

# PRODUCT DATASHEET CP15916\_CARMEN-RS-C

# **CARMEN-RS-C**

~10° 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:**

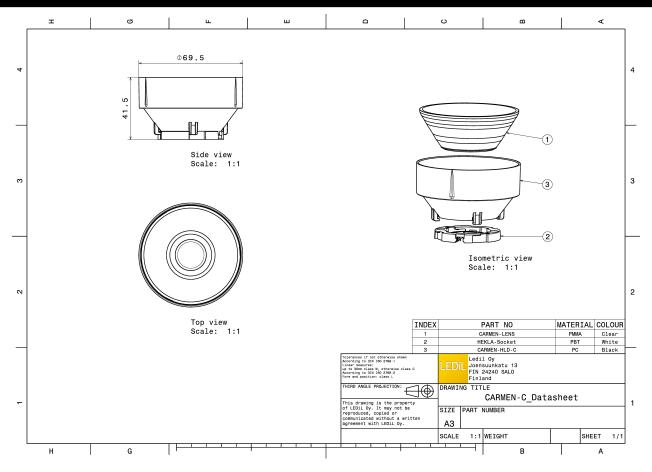
Component	Туре	Material	Colour	Finish
CARMEN-RS	Single lens	PMMA	clear	
CARMEN-HLD-C	Holder	PC	black	

#### **ORDERING INFORMATION:**

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CP15916_CARMEN-RS-C	Single lens	150	150	15	6.2
» Box size: 480 x 280 x 300 mm					

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See also our general installation guide: <u>www.ledil.com/installation\_guide</u>



LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15253_HEKLA	32,     0,     72,     0,     72,       36,     32,     10,     10,       26,     10,     10,       60,     10,     10,       33,     10,     10,       36,     10,     10,       36,     10,     10,       36,     10,     10,       36,     10,     10,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15616_HEKLA	



