

CARMEN-S-C

~14° spot beam. Assembly with holder C compatible with LEDiL HEKLA.

SPECIFICATION:

| | |
|----------------|-----------|
| Dimensions | Ø 69.5 mm |
| Height | 41.5 mm |
| Fastening | socket |
| ROHS compliant | yes ⓘ |

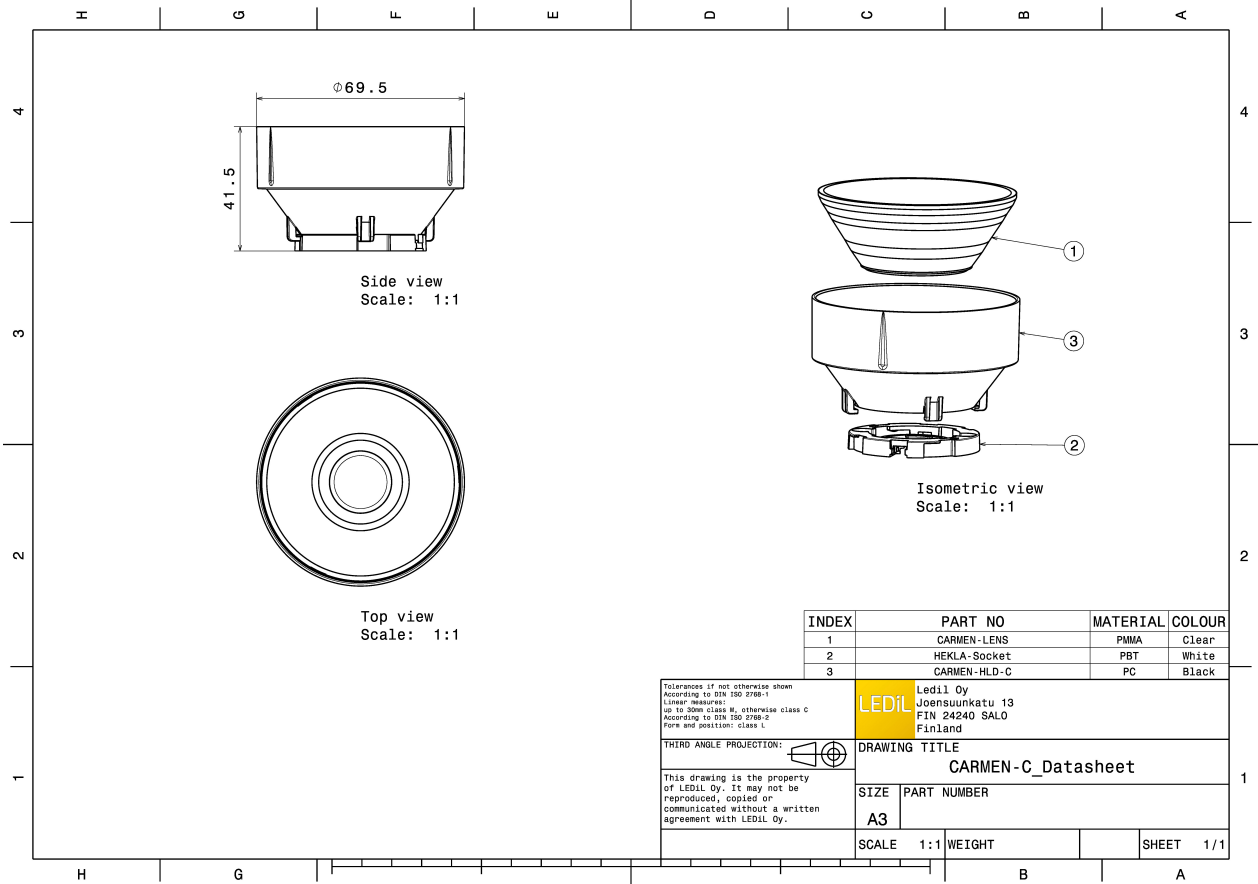


MATERIALS:

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

ORDERING INFORMATION:

| Component | Type | Qty in box | MOQ | MPQ | Box weight (kg) |
|--------------------------------|-------------|------------|-----|-----|-----------------|
| CP15774_CARMEN-S-C | Single lens | 150 | 150 | 15 | 4.5 |
| » Box size: 476 x 273 x 292 mm | | | | | |

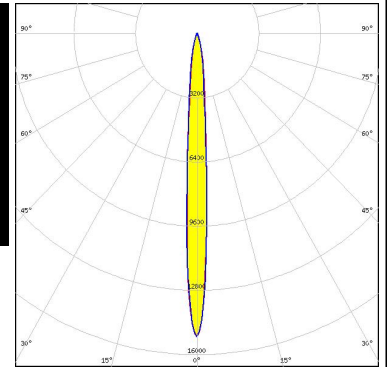
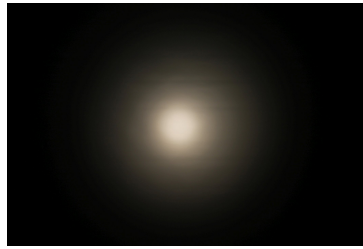


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

bridgelux

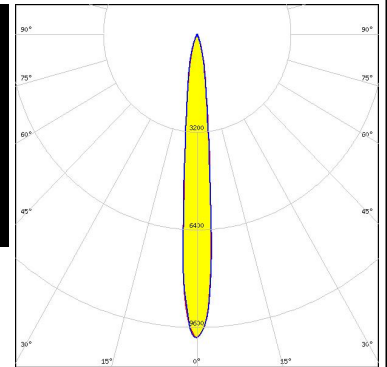
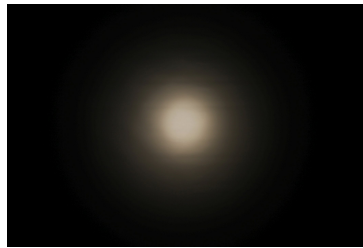
LED V4 HD Gen 7
 FWHM / FWTM 8.0° / 23.0°
 Efficiency 78 %
 Peak intensity 15 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15253_HEKLA-SOCKET-A



