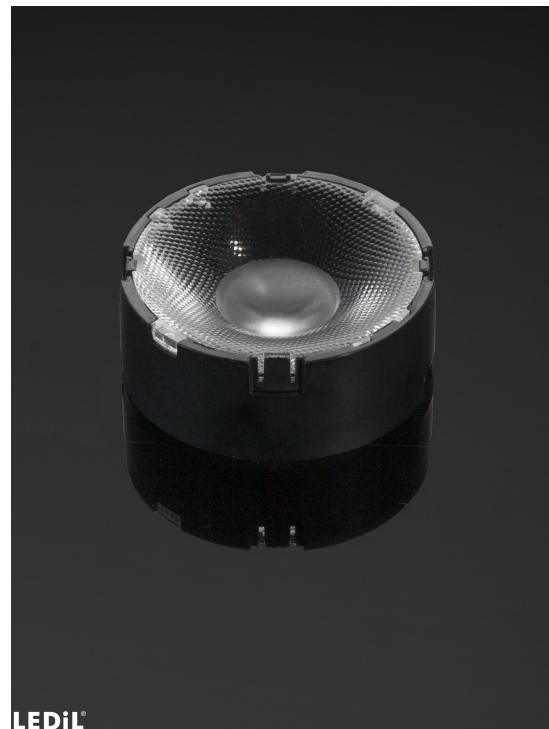


WINNIE-M-C

~35° spot beam with holder C compatible with LEDiL HEKLA

SPECIFICATION:

Dimensions	Ø 50.0
Height	19.5 mm
Fastening	tape
ROHS compliant	yes ⓘ



MATERIALS:

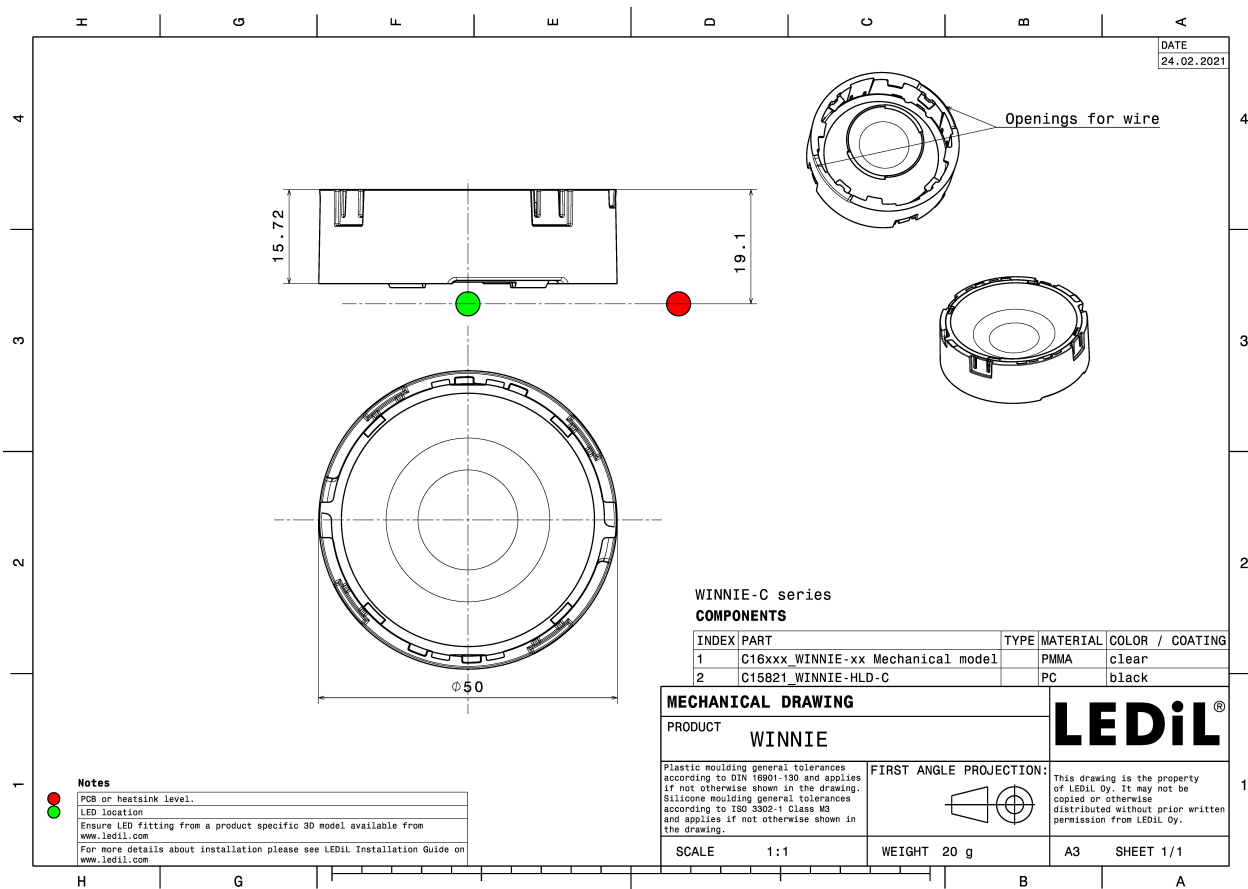
Component	Type	Material	Colour	Finish	Length (mm)
WINNIE-HLD-C	Holder	PC	black		
WINNIE-M	Single lens	PMMA	clear		

ORDERING INFORMATION:

Quantities for one set:

Single lens	1
Holder	1

Component		Qty in box	MOQ	MPQ	Box weight (kg)
C14233_WINNIE-M » Box size: 480 x 280 x 300 mm	Single lens	364	84	28	6.5
C15821_WINNIE-HLD-C » Box size: 400 x 300 x 300 mm	Holder	420		28	4.1

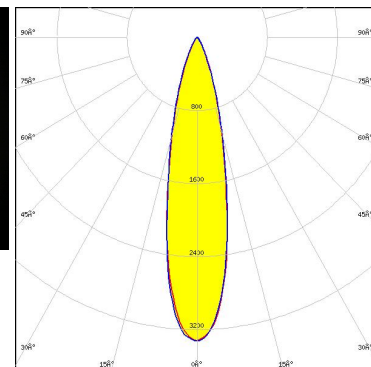
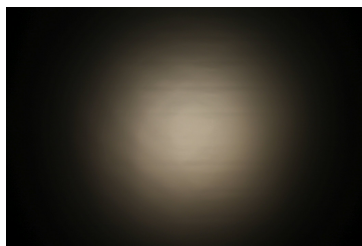


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):



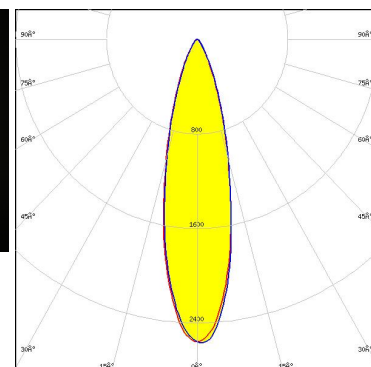
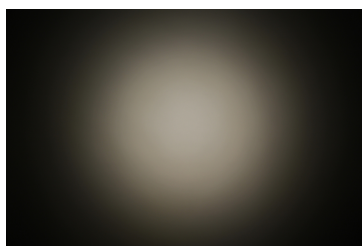
LED V4 HD Gen 7
FWHM / FWTM 23.0° / 48.0°
Efficiency 83 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15253_HEKLA-SOCKET-A



