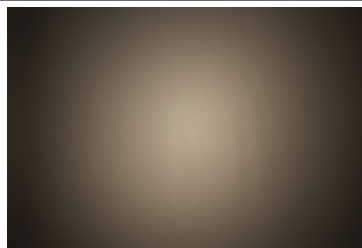
#### PHILIPS

LED Fortimo SLM L23 CoB  
FWHM 62.0°  
Efficiency 88 %  
Peak intensity 0.800 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F13671\_ANGE-RZ-LENS  
BJB: 47.319.2030



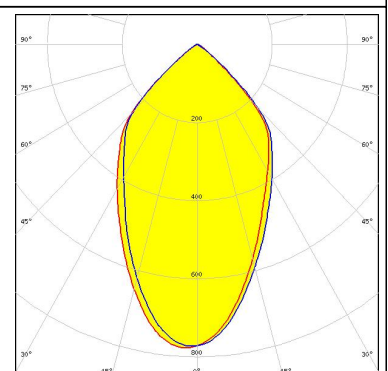
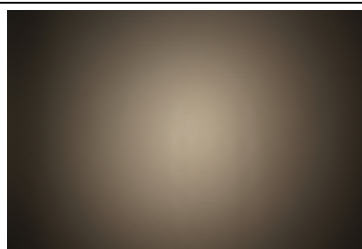
#### SAMSUNG

LED COB D Series LES 14.5 mm  
FWHM 62.0°  
Efficiency 89 %  
Peak intensity 0.780 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F13671\_ANGE-RZ-LENS  
BJB: 47.319.2021



#### SAMSUNG

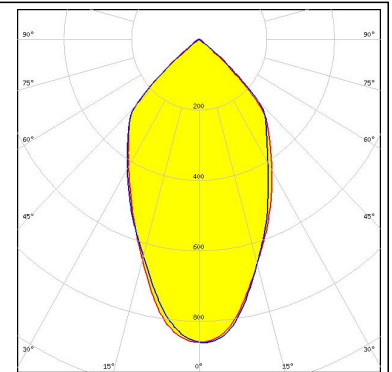
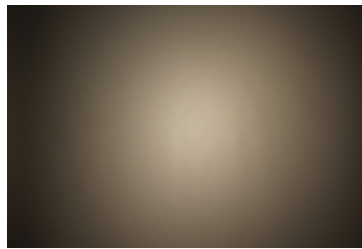
LED COB D Series LES 14.5 mm  
FWHM 62.0°  
Efficiency 89 %  
Peak intensity 0.780 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F13671\_ANGE-RZ-LENS  
A.A.G. STUCCHI: 8101/G2



#### PHOTOMETRIC DATA (MEASURED):

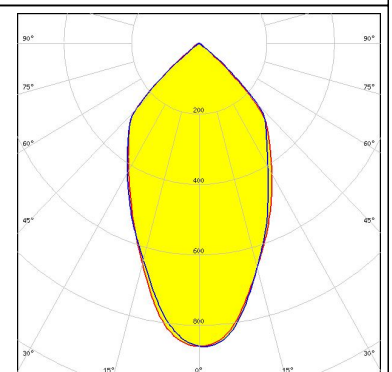
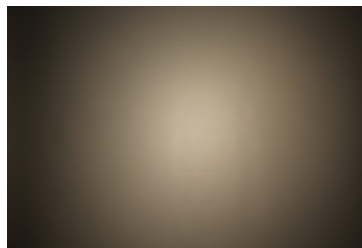
#### SAMSUNG

LED COB D Series LES 14.5 mm  
 FWHM 59.0°  
 Efficiency 93 %  
 Peak intensity 0.860 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2021



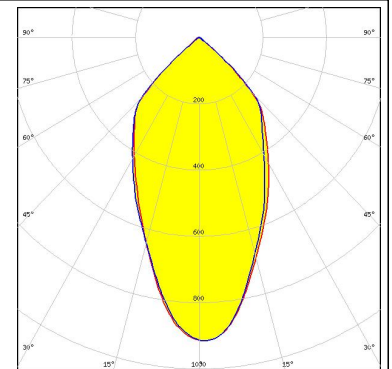
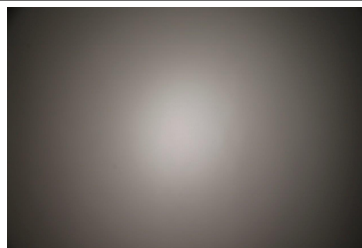
#### SAMSUNG

