

CARMEN-50-RS-C

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

SPECIFICATION:

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



MATERIALS:

Component	Type	Material	Colour	Finish	Length
CARMEN-50-RS	Single lens	PMMA	clear		47.0
CARMEN-50-HLD-C	Holder	PC	black		

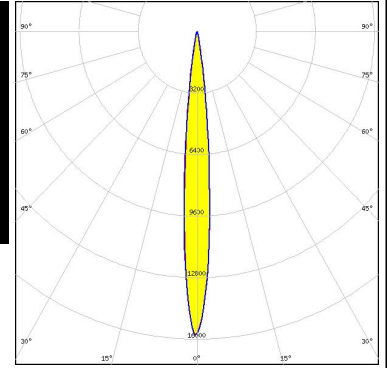
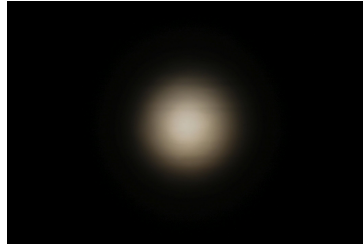
ORDERING INFORMATION:

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

OPTICAL RESULTS (MEASURED):



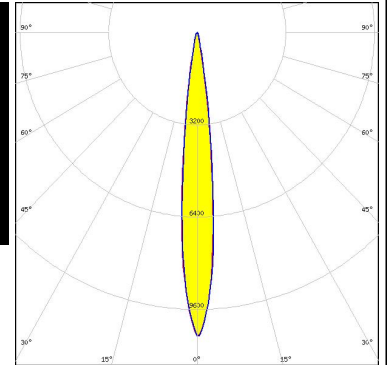
LED V4 HD Gen 7
FWHM / FWTM 10.0° / 19.0°
Efficiency 71 %
Peak intensity 16 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 F15253_HEKLA-SOCKET-A



Light distribution files



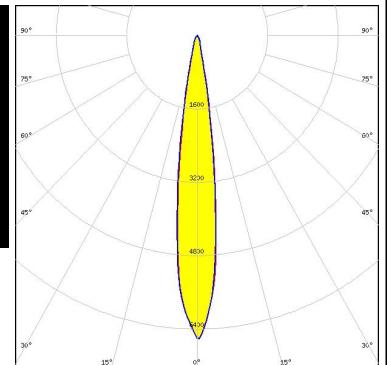
LED V6 HD Gen 7
FWHM / FWTM 12.0° / 22.0°
Efficiency 68 %
Peak intensity 10.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files



LED V9 HD Gen7
FWHM / FWTM 15.0° / 26.0°
Efficiency 64 %
Peak intensity 6.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 F15859_HEKLA-SOCKET-I

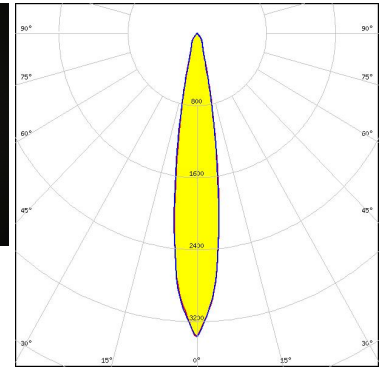


Light distribution files

OPTICAL RESULTS (MEASURED):

bridgelux

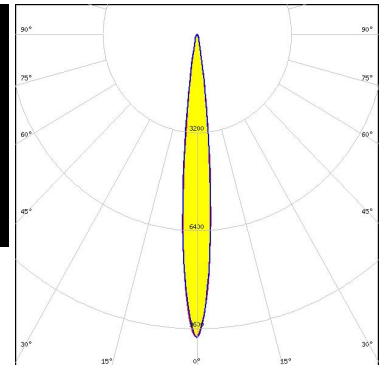
LED VERO13
 FWHM / FWTM 17.0° / 33.0°
 Efficiency 51 %
 Peak intensity 3.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16142_HEKLA-SOCKET-K



Light distribution files

bridgelux

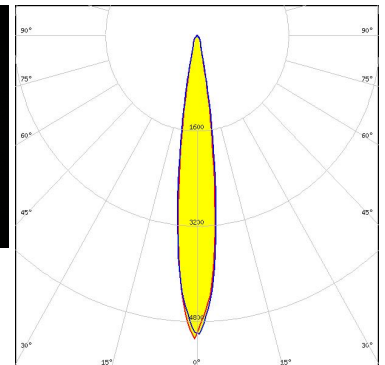
LED Vesta TW 6mm DP
 FWHM / FWTM 11.0° / 21.0°
 Efficiency 59 %
 Peak intensity 9.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 504 Typ L8



Light distribution files

bridgelux

LED Vesta TW 9mm (9W) DP
 FWHM / FWTM 15.0° / 28.0°
 Efficiency 54 %
 Peak intensity 5.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 489 Typ L8

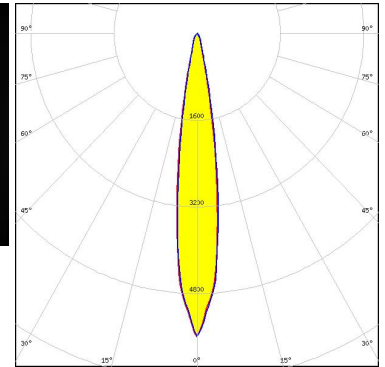
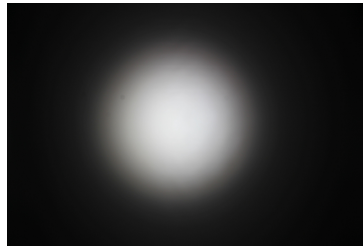


