

## ANGELINA-S-B

~20° spot beam compatible with BJB and B+W connectors



### SPECIFICATION:

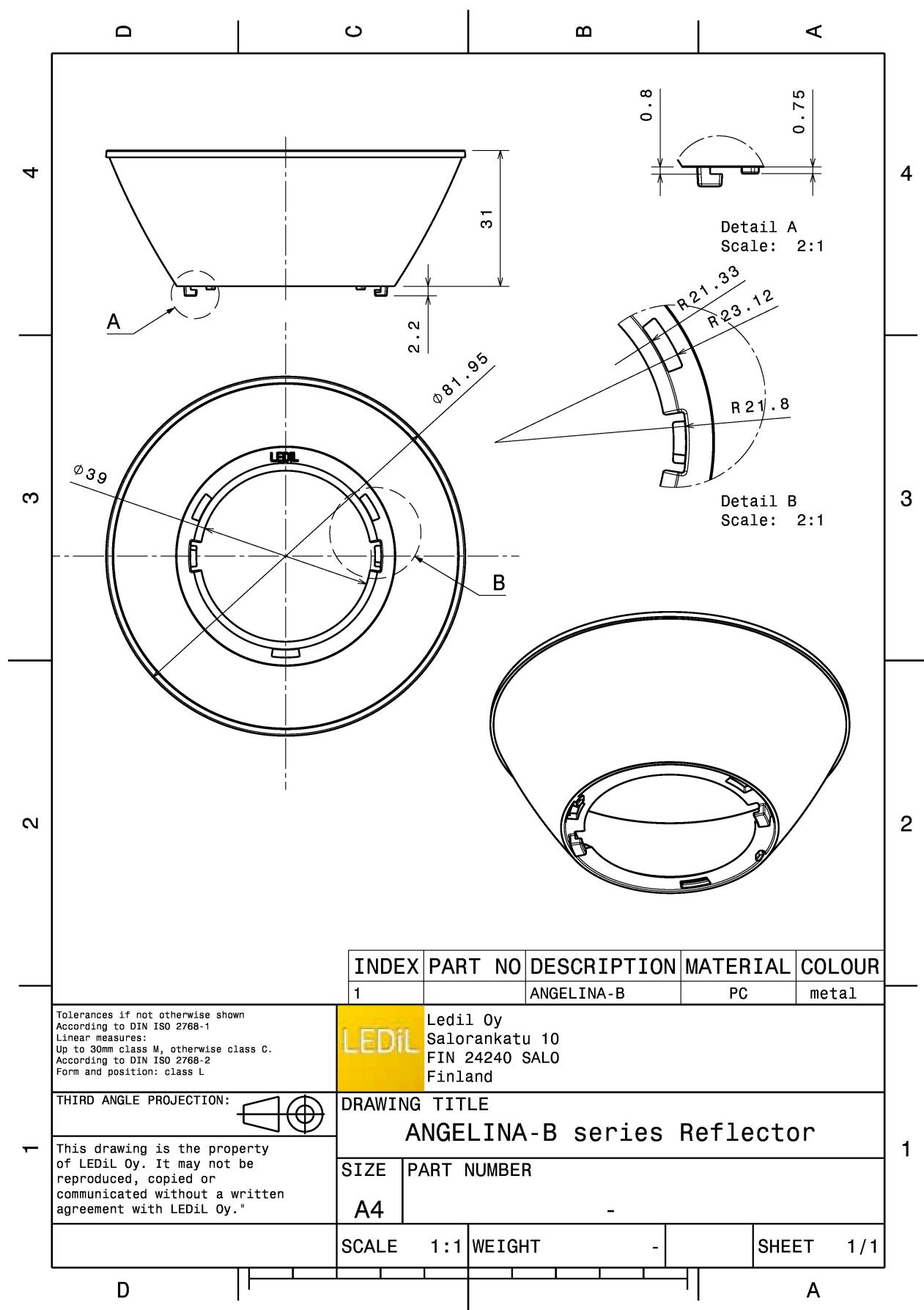
Dimensions	Ø 82.0 mm
Height	31 mm
Fastening	socket
ROHS compliant	yes ⓘ

