

CARMEN-50-S-C

~24° spot beam. Assembly with holder C compatible with LEDiL HEKLA.

SPECIFICATION:

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

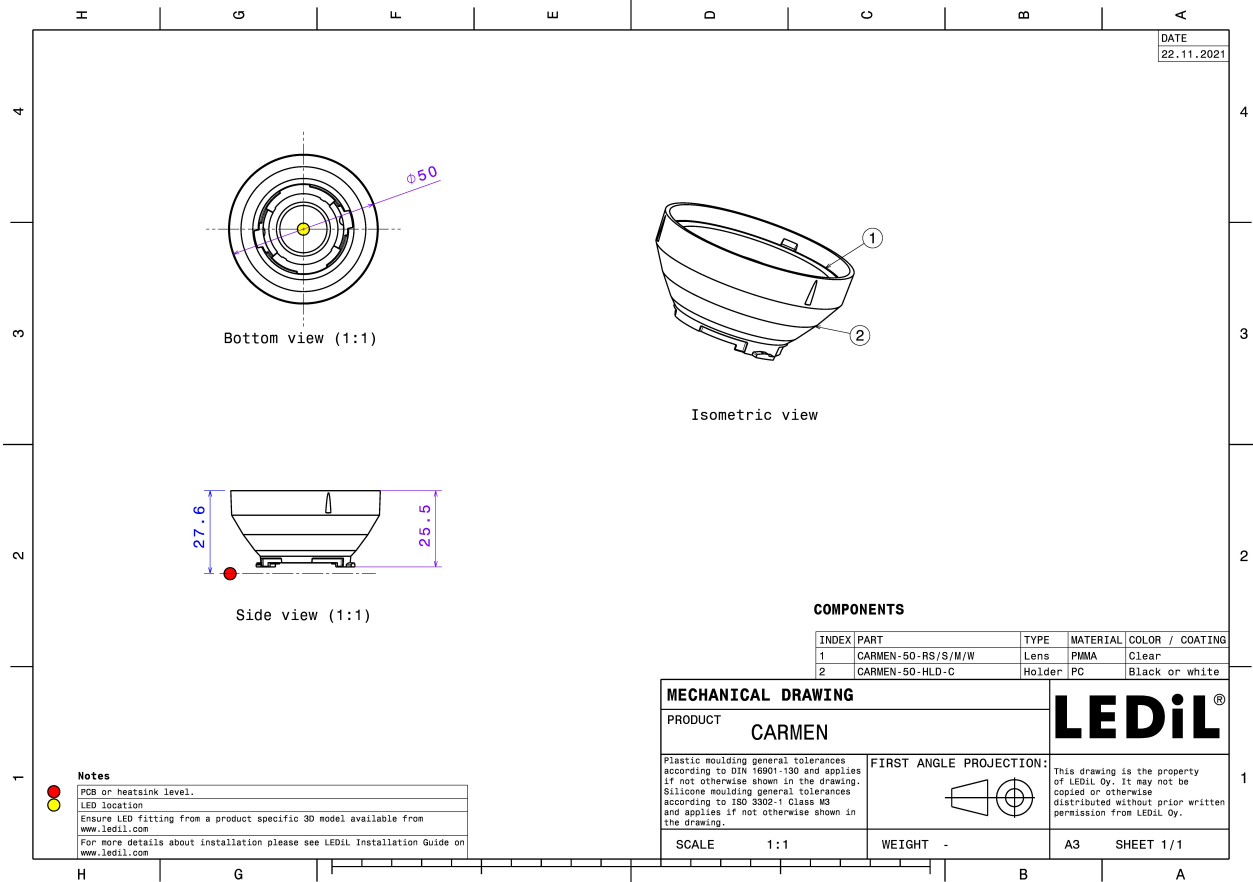


MATERIALS:

