

PRODUCT DATASHEET F15560_MIRELLA-G2-W

MIRELLA-G2-W

~35° 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-W **Type** Reflector

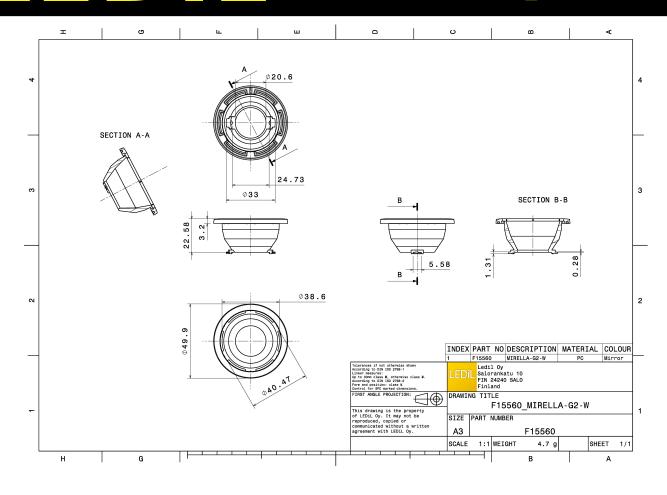
Material PC

Colour	Finish	Coating
metal		

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F15560_MIRELLA-G2-W	336		28	3.3
» Box size: 480 x 280 x 300 mm				

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



bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15253_HEKLA C13723_MIREL	-SOCKET-A		20, 0, 22, 0, 22, 26, 26, 26, 26, 26, 26, 26, 26, 26
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15253_HEKLA			12, 0, 0, 15, 3, 20, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA			30. 30. 30. 30. 30. 30. 30. 30.
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA C13723_MIREL	-SOCKET-C		20- 20- 20- 20- 20- 20- 20- 20-



bridgelux. LED V9 HD Gen7 FWHM / FWTM 45.0° / 84.0° Efficiency 79 % Peak intensity 1.1 cd/lm	90
FWHM / FWTM 45.0° / 84.0° Efficiency 79 % Peak intensity 1.1 cd/lm	
Efficiency 79 % Peak intensity 1.1 cd/lm	75
Peak intensity 1.1 cd/lm	
	× ×
LEDs/each optic 1	$ \setminus \times$
Light colour White	
Required components:	h
F15859_HEKLA-SOCKET-I	\wedge
C13723_MIRELLA-RZL	
34" 22 28	15° 30
bridgelux	90
LED V9 HD Gen7	
FWHM / FWTM 37.0° / 80.0°	10
Efficiency 87 %	$X \setminus X$
Peak intensity 1.4 cd/lm	
LEDs/each optic 1	XX
Light colour White	
Required components:	
F15859_HEKLA-SOCKET-I	A
	1 7
	15*
bridgelux.	90
LED VERO10	75
LED VERO10 FWHM / FWTM 38.0° / 79.0°	
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/lm	- 25
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/lm LEDs/each optic 1	
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/lm	
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: ************************************	
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White	5
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: ************************************	
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: ************************************	
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: F15616_HEKLA-SOCKET-F	
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: F15616_HEKLA-SOCKET-F	
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: F15616_HEKLA-SOCKET-F brdgeLX LED Vesta DTW 13mm (21W)	
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/m LEDs/each optic 1 Light colour White Required components: F15616_HEKLA-SOCKET-F bridgeluk LED Vesta DTW 13mm (21W) FWHM / FWTM 49.0° / 88.0°	
LED VERO10 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/m LEDs/each optic 1 Light colour White Required components: F15616_HEKLA-SOCKET-F bridgetux LED LED Vesta DTW 13mm (21W) FWHM / FWTM 49.0° / 88.0° Efficiency 75 %	
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: F15616_HEKLA-SOCKET-F bridgetuk LED Vesta DTW 13mm (21W) FWHM / FWTM 49.0° / 88.0° Efficiency 75 % Peak intensity 0.9 cd/lm	
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: F15616_HEKLA-SOCKET-F brdgeLX. LED Vesta DTW 13mm (21W) FWHM / FWTM 49.0° / 88.0° Efficiency 75 % Peak intensity 0.9 cd/lm LEDs/each optic 1	
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/m LEDs/each optic 1 Light colour White Required components: F15616_HEKLA-SOCKET-F bridgeLX LED Vesta DTW 13mm (21W) FWHM / FWTM 49.0° / 88.0° Efficiency 75 % Peak intensity 0.9 cd/m LEDs/each optic 1 Light colour Tunable White	
LED VERO10 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: F15616_HEKLA-SUCKET-F bridgeLR LED Vesta DTW 13mm (21W) FWHM / FWTM 49.0° / 88.0° Efficiency 75 % Peak intensity 0.9 cd/lm LEDs/each optic 1 Light colour Tunable White Required components:	
LED VER010 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/m LEDs/each optic 1 Light colour White Required components: F15616_HEKLA-SUCKET-F bridgeLV. LED Vesta DTW 13mm (21W) FWHM / FWTM 49.0° / 88.0° Efficiency 75 % Peak intensity 0.9 cd/m LEDs/each optic 1 Light colour Tunable White Required components: C16142_HEKLA-SUCKET-K	
LED VERO10 FWHM / FWTM 38.0° / 79.0° Efficiency 91 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: F15616_HEKLA-SUCKET-F	



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bridgelux.		90°	90*
LED	Vesta DTW 13mm (21W)		
FWHM / FWTM	47.0° / 83.0°	25	
Efficiency	84 %		
Peak intensity	1.1 cd/lm		400
LEDs/each optic	1		
Light colour	Tunable White	gr.	45°
Required compone			
C16142_HEKLA			
Bender Wirth: 49			
	· · · /F		
		305	1830 32. 30.
bridgelux.		90 ⁴	90*
LED	Vesta DTW 9mm (4W/6W/12W)		
FWHM / FWTM	41.0° / 79.0°	73	
Efficiency	80 %		400
Peak intensity	1.2 cd/lm		
LEDs/each optic	1		
Light colour	White	g,	63.
Required compone	ents:		
C16142_HEKLA			
C13723_MIREL			
Bender Wirth: 49		300	1230
		/ 13 ⁴ /	o° 15°
bridgelux.		50°	90*
bridgelux. LED	Vesta TW 13mm (25W) CSP	50°	50,
	Vesta TW 13mm (25W) CSP 47.0° / 86.0°	9)* 75	90* 200
LED		95°	20
LED FWHM / FWTM	47.0° / 86.0°	95* 73*	200
LED FWHM / FWTM Efficiency	47.0° / 86.0° 75 %	99 ⁴	200 40
LED FWHM / FWTM Efficiency Peak intensity	47.0° / 86.0° 75 % 0.9 cd/lm	5° 5°	200 900 000 000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	47.0° / 86.0° 75 % 0.9 cd/lm 1 White	55 ⁴ 55 ⁴ 55 ⁴	90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	47.0° / 86.0° 75 % 0.9 cd/lm 1 White ints:		200 400 800 800 800
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	47.0° / 86.0° 75 % 0.9 cd/lm 1 White ents: N-SOCKET-K		20 20 20 20 20 20 20 20 20 20 20 20 20 2
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	47.0° / 86.0° 75 % 0.9 cd/lm 1 White Ints: IN-SOCKET-K LA-RZL		200 10°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 43	47.0° / 86.0° 75 % 0.9 cd/lm 1 White Ints: IN-SOCKET-K LA-RZL		200 000 000 000 000 000 000 000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 43	47.0° / 86.0° 75 % 0.9 cd/lm 1 White Ints: IN-SOCKET-K LA-RZL 92 Typ L8		90 100 100 100 100 100 100 100 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 43	47.0° / 86.0° 75 % 0.9 cd/lm 1 White Ints: IN-SOCKET-K LA-RZL 92 Typ L8		50 50 50 50 50 50 50 50 50 50 50 50 50 5
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 49 bridgeLux, LED FWHM / FWTM	47.0° / 86.0° 75 % 0.9 cd/lm 1 White Ints: IN-SOCKET-K LA-RZL 22 Typ L8 Vesta TW 6mm DP 29.0° / 75.0°		90 10 10 10 10 10 10 10 10 10 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 43 bridgeLux, LED FWHM / FWTM Efficiency	47.0° / 86.0° 75 % 0.9 cd/lm 1 White Ints: -SOCKET-K LA-RZL 32 Typ L8 Vesta TW 6mm DP 29.0° / 75.0° 83 %		50 50 50 50 50 50 50 50 50 50 50 50 50 5
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 43 bridgeLux LED FWHM / FWTM Efficiency Peak intensity	47.0° / 86.0° 75 % 0.9 cd/lm 1 White Ints: IN-SOCKET-K LA-RZL 92 Typ L8 Vesta TW 6mm DP 29.0° / 75.0° 83 % 1.8 cd/lm		50 50 50 50 50 50 50 50 50 50 50 50 50 5
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 43 bridgeLux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	47.0° / 86.0° 75 % 0.9 cd/lm 1 White Ints: IN-SOCKET-K LA-RZL 32 Typ L8 Vesta TW 6mm DP 29.0° / 75.0° 83 % 1.8 cd/lm 1		50 50 50 50 50 50 50 50 50 50 50 50 50 5
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 49 bridgeLuX LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	47.0° / 86.0° 75 % 0.9 cd/lm 1 White I White White Vesta TW 6mm DP 29.0° / 75.0° 83 % 1.8 cd/lm 1 White		50 50 50 50 50 50 50 50 50 50 50 50 50 5
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 49 bridgeLux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	47.0° / 86.0° 75 % 0.9 cd/lm 1 White I White White Vesta TW 6mm DP 29.0° / 75.0° 83 % 1.8 cd/lm 1 White I White I N N N N N N N N N N N N N		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 45 bridgeLux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	47.0° / 86.0° 75 % 0.9 cd/lm 1 White I White White Vesta TW 6mm DP 29.0° / 75.0° 83 % 1.8 cd/lm 1 White I SOCKET-K		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 49 bridgeLux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	47.0° / 86.0° 75 % 0.9 cd/lm 1 White I White White Vesta TW 6mm DP 29.0° / 75.0° 83 % 1.8 cd/lm 1 White I SOCKET-K		100 100 100 100 100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 49 bridgeLux, LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	47.0° / 86.0° 75 % 0.9 cd/lm 1 White I White White Vesta TW 6mm DP 29.0° / 75.0° 83 % 1.8 cd/lm 1 White I SOCKET-K		100 100 100 100 100 100 100 100



