CARMEN-W-C

~55° wide beam. Assembly with holder C compatible with LEDiL HEKLA.

SPECIFICATION:

Dimensions	Ø 69.5 mm
Height	41.5 mm
Fastening	socket
ROHS compliant	yes

MATERIALS:

Component	Type	Material	Colour	Finish	Length
CARMEN-W	Single lens	PMMA	clear		66.4
CARMEN-HLD-C	Holder	PC	black		69.5

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CP15776_CARMEN-W-C » Box size: 476 x 273 x 292 mm	Single lens	150	150	15	4.5

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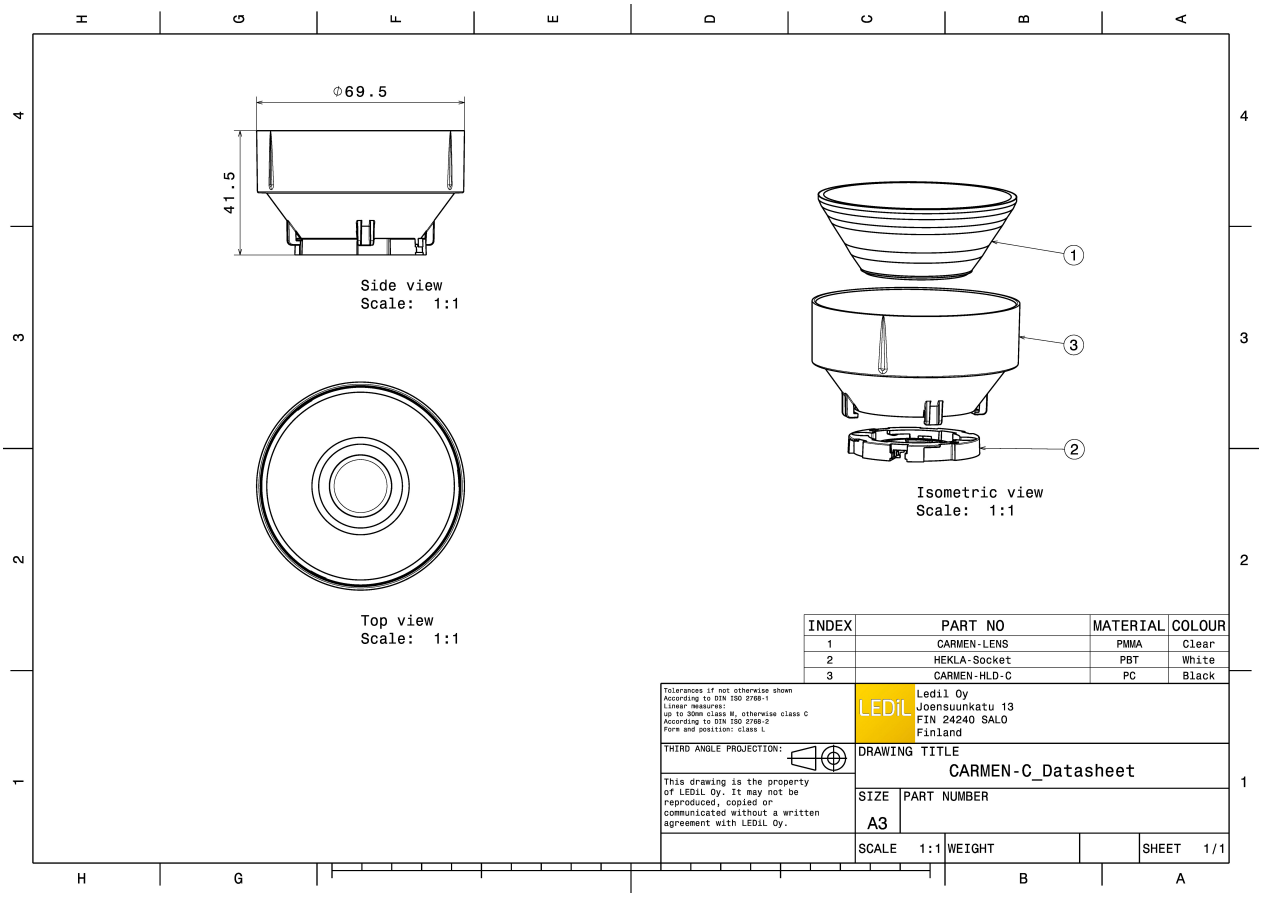

INDEX	PART NO	MATERIAL	COLOUR
1	CARMEN-LENS	PMMA	Clear
2	HEKLA-Socket	PBT	White
3	CARMEN-HLD-C	PC	Black

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

THIRD ANGLE PROJECTION:

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Ledil Oy
Joensuunkatu 13
FIN 24240 SALO
Finland

DRAWING TITLE
CARMEN-C_Datasheet

SIZE A3 | PART NUMBER

SCALE 1:1 | WEIGHT | SHEET 1/1

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

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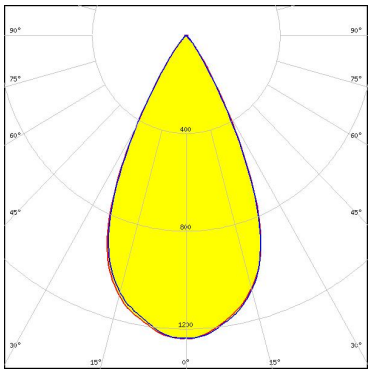
OPTICAL RESULTS (MEASURED):

bridgelux

LED	V4 HD Gen 7
FWHM / FWTM	52.0° / 72.0°
Efficiency	85 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F15253_HEKLA-SOCKET-A

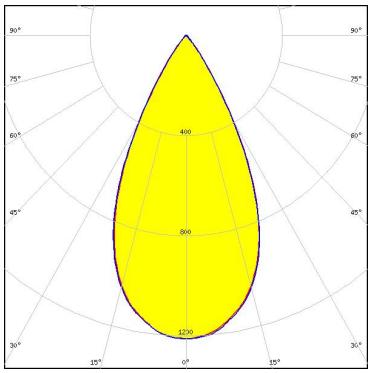


Light distribution files

bridgelux

LED	V6 HD Gen 7
FWHM / FWTM	52.0° / 73.0°
Efficiency	83 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F15255_HEKLA-SOCKET-C

