

PRODUCT DATASHEET F14739_BROOKE-G2-M

BROOKE-G2-M

~30° medium beam compatible with LEDiL HEKLA.

TECHNICAL SPECIFICATIONS:

Dimensions	Ø 45.0 mm
Height	18.9 mm
Fastening	socket
ROHS compliant	yes 🛈



MATERIAL SPECIFICATIONS:

Component	Туре	Material	Colour	Finish	Coating
BROOKE-G2-M	Reflector	PC	metal		lacquer

ORDERING INFORMATION:

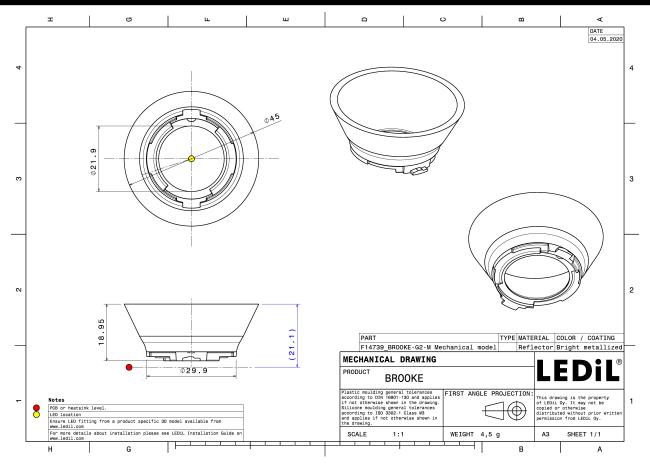
Component

- F14739_BROOKE-G2-M
- » Box size: 480 x 280 x 300 mm

Qty in box	MOQ	MPQ	Box weight (kg)
720	45	45	5.0



PRODUCT DATASHEET F14739_BROOKE-G2-M



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 componer F15253_HEKLA- C14658_BARBA	SOCKET-A	2010 2010
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer F15253_HEKLA-		94 97 75 96 96 96 96 96 96 96 96 96 96 96 96 96 9
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer F15255_HEKLA- C14658_BARBA	SOCKET-C	90° 75° 600 60° 60° 60° 60° 60° 60° 60
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer F15255_HEKLA-		25°



bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA- C14658_BARBA	SOCKET-I	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA		20 20 20 20 20 20 20 20 20 20
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15616_HEKLA		
bridgelux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA		



bridgelux.		90* 90*
LED	VERO18	
FWHM / FWTM	50.0° / 93.0°	
Efficiency	89 %	
Peak intensity	1.1 cd/lm	400
LEDs/each optic	1	
Light colour	White	45*
Required componer		
C16142_HEKLA-		800
		40 150 00 150
bridgelux.		90* <u>90</u> *
LED	Vesta DTW 13mm (21W)	
FWHM / FWTM	41.0° / 91.0°	
Efficiency	84 %	400 mm
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	Tunable White	9*
Required componer	nts:	
C16142_HEKLA-		
C14658_BARBA	RA-RZ-LENS	
Bender Wirth: 49		
		15° 0° 15°
bridgelux.		
	Vesta DTW 13mm (21W)	90° 0° 90°
bridgelux.	Vesta DTW 13mm (21W) 38.0° / 88.0°	25 of 25 100 100 100 100 100 100 100 10
bridgelux. LED		90°
bridgelux. LED FWHM / FWTM	38.0° / 88.0°	23 ⁴ 0 ⁴ 2 ³
bridgelux. LED FWHM / FWTM Efficiency	38.0° / 88.0° 90 %	22 0 20 20 20 20 20 20 20 20 20 20 20 20
bridgelux. LED FWHM / FWTM Efficiency Peak intensity	38.0° / 88.0° 90 % 1.4 cd/lm	25 ⁴ c ⁴ 25 ⁴
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	38.0° / 88.0° 90 % 1.4 cd/lm 1 Tunable White	25 [°] 0 [°] 25 [°]
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	38.0° / 88.0° 90 % 1.4 cd/lm 1 1 Tunable White ts:	22 0 20 20 20 20 20 20 20 20 20 20 20 20
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	38.0° / 88.0° 90 % 1.4 cd/lm 1 Tunable White hts: SOCKET-K	25 ⁴ e ⁴ 25 ⁴
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA-	38.0° / 88.0° 90 % 1.4 cd/lm 1 Tunable White hts: SOCKET-K	22 0 12 12 12 12 12 12 12 12 12 12 12 12 12
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA- Bender Wirth: 49	38.0° / 88.0° 90 % 1.4 cd/lm 1 Tunable White hts: SOCKET-K	
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA- Bender Wirth: 49	38.0° / 88.0° 90 % 1.4 cd/lm 1 Tunable White hts: -SOCKET-K 1 Typ L8	
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA- Bender Wirth: 49 bridgetux. LED	38.0° / 88.0° 90 % 1.4 cd/lm 1 Tunable White hts: SOCKET-K 1 Typ L8 Vesta DTW 15mm (33W)	
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA- Bender Wirth: 49 bridgetux. LED FWHM / FWTM	38.0° / 88.0° 90 % 1.4 cd/lm 1 Tunable White hts: SOCKET-K 1 Typ L8 Vesta DTW 15mm (33W) 41.0° / 90.0°	
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA- Bender Wirth: 49 bridgetux. LED FWHM / FWTM Efficiency	38.0° / 88.0° 90 % 1.4 cd/lm 1 Tunable White hts: SOCKET-K 1 Typ L8 Vesta DTW 15mm (33W) 41.0° / 90.0° 90 %	
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA- Bender Wirth: 49 bridgetux. LED FWHM / FWTM Efficiency Peak intensity	38.0° / 88.0° 90 % 1.4 cd/lm 1 Tunable White hts: SOCKET-K 1 Typ L8 Vesta DTW 15mm (33W) 41.0° / 90.0° 90 % 1.3 cd/lm	
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA- Bender Wirth: 49 bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	38.0° / 88.0° 90 % 1.4 cd/lm 1 Tunable White hts: SOCKET-K 1 Typ L8 Vesta DTW 15mm (33W) 41.0° / 90.0° 90 % 1.3 cd/lm 1	
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA- Bender Wirth: 49 bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	38.0° / 88.0° 90 % 1.4 cd/lm 1 Tunable White hts: SOCKET-K 1 Typ L8 Vesta DTW 15mm (33W) 41.0° / 90.0° 90 % 1.3 cd/lm 1 White	
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA- Bender Wirth: 49 bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	38.0° / 88.0° 90 % 1.4 cd/lm 1 Tunable White nts: -SOCKET-K 1 Typ L8 Vesta DTW 15mm (33W) 41.0° / 90.0° 90 % 1.3 cd/lm 1 White nts:	
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA- Bender Wirth: 49 bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA-	38.0° / 88.0° 90 % 1.4 cd/lm 1 Tunable White hts: -SOCKET-K 1 Typ L8 Vesta DTW 15mm (33W) 41.0° / 90.0° 90 % 1.3 cd/lm 1 White hts: -SOCKET-K	
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA- Bender Wirth: 49 bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	38.0° / 88.0° 90 % 1.4 cd/lm 1 Tunable White hts: -SOCKET-K 1 Typ L8 Vesta DTW 15mm (33W) 41.0° / 90.0° 90 % 1.3 cd/lm 1 White hts: -SOCKET-K	



