

PRODUCT DATASHEET C16731_ILONA-SS

ILONA-SS

~14° smooth spot beam

SPECIFICATION:

Dimensions	Ø 49.8 mm
Height	29.3 mm
Fastening	socket
ROHS compliant	yes 🛈



MATERIALS:

Component ILONA-SS

Type Single lens

Material	Colour	Finish
PMMA	clear	

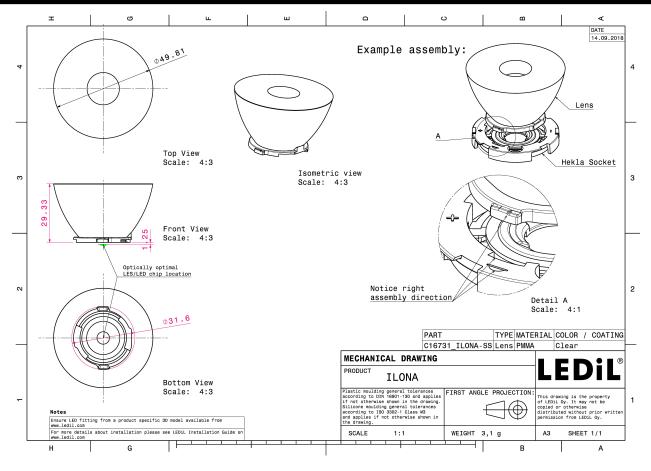
ORDERING INFORMATION:

Component
C16731_ILONA-SS
» Box size: 480 x 280 x 300 mm

Qty in box	MOQ	MPQ	Box weight (kg)
264	99	33	9.7



PRODUCT DATASHEET C16731_ILONA-SS



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



bridgelux.		90*
LED	V11 HD Gen 8	
FWHM / FWTM	22.0° / 41.0°	
Efficiency	94 %	
Peak intensity	4.8 cd/lm	
	1	
	White	¢.
Required component	its:	
Bender Wirth: 633		
		\times
		30-
		125 0 125 V
bridgelux.		50-
	V6 HD Gen 7	77
	15.0° / 27.0°	
	95 %	50°
	11.1 cd/lm	
LEDs/each optic	1	600
Light colour	White	
Required component		
Bender Wirth: 634	4c Hekla	
		30" 10" 0" 10"
bridgelux.		w.
unuyuu.		
	V6 HD Gen 7	
LED	V6 HD Gen 7 15.0° / 27.0°	32
LED FWHM / FWTM		77
LED FWHM / FWTM Efficiency	15.0° / 27.0°	
LED FWHM / FWTM Efficiency Peak intensity	15.0° / 27.0° 96 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	15.0° / 27.0° 96 % 11.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity	15.0° / 27.0° 96 % 11.4 cd/lm 1 White	73 64 65 603
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	15.0° / 27.0° 96 % 11.4 cd/lm 1 White tts:	77 91 91 92 92 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	15.0° / 27.0° 96 % 11.4 cd/lm 1 White tts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	15.0° / 27.0° 96 % 11.4 cd/lm 1 White tts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component F15255_HEKLA-S	15.0° / 27.0° 96 % 11.4 cd/lm 1 White tts:	25° 250 250 250 250 250 250 250 250 250 250
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component F15255_HEKLA-S	15.0° / 27.0° 96 % 11.4 cd/lm 1 White tts: SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component F15255_HEKLA-S	15.0° / 27.0° 96 % 11.4 cd/lm 1 White ts: SOCKET-C	25° 250 250 250 250 250 250 250 250 250 250
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component F15255_HEKLA-S	15.0° / 27.0° 96 % 11.4 cd/lm 1 White tts: SOCKET-C Vesta DTW 9mm (4W/6W/12W) 18.0° / 36.0°	25° 250 250 250 250 250 250 250 250 250 250
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component F15255_HEKLA-S bridgelux. LED FWHM / FWTM Efficiency	15.0° / 27.0° 96 % 11.4 cd/lm 1 White tts: SOCKET-C Vesta DTW 9mm (4W/6W/12W) 18.0° / 36.0° 93 %	25° 250 250 250 250 250 250 250 250 250 250
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component F15255_HEKLA-S bridgelux. LED FWHM / FWTM Efficiency Peak intensity	15.0° / 27.0° 96 % 11.4 cd/lm 1 White tts: SOCKET-C Vesta DTW 9mm (4W/6W/12W) 18.0° / 36.0° 93 % 6.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component F15255_HEKLA-S bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	15.0° / 27.0° 96 % 11.4 cd/lm 1 White tts: SOCKET-C Vesta DTW 9mm (4W/6W/12W) 18.0° / 36.0° 93 % 6.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component F15255_HEKLA-S bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	15.0° / 27.0° 96 % 11.4 cd/lm 1 White tts: SOCKET-C Vesta DTW 9mm (4W/6W/12W) 18.0° / 36.0° 93 % 6.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component F15255_HEKLA-S bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	15.0° / 27.0° 96 % 11.4 cd/lm 1 White tts: SOCKET-C Vesta DTW 9mm (4W/6W/12W) 18.0° / 36.0° 93 % 6.5 cd/lm 1 White tts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component F15255_HEKLA-S bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component C16142_HEKLA-S	15.0° / 27.0° 96 % 11.4 cd/lm 1 White tts: SOCKET-C Vesta DTW 9mm (4W/6W/12W) 18.0° / 36.0° 93 % 6.5 cd/lm 1 White tts: SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component F15255_HEKLA-S bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	15.0° / 27.0° 96 % 11.4 cd/lm 1 White tts: SOCKET-C Vesta DTW 9mm (4W/6W/12W) 18.0° / 36.0° 93 % 6.5 cd/lm 1 White tts: SOCKET-K	



