

## ANGELINA-M-B

~30° medium beam compatible with BJB and B+W connectors

### SPECIFICATION:

Dimensions	Ø 82.0 mm
Height	31 mm
Fastening	socket
ROHS compliant	yes ⓘ

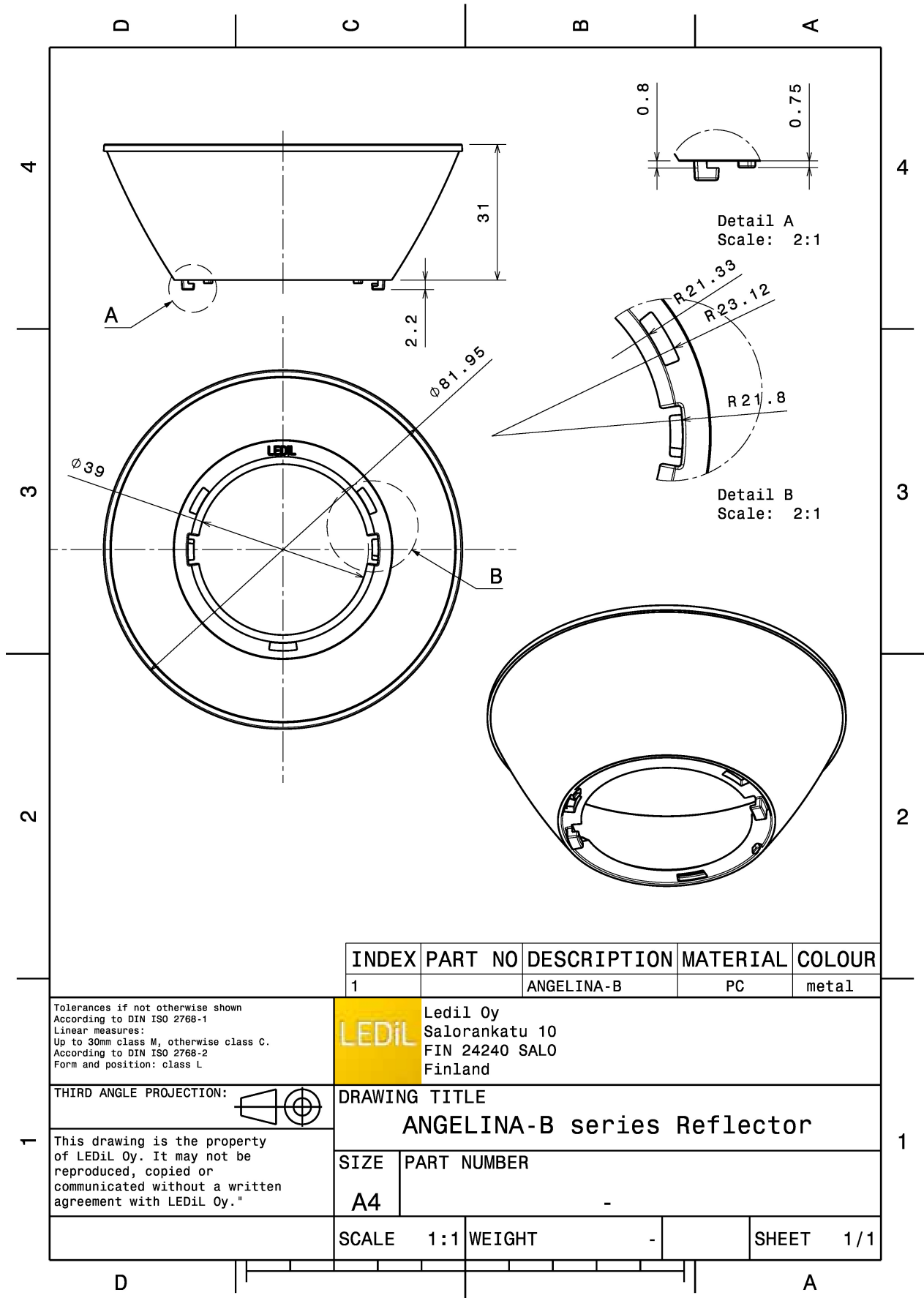


### MATERIALS:

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

### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F13660_ANGELINA-M-B » Box size: 480 x 280 x 300 mm	825	110	55	10.0

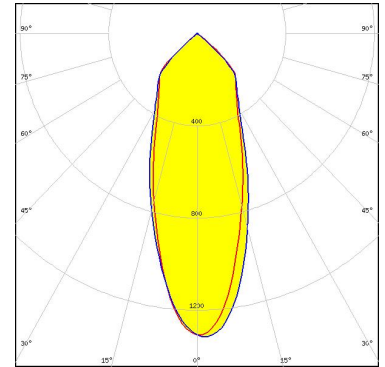


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

### OPTICAL RESULTS (MEASURED):



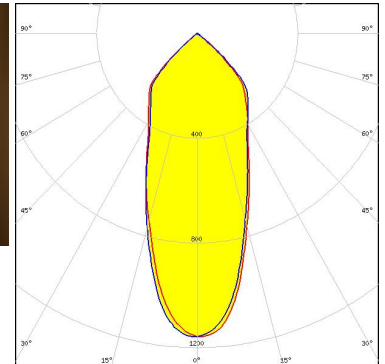
LED BXRA ES Rectangle  
FWHM / FWTM 38.0° / 97.0°  
Efficiency 92 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
BJB: 47.319.2040



Light distribution files



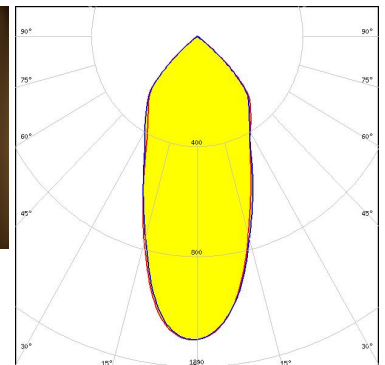
LED V15 Gen6  
FWHM / FWTM 41.0° / 98.0°  
Efficiency 93 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
BJB: 47.319.2224



Light distribution files



LED V18 Gen6  
FWHM / FWTM 44.0° / 98.0°  
Efficiency 93 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
BJB: 47.319.2274

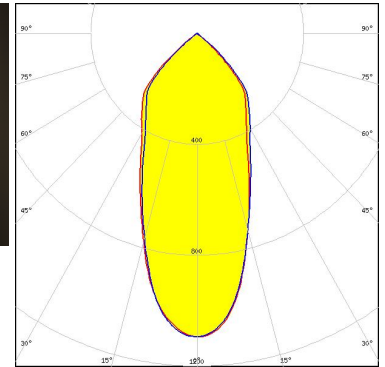
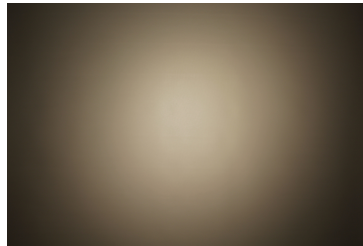


