

# PRODUCT DATASHEET RONDA-WAS-C

# **RONDA-WAS-C**

Asymmetric beam for wall washing with holder C compatible with LEDiL HEKLA

#### **TECHNICAL SPECIFICATIONS:**

Dimensions	Ø 53.9 mm
Height	24.7 mm
Fastening	socket
ROHS compliant	yes 🛈



#### MATERIAL SPECIFICATIONS:

Component F15156\_RONDA-WAS F15635\_RONDA-HLD-C

Туре
Single lens
Holder

Material	Colour	Finish
PMMA	clear	
PC	white	

#### **ORDERING INFORMATION:**

#### Quantities for one set:

Single lens 1 Holder 1

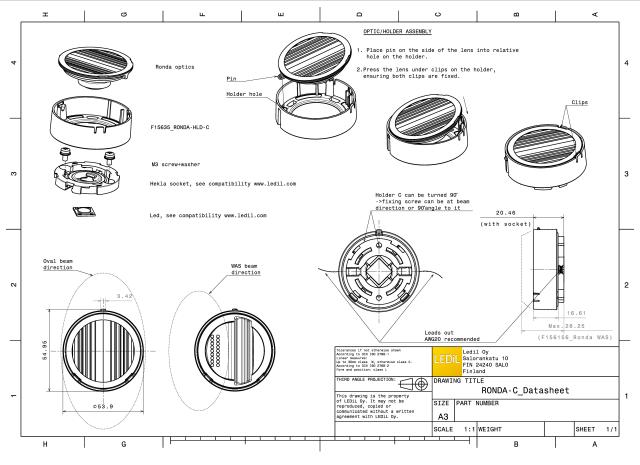


# PRODUCT DATASHEET RONDA-WAS-C

Component		Qty in box	MOQ	MPQ	Box weight (kg)
F15156_RONDA-WAS » Box size: 480 x 280 x 300 mm	Single lens	420	120	30	7.3
F15635_RONDA-HLD-C » Box size: 480 x 280 x 300 mm	Holder	420	120	30	4.1



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



LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6		91 <sup>*</sup> 72 61 <sup>*</sup> 61 <sup>*</sup> 60 <sup>*</sup>
bridgelux, LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15253_HEKLA		
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15253_HEKLA		90 91 92 92 93 90 90 90 90 90 90 90 90 90 90
bridgelux. LED FWHM / FWTM Efficiency	V6 HD Gen 7 Asymmetric	20°



r		
bridgelux.		90° 90°
LED	V9 HD Gen7	4
FWHM / FWTM	Asymmetric	73,
Efficiency	90 %	$\left  \right\rangle $
Peak intensity	1.2 cd/lm	60°
LEDs/each optic	1	
Light colour	White	97°
Required componer		
F15859_HEKLA		800
		15° 0° 15°
bridgelux.		90* 90*
LED	VERO10	
FWHM / FWTM	Asymmetric	73'
Efficiency	89 %	
Peak intensity	1 cd/lm	
LEDs/each optic	1	
Light colour	White	45*
Required componer	nts:	
F15616_HEKLA-	SOCKET-F	
		800
		36* 32*
		15 07 15
bridgelux.		90° 90° 90°
bridgelux. LED	Vesta DTW 13mm (21W)	10° 0° 10°
	Vesta DTW 13mm (21W) Asymmetric	
LED		
LED FWHM / FWTM	Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 81 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 81 % 0.6 cd/lm 1 Tunable White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	Asymmetric 81 % 0.6 cd/lm 1 Tunable White tts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	Asymmetric 81 % 0.6 cd/lm 1 Tunable White hts: SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	Asymmetric 81 % 0.6 cd/lm 1 Tunable White hts: SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	Asymmetric 81 % 0.6 cd/lm 1 Tunable White hts: SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	Asymmetric 81 % 0.6 cd/lm 1 Tunable White hts: SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	Asymmetric 81 % 0.6 cd/lm 1 Tunable White hts: SOCKET-K 1 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	Asymmetric 81 % 0.6 cd/lm 1 Tunable White hts: SOCKET-K 1 Typ L8 Vesta TW 13mm (25W) CSP	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49 bridgeLUX. LED FWHM / FWTM	Asymmetric 81 % 0.6 cd/lm 1 Tunable White hts: SOCKET-K 1 Typ L8 Vesta TW 13mm (25W) CSP Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49 bridgeLUX. LED FWHM / FWTM Efficiency	Asymmetric 81 % 0.6 cd/m 1 Tunable White hts: SOCKET-K 1 Typ L8 Vesta TW 13mm (25W) CSP Asymmetric 83 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49	Asymmetric 81 % 0.6 cd/lm 1 Tunable White hts: SOCKET-K 1 Typ L8 Vesta TW 13mm (25W) CSP Asymmetric 83 % 0.6 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49 bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 81 % 0.6 cd/lm 1 Tunable White hts: SOCKET-K 1 Typ L8 Vesta TW 13mm (25W) CSP Asymmetric 83 % 0.6 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49 bridgetux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 81 % 0.6 cd/lm 1 Tunable White hts: SOCKET-K 1 Typ L8 Vesta TW 13mm (25W) CSP Asymmetric 83 % 0.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49 bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	Asymmetric         81 %         0.6 cd/lm         1         Tunable White         tts:         SOCKET-K         1 Typ L8         Vesta TW 13mm (25W) CSP         Asymmetric         83 %         0.6 cd/lm         1         White         ts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA Bender Wirth: 49 bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	Asymmetric 81 % 0.6 cd/lm 1 Tunable White hts: SOCKET-K 1 Typ L8 Vesta TW 13mm (25W) CSP Asymmetric 83 % 0.6 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 bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	Asymmetric 81 % 0.6 cd/lm 1 Tunable White hts: SOCKET-K 1 Typ L8 Vesta TW 13mm (25W) CSP Asymmetric 83 % 0.6 cd/lm 1 White hts: SOCKET-K	



