

# PRODUCT DATASHEET CP17785\_AMY-70-WW-C

## AMY-70-WW-C

~60° wide beam. Assembly with holder C compatible with LEDiL HEKLA. Black version.

#### **SPECIFICATION:**

Dimensions	Ø 69.9 mm
Height	16.4 mm
ROHS compliant	yes 🛈



#### **MATERIALS:**

Component AMY-70-WW AMY-70-HLD-C

Туре	
Single lens	
Holder	

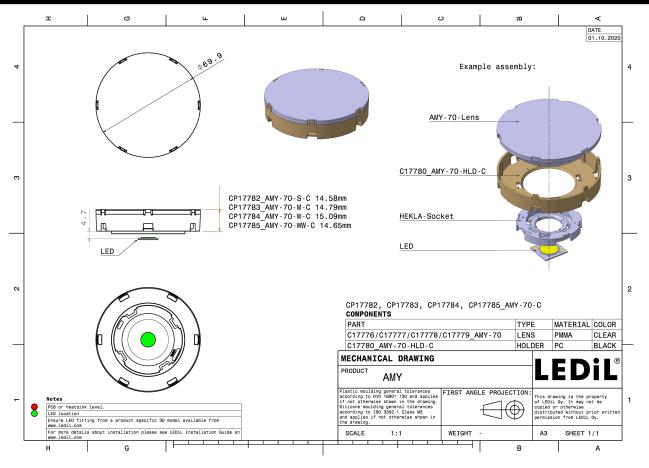
Material	Colour	Finish
PMMA		
PC	black	

#### **ORDERING INFORMATION:**

Component	Qty in box	MOQ	MPQ	Box weight (kg)
CP17785_AMY-70-WW-C	210	210	15	7.4
» Box size: 480 x 280 x 300 mm				



## PRODUCT DATASHEET CP17785\_AMY-70-WW-C



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



## **OPTICAL RESULTS (MEASURED):**

bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA			50 <sup>4</sup> 50 <sup>4</sup> 50 <sup>4</sup> 50 <sup>4</sup>
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63			20 20 20 20 20 20 20 20 20 20
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA			20 <sup>4</sup> 20 <sup>4</sup> 20 <sup>4</sup> 20 <sup>4</sup> 20 <sup>4</sup> 20 <sup>4</sup>
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15253_HEKLA			90 <sup>4</sup> 79 <sup>5</sup> 60 <sup>6</sup> 60 <sup>6</sup> 60 <sup>6</sup> 60 <sup>7</sup> 60 <sup>6</sup> 60 <sup>7</sup> 60 <sup>7</sup> 6



## **OPTICAL RESULTS (MEASURED):**

CITIZE	NT		T
CITIZE		90 <sup>4</sup>	90*
LED	CLL02x/CLU02x (LES10)	31	75*
FWHM / FWTM	54.0° / 75.0°		
Efficiency	87 %	60 <sup></sup>	60*
Peak intensity	1.2 cd/lm		
LEDs/each optic	1		5
Light colour	White		K
Required compone			
F17435_HEKLA	-G2-C		
		30* 2200 25* 0 <sup>1</sup>	30*
			90*
LED	CMU15xx		
FWHM / FWTM	57.0° / 80.0°		A
Efficiency	85 %		60*
Peak intensity	1 cd/lm		
LEDs/each optic	1		$N \times$
Light colour	White		45*
Required compone	nts:		X
F17438_HEKLA	-G2-I		f
		34* 22	36*
UMIL	EDS	9)*	90*
		90 <sup>+</sup>	90°
	EDS LUXEON Fusion 12-up (20x24) 53.0° / 76.0°	35°	
LED	LUXEON Fusion 12-up (20x24)	85°	50* 50*
LED FWHM / FWTM	LUXEON Fusion 12-up (20x24) 53.0° / 76.0°	90° 73° 60° 400	25°
LED FWHM / FWTM Efficiency	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 %	90* 71* 60* 400	
LED FWHM / FWTM Efficiency Peak intensity	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm	90* 70* 80* 87*	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White	99* 77 60* 60* 60* 60* 60* 60*	95° 35' 82°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White nts:	95* 95* 95* 900	80°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White nts: -SOCKET-K	95* 73 75 75 70 70 70	80°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White nts: -SOCKET-K -RZ-LENS		95° 32° 62° 52°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA F18158_HEKLA	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White nts: -SOCKET-K -RZ-LENS 12 Typ L8		90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA F18158_HEKLA Bender Wirth: 44	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White nts: -SOCKET-K -RZ-LENS 12 Typ L8		12,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA F18158_HEKLA Bender Wirth: 44	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White nts: -SOCKET-K -RZ-LENS 12 Typ L8 EDS LUXEON Fusion 21-up (20x24)		12,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA F18158_HEKLA Bender Wirth: 44	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White nts: -SOCKET-K -RZ-LENS 12 Typ L8		12,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA F18158_HEKLA Bender Wirth: 44	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White nts: -SOCKET-K -RZ-LENS 12 Typ L8 EDS LUXEON Fusion 21-up (20x24) 53.0° / 76.0°		12,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA F18158_HEKLA Bender Wirth: 44	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White nts: -SOCKET-K -RZ-LENS 12 Typ L8 EDS LUXEON Fusion 21-up (20x24) 53.0° / 76.0° 80 %		12,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA F18158_HEKLA Bender Wirth: 44 CONTINUE LED FWHM / FWTM Efficiency Peak intensity	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White nts: -SOCKET-K -RZ-LENS 12 Typ L8 EDS LUXEON Fusion 21-up (20x24) 53.0° / 76.0° 80 % 1 cd/lm		32,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA F18158_HEKLA Bender Wirth: 44 <b>WWW LED</b> FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White nts: -SOCKET-K -RZ-LENS 12 Typ L8 EDS LUXEON Fusion 21-up (20x24) 53.0° / 76.0° 80 % 1 cd/lm 21 White		90, 12,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA F18158_HEKLA Bender Wirth: 44 CONTINUE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White nts: -SOCKET-K -RZ-LENS 12 Typ L8 EDS LUXEON Fusion 21-up (20x24) 53.0° / 76.0° 80 % 1 cd/lm 21 White nts:		90, 12,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA F18158_HEKLA Bender Wirth: 44 CONTRACTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White nts: -SOCKET-K -RZ-LENS 12 Typ L8 EDS LUXEON Fusion 21-up (20x24) 53.0° / 76.0° 80 % 1 cd/lm 21 White nts: -SOCKET-K		90° 22. 32.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA F18158_HEKLA Bender Wirth: 44 CONTINUE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	LUXEON Fusion 12-up (20x24) 53.0° / 76.0° 86 % 1.1 cd/lm 12 White nts: -SOCKET-K -RZ-LENS 2 Typ L8 EDS LUXEON Fusion 21-up (20x24) 53.0° / 76.0° 80 % 1 cd/lm 21 White nts: -SOCKET-K -RZ-LENS		66. 26. 26. 26.



