

## 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:

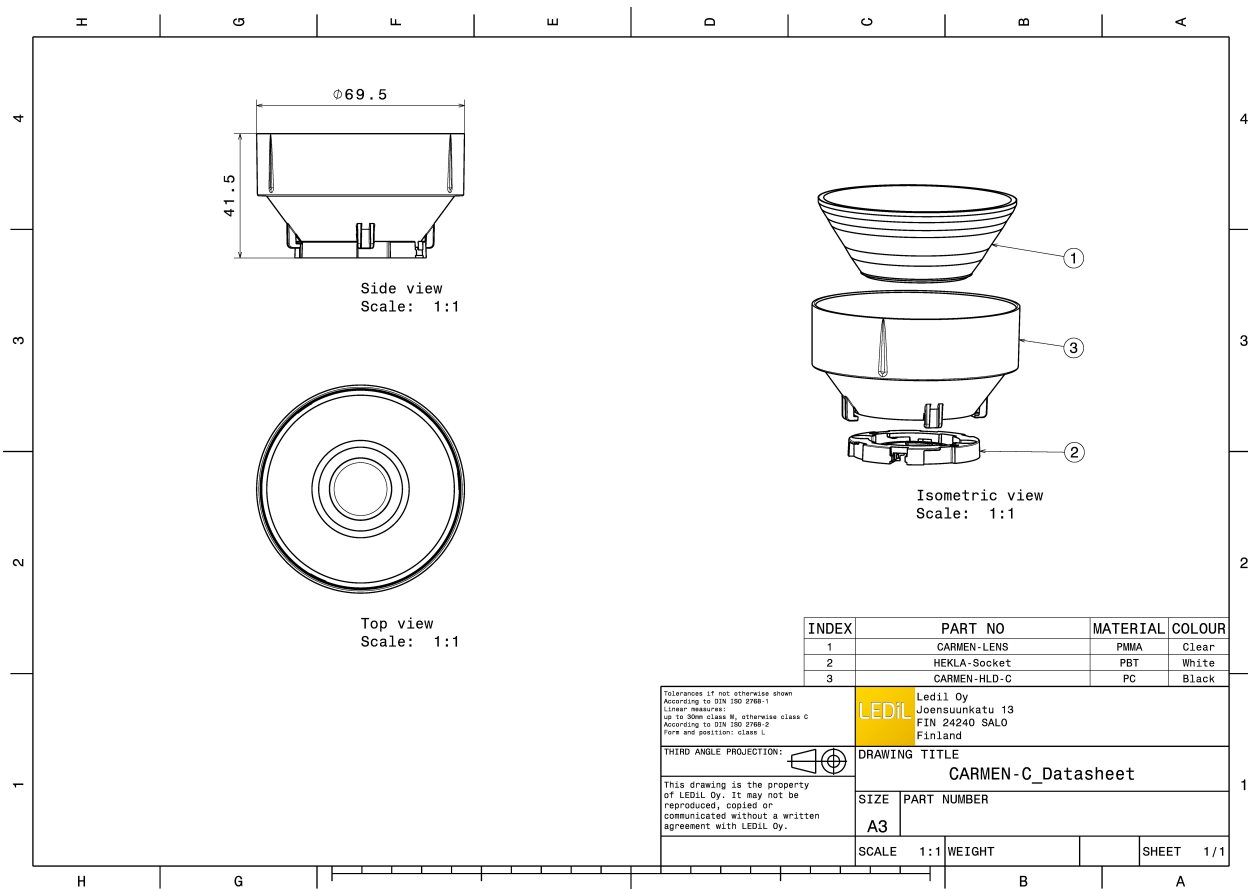
Component	Type	Material	Colour	Finish
CARMEN-S	Single lens	PMMA	clear	
CARMEN-HLD-C	Holder	PC	black	

### ORDERING INFORMATION:

Component		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					



LEDiL®



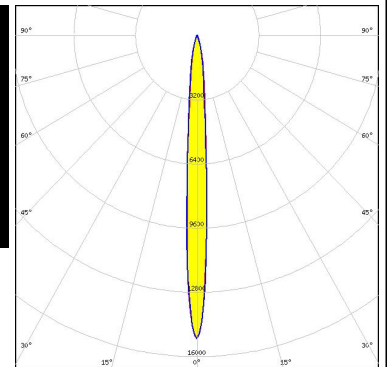
See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)



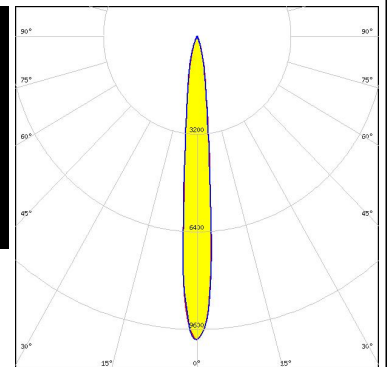
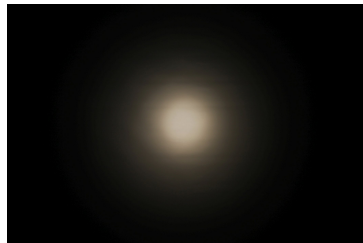
#### OPTICAL RESULTS (MEASURED):



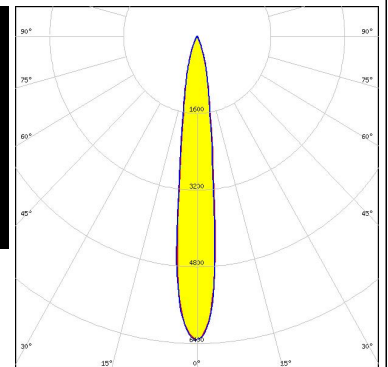
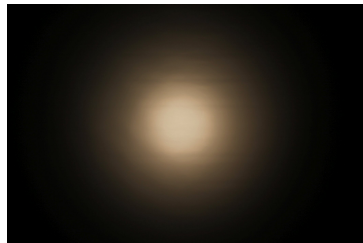
LED V4 HD Gen 7  
FWHM / FWTM 8.0° / 23.0°  
Efficiency 78 %  
Peak intensity 15 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15253\_HEKLA-SOCKET-A



