

BARBARA-S-PF

~15° spot beam

TECHNICAL SPECIFICATIONS:

Dimensions	Ø 70.0 mm
Height	41.7 mm
Fastening	socket
ROHS compliant	yes 🛈



PRODUCT DATASHEET F13700_BARBARA-S-PF

MATERIAL SPECIFICATIONS:

Component BARBARA-S-PF

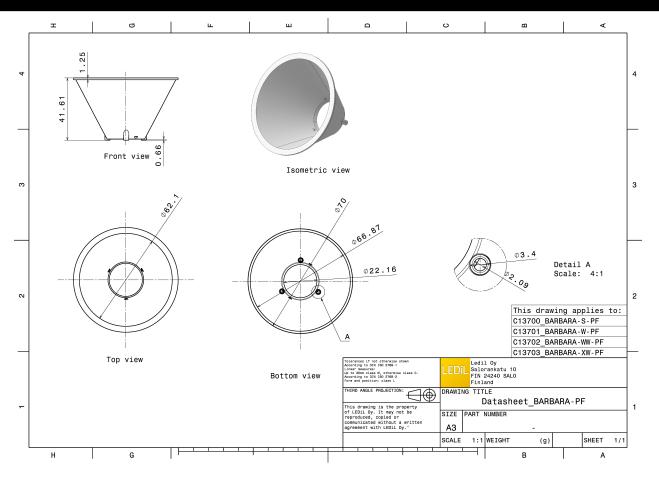
Type Reflector **Material** PC

Colour	Finish	Coating
metal		HMDS

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F13700_BARBARA-S-PF	288	90	18	6.1
» Box size: 480 x 280 x 300 mm				

PRODUCT DATASHEET F13700_BARBARA-S-PF



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



bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SC Bender Wirth: 4	OCKET-VERO13-18		20 20 20 20 20 20 20 20 20 20
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SC Bender Wirth: 4	OCKET-VERO13-18		
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SC Bender Wirth: 4	OCKET-VERO13-18		
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13708_PF-SC	VERO10 13.0° / 27.0° 90 % 9.3 cd/lm 1 White ents: DCKET-VERO10		20, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1