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

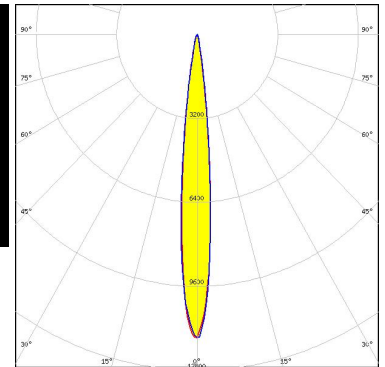
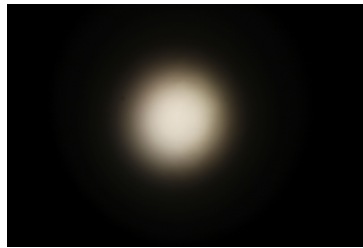
LED CLL02x/CLU02x (LES10)
FWHM / FWTM 16.0° / 29.0°
Efficiency 63 %
Peak intensity 5.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files

CITIZEN

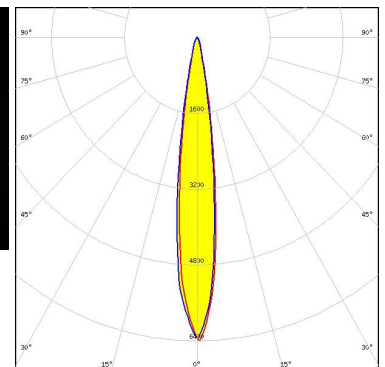
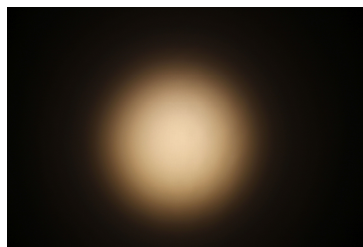
LED CLU700/701/702/703
FWHM / FWTM 11.0° / 21.0°
Efficiency 67 %
Peak intensity 11.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files

CITIZEN

LED CLU710/711
FWHM / FWTM 14.0° / 27.0°
Efficiency 62 %
Peak intensity 6.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15859_HEKLA-SOCKET-I

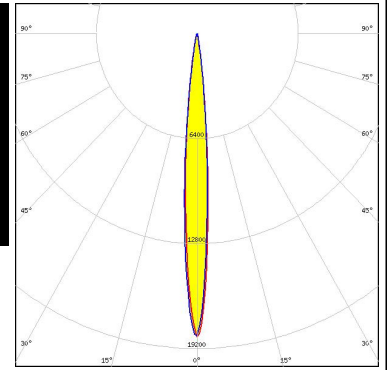
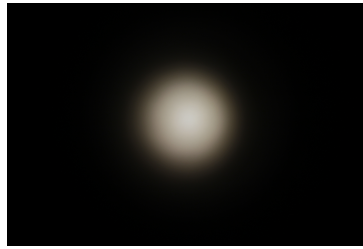


Light distribution files

OPTICAL RESULTS (MEASURED):

CITIZEN

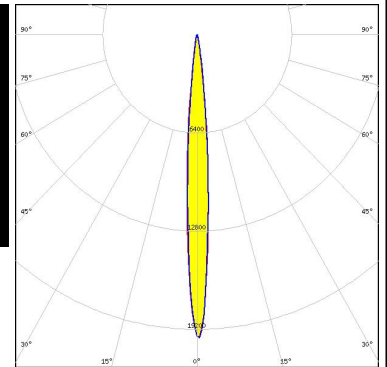
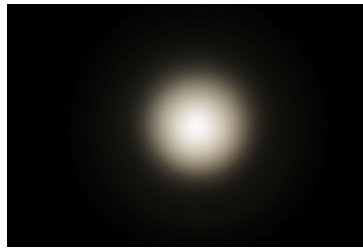
LED CLU7A2/7A3
FWHM / FWTM 9.0° / 18.0°
Efficiency 72 %
Peak intensity 18.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files

CITIZEN

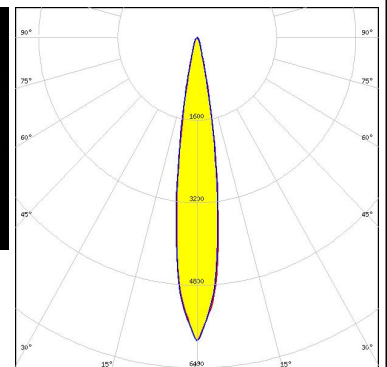
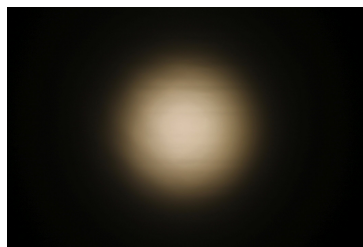
LED CLU7B2
FWHM / FWTM 8.0° / 17.0°
Efficiency 71 %
Peak intensity 20 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files



LED CMA1516
FWHM / FWTM 16.0° / 29.0°
Efficiency 65 %
Peak intensity 5.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15256_HEKLA-SOCKET-D

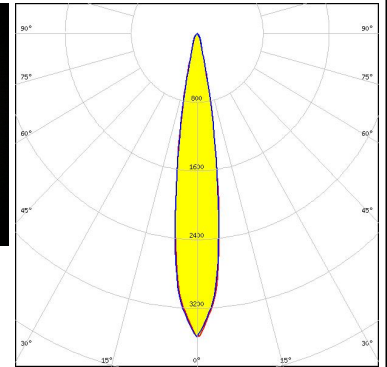


Light distribution files

OPTICAL RESULTS (MEASURED):