LED Vesta TW 6mm DP FNHA / FVTM 9.0' / 16.0' Filiciency 59 % Peak intensity 15.5 colim LEDovechopic 1 Light colour White Required components: C15142_HEKLA-SOCKET-K Bender Wirth: 504 Typ LB CONSCIENC. LED Vesta TW 9mm (9W) DP FWHA / FVTM 12.0' / 23.0' Efficiency 59 % Peak intensity 7.8 colim LEDovechopic 1 LEDovechopic 1			
PAYHA / PAYTM 13 07 / 16.0° Efficiency 59 % Registronal components: C15142_HEXLASOCKET-K Bender Wint: S04 Typ L8 EED Vesta TW 9mm (9W) DP Perform 25 % Peak intensity 7.8 cd/m LED Vesta TW 9mm (9W) DP Peak intensity 7.8 cd/m LED Vesta TW 9mm (9W) PP Peak intensity 7.8 cd/m Peak	bridgelux.		90* A
Efficiency 59% Peak intensity 16.5 col/m Light colour White Required components: C15142_HEKLASOCKET-K Bender Wint: 504 Typ L8	LED	Vesta TW 6mm DP	25
Peak Intensity 16.5 collin LED/aeah optic 1 LED/aeah opti	FWHM / FWTM	9.0° / 16.0°	
LEDseach optic 1 Light colour White Required components: C16142_HEKLA-SOCKET-K Bender Wirht: 504 Typ L8	Efficiency	59 %	egy er
Light colour White Required components: C11412_HEKLA-SOCKET-K Bender Wirth: 504 Typ L8	Peak intensity	16.5 cd/lm	
Required components: C1G142_HEKLA-SOCKET-C Ender Wint: 504 Typ LB	LEDs/each optic	1	
C16142_HEKLA-SOCKET-K Bender Wirth: 504 Typ L8	Light colour	White	
Bander Wirht: 504 Typ L8	Required compone	ents:	
CHILDEN LED Vesta TW 9mm (9W) DP EWHM / FVTTM 12.0* / 23.0* Efficiency 56 % Peak Intensity 7.8 cd/m LED%each optic 1 LED%each optic 1 LED%each optic 1 LED%each optic 2 CT11ZEN LED CLL02x/CLU02x (LES10) EWHM / FVTTM 13.0* / 22.0* Efficiency 59 % Peak Intensity 8.6 cd/m LED%each optic 1 LED%each optic 1	C16142_HEKLA	4-SOCKET-K	
LED Vesta TW 9mm (9W) DP FWHM / FVTTM 12.0° /23.0° Efficiency 59 % Peak intensity 7.8 cd/lm LEDS/each optic 1 LEDS/each optic 1 LEDS/each optic 1 LEDS/each optic 1 LEDS/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C Efficiency 59 % Peak intensity 8.6 cd/lm LEDS/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C Efficiency 62 % Peak intensity 20.2 cd/lm LEDS cd/lm LEDS/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C	Bender Wirth: 5	04 Typ L8	
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EWHM / FWTM 12.0° / 23.0° Efficiency 56 % Peak intensity 7.8 cd/m LEDS/each optic 1 Light colour White Required components: ECITIZEN LED CLL02x/CLU02x (LES10) FWHM / FWTM 13.0° / 22.0° Efficiency 59 % Peak intensity 8.6 cd/m LEDS/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C Efficiency 62 % Peak intensity 20.2 cd/m LEDS clu700701/702/703 FWHM / FWTM 8.0° / 15.0° Efficiency 62 % Peak intensity 20.2 cd/m LEDS clu700701/702/703 FWHM / SUP / 15.0° Efficiency 62 % Peak intensity 20.2 cd/m LEDS/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C	LED	Vesta TW 9mm (9W) DP	
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Light colour White Required components: C 16142_HEKLA-SOCKET-K Bender Wirk: 489 Typ L8 CCTTIZEEN LED CLL02x/CLU02x (LES10) EWHM / FWTM 13.0° / 22.0° Efficiency 59 % Peak intensity 8.6 cd/m LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C CCTTIZEEN LED CLU700/701/702/703 FWHM / FWTM 8.0° / 15.0° Efficiency 62 % Peak intensity 20.2 cd/m LEDs/each optic 1 LEDs/each optic 1 LEDs/ea			
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C16142_HEKLA-SOCKET-K Bender Wirth: 489 Typ L8			
Bender Wirth: 489 Typ L8  CTTIZEN LED CLL02x/CLU02x (LES10) FWHM / FWTM 13.0° / 22.0° Efficiency 59 % Peak intensity 8.6 cd/m LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C  CTTIZEN LED CLU700/701/702/703 FWHM / FWTM 8.0° / 15.0° Efficiency 62 % Peak intensity 20.2 cd/m LEDs/each optic 1 LEDs/each opti			642
CITIZEN LED CLL02x/CLU02x (LES10) FWHM / FWTM 13.0° / 22.0° Efficiency 59 % Peak intensity 8.6 cd/m LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C CITIZEN LED CLU700/701/702/703 FWHM / FWTM 8.0° / 15.0° Efficiency 62 % Peak intensity 2.0.2 cd/m LEDs/each optic 1 LEDs/each optic 1 LEDs/e			
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LED CLL02x/CLU02x (LES10) FWHM / FWTM 13.0° / 22.0° Efficiency 59 % Peak intensity 8.6 cd/m LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C Efficiency 62 % Peak intensity 20.2 cd/m LEDs/each optic 1 Light colour White Required components:	CITIZE	'N	9)* A
FWHM / FWTM 13.0° / 22.0° Efficiency 59 % Peak intensity 8.6 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C CCITIZEN LED CLU700/701/702/703 FWHM / FWTM 8.0° / 15.0° Efficiency 62 % Peak intensity 20.2 cd/lm LEDs/each optic 1 Light colour White Required components:	LED		
Peak intensity 8.6 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C CITIZEN LED CLU700/701/702/703 FWHM / FWTM 8.0° / 15.0° Efficiency 62 % Peak intensity 20.2 cd/lm LEDs/each optic 1 Light colour White Required components:	FWHM / FWTM		37
Peak intensity 8.6 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C CITIZEN LED CLU700/701/702/703 FWHM / FWTM 8.0° / 15.0° Efficiency 62 % Peak intensity 20.2 cd/lm LEDs/each optic 1 Light colour White Required components:	Efficiency	59 %	
LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C CITIZEN LED CLU700/701/702/703 FWHM / FWTM 8.0° / 15.0° Efficiency 62 % Peak intensity 20.2 cd/lm LEDs/each optic 1 Light colour White Required components:		8.6 cd/lm	5 J 200 K
Light colour White Required components: F15255_HEKLA-SOCKET-C	LEDs/each optic		
Required components: F15255_HEKLA-SOCKET-C CITIZEN LED CLU700/701/702/703 FWHM / FWTM 8.0° / 15.0° Efficiency 62 % Peak intensity 20.2 cd/lm LEDs/each optic 1 Light colour White Required components:		1	
CITIZEN LED CLU700/701/702/703 FWHM / FWTM 8.0° / 15.0° Efficiency 62 % Peak intensity 20.2 cd/lm LEDs/each optic 1 Light colour White Required components:	Light colour		
LED     CLU700/701/702/703       FWHM / FWTM     8.0° / 15.0°       Efficiency     62 %       Peak intensity     20.2 cd/lm       LEDs/each optic     1       Light colour     White       Required components:     1	Light colour Required compone	White	
LED     CLU700/701/702/703       FWHM / FWTM     8.0° / 15.0°       Efficiency     62 %       Peak intensity     20.2 cd/lm       LEDs/each optic     1       Light colour     White       Required components:     1	Required compone	White ents:	er
LED     CLU700/701/702/703       FWHM / FWTM     8.0° / 15.0°       Efficiency     62 %       Peak intensity     20.2 cd/lm       LEDs/each optic     1       Light colour     White       Required components:     1	Required compone	White ents:	g. (03)
LED       CLU700/701/702/703         FWHM / FWTM       8.0° / 15.0°         Efficiency       62 %         Peak intensity       20.2 cd/lm         LEDs/each optic       1         Light colour       White         Required components:	Required compone	White ents:	
FWHM / FWTM     8.0° / 15.0°       Efficiency     62 %       Peak intensity     20.2 cd/lm       LEDs/each optic     1       Light colour     White       Required components:     1	Required compone F15255_HEKLA	White ents: A-SOCKET-C	
Efficiency 62 % Peak intensity 20.2 cd/lm LEDs/each optic 1 Light colour White Required components:	Required compone F15255_HEKLA	White ents: A-SOCKET-C	
Peak intensity 20.2 cd/lm LEDs/each optic 1 Light colour White Required components:	Required compone F15255_HEKLA	White ents: A-SOCKET-C	
LEDs/each optic 1 Light colour White Required components:	Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM	White ents: A-SOCKET-C <b>CN</b> CLU700/701/702/703 8.0° / 15.0°	
Light colour White Required components:	Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency	White ents: A-SOCKET-C CLU700/701/702/703 8.0° / 15.0° 62 %	
Required components:	Required compone F15255_HEKLA CITIZE LED FWHM / FWTM Efficiency Peak intensity	White ents: A-SOCKET-C CLU700/701/702/703 8.0° / 15.0° 62 % 20.2 cd/lm	
	Required compone F15255_HEKLA CITIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	White ents: A-SOCKET-C CLU700/701/702/703 8.0° / 15.0° 62 % 20.2 cd/lm 1	
	Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	White ents: A-SOCKET-C CLU700/701/702/703 8.0° / 15.0° 62 % 20.2 cd/lm 1 White	
30 <sup>4</sup> 22 <sup>7</sup> 0 <sup>4</sup> 22 <sup>3</sup>	Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	White ents: A-SOCKET-C CLU700/701/702/703 8.0° / 15.0° 62 % 20.2 cd/lm 1 White ents:	
30° 30 30° 15°	Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	White ents: A-SOCKET-C CLU700/701/702/703 8.0° / 15.0° 62 % 20.2 cd/lm 1 White ents:	
	Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	White ents: A-SOCKET-C CLU700/701/702/703 8.0° / 15.0° 62 % 20.2 cd/lm 1 White ents:	

Last update: 13/02/2023Subject to change without prior noticePublished: 04/05/2018LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.4/17



