CARMEN-50-RS-C

~12° spot beam. Assembly with holder C compatible with LEDiL HEKLA.



SPECIFICATION:

Dimensions	Ø 50.0 mm
Height	25.5 mm
Fastening	socket
ROHS compliant	yes

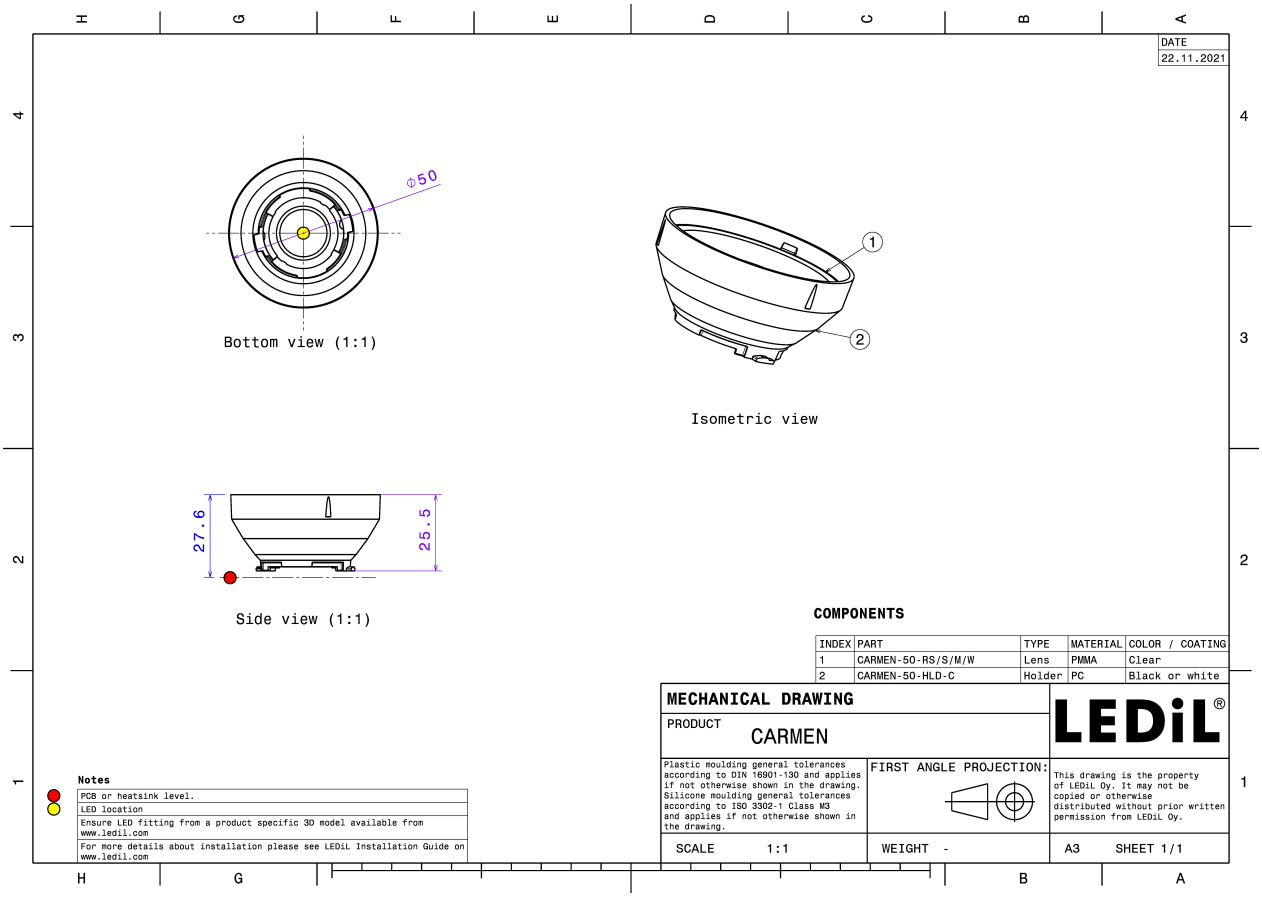
MATERIALS:

Component	Type	Material	Colour	Finish
CARMEN-50-RS	Single lens	PMMA	clear	
CARMEN-50-HLD-C	Holder	PC	black	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CP16106_CARMEN-50-RS-C » Box size: 476 x 273 x 292 mm	Single lens	308	112	28	7.2

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

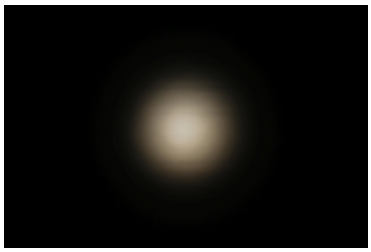
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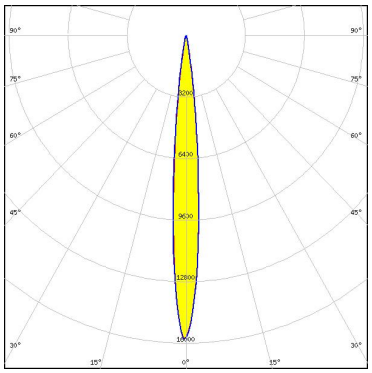
OPTICAL RESULTS (MEASURED):

bridgelux

LED	V4 HD Gen 7
FWHM / FWTM	10.0° / 19.0°
Efficiency	71 %
Peak intensity	16 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15253_HEKLA-SOCKET-A



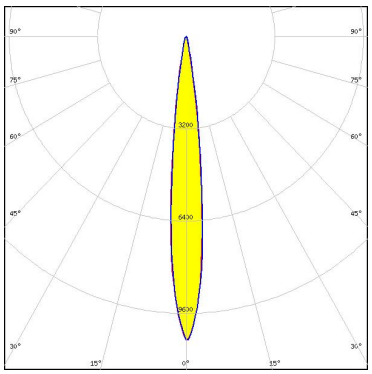


bridgelux

LED	V6 HD Gen 7
FWHM / FWTM	12.0° / 22.0°
Efficiency	68 %
Peak intensity	10.6 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15255_HEKLA-SOCKET-C