bridgelux.		90°
	/esta DTW 15mm (33W)	
	0.0° / 89.0°	
Efficiency 8	4%	400
Peak intensity 1	.2 cd/lm	
LEDs/each optic 1		
	Vhite	gr at at
Required components		
C16142_HEKLA-S	DCKET-K	
C14658_BARBAR	A-RZ-LENS	
Bender Wirth: 491	Тур L8	20* 25° 0° 25°
bridgelux.		90°
	/esta DTW 9mm (4W/6W/12W)	
	11.0° / 88.0°	75'
	6 %	400
	.5 cd/lm	605
LEDs/each optic 1		X = X + X
	Vhite	g
Required components		
C16142_HEKLA-S		
C14658_BARBAR		
Bender Wirth: 490		1200
		10° 0° 30°
bridgelux.		95*
LED \	/esta TW 13mm (25W) CSP	
FWHM/FWTM 3	6.0° / 87.0°	
Efficiency 8	4 %	605 600 600
Peak intensity 1	.4 cd/lm	
LEDs/each optic 1		
Light colour V	Vhite	95° 800 93°
Required components	:	
C16142_HEKLA-S	DCKET-K	
C14658_BARBAR	A-RZ-LENS	1220
Bender Wirth: 492	Тур L8	34 ⁴ 15 ⁷ 0 ⁴ 12 ⁴
bridgelux.		
LED \	/esta TW 6mm DP	
	7.0° / 86.0°	
	5 %	
Peak intensity 1	.8 cd/lm	
LEDs/each optic 1		
	Vhite	
Required components		
1		
C16142_HEKLA-S	Solerik	
C16142_HEKLA-S	A-RZ-LENS	



bridgelux.		
LED	Vesta TW 6mm DP	
FWHM / FWTM	22.0° / 82.0°	
Efficiency	89 %	
Peak intensity	2.5 cd/m	
LEDs/each optic	1	
Light colour	White	
Required componer C16142_HEKLA-		_
Bender Wirth: 50		
Dender With. 30		
bridgelux.		90° 90°
LED	Vesta TW 9mm (12W) CSP	75.
FWHM / FWTM	27.0° / 84.0°	
Efficiency	91 %	60* 60*
Peak intensity	2 cd/lm	000
LEDs/each optic	1	
Light colour	White	43*
Required componer	ts:	
C16142_HEKLA-	SOCKET-K	1630
Bender Wirth: 49) Typ L8	
		304 304
		15% 0% 15%
bridgelux.		90° 90°
LED	Vesta TW 9mm (12W) CSP	75*
FWHM / FWTM	30.0° / 86.0°	400
Efficiency	85 %	60*
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required componer		1200
C16142_HEKLA-		
C14658_BARBA		
Bender Wirth: 48		34°
Bender Wirth: 48	9 Typ L8	34 ⁴ 35 ² 9 ²
	9 Typ L8	
Bender Wirth: 48	о тур L8 N	17 J
Bender Wirth: 48 CITTIZE LED FWHM / FWTM	P Typ L8 N CLC020 Series (Dim-To-Warm)	
Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency	P Typ L8 CLC020 Series (Dim-To-Warm) 31.0° / 86.0° 84 %	17 J
Bender Wirth: 48 CITTIZE LED FWHM / FWTM	P Typ L8 N CLC020 Series (Dim-To-Warm) 31.0° / 86.0°	17 J
Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	A Typ L8 N CLC020 Series (Dim-To-Warm) 31.0° / 86.0° 84 % 1.6 cd/lm 1	17 J
Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Typ L8 N CLC020 Series (Dim-To-Warm) 31.0° / 86.0° 84 % 1.6 cd/lm 1 White	g
Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	A Typ L8 N CLC020 Series (Dim-To-Warm) 31.0° / 86.0° 84 % 1.6 cd/lm 1 White ts:	60°
Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA-	A Typ L8 N CLC020 Series (Dim-To-Warm) 31.0° / 86.0° 84 % 1.6 cd/lm 1 White ts: SOCKET-K	g
Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA- C14658_BARBA	N CLC020 Series (Dim-To-Warm) 31.0° / 86.0° 84 % 1.6 cd/lm 1 White ts: SOCKET-K RA-RZ-LENS	g
Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer C16142_HEKLA-	N CLC020 Series (Dim-To-Warm) 31.0° / 86.0° 84 % 1.6 cd/lm 1 White ts: SOCKET-K RA-RZ-LENS	g



CITIZE	N	59' 59'
LED FWHM / FWTM	CLC030 Series (Dim-To-Warm) 41.0° / 90.0°	
Efficiency	82 %	
Peak intensity	1.2 cd/lm	100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100
-	1	
LEDs/each optic	ı White	
Light colour		
Required compone C16142_HEKLA		
C14658_BARBA		
Bender Wirth: 43		30* 100 30
	NT	
CITIZE		
LED	CLC030 Series (Dim-To-Warm)	
FWHM / FWTM	38.0° / 88.0°	
Efficiency	88 %	60 ¹ 60
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
C16142_HEKLA	-SOCKET-K	1200
		30° 25° 2° 35°
CITIZE	N	90 ³
LED	CLU700/701/702	
FWHM / FWTM	23.0° / 84.0°	87 88
Efficiency	94 %	
-	2.6 cd/lm	
Peak intensity		
Peak intensity LEDs/each optic	1	
LEDs/each optic		a 100 a
LEDs/each optic Light colour	1 White	e. 100
LEDs/each optic	1 White nts:	a. <u>100</u> a
LEDs/each optic Light colour Required compone	1 White nts:	e. 199 et
LEDs/each optic Light colour Required compone	1 White nts:	
LEDs/each optic Light colour Required compone F15255_HEKLA	1 White nts: -SOCKET-C	
LEDs/each optic Light colour Required compone F15255_HEKLA	1 White nts: -SOCKET-C	260 264 357 07 35 35
LEDs/each optic Light colour Required compone F15255_HEKLA	1 White nts: -SOCKET-C N CLU700/701/702	260 264 357 07 35 35
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM	1 White nts: -SOCKET-C N CLU700/701/702 26.0° / 85.0°	200
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency	1 White nts: -SOCKET-C N CLU700/701/702 26.0° / 85.0° 91 %	200
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity	1 White nts: -SOCKET-C N CLU700/701/702 26.0° / 85.0° 91 % 2.1 cd/lm	260 264 357 07 35 35
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	1 White nts: -SOCKET-C N CLU700/701/702 26.0° / 85.0° 91 % 2.1 cd/lm 1	
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	1 White nts: -SOCKET-C N CLU700/701/702 26.0° / 85.0° 91 % 2.1 cd/lm 1 White	
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	1 White nts: -SOCKET-C N CLU700/701/702 26.0° / 85.0° 91 % 2.1 cd/lm 1 White nts:	
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	1 White nts: -SOCKET-C N CLU700/701/702 26.0° / 85.0° 91 % 2.1 cd/lm 1 White nts: -SOCKET-C	
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	1 White nts: -SOCKET-C N CLU700/701/702 26.0° / 85.0° 91 % 2.1 cd/lm 1 White nts: -SOCKET-C	260 264 357 07 35 35