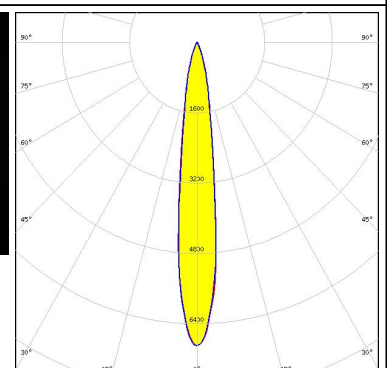
LED V6 HD Gen 7  
FWHM / FWTM 10.0° / 28.0°  
Efficiency 75 %  
Peak intensity 9.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15255\_HEKLA-SOCKET-C



LED V9 HD Gen7  
FWHM / FWTM 14.0° / 34.0°  
Efficiency 72 %  
Peak intensity 6.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15859\_HEKLA-SOCKET-I



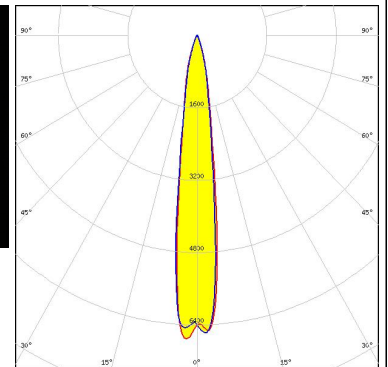
LED VERO10  
FWHM / FWTM 14.0° / 34.0°  
Efficiency 75 %  
Peak intensity 6.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15616\_HEKLA-SOCKET-F



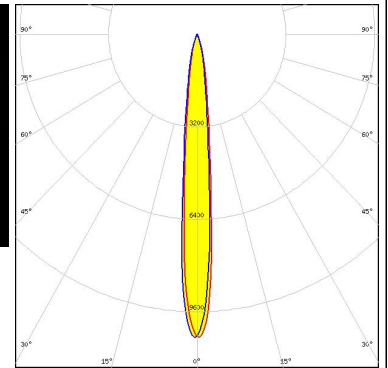
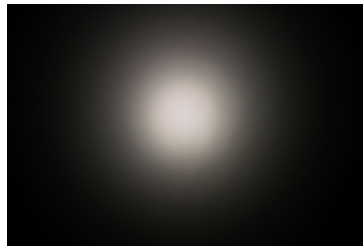
#### OPTICAL RESULTS (MEASURED):



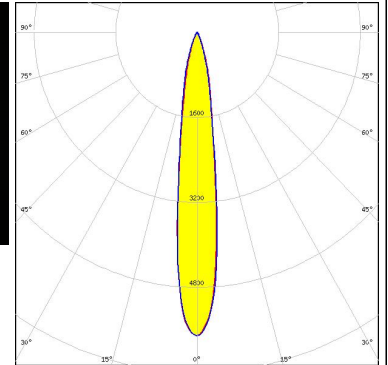
LED Vesta DTW 9mm (4W/6W/12W)  
 FWHM / FWTM 14.0° / 33.0°  
 Efficiency 71 %  
 Peak intensity 6.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 490 Typ L8



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 White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 504 Typ L8

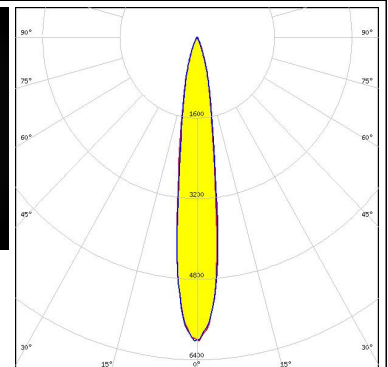
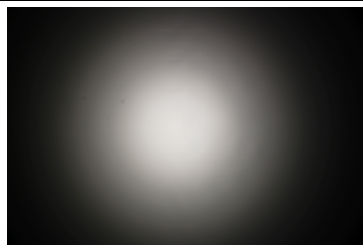


LED Vesta TW 9mm (9W) DP  
 FWHM / FWTM 15.0° / 36.0°  
 Efficiency 71 %  
 Peak intensity 5.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 489 Typ L8



#### CITIZEN

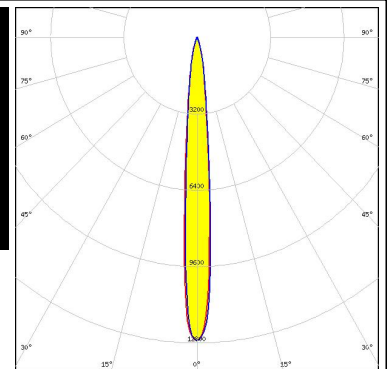
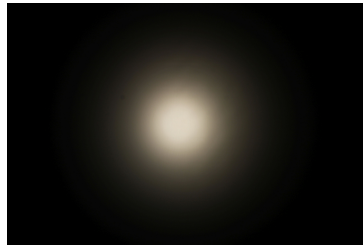
LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 15.0° / 36.0°  
 Efficiency 74 %  
 Peak intensity 6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### OPTICAL RESULTS (MEASURED):

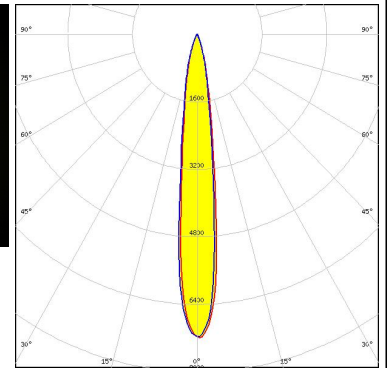
#### CITIZEN

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 White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



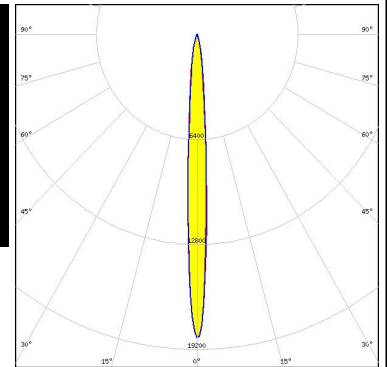
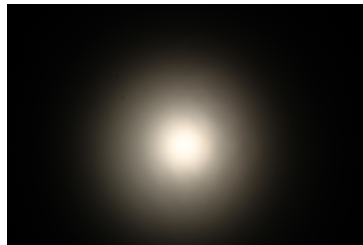
#### CITIZEN

LED CLU710/711  
 FWHM / FWTM 13.0° / 33.0°  
 Efficiency 73 %  
 Peak intensity 7.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