Light distribution files



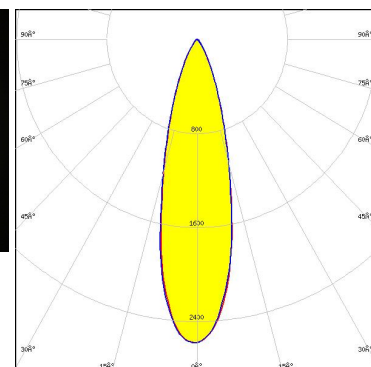
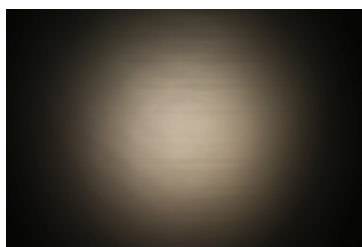
LED V6 Gen6
FWHM / FWTM 26.0° / 55.0°
Efficiency 80 %
Peak intensity 2.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15253_HEKLA-SOCKET-A



Light distribution files



LED V6 HD Gen 7
FWHM / FWTM 27.0° / 56.0°
Efficiency 83 %
Peak intensity 2.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C

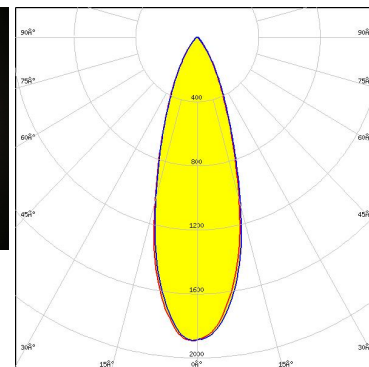
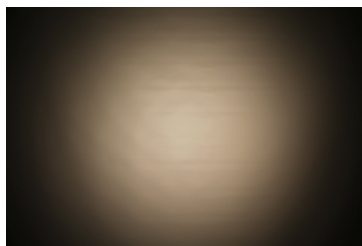


Light distribution files

OPTICAL RESULTS (MEASURED):



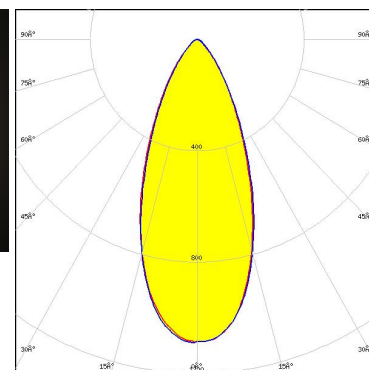
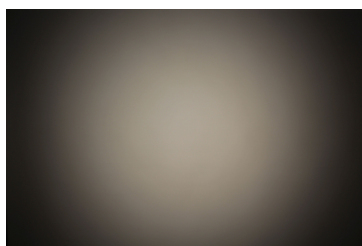
LED V9 HD Gen7
FWHM / FWTM 33.0° / 65.0°
Efficiency 82 %
Peak intensity 1.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15859_HEKLA-SOCKET-I



Light distribution files



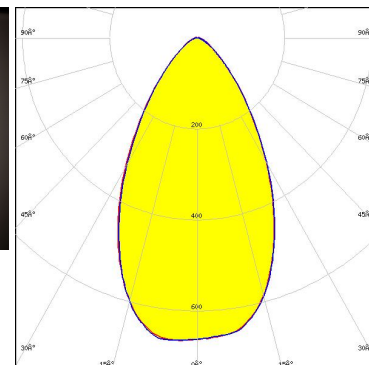
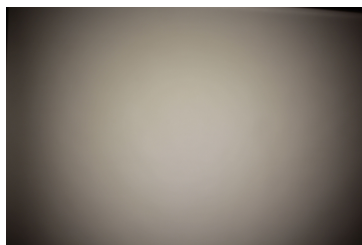
LED VERO13
FWHM / FWTM 43.0° / 82.0°
Efficiency 75 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16142_HEKLA-SOCKET-K



Light distribution files



LED VERO18
FWHM / FWTM 59.0° / 101.0°
Efficiency 73 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16142_HEKLA-SOCKET-K



Light distribution files

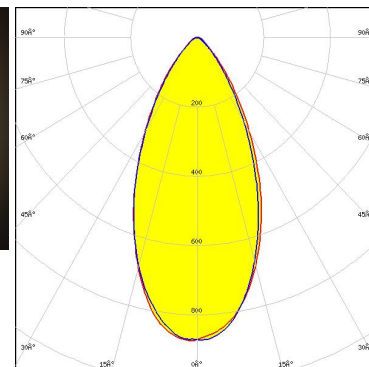
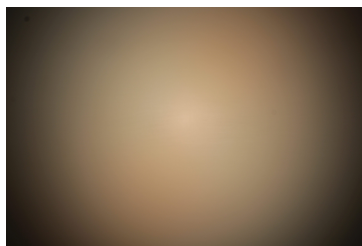
OPTICAL RESULTS (MEASURED):



LED Vesta DTW 13mm (21W)
FWHM / FWTM 49.0° / 89.0°
Efficiency 72 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type Tunable White

Required components:

C16142_HEKLA-SOCKET-K
Bender Wirth: 491 Typ L8



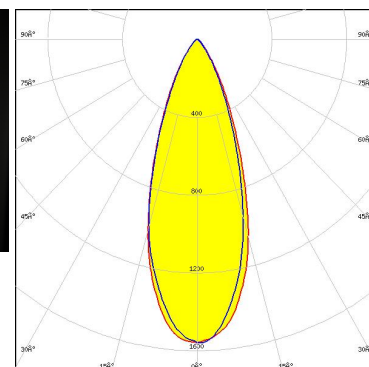
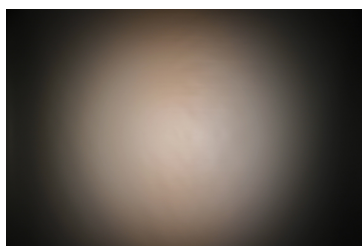
Light distribution files



LED Vesta DTW 9mm (4W/6W/12W)
FWHM / FWTM 37.0° / 68.0°
Efficiency 79 %
Peak intensity 1.6 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C16142_HEKLA-SOCKET-K
Bender Wirth: 490 Typ L8



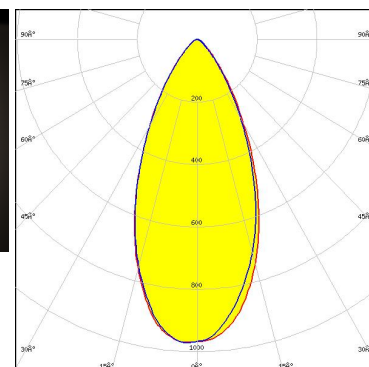
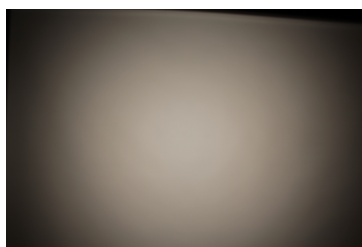
Light distribution files



LED Vesta TW 13mm (25W) CSP
FWHM / FWTM 47.0° / 85.0°
Efficiency 75 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