Light distribution files

bridgelux

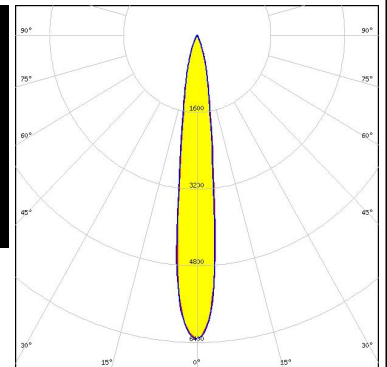
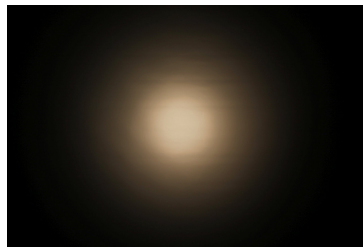
LED V6 HD Gen 7
 FWHM / FWTM 10.0° / 28.0°
 Efficiency 75 %
 Peak intensity 9.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files

bridgelux

LED V9 HD Gen7
 FWHM / FWTM 14.0° / 34.0°
 Efficiency 72 %
 Peak intensity 6.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15859_HEKLA-SOCKET-I

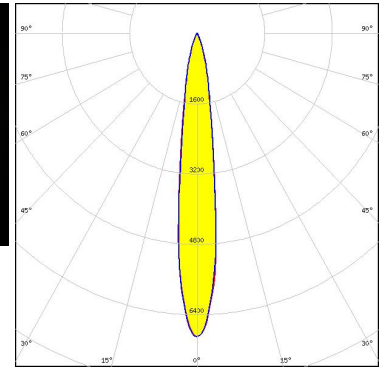


Light distribution files

OPTICAL RESULTS (MEASURED):



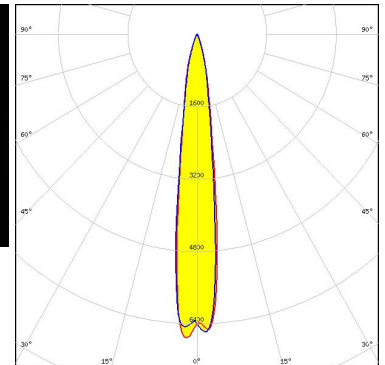
LED VERO10
FWHM / FWTM 14.0° / 34.0°
Efficiency 75 %
Peak intensity 6.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15616_HEKLA-SOCKET-F



Light distribution files



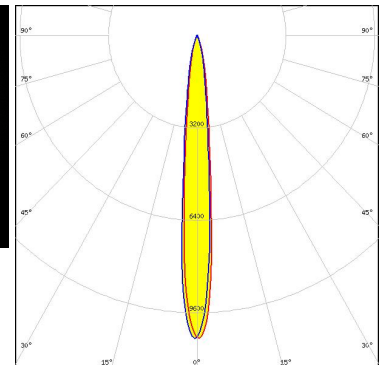
LED Vesta DTW 9mm (4W/6W/12W)
FWHM / FWTM 14.0° / 33.0°
Efficiency 71 %
Peak intensity 6.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16142_HEKLA-SOCKET-K
Bender Wirth: 490 Typ L8



Light distribution files



LED Vesta TW 6mm DP
FWHM / FWTM 11.0° / 27.0°
Efficiency 75 %
Peak intensity 10.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16142_HEKLA-SOCKET-K
Bender Wirth: 504 Typ L8

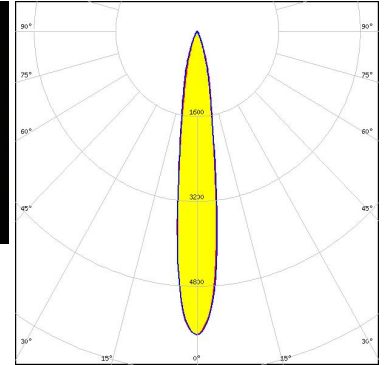


Light distribution files

OPTICAL RESULTS (MEASURED):

bridgelux

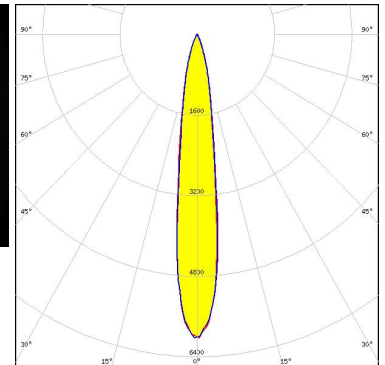
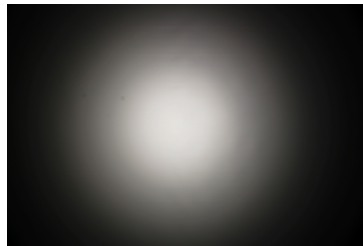
LED Vesta TW 9mm (9W) DP
 FWHM / FWTM 15.0° / 36.0°
 Efficiency 71 %
 Peak intensity 5.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 489 Typ L8



Light distribution files

CITIZEN

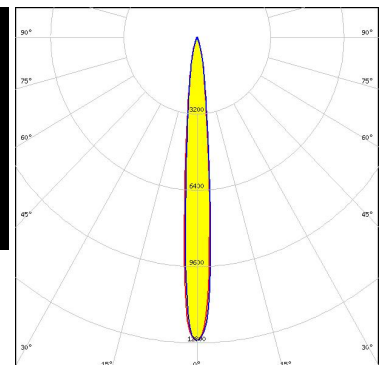
LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 15.0° / 36.0°
 Efficiency 74 %
 Peak intensity 6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files

CITIZEN

LED CLU700/701/702/703
 FWHM / FWTM 10.0° / 25.0°
 Efficiency 78 %
 Peak intensity 12.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C

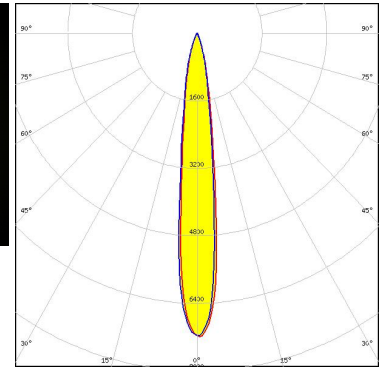


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

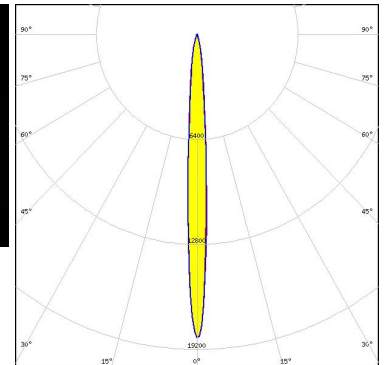
LED CLU710/711
FWHM / FWTM 13.0° / 33.0°
Efficiency 73 %
Peak intensity 7.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15859_HEKLA-SOCKET-I



