

PRODUCT DATASHEET CP16109_CARMEN-50-W-C

CARMEN-50-W-C

~55° wide beam. Assembly with holder C compatible with LEDiL HEKLA.

SPECIFICATION:

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



MATERIALS:

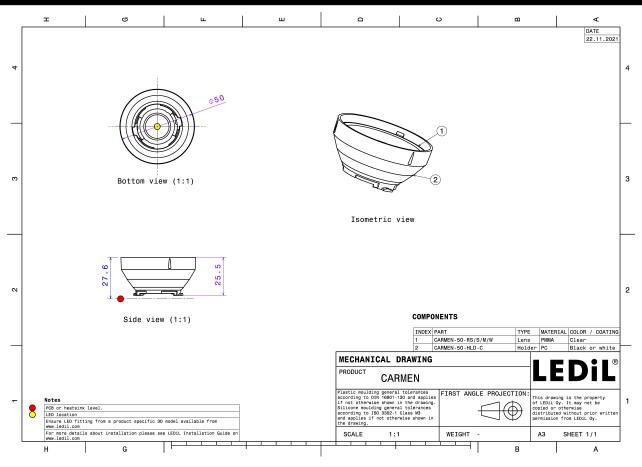
Component	Туре	Material	Colour	Finish
CARMEN-50-W	Single lens	PMMA	clear	
CARMEN-50-HLD-C	Holder	PC	black	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CP16109_CARMEN-50-W-C	Single lens	308	112	28	5.7
» Box size: 476 x 273 x 292 mm					



PRODUCT DATASHEET CP16109_CARMEN-50-W-C



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



bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15253_HEKLA-	
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA-	
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA	
bridgeluX. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	



bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone		
C16142_HEKLA Bender Wirth: 4§		30° 00 33°
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: 48	-SOCKET-K	
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLL02x/CLU02x (LES10) 54.0° / 81.0° 80 % 1 cd/lm 1 White nts:	



	N	30*	5
LED	CLU700/701/702/703		
FWHM / FWTM	52.0° / 76.0°		
Efficiency	85 %		~
Peak intensity	1.2 cd/lm		
LEDs/each optic	1		
Light colour	White	g.	
Required compone	nts:		
F15255_HEKLA	-SOCKET-C		
		30° 2200 20° 0° 25°	2
CITIZE	N	29*	
LED	CLU710/711		
FWHM / FWTM	52.0° / 77.0°		7
Efficiency	78 %		
Peak intensity	1.1 cd/lm		6
LEDs/each optic	1		
Light colour	White		>
Required compone			
F15859_HEKLA			
			X
		127 128 127	_
CITIZE	N	20*	5
LED	CLU7A2/7A3		
FWHM / FWTM	53.0° / 73.0°		
Efficiency	87 %		
Peak intensity	1.2 cd/lm		
	1.2 cd/lm 1		
LEDs/each optic			X
LEDs/each optic	1 White	97	\times
LEDs/each optic Light colour	1 White nts:	gr	X
LEDs/each optic Light colour Required compone	1 White nts:		X
LEDs/each optic Light colour Required compone	1 White nts:		X
LEDs/each optic Light colour Required compone F15255_HEKLA	1 White nts: -SOCKET-C		
LEDs/each optic Light colour Required compone F15255_HEKLA	1 White nts: -SOCKET-C		, , ,
LEDs/each optic Light colour Required compone F15255_HEKLA	1 White nts: -SOCKET-C N CLU7B2		
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM	1 White nts: -SOCKET-C N CLU7B2 51.0° / 72.0°		
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency	1 White nts: -SOCKET-C N CLU7B2 51.0° / 72.0° 85 %		
LEDs/each optic Light colour Required compone F15255_HEKLA CITIZE LED FWHM / FWTM Efficiency Peak intensity	1 White Ints: -SOCKET-C N CLU7B2 51.0° / 72.0° 85 % 1.2 cd/lm		
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	1 White Ints: -SOCKET-C N CLU7B2 51.0° / 72.0° 85 % 1.2 cd/lm 1		
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	1 White nts: -SOCKET-C N CLU7B2 51.0° / 72.0° 85 % 1.2 cd/lm 1 White		
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	1 White nts: -SOCKET-C N CLU7B2 51.0° / 72.0° 85 % 1.2 cd/lm 1 White nts:		
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	1 White nts: -SOCKET-C N CLU7B2 51.0° / 72.0° 85 % 1.2 cd/lm 1 White nts:		
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	1 White nts: -SOCKET-C N CLU7B2 51.0° / 72.0° 85 % 1.2 cd/lm 1 White nts:		