## **OPTICAL RESULTS (MEASURED):**

	EDC	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compon C16142_HEKL F18158_HEKL Bender Wirth: 4	LUXEON Fusion 27-up (20x24) 54.0° / 78.0° 80 % 1 cd/lm 27 White ents: A-SOCKET-K A-RZ-LENS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compon C16142_HEKL Bender Wirth: 4	CTM-14 (Tunable White) Gen2 56.0° / 78.0° 86 % 1 cd/lm 1 Tunable White ents: A-SOCKET-K	
SAMS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compon F15859_HEKL/	LC016D / LC019D / LC026D / LC033D 58.0° / 79.0° 87 % 1 cd/lm 1 White ents:	



bridgelux.		904
LED	V18 Gen 8	75
FWHM / FWTM	62.0° / 86.0°	
Efficiency	83 %	
Peak intensity	0.8 cd/lm	
LEDs/each optic	1	
Light colour	White	or a second s
Required components		
Bender Wirth: 639b		
		125 <sup>4</sup> 0 <sup>4</sup> 125 <sup>4</sup>
bridgelux.		10 <sup>+</sup>
LED	V3 HD Gen 8	
FWHM / FWTM	52.0° / 72.0°	
Efficiency	91 %	
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	97
Required components		
F15253_HEKLA-SC		
_		220
		2 <sup></sup> 15 <sup></sup> 0 <sup>0</sup> 15 <sup>-</sup>
bridgelux.		90 <sup>4</sup>
bridgelux. LED	V3 HD Gen 8 FC	
	V3 HD Gen 8 FC 52.0° / 72.0 + 71.0°	304
LED		
LED FWHM / FWTM	52.0° / 72.0 + 71.0°	90 <sup>4</sup> 77 60 <sup>4</sup>
LED FWHM / FWTM Efficiency	52.0° / 72.0 + 71.0° 90 %	60 <sup>x</sup>
LED FWHM / FWTM Efficiency Peak intensity	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm	90 97 97 97 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White	97 97 98 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White	97 97 97 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F15255_HEKLA-SC	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F15255_HEKLA-SC	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White CKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F15255_HEKLA-SC	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White CKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F15255_HEKLA-SC bridgeLuX LED FWHM / FWTM	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White CKET-C V4 HD Gen 8 53.0 + 54.0° / 72.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F15255_HEKLA-SC bridgeLuX. LED FWHM / FWTM Efficiency	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White CKET-C V4 HD Gen 8 53.0 + 54.0° / 72.0° 91 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F15255_HEKLA-SC bridgeLux. LED FWHM / FWTM Efficiency Peak intensity	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White CKET-C V4 HD Gen 8 53.0 + 54.0° / 72.0° 91 % 1.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F15255_HEKLA-SC bridgelux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White CKET-C V4 HD Gen 8 53.0 + 54.0° / 72.0° 91 % 1.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F15255_HEKLA-SC bridgeLUX LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White CKET-C V4 HD Gen 8 53.0 + 54.0° / 72.0° 91 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F15255_HEKLA-SC bridgeLux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White CKET-C V4 HD Gen 8 53.0 + 54.0° / 72.0° 91 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F15255_HEKLA-SC bridgeLUX LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White CKET-C V4 HD Gen 8 53.0 + 54.0° / 72.0° 91 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F15255_HEKLA-SC bridgeLux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White CKET-C V4 HD Gen 8 53.0 + 54.0° / 72.0° 91 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F15255_HEKLA-SC bridgeLux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	52.0° / 72.0 + 71.0° 90 % 1.4 cd/lm 1 White CKET-C V4 HD Gen 8 53.0 + 54.0° / 72.0° 91 % 1.3 cd/lm 1 White	



