

## ANGELA-W-B

~45° wide beam compatible with BJB connectors

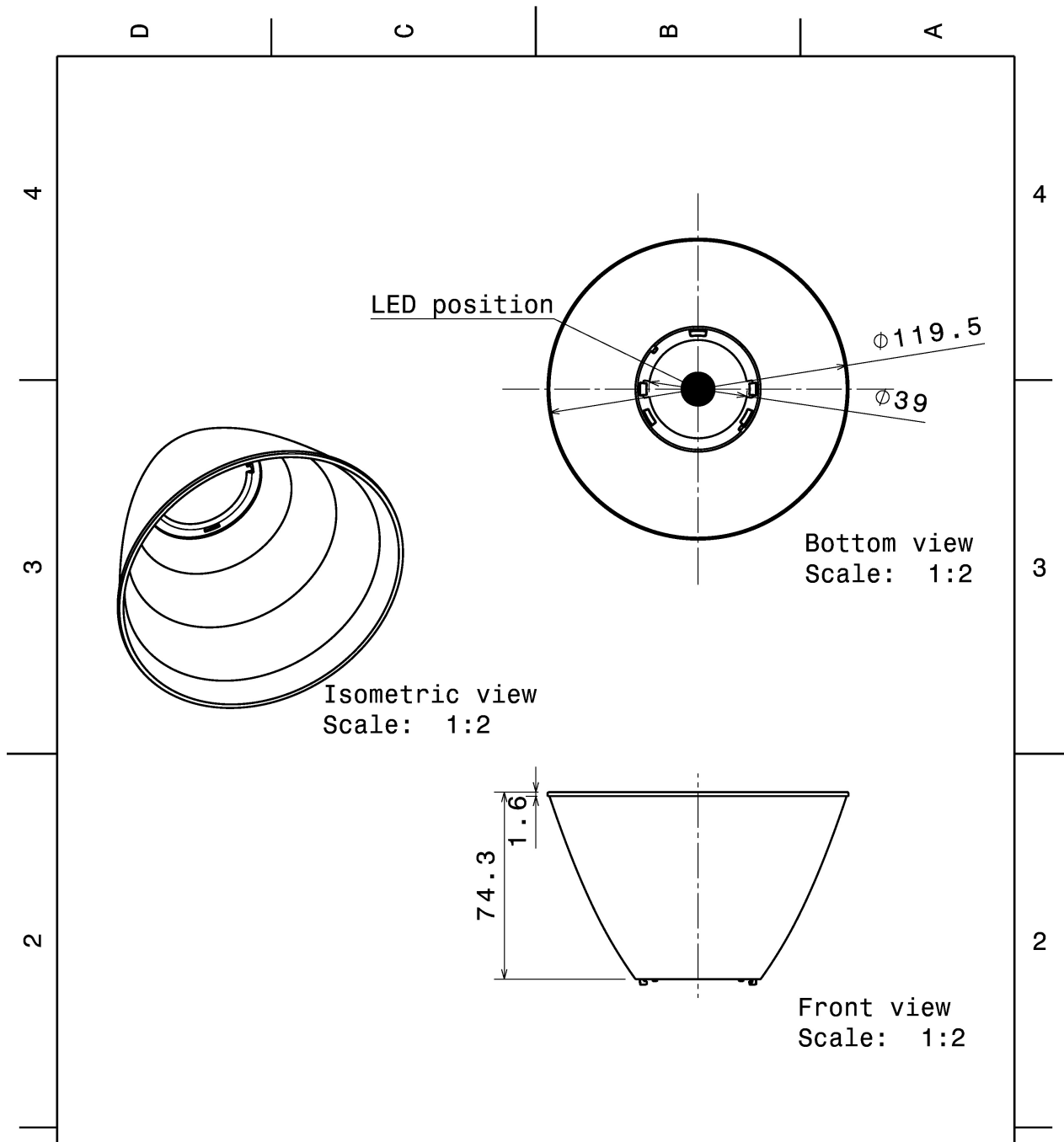
### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 119.5 mm
Height	74.5 mm
Fastening	socket
Colour	metal
Box size	398 x 298 x 265 mm
Box weight	9.1 kg
Quantity in Box	180 pcs
ROHS compliant	yes ⓘ



### MATERIAL SPECIFICATIONS:

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

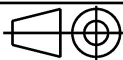


Tolerances if not otherwise shown  
According to DIN ISO 2768-1  
Linear measures:  
Up to 30mm class M, otherwise class C.  
According to DIN ISO 2768-2  
Form and position: class L

**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

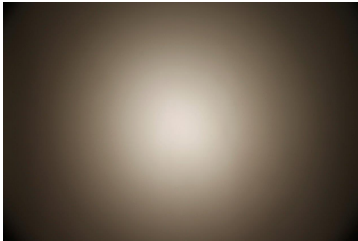
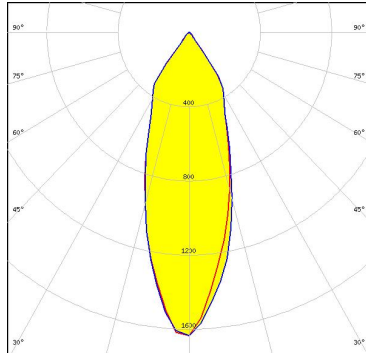
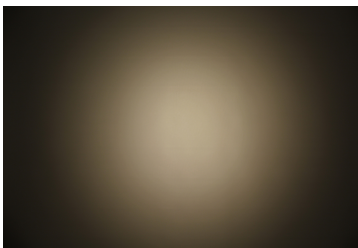
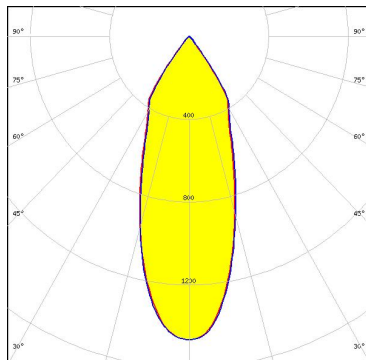
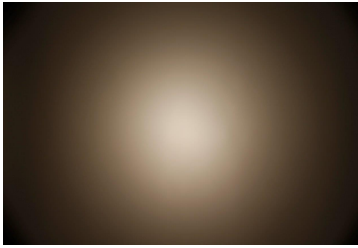
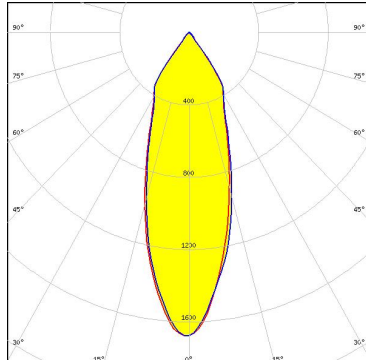
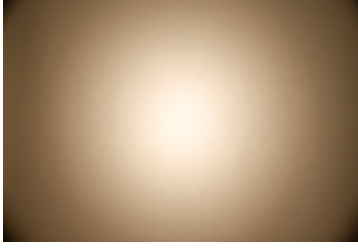
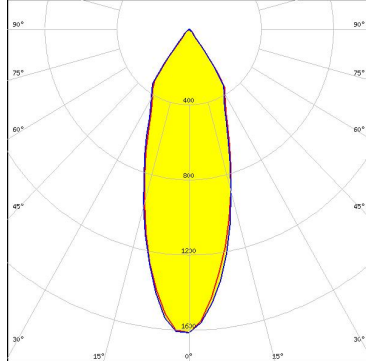
-