### MATERIALS:

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

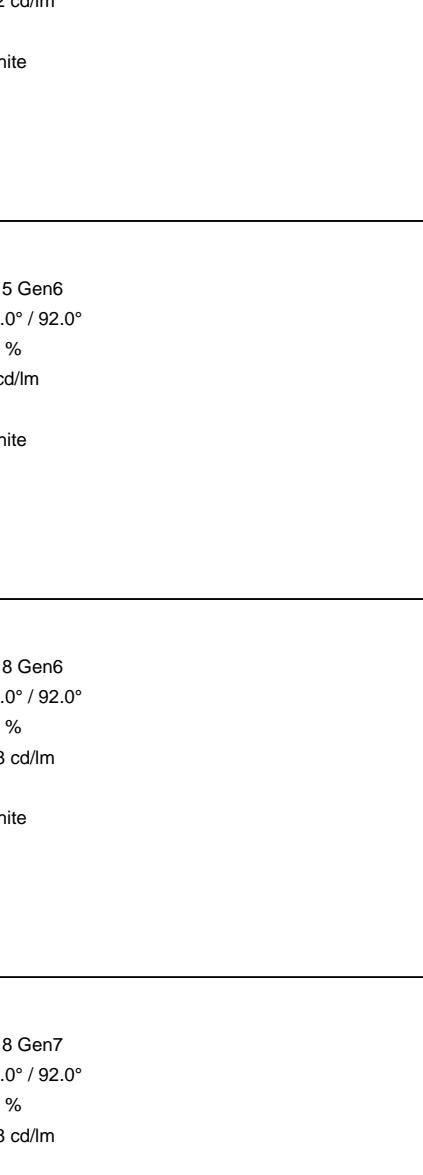
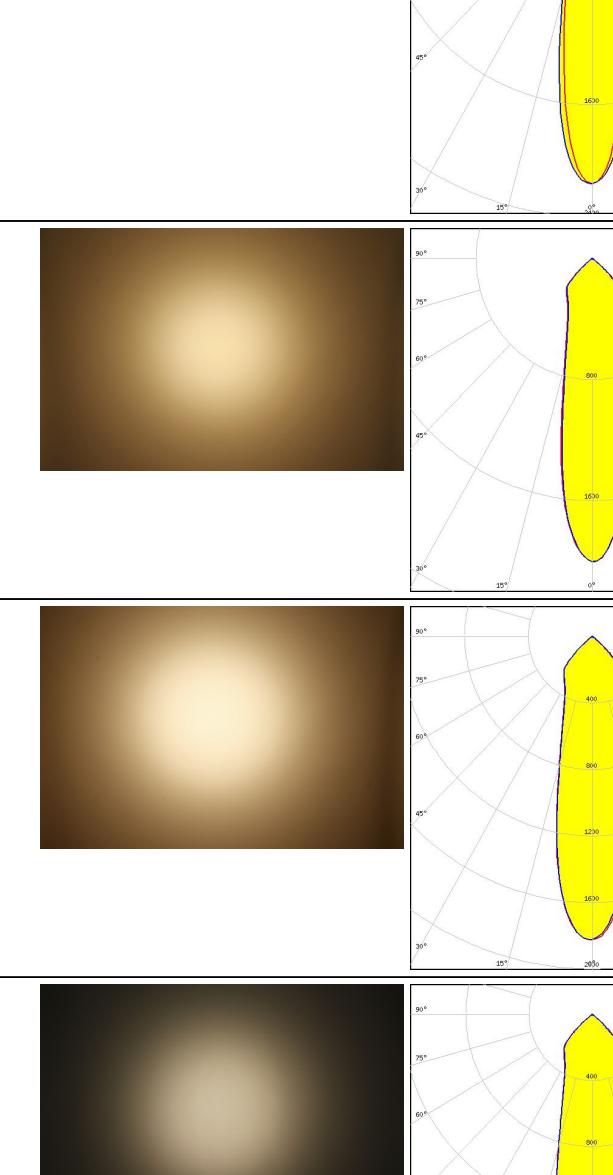
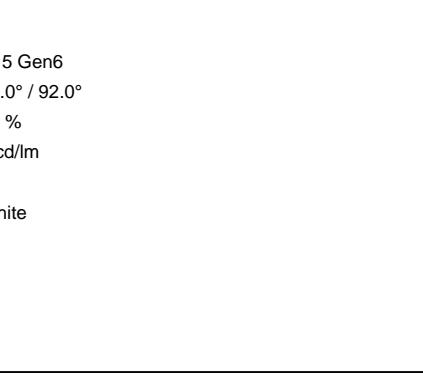
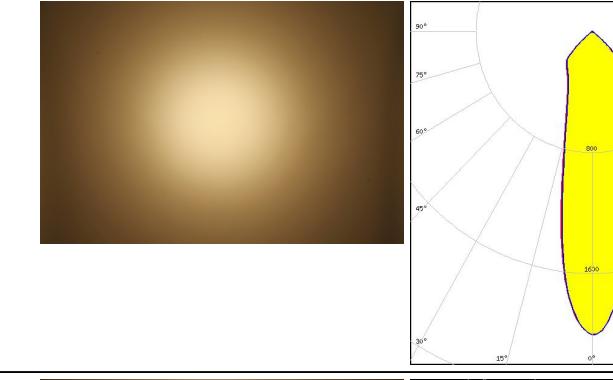
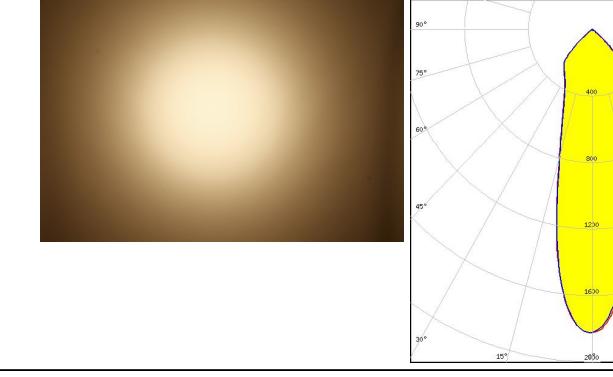
### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F13659_ANGELINA-S-B	825	110	55	11.3
» Box size: 480 x 280 x 300 mm				



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

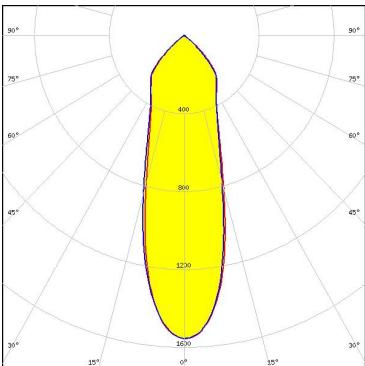
## OPTICAL RESULTS (MEASURED):

 <p><b>LED</b> BXRA ES Rectangle  <b>FWHM / FWTM</b> 23.0° / 90.0°  <b>Efficiency</b> 92 %  <b>Peak intensity</b> 2.2 cd/lm  <b>LEDs/each optic</b> 1  <b>Light colour</b> White  <b>Required components:</b>          BJB: 47.319.2040</p>		
 <p><b>LED</b> V15 Gen6  <b>FWHM / FWTM</b> 24.0° / 92.0°  <b>Efficiency</b> 92 %  <b>Peak intensity</b> 2 cd/lm  <b>LEDs/each optic</b> 1  <b>Light colour</b> White  <b>Required components:</b>          BJB: 47.319.2224</p>		
 <p><b>LED</b> V18 Gen6  <b>FWHM / FWTM</b> 27.0° / 92.0°  <b>Efficiency</b> 92 %  <b>Peak intensity</b> 1.8 cd/lm  <b>LEDs/each optic</b> 1  <b>Light colour</b> White  <b>Required components:</b>          BJB: 47.319.2274</p>		
 <p><b>LED</b> V18 Gen7  <b>FWHM / FWTM</b> 27.0° / 92.0°  <b>Efficiency</b> 93 %  <b>Peak intensity</b> 1.8 cd/lm  <b>LEDs/each optic</b> 1  <b>Light colour</b> White  <b>Required components:</b>          BJB: 47.319.2350</p>		

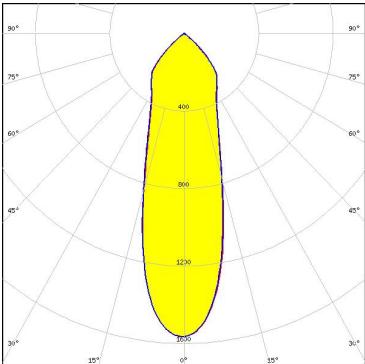
### OPTICAL RESULTS (MEASURED):



**LED** V22 Gen6  
**FWHM / FWTM** 31.0° / 93.0°  
**Efficiency** 91 %  
**Peak intensity** 1.6 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 A.A.G. STUCCHI: 8102-G2

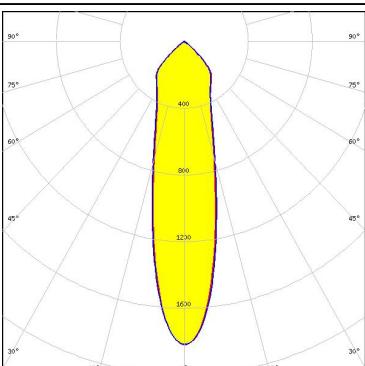


**LED** V22 Gen7  
**FWHM / FWTM** 31.0° / 92.0°  
**Efficiency** 91 %  
**Peak intensity** 1.6 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 BJB: 47.319.2030