bridgelux.		90* 90*
LED	V6 Gen 8	
FWHM / FWTM	55.0° / 74.0°	
Efficiency	90 %	400
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	gy. gy.
Required components:		
F15253_HEKLA-SO	CKET-A	
		30° 30° 30° 30°
bridgelux.		90* 90*
LED	V6 HD Gen 8	
FWHM / FWTM	52.0° / 73.0 + 72.0°	15 × × × × × × × × × × × × × × × × × × ×
Efficiency	90 %	400
Peak intensity	1.3 cd/lm	60* 60*
LEDs/each optic	1	
Light colour	White	gr
Required components:		
F15255_HEKLA-SO	CKET-C	
		30° 36° 15°
bridgelux.		90* 90*
bridgelux. LED	V8 Gen7	<u>55</u> *
LED	V8 Gen7 55.0° / 74.0°	<u>34</u> <u>35</u>
LED FWHM / FWTM		9° 9° 9° 9°
LED FWHM / FWTM Efficiency	55.0° / 74.0° 87 %	91 93 93 94 94 95
LED FWHM / FWTM Efficiency Peak intensity	55.0° / 74.0°	9 <sup>3</sup> 75 61 61 61 61 61 61 61 61 61 61 61 61 61
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	55.0° / 74.0° 87 % 1.2 cd/lm	g. g. y. y. y. y. y. y.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	55.0° / 74.0° 87 % 1.2 cd/lm 1	81 81 10 10 10 10 10 10 10 10 10 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	55.0° / 74.0° 87 % 1.2 cd/lm 1 White	95 <sup>4</sup> 77 97 97 97 989 97 989
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	55.0° / 74.0° 87 % 1.2 cd/lm 1 White	g*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	55.0° / 74.0° 87 % 1.2 cd/lm 1 White	51 <sup>4</sup> 51 72 64 67 60 60 67 60 67 67 60 67 67 67 67 67 67 67 67 67 67
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	55.0° / 74.0° 87 % 1.2 cd/lm 1 White	22 <sup>4</sup> 64 12 <sup>4</sup> 25 <sup></sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	55.0° / 74.0° 87 % 1.2 cd/lm 1 White	30, 30, 30,   31, 32, 30,   61, 30, 30,   62, 30, 30,   64, 90, 60,   65, 30, 30,   36, 30, 30,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	55.0° / 74.0° 87 % 1.2 cd/lm 1 White	No. No.   No.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	55.0° / 74.0° 87 % 1.2 cd/lm 1 White CKET-A	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 components: F15253_HEKLA-SO	55.0° / 74.0° 87 % 1.2 cd/lm 1 White CKET-A	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	55.0° / 74.0° 87 % 1.2 cd/lm 1 White CKET-A	64
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux. LED FWHM / FWTM Efficiency	55.0° / 74.0° 87 % 1.2 cd/lm 1 White CKET-A V9 HD Gen 8 54.0° / 74.0° 89 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgeluk. LED FWHM / FWTM Efficiency Peak intensity	55.0° / 74.0° 87 % 1.2 cd/lm 1 White CKET-A V9 HD Gen 8 54.0° / 74.0° 89 % 1.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	55.0° / 74.0° 87 % 1.2 cd/lm 1 White CKET-A V9 HD Gen 8 54.0° / 74.0° 89 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	55.0° / 74.0° 87 % 1.2 cd/lm 1 White CKET-A V9 HD Gen 8 54.0° / 74.0° 89 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	55.0° / 74.0° 87 % 1.2 cd/lm 1 White CKET-A V9 HD Gen 8 54.0° / 74.0° 89 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	55.0° / 74.0° 87 % 1.2 cd/lm 1 White CKET-A V9 HD Gen 8 54.0° / 74.0° 89 % 1.2 cd/lm 1 White	