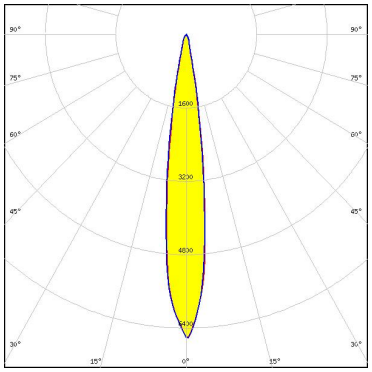


bridgelux

LED	V9 HD Gen7
FWHM / FWTM	15.0° / 26.0°
Efficiency	64 %
Peak intensity	6.7 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15859_HEKLA-SOCKET-I



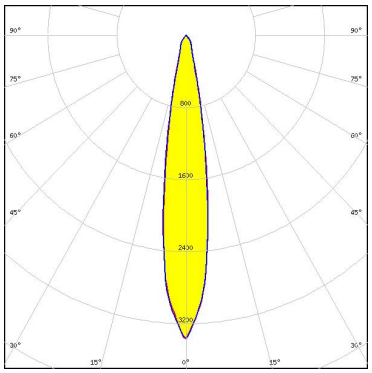


bridgelux

LED	VERO13
FWHM / FWTM	17.0° / 33.0°
Efficiency	51 %
Peak intensity	3.4 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
C16142_HEKLA-SOCKET-K





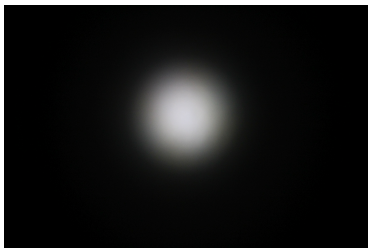
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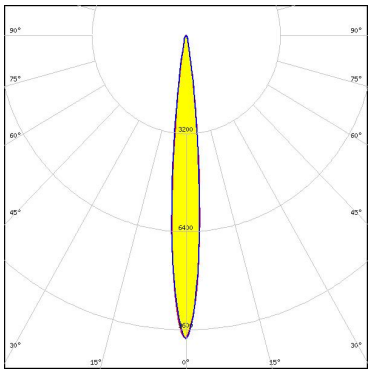
OPTICAL RESULTS (MEASURED):

bridgelux

LED	Vesta TW 6mm DP
FWHM / FWTM	11.0° / 21.0°
Efficiency	59 %
Peak intensity	9.9 cd/lm
LEDs/each optic	1
Light colour	White

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



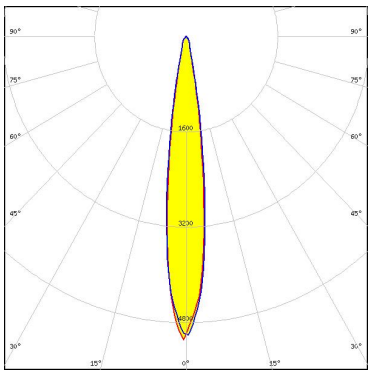


bridgelux

LED	Vesta TW 9mm (9W) DP
FWHM / FWTM	15.0° / 28.0°
Efficiency	54 %
Peak intensity	5.1 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
- C16142_HEKLA-SOCKET-K
- Bender Wirth: 489 Typ L8

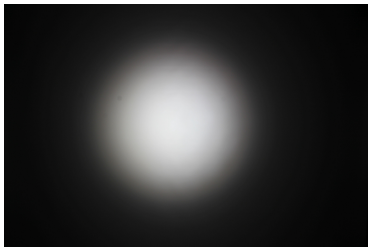


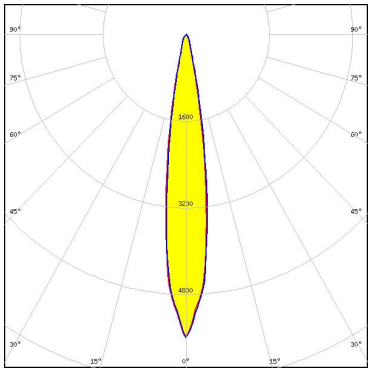


CITIZEN

LED	CLL02x/CLU02x (LES10)
FWHM / FWTM	16.0° / 29.0°
Efficiency	63 %
Peak intensity	5.6 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
- F15255_HEKLA-SOCKET-C

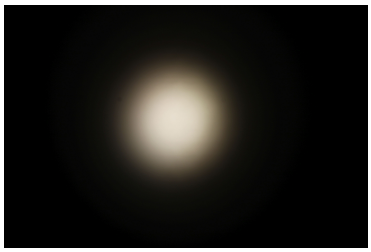


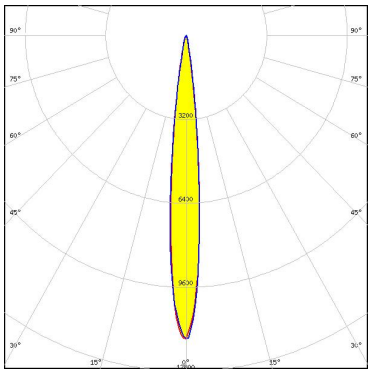


CITIZEN

LED	CLU700/701/702/703
FWHM / FWTM	11.0° / 21.0°
Efficiency	67 %
Peak intensity	11.8 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
- F15255_HEKLA-SOCKET-C





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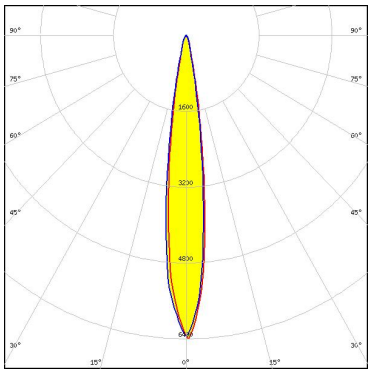
OPTICAL RESULTS (MEASURED):

CITIZEN

LED	CLU710/711
FWHM / FWTM	14.0° / 27.0°
Efficiency	62 %
Peak intensity	6.4 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15859_HEKLA-SOCKET-I

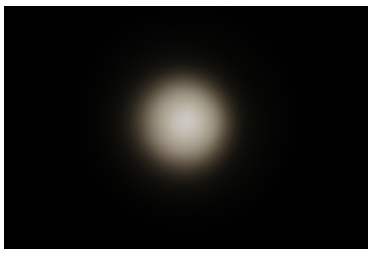


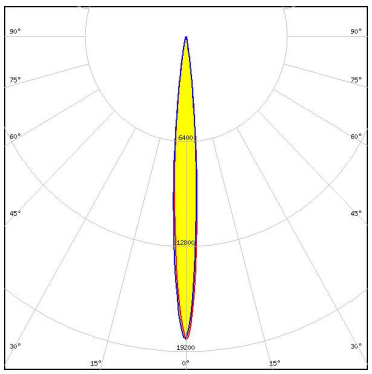


CITIZEN

LED	CLU7A2/7A3
FWHM / FWTM	9.0° / 18.0°
Efficiency	72 %
Peak intensity	18.5 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15255_HEKLA-SOCKET-C