bridgelux.		90*
LED	Vesta TW 6mm DP	
FWHM / FWTM	41.0° / 81.0°	73.
Efficiency	75 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	gr gr
Required componer	nts:	
C16142_HEKLA		
C13723_MIRELL	A-RZL	
Bender Wirth: 50	4 Тур L8	30- 1220 30-
		153 0 ⁰ 15 ⁵
bridgelux.		90 [*] 90 [*]
LED	Vesta TW 9mm (12W) CSP	
FWHM / FWTM	40.0° / 80.0°	
Efficiency	78 %	60* 400 60*
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required componer	nts:	
C16142_HEKLA	SOCKET-K	
C13723_MIRELL	A-RZL	
Bender Wirth: 48	9 Typ L8	30- 3200 35
1		15° 0° 15°
bridgelux		25 [°] 6 [°] 15 [°]
bridgelux.	Vorta TW 0mm (12W) CSP	<u>50</u> ⁴ <u>50</u> ⁴ <u>50</u> ⁴
LED	Vesta TW 9mm (12W) CSP	25 [°] 6 [°] 15 [°]
LED FWHM / FWTM	34.0° / 76.0°	23 ² 6 ³ 15 ²
LED FWHM / FWTM Efficiency	34.0° / 76.0° 88 %	64. 52. 53. 55. 60. 15. 15.
LED FWHM / FWTM Efficiency Peak intensity	34.0° / 76.0° 88 % 1.7 cd/lm	23 ⁴ 60 13 ⁵ 24 60 62
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	34.0° / 76.0° 88 % 1.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	34.0° / 76.0° 88 % 1.7 cd/lm 1 White	22 ⁵ 0 ² 12 ⁷
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	34.0° / 76.0° 88 % 1.7 cd/lm 1 White nts:	25 ⁴ 6 ³ 15 ³
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	34.0° / 76.0° 88 % 1.7 cd/lm 1 White hts: SOCKET-K	25 [°] 6 ⁰ 15 [°] 6 [°] 6 [°] 8 [°] 8 [°] 8 [°] 150 150 150 150
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	34.0° / 76.0° 88 % 1.7 cd/lm 1 White hts: SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	34.0° / 76.0° 88 % 1.7 cd/lm 1 White hts: SOCKET-K 0 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	34.0° / 76.0° 88 % 1.7 cd/lm 1 White hts: SOCKET-K 0 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	34.0° / 76.0° 88 % 1.7 cd/lm 1 White hts: SOCKET-K 0 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	34.0° / 76.0° 88 % 1.7 cd/lm 1 White hts: SOCKET-K 0 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	34.0° / 76.0° 88 % 1.7 cd/lm 1 White hts: SOCKET-K 0 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 CITTIZE LED FWHM / FWTM	34.0° / 76.0° 88 % 1.7 cd/lm 1 White hts: SOCKET-K 0 Typ L8 N CLC020 Series (Dim-To-Warm) 42.0° / 81.0°	
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	34.0° / 76.0° 88 % 1.7 cd/lm 1 White tts: SOCKET-K 0 Typ L8 N CLC020 Series (Dim-To-Warm) 42.0° / 81.0° 77 %	
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	34.0° / 76.0° 88 % 1.7 cd/lm 1 White tts: SOCKET-K 0 Typ L8 N CLC020 Series (Dim-To-Warm) 42.0° / 81.0° 77 % 1.1 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 LEDs/each optic	34.0° / 76.0° 88 % 1.7 cd/lm 1 White tts: SOCKET-K 0 Typ L8	
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	34.0° / 76.0° 88 % 1.7 cd/lm 1 White tts: SOCKET-K 0 Typ L8 N CLC020 Series (Dim-To-Warm) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White tts: 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 component	34.0° / 76.0° 88 % 1.7 cd/lm 1 White tts: SOCKET-K 0 Typ L8 N CLC020 Series (Dim-To-Warm) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White tts: 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	34.0° / 76.0° 88 % 1.7 cd/lm 1 White tts: SOCKET-K 0 Typ L8 N CLC020 Series (Dim-To-Warm) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White tts: SOCKET-K A-RZL	



CITIZE	N	30*
	CLC020 Series (Dim-To-Warm)	75
FWHM / FWTM	36.0° / 76.0°	
Efficiency	85 %	81
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required componen		120
C16142_HEKLA	-SOCKET-K	
		30°
CITIZE	Ν	50 ⁴ 50 ⁴
LED	CLU025/CLU027 (LES 6)	
FWHM / FWTM	31.0° / 77.0°	
Efficiency	90 %	
Peak intensity	1.9 cd/lm	
LEDs/each optic	1	
Light colour	White	a. 120 a.
Required componer	nts:	
F15255_HEKLA-	-SOCKET-C	
		30* 200 34*
CITIZE	Ν	9)* 9)*
		90 ⁴
LED	CLU700/701/702/703	25° 25°
LED FWHM / FWTM	CLU700/701/702/703 29.0° / 77.0°	50° 50°
LED FWHM / FWTM Efficiency	CLU700/701/702/703 29.0° / 77.0° 91 %	
LED FWHM / FWTM Efficiency Peak intensity	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA-	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White nts: -SOCKET-C	59° 59' 73° 60° 90° 60° 90° 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White nts: -SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA- C13723_MIRELL	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White nts: -SOCKET-C _A-RZL	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA- C13723_MIRELL	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White nts: -SOCKET-C _A-RZL	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA- C13723_MIRELL C13723_MIRELL	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White nts: -SOCKET-C _A-RZL N CLU700/701/702/703	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA- C13723_MIRELL C13723_MIRELL ED LED FWHM / FWTM	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White nts: -SOCKET-C _A-RZL N CLU700/701/702/703 29.0° / 77.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA- C13723_MIRELL C13723_MIRELL ED FWHM / FWTM Efficiency	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White nts: -SOCKET-C _A-RZL N CLU700/701/702/703 29.0° / 77.0° 92 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA- C13723_MIRELL C13723_MIRELL ED FWHM / FWTM Efficiency Peak intensity	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White nts: SOCKET-C _A-RZL N CLU700/701/702/703 29.0° / 77.0° 92 % 2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA- C13723_MIRELL C13723_MIRELL ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White nts: SOCKET-C _A-RZL N CLU700/701/702/703 29.0° / 77.0° 92 % 2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component F15255_HEKLA- C13723_MIRELL C13723_MIRELL ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White nts: SOCKET-C _A-RZL N CLU700/701/702/703 29.0° / 77.0° 92 % 2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA- C13723_MIRELL C13723_MIRELL ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White nts: SOCKET-C _A-RZL N CLU700/701/702/703 29.0° / 77.0° 92 % 2 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component F15255_HEKLA- C13723_MIRELL C13723_MIRELL ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White nts: SOCKET-C _A-RZL N CLU700/701/702/703 29.0° / 77.0° 92 % 2 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA- C13723_MIRELL C13723_MIRELL C13723_MIRELL ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CLU700/701/702/703 29.0° / 77.0° 91 % 2 cd/lm 1 White nts: SOCKET-C _A-RZL N CLU700/701/702/703 29.0° / 77.0° 92 % 2 cd/lm 1 White nts:	