Light distribution files

CITIZEN

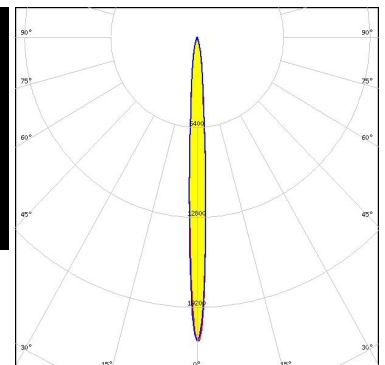
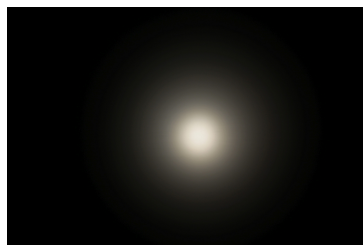
LED CLU7A2/7A3
FWHM / FWTM 7.0° / 20.0°
Efficiency 80 %
Peak intensity 18.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files

CITIZEN

LED CLU7B2
FWHM / FWTM 6.0° / 19.0°
Efficiency 80 %
Peak intensity 21.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C

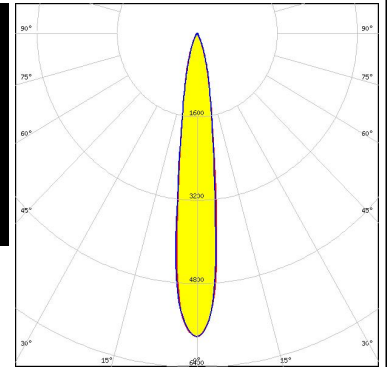
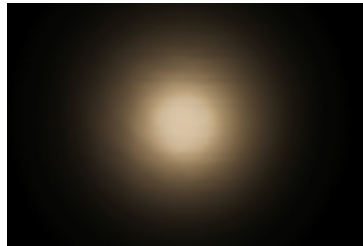


Light distribution files

OPTICAL RESULTS (MEASURED):



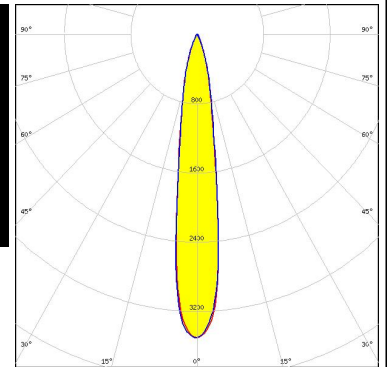
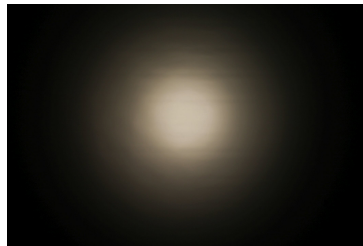
LED CMA1516
 FWHM / FWTM 14.0° / 36.0°
 Efficiency 72 %
 Peak intensity 5.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15256_HEKLA-SOCKET-D



Light distribution files



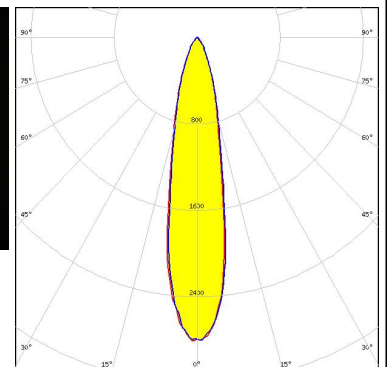
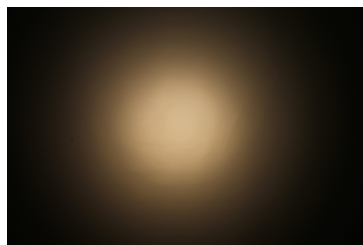
LED CMT14xx
 FWHM / FWTM 15.0° / 37.0°
 Efficiency 48 %
 Peak intensity 3.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files



LED LUXEON CX Plus CoB L08 (Gen2)
 FWHM / FWTM 21.0° / 50.0°
 Efficiency 67 %
 Peak intensity 2.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 637a Hekla

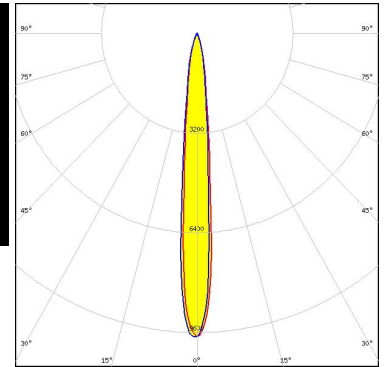


Light distribution files

OPTICAL RESULTS (MEASURED):



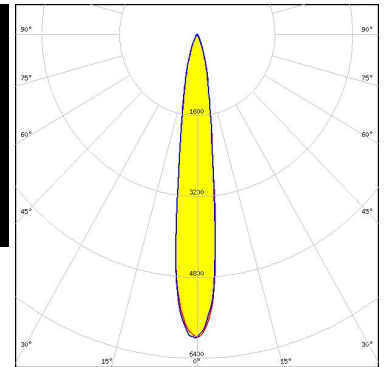
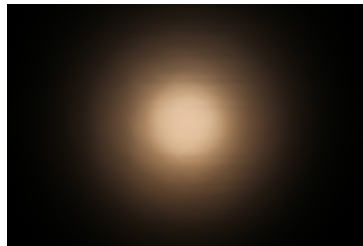
LED LUXEON CoB 1202HD
 FWHM / FWTM 10.0° / 28.0°
 Efficiency 75 %
 Peak intensity 9.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15848_HEKLA-SOCKET-G



Light distribution files



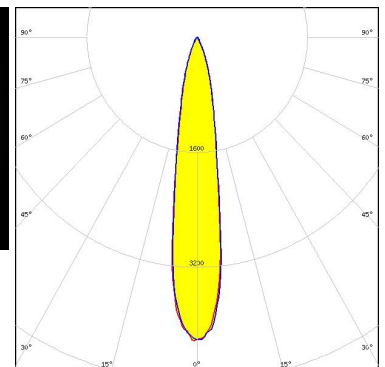
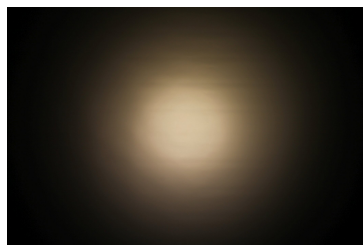
LED LUXEON CoB 1204HD
 FWHM / FWTM 14.0° / 35.0°
 Efficiency 73 %
 Peak intensity 6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15858_HEKLA-SOCKET-H