C16142_HEKLA-SOCKET-K
Bender Wirth: 492 Typ L8

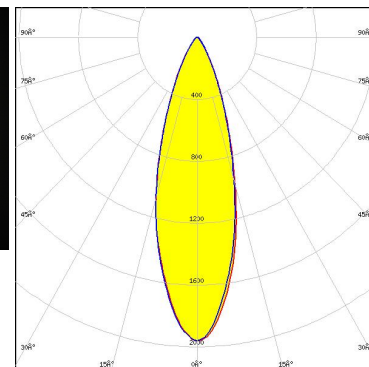
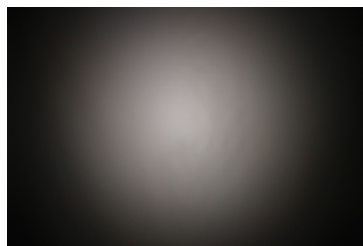


Light distribution files

OPTICAL RESULTS (MEASURED):



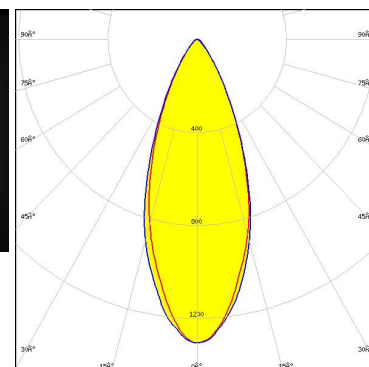
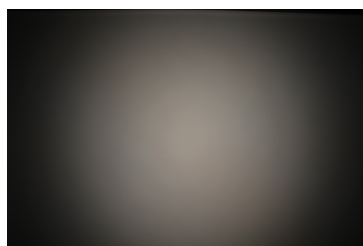
LED Vesta TW 6mm DP
FWHM / FWTM 31.0° / 61.0°
Efficiency 76 %
Peak intensity 2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16142_HEKLA-SOCKET-K
Bender Wirth: 504 Typ L8



Light distribution files



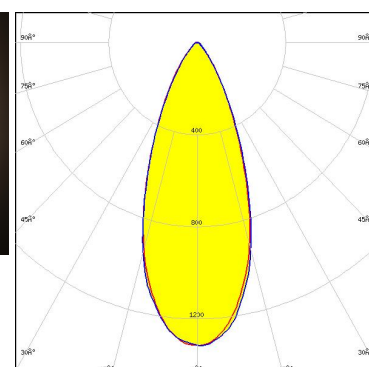
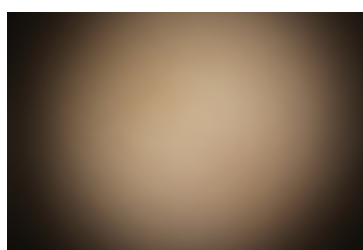
LED Vesta TW 9mm (12W) CSP
FWHM / FWTM 40.0° / 73.0°
Efficiency 75 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16142_HEKLA-SOCKET-K



Light distribution files

CITIZEN

LED CLC020 Series (Dim-To-Warm)
FWHM / FWTM 41.0° / 75.0°
Efficiency 76 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16142_HEKLA-SOCKET-K

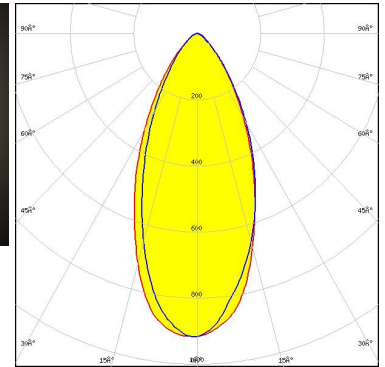
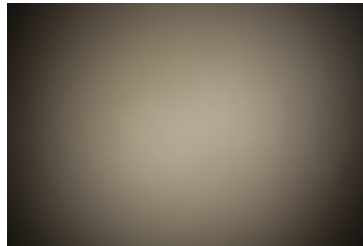


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

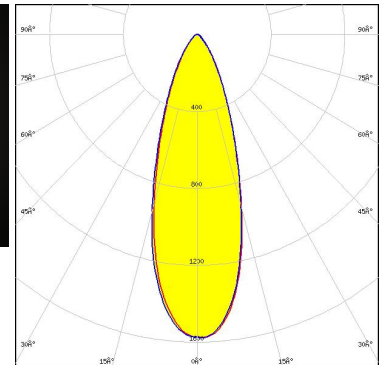
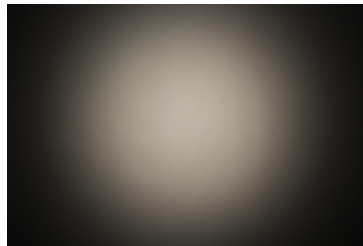
LED CLC030 Series (Dim-To-Warm)
 FWHM / FWTM 47.0° / 90.0°
 Efficiency 73 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16142_HEKLA-SOCKET-K



Light distribution files

CITIZEN

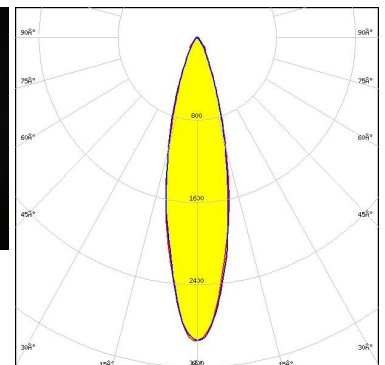
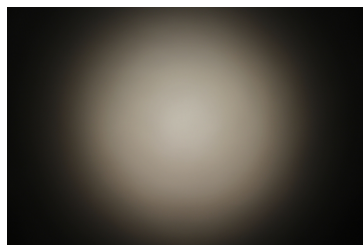
LED CLU02x (LES10)
 FWHM / FWTM 34.0° / 69.0°
 Efficiency 77 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files

CITIZEN

LED CLU7A2/7A3
 FWHM / FWTM 25.0° / 51.0°
 Efficiency 82 %
 Peak intensity 2.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C

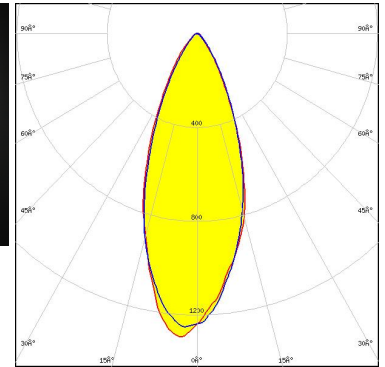
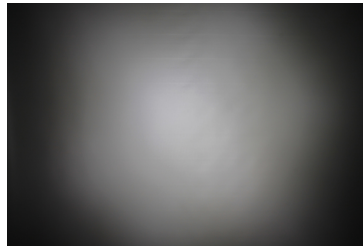


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

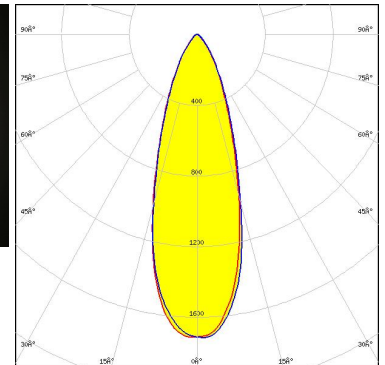
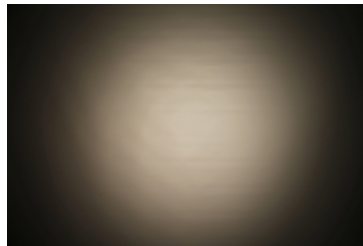
LED LCN-C01B (Tunable White)
 FWHM / FWTM 40.0° / 74.0°
 Efficiency 75 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 481 Typ L8