CITIZE	N			90°	90*
	CLU710/711			75	1 10
FWHM / FWTM	37.0° / 79.0°			400	$\gamma \sim \gamma$
Efficiency	87 %			60°	60.
Peak intensity	1.5 cd/lm				
LEDs/each optic	1			800	
Light colour	White				
Required compone F15859_HEKLA					
F 13639_HERLA	-30CKE1-1				
				30°	36*
CITIZE	N			159 1690	15*
				30°	90*
LED	CLU7A2/7A3			75*	75
FWHM / FWTM	24.0° / 77.0°				
Efficiency	89 %			60°	60.
Peak intensity	2.1 cd/lm				$(\land \land \land)$
LEDs/each optic	1		-		$\wedge \times$
Light colour	White			eg	
Required compone				1600	H
F15255_HEKLA	-SOCKET-C				
				30° 15° 0°	36.0
				- 10	~
CITIZE	N			90*	90*
		1		<u>80*</u>	90*
CITIZE	LCN-C01B (Tunable White) 42.0° / 81.0°			30*	30,
LED	LCN-C01B (Tunable White)			97 97	25.
LED FWHM / FWTM	LCN-C01B (Tunable White) 42.0° / 81.0°			93* 29 60* 60	50* 50*
LED FWHM / FWTM Efficiency	LCN-C01B (Tunable White) 42.0° / 81.0° 77 %			99* 73 60* 60	39'
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/lm		1	g- 60* 25	90°
LED FWHM / FWTM Efficiency Peak intensity	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White			g* 6/5 20 20	99 [°]
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White ints:			97* 97 97 97 90 90 90 90	99 [*]
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White Ints: I-SOCKET-K			93* 60* 67* 69* 69* 69* 69* 60* 60* 60* 60*	59 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White Ints: IN-SOCKET-K LA-RZL			20- 20- 20- 20- 20- 20- 20- 20-	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 48	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White Ints: IN-SOCKET-K LA-RZL 81 Typ L8			24 25 26 27 20 20 20 20 20 20 20 20 20 20	10° 10° 10° 10° 10° 10° 10° 10°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 48	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/Im 1 White Ints: IN-SOCKET-K LA-RZL 81 Typ L8				15'
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 48	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White Ints: IN-SOCKET-K LA-RZL 81 Typ L8 N LCN-C01B (Tunable White)				15'
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 48 CITTIZE LED FWHM / FWTM	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White Ints: INSOCKET-K LA-RZL 81 Typ L8 N LCN-C01B (Tunable White) 42.0° / 81.0°				15'
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White white white MSOCKET-K LA-RZL 81 Typ L8 N LCN-C01B (Tunable White) 42.0° / 81.0° 77 %				12,0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency Peak intensity	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White Ints: INSOCKET-K LA-RZL 81 Typ L8 N LCN-C01B (Tunable White) 42.0° / 81.0°				12,0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 44 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White white white SOCKET-K LA-RZL 81 Typ L8 N LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/lm 1				12°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 48 CI3723_MIREL Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White white white SOCKET-K LA-RZL 81 Typ L8 N LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/lm 1 White				12°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/Im 1 White white white SOCKET-K LA-RZL 81 Typ L8 N LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/Im 1 White white states of the states of				35*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/Im 1 White white white white N LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/Im 1 White white SOCKET-K				12°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/Im 1 White white white SOCKET-K LA-RZL X LCN-C01B (Tunable White) 42.0° / 81.0° 77 % 1.1 cd/Im 1 White sockET-K LA-RZL				15'



		90,	90*
LED	CMA1516		
FWHM / FWTM	40.0° / 82.0°		
Efficiency	88 %		$\sim n \sim$
Peak intensity	1.3 cd/lm	69 ¹	
LEDs/each optic	1		
Light colour	White	9 ⁴ 000	45*
Required component			
F15256_HEKLA			
			A
		25° 07	15°
		Bo*	90°
LED	CMT14xx		
FWHM / FWTM	41.0° / 82.0°		1/1/
Efficiency	88 %	ee-	
Peak intensity	1.3 cd/lm		$(\land \lor)$
LEDs/each optic	1		
Light colour	White		
Required compone	nts:		
F15255_HEKLA	-SOCKET-C		
		127	- A
		34	300
CREE ÷		20	90*
LED LEDS	CXA/B 13xx		
FWHM / FWTM	32.0° / 78.0°	31	7.75
Efficiency	91 %		
-	1.8 cd/lm		50°
Peak intensity			
LEDs/each optic	1		a.
LEDs/each optic Light colour	1 White	o;	67
LEDs/each optic Light colour Required compone	1 White nts:		
LEDs/each optic Light colour	1 White nts:		
LEDs/each optic Light colour Required compone	1 White nts:		
LEDs/each optic Light colour Required compone	1 White nts:		
LEDs/each optic Light colour Required compone	1 White nts:		
LEDs/each optic Light colour Required componen F15956_HEKLA	1 White nts: -SOCKET-J		57 30 ⁴
LEDs/each optic Light colour Required componel F15956_HEKLA	1 White nts: -SOCKET-J CXA/B 13xx		
LEDs/each optic Light colour Required componen F15956_HEKLA:	1 White nts: -SOCKET-J		30*
LEDs/each optic Light colour Required componen F15956_HEKLA	1 White nts: -SOCKET-J CXA/B 13xx 30.0° / 77.0° 92 %		
LEDs/each optic Light colour Required componen F15956_HEKLA: CREE LED FWHM / FWTM Efficiency Peak intensity	1 White nts: -SOCKET-J CXA/B 13xx 30.0° / 77.0°		
LEDs/each optic Light colour Required componen F15956_HEKLA: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	1 White nts: -SOCKET-J CXA/B 13xx 30.0° / 77.0° 92 % 1.9 cd/lm 1		
LEDs/each optic Light colour Required componen F15956_HEKLA: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	1 White nts: -SOCKET-J CXA/B 13xx 30.0° / 77.0° 92 % 1.9 cd/lm 1 White		
LEDs/each optic Light colour Required component F15956_HEKLA: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	1 White nts: -SOCKET-J CXA/B 13xx 30.0° / 77.0° 92 % 1.9 cd/lm 1 White nts:		15°
LEDs/each optic Light colour Required componen F15956_HEKLA CREECS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15956_HEKLA	1 White nts: -SOCKET-J CXA/B 13xx 30.0° / 77.0° 92 % 1.9 cd/lm 1 White nts: -SOCKET-J		15°
LEDs/each optic Light colour Required component F15956_HEKLA: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	1 White nts: -SOCKET-J CXA/B 13xx 30.0° / 77.0° 92 % 1.9 cd/lm 1 White nts: -SOCKET-J		15°



