

PRODUCT DATASHEET F15559_MIRELLA-G2-M

MIRELLA-G2-M

~25° wide beam. Compatible with LEDiL HEKLA.

SPECIFICATION:

Dimensions	Ø 49.9 mm
Height	22.6 mm
Fastening	socket
ROHS compliant	yes 🛈



MATERIALS:

Component MIRELLA-G2-M **Type** Reflector

Colour	Finish	Coating
metal		

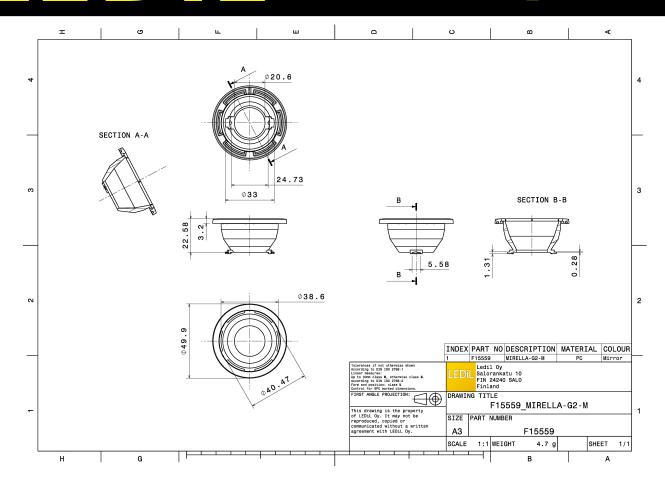
ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F15559_MIRELLA-G2-M	336		28	3.2
» Box size: 480 x 280 x 300 mm				

Material

PC

PRODUCT DATASHEET F15559_MIRELLA-G2-M



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



bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15253_HEKLA		90 ⁴ 90
bridgelux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15253_HEKLA- C13723_MIRELL	SOCKET-A	95 ³ 95 ³ 95 ⁴ 96 ⁴ 90 ⁴ 9
bridgelux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA- C13723_MIRELL	SOCKET-C	25° Cr 25
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA-		200 200 200 200 200 200 200 200



bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA		
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIRELI	-SOCKET-I	
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15616_HEKLA		
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 45	-SOCKET-K	



bridgelux.			90* 90*
LED	Vesta DTW 13mm (21W)		
FWHM / FWTM	43.0° / 81.0°		<u>3.</u>
Efficiency	73 %		
Peak intensity	1 cd/lm		400
LEDs/each optic	1		
Light colour	Tunable White		ar ar
Required compone	nts:		
C16142_HEKLA	-SOCKET-K		
C13723_MIREL	_A-RZL		
Bender Wirth: 49	11 Typ L8		36* 25° 36*
bridgelux.			90° 90°
LED	Vesta DTW 9mm (4W/6W/12W)		
FWHM / FWTM	33.0° / 70.0°		<u>Na</u> . <u>Na</u> .
Efficiency	77 %		400
Peak intensity	1.5 cd/lm		
LEDs/each optic	1		
Light colour	White		93 ² 01 ²
Required compone	nts:		
C16142_HEKLA	-SOCKET-K		
C13723_MIREL	_A-RZL		
Bender Wirth: 49	0 Typ L8		30" 26,50 34"
\frown			
bridgelux		and the second se	90° 90°
bridgelux.	Vosto TW/ 13mm (25W) CSP		90° 90°
LED	Vesta TW 13mm (25W) CSP		37 37 36 30
LED FWHM / FWTM	43.0° / 81.0°		3°
LED FWHM / FWTM Efficiency	43.0° / 81.0° 77 %		81 23 24 25 26 27 27 27 27 27 27 27 27 27 27
LED FWHM / FWTM Efficiency Peak intensity	43.0° / 81.0° 77 % 1 cd/lm		60 ⁴ 60 ⁴ 90 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	43.0° / 81.0° 77 %		gr 57
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	43.0° / 81.0° 77 % 1 cd/lm 1 White		81 92 81 92 91 92 92 93 95 95 95 95 95 95 95 95 95 95
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	43.0° / 81.0° 77 % 1 cd/lm 1 White nts:		9° 90° 27 6° 6° 800 ° 800 ° 80
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	43.0° / 81.0° 77 % 1 cd/lm 1 White nts: -SOCKET-K		9° 90° 00°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	43.0° / 81.0° 77 % 1 cd/lm 1 White nts: -SOCKET-K _A-RZL		30 30 30 30 30 30 30 30 30 30
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL	43.0° / 81.0° 77 % 1 cd/lm 1 White nts: -SOCKET-K _A-RZL		30 30 31 40 30 50 30 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIRELI Bender Wirth: 45	43.0° / 81.0° 77 % 1 cd/lm 1 White nts: -SOCKET-K _A-RZL 12 Typ L8		34 30 36 30 36 30 36 30 37 6 36 30 37 50 36 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIRELI Bender Wirth: 45	43.0° / 81.0° 77 % 1 cd/lm 1 White nts: -SOCKET-K _A-RZL		22 23 24 24 26 26 26 26 26 26 26 26 27 26 26 27 27 27 27 27 27 27 27 27 27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIRELI Bender Wirth: 45	43.0° / 81.0° 77 % 1 cd/lm 1 White nts: -SOCKET-K _A-RZL 12 Typ L8 Vesta TW 6mm DP		22 24 25 26 26 26 26 26 26 26 26 26 26
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIRELI Bender Wirth: 45 bridgeLux, LED FWHM / FWTM Efficiency	43.0° / 81.0° 77 % 1 cd/lm 1 White nts: -SOCKET-K _A-RZL 12 Typ L8 Vesta TW 6mm DP 18.0° / 58.0°		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIRELI Bender Wirth: 45 bridgeLux, LED FWHM / FWTM Efficiency Peak intensity	43.0° / 81.0° 77 % 1 cd/lm 1 White nts: -SOCKET-K _A-RZL 12 Typ L8 Vesta TW 6mm DP 18.0° / 58.0° 81 %		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIRELI Bender Wirth: 45 bridgeLux, LED FWHM / FWTM Efficiency	43.0° / 81.0° 77 % 1 cd/lm 1 White nts: -SOCKET-K A-RZL 12 Typ L8 Vesta TW 6mm DP 18.0° / 58.0° 81 % 3.5 cd/lm		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIRELI Bender Wirth: 45 bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	43.0° / 81.0° 77 % 1 cd/lm 1 White nts: -SOCKET-K A-RZL 2 Typ L8 Vesta TW 6mm DP 18.0° / 58.0° 81 % 3.5 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIRELI Bender Wirth: 45 bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	43.0° / 81.0° 77 % 1 cd/lm 1 White nts: -SOCKET-K _A-RZL 12 Typ L8 Vesta TW 6mm DP 18.0° / 58.0° 81 % 3.5 cd/lm 1 White nts:		g
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIRELI Bender Wirth: 45 bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	43.0° / 81.0° 77 % 1 cd/lm 1 White hts: -SOCKET-K A-RZL 2 Typ L8 Vesta TW 6mm DP 18.0° / 58.0° 81 % 3.5 cd/lm 1 White hts: -SOCKET-K		g
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIRELI Bender Wirth: 45 bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	43.0° / 81.0° 77 % 1 cd/lm 1 White hts: -SOCKET-K A-RZL 2 Typ L8 Vesta TW 6mm DP 18.0° / 58.0° 81 % 3.5 cd/lm 1 White hts: -SOCKET-K		g