LED VER013 EVMM / EVTIM 150° 35.0° Efficiency 91% Peak intensity 6.8 cd/lm LED/sech optic 1 LeD/sech optic 1 LED/sech optic 2 C13709_PF-SOCKET-VER013-18 ED/sech optic 2 LED VER018 ED/sech optic 2 LED/sech optic 3 LED/sech opti
Peak intensity 6.8 cd/lm EDS/each optic 1 .ight colour White Required components: C13709_PF-SOCKET-VER013-18 C13709_PF-SOCKET-VER013-18
Peak intensity 6.8 cd/m EDS/each optic 1 .ight colour White Required components: C13709_PF-SOCKET-VER013-18
LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VER013-18 CD CD CD CD CD CD CD CD CD CD CD CD CD CD CD
ight colour White Required components: C13709_PF-SOCKET-VER013-18 ED VER018 WHM / FWTM 22.0* / 58.0* Efficiency 91 % Peak intensity 3.6 cd/m EDS/each optic 1 i.jpt colour White Required components: C13709_PF-SOCKET-VER013-18 MODELN ED Xenio Point 13mm FWHM / FWTM 14.0* / 33.0* Efficiency 91 % Peak intensity 6.6 cd/m EDS/each optic 1 .jpt colour White Required components: C13709_PF-SOCKET-VER013-18
Required components: C 13709_PF-SOCKET-VERO13-18 ED VERO18 WHM / FWTM 22.0° / 58.0° Efficiency 91% Peak intensity 3.6 cd/m LEDs/each optic 1 Light colour White Required components: C 13709_PF-SOCKET-VERO13-18 ED Xenio Point 13mm WHM / FWTM 14.0° / 33.0° Efficiency 91% Peak intensity 6.6 cd/m LEDs/each optic 1 LEDs/each optic 1 LED Xenio Point 13mm WHM / FWTM 14.0° / 33.0° Efficiency 91% Peak intensity 6.6 cd/m LEDs/each optic 1 LEDs/each op
C13709_PF-SOCKET-VERO13-18
LED VERO18 WHM / FWTM 22.0° / 58.0° Efficiency 91 % Peak intensity 3.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VERO13-18 ED LED LED LED LED LED LED LED
LED VERO18 FWHM / FWTM 22.0° / 58.0° Efficiency 91 % Peak intensity 3.6 cd/m LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VERO13-18
LED VERO18 FWHM / FWTM 22.0° / 58.0° Efficiency 91 % Peak intensity 3.6 cd/m LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VERO13-18
EWHM / FWTM 22.0° / 58.0° Efficiency 91 % Peak intensity 3.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VERO13-18 C13709_PF-S
Efficiency 91 % Peak intensity 3.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VER013-18 DridgeLX. LED Xenio Point 13mm EWHM / FWTM 14.0° / 33.0° Efficiency 91 % Peak intensity 6.6 cd/lm LEDs/each optic 1 Light colour White Required components: ETU Search optic 1 Light colour White Required components:
Peak intensity 3.6 cd/m LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VERO13-18
LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VERO13-18 C13709_PF-SOCKET-VERO13-1
Light colour White Required components: C13709_PF-SOCKET-VERO13-18 C13709_PF-SOCKET
Required components: C13709_PF-SOCKET-VERO13-18 C13709_P
Required components: C13709_PF-SOCKET-VERO13-18 C13709_P
LED Xenio Point 13mm FWHM / FWTM 14.0° / 33.0° Efficiency 91 % Peak intensity 6.6 cd/lm LEDs/each optic 1 Light colour White Required components:
Dridgelux. LED Xenio Point 13mm FWHM / FWTM 14.0° / 33.0° Efficiency 91 % Peak intensity 6.6 cd/lm LEDs/each optic 1 Light colour White Required components:
LED Xenio Point 13mm WHM / FWTM 14.0° / 33.0° Efficiency 91 % Peak intensity 6.6 cd/lm LEDs/each optic 1 Light colour White Required components:
LED Xenio Point 13mm FWHM / FWTM 14.0° / 33.0° Efficiency 91 % Peak intensity 6.6 cd/lm LEDs/each optic 1 Light colour White Required components:
FWHM / FWTM 14.0° / 33.0° Efficiency 91 % Peak intensity 6.6 cd/lm LEDs/each optic 1 Light colour White Required components: •••
Efficiency 91 % Peak intensity 6.6 cd/lm LEDs/each optic 1 Light colour White Required components:
Peak intensity 6.6 cd/lm LEDs/each optic 1 Light colour White Required components:
LEDs/each optic 1 Light colour White Required components:
LEDs/each optic 1 Light colour White Required components:
Required components:
C13709_PF-SOCKET-VERO13-18
30
200
125° 0° 15°
pridgelux.
ED Xenio Point 18mm
FWHM / FWTM 21.0° / 60.0°
Efficiency 86 %
Peak intensity 3.2 cd/lm
EDs/each optic 1
Light colour White
Required components:
200
C13709_PF-SOCKET-VERO13-18



CITIZE	N	50°*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CLL02x/CLU02x (LES10) 12.0° / 27.0° 89 % 9.2 cd/lm 1 White ents: CKET-VERO13-18	
CITIZE	N	39' 39'
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CLL03x/CLU03x 16.0° / 42.0° 88 % 5.1 cd/lm 1 White ents: CKET-VERO13-18	
CITIZE	N	20 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLU720/721 14.0° / 33.0° 87 % 7.3 cd/lm 1 White ents: CKET-VERO13-18	
	D	90* 90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13083_PF-SO C14658_BARB/	CKET	



-		
		50°
LED	CXA/B 15xx	
FWHM / FWTM	15.0° / 30.0°	25
Efficiency	89 %	
Peak intensity	6.9 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
	CKET-VERO13-18	
Bender Wirth: 4		
		30 - 120 - 30
LED	CXA/B 15xx	
FWHM / FWTM	14.0° / 29.0°	
Efficiency	91 %	
Peak intensity	8.6 cd/lm	50 ⁻² 3000 MO
LEDs/each optic	1	
Light colour	White	gr
Required compone	ents:	
	CKET-CXA15-18	
		30" 30
		30*
LED	CXA/B 1816 & CXA/B 1820 & CXA 1850	
FWHM / FWTM	14.0° / 36.0°	751
Efficiency	86 %	
Peak intensity	6.1 cd/lm	
LEDs/each optic	1	
Light colour	White	43°
Required compone	ents:	
C13709_PF-SC	CKET-VERO13-18	(0)
Bender Wirth: 4	37 Typ L1	
		24* 64j0 25*
		90 ⁴
LED	CXA/B 1816 & CXA/B 1820 & CXA 1850	
FWHM / FWTM	15.0° / 36.0°	
Efficiency	92 %	
Peak intensity		
	6.8 cd/lm	$(X \times X) \to X$
	6.8 cd/lm 1	
LEDs/each optic		e
LEDs/each optic Light colour Required compone	1 White	o. 60
LEDs/each optic Light colour Required compone	1 White	¢. 60
LEDs/each optic Light colour Required compone	1 White ents:	e. 600
LEDs/each optic Light colour Required compone	1 White ents:	e