SCALE 1:2 WEIGHT

-

SHEET 1/1

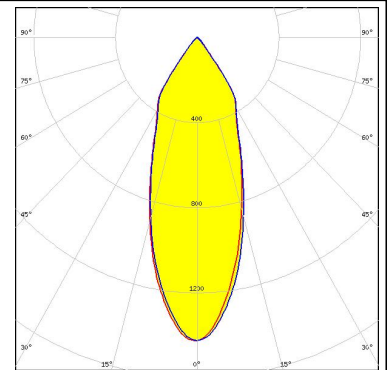
#### PHOTOMETRIC DATA (MEASURED):

<p>bridgelux.</p> <p>LED BXRA ES Rectangle</p> <p>FWHM 34.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.650 cd/lm</p> <p>Required components: BJB: 47.319.2040</p>		
<p>bridgelux.</p> <p>LED V18 Gen7</p> <p>FWHM 38.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.500 cd/lm</p> <p>Required components: BJB: 47.319.2350</p>		
<p><b>CITIZEN</b></p> <p>LED CLL03x/CLU03x</p> <p>FWHM 33.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.680 cd/lm</p> <p>Required components: BJB: 47.319.2021</p>		
<p><b>CITIZEN</b></p> <p>LED CLL03x/CLU03x</p> <p>FWHM 34.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.630 cd/lm</p> <p>Required components: A.A.G. STUCCHI: 8101/G2</p>		

**PHOTOMETRIC DATA (MEASURED):**

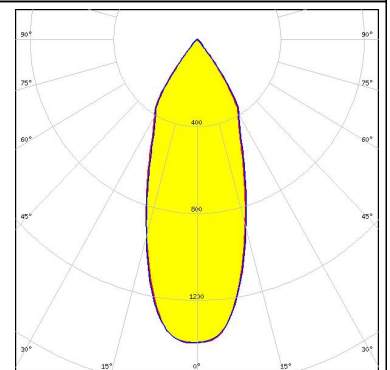
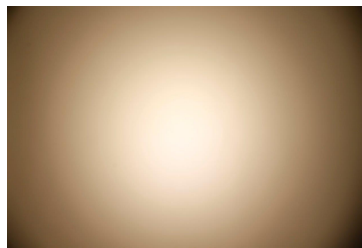
**CITIZEN**

LED CLL03x/CLU03x  
 FWHM 37.0°  
 Efficiency 78 %  
 Peak intensity 1.430 cd/lm  
 Required components:  
 F13671\_ANGLE-RZ-LENS  
 A.A.G. STUCCHI: 8101/G2



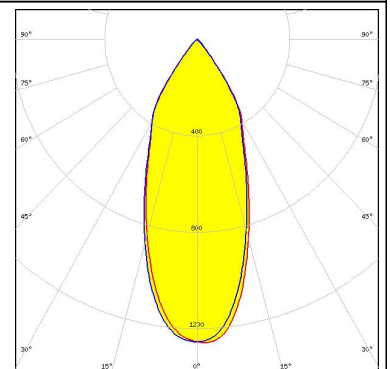
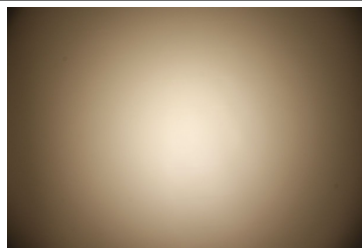
**CITIZEN**

LED CLL04x/CLU04x  
 FWHM 39.0°  
 Efficiency 82 %  
 Peak intensity 1.400 cd/lm  
 Required components:  
 A.A.G. STUCCHI: 8102/G2



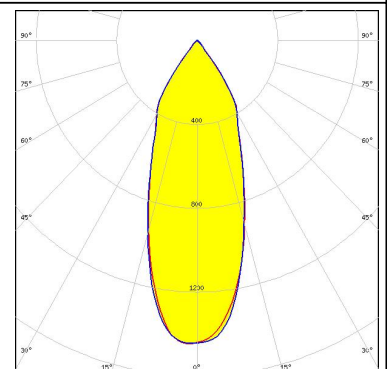
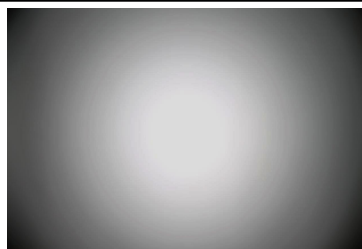
**CITIZEN**

LED CLL04x/CLU04x  
 FWHM 41.0°  
 Efficiency 77 %  
 Peak intensity 1.260 cd/lm  
 Required components:  
 F13671\_ANGLE-RZ-LENS  
 A.A.G. STUCCHI: 8102/G2



