ILONA-SS

~14° smooth spot beam



SPECIFICATION:

Dimensions	Ø 49.8
Height	29.3 mm
Fastening	socket
ROHS compliant	yes

MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
ILONA-SS	Single lens	PMMA	clear		
» Box size: 480 x 280 x 300 mm					

ORDERING INFORMATION:

Component	Type	Qty in box	MOQ	MPQ	Box weight (kg)
C16731_ILONA-SS	Single lens	264	99	33	9.7

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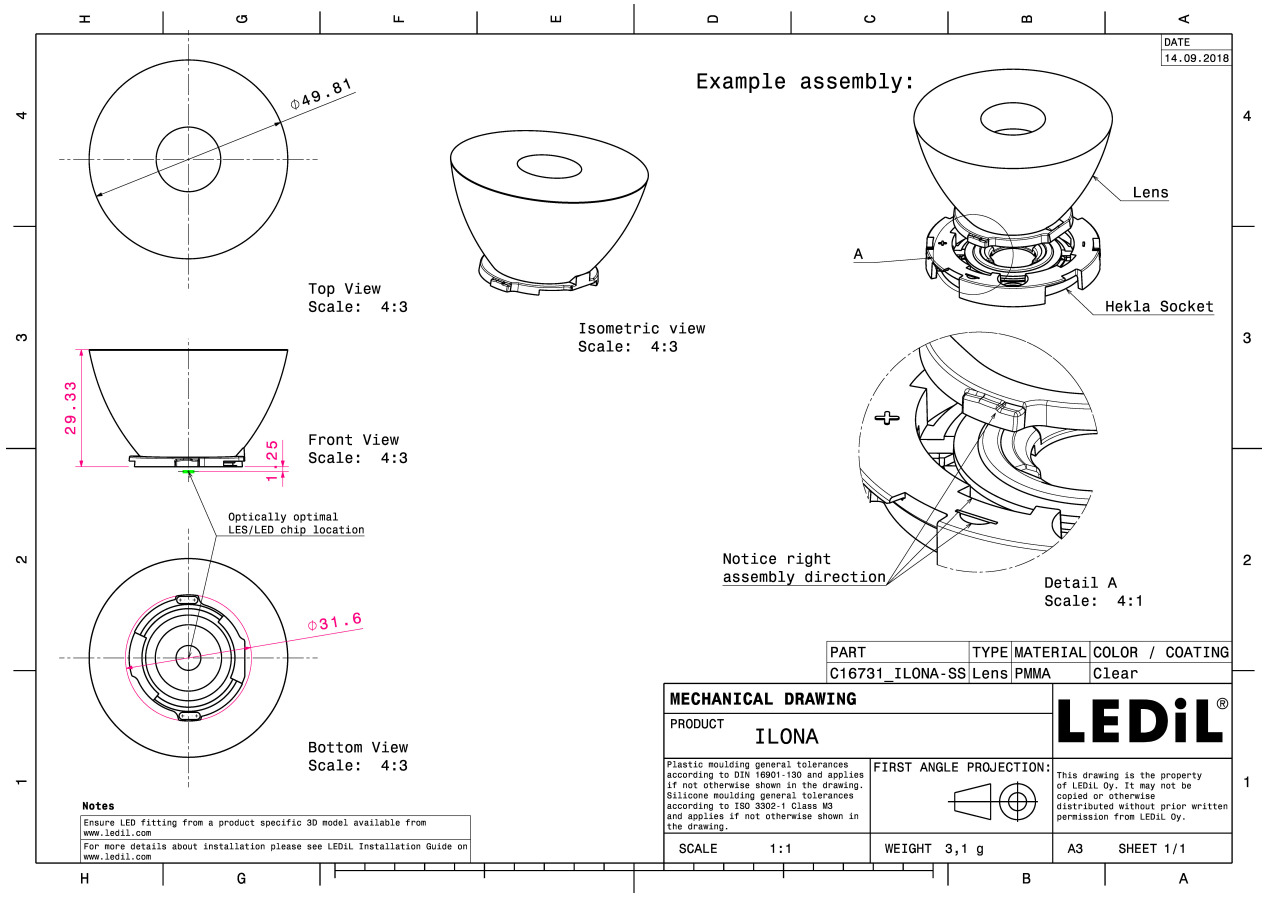

See also our general installation guide: www.ledil.com/installation_guide

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OPTICAL RESULTS (MEASURED):

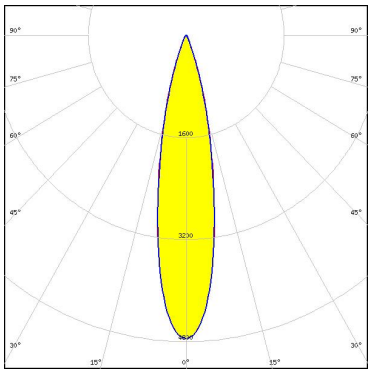
bridgelux

LED	V11 HD Gen 8
FWHM / FWTM	22.0° / 41.0°
Efficiency	94 %
Peak intensity	4.8 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

Bender Wirth: 633d Hekla





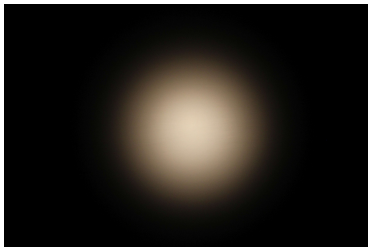
Light distribution files

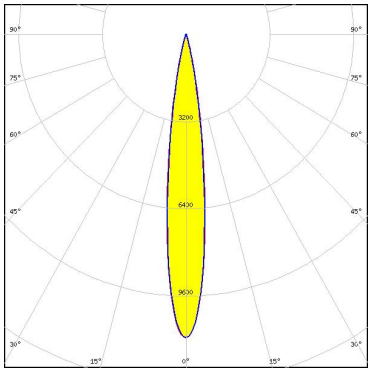
bridgelux

LED	V6 HD Gen 7
FWHM / FWTM	15.0° / 27.0°
Efficiency	95 %
Peak intensity	11.1 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

Bender Wirth: 634c Hekla





Light distribution files

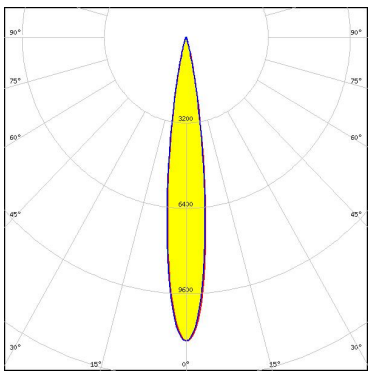
bridgelux

LED	V6 HD Gen 7
FWHM / FWTM	15.0° / 27.0°
Efficiency	96 %
Peak intensity	11.4 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