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



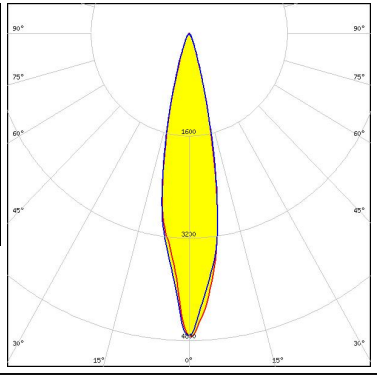


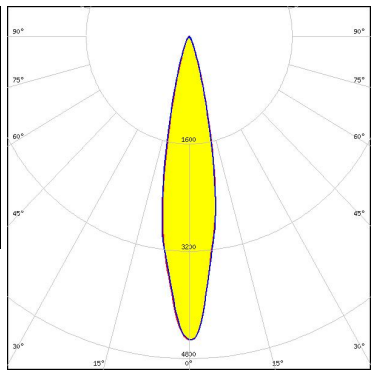


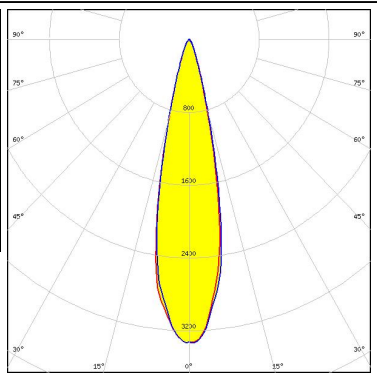


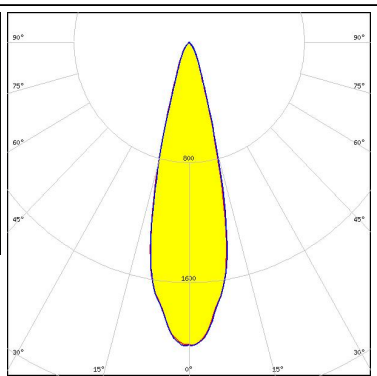
ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CP16107_CARMEN-50-S-C	Single lens	308	112	28	6.9
» Box size: 476 x 273 x 292 mm					



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

OPTICAL RESULTS (MEASURED):

<p></p> <p>LED V4 HD Gen 7</p> <p>FWHM / FWTM 21.0° / 38.0°</p> <p>Efficiency 79 %</p> <p>Peak intensity 4.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15253_HEKLA-SOCKET-A</p>		
<p></p> <p>LED V6 HD Gen 7</p> <p>FWHM / FWTM 20.0° / 38.0°</p> <p>Efficiency 73 %</p> <p>Peak intensity 4.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		
<p></p> <p>LED V9 HD Gen7</p> <p>FWHM / FWTM 23.0° / 40.0°</p> <p>Efficiency 65 %</p> <p>Peak intensity 3.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15859_HEKLA-SOCKET-I</p>		
<p></p> <p>LED VERO13</p> <p>FWHM / FWTM 27.0° / 46.0°</p> <p>Efficiency 53 %</p> <p>Peak intensity 2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K</p>		

OPTICAL RESULTS (MEASURED):

bridgelux.

LED Vesta TW 6mm DP
 FWHM / FWTM 15.0° / 31.0°
 Efficiency 63 %
 Peak intensity 5.7 cd/m
 LEDs/each optic 1
 Light colour White

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



bridgelux.

LED Vesta TW 9mm (9W) DP
 FWHM / FWTM 22.0° / 37.0°
 Efficiency 55 %
 Peak intensity 3.2 cd/m
 LEDs/each optic 1
 Light colour White

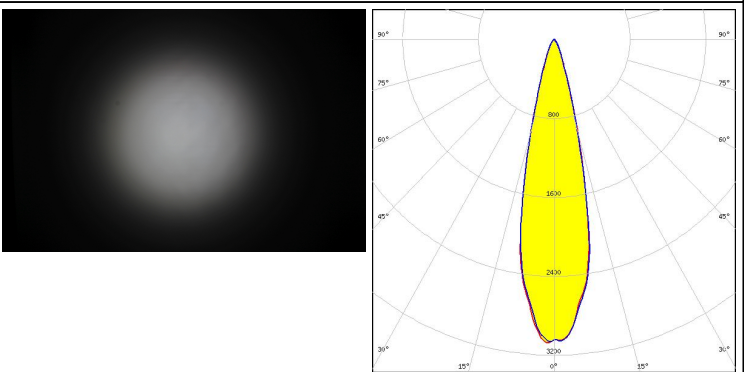
Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 489 Typ L8



CITIZEN

LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 24.0° / 42.0°
 Efficiency 66 %
 Peak intensity 3.1 cd/m
 LEDs/each optic 1
 Light colour White

Required components:
 F15255_HEKLA-SOCKET-C



CITIZEN

LED CLU700/701/702/703
 FWHM / FWTM 19.0° / 35.0°
 Efficiency 73 %
 Peak intensity 5.3 cd/m
 LEDs/each optic 1
 Light colour White

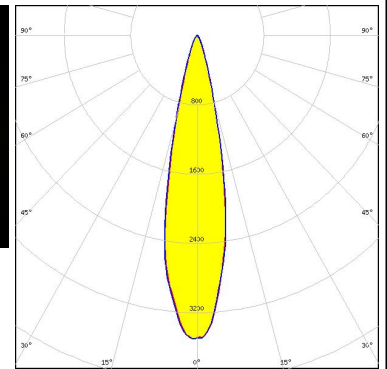
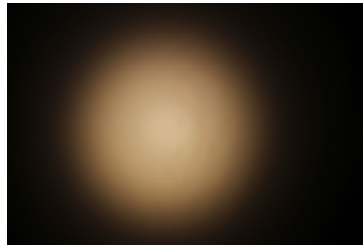
Required components:
 F15255_HEKLA-SOCKET-C