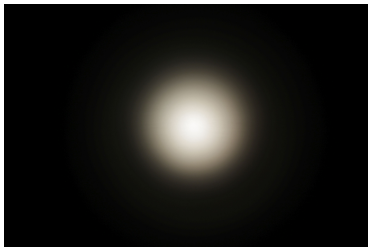


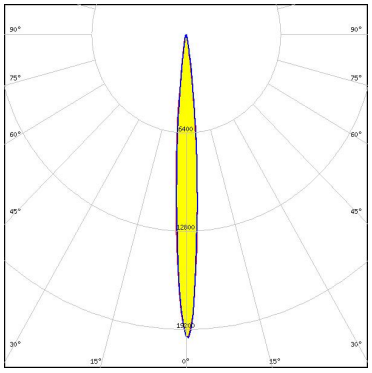


CITIZEN

LED	CLU7B2
FWHM / FWTM	8.0° / 17.0°
Efficiency	71 %
Peak intensity	20 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15255_HEKLA-SOCKET-C



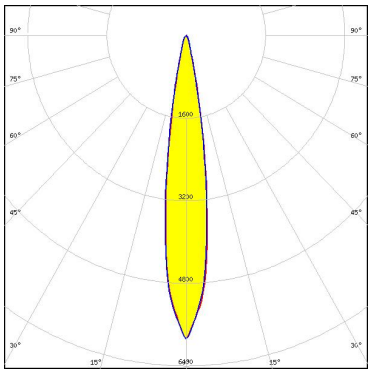


CREE LEDs

LED	CMA1516
FWHM / FWTM	16.0° / 29.0°
Efficiency	65 %
Peak intensity	5.9 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15256_HEKLA-SOCKET-D





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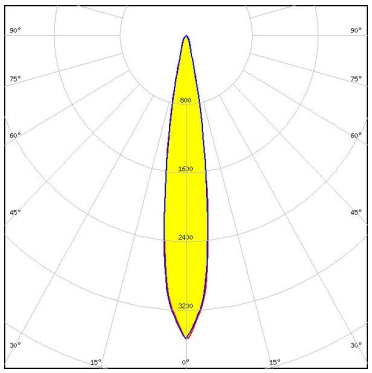
OPTICAL RESULTS (MEASURED):

CREE LEDs

LED	CMT14xx
FWHM / FWTM	16.0° / 30.0°
Efficiency	42 %
Peak intensity	3.6 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15255_HEKLA-SOCKET-C

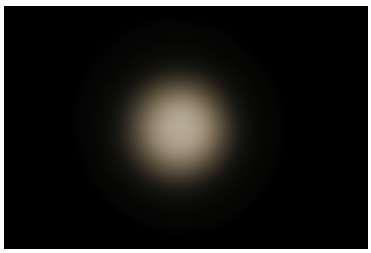


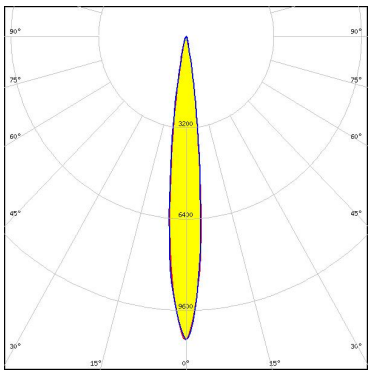


CREE LEDs

LED	CXA/B 13xx
FWHM / FWTM	12.0° / 23.0°
Efficiency	68 %
Peak intensity	10.6 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15956_HEKLA-SOCKET-J



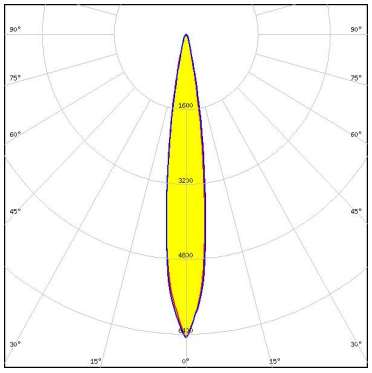


CREE LEDs

LED	CXA/B 15xx
FWHM / FWTM	15.0° / 28.0°
Efficiency	65 %
Peak intensity	6.5 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15256_HEKLA-SOCKET-D



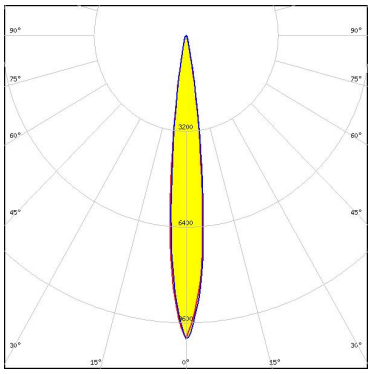


LUMILEDS

LED	LUXEON CoB 1202HD
FWHM / FWTM	12.0° / 23.0°
Efficiency	68 %
Peak intensity	10.1 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15848_HEKLA-SOCKET-G





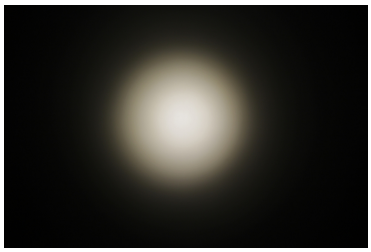
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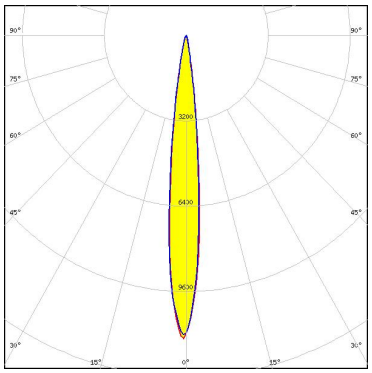
OPTICAL RESULTS (MEASURED):

LUMILEDS

LED	LUXEON CoB 1202s
FWHM / FWTM	12.0° / 22.0°
Efficiency	69 %
Peak intensity	11.4 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15848_HEKLA-SOCKET-G