			90°	90*
LED	CMA1516			
FWHM / FWTM	57.0° / 81.0°		75	
Efficiency	83 %			<
Peak intensity	1 cd/lm		60° - 400	60.
LEDs/each optic	1			$\langle \rangle$
Light colour	White			45*
Required compone				/
F15256_HEKLA				1
_				\sim
				365
			25° 0° 35°	
			50*	90°
LED	CMT14xx			_1
FWHM / FWTM	55.0° / 81.0°			- A
Efficiency	54 %		- 200	
Peak intensity	0.7 cd/lm			
LEDs/each optic	1			
Light colour	White		95* 400	45°
Required compone	nts:			
F15255_HEKLA	-SOCKET-C			$\langle \rangle$
				$\langle \cdot \rangle$
			*	360
			15 0, 15,	<u> </u>
CREE 🚖		and the second se		6.3.2
			90*	90°
LED	CXA/B 13xx		39 ⁴	90* 25*
LED FWHM / FWTM	54.0° / 77.0°		35 ⁴	90* 75*
LED FWHM / FWTM Efficiency	54.0° / 77.0° 86 %		39 ⁴	90° 25° 60°
LED FWHM / FWTM Efficiency Peak intensity	54.0° / 77.0° 86 % 1.1 cd/lm		99 ⁴	90* 25* 60*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	54.0° / 77.0° 86 % 1.1 cd/lm 1		90 ⁴ 39 6 ⁴ 97	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	54.0° / 77.0° 86 % 1.1 cd/lm 1 White		94* 79 6)* 57	90* 75* 60*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts:		94* 79 00* 00* 00* 00*	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts:		54* 75 04 75 00 00	99° 75°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts:		5° 5° 5° 5° 50	60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts:		94° 94° 94° 94° 94° 94° 96° 96° 96° 96° 96° 96° 96° 96° 96° 96	90* 25* 65* 5*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts:			90* 73* 60* 5* 90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J		7	90* 25* 6* 9.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J		7	90" 25" 60" 30" 25"
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0°		7	90* 25* 60* 55* 55* 25*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CREEE F15956_HEKLA	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0° 88 %		7	90* 25* 60* 35* 35*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CREECS LED FWHM / FWTM Efficiency Peak intensity	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0°		7	90* 25* 63* 35* 99*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA ENTERSE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0° 88 % 1.2 cd/lm 1		7	90* 25* 43* 90* 90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CREE F15956_HEKLA CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0° 88 % 1.2 cd/lm 1 White		7	90* 25* 60* 50* 50* 50*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0° 88 % 1.2 cd/lm 1 White nts:		7	90* 25* 62* 55* 50* 50*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CREE F15956_HEKLA CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0° 88 % 1.2 cd/lm 1 White nts:		7	90° 25° 60° 50° 90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0° 88 % 1.2 cd/lm 1 White nts:		7	90° 75° 60° 75° 60°