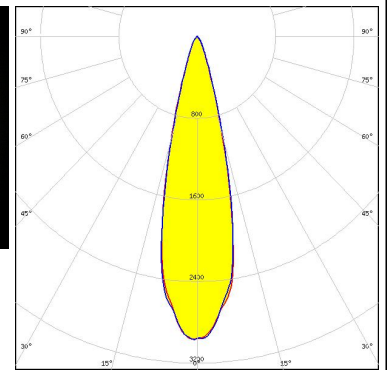
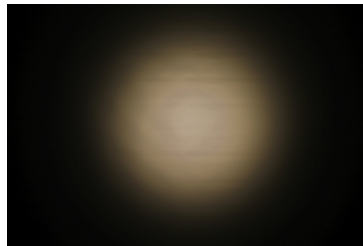
OPTICAL RESULTS (MEASURED):

CITIZEN

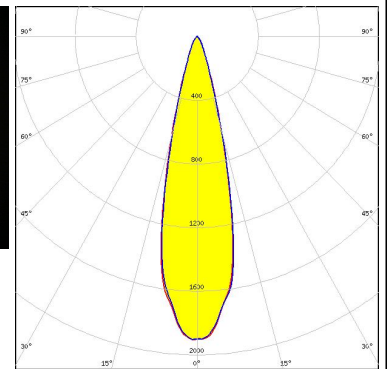
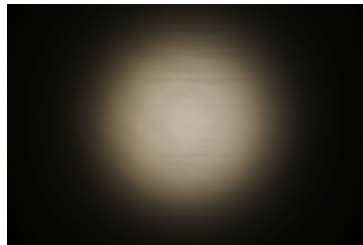
LED CLU710/711
 FWHM / FWTM 22.0° / 39.0°
 Efficiency 65 %
 Peak intensity 3.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



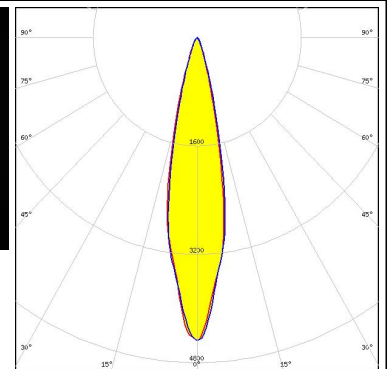
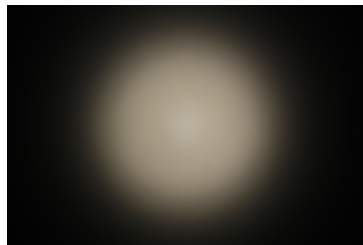
LED CMA1516
 FWHM / FWTM 25.0° / 43.0°
 Efficiency 68 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15256_HEKLA-SOCKET-D




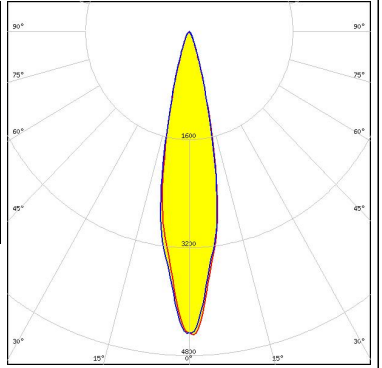

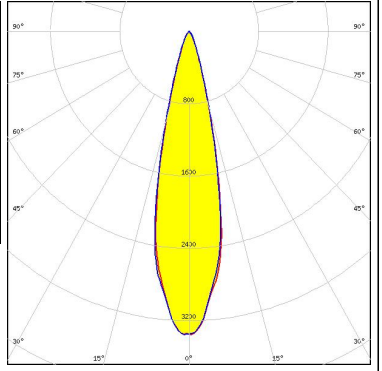
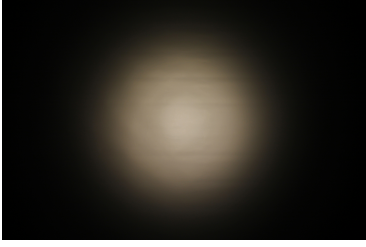
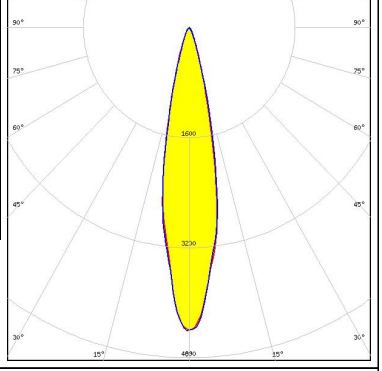