bridgelux.		
LED	Vesta TW 6mm DP	
FWHM / FWTM	14.0° / 28.0°	
Efficiency	91 %	er. 200
Peak intensity	10.3 cd/lm	
LEDs/each optic	1	
Light colour	White	50 000
Required compone	ents:	
C16142_HEKLA	A-SOCKET-K	
Bender Wirth: 5	04 Typ L8	900
		30 ⁴ 20 ⁴ 23 ⁴
CITIZE	N	20 ⁴
LED	CLU7A2/7A3	
FWHM / FWTM	11.0° / 21.0°	
Efficiency	94 %	
Peak intensity	18 cd/lm	
LEDs/each optic	1	
Light colour	White	g.
Required compone	ents:	1200
F15255_HEKLA	-SOCKET-C	
		20
		15° 0° 15°
CITIZE	NT	
CITIZE	N	ао*А
LED	CLU7B2	25*
LED FWHM / FWTM	CLU7B2 10.0° / 20.0°	99* 75
LED FWHM / FWTM Efficiency	CLU7B2 10.0° / 20.0° 94 %	50 ⁴
LED FWHM / FWTM Efficiency Peak intensity	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm	84 75 84 80 80 80 80 80 80 80 80 80 80 80 80 80
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1	30 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White	5. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents:	57 1300 67 1300
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents:	5 ¹ 5 ¹ 5 ¹ 5 ¹ 5 ¹ 5 ¹ 5 ¹ 5 ¹
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents: -SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents: SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents: -SOCKET-C	77
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents: -SOCKET-C LUXEON CX Plus CoB L08 (Gen2)	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents: -SOCKET-C EDS LUXEON CX Plus CoB L08 (Gen2) 26.0° / 52.0°	77
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents: -SOCKET-C EDS LUXEON CX Plus CoB L08 (Gen2) 26.0° / 52.0° 93 %	77
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents: -SOCKET-C LUXEON CX Plus CoB L08 (Gen2) 26.0° / 52.0° 93 % 3 cd/lm	37 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents: -SOCKET-C EDS LUXEON CX Plus CoB L08 (Gen2) 26.0° / 52.0° 93 % 3 cd/lm 1 White	37 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents: -SOCKET-C LUXEON CX Plus CoB L08 (Gen2) 26.0° / 52.0° 93 % 3 cd/lm 1 White ents:	37 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents: -SOCKET-C LUXEON CX Plus CoB L08 (Gen2) 26.0° / 52.0° 93 % 3 cd/lm 1 White ents:	27 26 27 20 20 20 20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7B2 10.0° / 20.0° 94 % 19.7 cd/lm 1 White ents: -SOCKET-C LUXEON CX Plus CoB L08 (Gen2) 26.0° / 52.0° 93 % 3 cd/lm 1 White ents:	27 26 27 20 20 20 20 20 20 20 20 20 20 20 20 20



	EDC		
UMIL	EDS		90
LED	LUXEON CX Plus CoB - HD S01H4	25	1
FWHM / FWTM	13.0° / 25.0°		
Efficiency	95 %	50×	
Peak intensity	13.2 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required compone			
Bender Wirth: 63	34c Hekla		
		30"	30
	EDS	30 ⁴	90
LED	LUXEON CX Plus CoB - HD S02H6		
FWHM / FWTM	14.0° / 27.0°	73	175
Efficiency	94 %		
Peak intensity	11.7 cd/lm	Box -	\ \ ```
LEDs/each optic	1		
Light colour	White	- 610	
Required compone	nts:		
Bender Wirth: 63		800	
		34.	30
		10 12000	
C LUMIL	EDS	90 ⁴	90
		<u>8</u> *	90
LED FWHM / FWTM	EDS LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0°	39 ⁴	50
LED	LUXEON CX Plus CoB - HD S04H9	39* 75 100	
LED FWHM / FWTM	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0°	6*	5
LED FWHM / FWTM Efficiency	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 %	99* 72- 100) 100*	23
LED FWHM / FWTM Efficiency Peak intensity	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm	6*	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White	6*	23 00 00 00 00 00 00 00 00 00 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White nts:	9)* 92	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White nts:	9)* 92	3
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White nts:	9)* 92	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White nts: 34c Hekla	9)* 92	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White nts: 34c Hekla		23 23 23 24 25 25
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White nts: 34c Hekla EDS LUXEON CX Plus CoB L04 / L05 (Gen2)		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White nts: 34c Hekla EDS LUXEON CX Plus CoB L04 / L05 (Gen2) 22.0° / 43.0°		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White nts: 34c Hekla EDS LUXEON CX Plus CoB L04 / L05 (Gen2) 22.0° / 43.0° 94 %		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White nts: 34c Hekla EDS LUXEON CX Plus CoB L04 / L05 (Gen2) 22.0° / 43.0°		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63 WILLED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White nts: 34c Hekla EDS LUXEON CX Plus CoB L04 / L05 (Gen2) 22.0° / 43.0° 94 % 4.6 cd/lm		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63 COMPLE Email Compose FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White nts: 34c Hekla EDS LUXEON CX Plus CoB L04 / L05 (Gen2) 22.0° / 43.0° 94 % 4.6 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63 WILLED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White nts: 34c Hekla EDS LUXEON CX Plus CoB L04 / L05 (Gen2) 22.0° / 43.0° 94 % 4.6 cd/lm 1 White nts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63 WIN / WITH Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White nts: 34c Hekla EDS LUXEON CX Plus CoB L04 / L05 (Gen2) 22.0° / 43.0° 94 % 4.6 cd/lm 1 White nts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63 CONTINUATION LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB - HD S04H9 19.0° / 35.0° 94 % 6.8 cd/lm 1 White nts: 34c Hekla EDS LUXEON CX Plus CoB L04 / L05 (Gen2) 22.0° / 43.0° 94 % 4.6 cd/lm 1 White nts:		