bridgelux.		90 ⁴
LED	Vesta TW 6mm DP	
FWHM / FWTM	29.0° / 71.0°	
Efficiency	74 %	
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	
Light colour	White	a, a,
Required componer	nts:	
C16142_HEKLA		
C13723_MIRELL	LA-RZL	
Bender Wirth: 50	04 Typ L8	30° at 30°
bridgelux.		
LED	Vesta TW 9mm (12W) CSP	
FWHM / FWTM	33.0° / 73.0°	
Efficiency	74 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	e
Required componer		
C16142_HEKLA		
C13723_MIRELL		220
Bender Wirth: 48		
	за тур со	36° 52° 6° 52°
bridgelux.		90 ⁴
LED	Vesta TW 9mm (12W) CSP	
	Vesta TW 9mm (12W) CSP 25.0° / 68.0°	2 ⁻ 2 ⁻ 2 ⁻
LED		6x 90 9x 99
LED FWHM / FWTM	25.0° / 68.0°	gr 900 27 29 29
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	25.0° / 68.0° 84 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	25.0° / 68.0° 84 % 2.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts: -SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts: -SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts: -SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts: -SOCKET-K 90 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts: -SOCKET-K 20 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts: -SOCKET-K 90 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49 CITTIZE LED FWHM / FWTM	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts: -SOCKET-K 90 Typ L8 N CLC020 Series (Dim-To-Warm)	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts: -SOCKET-K 90 Typ L8 N CLC020 Series (Dim-To-Warm) 36.0° / 74.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49 CITTIZE LED FWHM / FWTM Efficiency	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts: -SOCKET-K 20 Typ L8 N CLC020 Series (Dim-To-Warm) 36.0° / 74.0° 74 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts: -SOCKET-K 30 Typ L8 N CLC020 Series (Dim-To-Warm) 36.0° / 74.0° 74 % 1.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49 CITTIZE LED FWHM / FWTM Efficiency Peak intensity	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts: -SOCKET-K 20 Typ L8 N CLC020 Series (Dim-To-Warm) 36.0° / 74.0° 74 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts: -SOCKET-K 20 Typ L8 N CLC020 Series (Dim-To-Warm) 36.0° / 74.0° 74 % 1.3 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts: -SOCKET-K 20 Typ L8 N CLC020 Series (Dim-To-Warm) 36.0° / 74.0° 74 % 1.3 cd/lm 1 White nts: -SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	25.0° / 68.0° 84 % 2.6 cd/lm 1 White nts: -SOCKET-K 20 Typ L8 N CLC020 Series (Dim-To-Warm) 36.0° / 74.0° 74 % 1.3 cd/lm 1 White nts: -SOCKET-K _A-RZL	



CITIZE	N	90 ¹
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	CLC020 Series (Dim-To-Warm) 28.0° / 72.0° 80 % 2 cd/lm 1 White ents:	
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU025/CLU027 (LES 6) 20.0° / 59.0° 87 % 3.4 cd/lm 1 White ents:	
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU025/CLU027 (LES 6) 21.0° / 55.0° 86 % 3.5 cd/lm 1 White ents:	
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU700/701/702/703 19.0° / 50.0° 90 % 4 cd/lm 1 White ents:	



CITIZE	N	
LED	CLU700/701/702/703	
FWHM / FWTM	19.0° / 49.0°	
Efficiency	90 %	60* 500 F0*
Peak intensity	4 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		220
F15255_HEKLA	-300KET-C	
		30 ⁴ 32 ⁵ 0 ⁴ 15 ⁵
CITIZE	Ν	9)*
LED	CLU710/711	
FWHM / FWTM	26.0° / 73.0°	
Efficiency	85 %	
Peak intensity	2.3 cd/lm	
LEDs/each optic	1	
Light colour	White	g. e.
Required compone	ents:	
F15859_HEKLA	-SOCKET-I	
		30* 200 30*
CITIZE	N	
CITIZE		<u> </u>
LED	CLU7A2/7A3	90° 90° 22° 22°
LED FWHM / FWTM	CLU7A2/7A3 16.0° / 49.0°	90°
LED FWHM / FWTM Efficiency	CLU7A2/7A3 16.0° / 49.0° 87 %	
LED FWHM / FWTM Efficiency Peak intensity	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm	99 ⁴ 97 ⁵ 25 ⁷ 26 ⁹
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White	90 ⁴ 90 ⁴ 72 ⁻ 90 ⁴ 90 ⁴ 90 ⁴ 90 ⁴ 90 ⁴ 90 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White ints:	50 ³ 75 60 ⁴ 50 50 50 50 50 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White ints:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White ints:	99 ¹ 72 ¹ 99 ¹ 90 ¹ 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White ints:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White Ints: -SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White Ints: -SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White Ints: -SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White I SOCKET-C N LCN-C01B (Tunable White)	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White I SOCKET-C N LCN-C01B (Tunable White) 35.0° / 74.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White Ints: -SOCKET-C N LCN-C01B (Tunable White) 35.0° / 74.0° 75 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White I White SOCKET-C N LCN-C01B (Tunable White) 35.0° / 74.0° 75 % 1.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White ints: -SOCKET-C N LCN-C01B (Tunable White) 35.0° / 74.0° 75 % 1.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White ints: -SOCKET-C N LCN-C01B (Tunable White) 35.0° / 74.0° 75 % 1.4 cd/lm 1 White ints:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White ints: -SOCKET-C N LCN-C01B (Tunable White) 35.0° / 74.0° 75 % 1.4 cd/lm 1 White ints: -SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	CLU7A2/7A3 16.0° / 49.0° 87 % 4.2 cd/lm 1 White I SOCKET-C N LCN-C01B (Tunable White) 35.0° / 74.0° 75 % 1.4 cd/lm 1 White I SOCKET-K LA-RZL	



CITIZE	N	»·
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA C13723_MIRELI Bender Wirth: 48	-SOCKET-K A-RZL	
CREE Construction LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component F15256_HEKLA		
CREE Constructions LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA		
CREE C LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15956_HEKLA: C13333_MIRELI	SOCKET-J	



				90*	90
LED	CXA/B 13xx				\land
FWHM / FWTM	20.0° / 66.0°			75'	× 7-10
Efficiency	90 %			X/Λ	
Peak intensity	3.4 cd/lm			60.9	60
LEDs/each optic	1			$\sim M$	
Light colour	White			45*	
Required compone					2430
F15956_HEKLA					
				15*	0° 15° 30
				90°	90
LED	CXA/B 15xx			340	
FWHM / FWTM	25.0° / 67.0°			10	$ T^{\circ}$
Efficiency	91 %			60° / /	- 800 N N X 60
Peak intensity	2.9 cd/lm			$r \times / l$	
LEDs/each optic	1				1600
Light colour	White			45°	1000
Required compone	ents:				
F15256_HEKLA	A-SOCKET-D				2430
				30°	30
	FDS			13	
		 _		90°	90
LED	LUXEON CoB 1202/1203			90* 73*	90
LED FWHM / FWTM	LUXEON CoB 1202/1203 27.0° / 71.0°			35	2
LED FWHM / FWTM Efficiency	LUXEON CoB 1202/1203 27.0° / 71.0° 89 %			39 ⁴ 39 ⁴ 59 ⁴	500
LED FWHM / FWTM Efficiency Peak intensity	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm			39 ⁴	90 90 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1	C	1	27- 90* 90* 90*	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White	C		25- 25 ⁵ 25 ⁵ 55 ⁵	90 90 160. 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents:	C		99 ¹ 99 ¹ 99 ¹ 99 ¹	90 100 100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents: N-SOCKET-H			50 ⁴	500 1602 1602
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents: N-SOCKET-H			39°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents: N-SOCKET-H			25°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents: A-SOCKET-H LA-DL			29°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA C12479_MIREL	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents: A-SOCKET-H LA-DL				
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA C12479_MIREL	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents: A-SOCKET-H LA-DL			29°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA C12479_MIREL	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents: A-SOCKET-H LA-DL				
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA C12479_MIREL	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents: A-SOCKET-H LA-DL LUXEON CoB 1202/1203 27.0° / 71.0°				
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA C12479_MIREL	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents: -SOCKET-H LA-DL EDS LUXEON CoB 1202/1203 27.0° / 71.0° 89 %			39 ¹ 99 ¹ 99 ¹ 99 ¹ 99 ¹ 99 ¹ 99 ¹ 99 ¹ 99 ¹ 99 ¹	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA C12479_MIREL	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents: A-SOCKET-H LA-DL LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm				
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA C12479_MIREL	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents: A-SOCKET-H LA-DL EDS LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White				
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA C12479_MIREL C12479_MIREL C12479_MIREL ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents: A-SOCKET-H LA-DL .EDS LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents:				
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA C12479_MIREL C12479_MIREL C12479_MIREL ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents: A-SOCKET-H LA-DL .EDS LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents:				
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA C12479_MIREL C12479_MIREL C12479_MIREL ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents: A-SOCKET-H LA-DL .EDS LUXEON CoB 1202/1203 27.0° / 71.0° 89 % 2.5 cd/lm 1 White ents:				