Light distribution files

#### OPTICAL RESULTS (MEASURED):



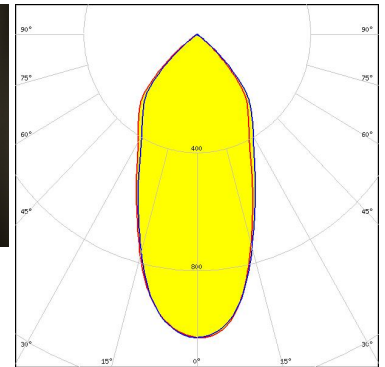
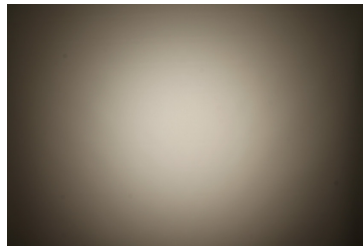
LED V18 Gen7  
FWHM / FWTM 44.0° / 99.0°  
Efficiency 93 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
BJB: 47.319.2350



Light distribution files



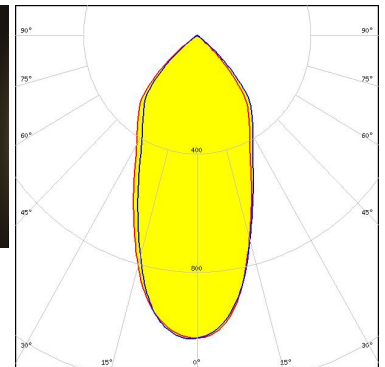
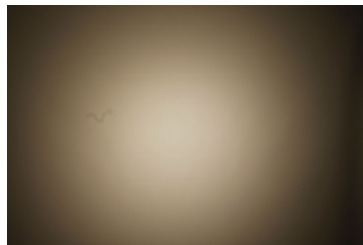
LED V22 Gen6  
FWHM / FWTM 47.0° / 98.0°  
Efficiency 91 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
A.A.G. STUCCHI: 8102-G2



Light distribution files



LED V22 Gen7  
FWHM / FWTM 47.0° / 98.0°  
Efficiency 91 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
BJB: 47.319.2030

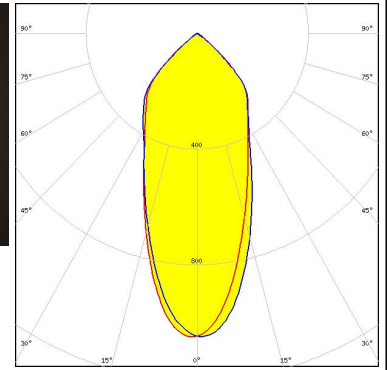
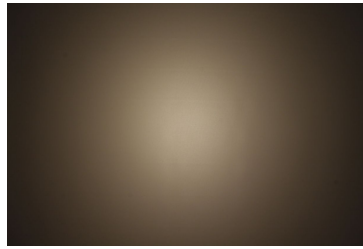


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### CITIZEN

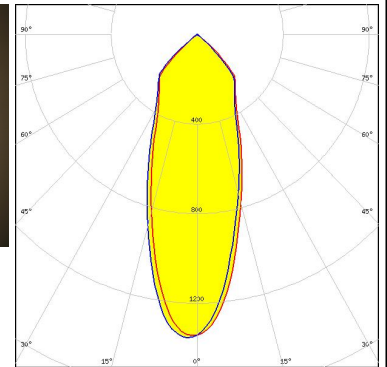
LED CLL03x/CLU03x  
FWHM / FWTM 43.0° / 99.0°  
Efficiency 89 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
F13671\_ANGE-RZ-LENS  
A.A.G. STUCCHI: 8101-G2



Light distribution files

### CITIZEN

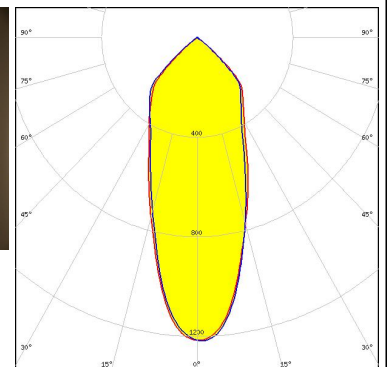
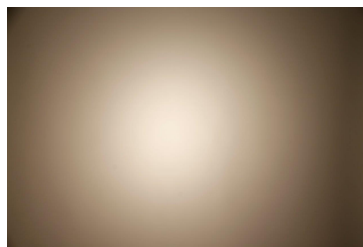
LED CLL03x/CLU03x  
FWHM / FWTM 37.0° / 96.0°  
Efficiency 92 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
BJB: 47.319.2021



Light distribution files

### CITIZEN

LED CLL03x/CLU03x  
FWHM / FWTM 39.0° / 98.0°  
Efficiency 94 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
A.A.G. STUCCHI: 8101-G2

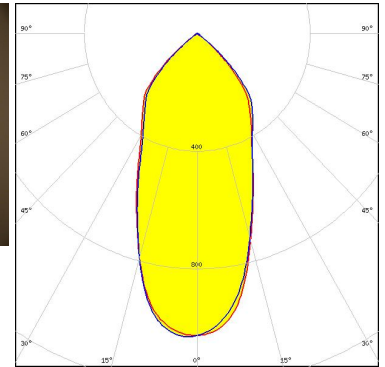
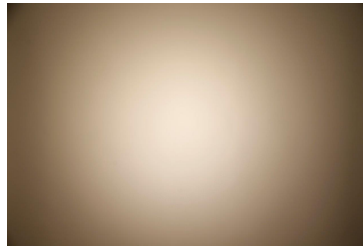


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### CITIZEN

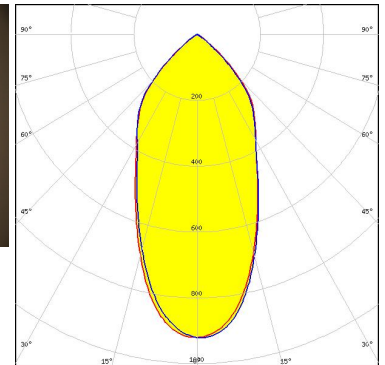
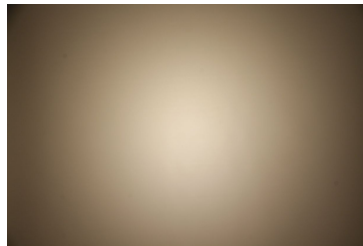
LED CLL04x/CLU04x  
FWHM / FWTM 39.0° / 98.0°  
Efficiency 94 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
A.A.G. STUCCHI: 8102-G2



