

WINNIE-O-C

~60° + 20° oval beam with holder C compatible with LEDiL HEKLA



TECHNICAL SPECIFICATIONS:

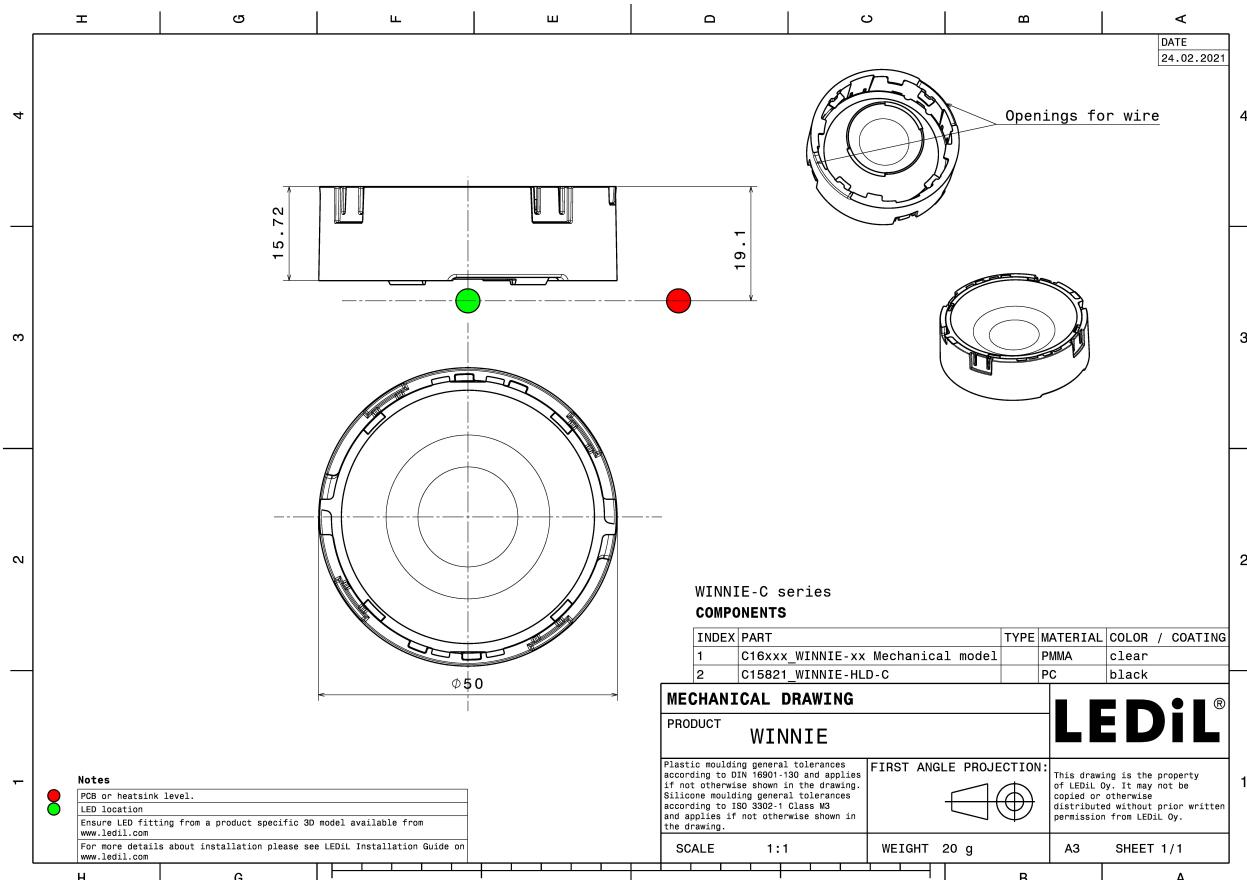
Dimensions	Ø 50.0 mm
Height	19.5 mm
Fastening	socket
ROHS compliant	yes 

MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
WINNIE-O	Single lens	PMMA	clear	
WINNIE-HLD-C	Holder	PC	black	

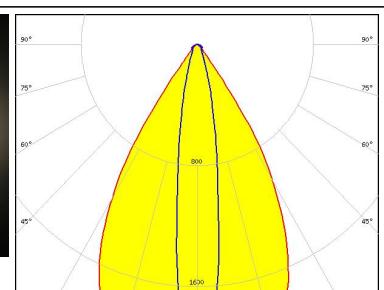
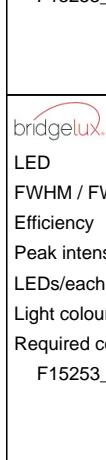
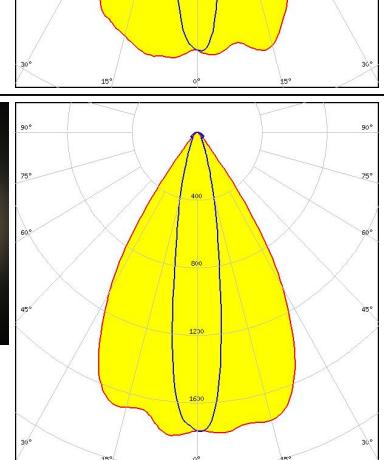
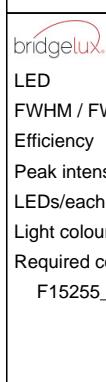
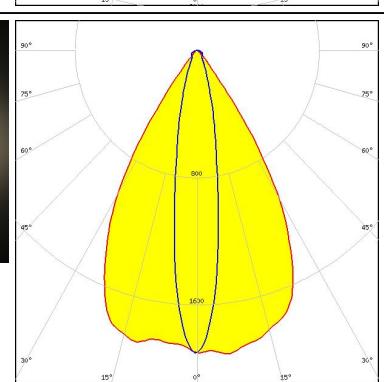
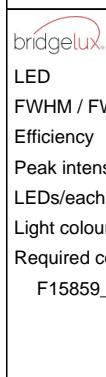
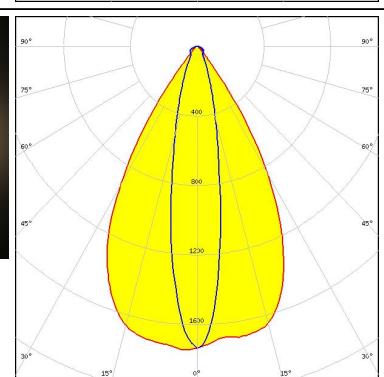
ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
CN15826_WINNIE-O-C	364	84	28	0.0
» Box size:				