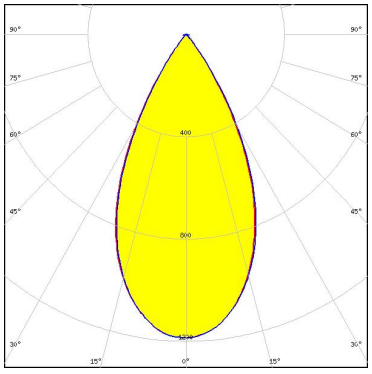


Light distribution files

bridgelux

LED	V9 HD Gen7
FWHM / FWTM	52.0° / 74.0°
Efficiency	81 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F15859_HEKLA-SOCKET-I



Light distribution files

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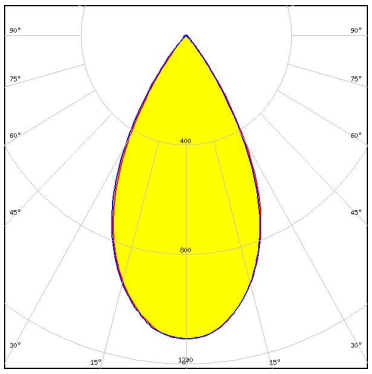
OPTICAL RESULTS (MEASURED):

bridgelux

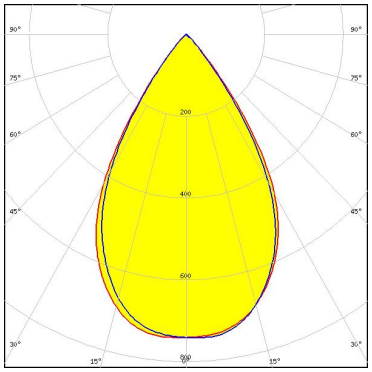
LED	VERO10
FWHM / FWTM	55.0° / 78.0°
Efficiency	83 %
Peak intensity	6.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

bridgelux

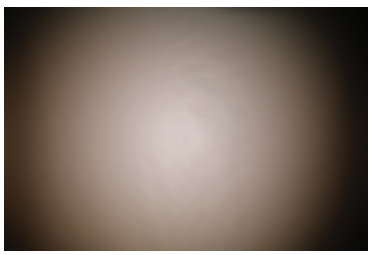
LED	Vesta DTW 13mm (21W)
FWHM / FWTM	64.0° / 84.0°
Efficiency	70 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour/type	Tunable White
Required components:	
C16142_HEKLA-SOCKET-K	
Bender Wirth: 491 Typ L8	

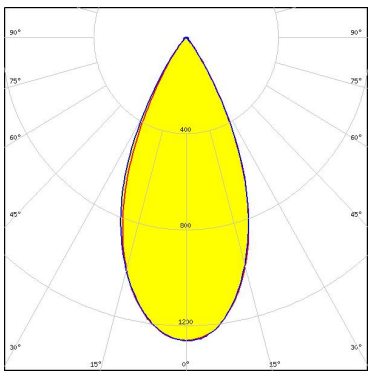


Light distribution files

bridgelux

LED	Vesta DTW 9mm (4W/6W/12W)
FWHM / FWTM	48.0° / 71.0°
Efficiency	76 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C16142_HEKLA-SOCKET-K	
Bender Wirth: 490 Typ L8	





Light distribution files

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OPTICAL RESULTS (MEASURED):

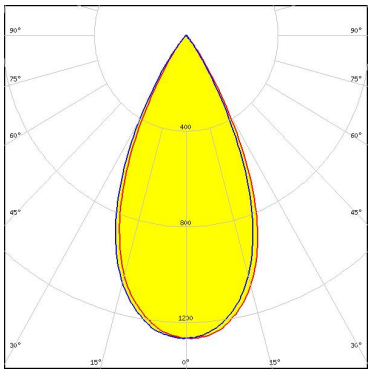
bridgelux

LED	Vesta TW 6mm DP
FWHM / FWTM	50.0° / 72.0°
Efficiency	81 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

C16142_HEKLA-SOCKET-K

Bender Wirth: 504 Typ L8



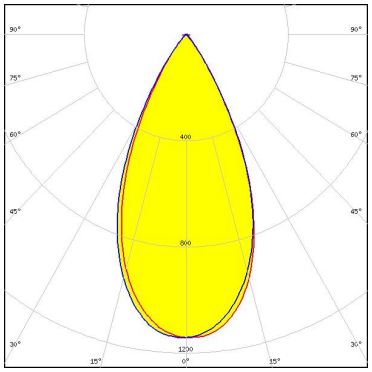
Light distribution files

bridgelux

LED	Vesta TW 9mm (12W) CSP
FWHM / FWTM	50.0° / 73.0°
Efficiency	75 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

C16142_HEKLA-SOCKET-K



Light distribution files

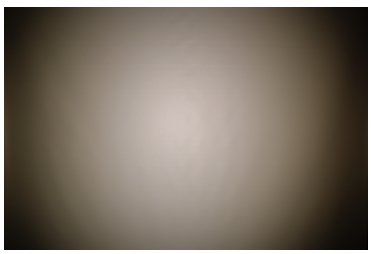
bridgelux

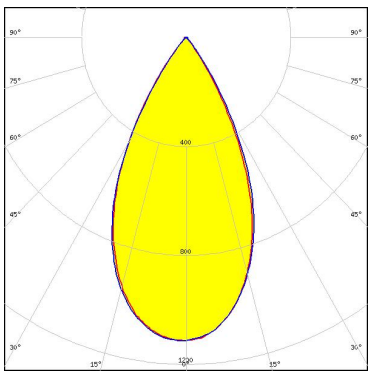
LED	Vesta TW 9mm (9W) DP
FWHM / FWTM	52.0° / 75.0°
Efficiency	77 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