Light distribution files



LED LUXEON CoB 1205HD
 FWHM / FWTM 17.0° / 41.0°
 Efficiency 69 %
 Peak intensity 4.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15858_HEKLA-SOCKET-H

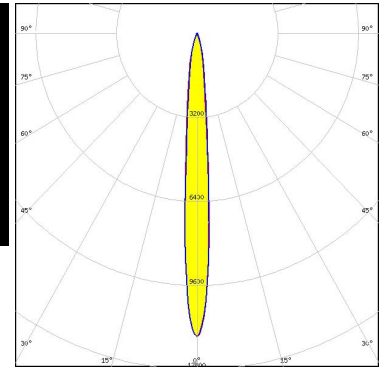


Light distribution files

OPTICAL RESULTS (MEASURED):



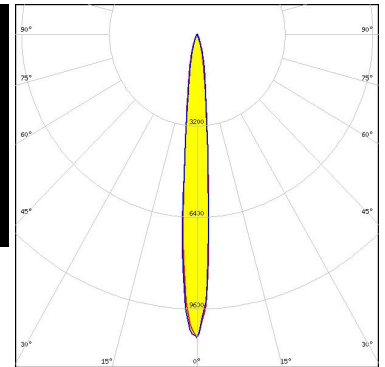
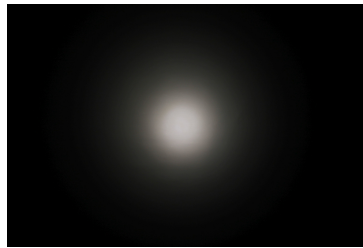
LED LUXEON CX Plus CoB - HD S01H4
 FWHM / FWTM 9.0° / 26.0°
 Efficiency 75 %
 Peak intensity 11.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 634c Hekla



Light distribution files



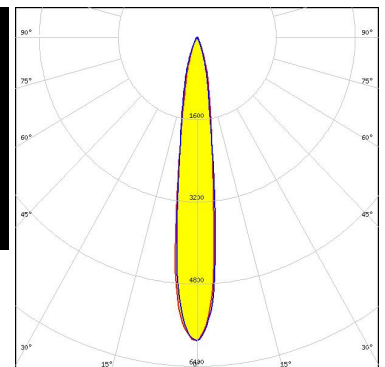
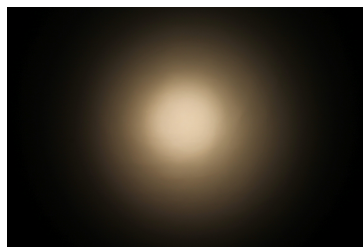
LED LUXEON CX Plus CoB - HD S02H6
 FWHM / FWTM 10.0° / 26.0°
 Efficiency 75 %
 Peak intensity 10.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 634c Hekla



Light distribution files



LED LUXEON CX Plus CoB - HD S04H9
 FWHM / FWTM 14.0° / 36.0°
 Efficiency 72 %
 Peak intensity 5.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 634c Hekla

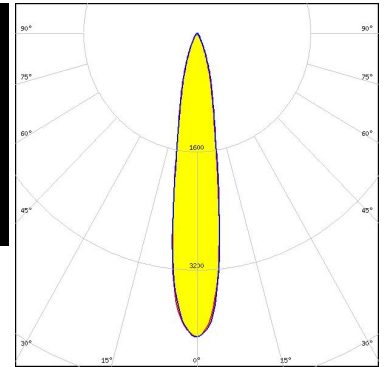


Light distribution files

OPTICAL RESULTS (MEASURED):



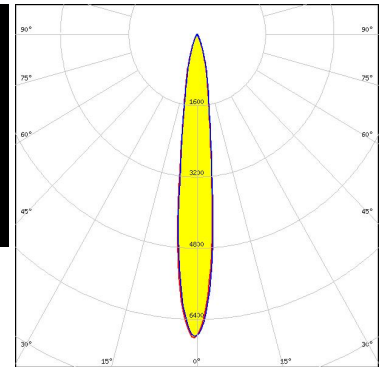
LED LUXEON CX Plus CoB L04 / L05 (Gen2)
 FWHM / FWTM 18.0° / 42.0°
 Efficiency 69 %
 Peak intensity 4.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 637a Hekla



Light distribution files



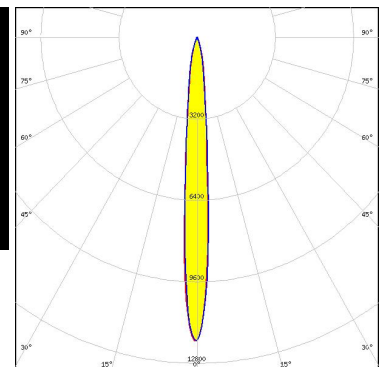
LED LUXEON CX Plus CoB M02 / M03 (Gen2)
 FWHM / FWTM 13.0° / 33.0°
 Efficiency 72 %
 Peak intensity 6.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 641a Hekla



Light distribution files



LED LUXEON CX Plus CoB S01 (Gen2)
 FWHM / FWTM 9.0° / 25.0°
 Efficiency 76 %
 Peak intensity 11.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 634c Hekla

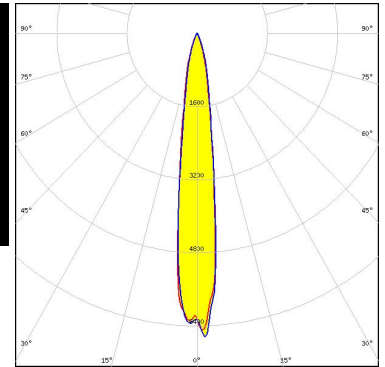
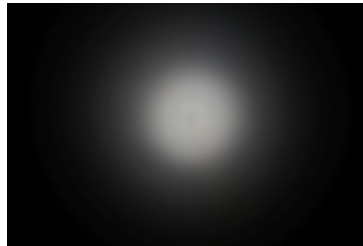


Light distribution files

OPTICAL RESULTS (MEASURED):



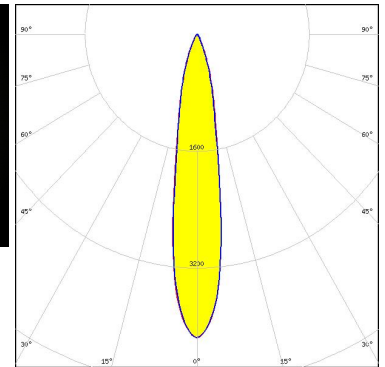
LED CDM-9 (Dim-To-Warm)
FWHM / FWTM 14.0° / 33.0°
Efficiency 71 %
Peak intensity 6.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C16142_HEKLA-SOCKET-K
Bender Wirth: 490 Typ L8