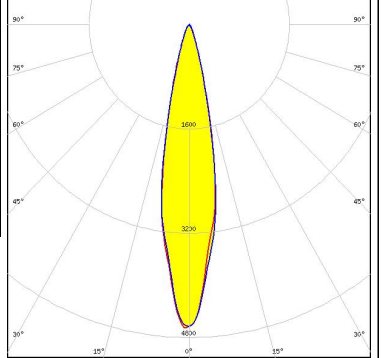
LED CMT14xx
 FWHM / FWTM 25.0° / 43.0°
 Efficiency 44 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



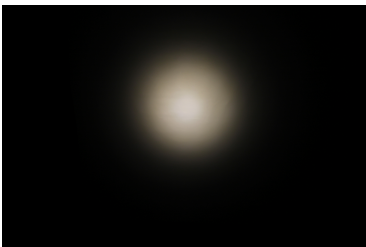
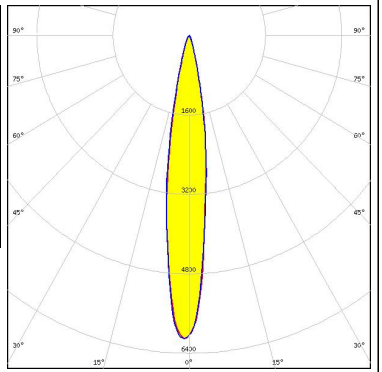
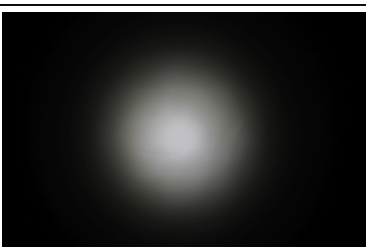
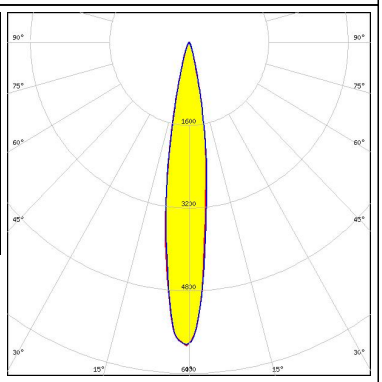
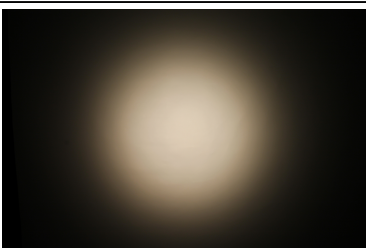
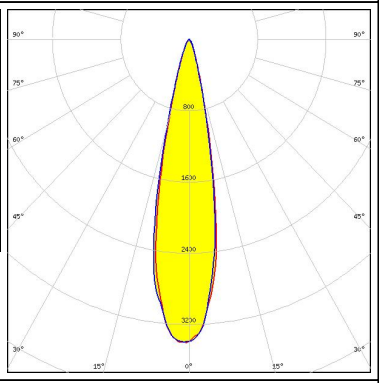

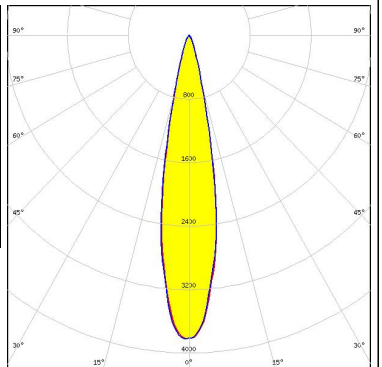
LED CXA/B 13xx
 FWHM / FWTM 22.0° / 39.0°
 Efficiency 77 %
 Peak intensity 4.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15956_HEKLA-SOCKET-J