bridgelux.		90* 90*
LED	VERO10	
FWHM / FWTM	54.0° / 74.0°	
Efficiency	87 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	95° (5°
Required components:		200 800 T
F15616_HEKLA-SO	CKET-F	
		15° 0° 15°
bridgelux.		50°
LED	VERO13	
FWHM / FWTM	56.0° / 76.0°	23.
Efficiency	85 %	
Peak intensity	1.1 cd/lm	60 <sup></sup> 60 <sup></sup>
LEDs/each optic	1	
Light colour	White	5° (5°
Required components:		
C16142_HEKLA-SO	CKET-K	
		15 00 150
bridgelux.		90°
LED	VERO18	
FWHM / FWTM	62.0° / 88.0°	200
Efficiency	87 %	60* 60*
Peak intensity	0.9 cd/lm	
LEDs/each optic	1	
Light colour	White	gr
Required components:		
C16142_HEKLA-SO	CKET-K	
		80
		30" 17" 0" 17" 36"
bridgelux.		90° 90°
	Vacta DTW 13mm (211W)	
	Vesta DTW 13mm (21W) 53.0° / 74.0°	75*
FWHM / FWTM Efficiency	53.0° / 74.0° 89 %	
Peak intensity	89 % 1.3 cd/lm	60°
LEDs/each optic	1.3 co/im 1	$  \times ///   \times  $
LEDS/each optic	1 White	er
Required components:	Wine	
Bender Wirth: 632b H		
Dender Wirth 00201		
Bender Winni 0025 I		1200
		3 <sup>4</sup> , 12 <sup>5</sup> , 0 <sup>4</sup> , 13 <sup>4</sup> , 3 <sup>5</sup> ,



bridgelux.		90* 90*
LED	Vesta DTW 15mm (33W)	
FWHM / FWTM	55.0 + 54.0° / 79.0°	
Efficiency	87 %	
Peak intensity	1.1 cd/lm	60 <sup>5</sup>
LEDs/each optic	1	
Light colour	White	gr ar
Required components		
Bender Wirth: 632t		
		30° 30° 30°
bridgelux.		30*
LED	Vesta DTW 6mm	
FWHM / FWTM	53.0 + 54.0° / 73.0 + 74.0°	75
Efficiency	89 %	
Peak intensity	1.2 cd/lm	\$0*
LEDs/each optic	1	
Light colour	White	gr
Required components		
Bender Wirth: 652b		
		1200
		30" 30" 30" 0° 35"
$\frown$		
bridgelux.		90*
bridgelux. LED	Vesta DTW 9mm (4W/6W/12W)	30° 30°
LED	Vesta DTW 9mm (4W/6W/12W) 53.0° / 74.0°	20 <sup>4</sup> 20 <sup>4</sup>
LED FWHM / FWTM		30 <sup>4</sup> 30 <sup>4</sup>
LED FWHM / FWTM Efficiency	53.0° / 74.0°	90 <sup>4</sup> 90 <sup>2</sup>
LED FWHM / FWTM Efficiency Peak intensity	53.0° / 74.0° 89 %	90 <sup>4</sup> 90 <sup>4</sup> 90 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	53.0° / 74.0° 89 % 1.2 cd/lm	39° 395 39° 400 {000} 400 {000} 400 {000} 400 {000} 400 {000} 400 {000} 400 {000} {
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	53.0° / 74.0° 89 % 1.2 cd/lm 1 White	94 95 96 96 96 96 96 96 96 96 96 96 96 96 96
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	53.0° / 74.0° 89 % 1.2 cd/lm 1 White	94 79 96 96 96 96 96 96 96 96 96 96 96 96 96
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	53.0° / 74.0° 89 % 1.2 cd/lm 1 White	200 - 200 200 - 200 200 200 - 200 200 - 200 200 - 200 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	53.0° / 74.0° 89 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components Bender Wirth: 652t	53.0° / 74.0° 89 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components Bender Wirth: 652t	53.0° / 74.0° 89 % 1.2 cd/lm 1 White : Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components Bender Wirth: 652t	53.0° / 74.0° 89 % 1.2 cd/lm 1 White : Hekla Vesta TW 13mm (18W) DP	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components Bender Wirth: 652t bridgelux. LED FWHM / FWTM	53.0° / 74.0° 89 % 1.2 cd/lm 1 White : Hekla Vesta TW 13mm (18W) DP 55.0 + 54.0° / 78.0 + 76.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components Bender Wirth: 652t bridgelux. LED FWHM / FWTM Efficiency	53.0° / 74.0° 89 % 1.2 cd/lm 1 White : Hekla Vesta TW 13mm (18W) DP 55.0 + 54.0° / 78.0 + 76.0° 87 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components Bender Wirth: 652t bridgelux LED FWHM / FWTM Efficiency Peak intensity	53.0° / 74.0° 89 % 1.2 cd/lm 1 White Hekla Vesta TW 13mm (18W) DP 55.0 + 54.0° / 78.0 + 76.0° 87 % 1.1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components Bender Wirth: 652t bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	53.0° / 74.0° 89 % 1.2 cd/lm 1 White Hekla Vesta TW 13mm (18W) DP 55.0 + 54.0° / 78.0 + 76.0° 87 % 1.1 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components Bender Wirth: 652t bridgelux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	53.0° / 74.0° 89 % 1.2 cd/lm 1 White Hekla Vesta TW 13mm (18W) DP 55.0 + 54.0° / 78.0 + 76.0° 87 % 1.1 cd/lm 1 Tunable White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components Bender Wirth: 652t bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	53.0° / 74.0° 89 % 1.2 cd/lm 1 White Hekla Vesta TW 13mm (18W) DP 55.0 + 54.0° / 78.0 + 76.0° 87 % 1.1 cd/lm 1 Tunable White :	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components Bender Wirth: 652t bridgelux, LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components C16142_HEKLA-S	53.0° / 74.0° 89 % 1.2 cd/lm 1 White Hekla Vesta TW 13mm (18W) DP 55.0 + 54.0° / 78.0 + 76.0° 87 % 1.1 cd/lm 1 Tunable White CKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components Bender Wirth: 652t bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	53.0° / 74.0° 89 % 1.2 cd/lm 1 White Hekla Vesta TW 13mm (18W) DP 55.0 + 54.0° / 78.0 + 76.0° 87 % 1.1 cd/lm 1 Tunable White CKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components Bender Wirth: 652t bridgeLux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components C16142_HEKLA-S	53.0° / 74.0° 89 % 1.2 cd/lm 1 White Hekla Vesta TW 13mm (18W) DP 55.0 + 54.0° / 78.0 + 76.0° 87 % 1.1 cd/lm 1 Tunable White CKET-K	



