

PRODUCT DATASHEET CP15776_CARMEN-W-C

CARMEN-W-C

~55° wide 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:

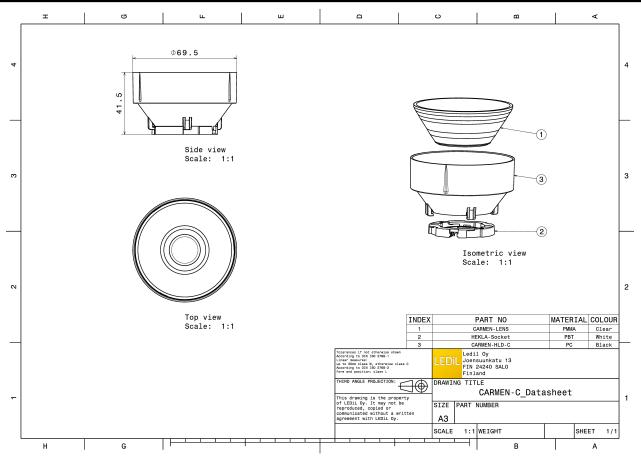
Component	Туре	Material	Colour	Finish
CARMEN-W	Single lens	PMMA	clear	
CARMEN-HLD-C	Holder	PC	black	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CP15776_CARMEN-W-C	Single lens	150	150	15	4.5
» Box size: 476 x 273 x 292 mm					



PRODUCT DATASHEET CP15776_CARMEN-W-C



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



bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15253_HEKLA		50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA		20 ¹ 20
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA		20 ¹⁰ 20 ¹⁰ 27 ² 27 ² 27 ² 600 600 60 ² 60 ²
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	VERO10 55.0° / 78.0° 83 % 6.9 cd/lm 1 White nts:	200 12° 12° 12° 2° 12°



bridgelux.		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4	A-SOCKET-K	
bridgelux. LED FWHM / FWTM Efficiency	Vesta DTW 9mm (4W/6W/12W) 48.0° / 71.0° 76 %	
Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4	1.3 cd/lm 1 White ents: A-SOCKET-K	
bridgelux. LED	Vesta TW 6mm DP	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	50.0° / 72.0° 81 % 1.3 cd/lm 1	
Light colour Required compone C16142_HEKL/ Bender Wirth: 5	A-SOCKET-K	
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Vesta TW 9mm (12W) CSP 50.0° / 73.0° 75 % 1.1 cd/lm 1	



bridgelux.		50'
LED	Vesta TW 9mm (9W) DP	x ¹
FWHM / FWTM	52.0° / 75.0°	
Efficiency	77 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	gr da
Required compone	nts:	
C16142_HEKLA	-SOCKET-K	
Bender Wirth: 48	39 Typ L8	
		34°
CITIZE	N	9° 90'
LED	CLC020 Series (Dim-To-Warm)	
FWHM / FWTM	48.0° / 72.0°	77
Efficiency	75 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	ar at
Required compone		
C16142_HEKLA		
_		
		15° 0° 15°
CITIZE	N	50* 5**
LED	CLL02x/CLU02x (LES10)	
FWHM / FWTM	54.0° / 78.0°	
Efficiency	82 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
F15255_HEKLA	-SOCKET-C	
		30° 1000 107 30°
CITIZE	N	90 ⁴ 99 ⁴
LED	CLU700/701/702/703	
FWHM / FWTM	52.0° / 74.0°	
Efficiency	85 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	e. e
Required compone		
F15255_HEKLA		
		30" 30