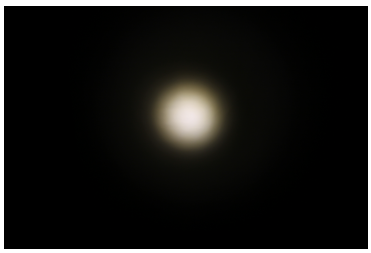


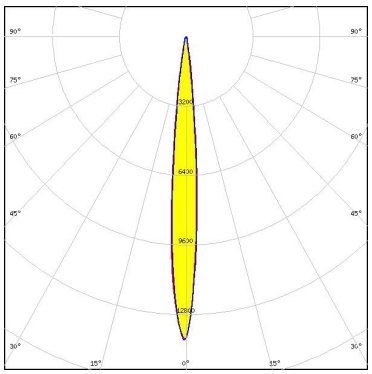


LUMILEDS

LED	LUXEON CX Plus CoB - HD S01H4
FWHM / FWTM	10.0° / 19.0°
Efficiency	64 %
Peak intensity	14 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
Bender Wirth: 634c Hekla

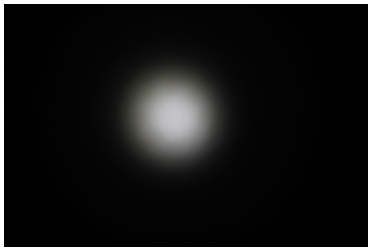


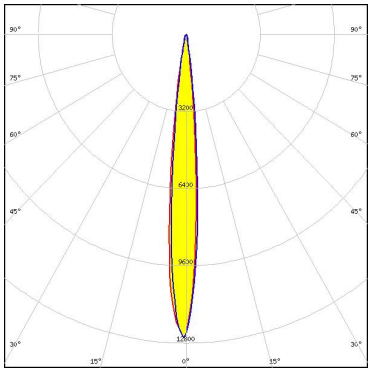


LUMILEDS

LED	LUXEON CX Plus CoB - HD S02H6
FWHM / FWTM	10.0° / 19.0°
Efficiency	64 %
Peak intensity	12.7 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
Bender Wirth: 634c Hekla



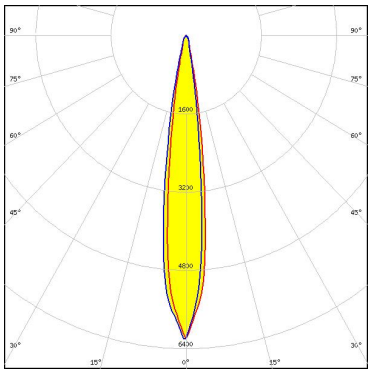


LUMILEDS

LED	LUXEON CX Plus CoB - HD S04H9
FWHM / FWTM	14.0° / 26.0°
Efficiency	60 %
Peak intensity	6.2 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
Bender Wirth: 634c Hekla





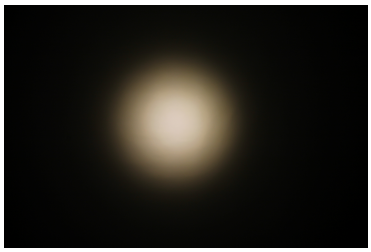
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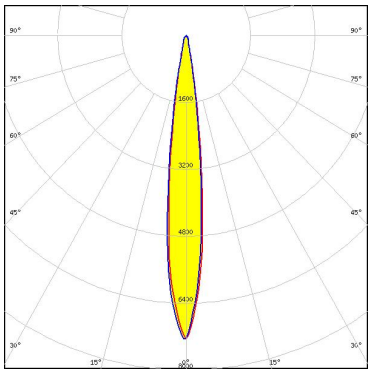
OPTICAL RESULTS (MEASURED):

LUMILEDS

LED	LUXEON CX Plus CoB M02 / M03 (Gen2)
FWHM / FWTM	13.0° / 25.0°
Efficiency	60 %
Peak intensity	7.3 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
Bender Wirth: 641a Hekla

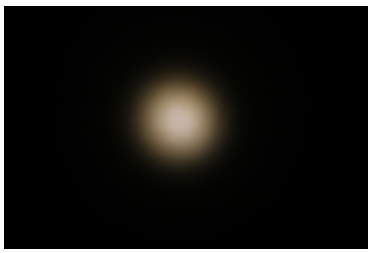


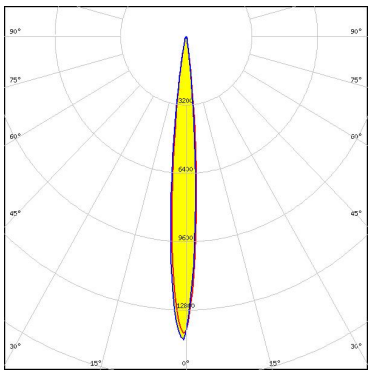


LUMILEDS

LED	LUXEON CX Plus CoB S01 (Gen2)
FWHM / FWTM	10.0° / 19.0°
Efficiency	65 %
Peak intensity	14.3 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
Bender Wirth: 634c Hekla

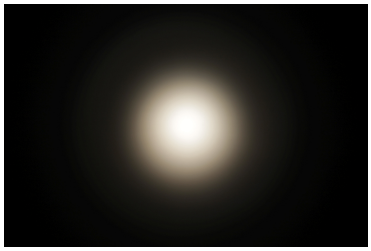


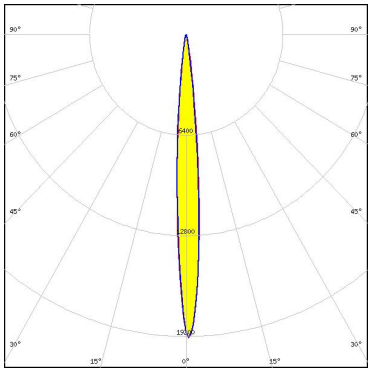


LUMINUS

LED	CXM-3
FWHM / FWTM	9.0° / 17.0°
Efficiency	72 %
Peak intensity	19.8 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15255_HEKLA-SOCKET-C

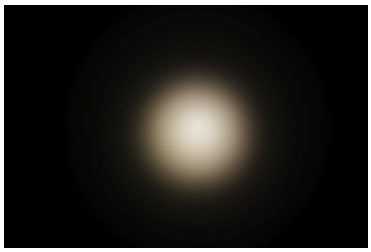


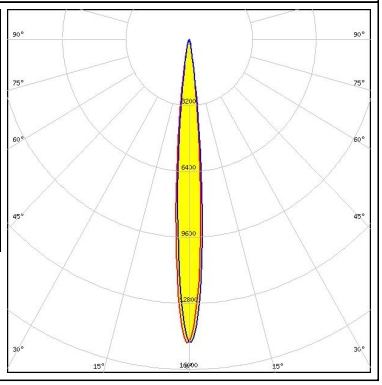


LUMINUS

LED	CXM-4
FWHM / FWTM	10.0° / 19.0°
Efficiency	68 %
Peak intensity	14.8 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15255_HEKLA-SOCKET-C