**CITIZEN**

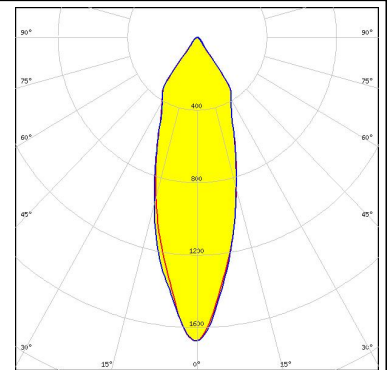
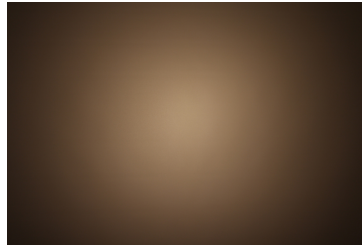
LED CLL04x/CLU04x  
 FWHM 38.0°  
 Efficiency 82 %  
 Peak intensity 1.450 cd/lm  
 Required components:  
 BJB: 47.319.2030



#### PHOTOMETRIC DATA (MEASURED):

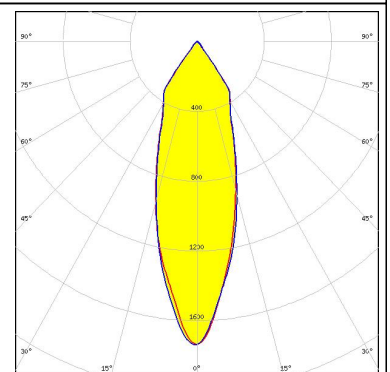
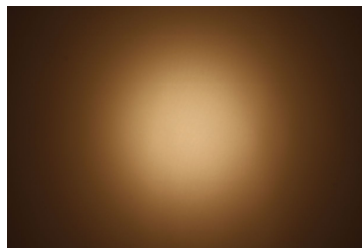
#### CITIZEN

LED CLU720/721  
 FWHM 32.0°  
 Efficiency 84 %  
 Peak intensity 1.700 cd/lm  
 Required components:  
 A.A.G. STUCCHI: 8101/G2



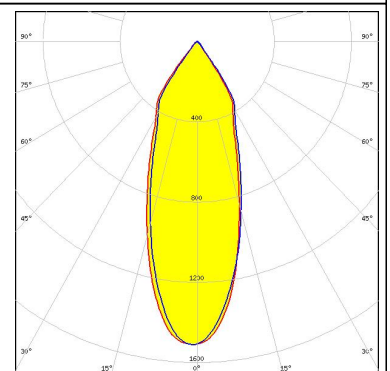
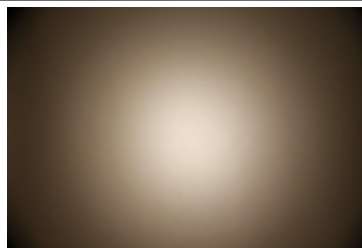
#### CITIZEN

LED CLU720/721  
 FWHM 32.0°  
 Efficiency 83 %  
 Peak intensity 1.700 cd/lm  
 Required components:  
 BJB: 47.319.2021



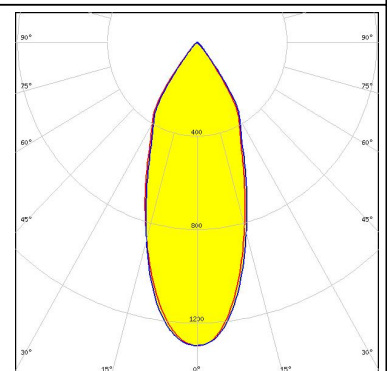
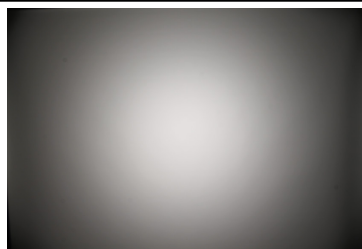
#### CREE

LED CXA/B 25xx  
 FWHM 37.0°  
 Efficiency 82 %  
 Peak intensity 1.510 cd/lm  
 Required components:  
 A.A.G. STUCCHI: 8401/G2



#### CREE

LED CXA/B 25xx  
 FWHM 40.0°  
 Efficiency 77 %  
 Peak intensity 1.300 cd/lm  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 BJB: 47.319.2141

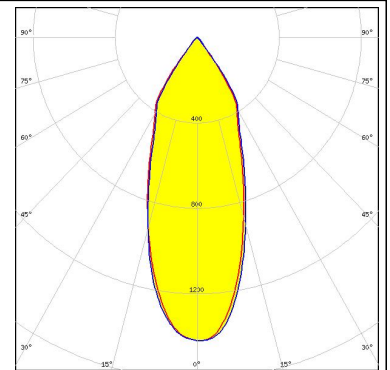




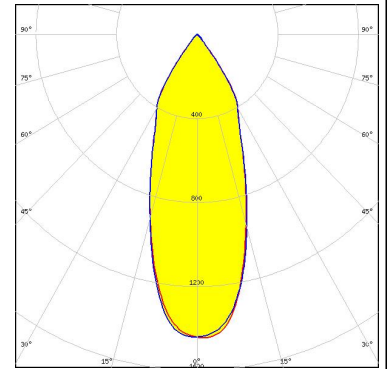
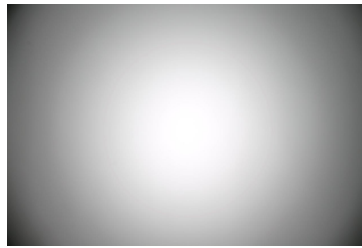
**PHOTOMETRIC DATA (MEASURED):**



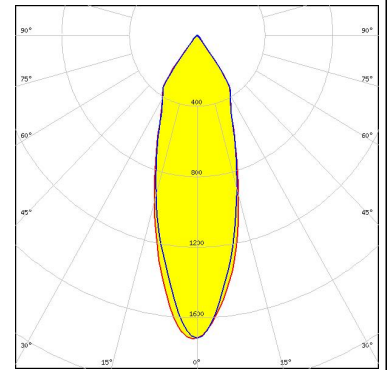
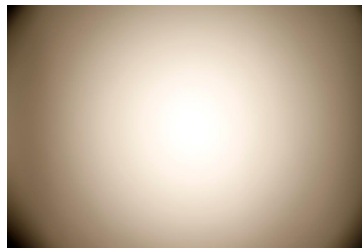
LED CXA/B 25xx  
FWHM 38.0°  
Efficiency 80 %  
Peak intensity 1.400 cd/lm  
Required components:



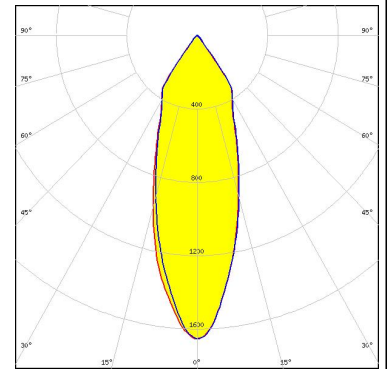
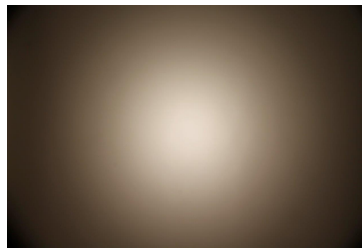
LED CXA/B 30xx  
FWHM 38.0°  
Efficiency 81 %  
Peak intensity 1.450 cd/lm  
Required components:  
A.A.G. STUCCHI: 8404/G2



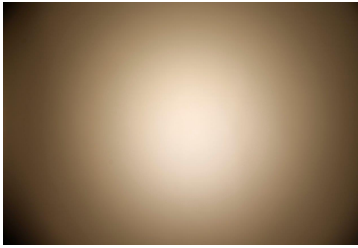
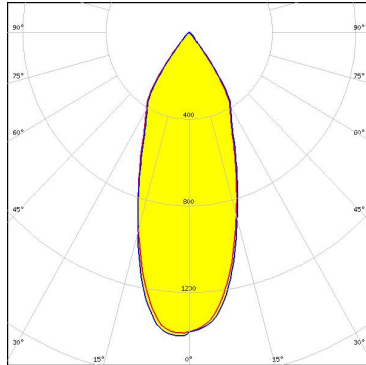
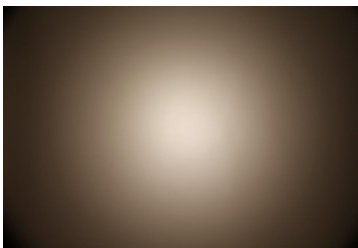
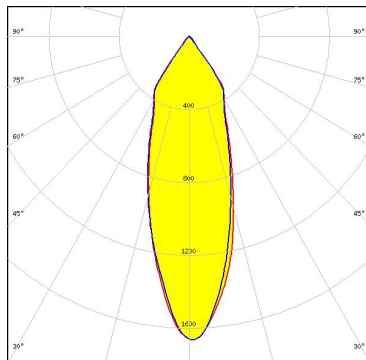
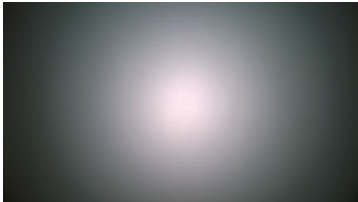
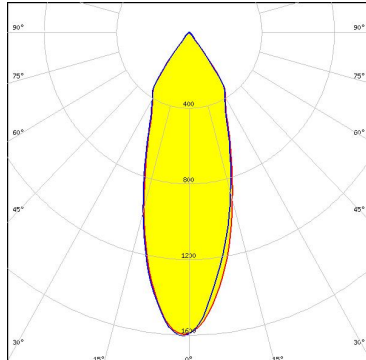
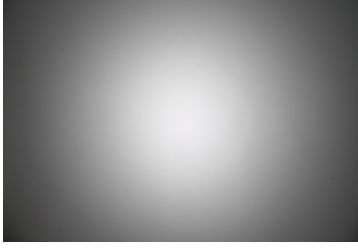
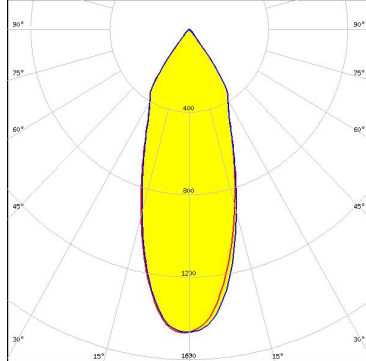
LED COB 10W/13W/17W/24W  
FWHM 33.0°  
Efficiency 84 %  
Peak intensity 1.700 cd/lm  
Required components:  
BJB: 47.319.2080



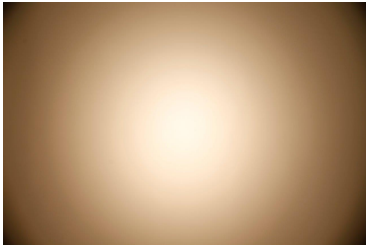
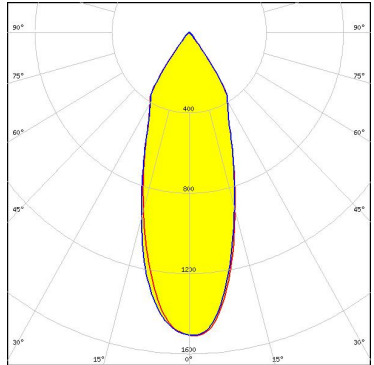
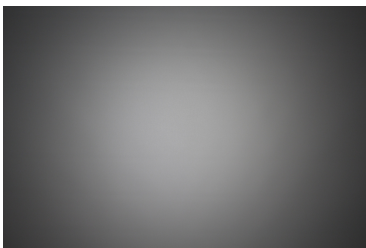
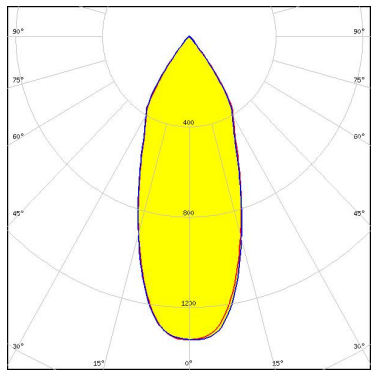