bridgelux.		90* 90*
LED	Vesta TW 15mm DP	
FWHM / FWTM	57.0° / 79.0 + 80.0°	75. 75.
Efficiency	86 %	
Peak intensity	1 cd/lm	60° 60°
LEDs/each optic	1	
Light colour	Tunable White	45°
Required components: C16142_HEKLA-SC		
Bender Wirth: 482 T	ур ца	
		135° 0° 15° 3°
bridgelux.		50° 50°
LED	Vesta TW 9mm (9W) DP	
FWHM / FWTM	54.0° / 78.0°	75
Efficiency	90 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	$  \times / /   \times   \times  $
Light colour	Tunable White	95 <sup>1</sup> 65*
Required components:		
C16142_HEKLA-SC		
Bender Wirth: 489 T		
	,,	123
		30°
CITIZEN	ſ	90* 90*
LED	CLL03x/CLU03x	90°
LED FWHM / FWTM	CLL03x/CLU03x 56.0° / 78.0°	90° (90° 75° (70° (70° (70° (70° (70° (70° (70° (70
LED FWHM / FWTM Efficiency	CLL03x/CLU03x 56.0° / 78.0° 85 %	61
LED FWHM / FWTM Efficiency Peak intensity	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm	94 <sup>*</sup> 94 <sup>*</sup> 33 <sup>*</sup> 66 <sup>*</sup> 66 <sup>*</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1	94 <sup>4</sup> 95 <sup>4</sup> 95 <sup>4</sup> 95 <sup>4</sup> 60 60 60 <sup>4</sup> 60 <sup>4</sup> 60 <sup>4</sup> 60 <sup>4</sup> 60 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White	90 <sup>4</sup> 90 <sup>4</sup> 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White	92 92 92 94 94 95 95 95 95 95 95 95 95 95 95 95 95 95
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White	6 <sup>1</sup> 6 <sup>1</sup> 9 <sup>2</sup> 9 <sup>2</sup> 9 <sup>2</sup> 9 <sup>2</sup> 9 <sup>2</sup> 9 <sup>2</sup> 9 <sup>2</sup> 9 <sup>2</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White	5°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White	27 00 10 10 10 10 10 10 10 10 10 10 10 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SC	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White DCKET-I	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SC	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White DCKET-1	Max Max
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SC	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White DCKET-1	25
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SC	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White DCKET-I CLU700/701/702/703 52.0° / 72.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SC <b>CITTIZEN</b> LED FWHM / FWTM Efficiency	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White DCKET-I CLU700/701/702/703 52.0° / 72.0° 88 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SC <b>CITTIZEN</b> LED FWHM / FWTM Efficiency Peak intensity	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White DCKET-I CLU700/701/702/703 52.0° / 72.0° 88 % 1.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SC <b>CITTIZEN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White DCKET-I CLU700/701/702/703 52.0° / 72.0° 88 % 1.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SC <b>CITTIZEN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White DCKET-I CLU700/701/702/703 52.0° / 72.0° 88 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SC CITTIZEN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White DCKET-I CLU700/701/702/703 52.0° / 72.0° 88 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SC <b>CITTIZEN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White DCKET-I CLU700/701/702/703 52.0° / 72.0° 88 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SC CITTIZEN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White DCKET-I CLU700/701/702/703 52.0° / 72.0° 88 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15859_HEKLA-SC CITIZEN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CLL03x/CLU03x 56.0° / 78.0° 85 % 1 cd/lm 1 White DCKET-I CLU700/701/702/703 52.0° / 72.0° 88 % 1.3 cd/lm 1 White	