F15255_HEKLA-SOCKET-C





Light distribution files

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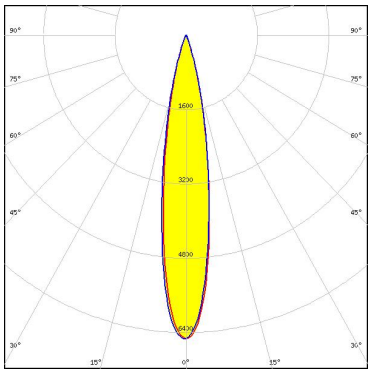
OPTICAL RESULTS (MEASURED):

bridgelux

LED	Vesta DTW 9mm (4W/6W/12W)
FWHM / FWTM	18.0° / 36.0°
Efficiency	93 %
Peak intensity	6.5 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
C16142_HEKLA-SOCKET-K
Bender Wirth: 490 Typ L8



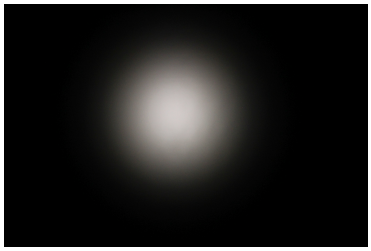


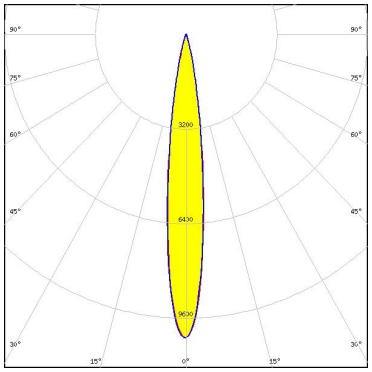
Light distribution files

bridgelux

LED	Vesta TW 6mm DP
FWHM / FWTM	14.0° / 28.0°
Efficiency	91 %
Peak intensity	10.3 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
C16142_HEKLA-SOCKET-K
Bender Wirth: 504 Typ L8



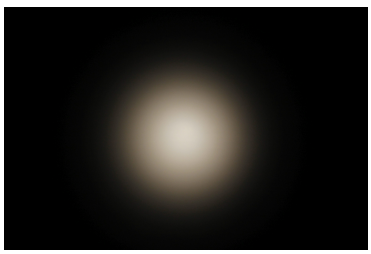


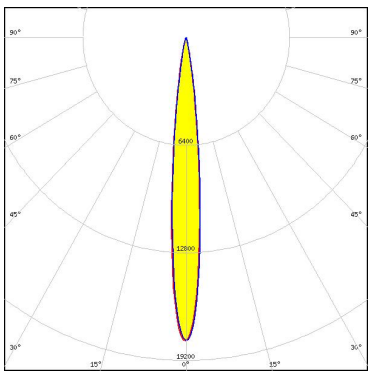
Light distribution files

CITIZEN

LED	CLU7A2/7A3
FWHM / FWTM	11.0° / 21.0°
Efficiency	94 %
Peak intensity	18 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F15255_HEKLA-SOCKET-C





Light distribution files

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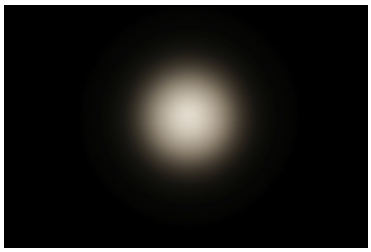
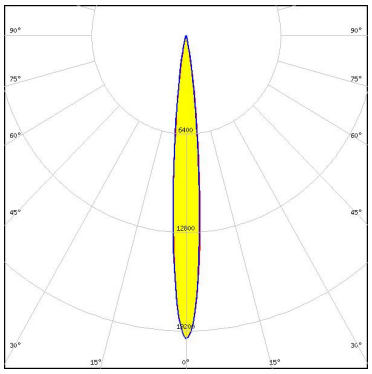
OPTICAL RESULTS (MEASURED):

CITIZEN

LED	CLU7B2
FWHM / FWTM	10.0° / 20.0°
Efficiency	94 %
Peak intensity	19.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	



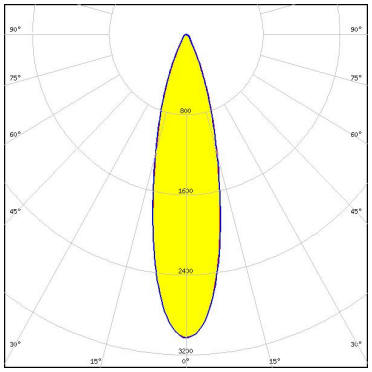


Light distribution files

LUMILEDS

LED	LUXEON CX Plus CoB L08 (Gen2)
FWHM / FWTM	26.0° / 52.0°
Efficiency	93 %
Peak intensity	3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
Bender Wirth: 637a Hekla	

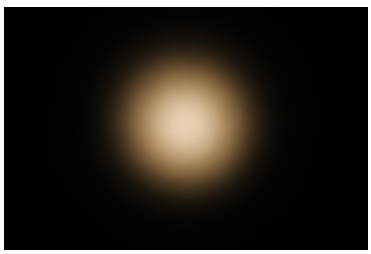


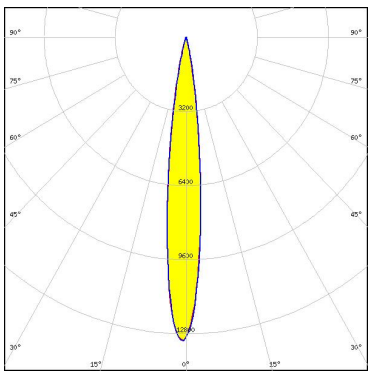


Light distribution files

LUMILEDS

LED	LUXEON CX Plus CoB - HD S01H4
FWHM / FWTM	13.0° / 25.0°
Efficiency	95 %
Peak intensity	13.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
Bender Wirth: 634c Hekla	





Light distribution files

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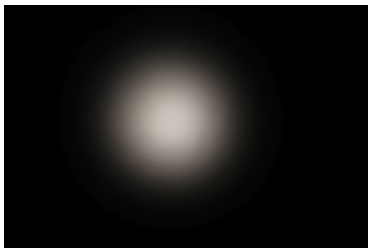
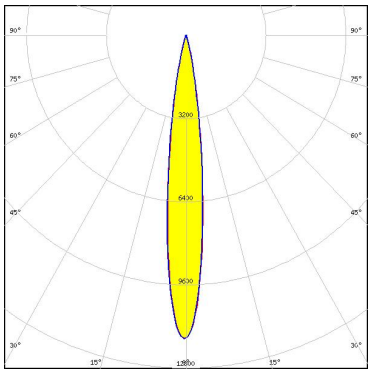
OPTICAL RESULTS (MEASURED):