See also our general installation guide: www.ledil.com/installation_guide

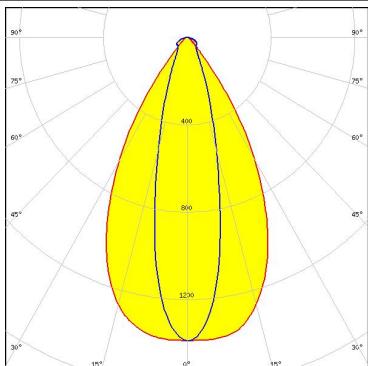
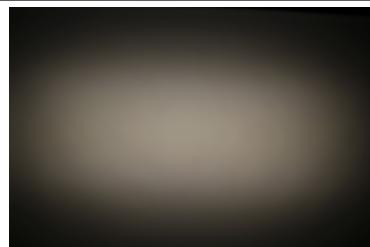
PHOTOMETRIC DATA (MEASURED):

	<p>LED V4 HD FWHM / FWTM 62.0 + 16.0° / 77.0 + 40.0° Efficiency 83 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour White Required components: F15253_HEKLA-SOCKET-A</p>		
	<p>LED V6 Gen6 FWHM / FWTM 64.0 + 18.0° / 79.0 + 43.0° Efficiency 82 % Peak intensity 1.8 cd/lm LEDs/each optic 1 Light colour White Required components: F15253_HEKLA-SOCKET-A</p>		
	<p>LED V6 HD FWHM / FWTM 62.0 + 17.0° / 78.0 + 43.0° Efficiency 83 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C</p>		
	<p>LED V9 HD FWHM / FWTM 60.0 + 19.0° / 79.0 + 48.0° Efficiency 83 % Peak intensity 1.8 cd/lm LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I</p>		

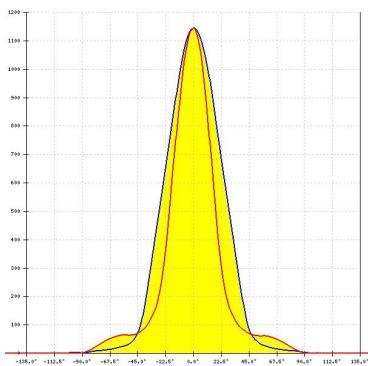
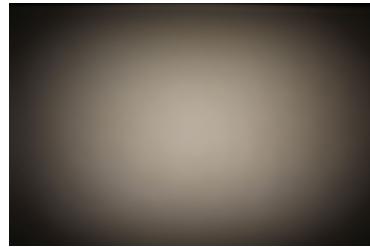
PHOTOMETRIC DATA (MEASURED):



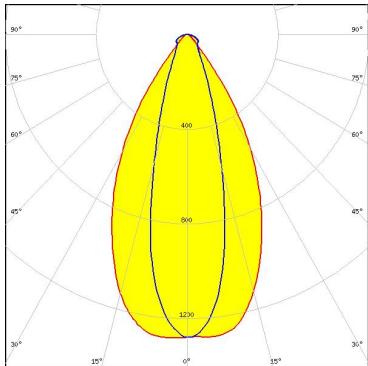
LED	VERO13
FWHM / FWTM	58.0 + 25.0° / 82.0 + 56.0°
Efficiency	81 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	C16142_HEKLA-SOCKET-K



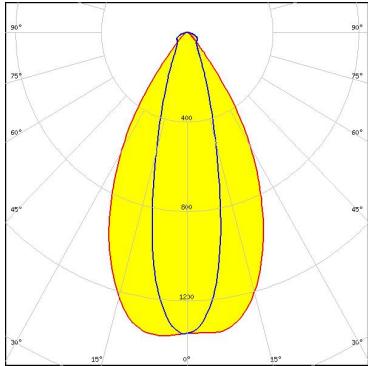
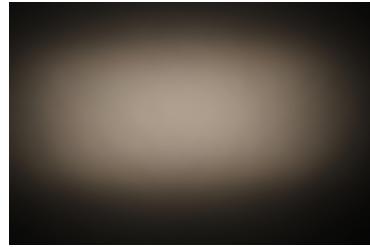
LED	VERO18
FWHM / FWTM	52.0 + 34.0° / 85.0 + 69.0°
Efficiency	79 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	C16142_HEKLA-SOCKET-K



LED	Vesta DTW 13mm (21W)
FWHM / FWTM	56.0 + 28.0° / 82.0 + 59.0°
Efficiency	79 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour	Tunable White
Required components:	
	C16142_HEKLA-SOCKET-K
	Bender Wirth: 491 Typ L8



LED	Vesta TW 13mm (25W) CSP
FWHM / FWTM	57.0 + 26.0° / 81.0 + 57.0°
Efficiency	80 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	C16142_HEKLA-SOCKET-K
	Bender Wirth: 492 Typ L8



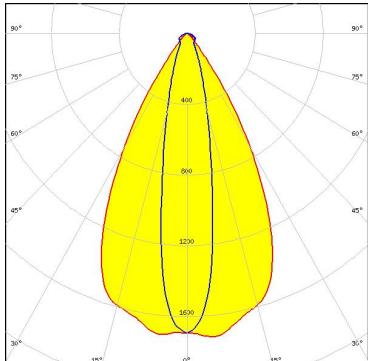
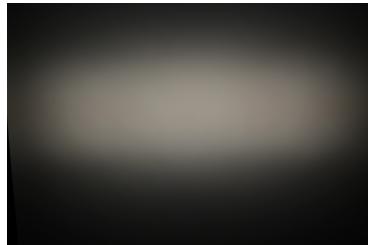
PHOTOMETRIC DATA (MEASURED):



LED	Vesta TW 6mm DP
FWHM / FWTM	59.0 + 16.0° / 77.0 + 42.0°
Efficiency	80 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	C16142_HEKLA-SOCKET-K
	Bender Wirth: 504 Typ L8

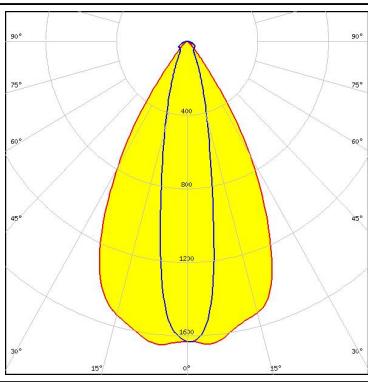


LED	Vesta TW 9mm (12W) CSP
FWHM / FWTM	57.0 + 20.0° / 78.0 + 49.0°
Efficiency	81 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	C16142_HEKLA-SOCKET-K