Light distribution files

### CITIZEN

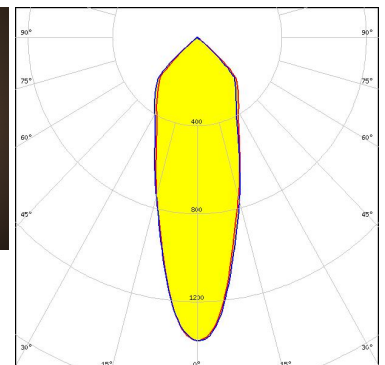
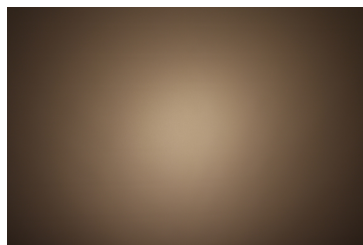
LED CLL04x/CLU04x  
FWHM / FWTM 50.0° / 101.0°  
Efficiency 87 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
F13671\_ANGE-RZ-LENS  
A.A.G. STUCCHI: 8102-G2



Light distribution files

### CITIZEN

LED CLU720/721/723  
FWHM / FWTM 35.0° / 97.0°  
Efficiency 94 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
A.A.G. STUCCHI: 8101-G2

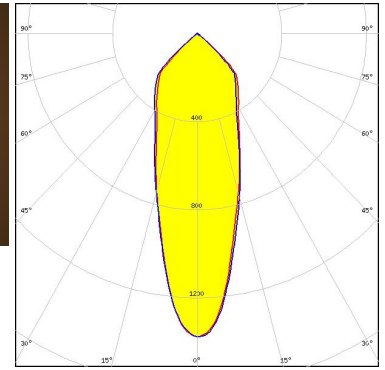
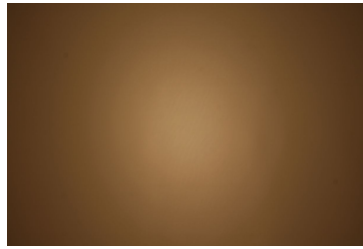


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### CITIZEN

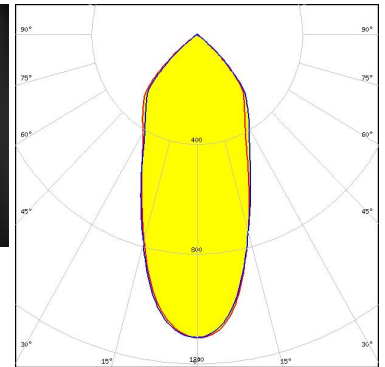
LED CLU720/721/723  
FWHM / FWTM 34.0° / 96.0°  
Efficiency 94 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
BJB: 47.319.2021



Light distribution files



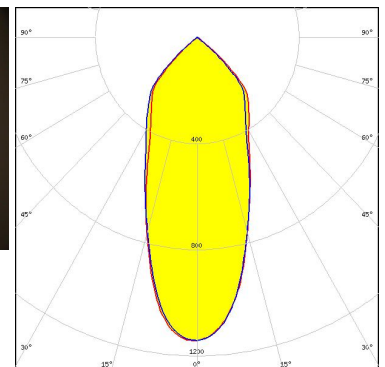
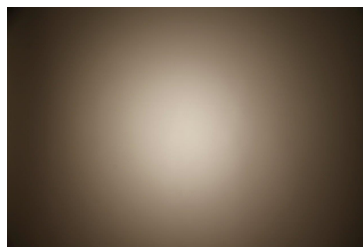
LED CXA/B 25xx  
FWHM / FWTM 44.0° / 98.0°  
Efficiency 92 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
BJB: 47.319.2141



Light distribution files



LED CXA/B 25xx  
FWHM / FWTM 42.0° / 98.0°  
Efficiency 93 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
A.A.G. STUCCHI: 8401-G2

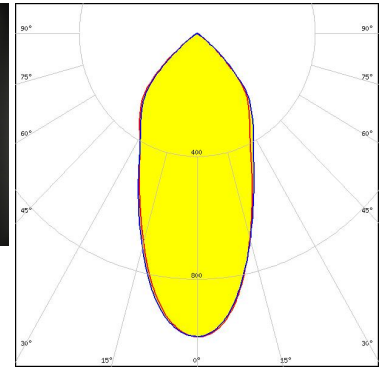
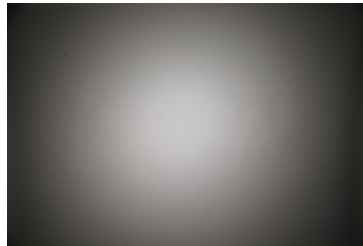


Light distribution files

#### OPTICAL RESULTS (MEASURED):



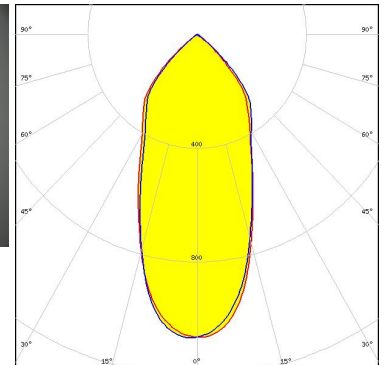
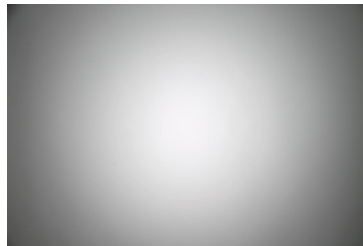
LED CXA/B 25xx  
 FWHM / FWTM 46.0° / 99.0°  
 Efficiency 89 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 BJB: 47.319.2141



Light distribution files



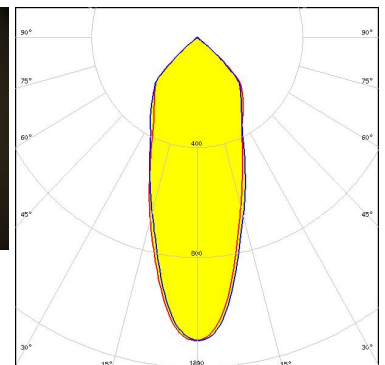
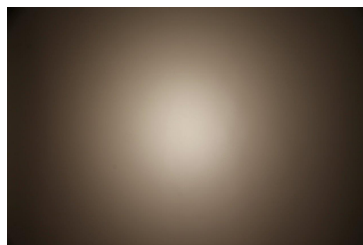
LED CXA/B 30xx  
 FWHM / FWTM 45.0° / 98.0°  
 Efficiency 92 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 A.A.G. STUCCHI: 8404-G2