Light distribution files



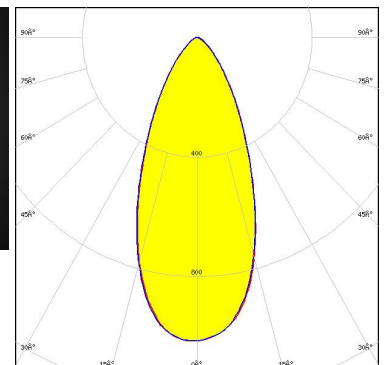
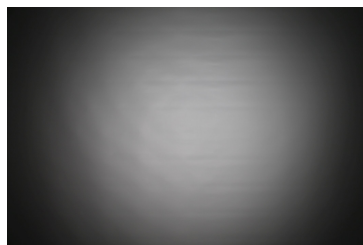
LED CMT14xx
 FWHM / FWTM 33.0° / 69.0°
 Efficiency 81 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files



LED CMT19xx
 FWHM / FWTM 45.0 + ° / 87.0°
 Efficiency 77 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15859_HEKLA-SOCKET-I

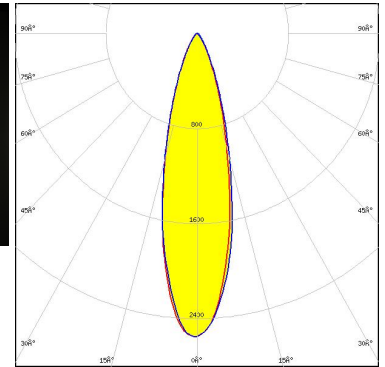
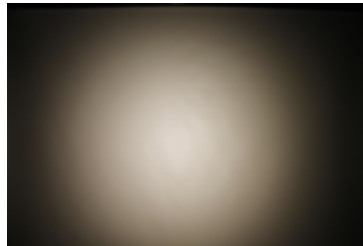


Light distribution files

OPTICAL RESULTS (MEASURED):



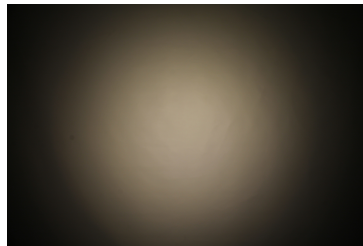
LED CXA/B 13xx
FWHM / FWTM 27.0° / 55.0°
Efficiency 81 %
Peak intensity 2.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15956_HEKLA-SOCKET-J



Light distribution files



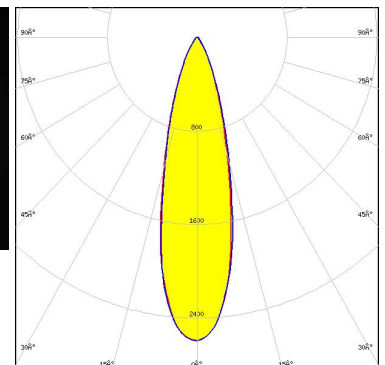
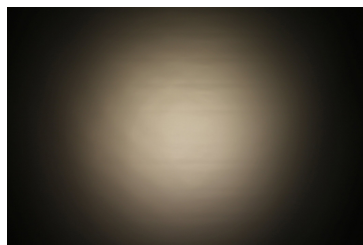
LED LUXEON CX Plus CoB L08 (Gen2)
FWHM / FWTM 46.0° / 87.0°
Efficiency 77 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
Bender Wirth: 637a Hekla



Light distribution files



LED LUXEON CoB 1202HD
FWHM / FWTM 27.0° / 55.0°
Efficiency 83 %
Peak intensity 2.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15848_HEKLA-SOCKET-G

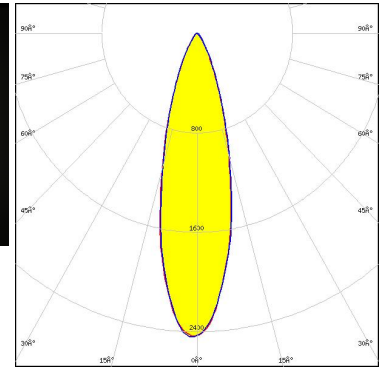
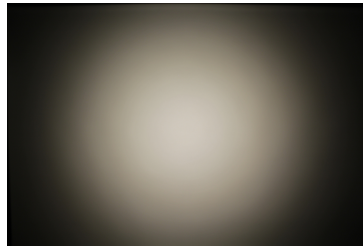


Light distribution files

OPTICAL RESULTS (MEASURED):



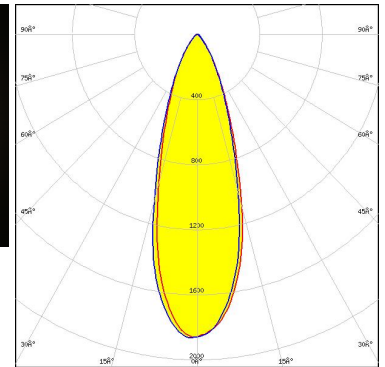
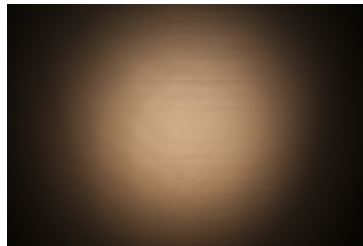
LED LUXEON CoB 1202s
FWHM / FWTM 27.0° / 57.0°
Efficiency 81 %
Peak intensity 2.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15848_HEKLA-SOCKET-G



Light distribution files



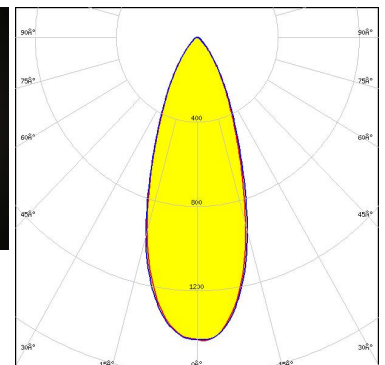
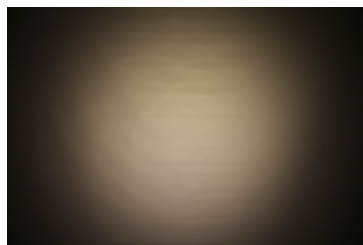
LED LUXEON CoB 1204HD
FWHM / FWTM 32.0° / 66.0°
Efficiency 83 %
Peak intensity 1.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15858_HEKLA-SOCKET-H



Light distribution files



LED LUXEON CoB 1205HD
FWHM / FWTM 38.0° / 75.0°
Efficiency 81 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15858_HEKLA-SOCKET-H

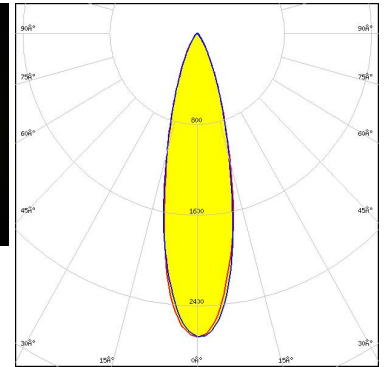
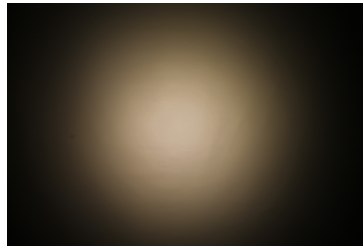


Light distribution files

OPTICAL RESULTS (MEASURED):