C16142_HEKLA-SOCKET-K

Bender Wirth: 489 Typ L8





Light distribution files

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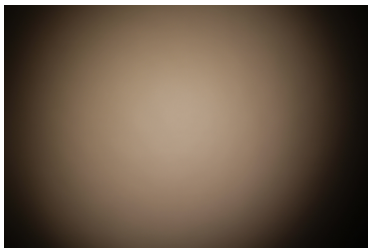
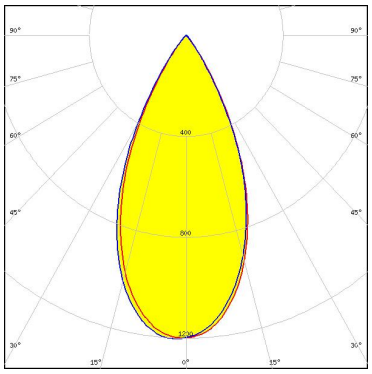
OPTICAL RESULTS (MEASURED):

CITIZEN

LED	CLC020 Series (Dim-To-Warm)
FWHM / FWTM	48.0° / 72.0°
Efficiency	75 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C16142_HEKLA-SOCKET-K	

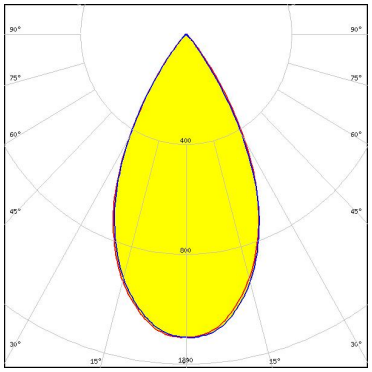




Light distribution files

CITIZEN

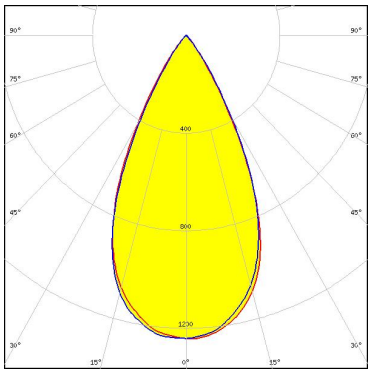
LED	CLL02x/CLU02x (LES10)
FWHM / FWTM	54.0° / 78.0°
Efficiency	82 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	



Light distribution files

CITIZEN

LED	CLU700/701/702/703
FWHM / FWTM	52.0° / 74.0°
Efficiency	85 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	



Light distribution files

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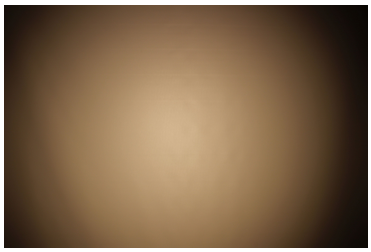
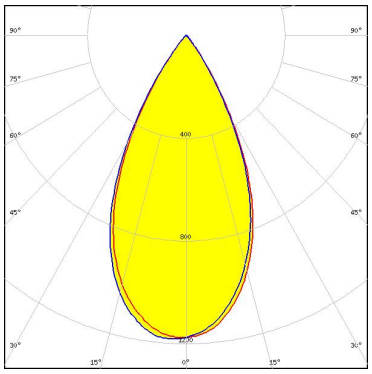
OPTICAL RESULTS (MEASURED):

CITIZEN

LED	CLU710/711
FWHM / FWTM	52.0° / 75.0°
Efficiency	81 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F15859_HEKLA-SOCKET-I



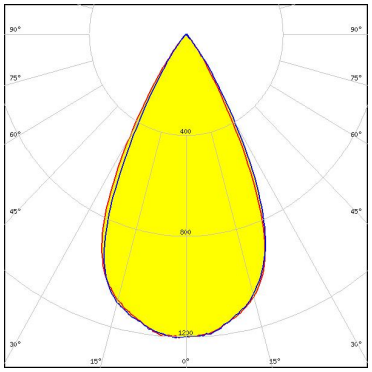


Light distribution files

CITIZEN

LED	CLU7A2/7A3
FWHM / FWTM	54.0° / 73.0°
Efficiency	86 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F15255_HEKLA-SOCKET-C

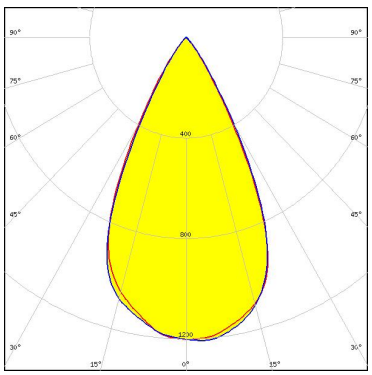


Light distribution files

CITIZEN

LED	CLU7B2
FWHM / FWTM	53.0° / 73.0°
Efficiency	86 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:



Light distribution files

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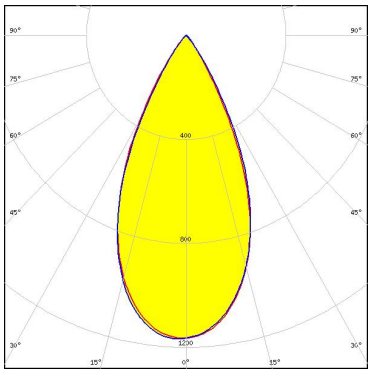
OPTICAL RESULTS (MEASURED):

CITIZEN

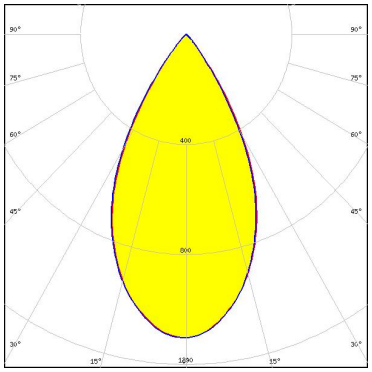
LED	LCN-C01B (Tunable White)
FWHM / FWTM	49.0° / 72.0°
Efficiency	74 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C16142_HEKLA-SOCKET-K	



Light distribution files

CREE LEDs

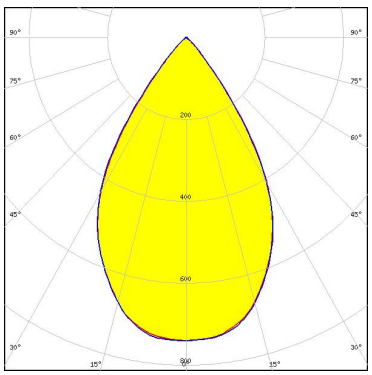
LED	CMA1516
FWHM / FWTM	55.0° / 78.0°
Efficiency	82 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15256_HEKLA-SOCKET-D	