CITIZE	'N	81
LED	CLU700/701/702/703	
FWHM / FWTM	9.0° / 15.0°	75
Efficiency	69 %	
Peak intensity	22.6 cd/lm	64
LEDs/each optic	1	
Light colour	White	
Required compone		
F15255_HEKLA		
		- <u>19</u>
CITIZE	<b>N</b>	
LED	CLU710/711	
FWHM / FWTM	12.0° / 19.0°	25
Efficiency	64 %	
Peak intensity	11.5 cd/lm	
LEDs/each optic	1	
Light colour	White	a. 500
Required compone	ents:	
F15859_HEKLA		
		13%
CITIZE	<b>N</b>	
		90°
	CLU7A2/7A3 6.0° / 11.0°	30* 35
LED FWHM / FWTM	CLU7A2/7A3	39* 37
LED FWHM / FWTM Efficiency	CLU7A2/7A3 6.0° / 11.0°	93* 73 60*
LED FWHM / FWTM Efficiency Peak intensity	CLU7A2/7A3 6.0° / 11.0° 65 %	50°*
LED FWHM / FWTM Efficiency	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm	5°*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White	54 54 60 75 75 75 75 75 75 75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents:	91 71 91 91 91 91 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents:	91 37 91 91 91 91 91 91 91 91 91 91 91 91 91
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents:	95 <sup>1</sup> 75 75 75 75 75 75 75 75 75 75 75 75 75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents: A-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents: A-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents: A-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents: -SOCKET-C <b>'N</b> CLU7B2 6.0° / 10.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents: -SOCKET-C <b>N</b> CLU7B2 6.0° / 10.0° 66 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA <b>CITTIZE</b> LED FWHM / FWTM Efficiency Peak intensity	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents: A-SOCKET-C <b>CLU7B2</b> 6.0° / 10.0° 66 % 43.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents: A-SOCKET-C <b>CLU7B2</b> 6.0° / 10.0° 66 % 43.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents: A-SOCKET-C <b>'N</b> CLU7B2 6.0° / 10.0° 66 % 43.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents: A-SOCKET-C <b>CLU7B2</b> 6.0° / 10.0° 66 % 43.4 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents: A-SOCKET-C <b>CLU7B2</b> 6.0° / 10.0° 66 % 43.4 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents: A-SOCKET-C <b>CLU7B2</b> 6.0° / 10.0° 66 % 43.4 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7A2/7A3 6.0° / 11.0° 65 % 34.7 cd/lm 1 White ents: A-SOCKET-C <b>CLU7B2</b> 6.0° / 10.0° 66 % 43.4 cd/lm 1 White ents:	



	D	30° 0 30°
LED	CMA1516	
FWHM / FWTM	13.0° / 20.0°	77 - 28
Efficiency	63 %	
Peak intensity	9.7 cd/lm	
LEDs/each optic	1	
Light colour	White	er et
Required compone	ents:	6602
F15256_HEKLA		
		94° 99
LED	CMT14xx	
FWHM / FWTM	14.0° / 23.0°	3
Efficiency	40 %	
Peak intensity	5 cd/lm	
LEDs/each optic	1	
Light colour	White	er er
Required compone		200
F15255_HEKLA		
		344 (10)
		<u>50° 500</u>
LED	CXA/B 13xx	72 72
	8.0° / 15.0°	
FWHM / FWTM		
Efficiency	64 %	
Efficiency Peak intensity	64 % 21.4 cd/lm	
Efficiency Peak intensity LEDs/each optic	64 % 21.4 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour	64 % 21.4 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required compone	64 % 21.4 cd/lm 1 White ints:	
Efficiency Peak intensity LEDs/each optic Light colour	64 % 21.4 cd/lm 1 White ints:	
Efficiency Peak intensity LEDs/each optic Light colour Required component	64 % 21.4 cd/lm 1 White ints:	
Efficiency Peak intensity LEDs/each optic Light colour Required compone	64 % 21.4 cd/lm 1 White ints:	
Efficiency Peak intensity LEDs/each optic Light colour Required component	64 % 21.4 cd/lm 1 White onts: -SOCKET-J	
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	64 % 21.4 cd/lm 1 White onts: -SOCKET-J	
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	64 % 21.4 cd/lm 1 White onts: -SOCKET-J	
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	64 % 21.4 cd/lm 1 White onts: -SOCKET-J	
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	64 % 21.4 cd/lm 1 White -SOCKET-J CXA/B 15xx 13.0° / 20.0°	
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	64 % 21.4 cd/lm 1 White mts: -SOCKET-J CXA/B 15xx 13.0° / 20.0° 65 %	
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	64 % 21.4 cd/lm 1 White I SOCKET-J CXA/B 15xx 13.0° / 20.0° 65 % 11.3 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	64 % 21.4 cd/lm 1 White I SOCKET-J CXA/B 15xx 13.0° / 20.0° 65 % 11.3 cd/lm 1 White I White I White	
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	64 % 21.4 cd/lm 1 White I SOCKET-J CXA/B 15xx 13.0° / 20.0° 65 % 11.3 cd/lm 1 White I White I White	
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	64 % 21.4 cd/lm 1 White I SOCKET-J CXA/B 15xx 13.0° / 20.0° 65 % 11.3 cd/lm 1 White I White I White	
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	64 % 21.4 cd/lm 1 White I SOCKET-J CXA/B 15xx 13.0° / 20.0° 65 % 11.3 cd/lm 1 White I White I White	



CREE CLED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15256_HEKLA	CXA/B 1816 & CXA/B 1820 & CXA 1850 17.0° / 26.0° 59 % 5.6 cd/lm 1 White nts:	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	LUXEON CX Plus CoB L08 (Gen2) 17.0° / 30.0° 54 % 4.3 cd/lm 1 White nts:	30 <sup>1</sup> 30
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	LUXEON CoB 1202HD 9.7° / 15.0° 66 % 18.5 cd/lm 1 White nts:	30*         1200         3*
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1204HD 13.0° / 20.0° 63 % 10 cd/lm 1 White nts:	20- 00- 00- 00- 00- 00- 00- 00-