LUMILEDS

LED	LUXEON CX Plus CoB - HD S02H6
FWHM / FWTM	14.0° / 27.0°
Efficiency	94 %
Peak intensity	11.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
Bender Wirth: 634c Hekla	



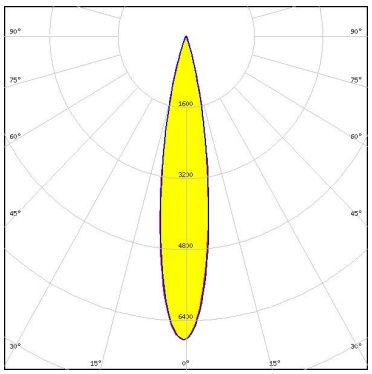


Light distribution files

LUMILEDS

LED	LUXEON CX Plus CoB - HD S04H9
FWHM / FWTM	19.0° / 35.0°
Efficiency	94 %
Peak intensity	6.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
Bender Wirth: 634c Hekla	



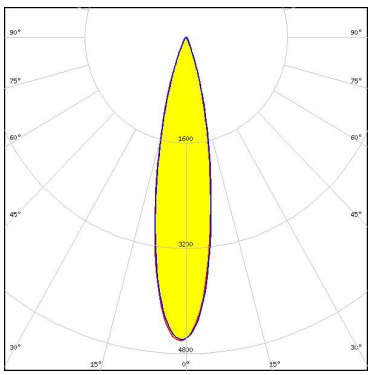


Light distribution files

LUMILEDS

LED	LUXEON CX Plus CoB L04 / L05 (Gen2)
FWHM / FWTM	22.0° / 43.0°
Efficiency	94 %
Peak intensity	4.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
Bender Wirth: 637a Hekla	





Light distribution files

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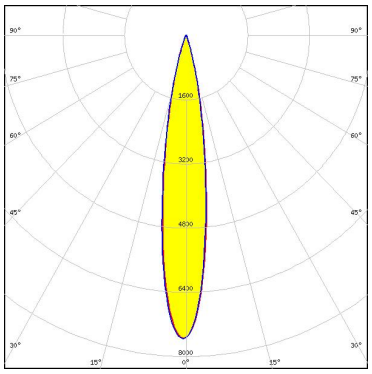
OPTICAL RESULTS (MEASURED):

LUMILEDS

LED	LUXEON CX Plus CoB M02 / M03 (Gen2)
FWHM / FWTM	17.0° / 33.0°
Efficiency	94 %
Peak intensity	7.6 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
Bender Wirth: 641a Hekla



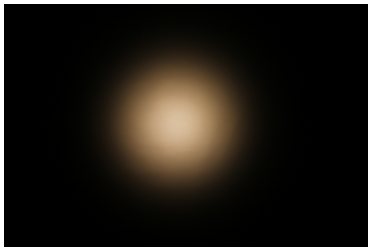


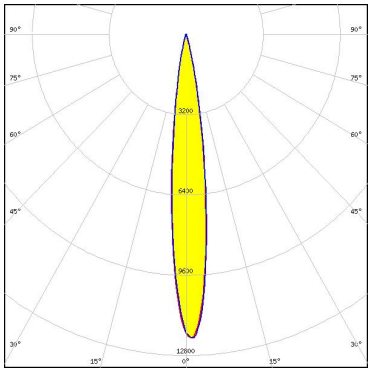
Light distribution files

LUMILEDS

LED	LUXEON CX Plus CoB S01 (Gen2)
FWHM / FWTM	13.0° / 26.0°
Efficiency	94 %
Peak intensity	12.3 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
Bender Wirth: 634c Hekla





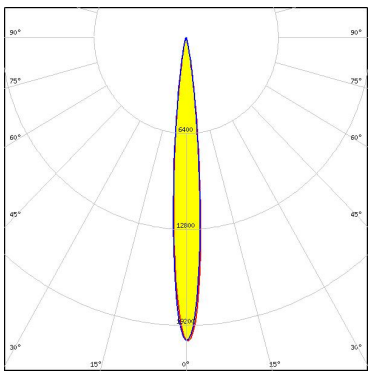
Light distribution files

LUMINUS

LED	CXM-3
FWHM / FWTM	11.0° / 20.0°
Efficiency	94 %
Peak intensity	20.2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F15255_HEKLA-SOCKET-C





Light distribution files

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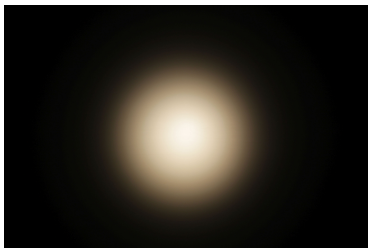
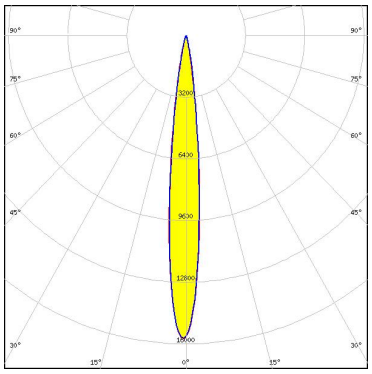
OPTICAL RESULTS (MEASURED):

LUMINUS

LED	CXM-4
FWHM / FWTM	12.0° / 23.0°
Efficiency	94 %
Peak intensity	15.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	

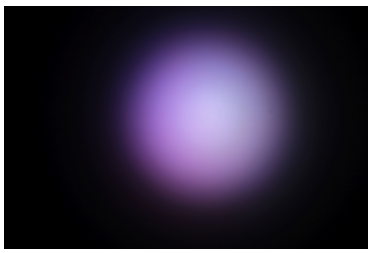


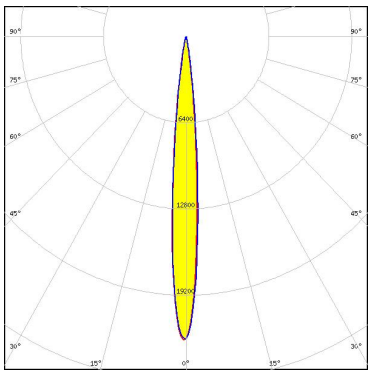


Light distribution files

OSRAM
Opto Semiconductors

LED	OSTAR Stage (S2WN)
FWHM / FWTM	10.0° / 19.0°
Efficiency	94 %
Peak intensity	22.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15859_HEKLA-SOCKET-I	