CITIZEN	J	»**
LED	CLU700/701/702/703	
FWHM / FWTM	52.0° / 72.0°	77
Efficiency	89 %	40
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	<del>7</del>
Required components	8:	
F15255_HEKLA-S		
		30° at 127
		394
LED	CMA1825	
FWHM / FWTM	56.0° / 78.0°	
Efficiency	86 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	5 <sup>44</sup>
Required components	8:	80
F15254_HEKLA-S	OCKET-B	
		×*
		10 <sup>4</sup> 19 <sup>5</sup> 0 10 <sup>4</sup>
		90*
	CMT14xx	
LED	CMT14xx 54.0° / 75.0°	77
LED FWHM / FWTM		
LED	54.0° / 75.0°	75-
LED FWHM / FWTM Efficiency	54.0° / 75.0° 86 %	27-
LED FWHM / FWTM Efficiency Peak intensity	54.0° / 75.0° 86 % 1.2 cd/lm	77- 100- 57-
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	54.0° / 75.0° 86 % 1.2 cd/lm 1 White	7°.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	54.0° / 75.0° 86 % 1.2 cd/lm 1 White	7°. 400 7°.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	54.0° / 75.0° 86 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	54.0° / 75.0° 86 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	54.0° / 75.0° 86 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F17435_HEKLA-G	54.0° / 75.0° 86 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F17435_HEKLA-G	54.0° / 75.0° 86 % 1.2 cd/lm 1 White 5: 2-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F17435_HEKLA-G	54.0° / 75.0° 86 % 1.2 cd/lm 1 White 5: 2-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F17435_HEKLA-G	54.0° / 75.0° 86 % 1.2 cd/lm 1 White 5: 2-C CMU10xx 55.0° / 76.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F17435_HEKLA-G	54.0° / 75.0° 86 % 1.2 cd/lm 1 White 3: 2-C CMU10xx 55.0° / 76.0° 87 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F17435_HEKLA-G	54.0° / 75.0° 86 % 1.2 cd/lm 1 White 3: 2-C CMU10xx 55.0° / 76.0° 87 % 1.1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F17435_HEKLA-G CREE LED EWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	54.0° / 75.0° 86 % 1.2 cd/lm 1 White 5: 2-C C MU10xx 55.0° / 76.0° 87 % 1.1 cd/lm 1 White 5:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F17435_HEKLA-G	54.0° / 75.0° 86 % 1.2 cd/lm 1 White 5: 2-C C MU10xx 55.0° / 76.0° 87 % 1.1 cd/lm 1 White 5:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F17435_HEKLA-G	54.0° / 75.0° 86 % 1.2 cd/lm 1 White 5: 2-C C MU10xx 55.0° / 76.0° 87 % 1.1 cd/lm 1 White 5:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F17435_HEKLA-G	54.0° / 75.0° 86 % 1.2 cd/lm 1 White 5: 2-C C MU10xx 55.0° / 76.0° 87 % 1.1 cd/lm 1 White 5:	



		90* 90*
LED	CXA/B 15xx	
FWHM / FWTM	55.0 + 54.0° / 74.0°	75'
Efficiency	86 %	
Peak intensity	1.1 cd/lm	80 <sup>17</sup> - 400
LEDs/each optic	1	
Light colour	White	93-
Required components:		
F15256_HEKLA-SOC	XET-D	
		30* 30*
		15° 1230 15°
		90° 90°
LED	CXA/B 1830	75*
FWHM / FWTM	56.0° / 79.0°	$  \lambda                                  $
Efficiency	86 %	692 602
Peak intensity	1.1 cd/lm	400
LEDs/each optic	1	
Light colour	White	42.
Required components:		
Bender Wirth: 637b H	lekla	
1		
1		30° 15° 0° 15° 30°
	)S	80. 123. 0. 123. 0. 124. 125. 0. 125. 0. 125
		90° 90° 90°
LED	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0°	3. 3. 3. 3.   80. 3. 3. 3.
LED FWHM / FWTM	LUXEON CoB 1202/1203	
LED FWHM / FWTM Efficiency	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0°	
LED FWHM / FWTM Efficiency Peak intensity	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 %	
LED FWHM / FWTM Efficiency	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOC	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1 White CKET-H	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOC	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1 White CKET-H	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOC	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1 White CKET-H	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOC	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1 White CKET-H S LUXEON CoB 1202HD 54.0° / 74.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOC	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1 White XKET-H S LUXEON CoB 1202HD 54.0° / 74.0° 90 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOC	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1 White CKET-H S LUXEON CoB 1202HD 54.0° / 74.0° 90 % 1.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOC	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1 White CKET-H S LUXEON CoB 1202HD 54.0° / 74.0° 90 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOC	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1 White CKET-H S LUXEON CoB 1202HD 54.0° / 74.0° 90 % 1.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOC ELED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1 White CKET-H S LUXEON CoB 1202HD 54.0° / 74.0° 90 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOC	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1 White CKET-H S LUXEON CoB 1202HD 54.0° / 74.0° 90 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15858_HEKLA-SOC ELED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON CoB 1202/1203 54.0° / 74.0 + 76.0° 89 % 1.2 cd/lm 1 White CKET-H S LUXEON CoB 1202HD 54.0° / 74.0° 90 % 1.2 cd/lm 1 White	