EWHM / FWTM 15.0° / 25.0° Efficiency 59 % Peak intensity 6.4 cd/lm LEDS/each optic 1 Light colour White Required components: F15858_HEKLA-SOCKET-H CUNILEDS LED LUXEON CX Plus CoB - HD S01H4 EWHM / FWTM 8.0° / 14.0° Efficiency 67 % Peak intensity 27.5 cd/lm LED/each optic 1 Light colour White Required components: Bender Wirth: 634c Hekla CUNILEDS LED LUXEON CX Plus CoB - HD S04H9 FWHM / FWTM 13.0° / 20.0° Efficiency 61 % Peak intensity 13.0° Peak intensity 13.0° P			
ED LUXEON CX Plus CoB L04 / L05 (Gen2) ELOMALEDS Ede Methany Di 3 dollan Elovaciano dolla dollan Elovaciano dollan Elovaciano dollan Elovaci	LUMIL	.EDS	90° A 90
FWHM / FWTM       15.0° / 25.0°         Efficiency       59 %         Reak intensity       6.4.0fm         EDS/sectionpic       1         July Colour       White         Required components:       P15581_HEKLA-SOCKET-H         PLUMILEDS       ED         LUXEON CX Plus CoB - HD S0114         WWM / FWTM       8.0° / 14.0°         ED       LUXEON CX Plus CoB - HD S0114         WWM / FWTM       8.0° / 14.0°         ED       LUXEON CX Plus CoB - HD S0114         WWM / FWTM       8.0° / 14.0°         ED       LUXEON CX Plus CoB - HD S0114         WWM / FWTM       8.0° / 14.0°         ED/section point       1         LED/section point       1         LED/section point       1         LED/section points:       Ender Winth: 634c Helal         Ender Winth: 634c Helala       Ender Winth: 634c Helala         Image: LED/section points:       Ender Winth: 634c Helala         Ender Winth: 634c Helala       Ender Winth: 634c Helala         Image: LED/section points:       Ender Winth: 634c Helala         Ender Winth: 637a Helala       Ender Winth: 637a Helala	LED		
Efficiency 59% Peak intensity 6.4 cdfm Edubated optic 1 uppt colour White Required components: F15858, HEKLA-SOCKET-H PLUMILEDS LED LUXEON CX Phys CoB - HD S01H4 WHM / FVTM 80° / 14.0° Efficiency 67% Pack intensity 2.7.5 cdfm EduSeach optic 1 uppt colour White Required components: Bender With: 634c Hekla PLUMILEDS LED LUXEON CX Phys CoB - HD S04H9 WMM / FVTM 130° / 20.0° Efficiency 61% Pack intensity 10.3 cdfm LUXEON CX Phys CoB - HD S04H9 WMM / FVTM 130° / 20.0° Efficiency 61% Pack intensity 10.3 cdfm LUXEON CX Phys CoB - HD S04H9 WMM / FVTM 130° / 20.0° Efficiency 61% Pack intensity 10.3 cdfm LUXEON CX Phys CoB L04 / L05 (Gen2) Efficiency 85% Pack intensity 63.5 cdfm LED LUXEON CX Phys CoB L04 / L05 (Gen2) EMM / FVTTM 150° / 26.0° Efficiency 85% Pack intensity 6.5 cdfm LED/wach optic 1 uppt colour White Required components: Bender With: 63.5 cdfm LED/wach optic 1 uppt colour White Required with that A	FWHM / FWTM		75
Pask Intensity G 4 cd/m LEDalwash optic 1 LEDalwash optic 1 LEDalwash optic 1 Miles Societ ACKET-H			3600
LEDviend optie 1 Light colour White Required components: F15858, HEKLA-SOCKET-H PLUMILEDS LED LUXEON CX Plus CoB + HD S01H4 EWHA / FWTM 80° / 14.0° Elboleron 07 % Peak Intensity 27.5 colin LEDviench point 1 Light colour White Required components: Bender Wirth: 634c Hekla PLUMILEDS LED LUXEON CX Plus CoB + HD S04H9 FWHA / FWTM 13.0° / 20.0° Elboleron 06 15 Bender Wirth: 634c Hekla PLUMILEDS LED LUXEON CX Plus CoB + HD S04H9 FWHA / FWTM 13.0° / 20.0° Elboleron 06 15 Bender Wirth: 634c Hekla	-		60° · · · · · · · · · · · · · · · · · · ·
Light colour White Required components: F1585L_HERLA.SOCKET.H			
Required components: F15858_HEKLA-SOCKET-H F15858_HEKLA-SOCKET-H FUNNLEDS LED LUXEON CX Plus CoB - HD S01H4 WMM / FWTM & 80 // 14.0° Efficiency 67 % Required components: Bender Wirth: 634c Hekla			95°
F1958B, HEKLA-SOCKET-H			
CUMILEDS     LED ULXEO K2 Plus CoB + HD S01H4     WHW /FWTM 507 / 14.0°     Ender Wirth: 534c Hekla      CUMILEDS     Lot COX Plus CoB + HD S01H4     Wirth S34c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     WHM /FWTM 13.0° / 20.0°     Ender Wirth: 534c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     WHM /FWTM 13.0° / 20.0°     Ender Wirth: 534c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     WHM /FWTM 13.0° / 20.0°     Ender Wirth: 534c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     WHM /FWTM 13.0° / 20.0°     Ender Wirth: 534c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     WHM /FWTM 15.0° / 20.0°     Ender Wirth: 534c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     WHM /FWTM 15.0° / 20.0°     Ender Wirth: 534c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     Wirth 634c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     Wirth: 634c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     Wirth: 634c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     Wirth: 634c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     Wirth: 634c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     Wirth: 634c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     Wirth: 634c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     Wirth: 634c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     Wirth: 634c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     Wirth: 634c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     Wirth: 634c Hekla      CUMILEDS     Lot COX Plus CoB + HD S04H9     Lot COX Plus COB + HD + H			
ED LUXEON CX Plus CoB - HD S01H4 WHM / FVTM 8,0° / 14.0° Ellolance of 7% Peak intensity 27.5 collm EDS/each optic 1 Light colour White Required components: Bender With: 634c Hekla CLUMILEDS LED LUXEON CX Plus CoB - HD S04H9 FWHM / FVTM 13.0° / 20.0° Efficiency 61 % Peak intensity 10.3 collm LEDS/each optic 1 Light colour White Required components: Bender With: 634c Hekla CLUMILEDS LED LUXEON CX Plus CoB - HD S04H9 FWHM / FVTM 13.0° / 20.0° Efficiency 61 % Peak intensity 0.3 collm LEDS/each optic 1 LEDS/each optic			
ED LUXEON CX Plus CoB - HD S01H4 WHM / FVTM 8,0° 114.0° Ellolance of 7% Peak intensity 27.5 cd/m EDS/each optic 1 Light colour White Required components: Bender Wirth: 634c Hekla CLUMILEDS LED LUXEON CX Plus CoB - HD S04H9 WHM / FVTM 13.0° / 20.0° Efficiency 61 % Peak intensity 1.3 cd/m LED%each optic 1 LED%each optic			30*
ED LUXEON CX Plus CoB - HD S01H4 WHM / FVTM 8,0° 114.0° Ellolance of 7% Peak intensity 27.5 cd/m EDS/each optic 1 Light colour White Required components: Bender With: 634c Hekla CLUMILEDS LED LUXEON CX Plus CoB - HD S04H9 WHM / FVTM 13.0° / 20.0° Efficiency 61 % Peak intensity 10.3 cd/m LED%each optic 1 LED%each optic	<i>(</i> )		 15° 0° 15°
FWHM / FVTM 8.0° / 14.0° Efficiency 67% Peak intensity 27.5 cd/m LEDs/each optic 1 Light colour White Required components: Bender Wirth: 634c Hekla CLUMILEDS LED LLXEON CX Plus CoB + HD 504H9 FWHM / FVTM 13.0° / 20.0° Efficiency 61% Peak intensity 10.3 cd/m LEDs/each optic 1 Light colour White Required components: Bender Wirth: 634c Hekla CLUXEON CX Plus CoB L04 / L05 (Gen2) FWHM / FVTM 15.0° / 28.0° Endiency 58 % Peak intensity 6.5 cd/m LEDS/each optic 1 Light colour White Required components: Bender Wirth: 637c Hekla		.EDS	90* 9
Efficiency 67 % Peak intensity 27.5 cd/m LEDS/each optic 1 Light colour White Required components: Bender Wirth: 634c Hekla	LED		75
Peak intensity 27.5 cd/lm LEDs/each optic 1 LeDs/each optic 1 LEDs/each optic 1 Lipt colour White Required components: Bender Wirth: 634c Hekla C LUMILEDS LED LUXEON CX Plus CoB + HD S04H9 WHM / FWTM 13.0° / 20.0° Efficiency 61 % Peak intensity 10.3 cd/lm LEDs/each optic 1 Lipt colour White Required components: Bender Wirth: 634c Hekla C LUMILEDS LED LUXEON CX Plus CoB L04 / L05 (Gen2) WHM / FVTM 15.0° / 26.0° Efficiency 58 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Lipt colour White Required components: Bender Wirth: 637a Hekla	FWHM / FWTM		
LEDs/each optic 1 Light colour White Required components: Bender Wirth: 634c Hekla	Efficiency	67 %	90 <sup>3</sup>
Light colour White Required components: Bender Wirth: 634c Hekka ED LUXEON CX Plus CoB - HD S04H9 WHM / FWTM 13.0° / 20.0° Efficiency 61 % Peak intensity 10.3 cd/m LEDS/each optic 1 Light colour White Required components: Bender Wirth: 634c Hekka ED LUXEON CX Plus CoB L04 / L05 (Gen2) EWHM / FWTM 15.0° / 26.0° Efficiency 58 % Peak intensity 6.5 cd/lm LEDS/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla	Peak intensity	27.5 cd/lm	
Agint accomponents: Bender Wirh: 634c Hekla	LEDs/each optic	1	
Bender Wirth: 534c Hekla	Light colour	White	45*
CONTRIBUTION     C	Required compone	ents:	
LED LUXEON CX Plus CoB - HD S04H9 FWHM / FWTM 13.0° / 20.0° Efficiency 61 % Peak intensity 10.3 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 634c Hekla ED LUXEON CX Plus CoB L04 / L05 (Gen2) FWHM / FWTM 15.0° / 26.0° Efficiency 58 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla	Bender Wirth: 6	34c Hekla	
LED LUXEON CX Plus CoB - HD S04H9 FWHM / FWTM 13.0° / 20.0° Efficiency 61 % Peak intensity 10.3 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 634c Hekla ED LUXEON CX Plus CoB L04 / L05 (Gen2) FWHM / FWTM 15.0° / 26.0° Efficiency 58 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla			
LED LUXEON CX Plus CoB - HD S04H9 FWHM / FWTM 13.0° / 20.0° Efficiency 61 % Peak intensity 10.3 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 634c Hekla ED LUXEON CX Plus CoB L04 / L05 (Gen2) FWHM / FWTM 15.0° / 26.0° Efficiency 58 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla			30° 15° 0° 15° 3
FWHM / FWTM 13.0° / 20.0° Efficiency 61 % Peak intensity 10.3 cd/m LEDs/each optic 1 Light colour White Required components: Bender Wirth: 634c Hekla <b>CUMILEDS</b> LED LUXEON CX Plus CoB L04 / L05 (Gen2) FWHM / FWTM 15.0° / 26.0° Efficiency 58 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla	UMIL	.EDS	90° A 9
Efficiency 61 % Peak intensity 10.3 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 634c Hekla <b>CUMILEDS</b> LED LUXEON CX Plus CoB L04 / L05 (Gen2) FWHM / FWTM 15.0° / 26.0° Efficiency 58 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla	LED	LUXEON CX Plus CoB - HD S04H9	
Peak intensity 10.3 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 634c Hekla <b>CUMILEDS</b> LED LUXEON CX Plus CoB L04 / L05 (Gen2) EVHM / FWTM 15.0° / 26.0° Efficiency 58 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla	FWHM / FWTM	13.0° / 20.0°	
LEDs/each optic 1 Light colour White Required components: Bender Wirth: 634c Hekla	Efficiency	61 %	605 S200
Light colour White Required components: Bender Wirth: 634c Hekla <b>CUMILEDS</b> LED LUXEON CX Plus CoB L04 / L05 (Gen2) FWHM / FWTM 15.0° / 26.0° Efficiency 58 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla	Peak intensity	10.3 cd/lm	
Required components: Bender Wirth: 634c Hekla	LEDs/each optic	1	
Bender Wirth: 634c Hekla	Light colour	White	45° 6430
Image: Second	Required compone	ents:	
LED LUXEON CX Plus CoB L04 / L05 (Gen2) FWHM / FWTM 15.0° / 26.0° Efficiency 58 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla	Bender Wirth: 6	34c Hekla	
LED LUXEON CX Plus CoB L04 / L05 (Gen2) FWHM / FWTM 15.0° / 26.0° Efficiency 58 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla			
LED LUXEON CX Plus CoB L04 / L05 (Gen2) FWHM / FWTM 15.0° / 26.0° Efficiency 58 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla			305
LED LUXEON CX Plus CoB L04 / L05 (Gen2) FWHM / FWTM 15.0° / 26.0° Efficiency 58 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla		EDS	153 <sup>°</sup> 0 <sup>8</sup> 15 <sup>°</sup>
FWHM / FWTM 15.0° / 26.0° Efficiency 58 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla			90* 91
Efficiency 58 % Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla			75
Peak intensity 6.5 cd/lm LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla			
LEDs/each optic 1 Light colour White Required components: Bender Wirth: 637a Hekla			
Light colour White Required components: Bender Wirth: 637a Hekla			
Required components: Bender Wirth: 637a Hekla			
Bender Wirth: 637a Hekla			$r \times / \square \setminus X$
34° (50)			 4830
		JI A LIENIA	X / V X
			CHINA CHINA