LED COB D Series LES 14.5 mm  
 FWHM 59.0°  
 Efficiency 93 %  
 Peak intensity 0.860 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8101/G2



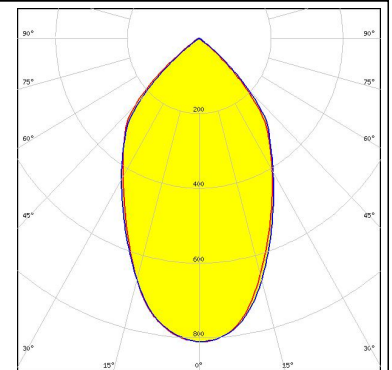
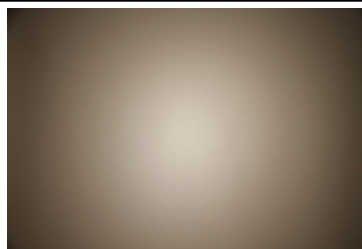
SEOUL SEMICONDUCTOR

LED ZC12/18  
 FWHM 54.0°  
 Efficiency 93 %  
 Peak intensity 0.920 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8101/G2



SEOUL SEMICONDUCTOR

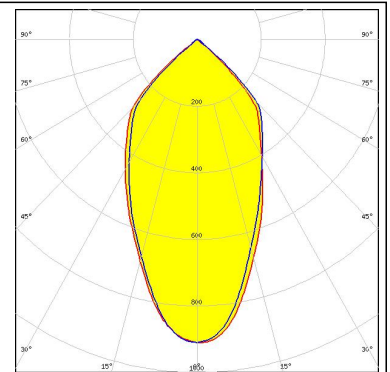
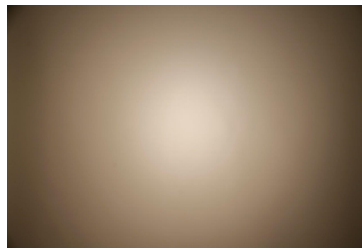
LED ZC25/40/60  
 FWHM 62.0°  
 Efficiency 92 %  
 Peak intensity 0.810 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8102/G2



#### PHOTOMETRIC DATA (MEASURED):

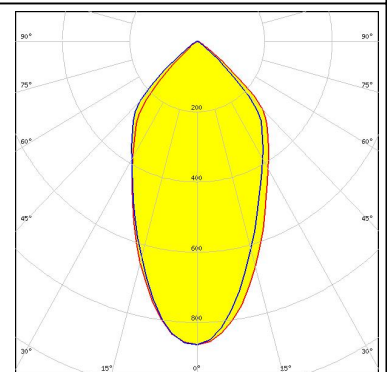
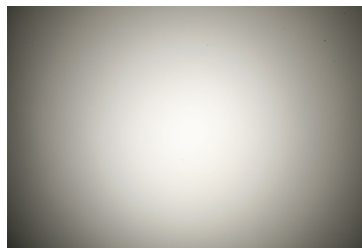
#### SHARP

LED Mega Zenigata (GW6DME)  
 FWHM 55.0°  
 Efficiency 94 %  
 Peak intensity 0.910 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8301/G2



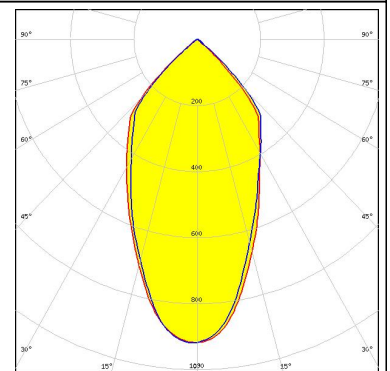
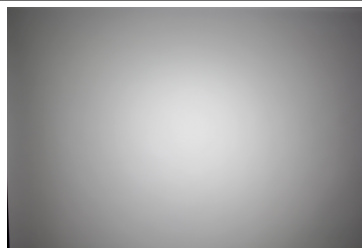
#### SHARP