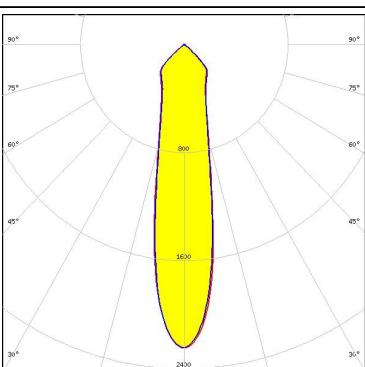
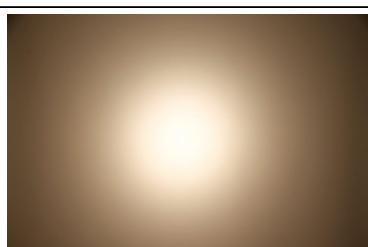
### CITIZEN

**LED** CLL03x/CLU03x  
**FWHM / FWTM** 25.0° / 92.0°  
**Efficiency** 89 %  
**Peak intensity** 1.8 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 F13671\_ANGE-RZ-LENS  
 A.A.G. STUCCHI: 8101-G2



### CITIZEN

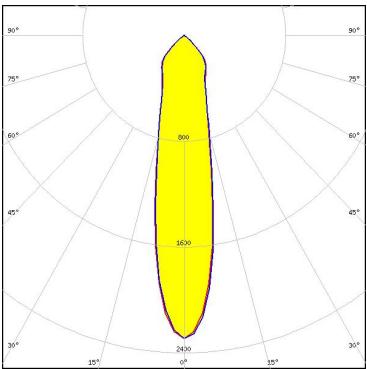
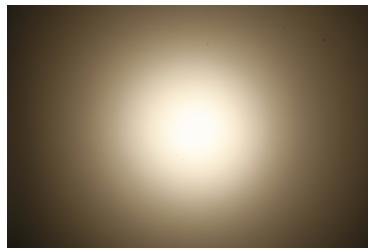
**LED** CLL03x/CLU03x  
**FWHM / FWTM** 22.0° / 91.0°  
**Efficiency** 94 %  
**Peak intensity** 2.3 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**  
 A.A.G. STUCCHI: 8101-G2



### OPTICAL RESULTS (MEASURED):

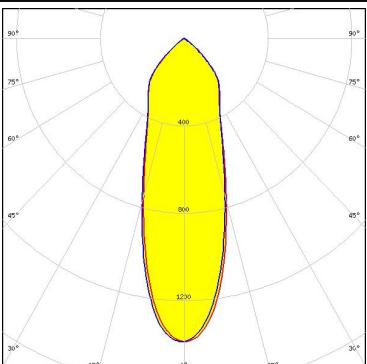
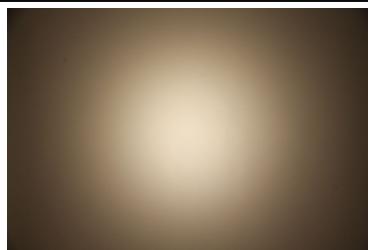
#### CITIZEN

LED CLL03x/CLU03x  
FWHM / FWTM 23.0° / 86.0°  
Efficiency 92 %  
Peak intensity 2.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BJB: 47.319.2021



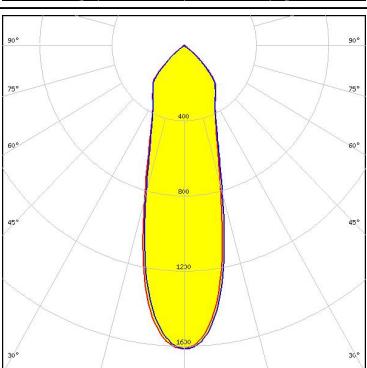
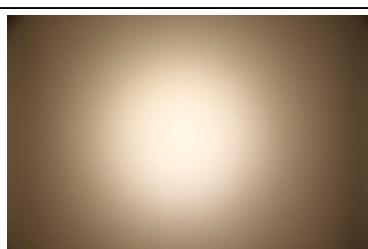
#### CITIZEN

LED CLL04x/CLU04x  
FWHM / FWTM 33.0° / 94.0°  
Efficiency 88 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F13671\_ANGE-RZ-LENS  
A.A.G. STUCCHI: 8102-G2



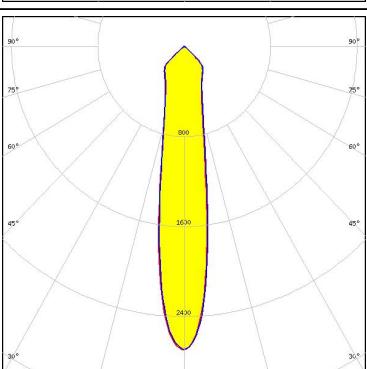
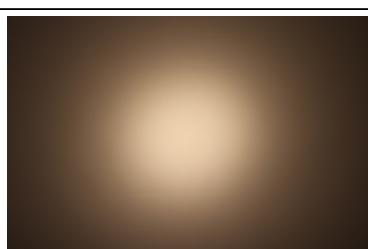
#### CITIZEN

LED CLL04x/CLU04x  
FWHM / FWTM 30.0° / 93.0°  
Efficiency 92 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8102-G2



#### CITIZEN

LED CLU720/721/723  
FWHM / FWTM 19.0° / 88.0°  
Efficiency 94 %  
Peak intensity 2.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
A.A.G. STUCCHI: 8101-G2



### OPTICAL RESULTS (MEASURED):

#### CITIZEN

LED CLU720/721/723

FWHM / FWTM 19.0° / 81.0°

Efficiency 94 %

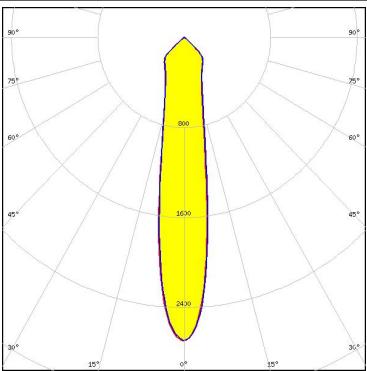
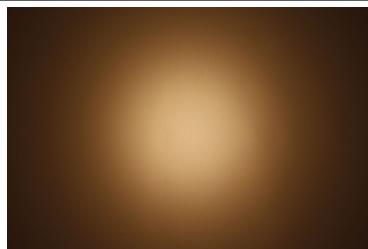
Peak intensity 2.7 cd/lm