Light distribution files

LUMILEDS

LED	LUXEON CX Plus CoB L08 (Gen2)
FWHM / FWTM	64.0° / 85.0°
Efficiency	71 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
Bender Wirth: 637a Hekla	



Light distribution files

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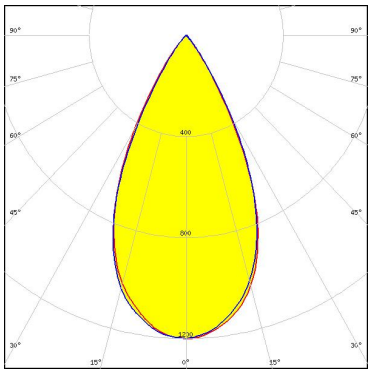
OPTICAL RESULTS (MEASURED):

LUMILEDS

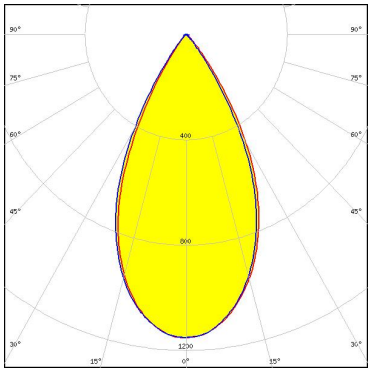
LED	LUXEON CoB 1202HD
FWHM / FWTM	52.0° / 74.0°
Efficiency	82 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15848_HEKLA-SOCKET-G	



Light distribution files

LUMILEDS

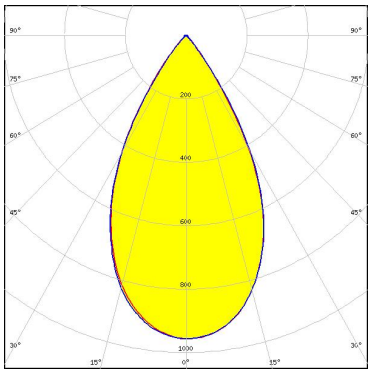
LED	LUXEON CoB 1204HD
FWHM / FWTM	53.0° / 75.0°
Efficiency	81 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15858_HEKLA-SOCKET-H	



Light distribution files

LUMILEDS

LED	LUXEON CoB 1205HD
FWHM / FWTM	56.0° / 79.0°
Efficiency	76 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15858_HEKLA-SOCKET-H	



Light distribution files

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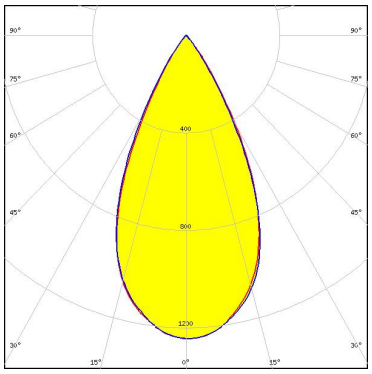
OPTICAL RESULTS (MEASURED):

LUMILEDS

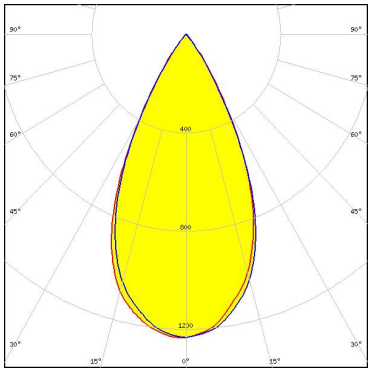
LED	LUXEON CX Plus CoB - HD S01H4
FWHM / FWTM	51.0° / 73.0°
Efficiency	82 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
Bender Wirth: 634c Hekla	



Light distribution files

LUMILEDS

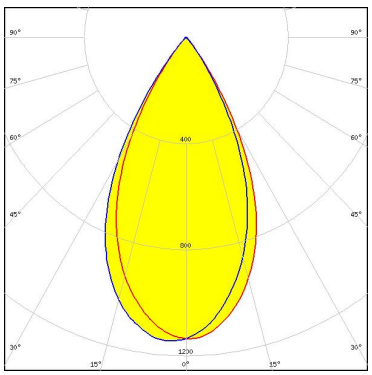
LED	LUXEON CX Plus CoB - HD S02H6
FWHM / FWTM	51.0° / 73.0°
Efficiency	81 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
Bender Wirth: 634c Hekla	



Light distribution files

LUMILEDS

LED	LUXEON CX Plus CoB - HD S04H9
FWHM / FWTM	53.0° / 76.0°
Efficiency	81 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
Bender Wirth: 634c Hekla	



Light distribution files

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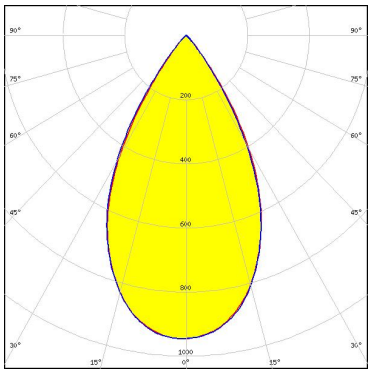
OPTICAL RESULTS (MEASURED):

LUMILEDS

LED	LUXEON CX Plus CoB L04 / L05 (Gen2)
FWHM / FWTM	57.0° / 80.0°
Efficiency	76 %
Peak intensity	0.9 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
Bender Wirth: 637a Hekla

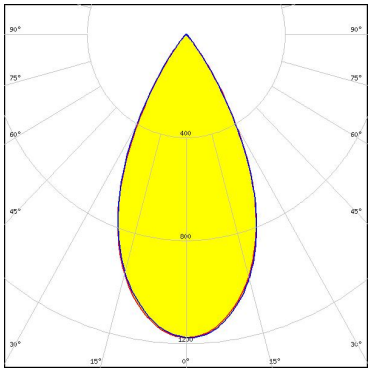


Light distribution files

LUMILEDS

LED	LUXEON CX Plus CoB M02 / M03 (Gen2)
FWHM / FWTM	52.0° / 75.0°
Efficiency	80 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
Bender Wirth: 641a Hekla

