

CARMEN-M-C

~35° medium beam. Assembly with holder C compatible with LEDiL HEKLA.

TECHNICAL SPECIFICATIONS:

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

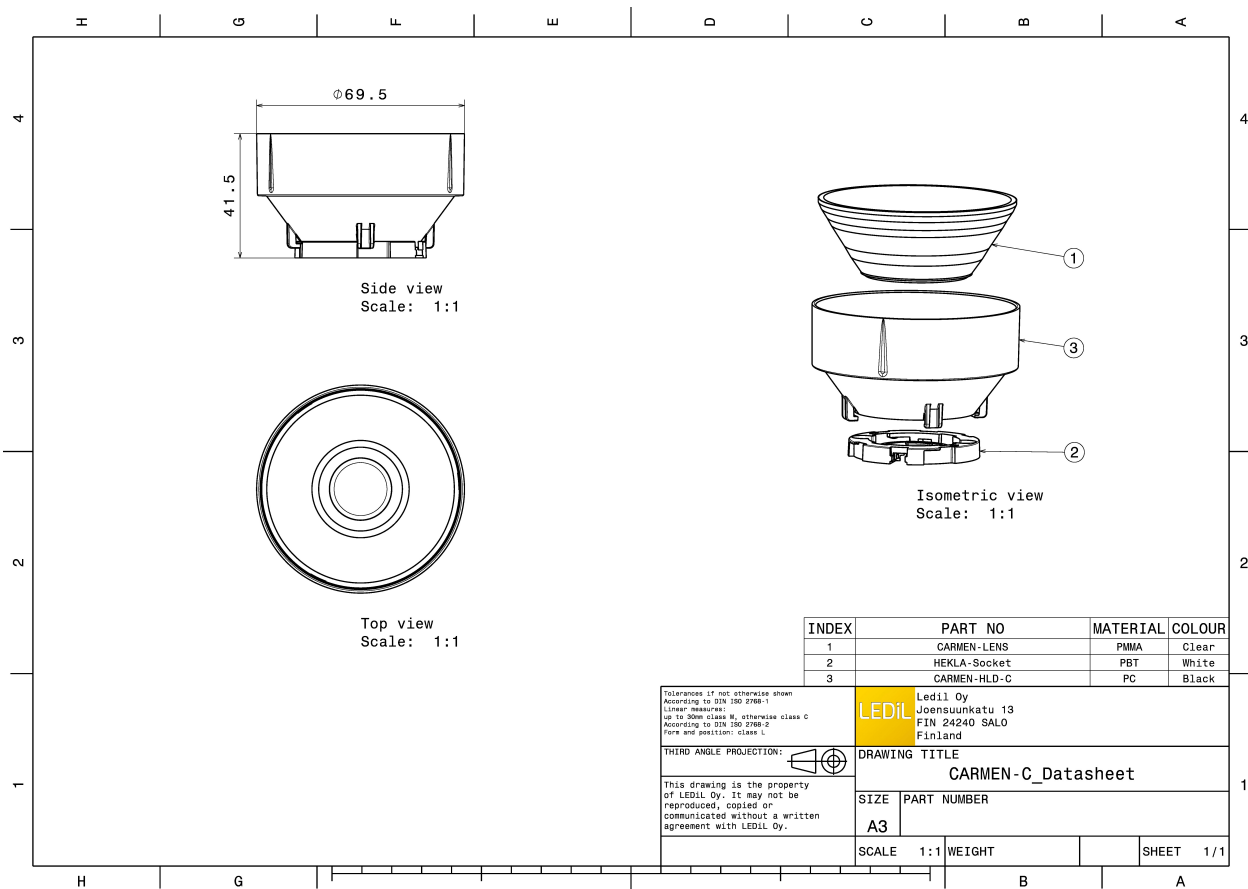
MATERIAL SPECIFICATIONS:

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

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CP15775_CARMEN-M-C	Single lens	150	150	15	4.6
» Box size: 476 x 273 x 292 mm					



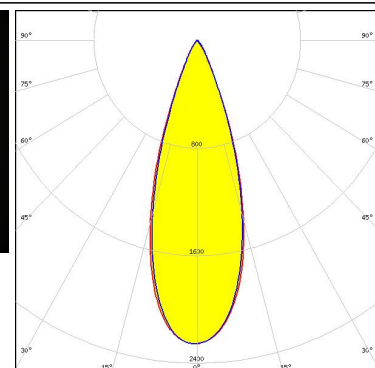
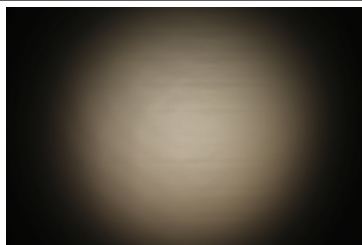


See also our general installation guide: www.ledil.com/installation_guide

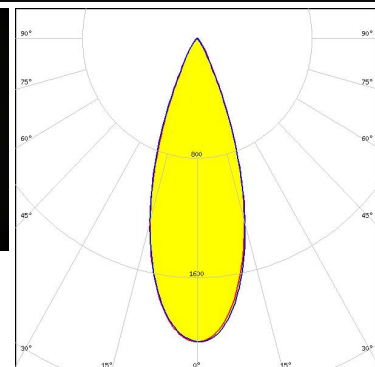
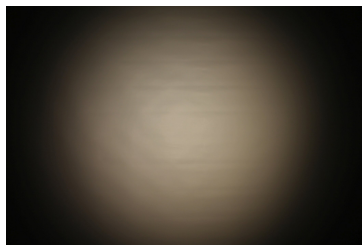
PHOTOMETRIC DATA (MEASURED):



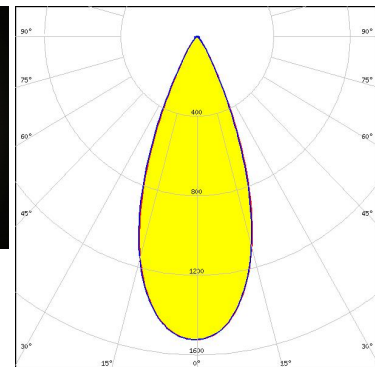
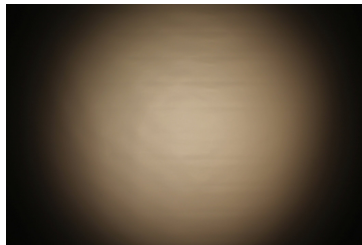
LED V4 HD Gen 7
FWHM / FWTM 34.0° / 55.0°
Efficiency 82 %
Peak intensity 2.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15253_HEKLA-SOCKET-A



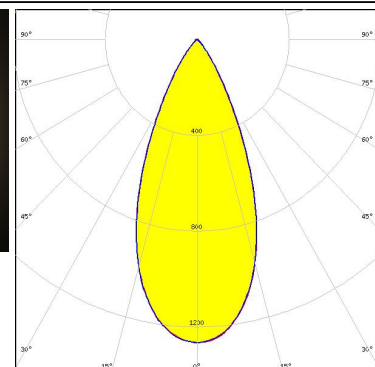
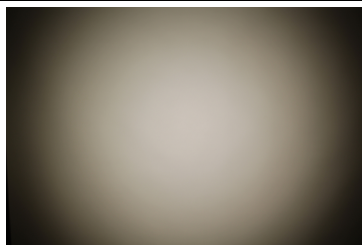
LED V6 HD Gen 7
FWHM / FWTM 36.0° / 58.0°
Efficiency 79 %
Peak intensity 2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15255_HEKLA-SOCKET-C