			9	30°	90*
LED	CXA/B 15xx				
FWHM / FWTM	37.0° / 79.0°		2	75'	2
Efficiency	91 %				
Peak intensity	1.6 cd/lm		•	30*	60'
LEDs/each optic	1				
Light colour	White		9	5 *	45
Required compone					
F15256_HEKLA				1230	
_				$\times \Lambda$	
			з	30.0	30
				15° 0°	15°
UMIL	.EDS		و	30°	90*
LED	LUXEON CoB 1202/1203				H-1-
FWHM / FWTM	38.0° / 79.0°		2		(T.
Efficiency	90 %			50.6	e
Peak intensity	1.5 cd/lm				VX °
LEDs/each optic	1			/ / _ svo	
Light colour	White		9	5°	45
Required compone	ents:			\times	
F15858_HEKLA	-SOCKET-H			- 1200	
			3	30%	36
				15° 0°	15.
CONTRACTOR CONTRACT	.EDS	1000	و	30*	90
		1000	9	»·	904
LED	LUXEON CoB 1202/1203		9	75- Na	90'
LED FWHM / FWTM	LUXEON CoB 1202/1203 38.0° / 79.0°		9	9°	99'
LED FWHM / FWTM Efficiency	LUXEON CoB 1202/1203 38.0° / 79.0° 90 %		9 2 9	9°	99
LED FWHM / FWTM Efficiency Peak intensity	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm		e 9 9	50 ⁴	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1		• •	544 179 1846 1800	99 99 99
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White		, 2 9	22. 204 23. 24.	50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents:		9 9 9	55° 15° 15°	50 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents:		و و و	9° 9° 9° 9° 9° 9° 9° 9° 9° 9° 9° 9° 9° 9	6, 52
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents:		9 9 9 9 9	50 ⁴ 75 75 75 75 75 75 75 75 75 75 75 75 75	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents: SOCKET-H		9 9 9 9 9 9		13 ⁴ 35
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents: SOCKET-H				57 57
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents: -SOCKET-H LUXEON CoB 1202HD				
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents: -SOCKET-H .EDS LUXEON CoB 1202HD 33.0° / 79.0°				57 57
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents: -SOCKET-H EDS LUXEON CoB 1202HD 33.0° / 79.0° 88 %				
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents: -SOCKET-H .EDS LUXEON CoB 1202HD 33.0° / 79.0°				
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents: -SOCKET-H LUXEON CoB 1202HD 33.0° / 79.0° 88 % 1.6 cd/lm 1				
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents: -SOCKET-H EDS LUXEON CoB 1202HD 33.0° / 79.0° 88 % 1.6 cd/lm 1 White				
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents: -SOCKET-H .EDS LUXEON CoB 1202HD 33.0° / 79.0° 88 % 1.6 cd/lm 1 White ents:				
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents: -SOCKET-H .EDS LUXEON CoB 1202HD 33.0° / 79.0° 88 % 1.6 cd/lm 1 White ents:			15. 16. 12. 13. 14. 14. 14. 14. 14. 14. 14. 14. 14. 14	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents: -SOCKET-H .EDS LUXEON CoB 1202HD 33.0° / 79.0° 88 % 1.6 cd/lm 1 White ents:			15. 16. 12. 13. 14. 14. 14. 14. 14. 14. 14. 14. 14. 14	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1202/1203 38.0° / 79.0° 90 % 1.5 cd/lm 1 White ents: -SOCKET-H .EDS LUXEON CoB 1202HD 33.0° / 79.0° 88 % 1.6 cd/lm 1 White ents:			15. 16. 12. 13. 14. 14. 14. 14. 14. 14. 14. 14. 14. 14	13° 13° 13°



M LUMIL	EDS	99*
LED	LUXEON CoB 1204HD	
FWHM / FWTM	40.0° / 81.0°	
Efficiency	89 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	e ^r e ^r
Required componer	nts:	
F15858_HEKLA-	SOCKET-H	
		34 34

UMIL	EDS	50 ⁺ 30 ⁺
LED	LUXEON CoB 1205HD	
FWHM / FWTM	44.0° / 83.0°	
Efficiency	87 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required componer	nts:	
F15858_HEKLA-	SOCKET-H	
		30"
	EDS	50 ⁺ 30 ⁺
		90 ⁴ 90 ⁵
	EDS LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0°	27 28 29 4 29 4 29 4 29 29 29 29 29 29 29 29 29 29 29 29 29
LED	LUXEON CX Plus CoB - HD S01H4	
LED FWHM / FWTM	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0°	
LED FWHM / FWTM Efficiency	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 %	
LED FWHM / FWTM Efficiency Peak intensity	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen Bender Wirth: 63	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White nts: 4c Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen Bender Wirth: 63	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White hts: 4c Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Bender Wirth: 63	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White hts: 4c Hekla EDS LUXEON CX Plus CoB - HD S01H4	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Bender Wirth: 63	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White hts: 4c Hekla EDS LUXEON CX Plus CoB - HD S01H4 42.0° / 82.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen Bender Wirth: 63	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White hts: 4c Hekla EDS LUXEON CX Plus CoB - HD S01H4 42.0° / 82.0° 76 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen Bender Wirth: 63	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White hts: 4c Hekla EDS LUXEON CX Plus CoB - HD S01H4 42.0° / 82.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen Bender Wirth: 63 WITH: 63 Ender Wirth: 63	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White hts: 4c Hekla EDS LUXEON CX Plus CoB - HD S01H4 42.0° / 82.0° 76 % 1.1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen Bender Wirth: 63 WHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White hts: 4c Hekla EDS LUXEON CX Plus CoB - HD S01H4 42.0° / 82.0° 76 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen Bender Wirth: 63 WIM / EVITM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White hts: 4c Hekla EDS LUXEON CX Plus CoB - HD S01H4 42.0° / 82.0° 76 % 1.1 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen Bender Wirth: 63 COMPLENT LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C13723_MIREL	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White hts: 4c Hekla EDS LUXEON CX Plus CoB - HD S01H4 42.0° / 82.0° 76 % 1.1 cd/lm 1 White hts: 	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen Bender Wirth: 63 Ender Wirth: 63 CUMIL LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON CX Plus CoB - HD S01H4 28.0° / 77.0° 84 % 1.8 cd/lm 1 White hts: 4c Hekla EDS LUXEON CX Plus CoB - HD S01H4 42.0° / 82.0° 76 % 1.1 cd/lm 1 White hts: 	



🥙 LUMIL	EDS	50 ⁺
LED	LUXEON CX Plus CoB - HD S02H6	
FWHM / FWTM	42.0° / 81.0°	
Efficiency	77 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	gr ar
Required compone	ents:	
C13723_MIREL		
Bender Wirth: 6	34c Hekla	
		20 ¹⁰ 10 ²⁰ 20
	EDS	
LED	LUXEON CX Plus CoB - HD S02H6	
FWHM / FWTM	29.0° / 77.0°	
Efficiency	84 %	
Peak intensity	1.8 cd/lm	
LEDs/each optic	1	
Light colour	White	gr ag
Required compone		
Bender Wirth: 6		
		200
		305
UMIL	.EDS	99*
	LUXEON CX Plus CoB - HD S04H9	
LED	LUXEON CX Plus CoB - HD S04H9	
LED FWHM / FWTM Efficiency	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0°	
LED FWHM / FWTM	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 %	
LED FWHM / FWTM Efficiency Peak intensity	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White ents: 34c Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White ents: 34c Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White ents: 34c Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White ents: 34c Hekla LUXEON CX Plus CoB - HD S04H9	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White ents: 34c Hekla LUXEON CX Plus CoB - HD S04H9 46.0° / 84.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White ents: 34c Hekla LUXEON CX Plus CoB - HD S04H9 46.0° / 84.0° 78 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White ents: 34c Hekla LUXEON CX Plus CoB - HD S04H9 46.0° / 84.0° 78 % 1.1 cd/lm	23°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6 WIM / WITH: 6 FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White ents: 34c Hekla LUXEON CX Plus CoB - HD S04H9 46.0° / 84.0° 78 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6 WIM / WITH: 6 WIM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White ents: 34c Hekla LUXEON CX Plus CoB - HD S04H9 46.0° / 84.0° 78 % 1.1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6 WIM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White ents: 34c Hekla LUXEON CX Plus CoB - HD S04H9 46.0° / 84.0° 78 % 1.1 cd/lm 1 White ents: LA-RZL	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6 CIUMIL LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL	LUXEON CX Plus CoB - HD S04H9 38.0° / 80.0° 85 % 1.4 cd/lm 1 White ents: 34c Hekla LUXEON CX Plus CoB - HD S04H9 46.0° / 84.0° 78 % 1.1 cd/lm 1 White ents: LA-RZL	