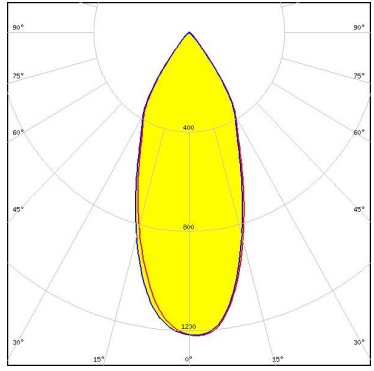
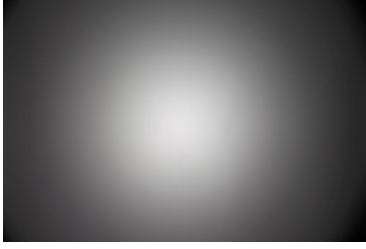
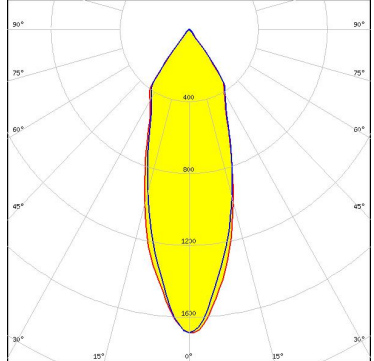
LED COB 10W/13W/17W/24W  
FWHM 34.0°  
Efficiency 83 %  
Peak intensity 1.650 cd/lm  
Required components:  
A.A.G. STUCCHI: 8600/G2



#### PHOTOMETRIC DATA (MEASURED):

<p><b>LG Innotek</b></p> <p>LED COB 40W/60W            FWHM 39.0°            Efficiency 81 %            Peak intensity 1.400 cd/lm            Required components:            A.A.G. STUCCHI: 8102/G2</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1204/1205            FWHM 33.0°            Efficiency 83 %            Peak intensity 1.660 cd/lm            Required components:            A.A.G. STUCCHI: 8301/G2</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1208            FWHM 35.0°            Efficiency 84 %            Peak intensity 1.600 cd/lm            Required components:            A.A.G. STUCCHI: 8301/G2</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1211            FWHM 37.0°            Efficiency 81 %            Peak intensity 1.500 cd/lm            Required components:            BJB: 47.319.2030</p>		

#### PHOTOMETRIC DATA (MEASURED):

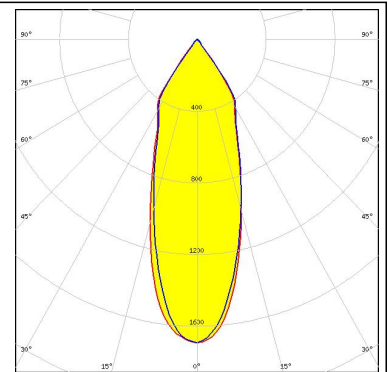
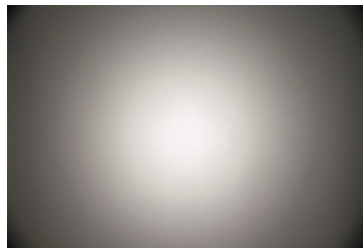
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1211</p> <p>FWHM 37.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1.500 cd/lm</p> <p>Required components: A.A.G. STUCCHI: 8102/G2</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1216/1812</p> <p>FWHM 40.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity 1.359 cd/lm</p> <p>Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1216/1812</p> <p>FWHM 42.0°</p> <p>Efficiency 76 %</p> <p>Peak intensity 1.220 cd/lm</p> <p>Required components: F13671_ANGLE-RZ-LENS BJB: 47.319.2030</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON K12</p> <p>FWHM 35.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 1.700 cd/lm</p> <p>Required components: BJB: 47.319.2070</p>		



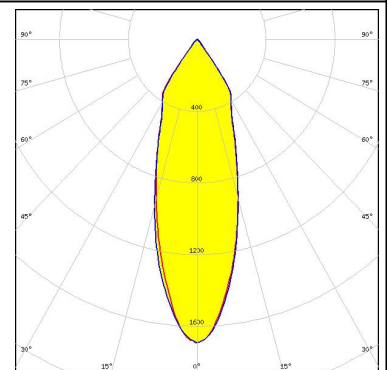
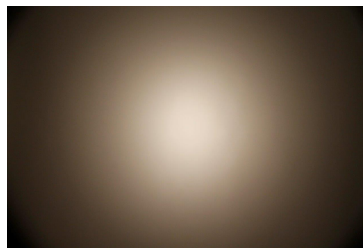
#### PHOTOMETRIC DATA (MEASURED):



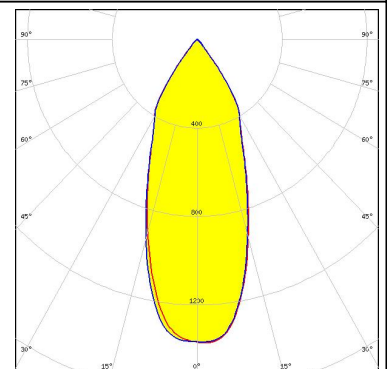
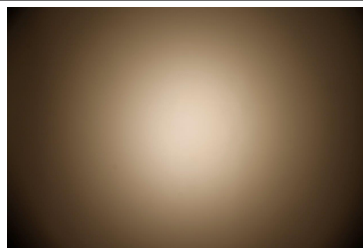
LED LUXEON K16  
 FWHM 36.0°  
 Efficiency 88 %  
 Peak intensity 1.700 cd/lm  
 Required components:  
 BJB: 47.319.2070



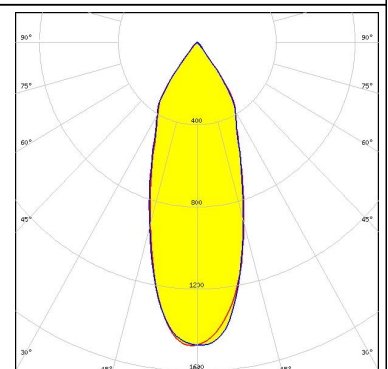
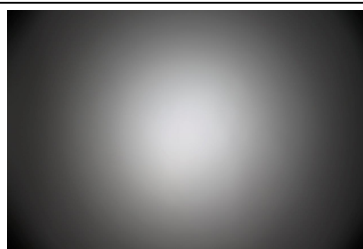
LED CXM-14  
 FWHM 33.0°  
 Efficiency 83 %  
 Peak intensity 1.700 cd/lm  
 Required components:  
 BJB: 47.319.2021