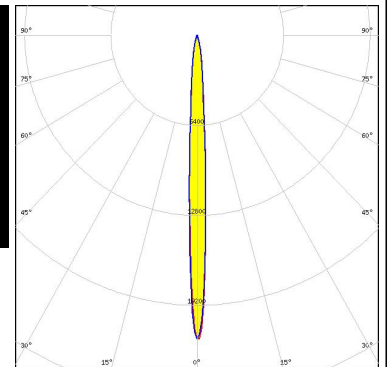
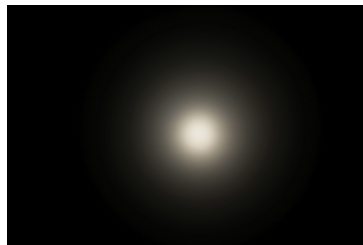
#### CITIZEN

LED CLU7A2/7A3  
 FWHM / FWTM 7.0° / 20.0°  
 Efficiency 80 %  
 Peak intensity 18.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### CITIZEN

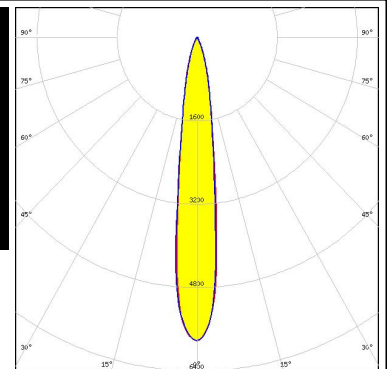
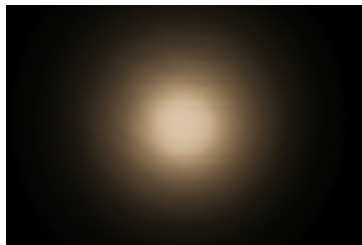
LED CLU7B2  
 FWHM / FWTM 6.0° / 19.0°  
 Efficiency 80 %  
 Peak intensity 21.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



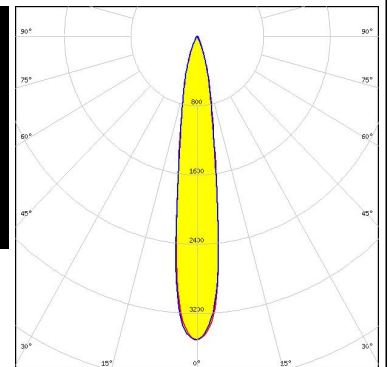
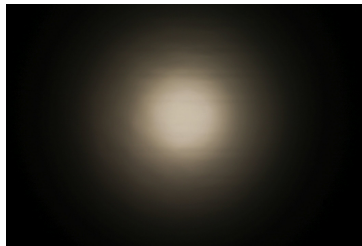
#### OPTICAL RESULTS (MEASURED):



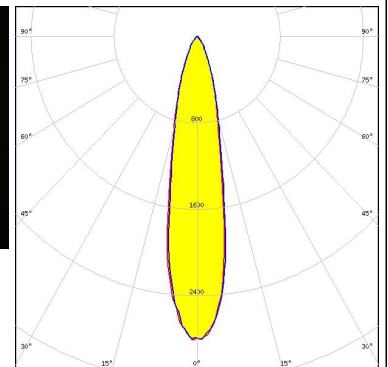
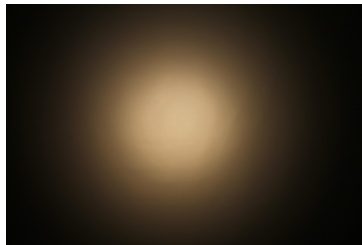
LED CMA1516  
FWHM / FWTM 14.0° / 36.0°  
Efficiency 72 %  
Peak intensity 5.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15256\_HEKLA-SOCKET-D



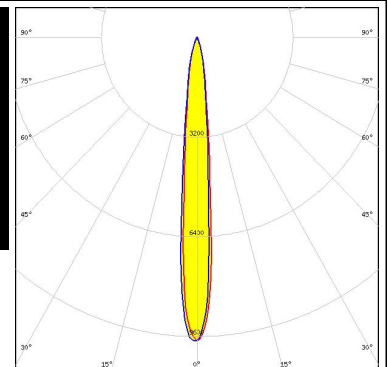
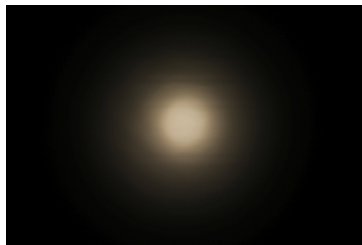
LED CMT14xx  
FWHM / FWTM 15.0° / 37.0°  
Efficiency 48 %  
Peak intensity 3.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15255\_HEKLA-SOCKET-C



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 White  
Required components:  
Bender Wirth: 637a Hekla



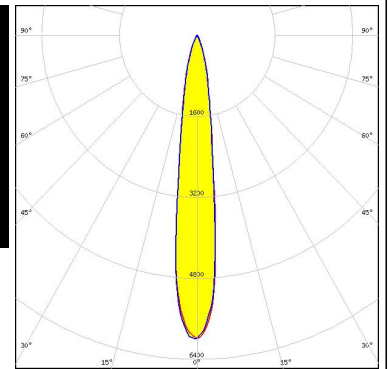
LED LUXEON CoB 1202HD  
FWHM / FWTM 10.0° / 28.0°  
Efficiency 75 %  
Peak intensity 9.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15848\_HEKLA-SOCKET-G



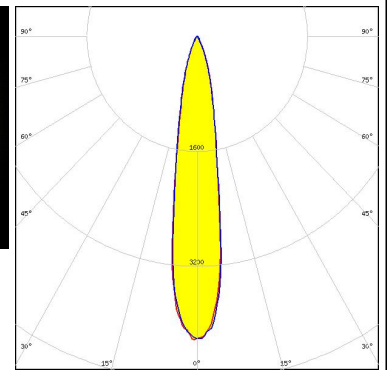
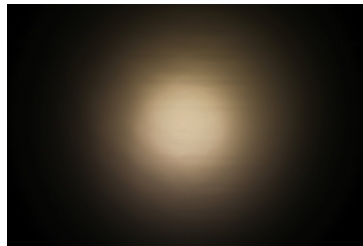
#### OPTICAL RESULTS (MEASURED):