OTTAT	N T	
CITIZE	N	50*
LED	CLU7A2 (LES 4.2mm)	
FWHM / FWTM	16.0° / 68.0°	
Efficiency	94 %	
Peak intensity	3.2 cd/lm	
LEDs/each optic	1	160
Light colour	White	
Required componer	nts:	
F15255_HEKLA-		
		34
CITIZE	N	20 ⁺ 0 ⁺ 12 ⁺
LED FWHM / FWTM	LCN-C01B (Tunable White)	75
	29.0° / 85.0° 86 %	
Efficiency Peak intensity	86 % 1.7 cd/lm	
-		
LEDs/each optic	1 White	
Light colour		
Required componer C16142_HEKLA		
C14658_BARBA		1500
Bender Wirth: 48	аттур цо	30 ⁶ 23 ⁷ 4 ⁰ 35 ⁷
CITIZE	Ν	99 ⁴ 99 ⁴
	N LCN-C02B (Tunable White)	
		94 ² 75 ² 40
LED	LCN-C02B (Tunable White)	
LED FWHM / FWTM	LCN-C02B (Tunable White) 39.0° / 89.0°	
LED FWHM / FWTM Efficiency	LCN-C02B (Tunable White) 39.0° / 89.0° 84 %	
LED FWHM / FWTM Efficiency Peak intensity	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White nts: -SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White nts: -SOCKET-K RA-RZ-LENS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA C14658_BARBA Bender Wirth: 48	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White nts: -SOCKET-K RA-RZ-LENS 31 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA C14658_BARBA Bender Wirth: 48	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White nts: -SOCKET-K RA-RZ-LENS 11 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA C14658_BARBA Bender Wirth: 48 CITTIZEE LED	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White nts: -SOCKET-K RA-RZ-LENS 11 Typ L8 N LCN-C02B (Tunable White)	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA C14658_BARBA Bender Wirth: 48 CITTIZE LED FWHM / FWTM	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White nts: -SOCKET-K RA-RZ-LENS 11 Typ L8 N LCN-C02B (Tunable White) 36.0° / 87.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA C14658_BARBA Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White nts: -SOCKET-K RA-RZ-LENS 11 Typ L8 N LCN-C02B (Tunable White) 36.0° / 87.0° 90 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA C14658_BARBA Bender Wirth: 48 CITTIZE LED FWHM / FWTM Efficiency Peak intensity	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White nts: -SOCKET-K RA-RZ-LENS 11 Typ L8 N LCN-C02B (Tunable White) 36.0° / 87.0° 90 % 1.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA C14658_BARBA Bender Wirth: 48 CITTIZEE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White nts: -SOCKET-K RA-RZ-LENS 11 Typ L8 N LCN-C02B (Tunable White) 36.0° / 87.0° 90 % 1.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component C16142_HEKLA C14658_BARBA Bender Wirth: 48 CITTIZEC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White nts: -SOCKET-K RA-RZ-LENS 11 Typ L8 N LCN-C02B (Tunable White) 36.0° / 87.0° 90 % 1.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA C14658_BARBA Bender Wirth: 48 CITTIZEE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White nts: SOCKET-K RA-RZ-LENS 11 Typ L8 N LCN-C02B (Tunable White) 36.0° / 87.0° 90 % 1.5 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component C16142_HEKLA C14658_BARBA Bender Wirth: 48 CITTIZEC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White nts: SOCKET-K RA-RZ-LENS 11 Typ L8 N LCN-C02B (Tunable White) 36.0° / 87.0° 90 % 1.5 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA C14658_BARBA Bender Wirth: 48 CITTIZEE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LCN-C02B (Tunable White) 39.0° / 89.0° 84 % 1.1 cd/lm 1 White nts: SOCKET-K RA-RZ-LENS 11 Typ L8 N LCN-C02B (Tunable White) 36.0° / 87.0° 90 % 1.5 cd/lm 1 White nts:	



CREE LEO FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15256_HEKLA	CMA1516 29.0° / 90.0° 94 % 1.8 cd/lm 1 White ents:		95° 73 64 67 77 87	400	
CREE (LEC) FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15254_HEKLA	CMA1825 36.0° / 92.0° 94 % 1.4 cd/lm 1 White ents:		99 73 94 94 94		
CREE (LEC) FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CMT14xx 29.0° / 90.0° 94 % 1.8 cd/lm 1 White ents:		99 ⁴ 73 64 64 64 64 64 64 64 64 64 64 64 64 64	400 100 100 100 100 100 100 100	99 92 99 99 99 99 99 99 99 99 99 99 99 9
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	CXA/B 13xx 25.0° / 88.0° 94 % 2.3 cd/lm 1 White ents:		93* 93* 93* 93*		



		50° 50°
LED	CXA/B 15xx	
FWHM / FWTM	32.0° / 90.0°	79
Efficiency	94 %	
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	gy d
Required compone	ents:	
F15256_HEKLA	-SOCKET-D	
		100
		34
	EDS	237 dt 133
		9 ^{54*} 9
LED	LUXEON CX Plus CoB L08 (Gen2)	
FWHM / FWTM	40.0° / 92.0°	
Efficiency	92 %	9 ⁴
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone Bender Wirth: 63		
Bender Wirth: 63	зла некіа	
		452
		36 ⁶ 0 ⁷ 15 ⁴
COMIL	.EDS	80°
LUMIL	LUXEON CX Plus CoB L08 (Gen2)	90 ⁴
		90 ⁴ 9
LED	LUXEON CX Plus CoB L08 (Gen2)	
LED FWHM / FWTM	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 %	
LED FWHM / FWTM Efficiency Peak intensity	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White ents: ARA-RZ-LENS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARBA	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White ents: ARA-RZ-LENS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARBA Bender Wirth: 63	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White ents: ARA-RZ-LENS 37a Hekla	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARBA Bender Wirth: 63	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White Ints: ARA-RZ-LENS 37a Hekla	<u> </u>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARBA Bender Wirth: 63	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White ents: ARA-RZ-LENS 37a Hekla	<u> </u>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARBA Bender Wirth: 63	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White white MRA-RZ-LENS 37a Hekla LUXEON CoB 1202HD	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARBA Bender Wirth: 63	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White ents: ARA-RZ-LENS 37a Hekla EDS LUXEON CoB 1202HD 22.0° / 87.0° 95 %	/ <u>25⁷</u> 0⁷ 25⁷
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARBA Bender Wirth: 63 COMPARENTION Efficiency Peak intensity	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White ents: ARA-RZ-LENS 37a Hekla LUXEON CoB 1202HD 22.0° / 87.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARBA Bender Wirth: 63 COMPUTE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White ents: ARA-RZ-LENS 37a Hekla EDS LUXEON CoB 1202HD 22.0° / 87.0° 95 % 2.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARBA Bender Wirth: 63 COMPUTE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White ents: ARA-RZ-LENS 37a Hekla EDS LUXEON CoB 1202HD 22.0° / 87.0° 95 % 2.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARBA Bender Wirth: 63 COMPUTE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White white MRA-RZ-LENS 37a Hekla EDS LUXEON CoB 1202HD 22.0° / 87.0° 95 % 2.4 cd/lm 1 White mts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARBA Bender Wirth: 63 COMPUTE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White white MRA-RZ-LENS 37a Hekla EDS LUXEON CoB 1202HD 22.0° / 87.0° 95 % 2.4 cd/lm 1 White mts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARBA Bender Wirth: 63 COMPARENTIAL LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON CX Plus CoB L08 (Gen2) 41.0° / 91.0° 84 % 1.2 cd/lm 1 White white MRA-RZ-LENS 37a Hekla EDS LUXEON CoB 1202HD 22.0° / 87.0° 95 % 2.4 cd/lm 1 White mts:	