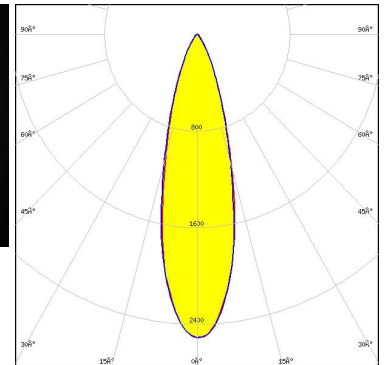
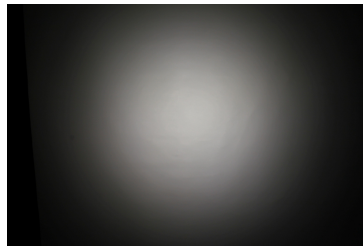
LED LUXEON CX Plus CoB - HD S01H4
 FWHM / FWTM 27.0° / 54.0°
 Efficiency 82 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 634c Lena



Light distribution files



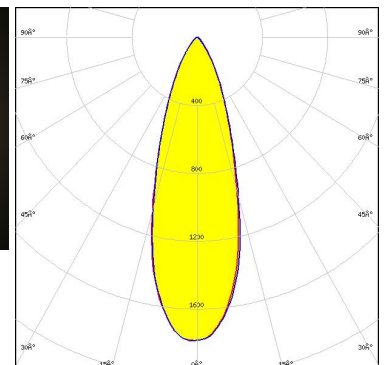
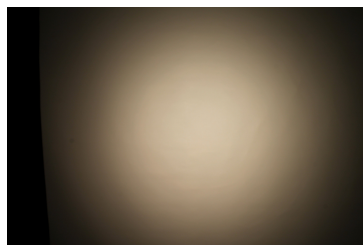
LED LUXEON CX Plus CoB - HD S02H6
 FWHM / FWTM 28.0° / 56.0°
 Efficiency 82 %
 Peak intensity 2.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 634c Hekla



Light distribution files



LED LUXEON CX Plus CoB - HD S04H9
 FWHM / FWTM 33.0° / 67.0°
 Efficiency 81 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 634c Hekla

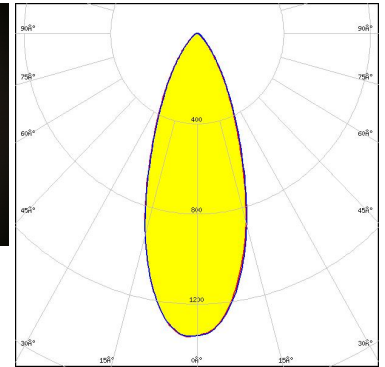
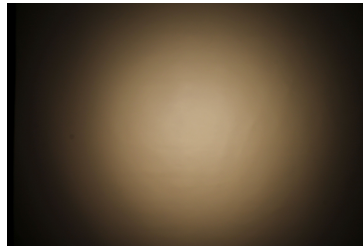


Light distribution files

OPTICAL RESULTS (MEASURED):



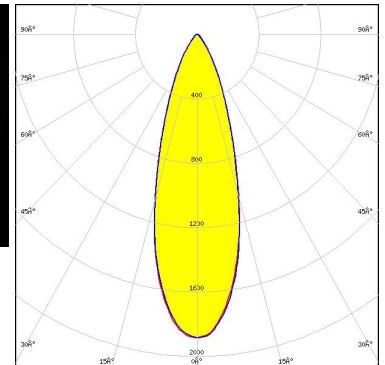
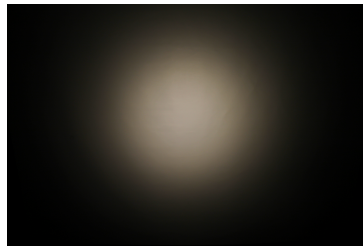
LED LUXEON CX Plus CoB L04 / L05 (Gen2)
 FWHM / FWTM 39.0° / 76.0°
 Efficiency 79 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 637a Hekla



Light distribution files



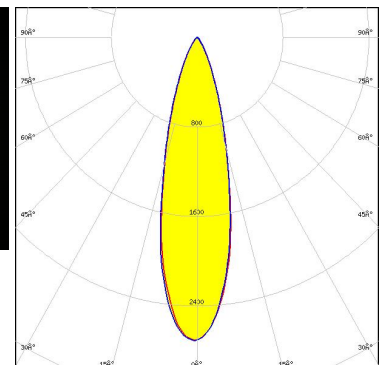
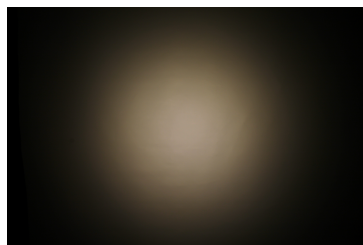
LED LUXEON CX Plus CoB M02 / M03 (Gen2)
 FWHM / FWTM 32.0° / 65.0°
 Efficiency 81 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 641a Hekla



Light distribution files



LED LUXEON CX Plus CoB S01 (Gen2)
 FWHM / FWTM 27.0° / 54.0°
 Efficiency 83 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 634c Hekla

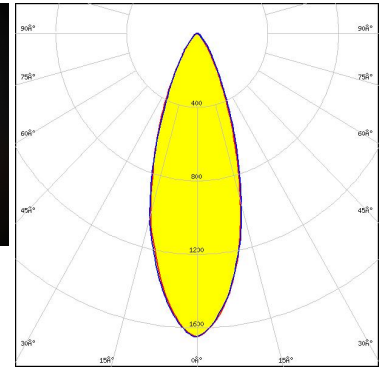
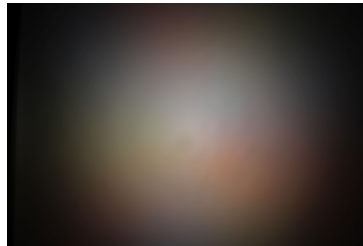


Light distribution files

OPTICAL RESULTS (MEASURED):



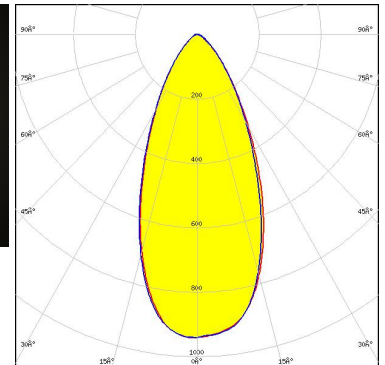
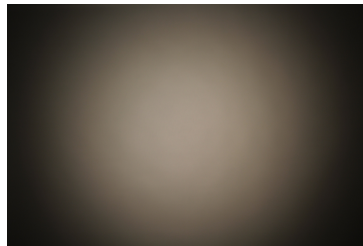
LED LUXEON Fusion 12-up (20x24)
 FWHM / FWTM 35.0° / 67.0°
 Efficiency 77 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour/type Tunable White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 442 Typ L8



Light distribution files



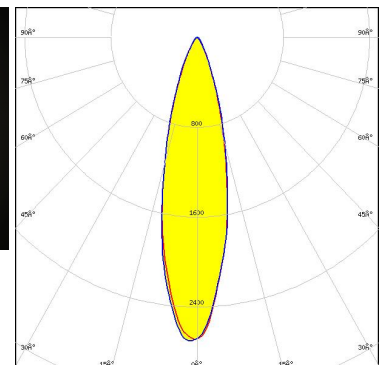
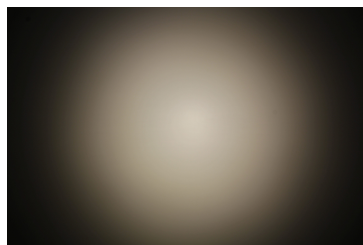
LED CxM-14 (19x19)
 FWHM / FWTM 47.0° / 89.0°
 Efficiency 75 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15859_HEKLA-SOCKET-I