		30* 90*
LED	CXA/B 15xx	
FWHM / FWTM	56.0° / 81.0°	3. 2.
Efficiency	84 %	
Peak intensity	1 cd/lm	
LEDs/each optic	1	
Light colour	White	g. g.
Required compone	ents:	
F15256_HEKLA	A-SOCKET-D	
	EDS	90° 300
LED	LUXEON CoB 1202HD	
FWHM / FWTM	54.0° / 76.0°	
Efficiency	85 %	
Peak intensity	1.1 cd/lm	69 ⁴
LEDs/each optic	1	
Light colour	White	gr at
Required compone		
F15848_HEKLA		
		30° <u>12</u> % 30°
	.EDS	90 ³ 90 ³
LED	LUXEON CoB 1202s	
FWHM / FWTM	52.0° / 75.0°	
Efficiency	85 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	₫ [×] 6,
Required compone		
F15848_HEKLA	A-SOCKET-G	
		30 ⁴ 1220 10 ⁵ 0 ⁴ 10 ⁵
	.EDS	
LED	LUXEON CX Plus CoB - HD S01H4	
FWHM / FWTM	45.0° / 67.0°	
Efficiency	78 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	a. <u>80</u>
Required compone	ents:	
Bender Wirth: 6	34c Hekla	
1		



🖉 LUMIL	EDS	30 ⁴
LED	LUXEON CX Plus CoB - HD S02H6	
FWHM / FWTM	45.0° / 68.0°	
Efficiency	77 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	gr (* * * * * * * * * * * * * * * * * * *
Required compone	ents:	
Bender Wirth: 6	34c Hekla	
M	EDC	<u>109</u> 09 100
	EDS	90° 90
LED	LUXEON CX Plus CoB - HD S04H9	75
FWHM / FWTM	49.0° / 74.0°	
Efficiency	76 %	90 ⁴ 600 500
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	of a second s
Required compone	ents:	
Bender Wirth: 6	34c Hekla	
		30° 1200 30
	.EDS	90°
LED	LUXEON CX Plus CoB M02 / M03 (Gen2)	
FWHM / FWTM	48.0° / 72.0°	
Efficiency	75 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	gr e
Required compone	ents:	
Bender Wirth: 6	41a Hekla	
		34
	FDS	
		9 ⁴
	LUXEON CX Plus CoB S01 (Gen2)	
FWHM / FWTM	45.0° / 67.0°	
Efficiency		50°
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
Bender Wirth: 6	34C HEKIA	100
		300 100 00 100 3



ELUM	INUS	20,	9 0°
LED	CDM-6 (Dim-To-Warm)		\land
FWHM / FWTM	44.0° / 68.0°	10	73
Efficiency	68 %		400
Peak intensity	1.3 cd/lm		60,
LEDs/each optic	1		
Light colour	White	g	
Required compone			
C16142_HEKLA			
Bender Wirth: 4			
		and the second sec	1200 36
LUM	INUS	<u></u>	90
LED	CDM-9 (Dim-To-Warm)		\sum
FWHM / FWTM	48.0° / 72.0°	7	
Efficiency	67 %		
Peak intensity	1.1 cd/lm		400 60
LEDs/each optic	1		
Light colour	White		
Required compone			X
C16142_HEKLA			800
Bender Wirth: 4			
Bondor Wintin.	55 T)p 25		\checkmark λ
		30"	30
		15	0" 15"
() LUM	INUS		90'
LED	CTM-9 (Tunable White)		90
		25°	×
LED	CTM-9 (Tunable White)		e9
LED FWHM / FWTM	CTM-9 (Tunable White) 48.0° / 72.0°		er32
LED FWHM / FWTM Efficiency	CTM-9 (Tunable White) 48.0° / 72.0° 67 %		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents:		67 357 39
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL4 Bender Wirth: 4	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 4	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8 INUS CXM-3 51.0° / 73.0°		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 4	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8 INUS CXM-3 51.0° / 73.0° 87 %		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4 Efficiency Peak intensity LEDs/each optic	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8 INUS CXM-3 51.0° / 73.0° 87 % 1.2 cd/lm		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4: Efficiency Peak intensity LEDs/each optic Light colour	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8 INUS CXM-3 51.0° / 73.0° 87 % 1.2 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4: Efficiency Peak intensity LEDs/each optic Light colour Required compone	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8 INUS CXM-3 51.0° / 73.0° 87 % 1.2 cd/lm 1 White ents:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4 Efficiency Peak intensity LEDs/each optic Light colour	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8 INUS CXM-3 51.0° / 73.0° 87 % 1.2 cd/lm 1 White ents:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4: WHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8 INUS CXM-3 51.0° / 73.0° 87 % 1.2 cd/lm 1 White ents:		