UMIL	EDS	91 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA		
	EDS	904 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15858_HEKLA	LUXEON CoB 1205HD 33.0° / 90.0° 94 % 1.6 cd/lm 1 White ints:	
	EDS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	LUXEON CoB 1208 41.0° / 90.0° 92 % 1.3 cd/lm 1 White ints:	
🖉 LUMIL	EDS	50 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARB/ Bender Wirth: 63	LUXEON CX Plus CoB - HD S01H4 22.0° / 84.0° 86 % 2.1 cd/lm 1 White Ints: ARA-RZ-LENS	



	.EDS	90 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6		
	.EDS	90* 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARB/ Bender Wirth: 6	ARA-RZ-LENS	
	FDS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6	LUXEON CX Plus CoB - HD S01H6 / HD S02H6 18.0° / 84.0° 93 % 2.8 cd/lm 1 White ents: 34c Hekla	
🤭 LUMIL	.EDS	90* 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARB/ Bender Wirth: 6	LUXEON CX Plus CoB - HD S04H9 29.0° / 87.0° 86 % 1.6 cd/lm 1 White ents: ARA-RZ-LENS	



	EDS	9/ ¹
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63		
	EDS	9 ¹⁰
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARB/ Bender Wirth: 63	ARA-RZ-LENS	
	FDS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 63	LUXEON CX Plus CoB L04 / L05 (Gen2) 33.0° / 89.0° 92 % 1.6 cd/lm 1 White Ints:	
UMIL	EDS	594
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6-		



UMIL	.EDS	9) ⁴ 99 ⁷
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARB/ Bender Wirth: 6	ARA-RZ-LENS	
	EDS	80 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Bender Wirth: 6	LUXEON CX Plus CoB S01 (Gen2) 17.0° / 83.0° 93 % 2.9 cd/lm 1 White	
	EDS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14658_BARB/ Bender Wirth: 6	LUXEON CX Plus CoB S01 (Gen2) 22.0° / 84.0° 86 % 2.1 cd/lm 1 White ents: ARA-RZ-LENS 34c Hekla	
ELUM	INUS	90 ⁴ 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL4 C14658_BARB/	CDM-14 (Dim-To-Warm) 38.0° / 89.0° 82 % 1.2 cd/lm 1 White ents: A-SOCKET-K	



ELUM	INUS	90° 90
LED	CDM-14 (Dim-To-Warm)	78
FWHM / FWTM	36.0° / 87.0°	
Efficiency	87 %	69
Peak intensity	1.5 cd/lm	
LEDs/each optic	1	
Light colour	White	or a second s
Required compone	ents:	
C16142_HEKLA		
Bender Wirth: 4	91 Typ L8	36° <u>160</u> 13°
	INUS	
LED	CDM-6 (Dim-To-Warm)	
FWHM / FWTM	26.0° / 84.0°	79 - 400 - 73
Efficiency	85 %	
Peak intensity	2 cd/lm	
LEDs/each optic	1	
Light colour	White	* 1200
Required compone	ents:	
C16142_HEKLA	A-SOCKET-K	367
C14658_BARBA	ARA-RZ-LENS	
Bender Wirth: 4	90 Typ L8	34 200 3
		15 [°] 0 [°] 15 [°]
	INUS	99 [*]
	CDM-9 (Dim-To-Warm) 30.0° / 86.0°	
LED FWHM / FWTM	CDM-9 (Dim-To-Warm)	
LED FWHM / FWTM Efficiency	CDM-9 (Dim-To-Warm) 30.0° / 86.0°	
LED FWHM / FWTM Efficiency Peak intensity	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm 1 White ents: A-SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm 1 White ents: A-SOCKET-K ARA-RZ-LENS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARB/ Bender Wirth: 43	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm 1 White ents: A-SOCKET-K ARA-RZ-LENS 90 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm 1 White ents: A-SOCKET-K ARA-RZ-LENS 90 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARB/ Bender Wirth: 4	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm 1 White Ponts: A-SOCKET-K ARA-RZ-LENS 90 Typ L8	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 49 C14658_LUM LED FWHM / FWTM	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm 1 White ents: A-SOCKET-K ARA-RZ-LENS 90 Typ L8 INUS CDM-9 (Dim-To-Warm)	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARB/ Bender Wirth: 43 LED FWHM / FWTM Efficiency	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm 1 White ents: A-SOCKET-K ARA-RZ-LENS 90 Typ L8 INUS CDM-9 (Dim-To-Warm) 28.0° / 84.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 43	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm 1 White ents: A-SOCKET-K ARA-RZ-LENS 90 Typ L8 INUS CDM-9 (Dim-To-Warm) 28.0° / 84.0° 89 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARB/ Bender Wirth: 4: Efficiency Peak intensity LEDs/each optic	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm 1 White ents: A-SOCKET-K ARA-RZ-LENS 90 Typ L8 INUS CDM-9 (Dim-To-Warm) 28.0° / 84.0° 89 % 2.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARB/ Bender Wirth: 49 Efficiency Peak intensity LEDs/each optic Light colour	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm 1 White ents: A-SOCKET-K ARA-RZ-LENS 90 Typ L8 INUS CDM-9 (Dim-To-Warm) 28.0° / 84.0° 89 % 2.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 49 Efficiency Peak intensity LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm 1 White ents: A-SOCKET-K ARA-RZ-LENS 90 Typ L8 CDM-9 (Dim-To-Warm) 28.0° / 84.0° 89 % 2.2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARB/ Bender Wirth: 49 Efficiency Peak intensity LEDs/each optic Light colour	CDM-9 (Dim-To-Warm) 30.0° / 86.0° 84 % 1.6 cd/lm 1 White ents: A-SOCKET-K ARA-RZ-LENS 90 Typ L8 INUS CDM-9 (Dim-To-Warm) 28.0° / 84.0° 89 % 2.2 cd/lm 1 White ents: A-SOCKET-K	



	INUS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA	CTM-9 (Tunable White) 30.0° / 86.0° 85 % 1.7 cd/lm 1 White white A-SOCKET-K ARA-RZ-LENS	
Bender Wirth: 49		20 ⁴ 15 ⁷ 0 ⁴ 15 ⁷
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	CxM-14 (19x19) 40.0° / 91.0° 94 % 1.4 cd/lm 1 White ents:	
	INUS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA C14658_BARBA	CXM-4 24.0° / 85.0° 89 % 2.1 cd/lm 1 White ents: -SOCKET-C ARA-RZ-LENS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CXM-4 19.0° / 74.0° 93 % 2.9 cd/lm 1 White ents:	



LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CxM-9 (13.5x13.5) 32.0° / 90.0° 94 % 1.7 cd/lm 1 White nts:	20 20 20 20 20 20 20 20 20 20
ØNICHI	k	90° 91
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA	-SOCKET-K	20 00 00 00 00 00 00 00 00 00
Bender Wirth: 49		 30° 35° 5
MNICHI		90* 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 45	-SOCKET-K	27 27 20 20 20 20 20 20 20 20 20 20 20 20 20
ØNICHI		90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA C14658_BARBA Bender Wirth: 45	NVCWJ024Z-V1MT: COB J-Type Tunable White 43.0° / 92.0° 84 % 1.1 cd/lm 1 White nts: -SOCKET-K RA-RZ-LENS	