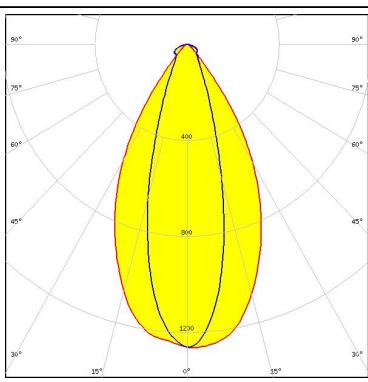
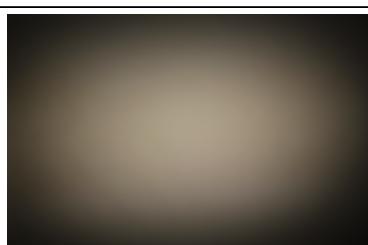
CITIZEN

LED	CLC020 Series (Dim-To-Warm)
FWHM / FWTM	58.0 + 20.0° / 78.0 + 49.0°
Efficiency	81 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	C16142_HEKLA-SOCKET-K



CITIZEN

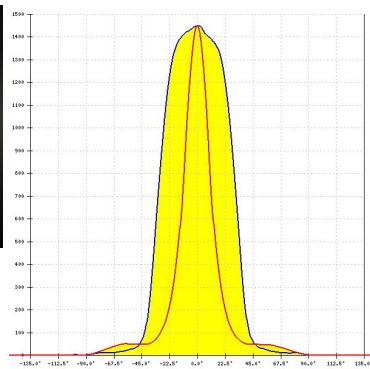
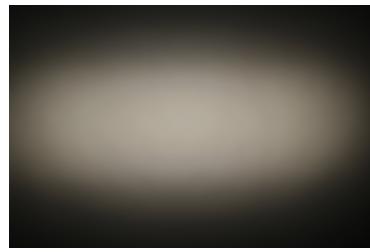
LED	CLC030 Series (Dim-To-Warm)
FWHM / FWTM	56.0 + 30.0° / 83.0 + 61.0°
Efficiency	79 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	C16142_HEKLA-SOCKET-K



PHOTOMETRIC DATA (MEASURED):

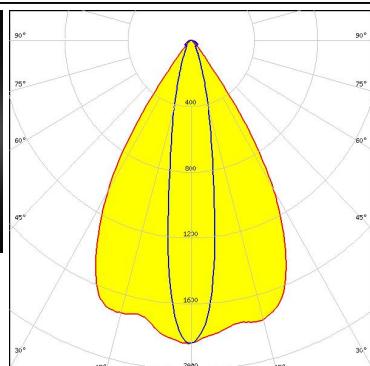
CITIZEN

LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 63.0 + 23.0° / 81.0 + 52.0°
 Efficiency 80 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



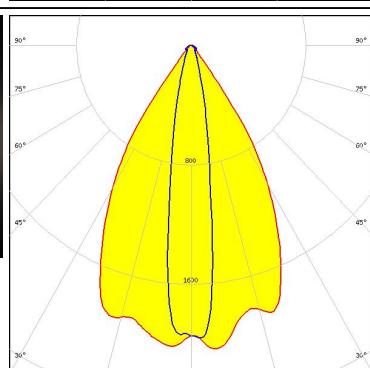
CITIZEN

LED CLU700/701/702
 FWHM / FWTM 63.0 + 18.0° / 79.0 + 43.0°
 Efficiency 82 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



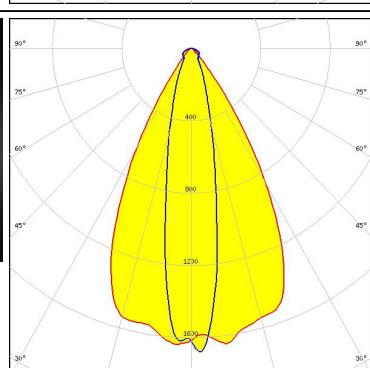
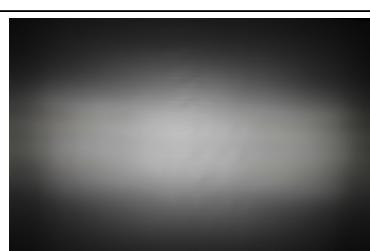
CITIZEN

LED CLU7A2 (LES 4.2mm)
 FWHM / FWTM 62.0 + 17.0° / 78.0 + 37.0°
 Efficiency 83 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C

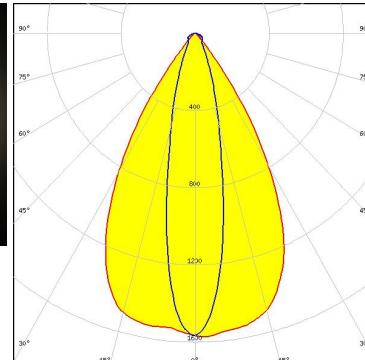
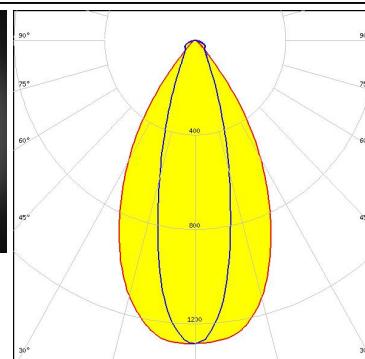
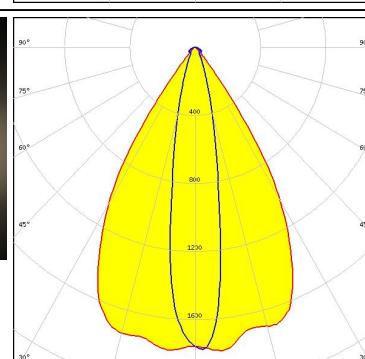
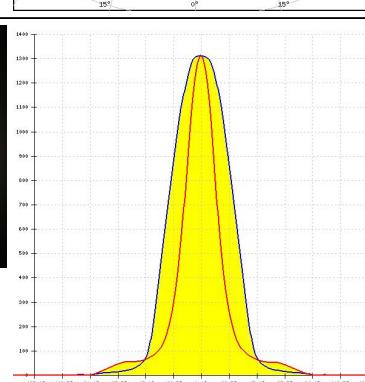