COMIL	EDS	90' 90'
LED		
FWHM / FWTM	LUXEON CX Plus CoB L04 / L05 (Gen2) 44.0° / 82.0°	7
Efficiency	83 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	' White	
Required compone		
Bender Wirth: 6		
Donadi Wittin 0		
		1200
		2 ⁹⁷ 35 0 ¹ 35 ⁴
UMIL	.EDS	50 ⁴
LED	LUXEON CX Plus CoB L04 / L05 (Gen2)	
FWHM / FWTM	48.0° / 87.0°	
Efficiency	75 %	
Peak intensity	1 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	ents:	
C13723_MIREL	LA-RZL	
Bender Wirth: 6	37a Hekla	
		30 ⁴ 5000 30
COMIL	.EDS	50 ¹
		50 ⁴
LED	EDS LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0°	20 ⁴ 2
LED	LUXEON CX Plus CoB M02 / M03 (Gen2)	99 [*] 9
LED FWHM / FWTM Efficiency	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0°	
LED FWHM / FWTM Efficiency Peak intensity	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm	90 ⁴ 25 92 92 92 90 90 90 90 90 90 90 90 90 90 90 90 90
LED FWHM / FWTM	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm 1 White	90 ⁴ 27 91 ² 92 92 92 92 93 90 90 90 90 90 90 90 90 90 90 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm 1 White ents:	9)* 9 75 6)* 40 6* 40 7*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 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 M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm 1 White ents: LA-RZL	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 6	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm 1 White ents: LA-RZL 41a Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 6	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm 1 White ents: LA-RZL 41a Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 6	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm 1 White ents: LA-RZL 41a Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 6	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm 1 White ents: LA-RZL 41a Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 6 C13723_MIREL Bender Wirth: 6 C13723_MIREL Bender Wirth: 6	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm 1 White ents: LA-RZL 41a Hekla EDS LUXEON CX Plus CoB M02 / M03 (Gen2) 36.0° / 79.0° 84 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 6 WILLED FWHM / FWTM Efficiency Peak intensity	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm 1 White ents: LA-RZL 41a Hekla .EDS LUXEON CX Plus CoB M02 / M03 (Gen2) 36.0° / 79.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 6 C13723_MIREL Bender Wirth: 6 C13723_MIREL Bender Wirth: 6	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm 1 White ents: LA-RZL 41a Hekla EDS LUXEON CX Plus CoB M02 / M03 (Gen2) 36.0° / 79.0° 84 % 1.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 6 COMPUTE Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm 1 White ents: LA-RZL 41a Hekla EDS LUXEON CX Plus CoB M02 / M03 (Gen2) 36.0° / 79.0° 84 % 1.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 6 COMPUTE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm 1 White ents: LA-RZL 41a Hekla EDS LUXEON CX Plus CoB M02 / M03 (Gen2) 36.0° / 79.0° 84 % 1.4 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 6 COMPUTE ENDER EDDER FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm 1 White ents: LA-RZL 41a Hekla EDS LUXEON CX Plus CoB M02 / M03 (Gen2) 36.0° / 79.0° 84 % 1.4 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL Bender Wirth: 6 COMPUTE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB M02 / M03 (Gen2) 45.0° / 84.0° 75 % 1 cd/lm 1 White ents: LA-RZL 41a Hekla EDS LUXEON CX Plus CoB M02 / M03 (Gen2) 36.0° / 79.0° 84 % 1.4 cd/lm 1 White ents:	



COMIL	EDS	30*
LED	LUXEON CX Plus CoB S01 (Gen2)	
FWHM / FWTM	41.0° / 82.0°	77
Efficiency	76 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required componer		
C13723_MIRELL		
Bender Wirth: 63	4c Hekla	
		30 ⁴ 30 ⁵ 30 ⁴
	EDS	9° 90
LED	LUXEON CX Plus CoB S01 (Gen2)	
FWHM / FWTM	28.0° / 77.0°	
Efficiency	84 %	
Peak intensity	1.8 cd/lm	
LEDs/each optic	1	
Light colour	White	gr a
Required componer		
Bender Wirth: 63		
		360
		10 0 ^h 157
	NUS	20 ⁴
	NUS CDM-6 (Dim-To-Warm)	90 ⁴ 50
LED	CDM-6 (Dim-To-Warm)	
LED FWHM / FWTM	CDM-6 (Dim-To-Warm) 30.0° / 76.0°	
LED FWHM / FWTM Efficiency	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 %	
LED FWHM / FWTM Efficiency Peak intensity	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/Im 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm 1 White nts: -SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm 1 White nts: -SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm 1 White nts: -SOCKET-K 0 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm 1 White hts: -SOCKET-K 0 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm 1 White hts: -SOCKET-K 0 Typ L8 NUS CDM-6 (Dim-To-Warm)	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm 1 White hts: -SOCKET-K 0 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm 1 White hts: -SOCKET-K 10 Typ L8 NUS CDM-6 (Dim-To-Warm) 39.0° / 81.0° 76 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm 1 White hts: SOCKET-K 0 Typ L8 NUS CDM-6 (Dim-To-Warm) 39.0° / 81.0° 76 % 1.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm 1 White hts: SOCKET-K 0 Typ L8 NUS CDM-6 (Dim-To-Warm) 39.0° / 81.0° 76 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm 1 White hts: -SOCKET-K 0 Typ L8 NUS CDM-6 (Dim-To-Warm) 39.0° / 81.0° 76 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm 1 White hts: SOCKET-K 0 Typ L8 NUS CDM-6 (Dim-To-Warm) 39.0° / 81.0° 76 % 1.2 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49 Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm 1 White hts: SOCKET-K 0 Typ L8 NUS CDM-6 (Dim-To-Warm) 39.0° / 81.0° 76 % 1.2 cd/lm 1 White hts: -SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	CDM-6 (Dim-To-Warm) 30.0° / 76.0° 84 % 1.8 cd/lm 1 White hts: SOCKET-K 0 Typ L8 NUS CDM-6 (Dim-To-Warm) 39.0° / 81.0° 76 % 1.2 cd/lm 1 White hts: SOCKET-K A-RZL	