LED Tiger Zenigata (GWTGCBG4FD)  
 FWHM 54.0°  
 Efficiency 90 %  
 Peak intensity 0.870 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 BJB: 47.319.2051



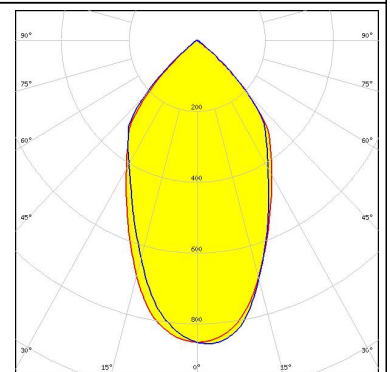
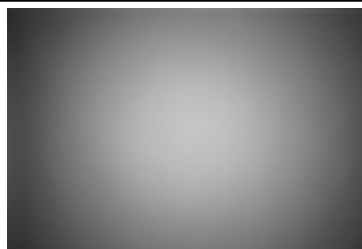
#### TRIDONIC

LED SLE G7 LES17 H  
 FWHM 53.0°  
 Efficiency 91 %  
 Peak intensity 0.920 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### TRIDONIC

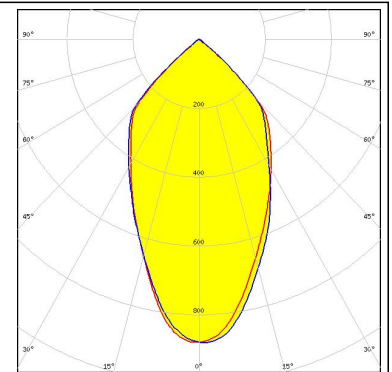
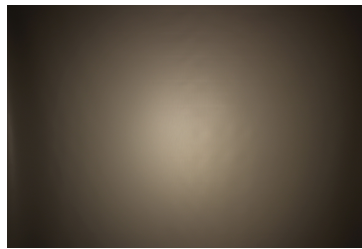
LED SLE G7 LES21 H  
 FWHM 59.0°  
 Efficiency 91 %  
 Peak intensity 0.860 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### PHOTOMETRIC DATA (MEASURED):

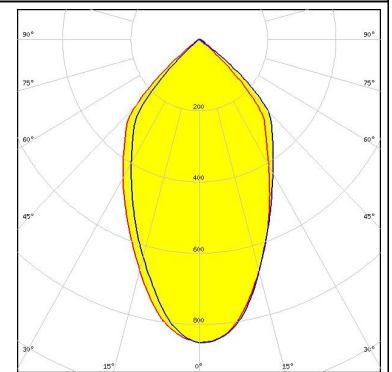
#### XICATO

LED XOB 14.5 mm  
FWHM 57.0°  
Efficiency 94 %  
Peak intensity 0.882 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2021



#### XICATO

LED XTM - 19mm LES  
FWHM 59.0°  
Efficiency 92 %  
Peak intensity 0.900 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C15743\_XTM-ADAPTER-50-B



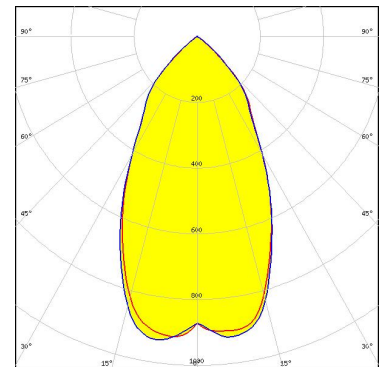
### PHOTOMETRIC DATA (SIMULATED):

#### CITIZEN

LED CLL04x/CLU04x  
FWHM 52.0°  
Efficiency 95 %  
Peak intensity 1.100 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2030

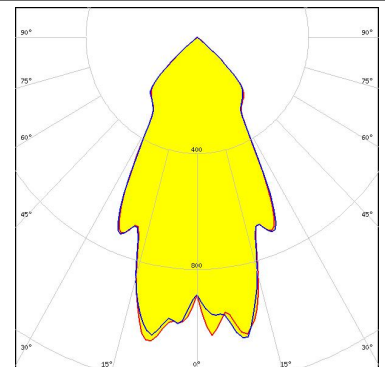
#### CITIZEN

LED CLL04x/CLU04x  
FWHM 55.0°  
Efficiency 90 %  
Peak intensity 0.940 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2030