bridgelux.		90°
LED	Vesta TW 6mm DP	
FWHM / FWTM	Asymmetric	
Efficiency	86 %	400
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	95*
Required compone	nts:	80
C16142_HEKLA		
Bender Wirth: 5	14 Тур L8	
		36" 1220 36" 25" 01" 15" 30"
bridgelux.		50* 50*
LED	Vesta TW 9mm (12W) CSP	
FWHM / FWTM	Asymmetric	75*
Efficiency	85 %	
Peak intensity	0.9 cd/lm	Ň ZNU N Ž
LEDs/each optic	1	
Light colour	White	95*
Required compone	nts:	60
C16142_HEKL	-SOCKET-K	
		15° 0° 15°
CITIZE	Ν	90* 90*
LED	CLC020 Series (Dim-To-Warm)	
FWHM / FWTM	Asymmetric	
Efficiency	86 %	601 601
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	45* 45*
Required compone	nts:	
C16142_HEKLA		
C16142_HEKL		00
C16142_HEKLA		
	-SOCKET-K	90° 90° 90° 90° 90° 90° 90° 90° 90° 90°
CITIZE	-socket-к <b>N</b>	
	-SOCKET-K N CLL02x/CLU02x (LES10)	
CITIZE LED FWHM / FWTM	-SOCKET-K N CLL02x/CLU02x (LES10) Asymmetric	
CITIZE LED FWHM / FWTM Efficiency	-SOCKET-K N CLL02x/CLU02x (LES10) Asymmetric 89 %	
CITIZE LED FWHM / FWTM Efficiency Peak intensity	-SOCKET-K N CLL02x/CLU02x (LES10) Asymmetric 89 % 1 cd/lm	
CITIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	-SOCKET-K N CLL02x/CLU02x (LES10) Asymmetric 89 % 1 cd/lm 1	90 90 90 90 90 90 90 90 90 90
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	-SOCKET-K N CLL02x/CLU02x (LES10) Asymmetric 89 % 1 cd/lm 1 White	
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	-SOCKET-K N CLL02x/CLU02x (LES10) Asymmetric 89 % 1 cd/lm 1 White nts:	60 60 60 60 60 60 60 60 60 60
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	-SOCKET-K N CLL02x/CLU02x (LES10) Asymmetric 89 % 1 cd/lm 1 White nts:	
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	-SOCKET-K N CLL02x/CLU02x (LES10) Asymmetric 89 % 1 cd/lm 1 White nts:	
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	-SOCKET-K N CLL02x/CLU02x (LES10) Asymmetric 89 % 1 cd/lm 1 White nts:	



CITIZE	'N	
		60°
LED	CLL03x/CLU03x	71 72
FWHM / FWTM	Asymmetric	
Efficiency	83 %	60 - 200 - 60
Peak intensity	0.6 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
F15859_HEKLA	A-SOCKET-I	
		30 <sup>4</sup> 500 301
CITIZE	N	90 <sup>4</sup> 990
LED	CLU700/701/702	$\square$
EUD FWHM / FWTM	Asymmetric	
Efficiency	90 %	
Peak intensity	1.3 cd/lm	60 60
LEDs/each optic	1	
Light colour	White	er
Required compone		00
F15255_HEKLA		
		1270
		<sup>30*</sup> 15* 0 <sup>6</sup> 15*
CITIZE	N	90 <sup>+</sup>
	CLU710/711	95* 99*
		90* 23-
LED	CLU710/711	
LED FWHM / FWTM Efficiency	CLU710/711 Asymmetric	
LED FWHM / FWTM	CLU710/711 Asymmetric 87 %	90* 997 72* 72 63* 64*
LED FWHM / FWTM Efficiency Peak intensity	CLU710/711 Asymmetric 87 % 1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents: A-SOCKET-J	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents: A-SOCKET-J	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents: A-SOCKET-J	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents: K-SOCKET-J	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CITTIZE LED FWHM / FWTM Efficiency	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents: N-SOCKET-J CLU7A2 (LES 4.2mm) Asymmetric 91 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA Efficiency Peak intensity	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents: K-SOCKET-J	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA Efficiency Peak intensity LEDs/each optic	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents: A-SOCKET-J <b>CLU7A2 (LES 4.2mm)</b> Asymmetric 91 % 1.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA Efficiency Peak intensity LEDs/each optic Light colour	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents: A-SOCKET-J <b>CLU7A2 (LES 4.2mm)</b> Asymmetric 91 % 1.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents: A-SOCKET-J CLU7A2 (LES 4.2mm) Asymmetric 91 % 1.5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA Efficiency Peak intensity LEDs/each optic Light colour	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents: A-SOCKET-J CLU7A2 (LES 4.2mm) Asymmetric 91 % 1.5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents: A-SOCKET-J CLU7A2 (LES 4.2mm) Asymmetric 91 % 1.5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU710/711 Asymmetric 87 % 1 cd/lm 1 White ents: A-SOCKET-J CLU7A2 (LES 4.2mm) Asymmetric 91 % 1.5 cd/lm 1 White ents:	



