

PRODUCT DATASHEET CP16108_CARMEN-50-M-C

CARMEN-50-M-C

 ${\sim}35^\circ$ medium beam. Assembly with holder C compatible with LEDiL HEKLA.

TECHNICAL SPECIFICATIONS:

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



MATERIAL SPECIFICATIONS:

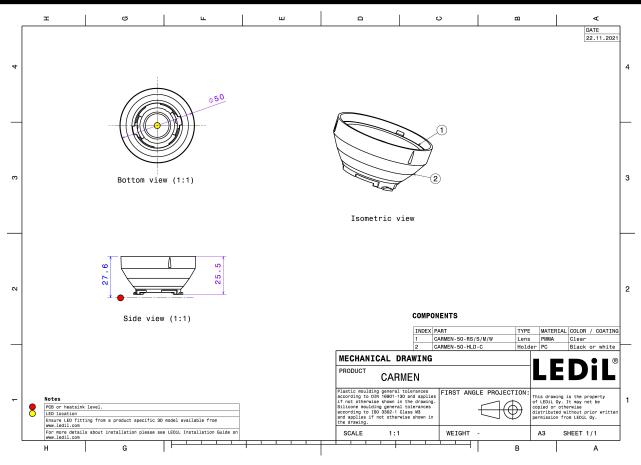
Component	Туре	Material	Colour	Finish
CARMEN-50-M	Single lens	PMMA	clear	
CARMEN-50-HLD-C	Holder	PC	black	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CP16108_CARMEN-50-M-C	Single lens	308	112	28	5.9
» Box size: 476 x 273 x 292 mm					



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



bridgelux. LED FWHM / FWTM	V4 HD Gen 7 35.0° / 57.0°	90 ⁴ 9
Efficiency	84 %	601 000
Peak intensity	2.2 cd/Im	
LEDs/each optic	1	
Light colour	White	
Required compone		
F15253_HEKLA	-SUCKET-A	
		30 ⁴ 53 ⁵ 31 ² 55 ⁵
bridgelux.		50 ⁴
LED	V6 HD Gen 7	
FWHM / FWTM	38.0° / 60.0°	73
Efficiency	81 %	
Peak intensity	1.9 cd/lm	
LEDs/each optic	1	
Light colour	White	er
Required compone	nts:	
F15255_HEKLA	-SOCKET-C	
		34
		30, 3960 72,
bridgelux.		
LED	V9 HD Gen7	73
FWHM / FWTM	43.0° / 65.0°	
Efficiency	75 %	61 - S
Peak intensity	1.4 cd/lm 1	
LEDs/each optic Light colour	l White	e
Required compone		
F15859_HEKLA		
T TOODO_THEILE		
		30° 3
bridgelux.		50°
LED	VERO13	
FWHM / FWTM	49.0° / 75.0°	73
Efficiency	62 %	
Peak intensity	0.9 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		••••
	nts:	
C16142_HEKLA		
		44

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LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 45	-SOCKET-K	
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 50	-SOCKET-K	
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 44	-SOCKET-K	
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLL02x/CLU02x (LES10) 46.0° / 72.0° 76 % 1.2 cd/lm 1 White ints:	



CITIZE	N	59'
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU700/701/702 36.0° / 59.0° 80 % 1.9 cd/lm 1 White ents:	
CITIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	CLU710/711 41.0° / 65.0° 73 % 1.4 cd/lm 1 White ents:	
	IN T	10 10 10 10 10 10 10 10 10 10 10 10 10 1
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7A2 (LES 4.2mm) 35.0° / 56.0° 84 % 2.2 cd/lm 1 White ents:	
CITIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7B2 32.0° / 53.0° 82 % 2.4 cd/lm 1 White	