UMIL	EDS	90° A 90°
LED	LUXEON CX Plus CoB M02 / M03 (Gen2)	
FWHM / FWTM	17.0° / 33.0°	25* 25*
Efficiency	94 %	60*
Peak intensity	7.6 cd/lm	
LEDs/each optic	1	
Light colour	White	45° 450
Required compone		
Bender Wirth: 64	41a Hekla	6100
		\times / \vee \times
		30° 8000 30° 30°
	.EDS	90* A 90 ⁴
LED	LUXEON CX Plus CoB S01 (Gen2)	
FWHM / FWTM	13.0° / 26.0°	25'
Efficiency	94 %	800
Peak intensity	12.3 cd/lm	$^{\circ}$ X/////X $^{\circ}$
LEDs/each optic	1	6430
Light colour	White	63*
Required compone		
Bender Wirth: 63	34c Hekla	9600
		\times / \vee \times
		30 ⁴ 12800 36 ⁴ 36 ⁴
	INUS	90° 90°
		Δ.
LED	CXM-3	
		7
LED	CXM-3	25
LED FWHM / FWTM Efficiency Peak intensity	CXM-3 11.0° / 20.0°	ge
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1	27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White	27. 64. 64. 64. 64. 64. 64. 64. 64. 64. 64
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White ents:	a, 1100 at
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White ents:	g. (c. (c. (c.) (c.) (c.) (c.) (c.) (c.)
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White ents:	gr
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White ents:	24° 23° 24° 25° 26°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White ents: -SOCKET-C	24° 25° 4° 25° 25° 25° 25° 25° 25° 25° 25° 25° 25
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White ents: -SOCKET-C	20- 20- 20- 20- 20- 20- 20- 20-
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White white SOCKET-C	2
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White ents: -SOCKET-C CXM-4 12.0° / 23.0° 94 %	61 91 92 92 92 92 92 92 92 92 92 92
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White ents: -SOCKET-C CXM-4 12.0° / 23.0° 94 % 15.8 cd/lm	64 653 654 24 654 26 70 70 70 70 70 70 70 70 70 70 70 70 70
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White ents: -SOCKET-C CXM-4 12.0° / 23.0° 94 % 15.8 cd/lm 1	2- 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White ents: -SOCKET-C CXM-4 12.0° / 23.0° 94 % 15.8 cd/lm 1 White	9 X00 40 90 100 90 90 100 90 90 100 90 90 100 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White ents: -SOCKET-C CXM-4 12.0° / 23.0° 94 % 15.8 cd/lm 1 White ents:	ge 605
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White ents: -SOCKET-C CXM-4 12.0° / 23.0° 94 % 15.8 cd/lm 1 White ents:	ge 605
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White ents: -SOCKET-C CXM-4 12.0° / 23.0° 94 % 15.8 cd/lm 1 White ents:	ge 605
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-3 11.0° / 20.0° 94 % 20.2 cd/lm 1 White ents: -SOCKET-C CXM-4 12.0° / 23.0° 94 % 15.8 cd/lm 1 White ents:	ge



OSRAM Opto Semiconductors		
LED	OSTAR Stage (S2WN)	
FWHM / FWTM	10.0° / 19.0°	
Efficiency	94 %	en
Peak intensity	22.9 cd/lm	
LEDs/each optic	1	
Light colour	White	g. 1300 t
Required compone	nts:	
F15859_HEKLA	-SOCKET-I	
OCDAM		
OSRAM Opto Semiconductors		_90*9
LED	OSTAR Stage (S2WP)	2*
FWHM / FWTM	11.0° / 21.0°	
Efficiency	94 %	654
Peak intensity	18.6 cd/lm	
LEDs/each optic	1	
Light colour	White	er e
Required compone	ints:	1200
F15859_HEKLA	-SOCKET-I	
		\times / \setminus \times
		30* 15000 3
SAMSI	INC	25 ⁵ 6 ⁴ 25 ⁴
LED	LC010T (Tunable White)	77
FWHM / FWTM	18.0° / 37.0°	
Efficiency	94 %	627
Peak intensity	6.1 cd/lm	
LEDs/each optic	1	
Light colour	Tunable White	d'
Required compone		400
C16142_HEKLA		
Bender Wirth: 5	01 Тур L8	
		300 <u>6010</u> 3 25 ¹ 6 ¹ 25 ²
SEOUL		301 9
SEOUL SEMICONDUCTOR	MJT COB LES 14.5	
FWHM / FWTM	33.0° / 57.0°	
Efficiency	95 %	
Peak intensity	2.4 cd/lm	
LEDs/each optic	2.4 co/m 1	
LEDS/each optic	ı White	et a
Required compone		
F17438_HEKLA		
	-02-1	
		30 ⁶ 37