CITIZE	NT			T
CITIZE			90*	90*
LED	CLU710/711		73*	75*
FWHM / FWTM	52.0° / 75.0°			
Efficiency	81 %		eg	60*
Peak intensity	1.2 cd/lm			\mathbb{N}
LEDs/each optic	1			
Light colour	White		95°	43*
Required compone				
F15859_HEKLA	-SOCKET-I			
			30. 120 0	30°
CITIZE	N		90'	90°
LED	CLU7A2/7A3			
FWHM / FWTM	54.0° / 73.0°			8
Efficiency	86 %		60 ⁴ 400	
Peak intensity	1.2 cd/lm			\land
LEDs/each optic	1			$\Lambda \times$
Light colour	White		454	65.
Required compone	nts:			
F15255_HEKLA				
			30*	36.
CITIZE	NT		- 199 ¹ 01	12.
	N		90*	90*
	CLU7B2	1		75*
		1	77	75
LED	CLU7B2		27	
LED FWHM / FWTM Efficiency Peak intensity	CLU7B2 53.0° / 73.0°		27 27	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White		27 00 07 07	e. 45
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White		97 97 97	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White		75 60 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White		73 64 55 50 800	6.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White			82 02 02 02
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White nts:			22 24 24 25 25
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White nts:			12- 12- 12- 12- 12- 12- 12- 12- 12- 12-
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White nts: N LCN-C01B (Tunable White)			80 80 80 80 80 80 80 80 80 80 80 80 80 8
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White nts: N LCN-C01B (Tunable White) 49.0° / 72.0°			100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CITIZE LED FWHM / FWTM Efficiency	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White nts: N LCN-C01B (Tunable White) 49.0° / 72.0° 74 %			100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CITTIZE LED FWHM / FWTM Efficiency Peak intensity	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White nts: N LCN-C01B (Tunable White) 49.0° / 72.0° 74 % 1.2 cd/lm			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CITIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White nts: N LCN-C01B (Tunable White) 49.0° / 72.0° 74 % 1.2 cd/lm 1			27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CITIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White nts: N LCN-C01B (Tunable White) 49.0° / 72.0° 74 % 1.2 cd/lm 1 White			77*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CITIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White nts: N LCN-C01B (Tunable White) 49.0° / 72.0° 74 % 1.2 cd/lm 1 White nts:			77*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CITIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White nts: N LCN-C01B (Tunable White) 49.0° / 72.0° 74 % 1.2 cd/lm 1 White nts:			77-
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7B2 53.0° / 73.0° 86 % 1.2 cd/lm 1 White nts: N LCN-C01B (Tunable White) 49.0° / 72.0° 74 % 1.2 cd/lm 1 White nts:			77-



		50* 20*
LED	CMA1516	
FWHM / FWTM	55.0° / 78.0°	
Efficiency	82 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	gr at
Required compone	nts:	
F15256_HEKLA	-SOCKET-D	
		34 34
	FDS	1271 1860 127
		99 ⁴ 99 ⁴
	LUXEON CX Plus CoB L08 (Gen2)	75
FWHM / FWTM	64.0° / 85.0°	
Efficiency	71 % 0.7 cd/lm	
Peak intensity		
LEDs/each optic Light colour	1 White	
Required compone		
Bender Wirth: 63		
Dender Wirth. 0.		
		30 ¹⁰ 30 ¹⁰ 10 ¹ 10 ¹ 10 ¹
UMIL	EDS	50° 50°
LED	LUXEON CoB 1202HD	
FWHM / FWTM	52.0° / 74.0°	
Efficiency	82 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	or be
Required compone		
F15848_HEKLA	-SOCKET-G	
		30 ¹⁰ 2000 30 ¹
	EDS	90 ⁴ 99 ⁹
LED	LUXEON CoB 1204HD	
FWHM / FWTM	53.0° / 75.0°	
Efficiency	81 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	er er
Required compone		
F15858_HEKLA	-SOCKET-H	
F15858_HEKLA	-SOCKET-H	
F15858_HEKLA	-SOCKET-H	24° 250 30



ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1205HD 56.0° / 79.0° 76 % 1 cd/lm 1 White ints:	
	EDS LUXEON CX Plus CoB - HD S01H4	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63		
	EDS	59'
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	LUXEON CX Plus CoB - HD S02H6 51.0° / 73.0° 81 % 1.2 cd/lm 1 White Ints:	
ED EVHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	LUXEON CX Plus CoB - HD S04H9 53.0° / 76.0° 81 % 1.1 cd/lm 1 White Ints:	



Vertication Control Co	LUXEON CX Plus CoB L04 / L05 (Gen2) 57.0° / 80.0° 76 % 0.9 cd/lm 1 White ints:	
	EDS	90 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6-		
	EDS	50 ⁴ 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	LUXEON CX Plus CoB S01 (Gen2) 51.0° / 72.0° 83 % 1.3 cd/lm 1 White I S4c Hekla	
	INUS	99 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 49	A-SOCKET-K	