Light distribution files



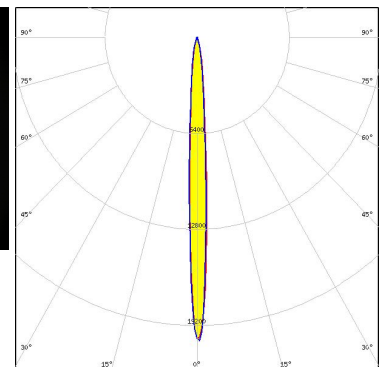
LED CxM-11 (19x19)
FWHM / FWTM 18.0° / 42.0°
Efficiency 70 %
Peak intensity 4.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15859_HEKLA-SOCKET-I



Light distribution files



LED CXM-3
FWHM / FWTM 7.0° / 19.0°
Efficiency 80 %
Peak intensity 20.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C

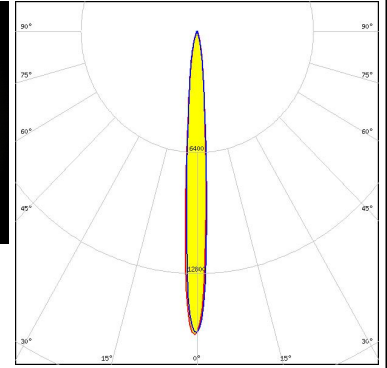


Light distribution files

OPTICAL RESULTS (MEASURED):



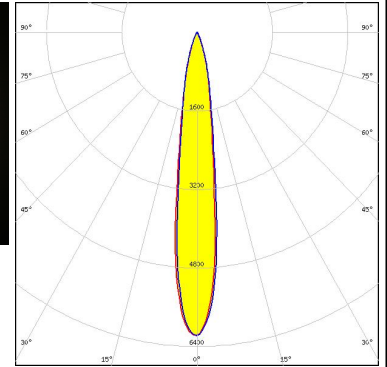
LED CXM-4
FWHM / FWTM 8.0° / 22.0°
Efficiency 78 %
Peak intensity 16 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files



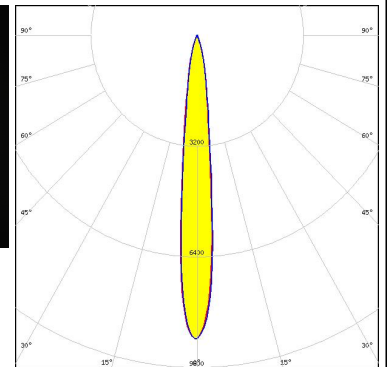
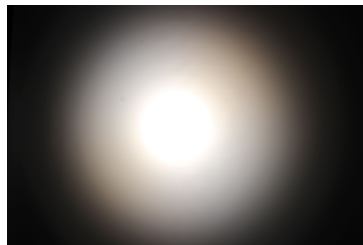
LED CxM-9 (13.5x13.5)
FWHM / FWTM 15.0° / 35.0°
Efficiency 74 %
Peak intensity 6.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files



LED NJCWL024Z-V1MT: COB L-Type Tunable White
FWHM / FWTM 12.0° / 29.0°
Efficiency 71 %
Peak intensity 8.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 497 Typ L8

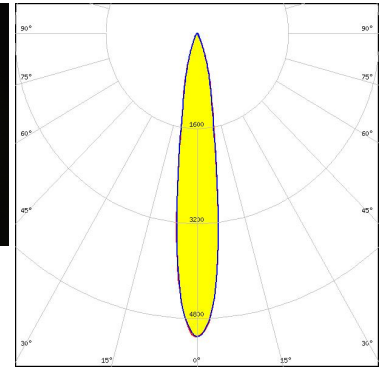
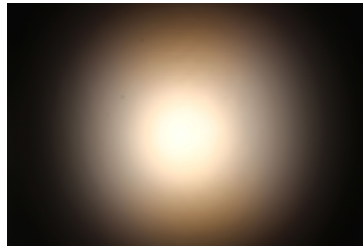


Light distribution files

OPTICAL RESULTS (MEASURED):



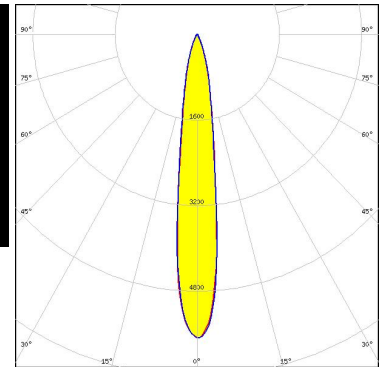
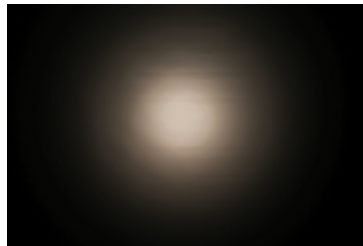
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
 FWHM / FWTM 16.0° / 37.0°
 Efficiency 69 %
 Peak intensity 5.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 498 Typ L8



Light distribution files



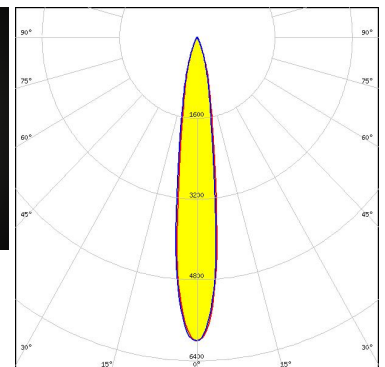
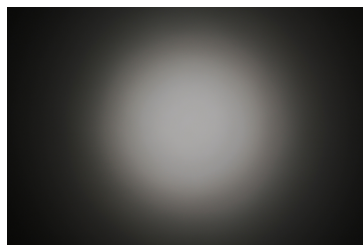
LED Fortimo SLM L09 CoB
 FWHM / FWTM 15.0° / 36.0°
 Efficiency 72 %
 Peak intensity 5.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15858_HEKLA-SOCKET-H



Light distribution files



LED LC003D / LC006D / LC009D / LC013D
 FWHM / FWTM 15.0° / 36.0°
 Efficiency 74 %
 Peak intensity 6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C