Light distribution files



LED CXM-4
 FWHM / FWTM 26.0° / 53.0°
 Efficiency 79 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C

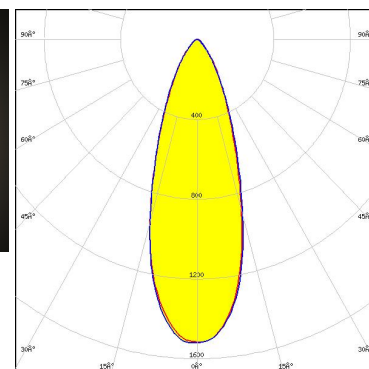
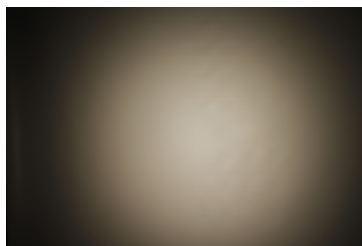


Light distribution files

OPTICAL RESULTS (MEASURED):



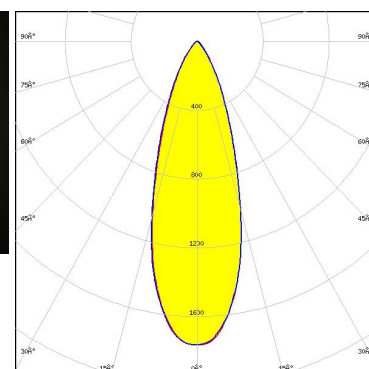
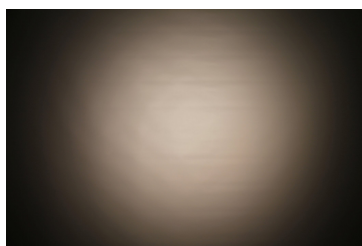
LED CxM-9 (13.5x13.5)
FWHM / FWTM 35.0° / 72.0°
Efficiency 78 %
Peak intensity 1.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files



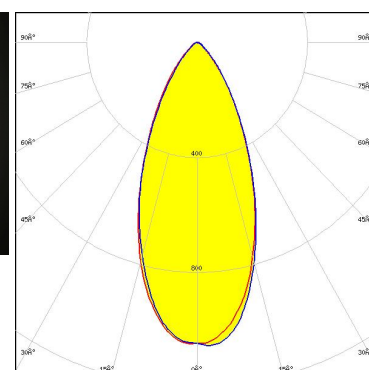
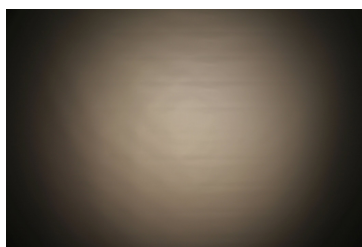
LED Fortimo SLM L09 CoB
FWHM / FWTM 34.0° / 67.0°
Efficiency 82 %
Peak intensity 1.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15858_HEKLA-SOCKET-H



Light distribution files



LED Fortimo SLM L13 CoB
FWHM / FWTM 45.0° / 84.0°
Efficiency 77 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16142_HEKLA-SOCKET-K
Bender Wirth: 432 Typ L8

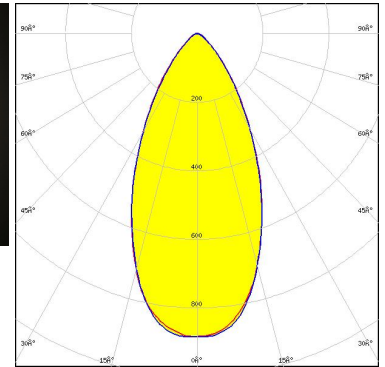
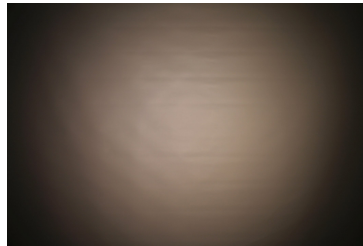


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

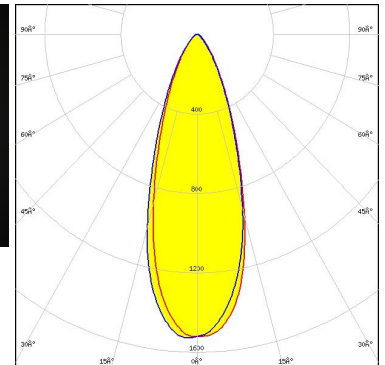
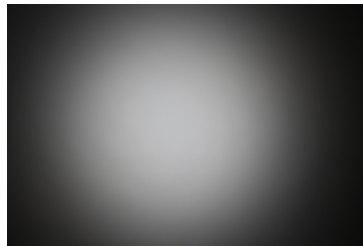
LED Fortimo SLM L15 CoB
 FWHM / FWTM 50.0° / 91.0°
 Efficiency 76 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 499 Typ L8



Light distribution files

SAMSUNG

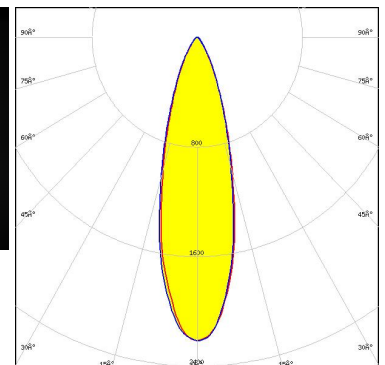
LED LC003D / LC006D / LC009D / LC013D
 FWHM / FWTM 35.0° / 71.0°
 Efficiency 79 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files

SAMSUNG

LED LC010C
 FWHM / FWTM 28.0° / 59.0°
 Efficiency 79 %
 Peak intensity 2.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15848_HEKLA-SOCKET-G

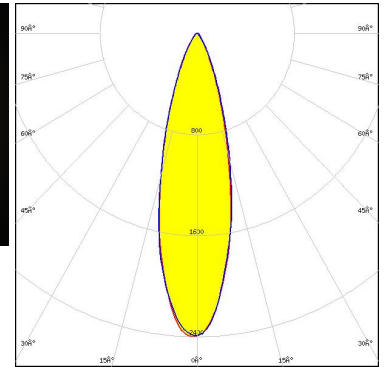
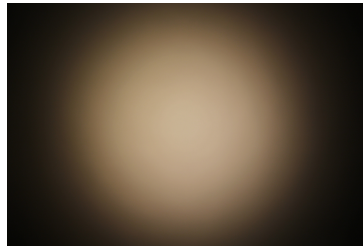


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

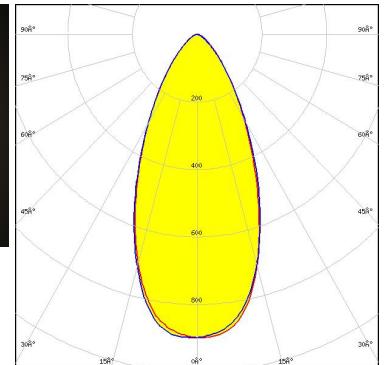
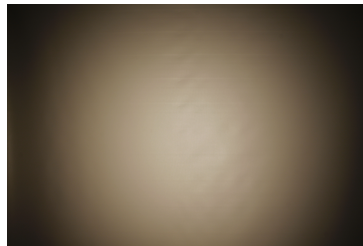
LED LC010C G2
FWHM / FWTM 28.0° / 56.0°
Efficiency 80 %
Peak intensity 2.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files

