

ANGELA-S-B

~10° spot beam compatible with BJB connectors

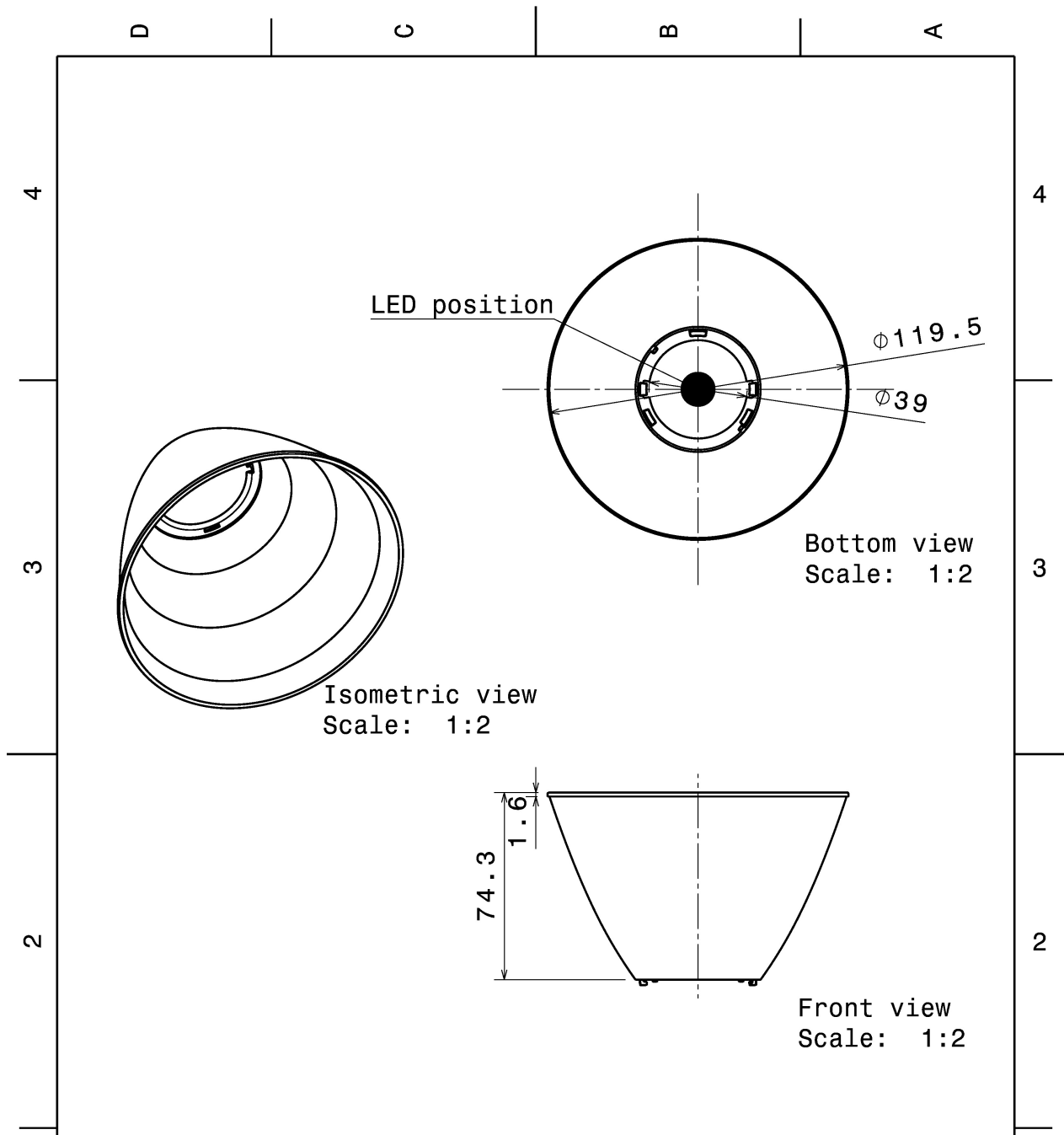
TECHNICAL SPECIFICATIONS:

Dimensions	Ø 119.5 mm
Height	74.5 mm
Fastening	socket
Colour	metal
Box size	398 x 298 x 265 mm
Box weight	8.6 kg
Quantity in Box	180 pcs
ROHS compliant	yes ⓘ



MATERIAL SPECIFICATIONS:

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



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:


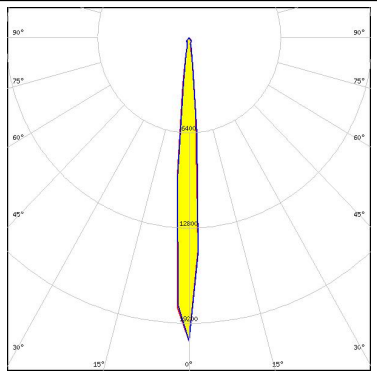

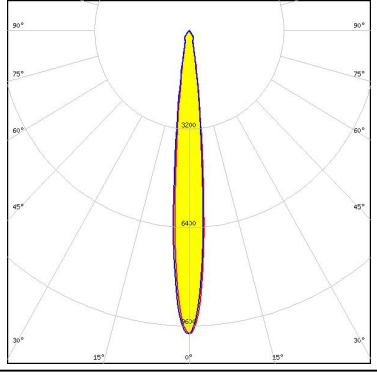

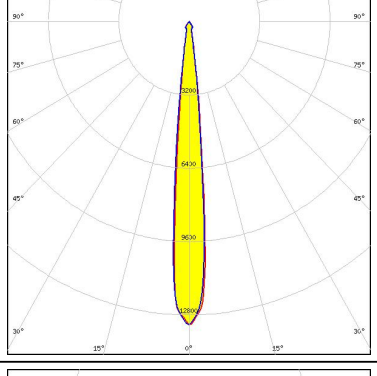

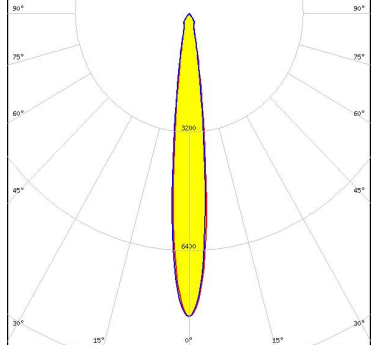
DRAWING TITLE
Angela-B

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


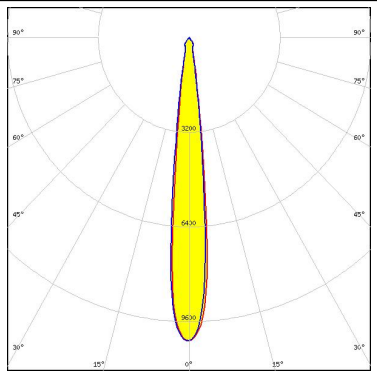
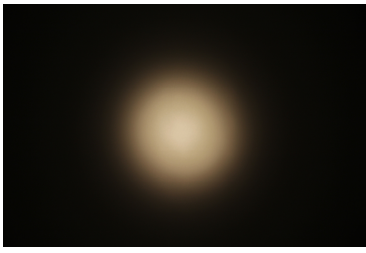
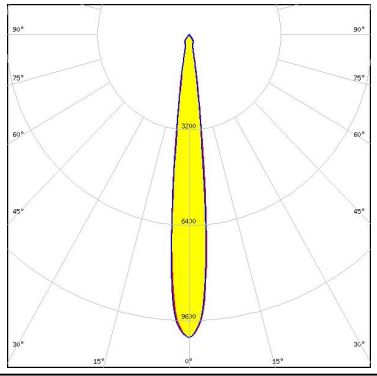