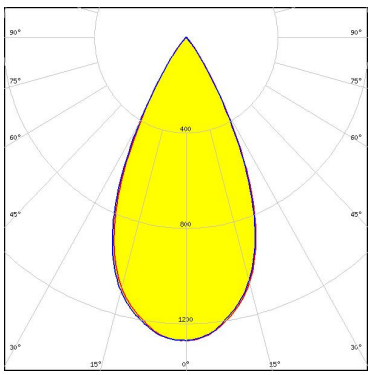


Light distribution files

LUMILEDS

LED	LUXEON CX Plus CoB S01 (Gen2)
FWHM / FWTM	51.0° / 72.0°
Efficiency	83 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
Bender Wirth: 634c Hekla



Light distribution files

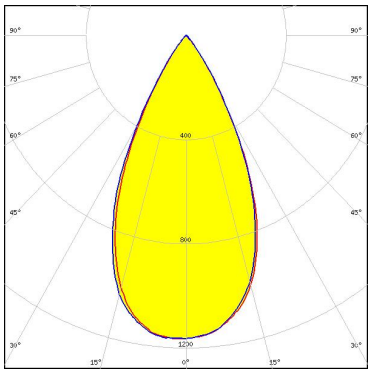
LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.

OPTICAL RESULTS (MEASURED):

LUMINUS

LED	CDM-6 (Dim-To-Warm)
FWHM / FWTM	51.0° / 73.0°
Efficiency	78 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White

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

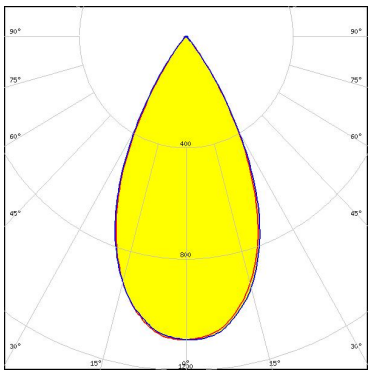


Light distribution files

LUMINUS

LED	CDM-9 (Dim-To-Warm)
FWHM / FWTM	53.0° / 75.0°
Efficiency	77 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White

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

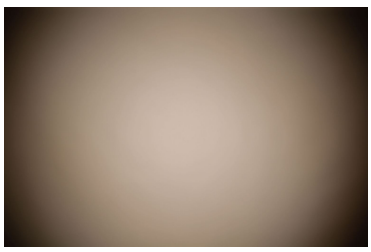


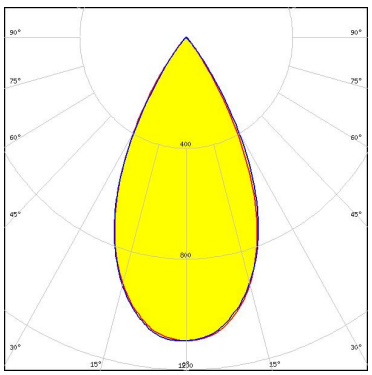
Light distribution files

LUMINUS

LED	CTM-9 (Tunable White)
FWHM / FWTM	53.0° / 75.0°
Efficiency	77 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
C16142_HEKLA-SOCKET-K
Bender Wirth: 495 Typ L8





Light distribution files

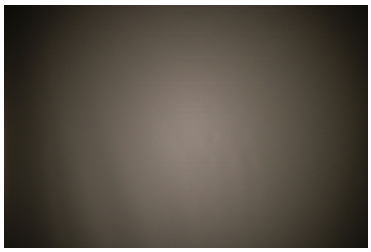
LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.

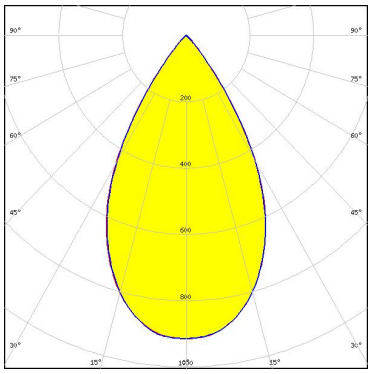
OPTICAL RESULTS (MEASURED):

LUMINUS

LED	CxM-11 (19x19)
FWHM / FWTM	58.0° / 81.0°
Efficiency	76 %
Peak intensity	0.9 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F15859_HEKLA-SOCKET-I



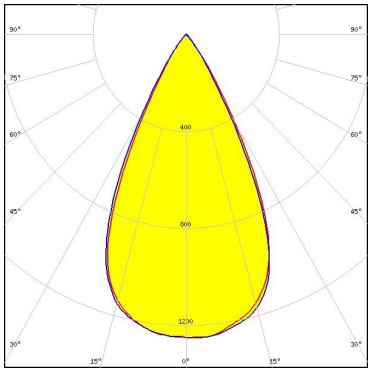


Light distribution files

LUMINUS

LED	CXM-3
FWHM / FWTM	53.0° / 72.0°
Efficiency	88 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F15255_HEKLA-SOCKET-C

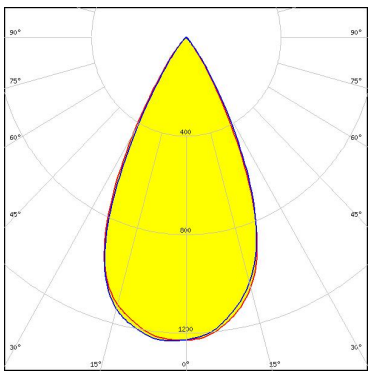


Light distribution files

LUMINUS

LED	CXM-4
FWHM / FWTM	52.0° / 73.0°
Efficiency	85 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F15255_HEKLA-SOCKET-C



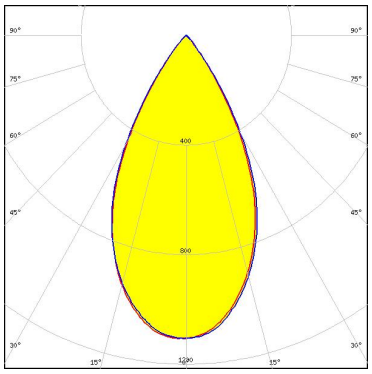
Light distribution files

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

OPTICAL RESULTS (MEASURED):