LED V9 HD Gen7
FWHM / FWTM 41.0° / 63.0°
Efficiency 74 %
Peak intensity 1.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15859_HEKLA-SOCKET-I



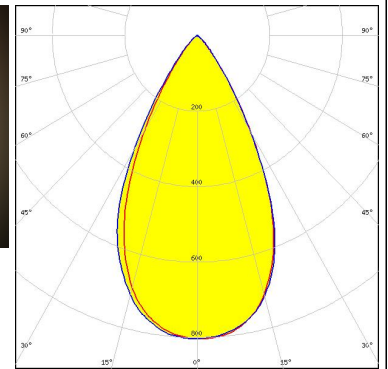
LED VERO10
FWHM / FWTM 45.0° / 72.0°
Efficiency 74 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15616_HEKLA-SOCKET-F



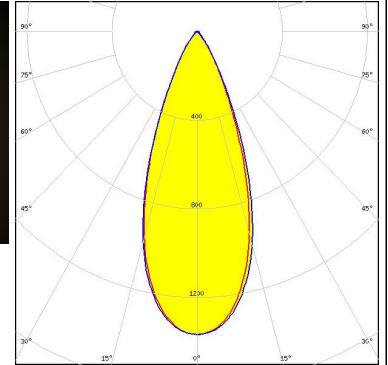
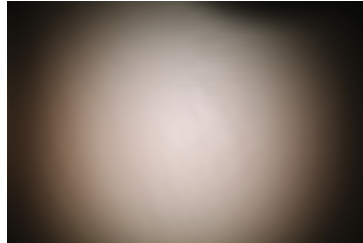
PHOTOMETRIC DATA (MEASURED):



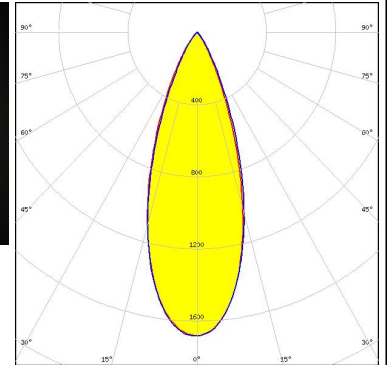
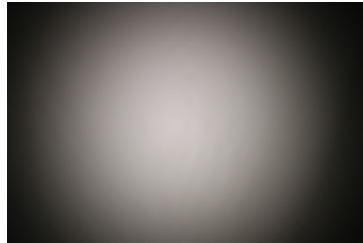
LED Vesta DTW 13mm (21W)
 FWHM / FWTM 55.0° / 80.0°
 Efficiency 64 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour Tunable White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 491 Typ L8



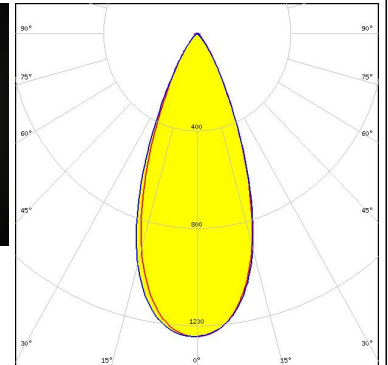
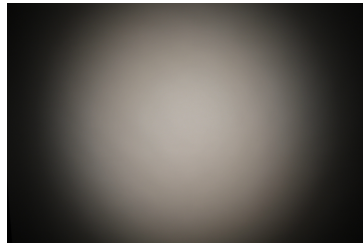
LED Vesta DTW 9mm (4W/6W/12W)
 FWHM / FWTM 40.0° / 67.0°
 Efficiency 67 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 490 Typ L8



LED Vesta TW 6mm DP
 FWHM / FWTM 37.0° / 63.0°
 Efficiency 72 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 504 Typ L8



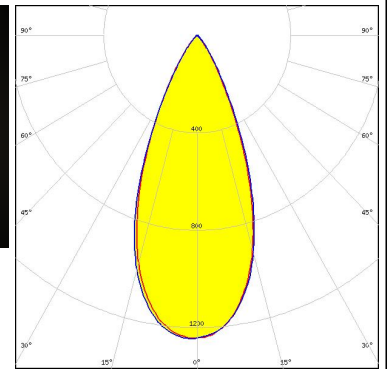
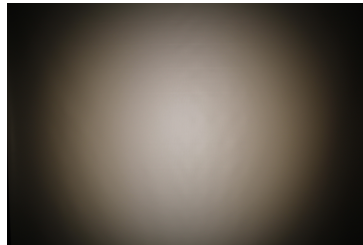
LED Vesta TW 9mm (12W) CSP
 FWHM / FWTM 42.0° / 69.0°
 Efficiency 66 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K



PHOTOMETRIC DATA (MEASURED):

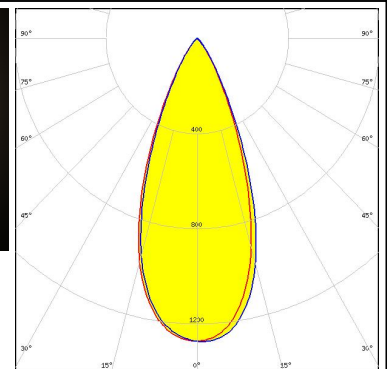
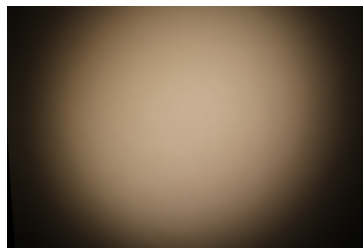


LED Vesta TW 9mm (9W) DP
 FWHM / FWTM 43.0° / 69.0°
 Efficiency 69 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 489 Typ L8



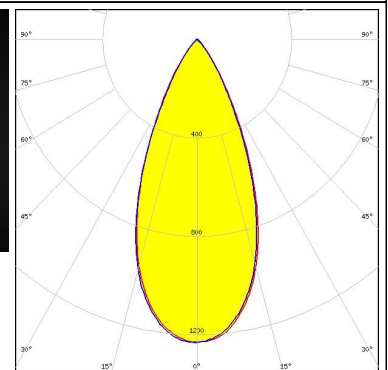
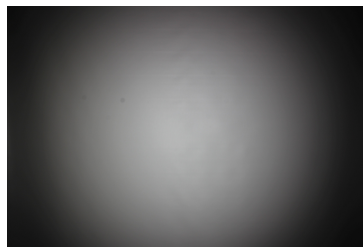
CITIZEN

LED CLC020 Series (Dim-To-Warm)
 FWHM / FWTM 42.0° / 68.0°
 Efficiency 66 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K