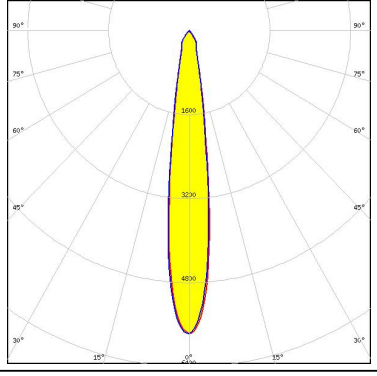

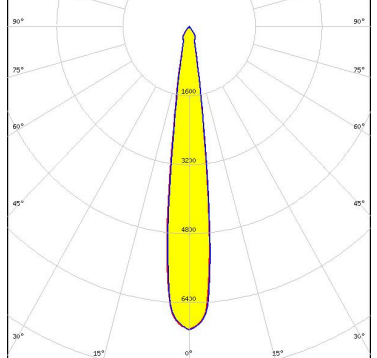
SIZE	PART NUMBER
A4	-

SCALE	1:2	WEIGHT	-	SHEET	1/1
-------	-----	--------	---	-------	-----

PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED BXRA ES Rectangle</p> <p>FWHM 8.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 20.740 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: BJB: 47.319.2040</p>		
<p>bridgelux.</p> <p>LED V15 Gen6</p> <p>FWHM 11.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 9.900 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS BJB: 47.319.2274</p>		
<p>bridgelux.</p> <p>LED V15 Gen6</p> <p>FWHM 11.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 13.000 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 13.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 8.200 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F13671_ANGE-RZ-LENS BJB: 47.319.2274</p>		

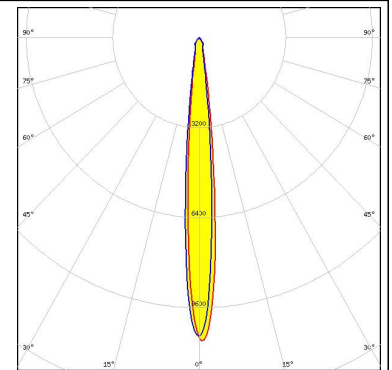
PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED V18 Gen6 FWHM 12.0° Efficiency 89 % Peak intensity 10.000 cd/lm LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2274</p>		
<p>bridgelux.</p> <p>LED V18 Gen7 FWHM 12.0° Efficiency 91 % Peak intensity 10.200 cd/lm LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2350</p>		
<p>bridgelux.</p> <p>LED V22 Gen6 FWHM 15.0° Efficiency 84 % Peak intensity 5.800 cd/lm LEDs/each optic 1 Light colour White Required components: F13671_ANGE-RZ-LENS A.A.G. STUCCHI: 8102/G2</p>		
<p>bridgelux.</p> <p>LED V22 Gen6 FWHM 15.0° Efficiency 88 % Peak intensity 7.000 cd/lm LEDs/each optic 1 Light colour White Required components: A.A.G. STUCCHI: 8102/G2</p>		

PHOTOMETRIC DATA (MEASURED):

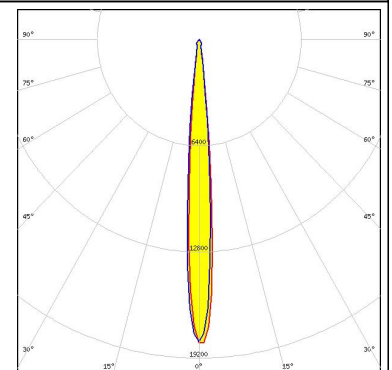
CITIZEN

LED CLL03x/CLU03x
FWHM 10.0°
Efficiency 86 %
Peak intensity 10.780 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F13671_ANGE-RZ-LENS
A.A.G. STUCCHI: 8101/G2



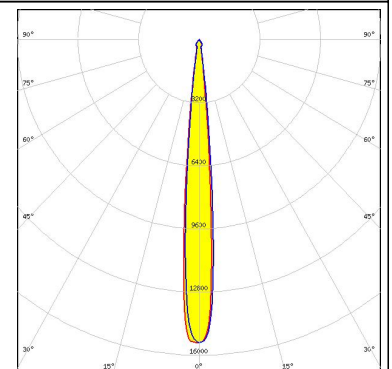
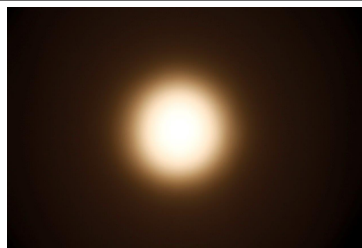
CITIZEN

LED CLL03x/CLU03x
FWHM 9.0°
Efficiency 94 %
Peak intensity 18.300 cd/lm
LEDs/each optic 1
Light colour White
Required components:
BJB: 47.319.2021



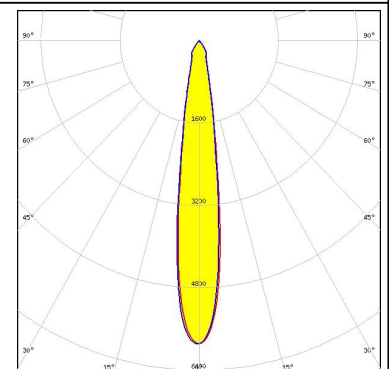
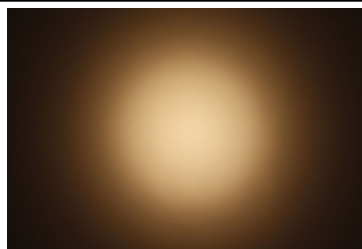
CITIZEN

LED CLL03x/CLU03x
FWHM 10.0°
Efficiency 93 %
Peak intensity 15.400 cd/lm
LEDs/each optic 1
Light colour White
Required components:
A.A.G. STUCCHI: 8101/G2