CITIZE	N	50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 48	LCN-C01B (Tunable White) Asymmetric 87 % 1.1 cd/lm 1 White nts: -SOCKET-K	
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15256_HEKLA	CMA1516 Asymmetric 92 % 1 cd/lm 1 White nts:	
CREE CLED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15254_HEKLA	CMA1825 Asymmetric 90 % 0.8 cd/lm 1 White nts:	
CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CMT14xx Asymmetric 91 % 1 cd/lm 1 White nts:	



		50° 50°
LED	CMT19xx	
FWHM / FWTM	Asymmetric	77
Efficiency	85 %	
Peak intensity	0.6 cd/lm	
LEDs/each optic	1	
Light colour	White	gr
Required compone	nts:	
F15859_HEKLA		
		30* 00 07 32*
		90°
LED	CXA/B 13xx	
FWHM / FWTM	Asymmetric	37
Efficiency	91 %	
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	gr gr
Required compone	nts:	00
F15956_HEKLA		
		30" 1200 3."
		35° 0° 15°
Comment of Management		
		90°
LED	CXA/B 15xx	90* 99* 70* 78*
LED FWHM / FWTM	CXA/B 15xx Asymmetric	72. 29*
LED FWHM / FWTM Efficiency	CXA/B 15xx Asymmetric 91 %	60 <sup>4</sup> 60 <sup>4</sup> 20 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity	CXA/B 15xx Asymmetric 91 % 1 cd/lm	90* 98* 72* 75* 60* 60*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White ints:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White ints:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White ints:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White ints:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White Ints: -SOCKET-D	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15256_HEKLA	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White Ints: -SOCKET-D	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15256_HEKLA	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White ints: -SOCKET-D	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15256_HEKLA	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White Ints: -SOCKET-D CXA/B 1816 & CXA/B 1820 & CXA 1850	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15256_HEKLA	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White Ints: -SOCKET-D CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15256_HEKLA	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White Ints: -SOCKET-D CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 87 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15256_HEKLA	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White Ints: -SOCKET-D CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 87 % 0.7 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15256_HEKLA	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White Ints: -SOCKET-D CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 87 % 0.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15256_HEKLA	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White Ints: -SOCKET-D CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 87 % 0.7 cd/lm 1 White Ints:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15256_HEKLA	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White Ints: -SOCKET-D CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 87 % 0.7 cd/lm 1 White Ints:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15256_HEKLA	CXA/B 15xx Asymmetric 91 % 1 cd/lm 1 White Ints: -SOCKET-D CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 87 % 0.7 cd/lm 1 White Ints:	