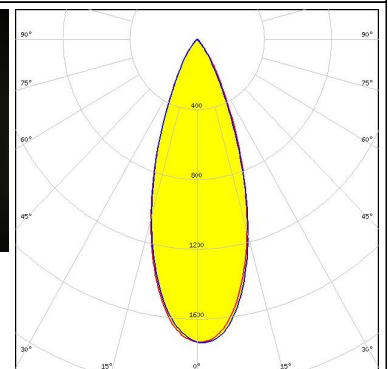
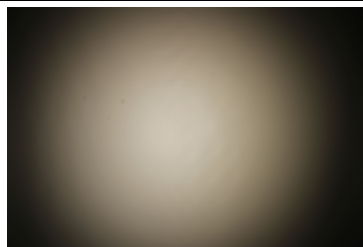
CITIZEN

LED CLL02x/CLU02x (LES10)
 FWHM / FWTM 45.0° / 73.0°
 Efficiency 73 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



CITIZEN

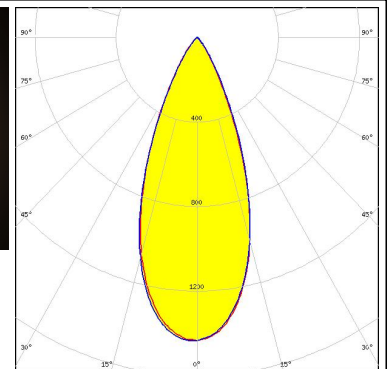
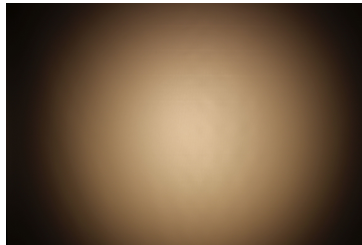
LED CLU700/701/702
 FWHM / FWTM 37.0° / 66.0°
 Efficiency 76 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



PHOTOMETRIC DATA (MEASURED):

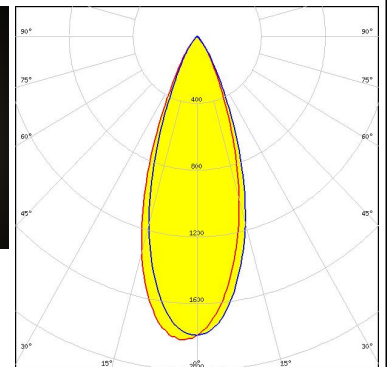
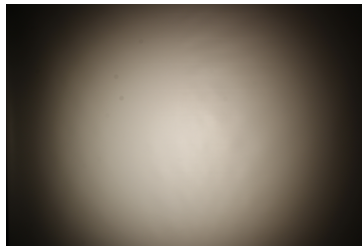
CITIZEN

LED CLU710/711
 FWHM / FWTM 41.0° / 68.0°
 Efficiency 73 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



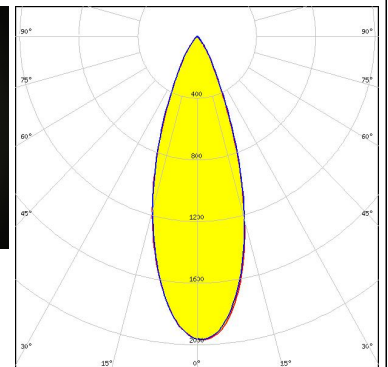
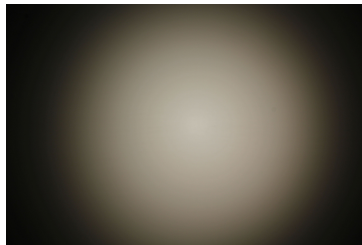
CITIZEN

LED CLU7A2 (LES 4.2mm)
 FWHM / FWTM 37.0° / 64.0°
 Efficiency 78 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



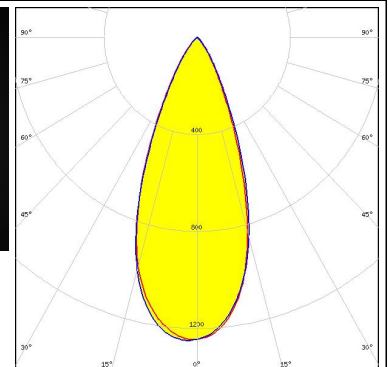
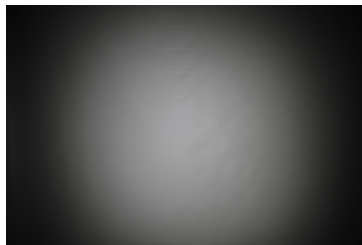
CITIZEN

LED CLU7B2
 FWHM / FWTM 35.0° / 62.0°
 Efficiency 80 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



CITIZEN

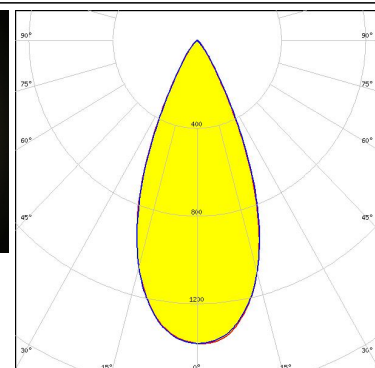
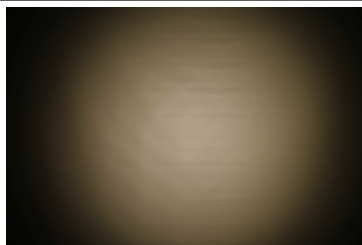
LED LCN-C01B (Tunable White)
 FWHM / FWTM 41.0° / 69.0°
 Efficiency 66 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K



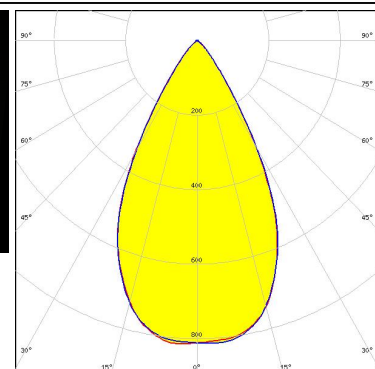
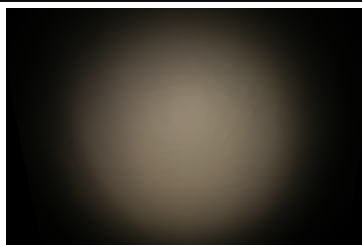
PHOTOMETRIC DATA (MEASURED):



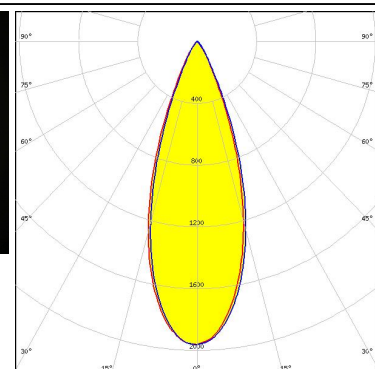
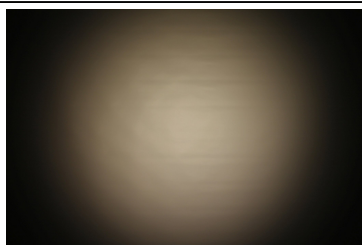
LED CMA1516
FWHM / FWTM 45.0° / 68.0°
Efficiency 77 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15256_HEKLA-SOCKET-D