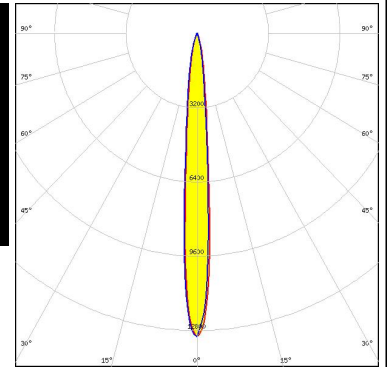


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

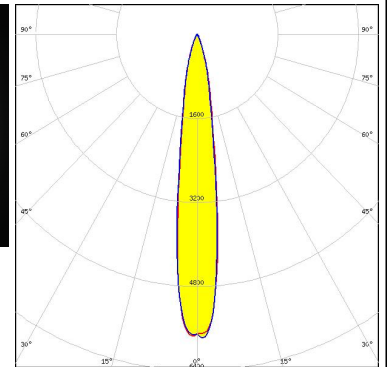
LED LC010C G2
 FWHM / FWTM 9.0° / 24.0°
 Efficiency 77 %
 Peak intensity 13.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files

SAMSUNG

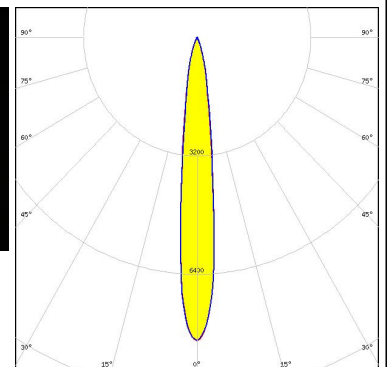
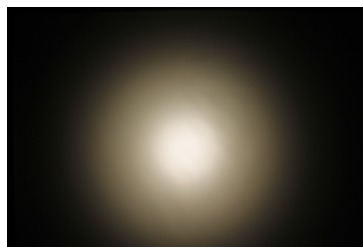
LED LC010T (Tunable White)
 FWHM / FWTM 15.0° / 35.0°
 Efficiency 71 %
 Peak intensity 5.8 cd/lm
 LEDs/each optic 1
 Light colour/type Tunable White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 501 Typ L8



Light distribution files

SAMSUNG

LED LC020C
 FWHM / FWTM 12.0° / 31.0°
 Efficiency 76 %
 Peak intensity 8.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15848_HEKLA-SOCKET-G

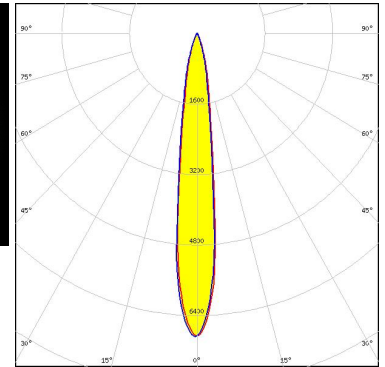


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

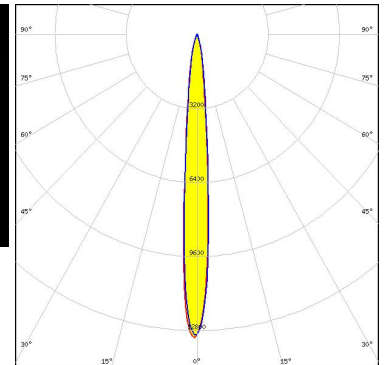
LED LC020C G2
 FWHM / FWTM 14.0° / 33.0°
 Efficiency 74 %
 Peak intensity 6.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15859_HEKLA-SOCKET-I



Light distribution files



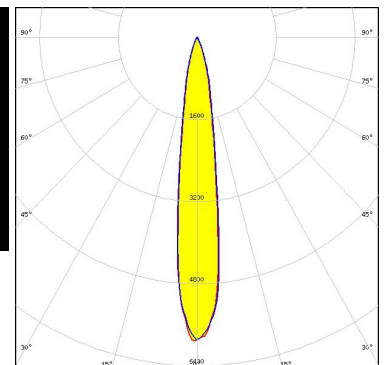
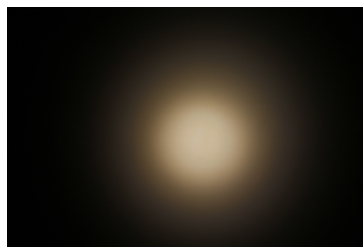
LED MJT COB LES 6
 FWHM / FWTM 9.0° / 23.0°
 Efficiency 76 %
 Peak intensity 13.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files



LED MJT COB LES 9.8
 FWHM / FWTM 15.0° / 35.0°
 Efficiency 72 %
 Peak intensity 5.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C

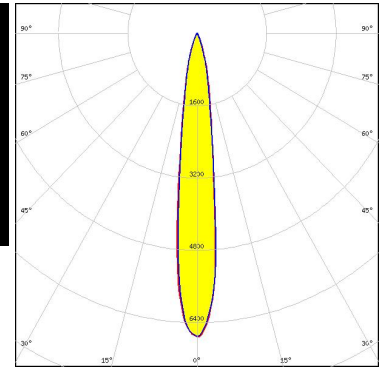


Light distribution files

OPTICAL RESULTS (MEASURED):

TRIDONIC

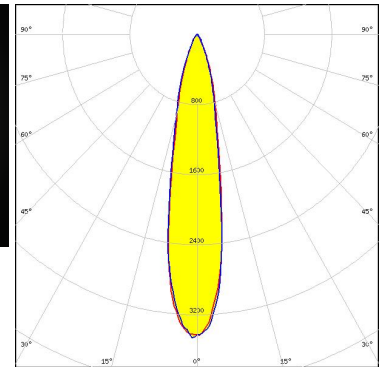
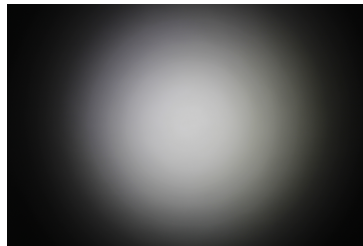
LED SLE G7 LES09
FWHM / FWTM 14.0° / 34.0°
Efficiency 74 %
Peak intensity 6.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files

TRIDONIC

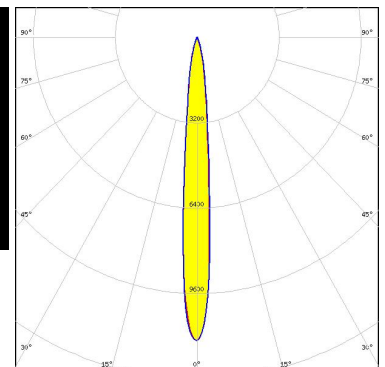
LED SLE G7 LES13
FWHM / FWTM 20.0° / 45.0°
Efficiency 69 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15859_HEKLA-SOCKET-I