CITIZEN

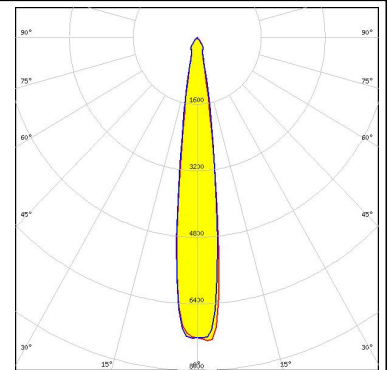
LED CLL04x/CLU04x
FWHM 15.0°
Efficiency 86 %
Peak intensity 5.890 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F13671_ANGE-RZ-LENS
A.A.G. STUCCHI: 8102/G2



PHOTOMETRIC DATA (MEASURED):

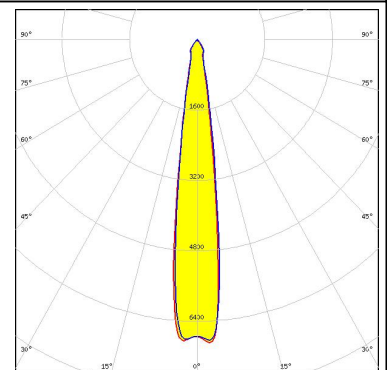
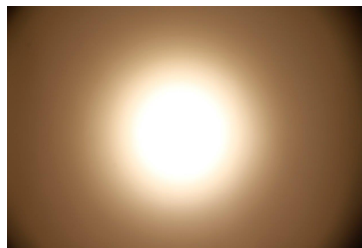
CITIZEN

LED CLL04x/CLU04x
FWHM 15.0°
Efficiency 92 %
Peak intensity 7.300 cd/lm
LEDs/each optic 1
Light colour White
Required components:
BJB: 47.319.2030



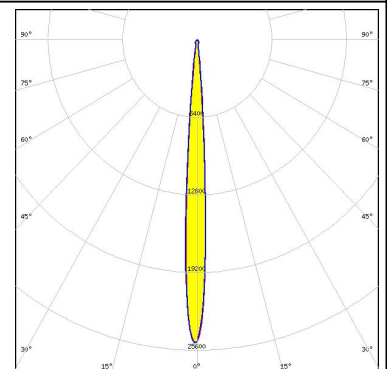
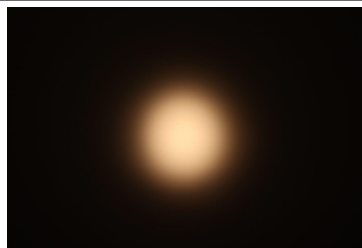
CITIZEN

LED CLL04x/CLU04x
FWHM 15.0°
Efficiency 92 %
Peak intensity 6.900 cd/lm
LEDs/each optic 1
Light colour White
Required components:
A.A.G. STUCCHI: 8102/G2



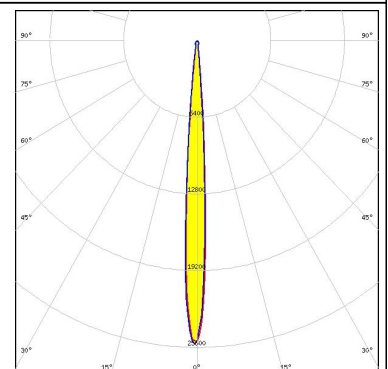
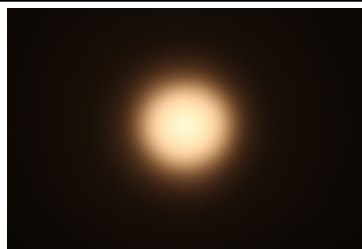
CITIZEN

LED CLU720/721
FWHM 7.0°
Efficiency 94 %
Peak intensity 25.000 cd/lm
LEDs/each optic 1
Light colour White
Required components:
A.A.G. STUCCHI: 8101/G2



CITIZEN

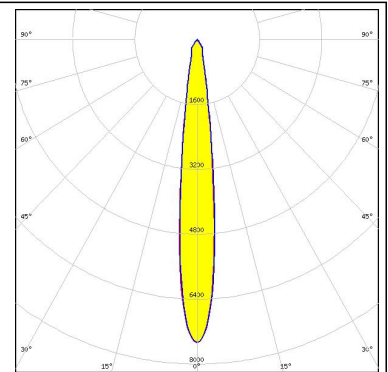
LED CLU720/721
FWHM 7.0°
Efficiency 94 %
Peak intensity 25.300 cd/lm
LEDs/each optic 1
Light colour White
Required components:
BJB: 47.319.2021



PHOTOMETRIC DATA (MEASURED):

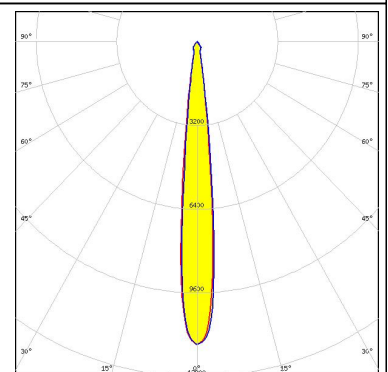
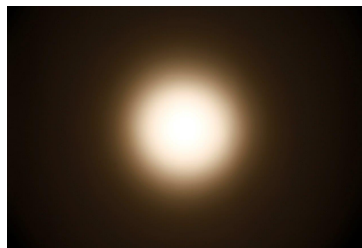
CREE 

LED CXA/B 25xx
 FWHM 13.0°
 Efficiency 86 %
 Peak intensity 7.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 BJB: 47.319.2141



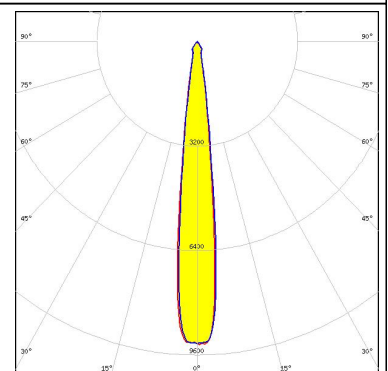
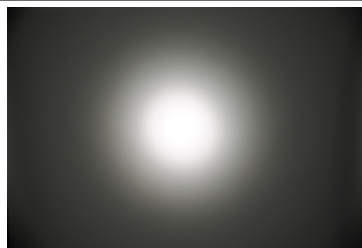
CREE 

LED CXA/B 25xx
 FWHM 11.0°
 Efficiency 92 %
 Peak intensity 11.590 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 A.A.G. STUCCHI: 8401/G2