CITIZEN

LED LCN-C01B (Tunable White)
 FWHM / FWTM 58.0 + 20.0° / 77.0 + 50.0°
 Efficiency 81 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 481 Typ L8



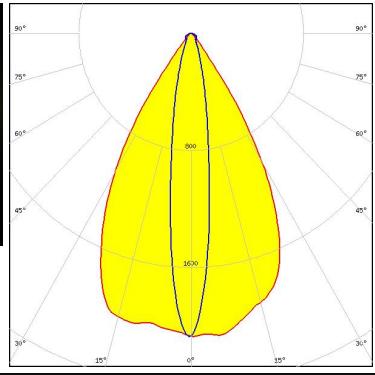
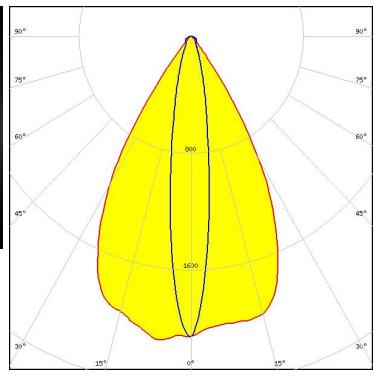
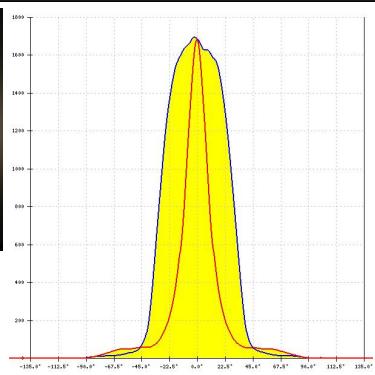
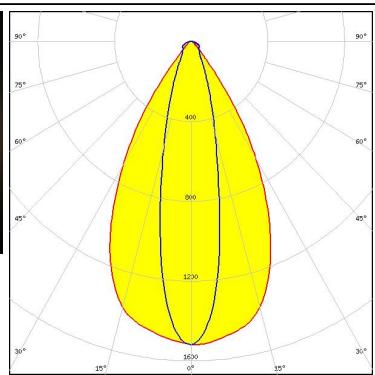
PHOTOMETRIC DATA (MEASURED):

	<p>LED CMT14xx FWHM / FWTM 61.0 + 22.0° / 81.0 + 52.0° Efficiency 83 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C</p>		
	<p>LED CMT19xx FWHM / FWTM 57.0 + 28.5° / 84.0 + 61.0° Efficiency 81 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I</p>		
	<p>LED CXA/B 13xx FWHM / FWTM 64.0 + 19.0° / 79.0 + 43.0° Efficiency 83 % Peak intensity 1.8 cd/lm LEDs/each optic 1 Light colour White Required components: F15956_HEKLA-SOCKET-J</p>		
	<p>LED LUXEON CX Plus CoB L08 (Gen2) FWHM / FWTM 56.0 + 28.0° / 83.0 + 61.0° Efficiency 82 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla</p>		

PHOTOMETRIC DATA (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CoB 1202HD</p> <p>FWHM / FWTM 63.0 + 18.0° / 78.0 + 43.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15848_HEKLA-SOCKET-G</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1202s</p> <p>FWHM / FWTM 64.0 + 18.0° / 79.0 + 43.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15848_HEKLA-SOCKET-G</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1204HD</p> <p>FWHM / FWTM 61.0 + 21.0° / 80.0 + 49.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15858_HEKLA-SOCKET-H</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1205HD</p> <p>FWHM / FWTM 59.0 + 24.0° / 81.0 + 54.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15858_HEKLA-SOCKET-H</p>		

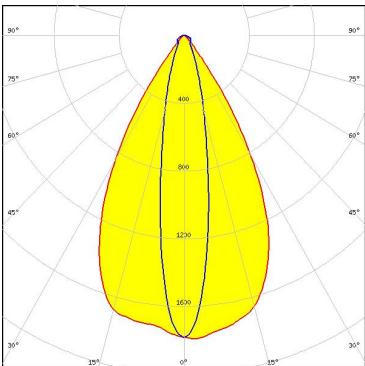
PHOTOMETRIC DATA (MEASURED):

	LUMILEDS		
LED	LUXEON CX Plus CoB - HD S01H4		
FWHM / FWTM	61.0 + 16.0° / 77.0 + 40.0°		
Efficiency	83 %		
Peak intensity	2.1 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required components:			
	Bender Wirth: 634c Hekla		
	LUMILEDS		
LED	LUXEON CX Plus CoB - HD S01H6 / HD S02H6		
FWHM / FWTM	61.0 + 16.0° / 77.0 + 41.0°		
Efficiency	83 %		
Peak intensity	2.1 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required components:			
	Bender Wirth: 634c Hekla		
	LUMILEDS		
LED	LUXEON CX Plus CoB - HD S04H9		
FWHM / FWTM	60.0 + 20.0° / 80.0 + 50.0°		
Efficiency	83 %		
Peak intensity	1.7 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required components:			
	Bender Wirth: 634c Hekla		
	LUMILEDS		
LED	LUXEON CX Plus CoB L04 / L05 (Gen2)		
FWHM / FWTM	58.0 + 23.0° / 81.0 + 54.0°		
Efficiency	82 %		
Peak intensity	1.5 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required components:			
	Bender Wirth: 637a Hekla		

PHOTOMETRIC DATA (MEASURED):

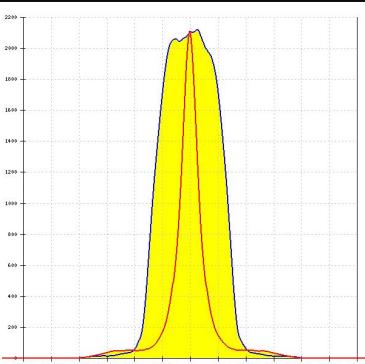
LUMILEDS

LED LUXEON CX Plus CoB M02 / M03 (Gen2)
 FWHM / FWTM 58.0 + 19.0° / 78.0 + 48.0°
 Efficiency 83 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 Bender Wirth: 641a Hekla



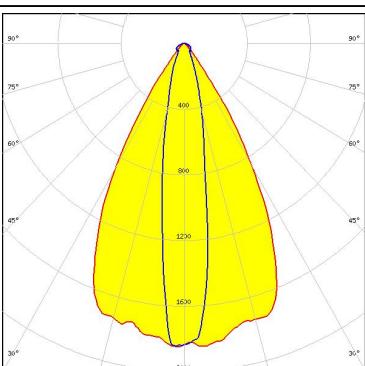
LUMILEDS

LED LUXEON CX Plus CoB S01 (Gen2)
 FWHM / FWTM 60.0 + 16.0° / 77.0 + 40.0°
 Efficiency 83 %
 Peak intensity 2.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 Bender Wirth: 634c Hekla