ELUM	INUS	50°
LED	CXM-4	
FWHM / FWTM	50.0° / 73.0°	
Efficiency	83 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	gi -
Required compone	ents:	
F15255_HEKLA		
		34.6
E LUM	INUS	94°
LED		
FWHM / FWTM	CxM-9 (13.5x13.5) 55.0° / 81.0°	75
Efficiency	83 %	
Peak intensity	63 % 1 cd/lm	80 ⁵ 400
LEDs/each optic	1	
Light colour	' White	er /
Required compone		
F15255_HEKLA		
110200_1121(2)		
		30 ⁴ 15 ⁵ 0 ⁴ 15 ⁵
ØNICHI/	N Contraction of the second seco	90'
		*u
	COB S-Type (LES 7) 53.0° / 78.0°	3°*
LED	COB S-Type (LES 7)	
LED FWHM / FWTM	COB S-Type (LES 7) 53.0° / 78.0°	
LED FWHM / FWTM Efficiency	COB S-Type (LES 7) 53.0° / 78.0° 83 %	954 75 964 960
LED FWHM / FWTM Efficiency Peak intensity	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm	954 97 97 97 97 400
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White 42.0° / 67.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White 42.0° / 67.0° 66 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White 42.0° / 67.0° 66 % 1.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White 42.0° / 67.0° 66 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White 42.0° / 67.0° 66 % 1.3 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White 42.0° / 67.0° 66 % 1.3 cd/lm 1 White ents: A-SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White 42.0° / 67.0° 66 % 1.3 cd/lm 1 White ents: A-SOCKET-K	



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ØNICHI/	N Contraction of the second	90 ⁴
LED	NVCWJ024Z-V1MT: COB J-Type Tunable White	
FWHM / FWTM	49.0° / 74.0°	
Efficiency	65 %	
Peak intensity	1 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	ents:	
C16142_HEKL	A-SOCKET-K	
Bender Wirth: 4	98 Typ L8	
		30* 25* 01 25*
PHILI	DS	
LED	Fortimo SLM L09 CoB	
FWHM / FWTM	55.0° / 79.0°	
Efficiency	81 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	g.,
Required compone	ents:	
F15858_HEKLA		
		3/*
		155 ⁴ 0 ⁶ 155
CUWUS	ING	
		20 ⁴
LED	LC003D / LC006D / LC009D / LC013D	<u>29-</u>
LED FWHM / FWTM	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0°	32
LED FWHM / FWTM Efficiency	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 %	60 c c c c c c c c c c c c c c c c c c c
LED FWHM / FWTM Efficiency Peak intensity	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1	29* 29* 09* 09*
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White	954 72 05 05 05 05 05 05 05 05 05 05 05 05 05
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: -SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: -SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: 	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: 	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSI LED FWHM / FWTM	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSI LED FWHM / FWTM Efficiency	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: -SOCKET-C UNC LC010C G2 51.0° / 74.0° 85 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: A-SOCKET-C UNG LC010C G2 51.0° / 74.0° 85 % 1.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: A-SOCKET-C UNC LC010C G2 51.0° / 74.0° 85 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: A-SOCKET-C UNC LC010C G2 51.0° / 74.0° 85 % 1.2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: A-SOCKET-C UNC LC010C G2 51.0° / 74.0° 85 % 1.2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: A-SOCKET-C UNC LC010C G2 51.0° / 74.0° 85 % 1.2 cd/lm 1 White ents:	