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			90°	90
LED	CMA1516			
FWHM / FWTM	46.0° / 71.0°		33	
Efficiency	79 %		Solt	400
Peak intensity	1.3 cd/lm			$(\land \land$
LEDs/each optic	1			
Light colour	White		54	800 45
Required compone	nts:			
F15256_HEKLA	-SOCKET-D			
				1200
			30*	0° 12°
			90*	90
LED	CMT14xx			\wedge
FWHM / FWTM	47.0° / 72.0°		73*	
Efficiency	51 %			
Peak intensity	0.8 cd/lm		60.5	
LEDs/each optic	1			400
Light colour	White		57*	
Required compone	nts:			500
F15255_HEKLA				
			300	
			7	
			157	1 #
			90*	
	CXA/B 13xx		90*	
			99 ³	
LED	CXA/B 13xx		25 25 04	
LED FWHM / FWTM	CXA/B 13xx 38.0° / 62.0°		25°	
LED FWHM / FWTM Efficiency	CXA/B 13xx 38.0° / 62.0° 83 %		9%	
LED FWHM / FWTM Efficiency Peak intensity	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm		97 94 94	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White		9°	- 40 - 60 - 152
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White nts:		10°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White nts:			5 27 50 20 50 20 50 50 20 50 20 50 50 50 50 20 50 20 50 20 50 20 5
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White nts:		3% 9% 9%	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White nts: -SOCKET-J			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White nts: -SOCKET-J			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White nts: -SOCKET-J			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 37.0° / 61.0°			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 37.0° / 61.0° 83 %			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 37.0° / 61.0° 83 % 1.9 cd/lm			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 37.0° / 61.0° 83 % 1.9 cd/lm 1 White			1607 3007 100 100 100 100 100 100 100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 37.0° / 61.0° 83 % 1.9 cd/lm 1 White nts:			1607 3007 100 100 100 100 100 100 100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 37.0° / 61.0° 83 % 1.9 cd/lm 1 White nts:			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	CXA/B 13xx 38.0° / 62.0° 83 % 1.8 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 37.0° / 61.0° 83 % 1.9 cd/lm 1 White nts:			

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	D	89°
LED	CXA/B 15xx	
FWHM / FWTM	45.0° / 69.0°	
Efficiency	79 %	
Peak intensity	1.4 cd/lm	60 70
LEDs/each optic	1	
Light colour	White	a. 30 a.
Required compone	ents:	
F15256_HEKLA		
-		25% 0% 15'
UMIL	.EDS	80*
LED	LUXEON CoB 1202HD	
FWHM / FWTM	38.0° / 61.0°	
Efficiency	82 %	
Peak intensity	1.8 cd/lm	
LEDs/each optic	1	
Light colour	White	e ^r
Required compone	ents:	
F15848_HEKLA	A-SOCKET-G	
		30. 300 300 30
	.EDS	50°
LED	LUXEON CoB 1202s	
FWHM / FWTM	37.0° / 60.0°	73 400
Efficiency	81 %	
Peak intensity	1.9 cd/lm	67 ⁵ 100
LEDs/each optic	1	
Light colour	White	
Required compone	ents:	
F15848_HEKLA		100
		30. 200 34
		10 ⁻¹ 10 ⁻¹
		99° 99°
LED	LUXEON CX Plus CoB - HD S01H4	75
FWHM / FWTM	32.0° / 54.0°	
Efficiency	73 %	60 ¹ 60 ²
Peak intensity	2.2 cd/lm	
LEDs/each optic	1	
Light colour	White	a, a
Required compone		160
Bender Wirth: 6	34c Hekla	
		20.
		15° 2480 55°