ELUM	INUS	50*
LED	CDM-9 (Dim-To-Warm)	
FWHM / FWTM	53.0° / 75.0°	3'
Efficiency	77 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	er e
Required compone		
C16142_HEKLA		
Bender Wirth: 4		
		30 ⁴ 30 ⁵ 30 ⁵ 30 ⁵
E LUM	INUS	
LED	CTM-9 (Tunable White)	
FWHM / FWTM	53.0° / 75.0°	
Efficiency	77 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	gr d
Required compone		
C16142_HEKLA		
Bender Wirth: 4		
E LUM	INUS	39'
LED	CxM-11 (19x19)	
FWHM / FWTM	58.0° / 81.0°	77
Efficiency	76 %	
Peak intensity	0.9 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	ents:	
F15859_HEKLA	A-SOCKET-I	
		305 25 ⁷ 100 25 ⁷ X
ELUM	INUS	24 [*]
LED	CXM-3	
FWHM / FWTM	53.0° / 72.0°	
Efficiency	88 %	
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
F15255_HEKLA		
		100



	NUS	90° 90°
LED	CXM-4	
FWHM / FWTM	52.0° / 73.0°	
Efficiency	85 %	400
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	42*
Required compone	nts:	
F15255_HEKLA	-SOCKET-C	
		36* 35*
	NUS	
		90°
LED	CxM-9 (13.5x13.5)	73.
FWHM / FWTM	53.0° / 77.0°	
Efficiency	81 %	60 ⁴
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
F15255_HEKLA	-SUCKET-C	
		36° 38° 38°
ØNICHI		90° 90°
LED	NJCWL024Z-V1MT: COB L-Type Tunable White	
FWHM / FWTM	48.0° / 71.0°	
FWHM / FWTM Efficiency	48.0° / 71.0° 76 %	77 400
		99 ⁵ - 400 - 20 ⁵
Efficiency Peak intensity	76 %	
Efficiency	76 % 1.2 cd/lm	
Efficiency Peak intensity LEDs/each optic	76 % 1.2 cd/lm 1 White	5 ⁷ 60 60 60 ⁷
Efficiency Peak intensity LEDs/each optic Light colour	76 % 1.2 cd/lm 1 White nts:	9 ² - 100 - 07
Efficiency Peak intensity LEDs/each optic Light colour Required compone	76 % 1.2 cd/lm 1 White nts: -SOCKET-K	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	76 % 1.2 cd/lm 1 White nts: -SOCKET-K	
Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 49	76 % 1.2 cd/lm 1 White nts: -SOCKET-K 17 Typ L8	20° 20° 20° 20° 20° 20° 20° 20° 20° 20°
Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 45	76 % 1.2 cd/lm 1 White nts: -SOCKET-K 17 Typ L8	
Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 45	76 % 1.2 cd/lm 1 White nts: -SOCKET-K 17 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White	
Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 49	76 % 1.2 cd/lm 1 White nts: -SOCKET-K 17 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 53.0° / 76.0°	
Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 49 WICHIM LED FWHM / FWTM Efficiency	76 % 1.2 cd/lm 1 White nts: -SOCKET-K 77 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 53.0° / 76.0° 74 %	
Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 49 MICHIA LED FWHM / FWTM Efficiency Peak intensity	76 % 1.2 cd/lm 1 White nts: -SOCKET-K 77 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 53.0° / 76.0° 74 % 1 cd/lm	
Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 49 WICHIA Bender Wirth: 49 Efficiency Peak intensity LEDs/each optic	76 % 1.2 cd/lm 1 White nts: -SOCKET-K 77 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 53.0° / 76.0° 74 % 1 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 4S WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	76 % 1.2 cd/lm 1 White nts: -SOCKET-K 77 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 53.0° / 76.0° 74 % 1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 49 ONICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	76 % 1.2 cd/lm 1 White nts: -SOCKET-K 17 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 53.0° / 76.0° 74 % 1 cd/lm 1 White nts:	
Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 49 NICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	76 % 1.2 cd/lm 1 White hts: -SOCKET-K 17 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 53.0° / 76.0° 74 % 1 cd/lm 1 White hts: -SOCKET-K	
Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 49 ONICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	76 % 1.2 cd/lm 1 White hts: -SOCKET-K 17 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 53.0° / 76.0° 74 % 1 cd/lm 1 White hts: -SOCKET-K	