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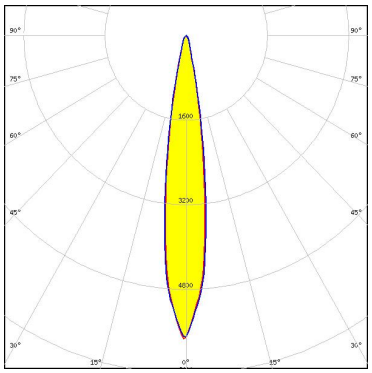
OPTICAL RESULTS (MEASURED):

LUMINUS

LED	CxM-9 (13.5x13.5)
FWHM / FWTM	15.0° / 29.0°
Efficiency	63 %
Peak intensity	5.8 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15255_HEKLA-SOCKET-C



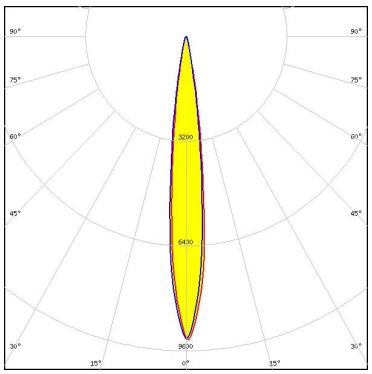


NICHIA

LED	COB S-Type (LES 7)
FWHM / FWTM	13.0° / 24.0°
Efficiency	67 %
Peak intensity	9.3 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15848_HEKLA-SOCKET-G



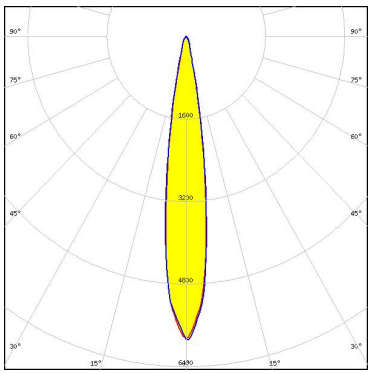


PHILIPS

LED	Fortimo SLM L09 CoB
FWHM / FWTM	15.0° / 28.0°
Efficiency	64 %
Peak intensity	6 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15858_HEKLA-SOCKET-H



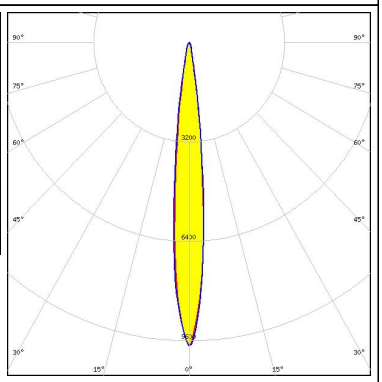


SAMSUNG

LED	LC010C
FWHM / FWTM	11.0° / 22.0°
Efficiency	64 %
Peak intensity	9.8 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15848_HEKLA-SOCKET-G





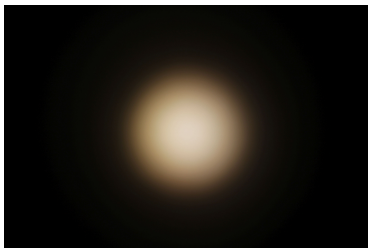
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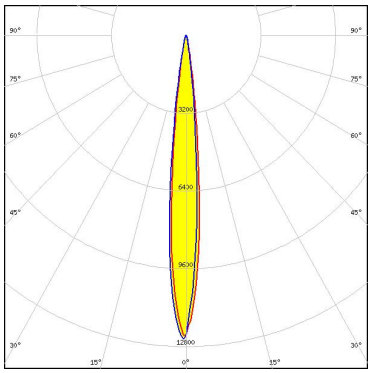
OPTICAL RESULTS (MEASURED):

SAMSUNG

LED	LC010C G2
FWHM / FWTM	11.0° / 21.0°
Efficiency	67 %
Peak intensity	12.6 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15255_HEKLA-SOCKET-C

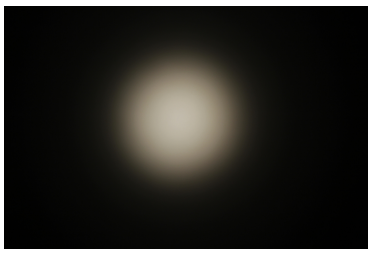


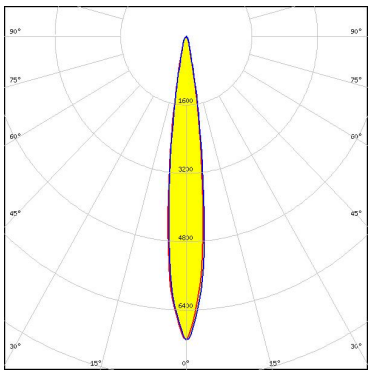


SAMSUNG

LED	LC020C
FWHM / FWTM	13.0° / 26.0°
Efficiency	64 %
Peak intensity	7.1 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15848_HEKLA-SOCKET-G



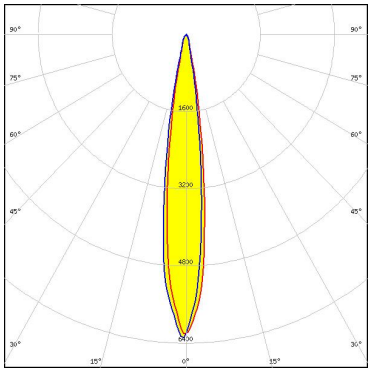


SAMSUNG

LED	LC020C G2
FWHM / FWTM	15.0° / 27.0°
Efficiency	63 %
Peak intensity	6.3 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15859_HEKLA-SOCKET-I