LED CXM-22  
 FWHM 40.0°  
 Efficiency 81 %  
 Peak intensity 1.400 cd/lm  
 Required components:  
 BJB: 47.319.2030



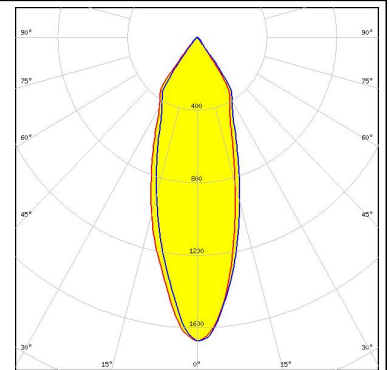
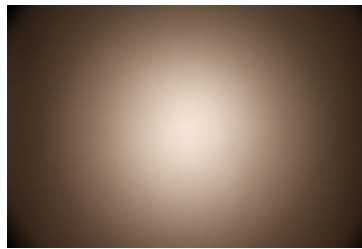
LED Soleriq E30  
 FWHM 37.0°  
 Efficiency 81 %  
 Peak intensity 1.480 cd/lm  
 Required components:  
 BJB: 47.319.2090



### PHOTOMETRIC DATA (MEASURED):

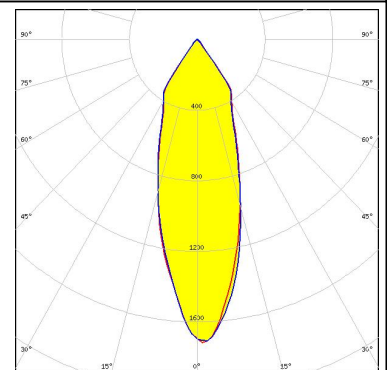
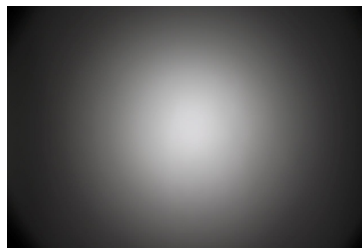
**OSRAM**  
Opto Semiconductors

LED Soleriq P13  
FWHM 33.0°  
Efficiency 83 %  
Peak intensity 1.670 cd/lm  
Required components:  
A.A.G. STUCCHI: 8502/G2



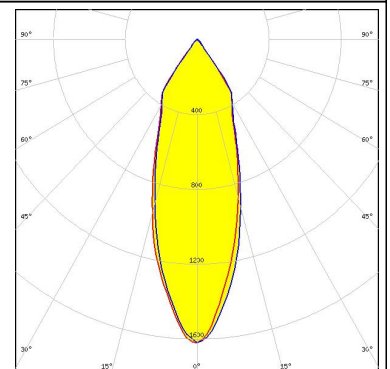
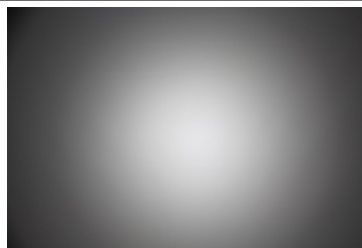
**OSRAM**  
Opto Semiconductors

LED Soleriq S13  
FWHM 33.0°  
Efficiency 84 %  
Peak intensity 1.700 cd/lm  
Required components:  
A.A.G. STUCCHI: 8502/G2



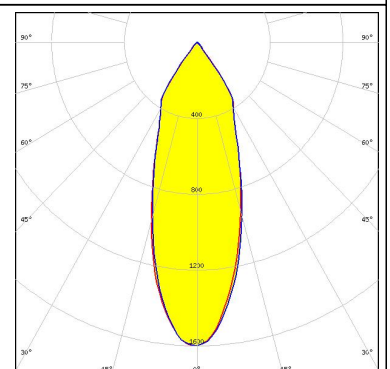
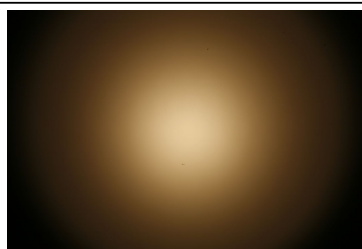
**OSRAM**  
Opto Semiconductors

LED Soleriq S13 Gen2  
FWHM 34.0°  
Efficiency 81 %  
Peak intensity 1.620 cd/lm  
Required components:  
BJB: 47.319.2021



**OSRAM**  
Opto Semiconductors

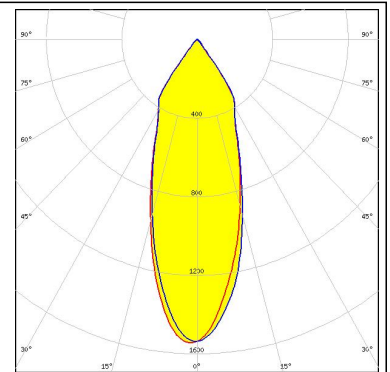
LED Soleriq S19  
FWHM 35.0°  
Efficiency 83 %  
Peak intensity 1.600 cd/lm  
Required components:  
BJB: 47.319.2170



**PHOTOMETRIC DATA (MEASURED):**

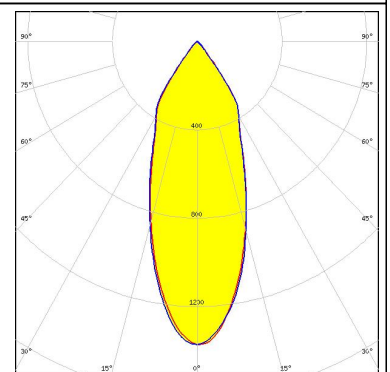
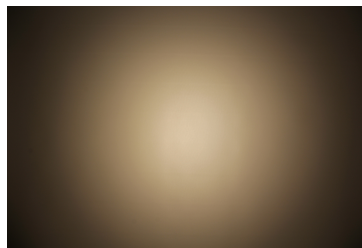
**SAMSUNG**