PHILIP	DS .	20 ⁴
LED	Fortimo SLM L09 CoB	
FWHM / FWTM	54.0° / 76.0°	23. 24.
Efficiency	81 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	gr gr
Required compone	ents:	
F15858_HEKLA	A-SOCKET-H	
		30" 2200 34"
SAMSI		15 [°] 0 [°] 15 [°]
	LC003D / LC006D / LC009D / LC013D	<u>x</u>
FWHM / FWTM	55.0° / 78.0°	
Efficiency Peak intensity	82 % 1.1 cd/lm	
LEDs/each optic	1 White	er er
Light colour		
Required compone F15255_HEKLA		
F 15255_HERLA	4-30CKET-C	
		30 ⁴ 32 ⁴
SAMSI	UNG	30°
LED	LC010C G2	
FWHM / FWTM	52.0° / 74.0°	
Efficiency	84 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	ar ar
Required compone	ents:	
F15255_HEKLA		
		30 220
SAMSI		225 ¹ o ^b 125 ¹
		90°
	LC010T (Tunable White)	75
FWHM / FWTM	51.0° / 74.0°	
Efficiency	76 %	60 ⁵
Peak intensity	1.1 cd/lm	
LEDs/each optic	1 Turchla Millia	
Light colour	Tunable White	
Required compone		
C16142_HEKLA		
Bender Wirth: 5	υ1 тур L8	
		30 ¹⁰ 5000 900



SAMSI	JNG	90° 90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC020C G2 52.0° / 75.0° 80 % 1.2 cd/lm 1	20 29 60* 400 60
Light colour Required compone F15859_HEKLA		
SEOUL		90° 980
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA		
SEOUL SEMICONDUCTOR		90° 99°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	SLE G7 LES09 53.0° / 77.0° 83 % 1.1 cd/lm 1 White nts:	