LEDs/each optic 1

Light colour White

Required components:

BJB: 47.319.2021



#### CREE LEDs

LED CXA/B 25xx

FWHM / FWTM 30.0° / 93.0°

Efficiency 88 %

Peak intensity 1.5 cd/lm

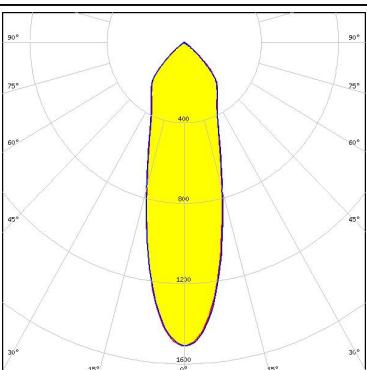
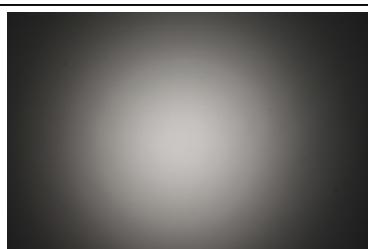
LEDs/each optic 1

Light colour White

Required components:

F13671\_ANGE-RZ-LENS

BJB: 47.319.2141



#### CREE LEDs

LED CXA/B 25xx

FWHM / FWTM 27.0° / 91.0°

Efficiency 92 %

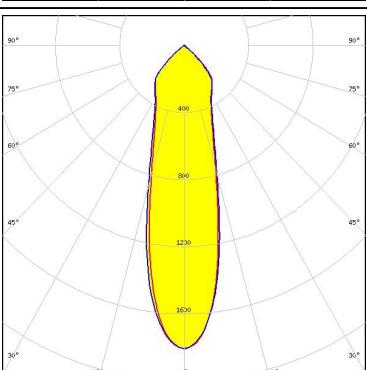
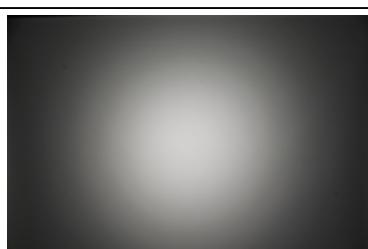
Peak intensity 1.8 cd/lm

LEDs/each optic 1

Light colour White

Required components:

BJB: 47.319.2141



#### CREE LEDs

LED CXA/B 25xx

FWHM / FWTM 25.0° / 91.0°

Efficiency 93 %

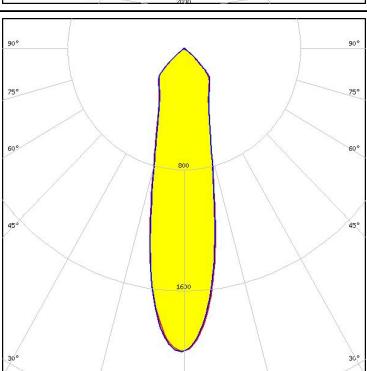
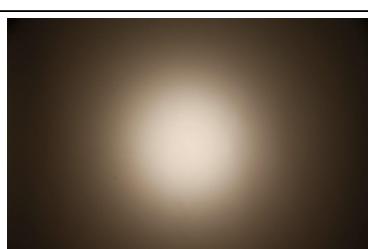
Peak intensity 2 cd/lm

LEDs/each optic 1

Light colour White

Required components:

A.A.G. STUCCHI: 8401-G2



### OPTICAL RESULTS (MEASURED):



LED CXA/B 30xx

FWHM / FWTM 30.0° / 92.0°

Efficiency 92 %

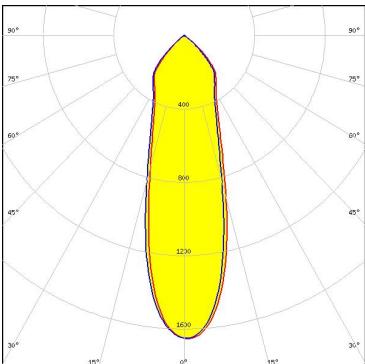
Peak intensity 1.7 cd/lm

LEDs/each optic 1

Light colour White

Required components:

A.A.G. STUCCHI: 8404-G2



LED LUXEON CoB 1204/1205

FWHM / FWTM 21.0° / 89.0°

Efficiency 94 %

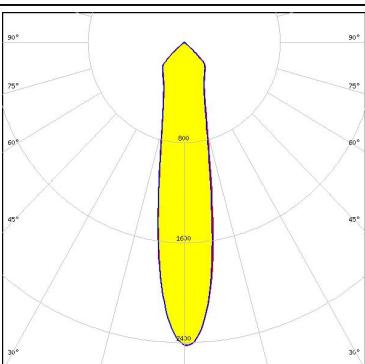
Peak intensity 2.4 cd/lm

LEDs/each optic 1

Light colour White

Required components:

A.A.G. STUCCHI: 8301-G2



LED LUXEON CoB 1208

FWHM / FWTM 23.0° / 90.0°

Efficiency 94 %

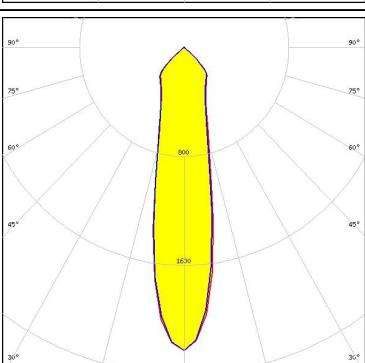
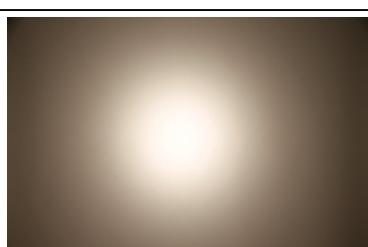
Peak intensity 2.2 cd/lm

LEDs/each optic 1

Light colour White

Required components:

A.A.G. STUCCHI: 8301-G2



LED LUXEON CoB 1211

FWHM / FWTM 26.0° / 91.0°

Efficiency 92 %

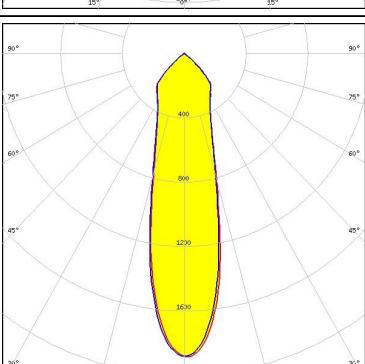
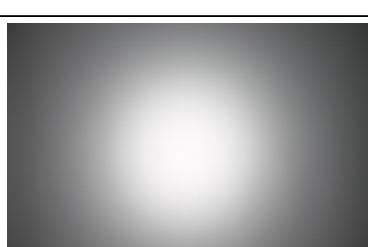
Peak intensity 1.9 cd/lm