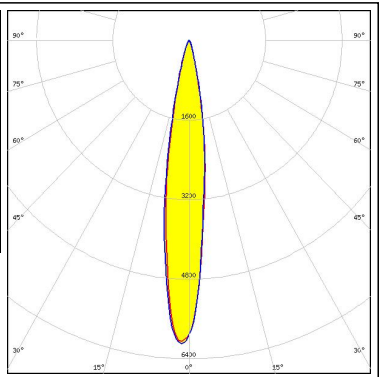

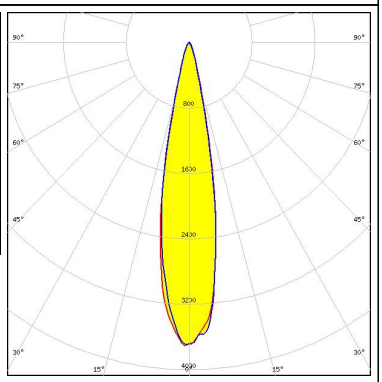

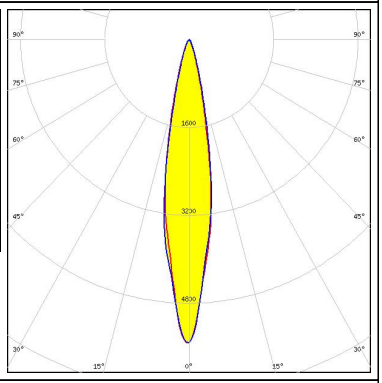

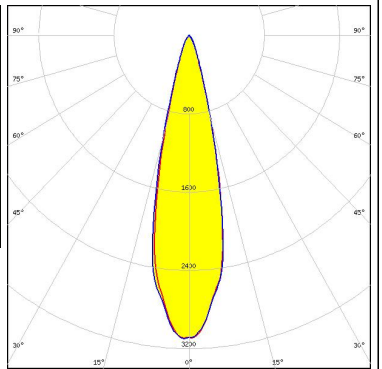
OPTICAL RESULTS (MEASURED):

<p>CREE LEDs</p> <p>LED CXA/B 13xx FWHM / FWTM 21.0° / 39.0° Efficiency 76 % Peak intensity 4.5 cd/m LEDs/each optic 1 Light colour White Required components: F15956_HEKLA-SOCKET-J</p>		
<p>CREE LEDs</p> <p>LED CXA/B 15xx FWHM / FWTM 24.0° / 41.0° Efficiency 69 % Peak intensity 3.4 cd/m LEDs/each optic 1 Light colour White Required components: F15256_HEKLA-SOCKET-D</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1202HD FWHM / FWTM 21.0° / 38.0° Efficiency 73 % Peak intensity 4.4 cd/m LEDs/each optic 1 Light colour White Required components: F15848_HEKLA-SOCKET-G</p>		
<p>LUMILEDS</p> <p>LED LUXEON CoB 1202s FWHM / FWTM 21.0° / 38.0° Efficiency 75 % Peak intensity 4.7 cd/m LEDs/each optic 1 Light colour White Required components: F15848_HEKLA-SOCKET-G</p>		


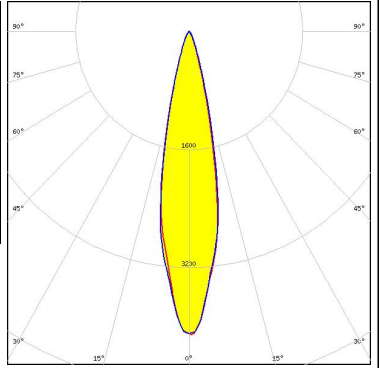

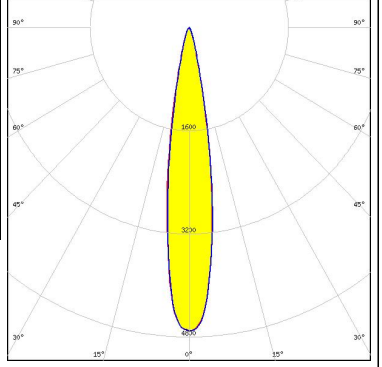

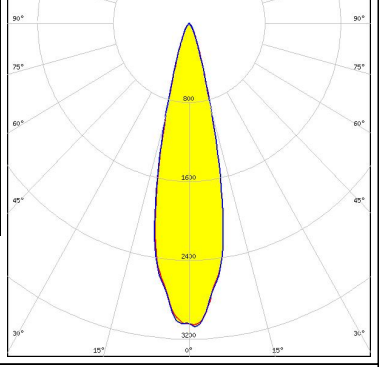

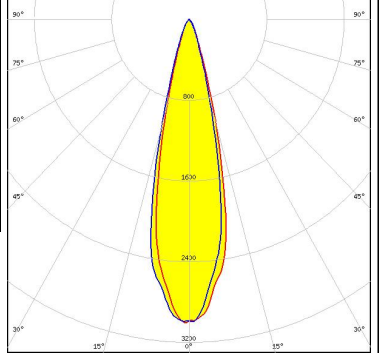
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB - HD S01H4</p> <p>FWHM / FWTM 16.0° / 32.0°</p> <p>Efficiency 68 %</p> <p>Peak intensity 6.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 634c Hekla</p>		
<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB - HD S02H6</p> <p>FWHM / FWTM 16.0° / 32.0°</p> <p>Efficiency 67 %</p> <p>Peak intensity 5.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 634c Hekla</p>		
<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB - HD S04H9</p> <p>FWHM / FWTM 22.0° / 38.0°</p> <p>Efficiency 61 %</p> <p>Peak intensity 3.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 634c Hekla</p>		
<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB M02 / M03 (Gen2)</p> <p>FWHM / FWTM 20.0° / 36.0°</p> <p>Efficiency 61 %</p> <p>Peak intensity 3.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 641a Hekla</p>		

OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON CX Plus CoB S01 (Gen2)</p> <p>FWHM / FWTM 15.0° / 31.0°</p> <p>Efficiency 68 %</p> <p>Peak intensity 6.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 634c Hekla</p>		
<p>LUMINUS</p> <p>LED CDM-9 (Dim-To-Warm)</p> <p>FWHM / FWTM 21.0° / 35.0°</p> <p>Efficiency 57 %</p> <p>Peak intensity 3.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K Bender Wirth: 490 Typ L8</p>		
<p>LUMINUS</p> <p>LED CXM-4</p> <p>FWHM / FWTM 18.0° / 35.0°</p> <p>Efficiency 76 %</p> <p>Peak intensity 5.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		
<p>LUMINUS</p> <p>LED CxM-9 (13.5x13.5)</p> <p>FWHM / FWTM 24.0° / 42.0°</p> <p>Efficiency 67 %</p> <p>Peak intensity 3.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		

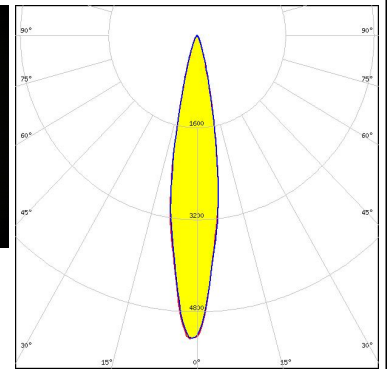
OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED COB S-Type (LES 7)</p> <p>FWHM / FWTM 22.0° / 39.0°</p> <p>Efficiency 73 %</p> <p>Peak intensity 4.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15848_HEKLA-SOCKET-G</p>		
<p>NICHIA</p> <p>LED NJCWL024Z-V1MT: COB L-Type Tunable White</p> <p>FWHM / FWTM 17.0° / 31.0°</p> <p>Efficiency 56 %</p> <p>Peak intensity 4.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C16142_HEKLA-SOCKET-K Bender Wirth: 497 Typ L8</p>		
<p>PHILIPS</p> <p>LED Fortimo SLM L09 CoB</p> <p>FWHM / FWTM 24.0° / 41.0°</p> <p>Efficiency 65 %</p> <p>Peak intensity 3.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15858_HEKLA-SOCKET-H</p>		
<p>SAMSUNG</p> <p>LED LC003D / LC006D / LC009D / LC013D</p> <p>FWHM / FWTM 25.0° / 43.0°</p> <p>Efficiency 67 %</p> <p>Peak intensity 3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: F15255_HEKLA-SOCKET-C</p>		

OPTICAL RESULTS (MEASURED):

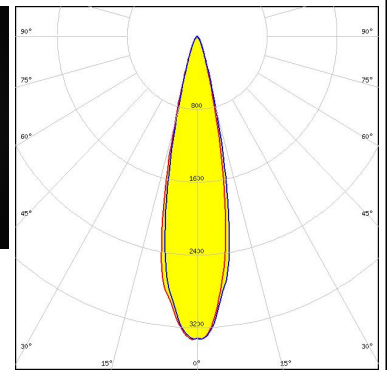
SAMSUNG

LED LC010C G2
 FWHM / FWTM 19.0° / 35.0°
 Efficiency 74 %
 Peak intensity 5.3 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



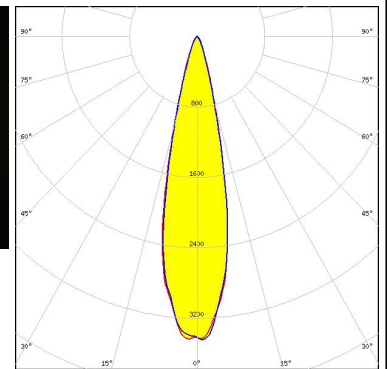
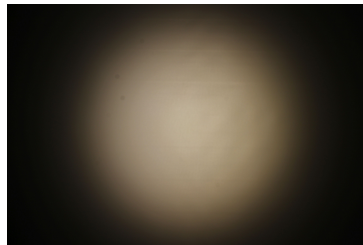
SAMSUNG

LED LC020C G2
 FWHM / FWTM 23.0° / 40.0°
 Efficiency 65 %
 Peak intensity 3.3 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



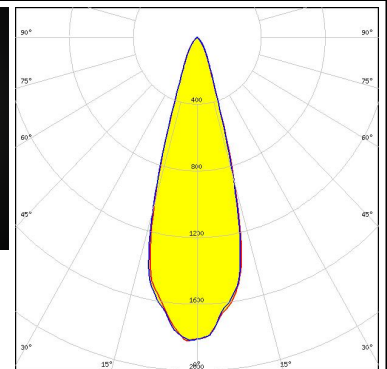
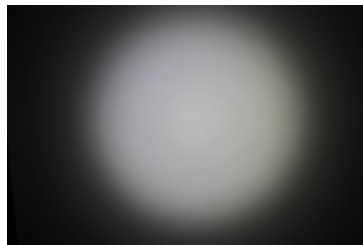
TRIDONIC