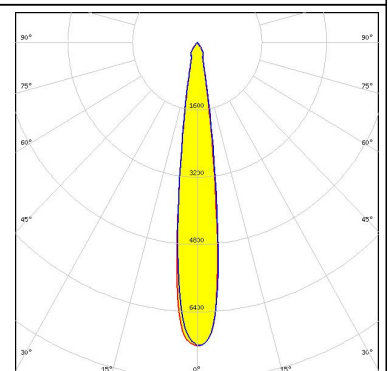
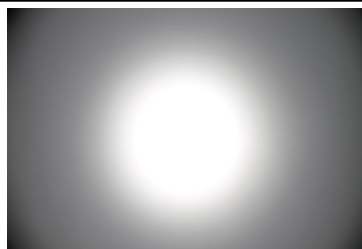
CREE 

LED CXA/B 25xx
 FWHM 13.0°
 Efficiency 89 %
 Peak intensity 9.300 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 BJB: 47.319.2141



CREE 

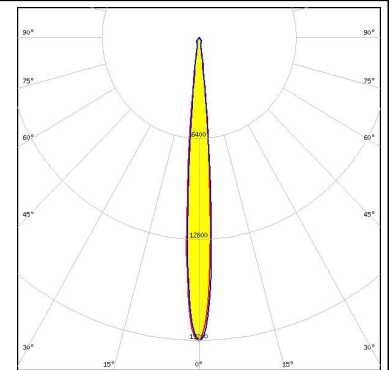
LED CXA/B 30xx
 FWHM 15.0°
 Efficiency 91 %
 Peak intensity 7.200 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 A.A.G. STUCCHI: 8404/G2



PHOTOMETRIC DATA (MEASURED):

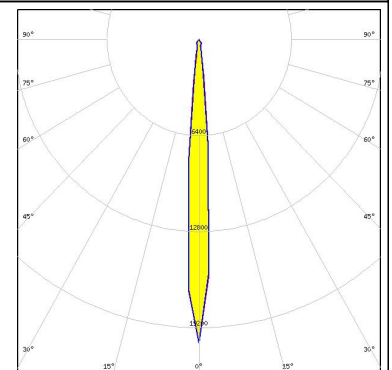
LG Innotek

LED COB 10W/13W/17W/24W
 FWHM 9.0°
 Efficiency 93 %
 Peak intensity 19.240 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 A.A.G. STUCCHI: 8600/G2



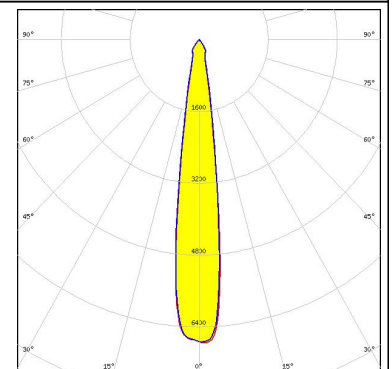
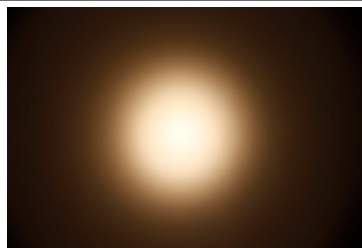
LG Innotek

LED COB 10W/13W/17W/24W
 FWHM 8.0°
 Efficiency 94 %
 Peak intensity 16.200 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 BJB: 47.319.2080



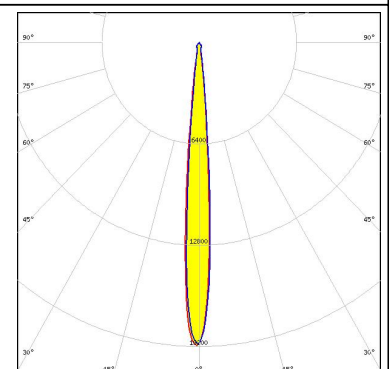
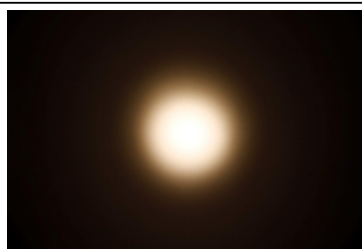
LG Innotek

LED COB 40W/60W
 FWHM 15.0°
 Efficiency 91 %
 Peak intensity 6.760 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 A.A.G. STUCCHI: 8102/G2



LUMILEDS

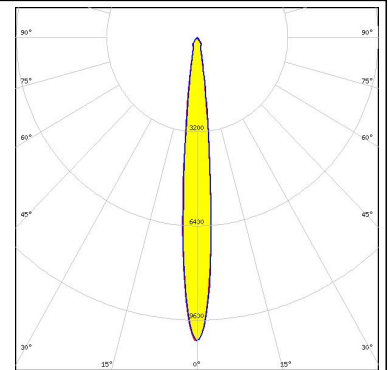
LED LUXEON CoB 1204/1205
 FWHM 9.0°
 Efficiency 93 %
 Peak intensity 19.200 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 A.A.G. STUCCHI: 8301/G2



PHOTOMETRIC DATA (MEASURED):

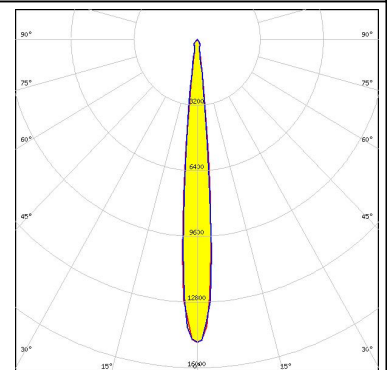
LUMILEDS

LED LUXEON CoB 1208
 FWHM 11.0°
 Efficiency 86 %
 Peak intensity 10.000 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 A.A.G. STUCCHI: 8301/G2



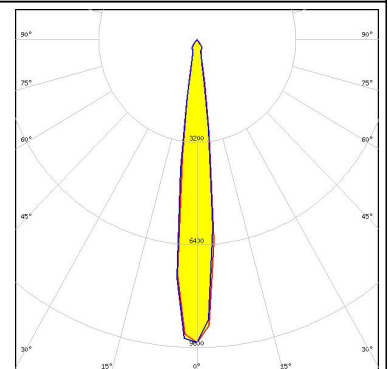
LUMILEDS

LED LUXEON CoB 1208
 FWHM 10.0°
 Efficiency 94 %
 Peak intensity 14.800 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 A.A.G. STUCCHI: 8301/G2



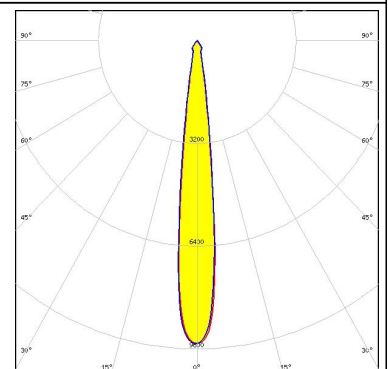
LUMILEDS

LED LUXEON CoB 1211
 FWHM 13.0°
 Efficiency 91 %
 Peak intensity 9.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 A.A.G. STUCCHI: 8102/G2