90°

	ED2		90°
LED	LUXEON CX Plus CoB M02 / M03 (Gen2)		25*
FWHM / FWTM	11.0° / 20.0°		735
Efficiency	62 %		605
Peak intensity	12.8 cd/lm		
LEDs/each optic	1		0459
Light colour	White		47*
Required compone	ents:		
Bender Wirth: 6			
			X   X
			30° 30
			15° 0° 15°
M LUMIL	EDS		90* 90
LED	LUXEON CX Plus CoB S01 (Gen2)		
FWHM / FWTM	8.0° / 14.0°		73
Efficiency	66 %		
Peak intensity	27.5 cd/lm		$\mathbf{X} \longrightarrow (1 \times 2)$
LEDs/each optic	1		
Light colour	White		er la
Required compone	ents:		1320
Bender Wirth: 6	34c Hekla		
			304
			15° 0° 15°
ELUM	INUS		90* 99
LED	CxM-11 (19x19)		
FWHM / FWTM	15.0° / 26.0°		75
Efficiency	56 %		60° 1600
Peak intensity	5.5 cd/lm		
LEDs/each optic	1		
Light colour	White		95 <sup>4</sup> 3200 45
Required compone	ents:		
F15859_HEKLA	A-SOCKET-I		
			4830
			30*
<b>E</b> LUM			
LED	CXM-3		90* 90
		a management of the second	75
FWHM / FWTM	6.0° / 11.0°		
Efficiency	66 %		60° 200 60
Peak intensity LEDs/each optic	38.5 cd/lm		
	1 White		47*
Light colour Required compone	White		
F15255_HEKLA			
F 15255_REKLA			
			30° 30° 30