LED SLE G7 LES09
 FWHM / FWTM 23.0° / 41.0°
 Efficiency 69 %
 Peak intensity 3.5 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



TRIDONIC

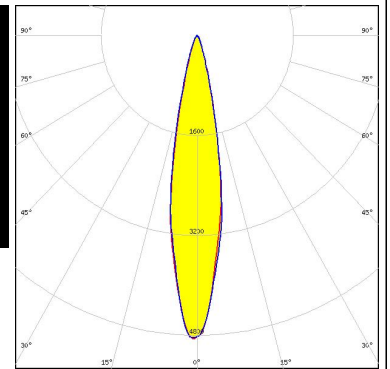
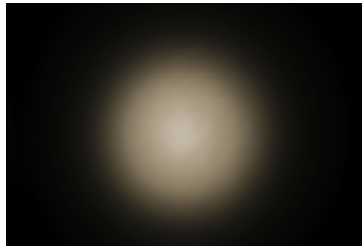
LED SLE G7 LES13
 FWHM / FWTM 31.0° / 51.0°
 Efficiency 58 %
 Peak intensity 1.8 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



OPTICAL RESULTS (MEASURED):

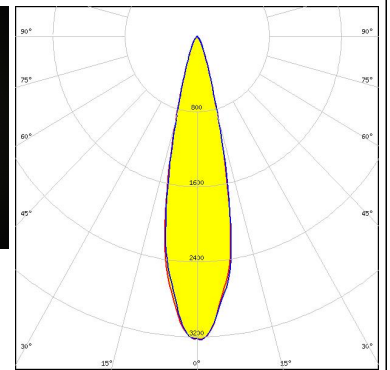
XICATO

LED XOB 6 mm
FWHM / FWTM 19.0° / 36.0°
Efficiency 73 %
Peak intensity 4.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15255_HEKLA-SOCKET-C


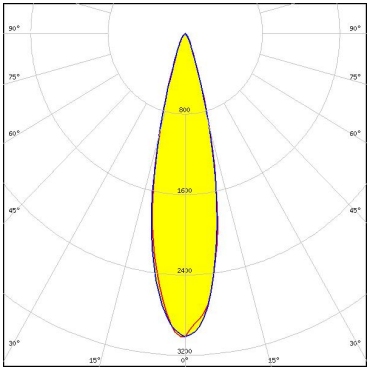

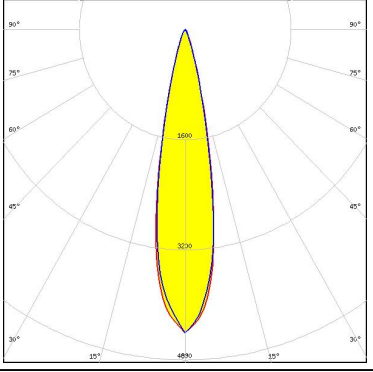

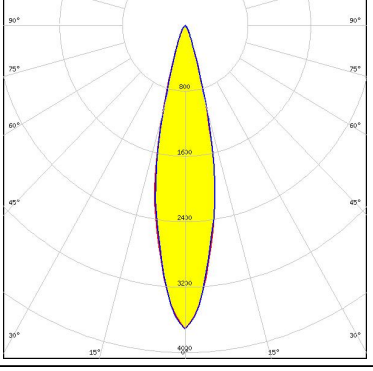

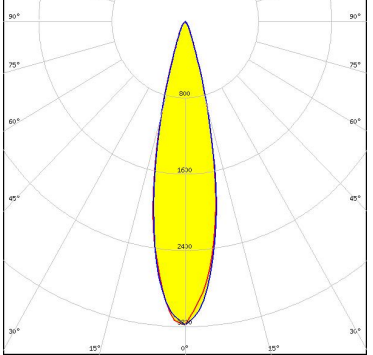


XICATO

LED XOB 9.8 mm
FWHM / FWTM 24.0° / 42.0°
Efficiency 67 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15255_HEKLA-SOCKET-C



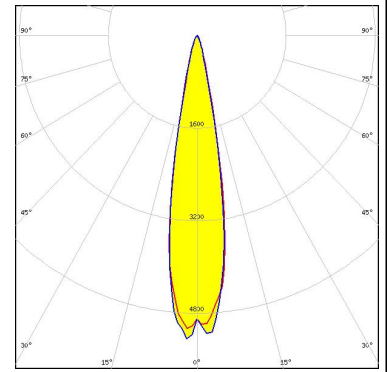
OPTICAL RESULTS (SIMULATED):