LED SLE GY LES13 FMHA/FVTM 63.07 / 83.07 Efficiency 7.4% Peak intensity 0.8 dd/m LED Address 1 Light colour White Required components: F15859_HEKLA-SOCKET-I Efficiency 83.% Peak intensity 1.2 dd/m LED XOB 9 mm EVMA /FVTM 53.07 /77.07 Efficiency 83.% Peak intensity 1.2 dd/m LED XOB 9.8 mm EVMA /FVTM 53.07 /77.07 Efficiency 83.% Peak intensity 1.1 dd/m ELD XOB 9.8 mm EVMA /FVTM 53.07 /77.07 Efficiency 83.% F15255_HEKLA-SOCKET-C EXICATO LED XOB 9.8 mm EVMA /FVTM 53.07 /77.07 Efficiency 83.% Peak intensity 1.1 dd/m LED XOB 9.8 mm EVMA /FVTM 53.07 /77.07 Efficiency 83.% Peak intensity 1.1 dd/m LED XOB 9.8 mm EVMA /FVTM 53.07 /77.07 Efficiency 63.% F15255_HEKLA-SOCKET-C ELD XIN-19mm LES F15256_HEKLA-SOCKET-C	TRIDO	VIC		90°		90'
Privile / Privile 33.0° Efficiency 74.% Reak Intensity 0.8 od/m Required components: P19525_HEKLA-SOCKET-I Efficiency 83.% Peak Intensity 1.2 od/m LEDS/each optic 1 Light colour While Required components: P15255_HEKLA-SOCKET-C Efficiency 83.% Peak Intensity 1.2 od/m LEDS/each optic 1 Light colour While Required components: P15255_HEKLA-SOCKET-C Efficiency 83.% Peak Intensity 1.1 od/m LEDS/each optic 1 LEDS/each optic 1						
Efficiency 74% Peak Itensity 0.8 cd/in LED/each optic F15859_HEKLA-SOCKET-I ED XICATO LED ACD Soft of mn PVHM//FVTM 53.0 / 74.0" Efficiency 83% Peak Itensity 1.2 cd/in LED/each optic 1 LED/each optic 1 LED/each optic 1 LED/each optic 1 LED/each optic 1 LED/each optic 1 LED/each optic 1 Light colour White Required components: F1525_HEKLA-SOCKET-C XICATO LED XICATO XIC				75*	$\langle \rangle \rangle$	$ \land \uparrow^*$
Peak intensity 0.8 cd/m LED isob optic 1 LED isob petch 1 LED isob petch 2 F15559_HEKLA-SOCKET-1 XICATO LED XOB 6 mm Peak intensity 12 cd/m LED isob 77.0° Efficiency 83 % Peak intensity 12 cd/m LED XOB 9.8 mm PWHM /PKTM S3.0° /77.0° Efficiency 83 % Peak intensity 11 cd/m LED XOB 9.8 mm PWHM /PKTM S3.0° /77.0° Efficiency 83 % Peak intensity 11 cd/m LED isob 9.8 mm PWHM /PKTM S3.0° /77.0° Efficiency 83 % Peak intensity 11 cd/m LED isob 9.8 mm PWHM /PKTM S3.0° /77.0° Efficiency 83 % Peak intensity 11 cd/m LED isob 9.8 mm PWHM /PKTM S3.0° /77.0° Efficiency 83 % Peak intensity 11 cd/m LED isob 9.8 mm PWHM /PKTM S3.0° /77.0° Efficiency 83 % Peak intensity 11 cd/m LED isob 9.8 mm PWHM /PKTM S3.0° /77.0° Efficiency 83 % Peak intensity 11 cd/m LED isob 9.8 mm PWHM /PKTM S3.0° /77.0° Efficiency 65 % Peak intensity 0.7 cd/m LED XTM - 19mm LES PHM /PKTM 64.0° /91.0° Efficiency 65 % Peak intensity 0.7 cd/m LED XTM - 19mm LES PHM /PKTM S4.0° /7 cd/m LED isob 9.8 mm PHM /PKTM S4.0° /7 cd/m LED isob 9.8 mm					_200	$\times \times$
LEDvieach optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I XICATO LED XOB 6 mm FWMH/FWTM 53.0°/77.0° Fficiency 83 % Peak intensity 12 culim LEDvieach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C XICATO LED XOB 9.8 mm Peak intensity 1.1 culim LEDvieach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C XICATO LED XOB 9.8 mm Peak intensity 1.1 culim LEDvieach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C	-			60*	$\sim \times / / \sim$	
Light colour White Required components: F16959_HEKLA-SOCKET-1 XICATO LED XOB 6 mm ProMH /FVTM 53.0° /7.4.0° Efficiency 83 % Peak Intensity 1.2 colm LED/each ofte 1 Light colour White Required components: F15255_HEKLA-SOCKET-C XICATO LED XOB 9.8 mm ProMH /FVTM 53.0° /77.0° Efficiency 33 % Peak Intensity 1.1 colfm LED/each ofte 1 Light colour White Required components: F15255_HEKLA-SOCKET-C						$\langle \langle \rangle \rangle$
Required components: F15859_HEKLA-SOCKET-1 XICATO LED TX X08 6 mm FWHM / FVTM S3.0° / 74.0° Efficiency 83 % Peak intensity 1.2 cd/m LED cach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C XICATO LED X08 9.8 mm FWHM / FVTM S3.0° / 77.0° Efficiency 83 % Peak intensity 1.1 cd/m LEDStach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C XICATO LED X10 + 19mm LES FWHM / FVTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/m LED CATO LED XTM - 19mm LES FWHM / FVTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/m LED CATO LED X1M - 19mm LES FWHM / FVTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/m LED CATO LED CATO LED X1M - 19mm LES FWHM / FVTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/m LED CATO LED	-			45-	$\times I$ (\land)	
F19599_HEKLA-SOCKET-I						K
XICATO LED X08 6 mm EWHM / FWTM 53.0° /74.0° Ellidency 83 % Peak intensity 1.2 cd/m LED XCATO Image: Components: F152d5_HEKLA-SOCKET-C Image: Components: F15					600	
LED XOB 9 mm FWHM / FWTM 53.0° / 74.0° Efficiency 83 % Peak intensity 1.2 cd/lm LEDSeach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C Efficiency 83 % Peak intensity 1.1 cd/lm LEDSeach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C Efficiency 83 % Peak intensity 1.1 cd/lm LEDSeach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C	_				\times \setminus \square	$X \times$
LED XOB 9 mm FWHM / FWTM 53.0° / 74.0° Efficiency 83 % Peak intensity 1.2 cd/lm LEDseach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C Efficiency 83 % Peak intensity 1.1 cd/lm LEDseach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C Efficiency 83 % Peak intensity 1.1 cd/lm LEDseach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C				300		X
LED XOB 9 mm FWHM / FWTM 53.0° / 74.0° Efficiency 83 % Peak intensity 1.2 cd/lm LEDseach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C Efficiency 83 % Peak intensity 1.1 cd/lm LEDseach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C Efficiency 83 % Peak intensity 1.1 cd/lm LEDseach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C	XICATO	h		90*	15% 0%	12,
FWHM/FWTM 53.0° / 74.0° Efficiency 83 % Peak intensity 1.2 collm LEDS/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C Efficiency 83 % Peak intensity 1.1 collm LEDS/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C Efficiency 83 % Peak intensity 1.1 collm LEDS/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C					\land	~