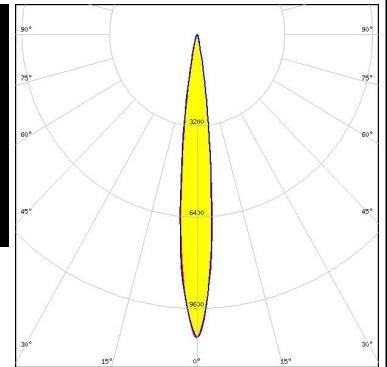
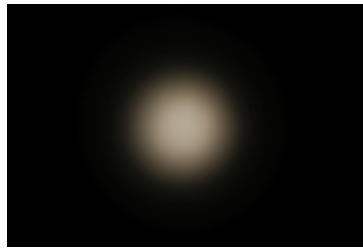
LED CMT14xx
 FWHM / FWTM 16.0° / 30.0°
 Efficiency 42 %
 Peak intensity 3.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files



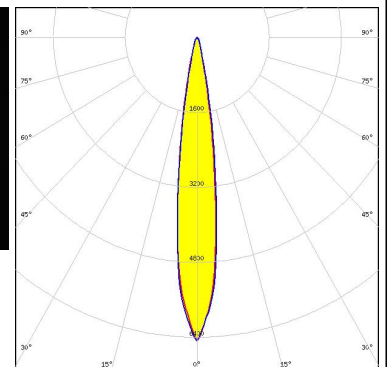
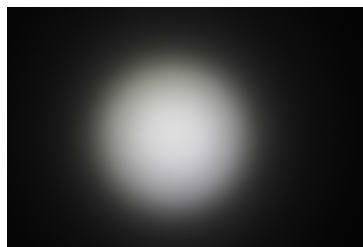
LED CXA/B 13xx
 FWHM / FWTM 12.0° / 23.0°
 Efficiency 68 %
 Peak intensity 10.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15956_HEKLA-SOCKET-J



Light distribution files



LED CXA/B 15xx
 FWHM / FWTM 15.0° / 28.0°
 Efficiency 65 %
 Peak intensity 6.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15256_HEKLA-SOCKET-D

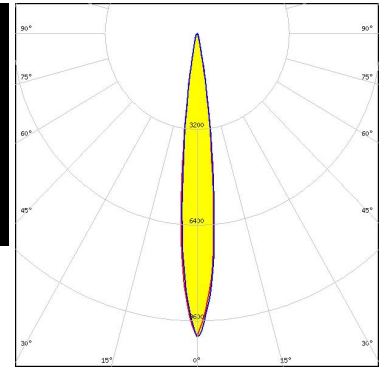


Light distribution files

OPTICAL RESULTS (MEASURED):



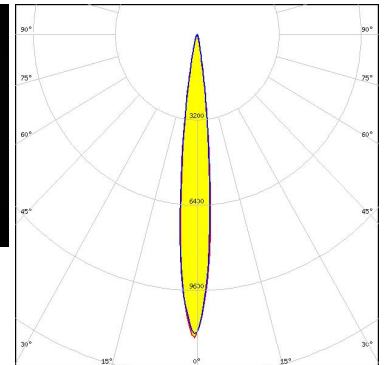
LED LUXEON CoB 1202HD
 FWHM / FWTM 12.0° / 23.0°
 Efficiency 68 %
 Peak intensity 10.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15848_HEKLA-SOCKET-G



Light distribution files



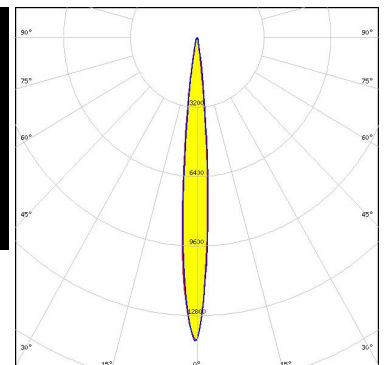
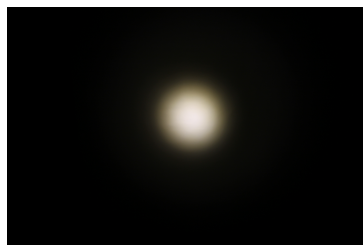
LED LUXEON CoB 1202s
 FWHM / FWTM 12.0° / 22.0°
 Efficiency 69 %
 Peak intensity 11.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15848_HEKLA-SOCKET-G



Light distribution files



LED LUXEON CX Plus CoB - HD S01H4
 FWHM / FWTM 10.0° / 19.0°
 Efficiency 64 %
 Peak intensity 14 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 634c Hekla

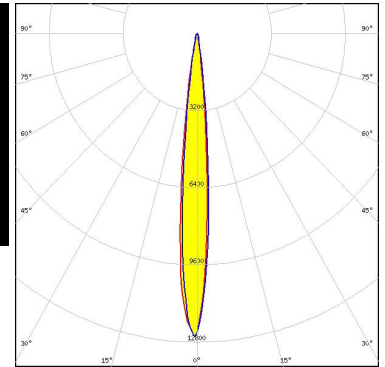
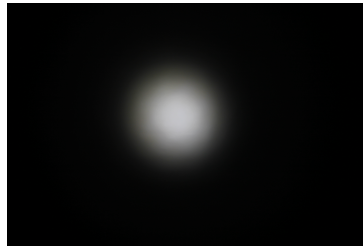


Light distribution files

OPTICAL RESULTS (MEASURED):



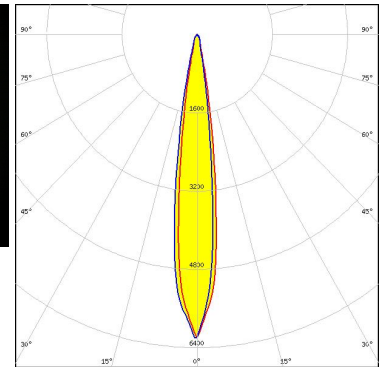
LED LUXEON CX Plus CoB - HD S02H6
 FWHM / FWTM 10.0° / 19.0°
 Efficiency 64 %
 Peak intensity 12.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 634c Hekla