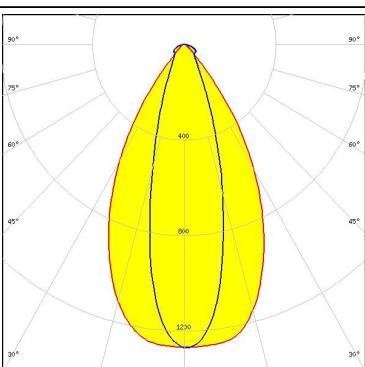
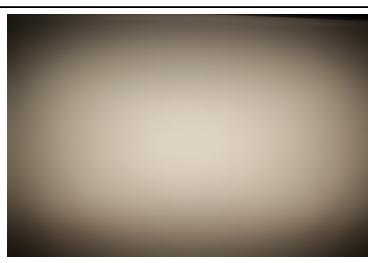
LUMILEDS

LED LUXEON Fusion 12-up (20x24)
 FWHM / FWTM 59.0 + 17.0° / 77.0 + 45.0°
 Efficiency 82 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour Tunable White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 442 Typ L8

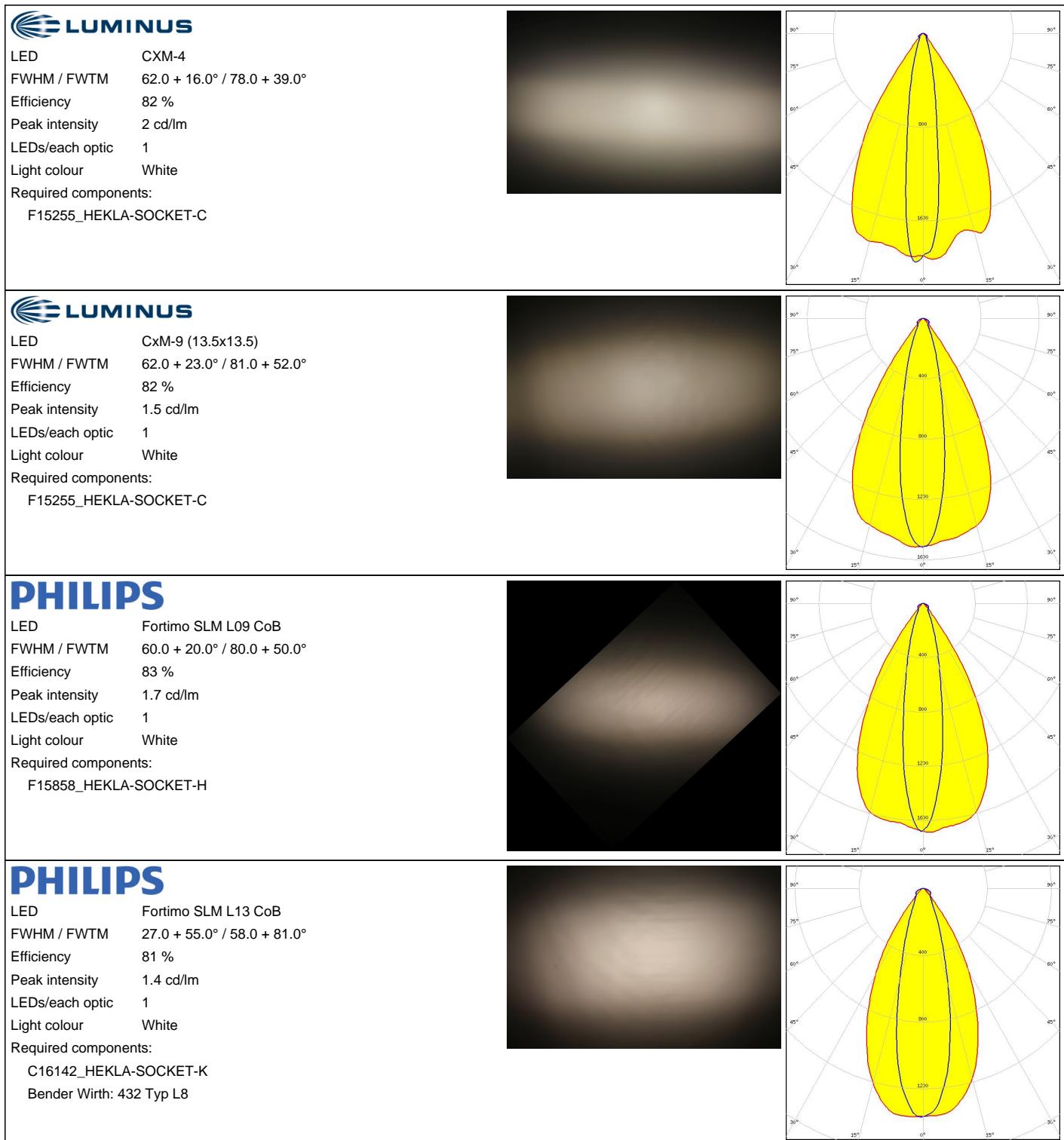


LUMINUS

LED CxM-14 (19x19)
 FWHM / FWTM 58.0 + 29.0° / 84.0 + 60.0°
 Efficiency 81 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



PHOTOMETRIC DATA (MEASURED):



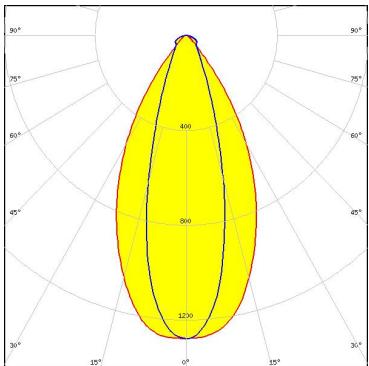
PHOTOMETRIC DATA (MEASURED):