ELUM	INUS	90 <sup>4</sup> 90 <sup>4</sup>
LED	CXM-4	
FWHM / FWTM	7.0° / 13.0°	75
Efficiency	63 %	
Peak intensity	28.1 cd/lm	
LEDs/each optic	1	
Light colour	White	q
Required compone	ents:	
F15255_HEKLA	-SOCKET-C	
		240
		300 V
(e		339 09 390
ELUM	INUS	90 <sup>4</sup> 99
LED	CxM-9 (13.5x13.5)	2
FWHM / FWTM	13.0° / 21.0°	
Efficiency	59 %	90 <sup>4</sup>
Peak intensity	9.3 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		600
F15255_HEKLA	A-SOCKET-C	
		30 <sup>4</sup> 250 30
	S	90° 900
PHILIP		90 <sup>+</sup> 20
LED	Fortimo SLM L09 CoB	99*
LED FWHM / FWTM	Fortimo SLM L09 CoB 13.0° / 21.0°	98 <sup>4</sup> 99
LED FWHM / FWTM Efficiency	Fortimo SLM L09 CoB 13.0° / 21.0° 63 %	95 <sup>4</sup> 99 75 60 <sup>4</sup> 520 60
LED FWHM / FWTM Efficiency Peak intensity	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1	90 <sup>4</sup> 200 60 97 200 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents: -SOCKET-H	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents: -SOCKET-H	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents: -SOCKET-H	21 <sup>5</sup> 22 <sup>7</sup> 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents: -SOCKET-H UNG LC003D / LC006D / LC009D / LC013D 13.0° / 21.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents: -SOCKET-H	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents: -SOCKET-H UNG LC003D / LC006D / LC009D / LC013D 13.0° / 21.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents: -SOCKET-H <b>UNG</b> LC003D / LC006D / LC009D / LC013D 13.0° / 21.0° 60 % 9.3 cd/lm 1	21 <sup>5</sup> 22 <sup>7</sup> 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents: -SOCKET-H <b>UNG</b> LC003D / LC006D / LC009D / LC013D 13.0° / 21.0° 60 % 9.3 cd/lm 1 White	21 <sup>5</sup> 22 <sup>7</sup> 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents: -SOCKET-H <b>UNG</b> LC003D / LC006D / LC009D / LC013D 13.0° / 21.0° 60 % 9.3 cd/lm 1 White ents:	21 <sup>5</sup> 22 <sup>7</sup> 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents: -SOCKET-H <b>UNG</b> LC003D / LC006D / LC009D / LC013D 13.0° / 21.0° 60 % 9.3 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents: -SOCKET-H <b>UNG</b> LC003D / LC006D / LC009D / LC013D 13.0° / 21.0° 60 % 9.3 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo SLM L09 CoB 13.0° / 21.0° 63 % 9.6 cd/lm 1 White ents: -SOCKET-H <b>UNG</b> LC003D / LC006D / LC009D / LC013D 13.0° / 21.0° 60 % 9.3 cd/lm 1 White ents:	20 00 12 00 10 10 10 10 10 10 10 10 10 10 10 10



SAMSI	UNG	894
LED	LC020C	
FWHM / FWTM	11.0° / 19.0°	77
Efficiency	61 %	
Peak intensity	12 cd/lm	
LEDs/each optic	1	
Light colour	White	84
Required compone		
F15848_HEKLA		900
		30* 12000
SAMSI	UNG	
LED	LC020C G2	
FWHM / FWTM	12.0° / 20.0°	75 × 1
Efficiency	59 %	
Peak intensity	10 cd/lm	6st l
LEDs/each optic	1	
Light colour	White	97 X
Required compone		
F15859_HEKLA		
		the second se
		255 Q <sup>+</sup> 155
TRIDON	VIC	94*
LED	SLE G7 LES09	
		72
LED	SLE G7 LES09	22
LED FWHM / FWTM	SLE G7 LES09 12.0° / 19.0°	97 61
LED FWHM / FWTM Efficiency	SLE G7 LES09 12.0° / 19.0° 61 %	97 97
LED FWHM / FWTM Efficiency Peak intensity	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm	21 52 52 52 52 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White	27 85 87 87 80
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White ents:	57 57 57 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White ents:	77 61 62 62 63 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White ents: -SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White ents: x-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White ents: -SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White ents: x-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA TRIDON LED FWHM / FWTM Efficiency	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White ents: -SOCKET-C SLE G7 LES13 17.0° / 28.0° 56 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White ents: -SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White ents: A-SOCKET-C SLE G7 LES13 17.0° / 28.0° 56 % 5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White ents: A-SOCKET-C SLE G7 LES13 17.0° / 28.0° 56 % 5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA <b>TRIDON</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White ents: A-SOCKET-C SLE G7 LES13 17.0° / 28.0° 56 % 5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White ents: A-SOCKET-C SLE G7 LES13 17.0° / 28.0° 56 % 5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES09 12.0° / 19.0° 61 % 10.9 cd/lm 1 White ents: A-SOCKET-C SLE G7 LES13 17.0° / 28.0° 56 % 5 cd/lm 1 White ents:	