COMIL	EDS	99*	
	LUXEON CX Plus CoB - HD S01H6 / HD S02H6	25	
FWHM / FWTM	32.0° / 54.0° 72 %		
Efficiency Rock intensity	2.1 cd/lm	600	
Peak intensity LEDs/each optic	1		
Light colour	l White	ar a construction of the c	
Required compone			
Bender Wirth: 63			1630
Bondor Wintin oc			
		30*	
	FDS		0 ⁶ 32 ⁵
		30,	\land
LED FWHM / FWTM	LUXEON CX Plus CoB - HD S04H9 41.0° / 65.0°	787	
Efficiency	41.0° / 65.0° 70 %		400
-	1.4 cd/lm	60.8	
Peak intensity LEDs/each optic	1.4 co/m 1		
Light colour	T White		80
Required compone			
Bender Wirth: 63		X	
Dender Wirth. O.	HC LIENIA		1230
		30°	06 723
UMIL	EDS	99*	
LED	LUXEON CX Plus CoB M02 / M03 (Gen2)	145	
LED FWHM / FWTM	LUXEON CX Plus CoB M02 / M03 (Gen2) 39.0° / 62.0°	79	
FWHM / FWTM		75	40
FWHM / FWTM Efficiency	39.0° / 62.0°	73° 59*	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	39.0° / 62.0° 69 %	27 50 ⁴	60
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	39.0° / 62.0° 69 % 1.5 cd/lm 1 White	57 57	60
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	39.0° / 62.0° 69 % 1.5 cd/lm 1 White nts:	73 173 173	60
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	39.0° / 62.0° 69 % 1.5 cd/lm 1 White nts:	57 57 57	400
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	39.0° / 62.0° 69 % 1.5 cd/lm 1 White nts:	57 57	400
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	39.0° / 62.0° 69 % 1.5 cd/lm 1 White nts:	20- 27- 27- 27- 27- 27- 27- 27- 27- 27- 27	2230 000 000
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	39.0° / 62.0° 69 % 1.5 cd/lm 1 White nts: 11a Hekla	73 93 93 94 95 157	60 100 100 100 100 100 100 100
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 64	39.0° / 62.0° 69 % 1.5 cd/lm 1 White nts: 11a Hekla		400 400 1250 1250 1270 17
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 64	39.0° / 62.0° 69 % 1.5 cd/lm 1 White nts: I1a Hekla		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 64	39.0° / 62.0° 69 % 1.5 cd/lm 1 White nts: 11a Hekla EDS LUXEON CX Plus CoB S01 (Gen2)		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 64	39.0° / 62.0° 69 % 1.5 cd/lm 1 White nts: 11a Hekla EDS LUXEON CX Plus CoB S01 (Gen2) 31.0° / 53.0°		400
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 64	39.0° / 62.0° 69 % 1.5 cd/lm 1 White nts: 11a Hekla EDS LUXEON CX Plus CoB S01 (Gen2) 31.0° / 53.0° 73 %		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 64 WIM / WITH LED FWHM / FWTM Efficiency Peak intensity	39.0° / 62.0° 69 % 1.5 cd/lm 1 White nts: 11a Hekla EDS LUXEON CX Plus CoB S01 (Gen2) 31.0° / 53.0° 73 % 2.2 cd/lm		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 64	39.0° / 62.0° 69 % 1.5 cd/lm 1 White nts: 11a Hekla EDS LUXEON CX Plus CoB S01 (Gen2) 31.0° / 53.0° 73 % 2.2 cd/lm 1 White		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 64	39.0° / 62.0° 69 % 1.5 cd/lm 1 White nts: 11a Hekla EDS LUXEON CX Plus CoB S01 (Gen2) 31.0° / 53.0° 73 % 2.2 cd/lm 1 White nts:		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 64	39.0° / 62.0° 69 % 1.5 cd/lm 1 White nts: 11a Hekla EDS LUXEON CX Plus CoB S01 (Gen2) 31.0° / 53.0° 73 % 2.2 cd/lm 1 White nts:		

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ELUM	INUS	50°
LED	CDM-6 (Dim-To-Warm)	
FWHM / FWTM	34.0° / 56.0°	77
Efficiency	63 %	
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	er la
Required compone		
C16142_HEKLA		
Bender Wirth: 4		
Bender Wirth. 4	30 Typ 20	809
		30° 155° 0° 35°
ELUM	INUS	50 ⁴
LED	CDM-9 (Dim-To-Warm)	
FWHM / FWTM	40.0° / 63.0°	
Efficiency	61 %	
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	₹ ²
Required compone	ents:	
C16142_HEKL	A-SOCKET-K	
Bender Wirth: 4		120
		30
		135 ¹ 0 ⁴ 155 ⁵
ELUM		90 [,]
LED	CXM-3	80°
LED FWHM / FWTM	CXM-3 32.0° / 53.0°	39°
LED FWHM / FWTM Efficiency	CXM-3 32.0° / 53.0° 83 %	80 ⁴
LED FWHM / FWTM Efficiency Peak intensity	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm	90 ⁴ 90 91
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents: A-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents: A-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents: A-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents: A-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents: A-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents: A-SOCKET-C INUS CXM-4 32.0° / 55.0° 79 % 2.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents: A-SOCKET-C CXM-4 32.0° / 55.0° 79 % 2.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents: A-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents: A-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents: A-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents: A-SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 32.0° / 53.0° 83 % 2.5 cd/lm 1 White ents: A-SOCKET-C	