Light distribution files



LED LUXEON CoB 1204/1205  
 FWHM / FWTM 38.0° / 97.0°  
 Efficiency 94 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 A.A.G. STUCCHI: 8301-G2



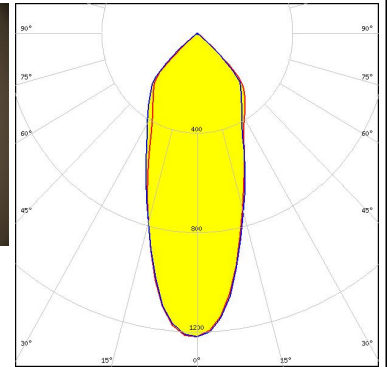
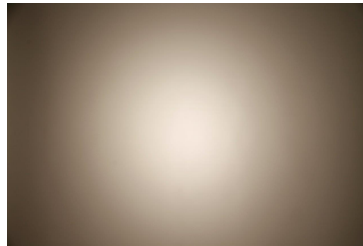
Light distribution files



#### OPTICAL RESULTS (MEASURED):



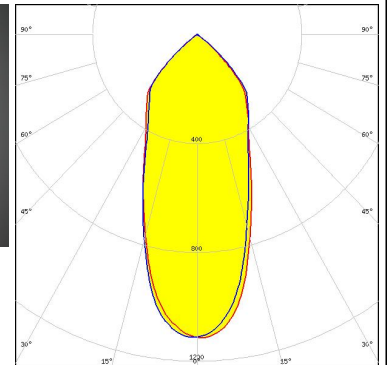
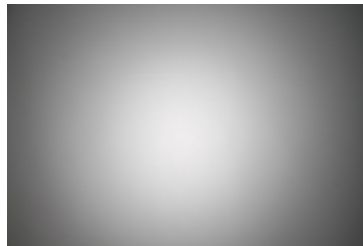
LED LUXEON CoB 1208  
FWHM / FWTM 39.0° / 97.0°  
Efficiency 94 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
A.A.G. STUCCHI: 8301-G2



Light distribution files



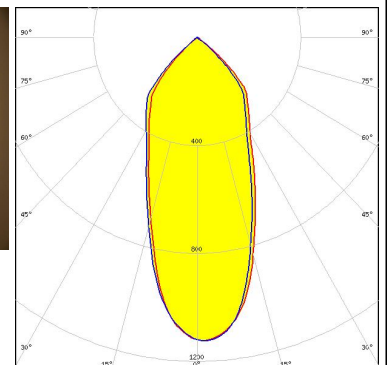
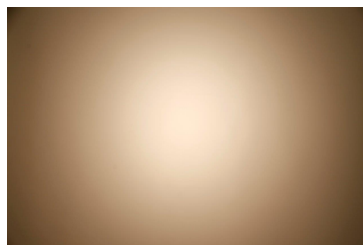
LED LUXEON CoB 1211  
FWHM / FWTM 44.0° / 98.0°  
Efficiency 92 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
BJB: 47.319.2030



Light distribution files



LED LUXEON CoB 1211  
FWHM / FWTM 43.0° / 97.0°  
Efficiency 92 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
A.A.G. STUCCHI: 8102-G2

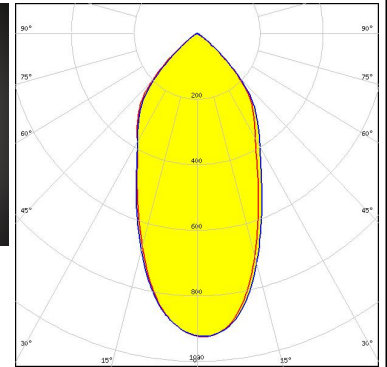


Light distribution files

#### OPTICAL RESULTS (MEASURED):



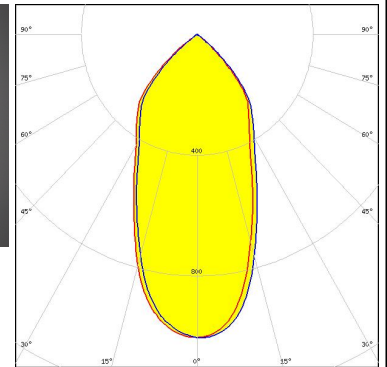
LED LUXEON CoB 1213/1216/1812  
FWHM / FWTM 50.0° / 100.0°  
Efficiency 88 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
F13671\_ANGE-RZ-LENS  
BJB: 47.319.2030



Light distribution files



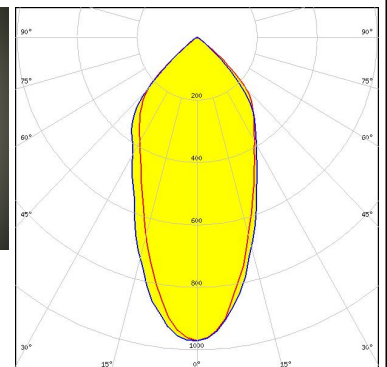
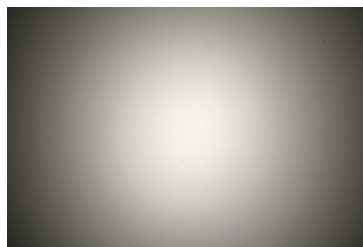
LED LUXEON CoB 1213/1216/1812  
FWHM / FWTM 49.0° / 99.0°  
Efficiency 91 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
BJB: 47.319.2030



Light distribution files



LED LUXEON K12  
FWHM / FWTM 48.0° / 101.0°  
Efficiency 89 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
F13671\_ANGE-RZ-LENS  
BJB: 47.319.2070

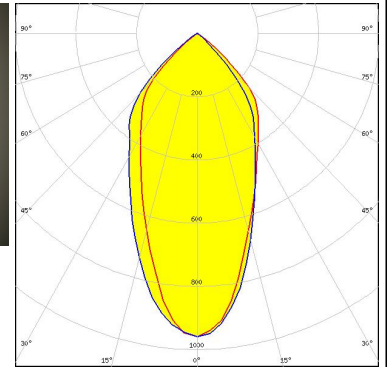
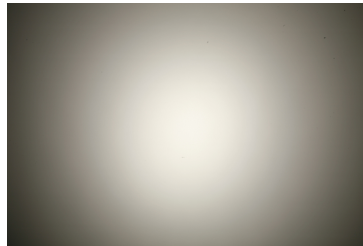