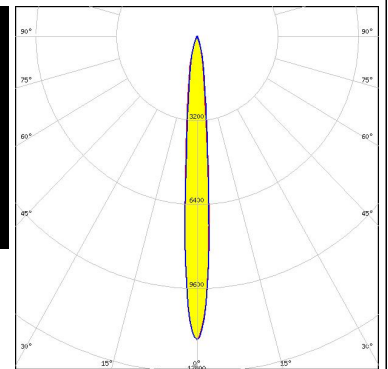
LED LUXEON CoB 1204HD  
 FWHM / FWTM 14.0° / 35.0°  
 Efficiency 73 %  
 Peak intensity 6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15858\_HEKLA-SOCKET-H



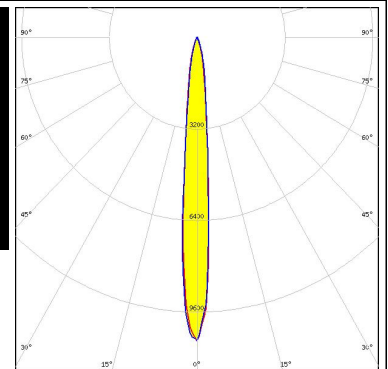
LED LUXEON CoB 1205HD  
 FWHM / FWTM 17.0° / 41.0°  
 Efficiency 69 %  
 Peak intensity 4.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15858\_HEKLA-SOCKET-H



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 White  
 Required components:  
 Bender Wirth: 634c Hekla



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 White  
 Required components:  
 Bender Wirth: 634c Hekla

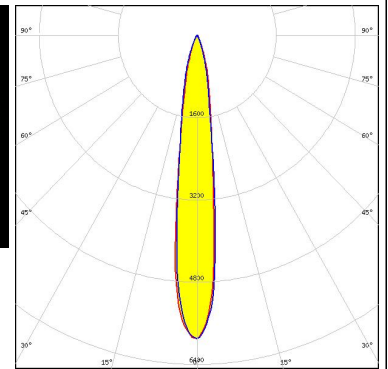




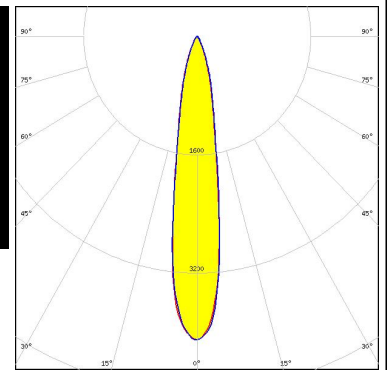
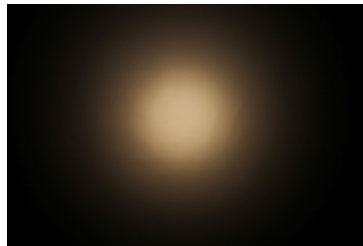
#### OPTICAL RESULTS (MEASURED):



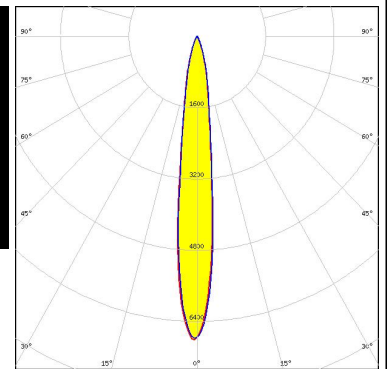
LED LUXEON CX Plus CoB - HD S04H9  
 FWHM / FWTM 14.0° / 36.0°  
 Efficiency 72 %  
 Peak intensity 5.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 634c Hekla



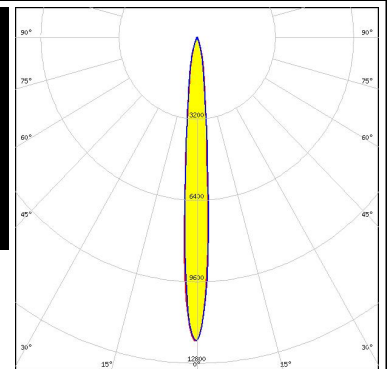
LED LUXEON CX Plus CoB L04 / L05 (Gen2)  
 FWHM / FWTM 18.0° / 42.0°  
 Efficiency 69 %  
 Peak intensity 4.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 637a Hekla



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 White  
 Required components:  
 Bender Wirth: 641a Hekla



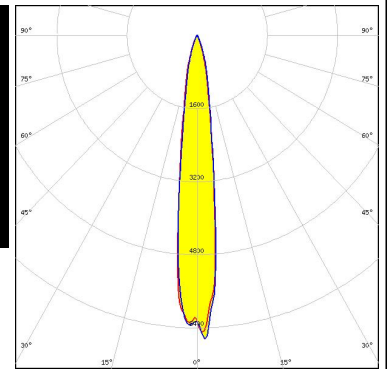
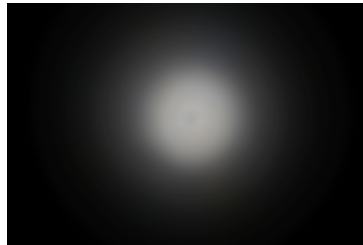
LED LUXEON CX Plus CoB S01 (Gen2)  
 FWHM / FWTM 9.0° / 25.0°  
 Efficiency 76 %  
 Peak intensity 11.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 634c Hekla



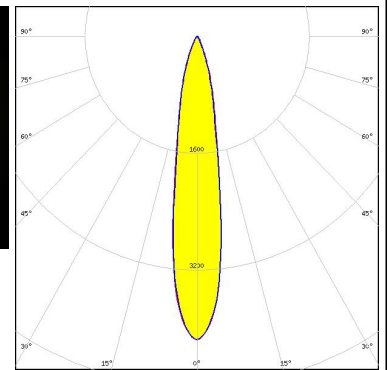
#### OPTICAL RESULTS (MEASURED):



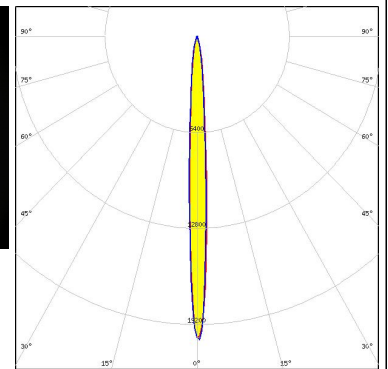
LED CDM-9 (Dim-To-Warm)  
 FWHM / FWTM 14.0° / 33.0°  
 Efficiency 71 %  
 Peak intensity 6.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 490 Typ L8