CUMIL	EDS	50 ⁵ 30 ⁵
LED	LUXEON CoB 1202HD	
FWHM / FWTM	23.0° / 74.0°	
Efficiency	85 %	
Peak intensity	2.5 cd/lm	
LEDs/each optic	1	
Light colour	White	er
Required compone	ents:	
F15848_HEKLA	A-SOCKET-G	
		30"
	EDS	25" o ⁴ 15 ⁵
LED	LUXEON CoB 1204HD	
FWHM / FWTM	29.0° / 77.0°	31 40 51
Efficiency	85 %	
Peak intensity	1.9 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
F15858_HEKLA		
		10 ⁻⁰ 10 ⁻⁰ 10 ⁻⁰
LUMIL	.EDS	50° 50°
LED	LUXEON CoB 1205HD	
FWHM / FWTM	35.0° / 79.0°	
Efficiency	83 %	61
Peak intensity	1.5 cd/lm	
LEDs/each optic	1	
Light colour	White	9° (0)
Required compone		
F15858_HEKLA	A-SOCKET-H	
		30* 1650 34* 25* 0 ⁺ 25*
	.EDS	<u>90</u> *
LED	LUXEON CX Plus CoB - HD S01H4	
FWHM / FWTM	31.0° / 74.0°	77
Efficiency	74 %	60 ⁻ 60 ⁻ 60 ⁻
Peak intensity	1.5 cd/lm	$(X \land X) = (X \land X)$
LEDs/each optic	1	
Light colour	White	
Required compone	ents:	\times \wedge \times
C13723_MIREL	LA-RZL	300
Bender Wirth: 6	34c Hekla	
		20 ¹⁰ 20 ¹⁰
		15* 16% 15*



	EDC	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6	LUXEON CX Plus CoB - HD S01H4 19.0° / 70.0° 81 % 3 cd/lm 1 White ents:	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6	LUXEON CX Plus CoB - HD S02H6 19.0° / 71.0° 81 % 2.9 cd/lm 1 White ents:	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 6	LUXEON CX Plus CoB - HD S02H6 32.0° / 74.0° 74 % 1.5 cd/lm 1 White ents: LA-RZL	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 6	LUXEON CX Plus CoB - HD S04H9 37.0° / 76.0° 75 % 1.3 cd/lm 1 White ents: LA-RZL	



🥙 LUMIL	EDS	50'*
LED	LUXEON CX Plus CoB - HD S04H9	
FWHM / FWTM	28.0° / 75.0°	73
Efficiency	82 %	
Peak intensity	1.9 cd/lm	
LEDs/each optic	1	
Light colour	White	er er
Required compone	nts:	
Bender Wirth: 63		100
		30' 0000 33'
UMIL	EDC	**************************************
LED	LUXEON CX Plus CoB L04 / L05 (Gen2)	75
FWHM / FWTM	35.0° / 78.0°	
Efficiency	80 %	60 ¹
Peak intensity	1.5 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
Bender Wirth: 63	37a Hekla	
		34" 25" 1690 25" 369
🤭 LUMIL	.EDS	50 [,]
		94 ⁴ 90
	EDS LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0°	
LED	LUXEON CX Plus CoB L04 / L05 (Gen2)	
LED FWHM / FWTM	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0°	
LED FWHM / FWTM Efficiency	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 %	
LED FWHM / FWTM Efficiency Peak intensity	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White Ints:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White white LA-RZL	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White white LA-RZL	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White ILA-RZL 37a Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White I UA-RZL 37a Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White ILA-RZL 37a Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White Ints: LA-RZL 37a Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White Ints: LA-RZL 37a Hekla EDS LUXEON CX Plus CoB M02 / M03 (Gen2) 37.0° / 77.0° 73 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White Ints: LA-RZL 37a Hekla LUXEON CX Plus CoB M02 / M03 (Gen2) 37.0° / 77.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White mts: LA-RZL 37a Hekla EDS LUXEON CX Plus CoB M02 / M03 (Gen2) 37.0° / 77.0° 73 % 1.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63 COMPUTE Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White mts: LA-RZL 37a Hekla EDS LUXEON CX Plus CoB M02 / M03 (Gen2) 37.0° / 77.0° 73 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63 COMPARENT Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White I White I LA-RZL 37a Hekla EDS LUXEON CX Plus CoB M02 / M03 (Gen2) 37.0° / 77.0° 73 % 1.3 cd/lm 1 White I I White I I I I I I I I I I I I I	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63 COMPUTE Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White ints: LA-RZL 37a Hekla EDS LUXEON CX Plus CoB M02 / M03 (Gen2) 37.0° / 77.0° 73 % 1.3 cd/lm 1 White ints: LA-RZL	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63 COMPLET EVHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL	LUXEON CX Plus CoB L04 / L05 (Gen2) 42.0° / 81.0° 72 % 1.1 cd/lm 1 White ints: LA-RZL 37a Hekla EDS LUXEON CX Plus CoB M02 / M03 (Gen2) 37.0° / 77.0° 73 % 1.3 cd/lm 1 White ints: LA-RZL	



[
M LUMIL	.EDS	90*
LED	LUXEON CX Plus CoB M02 / M03 (Gen2)	
FWHM / FWTM	25.0° / 74.0°	75
Efficiency	80 %	
Peak intensity	2.1 cd/lm	60 ⁵
LEDs/each optic	1	
Light colour	White	gr ()
Required compone		
Bender Wirth: 64		1000
		30°
		 15 [°] 0 [°] 15 [°]
M LUMIL	.EDS	90* 90*
LED	LUXEON CX Plus CoB S01 (Gen2)	
FWHM / FWTM	18.0° / 69.0°	75
Efficiency	81 %	800
Peak intensity	3.1 cd/lm	
LEDs/each optic	1	
Light colour	White	gr est
Required compone	ents:	
Bender Wirth: 63	34c Hekla	2830
		\times / \vee \times
		30* 300 30
	EDS	90° 90° 90°
LED	LUXEON CX Plus CoB S01 (Gen2)	
LED FWHM / FWTM		
LED FWHM / FWTM Efficiency	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0°	
LED FWHM / FWTM Efficiency Peak intensity	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White ents: LA-RZL	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White ents: LA-RZL	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White ents: LA-RZL 34c Hekla	20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White ents: LA-RZL 34c Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White ents: LA-RZL 34c Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White white LA-RZL 34c Hekla CDM-6 (Dim-To-Warm)	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White ents: LA-RZL 34c Hekla CDM-6 (Dim-To-Warm) 20.0° / 60.0° 82 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White ents: LA-RZL 34c Hekla CDM-6 (Dim-To-Warm) 20.0° / 60.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White ents: LA-RZL 34c Hekla CDM-6 (Dim-To-Warm) 20.0° / 60.0° 82 % 3.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63 Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White white white CDM-6 (Dim-To-Warm) 20.0° / 60.0° 82 % 3.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63 Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White white white DM-6 (Dim-To-Warm) 20.0° / 60.0° 82 % 3.2 cd/lm 1 White mts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63 Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White ents: LA-RZL 34c Hekla CDM-6 (Dim-To-Warm) 20.0° / 60.0° 82 % 3.2 cd/lm 1 White ents: -SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 63 EED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	LUXEON CX Plus CoB S01 (Gen2) 31.0° / 73.0° 74 % 1.5 cd/lm 1 White ents: LA-RZL 34c Hekla INUS CDM-6 (Dim-To-Warm) 20.0° / 60.0° 82 % 3.2 cd/lm 1 White ents: -SOCKET-K	