LUMINUS

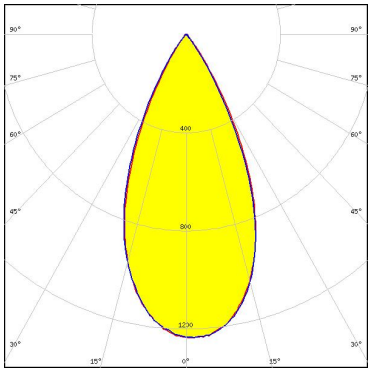
LED	CxM-9 (13.5x13.5)
FWHM / FWTM	53.0° / 77.0°
Efficiency	81 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	



Light distribution files

NICHIA

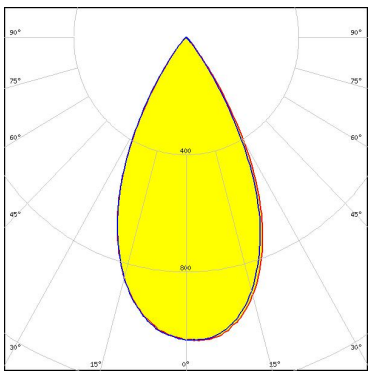
LED	NJCWL024Z-V1MT: COB L-Type Tunable White
FWHM / FWTM	48.0° / 71.0°
Efficiency	76 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C16142_HEKLA-SOCKET-K	
Bender Wirth: 497 Typ L8	



Light distribution files

NICHIA

LED	NVCWJ024Z-V1MT: COB J-Type Tunable White
FWHM / FWTM	53.0° / 76.0°
Efficiency	74 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C16142_HEKLA-SOCKET-K	
Bender Wirth: 498 Typ L8	



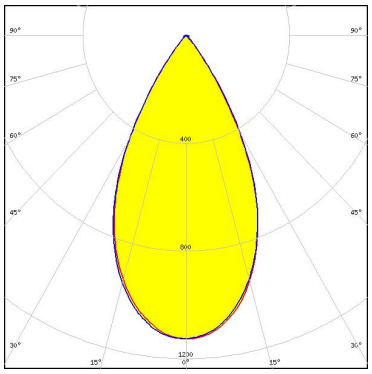
Light distribution files

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

OPTICAL RESULTS (MEASURED):

PHILIPS

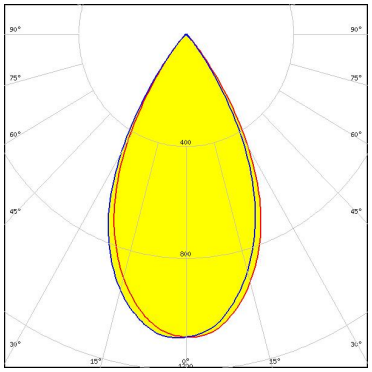
LED	Fortimo SLM L09 CoB
FWHM / FWTM	54.0° / 76.0°
Efficiency	81 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15858_HEKLA-SOCKET-H	



Light distribution files

SAMSUNG

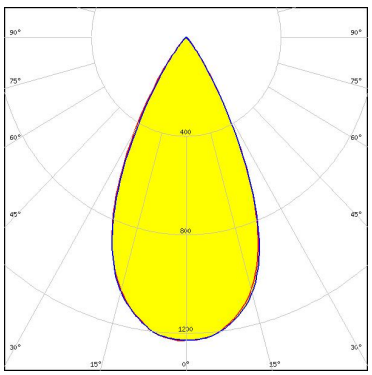
LED	LC003D / LC006D / LC009D / LC013D
FWHM / FWTM	55.0° / 78.0°
Efficiency	82 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	



Light distribution files

SAMSUNG

LED	LC010C G2
FWHM / FWTM	52.0° / 74.0°
Efficiency	84 %
Peak intensity	1.2 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.

OPTICAL RESULTS (MEASURED):

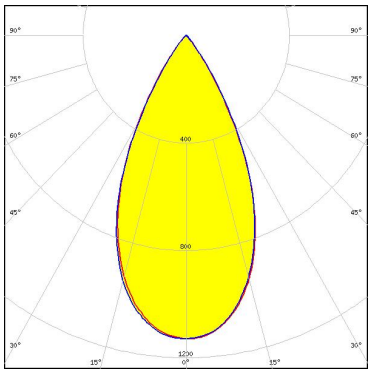
SAMSUNG

LED	LC010T (Tunable White)
FWHM / FWTM	51.0° / 74.0°
Efficiency	76 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	Tunable White

Required components:

C16142_HEKLA-SOCKET-K

Bender Wirth: 501 Typ L8



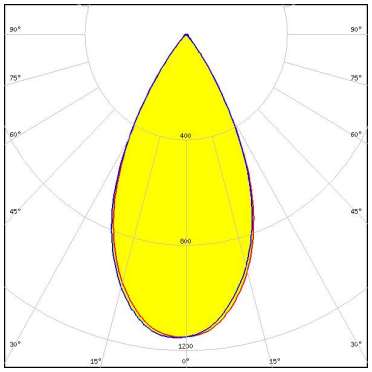
Light distribution files

SAMSUNG

LED	LC020C G2
FWHM / FWTM	52.0° / 75.0°
Efficiency	80 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

F15859_HEKLA-SOCKET-I



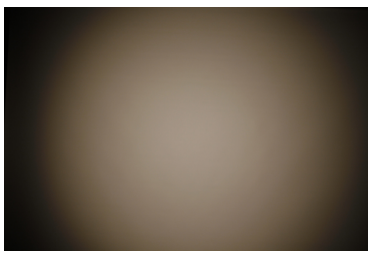
Light distribution files

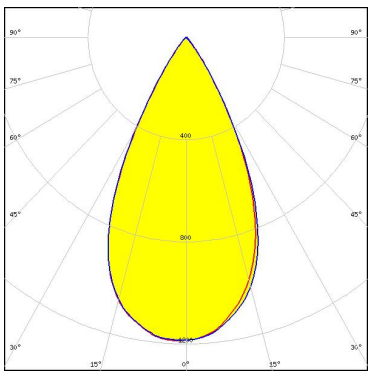
SEOUL SEMICONDUCTOR

LED	MJT COB LES 6
FWHM / FWTM	52.0° / 73.0°
Efficiency	82 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