#### CITIZEN

LED CLU730/731  
FWHM 52.0°  
Efficiency 93 %  
Peak intensity 1.080 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2030



#### LUMILEDS

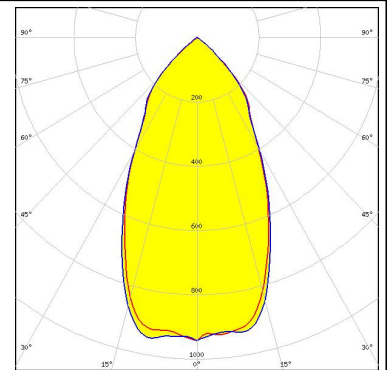
LED LUXEON K12  
FWHM 46.0°  
Efficiency %  
Peak intensity cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2070



#### PHOTOMETRIC DATA (SIMULATED):

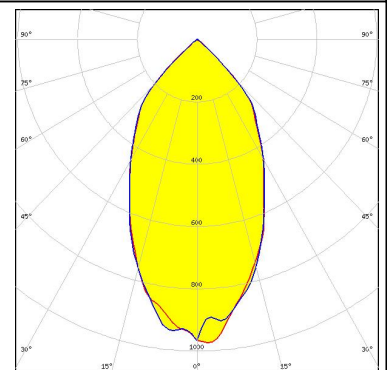
#### SAMSUNG

LED COB D Series LES 22 mm  
 FWHM 54.0°  
 Efficiency 90 %  
 Peak intensity 0.950 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2030



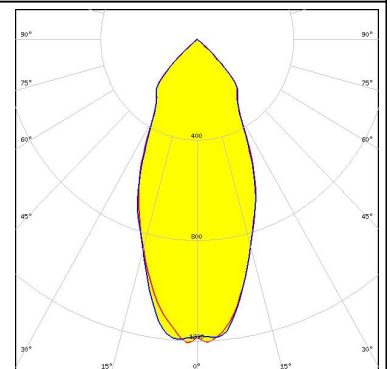
#### TRIDONIC

LED SLE G6 LES15 H D50  
 FWHM 54.0°  
 Efficiency 91 %  
 Peak intensity 0.990 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



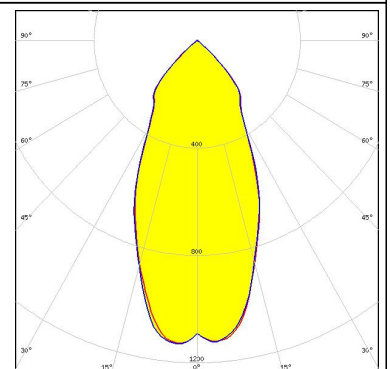
#### TRIDONIC

LED SLE G6 LES17 H  
 FWHM 46.0°  
 Efficiency 91 %  
 Peak intensity 1.200 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### TRIDONIC

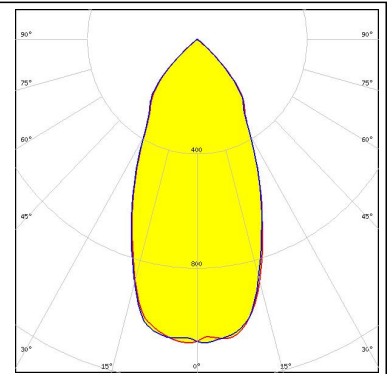
LED SLE G6 LES19 H  
 FWHM 48.0°  
 Efficiency 91 %  
 Peak intensity 1.160 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



## PHOTOMETRIC DATA (SIMULATED):

### TRIDONIC

LED SLE G6 LES23 H  
FWHM 50.0°  
Efficiency 91 %  
Peak intensity 1.080 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



### 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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#### LEDiL Oy

Joensuunkatu 13  
FI-24240 SALO  
Finland

#### LEDiL Inc.

228 West Page Street  
Suite D  
Sycamore IL 60178  
USA

#### Local sales and technical support

[www.ledil.com/where\\_to\\_buy](http://www.ledil.com/where_to_buy)

#### Shipping locations

Salo, Finland  
Hong Kong, China

#### Distribution Partners

[www.ledil.com/where\\_to\\_buy](http://www.ledil.com/where_to_buy)