	DS	99 <sup>4</sup>
LED	LUXEON CoB 1204/1205	21
FWHM / FWTM	55.0 + 56.0° / 77.0 + 78.0°	
Efficiency	88 %	50 <sup>4</sup>
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	7
Required components		
Bender Wirth: 632a	a Hekla XL	
		34 <sup>1</sup> 137 1390 137
	DS	84
LED	LUXEON CoB 1204HD	
FWHM / FWTM	54.0° / 74.0 + 76.0°	
Efficiency	89 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components	:	
F15858_HEKLA-S		
		30%
		229 09 12 <sup>3</sup>
UMILE	DS	95 <sup>4</sup>
LED	LUXEON CoB 1205HD	
FWHM / FWTM	56.0° / 76.0°	
Efficiency	88 %	605
Efficiency	88 % 1.1 cd/lm	er and a second s
Efficiency Peak intensity		91 - 40 - 1
Efficiency Peak intensity LEDs/each optic	1.1 cd/lm	er
	1.1 cd/lm 1 White	et 40
Efficiency Peak intensity LEDs/each optic Light colour	1.1 cd/lm 1 White s:	<b>5</b> . 00
Efficiency Peak intensity LEDs/each optic Light colour Required components	1.1 cd/lm 1 White s:	<b>e</b> r
Efficiency Peak intensity LEDs/each optic Light colour Required components	1.1 cd/lm 1 White s:	
Efficiency Peak intensity LEDs/each optic Light colour Required components F15858_HEKLA-St	1.1 cd/lm 1 White S: OCKET-H	
Efficiency Peak intensity LEDs/each optic Light colour Required components	1.1 cd/lm 1 White S: DCKET-H	
Efficiency Peak intensity LEDs/each optic Light colour Required components F15858_HEKLA-St	1.1 cd/lm 1 White SC DCKET-H	
Efficiency Peak intensity LEDs/each optic Light colour Required components F15858_HEKLA-SC	1.1 cd/lm 1 White S: DCKET-H	
Efficiency Peak intensity LEDs/each optic Light colour Required components F15858_HEKLA-St Vertical Components F15858_HEKLA-St Efficiency	1.1 cd/lm 1 White SCOCKET-H UXEON CoB 1208 56.0° / 78.0 + 79.0° 88 %	
Efficiency Peak intensity LEDs/each optic Light colour Required components F15858_HEKLA-S( VIIII) Efficiency Peak intensity	1.1 cd/lm 1 White S: OCKET-H LUXEON CoB 1208 56.0° / 78.0 + 79.0°	
Efficiency Peak intensity LEDs/each optic Light colour Required components F15858_HEKLA-St <b>With Composed</b> <b>ED</b> FWHM / FWTM Efficiency Peak intensity LEDs/each optic	1.1 cd/lm 1 White SCOCKET-H UXEON CoB 1208 56.0° / 78.0 + 79.0° 88 % 1.1 cd/lm	
Efficiency Peak intensity LEDs/each optic Light colour Required components F15858_HEKLA-So UMILE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	1.1 cd/lm 1 White S: DCKET-H <b>DS</b> LUXEON CoB 1208 56.0° / 78.0 + 79.0° 88 % 1.1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required components F15858_HEKLA-St <b>With Composed</b> <b>ED</b> FWHM / FWTM Efficiency Peak intensity LEDs/each optic	1.1 cd/lm 1 White S: OCKET-H <b>DS</b> LUXEON CoB 1208 56.0° / 78.0 + 79.0° 88 % 1.1 cd/lm 1 White S:	
Efficiency Peak intensity LEDs/each optic Light colour Required components F15858_HEKLA-SC <b>CONTINUE</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	1.1 cd/lm 1 White S: OCKET-H <b>DS</b> LUXEON CoB 1208 56.0° / 78.0 + 79.0° 88 % 1.1 cd/lm 1 White S:	
Efficiency Peak intensity LEDs/each optic Light colour Required components F15858_HEKLA-SC <b>CONTINE</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	1.1 cd/lm 1 White S: OCKET-H <b>DS</b> LUXEON CoB 1208 56.0° / 78.0 + 79.0° 88 % 1.1 cd/lm 1 White S:	