LED COB D Series LES 14.5 mm  
 FWHM 36.0°  
 Efficiency 82 %  
 Peak intensity 1.550 cd/lm  
 Required components:  
 A.A.G. STUCCHI: 8101/G2



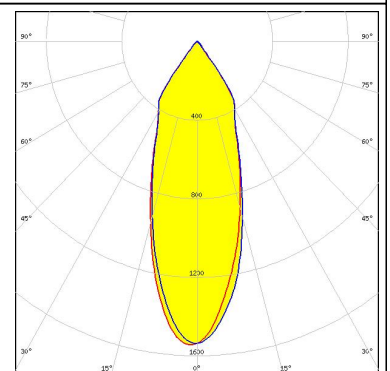
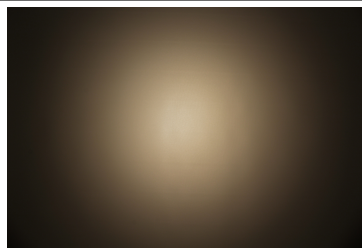
**SAMSUNG**

LED COB D Series LES 14.5 mm  
 FWHM 38.0°  
 Efficiency 79 %  
 Peak intensity 1.370 cd/lm  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 BJB: 47.319.2021



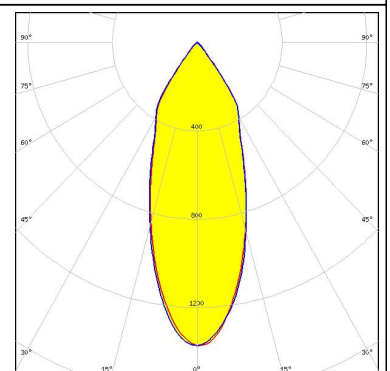
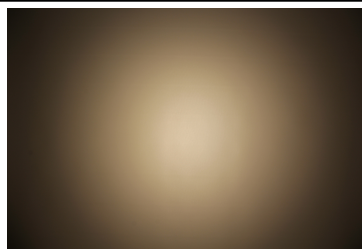
**SAMSUNG**

LED COB D Series LES 14.5 mm  
 FWHM 36.0°  
 Efficiency 82 %  
 Peak intensity 1.550 cd/lm  
 Required components:  
 BJB: 47.319.2021


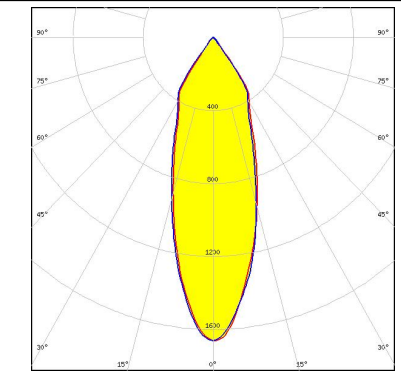
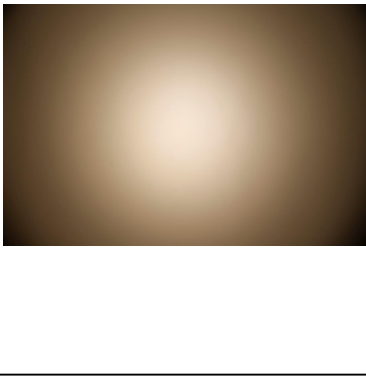
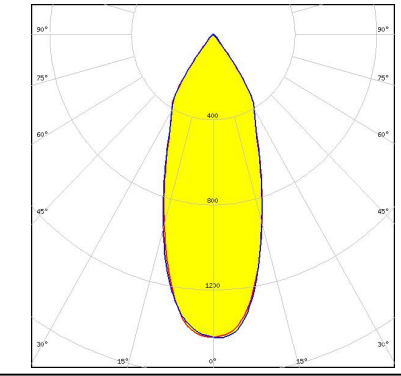

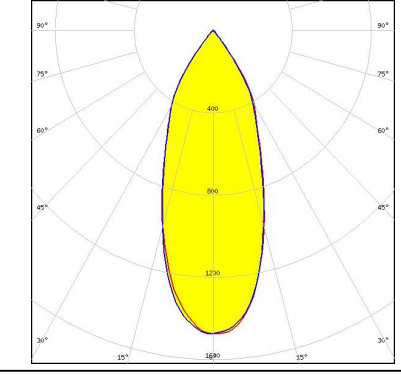

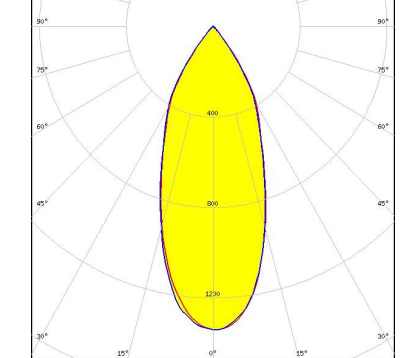


**SAMSUNG**

LED COB D Series LES 14.5 mm  
 FWHM 38.0°  
 Efficiency 79 %  
 Peak intensity 1.370 cd/lm  
 Required components:  
 F13671\_ANGE-RZ-LENS  
 A.A.G. STUCCHI: 8101/G2



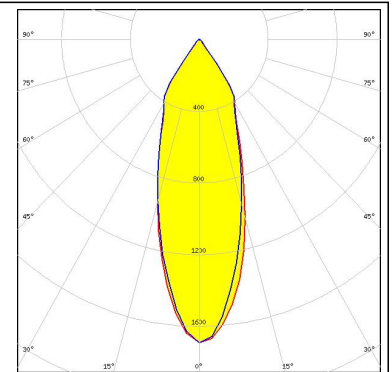
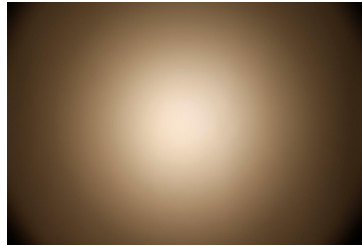
#### PHOTOMETRIC DATA (MEASURED):