LUMILEDS

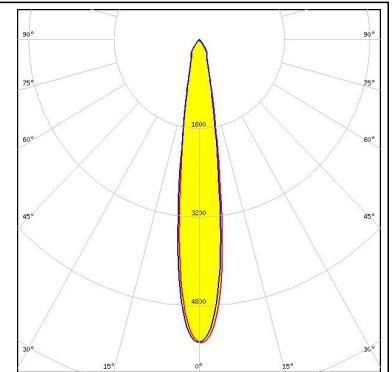
LED LUXEON CoB 1211
 FWHM 13.0°
 Efficiency 90 %
 Peak intensity 9.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 BJB: 47.319.2030



PHOTOMETRIC DATA (MEASURED):

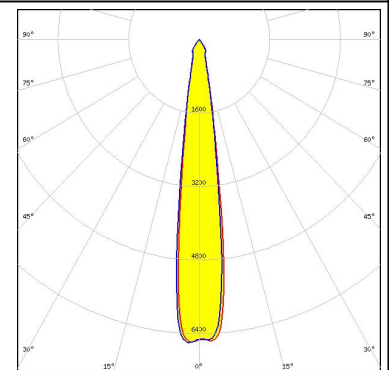
LUMILEDS

LED LUXEON CoB 1216/1812
 FWHM 16.0°
 Efficiency 85 %
 Peak intensity 5.470 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 BJB: 47.319.2030



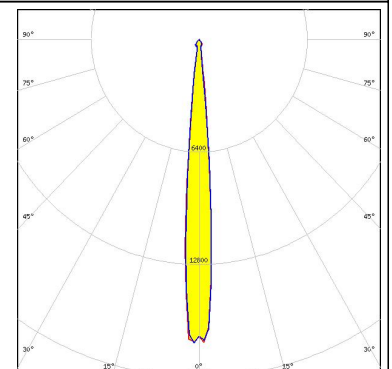
LUMILEDS

LED LUXEON CoB 1216/1812
 FWHM 15.0°
 Efficiency 89 %
 Peak intensity 6.620 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 BJB: 47.319.2030



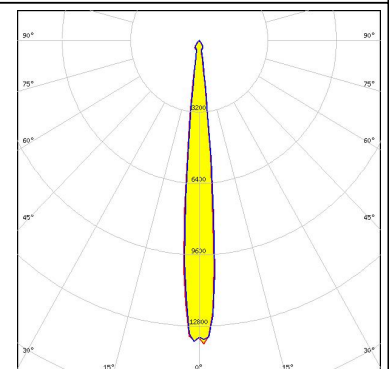
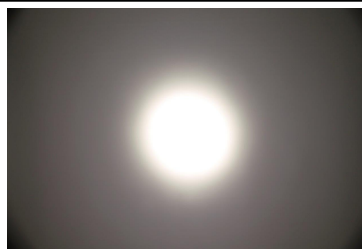
LUMILEDS

LED LUXEON K12
 FWHM 9.0°
 Efficiency 94 %
 Peak intensity 17.300 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 BJB: 47.319.2070


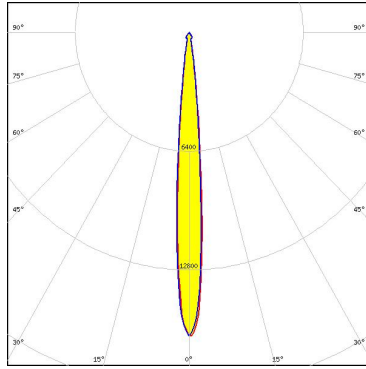
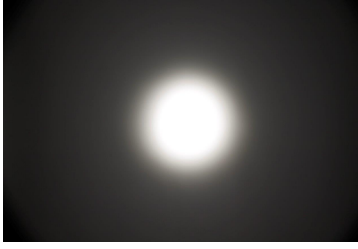
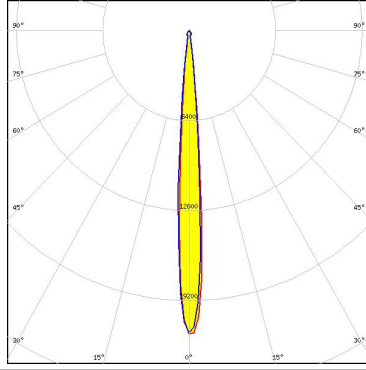

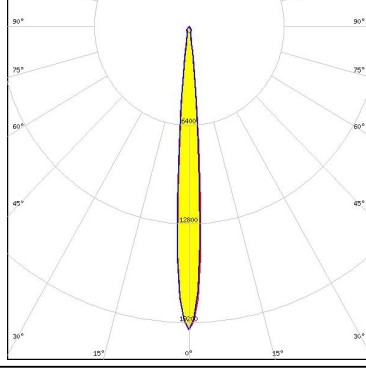
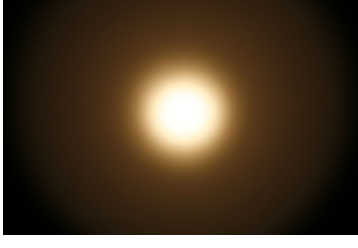
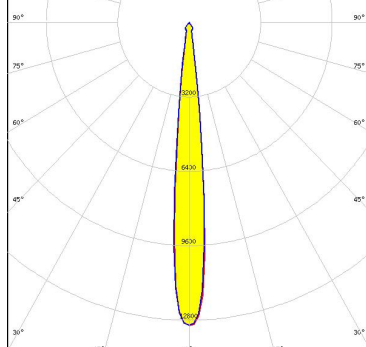


LUMILEDS

LED LUXEON K16
 FWHM 11.0°
 Efficiency 94 %
 Peak intensity 13.600 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 BJB: 47.319.2070



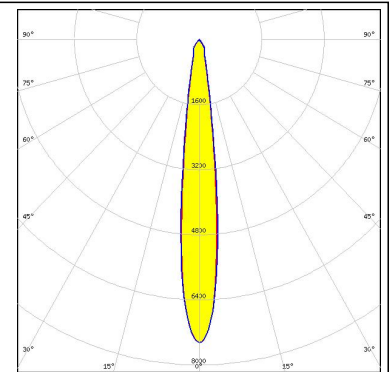
PHOTOMETRIC DATA (MEASURED):

<p>LUMINUS</p> <p>LED CxM-14 (19x19) FWHM 9.0° Efficiency 93 % Peak intensity 16.300 cd/lm LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2021</p>		
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED Soleriq S13 FWHM 8.0° Efficiency 94 % Peak intensity 21.570 cd/lm LEDs/each optic 1 Light colour White Required components: A.A.G. STUCCHI: 8502/G2</p>		
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED Soleriq S13 19x19 FWHM 8.5° Efficiency 89 % Peak intensity 19.700 cd/lm LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2021</p>		
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED Soleriq S19 FWHM 11.0° Efficiency 93 % Peak intensity 13.050 cd/lm LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2170</p>		