<p></p> <p>LED V10 Gen7 FWHM / FWTM 24.0° / 42.0° Efficiency 65 % Peak intensity 3.1 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C</p>	
<p></p> <p>LED V6 Gen6 FWHM / FWTM 21.0° / 37.0° Efficiency 71 % Peak intensity 4.4 cd/lm LEDs/each optic 1 Light colour White Required components: F15253_HEKLA-SOCKET-A</p>	
<p></p> <p>LED V8 Gen7 FWHM / FWTM 24.0° / 40.0° Efficiency 71 % Peak intensity 3.7 cd/lm LEDs/each optic 1 Light colour White Required components: F15253_HEKLA-SOCKET-A</p>	
<p></p> <p>LED VERO10 FWHM / FWTM 24.0° / 41.0° Efficiency 64 % Peak intensity 3.2 cd/lm LEDs/each optic 1 Light colour White Required components: F15616_HEKLA-SOCKET-F</p>	

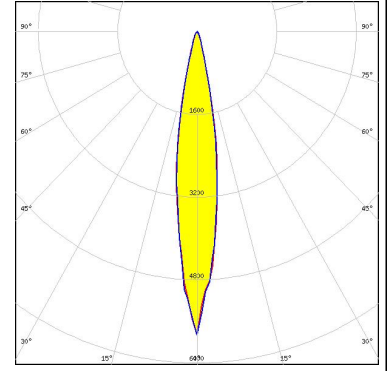
OPTICAL RESULTS (SIMULATED):



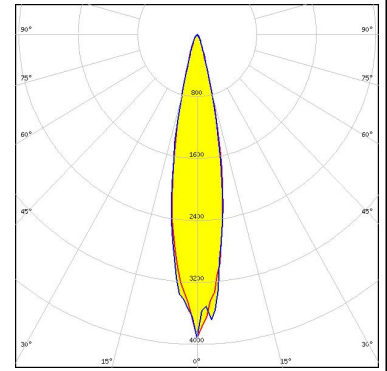
LED: CHA0304
 FWHM / FWTM: 20.0° / 33.0°
 Efficiency: 72 %
 Peak intensity: 5.4 cd/lm
 LEDs/each optic: 1
 Light colour: White
 Required components:
 F17435_HEKLA-G2-C



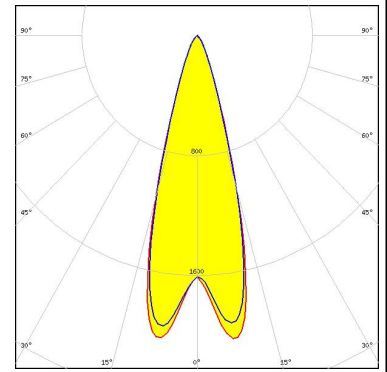
LED: CHA0612
 FWHM / FWTM: 16.0° / 31.0°
 Efficiency: 66 %
 Peak intensity: 5.9 cd/lm
 LEDs/each optic: 1
 Light colour: White
 Required components:
 F17435_HEKLA-G2-C



LED: CHA0825
 FWHM / FWTM: 20.0° / 36.0°
 Efficiency: 60 %
 Peak intensity: 3.9 cd/lm
 LEDs/each optic: 1
 Light colour: White
 Required components:
 F17438_HEKLA-G2-I



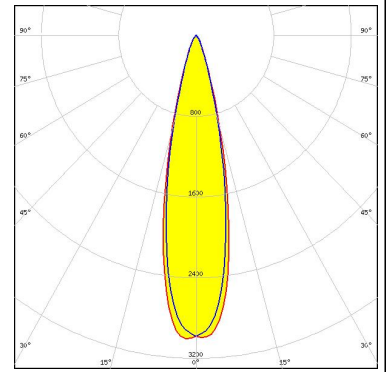
LED: COB S-Type (LES 6)
 FWHM / FWTM: 30.0° / 50.0°
 Efficiency: 62 %
 Peak intensity: 2.1 cd/lm
 LEDs/each optic: 1
 Light colour: White
 Required components:
 F15848_HEKLA-SOCKET-G



OPTICAL RESULTS (SIMULATED):

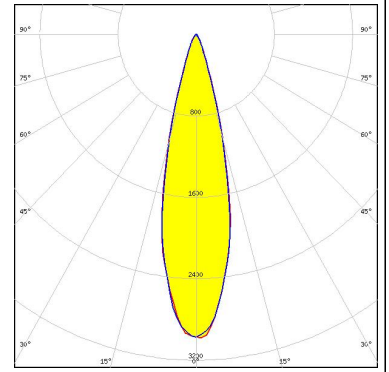
SAMSUNG

LED LH231B
FWHM / FWTM 23.0° / 42.0°
Efficiency 63 %
Peak intensity 3 cd/lm
LEDs/each optic 7
Light colour White
Required components:
F15255_HEKLA-SOCKET-C



XICATO

LED XTM - 9mm LES
FWHM / FWTM 25.0° / 43.0°
Efficiency 67 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C15743_XTM-ADAPTER-50-B



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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