Light distribution files

#### OPTICAL RESULTS (MEASURED):



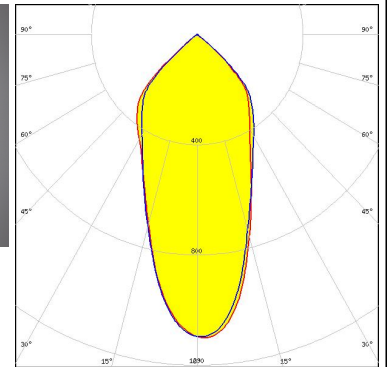
**LED** LUXEON K16  
**FWHM / FWTM** 50.0° / 101.0°  
**Efficiency** 89 %  
**Peak intensity** 1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 F13671\_ANGE-RZ-LENS  
 BJB: 47.319.2070



Light distribution files



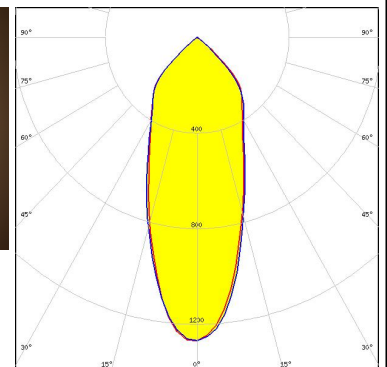
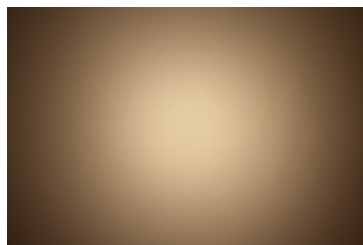
**LED** LUXEON K16  
**FWHM / FWTM** 44.0° / 98.0°  
**Efficiency** 94 %  
**Peak intensity** 1.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 BJB: 47.319.2070



Light distribution files

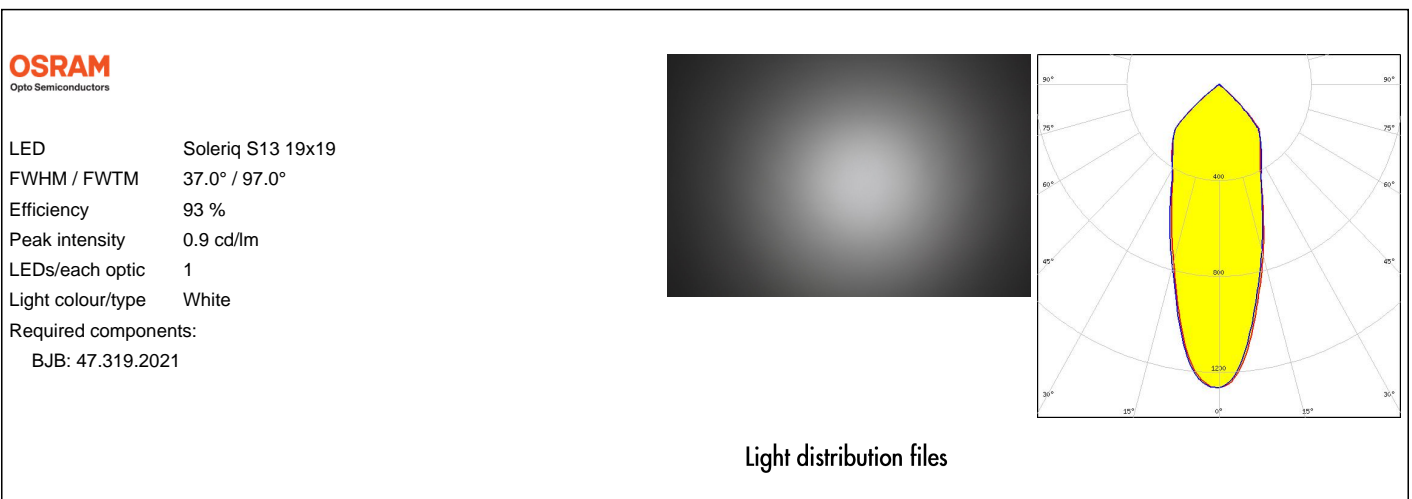
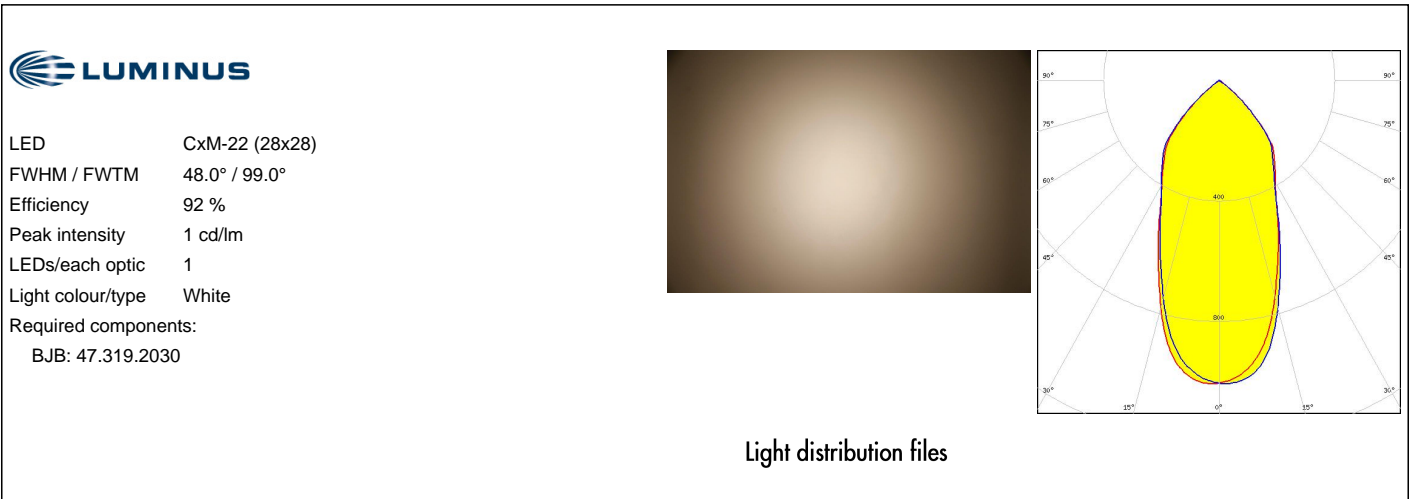


**LED** CxM-14 (19x19)  
**FWHM / FWTM** 40.0° / 98.0°  
**Efficiency** 94 %  
**Peak intensity** 1.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**  
 BJB: 47.319.2021