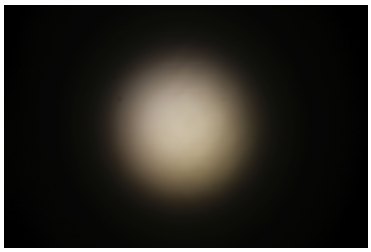


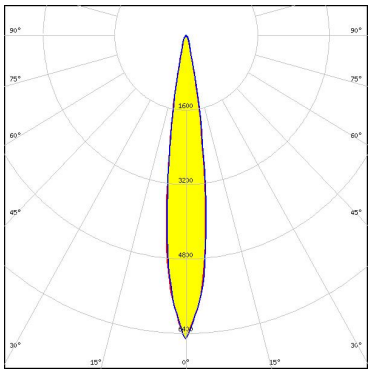


TRIDONIC

LED	SLE G7 LES09
FWHM / FWTM	15.0° / 27.0°
Efficiency	66 %
Peak intensity	6.5 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15255_HEKLA-SOCKET-C





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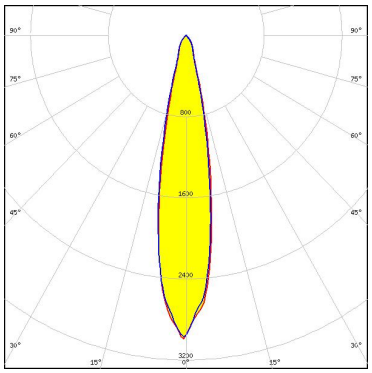
OPTICAL RESULTS (MEASURED):

TRIDONIC

LED	SLE G7 LES13
FWHM / FWTM	20.0° / 37.0°
Efficiency	56 %
Peak intensity	3 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15858_HEKLA-SOCKET-H

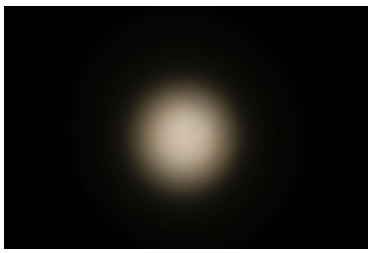


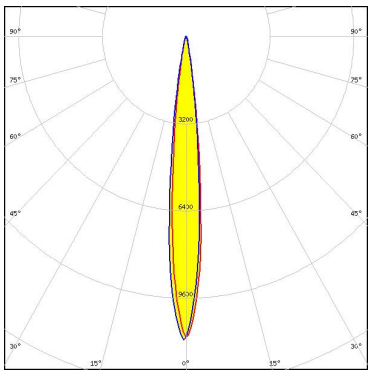


XICATO

LED	XOB 6 mm
FWHM / FWTM	11.0° / 21.0°
Efficiency	66 %
Peak intensity	11.1 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15255_HEKLA-SOCKET-C



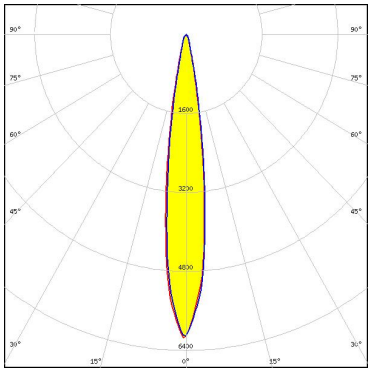


XICATO

LED	XOB 9.8 mm
FWHM / FWTM	15.0° / 28.0°
Efficiency	63 %
Peak intensity	6.1 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15255_HEKLA-SOCKET-C



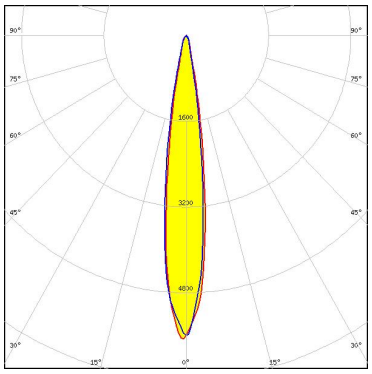


XICATO

LED	XTM - 9mm LES
FWHM / FWTM	15.0° / 28.0°
Efficiency	60 %
Peak intensity	5.8 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
C15743_XTM-ADAPTER-50-B





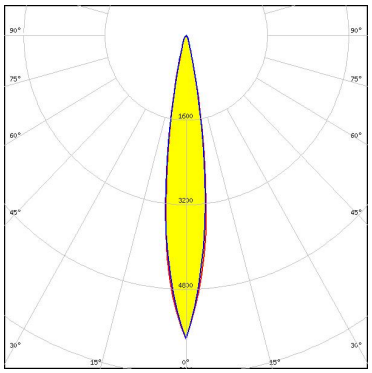
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OPTICAL RESULTS (SIMULATED):

bridgelux

LED	V10 Gen7
FWHM / FWTM	16.0° / 30.0°
Efficiency	60 %
Peak intensity	5.7 cd/lm
LEDs/each optic	1
Light colour	White

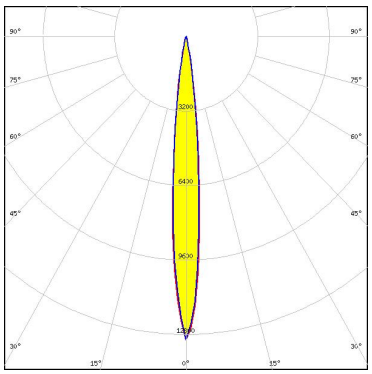
Required components:
F15255_HEKLA-SOCKET-C



bridgelux

LED	V6 Gen6
FWHM / FWTM	10.0° / 21.0°
Efficiency	66 %
Peak intensity	13 cd/lm
LEDs/each optic	1
Light colour	White

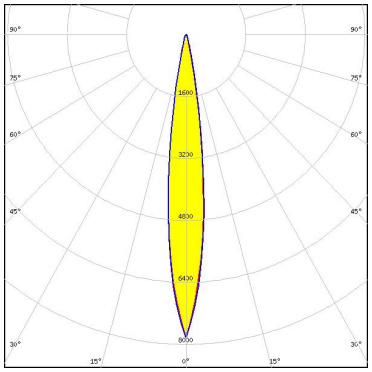
Required components:
F15253_HEKLA-SOCKET-A



bridgelux

LED	V8 Gen7
FWHM / FWTM	14.0° / 26.0°
Efficiency	63 %
Peak intensity	7.8 cd/lm
LEDs/each optic	1
Light colour	White