SAMSUNG

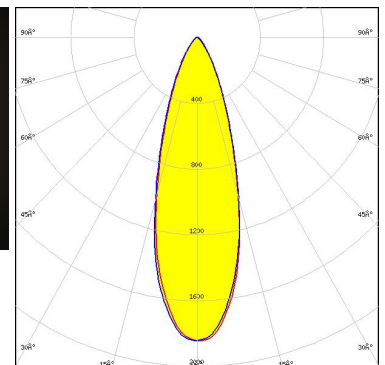
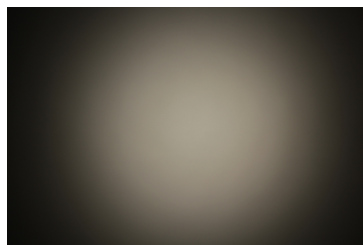
LED LC016D / LC019D / LC026D / LC033D
FWHM / FWTM 48.0° / 91.0°
Efficiency 75 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15859_HEKLA-SOCKET-I



Light distribution files

SAMSUNG

LED LC020C
FWHM / FWTM 32.0° / 64.0°
Efficiency 80 %
Peak intensity 1.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

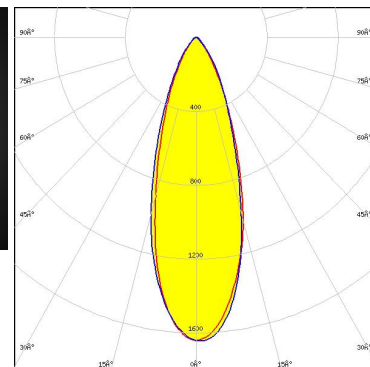
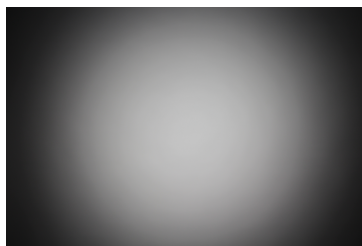


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

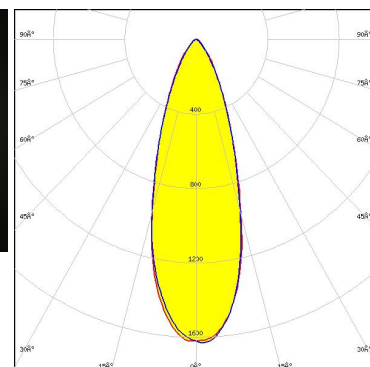
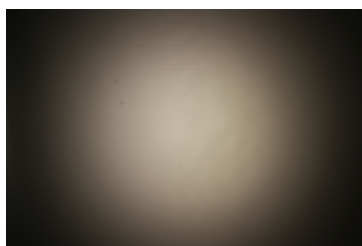
LED LC020C G2
FWHM / FWTM 34.0° / 68.0°
Efficiency 79 %
Peak intensity 1.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15859_HEKLA-SOCKET-I



Light distribution files

TRIDONIC

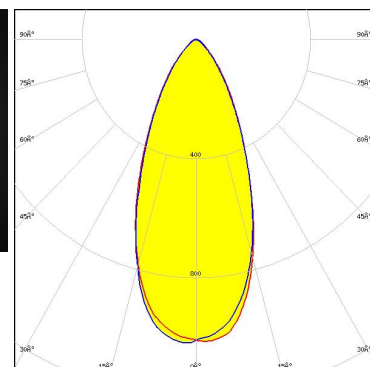
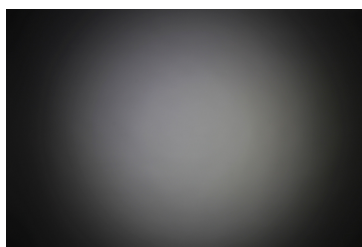
LED SLE G7 LES09
FWHM / FWTM 34.0° / 69.0°
Efficiency 78 %
Peak intensity 1.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files

TRIDONIC

LED SLE G7 LES13
FWHM / FWTM 45.0° / 86.0°
Efficiency 75 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15859_HEKLA-SOCKET-I

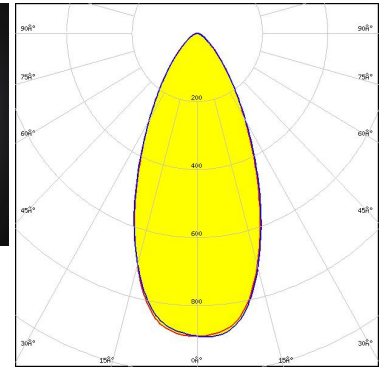
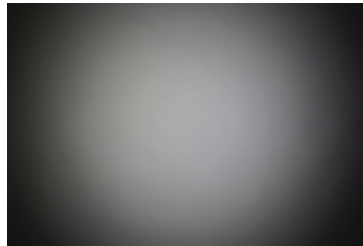


Light distribution files

OPTICAL RESULTS (MEASURED):

TRIDONIC

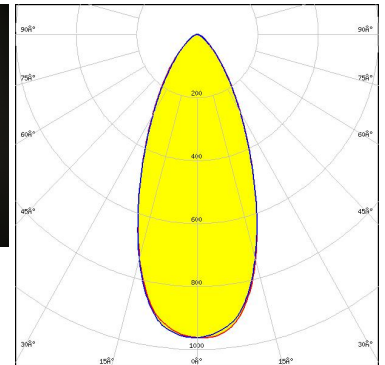
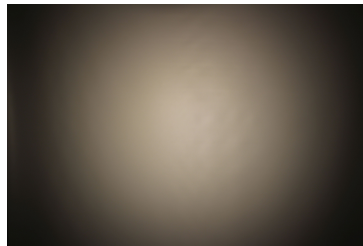
LED SLE G7 LES15
FWHM / FWTM 48.0° / 91.0°
Efficiency 75 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15859_HEKLA-SOCKET-I



Light distribution files

XICATO

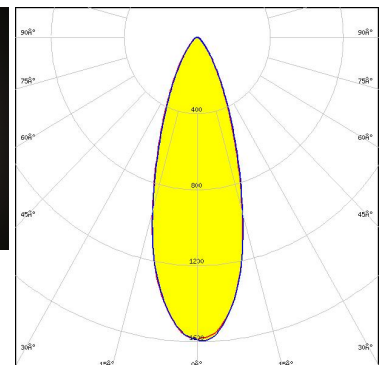
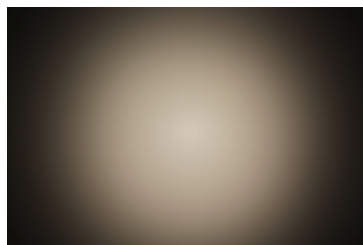
LED XOB 14.5 mm
FWHM / FWTM 45.0° / 88.0°
Efficiency 75 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15859_HEKLA-SOCKET-I



Light distribution files

XICATO

LED XOB 9.8 mm
FWHM / FWTM 35.0° / 69.0°
Efficiency 78 %
Peak intensity 1.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C