UMIL	EDS	50° 9
LED	LUXEON CX Plus CoB L08 (Gen2)	
FWHM / FWTM	Asymmetric	
Efficiency	86 %	eo. 200
Peak intensity	0.6 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
Bender Wirth: 6	37a Hekla	
		3/4 25" 0" 25"
	.EDS	94 · · · · · · · · · · · · · · · · · · ·
LED	LUXEON CoB 1202HD	$\frac{1}{1}$
FWHM / FWTM	Asymmetric	
Efficiency	92 %	
Peak intensity	1.4 cd/lm	107 V
LEDs/each optic	1	
Light colour	White	e
Required compone	ents:	
F15848_HEKLA	A-SOCKET-G	
		1220
		30*
<b>M</b>		
UMIL	.EDS	90* 9
	LUXEON CoB 1202s	77
LED FWHM / FWTM	Asymmetric	
FWHM / FWTM Efficiency	Asymmetric 91 %	
FWHM / FWTM Efficiency Peak intensity	Asymmetric 91 % 1.3 cd/lm	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 91 % 1.3 cd/lm 1	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 91 % 1.3 cd/lm 1 White	73 601 601 601 601 601 601 601 601 601 601
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 91 % 1.3 cd/lm 1 White ents:	57 69 75 100
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 91 % 1.3 cd/lm 1 White ents:	33 64 90 90 90
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 91 % 1.3 cd/lm 1 White ents:	75 60 61 61 61 61 61 61 61 61 61 61 61 61 61
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compose	Asymmetric 91 % 1.3 cd/lm 1 White ents:	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	Asymmetric 91 % 1.3 cd/lm 1 White ents: A-SOCKET-G	30°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	Asymmetric 91 % 1.3 cd/lm 1 White ents: A-SOCKET-G	30°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	Asymmetric 91 % 1.3 cd/lm 1 White ents: A-SOCKET-G	39* 3
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	Asymmetric 91 % 1.3 cd/lm 1 White ents: A-SOCKET-G LUXEON CoB 1204HD	39* 3
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	Asymmetric 91 % 1.3 cd/lm 1 White ents: A-SOCKET-G LUXEON CoB 1204HD Asymmetric	39* 3
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	Asymmetric 91 % 1.3 cd/lm 1 White ents: A-SOCKET-G LUXEON CoB 1204HD Asymmetric 91 %	30°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	Asymmetric 91 % 1.3 cd/lm 1 White ents: A-SOCKET-G LUXEON CoB 1204HD Asymmetric 91 % 1.1 cd/lm	30*
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	Asymmetric 91 % 1.3 cd/lm 1 White ents: A-SOCKET-G LUXEON CoB 1204HD Asymmetric 91 % 1.1 cd/lm 1 White	30°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	Asymmetric 91 % 1.3 cd/lm 1 White ents: A-SOCKET-G LUXEON CoB 1204HD Asymmetric 91 % 1.1 cd/lm 1 White ents:	30°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	Asymmetric 91 % 1.3 cd/lm 1 White ents: A-SOCKET-G LUXEON CoB 1204HD Asymmetric 91 % 1.1 cd/lm 1 White ents:	30*
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA WWM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 91 % 1.3 cd/lm 1 White ents: A-SOCKET-G LUXEON CoB 1204HD Asymmetric 91 % 1.1 cd/lm 1 White ents:	30°



UMIL	EDS	90* 90*
LED	LUXEON CoB 1205HD	
FWHM / FWTM	Asymmetric	73* 73*
Efficiency	90 %	200
Peak intensity	0.9 cd/lm	60°
LEDs/each optic	1	400
Light colour	White	45*
Required compone		
F15858_HEKLA		
		810
		30° 30° 30° 30°
LUMIL	EDS	90 <sup>4</sup> 90 <sup>4</sup>
LED	LUXEON CX Plus CoB - HD S01H4	
FWHM / FWTM	Asymmetric	
Efficiency	91 %	605 600
Peak intensity	1.4 cd/im	$r \sim / / N \sim 1$
LEDs/each optic	1	
Light colour	White	45* <u>310</u> 45*
Required compone	ints:	
Bender Wirth: 6	34c Hekla	
		12200
		36* 36*
	EDS	201 7
LED	LUXEON CX Plus CoB - HD S01H6 / HD S02H6	
FWHM / FWTM	Asymmetric	78" 73"
Efficiency	91 %	400
Peak intensity	1.4 cd/lm	60.0
LEDs/each optic	1	
Light colour	White	ar* 800 ar*
Required compone		
	ints:	
Bender Wirth: 6		
		30
Bender Wirth: 6	34c Hekla	
Bender Wirth: 6	.EDS	90° 15° 0° 15° 5°
Bender Wirth: 6	.EDS LUXEON CX Plus CoB - HD S04H9	25- 26- 26- 20- 20- 20- 20- 20- 20- 20- 20- 20- 20
Bender Wirth: 6	SAC Hekla EDS LUXEON CX Plus CoB - HD S04H9 Asymmetric	25- 25- 25- 25- 25- 25- 25- 25- 25- 25-
Bender Wirth: 6	EDS LUXEON CX Plus CoB - HD S04H9 Asymmetric 91 %	60°
Bender Wirth: 6	EDS LUXEON CX Plus CoB - HD S04H9 Asymmetric 91 % 1.1 cd/lm	
Bender Wirth: 6	EDS LUXEON CX Plus CoB - HD S04H9 Asymmetric 91 % 1.1 cd/lm 1	
Bender Wirth: 6	EDS LUXEON CX Plus CoB - HD S04H9 Asymmetric 91 % 1.1 cd/lm 1 White	
Bender Wirth: 6	EDS LUXEON CX Plus CoB - HD S04H9 Asymmetric 91 % 1.1 cd/lm 1 White ints:	22 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25
Bender Wirth: 6	EDS LUXEON CX Plus CoB - HD S04H9 Asymmetric 91 % 1.1 cd/lm 1 White ints:	
Bender Wirth: 6	EDS LUXEON CX Plus CoB - HD S04H9 Asymmetric 91 % 1.1 cd/lm 1 White ints:	
Bender Wirth: 6	EDS LUXEON CX Plus CoB - HD S04H9 Asymmetric 91 % 1.1 cd/lm 1 White ints:	200 200 200 200 200 200 200 200