			99 ⁴ 99 ⁴
LED	NVCWJ024Z-V1MT: COB J-Type Tunable White		90'
FWHM / FWTM	30.0° / 84.0°		75 400
Efficiency	90 %		
Peak intensity	1.8 cd/lm		60 ⁴
LEDs/each optic	1		
Light colour	White		er er
Required componer	nts:		
C16142_HEKLA			
Bender Wirth: 49	98 Тур L8		1600
			36° 35° 35°
PHILIP	S		50* 50*
LED	Fortimo SLM L09 CoB	And in case of the local division of the loc	
FWHM / FWTM	28.0° / 89.0°		400
Efficiency	%		65°
Peak intensity	1.8 cd/lm		
LEDs/each optic	1		
Light colour	White		a7 a3
Required componer	nts:		
F15858_HEKLA-	-SOCKET-H		
			1600
			30* 337
PHILIP	S		50°
LED	Fortimo SLM L09 CoB	and the second se	
FWHM / FWTM	30.0° / 89.0°		73
Efficiency	88 %		60* 60*
Peak intensity	1.6 cd/lm		
LEDs/each optic	1	the second se	
Light colour	White		gr
Required componer	nts:		1200
F15858_HEKLA-	-SOCKET-H		
C14658_BARBA	RA-RZ-LENS		
			30° 31° 31°
PHILIP	S		
LED	Fortimo SLM L13 CoB		
FWHM / FWTM	39.0° / 90.0°		
Efficiency	84 %		
Peak intensity	1.2 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required componer	nts:		l
C16142_HEKLA			
C14658_BARBA	RA-RZ-LENS		
Bender Wirth: 43	2 Typ L8		



PHILIPS

Fortimo SLM L13 CoB
36.0° / 89.0°
89 %
1.4 cd/lm
1
White
ts:
SOCKET-K
2 Typ L8



SAMSUNG

 LED
 LC003D / I

 FWHM / FWTM
 28.0° / 87.0

 Efficiency
 94 %

 Peak intensity
 2 cd/lm

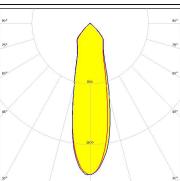
 LEDs/each optic
 1

 Light colour
 White

 Required components:
 F15255_HEKLA-SOCKET-C

LC003D / LC006D / LC009D / LC013D 28.0° / 87.0° 94 % 2 cd/lm 1 White ts:

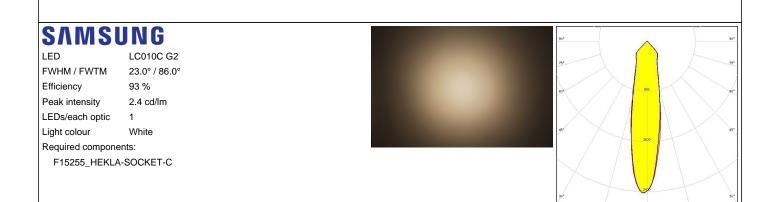




SAMSUNG

LED	LC003D / L
FWHM / FWTM	28.0° / 87.0
Efficiency	94 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour	White
Required component	its:
F15255_HEKLA-	SOCKET-C

C003D / LC006D / LC009D / LC013D 3.0° / 87.0° 4 % cd/lm /hite





<u> 37 IVI 31</u>	JNG	20	9
LED	LC010T (Tunable White)		
FWHM / FWTM	30.0° / 85.0°		
Efficiency	86 %		
Peak intensity	1.7 cd/lm		
LEDs/each optic	1		
Light colour	Tunable White	5*	
Required compone	nts:		
C16142_HEKLA	-SOCKET-K		
C14658_BARBA	RA-RZ-LENS		
Bender Wirth: 50	01 Typ L8	200 201	12,
<u> </u> S M S I 	JNG	<u>10</u> ,	
LED	LC010T (Tunable White)		
FWHM / FWTM	27.0° / 84.0°	32	1
Efficiency	90 %		$\langle \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
Peak intensity	2.1 cd/lm		$\overline{\ }$
LEDs/each optic	1		
Light colour	Tunable White	σ. /	\setminus
Required compone	nts:		
C16142_HEKLA	-SOCKET-K	400	
Bender Wirth: 50	01 Typ L8		
			10°
SAMSL	JNG		9
LED	LC020C G2		
FWHM / FWTM	31.0° / 88.0°		
Efficiency	94 %		
	1.8 cd/lm		\sim /
Peak intensity			
Peak intensity LEDs/each optic	1		
LEDs/each optic		5.	$\langle \rangle$
=	1 White	¢,	$\langle \rangle$
LEDs/each optic Light colour	1 White nts:		
LEDs/each optic Light colour Required component	1 White nts:	97 - 120 120	K
LEDs/each optic Light colour Required component	1 White nts:		10°
LEDs/each optic Light colour Required componel F15859_HEKLA	1 White nts: -SOCKET-I		33
LEDs/each optic Light colour Required componer F15859_HEKLA	1 White nts: -SOCKET-I	30 ¹ 30 ³ 30 ¹	192
LEDs/each optic Light colour Required componel F15859_HEKLA SAMSU	1 White nts: -SOCKET-I JNG LC020T (Tunable white)	30 ¹ 30 ³ 30 ¹	
LEDs/each optic Light colour Required componen F15859_HEKLA SAMSU LED FWHM / FWTM	1 White nts: -SOCKET-I JNG LC020T (Tunable white) 38.0° / 86.0°	30 ¹ 30 ³ 30 ¹	
LEDs/each optic Light colour Required componen F15859_HEKLA SAMSU LED FWHM / FWTM Efficiency	1 White nts: -SOCKET-I JNG LC020T (Tunable white) 38.0° / 86.0° 85 %	30 ¹ 30 ³ 30 ¹	
LEDs/each optic Light colour Required componen F15859_HEKLA SAMSU LED FWHM / FWTM Efficiency Peak intensity	1 White nts: -SOCKET-I JNG LC020T (Tunable white) 38.0° / 86.0°	30 ¹ 30 ³ 30 ¹	EF
LEDs/each optic Light colour Required componen F15859_HEKLA SAMSL LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	1 White nts: -SOCKET-I JNG LC020T (Tunable white) 38.0° / 86.0° 85 % 1.3 cd/lm 1	30 ¹ 30 ³ 30 ¹	EF
LEDs/each optic Light colour Required componen F15859_HEKLA SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	1 White nts: -SOCKET-I JNG LC020T (Tunable white) 38.0° / 86.0° 85 % 1.3 cd/lm 1 Tunable White	30 ¹ 30 ³ 30 ¹	· · · ·
LEDs/each optic Light colour Required componen F15859_HEKLA SANSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	1 White nts: -SOCKET-I JNG LC020T (Tunable white) 38.0° / 86.0° 85 % 1.3 cd/lm 1 Tunable White nts:	30 ¹ 30 ³ 30 ¹	
LEDs/each optic Light colour Required componen F15859_HEKLA SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	1 White nts: -SOCKET-I JNG LC020T (Tunable white) 38.0° / 86.0° 85 % 1.3 cd/lm 1 Tunable White nts: -SOCKET-K	30 ¹ 30 ³ 30 ¹	