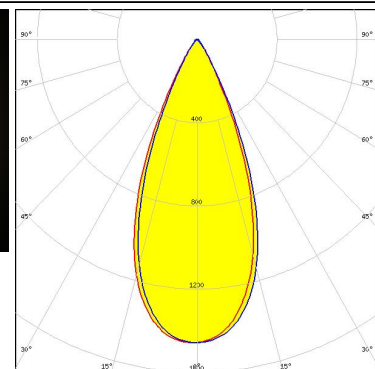
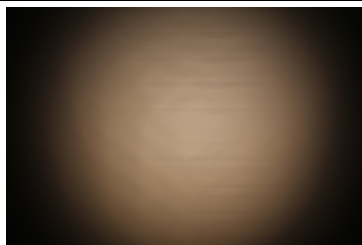
LED LUXEON CX Plus CoB L08 (Gen2)
FWHM / FWTM 56.0° / 80.0°
Efficiency 67 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:
Bender Wirth: 637a Hekla



LED LUXEON CoB 1202HD
FWHM / FWTM 36.0° / 59.0°
Efficiency 78 %
Peak intensity 2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15848_HEKLA-SOCKET-G



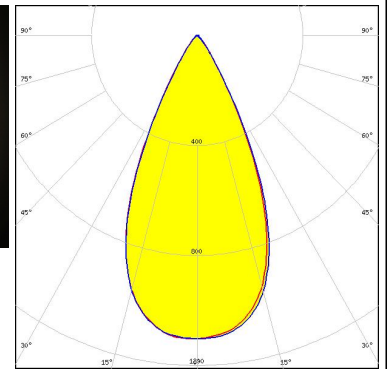
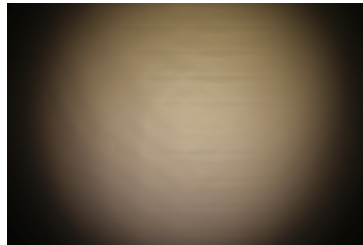
LED LUXEON CoB 1204HD
FWHM / FWTM 43.0° / 64.0°
Efficiency 76 %
Peak intensity 1.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15858_HEKLA-SOCKET-H



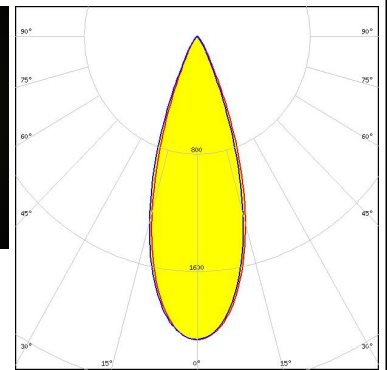
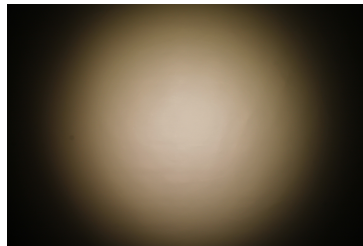
PHOTOMETRIC DATA (MEASURED):



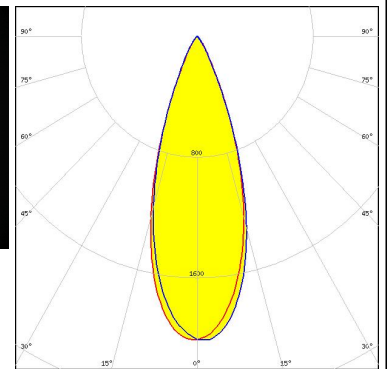
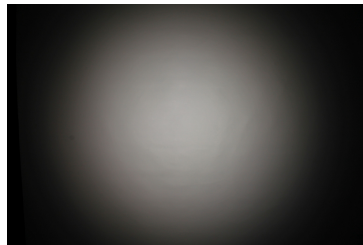
LED LUXEON CoB 1205HD
 FWHM / FWTM 49.0° / 70.0°
 Efficiency 71 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15858_HEKLA-SOCKET-H



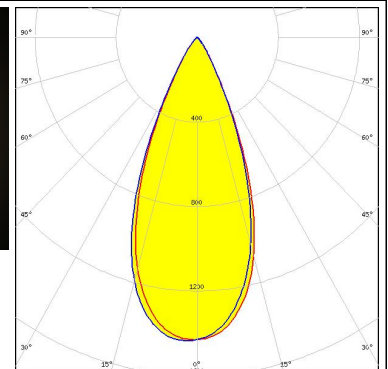
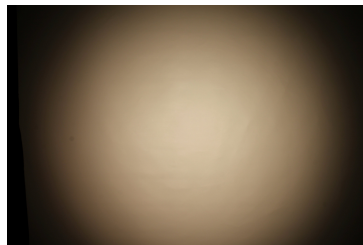
LED LUXEON CX Plus CoB - HD S01H4
 FWHM / FWTM 36.0° / 57.0°
 Efficiency 78 %
 Peak intensity 2.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 Bender Wirth: 634c Hekla



LED LUXEON CX Plus CoB - HD S01H6 / HD S02H6
 FWHM / FWTM 35.0° / 57.0°
 Efficiency 77 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 Bender Wirth: 634c Hekla



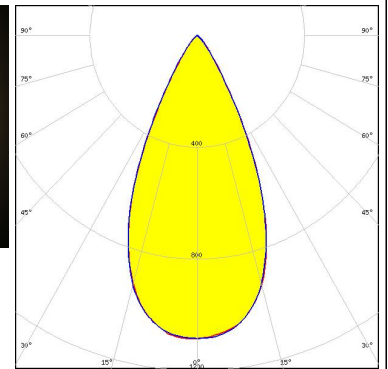
LED LUXEON CX Plus CoB - HD S04H9
 FWHM / FWTM 43.0° / 66.0°
 Efficiency 75 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 Bender Wirth: 634c Hekla



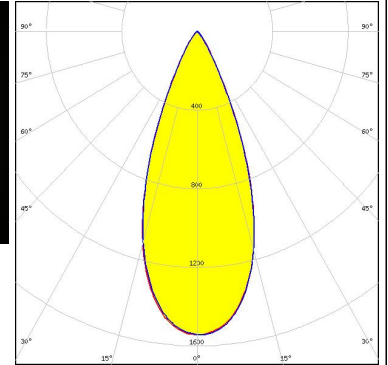
PHOTOMETRIC DATA (MEASURED):



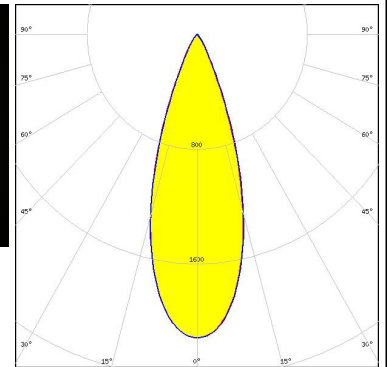
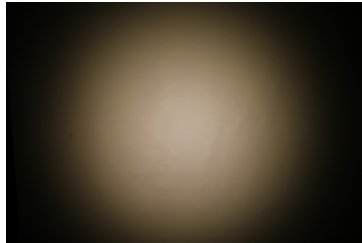
LED LUXEON CX Plus CoB L04 / L05 (Gen2)
 FWHM / FWTM 49.0° / 72.0°
 Efficiency 71 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 Bender Wirth: 637a Hekla