LEDs/each optic 1

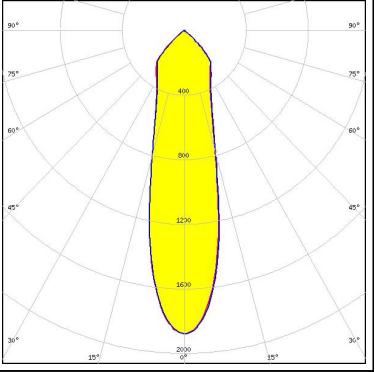
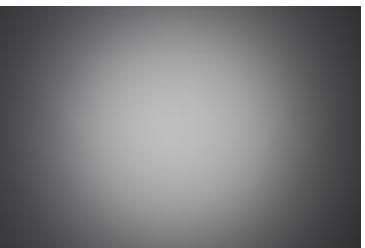
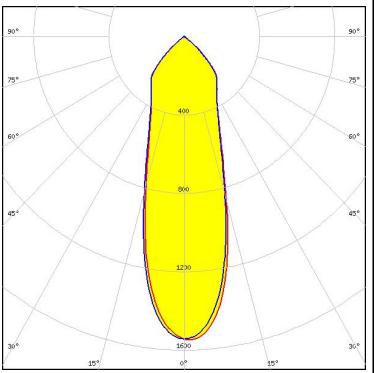
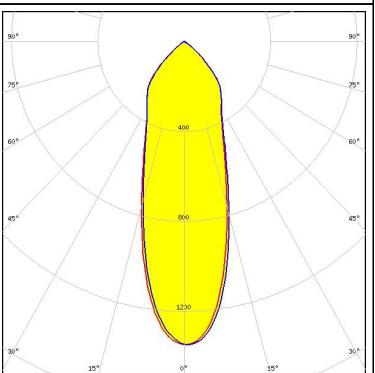
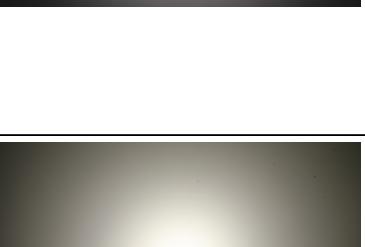
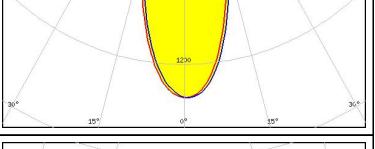
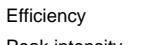
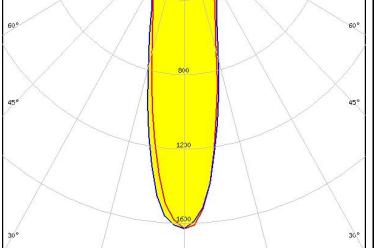
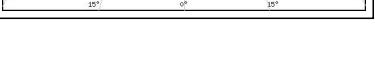
Light colour White

Required components:

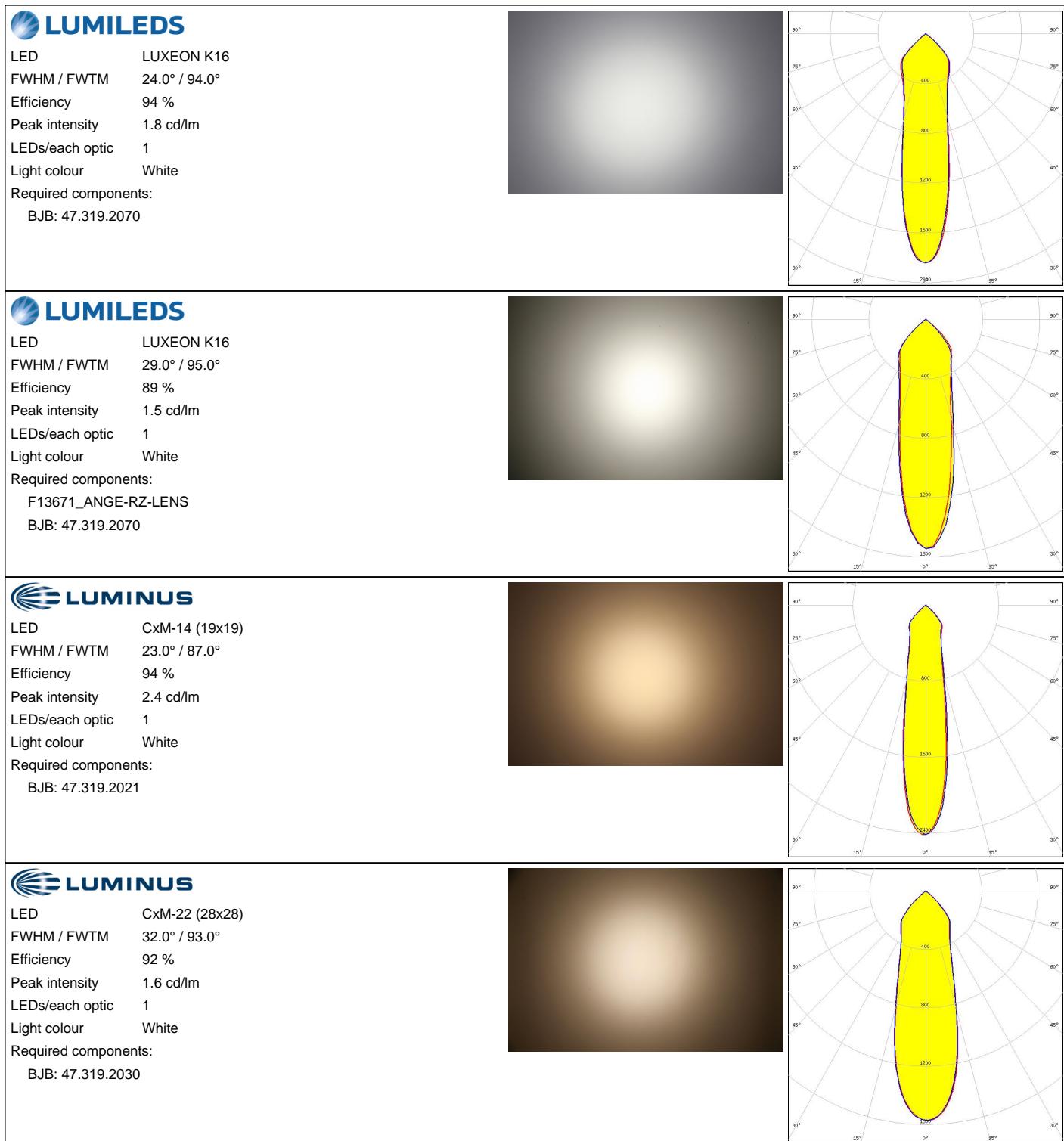
BJB: 47.319.2030



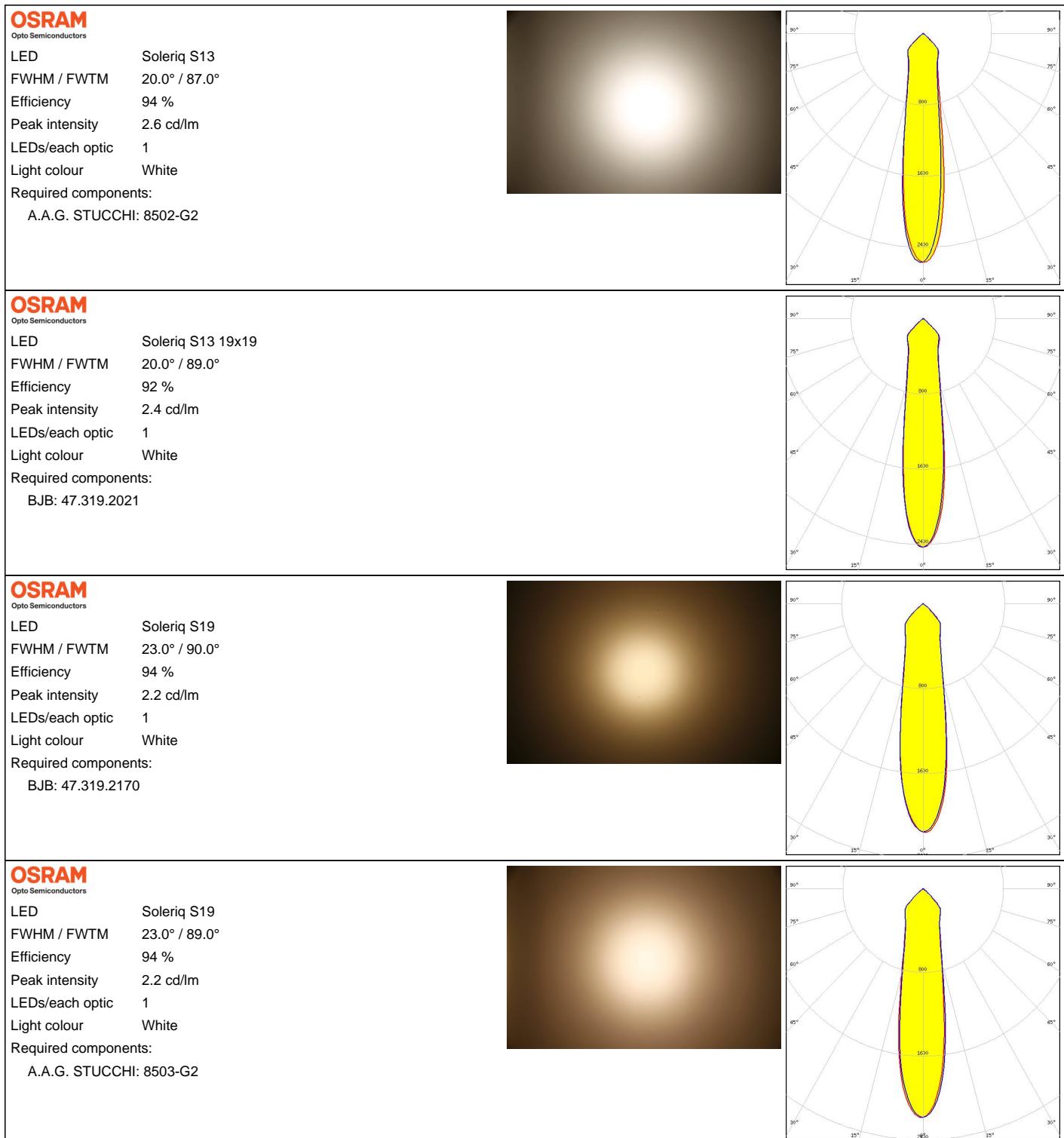
### OPTICAL RESULTS (MEASURED):

	<b>LUMILEDS</b>		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON CoB 1211 26.0° / 91.0° 92 % 1.9 cd/lm 1 White A.A.G. STUCCHI: 8102-G2		
	<b>LUMILEDS</b>		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON CoB 1213/1216/1812 32.0° / 93.0° 91 % 1.6 cd/lm 1 White BJB: 47.319.2030		
	<b>LUMILEDS</b>		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON K12 27.0° / 95.0° 89 % 1.6 cd/lm 1 White F13671_ANGE-RZ-LENS BJB: 47.319.2070		

### OPTICAL RESULTS (MEASURED):



### OPTICAL RESULTS (MEASURED):



### OPTICAL RESULTS (MEASURED):

#### PHILIPS

LED Fortimo SLM L19 CoB

FWHM / FWTM 30.0° / 94.0°

Efficiency 88 %

Peak intensity 1.5 cd/lm

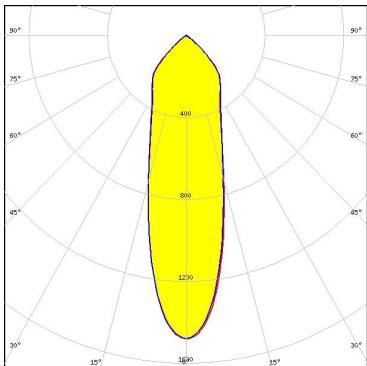
LEDs/each optic 1

Light colour White

Required components:

F13671\_ANGE-RZ-LENS

BJB: 47.319.2030



#### PHILIPS

LED Fortimo SLM L19 CoB

FWHM / FWTM 27.0° / 92.0°

Efficiency 93 %

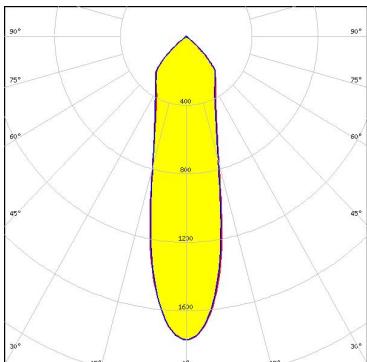
Peak intensity 1.8 cd/lm

LEDs/each optic 1

Light colour White

Required components:

BJB: 47.319.2030



#### PHILIPS

LED Fortimo SLM L23 CoB

FWHM / FWTM 34.0° / 95.0°

Efficiency 88 %

Peak intensity 1.3 cd/lm

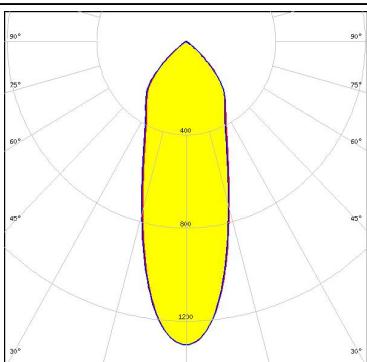
LEDs/each optic 1

Light colour White

Required components:

F13671\_ANGE-RZ-LENS

BJB: 47.319.2030



#### PHILIPS

LED Fortimo SLM L23 CoB

FWHM / FWTM 32.0° / 95.0°

Efficiency 93 %

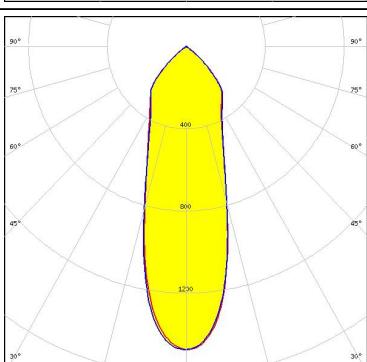
Peak intensity 1.5 cd/lm

LEDs/each optic 1

Light colour White

Required components:

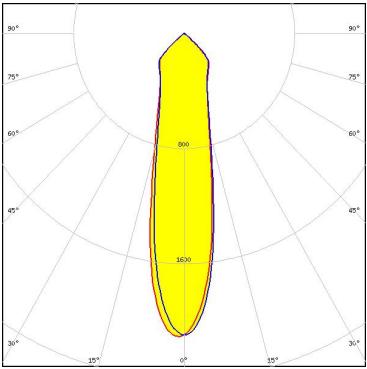
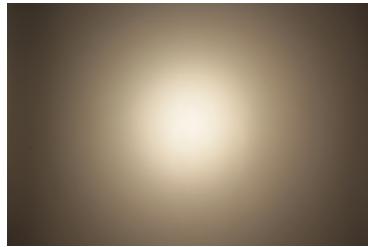
BJB: 47.319.2030



## OPTICAL RESULTS (MEASURED):

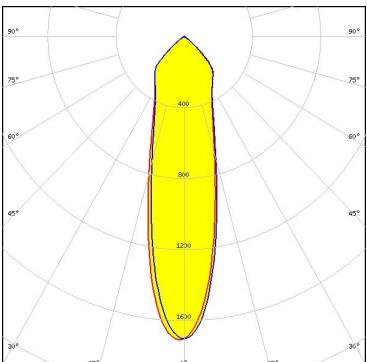
### SAMSUNG

LED LC016D / LC019D / LC026D / LC033D  
 FWHM / FWTM 24.0° / 91.0°  
 Efficiency 93 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 BJB: 47.319.2021



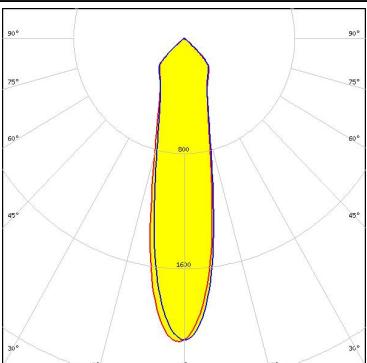
### SAMSUNG

LED LC016D / LC019D / LC026D / LC033D  
 FWHM / FWTM 27.0° / 93.0°  
 Efficiency 89 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 A.A.G. STUCCHI: 8101-G2



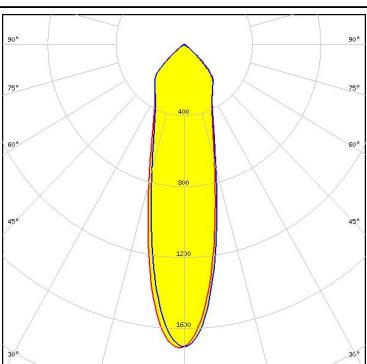
### SAMSUNG

LED LC016D / LC019D / LC026D / LC033D  
 FWHM / FWTM 24.0° / 91.0°  
 Efficiency 93 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 A.A.G. STUCCHI: 8101-G2