ELUM	INUS	514 504
LED	CDM-6 (Dim-To-Warm)	
FWHM / FWTM	28.0° / 68.0°	
Efficiency	75 %	
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	¢. (
Required compone	ents:	
C16142_HEKL/	A-SOCKET-K	
C13723_MIREL		1500
Bender Wirth: 4	90 Typ L8	30 20 00 20 30
() LUM	INUS	2 2 ⁴
LED	CDM-9 (Dim-To-Warm)	
FWHM / FWTM	24.0° / 69.0°	
Efficiency	81 %	
Peak intensity	2.5 cd/lm	
LEDs/each optic	1	
Light colour	White	a. a
Required compone	ents:	
C16142_HEKL/	A-SOCKET-K	
Bender Wirth: 4	90 Typ L8	
E LUM	INUS	90 ⁴ 90 ⁴
LED	CDM-9 (Dim-To-Warm)	
FWHM / FWTM	32.0° / 71.0°	78
Efficiency	74 %	
Peak intensity	1.5 cd/lm	
LEDs/each optic	1	
Light colour	White	g. a
Required compone	ents:	
C16142_HEKL/	A-SOCKET-K	100
C13723_MIREL	LA-RZL	
Bender Wirth: 4	90 Typ L8	30 ⁴ <u>1000</u> 30 20 ch 20'
() LUM	INUS	90°
LED	CTM-9 (Tunable White)	
FWHM / FWTM	25.0° / 70.0°	
Efficiency	80 %	
Peak intensity	2.4 cd/lm	
LEDs/each optic	1	
Light colour	White	g. a
Required compone	ents:	
C16142_HEKL	A-SOCKET-K	
Bender Wirth: 4		
		30 ⁴ 200 30 20 ⁹ 0 ⁴ 20 ⁵



ELUM	INUS	80° 80
LED	CTM-9 (Tunable White)	
FWHM / FWTM	34.0° / 75.0°	
Efficiency	72 %	
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	e. <u> </u>
Required compone	ents:	
C16142_HEKLA		
C13723_MIREL		2200
Bender Wirth: 4		
() LUM	INUS	99°
LED	CXM-4	
FWHM / FWTM	16.0° / 46.0°	32
Efficiency	87 %	
Peak intensity	4.4 cd/lm	
LEDs/each optic	1	
Light colour	White	g
Required compone	ents:	
F15255_HEKLA	A-SOCKET-C	
		ar
E LUM	INUS	25° 460 15°
LED FWHM / FWTM	CXM-4 29.0° / 71.0°	
Efficiency	79 %	
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	e, e,
Required compone		
F15255_HEKLA		
C13723_MIREL		
010720_WIITEE		
ELUM	INUS	50° 00 ¹ 157
LED	CxM-9 (13.5x13.5)	
FWHM / FWTM	29.0° / 75.0°	787
Efficiency	87 %	
Peak intensity	2.1 cd/lm	61* 61*
LEDs/each optic	1	
Light colour	White	
Required compone		
F15255_HEKLA		3000
		30% of 15° 00°



		90* 90*
LED	NJCWL024Z-V1MT: COB L-Type Tunable White	75
FWHM / FWTM	19.0° / 58.0°	
Efficiency	82 %	605 80
Peak intensity	3.4 cd/lm	
LEDs/each optic	1	
Light colour	White	63× 65
Required compone		2400
C16142_HEKLA		\times
Bender Wirth: 49	97 Typ L8	220
		90° 90°
LED	NJCWL024Z-V1MT: COB L-Type Tunable White	75.
FWHM / FWTM	30.0° / 69.0°	400
Efficiency	74 %	60° / 60°
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		1200
C16142_HEKLA	-SOCKET-K	
C13723_MIREL	LA-RZL	
Bender Wirth: 49	97 Тур L8	30° 30° 30°
		90* 90*
		90°
*	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0°	91 ⁴ 92 ⁴
LED	NVCWJ024Z-V1MT: COB J-Type Tunable White	90 ⁴ 90 77 77 78 77 77 72
LED FWHM / FWTM	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0°	90 ⁴ 99 ⁴
LED FWHM / FWTM Efficiency	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 %	60 00 00 10 00
LED FWHM / FWTM Efficiency Peak intensity	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/Im	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/lm 1 White	g
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/Im 1 White nts:	90° 90° 90° 90° 90° 90° 90° 90° 90° 90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/lm 1 White nts: -SOCKET-K	90° 90° 90° 72° 72° 90° 90° 90° 90° 90° 90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/lm 1 White nts: -SOCKET-K LA-RZL	20° 00 12° 00 00 00 100 00 100 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/lm 1 White nts: -SOCKET-K LA-RZL 28 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 45	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/lm 1 White nts: -SOCKET-K LA-RZL 28 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 45	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/lm 1 White nts: -SOCKET-K LA-RZL 38 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 49	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/lm 1 White nts: -SOCKET-K LA-RZL 28 Typ L8	<u>15</u>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 45 NICHIA LED FWHM / FWTM	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/lm 1 White nts: -SOCKET-K LA-RZL 28 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 28.0° / 73.0°	<u>15</u>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 45 MICHIA LED FWHM / FWTM Efficiency	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/lm 1 White nts: -SOCKET-K LA-RZL 28 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 28.0° / 73.0° 80 %	<u>B</u> ²
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 45 WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/lm 1 White nts: -SOCKET-K LA-RZL 28 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 28.0° / 73.0° 80 % 1.8 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 43 WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/lm 1 White nts: -SOCKET-K LA-RZL 28 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 28.0° / 73.0° 80 % 1.8 cd/lm 1 White	13'
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 45 WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/lm 1 White nts: -SOCKET-K LA-RZL 38 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 28.0° / 73.0° 80 % 1.8 cd/lm 1 White nts:	g.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 49 WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/lm 1 White nts: -SOCKET-K LA-RZL 28 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 28.0° / 73.0° 80 % 1.8 cd/lm 1 White nts: -SOCKET-K	25 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 4S EXAMPLE FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	NVCWJ024Z-V1MT: COB J-Type Tunable White 37.0° / 77.0° 73 % 1.2 cd/lm 1 White nts: -SOCKET-K LA-RZL 28 Typ L8 NVCWJ024Z-V1MT: COB J-Type Tunable White 28.0° / 73.0° 80 % 1.8 cd/lm 1 White nts: -SOCKET-K	g.