ELUM	INUS		90*	90*
LED	CDM-9 (Dim-To-Warm)			
FWHM / FWTM	42.0° / 82.0°		75*	
Efficiency	75 %			
Peak intensity	1.1 cd/lm		80.	400
LEDs/each optic	1			
Light colour	White		45°	45
Required compone				200
C16142_HEKLA				
C13723_MIREL				
Bender Wirth: 4			36* 15*	1220 15"
(C) LUM	INUS		90*	50*
LED	CDM-9 (Dim-To-Warm)			
FWHM / FWTM	35.0° / 78.0°		73*	
Efficiency	83 %		pat	400
Peak intensity	1.5 cd/lm			
LEDs/each optic	1			
Light colour	White		45*	47.
Required compone	ents:			
C16142_HEKLA	A-SOCKET-K			A 1230
Bender Wirth: 4				
			300 100	1000 000 300
ELUM	INUS		90°	90*
LED			90*	500
	CTM-9 (Tunable White) 43.0° / 82.0°		90* 255	
LED	CTM-9 (Tunable White)		35 35	
LED FWHM / FWTM	CTM-9 (Tunable White) 43.0° / 82.0°		95 ⁴	20 40
LED FWHM / FWTM Efficiency	CTM-9 (Tunable White) 43.0° / 82.0° 75 %		94°	40
LED FWHM / FWTM Efficiency Peak intensity	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm		94 95 94	400
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White		97 95 95	80 80 80 80
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White ents:		9× 97	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White ents: A-SOCKET-K		95* 95*	40 - 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White ents: A-SOCKET-K LA-RZL		31,0 21, 22, 23, 24, 25, 25, 25, 25, 25, 25, 25, 25, 25, 25	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White ents: A-SOCKET-K LA-RZL 95 Typ L8		5°	400 600 600 600 600 600 600 600
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 4	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White ents: A-SOCKET-K LA-RZL 95 Typ L8		5°	0° 15°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 4	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White ents: A-SOCKET-K LA-RZL 95 Typ L8		25 25 25 25 25 25 25 25 25 25 25 25 25 2	0° 15°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ C13723_MIREL Bender Wirth: 4	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White ents: A-SOCKET-K LA-RZL 95 Typ L8			0° 15°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 4	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White ents: A-SOCKET-K LA-RZL 95 Typ L8 INUS CXM-4 26.0° / 77.0°			0° 15°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 4	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White ents: A-SOCKET-K LA-RZL 95 Typ L8 INUS CXM-4 26.0° / 77.0° 88 %			<u><u><u></u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 4 C13723_MIREL Bender Wirth: 4 C1	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White ents: A-SOCKET-K LA-RZL 95 Typ L8 INUS CXM-4 26.0° / 77.0° 88 % 2 cd/lm			<u><u><u></u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 4' C13723_MIREL Bender Wirth	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White ents: A-SOCKET-K LA-RZL 95 Typ L8 INUS CXM-4 26.0° / 77.0° 88 % 2 cd/lm 1 White			<u><u><u></u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 4'	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White ents: A-SOCKET-K LA-RZL 95 Typ L8 INUS CXM-4 26.0° / 77.0° 88 % 2 cd/lm 1 White ents:			<u><u><u></u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ C13723_MIREL Bender Wirth: 4 C13723_MIREL Bender Wirth: 4 Efficiency Peak intensity LEDs/each optic Light colour Required compone	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White ents: A-SOCKET-K LA-RZL 95 Typ L8 INUS CXM-4 26.0° / 77.0° 88 % 2 cd/lm 1 White ents:			<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ C13723_MIREL Bender Wirth: 4 C13723_MIREL Bender Wirth: 4 Efficiency Peak intensity LEDs/each optic Light colour Required compone	CTM-9 (Tunable White) 43.0° / 82.0° 75 % 1.1 cd/lm 1 White ents: A-SOCKET-K LA-RZL 95 Typ L8 INUS CXM-4 26.0° / 77.0° 88 % 2 cd/lm 1 White ents:			<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>



C LUMI	NUC	7
-		90* 90*
LED	CXM-4	75'
FWHM / FWTM	41.0° / 82.0°	
Efficiency	79 %	60* 60*
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
F15255_HEKLA		
C13723_MIRELI	A-RZL	30 ⁴ 10 ⁵ 10 ⁵ 30 ⁵
	NUS	90 ⁴ 90 ⁴
LED	CxM-9 (13.5x13.5)	
FWHM / FWTM	40.0° / 81.0°	25.
Efficiency	89 %	400
Peak intensity	1.4 cd/lm	60° 00°
LEDs/each optic	1	
Light colour	White	45°
Required compone	nts:	
F15255_HEKLA		
		1220
		15° 0° 15°
ØNICHI	N	90 ⁴ 90 ⁴
LED	NJCWL024Z-V1MT: COB L-Type Tunable White	
FWHM / FWTM	30.0° / 76.0°	75
Efficiency	83 %	60 ⁵ 60°
Peak intensity	1.7 cd/lm	
LEDs/each optic		
	1	
Light colour	1 White	g
	White	gr gr gr
Light colour	White nts:	
Light colour Required compone	White nts: -SOCKET-K	
Light colour Required compone C16142_HEKLA	White nts: -SOCKET-K	
Light colour Required componen C16142_HEKLA Bender Wirth: 49	White nts: -SOCKET-K /7 Typ L8	
Light colour Required componen C16142_HEKLA Bender Wirth: 49	White nts: -SOCKET-K 17 Typ L8	
Light colour Required componen C16142_HEKLA Bender Wirth: 49	White hts: -SOCKET-K 7 Typ L8 NJCWL024Z-V1MT: COB L-Type Tunable White	
Light colour Required componen C16142_HEKLA Bender Wirth: 49 MICHIA LED FWHM / FWTM	White hts: -SOCKET-K 7 Typ L8 NJCWL024Z-V1MT: COB L-Type Tunable White 41.0° / 81.0°	
Light colour Required componen C16142_HEKLA Bender Wirth: 49	White hts: -SOCKET-K 7 Typ L8 NJCWL024Z-V1MT: COB L-Type Tunable White 41.0° / 81.0° 74 %	
Light colour Required componen C16142_HEKLA Bender Wirth: 49	White hts: -SOCKET-K 7 Typ L8 NJCWL024Z-V1MT: COB L-Type Tunable White 41.0° / 81.0° 74 % 1.1 cd/lm	
Light colour Required componen C16142_HEKLA Bender Wirth: 49 MICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	White hts: -SOCKET-K 7 Typ L8 NJCWL024Z-V1MT: COB L-Type Tunable White 41.0° / 81.0° 74 % 1.1 cd/lm 1	
Light colour Required componen C16142_HEKLA Bender Wirth: 49 MICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	White hts: -SOCKET-K 7 Typ L8 NJCWL024Z-V1MT: COB L-Type Tunable White 41.0° / 81.0° 74 % 1.1 cd/lm 1 White	
Light colour Required componen C16142_HEKLA Bender Wirth: 49 MICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	White hts: -SOCKET-K 7 Typ L8 NJCWL024Z-V1MT: COB L-Type Tunable White 41.0° / 81.0° 74 % 1.1 cd/lm 1 White hts:	
Light colour Required componen C16142_HEKLA Bender Wirth: 49 WICHIO LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	White hts: -SOCKET-K 7 Typ L8 NJCWL024Z-V1MT: COB L-Type Tunable White 41.0° / 81.0° 74 % 1.1 cd/lm 1 White hts: -SOCKET-K	
Light colour Required componen C16142_HEKLA Bender Wirth: 49 MICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	White hts: -SOCKET-K 7 Typ L8 NJCWL024Z-V1MT: COB L-Type Tunable White 41.0° / 81.0° 74 % 1.1 cd/lm 1 White hts: -SOCKET-K A-RZL	



ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 43	NVCWJ024Z-V1MT: COB J-Type Tunable White 39.0° / 79.0° 84 % 1.3 cd/lm 1 White ents: A-SOCKET-K	99* 90 73 69* 60 69* 60 75* 75* 75* 75* 75* 75* 75* 75* 75* 75*
Mauri		 107 0 ⁹ 107 0 ⁴
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C13723_MIREL Bender Wirth: 43	NVCWJ024Z-V1MT: COB J-Type Tunable White 45.0° / 85.0° 74 % 1 cd/lm 1 White ents: A-SOCKET-K LA-RZL	9° 9° 9° 6° 6° 6° 9° 9° 9° 9° 9° 9° 9° 9° 9° 9
OSRAM Opto Semiconductors		90 ⁴ 90 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA		27. 27. 29. 29. 29. 29. 29. 29. 29. 29
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA C12479_MIREL	-SOCKET-C	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°



PHILIF	S	39*
LED	Fortimo SLM L09 CoB	
FWHM / FWTM	39.0° / 81.0°	
Efficiency	88 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	9 ⁴⁴ 80 6
Required compone		
F15858_HEKLA		
PHILIF	DS	
LED	Fortimo SLM L09 CoB	
LED FWHM / FWTM	46.0° / 85.0°	25
Efficiency	46.0° / 85.0° 79 %	
Peak intensity	79 % 1.1 cd/lm	60 ⁴
LEDs/each optic	1. i co/im 1	
Light colour	White	
Required compone		
F15858_HEKLA		
C13723_MIREL		
CI3723_WIREL		
		30 ⁵ - 227 - 0 ⁴ - 35 ⁴
PHILIF	S	
LED	Fortimo SLM L13 CoB	
FWHM / FWTM	49.0° / 87.0°	
Efficiency	77 %	
Peak intensity	0.9 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	nts:	
C16142_HEKLA	-SOCKET-K	
C13723_MIREL		
Bender Wirth: 43	32 Typ L8	
PHILIF	S	
LED	Fortimo SLM L13 CoB	
FWHM / FWTM	47.0° / 82.0°	
Efficiency	83 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	er es
Required compone		
Required compone		
	-SOCKET-K	
C16142_HEKLA		