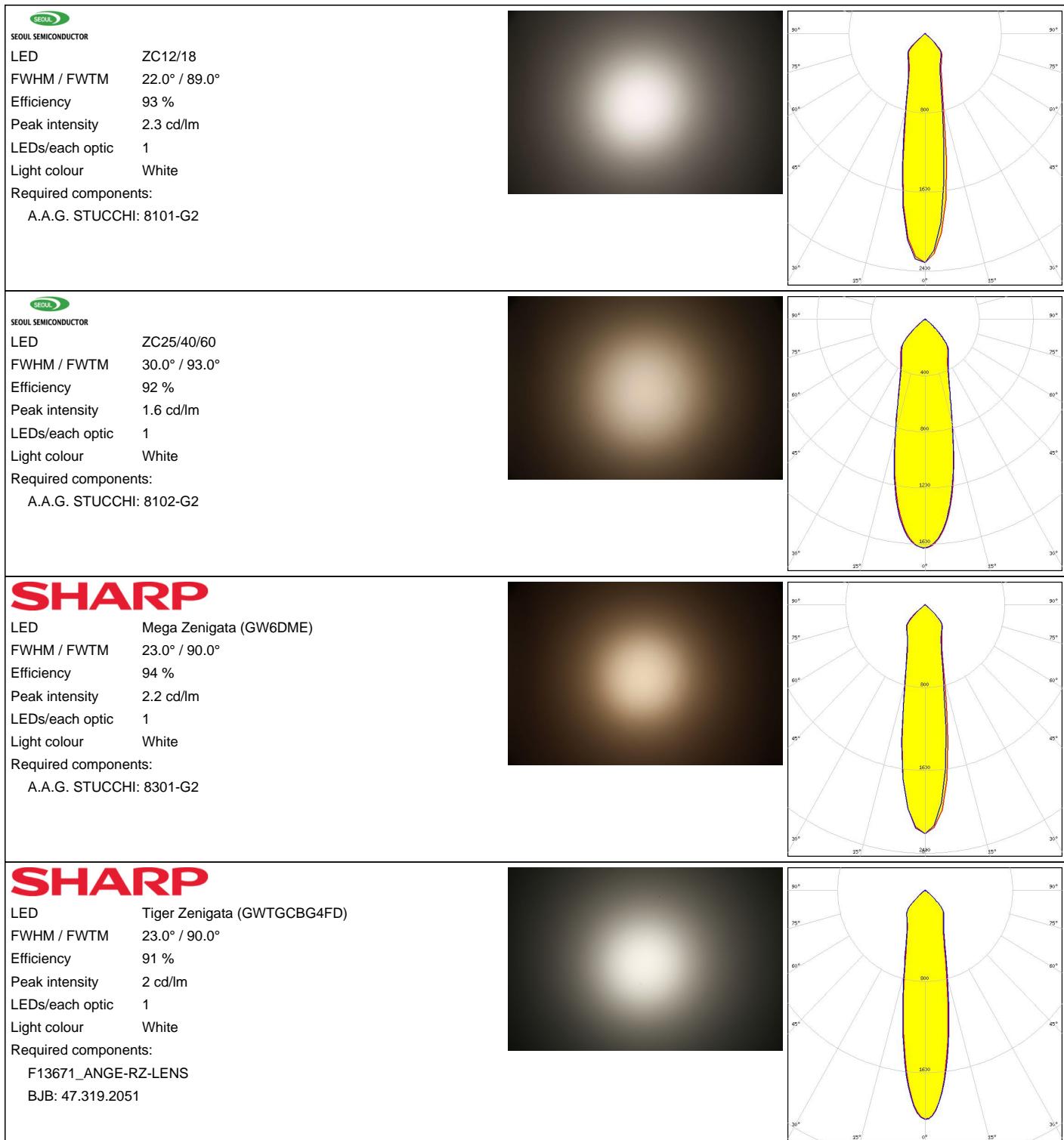


### SAMSUNG

LED LC016D / LC019D / LC026D / LC033D  
 FWHM / FWTM 27.0° / 93.0°  
 Efficiency 89 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 BJB: 47.319.2021



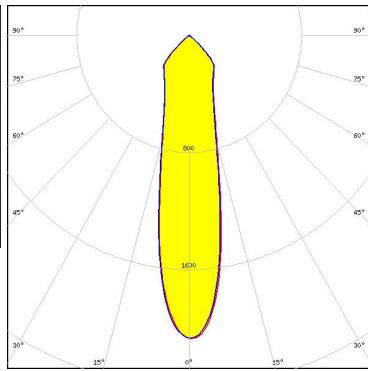
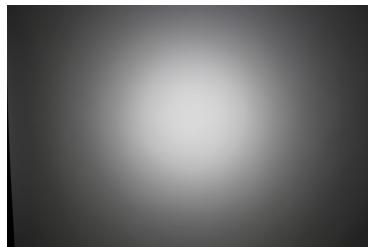
## OPTICAL RESULTS (MEASURED):



## OPTICAL RESULTS (MEASURED):

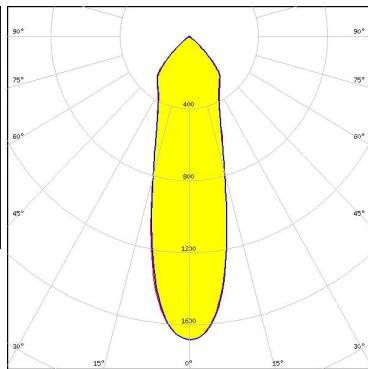
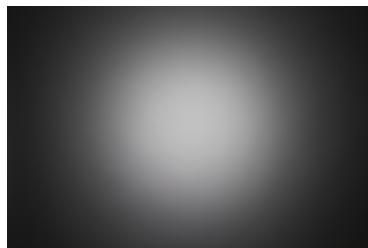
### TRIDONIC

LED SLE G7 LES17 H  
FWHM / FWTM 24.0° / 89.0°  
Efficiency 91 %  
Peak intensity 2.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



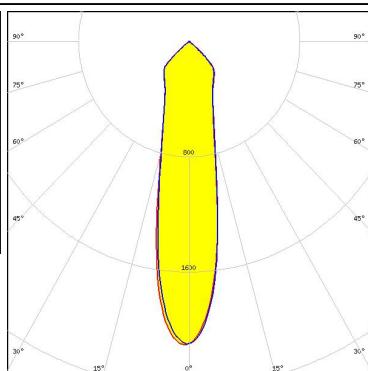
### TRIDONIC

LED SLE G7 LES21 H  
FWHM / FWTM 29.0° / 91.0°  
Efficiency 91 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



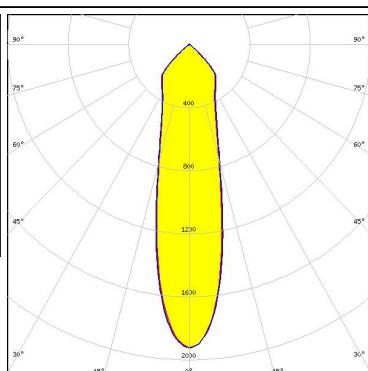
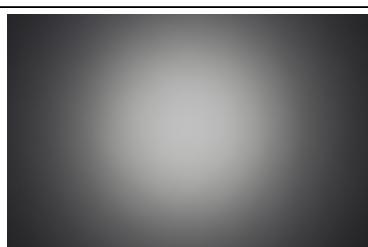
### XICATO

LED XOB 14.5 mm  
FWHM / FWTM 23.0° / 92.0°  
Efficiency 94 %  
Peak intensity 2.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
BBJ: 47.319.2021



### XICATO

LED XTM - 19mm LES  
FWHM / FWTM 25.0° / 91.0°  
Efficiency 93 %  
Peak intensity 1.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C15743\_XTM-ADAPTER-50-B



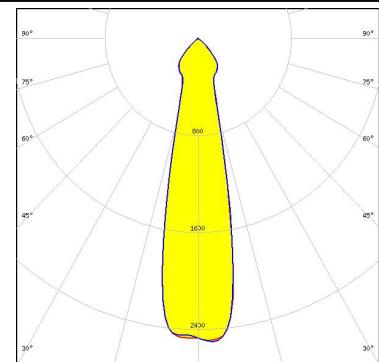
## OPTICAL RESULTS (SIMULATED):

### CITIZEN

LED	CLL04x/CLU04x
FWHM / FWTM	22.0° / 68.0°
Efficiency	95 %
Peak intensity	3.1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	BJB: 47.319.2030

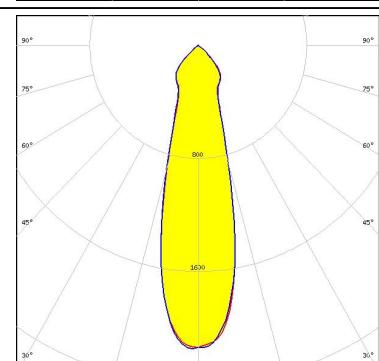
### CITIZEN

LED	CLL04x/CLU04x
FWHM / FWTM	24.0° / 79.0°
Efficiency	89 %
Peak intensity	2.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	BJB: 47.319.2315



### SAMSUNG

LED	LC040D / LC060D / LC080D
FWHM / FWTM	27.0° / 85.0°
Efficiency	90 %
Peak intensity	2.2 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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