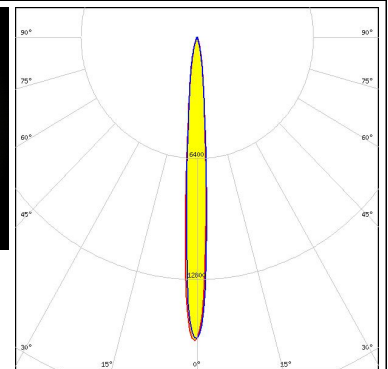
LED CxM-11 (19x19)  
 FWHM / FWTM 18.0° / 42.0°  
 Efficiency 70 %  
 Peak intensity 4.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



LED CXM-3  
 FWHM / FWTM 7.0° / 19.0°  
 Efficiency 80 %  
 Peak intensity 20.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



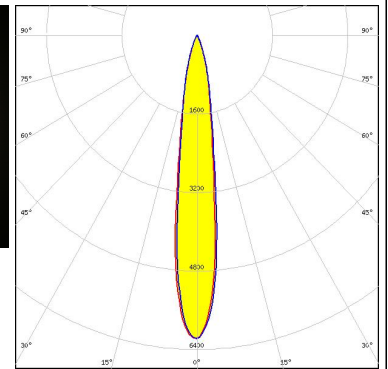
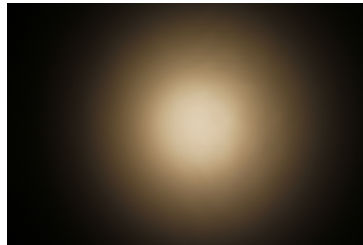
LED CXM-4  
 FWHM / FWTM 8.0° / 22.0°  
 Efficiency 78 %  
 Peak intensity 16 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



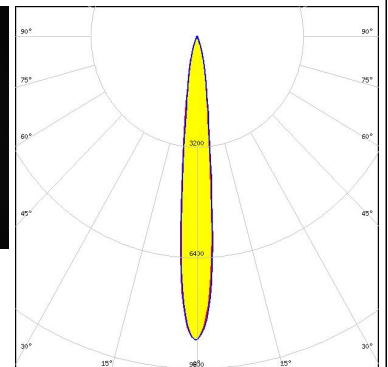
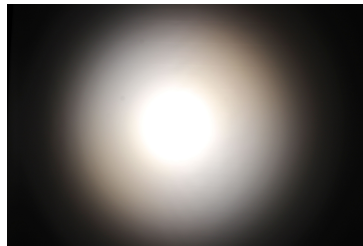
#### OPTICAL RESULTS (MEASURED):



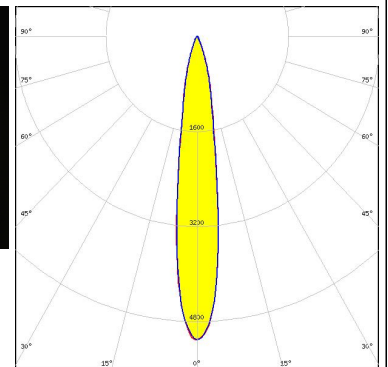
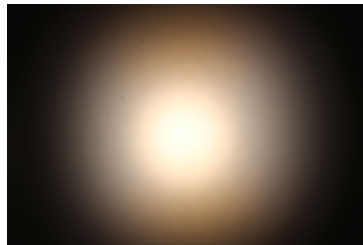
LED CxM-9 (13.5x13.5)  
 FWHM / FWTM 15.0° / 35.0°  
 Efficiency 74 %  
 Peak intensity 6.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



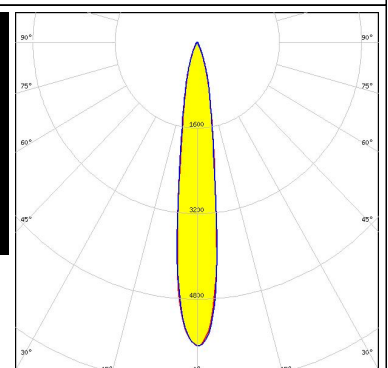
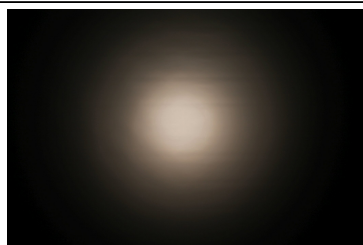
LED NJCWL024Z-V1MT: COB L-Type Tunable White  
 FWHM / FWTM 12.0° / 29.0°  
 Efficiency 71 %  
 Peak intensity 8.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 497 Typ L8



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 White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 498 Typ L8



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 White  
 Required components:  
 F15858\_HEKLA-SOCKET-H

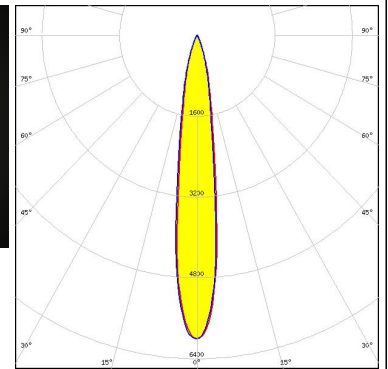
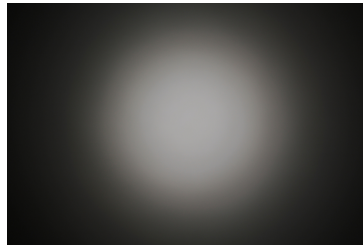




#### OPTICAL RESULTS (MEASURED):

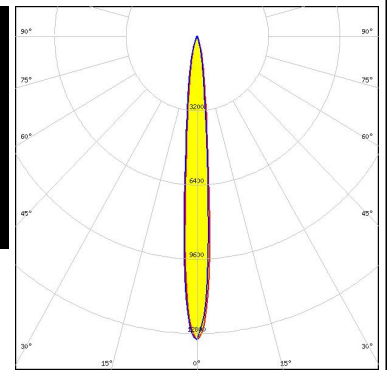
#### SAMSUNG

LED LC003D / LC006D / LC009D / LC013D  
 FWHM / FWTM 15.0° / 36.0°  
 Efficiency 74 %  
 Peak intensity 6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