Light distribution files

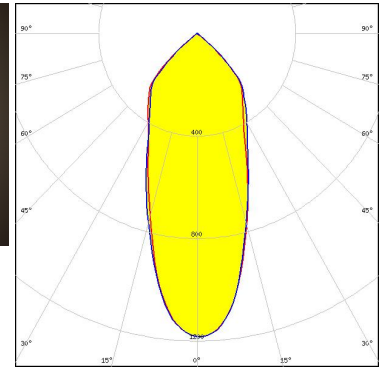
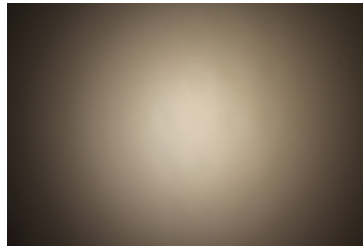
#### OPTICAL RESULTS (MEASURED):



### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

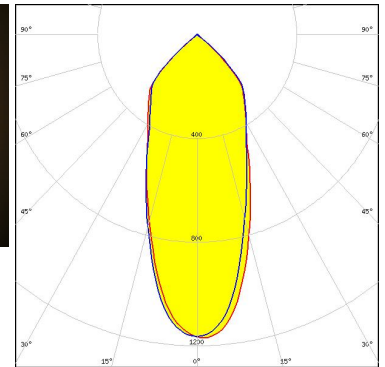
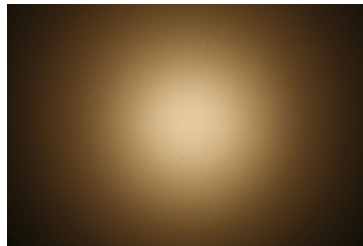
LED Soleriq S19  
FWHM / FWTM 41.0° / 97.0°  
Efficiency 93 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
A.A.G. STUCCHI: 8503-G2



Light distribution files

**OSRAM**  
Opto Semiconductors

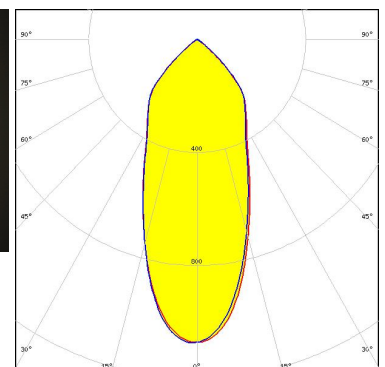
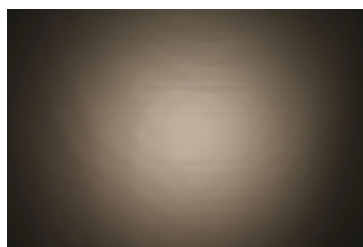
LED Soleriq S19  
FWHM / FWTM 41.0° / 98.0°  
Efficiency 94 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
BJB: 47.319.2170



Light distribution files

**PHILIPS**

LED Fortimo SLM L19 CoB  
FWHM / FWTM 42.0° / 98.0°  
Efficiency 88 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
F13671\_ANGE-RZ-LENS  
BJB: 47.319.2030

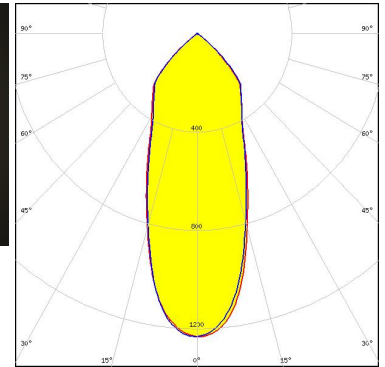
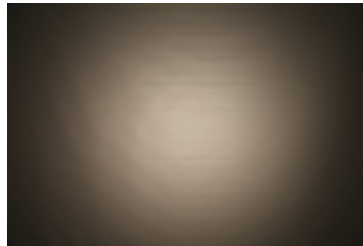


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### PHILIPS

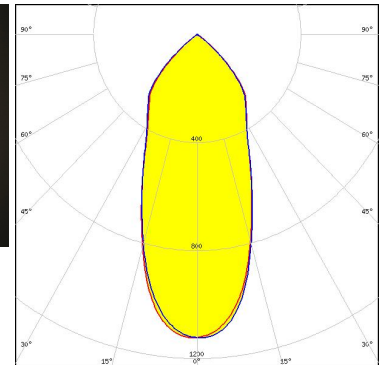
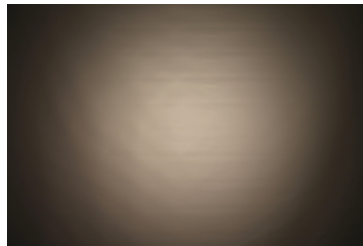
LED Fortimo SLM L19 CoB  
 FWHM / FWTM 40.0° / 97.0°  
 Efficiency 93 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 BJB: 47.319.2030



Light distribution files

### PHILIPS

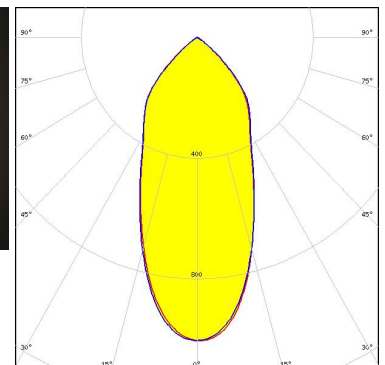
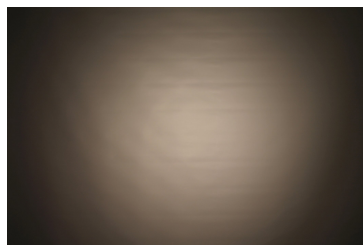
LED Fortimo SLM L23 CoB  
 FWHM / FWTM 44.0° / 98.0°  
 Efficiency 93 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 BJB: 47.319.2030



Light distribution files

### PHILIPS

LED Fortimo SLM L23 CoB  
 FWHM / FWTM 45.0° / 99.0°  
 Efficiency 88 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 BJB: 47.319.2030

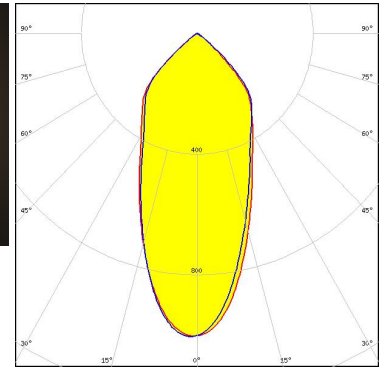
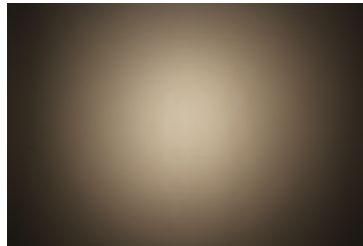