Light distribution files

XICATO

LED XOB 6 mm
FWHM / FWTM 10.0° / 26.0°
Efficiency 76 %
Peak intensity 11.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C

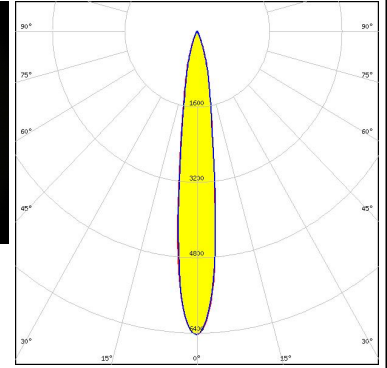


Light distribution files

OPTICAL RESULTS (MEASURED):

XICATO

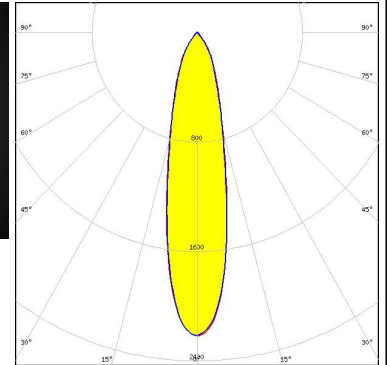
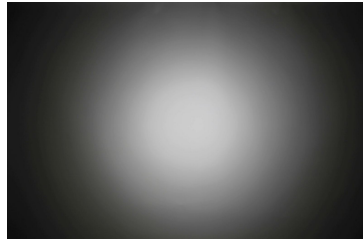
LED XOB 9.8 mm
 FWHM / FWTM 14.0° / 34.5 + 34.0°
 Efficiency 74 %
 Peak intensity 6.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files

XICATO

LED XTM - 19mm LES
 FWHM / FWTM 23.0° / 60.0°
 Efficiency 66 %
 Peak intensity 2.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16058_XTM-ADAPTER-50-C

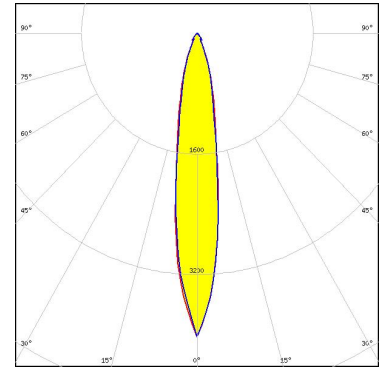


Light distribution files

OPTICAL RESULTS (SIMULATED):



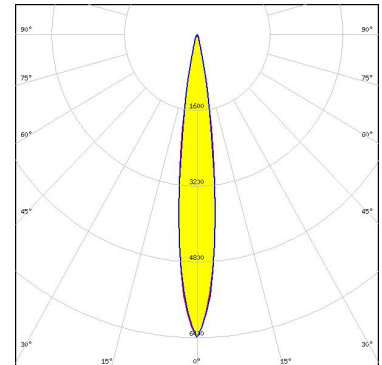
LED VERO13
FWHM / FWTM 16.0° / 42.0°
Efficiency 70 %
Peak intensity 4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 C16142_HEKLA-SOCKET-K



Light distribution files

CITIZEN

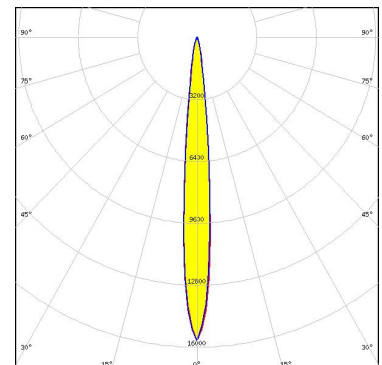
LED CLL02x/CLU02x (LES10)
FWHM / FWTM 14.0° / 26.0°
Efficiency 50 %
Peak intensity 6.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 F15859_HEKLA-SOCKET-I
 C16752_CARMEN-70-SHD



Light distribution files

CITIZEN

LED CLU700/701/702/703
FWHM / FWTM 10.4° / 22.0°
Efficiency 0 %
Peak intensity 15.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 F15255_HEKLA-SOCKET-C

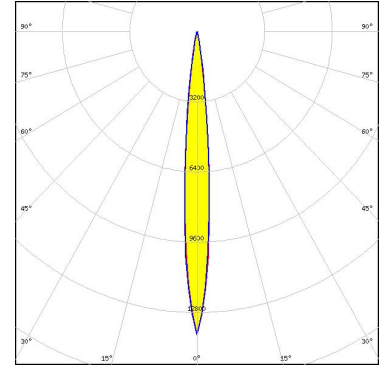


Light distribution files

OPTICAL RESULTS (SIMULATED):

CITIZEN

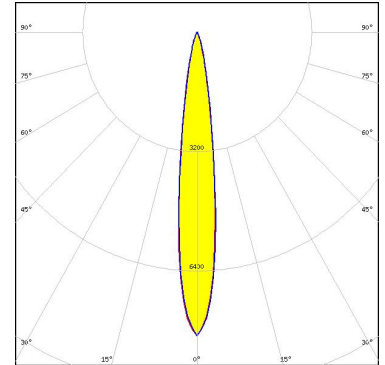
LED CLU700/701/702/703
 FWHM / FWTM 10.0° / 19.0°
 Efficiency 54 %
 Peak intensity 13.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C
 C16752_CARMEN-70-SHD



Light distribution files

CITIZEN

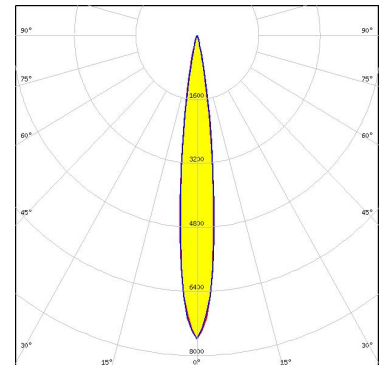
LED CLU712/713
 FWHM / FWTM 14.0° / 30.0°
 Efficiency 75 %
 Peak intensity 8.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15859_HEKLA-SOCKET-I



Light distribution files

CITIZEN

LED CLU712/713
 FWHM / FWTM 12.0° / 24.0°
 Efficiency 51 %
 Peak intensity 7.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15859_HEKLA-SOCKET-I
 C16752_CARMEN-70-SHD