Light distribution files



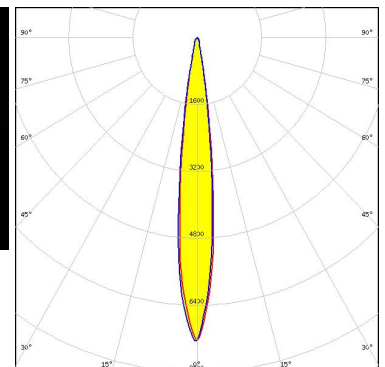
LED LUXEON CX Plus CoB - HD S04H9
 FWHM / FWTM 14.0° / 26.0°
 Efficiency 60 %
 Peak intensity 6.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 634c Hekla



Light distribution files



LED LUXEON CX Plus CoB M02 / M03 (Gen2)
 FWHM / FWTM 13.0° / 25.0°
 Efficiency 60 %
 Peak intensity 7.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 641a Hekla

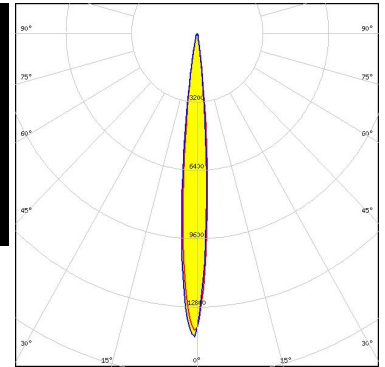
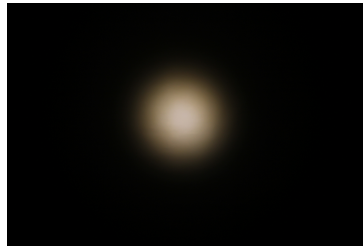


Light distribution files

OPTICAL RESULTS (MEASURED):



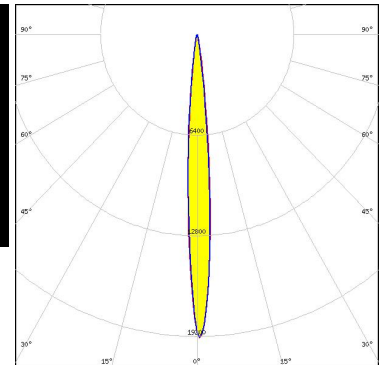
LED LUXEON CX Plus CoB S01 (Gen2)
 FWHM / FWTM 10.0° / 19.0°
 Efficiency 65 %
 Peak intensity 14.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 Bender Wirth: 634c Hekla



Light distribution files



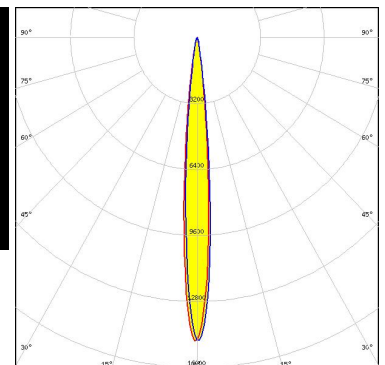
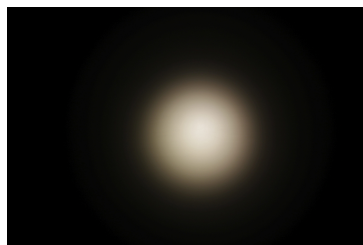
LED CXM-3
 FWHM / FWTM 9.0° / 17.0°
 Efficiency 72 %
 Peak intensity 19.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files



LED CXM-4
 FWHM / FWTM 10.0° / 19.0°
 Efficiency 68 %
 Peak intensity 14.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C

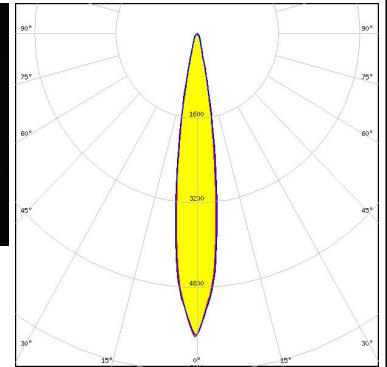


Light distribution files

OPTICAL RESULTS (MEASURED):



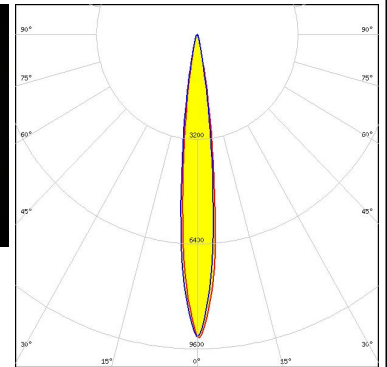
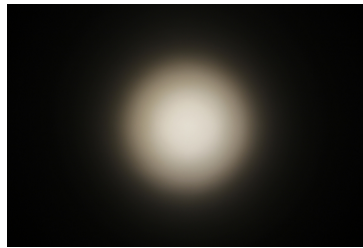
LED CxM-9 (13.5x13.5)
FWHM / FWTM 15.0° / 29.0°
Efficiency 63 %
Peak intensity 5.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files



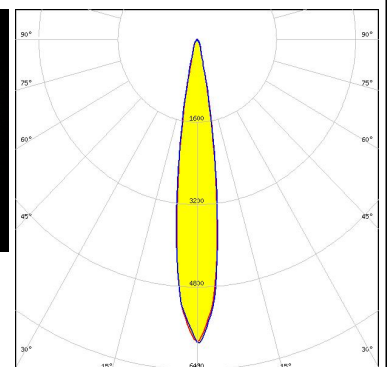
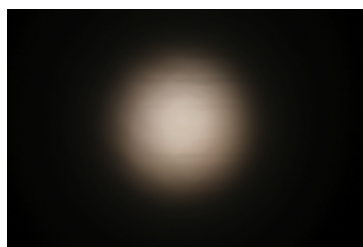
LED COB S-Type (LES 7)
FWHM / FWTM 13.0° / 24.0°
Efficiency 67 %
Peak intensity 9.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15848_HEKLA-SOCKET-G