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### SAMSUNG

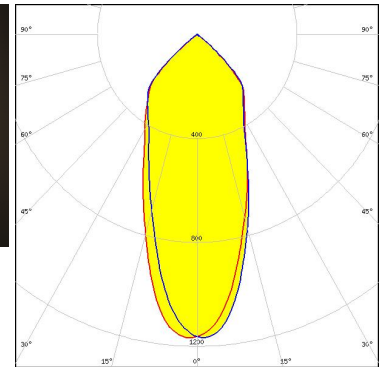
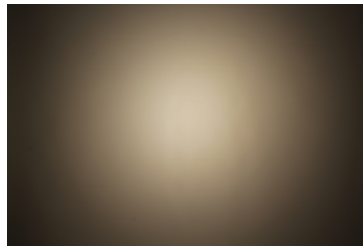
LED LC016D / LC019D / LC026D / LC033D  
FWHM / FWTM 45.0° / 100.0°  
Efficiency 89 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
F13671\_ANGE-RZ-LENS  
BJB: 47.319.2021



Light distribution files

### SAMSUNG

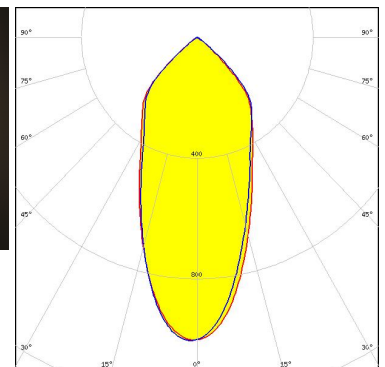
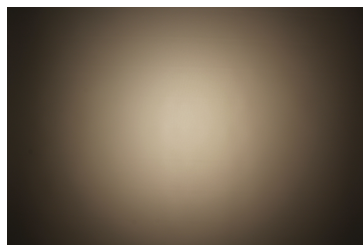
LED LC016D / LC019D / LC026D / LC033D  
FWHM / FWTM 41.0° / 98.0°  
Efficiency 93 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
BJB: 47.319.2021



Light distribution files

### SAMSUNG

LED LC016D / LC019D / LC026D / LC033D  
FWHM / FWTM 45.0° / 100.0°  
Efficiency 89 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
F13671\_ANGE-RZ-LENS  
A.A.G. STUCCHI: 8101-G2

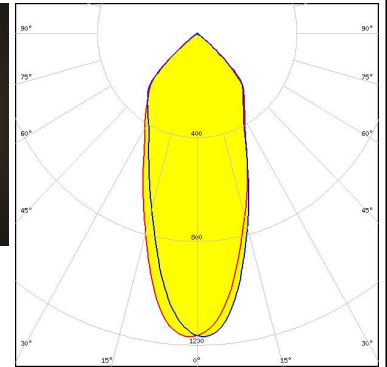
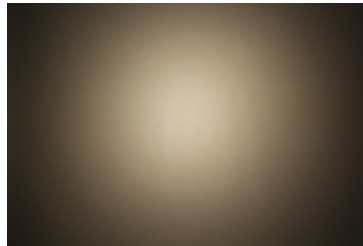


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### SAMSUNG

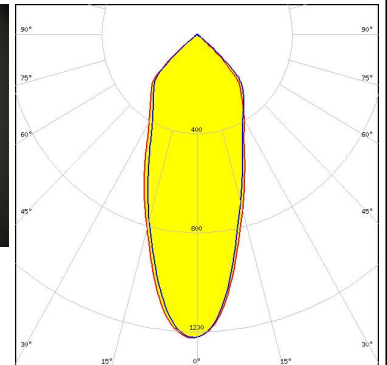
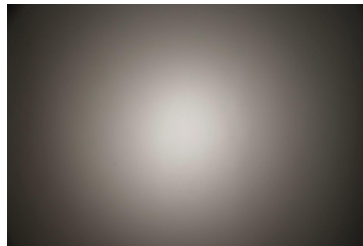
LED LC016D / LC019D / LC026D / LC033D  
 FWHM / FWTM 41.0° / 98.0°  
 Efficiency 93 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 A.A.G. STUCCHI: 8101-G2



Light distribution files



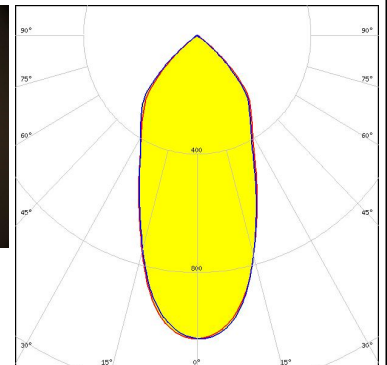
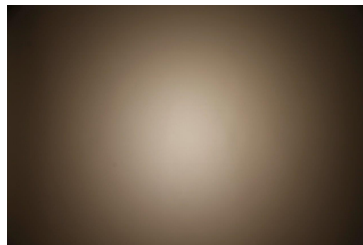
LED ZC12/18  
 FWHM / FWTM 39.0° / 97.0°  
 Efficiency 93 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 A.A.G. STUCCHI: 8101-G2



Light distribution files



LED ZC25/40/60  
 FWHM / FWTM 47.0° / 99.0°  
 Efficiency 92 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 A.A.G. STUCCHI: 8102-G2



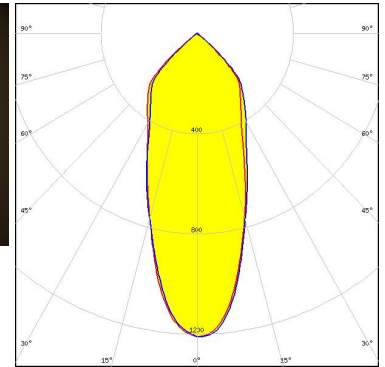
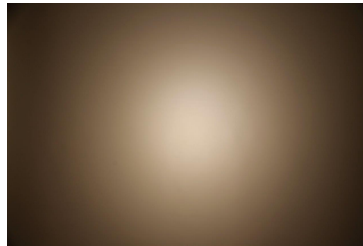
Light distribution files