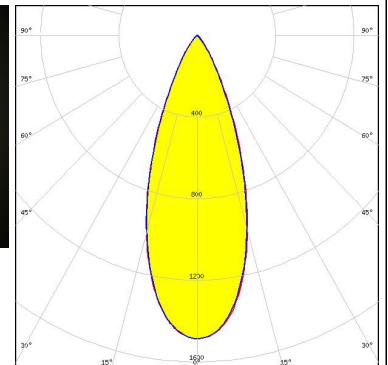
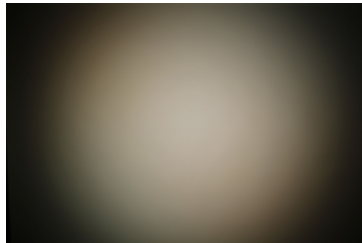
LED LUXEON CX Plus CoB M02 / M03 (Gen2)
 FWHM / FWTM 41.0° / 63.0°
 Efficiency 74 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 Bender Wirth: 641a Hekla



LED LUXEON CX Plus CoB S01 (Gen2)
 FWHM / FWTM 35.0° / 56.0°
 Efficiency 78 %
 Peak intensity 2.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 Bender Wirth: 634c Hekla



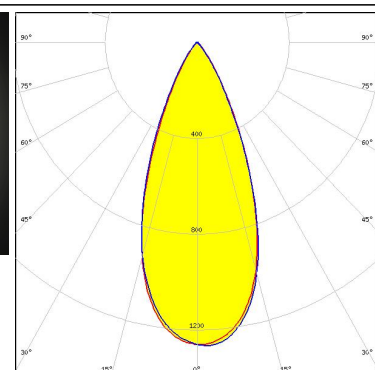
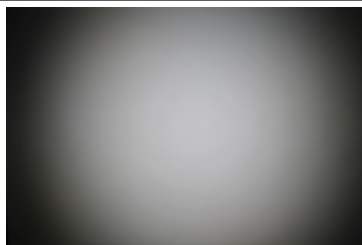
LED CDM-6 (Dim-To-Warm)
 FWHM / FWTM 38.0° / 66.0°
 Efficiency 70 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 490 Typ L8



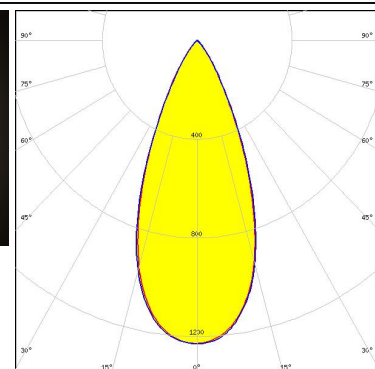
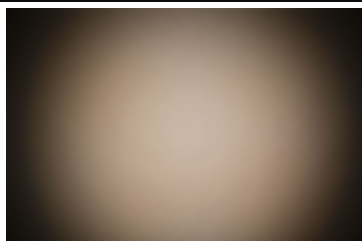
PHOTOMETRIC DATA (MEASURED):



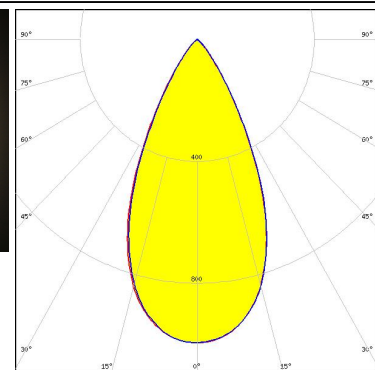
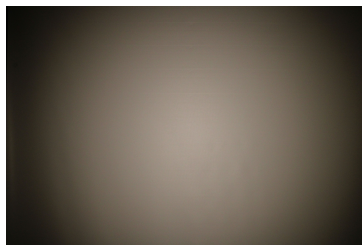
LED CDM-9 (Dim-To-Warm)
 FWHM / FWTM 43.0° / 69.0°
 Efficiency 68 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 490 Typ L8



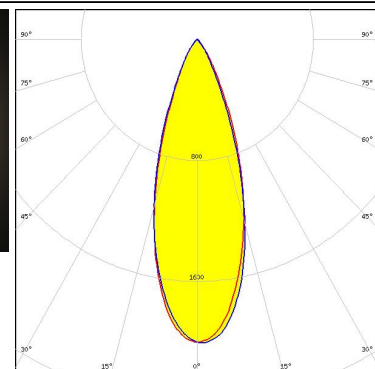
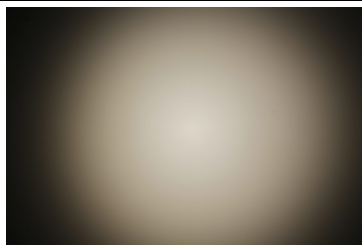
LED CTM-9 (Tunable White)
 FWHM / FWTM 43.0° / 69.0°
 Efficiency 67 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 495 Typ L8



LED CxM-11 (19x19)
 FWHM / FWTM 51.0° / 77.0°
 Efficiency 69 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



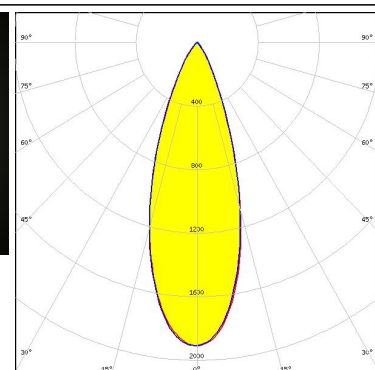
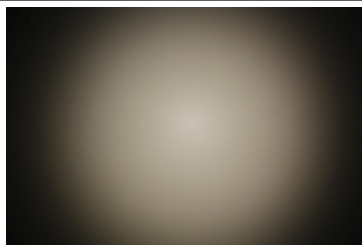
LED CXM-3
 FWHM / FWTM 35.0° / 61.0°
 Efficiency 80 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



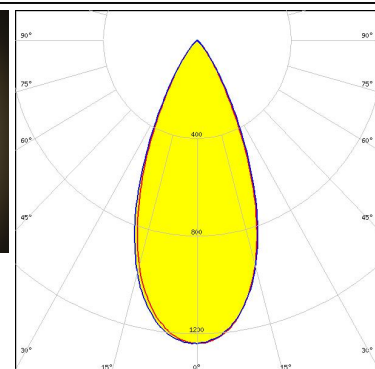
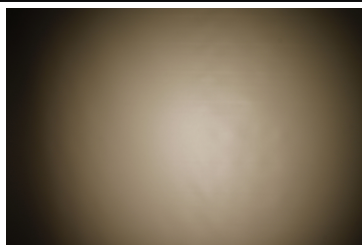
PHOTOMETRIC DATA (MEASURED):