SAMSU	JNG	99°
LED	LC010T (Tunable White)	
FWHM / FWTM	47.0° / 72.0°	
Efficiency	67 %	80
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	Tunable White	¢r (
Required compone	nts:	
C16142_HEKLA	-SOCKET-K	
Bender Wirth: 50	01 Typ L8	
		30 ⁺ 25 ⁻ 0 ⁺ 13 ⁻
<u> </u> S M S I 	JNG	50°
LED	LC020C G2	
FWHM / FWTM	53.0° / 77.0°	
Efficiency	79 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	σ
Required compone	nts:	
F15859_HEKLA		
TRIDON		9°
LED	SLE G7 LES09	
FWHM / FWTM	53.0° / 79.0°	
Efficiency	82 %	50°
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	¢.
Required compone		
F15255_HEKLA	-SOCKET-C	
		30* 120 120 127
		30° 100 100 100 30°
TRIDON		30* 135 135 90*
LED	SLE G7 LES13	34* 35* 350 39* 39
LED FWHM / FWTM	SLE G7 LES13 64.0° / 87.0°	
LED FWHM / FWTM Efficiency	SLE G7 LES13 64.0° / 87.0° 73 %	
LED FWHM / FWTM Efficiency Peak intensity	SLE G7 LES13 64.0° / 87.0° 73 % 0.7 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	SLE G7 LES13 64.0° / 87.0° 73 % 0.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SLE G7 LES13 64.0° / 87.0° 73 % 0.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES13 64.0° / 87.0° 73 % 0.7 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SLE G7 LES13 64.0° / 87.0° 73 % 0.7 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES13 64.0° / 87.0° 73 % 0.7 cd/lm 1 White nts:	



XICATO	0			90°
LED	XOB 6 mm			
FWHM / FWTM	50.0° / 73.0°			
Efficiency	82 %			400
Peak intensity	1.2 cd/lm		1000	
LEDs/each optic	1			
Light colour	White			937 43*
Required compone	ents:			
F15255_HEKLA	A-SOCKET-C			
				30* 320
				15° 0° 15°
XICATO)	100 million (1997)		90* 90*
LED	XOB 9.8 mm			
FWHM / FWTM	54.0° / 79.0°			73*
Efficiency	83 %			
Peak intensity	1.1 cd/lm			
LEDs/each optic	1			
Light colour	White			
Required compone	ents:			
F15255_HEKL	A-SOCKET-C			
				30° 320



bridgelux.		90° 90°
LED	V10 Gen7	
FWHM / FWTM	54.0° / 76.0°	73*
Efficiency	84 %	
Peak intensity	1.2 cd/lm	NO- NO- NO-
LEDs/each optic	1	$ \times / / \times \times $
Light colour	White	45"
Required components:		/ T 000 /
F15255_HEKLA-SO	CKET-C	
		30° 30° 30° 30° 30°
bridgelux.		50° 50°
LED	V6 Gen6	
FWHM / FWTM	46.0° / 63.0°	13
Efficiency	85 %	400
Peak intensity	1.5 cd/lm	60° 60°
LEDs/each optic	1	
Light colour	White	450 456
Required components:		
F15253_HEKLA-SO	CKET-A	
		1229
		30 <u>150</u> 00 <u>15</u>
bridgelux		80*
bridgelux. LED	V8 Gen7	30 ¹ 30 ²
LED	V8 Gen7 54.0° / 74.0°	2 ¹ 2 ¹ 2 ¹ 2 ¹
		5° 5° 5° 5° 5° 5°
LED FWHM / FWTM	54.0° / 74.0°	99 ⁴ 99 ⁴ 99 ⁴ 99 ⁴ 99 ⁴ 99 ⁴ 99 ⁴ 99 ⁴
LED FWHM / FWTM Efficiency	54.0° / 74.0° 90 %	97 97 97 99 00 00
LED FWHM / FWTM Efficiency Peak intensity	54.0° / 74.0° 90 % 1.2 cd/lm	gr
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	54.0° / 74.0° 90 % 1.2 cd/lm 1	97 97 97 97 97 97 97 97 97 97 97 97 97 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	54.0° / 74.0° 90 % 1.2 cd/lm 1 White	6. 6. 6. 6. 7. 60 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 components:	54.0° / 74.0° 90 % 1.2 cd/lm 1 White	gr
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	54.0° / 74.0° 90 % 1.2 cd/lm 1 White	27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	54.0° / 74.0° 90 % 1.2 cd/lm 1 White	20° 20° 20° 20° 20° 20° 20° 20°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	54.0° / 74.0° 90 % 1.2 cd/lm 1 White	30, 10, 20, 26, 00 00 6, 00 00 8, 00 00 8, 00 00 8, 00 00 8, 00 00 8, 00 00 8, 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	54.0° / 74.0° 90 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A	99° 99° 99° 99° 99° 99° 99° 99° 99° 99°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgeLux. LED FWHM / FWTM Efficiency	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A VERO10 49.0° / 73.0° 83 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A	
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	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A VERO10 49.0° / 73.0° 83 %	
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	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A VERO10 49.0° / 73.0° 83 % 1.3 cd/lm	
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	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A VERO10 49.0° / 73.0° 83 % 1.3 cd/lm 1	
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	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A VERO10 49.0° / 73.0° 83 % 1.3 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:	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A VERO10 49.0° / 73.0° 83 % 1.3 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:	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A VERO10 49.0° / 73.0° 83 % 1.3 cd/lm 1 White	5° 000 0° 0°