OSRAM Opto Semiconductors				90*
LED	Soleriq S9			
FWHM / FWTM	28.0° / 71.0°			75
Efficiency	90 %			
Peak intensity	2.4 cd/lm			eose
LEDs/each optic	1			
Light colour	White			gr A
Required compone				1639
F15255_HEKLA				$K \neq / N \models N \setminus N$
				30°
				15° 0° 35°
OSRAM Opto Semiconductors				90* 9
LED	Soleriq S9			
FWHM / FWTM	28.0° / 71.0°			$ \land \land \land $
Efficiency	90 %			60% 600 F
Peak intensity	2.4 cd/lm			
LEDs/each optic	1			
Light colour	White			45 ²⁴ 1600
Required compone	ents:			
F15255_HEKLA				
C13723_MIREL	LA-RZL			
				30° 2400
1				
				125 ³ 0 ⁶ 325 ³
PHILIP				204 22 225 6 225
LED	Fortimo SLM L09 CoB			25° 0° 35°
LED FWHM / FWTM	Fortimo SLM L09 CoB 29.0° / 77.0°			20 ⁴ 0 ⁴ 25 ⁴
LED FWHM / FWTM Efficiency	Fortimo SLM L09 CoB 29.0° / 77.0° 83 %		1	90 75 90 90 90 90 90 90 90 90 90 90 90 90 90
LED FWHM / FWTM Efficiency Peak intensity	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm		1	90 97 75 90 90 90 90 90 90 90 90 90 90 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1		1	25° 0° 25°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White		1	25 ⁴ 0 ⁴ 25 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White ents:		1	97
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White ents:			97
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White ents:			25 60 60 - 00 - 00 - 00 - 00 - 00 - 00 - 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White ents: -SOCKET-H			27 40 57 57 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White ents: -SOCKET-H			25 60 60 - 00 - 00 - 00 - 00 - 00 - 00 - 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White ents: -SOCKET-H			20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White ents: -SOCKET-H			20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White ents: -SOCKET-H			20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White ents: -SOCKET-H			20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White ents: -SOCKET-H S Fortimo SLM L09 CoB 39.0° / 78.0° 75 %			20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA PHILLE LED FWHM / FWTM Efficiency Peak intensity	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White onts: -SOCKET-H S Fortimo SLM L09 CoB 39.0° / 78.0° 75 % 1.2 cd/lm			20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA PHILLE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White onts: -SOCKET-H S Fortimo SLM L09 CoB 39.0° / 78.0° 75 % 1.2 cd/lm 1 White			20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA PHILLE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White ents: -SOCKET-H S Fortimo SLM L09 CoB 39.0° / 78.0° 75 % 1.2 cd/lm 1 White ents:			20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA PHILLE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White ents: -SOCKET-H S Fortimo SLM L09 CoB 39.0° / 78.0° 75 % 1.2 cd/lm 1 White ents: -SOCKET-H			20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA PHILLE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo SLM L09 CoB 29.0° / 77.0° 83 % 1.8 cd/lm 1 White ents: -SOCKET-H S Fortimo SLM L09 CoB 39.0° / 78.0° 75 % 1.2 cd/lm 1 White ents: -SOCKET-H			20 20 20 20 20 20 20 20 20 20



				
PHILI	DS		90°	90°
LED	Fortimo SLM L13 CoB			
FWHM / FWTM	40.0° / 80.0°		73*	15
Efficiency	77 %		400	
Peak intensity	1.2 cd/lm		00	
LEDs/each optic	1			
Light colour	White		87°	× 6,
Required compone	ents:			
C16142_HEKLA	A-SOCKET-K			
Bender Wirth: 4	32 Typ L8			
			30°	150
PHILI	DS		80°	90*
LED	Fortimo SLM L13 CoB			
FWHM / FWTM	45.0° / 82.0°		75	25'
Efficiency	71 %			
Peak intensity	1 cd/lm		50° 400	60.
LEDs/each optic	1			
Light colour	White		97	67
Required compone				
C16142_HEKLA			200	
C13723_MIREL				
Bender Wirth: 4				
			- 15º 0º	12,
PHILIP	DS			
LED	Fortimo SLM L13 CoB			
FWHM / FWTM	45.0° / 82.0°			
Efficiency	71 %			
Peak intensity	1 cd/lm			
LEDs/each optic	1			
Light colour	White			
Required compone	ents:			
C16142_HEKLA	A-SOCKET-K			
C13723_MIREL	LA-RZL			
Bender Wirth: 4	32 Typ L8			
PHILIP	PS			
LED	Fortimo SLM L13 CoB			
FWHM / FWTM	40.0° / 80.0°			
Efficiency	77 %			
Peak intensity	1.2 cd/lm			
LEDs/each optic	1			
Light colour	White			
Required compone				
C16142_HEKL				
Bender Wirth: 4				
	- 1			



SAMSU	JNG	99°	90*
LED	LC010C G2		
FWHM / FWTM	19.0° / 65.0°	73	800
Efficiency	86 %	501	
Peak intensity	3.4 cd/lm		
LEDs/each optic	1		1630
Light colour	White	97	
Required compone	ents:		2430
F15255_HEKLA	-SOCKET-C		
			3230
			00 15° 30
S ΛΜSI	JNG	90°	90
LED	LC010T (Tunable White)		\land
FWHM / FWTM	26.0° / 72.0°	73	
Efficiency	81 %		
Peak intensity	2.2 cd/lm		800 66
LEDs/each optic	1		
Light colour	Tunable White		
Required compone	ents:		1630
C16142_HEKLA	A-SOCKET-K		
Bender Wirth: 50			
		¥*	
		153	2400 15°
CUWU	ING		
SAMSI		90°	90
LED	LC010T (Tunable White)	30°	99
LED FWHM / FWTM	LC010T (Tunable White) 27.0° / 69.0°	90* 20	400 9
LED FWHM / FWTM Efficiency	LC010T (Tunable White) 27.0° / 69.0° 76 %	90°	
LED FWHM / FWTM Efficiency Peak intensity	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm	60×	10 10 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1	90 ⁺	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White	9)* 32 60* 72	40 40 10 10 10 10 10 10 10 10 10 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White ents:	9)* 70 60 60	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White ents: N-SOCKET-K		40 40 100 100 100 100 100 100 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White ents: A-SOCKET-K ARA-RZ-LENS		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 50	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White ents: N-SOCKET-K ARA-RZ-LENS 01 Typ L8		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White ents: N-SOCKET-K ARA-RZ-LENS 01 Typ L8		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 50	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White ents: N-SOCKET-K ARA-RZ-LENS 01 Typ L8	34- 35	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 50	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White white white SOCKET-K ARA-RZ-LENS D1 Typ L8	34- 35	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 50	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White ents: ASOCKET-K ARA-RZ-LENS D1 Typ L8 UNG LC016D / LC019D / LC026D / LC033D	34- 35	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 50 SAMSU LED FWHM / FWTM Efficiency Peak intensity	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White ents: -SOCKET-K ARA-RZ-LENS 01 Typ L8 JNG LC016D / LC019D / LC026D / LC033D 47.0° / 81.0°	34- 35	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 50 SAMSSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White onts: A-SOCKET-K ARA-RZ-LENS 01 Typ L8 JNG LC016D / LC019D / LC026D / LC033D 47.0° / 81.0° 77 % 1.1 cd/lm 1	34- 35	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 50 SAMSU LED FWHM / FWTM Efficiency Peak intensity	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White ents: A-SOCKET-K ARA-RZ-LENS 01 Typ L8 JNG LC016D / LC019D / LC026D / LC033D 47.0° / 81.0° 77 % 1.1 cd/lm	34- 35	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 50 SAMSSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White white white white white White UNC LC016D / LC019D / LC026D / LC033D 47.0° / 81.0° 77 % 1.1 cd/lm 1 White	34- 35	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 50 SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White white white M-SOCKET-K ARA-RZ-LENS 01 Typ L8 JNG LC016D / LC019D / LC026D / LC033D 47.0° / 81.0° 77 % 1.1 cd/lm 1 White white white	34- 35	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 50 SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White white white A-SOCKET-K ARA-RZ-LENS 01 Typ L8 JNG LC016D / LC019D / LC026D / LC033D 47.0° / 81.0° 77 % 1.1 cd/lm 1 White white sts: -SOCKET-I	34- 35	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 50 SAMSSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	LC010T (Tunable White) 27.0° / 69.0° 76 % 2 cd/lm 1 White white white A-SOCKET-K ARA-RZ-LENS 01 Typ L8 JNG LC016D / LC019D / LC026D / LC033D 47.0° / 81.0° 77 % 1.1 cd/lm 1 White white sts: -SOCKET-I	34- 35	