SEOUL			90° 90°
SEOUL SEMICONDUCTOR	MJT COB LES 6		
	14.0° / 26.0°		75*
FWHM / FWTM	96 %		3200
Efficiency			60°
Peak intensity	12.5 cd/lm		
LEDs/each optic	1		5430
Light colour	White		
Required compone			800
F17435_HEKLA	-62-0		
			30° 12000 30°
SEOUL			50°
SEOUL SEMICONDUCTOR	MJT COB LES 9.8		
FWHM / FWTM	21.0° / 37.0°		75.
Efficiency	96 %		1600
Peak intensity	5.9 cd/lm		60°
LEDs/each optic	1		
Light colour	White		45
Required compone			
F17435_HEKLA			400
	-02-0		
			30° 30° 30°
TRIDON			90° 90°
LED FWHM / FWTM	SLE G7 LES09		73. 75.
	18.0° / 34.0°		
Efficiency	95 %		ion or
Efficiency Peak intensity	95 % 7 cd/lm		100 CC C
Efficiency Peak intensity LEDs/each optic	95 % 7 cd/lm 1		
Efficiency Peak intensity LEDs/each optic Light colour	95 % 7 cd/lm 1 White		
Efficiency Peak intensity LEDs/each optic Light colour Required compone	95 % 7 cd/lm 1 White nts:		e. et
Efficiency Peak intensity LEDs/each optic Light colour	95 % 7 cd/lm 1 White nts:		e. et
Efficiency Peak intensity LEDs/each optic Light colour Required compone	95 % 7 cd/lm 1 White nts:		e. et
Efficiency Peak intensity LEDs/each optic Light colour Required compone	95 % 7 cd/lm 1 White nts:		e. et
Efficiency Peak intensity LEDs/each optic Light colour Required compone	95 % 7 cd/lm 1 White nts: -SOCKET-C		e. et
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	95 % 7 cd/lm 1 White nts: -SOCKET-C		20 20 20 20 20 20 20 20 20 20
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	95 % 7 cd/lm 1 White nts: -SOCKET-C		
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	95 % 7 cd/lm 1 White nts: -SOCKET-C		20 20 20 20 20 20 20 20 20 20
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA XICATC LED FWHM / FWTM Efficiency	95 % 7 cd/lm 1 White nts: -SOCKET-C XOB 6 mm 14.0° / 26.0° 94 %		20 20 20 20 20 20 20 20 20 20
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity	95 % 7 cd/lm 1 White nts: -SOCKET-C XOB 6 mm 14.0° / 26.0°		20 20 20 20 20 20 20 20 20 20
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	95 % 7 cd/lm 1 White nts: -SOCKET-C XOB 6 mm 14.0° / 26.0° 94 % 11.7 cd/lm		20 20 20 20 20 20 20 20 20 20
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	95 % 7 cd/lm 1 White nts: -SOCKET-C XOB 6 mm 14.0° / 26.0° 94 % 11.7 cd/lm 1 White		20 20 20 20 20 20 20 20 20 20
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	95 % 7 cd/lm 1 White nts: -SOCKET-C XOB 6 mm 14.0° / 26.0° 94 % 11.7 cd/lm 1 White nts:		20 20 20 20 20 20 20 20 20 20
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	95 % 7 cd/lm 1 White nts: -SOCKET-C XOB 6 mm 14.0° / 26.0° 94 % 11.7 cd/lm 1 White nts:		20 20 20 20 20 20 20 20 20 20
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	95 % 7 cd/lm 1 White nts: -SOCKET-C XOB 6 mm 14.0° / 26.0° 94 % 11.7 cd/lm 1 White nts:		20 20 20 20 20 20 20 20 20 20



XICATO)		90° A
LED	XOB 9.8 mm		25
FWHM / FWTM	19.0° / 35.0°		1500
Efficiency	94 %		600
Peak intensity	6.8 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required compone	ents:		
F15255_HEKLA	A-SOCKET-C		
			6430
			30
			15° 0° 35°