PHILIPS

LED Fortimo SLM L15 CoB
FWHM / FWTM $54.0 + 30.0^\circ / 83.0 + 63.0^\circ$

Efficiency 80 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour White

Required components:
C16142_HEKLA-SOCKET-K
Bender Wirth: 432 Typ L8

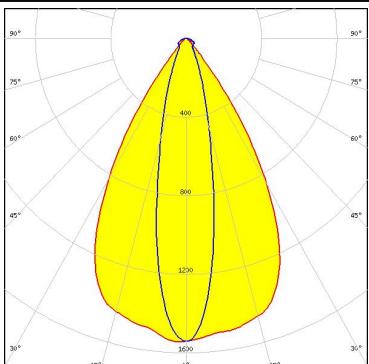
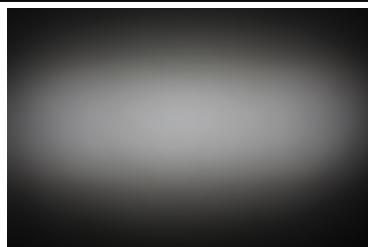


SAMSUNG

LED LC003D / LC006D / LC009D / LC013D
FWHM / FWTM $62.0 + 22.0^\circ / 81.0 + 51.0^\circ$

Efficiency 82 %
Peak intensity 1.5 cd/lm
LEDs/each optic 1
Light colour White

Required components:
F15255_HEKLA-SOCKET-C

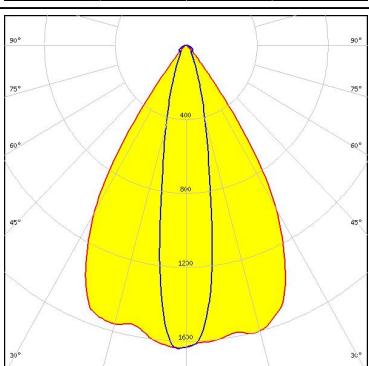
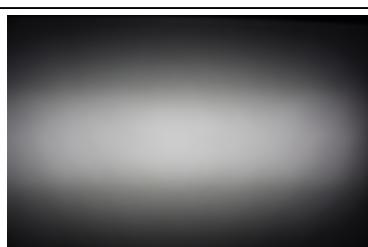


SAMSUNG

LED LC010C
FWHM / FWTM $65.0 + 20.0^\circ / 80.0 + 46.0^\circ$

Efficiency 81 %
Peak intensity 1.6 cd/lm
LEDs/each optic 1
Light colour White

Required components:
F15848_HEKLA-SOCKET-G

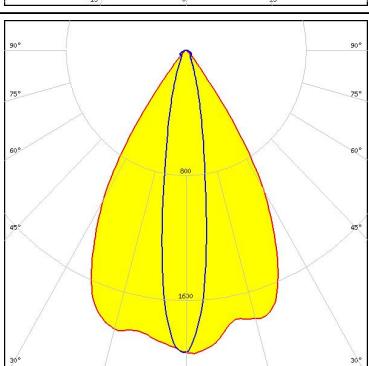


SAMSUNG

LED LC010C G2
FWHM / FWTM $62.0 + 17.0^\circ / 78.0 + 41.0^\circ$

Efficiency 82 %
Peak intensity 1.9 cd/lm
LEDs/each optic 1
Light colour White

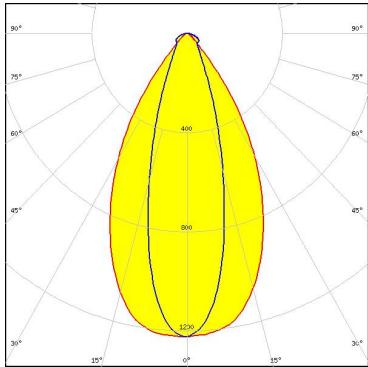
Required components:
F15255_HEKLA-SOCKET-C



PHOTOMETRIC DATA (MEASURED):

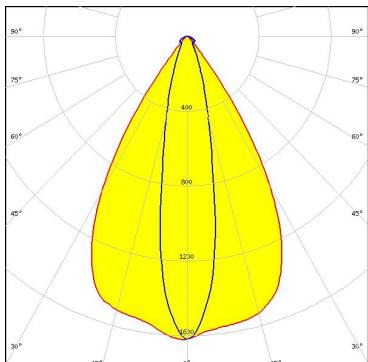
SAMSUNG

LED LC016D / LC019D / LC026D / LC033D
 FWHM / FWTM 58.0 + 29.0° / 85.0 + 62.0°
 Efficiency 80 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



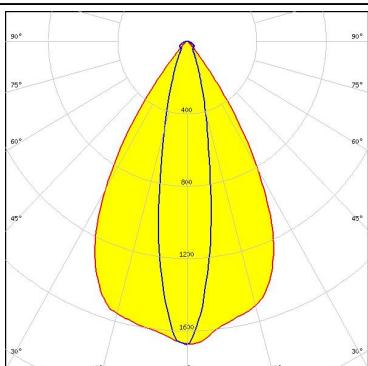
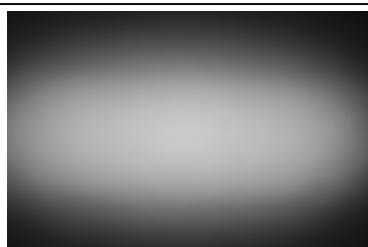
SAMSUNG

LED LC020C
 FWHM / FWTM 63.0 + 21.0° / 81.0 + 48.0°
 Efficiency 82 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15848_HEKLA-SOCKET-G



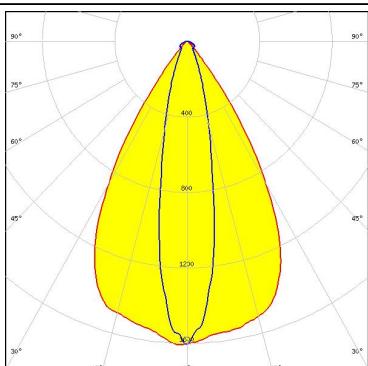
SAMSUNG

LED LC020C G2
 FWHM / FWTM 61.0 + 20.0° / 81.0 + 47.0°
 Efficiency 82 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



TRIDONIC

LED SLE G7 LES09
 FWHM / FWTM 62.0 + 21.0° / 81.0 + 49.0°
 Efficiency 82 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C

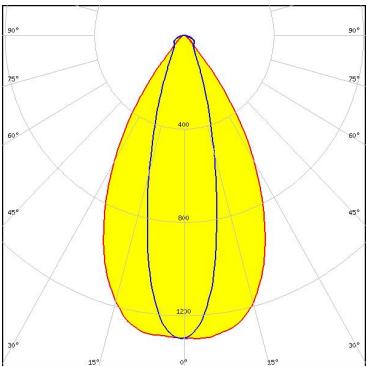


PHOTOMETRIC DATA (MEASURED):