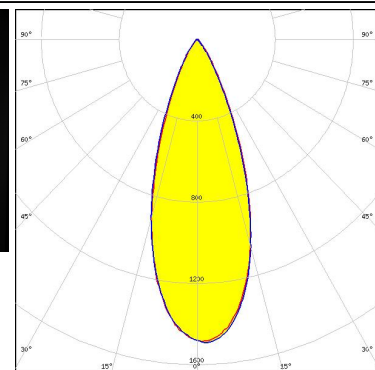
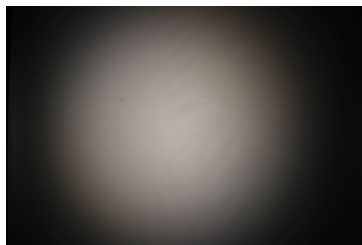
LED CXM-4
FWHM / FWTM 35.0° / 62.0°
Efficiency 78 %
Peak intensity 1.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15255_HEKLA-SOCKET-C



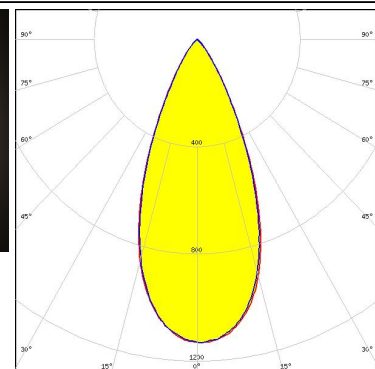
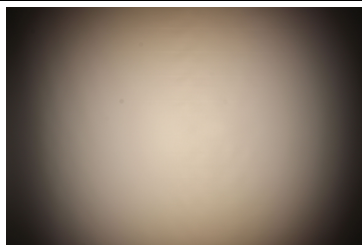
LED CxM-9 (13.5x13.5)
FWHM / FWTM 44.0° / 72.0°
Efficiency 73 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15255_HEKLA-SOCKET-C



LED NJCWL024Z-V1MT: COB L-Type Tunable White
FWHM / FWTM 37.0° / 64.0°
Efficiency 67 %
Peak intensity 1.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C16142_HEKLA-SOCKET-K
Bender Wirth: 497 Typ L8



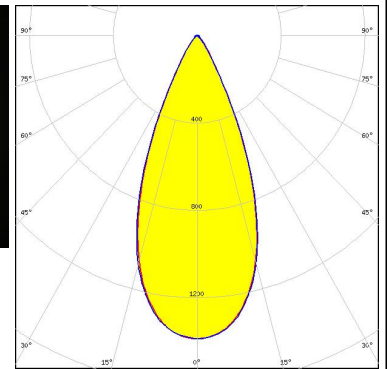
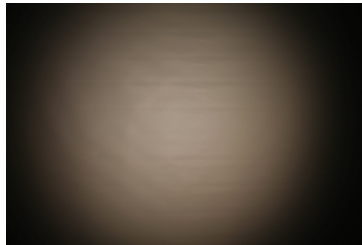
LED NVCWJ024Z-V1MT: COB J-Type Tunable White
FWHM / FWTM 44.0° / 71.0°
Efficiency 66 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:
C16142_HEKLA-SOCKET-K
Bender Wirth: 498 Typ L8



PHOTOMETRIC DATA (MEASURED):

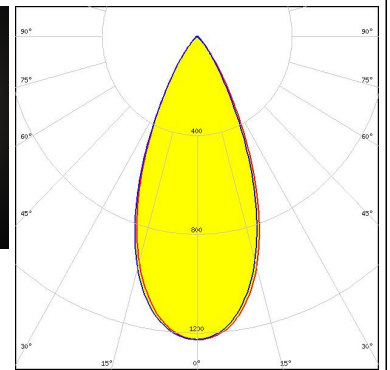
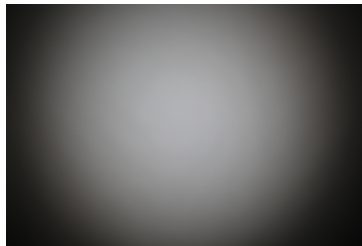
PHILIPS

LED Fortimo SLM L09 CoB
 FWHM / FWTM 44.0° / 66.0°
 Efficiency 75 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15858_HEKLA-SOCKET-H



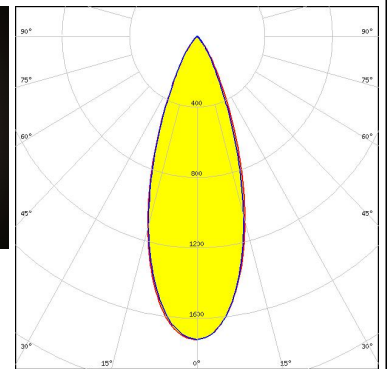
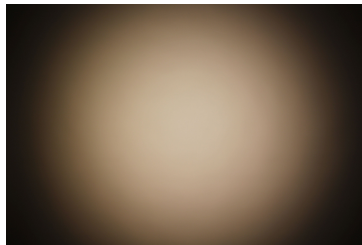
SAMSUNG

LED LC003D / LC006D / LC009D / LC013D
 FWHM / FWTM 45.0° / 73.0°
 Efficiency 74 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



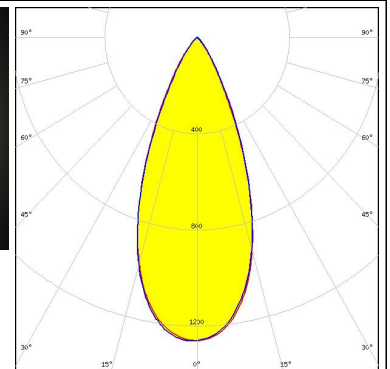
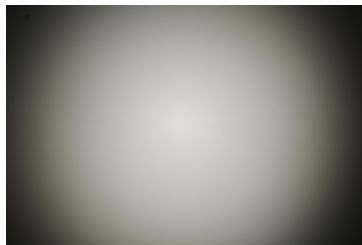
SAMSUNG

LED LC010C G2
 FWHM / FWTM 37.0° / 65.0°
 Efficiency 76 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



SAMSUNG

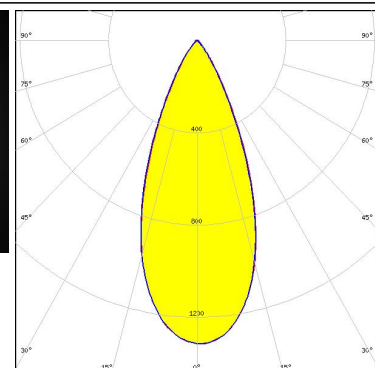
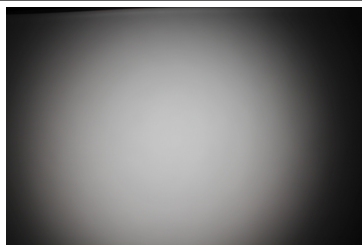
LED LC010T (Tunable White)
 FWHM / FWTM 42.0° / 70.0°
 Efficiency 68 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour Tunable White
 Required components:
 C16142_HEKLA-SOCKET-K
 Bender Wirth: 501 Typ L8



PHOTOMETRIC DATA (MEASURED):