<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED            ZC12/18 FWHM        34.0° Efficiency    83 % Peak intensity 1.660 cd/lm Required components: A.A.G. STUCCHI: 8101/G2</p>		
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED            ZC25/40/60 FWHM        39.0° Efficiency    82 % Peak intensity 1.430 cd/lm Required components: A.A.G. STUCCHI: 8102/G2</p>		
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED            ZC25/40/60 FWHM        40.0° Efficiency    82 % Peak intensity 1.480 cd/lm Required components: BJB: 47.319.2030</p>		
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED            ZC25/40/60 FWHM        42.0° Efficiency    79 % Peak intensity 1.340 cd/lm Required components: F13671_ANGE-RZ-LENS BJB: 47.319.2030</p>		

### PHOTOMETRIC DATA (MEASURED):

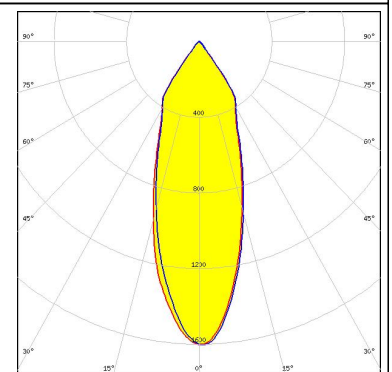
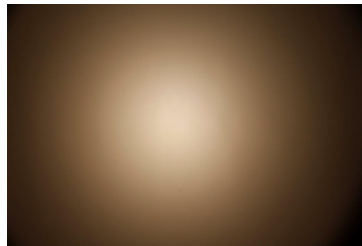
#### SHARP

LED Mega Zenigata (GW6DME)  
FWHM 34.0°  
Efficiency 85 %  
Peak intensity 1.700 cd/lm  
Required components:  
BJB: 47.319.2011



#### SHARP

LED Mega Zenigata (GW6DME)  
FWHM 35.0°  
Efficiency 84 %  
Peak intensity 1.600 cd/lm  
Required components:  
A.A.G. STUCCHI: 8301/G2

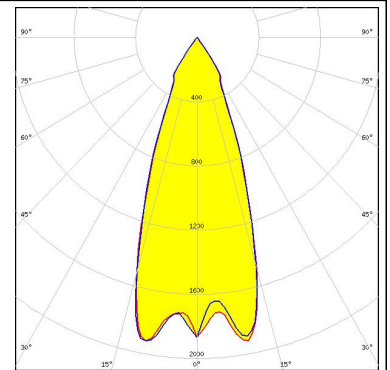




### PHOTOMETRIC DATA (SIMULATED):

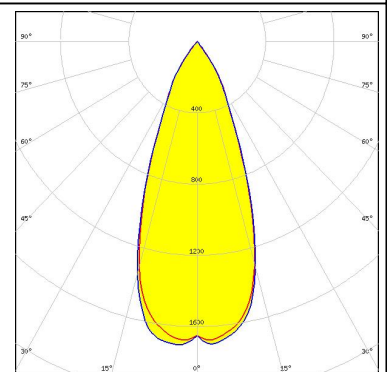
#### CITIZEN

LED CLU730/731  
FWHM 35.0°  
Efficiency 91 %  
Peak intensity 1.950 cd/lm  
Required components:  
BJB: 47.319.2030



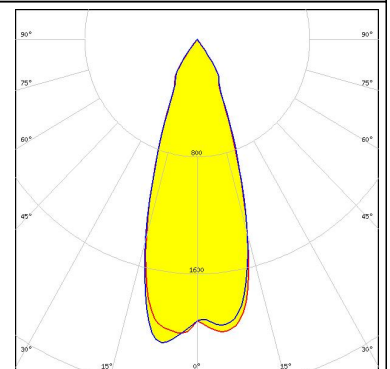
#### SAMSUNG

LED COB D Series LES 22 mm  
FWHM 40.0°  
Efficiency 86 %  
Peak intensity 1.720 cd/lm  
Required components:  
BJB: 47.319.2030



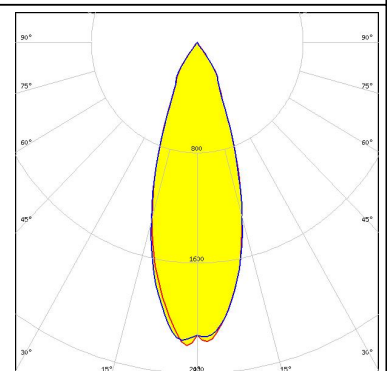
#### TRIDONIC

LED SLE G6 LES15 H D50  
FWHM 35.0°  
Efficiency 87 %  
Peak intensity 2.110 cd/lm  
Required components:



#### TRIDONIC

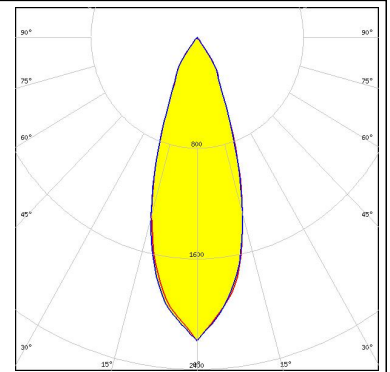
LED SLE G6 LES17 H  
FWHM 35.0°  
Efficiency 88 %  
Peak intensity 2.200 cd/lm  
Required components:



### PHOTOMETRIC DATA (SIMULATED):

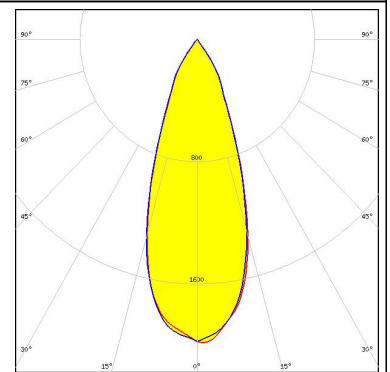
#### TRIDONIC

LED SLE G6 LES19 H  
FWHM 35.0°  
Efficiency 87 %  
Peak intensity 2.190 cd/lm  
Required components:



#### TRIDONIC

LED SLE G6 LES23 H  
FWHM 37.0°  
Efficiency 87 %  
Peak intensity 1.990 cd/lm  
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)