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(ca		
ELUM	INUS	90* 90*
LED	CxM-9 (13.5x13.5)	
FWHM / FWTM	46.0° / 71.0°	
Efficiency	77 %	605 600 600
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	97°
Required compone	ents:	
F15255_HEKLA	-SOCKET-C	
		1200
		30° 30° 30
ØNICHI/		90 ⁴ 90 ⁴
LED	COB S-Type (LES 7)	
FWHM / FWTM	39.0° / 64.0°	75
Efficiency	80 %	
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	97
Required compone		1230
F15848_HEKLA		
_		
		300
		15° 0° 15°
\sim		
ØNICHI/		90 ⁴ 90 ⁴
	NJCWL024Z-V1MT: COB L-Type Tunable White	90 ⁴ 99
		35
LED	NJCWL024Z-V1MT: COB L-Type Tunable White	59° 59 73° 50° 72°
LED FWHM / FWTM	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0°	59° 50 59° 50 60° 60°
LED FWHM / FWTM Efficiency	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 White	5°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 White ents:	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 white ents: N-SOCKET-K	57 - 50 - 72 64 - 67
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 white ents: N-SOCKET-K	27 64 64 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 white ents: N-SOCKET-K	57 - 50 - 72 64 - 67
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 White ents: -SOCKET-K 97 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 4	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 White ents: -SOCKET-K 97 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 4	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 White ents: A-SOCKET-K 97 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 White Ints: N-SOCKET-K 97 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 4	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 White ents: -SOCKET-K 97 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 42.0° / 67.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 4'	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 White ents: NSOCKET-K 97 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 42.0° / 67.0° 61 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 4: MICHIA LED FWHM / FWTM Efficiency Peak intensity	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 White ents: SOCKET-K 97 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 42.0° / 67.0° 61 % 1.1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4 WICHI/ LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 White white v-SOCKET-K 97 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 42.0° / 67.0° 61 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL4 Bender Wirth: 4: WICHIA Efficiency Peak intensity LEDs/each optic Light colour	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 White white white A-SOCKET-K 97 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 42.0° / 67.0° 61 % 1.1 cd/lm 1 White white white statesting 1 White white white the statesting 1 White the statesting 1 1 1 1 1 1 1 1 1 1 1 1 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4: WICHIA Efficiency Peak intensity LEDs/each optic Light colour Required compone	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 White white white NVCWJ024Z-V1MT: COB J-Type Tunable White 42.0° / 67.0° 61 % 1.1 cd/lm 1 White sints: -SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4: WICHIA Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/	NJCWL024Z-V1MT: COB L-Type Tunable White 34.0° / 56.0° 62 % 1.7 cd/lm 1 White white white NVCWJ024Z-V1MT: COB J-Type Tunable White 42.0° / 67.0° 61 % 1.1 cd/lm 1 White sints: -SOCKET-K	