Efficiency 83 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Liph colour White Required components: F15255_HEKLA-SOCKET-C				75*		1
Peak intensity 1.2 cd/m LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C XICATO LED XOB 9.8 mm FWHM / FVTM 53.0° / 77.0° Efficiency 83 % Peak intensity 1.1 cd/m LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C XICATO LED XTM - 19mm LES FWHM / FVTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/m LED XTM - 19mm LES FWHM / FVTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/m LED XTM - 19mm LES FWHM / FVTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/m LEDS/each optic 1 Light colour White Required components:					> > /	
LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C XICATO LED XOB 9.8 mm FWHM / FWTM 53.0° / 77.0° Efficiency 83 % Peak intensity 1.1 cd/m LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C XICATO LED XTM - 19mm LES FWHM / FWTM 64.0° P10.0° Efficiency 66 % Peak intensity 0.7 cd/m LEDs/each optic 1 Light colour White Required components:	-			60.0	400	$\langle \rangle >$
Light colour White Required components: F15255_HEKLA-SOCKET-C					\times /////	
Required components: F15255_HEKLA-SOCKET-C XICATO LED XOB 9.8 mm FWHM / FWTM 53.0° / 77.0° Efficiency 83% Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C XICATO LED XTM - 19mm LES FWHM / FWTM 64.0° / 91.0° Efficiency 66% Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components:				474		
F15255_HEKLA-SOCKET-C					- 800	
LED XOB 9.8 mm FWHM / FWTM 53.0° / 77.0° Efficiency 93 % Peak intensity 1.1 cd/m LEDskeach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C FIS255_HEKLA-SOCKET-C Image: Component State						
LED XOB 9.8 mm FWHM / FWTM 53.0° / 77.0° Efficiency 83 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C XICATO LED XTM - 19mm LES FWHM / FWTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components:	F15255_HEKLA	A-SUCKET-C			\checkmark \land	
LED XOB 9.8 mm FWHM / FWTM 53.0° / 77.0° Efficiency 83 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C XICATO LED XTM - 19mm LES FWHM / FWTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components:						1
LED XOB 9.8 mm FWHM / FWTM 53.0° / 77.0° Efficiency 83 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C XICATO LED XTM - 19mm LES FWHM / FWTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components:				36*	15° 0°	36
LED XOB 9.8 mm FWHM / FWTM 53.0° / 77.0° Efficiency 83 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C XICATO LED XTM - 19mm LES FWHM / FWTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components:		`			7	-
FWHM / FWTM 53.0° / 77.0° Efficiency 83 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C EXICATO LED XTM - 19mm LES FWHM / FWTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components:	XICAT			90°		90
Efficiency 83 % Peak intensity 1.1 cd/m LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C			1	90*		90
Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C	LED	XOB 9.8 mm	5	90* 75*		
LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C	LED FWHM / FWTM	XOB 9.8 mm 53.0° / 77.0°	1	90 ⁴ 75*		
Light colour White Required components: F15255_HEKLA-SOCKET-C	LED FWHM / FWTM Efficiency	XOB 9.8 mm 53.0° / 77.0° 83 %		90° 78°		9
Required components: F15255_HEKLA-SOCKET-C SICATO LED XTM - 19mm LES FWHM / FWTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/m LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm		60 23		
F15255_HEKLA-SOCKET-C	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1		6.	40	
Sicaro LED XTM - 19mm LES FWHM / FWTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components: Image: Component (Component)	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White		92 92 94 94 94 94 94 94 94 94 94 94 94 94 94	40	
Image: Description of the second s	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White ents:		94 95 97 97		
Image: Description of the second s	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White ents:		92* 95: 94: 94: 94: 94: 94: 94: 94: 94: 94: 94	60	23
LED XTM - 19mm LES FWHM / FWTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White ents:		92 92 94 94 94		
FWHM / FWTM 64.0° / 91.0° Efficiency 66 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-C		90 92 94 94 94 94 94	- 400 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500 - 500	
Efficiency 66 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-C		92 92 97 97 97 97 97	15° 0°	25 66 67 77 78 78
Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-C			15° 0°	9 7 8 8 8 9 8 7 9 7 7
LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-C XTM - 19mm LES 64.0° / 91.0°		می ۲۳ ۲۳ ۲۳ ۲۳	15° 0°	25 66 10 10 10 10 10 10 10 10 10 10 10 10 10
Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-C XTM - 19mm LES 64.0° / 91.0° 66 %		29 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	15° 0°	9 7 8 9 7 8 9 7 7 7 7 9 7 7 7
Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-C XTM - 19mm LES 64.0° / 91.0° 66 %			15° 0°	9 12 ³ 27
	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-C XTM - 19mm LES 64.0° / 91.0° 66 % 0.7 cd/lm 1			15° 0°	
C16058_XTM-ADAPTER-50-C	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-C XTM - 19mm LES 64.0° / 91.0° 66 % 0.7 cd/lm 1 White			15° 0°	
30	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-C XTM - 19mm LES 64.0° / 91.0° 66 % 0.7 cd/lm 1 White ents:			15° 0°	
	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-C XTM - 19mm LES 64.0° / 91.0° 66 % 0.7 cd/lm 1 White ents:			15° 0°	
	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 9.8 mm 53.0° / 77.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-C XTM - 19mm LES 64.0° / 91.0° 66 % 0.7 cd/lm 1 White ents:			15° 0°	