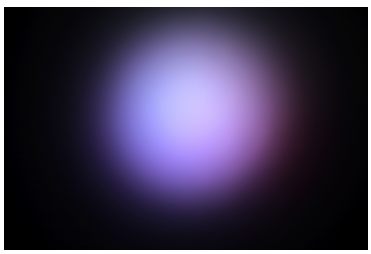


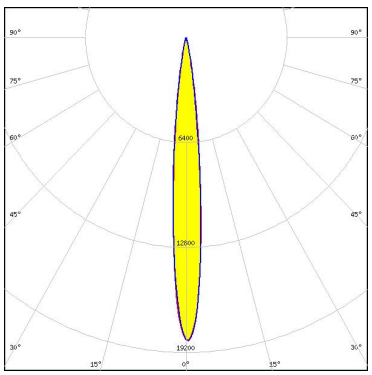


Light distribution files

OSRAM
Opto Semiconductors

LED	OSTAR Stage (S2WP)
FWHM / FWTM	11.0° / 21.0°
Efficiency	94 %
Peak intensity	18.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15859_HEKLA-SOCKET-I	





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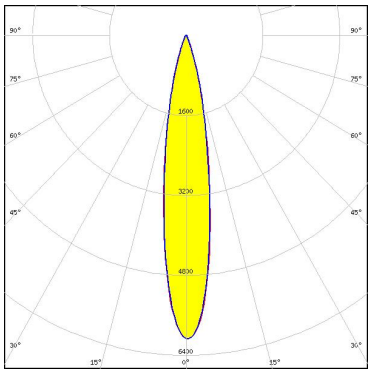
OPTICAL RESULTS (MEASURED):

SAMSUNG

LED	LC010T (Tunable White)
FWHM / FWTM	18.0° / 37.0°
Efficiency	94 %
Peak intensity	6.1 cd/lm
LEDs/each optic	1
Light colour/type	Tunable White

Required components:
C16142_HEKLA-SOCKET-K
Bender Wirth: 501 Typ L8





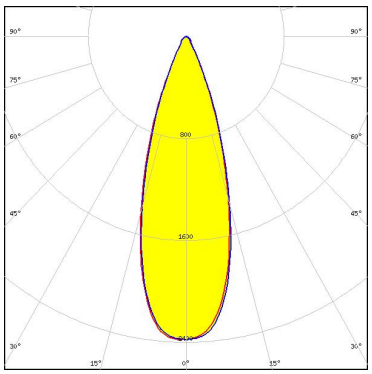
Light distribution files

SEOUL SEMICONDUCTOR

LED	MJT COB LES 14.5
FWHM / FWTM	33.0° / 57.0°
Efficiency	95 %
Peak intensity	2.4 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F17438_HEKLA-G2-I



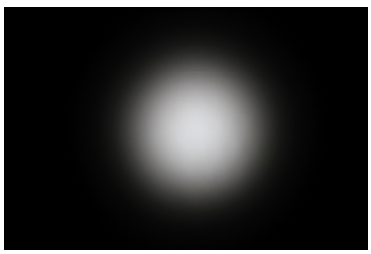


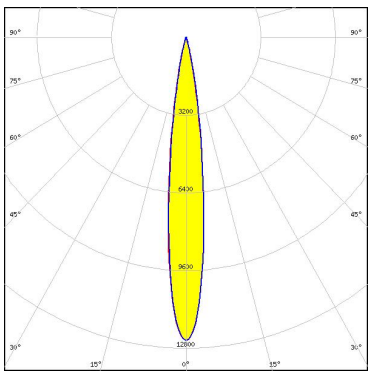
Light distribution files

SEOUL SEMICONDUCTOR

LED	MJT COB LES 6
FWHM / FWTM	14.0° / 26.0°
Efficiency	96 %
Peak intensity	12.5 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F17435_HEKLA-G2-C





Light distribution files

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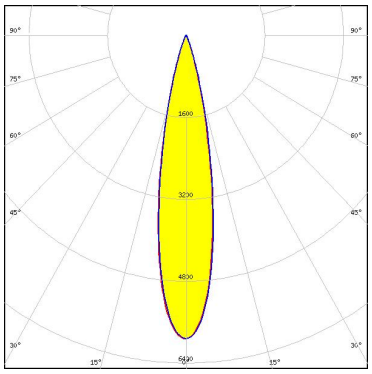
OPTICAL RESULTS (MEASURED):

SEOUL SEMICONDUCTOR

LED	MJT COB LES 9.8
FWHM / FWTM	21.0° / 37.0°
Efficiency	96 %
Peak intensity	5.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F17435_HEKLA-G2-C	



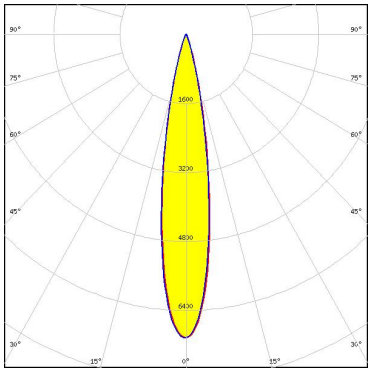


Light distribution files

TRIDONIC

LED	SLE G7 LES09
FWHM / FWTM	18.0° / 34.0°
Efficiency	95 %
Peak intensity	7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	

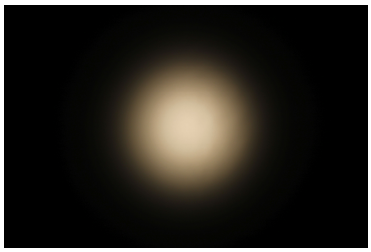


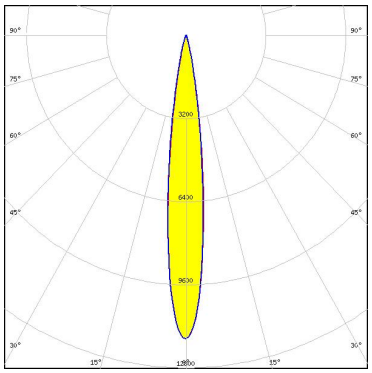


Light distribution files

XICATO

LED	XOB06 Gen1
FWHM / FWTM	14.0° / 26.0°
Efficiency	94 %
Peak intensity	11.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	





Light distribution files

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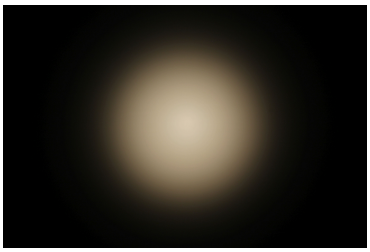
OPTICAL RESULTS (MEASURED):

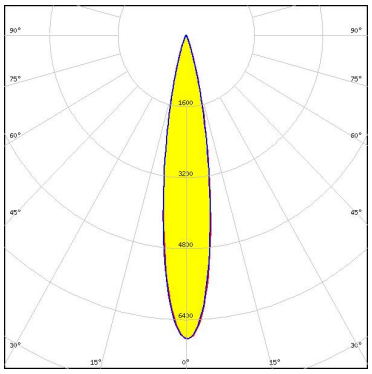
XICATO

LED	XOB09 Gen1
FWHM / FWTM	19.0° / 35.0°
Efficiency	94 %
Peak intensity	6.8 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

F15255_HEKLA-SOCKET-C





Light distribution files

LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.