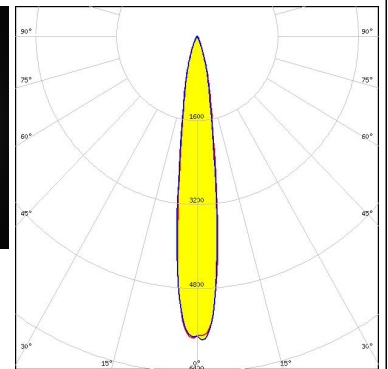
#### SAMSUNG

LED LC010C G2  
 FWHM / FWTM 9.0° / 24.0°  
 Efficiency 77 %  
 Peak intensity 13.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



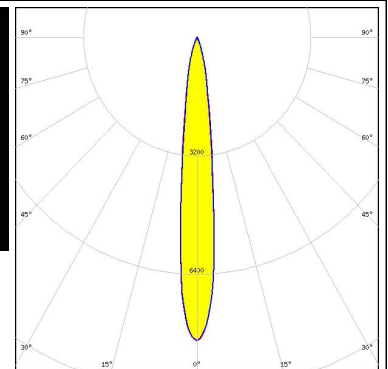
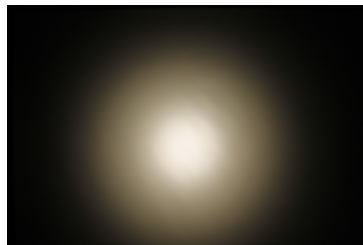
#### SAMSUNG

LED LC010T (Tunable White)  
 FWHM / FWTM 15.0° / 35.0°  
 Efficiency 71 %  
 Peak intensity 5.8 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:  
 C16142\_HEKLA-SOCKET-K  
 Bender Wirth: 501 Typ L8



#### SAMSUNG

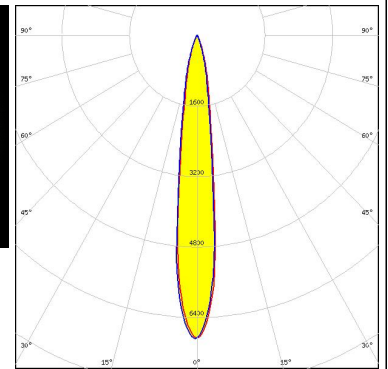
LED LC020C  
 FWHM / FWTM 12.0° / 31.0°  
 Efficiency 76 %  
 Peak intensity 8.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15848\_HEKLA-SOCKET-G



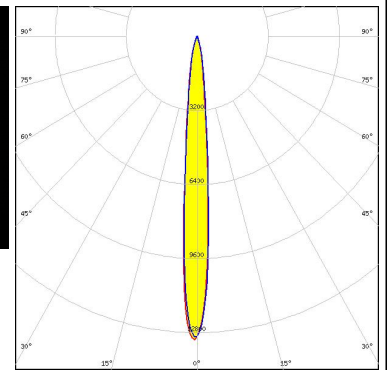
#### OPTICAL RESULTS (MEASURED):

#### SAMSUNG

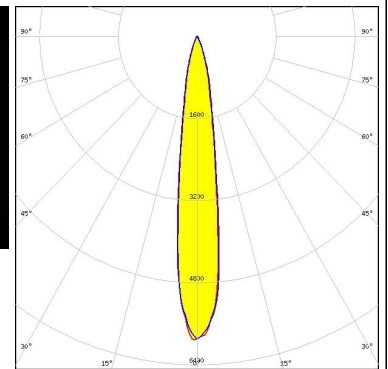
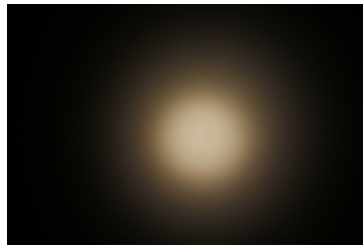
LED LC020C G2  
FWHM / FWTM 14.0° / 33.0°  
Efficiency 74 %  
Peak intensity 6.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15859\_HEKLA-SOCKET-I



SEOUL SEMICONDUCTOR  
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 White  
Required components:  
F15255\_HEKLA-SOCKET-C

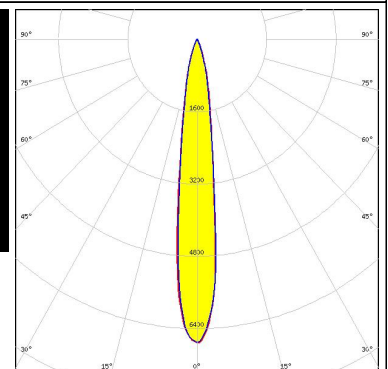


SEOUL SEMICONDUCTOR  
LED MJT COB LES 9.8  
FWHM / FWTM 15.0° / 35.0°  
Efficiency 72 %  
Peak intensity 5.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15255\_HEKLA-SOCKET-C



#### TRIDONIC

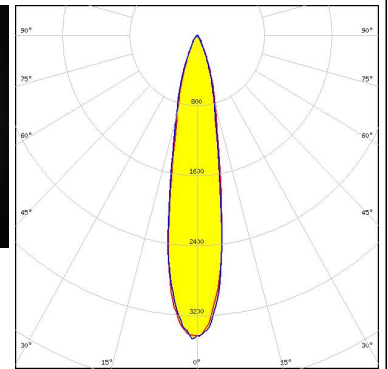
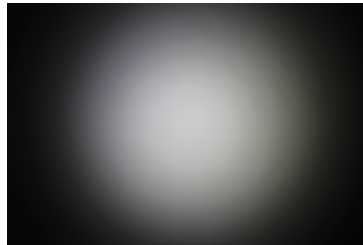
LED SLE G7 LES09  
FWHM / FWTM 14.0° / 34.0°  
Efficiency 74 %  
Peak intensity 6.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15255\_HEKLA-SOCKET-C