XICATO		90 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	XOB 6 mm 9.0° / 15.0° 62 % 20.1 cd/lm 1 White ents:	
XICATO		50 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	XOB 9.8 mm 12.0° / 20.0 + 20.5° 60 % 10.4 cd/lm 1 White ents:	5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5
		20 <sup>5</sup> 20 <sup>7</sup> 20 <sup>7</sup> 20 <sup>7</sup>
XICATO		
LED FWHM / FWTM	XTM - 19mm LES 18.0° / 38.0°	77
Efficiency	50 %	
Peak intensity	2.9 cd/lm	9°.
LEDs/each optic	1	
Light colour	White	qr
Required compone C16058_XTM-A		200



bridgelux.		90* 90*
LED	VERO13	
FWHM / FWTM	15.0° / 30.0°	
Efficiency	61 %	
Peak intensity	5.3 cd/lm	60°
LEDs/each optic	1	
Light colour	' White	42+ 3200 42+
Required components:	Wine	
C16142_HEKLA-SO		
		30° 30° 30° 30°
CITIZEN		
		90° 90°
LED	CLL02x/CLU02x (LES10)	75'
FWHM / FWTM	14.0° / 24.0°	A A A A A A A A A A A A A A A A A A A
Efficiency	45 %	60% X / / / X / / K**
Peak intensity	7.3 cd/lm	
LEDs/each optic	1	
Light colour	White	4000
Required components:		
F15859_HEKLA-SO	CKET-I	
C16752_CARMEN-7	0-SHD	630
		30° 30°
		15° 8080 35°
CITIZEN		50* <u> </u>
CITIZEN	CLU700/701/702/703	50°
	CLU700/701/702/703 9.0° / 16.0°	30°
LED		97 97 97 97 97 97
LED FWHM / FWTM Efficiency	9.0° / 16.0°	60 <sup>1</sup> 600 35 <sup>1</sup> 55 <sup>1</sup> 90 <sup>2</sup> 55 <sup>1</sup>
LED FWHM / FWTM	9.0° / 16.0° 51 %	60 60 60 50 50 50 50 50 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	9.0° / 16.0° 51 % 17.5 cd/lm	gr
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	9.0° / 16.0° 51 % 17.5 cd/lm 1	91 92 32 91 92 33 90 90 90 90 90 90 90 90 90 90 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	9.0° / 16.0° 51 % 17.5 cd/lm 1 White	0° 0° 0° 0°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SOO	9.0° / 16.0° 51 % 17.5 cd/lm 1 White CKET-C	9° 77 60° 60° 60° 60° 60° 60° 60° 60° 60° 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	9.0° / 16.0° 51 % 17.5 cd/lm 1 White CKET-C	37 57 60 60 60 60 60 60 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SOC C16752_CARMEN-7	9.0° / 16.0° 51 % 17.5 cd/lm 1 White CKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SOC C16752_CARMEN-7	9.0° / 16.0° 51 % 17.5 cd/lm 1 White CKET-C	No.         No.           No.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SOC C16752_CARMEN-7	9.0° / 16.0° 51 % 17.5 cd/lm 1 White CKET-C 0-SHD CLU712/713	21 21 21 21 21 21 21 21 21 21
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SOC C16752_CARMEN-7	9.0° / 16.0° 51 % 17.5 cd/lm 1 White CKET-C 0-SHD	30 <sup>4</sup> 30 <sup>4</sup> 30 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SOC C16752_CARMEN-7 <b>CITTIZEN</b> LED FWHM / FWTM Efficiency	9.0° / 16.0° 51 % 17.5 cd/lm 1 White CKET-C 0-SHD CLU712/713	30 <sup>4</sup> 30 <sup>4</sup> 30 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SOC C16752_CARMEN-7 <b>CITTIZEN</b> LED FWHM / FWTM	9.0° / 16.0° 51 % 17.5 cd/lm 1 White CKET-C 0-SHD CLU712/713 13.0° / 22.0°	30 <sup>4</sup> 30 <sup>4</sup> 30 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SOC C16752_CARMEN-7 <b>CITTIZEN</b> LED FWHM / FWTM Efficiency	9.0° / 16.0° 51 % 17.5 cd/lm 1 White CKET-C 0-SHD CLU712/713 13.0° / 22.0° 47 %	30 <sup>4</sup> 30 <sup>4</sup> 30 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SOU C16752_CARMEN-7 <b>CITTIZEN</b> LED FWHM / FWTM Efficiency Peak intensity	9.0° / 16.0° 51 % 17.5 cd/lm 1 White CKET-C 0-SHD CLU712/713 13.0° / 22.0° 47 % 8.7 cd/lm	30 <sup>4</sup> 30 <sup>4</sup> 30 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO( C16752_CARMEN-7 CI6752_CARMEN-7 CITTIZEN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	9.0° / 16.0° 51 % 17.5 cd/lm 1 White CKET-C 0-SHD CLU712/713 13.0° / 22.0° 47 % 8.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO( C16752_CARMEN-7 CI6752_CARMEN-7 CI6752_CARMEN-7 ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	9.0° / 16.0° 51 % 17.5 cd/lm 1 White CKET-C 0-SHD CLU712/713 13.0° / 22.0° 47 % 8.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SOC C16752_CARMEN-7 CI6752_CARMEN-7 CI6752_CARMEN-7 Efficiency Peak intensity LEDs/each optic Light colour Required components:	9.0° / 16.0° 51 % 17.5 cd/lm 1 White CKET-C 0-SHD CLU712/713 13.0° / 22.0° 47 % 8.7 cd/lm 1 White CKET-I	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SOC C16752_CARMEN-7 CI6752_CARMEN-7 ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOC	9.0° / 16.0° 51 % 17.5 cd/lm 1 White CKET-C 0-SHD CLU712/713 13.0° / 22.0° 47 % 8.7 cd/lm 1 White CKET-I	