bridgelux.		90*
LED	V13 Gen 8	75'
FWHM / FWTM	30.0° / 52.0°	
Efficiency	92 %	60* 60*
Peak intensity	3 cd/lm	$\Gamma \times / \square \setminus X \cap$
LEDs/each optic	1	1000
Light colour	White	ga 62*
Required components:		$\times \land \land \times$
F15859_HEKLA-SO	CKET-I	2400
		30° 30°
		15 30 15 .
bridgelux.		90° 90°
LED	V4 HD Gen 7	10
FWHM / FWTM	12.0° / 23.0°	
Efficiency	91 %	602 60*
Peak intensity	15.6 cd/lm	632
LEDs/each optic	1	
Light colour	White	950
Required components:		
F15253_HEKLA-SO	CKET-A	12800
		30* 15000 30*
		15° 0° 15°
bridgelux.		90°
bridgelux. LED	V9 HD Gen7	2 ³
	V9 HD Gen7 18.0° / 32.0°	34 25 26 26 26
LED		39 ⁴ 39 ⁴
LED FWHM / FWTM	18.0° / 32.0°	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
LED FWHM / FWTM Efficiency	18.0° / 32.0° 94 %	27 1200 - 27 1200 - 67
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	18.0° / 32.0° 94 % 7.7 cd/lm	27 1200 - 27 1200 - 67
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	18.0° / 32.0° 94 % 7.7 cd/lm 1 White	9° 500 57
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	18.0° / 32.0° 94 % 7.7 cd/lm 1 White	20 9 9 100 100 100 100 100 100 100 100 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	18.0° / 32.0° 94 % 7.7 cd/lm 1 White	5° 65 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	18.0° / 32.0° 94 % 7.7 cd/lm 1 White	27 60 60 60 60 60 60 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOC	18.0° / 32.0° 94 % 7.7 cd/lm 1 White	27 60 77 60 60 60 60 77 60 60 77 60 60 77 77 60 77 77 60 77 77 60 77 77 77 77 77 77 77 77 77 7
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOG	18.0° / 32.0° 94 % 7.7 cd/lm 1 White CKET-I	27 60 60 60 60 60 60 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOG	18.0° / 32.0° 94 % 7.7 cd/lm 1 White CKET-I	27 60 77 60 60 60 60 77 60 60 77 60 60 77 77 60 77 77 60 77 77 60 77 77 77 77 77 77 77 77 77 7
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOO	18.0° / 32.0° 94 % 7.7 cd/lm 1 White CKET-I Vero SE 10 18.0° / 36.0°	30. 30. 30. 30. 60. 60. 60. 60. 60. 60. 60. 60. 60. 60. 60. 60.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOO bridgelux. LED FWHM / FWTM Efficiency	18.0° / 32.0° 94 % 7.7 cd/lm 1 White CKET-I Vero SE 10 18.0° / 36.0° 94 %	27 27 27 27 27 27 27 27 27 27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOO bridgelux. LED FWHM / FWTM Efficiency Peak intensity	18.0° / 32.0° 94 % 7.7 cd/lm 1 White CKET-I Vero SE 10 18.0° / 36.0° 94 % 6.7 cd/lm	27 27 27 27 27 27 27 27 27 27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOO bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	18.0° / 32.0° 94 % 7.7 cd/lm 1 White CKET-I Vero SE 10 18.0° / 36.0° 94 % 6.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOO bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	18.0° / 32.0° 94 % 7.7 cd/lm 1 White CKET-I Vero SE 10 18.0° / 36.0° 94 % 6.7 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOO bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	18.0° / 32.0° 94 % 7.7 cd/lm 1 White CKET-I Vero SE 10 18.0° / 36.0° 94 % 6.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOO bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	18.0° / 32.0° 94 % 7.7 cd/lm 1 White CKET-I Vero SE 10 18.0° / 36.0° 94 % 6.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOO bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	18.0° / 32.0° 94 % 7.7 cd/lm 1 White CKET-I Vero SE 10 18.0° / 36.0° 94 % 6.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SOO bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	18.0° / 32.0° 94 % 7.7 cd/lm 1 White CKET-I Vero SE 10 18.0° / 36.0° 94 % 6.7 cd/lm 1	