LED Fortmo SLM L09 Co8 FWHM / FWTM 45.07 / 86.07 FWM / FWTM 45.07 / 86.07 FWM / FWTM 13.04 In L2DHeach optic 1 Light colour White Required components: FISBS_HEKLA_SOCKET-H SAMSUNC LED LC003D / LC009D / LC013D FWHM / FWTM 17.07 / 73.0° FWHM / FWTM 17.07 / 73.0° FWHM / FWTM 12.04 In LED LC003D / LC009D / LC013D FWHM / FWTM 35.07 / 58.0° FWHM / FWTM 35.07 / 10.0000 FWHM / FWTM 35.07 / 10.	PHILIF	S	50 ⁺ 90
Efficiency 76% Peak Intensity 1.3 cd/m LEDSeach optio 1 Lypt colour White Regulated components: F15858_HEKLA SOCKET.H SAMSUNC LED LC0030 / LC008D / LC003D / LC013D FWMH / FWTM 47.0° / 73.0° Efficiency 77% Peak Intensity 1.2 cd/m LEDSeach optio 1 LEDSeach EXASOCKET-K	LED		
Peak Intensity 1.3 cd/m LED#sead optic 1 LED#sead optic 2 F15958_HEKLA-SOCKET-H SAMSUNC LED LC0300 / LC0980 / LC013D PMM / FWTM 47:0* / 72:0* Efficiency 77:% Peak Intensity 1.2 cd/m LED#sead optic 1 Light colour White Required components: F15258_HEKLA-SOCKET-C Efficiency 80:% PMM / FWTM 86:0* 758:0* Efficiency 80:% PMM / FWTM 85:0* 768:0* Efficiency 80:% PMM / FWTM 85:0* 768:0* Efficiency 80:% PMM / FWTM 35:0* 768:0* Efficiency 80:% PMM / FWTM 35:0* PMM / FWTM 35:0* PMM / FWTM 35:0* PMM / FWTM 35:0* Efficiency 80:% PMM / FWTM 35:0* PMM	FWHM / FWTM	45.0° / 68.0°	
LEDPiesch optio 1 Light colour White Required components: F15858_HEKLA-SOCKET-H SAMSUNC LED LC0005D / LC006D / LC009D / LC013D EVMA / FV/T M 47.0/ 77.30 Fildency 77.5% Peak Intensity 1.2 colfm Light colour White Required components: SAMSUNC LED EDSeach optio 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNC ELED LC0105 G2 FWMM / FV/TM 36.0/ 56.0° Fildency 80 % Peak Intensity 2 colfm LEDSeach optio 1 Light colour moments: F15255_HEKLA-SOCKET-C	Efficiency	76 %	60 - 40 - 40 - 40 - 40 - 40 - 40 - 40 -
Light colour White Required components: F15858_HEKLA-SOCKET.H SAMSUNG LED LC0030/LC0080/LC0090/LC013D EWHM/FWTM 47.0°73.0° Efficiency 77% Peak intensity 12 cullm LEDa/each optic 1 Light colour White Required components: SAMSUNG LED LC010C G2 FWHM/FWTM 38.0°/58.0° Efficiency 80% Peak intensity 2 cullm LEDa/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET.C SAMSUNG LED LC010T (Tunable White) FWHM/FWTM 38.0°/58.0° Efficiency 80% Peak intensity 2 cullm LEDa/each optic 1 LEDa/each optic 1 LLDa/each optic 1 LLDa/each optic 1 LLDa/each optic 1	Peak intensity	1.3 cd/lm	
Required components: F19858_HEKLA-SOCKET-H SAMSUNG LED LC008D / LC009D / LC019D EVMM / FVT M 47.0° / 73.0° Efficiency 77 % Peak Intensity 1.2 colim LED/aeach optic 1 LED/aeach optic 1 LED/aeach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010C d2 FVMM / FVT M 38.0° / 58.0° Efficiency 80 % Peak Intensity 2 colim LED/aeach optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C	LEDs/each optic	1	
F19808_HEKLA-SOCKET-H	Light colour	White	9* / <u>** 80</u>
SAMSUNG LED LC008D / LC009D / LC013D FVHM / FVTM 47.0° / 73.0° Efficiency 77 % Peak intensity 1.2 cd //m LLDbreach optio 1 Llph colour White Required components: SAMSUNG LED LC010G G2 FVHM / FVTM 36.0° / 56.0° Efficiency 80 % Peak intensity 2 cd/m LLDbreach optio 1 Llph colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010F (funable White) FVHM / FVTM 30.0° / funable White) Efficiency 61 % Peak intensity 1.3 dd/m LEDbreach optio 1 LDM colour Tunable White) FMH / FVTM 30.0° / funable White) Efficiency 61 % Peak intensity 1.3 dd/m LEDbreach optio 1 LLDbreach optio 1 L	Required compone	ints:	
LED LC003D / LC006D / LC003D /	F15858_HEKLA	-SOCKET-H	
LED LC003D / LC006D / LC003D /			
LED LC003D / LC006D / LC003D /			30 ⁴ 127 0 ⁴ 127
LED LC003D / LC006D / LC003D /	SAMSI	JNG	90° 9
FWHM / FWTM 47.0° / 73.0° Efficiency 77 % Peak intensity 12 cd/m LEDs/each optic 1 Light colour White Required components: SAMSUNG LED LCOTOC 62 FWHM / FWTM 36.0° / 58.0° Efficiency 80 % Peak intensity 2 cd/m LEDs/each optic 1 LEDs/each optic 1 LE	LED		
Efficiency 77 % Peak intensity 1.2 cd/m LEDs/each optic 1 Light colour White Required components: SAMSUNG LED LC010C G2 FWHM / FWTM 36.0° / 58.0° Efficiency 80 % Peak intensity 2 cd/m LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 91 % Peak intensity 1.3 cd/m LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	FWHM / FWTM		
Peak intensity 1.2 cd/m LEDS/each optic 1 Light colour White Required components: SAMSUNG LED LC010C G2 FWHM /FVTM 36.0° /58.0° Efficiency 80 % Peak intensity 2 cd/m LEDS/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM /FVTM 38.0° /64.0° Efficiency 61 % Peak intensity 1.3 cd/m LEDS/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K			