SAMSU	JNG	51*
LED	LC020T (Tunable white)	
FWHM / FWTM	36.0° / 87.0°	
Efficiency	90 %	
Peak intensity	1.5 cd/lm	
LEDs/each optic	1	80
Light colour	Tunable White	9
Required compone	nts:	
C16142_HEKLA	-SOCKET-K	
Bender Wirth: 50	01 Тур L8	
SEOUL		47° 1600 133 d ² 159
SEOUL SEMICONDUCTOR		99*
LED	MJT COB LES 6	
FWHM / FWTM	20.0° / 82.0°	
Efficiency	93 %	or 50.
Peak intensity	2.7 cd/lm	
LEDs/each optic	1	
Light colour	White	5 ⁴
Required compone	nts:	
F15255_HEKLA	-SOCKET-C	
		300
		25° 0° 25°
		20 ⁴ 20 ⁴ 20 ⁴
SEOUL SEMICONDUCTOR	MJT COB LES 9.8	
SEOUL SEMICONDUCTOR	MJT COB LES 9.8 31.0° / 89.0°	
seoul semiconductor LED FWHM / FWTM	31.0° / 89.0°	20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency	31.0° / 89.0° 93 %	
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	31.0° / 89.0° 93 % 1.8 cd/lm	
stour stericonductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	31.0° / 89.0° 93 % 1.8 cd/Im 1	
stour stericonductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	31.0° / 89.0° 93 % 1.8 cd/lm 1 White	
stour seniconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	31.0° / 89.0° 93 % 1.8 cd/lm 1 White nts:	et. 60. 20.
stour stericonductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	31.0° / 89.0° 93 % 1.8 cd/lm 1 White nts:	et. 60. 20.
stour seniconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	31.0° / 89.0° 93 % 1.8 cd/lm 1 White nts:	
stour stemiconourcor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	31.0° / 89.0° 93 % 1.8 cd/lm 1 White Ints: -SOCKET-C	
stour seniconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	31.0° / 89.0° 93 % 1.8 cd/lm 1 White Ints: -SOCKET-C	
stour structure LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	31.0° / 89.0° 93 % 1.8 cd/lm 1 White Ints: -SOCKET-C	
stour seniconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA TRIDON LED FWHM / FWTM	31.0° / 89.0° 93 % 1.8 cd/lm 1 White I SOCKET-C SLE G7 LES09 30.0° / 87.0°	
stour structure LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA TRIDON LED FWHM / FWTM Efficiency	31.0° / 89.0° 93 % 1.8 cd/lm 1 White I SOCKET-C SLE G7 LES09 30.0° / 87.0° 91 %	
stour seniconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity	31.0° / 89.0° 93 % 1.8 cd/lm 1 White I SOCKET-C SLE G7 LES09 30.0° / 87.0°	
stour seniconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	31.0° / 89.0° 93 % 1.8 cd/lm 1 White ints: -SOCKET-C SLE G7 LES09 30.0° / 87.0° 91 % 1.7 cd/lm 1	
stour seniconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	31.0° / 89.0° 93 % 1.8 cd/lm 1 White ints: -SOCKET-C SLE G7 LES09 30.0° / 87.0° 91 % 1.7 cd/lm 1 White	
stour seniconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	31.0° / 89.0° 93 % 1.8 cd/lm 1 White I SOCKET-C SLE G7 LES09 30.0° / 87.0° 91 % 1.7 cd/lm 1 White I White I SUC SUC SUC SUC SUC SUC SUC SUC	
stour seniconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	31.0° / 89.0° 93 % 1.8 cd/lm 1 White I SOCKET-C SLE G7 LES09 30.0° / 87.0° 91 % 1.7 cd/lm 1 White I White I SUC SUC SUC SUC SUC SUC SUC SUC	
stout semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	31.0° / 89.0° 93 % 1.8 cd/lm 1 White I SOCKET-C SLE G7 LES09 30.0° / 87.0° 91 % 1.7 cd/lm 1 White I SOCKET-C	



TRIDON			
			90*
	SLE G7 LES09		75
FWHM / FWTM	31.0° / 89.0°		
Efficiency	94 %		60
Peak intensity	1.8 cd/lm		
LEDs/each optic	1 W/bito		
Light colour	White		1230
Required compone F15255_HEKLA			$\neg \land \land \land \land \land$
T TS255_HEREA	-300RE1-0		1630
			30° 2000 35°
TRIDON	IIC		90°
LED	SLE G7 LES13		
FWHM / FWTM	39.0° / 91.0°		
Efficiency	93 %		60 ⁶
Peak intensity	1.4 cd/lm		$ \Gamma \times / = \setminus \times$
LEDs/each optic	1		
Light colour	White		
Required compone	nts:		
F15859_HEKLA	-SOCKET-I		1200
			364
			15 ² 0 ⁰ 15 ³
TRIDON			90°
LED	SLE G7 LES13		35- 59-
LED FWHM / FWTM	SLE G7 LES13 40.0° / 90.0°		32
LED FWHM / FWTM Efficiency	SLE G7 LES13 40.0° / 90.0° 86 %		20°
LED FWHM / FWTM Efficiency Peak intensity	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm		90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1		99° 725 99° 99°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White		9 ⁴ 73 6 ⁴ 7 ⁴ 8 ⁴ 8 ⁴ 8 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts:		5 ⁴ 5 ³ 6 ⁴⁰ 5 ⁴ 5 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts: -SOCKET-I		5 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts: -SOCKET-I		5°. 5°. 00 100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts: -SOCKET-I		5° 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 F15859_HEKLA C14658_BARBA	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts: -SOCKET-I .RA-RZ-LENS		With 00 12.0 Dist 00 12.0 Dist 00 00 Dist 00 00 Dist 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts: -SOCKET-I NRA-RZ-LENS		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C14658_BARBA	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts: -SOCKET-I .RA-RZ-LENS		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C14658_BARBA	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts: -SOCKET-I .RA-RZ-LENS SLE G7 LES13		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C14658_BARBA C14658_BARBA	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts: -SOCKET-I .RA-RZ-LENS SLE G7 LES13 38.0° / 91.0° 93 %		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C14658_BARBA	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts: -SOCKET-I .RA-RZ-LENS SLE G7 LES13 38.0° / 91.0°		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C14658_BARBA C14658_BARBA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts: -SOCKET-I .RA-RZ-LENS SLE G7 LES13 38.0° / 91.0° 93 % 1.4 cd/lm		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C14658_BARBA C14658_BARBA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts: -SOCKET-I RA-RZ-LENS SLE G7 LES13 38.0° / 91.0° 93 % 1.4 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C14658_BARBA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts: -SOCKET-I RA-RZ-LENS SLE G7 LES13 38.0° / 91.0° 93 % 1.4 cd/lm 1 White nts:		77. 69.4 50.0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C14658_BARBA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts: -SOCKET-I RA-RZ-LENS SLE G7 LES13 38.0° / 91.0° 93 % 1.4 cd/lm 1 White nts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA C14658_BARBA TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES13 40.0° / 90.0° 86 % 1.3 cd/lm 1 White nts: -SOCKET-I RA-RZ-LENS SLE G7 LES13 38.0° / 91.0° 93 % 1.4 cd/lm 1 White nts:		77. 69.4 50.0