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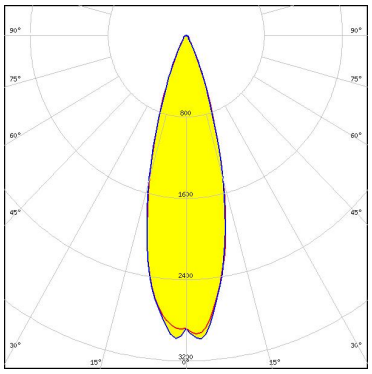
OPTICAL RESULTS (SIMULATED):

bridgelux

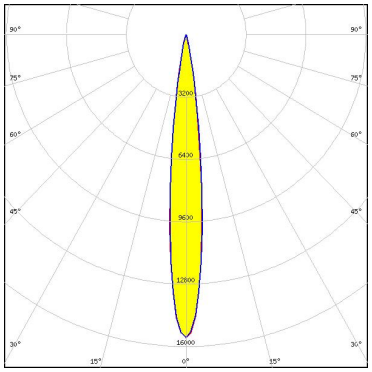
LED	V13 Gen 8-9
FWHM / FWTM	30.0° / 52.0°
Efficiency	92 %
Peak intensity	3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15859_HEKLA-SOCKET-I	



Light distribution files

bridgelux

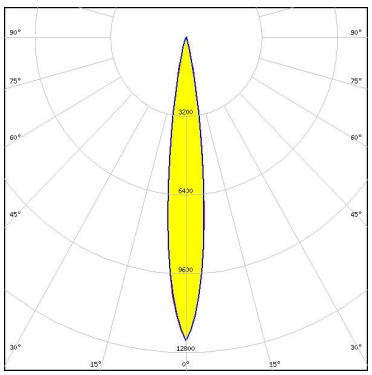
LED	V4 HD Gen 7
FWHM / FWTM	12.0° / 23.0°
Efficiency	91 %
Peak intensity	15.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15253_HEKLA-SOCKET-A	



Light distribution files

bridgelux

LED	V6 HD Gen 7
FWHM / FWTM	14.0° / 26.0°
Efficiency	95 %
Peak intensity	12.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	



Light distribution files

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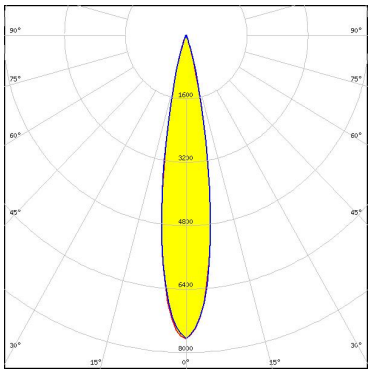
OPTICAL RESULTS (SIMULATED):

bridgelux

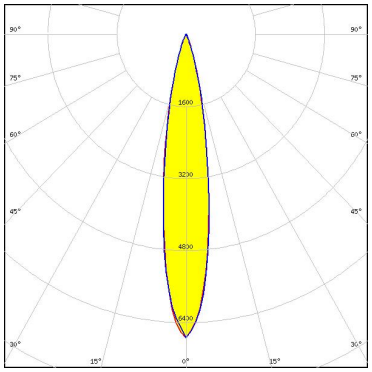
LED	V9 HD Gen7
FWHM / FWTM	18.0° / 32.0°
Efficiency	94 %
Peak intensity	7.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15859_HEKLA-SOCKET-I	



Light distribution files

bridgelux

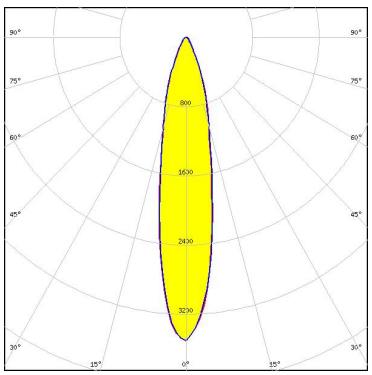
LED	Vero SE 10
FWHM / FWTM	18.0° / 36.0°
Efficiency	94 %
Peak intensity	6.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

bridgelux

LED	Vero SE 13
FWHM / FWTM	20.0° / 50.0°
Efficiency	91 %
Peak intensity	3.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C16142_HEKLA-SOCKET-K	



Light distribution files

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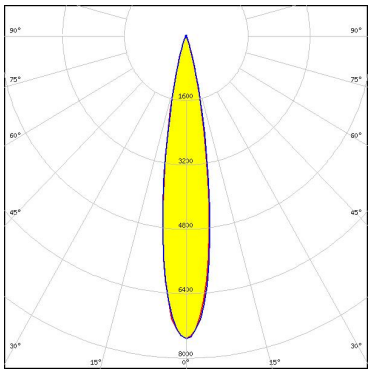
OPTICAL RESULTS (SIMULATED):

bridgelux

LED	Vesta DTW 9mm (4W/6W/12W)
FWHM / FWTM	18.0° / 32.0°
Efficiency	90 %
Peak intensity	7.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C16142_HEKLA-SOCKET-K	

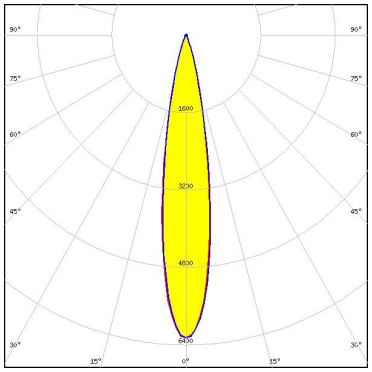


Bender Wirth: 490 Typ L8

Light distribution files

bridgelux

LED	Vesta TW 9mm (9W) DP
FWHM / FWTM	18.0° / 35.0°
Efficiency	86 %
Peak intensity	6.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C16142_HEKLA-SOCKET-K	

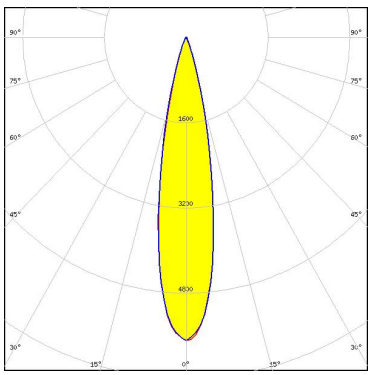


Bender Wirth: 489 Typ L8

Light distribution files

bridgelux

LED	Vesta TW 9mm (9W) DP
FWHM / FWTM	20.0° / 38.0°
Efficiency	92 %
Peak intensity	5.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F19861_HEKLA-G2B-TW1	