bridgelux.		50* 50*
LED	Vero SE 13	
FWHM / FWTM	20.0° / 50.0°	75°
Efficiency	91 %	
Peak intensity	3.5 cd/lm	60° 50°
LEDs/each optic	1	1699
Light colour	White	5° 6°
Required components:	WING	2000
C16142_HEKLA-SO	CKET-K	
		330
		$\mathbf{k} / \mathbf{V} \wedge \mathbf{x}$
		30° 30° 30° 30°
bridgelux.		50° A 50°
LED	Vesta TW 9mm (9W) DP	
FWHM / FWTM	18.0° / 35.0°	72.
Efficiency	86 %	
Peak intensity	6.3 cd/lm	
LEDs/each optic	1	
Light colour	White	43°
Required components:		\times
C16142_HEKLA-SO	CKET-K	
Bender Wirth: 489 T	/p L8	
		36* 6450 36*
		15° 0° 15°
CITIZEN		90* A 90*
		50° 0 ^h 10° 90°
CITIZEN	CLL02x/CLU02x (LES10) 21.0° / 35.0°	30, 30, 30, 30,
LED FWHM / FWTM	CLL02x/CLU02x (LES10)	
LED FWHM / FWTM Efficiency	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 %	32
LED FWHM / FWTM Efficiency Peak intensity	CLL02x/CLU02x (LES10) 21.0° / 35.0°	32
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm	52°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1	52°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White	52°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White	7. 6. g. g.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White	7. 6. g. g.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White	20 60 60 60 60 60 60 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White	77. 60 60 60 60 60 60 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White CKET-C	30° 50° 50° 30° 50° 50° 60° 60° 60° 90° 50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White	77. 60 60 60 60 60 60 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White CKET-C CLU700/701/702/703	30° 50° 50° 60° 60° 60° 50° 60° 50° 60° 60° 60° 9° 60° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO CITTIZEN LED FWHM / FWTM Efficiency	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White CKET-C CLU700/701/702/703 14.0° / 25.0°	30° 50° 50° 30° 50° 50° 60° 60° 60° 90° 50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO CITTIZEN LED FWHM / FWTM Efficiency Peak intensity	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White CKET-C CLU700/701/702/703 14.0° / 25.0° 91 %	30° 50° 50° 30° 50° 50° 60° 60° 60° 90° 50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO CITTIZEN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White CKET-C CLU700/701/702/703 14.0° / 25.0° 91 % 12.9 cd/lm 1	61 92 92 92 92 92 92 92 92 92 92
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO CITTIZEN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White CKET-C CLU700/701/702/703 14.0° / 25.0° 91 % 12.9 cd/lm	61 61 91 92 92 92 92 92 92 92 92 92 92
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO CITTIZEN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White CKET-C CLU700/701/702/703 14.0° / 25.0° 91 % 12.9 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO CITTIZEN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White CKET-C CLU700/701/702/703 14.0° / 25.0° 91 % 12.9 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO CITTIZEN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CLL02x/CLU02x (LES10) 21.0° / 35.0° 87 % 6.2 cd/lm 1 White CKET-C CLU700/701/702/703 14.0° / 25.0° 91 % 12.9 cd/lm 1 White	



OTHTOTAL		
CITIZEN		90° 90°
LED	CLU712/713	
FWHM / FWTM	18.0° / 33.0°	25'
Efficiency	95 %	
Peak intensity	7.6 cd/lm	60 ²
LEDs/each optic	1	\times / π \wedge \times
Light colour	' White	45° 65
Required components:		
F17438_HEKLA-G2-		
		600
		30" <u>90500</u> 300 15" 0 ⁶ 15"
		90* A 90'
LED	CHA0304	
FWHM / FWTM	11.0° / 22.0°	
Efficiency	95 %	
Peak intensity	18.1 cd/lm	K / / T
LEDs/each optic	1	
Light colour	White	g* @
Required components:		12000
F17435_HEKLA-G2-	C	
		\times / \vee \times
		30° 15000 30
		15° 0° 15°
		90° A 90°
LED	CHA0410	
FWHM / FWTM	12.0° / 24.0°	
Efficiency	12.0° / 24.0° 95 %	
		6 ¹
Efficiency	95 %	00 ¹⁰ 000 000
Efficiency Peak intensity	95 % 15.1 cd/lm	
Efficiency Peak intensity LEDs/each optic	95 % 15.1 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour	95 % 15.1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required components:	95 % 15.1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required components:	95 % 15.1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-	95 % 15.1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-	95 % 15.1 cd/lm 1 White C	
Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-	95 % 15.1 cd/lm 1 White C	
Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-	95 % 15.1 cd/lm 1 White C C C C C C C C C C C C C	5)* 5)* 5)* 5)* 5)* 5)* 5)* 5)*
Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-	95 % 15.1 cd/lm 1 White C C C C C C C C MA1303 12.0° / 24.0° 96 %	20°
Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-	95 % 15.1 cd/lm 1 White C CMA1303 12.0° / 24.0° 96 % 16 cd/lm	99 ³
Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-	95 % 15.1 cd/lm 1 White C C C C C C MA1303 12.0° / 24.0° 96 % 16 cd/lm 1	20°
Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-	95 % 15.1 cd/lm 1 White C CMA1303 12.0° / 24.0° 96 % 16 cd/lm	9)* 9)* 900 100
Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-	95 % 15.1 cd/lm 1 White C C C C C C C C MA1303 12.0° / 24.0° 96 % 16 cd/lm 1 White	5)* 5)* 5)* 5)* 5)* 5)* 5)* 5)*
Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-	95 % 15.1 cd/lm 1 White C C C C C C C C MA1303 12.0° / 24.0° 96 % 16 cd/lm 1 White	200 Jan 200 Ja
Efficiency Peak intensity LEDs/each optic Light colour Required components: F17435_HEKLA-G2-	95 % 15.1 cd/lm 1 White C C C C C C C C MA1303 12.0° / 24.0° 96 % 16 cd/lm 1 White	200 100 200 100 200 200 100 200 100



LED ENGIN	LZ4-00XX08 12.0° / 23.0° 96 % 1 IR CKET-C	
LED ENGIN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15255_HEKLA-SO	LZ4-00XX08 10.0° / 22.0° 95 % 19.7 cd/lm 1 White CKET-C	
When the second	LUXEON CoB 1202/1203 19.0° / 35.0° 93 % 6.8 cd/lm 1 White	
EUMILE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SO	LUXEON CoB 1202s 14.0° / 26.0° 96 % 12.1 cd/lm 1 White	