	S	90* 90'
LED	LUXEON CX Plus CoB - HD S04H9	75'
FWHM / FWTM	54.0° / 76.0°	
Efficiency	87 %	60° 600 60
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	er i i i i i i i i i i i i i i i i i i i
Required components:		800
F15255_HEKLA-SOC	KET-C	$k \neq \mathbf{X} \models \mathbf{Z} \mid \mathbf{X}$
		30° 1250 30
	JS	90* 90
LED	CxM-14 (19x19)	
FWHM / FWTM	58.0° / 81.0°	75 200
Efficiency	84 %	
Peak intensity	1 cd/lm	
LEDs/each optic	1	
Light colour	White	er
Required components:		
F17438_HEKLA-G2-I		
		30° 300 30
<b>Μ</b> ΝΙCΗΙΛ		90° 90°
LED	COB L-Type (LES 11)	
FWHM / FWTM	56.0° / 77.0°	73*
Efficiency	86 %	
Peak intensity	1.1 cd/lm	69° 69
LEDs/each optic	1	
Light colour	White	45°
Required components:		
Required components: F17437_HEKLA-G2-I	1	
Required components: F17437_HEKLA-G2-I	ł	
	I	
F17437_HEKLA-G2-I	I	20 <sup>4</sup>
F17437_HEKLA-G2-I		
F17437_HEKLA-G2-I	PrevaLED Core G7 LES15 CoB	25° 280° 15°
F17437_HEKLA-G2-I OSRAM LED FWHM / FWTM	PrevaLED Core G7 LES15 CoB 58.0° / 80.0°	
F17437_HEKLA-G2-I OSRAM LED FWHM / FWTM Efficiency	PrevaLED Core G7 LES15 CoB 58.0° / 80.0° 85 %	25° 280° 15°
F17437_HEKLA-G2-I OSRAM LED FWHM / FWTM Efficiency Peak intensity	PrevaLED Core G7 LES15 CoB 58.0° / 80.0° 85 % 1 cd/lm	27 280 27 94°
F17437_HEKLA-G2-I	PrevaLED Core G7 LES15 CoB 58.0° / 80.0° 85 % 1 cd/lm 1	27 280 27 94°
F17437_HEKLA-G2-I OSRAM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	PrevaLED Core G7 LES15 CoB 58.0° / 80.0° 85 % 1 cd/lm	27 280 27 94°
F17437_HEKLA-G2-I OSRAM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	PrevaLED Core G7 LES15 CoB 58.0° / 80.0° 85 % 1 cd/lm 1	25° 280° 15°
F17437_HEKLA-G2- <b>OSRAM</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	PrevaLED Core G7 LES15 CoB 58.0° / 80.0° 85 % 1 cd/lm 1	27 280 27 94°
F17437_HEKLA-G2-I OSRAM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	PrevaLED Core G7 LES15 CoB 58.0° / 80.0° 85 % 1 cd/lm 1	27 280 27 94° 9 97 9



SAMSUI	VG	90°
LED	LC003D / LC006D / LC009D / LC013D	
FWHM / FWTM	54.0° / 76.0 + 75.0°	787
Efficiency	88 %	
Peak intensity	1.2 cd/lm	400
LEDs/each optic	1	
Light colour	White	g65
Required components:		800
F15255_HEKLA-SC	CKET-C	
		30 <sup>4</sup> 15 <sup>9</sup> 0 <sup>0</sup> 15 <sup>9</sup> 30
SAMSUI	VG	50* B0
LED	LC020T (Tunable white)	
FWHM / FWTM	56.0° / 76.0°	75.
Efficiency	87 %	
Peak intensity	1.1 cd/lm	60 <sup>5</sup>
LEDs/each optic	1	
Light colour	White	gy gy
Required components:		800
F15859_HEKLA-SC		
		30° 1200 15°
SAMSUI	VG	90*
LED	LC020T (Tunable white)	
FWHM / FWTM	56.0° / 76.0°	75.
Efficiency	86 %	
Peak intensity	1.1 cd/lm	60 <sup>5</sup>
LEDs/each optic	1	
Light colour	White	er et
Required components:		
F15859_HEKLA-SC		
	CKET-I	
	CKET-I	
	CKET-I	34
TRIDONI		20 <sup>3</sup> 20 <sup>3</sup> 20 <sup>3</sup> 20 <sup>3</sup>
	C	29 <sup>1</sup> 20 29 <sup>1</sup> 30 29 <sup>1</sup> 30 20 20 20 20 20 20 20 20 20 2
		2 <sup>3</sup> 2 <sup>3</sup> 2 <sup>3</sup> 2 <sup>3</sup> 2 <sup>3</sup> 2 <sup>3</sup> 2 <sup>3</sup> 2 <sup>3</sup>
LED	SLE G7 LES13	
LED FWHM / FWTM	C SLE G7 LES13 56.0° / 78.0°	
LED FWHM / FWTM Efficiency	C SLE G7 LES13 56.0° / 78.0° 86 %	
LED FWHM / FWTM Efficiency Peak intensity	C SLE G7 LES13 56.0° / 78.0° 86 % 1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	C SLE G7 LES13 56.0° / 78.0° 86 % 1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	C SLE G7 LES13 56.0° / 78.0° 86 % 1 cd/lm 1 White	g*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	C SLE G7 LES13 56.0° / 78.0° 86 % 1 cd/lm 1 White	



XICATO		90* 90*
LED	XOB 14.5 mm	
FWHM / FWTM	55.0° / 76.0°	
Efficiency	79 %	
Peak intensity	1 cd/lm	
LEDs/each optic	1	
Light colour	White	er
Required component	ts:	
F17438_HEKLA-0	G2-I	
		25° 0° 15°



#### **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.

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