OPTICAL RESULTS (SIMULATED):

bridgelux.		90 ⁺
LED	VERO10	73*
FWHM / FWTM	50.7° / 72.0°	400
Efficiency	0 %	60°
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	
Light colour	White	e.
Required components:		1200
F15616_HEKLA-SOC	CKET-F	
		30° 1600 30° 30°
bridgelux.		90 ⁴ 90 ⁴
LED	VER013	25*
FWHM / FWTM	52.0° / 76.0°	$ \lambda / \lambda $
Efficiency	72 %	60°
Peak intensity	1 cd/lm	400
LEDs/each optic	1	
Light colour	White	ar
Required components:		
C16142_HEKLA-SO	CKET-K	200
CITIZEN		
CITIZEN	CLL03x/CLU03x	15° 0° 15° 90° 90° 90° 35° 90° 90°
	CLL03x/CLU03x 63.0° / 85.0°	20 20 20 20 20 20 20 20 20 20
LED		20
LED FWHM / FWTM	63.0° / 85.0°	99 ⁴
LED FWHM / FWTM Efficiency	63.0° / 85.0° 66 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	63.0° / 85.0° 66 % 0.7 cd/lm	200 er e e e e e e e e e e e e e e e e e
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	63.0° / 85.0° 66 % 0.7 cd/lm 1 White	200 - 000 - 007
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	63.0° / 85.0° 66 % 0.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	63.0° / 85.0° 66 % 0.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	63.0° / 85.0° 66 % 0.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOC	63.0° / 85.0° 66 % 0.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOC	63.0° / 85.0° 66 % 0.7 cd/lm 1 White CKET-I	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOC	63.0° / 85.0° 66 % 0.7 cd/lm 1 White CKET-I CMA1825	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOC	63.0° / 85.0° 66 % 0.7 cd/lm 1 White CKET-1 CMA1825 59.0° / 80.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOC	63.0° / 85.0° 66 % 0.7 cd/lm 1 White CKET-1 CMA1825 59.0° / 80.0° 77 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOC	63.0° / 85.0° 66 % 0.7 cd/lm 1 White CKET-1 CMA1825 59.0° / 80.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOC	63.0° / 85.0° 66 % 0.7 cd/lm 1 White CKET-I CMA1825 59.0° / 80.0° 77 % 0.9 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOC	63.0° / 85.0° 66 % 0.7 cd/lm 1 White CKET-I CMA1825 59.0° / 80.0° 77 % 0.9 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOC	63.0° / 85.0° 66 % 0.7 cd/lm 1 White CKET-I CMA1825 59.0° / 80.0° 77 % 0.9 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOC	63.0° / 85.0° 66 % 0.7 cd/lm 1 White CKET-I CMA1825 59.0° / 80.0° 77 % 0.9 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOC	63.0° / 85.0° 66 % 0.7 cd/lm 1 White CKET-I CMA1825 59.0° / 80.0° 77 % 0.9 cd/lm 1	



OPTICAL RESULTS (SIMULATED):