Light distribution files

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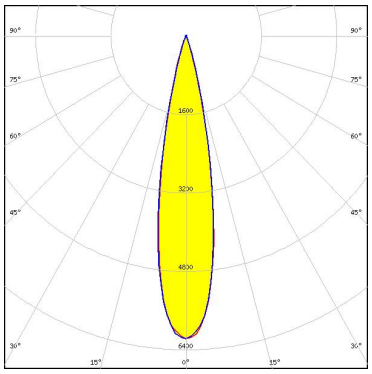
OPTICAL RESULTS (SIMULATED):

CITIZEN

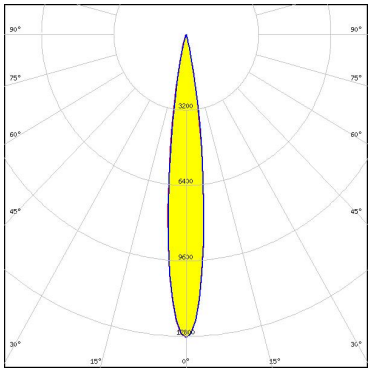
LED	CLU02x (LES10)
FWHM / FWTM	21.0° / 35.0°
Efficiency	87 %
Peak intensity	6.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	



Light distribution files

CITIZEN

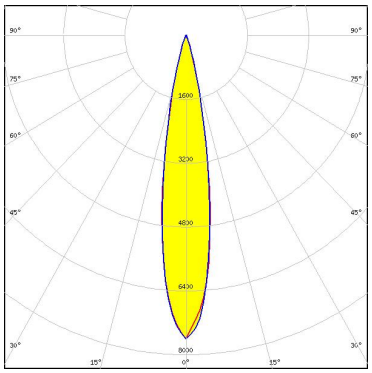
LED	CLU700/701/702/703
FWHM / FWTM	14.0° / 25.0°
Efficiency	91 %
Peak intensity	12.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	



Light distribution files

CITIZEN

LED	CLU712/713
FWHM / FWTM	18.0° / 33.0°
Efficiency	95 %
Peak intensity	7.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F17438_HEKLA-G2-I	



Light distribution files

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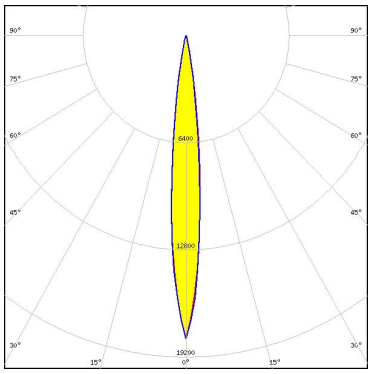
OPTICAL RESULTS (SIMULATED):

CREE LEDs

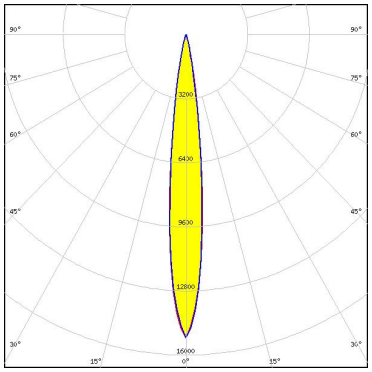
LED	CHA0304
FWHM / FWTM	11.0° / 22.0°
Efficiency	95 %
Peak intensity	18.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F17435_HEKLA-G2-C	



Light distribution files

CREE LEDs

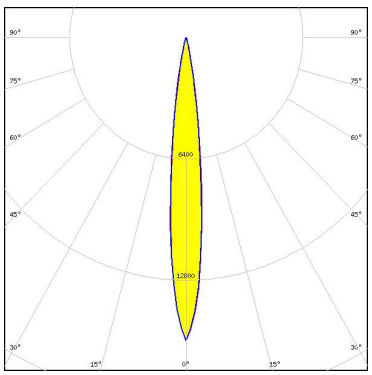
LED	CHA0410
FWHM / FWTM	12.0° / 24.0°
Efficiency	95 %
Peak intensity	15.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F17435_HEKLA-G2-C	



Light distribution files

CREE LEDs

LED	CMA1303
FWHM / FWTM	12.0° / 24.0°
Efficiency	96 %
Peak intensity	16 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F17439_HEKLA-G2-J	



Light distribution files

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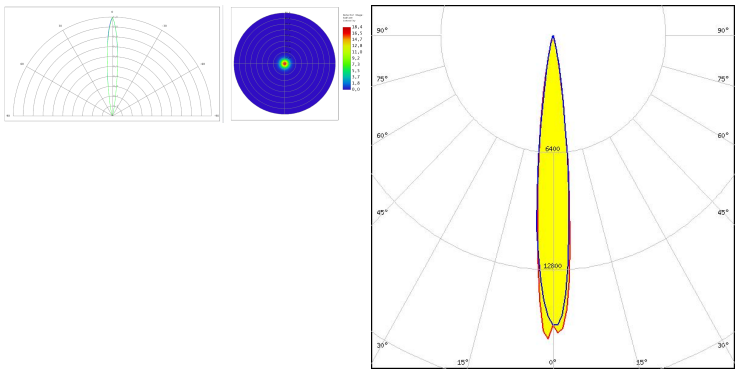
OPTICAL RESULTS (SIMULATED):

LED ENGIN

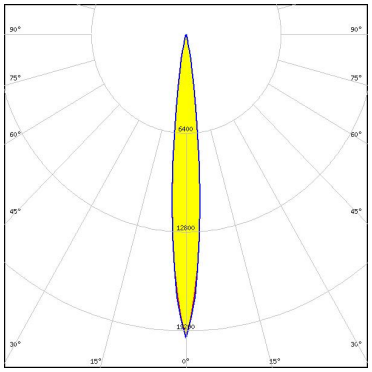
LED	LZ4-00XX08
FWHM / FWTM	12.0° / 23.0°
Efficiency	96 %
LEDs/each optic	1
Light colour/type	IR
Required components:	
F15255_HEKLA-SOCKET-C	



Light distribution files

LED ENGIN

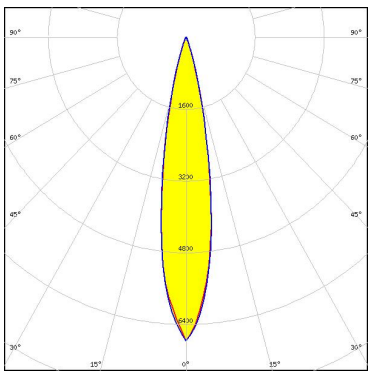
LED	LZ4-00XX08
FWHM / FWTM	10.0° / 22.0°
Efficiency	95 %
Peak intensity	19.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	