LEDs/each optic 1 Light colour White Required components: SAMSUNG LED LC010C G2 FWHM / FWTM 36.0° / 56.0° Efficiency 80% Peak intensity 2 cd/m LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61% Peak intensity 1.3 cd/m LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	-		
Light colour White Required components: SAMSUNG LED LC010C G2 FWHM / FVTM 36.0° / 56.0° Efficiency 80% Peak intensity 2 cd/m LEDs/each optic 1 LEDs/each optic 1 F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM / FVTM 39.0° / 64.0° Efficiency 61% Peak intensity 1.3 cd/m LEDS/each optic 1 LIght colour a Tunable White) FWHM / FVTM 39.0° / 64.0° Efficiency 61% Peak intensity 1.3 cd/m LEDS/each optic 1 LIght colour a Tunable White Required components: C16142_HEKLA-SOCKET-K			
Required components: SAMSUNG LED LC010C G2 FWHM / FWTM 36.0° / 58.0° Efficiency 80 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/lm LEDS/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K			e.
SAMSUNG LED LC010C G2 FWHM / FWTM 36.0° / 58.0° Efficiency 80 % Peak intensity 2.0d/m LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 col/m LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K			
LED LC010C G2 FWHM / FWTM 36.0° / 58.0° Efficiency 80 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K			
LED LC010C G2 FWHM / FWTM 36.0° / 58.0° Efficiency 80 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K			
LED LC010C G2 FWHM / FWTM 36.0° / 58.0° Efficiency 80 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K			30*
LED LC010C G2 FWHM / FWTM 36.0° / 58.0° Efficiency 80 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K			15 ⁵ 0 ⁶ 25 ⁶
FWHM / FWTM 36.0° / 58.0° Efficiency 80 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K			
Efficiency 80 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	SVWSI	JNG	90°
Peak intensity 2 cd/m LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/m LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K			
LEDs/each optic 1 Light colour White Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 col/m LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	LED	LC010C G2	35'
Light colour White Required components: F15255_HEKLA-SOCKET-C	LED FWHM / FWTM	LC010C G2 36.0° / 58.0°	80 ⁴
Required components: F15255_HEKLA-SOCKET-C SAMSUNG LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	LED FWHM / FWTM Efficiency Peak intensity	LC010C G2 36.0° / 58.0° 80 %	99 ⁴ 79 79
F15255_HEKLA-SOCKET-C	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1	30 ⁴ 30 60 ⁴ 30
SAMSUNG LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/m LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White	
LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White ints:	
LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White ints:	
LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White ints:	
LED LC010T (Tunable White) FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White ints:	
FWHM / FWTM 39.0° / 64.0° Efficiency 61 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White Ints: -SOCKET-C	
Efficiency 61 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White ints: -SOCKET-C	
Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White I SOCKET-C UNG LC010T (Tunable White)	
LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White I SOCKET-C UNG LC010T (Tunable White) 39.0° / 64.0°	
Light colour Tunable White Required components: C16142_HEKLA-SOCKET-K	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSU LED FWHM / FWTM	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White Ints: -SOCKET-C UNG LC010T (Tunable White) 39.0° / 64.0° 61 %	
Required components: C16142_HEKLA-SOCKET-K	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSU LED FWHM / FWTM Efficiency	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White ints: -SOCKET-C JNG LC010T (Tunable White) 39.0° / 64.0° 61 % 1.3 cd/lm	
C16142_HEKLA-SOCKET-K	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSU LED FWHM / FWTM Efficiency Peak intensity	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White ints: -SOCKET-C JNG LC010T (Tunable White) 39.0° / 64.0° 61 % 1.3 cd/lm 1	
	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White ints: -SOCKET-C JNG LC010T (Tunable White) 39.0° / 64.0° 61 % 1.3 cd/lm 1 Tunable White	
304	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White ints: -SOCKET-C	
	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSU ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	LC010C G2 36.0° / 58.0° 80 % 2 cd/lm 1 White ints: -SOCKET-C	