#### OPTICAL RESULTS (MEASURED):

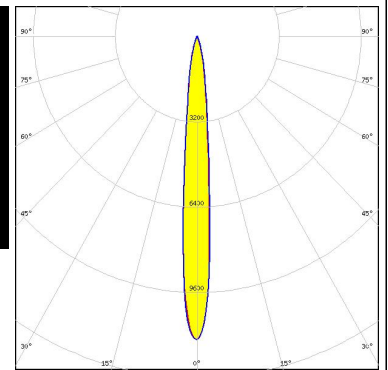
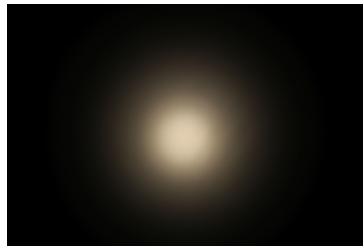
#### TRIDONIC

LED SLE G7 LES13  
 FWHM / FWTM 20.0° / 45.0°  
 Efficiency 69 %  
 Peak intensity 3.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I



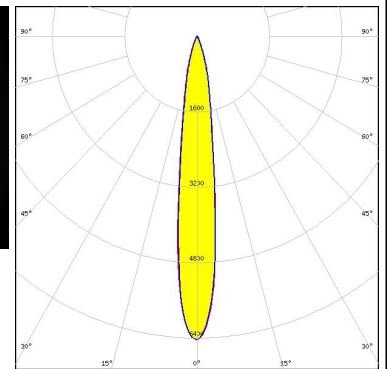
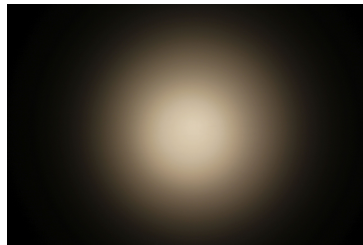
#### XICATO

LED XOB 6 mm  
 FWHM / FWTM 10.0° / 26.0°  
 Efficiency 76 %  
 Peak intensity 11.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



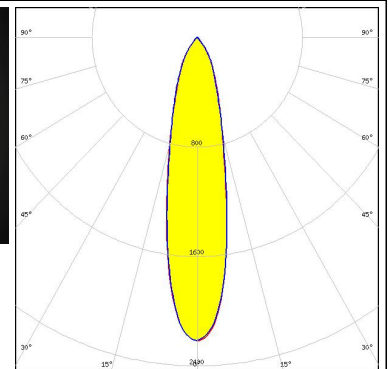
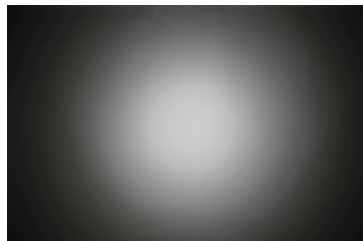
#### XICATO

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 White  
 Required components:  
 F15255\_HEKLA-SOCKET-C



#### XICATO

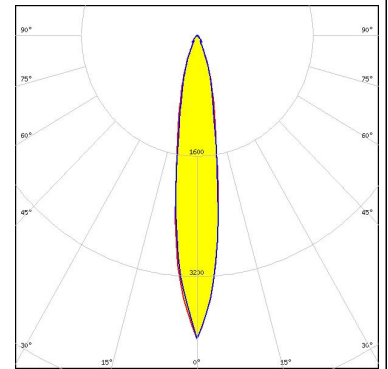
LED XTM - 19mm LES  
 FWHM / FWTM 23.0° / 60.0°  
 Efficiency 66 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C16058\_XTM-ADAPTER-50-C



#### OPTICAL RESULTS (SIMULATED):

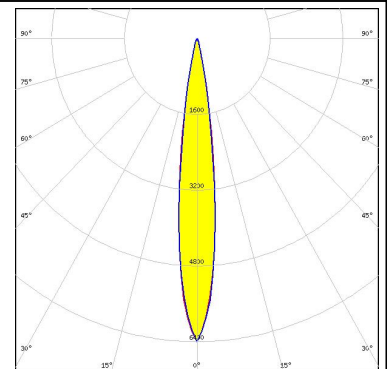


LED VERO13  
FWHM / FWTM 16.0° / 42.0°  
Efficiency 70 %  
Peak intensity 4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C16142\_HEKLA-SOCKET-K



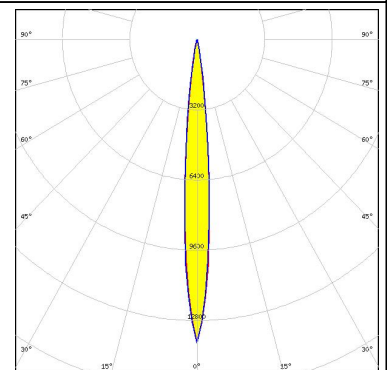
#### CITIZEN

LED CLL02x/CLU02x (LES10)  
FWHM / FWTM 14.0° / 26.0°  
Efficiency 50 %  
Peak intensity 6.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15859\_HEKLA-SOCKET-I  
C16752\_CARMEN-70-SHD



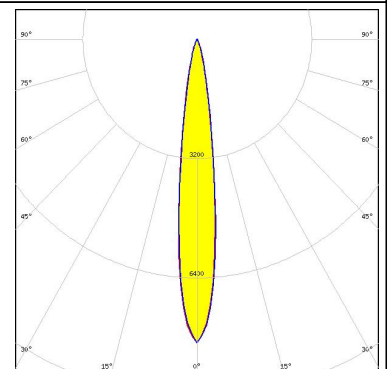
#### CITIZEN

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 White  
Required components:  
F15255\_HEKLA-SOCKET-C  
C16752\_CARMEN-70-SHD



#### CITIZEN

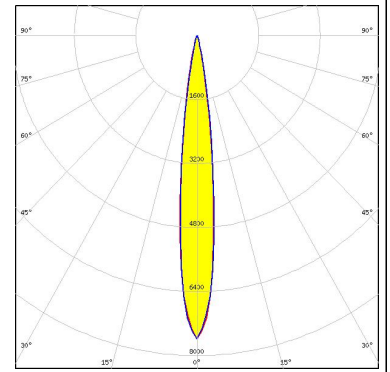
LED CLU712/713  
FWHM / FWTM 14.0° / 30.0°  
Efficiency 75 %  
Peak intensity 8.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15859\_HEKLA-SOCKET-I