Light distribution files



LED Fortimo SLM L09 CoB
FWHM / FWTM 15.0° / 28.0°
Efficiency 64 %
Peak intensity 6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15858_HEKLA-SOCKET-H

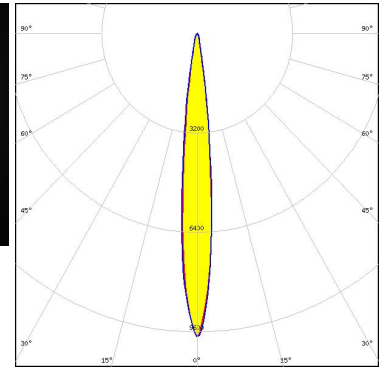


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

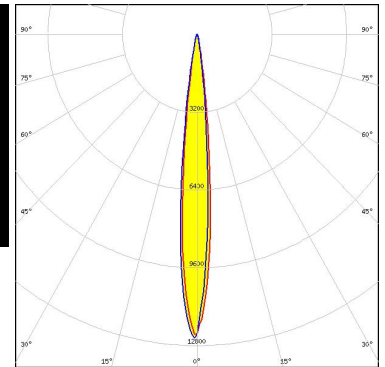
LED LC010C
FWHM / FWTM 11.0° / 22.0°
Efficiency 64 %
Peak intensity 9.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15848_HEKLA-SOCKET-G



Light distribution files

SAMSUNG

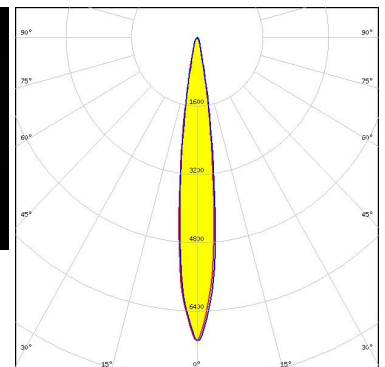
LED LC010C G2
FWHM / FWTM 11.0° / 21.0°
Efficiency 67 %
Peak intensity 12.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files

SAMSUNG

LED LC020C
FWHM / FWTM 13.0° / 26.0°
Efficiency 64 %
Peak intensity 7.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15848_HEKLA-SOCKET-G

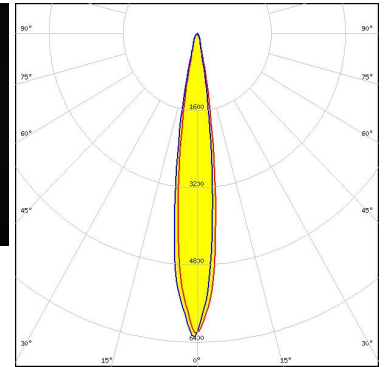
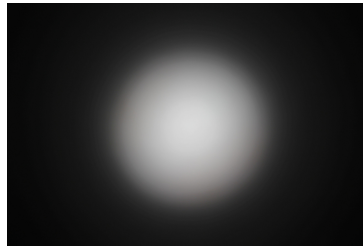


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

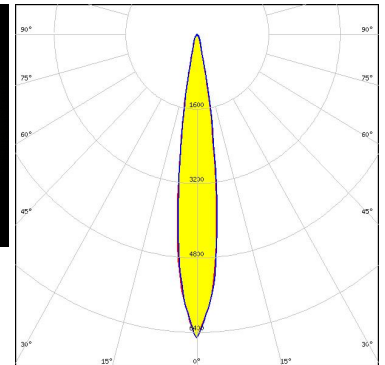
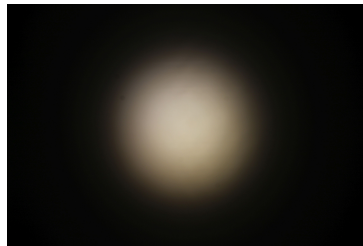
LED LC020C G2
FWHM / FWTM 15.0° / 27.0°
Efficiency 63 %
Peak intensity 6.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15859_HEKLA-SOCKET-I



Light distribution files

TRIDONIC

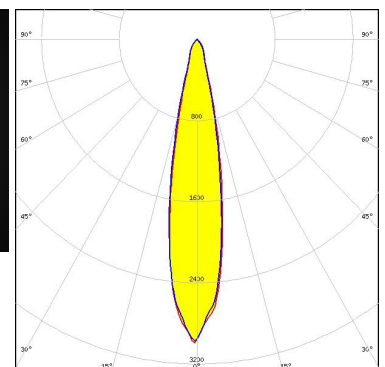
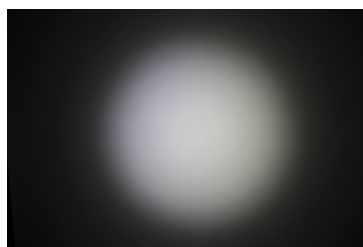
LED SLE G7 LES09
FWHM / FWTM 15.0° / 27.0°
Efficiency 66 %
Peak intensity 6.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files

TRIDONIC

LED SLE G7 LES13
FWHM / FWTM 20.0° / 37.0°
Efficiency 56 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15858_HEKLA-SOCKET-H

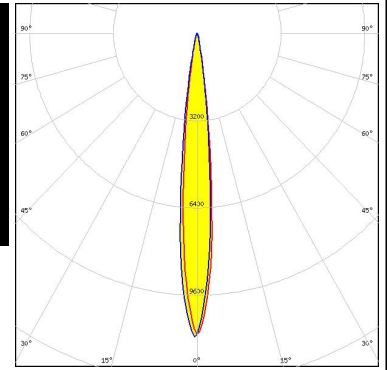
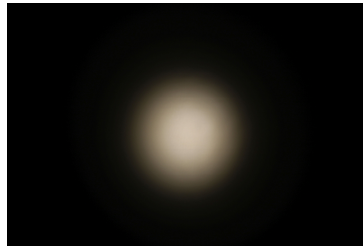