F15255_HEKLA-SOCKET-C





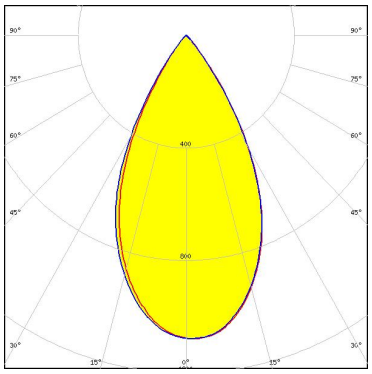
Light distribution files

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

OPTICAL RESULTS (MEASURED):

SEOUL SEMICONDUCTOR

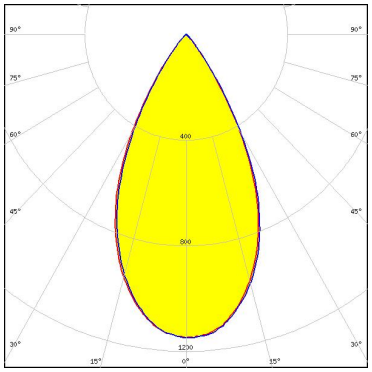
LED	MJT COB LES 9.8
FWHM / FWTM	54.0° / 77.0°
Efficiency	79 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	



Light distribution files

TRIDONIC

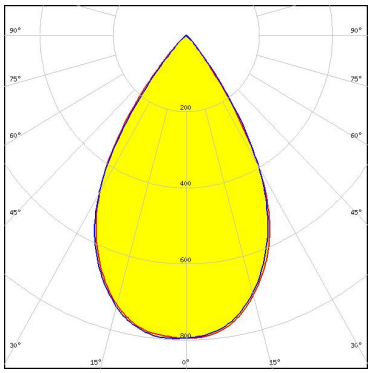
LED	SLE G7 LES09
FWHM / FWTM	53.0° / 77.0°
Efficiency	83 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15255_HEKLA-SOCKET-C	



Light distribution files

TRIDONIC

LED	SLE G7 LES13
FWHM / FWTM	63.0° / 83.0°
Efficiency	74 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15859_HEKLA-SOCKET-I	



Light distribution files

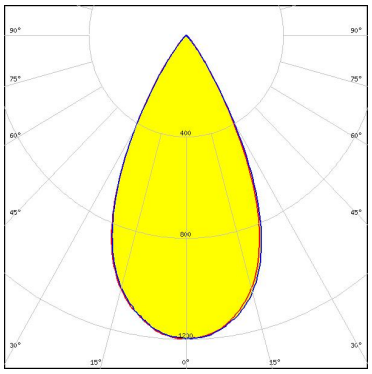
LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.

OPTICAL RESULTS (MEASURED):

XICATO

LED	XOB 6 mm
FWHM / FWTM	53.0° / 74.0°
Efficiency	83 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F15255_HEKLA-SOCKET-C

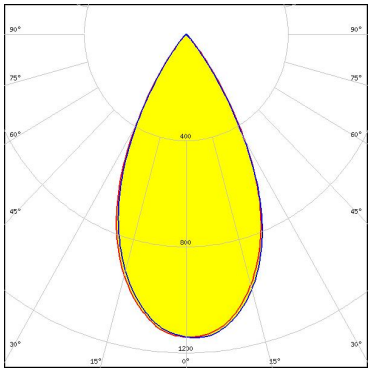


Light distribution files

XICATO

LED	XOB 9.8 mm
FWHM / FWTM	53.0° / 77.0°
Efficiency	83 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F15255_HEKLA-SOCKET-C

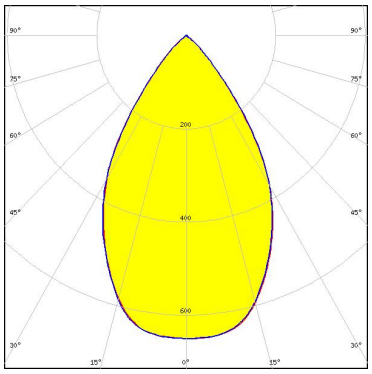


Light distribution files

XICATO

LED	XTM - 19mm LES
FWHM / FWTM	64.0° / 91.0°
Efficiency	66 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
C16058_XTM-ADAPTER-50-C



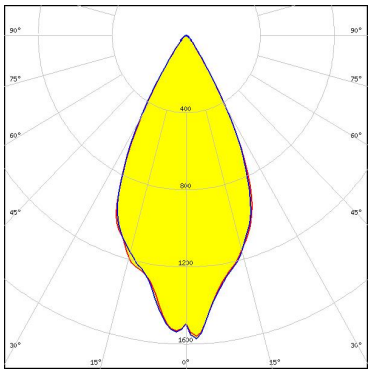
Light distribution files

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

OPTICAL RESULTS (SIMULATED):

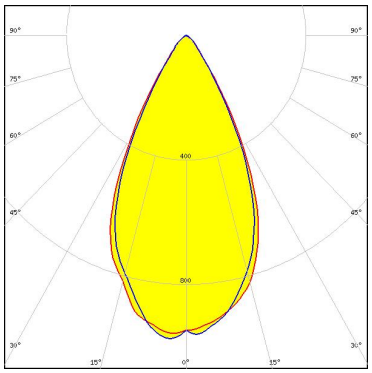
bridgelux

LED	VERO10
FWHM / FWTM	50.7° / 72.0°
Efficiency	0 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15616_HEKLA-SOCKET-F	



bridgelux

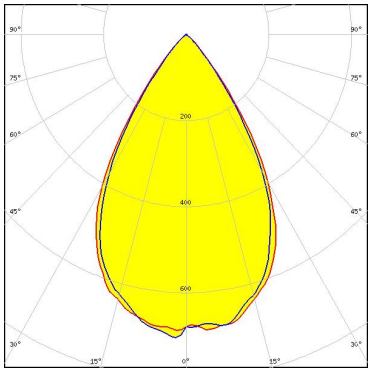
LED	VERO13
FWHM / FWTM	52.0° / 76.0°
Efficiency	72 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
C16142_HEKLA-SOCKET-K	



Light distribution files

CITIZEN

LED	CLL03x/CLU03x
FWHM / FWTM	63.0° / 85.0°
Efficiency	66 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15859_HEKLA-SOCKET-I	