	EDS		90* 90*
LED FWHM / FWTM	LUXEON CX Plus CoB L04 / L05 (Gen2) Asymmetric		72
Efficiency	90 %		601 601
Peak intensity	0.8 cd/lm		
LEDs/each optic	1 White		
Light colour Required compone			$r \times / \tau$
Bender Wirth: 63			60
Bender With. 0.			30 <sup>4</sup> 15 <sup>7</sup> 0 <sup>6</sup> 15 <sup>7</sup> 3 <sup>6</sup>
	EDS		90° 90°
LED	LUXEON CX Plus CoB M02 / M03 (Gen2)		
FWHM / FWTM	Asymmetric		23.
Efficiency	91 %		
Peak intensity	1.2 cd/lm		
LEDs/each optic	1		
Light colour	White		95 G
Required compone Bender Wirth: 64			
	EDS LUXEON CX Plus CoB S01 (Gen2)		
FWHM / FWTM	Asymmetric		73-
		and the second se	400
	92 %		
Efficiency	92 % 1.5 cd/m		60,9
Efficiency Peak intensity	92 % 1.5 cd/lm 1		60*
Efficiency Peak intensity LEDs/each optic	1.5 cd/lm		607 (60 47* (60) (60) (60) (60) (60) (60) (60) (60)
	1.5 cd/lm 1 White nts:		20 20 20 20 10 10 10 10 10 10 10 10 10 1
Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	1.5 cd/lm 1 White nts: 34c Hekla		
Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	1.5 cd/lm 1 White nts: 34c Hekla		
Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	1.5 cd/lm 1 White nts: 34c Hekla		
Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	1.5 cd/lm 1 White nts: 34c Hekla SUUS CDM-14 (Dim-To-Warm)		
Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63 WITH: 63 EFMENTINE LED FWHM / FWTM Efficiency Peak intensity	1.5 cd/lm 1 White nts: 34c Hekla CDM-14 (Dim-To-Warm) Asymmetric		
Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63 Wirth: 63 Ender Wirth: 63 Ender Wirth	1.5 cd/lm 1 White nts: B4c Hekla CDM-14 (Dim-To-Warm) Asymmetric 80 % 0.6 cd/lm 1		
Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63 WIM / Wirth: 63 UED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	1.5 cd/lm 1 White nts: B4c Hekla CDM-14 (Dim-To-Warm) Asymmetric 80 % 0.6 cd/lm 1 White		
Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63 WIM / Wirth: 63 WIM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	1.5 cd/lm 1 White nts: 34c Hekla CDM-14 (Dim-To-Warm) Asymmetric 80 % 0.6 cd/lm 1 White nts:		
Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	1.5 cd/lm 1 White nts: 34c Hekla CDM-14 (Dim-To-Warm) Asymmetric 80 % 0.6 cd/lm 1 White nts: -SOCKET-K		



	NUS		90*
LED	CDM-6 (Dim-To-Warm)		
FWHM / FWTM	Asymmetric		
Efficiency	82 %		89° 400 68
Peak intensity	1.2 cd/lm		
LEDs/each optic	1		
Light colour	White		45*
Required componer			800
C16142_HEKLA			
Bender Wirth: 49	90 Тур L8		
Ce			10° 12° 12° 50° 50° 50° 50° 50° 50° 50° 50° 50° 50
			90* 9
LED	CDM-9 (Dim-To-Warm)		73"
FWHM / FWTM	Asymmetric		
Efficiency	85 %		
Peak intensity	0.9 cd/lm		
LEDs/each optic	1		
Light colour	White		85°
Required componer	nts:		
C16142_HEKLA	-SOCKET-K		
Bender Wirth: 49	90 Typ L8		80
			364 157 34
			Y Y
C-LOMI	NUS		90* 90
			90* 9
LED	CxM-14 (19x19) Asymmetric		23°-
	CxM-14 (19x19)		
LED FWHM / FWTM	CxM-14 (19x19) Asymmetric		94* 9 72 91 92 92 92 92
LED FWHM / FWTM Efficiency	CxM-14 (19x19) Asymmetric 82 %		92° 9 73° 7 60° 7 200 6
LED FWHM / FWTM Efficiency Peak intensity	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm		9° 9 9° 7 9° 7 9° 7 9° 7 90 7 90 7 90 7 90 7 90 7 90 7 90 7 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White		92° 9 92° 7 92° 7 90° 6 90° 6 90 90 90 900 90 900 900 90 900 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White nts:		92° 9 2° 7 0° 7 0° 7 0° 7 0° 7 0° 7 0° 7 0° 7 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White nts:		92* 9 95* 7 95* 200 0 95* 600 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White nts:		200 00 00 00 00 00 00 00 00 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA-	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White nts: -SOCKET-I		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA:	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White nts: -SOCKET-I		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA:	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White nts: -SOCKET-I		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White nts: -SOCKET-1		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA-	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White nts: -SOCKET-I		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA-	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White nts: -SOCKET-1		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA-	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White nts: -SOCKET-I <b>NUS</b> CXM-4 Asymmetric 90 % 1.4 cd/lm 1		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA-	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White nts: -SOCKET-I <b>NUS</b> CXM-4 Asymmetric 90 % 1.4 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA-	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White nts: -SOCKET-I <b>NUS</b> CXM-4 Asymmetric 90 % 1.4 cd/lm 1 White nts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA-	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White nts: -SOCKET-I <b>NUS</b> CXM-4 Asymmetric 90 % 1.4 cd/lm 1 White nts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA-	CxM-14 (19x19) Asymmetric 82 % 0.6 cd/lm 1 White nts: -SOCKET-I <b>NUS</b> CXM-4 Asymmetric 90 % 1.4 cd/lm 1 White nts:		