Light distribution files

OPTICAL RESULTS (MEASURED):

XICATO

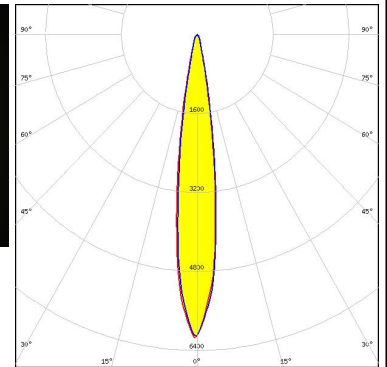
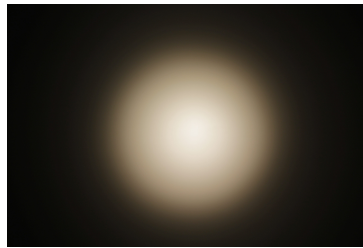
LED XOB 6 mm
FWHM / FWTM 11.0° / 21.0°
Efficiency 66 %
Peak intensity 11.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files

XICATO

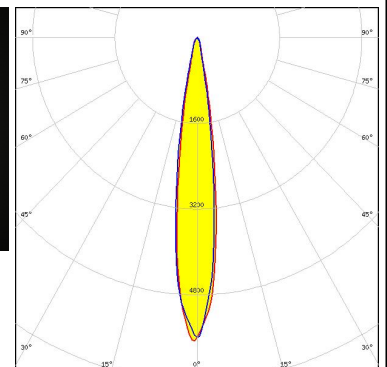
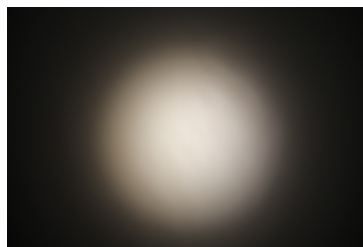
LED XOB 9.8 mm
FWHM / FWTM 15.0° / 28.0°
Efficiency 63 %
Peak intensity 6.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15255_HEKLA-SOCKET-C



Light distribution files

XICATO

LED XTM - 9mm LES
FWHM / FWTM 15.0° / 28.0°
Efficiency 60 %
Peak intensity 5.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
C15743_XTM-ADAPTER-50-B

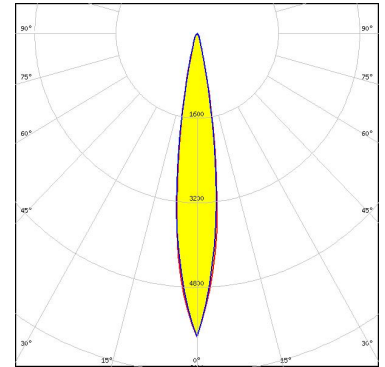


Light distribution files

OPTICAL RESULTS (SIMULATED):



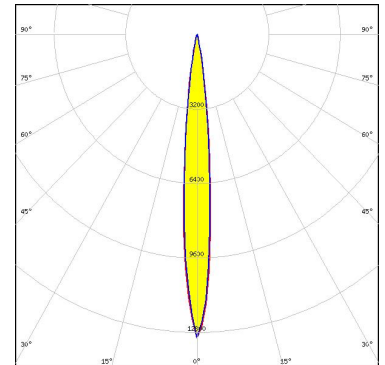
LED V10 Gen7
FWHM / FWTM 16.0° / 30.0°
Efficiency 60 %
Peak intensity 5.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files



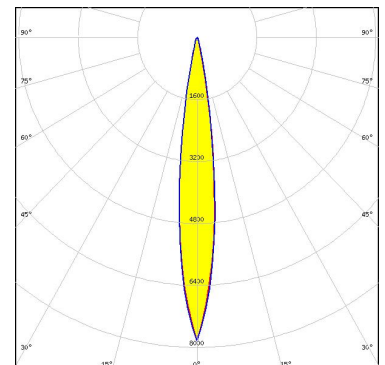
LED V6 Gen6
FWHM / FWTM 10.0° / 21.0°
Efficiency 66 %
Peak intensity 13 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 F15253_HEKLA-SOCKET-A



Light distribution files



LED V8 Gen7
FWHM / FWTM 14.0° / 26.0°
Efficiency 63 %
Peak intensity 7.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
 F15253_HEKLA-SOCKET-A

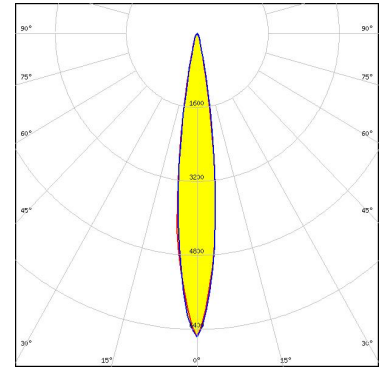


Light distribution files

OPTICAL RESULTS (SIMULATED):



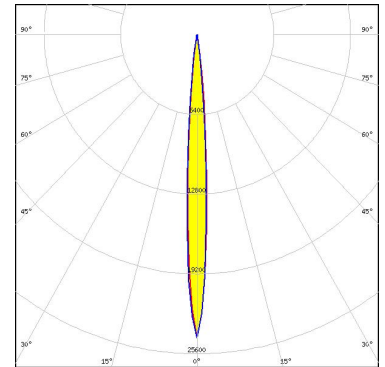
LED VERO10
 FWHM / FWTM 15.0° / 27.0°
 Efficiency 61 %
 Peak intensity 6.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F15616_HEKLA-SOCKET-F