TRIDOM	AIC.		90*	90*
LED	SLE G7 LES13			
FWHM / FWTM	39.0° / 91.0°		37	75*
Efficiency	87 %			
Peak intensity	1.3 cd/lm		60°	60°
LEDs/each optic	1			
-	ı White		43 ²	45*
Light colour Required compone				
F15859_HEKLA				
C14658_BARBA				
			30"	360
TRIDON			90°	90*
LED	SLE G7 LES15			
FWHM / FWTM	42.0° / 92.0°		×	75*
Efficiency	94 %		400	
Peak intensity	1.3 cd/lm		69°	60°
LEDs/each optic	1			
Light colour	White		97* 800	45*
Required compone				
F15859_HEKLA				
1.10000_112112				
				$\langle \rangle$
			2 ⁷ 13 ⁹ 0 ⁹ 13 ⁹	. ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
XICATO			90°	90°
	XOB 14.5 mm	and the second division of the second divisio		90*
LED		a second second	20	90°
LED FWHM / FWTM	XOB 14.5 mm		90° 77 60	90*
LED FWHM / FWTM	XOB 14.5 mm 42.0° / 92.0°		94° 74° 61°	90°
LED FWHM / FWTM Efficiency	XOB 14.5 mm 42.0° / 92.0° 94 %		94 27 61	90°
FWHM / FWTM Efficiency Peak intensity	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm		91 20 91 91 90	30"
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White		91 71 60 61 60	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White ents:		91 90 91 90 90 90	90° 75° 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White ents:		545 77 61 67 60 60 60 60 60 60 60 60 60 60 60 60 60	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White ents:		54* 54* 64* 660 123 123 127 64* 127 64 127 64 127 127 127 127 127 127 127 127	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White ents: -SOCKET-I			90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White ents: -SOCKET-I			90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White ents: x-SOCKET-I			90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White ents: -SOCKET-I			90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White ents: -SOCKET-I XOB 6 mm 27.0° / 86.0°			90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA XICATC LED FWHM / FWTM Efficiency	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White ents: XOB 6 mm 27.0° / 86.0° 88 %			90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White ents: XOB 6 mm 27.0° / 86.0° 88 % 1.9 cd/lm		77	99 77 60 60 99 99 99 99 99 99 99
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White ents: XOB 6 mm 27.0° / 86.0° 88 % 1.9 cd/lm 1 White			99 77 60 90 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White ents: A-SOCKET-1 XOB 6 mm 27.0° / 86.0° 88 % 1.9 cd/lm 1 White ents:		27 67 7 7 7 7 7 7 7 7 7 7 7 107	6° 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White ents: XOB 6 mm 27.0° / 86.0° 88 % 1.9 cd/lm 1 White ents: -SOCKET-C		77	97 97 97 97 97 97 97 97 97 97 97 97 97 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15859_HEKLA XICATC LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	XOB 14.5 mm 42.0° / 92.0° 94 % 1.3 cd/lm 1 White ents: XOB 6 mm 27.0° / 86.0° 88 % 1.9 cd/lm 1 White ents: -SOCKET-C		27 67 7 7 7 7 7 7 7 7 7 7 7 107	90°

Last update: 05/05/2020Subject to change without prior noticePublished: 02/05/2018LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.24/32



XICATO		
LED	XOB 6 mm	
FWHM / FWTM	25.0° / 87.0°	
Efficiency	94 %	
Peak intensity	2.3 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	nts:	
F15255_HEKLA	-SOCKET-C	
XICATO)	20*
	XOB 9.8 mm	
LED FWHM / FWTM	32.0° / 90.0°	
Efficiency	94 %	
Peak intensity	94 % 1.7 cd/lm	
LEDs/each optic	1.7 co/m 1	
Light colour	' White	
Required compone F15255_HEKLA		
F15255_HERLA	-SOCKET-C	
		30 ² 0 ² 30
XICATO		90*
LED	XOB 9.8 mm	
FWHM / FWTM	32.0° / 89.0°	27
Efficiency	89 %	
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
F15255_HEKLA		
C14658_BARB		
011000_0/1100		24
XICATO		90 ⁴ 99
LED	XTM - 19mm LES	
FWHM / FWTM	48.0° / 95.0°	
	48.0° / 95.0° 91 %	
Efficiency		0 ³ 60
Efficiency Peak intensity	91 %	9 ² 60
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	91 % 1.1 cd/lm	
Efficiency Peak intensity LEDs/each optic	91 % 1.1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour	91 % 1.1 cd/lm 1 White nts:	
Efficiency Peak intensity LEDs/each optic Light colour Required compone	91 % 1.1 cd/lm 1 White nts:	
Efficiency Peak intensity LEDs/each optic Light colour Required compone	91 % 1.1 cd/lm 1 White nts:	



XICATO)		90*		90*
LED	XTM - 9mm LES	_	75*	+	
FWHM / FWTM	28.0° / 90.0°		and the second se	400	$\langle \cdot \rangle$
Efficiency	94 %		60*	$< \chi / $	60°
Peak intensity	1.8 cd/lm				$K \setminus \Gamma$
LEDs/each optic	1			\sim / /	
Light colour	White		47.*	1200	45°
Required compone	ents:				
C15743_XTM-A	DAPTER-50-B				
			\sim	1600	
			36*		36*
				15° 2090	15*



bridgelux.					•
	V13 Gen6				
			75*	-	
FWHM / FWTM	28.0° / 80.0°				
Efficiency	91 %		605	< / H_	»•K \
Peak intensity	2.2 cd/lm				
LEDs/each optic	1			\times / /	
Light colour	White		***	\times	ΛX
Required components					600 / / / / /
F14988_HEKLA-S	OCKET-E				
				< 1	
			36*	15° 3	400 15°
bridgelux.					
LED	V8 Gen6				
FWHM / FWTM	25.0°				
Efficiency	0 %				
LEDs/each optic	1				
Light colour	White				
Required components					
F15253_HEKLA-S					
bridgelux					
bridgelux. LED	V8 Gen6				
	V8 Gen6 25.0°				
LED					
LED FWHM / FWTM	25.0°				
LED FWHM / FWTM Efficiency	25.0° %				
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components	25.0° % 1 White S:				
LED FWHM / FWTM Efficiency LEDs/each optic Light colour	25.0° % 1 White S:				
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required component: F15253_HEKLA-S	25.0° % 1 White S:				
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required component: F15253_HEKLA-S	25.0° % 1 White s: OCKET-A				
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required component: F15253_HEKLA-S	25.0° % 1 White s: OCKET-A Vesta TW 9mm (9W) DP				
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required component: F15253_HEKLA-S	25.0° % 1 White 5: OCKET-A Vesta TW 9mm (9W) DP 28.0° / 84.0°				
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required component F15253_HEKLA-S bridgeLUX. LED FWHM / FWTM Efficiency	25.0° % 1 White S: OCKET-A Vesta TW 9mm (9W) DP 28.0° / 84.0° 87 %				
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required component F15253_HEKLA-S bridgeLux. LED FWHM / FWTM Efficiency Peak intensity	25.0° % 1 White s: OCKET-A Vesta TW 9mm (9W) DP 28.0° / 84.0° 87 % 2 cd/lm				
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required component F15253_HEKLA-S bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	25.0° % 1 White S: OCKET-A Vesta TW 9mm (9W) DP 28.0° / 84.0° 87 % 2 cd/lm 1				
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required component: F15253_HEKLA-S bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	25.0° % 1 White S: OCKET-A Vesta TW 9mm (9W) DP 28.0° / 84.0° 87 % 2 cd/lm 1 White				
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required component: F15253_HEKLA-S bridgeLux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component:	25.0° % 1 White S: OCKET-A Vesta TW 9mm (9W) DP 28.0° / 84.0° 87 % 2 cd/lm 1 White S:				
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required component: F15253_HEKLA-S bridgeLuX. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component: C16142_HEKLA-S	25.0° % 1 White s: OCKET-A Vesta TW 9mm (9W) DP 28.0° / 84.0° 87 % 2 cd/lm 1 White s: S:				
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required component: F15253_HEKLA-S bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component:	25.0° % 1 White s: OCKET-A Vesta TW 9mm (9W) DP 28.0° / 84.0° 87 % 2 cd/lm 1 White s: OCKET-K A-RZ-LENS				



CITIZEN

LED	CLL02x/CLU02x (LES10)
FWHM / FWTM	26.0°
Efficiency	0 %
LEDs/each optic	1
Light colour	White
Required components:	
F15255_HEKLA-SOC	KET-C