Light distribution files

LUMILEDS

LED	LUXEON CoB 1202/1203
FWHM / FWTM	19.0° / 35.0°
Efficiency	93 %
Peak intensity	6.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F17437_HEKLA-G2-H	



Light distribution files

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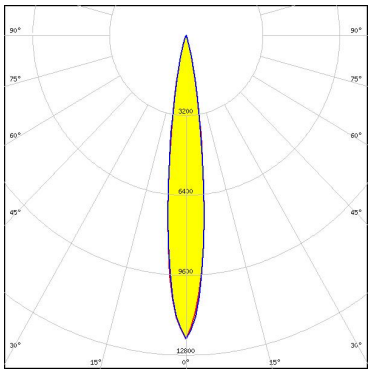
OPTICAL RESULTS (SIMULATED):

LUMILEDS

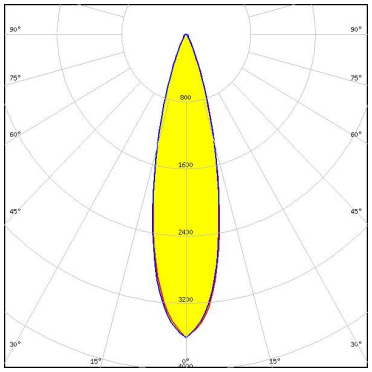
LED	LUXEON CoB 1202s
FWHM / FWTM	14.0° / 26.0°
Efficiency	96 %
Peak intensity	12.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15858_HEKLA-SOCKET-H	



Light distribution files

LUMILEDS

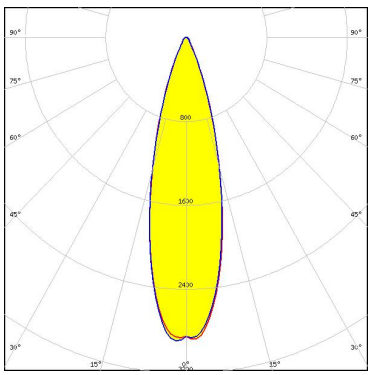
LED	LUXEON CoB 1204/1205
FWHM / FWTM	26.0° / 47.0°
Efficiency	93 %
Peak intensity	3.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

LED	LUXEON CoB 1208
FWHM / FWTM	28.0° / 52.0°
Efficiency	90 %
Peak intensity	2.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

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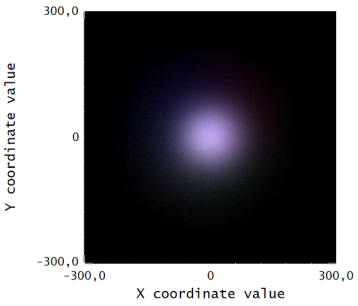
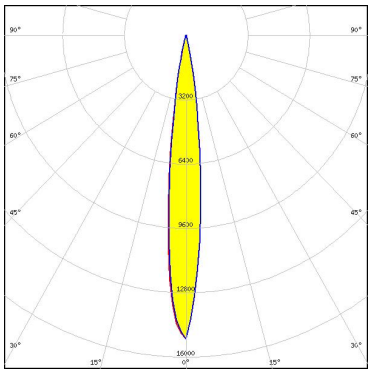
OPTICAL RESULTS (SIMULATED):

LUMILEDS

LED	LUXEON Rubix
FWHM / FWTM	13.0° / 24.0°
Efficiency	95 %
Peak intensity	15.1 cd/lm
LEDs/each optic	4
Light colour/type	RGBW
Required components:	

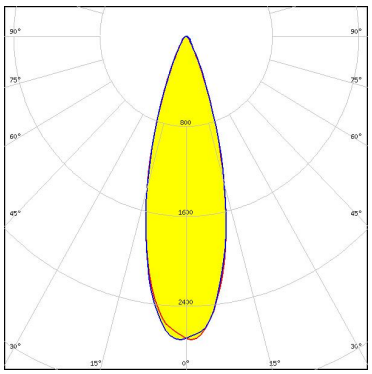




Light distribution files

LUMINUS

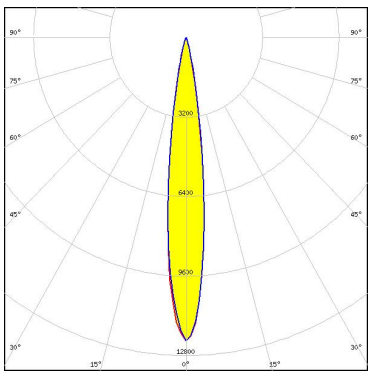
LED	CxM-14 (18.5x18.5)
FWHM / FWTM	30.0° / 54.0°
Efficiency	93 %
Peak intensity	2.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F17438_HEKLA-G2-I	



Light distribution files

NICHIA

LED	COB S-Type (LES 6)
FWHM / FWTM	14.0° / 26.0°
Efficiency	93 %
Peak intensity	12.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15848_HEKLA-SOCKET-G	



Light distribution files

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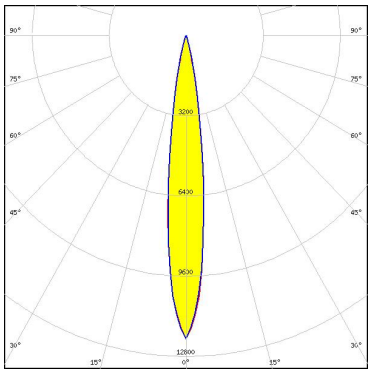
OPTICAL RESULTS (SIMULATED):

NICHIA

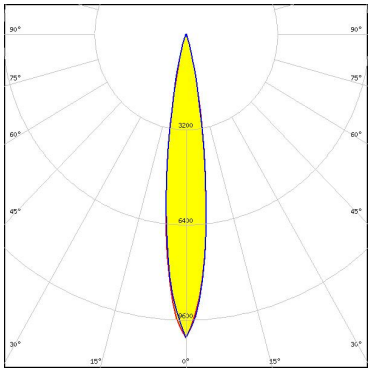
LED	COB S-Type (LES 6)
FWHM / FWTM	14.0° / 26.0°
Efficiency	93 %
Peak intensity	12.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15848_HEKLA-SOCKET-G	



Light distribution files

NICHIA

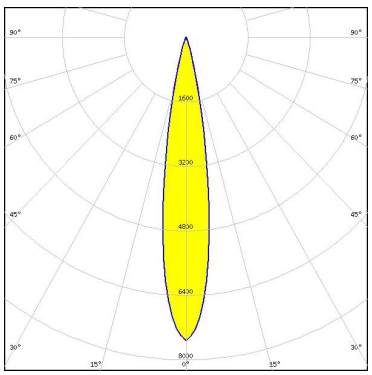
LED	COB S-Type (LES 7)
FWHM / FWTM	16.0° / 30.0°
Efficiency	95 %
Peak intensity	10.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15848_HEKLA-SOCKET-G	