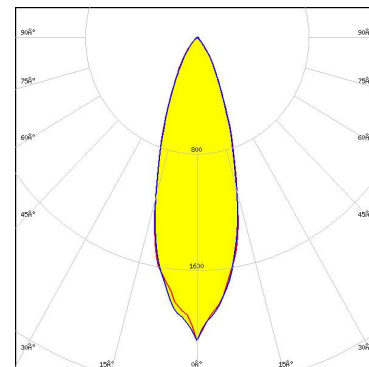


Light distribution files

OPTICAL RESULTS (SIMULATED):



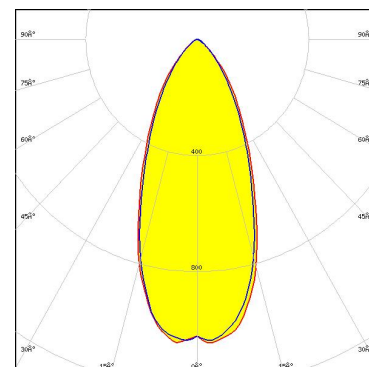
LED VERO10
FWHM / FWTM 32.0° / 65.0°
Efficiency 83 %
Peak intensity 2.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15616_HEKLA-SOCKET-F



Light distribution files

CITIZEN

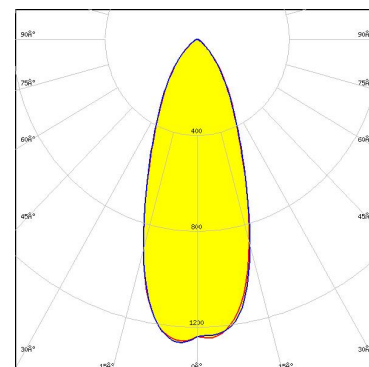
LED CLU03x
FWHM / FWTM 45.0° / 89.0°
Efficiency 77 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15859_HEKLA-SOCKET-I



Light distribution files



LED CMA1825
FWHM / FWTM 40.0° / 84.0°
Efficiency 82 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15254_HEKLA-SOCKET-B



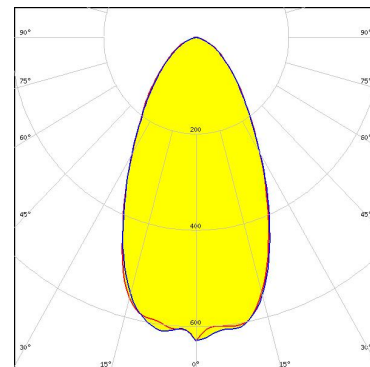
Light distribution files

OPTICAL RESULTS (SIMULATED):



LED CMB2550
FWHM / FWTM 56.0° / 113.0°
Efficiency 71 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

Bender Wirth: 639a Hekla XL

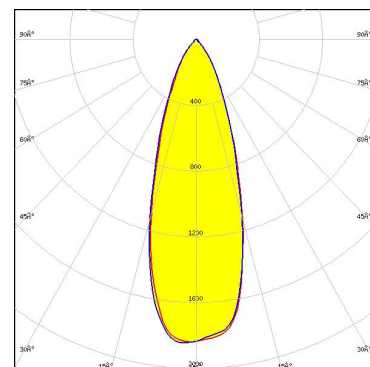


Light distribution files



LED CXA/B 15xx
FWHM / FWTM 24.0° / 68.0°
Efficiency 84 %
Peak intensity 1.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

F15256_HEKLA-SOCKET-D

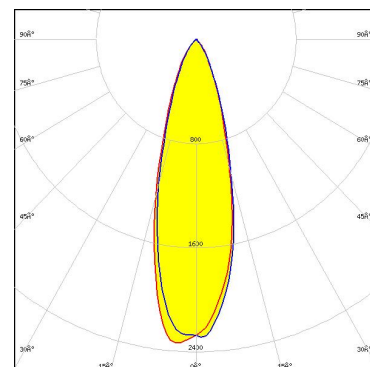


Light distribution files



LED CXA/B 15xx
FWHM / FWTM 30.0° / 61.0°
Efficiency 83 %
Peak intensity 2.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

F15256_HEKLA-SOCKET-D

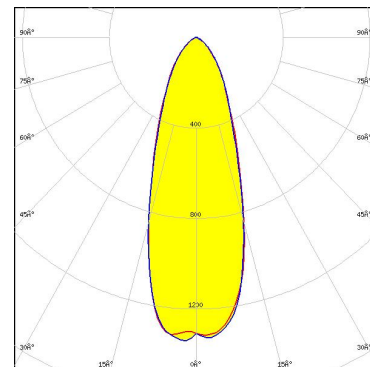


Light distribution files

OPTICAL RESULTS (SIMULATED):



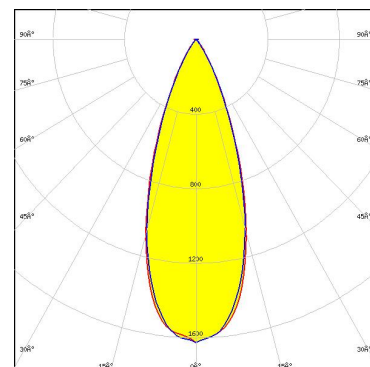
LED CXA/B 1816 & CXA/B 1820 & CXA 1850
 FWHM / FWTM 36.0° / 84.0°
 Efficiency 81 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15254_HEKLA-SOCKET-B



Light distribution files



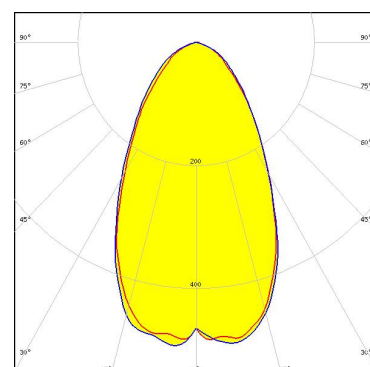
LED NFSWE11A
 FWHM / FWTM 37.0° / 63.0°
 Efficiency 72 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 30
 Light colour/type White
 Required components:



Light distribution files



LED LC040D / LC060D / LC080D
 FWHM / FWTM 60.0° / 122.0°
 Efficiency 63 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



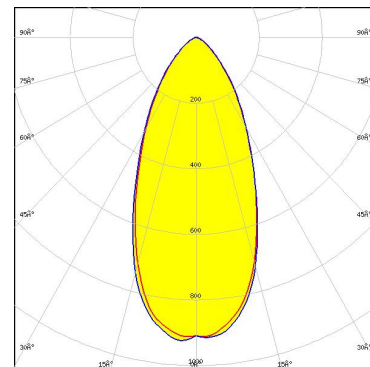
Bender Wirth: 631b Hekla XL

Light distribution files

OPTICAL RESULTS (SIMULATED):



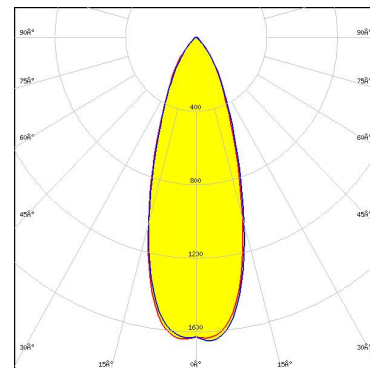
LED MJT COB LES 14.5
FWHM / FWTM 48.0° / 95.0 + 96.0°
Efficiency 78 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15859_HEKLA-SOCKET-I



Light distribution files



LED MJT COB LES 9.8
FWHM / FWTM 36.0° / 73.0°
Efficiency 82 %
Peak intensity 1.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files

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.

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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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