	NUS	90* 90*
LED	CxM-9 (13.5x13.5)	
FWHM / FWTM	Asymmetric	73*
Efficiency	89 %	
Peak intensity	1 cd/lm	
LEDs/each optic	1	
Light colour	White	457
Required compone	its:	
F15255_HEKLA	SOCKET-C	
		90,*
LED		
LED FWHM / FWTM	NJCWL024Z-V1MT: COB L-Type Tunable White	73.
Efficiency	Asymmetric 83 %	$\square \land \forall \land \land$
Peak intensity	83 % 1.2 cd/lm	605 400 60
LEDs/each optic	1	
	White	
Light colour		
Required compone C16142_HEKLA		810
Bender Wirth: 49	γ Typ Lo	$\mathbf{K}$ / $\mathbf{N}$
		36° 13° 0° 15° 34°
		90* 90*
LED	NVCWJ024Z-V1MT: COB J-Type Tunable White	
FWHM / FWTM	Asymmetric	75°
Efficiency	86 %	
Peak intensity	0.9 cd/lm	
LEDs/each optic	1	
Light colour	White	634 63
Required compone	its:	000
C16142_HEKLA	SOCKET-K	
Bender Wirth: 49		
		30 <sup>4</sup> 10 <sup>7</sup> 00 10 <sup>7</sup> 30 <sup>4</sup>
Bender Wirth: 49		20 <sup>4</sup> 20 <sup>5</sup> 20 <sup>5</sup> 20 <sup>5</sup> 20 <sup>5</sup>
Bender Wirth: 49	8 Typ L8	90° 90° 90° 90° 90° 90° 90° 90° 90° 90°
Bender Wirth: 49	8 Typ L8 S Fortimo SLM L09 CoB	20 <sup>1</sup> 0 <sup>1</sup> 25 <sup>1</sup> 25
Bender Wirth: 49	8 Typ L8 S Fortimo SLM L09 CoB Asymmetric	90° 32° 32° 32° 32° 32° 32° 32° 32° 32° 32
Bender Wirth: 45	8 Typ L8 S Fortimo SLM L09 CoB Asymmetric 91 %	23 <sup>4</sup> 23 <sup>5</sup> 29 29 <sup>4</sup> 29 29 <sup>4</sup> 29 20 20 20 20 20 20 20 20 20 20 20 20 20
Bender Wirth: 45	8 Typ L8 S Fortimo SLM L09 CoB Asymmetric 91 % 1 cd/lm	8° 8° 8° 8° 8° 8° 8° 8° 8° 8°
Bender Wirth: 45	8 Typ L8 S Fortimo SLM L09 CoB Asymmetric 91 % 1 cd/lm 1	
Bender Wirth: 45	8 Typ L8 S Fortimo SLM L09 CoB Asymmetric 91 % 1 cd/lm 1 White	20 <sup>1</sup>
Bender Wirth: 45	8 Typ L8 S Fortimo SLM L09 CoB Asymmetric 91 % 1 cd/lm 1 White tts:	
Bender Wirth: 45	8 Typ L8 S Fortimo SLM L09 CoB Asymmetric 91 % 1 cd/lm 1 White tts:	
Bender Wirth: 45	8 Typ L8 S Fortimo SLM L09 CoB Asymmetric 91 % 1 cd/lm 1 White tts:	