LED LC018D / LC018D / LC028D / LC023D FWHM / FWTM 47.0' 79.0' Elfidency 79.% Peak Intensity 1.2 cd/m LEDWeach optic 1 Light colour White Reguined components: F15859_HEKLA-SDCKET-I C1372_MIRELLA-RZ ED LC016D / LC019D / LC028D / LC033D FWHM / FWTM 47.0' / 82.0' Elfidency 74.% Peak Intensity 1.2 cd/m LEDWeach optic 1 LEDMeak optic 1	SAMSI	JNG	90*
Efficiency 79% Peak intensity 1.2 cd/m ELD0veach optic 1 Equired components: C15570_LENA-STD-BASE2-VER013-18 C15333_MIRELLA-CL ED CO160/LC0160/LC0260/LC0230 FWHM /FWTM 47.0*/85.0° Efficiency 74% Peak intensity 1 cd/m ELD0veach optic 1 ElD0veach optic 1 ElD0veach optic 1 ElD0veach optic 2 F15859_HEKLA-SOCKET-I C15723_MIRELLA-RZL ESAMSSUNG LED0veach optic 2 LED0veach optic 2 LED0veach optic 2 LED0veach optic 3% Peak intensity 12 cd/m ELD0veach optic 3% Peak intensity 12 cd/m ELD0veach optic 3% Peak intensity 12 cd/m ELD0veach optic 4 Light colour White Required components: F15859_HEKLA-SOCKET-I C15723_MIRELLA-SOCKET-I C15723_MIRELLA-SOCKET-I ED0veach optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I	LED		
Peak intensity 1.2 cd/m LED/sech optic 1 LED/sech optic 2 C15370_LENASTDAASE2VER013-18 C13333_MIRELLA-CL SAMSUNC LED LC0160 / LC0180 / LC0280 / LC033D FMMI / FVTM 47.0° / 85.0° Efficiency 74% Peak intensity 1.2 dm LED/sech optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I C13723_MIRELLA-RZ Efficiency 83% Peak intensity 1.2 cdm LED/sech optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I C13723_MIRELLA-RZ Efficiency 83% Peak intensity 1.2 cdm LED/sech optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I C13723_MIRELLA-RZ Efficiency 83% Peak intensity 2.2 cdm LED/sech optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I	FWHM / FWTM	47.0° / 79.0°	
LEDPseado points 1 Light colour White Required components: C1577 J.ENA-STD-BASE2-VERO13-18 C1333 JMRELLA-CL SAMAS UNC EID LO16D / LO18D / LC028D / LC033D FWHM / FVTM 47.0° / 85.0° Efficiency 1 cd/m LEDPseado point 1 LEDPseado p	Efficiency	79 %	
Light colour White Required components: C15370_LINASTDEASE2-VERO13-18 C13333_MIRELLA-CL SAMSUNG LED LC016D / LC019D / LC026D / LC033D FWHM / FVT 1 cd/m LEDbreach optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1 C13723_MIRELLA-RZL SAMSUNG EMBINE ED LC016D / LC019D / LC026D / LC033D FWHM / FVT 44.0° / 82.0° Efficiency 83 % Peak intensity 1 2 cd/m LEDbreach optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1 C13723_MIRELLA-RZL SAMSUNG EID LC016D / LC019D / LC026D / LC033D FWHM / FVT 44.0° / 82.0° Efficiency 83 % Peak intensity 1 2 cd/m LEDbreach optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1	Peak intensity	1.2 cd/lm	
Required components: C 15570_LENA-STD-BASE2-VER01318 C 1333_MIRELA-CL SAMASUNC LED Colliso / LC0190 / LC028D / LC033D FWHM / FVTM 47.0° / 85.0° Ellielinency 74% Pask intensity 1 od/m LEDbreach optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1 C 13723_MIRELA-RZL Ellionency 83 % Pask intensity 1.2 colm LEDbreach optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1 C 13723_MIRELA-RZL Ellionency 83 % Pask intensity 1.2 colm LEDbreach optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1 Ellionency 83 % Pask intensity 2.5 col/m LEDbreach optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1	LEDs/each optic	1	
C16570_LENA-STD-BASE2-VER013-18 C13333_MIRELLA-CL ED ED ED ED ED ED ED ED ED ED	Light colour	White	
C13333_MIRELA-CL SAMASUNG LED CONFID / LC026D / LC033D FWHM / FVTM 47.0° / 85.0° EMBINENTIX 1 cd/m LEDS/each optic 1 LEDS/each optic 1 C13723_MIRELA-R2L SAMASUNG LED C016D / LC026D / LC033D FWHM / FVTM 44.0° / 82.0° EMBIONOR 83 % Peak intensity 12 cd/m LEDS/each optic 1 LEDM C000C FWHK / FVTM 45.0° / 73.0° EMBIONOR 93.0° EMBIONOR 93.0	Required compone	ents:	
SAMSUNG LD LO16D/LC019D/LC028D/LC03D FWH/FVTM 470°/850° Efficiency 74% Peak intensity 1 cd/in LDD/seah optic 1 LDD/seah optic 1 C13723_MIRELLA-RZL SAMSUNG LD LO16D/LC019D/LC028D/LC03D FWH/FVTM 440°/820° Efficiency 83% Peak intensity 1.2 cd/in LDD/seah optic 1 LDM/seah			
SAMSUNG LED LC016D / LC019D / LC026D / LC033D FVHM / FVTM 47.0° / 85.0° Efficiency 74 % Peak intensity 1 collm LEDseeach optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1 C13723_MIRELLA-RZL SAMSUNG LED LC016D / LC019D / LC026D / LC033D FWHM / FVTM 44.0° / 82.0° Efficiency 83 % Peak intensity 1 2 collm LEDS/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1 SAMSUNG LED LC020C FWHM / FVTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 collm LED LC020C FVHM / FVTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 collm LEDS/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1	C13333_MIREL	LA-CL	
LED LC016D / LC019D / LC026D / LC033D FWHM / FVTTM 470' / 85.0° Elficiency 74 % Peak intensity 1 cd/m LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET1 C13723_MIRELLA-RZL			30" <u>120</u> 25" of 25"
FWHM / FWTM 47.0° / 85.0° Efficiency 74 % Peak intensity 1 od/m LEDvieach optic 1 Light colour While Required components: F15859_HEKLA-SOCKET-I C13723_MIRELLA-RZL ED LC016D / LC019D / LC026D / LC033D FWHM / FWTM 44.0° / 82.0° Efficiency 83 % Peak intensity 1.2 cd/m LEDvieach optic 1 Light colour While Required components: F15859_HEKLA-SOCKET-I Efficiency 88 % Peak intensity 2.5 cd/m LEDvieach optic 1 Light colour While Required components: F15859_HEKLA-SOCKET-I	SAMSI	JNG	<u>86</u>
Efficiency 74 % Peak intensity 1 cd/m LEDS/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1 C13723_MIRELLA-RZL	LED		
Peak intensity 1 cd/lm LEDs/ach optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1 C13723_MIRELLA-RZL	FWHM / FWTM	47.0° / 85.0°	
LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I C13723_MIRELLA-RZL SAMSSUNG LED LCO16D / LCO19D / LCO26D / LCO33D FWHM / FWTM 44.0° / 82.0° Efficiency 83 % Peak intensity 1.2 cd/in LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I SAMSSUNG LED LCO20C FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 cd/in LEDs/each optic 1 Light colour White Required components:	Efficiency	74 %	
Light colour White Required components: F15859_HEKLA-SOCKET-1 C13723_MIRELLA-RZL SAMSUNG LED LC016D / LC019D / LC026D / LC033D FWHM / FWTM 44.0° / 82.0° Efficiency 83 % Peak intensity 1.2 colin LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1 SAMSUNG LED LC020C FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 colin LEDS/each optic 1 LEDS/each optic	Peak intensity	1 cd/lm	
Required components: F15859_HEKLA-SOCKET-I C13723_MIRELLA-RZL SAMSUNG LED LC016D / LC019D / LC026D / LC033D FWHM / FWTM 44.0° / 82.0° Efficiency 83 % Peak intensity 1.2 col/m LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I ED LC020C FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 col/m LEDs/each optic 1 LEDs/each optic 1 LEDs/ea	LEDs/each optic	1	
F15859_HEKLA-SOCKET-I C13723_MIRELLA-RZL SAMSUNG LED LC016D/LC019D/LC026D/LC033D FWHM/FWTM 44.0°/82.0° Efficiency 83 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I SAMSUNG LED LC020C FWHM/FWTM 25.0°/73.0° Efficiency 88 % Peak intensity 2.5 cd/lm LEDs/each optic 1 Light colour White Required components: Required components: Required components:	Light colour	White	
C13723_MIRELLA-RZL	Required compone	ents:	
SAMSUNG LED LO16D / LC019D / LC026D / LC033D FWHM / FWTM 44.0° / 82.0° Efficiency 83 % Peak intensity 1.2 cd/m LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1 SAMSUNG LED LO20C FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 cd/m LEDs/each optic 1 Light colour White Required components:	F15859_HEKLA	A-SOCKET-I	
LED LC016D / LC019D / LC026D / LC033D FWHM / FWTM 44.0° / 82.0° Efficiency 83 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1	C13723_MIREL	LA-RZL	
LED LC016D / LC019D / LC026D / LC033D FWHM / FWTM 44.0° / 82.0° Efficiency 83 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1			30* <u>309</u> 7
LED LC016D / LC019D / LC026D / LC033D FWHM / FWTM 44.0° / 82.0° Efficiency 83 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-1	SAMS	JNG	24 ²
Efficiency 83 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I SAMSSUNG LED LC020C FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 cd/lm LEDs/each optic 1 Light colour White Required components:	LED		
Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I SAMSUNG LED LC020C FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 cd/lm LEDs/each optic 1 Light colour White Required components:	FWHM / FWTM		
LEDs/each optic 1 Light colour White Required components: F15859_HEKLA-SOCKET-I SAMSUNG LED LC020C FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 cd/m LEDs/each optic 1 Light colour White Required components:	Efficiency	83 %	
Light colour White Required components: F15859_HEKLA-SOCKET-I SAMSUNG LED LC020C FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 cd/lm LEDs/each optic 1 Light colour White Required components:	Peak intensity	1.2 cd/lm	
Required components: F15859_HEKLA-SOCKET-I SAMSUNG LED LC020C FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 cd/lm LEDs/each optic 1 Light colour White Required components:	LEDs/each optic	1	
F15859_HEKLA-SOCKET-I	Light colour	White	5° / 100
SAMSUNG LED LC020C FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 cd/m LEDs/each optic 1 Light colour White Required components:	Required compone	ents:	
LED LC020C FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 cd/lm LEDs/each optic 1 Light colour White Required components:	F15859_HEKLA	A-SOCKET-I	
LED LC020C FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 cd/lm LEDs/each optic 1 Light colour White Required components:			
LED LC020C FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 cd/lm LEDs/each optic 1 Light colour White Required components:			30*
LED LC020C FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 cd/lm LEDs/each optic 1 Light colour White Required components:			(<u>15°</u> 0 <mark>°</mark> 15°
FWHM / FWTM 25.0° / 73.0° Efficiency 88 % Peak intensity 2.5 cd/lm LEDs/each optic 1 Light colour White Required components:	SAMSI	JNG	20 ⁴
Efficiency 88 % Peak intensity 2.5 cd/lm LEDs/each optic 1 Light colour White Required components:			235 ¹ 0 ⁴ 25 ³
Peak intensity 2.5 cd/lm LEDs/each optic 1 Light colour White Required components:	LED	LC020C	23 ⁴ 0 ⁴ 23 ⁵
LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM	LC020C 25.0° / 73.0°	
Light colour White Required components:	LED FWHM / FWTM Efficiency	LC020C 25.0° / 73.0° 88 %	
Required components:	LED FWHM / FWTM Efficiency Peak intensity	LC020C 25.0° / 73.0° 88 % 2.5 cd/lm	
	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC020C 25.0° / 73.0° 88 % 2.5 cd/lm 1	
	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC020C 25.0° / 73.0° 88 % 2.5 cd/lm 1 White	
34.	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC020C 25.0° / 73.0° 88 % 2.5 cd/lm 1 White ents:	