PHOTOMETRIC DATA (MEASURED):

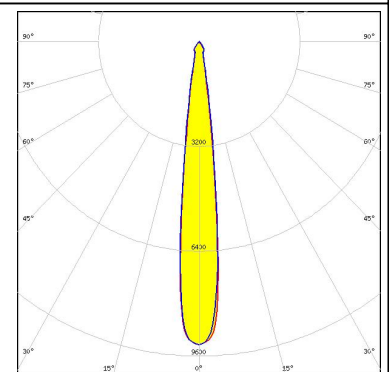
PHILIPS

LED Fortimo SLM L19 CoB
 FWHM 13.0°
 Efficiency 86 %
 Peak intensity 7.500 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 BJB: 47.319.2030



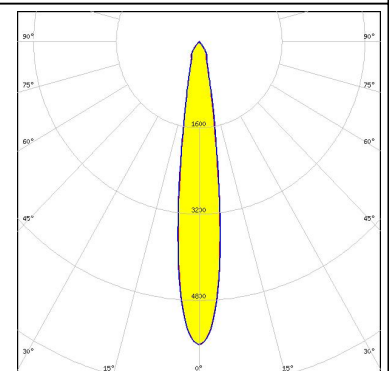
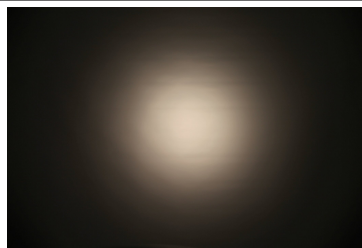
PHILIPS

LED Fortimo SLM L19 CoB
 FWHM 13.0°
 Efficiency 91 %
 Peak intensity 9.300 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 BJB: 47.319.2030



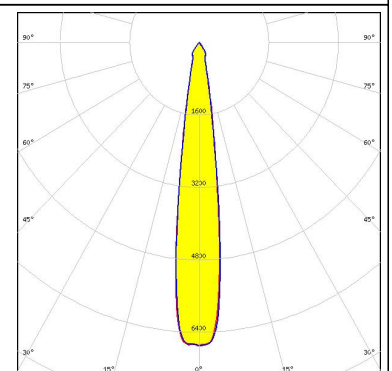
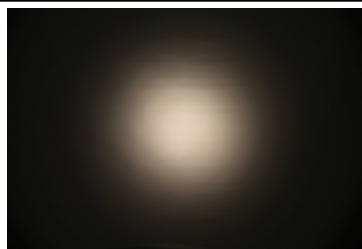
PHILIPS

LED Fortimo SLM L23 CoB
 FWHM 16.0°
 Efficiency 86 %
 Peak intensity 5.600 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 F13671_ANGE-RZ-LENS
 BJB: 47.319.2030



PHILIPS

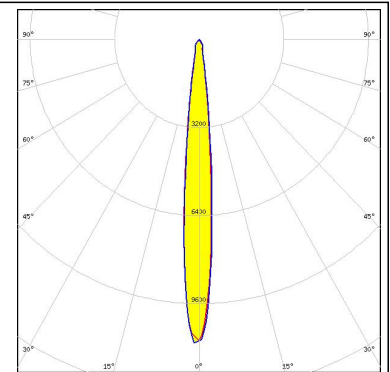
LED Fortimo SLM L23 CoB
 FWHM 15.0°
 Efficiency 91 %
 Peak intensity 6.700 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 BJB: 47.319.2030



PHOTOMETRIC DATA (MEASURED):

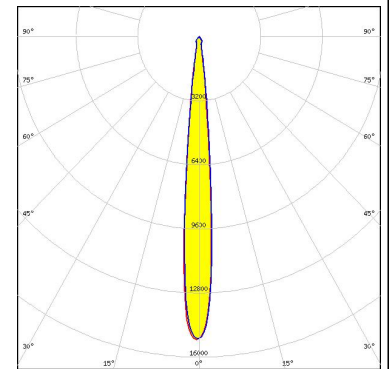
SAMSUNG

LED COB D Series LES 14.5 mm
FWHM 11.0°
Efficiency 87 %
Peak intensity 11.030 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F13671_ANGE-RZ-LENS
BJB: 47.319.2021



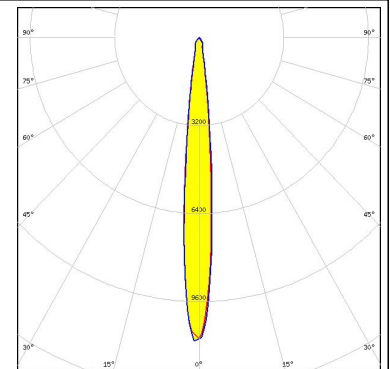
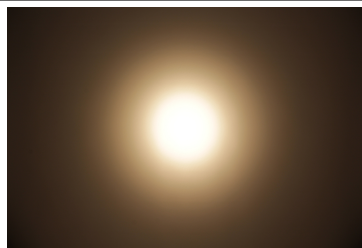
SAMSUNG

LED COB D Series LES 14.5 mm
FWHM 10.0°
Efficiency 91 %
Peak intensity 15.150 cd/lm
LEDs/each optic 1
Light colour White
Required components:
BJB: 47.319.2021



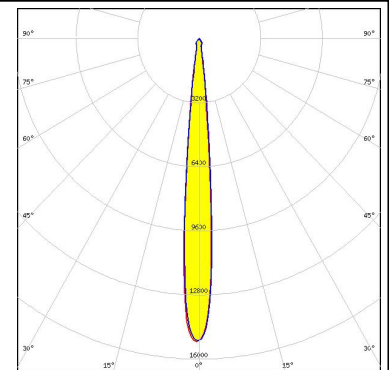
SAMSUNG

LED COB D Series LES 14.5 mm
FWHM 11.0°
Efficiency 87 %
Peak intensity 11.030 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F13671_ANGE-RZ-LENS
A.A.G. STUCCHI: 8101/G2