Light distribution files

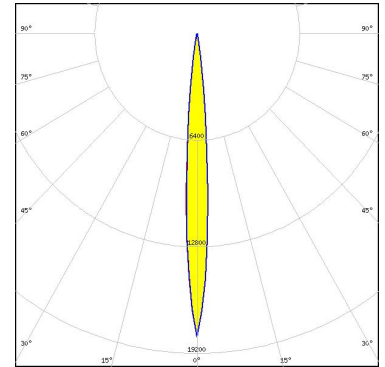
OPTICAL RESULTS (SIMULATED):

CITIZEN

LED CLU7A2/7A3
FWHM / FWTM 8.0° / 16.0°
Efficiency 55 %
Peak intensity 18.2 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

F15255_HEKLA-SOCKET-C
C16752_CARMEN-70-SHD



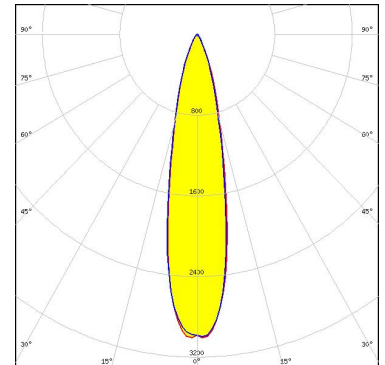
Light distribution files



LED CMA1840
FWHM / FWTM 22.0° / 47.0°
Efficiency 66 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

Bender Wirth: 637a Hekla



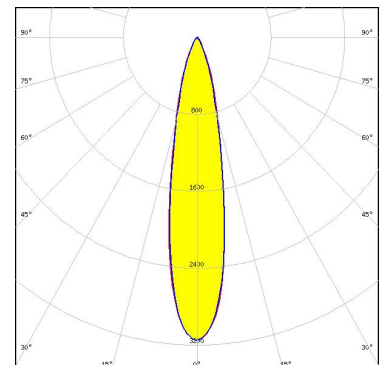
Light distribution files



LED CMU15xx
FWHM / FWTM 21.0° / 46.0°
Efficiency 65 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

F17438_HEKLA-G2-I

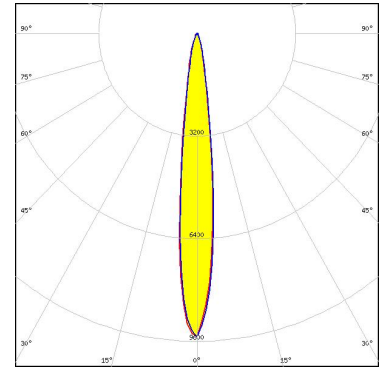


Light distribution files

OPTICAL RESULTS (SIMULATED):



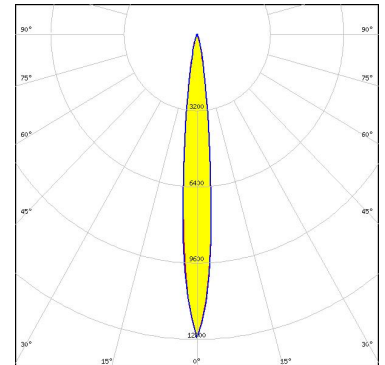
LED CXA/B 15xx
 FWHM / FWTM 12.9° / 28.4°
 Efficiency 0 %
 Peak intensity 9.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15256_HEKLA-SOCKET-D



Light distribution files



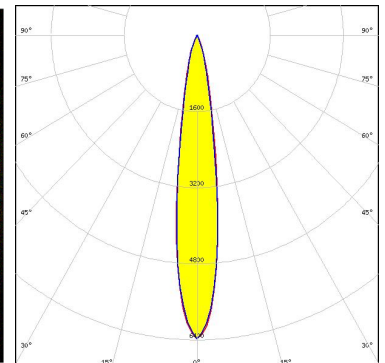
LED COB T-Type
 FWHM / FWTM 11.0° / 24.0°
 Efficiency 78 %
 Peak intensity 12.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15848_HEKLA-SOCKET-G



Light distribution files



LED LC003D / LC006D / LC009D / LC013D
 FWHM / FWTM 16.0° / 34.0°
 Efficiency 73 %
 Peak intensity 6.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F17435_HEKLA-G2-C

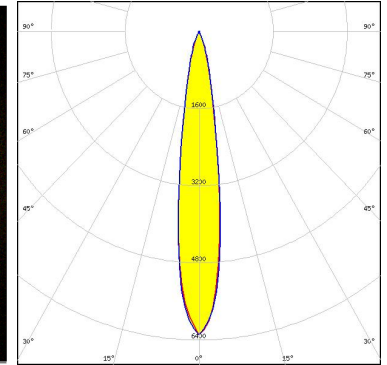
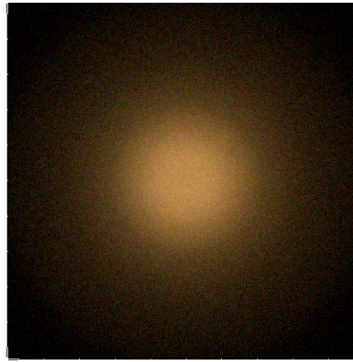


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

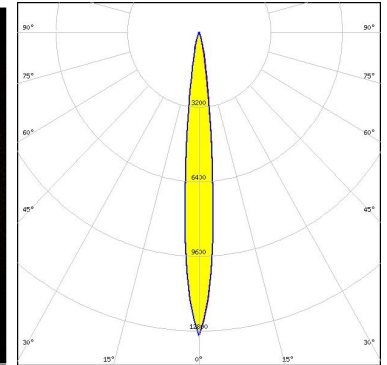
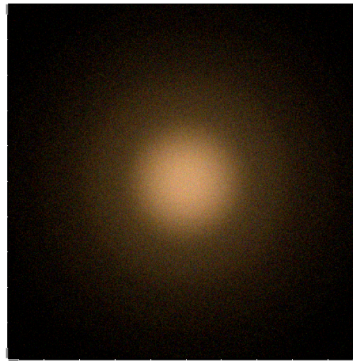
LED LC003D / LC006D / LC009D / LC013D
FWHM / FWTM 16.0° / 34.0°
Efficiency 73 %
Peak intensity 6.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F17435_HEKLA-G2-C



Light distribution files

SAMSUNG

LED LC010C
FWHM / FWTM 11.0° / 24.0°
Efficiency 78 %
Peak intensity 13 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F17435_HEKLA-G2-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.

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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