TRIDONIC

LED	SLE G7 LES13
FWHM / FWTM	59.0 + 27.0° / 83.0 + 58.0°
Efficiency	80 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

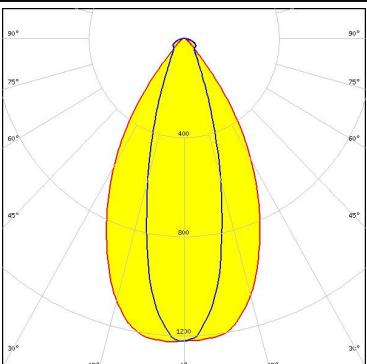
F15859_HEKLA-SOCKET-I



TRIDONIC

LED	SLE G7 LES15
FWHM / FWTM	58.0 + 29.0° / 85.0 + 62.0°
Efficiency	80 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

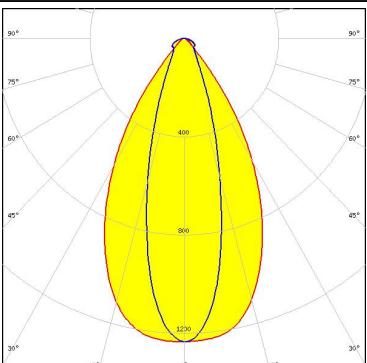
F15859_HEKLA-SOCKET-I



XICATO

LED	XOB 14.5 mm
FWHM / FWTM	58.0 + 29.0° / 84.0 + 61.0°
Efficiency	80 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

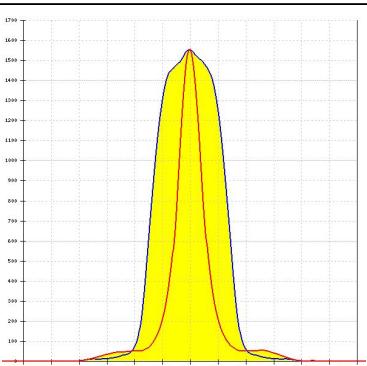
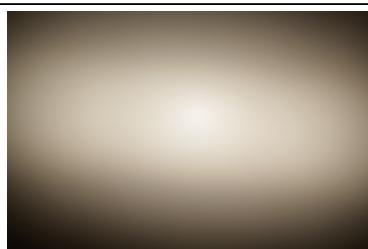
F15859_HEKLA-SOCKET-I



XICATO

LED	XOB 9.8 mm
FWHM / FWTM	62.0 + 22.0° / 81.0 + 51.0°
Efficiency	82 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

F15255_HEKLA-SOCKET-C



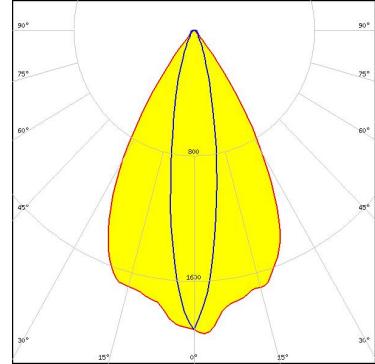
PHOTOMETRIC DATA (SIMULATED):



LED	VERO10
FWHM / FWTM	59.0 + 18.0° / 78.0 + 45.0°
Efficiency	83 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

F15616_HEKLA-SOCKET-F

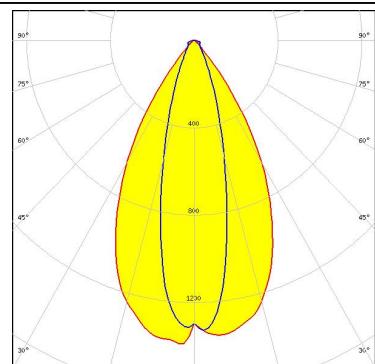


CITIZEN

LED	CLL03x/CLU03x
FWHM / FWTM	58.0 + 26.0° / 82.0 + 57.0°
Efficiency	77 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

F15859_HEKLA-SOCKET-I

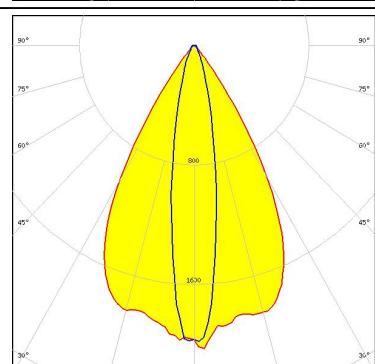


CITIZEN

LED	CLU710/711
FWHM / FWTM	61.0 + 18.0° / 78.0 + 42.0°
Efficiency	83 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

F15859_HEKLA-SOCKET-I

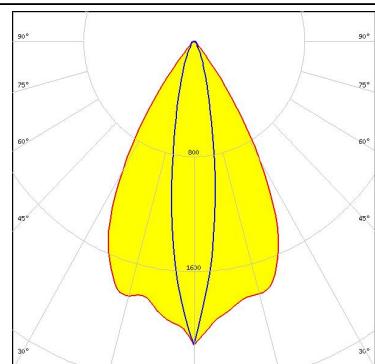


CREE LED

LED	CXA/B 15xx
FWHM / FWTM	59.0 + 17.0° / 79.0 + 42.0°
Efficiency	84 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

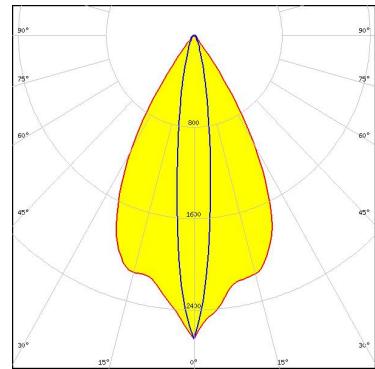
F15256_HEKLA-SOCKET-D



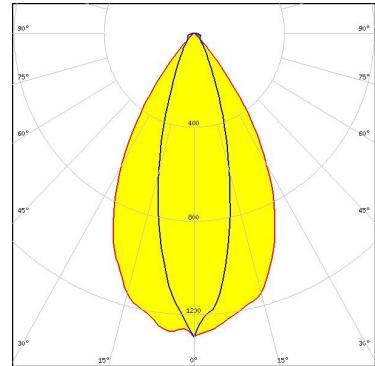
PHOTOMETRIC DATA (SIMULATED):