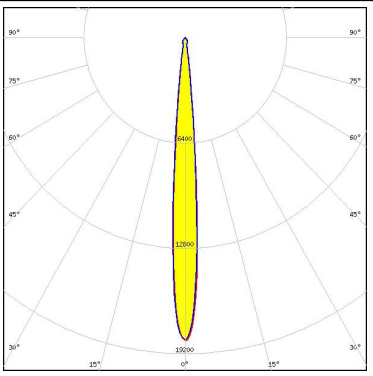


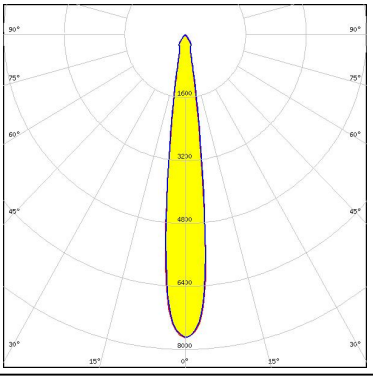


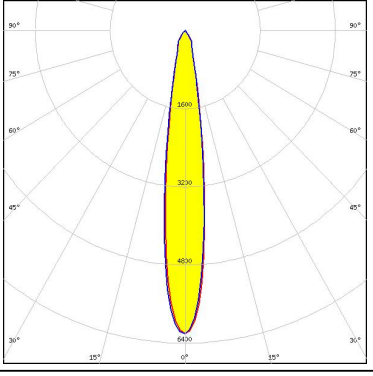


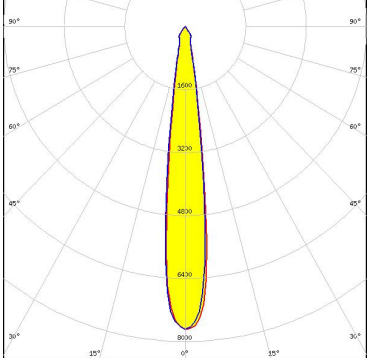


SAMSUNG

LED COB D Series LES 14.5 mm
FWHM 10.0°
Efficiency 91 %
Peak intensity 15.150 cd/lm
LEDs/each optic 1
Light colour White
Required components:
A.A.G. STUCCHI: 8101/G2



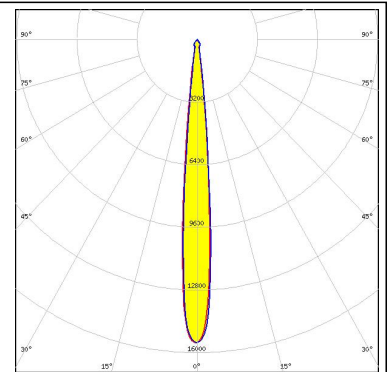
PHOTOMETRIC DATA (MEASURED):

<p> SEOUL SEMICONDUCTOR</p> <p>LED ZC12/18 FWHM 9.0° Efficiency 93 % Peak intensity 18.400 cd/lm LEDs/each optic 1 Light colour White Required components: A.A.G. STUCCHI: 8101/G2</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED ZC25/40/60 FWHM 14.0° Efficiency 91 % Peak intensity 7.700 cd/lm LEDs/each optic 1 Light colour White Required components: A.A.G. STUCCHI: 8102/G2</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED ZC25/40/60 FWHM 16.0° Efficiency 87 % Peak intensity 6.210 cd/lm LEDs/each optic 1 Light colour White Required components: F13671_ANGE-RZ-LENS BJB: 47.319.2030</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED ZC25/40/60 FWHM 14.0° Efficiency 93 % Peak intensity 7.700 cd/lm LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2030</p>		

PHOTOMETRIC DATA (MEASURED):

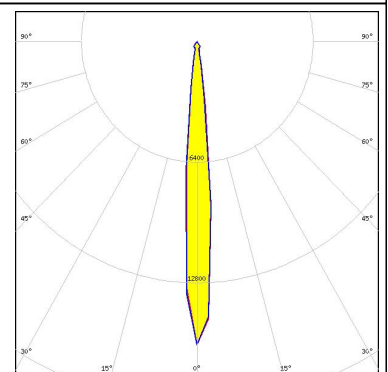
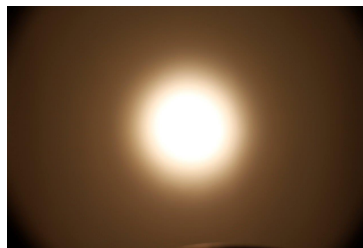
SHARP

LED Mega Zenigata (GW6DME)
 FWHM 10.0°
 Efficiency 94 %
 Peak intensity 15.500 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 A.A.G. STUCCHI: 8301/G2



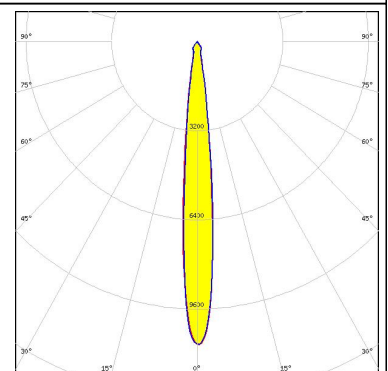
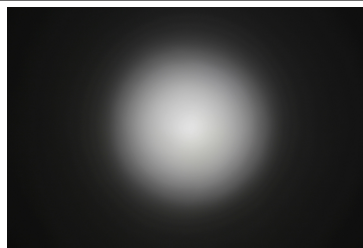
SHARP

LED Mega Zenigata (GW6DME)
 FWHM 10.0°
 Efficiency 94 %
 Peak intensity 16.100 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 BJB: 47.319.2011



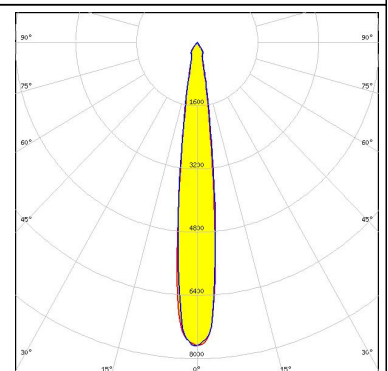
TRIDONIC

LED SLE G7 LES17 H
 FWHM 11.0°
 Efficiency 90 %
 Peak intensity 10.900 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



TRIDONIC

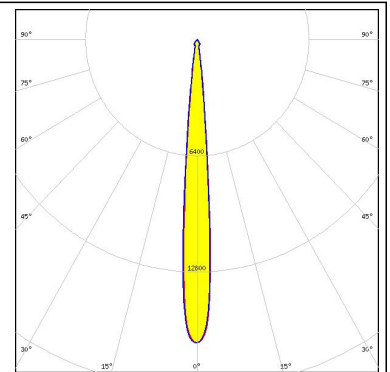
LED SLE G7 LES21 H
 FWHM 14.0°
 Efficiency 90 %
 Peak intensity 7.700 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (MEASURED):

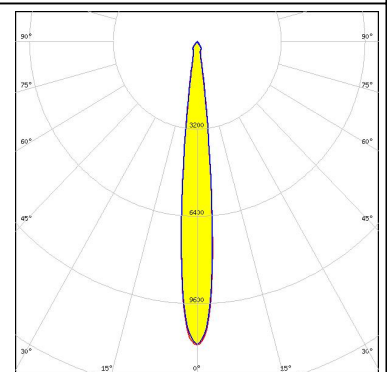
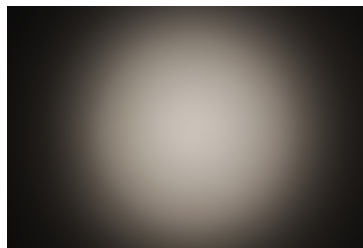
XICATO