#### OPTICAL RESULTS (SIMULATED):

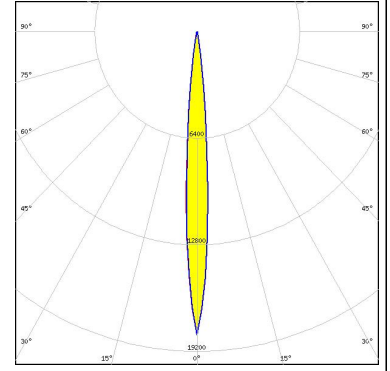
#### CITIZEN

LED CLU712/713  
 FWHM / FWTM 12.0° / 24.0°  
 Efficiency 51 %  
 Peak intensity 7.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15859\_HEKLA-SOCKET-I  
 C16752\_CARMEN-70-SHD



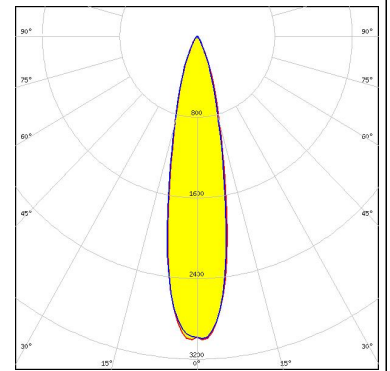
#### CITIZEN

LED CLU7A2/7A3  
 FWHM / FWTM 8.0° / 16.0°  
 Efficiency 55 %  
 Peak intensity 18.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F15255\_HEKLA-SOCKET-C  
 C16752\_CARMEN-70-SHD



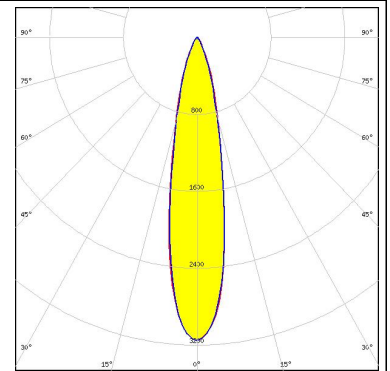
#### CREE LEDs

LED CMA1840  
 FWHM / FWTM 22.0° / 47.0°  
 Efficiency 66 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 Bender Wirth: 637a Hekla



#### CREE LEDs

LED CMU15xx  
 FWHM / FWTM 21.0° / 46.0°  
 Efficiency 65 %  
 Peak intensity 3.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 F17438\_HEKLA-G2-I

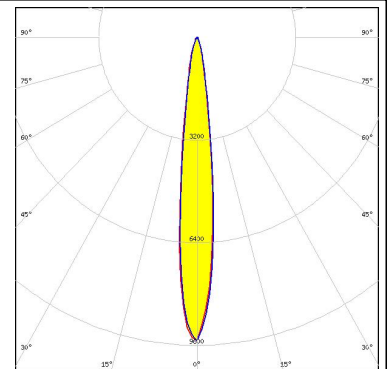




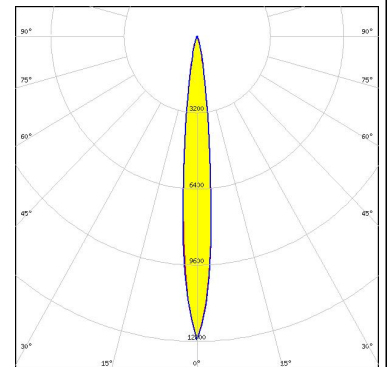
#### OPTICAL RESULTS (SIMULATED):



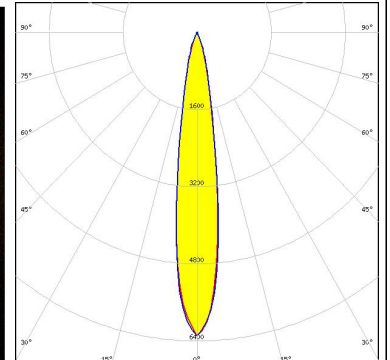
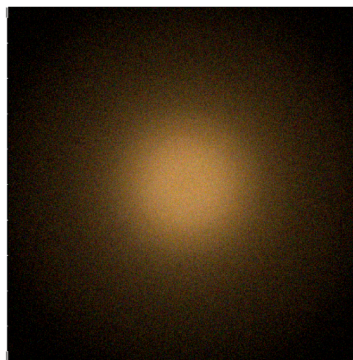
LED CXA/B 15xx  
FWHM / FWTM 12.9° / 28.4°  
Efficiency 0 %  
Peak intensity 9.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15256\_HEKLA-SOCKET-D



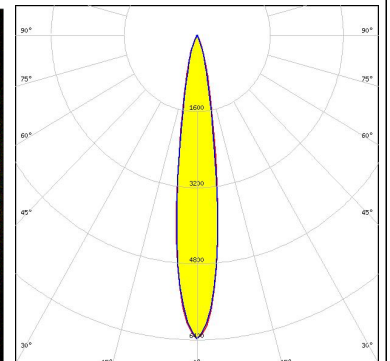
LED COB T-Type  
FWHM / FWTM 11.0° / 24.0°  
Efficiency 78 %  
Peak intensity 12.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F15848\_HEKLA-SOCKET-G



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 White  
Required components:  
F17435\_HEKLA-G2-C



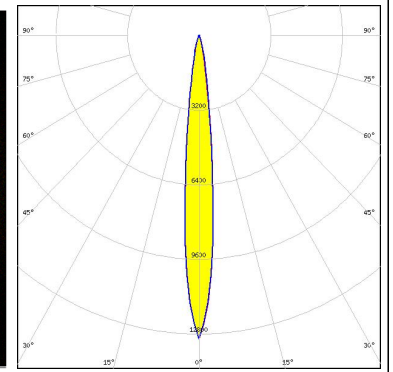
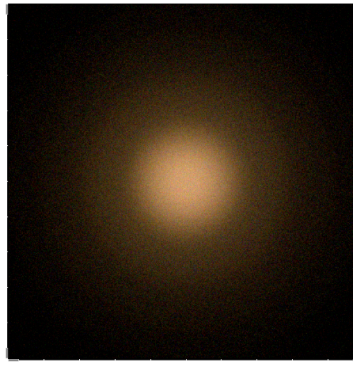
LED LC003D / LC006D / LC009D / LC013D  
FWHM / FWTM 16.0° / 34.0°  
Efficiency 73 %  
Peak intensity 6.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
F17435\_HEKLA-G2-C



## OPTICAL RESULTS (SIMULATED):

### SAMSUNG

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



### 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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