Light distribution files



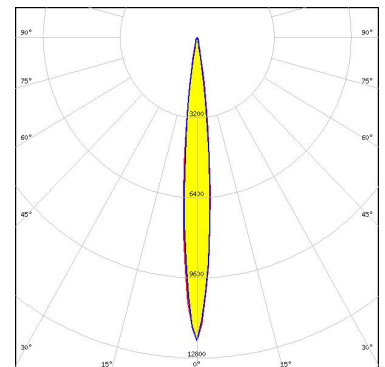
LED CHA0304
 FWHM / FWTM 8.0° / 15.0°
 Efficiency 65 %
 Peak intensity 24.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F17435_HEKLA-G2-C



Light distribution files



LED CHA0612
 FWHM / FWTM 10.0° / 20.0°
 Efficiency 61 %
 Peak intensity 12.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F17435_HEKLA-G2-C

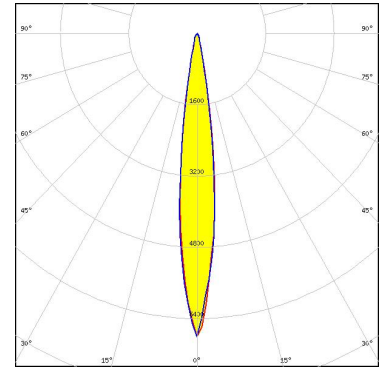


Light distribution files

OPTICAL RESULTS (SIMULATED):



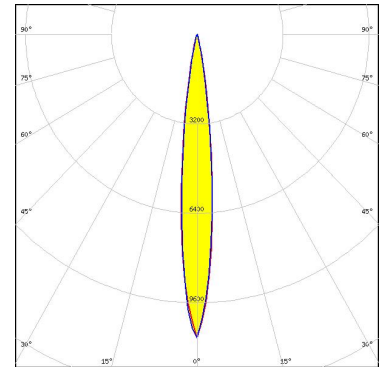
LED CHA0825
FWHM / FWTM 14.0° / 26.0°
Efficiency 57 %
Peak intensity 6.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F17438_HEKLA-G2-I



Light distribution files



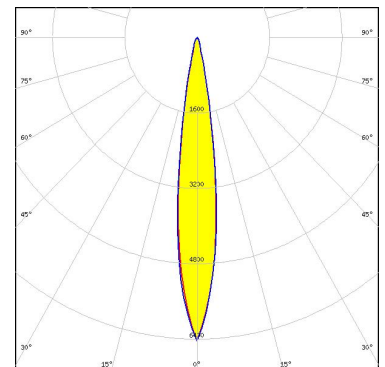
LED CXA/B 13xx
FWHM / FWTM 12.0° / 24.0°
Efficiency 69 %
Peak intensity 11 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15956_HEKLA-SOCKET-J



Light distribution files



LED LUXEON CoB 1202/1203
FWHM / FWTM 14.0° / 28.0°
Efficiency 61 %
Peak intensity 6.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15858_HEKLA-SOCKET-H

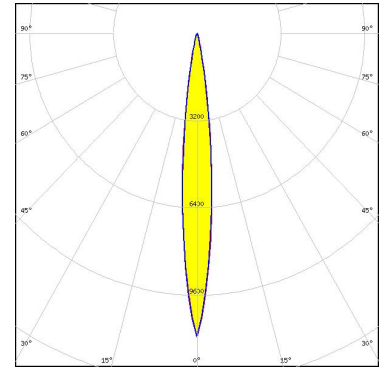


Light distribution files

OPTICAL RESULTS (SIMULATED):



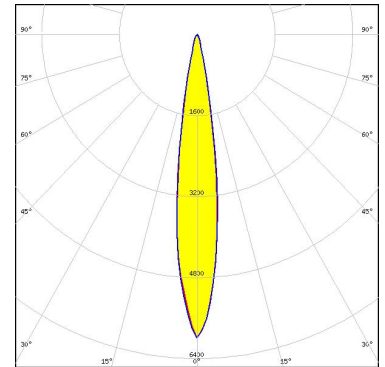
LED LUXEON CoB 1202s
FWHM / FWTM 12.0° / 23.0°
Efficiency 69 %
Peak intensity 11 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15848_HEKLA-SOCKET-G



Light distribution files



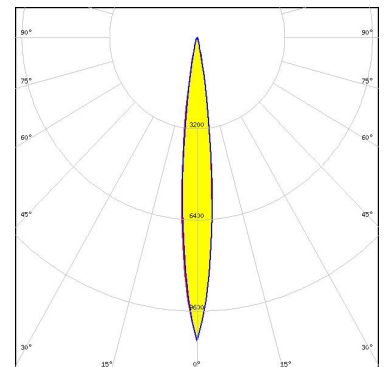
LED LUXEON CoB 1204HD
FWHM / FWTM 16.0° / 28.0°
Efficiency 61 %
Peak intensity 6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F15858_HEKLA-SOCKET-H



Light distribution files



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



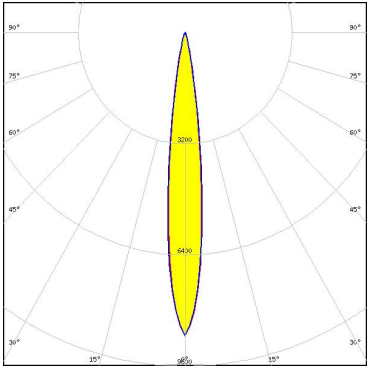
Light distribution files

OPTICAL RESULTS (SIMULATED):