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SAMSI	UNG	30"
LED	LC020C G2	
FWHM / FWTM	43.0° / 67.0°	
Efficiency	73 %	60°
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	5° (1
Required compone		
F15859_HEKLA	A-SOCKET-I	
		20 ⁴ 23 ⁷ 0 ⁴ 23 ⁷
TRIDO	NIC	90 ⁴
LED	SLE G7 LES09	
FWHM / FWTM	44.0° / 69.0°	
Efficiency	77 %	60 ^x
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	e ^r e ^r
Required compone	ents:	
F15255_HEKLA	A-SOCKET-C	
		3 ^{1/2} 25 2 ⁴ 35
TRIDO	NIC .	90 [°]
LED	SLE G7 LES13	
FWHM / FWTM	57.0° / 82.0°	25
Efficiency	67 %	
Peak intensity	0.8 cd/lm	
LEDs/each optic	1	
Light colour	White	ar at
Required compone	ents:	
F15859_HEKLA	A-SOCKET-I	
		20 ⁴ 20 ⁴ 21 ⁴
XICATO)	50 ⁴
		90 ⁴
LED	XOB 6 mm	
LED FWHM / FWTM	XOB 6 mm 36.0° / 59.0°	90 ⁴ 92
LED FWHM / FWTM Efficiency	XOB 6 mm 36.0° / 59.0° 78 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XOB 6 mm 36.0° / 59.0° 78 % 1.9 cd/lm	60° 600 22. 400 24. 250 26. 250 26. 250 26. 250 26. 250 250 250 250 250 250 250 250 250 250
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XOB 6 mm 36.0° / 59.0° 78 % 1.9 cd/Im 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XOB 6 mm 36.0° / 59.0° 78 % 1.9 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 6 mm 36.0° / 59.0° 78 % 1.9 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XOB 6 mm 36.0° / 59.0° 78 % 1.9 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 6 mm 36.0° / 59.0° 78 % 1.9 cd/lm 1 White ents:	