PHILIF	S
LED	Fortimo SLM L13 CoB
FWHM / FWTM	47.0° / 83.0°
Efficiency	83 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour	White
Required compone	ents:
C16142_HEKLA	A-SOCKET-K
Bender Wirth: 43	32 Typ L8



PHILIPS

LED	Fortimo SLM L13 CoB
FWHM / FWTM	49.0° / 86.0°
Efficiency	77 %
Peak intensity	0.9 cd/lm
LEDs/each optic	1
Light colour	White
Required componen	its:
C16142_HEKLA-	SOCKET-K
C13723_MIRELL	A-RZL
Bender Wirth: 432	2 Typ L8

SAMSUNG

LED	LC010C G2
FWHM / FWTM	29.0° / 78.0°
Efficiency	88 %
Peak intensity	1.8 cd/lm
LEDs/each optic	1
Light colour	White
Required componer	nts:
F15255_HEKLA-	SOCKET-C

SAMSUNG

 LED
 LC010T (Tunable White)

 FWHM / FWTM
 36.0° / 77.0°

 Efficiency
 84 %

 Peak intensity
 1.4 cd/lm

 LEDs/each optic
 1

 Light colour
 Tunable White

 Required components:
 C16142_HEKLA-SOCKET-K Bender Wirth: 501 Typ L8



200



0.0.0.0			
SAMSI	JNG	20*	90
LED	LC010T (Tunable White)		
FWHM / FWTM	37.0° / 75.0°		1
Efficiency	79 %		
Peak intensity	1.3 cd/lm		
LEDs/each optic	1		
Light colour	Tunable White	g	45
Required compone	ents:		
C16142_HEKL	A-SOCKET-K		
C14658_BARB/	ARA-RZ-LENS	1220	
Bender Wirth: 5	01 Тур L8	30° - 10° - 10°	36
SAMSI	UNG	90 ⁴	90
LED	LC016D / LC019D / LC026D / LC033D		
FWHM / FWTM	51.0° / 90.0°	25	75
Efficiency	77 %		
Peak intensity	0.9 cd/lm		69
LEDs/each optic	1		
Light colour	White	gr.	45
Required compone	ents:	60	
F15859_HEKLA			
C13723_MIREL	LA-RZL	00	
		30 ⁻	36
SAMS	U N G	»*	90
SAMSU		50°	90
LED	LC016D / LC019D / LC026D / LC033D	<u>99</u> 4 79	90
LED FWHM / FWTM	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0°	50 ⁴	90
LED FWHM / FWTM Efficiency	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 %	90 ⁴ 75 69 ⁴ 40	90
LED FWHM / FWTM Efficiency Peak intensity	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm	90* 79: 60* 405	90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1	5°.	90 75 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White	50' 72' 60' 73' 74) 74) 74) 74) 74) 74) 74) 74) 74) 74)	90 75 60 65
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents:	50' 72' 62' 40 50'	90 75 65
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents:	5°. 70 60 67 50 50	90 73 60 45
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents:	50" 50" 50" 60 60 60 60 60 60 60 60 60 60	60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents: A-SOCKET-I		90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents: A-SOCKET-I		29 73 60 60 63 65 65 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents: A-SOCKET-I		99 73 60 60 65 55
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents: A-SOCKET-I		99 73 60 60 65 50 73
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents: A-SOCKET-I		99 73 60 60 60 73 50 73 75 75 75 75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA SAMSI LED FWHM / FWTM	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents: A-SOCKET-I UNG LC016D / LC019D / LC026D / LC033D 53.0° / 87.0°		99 73 60 60 60 75 75 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA SAMSS LED FWHM / FWTM Efficiency	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents: A-SOCKET-I UNG LC016D / LC019D / LC026D / LC033D 53.0° / 87.0° 79 %		90 73 60 60 73 75 75 75 75 75 75 75 75 75 75 75 75 75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents: A-SOCKET-I UNG LC016D / LC019D / LC026D / LC033D 53.0° / 87.0° 79 % 0.9 cd/lm		95 73 66 67 75 75 75 75 75 75 75 75 75 75 75 75 75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents: A-SOCKET-I UNC LC016D / LC019D / LC026D / LC033D 53.0° / 87.0° 79 % 0.9 cd/lm 1 White		90 73 60 60 60 75 75 75 75 75 75 75 75 75 75 75 75 75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents: A-SOCKET-I UNC LC016D / LC019D / LC026D / LC033D 53.0° / 87.0° 79 % 0.9 cd/lm 1 White ents:		95 73 66 67 73 75 75 75 75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents: A-SOCKET-I UNC LC016D / LC019D / LC026D / LC033D 53.0° / 87.0° 79 % 0.9 cd/lm 1 White ents: A-SOCKET-I		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA SAMSI LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	LC016D / LC019D / LC026D / LC033D 52.0° / 85.0° 87 % 1.1 cd/lm 1 White ents: A-SOCKET-I UNC LC016D / LC019D / LC026D / LC033D 53.0° / 87.0° 79 % 0.9 cd/lm 1 White ents: A-SOCKET-I		



SAMS	UNG	20'
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC016D / LC019D / LC026D / LC033D 53.0° / 83.0° 82 % 1 cd/lm 1 White	6. 6. 23.
Required compone F15859_HEKLA C13333_MIREL	A-SOCKET-I .LA-CL	20° 00 25°
SAMSI		
LED FWHM / FWTM	LC020C 36.0° / 79.0°	
Efficiency Peak intensity	90 % 1.6 cd/lm	62
LEDs/each optic	1	
Light colour	White	a.
Required compone F15848_HEKLA		250 9 ⁴ 27 0 27
SAMS	UNG	22
LED	LC020C G2	
		7
LED FWHM / FWTM Efficiency	LC020C G2 38.0° / 80.0° 87 %	ge. 60
LED FWHM / FWTM Efficiency Peak intensity	LC020C G2 38.0° / 80.0° 87 % 1.4 cd/lm	27 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC020C G2 38.0° / 80.0° 87 % 1.4 cd/lm 1 White	27 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC020C G2 38.0° / 80.0° 87 % 1.4 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC020C G2 38.0° / 80.0° 87 % 1.4 cd/lm 1 White ents: A-SOCKET-I	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	LC020C G2 38.0° / 80.0° 87 % 1.4 cd/lm 1 White ents: A-SOCKET-I SLE G7 LES09	295
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	LC020C G2 38.0° / 80.0° 87 % 1.4 cd/lm 1 White ents: A-SOCKET-I SLE G7 LES09 38.0° / 80.0°	20 ⁵ 20 ⁵ 20 ⁵
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA TRIDON LED FWHM / FWTM Efficiency	LC020C G2 38.0° / 80.0° 87 % 1.4 cd/lm 1 White ents: A-SOCKET-I SLE G7 LES09 38.0° / 80.0° 90 %	20 ⁵ 20 ⁵ 20 ⁵
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity	LC020C G2 38.0° / 80.0° 87 % 1.4 cd/lm 1 White ents: A-SOCKET-I SLE G7 LES09 38.0° / 80.0° 90 % 1.5 cd/lm	20 ⁵ 20 ⁵ 20 ⁵
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC020C G2 38.0° / 80.0° 87 % 1.4 cd/lm 1 White ents: A-SOCKET-I SLE G7 LES09 38.0° / 80.0° 90 % 1.5 cd/lm 1	20 ⁵ 20 ⁵ 20 ⁵
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC020C G2 38.0° / 80.0° 87 % 1.4 cd/lm 1 White ents: A-SOCKET-I SLE G7 LES09 38.0° / 80.0° 90 % 1.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC020C G2 38.0° / 80.0° 87 % 1.4 cd/lm 1 White ents: A-SOCKET-I SLE G7 LES09 38.0° / 80.0° 90 % 1.5 cd/lm 1 White ents:	