PHILIF	<b>'</b> 5	90* 90*
LED	Fortimo SLM L13 CoB	71 71
FWHM / FWTM	Asymmetric	
Efficiency	84 %	50°
Peak intensity	0.6 cd/lm	
LEDs/each optic	1	
Light colour	White	454 450 454
Required compone		
C16142_HEKLA		
Bender Wirth: 43	32 Тур L8	
		30* 15* 0* 15*
<b>S</b> ΛΜS	JNG	90* 90*
LED	LC003D / LC006D / LC009D / LC013D	
FWHM / FWTM	Asymmetric	75* 200
Efficiency	90 %	
Peak intensity	1 cd/lm	
LEDs/each optic	1	
Light colour	White	63e - 63e
Required compone	ints:	
		200
		30* 30*
		15° 1080 15°
CANCI	INC	7
SAMSI		50° 50°
LED	LC010C	27. 29°
LED FWHM / FWTM	LC010C Asymmetric	22 <sup>.</sup> 22 <sup>.</sup> 22 <sup>.</sup>
LED FWHM / FWTM Efficiency	LC010C Asymmetric 90 %	604 25- 26- 26- 26- 26- 26- 26- 26- 26- 26- 26
LED FWHM / FWTM Efficiency Peak intensity	LC010C Asymmetric 90 % 1.1 cd/lm	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC010C Asymmetric 90 % 1.1 cd/lm 1	90° 90° 73° 60° 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC010C Asymmetric 90 % 1.1 cd/lm 1 White	gr
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC010C Asymmetric 90 % 1.1 cd/lm 1 White ints:	61 <u>61</u> 62 <u>62</u> 52 <u>52</u>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC010C Asymmetric 90 % 1.1 cd/lm 1 White ints:	64 64 69 73 75 75 75 75 75 75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC010C Asymmetric 90 % 1.1 cd/lm 1 White ints:	6, 6, 6, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC010C Asymmetric 90 % 1.1 cd/lm 1 White ints:	24- 25- 64- 64- 64- 64- 64- 64- 64- 64
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC010C Asymmetric 90 % 1.1 cd/lm 1 White Ints: -SOCKET-G	77 77 601 602 97 99 909
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	LC010C Asymmetric 90 % 1.1 cd/lm 1 White Ints: -SOCKET-G	77 77 601 602 97 99 909
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	LC010C Asymmetric 90 % 1.1 cd/lm 1 White Ints: -SOCKET-G	27 64 97 06 06 06 06 06 06
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	LC010C Asymmetric 90 % 1.1 cd/lm 1 White Ints: -SOCKET-G	27 60 97 09 09 09 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA SAMSU LED FWHM / FWTM	LC010C Asymmetric 90 % 1.1 cd/lm 1 White Ints: -SOCKET-G	27 60 97 09 09 09 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA SAMSU LED FWHM / FWTM Efficiency	LC010C Asymmetric 90 % 1.1 cd/lm 1 White Ints: -SOCKET-G	77 77 601 602 97 99 909
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA SAMSU LED FWHM / FWTM Efficiency Peak intensity	LC010C Asymmetric 90 % 1.1 cd/lm 1 White Ints: -SOCKET-G SOCKET-G LC010C G2 Asymmetric 88 % 1.5 cd/lm	77 77 601 602 97 99 909
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC010C Asymmetric 90 % 1.1 cd/lm 1 White Ints: -SOCKET-G JNCG LC010C G2 Asymmetric 88 % 1.5 cd/lm 1 White	27 60 97 09 09 09 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC010C Asymmetric 90 % 1.1 cd/lm 1 White ints: -SOCKET-G LC010C G2 Asymmetric 88 % 1.5 cd/lm 1 White ints:	27 60 97 09 09 09 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC010C Asymmetric 90 % 1.1 cd/lm 1 White ints: -SOCKET-G LC010C G2 Asymmetric 88 % 1.5 cd/lm 1 White ints:	27 64 97 06 06 06 06 06 06
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC010C Asymmetric 90 % 1.1 cd/lm 1 White ints: -SOCKET-G LC010C G2 Asymmetric 88 % 1.5 cd/lm 1 White ints:	27 - 20 64 - 60 97 - 05



SAMSI		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	LC016D / LC019D / LC026D / LC033D Asymmetric 83 % 0.6 cd/lm 1 White nts:	
SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	LC020C Asymmetric 90 % 1 cd/lm 1 White nts:	91 <sup>4</sup> 92 <sup>5</sup> 72 <sup>5</sup> 61 <sup>4</sup> 61 <sup>4</sup> 61 <sup>4</sup>
SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC020C G2 Asymmetric 89 % 1 cd/lm 1 White	27 27 27 27 27 27 27 27 27 27
F15859_HEKLA seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	-SOCKET-I MJT COB LES 6 Asymmetric 88 % 1.2 cd/lm 1 White	22- 60 23- 24- 25- 00 00 00 00 00 00 00 00 00 0
Required compone F15255_HEKLA	nts:	90 90 25 00 15 32



SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA		24 25 66 75 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	SLE G7 LES09 Asymmetric 89 % 1 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	SLE G7 LES13 Asymmetric 85 % 0.7 cd/lm 1 White nts:	
TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	SLE G7 LES15 Asymmetric 82 % 0.5 cd/lm 1 White nts:	



XICATO	0	50* 50*
LED	XOB 14.5 mm	
FWHM / FWTM	Asymmetric	72 22
Efficiency	83 %	
Peak intensity	0.6 cd/lm	
LEDs/each optic	1	
Light colour	White	67
Required compone	ents:	
F15859_HEKL4	A-SOCKET-I	30* <u>60</u> 30
XICATO	0	90° 99
LED	XOB 9.8 mm	
FWHM / FWTM	Asymmetric	
Efficiency	90 %	
Peak intensity	1 cd/lm	
LEDs/each optic	1	
Light colour	White	er er
Required compone	ents:	
F15255_HEKLA	A-SOCKET-C	24- 157 12- 12- 12-
XICATO	0	30° 90
LED	XTM - 19mm LES	
FWHM / FWTM	Asymmetric	
Efficiency	83 %	
Peak intensity	0.5 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
C16058_XTM-A	DAPTER-50-C	