<u> 21 INI 21</u>	JNG		90*	90
LED	LC020C G2			
FWHM / FWTM	27.0° / 74.0°		73	
Efficiency	85 %		60.5	
Peak intensity	2.2 cd/lm			
LEDs/each optic	1			
Light colour	White		42.4	
Required compone	ents:		1600	HA
F15859_HEKLA	-SOCKET-I			
			30° 15° 0°	353 3
TRIDON			90*	9
LED	SLE G7 LES09			
FWHM / FWTM	27.0° / 73.0°		75*	
Efficiency	89 %			
Peak intensity	2.3 cd/lm			
LEDs/each optic	1			
Light colour	White		45*	
Required compone	ents:			-+
F15255_HEKLA				
_				$/ \setminus X$
			30+ 3456	
			15° 0°	15°
TRIDON			90*	90
			50.	
LED	SLE G7 LES09		25	
LED FWHM / FWTM		5	25	
	SLE G7 LES09		90° 73° 60°	
FWHM / FWTM	SLE G7 LES09 36.0° / 75.0°		64. 22.	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	SLE G7 LES09 36.0° / 75.0° 82 %		27 27 6,4 00	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White		97 75 661 67 67	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White ents:		97 73 99 90 90 90	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White ents: -SOCKET-C		97 73 00 00 00 00 00 00 00 00 00 00 00 00 00	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White ents: -SOCKET-C		73 63 07 00	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White ents: -SOCKET-C		73 63 07 00	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA C13723_MIRELI	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White ents: -SOCKET-C LA-RZL		75 64 67 67 67 110 110 110 110	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White ents: -SOCKET-C LA-RZL			
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA C13723_MIRELI	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White ents: -SOCKET-C LA-RZL		75 64 67 67 67 110 110 110 110	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA C13723_MIRELI	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White white socket-c LA-RZL SLE G7 LES13			
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA C13723_MIRELI	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White ents: -SOCKET-C LA-RZL SLE G7 LES13 39.0° / 80.0°			
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA C13723_MIRELI TRIDON LED FWHM / FWTM Efficiency Peak intensity	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White ents: -SOCKET-C LA-RZL SLE G7 LES13 39.0° / 80.0° 84 %			
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA C13723_MIRELI TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White onts: -SOCKET-C LA-RZL SLE G7 LES13 39.0° / 80.0° 84 % 1.4 cd/lm			
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA C13723_MIRELI	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White onts: -SOCKET-C LA-RZL SLE G7 LES13 39.0° / 80.0° 84 % 1.4 cd/lm 1 White			
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA C13723_MIRELI TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White Ponts: -SOCKET-C LA-RZL SLE G7 LES13 39.0° / 80.0° 84 % 1.4 cd/lm 1 White Ponts: -SOCKET:			
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA C13723_MIRELI TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES09 36.0° / 75.0° 82 % 1.5 cd/lm 1 White Ponts: -SOCKET-C LA-RZL SLE G7 LES13 39.0° / 80.0° 84 % 1.4 cd/lm 1 White Ponts: -SOCKET:			