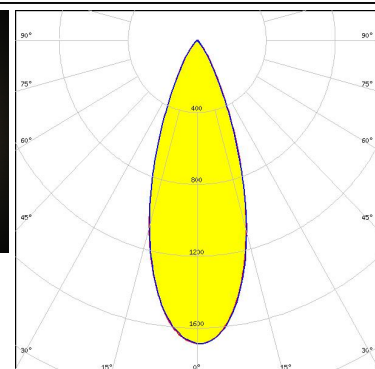
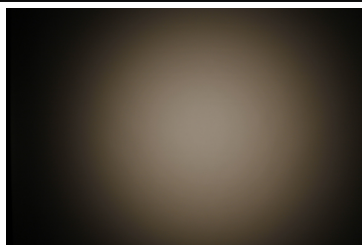
SAMSUNG

LED LC020C G2
FWHM / FWTM 43.0° / 70.0°
Efficiency 72 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15859_HEKLA-SOCKET-I



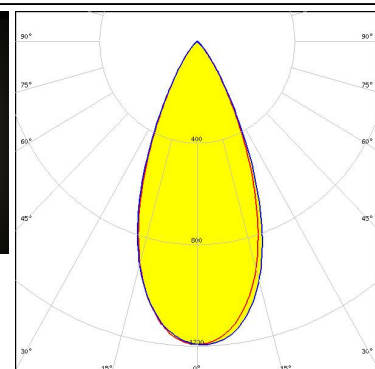
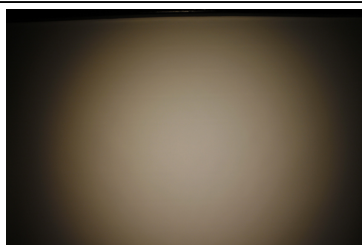
SEOUL SEMICONDUCTOR

LED MJT COB LES 6
FWHM / FWTM 37.0° / 64.0°
Efficiency 74 %
Peak intensity 1.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15255_HEKLA-SOCKET-C



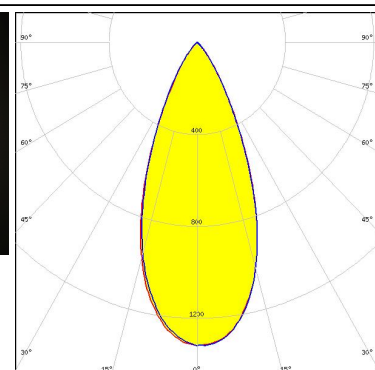
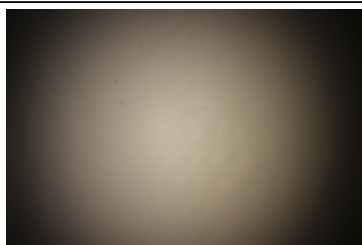
SEOUL SEMICONDUCTOR

LED MJT COB LES 9.8
FWHM / FWTM 45.0° / 72.0°
Efficiency 71 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15255_HEKLA-SOCKET-C



TRIDONIC

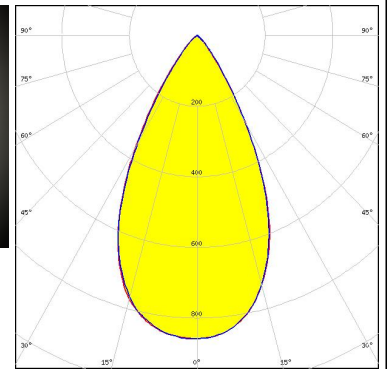
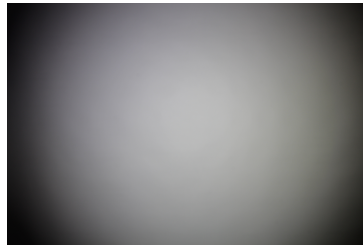
LED SLE G7 LES09
FWHM / FWTM 43.0° / 71.0°
Efficiency 74 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15255_HEKLA-SOCKET-C



PHOTOMETRIC DATA (MEASURED):

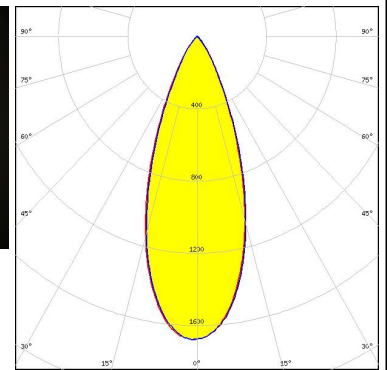
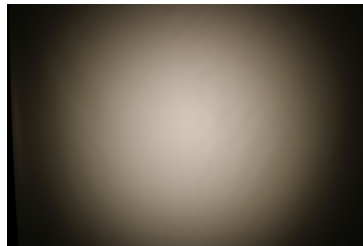
TRIDONIC

LED SLE G7 LES13
 FWHM / FWTM 54.0° / 79.0°
 Efficiency 66 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15859_HEKLA-SOCKET-I



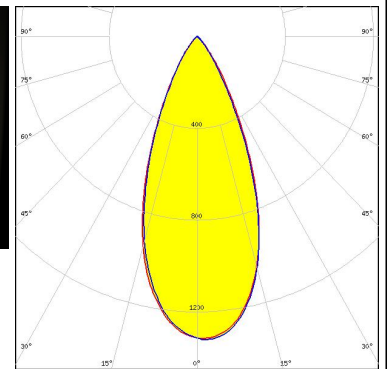
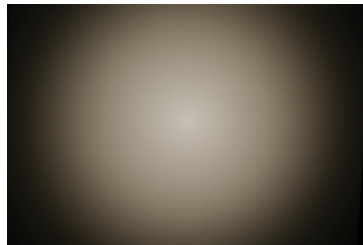
XICATO

LED XOB 6 mm
 FWHM / FWTM 38.0° / 66.0°
 Efficiency 76 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



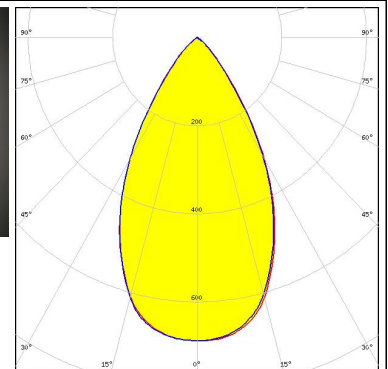
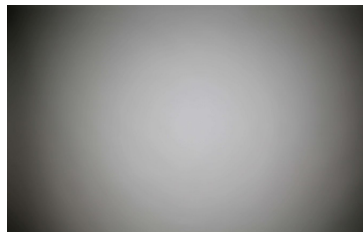
XICATO

LED XOB 9.8 mm
 FWHM / FWTM 43.0° / 72.0°
 Efficiency 74 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F15255_HEKLA-SOCKET-C



XICATO

LED XTM - 19mm LES
 FWHM / FWTM 58.0° / 88.0°
 Efficiency 61 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16058_XTM-ADAPTER-50-C



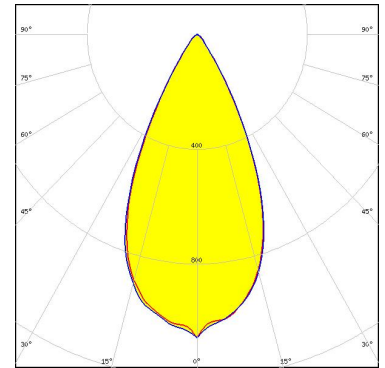
PHOTOMETRIC DATA (SIMULATED):