# PHOTOMETRIC DATA (SIMULATED):

bridgelux.		90°
LED	V13 Gen7	
FWHM / FWTM	Asymmetric	
Efficiency	79 %	
Peak intensity	0.7 cd/lm	
LEDs/each optic	1	
Light colour	White	9 <sup>1</sup> 40 - 40
Required components		
F15859_HEKLA-S		
_		80
		30" 15" 0 <sup>h</sup> 15"
	DS	50*
LED	LUXEON CoB L04/L05	
FWHM / FWTM	Asymmetric	78
Efficiency	86 %	
Peak intensity	0.8 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components		
F15254_HEKLA-S		
_		
		80
		253 <sup>°</sup> 0 <sup>°</sup> 153 <sup>°</sup>
COMILE	DS	50° 30°
LED	LUXEON CoB L08	
FWHM / FWTM	Asymmetric	
Efficiency	78 %	
Peak intensity	0.6 cd/lm	
LEDs/each optic	1	
LEDs/each optic Light colour		er er
	1 White	97
Light colour	1 White S:	¢*
Light colour Required components	1 White S: OCKET-K	e.
Light colour Required components C16142_HEKLA-S	1 White S: OCKET-K	
Light colour Required components C16142_HEKLA-S Bender Wirth: 457	1 White S: OCKET-K Typ L8	
Light colour Required components C16142_HEKLA-S Bender Wirth: 457	1 White S: OCKET-K Typ L8	
Light colour Required components C16142_HEKLA-S Bender Wirth: 457	1 White S: OCKET-K Typ L8 <b>:DS</b> LUXEON CoB M02/M03	
Light colour Required components C16142_HEKLA-S Bender Wirth: 457	1 White S: OCKET-K Typ L8 <b>:DS</b> LUXEON CoB M02/M03 Asymmetric	71
Light colour Required components C16142_HEKLA-S Bender Wirth: 457	1 White S: OCKET-K Typ L8 S LUXEON CoB M02/M03 Asymmetric 89 %	
Light colour Required components C16142_HEKLA-S Bender Wirth: 457	1 White s: OCKET-K Typ L8 <b>DS</b> LUXEON CoB M02/M03 Asymmetric 89 % 1.2 cd/lm	
Light colour Required components C16142_HEKLA-S Bender Wirth: 457	1 White s: OCKET-K Typ L8 <b>DS</b> LUXEON CoB M02/M03 Asymmetric 89 % 1.2 cd/lm 1	
Light colour Required components C16142_HEKLA-S Bender Wirth: 457	1 White S: OCKET-K Typ L8 <b>DS</b> LUXEON CoB M02/M03 Asymmetric 89 % 1.2 cd/lm 1 White	
Light colour Required components C16142_HEKLA-S Bender Wirth: 457	1 White S: OCKET-K Typ L8 <b>DS</b> LUXEON CoB M02/M03 Asymmetric 89 % 1.2 cd/lm 1 White S:	
Light colour Required components C16142_HEKLA-S Bender Wirth: 457	1 White S: OCKET-K Typ L8 <b>DS</b> LUXEON CoB M02/M03 Asymmetric 89 % 1.2 cd/lm 1 White S:	
Light colour Required components C16142_HEKLA-S Bender Wirth: 457	1 White S: OCKET-K Typ L8 <b>DS</b> LUXEON CoB M02/M03 Asymmetric 89 % 1.2 cd/lm 1 White S:	
Light colour Required components C16142_HEKLA-S Bender Wirth: 457	1 White S: OCKET-K Typ L8 <b>DS</b> LUXEON CoB M02/M03 Asymmetric 89 % 1.2 cd/lm 1 White S:	



# PHOTOMETRIC DATA (SIMULATED):

	DS	
LED	LUXEON CoB S01	
FWHM / FWTM	Asymmetric	
Efficiency	90 %	
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
F15956_HEKLA-SC	CKET-J	
		50°
LED	CxM-9 (13.5x13.5)	
FWHM / FWTM	Asymmetric	77*
Efficiency	81 %	
Peak intensity	0.9 cd/lm	
LEDs/each optic	1	
Light colour	White	45* 660 45*
Required components:		
F17435_HEKLA-G2	-C	
		80
		50° 50°
~		15° 1800 15°
<b>Μ</b> ΝΙCΗΙΛ		90* 90*
LED	СОВ D-Туре	
FWHM / FWTM	Asymmetric	750 75°
Efficiency	84 %	200
Peak intensity	0.6 cd/lm	607 607
LEDs/each optic	1	
Light colour	White	45* 400 45*
Required components:		
F17437_HEKLA-G2	-H	
		600
		30* 30*
<b>Ø</b> ΝΙCΗΙΛ		
LED	COB L-Type (LES 11)	
FWHM / FWTM	Asymmetric	750 750
Efficiency	88 %	200
Peak intensity	00 % 0.7 cd/lm	.66*
LEDs/each optic	0.7 co/im 1	
Light colour	u White	400
Required components:		67 67 67
C16142_HEKLA-SC		600
Bender Wirth: 463 T	ур цо	
		30* 30*
		15' 466 15'



# PHOTOMETRIC DATA (SIMULATED):

<b>Ø</b> ΝΙCΗΙΛ		90°
LED	COB T-Type	71 71
FWHM / FWTM	Asymmetric	
Efficiency	83 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	a
Required components	s:	
F15848_HEKLA-S	OCKET-G	
		300 320
		133



#### **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:

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