NICHIA

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

Required components:
F15848_HEKLA-SOCKET-G

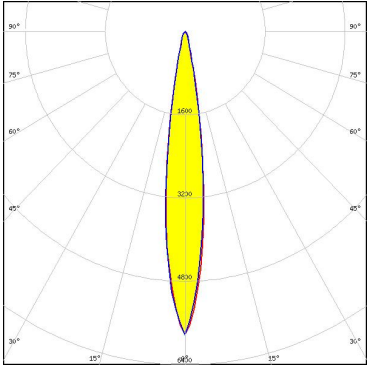


Light distribution files

OSRAM
Opto Semiconductors

LED	Soleriq S9
FWHM / FWTM	15.0° / 28.0°
Efficiency	59 %
Peak intensity	5.8 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F15255_HEKLA-SOCKET-C

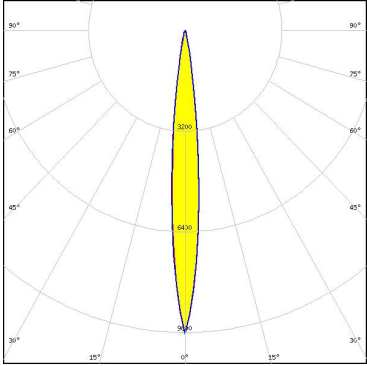


Light distribution files

PHILIPS

LED	Fortimo SLM L06 CoB
FWHM / FWTM	10.0° / 22.0°
Efficiency	53 %
Peak intensity	9.6 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:
F15858_HEKLA-SOCKET-H

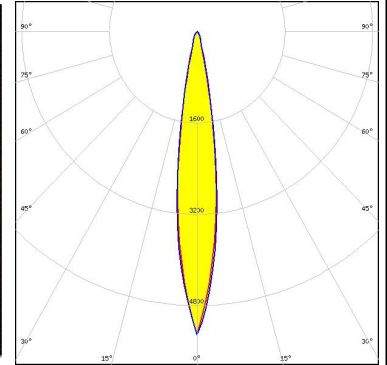
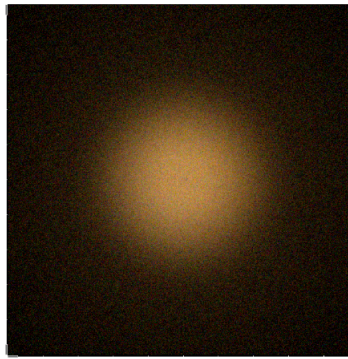


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

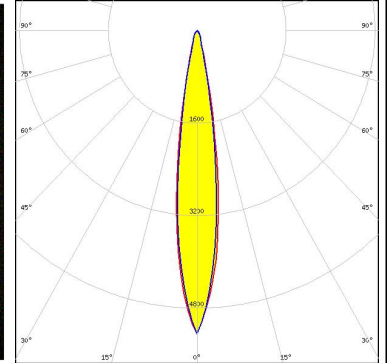
LED LC003D / LC006D / LC009D / LC013D
FWHM / FWTM 16.0° / 30.0°
Efficiency 58 %
Peak intensity 5.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F17435_HEKLA-G2-C



Light distribution files

SAMSUNG

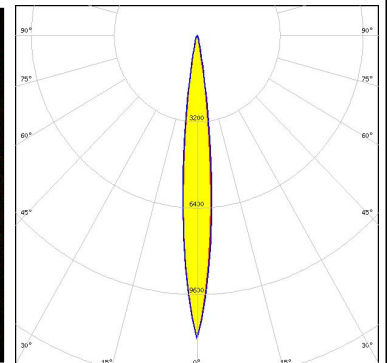
LED LC003D / LC006D / LC009D / LC013D
FWHM / FWTM 16.0° / 30.0°
Efficiency 58 %
Peak intensity 5.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
F17435_HEKLA-G2-C



Light distribution files

SAMSUNG

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

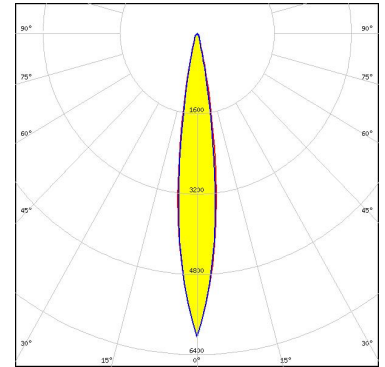


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

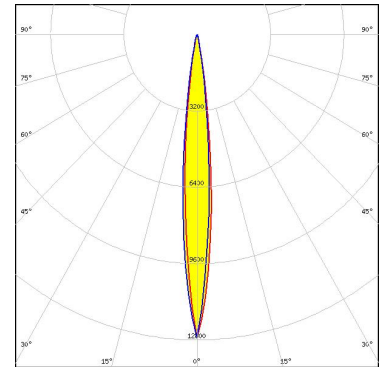
LED LH231B
 FWHM / FWTM 15.0° / 28.0°
 Efficiency 58 %
 Peak intensity 6 cd/lm
 LEDs/each optic 7
 Light colour/type White
 Required components:
 F15255_HEKLA-SOCKET-C



Light distribution files



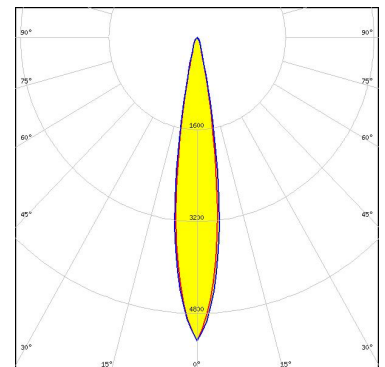
LED MJT COB LES 6
 FWHM / FWTM 11.0° / 21.0°
 Efficiency 65 %
 Peak intensity 12.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:
 F17435_HEKLA-G2-C



Light distribution files



LED MJT COB LES 9.8
 FWHM / FWTM 16.0° / 30.0°
 Efficiency 60 %
 Peak intensity 5.3 cd/lm
 LEDs/each optic 1
 Light colour/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.

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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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