LED XOB 14.5 mm
FWHM 9.0°
Efficiency 92 %
Peak intensity 16.705 cd/lm
LEDs/each optic 1
Light colour White
Required components:
BJB: 47.319.2021



XICATO

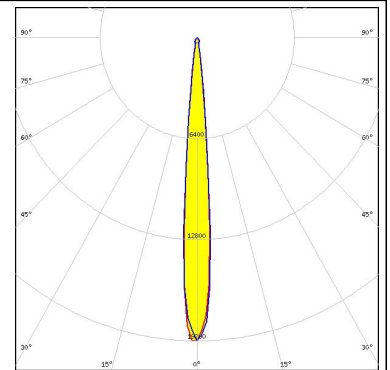
LED XTM - 19mm LES
FWHM 12.0°
Efficiency 91 %
Peak intensity 11.000 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C15743_XTM-ADAPTER-50-B



PHOTOMETRIC DATA (SIMULATED):

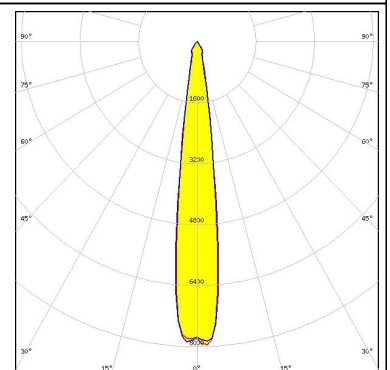
CITIZEN

LED CLL03x/CLU03x
 FWHM 9.3°
 Efficiency 94 %
 Peak intensity 19.200 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 BJB: 47.319.2021



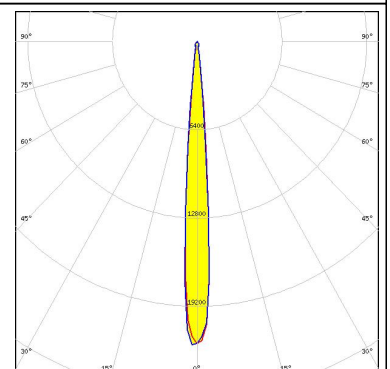
CITIZEN

LED CLL04x/CLU04x
 FWHM 14.0°
 Efficiency 93 %
 Peak intensity 8.000 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 BJB: 47.319.2030



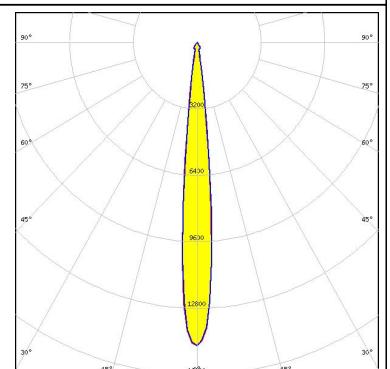
CITIZEN

LED CLU730/731
 FWHM 8.5°
 Efficiency 92 %
 Peak intensity 22.200 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 BJB: 47.319.2030



OSRAM

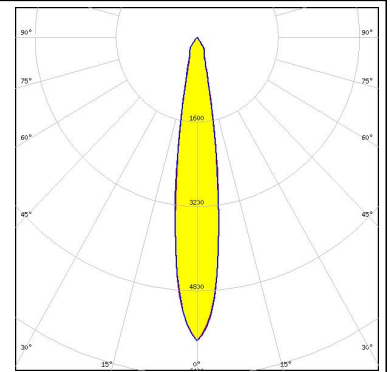
Opto Semiconductors
 LED Soleriq S15
 FWHM 10.0°
 Efficiency 90 %
 Peak intensity 14.600 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 BJB: 47.319.2021



PHOTOMETRIC DATA (SIMULATED):

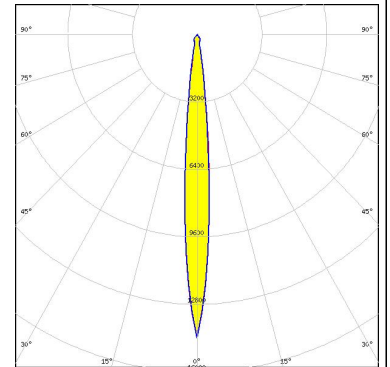
SAMSUNG

LED COB D Series LES 22 mm
 FWHM 17.0°
 Efficiency 87 %
 Peak intensity 5.750 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 BJB: 47.319.2030



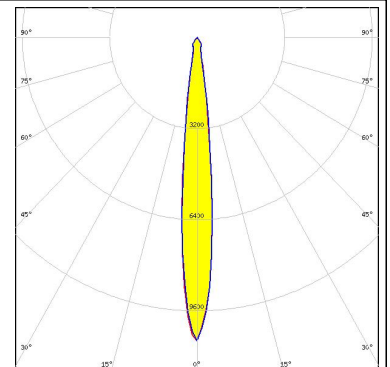
TRIDONIC

LED SLE G6 LES15 H D50
 FWHM 9.7°
 Efficiency 89 %
 Peak intensity 14.300 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



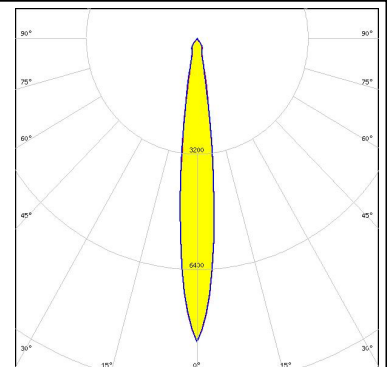
TRIDONIC

LED SLE G6 LES17 H
 FWHM 12.0°
 Efficiency 88 %
 Peak intensity 10.700 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



TRIDONIC

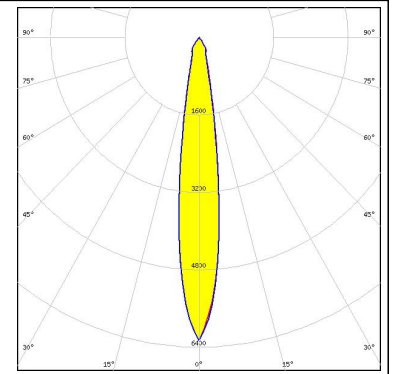
LED SLE G6 LES19 H
 FWHM 13.0°
 Efficiency 89 %
 Peak intensity 8.400 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (SIMULATED):

TRIDONIC

LED SLE G6 LES23 H
FWHM 16.0°
Efficiency 88 %
Peak intensity 6.270 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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

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)