XICATO)	140	
LED	XOB 9.8 mm	1200	·····
FWHM / FWTM	44.0° / 70.0°	п»	
Efficiency	76 %	100	
Peak intensity	1.3 cd/lm		
LEDs/each optic	1	799	
Light colour	White		
Required compone	nts:	500	
F15255_HEKLA	-SOCKET-C	500	
		20	



PHOTOMETRIC DATA (SIMULATED):

bridgelux.		50*
LED	V10 Gen7	
FWHM / FWTM	44.0° / 66.0°	75*
Efficiency	75 %	400
Peak intensity	1.4 cd/lm	60°
LEDs/each optic	1	
Light colour	White	45*
Required components:		
F15255_HEKLA-SO		
1 13233_HEREA-30		1200
		36 ⁶ 15 ² 0 ⁶ 15 ² 30 ⁴
bridgelux.		90° A 90°
LED	V6 Gen6	$\square \land \land \land \land \land$
FWHM / FWTM	29.0° / 48.0°	75'
Efficiency	77 %	
Peak intensity	3 cd/lm	
LEDs/each optic	1	
Light colour	White	45°
Required components:		
F15253_HEKLA-SO		2430
		30* 34.*
		30" 3220 30" 30"
bridgelux.		50* 50*
bridgelux.	V8 Gen7	<u>81</u> * 97
LED	V8 Gen7 40 0° / 62 0°	77 78 10 10 10 10 10 10 10 10 10 10 10 10 10
LED FWHM / FWTM	40.0° / 62.0°	27 29 20 20 20 20
LED FWHM / FWTM Efficiency	40.0° / 62.0° 83 %	61 17 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10
LED FWHM / FWTM Efficiency Peak intensity	40.0° / 62.0° 83 % 1.8 cd/lm	50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	40.0° / 62.0° 83 % 1.8 cd/lm 1	5° 5° 5° 5° 5° 5° 5° 5°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	40.0° / 62.0° 83 % 1.8 cd/lm 1 White	51 ⁴ 51 ⁴ 52 64 64 65 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 components:	40.0° / 62.0° 83 % 1.8 cd/lm 1 White	91 ⁴ 92 ⁴ 72 61 61 62 61 62 61 62 61 61 61 61 61 61 61 61 61 61 61 61 61
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	40.0° / 62.0° 83 % 1.8 cd/lm 1 White	5°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	40.0° / 62.0° 83 % 1.8 cd/lm 1 White	5° 5° 5° 128 159 159 159 159
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	40.0° / 62.0° 83 % 1.8 cd/lm 1 White	22, 25, 25, 25, 25, 25, 25, 25, 25, 25,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	40.0° / 62.0° 83 % 1.8 cd/lm 1 White	7. 60 7. 61 62 62 63 63 64 100 100 100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	40.0° / 62.0° 83 % 1.8 cd/lm 1 White	34 36 35 36 36 36 37 36 38 36
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	40.0° / 62.0° 83 % 1.8 cd/lm 1 White CKET-A	7. 60 7. 61 62 62 63 63 64 100 100 100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	40.0° / 62.0° 83 % 1.8 cd/lm 1 White CKET-A	32 36 32 34 36 32 35 36 35
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	40.0° / 62.0° 83 % 1.8 cd/lm 1 White CKET-A VERO10 40.0° / 63.0°	32 36 32 34 36 32 35 36 35
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgetux. LED FWHM / FWTM Efficiency	40.0° / 62.0° 83 % 1.8 cd/lm 1 White CKET-A VERO10 40.0° / 63.0° 74 %	32 36 32 34 36 32 35 36 35
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux. LED FWHM / FWTM Efficiency Peak intensity	40.0° / 62.0° 83 % 1.8 cd/lm 1 White CKET-A VERO10 40.0° / 63.0° 74 % 1.6 cd/lm	32 90 34 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	40.0° / 62.0° 83 % 1.8 cd/lm 1 White CKET-A VERO10 40.0° / 63.0° 74 % 1.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	40.0° / 62.0° 83 % 1.8 cd/lm 1 White CKET-A VERO10 40.0° / 63.0° 74 % 1.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	40.0° / 62.0° 83 % 1.8 cd/lm 1 White CKET-A VERO10 40.0° / 63.0° 74 % 1.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	40.0° / 62.0° 83 % 1.8 cd/lm 1 White CKET-A VERO10 40.0° / 63.0° 74 % 1.6 cd/lm 1 White	



PHOTOMETRIC DATA (SIMULATED):

~		 7 7
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15848_HEKLA-SOC	COB S-Type (LES 6) 32.0° / 52.0° 69 % 2.3 cd/lm 1 White KET-G	g
SAMSUN LED FWHM / FWTM Efficiency	G LC003D / LC006D / LC009D / LC013D 46.0° / 67.0° 71 %	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-0	1.3 cd/lm 1 White	er 100 100 100 100 100 100 100 10
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-0	LC003D / LC006D / LC009D / LC013D 44.0° / 66.0° 71 % 1.3 cd/lm 1 White	
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-0	LC010C 34.0° / 54.0° 77 % 2.3 cd/lm 1 White	

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PHOTOMETRIC DATA (SIMULATED):

SAMSU	NG	
LED	LH231B	
FWHM / FWTM	41.0° / 65.0°	
Efficiency	73 %	
Peak intensity	1.5 cd/lm	
LEDs/each optic	7	
Light colour	White	
Required componen	s:	
F15255_HEKLA-S	OCKET-C	
		50 ⁵
LED	XTM - 9mm LES	99 ⁴
LED FWHM / FWTM	XTM - 9mm LES 42.0° / 63.0°	77 20
LED FWHM / FWTM Efficiency	XTM - 9mm LES 42.0° / 63.0° 79 %	
LED FWHM / FWTM Efficiency Peak intensity	XTM - 9mm LES 42.0° / 63.0°	77 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XTM - 9mm LES 42.0° / 63.0° 79 % 1.6 cd/lm	77 20
XICATO LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	XTM - 9mm LES 42.0° / 63.0° 79 % 1.6 cd/lm 1 White	77* 69* 900



PRODUCT DATASHEET CP16108_CARMEN-50-M-C

GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.

MATERIALS:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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