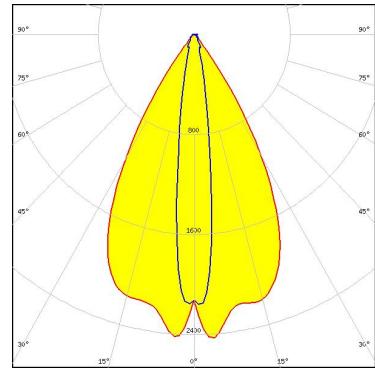
LED	CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM / FWTM	56.0 + 13.0° / 75.0 + 35.0°
Efficiency	86 %
Peak intensity	2.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	F15254_HEKLA-SOCKET-B



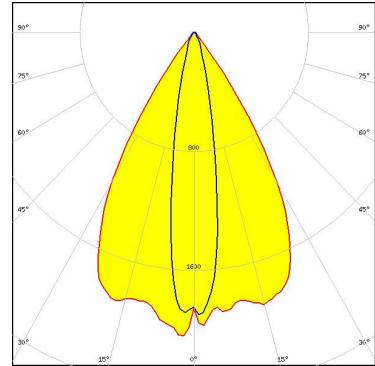
LED	CXA/B 1830
FWHM / FWTM	60.0 + 28.0° / 84.0 + 60.0°
Efficiency	79 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	C16142_HEKLA-SOCKET-K
	Bender Wirth: 457 Typ L8



LED	XP-G3
FWHM / FWTM	58.0 + 14.0° / 76.0 + 32.0°
Efficiency	84 %
Peak intensity	2.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	F17438_HEKLA-G2-I



LED	COB T-Type
FWHM / FWTM	62.0 + 18.0° / 78.0 + 38.0°
Efficiency	83 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
	F15848_HEKLA-SOCKET-G

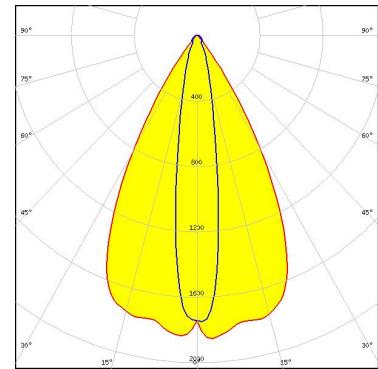


PHOTOMETRIC DATA (SIMULATED):



LED	NFSWE11A
FWHM / FWTM	58.0 + 18.0° / 76.0 + 42.0°
Efficiency	74 %
Peak intensity	1.9 cd/lm
LEDs/each optic	30
Light colour	White

Required components:



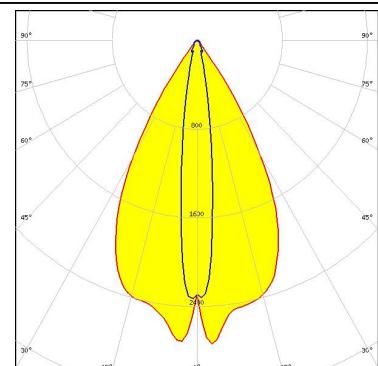
OSRAM

Opto Semiconductors

LED	OSLON Square CSSRM2/CSSRM3
FWHM / FWTM	58.0 + 14.0° / 74.0 + 30.0°
Efficiency	86 %
Peak intensity	2.7 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

F17438_HEKLA-G2-I



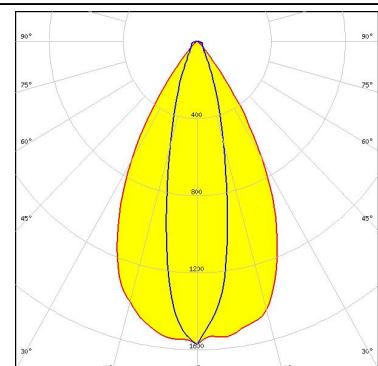
OSRAM

Opto Semiconductors

LED	Soleriq S13 19x19
FWHM / FWTM	57.0 + 24.0° / 81.0 + 54.0°
Efficiency	83 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

F15859_HEKLA-SOCKET-I



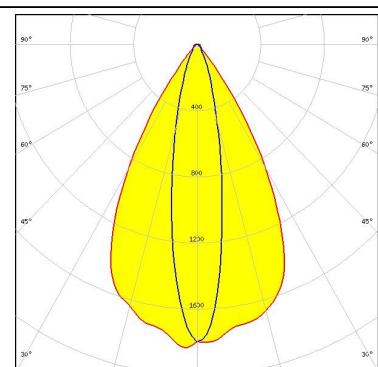
OSRAM

Opto Semiconductors

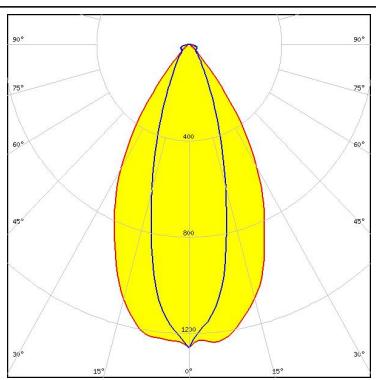
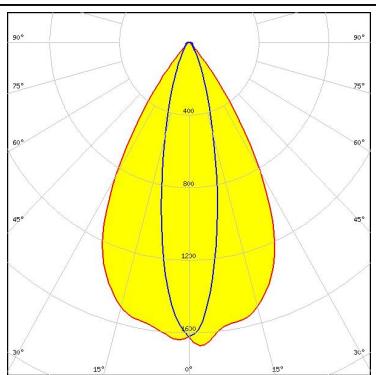
LED	Soleriq S9
FWHM / FWTM	59.0 + 20.0° / 80.0 + 48.0°
Efficiency	85 %
Peak intensity	1.8 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

F15255_HEKLA-SOCKET-C



PHOTOMETRIC DATA (SIMULATED):

 SEOUL SEMICONDUCTOR	<p>LED MJT COB LES 14.5 FWHM / FWTM 58.0 + 30.0° / 84.0 + 62.0° Efficiency 80 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I</p>	
 SEOUL SEMICONDUCTOR	<p>LED MJT COB LES 9.8 FWHM / FWTM 60.0 + 22.0° / 80.0 + 51.0° Efficiency 83 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C</p>	

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

**Ledil Optics Technology
(Shenzhen) Co., Ltd.**
405 , Block B
Casic Motor Building
Shenzhen 518057
P.R.CHINA

**Local sales and technical
support**
www.ledil.com/
where_to_buy

Shipping locations
Salo, Finland
Hong Kong, China

Distribution Partners
www.ledil.com/
where_to_buy