Light distribution files

NICHIA

LED	NFSWE11A
FWHM / FWTM	18.0° / 32.0°
Efficiency	88 %
Peak intensity	7.5 cd/lm
LEDs/each optic	30
Light colour/type	White
Required components:	
C16142_HEKLA-SOCKET-K	



Light distribution files

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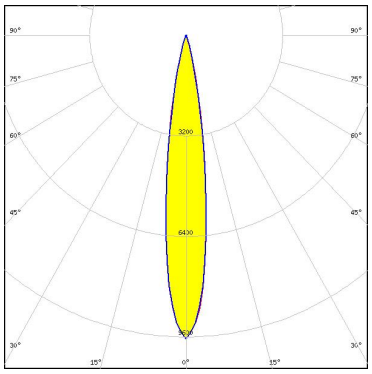
OPTICAL RESULTS (SIMULATED):

NICHIA

LED	NJCWL024Z-V1MT: COB L-Type Tunable White
FWHM / FWTM	16.0° / 30.0°
Efficiency	94 %
Peak intensity	9.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C16142_HEKLA-SOCKET-K	

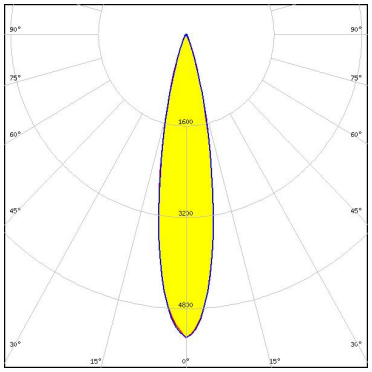


Bender Wirth: 497 Typ L8

Light distribution files

NICHIA

LED	NVCWJ024Z-V1MT: COB J-Type Tunable White
FWHM / FWTM	20.0° / 40.0°
Efficiency	93 %
Peak intensity	5.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C16142_HEKLA-SOCKET-K	

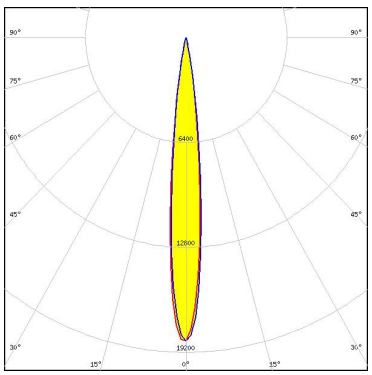


Bender Wirth: 498 Typ L8

Light distribution files

OSRAM
Opto Semiconductors

LED	OSTAR Stage (S2WP)
FWHM / FWTM	12.0° / 21.0°
Efficiency	93 %
Peak intensity	18.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

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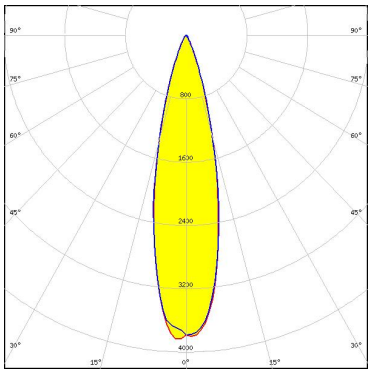
OPTICAL RESULTS (SIMULATED):

PHILIPS

LED	Fortimo SLM L13 CoB
FWHM / FWTM	24.0° / 46.0°
Efficiency	93 %
Peak intensity	3.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Bender Wirth: 632a Hekla XL

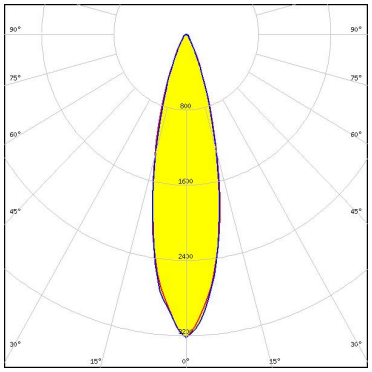


Light distribution files

PHILIPS

LED	Fortimo SLM L15 CoB
FWHM / FWTM	26.0° / 51.0°
Efficiency	92 %
Peak intensity	3.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

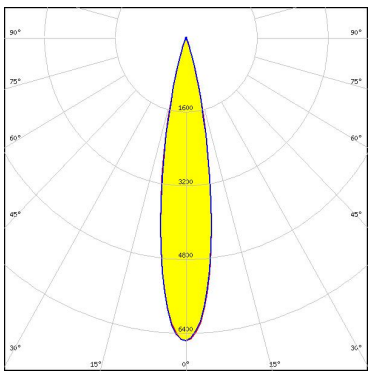
Bender Wirth: 632a Hekla XL



Light distribution files

SAMSUNG

LED	LC003D / LC006D / LC009D / LC013D
FWHM / FWTM	19.0° / 34.0°
Efficiency	87 %
Peak intensity	6.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	



Light distribution files

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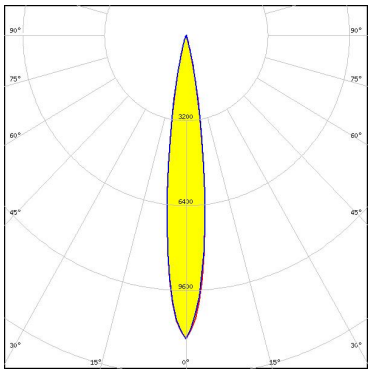
OPTICAL RESULTS (SIMULATED):

SAMSUNG

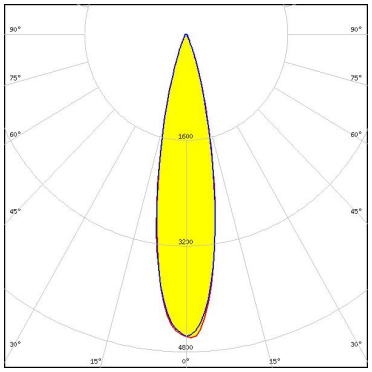
LED	LC020C
FWHM / FWTM	14.0° / 28.0°
Efficiency	94 %
Peak intensity	11.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F17438_HEKLA-G2-I	



Light distribution files

SAMSUNG

LED	LC020T (Tunable white)
FWHM / FWTM	22.0° / 42.0°
Efficiency	92 %
Peak intensity	4.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C16142_HEKLA-SOCKET-K	



Light distribution files

Bender Wirth: 501 Typ L8

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GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.

MATERIALS:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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