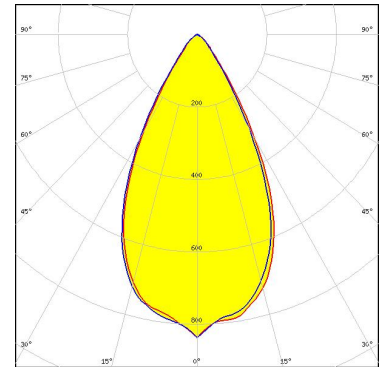
LED VERO13
 FWHM / FWTM 45.0° / 73.0°
 Efficiency 63 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C16142_HEKLA-SOCKET-K



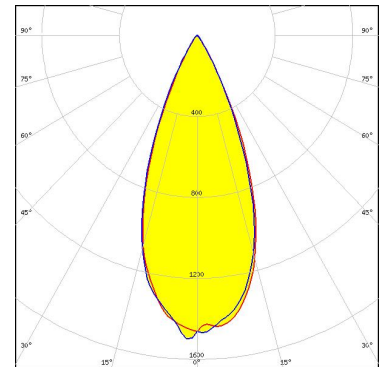
LED CMA1825
 FWHM / FWTM 49.0° / 72.0°
 Efficiency 70 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED CMA1840
 FWHM / FWTM 55.0° / 79.0°
 Efficiency 66 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



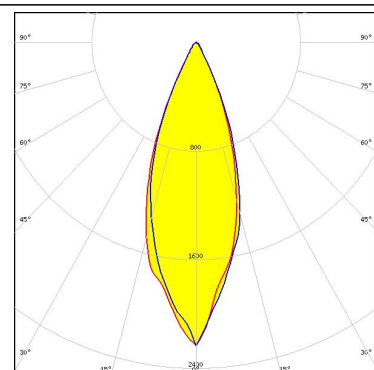
LED CMT14xx
 FWHM / FWTM 41.0° / 63.0°
 Efficiency 71 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 F17435_HEKLA-G2-C



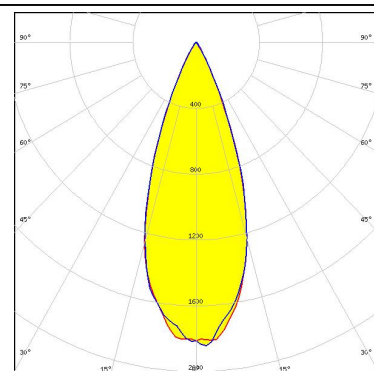
PHOTOMETRIC DATA (SIMULATED):



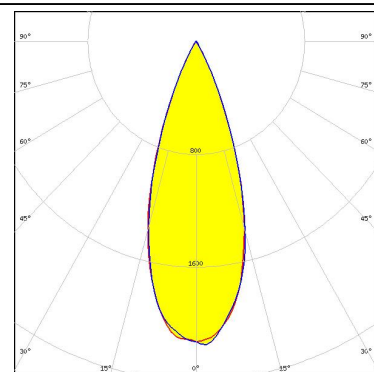
LED CXA/B 15xx
FWHM / FWTM 35.8° / 60.0°
Efficiency %
Peak intensity 2.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15256_HEKLA-SOCKET-D



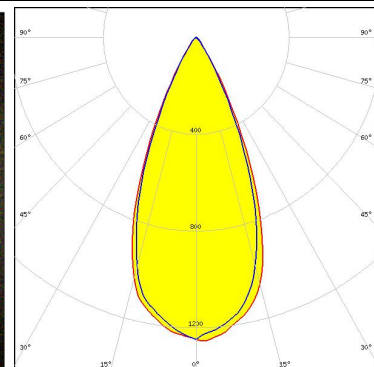
LED COB S-Type (LES 7)
FWHM / FWTM 38.0° / 58.0°
Efficiency 75 %
Peak intensity 1.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15848_HEKLA-SOCKET-G



LED COB T-Type
FWHM / FWTM 36.0° / 55.0°
Efficiency 78 %
Peak intensity 2.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F15848_HEKLA-SOCKET-G



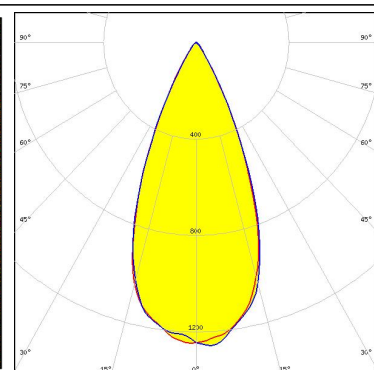
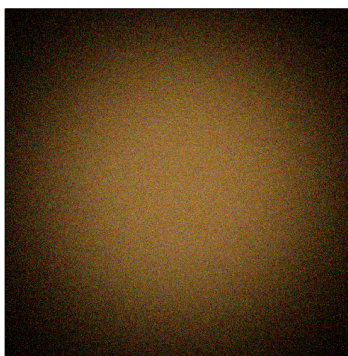
LED LC003D / LC006D / LC009D / LC013D
FWHM / FWTM 45.0° / 67.0°
Efficiency 69 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F17435_HEKLA-G2-C



PHOTOMETRIC DATA (SIMULATED):

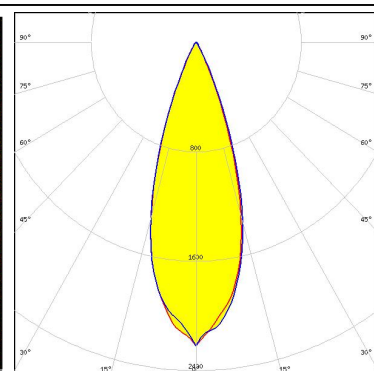
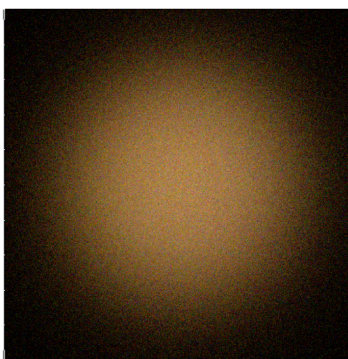
SAMSUNG

LED LC003D / LC006D / LC009D / LC013D
FWHM / FWTM 44.0° / 66.0°
Efficiency 69 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:
F17435_HEKLA-G2-C



SAMSUNG

LED LC010C
FWHM / FWTM 34.0° / 54.0°
Efficiency 76 %
Peak intensity 2.2 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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

LEDiL Oy

Joensuunkatu 13
FI-24240 SALO
Finland

LEDiL Inc.

228 West Page Street
Suite D
Sycamore IL 60178
USA

Ledil Optics Technology (Shenzhen) Co., Ltd.

405 , Block B
Casic Motor Building
Shenzhen 518057
P.R.CHINA

Local sales and technical support

[www.ledil.com/
where_to_buy](http://www.ledil.com/where_to_buy)

Shipping locations

Salo, Finland
Hong Kong, China

Distribution Partners

[www.ledil.com/
where_to_buy](http://www.ledil.com/where_to_buy)