UMILEC)S		90*
LED	LUXEON CoB 1204/1205		75
FWHM / FWTM	26.0° / 47.0°		000
Efficiency	93 %		607 e
Peak intensity	3.6 cd/lm		1600
LEDs/each optic	1		
Light colour	White		e ⁹⁷ e
Required components:			
			320
			137
	05		30*
LED	LUXEON CoB 1208		75
FWHM / FWTM	28.0° / 52.0°		
Efficiency	90 %		ee*ee
Peak intensity	2.9 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required components:			$\times \land \land \times$
			2430
			30° 15° 30
	S	300,0	90*
LED	LUXEON Rubix		
FWHM / FWTM	13.0° / 24.0°	Iue	75
Efficiency	95 %	e va	
Peak intensity	15.1 cd/lm	o o	605 60
LEDs/each optic	4	Y coordinate value o	
Light colour	RGBW	≺ co	50° 500
Required components:			
		-300,0 -300,0 0	300,0
		X coordinate value	
			30 ⁴ 10000 30
E-	16		
	72		90. 90
LED	CxM-14 (18.5x18.5)		
LED FWHM / FWTM	CxM-14 (18.5x18.5) 30.0° / 54.0°		30 30 00
LED FWHM / FWTM Efficiency	CxM-14 (18.5x18.5)		
LED FWHM / FWTM	CxM-14 (18.5x18.5) 30.0° / 54.0° 93 %		
LED FWHM / FWTM Efficiency Peak intensity	CxM-14 (18.5x18.5) 30.0° / 54.0° 93 % 2.7 cd/lm		27 27 27 27 20 20 20 20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CxM-14 (18.5x18.5) 30.0° / 54.0° 93 % 2.7 cd/lm 1		90 73 60 7 7 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	CxM-14 (18.5x18.5) 30.0° / 54.0° 93 % 2.7 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CxM-14 (18.5x18.5) 30.0° / 54.0° 93 % 2.7 cd/lm 1 White		90 90 90 90 90 90 90 90 90 90 90 90 90 9



MICHIΛ		50° 50°
LED	COB S-Type (LES 6)	
FWHM / FWTM	14.0° / 26.0°	78
Efficiency	93 %	ant 1300
Peak intensity	12.1 cd/lm	X / (X) X
LEDs/each optic	1	6130
Light colour	White	45 ⁴
Required components:		
F15848_HEKLA-SO	CKET-G	850
		\times / \vee \times
		30° 12000 30
Μ ΝΙCΗΙΛ		90* B
LED	COB S-Type (LES 6)	$ \rightarrow \land \land$
FWHM / FWTM	14.0° / 26.0°	75
Efficiency	93 %	
Peak intensity	12.2 cd/lm	
LEDs/each optic	1	6100
Light colour	White	67 ⁻
Required components:		\times
F15848_HEKLA-SO	CKET-G	9630
		30°
		12800 15° 0° 15°
Μ ΝΙCΗΙΛ		90° A 90'
	COB S-Type (LES 7)	99 [*]
	COB S-Type (LES 7) 16.0° / 30.0°	25- 25- 25- 25- 29- 29- 29- 29- 29- 29- 29- 29- 29- 29
LED FWHM / FWTM		9 ⁴
LED	16.0° / 30.0°	99* 99 73* 72 69* 80
LED FWHM / FWTM Efficiency	16.0° / 30.0° 95 %	99 ⁴ 99 97 97 90 90 90 90 90 90 90 90 90 90 90 90 90
LED FWHM / FWTM Efficiency Peak intensity	16.0° / 30.0° 95 % 10.2 cd/lm	91 [*] 92 92 94 95 95 640 640 640 85 640
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	16.0° / 30.0° 95 % 10.2 cd/lm 1	50° × ×
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	16.0° / 30.0° 95 % 10.2 cd/lm 1 White	9° 90 9° 90 6° 600 60 6° 600 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	16.0° / 30.0° 95 % 10.2 cd/lm 1 White	9° 90 9° 90 9° 90 9° 90 9° 90 90 90 90 90 90 90 90 90 90 90 90 90 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	16.0° / 30.0° 95 % 10.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15848_HEKLA-SO	16.0° / 30.0° 95 % 10.2 cd/lm 1 White	500 500 6 ⁴ 500 500 500 500 500 500 500 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15848_HEKLA-SO	16.0° / 30.0° 95 % 10.2 cd/lm 1 White CKET-G	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15848_HEKLA-SO	16.0° / 30.0° 95 % 10.2 cd/lm 1 White CKET-G	25 29 29 20 0 0 0 0 0 0 0 0 0 0 0 0 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15848_HEKLA-SO	16.0° / 30.0° 95 % 10.2 cd/lm 1 White CKET-G	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15848_HEKLA-SO	16.0° / 30.0° 95 % 10.2 cd/lm 1 White CKET-G NFSWE11A 18.0° / 32.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15848_HEKLA-SO	16.0° / 30.0° 95 % 10.2 cd/lm 1 White CKET-G NFSWE11A 18.0° / 32.0° 88 %	64 27 28 29 20 00 120 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15848_HEKLA-SO	16.0° / 30.0° 95 % 10.2 cd/lm 1 White CKET-G NFSWE11A 18.0° / 32.0° 88 % 7.5 cd/lm	8 ⁻ 3 ⁻ 3 ⁻ 3 ⁻ 3 ⁻ 3 ⁻ 3 ⁻ 3 ⁻ 3
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15848_HEKLA-SO	16.0° / 30.0° 95 % 10.2 cd/lm 1 White CKET-G NFSWE11A 18.0° / 32.0° 88 % 7.5 cd/lm 30	61 20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15848_HEKLA-SO	16.0° / 30.0° 95 % 10.2 cd/lm 1 White CKET-G NFSWE11A 18.0° / 32.0° 88 % 7.5 cd/lm 30 White	er er er er sr sr sr sr sr sr sr sr sr s
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15848_HEKLA-SO	16.0° / 30.0° 95 % 10.2 cd/lm 1 White CKET-G NFSWE11A 18.0° / 32.0° 88 % 7.5 cd/lm 30 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15848_HEKLA-SO WICHIN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	16.0° / 30.0° 95 % 10.2 cd/lm 1 White CKET-G NFSWE11A 18.0° / 32.0° 88 % 7.5 cd/lm 30 White	200 201 201 201 201 201 201 201