TRIDOM			90*
		and the second se	
LED FWHM / FWTM	SLE G7 LES09 46.0° / 85.0°		73'
Efficiency	46.0° / 85.0° 82 %		
Peak intensity	02 % 1.1 cd/lm		60* 60
	1.1 Cd/im		
LEDs/each optic	ı White		
Light colour			
Required compone F15255_HEKLA			
C13723_MIREL			
010/20_00022			24
TRIDON			15% 1880 15%
			90 N
	SLE G7 LES13		73.
FWHM / FWTM	48.0° / 84.0°		
Efficiency	86 %		60 ⁶ 400 60
Peak intensity	1.1 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required compone			
F15859_HEKLA	-300KET-1		
			30° 15° 1230 15°
TRIDON	1IC		90° 90
LED	SLE G7 LES13		
			75'
FWHM / FWTM	50.0° / 88.0°		200
FWHM / FWTM Efficiency	50.0° / 88.0° 77 %		
Efficiency	77 %		
Efficiency Peak intensity	77 % 0.9 cd/lm		
Efficiency Peak intensity LEDs/each optic	77 % 0.9 cd/lm 1		
Efficiency Peak intensity LEDs/each optic Light colour	77 % 0.9 cd/lm 1 White		9 ²
Efficiency Peak intensity LEDs/each optic Light colour Required compone	77 % 0.9 cd/lm 1 White nts:		
Efficiency Peak intensity LEDs/each optic Light colour	77 % 0.9 cd/lm 1 White onts: -SOCKET-I		
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	77 % 0.9 cd/lm 1 White onts: -SOCKET-I		
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL	77 % 0.9 cd/lm 1 White onts: -SOCKET-I LA-RZL		
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL	77 % 0.9 cd/lm 1 White onts: -SOCKET-I LA-RZL		
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL	77 % 0.9 cd/lm 1 White onts: -SOCKET-I LA-RZL		
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL XICATC LED FWHM / FWTM	77 % 0.9 cd/lm 1 White onts: -SOCKET-I LA-RZL		
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL XICATC LED FWHM / FWTM Efficiency	77 % 0.9 cd/lm 1 White onts: -SOCKET-I LA-RZL XOB 14.5 mm 52.0° / 86.0° 86 %		
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL XICATC LED FWHM / FWTM Efficiency Peak intensity	77 % 0.9 cd/lm 1 White onts: -SOCKET-I LA-RZL XOB 14.5 mm 52.0° / 86.0°		
Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C13723_MIREL XICATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	77 % 0.9 cd/lm 1 White white SOCKET-I LA-RZL XOB 14.5 mm 52.0° / 86.0° 86 % 1.1 cd/lm		
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	77 % 0.9 cd/lm 1 White I SOCKET-I LA-RZL XOB 14.5 mm 52.0° / 86.0° 86 % 1.1 cd/lm 1 White		
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	77 % 0.9 cd/lm 1 White I SOCKET-I LA-RZL XOB 14.5 mm 52.0° / 86.0° 86 % 1.1 cd/lm 1 White I White I NOB NOB NOB NOB NOB NOB NOB NOB		
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	77 % 0.9 cd/lm 1 White I SOCKET-I LA-RZL XOB 14.5 mm 52.0° / 86.0° 86 % 1.1 cd/lm 1 White I White I NOB NOB NOB NOB NOB NOB NOB NOB		
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	77 % 0.9 cd/lm 1 White I SOCKET-I LA-RZL XOB 14.5 mm 52.0° / 86.0° 86 % 1.1 cd/lm 1 White I White I NOB NOB NOB NOB NOB NOB NOB NOB		



XICATO		50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKL/ C13723_MIREL	XOB 14.5 mm 51.0° / 89.0° 78 % 0.9 cd/lm 1 White ents: X-SOCKET-I	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer F15255_HEKL/	XOB 6 mm 32.0° / 78.0° 88 % 1.7 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKL/ C13723_MIREL	XOB 6 mm 44.0° / 84.0° 78 % 1.1 cd/lm 1 White ents: SOCKET-C	9)* 92 93 94 96 90 90 90 90 90 90 90 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	XOB 9.8 mm 39.0° / 81.0° 88 % 1.4 cd/lm 1 White	



XICATO		90* 90*
LED	XOB 9.8 mm	
FWHM / FWTM	47.0° / 85.0°	
Efficiency	80 %	60 ⁴ 60 ⁴
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	ar ar
Required compone	nts:	
F15255_HEKLA	-SOCKET-C	
C13723_MIREL	LA-RZL	
		30° 31,0
		15° 0° 15°



OPTICAL RESULTS (SIMULATED):

bridgelux.		50 ⁴
LED	VERO13	
FWHM / FWTM	39.0° / 75.0°	75
Efficiency	87 %	
Peak intensity	1.5 cd/lm	90 W
LEDs/each optic	1	
Light colour	White	
Required components		1200
C16142_HEKLA-S	OCKET-K	
		30" 1600 30 10" 0 ⁰ 15"
	т	
CITIZEN	N	50°*
LED	CLL02x/CLU02x (LES10)	75
FWHM / FWTM	37.2° / 76.7°	
Efficiency	88 %	60 E
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	gr a
Required component	s:	
F15255_HEKLA-S	OCKET-C	
		25 ⁹ 0 ⁰ 25 ⁹
Μ ΝΙCΗΙΛ		50 ⁴ 50
LED	COB L-Type (LES 11)	
FWHM / FWTM	42.0° / 78.0°	27
		400
Efficiency	90 %	
-		
Peak intensity	90 %	
Peak intensity LEDs/each optic	90 % 1.5 cd/lm	
Peak intensity LEDs/each optic Light colour	90 % 1.5 cd/lm 1 White	
Peak intensity LEDs/each optic	90 % 1.5 cd/lm 1 White s:	
Peak intensity LEDs/each optic Light colour Required component	90 % 1.5 cd/lm 1 White s:	
Peak intensity LEDs/each optic Light colour Required component	90 % 1.5 cd/lm 1 White s:	
Peak intensity LEDs/each optic Light colour Required component F15858_HEKLA-S	90 % 1.5 cd/lm 1 White s:	
Peak intensity LEDs/each optic Light colour Required component F15858_HEKLA-S	90 % 1.5 cd/lm 1 White s:	
Peak intensity LEDs/each optic Light colour Required component F15858_HEKLA-S	90 % 1.5 cd/lm 1 White s: OCKET-H	20* 16 ⁰ 12* 20
Peak intensity LEDs/each optic Light colour Required component: F15858_HEKLA-S	90 % 1.5 cd/lm 1 White s: OCKET-H COB T-Type	100 100 100
Peak intensity LEDs/each optic Light colour Required component: F15858_HEKLA-S	90 % 1.5 cd/lm 1 White S: OCKET-H COB T-Type 30.0° / 75.0°	20* 16 ⁰ 12* 20
Peak intensity LEDs/each optic Light colour Required component: F15858_HEKLA-S	90 % 1.5 cd/lm 1 White S: OCKET-H COB T-Type 30.0° / 75.0° 88 %	20* 16 ⁰ 12* 20
Peak intensity LEDs/each optic Light colour Required component: F15858_HEKLA-S	90 % 1.5 cd/lm 1 White s: OCKET-H COB T-Type 30.0° / 75.0° 88 % 2 cd/lm	20* 16 ⁰ 12* 20
Peak intensity LEDs/each optic Light colour Required component: F15858_HEKLA-S	90 % 1.5 cd/lm 1 White s: OCKET-H COB T-Type 30.0° / 75.0° 88 % 2 cd/lm 1	20* 16 ⁰ 12* 20
Peak intensity LEDs/each optic Light colour Required components F15858_HEKLA-S	90 % 1.5 cd/lm 1 White S: OCKET-H COB T-Type 30.0° / 75.0° 88 % 2 cd/lm 1 White	20* 16 ⁰ 12* 20
Peak intensity LEDs/each optic Light colour Required component F15858_HEKLA-S	90 % 1.5 cd/lm 1 White S: OCKET-H COB T-Type 30.0° / 75.0° 88 % 2 cd/lm 1 White S:	20* 16 ⁰ 12* 20
Peak intensity LEDs/each optic Light colour Required components F15858_HEKLA-S	90 % 1.5 cd/lm 1 White S: OCKET-H COB T-Type 30.0° / 75.0° 88 % 2 cd/lm 1 White S:	20* 16 ⁰ 12* 20
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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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