r		
MICHIΛ		90* 90
LED	COB L-Type (LES 11)	
FWHM / FWTM	65.0° / 87.0°	75
Efficiency	84 %	400
Peak intensity	0.8 cd/lm	
LEDs/each optic	1	
Light colour	White	47 ⁴ 42
Required components		
F15858_HEKLA-SO	DCKET-H	
		30° 1230 38
Μ ΝΙCΗΙΛ		50° 38
LED		
LED FWHM / FWTM	COB L-Type (LES 9) 62.0° / 81.0°	75'
Efficiency	62.0° / 81.0° 89 %	
Peak intensity	89 % 1 cd/lm	60 ⁶ 60
LEDs/each optic	1	
Light colour	' White	47* 45
Required components		
F15858_HEKLA-SC		
T 13030_HEREA-OC		
		1230
		36° 36 15° 0° 15°
Μ ΝΙCΗΙΛ		90*
LED	COB S-Type (LES 6)	
FWHM / FWTM	48.0° / 67.0°	
Efficiency	79 %	400
Peak intensity	1.4 cd/lm	60°
LEDs/each optic	1	
Light colour	White	45 ⁴ 65
Required components		
F15848_HEKLA-SC	DCKET-G	
		1220
		30%
		 15 0% 15
SAMSU	NG	90*90
LED	LC003D / LC006D / LC009D / LC013D	
FWHM / FWTM	53.0° / 75.0°	
Efficiency	79 %	60° 400 m
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	$ \times / / \times \times $
Light colour	White	gr e
Required components	:	
F17435_HEKLA-G2	2-C	
		30- 1200 3
		15° 0° 15°



SAMSU	NG	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F17435_HEKLA-G:	LC003D / LC006D / LC009D / LC013D 52.0° / 74.0° 80 % 1.2 cd/lm 1 White	77 77 90 90 90 90 90
SNMSU	NG	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F17435_HEKLA-G	LC010C 51.0° / 68.0° 84 % 1.3 cd/lm 1 White	
SAMSU	NG	90 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	LH231B 50.0° / 73.0° 82 % 1.2 cd/lm 7 White	77 90 90 90 90 90 90 90 90 90 90 90 90 90
F15255_HEKLA-S	DCKET-C	30 ⁴ 15 ⁵ 0 ⁴ 15 ⁵ 2
SEOUL		50°
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	MJT COB LES 6 53.0° / 70.0° 86 % 1.3 cd/lm	77 get 400
LEDs/each optic Light colour Required components F17435_HEKLA-Gi	1 White S:	gri



SEOUL SEMICONDUCTOR		90*
LED	MJT COB LES 9.8	75
FWHM / FWTM	53.0° / 75.0°	
Efficiency	81 %	607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required component	s:	
F17435_HEKLA-0	62-C	
		31" 30
		15° 0 [†] 15°
XICATO		50 ⁴ 5
LED	XTM - 9mm LES	
FWHM / FWTM	55.0° / 76.0 + 6.0°	
Efficiency	87 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	gr
Required component	S:	
C15743_XTM-AD	APTER-50-B	