Μ ΝΙCΗΙΛ		50*
LED	NJCWL024Z-V1MT: COB L-Type Tunable White	21
FWHM / FWTM	16.0° / 30.0°	
Efficiency	94 %	000
Peak intensity	9.7 cd/lm	
LEDs/each optic	1	
Light colour	White	e7* 6130
Required components	:	
C16142_HEKLA-S	OCKET-K	
Bender Wirth: 497	Тур L8	
		34° 237 67 137°
Ø NICHIΛ		90 ⁴
LED	NVCWJ024Z-V1MT: COB J-Type Tunable White	
FWHM / FWTM	20.0° / 40.0°	
Efficiency	93 %	60
Peak intensity	5.3 cd/lm	
LEDs/each optic	1	
Light colour	White	5 7
Required components	:	
C16142_HEKLA-S	OCKET-K	
Bender Wirth: 498	Тур L8	4500
		30° m or no
PHILIP	S	80
LED	Fortimo SLM L13 CoB	
FWHM / FWTM	24.0° / 46.0°	73
Efficiency	93 %	
Peak intensity	3.9 cd/lm	
LEDs/each optic	1	
Light colour	White	₹* <u>- 300</u>
Required components	:	
Bender Wirth: 632a	Hekla XL	220
		20* 4000 25 dr 25*
PHILIP	S	50°
	Fortimo SLM L15 CoB	
LED	Fortimo SLM L15 CoB 26.0° / 51.0°	71
LED FWHM / FWTM		27
LED FWHM / FWTM Efficiency	26.0° / 51.0°	27 61
LED FWHM / FWTM Efficiency Peak intensity	26.0° / 51.0° 92 %	27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	26.0° / 51.0° 92 % 3.2 cd/lm	gr. 200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	26.0° / 51.0° 92 % 3.2 cd/lm 1 White	g. (00) g. (10) g. (10)
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	26.0° / 51.0° 92 % 3.2 cd/lm 1 White	gr - 100 -
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	26.0° / 51.0° 92 % 3.2 cd/lm 1 White	g
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	26.0° / 51.0° 92 % 3.2 cd/lm 1 White	g



SAMSU	NG	90° 90'
LED	LC003D / LC006D / LC009D / LC013D	
FWHM / FWTM	19.0° / 34.0°	2.
Efficiency	87 %	
Peak intensity	6.6 cd/lm	
LEDs/each optic	1	
Light colour	White	g
Required components	::	630
F15255_HEKLA-S	OCKET-C	
		30° 36 15° 0° 15°
SAMSU	NG	90 ⁴
LED	LC020C	
FWHM / FWTM	14.0° / 28.0°	75
Efficiency	94 %	2000
Peak intensity	11.4 cd/lm	$f \times / / $
LEDs/each optic	1	500
Light colour	White	45*
Required components	s:	
F17438_HEKLA-G	2-1	950
		30° 15° 0° 15° 30
SAMSU	NG	90* A 90'
LED	LC020T (Tunable white)	
FWHM / FWTM	22.0° / 42.0°	
Efficiency	92 %	501 500 50
Peak intensity	4.6 cd/lm	
LEDs/each optic	1	
Light colour	White	er i i i i i i i i i i i i i i i i i i i
Required component		3200
C16142_HEKLA-S		
Bender Wirth: 501	Тур L8	
		30° (4800 30 15° 0° 35°
XICATO		90* A 90
	XTM - 9mm LES	50 ⁴
LED FWHM / FWTM	XTM - 9mm LES 18.0° / 34.0°	99 ⁴ 99 37 2001 20
LED FWHM / FWTM		50° × ×
LED FWHM / FWTM Efficiency Peak intensity	18.0° / 34.0°	99 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	18.0° / 34.0° 94 % 7.5 cd/lm 1	55 ⁴ 73 66 ⁴ 320
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	18.0° / 34.0° 94 % 7.5 cd/lm 1 White	59 ⁴ 73 69 ⁴ 700 700 700 700 700 700 700 700 700 70
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	18.0° / 34.0° 94 % 7.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	18.0° / 34.0° 94 % 7.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component:	18.0° / 34.0° 94 % 7.5 cd/lm 1 White	e)



GENERAL INFORMATION:

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

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

MATERIALS:

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

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