CITIZEN

LED	CLL02x/CLU02x (LES10)
FWHM / FWTM	26.0° / 78.0°
Efficiency	%
LEDs/each optic	1
Light colour	White
Required components:	
F15255_HEKLA-SOC	KET-C

CITIZEI	N	90*
LED	CLL02x/CLU02x (LES10)	×*
FWHM / FWTM	26.0° / 81.0°	
Efficiency	92 %	60 ² 60 ³ 60 ⁴
Peak intensity	2.5 cd/lm	
LEDs/each optic	1	
Light colour	White	er
Required component	ts:	
F15255_HEKLA-S	SOCKET-C	
		30°
OTTIGE	-	233 0 ⁴ 12 ²
CITIZEI	N	50 ⁺
LED	CLL03x/CLU03x	77
FWHM / FWTM	36.0° / 87.0°	
Efficiency	93 %	60 ⁻ 60 ⁻
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	
Light colour	White	9 ⁷ 87.
Required component	ts:	
F15859_HEKLA-S	SOCKET-I	
		34" 5.7
		15 ⁵ 0 ⁶ 15 ⁵



LED	CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM / FWTM	31.0°
Efficiency	0 %
LEDs/each optic	1
Light colour	White
Required components:	
F15254_HEKLA-SOC	KET-B

LED	CXA/B 1816 & CXA/B 1820 & CXA 1850
FWHM / FWTM	31.0°
Efficiency	%
LEDs/each optic	1
Light colour	White
Required components:	
F15254_HEKLA-SOC	KET-B

	NUS	90 ¹ 99 ¹
LED	CxM-6 (13.5x13.5)	
FWHM / FWTM	22.0° / 56.0°	37
Efficiency	93 %	60 ⁴
Peak intensity	3.1 cd/lm	
LEDs/each optic	1	
Light colour	White	gr et
Required component	S:	
F17435_HEKLA-G	32-C	
		314 3209 301
		135 ¹ 0 ³ 15 ²
Μ ΝΙCΗΙΛ		30*
LED	COB L-Type (LES 11)	75 77
FWHM / FWTM	28.0° / 82.0°	
Efficiency	93 %	9/* 60°
Peak intensity	2.2 cd/lm	
LEDs/each optic	1	
Light colour	White	qr. ar
Required component	s:	100
F15858_HEKLA-S	OCKET-H	
		30° 300 30°



Μ ΝΙCΗΙΛ		90* 90°
LED	COB L-Type (LES 9)	
FWHM / FWTM	26.0° / 80.0°	75.
Efficiency	93 %	
Peak intensity	2.5 cd/lm	
LEDs/each optic	1	
Light colour	White	eg. (500
Required components:		
F15858_HEKLA-SO	CKET-H	
		30° 30 15° 0° 15°
Μ ΝΙCΗΙΛ		90 ⁴ 90
LED	COB T-Type	
FWHM / FWTM	24.0° / 77.0°	
Efficiency	90 %	
Peak intensity	2.7 cd/lm	60 ¹⁰
LEDs/each optic	1	
Light colour	White	45* 45
Required components:		
F15848_HEKLA-SO	CKET-G	\times
		398
		30° 300
		15' 0' 15'
Μ ΝΙCΗΙΛ		99° 99° 99'
	NFSWE11A	90 ⁴ 90
	NFSWE11A 24.0° / 64.0°	
LED		
LED FWHM / FWTM	24.0° / 64.0°	
LED FWHM / FWTM Efficiency	24.0° / 64.0° 86 %	
LED FWHM / FWTM Efficiency Peak intensity	24.0° / 64.0° 86 % 2.6 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	24.0° / 64.0° 86 % 2.6 cd/lm 30 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	24.0° / 64.0° 86 % 2.6 cd/lm 30 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	24.0° / 64.0° 86 % 2.6 cd/lm 30 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	24.0° / 64.0° 86 % 2.6 cd/lm 30 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C16142_HEKLA-SO	24.0° / 64.0° 86 % 2.6 cd/lm 30 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C16142_HEKLA-SO	24.0° / 64.0° 86 % 2.6 cd/lm 30 White CKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C16142_HEKLA-SO	24.0° / 64.0° 86 % 2.6 cd/lm 30 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C16142_HEKLA-SO	24.0° / 64.0° 86 % 2.6 cd/lm 30 White CKET-K Soleriq S13 19x19	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C16142_HEKLA-SO	24.0° / 64.0° 86 % 2.6 cd/lm 30 White CKET-K Soleriq S13 19x19 28.2° / 81.4°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C16142_HEKLA-SO	24.0° / 64.0° 86 % 2.6 cd/lm 30 White CKET-K Soleriq S13 19x19 28.2° / 81.4° 93 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C16142_HEKLA-SO OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	24.0° / 64.0° 86 % 2.6 cd/lm 30 White CKET-K Soleriq S13 19x19 28.2° / 81.4° 93 % 2.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C16142_HEKLA-SO OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	24.0° / 64.0° 86 % 2.6 cd/lm 30 White CKET-K Soleriq S13 19x19 28.2° / 81.4° 93 % 2.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C16142_HEKLA-SO OSRAM Optio Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	24.0° / 64.0° 86 % 2.6 cd/lm 30 White CKET-K Soleriq S13 19x19 28.2° / 81.4° 93 % 2.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C16142_HEKLA-SO OPSSEAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	24.0° / 64.0° 86 % 2.6 cd/lm 30 White CKET-K Soleriq S13 19x19 28.2° / 81.4° 93 % 2.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C16142_HEKLA-SO OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	24.0° / 64.0° 86 % 2.6 cd/lm 30 White CKET-K Soleriq S13 19x19 28.2° / 81.4° 93 % 2.2 cd/lm 1 White	



OSRAM Opto Semiconductors		99 ⁴ 50 ⁴
LED	Soleriq S9	
FWHM / FWTM	25.7° / 80.8°	
Efficiency	93 %	60° 60°
Peak intensity	2.5 cd/lm	
LEDs/each optic	1	
Light colour	White	e7* e3*
Required component	S:	
F15255_HEKLA-S	OCKET-C	
		30* 35*
		15° 0 ⁰ 15°
SAMSU	NG	90* 90*
LED	LC016D / LC019D / LC026D / LC033D	
LED FWHM / FWTM	LC016D / LC019D / LC026D / LC033D 35.0° / 86.5°	7
		71°
FWHM / FWTM	35.0° / 86.5°	
FWHM / FWTM Efficiency	35.0° / 86.5° 88 %	
FWHM / FWTM Efficiency Peak intensity	35.0° / 86.5° 88 % 1.6 cd/lm	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	35.0° / 86.5° 88 % 1.6 cd/lm 1 White	67 60°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	35.0° / 86.5° 88 % 1.6 cd/lm 1 White s:	67 60°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	35.0° / 86.5° 88 % 1.6 cd/lm 1 White s:	gr 600 - 600
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	35.0° / 86.5° 88 % 1.6 cd/lm 1 White s:	gr 600 - 600



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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

LEDiL Oy

Joensuunkatu 13 FI-24240 SALO Finland

LEDiL Inc.

228 West Page Street Suite D Sycamore IL 60178 USA

Ledil Optics Technology (Shenzhen) Co., Ltd. # 405 , Block B Casic Motor Building Shenzhen 518057 P.R.CHINA

Local sales and technical support www.ledil.com/ where_to_buy

Shipping locations

Salo, Finland Hong Kong, China

Distribution Partners www.ledil.com/

where_to_buy