-		
CREE ≑		90° 90°
LEDS	CMA1840	
LED FWHM / FWTM	62.0° / 87.0°	73.
	72 %	200
Efficiency Peak intensity	7.2 % 0.8 cd/lm	60°
LEDs/each optic Light colour	1 White	400
Required components:	White	
Required components.		000
		30° 30° 30° 30°
		90* 90*
LED	CMT14xx	
FWHM / FWTM	52.0° / 73.0°	75'
Efficiency	80 %	
Peak intensity	1.2 cd/lm	60* / / / / / / / / / / / / / / / / / / /
LEDs/each optic	1	$\perp \times /// \rightarrow \times$
Light colour	White	gy gy
Required components:		
F17435_HEKLA-G2-	C	
		30*
		30 ⁶
CREE ÷		99 ⁴ 99 ⁴ 99 ⁴
CREE ÷ LEDs	CXA/B 15xx	157 0° 157 0°
	CXA/B 15xx 53.5° / 72.5°	22. 904 904 904 905 905 905 905 905 905 905 905 905 905
LED		60
LED FWHM / FWTM	53.5° / 72.5°	60 60 60 60 60 60 90 90 120 90 120 90 120 90 120 90 120 120 120 120 120 120 120 12
LED FWHM / FWTM Efficiency	53.5° / 72.5° 0 %	60 60 90 90 120 00 120 120 120 120 120 120
LED FWHM / FWTM Efficiency Peak intensity	53.5° / 72.5° 0 % 1.4 cd/lm	Q1 Q0 Q2 Q1 Q0 Q2 Q1 Q0 Q2 Q2 Q2 Q2 Q3 Q2 Q2 Q3 Q2 Q2 Q3 Q2 Q2 Q3 Q2 Q3 Q4 Q2 Q2
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	53.5° / 72.5° 0 % 1.4 cd/lm 1 White	25° 000 00°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	53.5° / 72.5° 0 % 1.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	53.5° / 72.5° 0 % 1.4 cd/lm 1 White	27 60 60 60 60 60 60 60 60 90 90 90 90 90 90 90 90 90 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	53.5° / 72.5° 0 % 1.4 cd/lm 1 White	20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15256_HEKLA-SOC	53.5° / 72.5° 0 % 1.4 cd/lm 1 White CKET-D	24 20 20 20 20 00 20 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15256_HEKLA-SOC	53.5° / 72.5° 0% 1.4 cd/lm 1 White CKET-D	30. 30. 30. 30. 30. 30. 30. 40. 40. 30. 40. 40. 30. 40. 40. 30. 40. 40. 30. 40. 40. 30. 40. 40. 30. 40. 40. 30. 40. 40. 30. 40. 40. 30. 40. 40. 30. 40. 40. 30. 40. 40. 30. 40. 40. 30. 40. 40. 30. 40. 40. 30. 40. 40. 30. 40. 40.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15256_HEKLA-SOC	53.5° / 72.5° 0 % 1.4 cd/lm 1 White CKET-D US CXM-6 (13.5x13.5)	22
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15256_HEKLA-SOC	53.5° / 72.5° 0 % 1.4 cd/lm 1 White CKET-D CxM-6 (13.5x13.5) 52.0° / 69.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15256_HEKLA-SOC	53.5° / 72.5° 0 % 1.4 cd/lm 1 White CKET-D US CxM-6 (13.5x13.5) 52.0° / 69.0° 83 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15256_HEKLA-SOC	53.5° / 72.5° 0 % 1.4 cd/lm 1 White CKET-D CxM-6 (13.5x13.5) 52.0° / 69.0° 83 % 1.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15256_HEKLA-SOC	53.5° / 72.5° 0 % 1.4 cd/lm 1 White CKET-D CXM-6 (13.5x13.5) 52.0° / 69.0° 83 % 1.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15256_HEKLA-SOC	53.5° / 72.5° 0 % 1.4 cd/lm 1 White CKET-D CxM-6 (13.5x13.5) 52.0° / 69.0° 83 % 1.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15256_HEKLA-SOC ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	53.5° / 72.5° 0 % 1.4 cd/lm 1 White CKET-D CxM-6 (13.5x13.5) 52.0° / 69.0° 83 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15256_HEKLA-SOC	53.5° / 72.5° 0 % 1.4 cd/lm 1 White CKET-D CxM-6 (13.5x13.5) 52.0° / 69.0° 83 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15256_HEKLA-SOC ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	53.5° / 72.5° 0 % 1.4 cd/lm 1 White CKET-D CxM-6 (13.5x13.5) 52.0° / 69.0° 83 % 1.3 cd/lm 1 White	



OPTICAL RESULTS (SIMULATED):

Μ ΝΙCΗΙΛ		7
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15848_HEKLA-SOC	COB T-Type 54.0° / 69.0° 84 % 1.2 cd/lm 1 White KET-G	
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-C	LC003D / LC006D / LC009D / LC013D 52.0° / 74.0° 80 % 1.2 cd/lm 1 White	
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-C	LC003D / LC006D / LC009D / LC013D 55.0° / 75.0° 80 % 1.1 cd/lm 1 White	
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-C	LC010C 51.0° / 68.0° 85 % 1.3 cd/lm 1 White	

Last update: 18/08/2023Subject to change without prior noticePublished: 04/05/2018LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.17/18



PRODUCT DATASHEET CP15776_CARMEN-W-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:

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