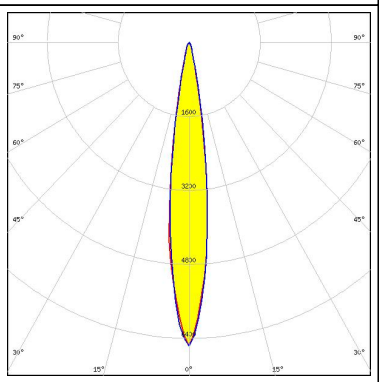
Required components:
F15253_HEKLA-SOCKET-A



bridgelux

LED	VERO10
FWHM / FWTM	15.0° / 27.0°
Efficiency	61 %
Peak intensity	6.7 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15616_HEKLA-SOCKET-F



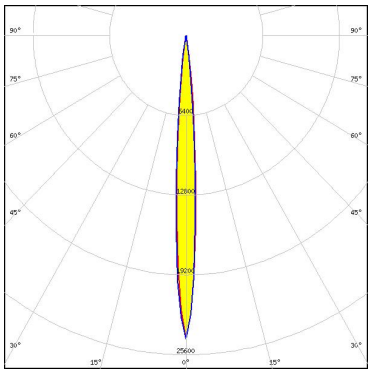
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OPTICAL RESULTS (SIMULATED):

CREE LEDs

LED	CHA0304
FWHM / FWTM	8.0° / 15.0°
Efficiency	65 %
Peak intensity	24.3 cd/lm
LEDs/each optic	1
Light colour	White

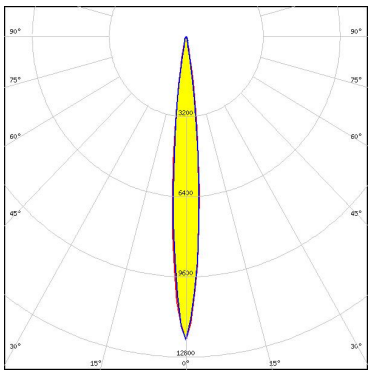
Required components:
F17435_HEKLA-G2-C



CREE LEDs

LED	CHA0612
FWHM / FWTM	10.0° / 20.0°
Efficiency	61 %
Peak intensity	12.1 cd/lm
LEDs/each optic	1
Light colour	White

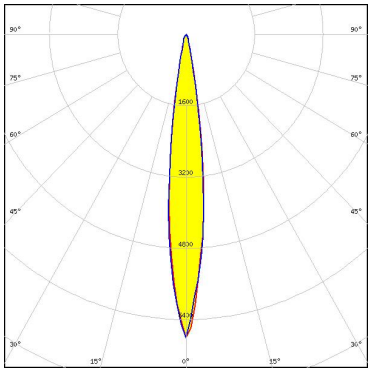
Required components:
F17435_HEKLA-G2-C



CREE LEDs

LED	CHA0825
FWHM / FWTM	14.0° / 26.0°
Efficiency	57 %
Peak intensity	6.8 cd/lm
LEDs/each optic	1
Light colour	White

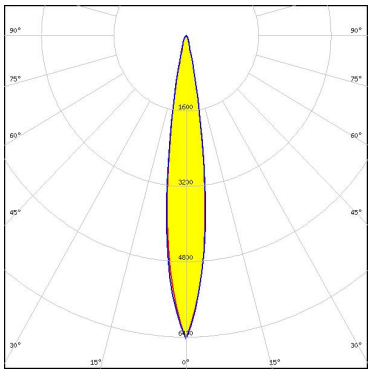
Required components:
F17438_HEKLA-G2-I



LUMILEDS

LED	LUXEON CoB 1202/1203
FWHM / FWTM	14.0° / 28.0°
Efficiency	61 %
Peak intensity	6.4 cd/lm
LEDs/each optic	1
Light colour	White

Required components:
F15858_HEKLA-SOCKET-H

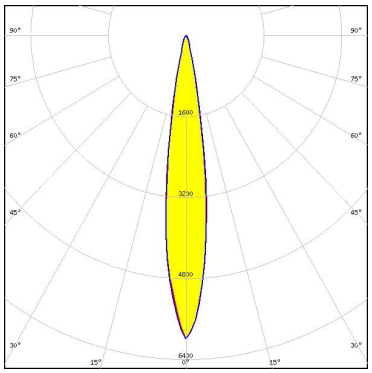


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OPTICAL RESULTS (SIMULATED):

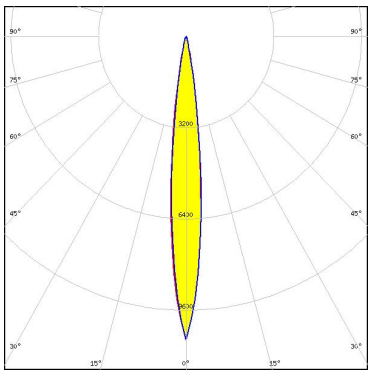
LUMILEDS

LED	LUXEON CoB 1204HD
FWHM / FWTM	16.0° / 28.0°
Efficiency	61 %
Peak intensity	6 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
F15858_HEKLA-SOCKET-H	



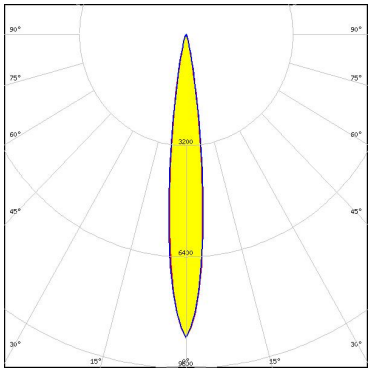
LUMINUS

LED	CxM-6 (13.5x13.5)
FWHM / FWTM	12.0° / 23.0°
Efficiency	65 %
Peak intensity	10.6 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
F15255_HEKLA-SOCKET-C	



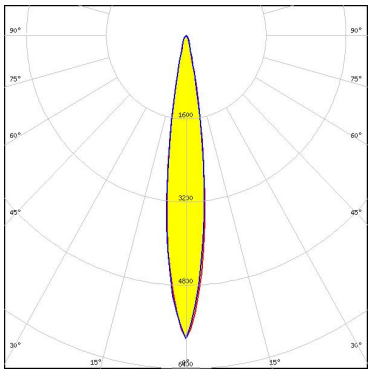
NICHIA

LED	COB S-Type (LES 6)
FWHM / FWTM	13.0° / 25.0°
Efficiency	63 %
Peak intensity	8.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
F15848_HEKLA-SOCKET-G	



OSRAM
Opto Semiconductors

LED	Soleriq S9
FWHM / FWTM	15.0° / 28.0°
Efficiency	59 %
Peak intensity	5.8 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
F15255_HEKLA-SOCKET-C	