TRIDON			90°
			90°
LED	SLE G7 LES13		73*
FWHM / FWTM	44.0° / 82.0°		
Efficiency	76 %		60 ¹ 400
Peak intensity	1.1 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required compone			
F15859_HEKLA			
C13723_MIREL	LA-RZL		30-
XICATO)		125° 1280 125°
LED	XOB 14.5 mm		
FWHM / FWTM	42.0° / 81.0°		
Efficiency	84 %		
Peak intensity	1.3 cd/lm		Eas-
LEDs/each optic	1		
Light colour	White		97° 000
Required compone			
F15859_HEKLA			
1.10000_112112			1220
			30° 13°
VIC AT			
XICATO		and the second division of the second divisio	90*
	XOB 14.5 mm		20 ¹
			25-
LED	XOB 14.5 mm		25°
LED FWHM / FWTM	XOB 14.5 mm 46.0° / 84.0°		95* 75 05
LED FWHM / FWTM Efficiency	XOB 14.5 mm 46.0° / 84.0° 77 %		
LED FWHM / FWTM Efficiency Peak intensity	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm		50° 72° 50° 50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White		25- 25- 25- 25- 25- 25- 25- 25- 25- 20- 20- 20- 20- 20- 20- 20- 20- 20- 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White ents:		50 ⁴ 72 60 ⁵ 67 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White ents: -SOCKET-I		95* 95 95 95 96 96 96 96 96
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White ents: -SOCKET-I		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White ents: x-SOCKET-I LA-RZL		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White ents: x-SOCKET-I LA-RZL		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White ents: SOCKET-I LA-RZL		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White ents: -SOCKET-I LA-RZL		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White ents: -SOCKET-I LA-RZL XOB 6 mm 20.0° / 65.0°		73 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL XICCATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White ents: -SOCKET-I LA-RZL XOB 6 mm 20.0° / 65.0° 87 %		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL XICCATC LED FWHM / FWTM Efficiency Peak intensity	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White ents: XOCKET-I LA-RZL XOB 6 mm 20.0° / 65.0° 87 % 3.4 cd/lm		73 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL XICCATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White ents: XOKET-I LA-RZL XOB 6 mm 20.0° / 65.0° 87 % 3.4 cd/lm 1 White		73 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL XICCATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White ents: XOB 6 mm 20.0° / 65.0° 87 % 3.4 cd/lm 1 White ents:		73: 000 500
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL XICATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White ents: XOB 6 mm 20.0° / 65.0° 87 % 3.4 cd/lm 1 White ents:		73: 000 500
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL EXICATC ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 14.5 mm 46.0° / 84.0° 77 % 1.1 cd/lm 1 White ents: XOB 6 mm 20.0° / 65.0° 87 % 3.4 cd/lm 1 White ents:		73: 000 500



XICATO	0		30 ⁴	90
LED	XOB 6 mm			
FWHM / FWTM	31.0° / 72.0°		75	
Efficiency	80 %			
Peak intensity	1.6 cd/lm		60.5	X
LEDs/each optic	1			
Light colour	White		95-	
Required compone			1200	
F15255_HEKL				
C13723_MIREL				
			30 ⁹ 15 ⁹ 0 ⁶ 3	30 5°
XICAT	C	 -	50*	90
LED	XOB 9.8 mm			
FWHM / FWTM	36.0° / 76.0°		75	75
Efficiency	80 %		400	\sim \sim
Peak intensity	1.4 cd/lm		63-	
LEDs/each optic	1			
Light colour	White		er / / /	4
Required compone	ents:			
F15255_HEKL	A-SOCKET-C		1200	
C13723_MIREL	LLA-RZL		¥*	34
XICATO)		90°	5° 90
LED	XOB 9.8 mm			
FWHM / FWTM	27.0° / 74.0°		25	~ ~
Efficiency	88 %			
Peak intensity	2.3 cd/lm			$\langle \rangle$
LEDs/each optic	1			
Light colour	White			\times
Required compone	ents:			
F15255_HEKL/	A-SOCKET-C			
C13723_MIREL	LLA-RZL		30" 200	
			15° 0° 1	5°



OPTICAL RESULTS (SIMULATED):

CITIZEN		
		90 ⁻
LED FWHM / FWTM	CLL02x/CLU02x (LES10) 27.3° / 65.3°	70
	87 %	
Efficiency	87 % 2.7 cd/lm	501 · · · · · · · · · · · · · · · · · · ·
Peak intensity	2.7 co/im 1	
LEDs/each optic	White	45%
Light colour Required components:	White	
F15255_HEKLA-SO	CKET C	
1 15255_HEREA-500		2430
		10 ⁶ 0 ⁹ 15 ⁹ 3
	DS	90*
LED	LUXEON M/MX	
FWHM / FWTM	20.0° / 41.0°	
Efficiency	89 %	
Peak intensity	4.4 cd/lm	1000 N
LEDs/each optic	1	
Light colour	White	er e
Required components:		320
F15255_HEKLA-SO	CKET-C	
		30° 30
		15° 480×0 15°
ΜΝΙCΗΙΛ		
\sim		90 ⁺ 90
LED	COB L-Type (LES 11)	90°
	COB L-Type (LES 11) 32.0° / 71.0°	<u>8</u> *
LED		
LED FWHM / FWTM	32.0° / 71.0°	94* 9 71 7 61 00 6
LED FWHM / FWTM Efficiency	32.0° / 71.0° 88 %	94* 9 72 94 00 0
LED FWHM / FWTM Efficiency Peak intensity	32.0° / 71.0° 88 % 2.1 cd/lm	94 ¹ 72 64 67 67
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	32.0° / 71.0° 88 % 2.1 cd/lm 1	50 50 C
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	32.0° / 71.0° 88 % 2.1 cd/lm 1 White	94 ³ 77 64 66 66 66 66 66 66 66 66 66 66 66 66
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	32.0° / 71.0° 88 % 2.1 cd/lm 1 White	54 5 75 7 64 7 60 7 60 7 60 7 60 7 60 7 60 7 60 7 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	32.0° / 71.0° 88 % 2.1 cd/lm 1 White	94 ⁴ 5 72 64 64 67 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 components: F15858_HEKLA-SO	32.0° / 71.0° 88 % 2.1 cd/lm 1 White	94 ⁴ 70 64 97 97 97 97 90 90 90 90 90 90 90 90 90 90 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOU	32.0° / 71.0° 88 % 2.1 cd/lm 1 White CKET-H	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOU	32.0° / 71.0° 88 % 2.1 cd/lm 1 White CKET-H COB T-Type	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOU	32.0° / 71.0° 88 % 2.1 cd/lm 1 White CKET-H COB T-Type 21.0° / 43.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOU	32.0° / 71.0° 88 % 2.1 cd/lm 1 White CKET-H COB T-Type 21.0° / 43.0° 88 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOU	32.0° / 71.0° 88 % 2.1 cd/lm 1 White CKET-H COB T-Type 21.0° / 43.0° 88 % 4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOU Efficiency Peak intensity LEDs/each optic	32.0° / 71.0° 88 % 2.1 cd/lm 1 White CKET-H COB T-Type 21.0° / 43.0° 88 % 4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOU Efficiency Peak intensity LEDs/each optic Light colour	32.0° / 71.0° 88 % 2.1 cd/lm 1 White CKET-H COB T-Type 21.0° / 43.0° 88 % 4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOU WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	32.0° / 71.0° 88 % 2.1 cd/lm 1 White CKET-H COB T-Type 21.0° / 43.0° 88 % 4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOU WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	32.0° / 71.0° 88 % 2.1 cd/lm 1 White CKET-H COB T-Type 21.0° / 43.0° 88 % 4 cd/lm 1 White	9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOU WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	32.0° / 71.0° 88 % 2.1 cd/lm 1 White CKET-H COB T-Type 21.0° / 43.0° 88 % 4 cd/lm 1 White	9 - 30



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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