#### OPTICAL RESULTS (MEASURED):

### SHARP

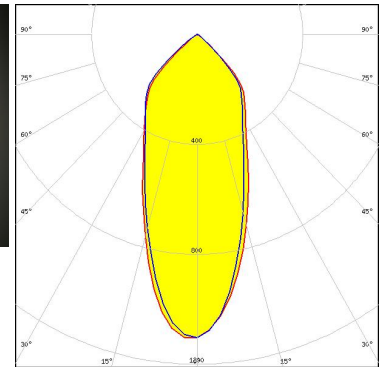
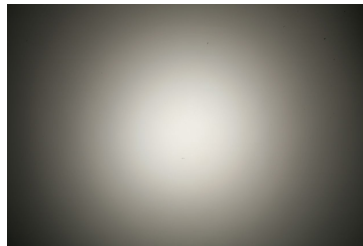
LED Mega Zenigata (GW6DME)  
FWHM / FWTM 40.0° / 98.0°  
Efficiency 94 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
A.A.G. STUCCHI: 8301-G2



Light distribution files

### SHARP

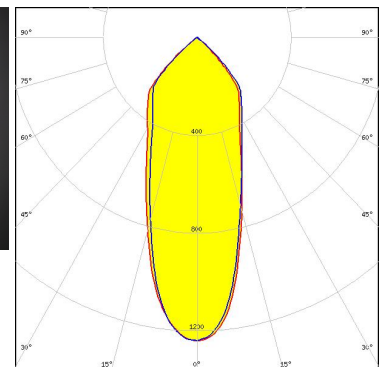
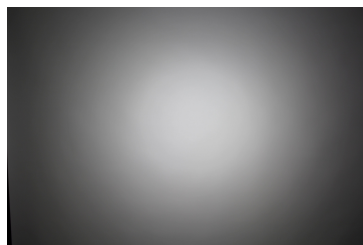
LED Tiger Zenigata (GWTGCBG4FD)  
FWHM / FWTM 41.0° / 99.0°  
Efficiency 90 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
F13671\_ANGE-RZ-LENS  
BJB: 47.319.2051



Light distribution files

### TRIDONIC

LED SLE G7 LES17 H  
FWHM / FWTM 38.0° / 96.0°  
Efficiency 91 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

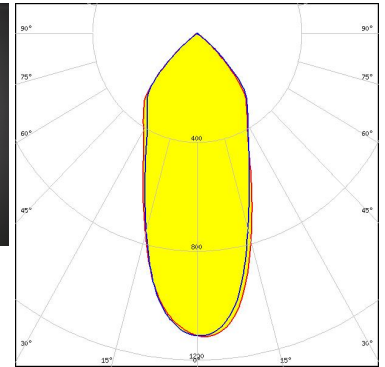
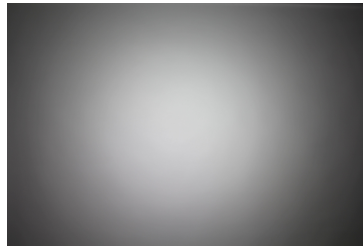


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### TRIDONIC

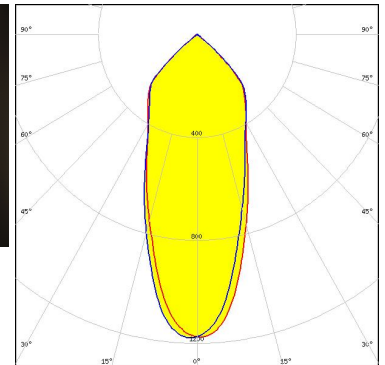
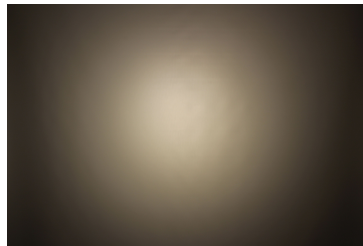
LED SLE G7 LES21 H  
FWHM / FWTM 43.0° / 97.0°  
Efficiency 91 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

### XICATO

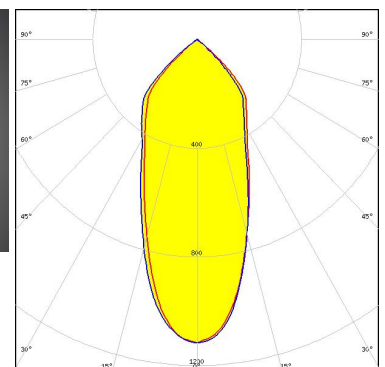
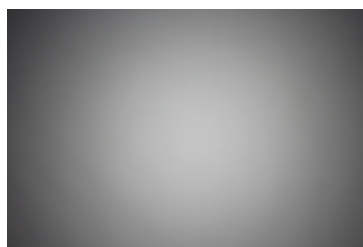
LED XOB 14.5 mm  
FWHM / FWTM 40.0° / 98.0°  
Efficiency 94 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
BJB: 47.319.2021



Light distribution files

### XICATO

LED XTM - 19mm LES  
FWHM / FWTM 43.0° / 98.0°  
Efficiency 93 %  
Peak intensity 1.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C15743\_XTM-ADAPTER-50-B



Light distribution files

#### OPTICAL RESULTS (SIMULATED):

### CITIZEN

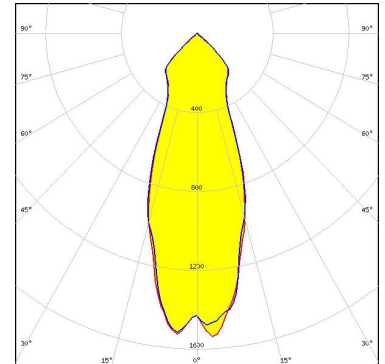
LED CLL04x/CLU04x  
FWHM / FWTM 37.0° / 90.0°  
Efficiency 95 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

BJB: 47.319.2030

### CITIZEN

LED CLU730/731/733  
FWHM / FWTM 37.0° / 93.0°  
Efficiency 91 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

BJB: 47.319.2030



### LUMILEDS

LED LUXEON K12  
FWHM / FWTM 29.0° / 93.0°  
Efficiency %  
LEDs/each optic 1  
Light colour/type White  
Required components:

BJB: 47.319.2070

Light distribution files

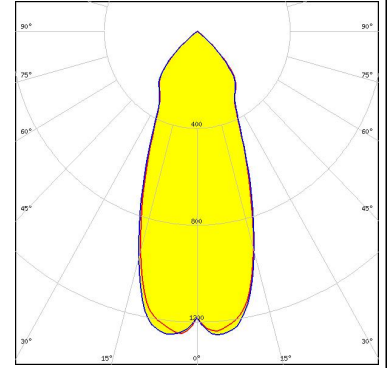
#### OPTICAL RESULTS (SIMULATED):

### SAMSUNG

LED	LC040D / LC060D / LC080D
FWHM / FWTM	41.0° / 94.0°
Efficiency	90 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

BJB: 47.319.2030

Light distribution files



#### 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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