CITIZEN		30* 30*
LED	CLU712/713	
FWHM / FWTM	12.0° / 22.0°	75
Efficiency	64 %	3200
Peak intensity	10.8 cd/lm	60 <sup>5</sup> 60 <sup>4</sup>
LEDs/each optic	1	
Light colour	White	93° 5430
Required components:		
F15859_HEKLA-SO		
		0630
		15% 0% 15%
<b>CITIZEN</b>		90* A 90*
LED	CLU720/721/723	
FWHM / FWTM	15.0° / 29.0°	787
Efficiency	61 %	
Peak intensity	6.6 cd/lm	
LEDs/each optic	1	
Light colour	White	ar as
Required components:		4000
F15859_HEKLA-SO	CKET-I	
		30" 30"
		15° 0° 15°
CITIZEN	•	90 <sup>4</sup> 90 <sup>4</sup>
	CLU7A2/7A3	
		90 <sup>4</sup> 90 <sup>1</sup>
LED	CLU7A2/7A3	
LED FWHM / FWTM	CLU7A2/7A3 8.0° / 14.0°	
LED FWHM / FWTM Efficiency	CLU7A2/7A3 8.0° / 14.0° 52 %	
LED FWHM / FWTM Efficiency Peak intensity	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White CKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White CKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO C16752_CARMEN-7	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White CKET-C 70-SHD	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO C16752_CARMEN-7	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White CKET-C 70-SHD	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO C16752_CARMEN-7	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White CKET-C 70-SHD DS LUXEON CoB Compact	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO C16752_CARMEN-7	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White CKET-C 70-SHD DS LUXEON CoB Compact 10.0° / 18.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO C16752_CARMEN-7	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White CKET-C 70-SHD DS LUXEON CoB Compact 10.0° / 18.0° 71 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO C16752_CARMEN-7	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White CKET-C 70-SHD DS LUXEON CoB Compact 10.0° / 18.0° 71 % 18 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO C16752_CARMEN-7	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White CKET-C 70-SHD DS LUXEON CoB Compact 10.0° / 18.0° 71 % 18 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO C16752_CARMEN-7 VENTMENT LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White CKET-C 70-SHD DS LUXEON CoB Compact 10.0° / 18.0° 71 % 18 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO C16752_CARMEN-7 V C16752_CARMEN-7 Efficiency Peak intensity LEDs/each optic Light colour Required components:	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White CKET-C 70-SHD DS LUXEON CoB Compact 10.0° / 18.0° 71 % 18 cd/lm 1 White	50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO C16752_CARMEN-7 VENTMENT LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White CKET-C 70-SHD DS LUXEON CoB Compact 10.0° / 18.0° 71 % 18 cd/lm 1 White	50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO C16752_CARMEN-7 ELED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CLU7A2/7A3 8.0° / 14.0° 52 % 25.9 cd/lm 1 White CKET-C 70-SHD DS LUXEON CoB Compact 10.0° / 18.0° 71 % 18 cd/lm 1 White	594 594 594 594 594 595 594 595 595



	US	90*
LED	CXM-4	
FWHM / FWTM	8.0° / 14.0°	75-
Efficiency	52 %	
Peak intensity	24.6 cd/lm	$\uparrow$ X/( $\mid$ ) X $\uparrow$
LEDs/each optic	1	
Light colour	White	g*
Required components:		
F17435_HEKLA-G2-	C	iscon
C16752_CARMEN-7	0-SHD	$\times$ / $\setminus$ $\times$
		30° 22600 30°
	US	90* <b>9</b> 0*
LED	CxM-6 (12x13)	
FWHM / FWTM	10.0° / 18.0°	73
Efficiency	68 %	
Peak intensity	18.5 cd/lm	
LEDs/each optic	1	
Light colour	White	47× 47×
Required components:		12800
F15255_HEKLA-SO	CKET-C	
		30° 30° 30° 30° 30° 30° 30°
	US	90° 90°
		50°
	US CxM-6 (13.5x13.5) 10.0° / 18.0°	27. 27. 26.
LED FWHM / FWTM	CxM-6 (13.5x13.5)	50° 50°
LED FWHM / FWTM Efficiency	CxM-6 (13.5x13.5) 10.0° / 18.0°	50° 50° 73° 72° 60° 60°
LED FWHM / FWTM	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 %	80° 90° 90° 90° 90° 90° 90° 90° 90° 90° 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm	di. 600 - 601 22. 23. 25.
LED FWHM / FWTM Efficiency Peak intensity	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1	0°         0°           0°         0°           0°         0°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1 White	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1 White	d.         1390         61           d.         1300         62           j.         52         52           j.         53         55
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1 White	20 0° 10° 20° 0° 10° 20° 0° 0° 20° 0° 20° 0° 20° 0° 20° 0° 20° 0° 20°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1 White C	20° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1 White C	304         304           304         1200           604         1200           604         605           605         605           605         605
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1 White C I G LC003D / LC006D / LC009D / LC013D	22. 26. 26. 26. 26. 27. 1200 26. 26. 27. 1200 26. 27. 26. 27. 26. 27. 26. 27. 26. 27. 26. 27. 27. 26. 27. 27. 27. 27. 27. 27. 27. 27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2- SAMSUN LED FWHM / FWTM	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1 White C C LC003D / LC006D / LC009D / LC013D 14.0° / 24.0°	32.         52.           33.         50.           36.         50.           36.         50.           36.         50.           36.         50.           36.         50.           36.         50.           36.         50.           36.         50.           36.         50.           36.         50.           36.         50.           36.         50.           36.         50.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2- <b>SAMSUN</b> LED FWHM / FWTM Efficiency	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1 White C C LC003D / LC006D / LC009D / LC013D 14.0° / 24.0° 62 %	804         200         804           204         200         804           204         200         804           204         200         804           204         200         804           204         200         804
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2- <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1 White C C C C C C C C C C C C C	200         000         00           201         000         00           202         00         00           203         00         00           204         00         00           205         00         00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2- SANSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1 White C C C C C C C C C C C C C	20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2- SANSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1 White C C C C C C C C C C C C C	20         20           21         20           22         20           24         20           25         25           26         25           26         25           26         25           26         25           26         25           27         25           26         25           26         25           27         25           26         25           26         25           27         26           28         25           29         25           20         25           27         25           28         27           29         27           29         27           20         28           27         27           28         27           29         27           29         28           29         27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2- <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1 White C C C C C C C C C C C C C	27         200         61           39         200         62           39         200         62           39         200         62           39         200         62           39         200         62           39         200         62           39         200         62           39         200         62           39         200         62           39         200         62           39         200         62           39         200         62           39         200         62           30         200         62           30         200         62           30         200         62           30         200         62           30         200         62           30         200         62           30         200         62           30         200         62           30         200         62           30         200         20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2- SANSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1 White C C C C C C C C C C C C C	89*     90*       99*     90*       99*     90*       99*     90*       99*     90*       99*     90*       99*     90*       99*     90*       99*     90*       99*     90*       99*     90*       90*     90*       90*     90*       90*     90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2- <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CxM-6 (13.5x13.5) 10.0° / 18.0° 68 % 18.5 cd/lm 1 White C C C C C C C C C C C C C	



SAMSU	NG	90° 0
LED	LC003D / LC006D / LC009D / LC013D	
FWHM / FWTM	13.0° / 24.0°	
Efficiency	62 %	
Peak intensity	8.7 cd/lm	
LEDs/each optic	1	
Light colour	White	974
Required component	s:	5430
F17435_HEKLA-0	62-C	
		30° 30°
0.	NO	15% 98% 155'
SAMSU	NG	90° 90°
LED	LC010C	
FWHM / FWTM	10.0° / 18.0°	
Efficiency	68 %	600 600
Peak intensity	18.6 cd/lm	
LEDs/each optic	1	
Light colour	White	e.
	White	g
Light colour	White s:	a
Light colour Required component	White s:	e
Light colour Required component	White s:	gr - 1200 - 50



# PRODUCT DATASHEET CP15916\_CARMEN-RS-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.

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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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#### 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

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