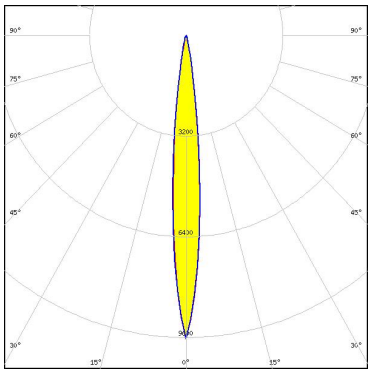


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OPTICAL RESULTS (SIMULATED):

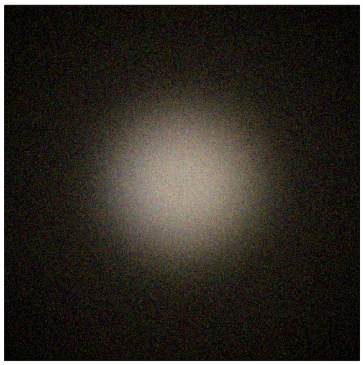
PHILIPS

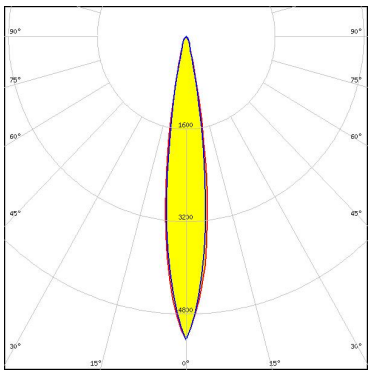
LED	Fortimo SLM L06 CoB
FWHM / FWTM	10.0° / 22.0°
Efficiency	53 %
Peak intensity	9.6 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
F15858_HEKLA-SOCKET-H	



SAMSUNG

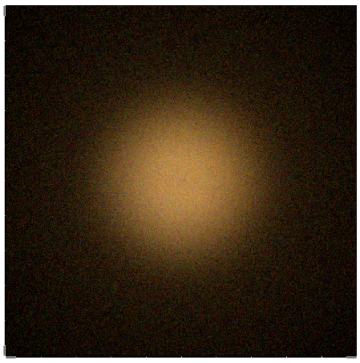
LED	LC003D / LC006D / LC009D / LC013D
FWHM / FWTM	16.0° / 30.0°
Efficiency	58 %
Peak intensity	5.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
F17435_HEKLA-G2-C	

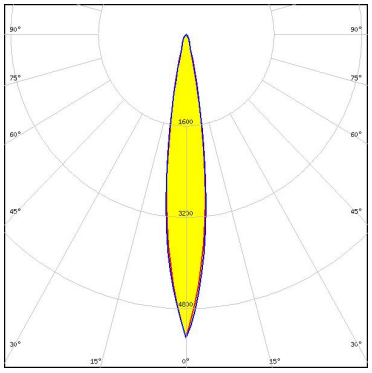




SAMSUNG

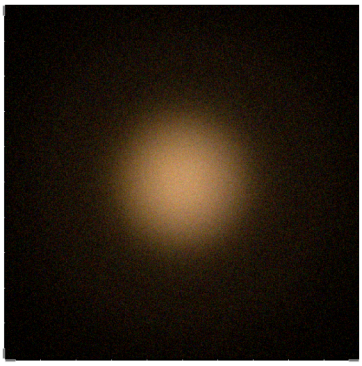
LED	LC003D / LC006D / LC009D / LC013D
FWHM / FWTM	16.0° / 30.0°
Efficiency	58 %
Peak intensity	5.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
F17435_HEKLA-G2-C	

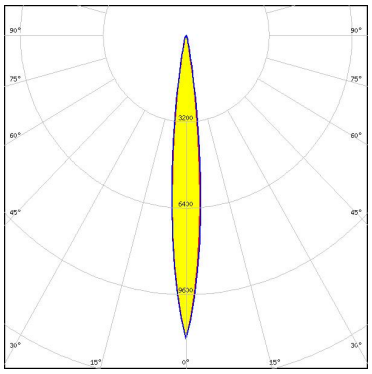




SAMSUNG

LED	LC010C
FWHM / FWTM	12.0° / 22.0°
Efficiency	64 %
Peak intensity	11.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
F17435_HEKLA-G2-C	



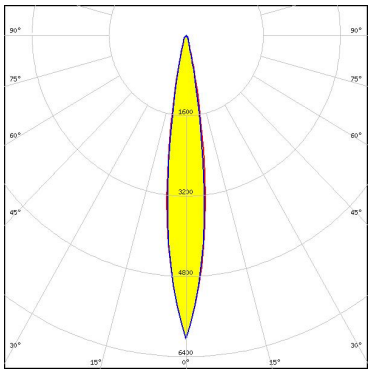


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OPTICAL RESULTS (SIMULATED):

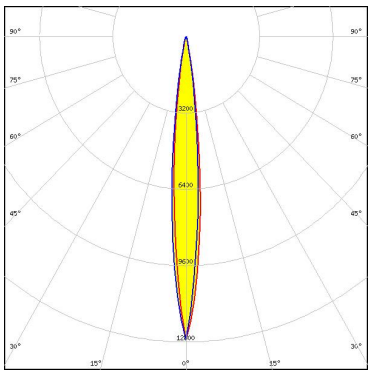
SAMSUNG

LED	LH231B
FWHM / FWTM	15.0° / 28.0°
Efficiency	58 %
Peak intensity	6 cd/lm
LEDs/each optic	7
Light colour	White
Required components:	
F15255_HEKLA-SOCKET-C	



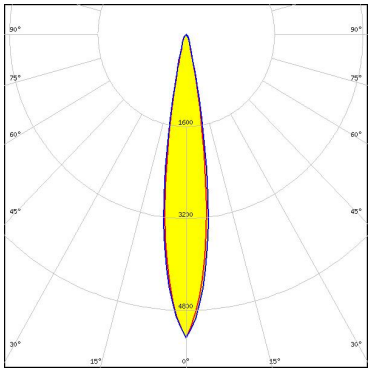
SEOUL SEMICONDUCTOR

LED	MJT COB LES 6
FWHM / FWTM	11.0° / 21.0°
Efficiency	65 %
Peak intensity	12.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
F17435_HEKLA-G2-C	



SEOUL SEMICONDUCTOR

LED	MJT COB LES 9.8
FWHM / FWTM	16.0° / 30.0°
Efficiency	60 %
Peak intensity	5.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
F17435_HEKLA-G2-C	



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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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