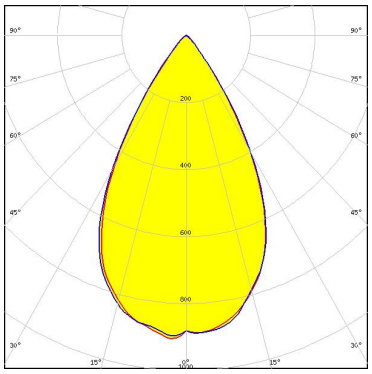
Light distribution files

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

OPTICAL RESULTS (SIMULATED):

CREE LEDs

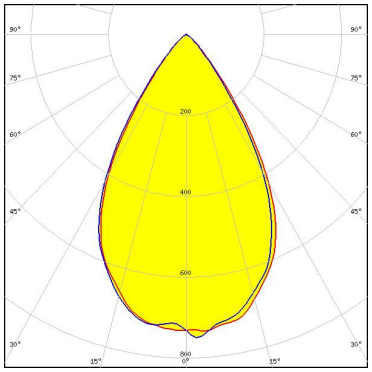
LED	CMA1825
FWHM / FWTM	59.0° / 80.0°
Efficiency	77 %
Peak intensity	0.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

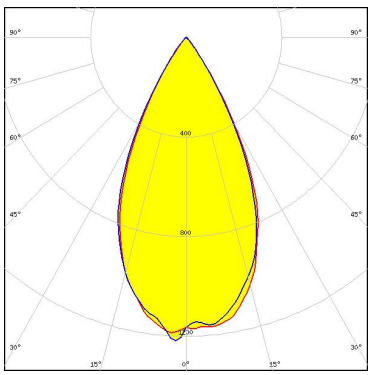
LED	CMA1840
FWHM / FWTM	62.0° / 87.0°
Efficiency	72 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

LED	CMT14xx
FWHM / FWTM	52.0° / 73.0°
Efficiency	80 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F17435_HEKLA-G2-C	



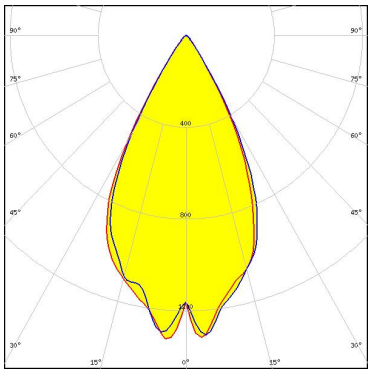
Light distribution files

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

OPTICAL RESULTS (SIMULATED):

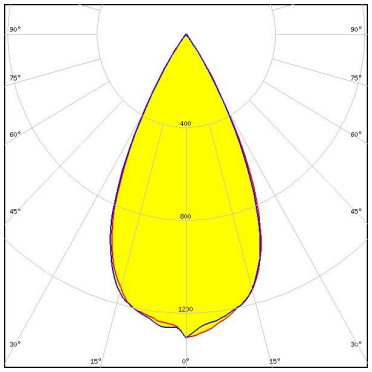
CREE LEDs

LED	CXA/B 15xx
FWHM / FWTM	53.5° / 72.5°
Efficiency	0 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15256_HEKLA-SOCKET-D	



LUMINUS

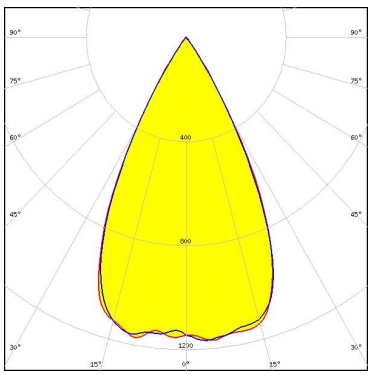
LED	CxM-6 (13.5x13.5)
FWHM / FWTM	52.0° / 69.0°
Efficiency	83 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F17435_HEKLA-G2-C	



Light distribution files

NICHIA

LED	COB T-Type
FWHM / FWTM	54.0° / 69.0°
Efficiency	84 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F15848_HEKLA-SOCKET-G	



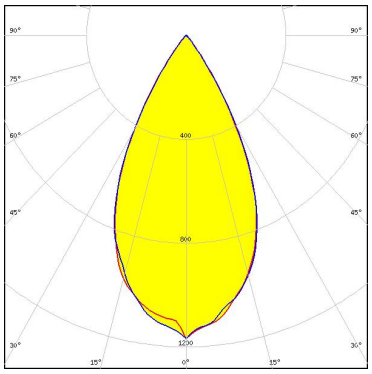
Light distribution files

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

OPTICAL RESULTS (SIMULATED):

SAMSUNG

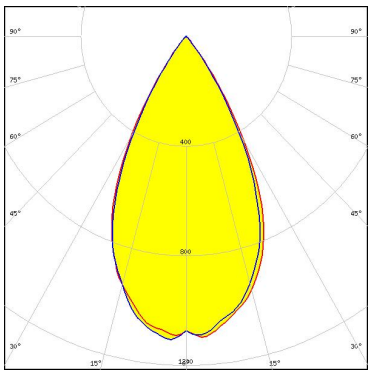
LED	LC003D / LC006D / LC009D / LC013D
FWHM / FWTM	52.0° / 74.0°
Efficiency	80 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F17435_HEKLA-G2-C	



Light distribution files

SAMSUNG

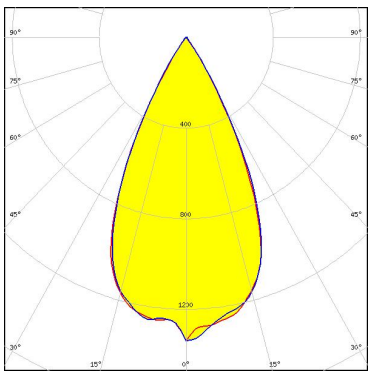
LED	LC003D / LC006D / LC009D / LC013D
FWHM / FWTM	55.0° / 75.0°
Efficiency	80 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F17435_HEKLA-G2-C	



Light distribution files

SAMSUNG

LED	LC010C
FWHM / FWTM	51.0° / 68.0°
Efficiency	85 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	
F17435_HEKLA-G2-C	



Light distribution files

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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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