LED LUXEON COB 1202/1203 FWHM / FWTM 12.0° / 25.0° Ellicency 90 % Peak Intensity 10.6 cd/m LEDSeach optic 1 Light colour White Required components: C H437_PF-NSX-SOCKET C LUXEON COB 1202/1203 FWHM / FWTM 14.0° / 30.0° Ellicency 88 % Peak Intensity 7.3 cd/m LEDSeach optic 1 LUXEON COB 1202/1203 FWHM / FWTM 14.0° / 30.0° Ellicency 88 % Peak Intensity 19.6 cd/m LEDSeach optic 1 LUXEON COB 1202/8 FWHM / FWTM 9.0° / 18.0° Ellicency 90 % Peak Intensity 19.6 cd/m LEDSeach optic 1 LUXEON COB 1202/8 FWHM / FWTM 9.0° / 18.0° Ellicency 90 % Peak Intensity 19.6 cd/m LEDSeach optic 1 LUXEON COB 1202/8 FWHM / FWTM 9.0° / 14.0° ELDSeach optic 1 LUXEON COB 1202/8 FWHM / FWTM 9.0° / 14.0° ELDSeach optic 1 LUXEON COB 1202/8 FWHM / FWTM 9.0° / 14.0° ELDSeach optic 1 LUXEON COB 17/ppe FWHM / FWTM 9.0° / 14.0° ElDSeach optic 1 LUXEON COB 17/ppe FWHM / FWTM 9.0° / 14.0° ElDSeach optic 1 LUXEON 0.00 1202/8 FWHM / FWTM 9.0° / 14.0° ElDSeach optic 1 LUXEON 0.00 1202/8 FWHM / FWTM 9.0° / 14.0° ElDSeach optic 1 LUXEON 0.00 1202/8 FWHM / FWTM 9.0° / 14.0° ElDSeach optic 1 LUXEON 0.00 1202/8 FWHM / FWTM 9.0° / 14.0° ElDSeach optic 1 LUXEON 0.00 1202/8 FWHM / FWTM 9.0° / 14.0° ElDSeach optic 1 LUXEON 0.00 1202/8 FWHM / FWTM 9.0° / 14.0° ElDSeach optic 1 LUXEON 0.00 1202/8 FWHM / FWTM 9.0° / 14.0° ElDSeach optic 1 LUXEON 0.00 1202/8 FWHM / FWTM 9.0° / 14.0° ElDSeach optic 1 LUXEON 0.00 120/8 FWHM / FWTM 9.0° / 14.0° ElDSeach optic 1 LUXEON 0.00 120/8 FWHM / FWTM 9.0° / 14.0° ElDSeach optic 1 LUXEON 0.00 120/8 FWHM / FWTM 9.0° / 14.0° ElDSeach optic 1 ElDSeach 0.00 FWHM / FWTM 9.0° / 14.0° ElDSEACH 0.00 FWTM / 10.0° / 10.0° ElDSEACH 0.00 FWTM / 10.0° / 10.0° ElDS		EDC	
PWHM / PWTM 1 20 / 25 0° Efficiency 90 % Peak intensity 10.6 dd/m ELD9eedn optio 1 LED9eedn optio 2 C 14037_PF-NSX-SOCKET			20 ⁷
Efficiency 90% Peak Intensity 10.6 cd/im Light colour White Required components: C 4007_PF-NSX-SOCKET C LUMILEDS LED LUXEON CGB 1202/203 FWHM /FVTM 14.07 / 30.0° Efficiency 88% Peak Intensity 7.3 cd/im Light colour White Required components: C 13709_PF-SOCKET-VER013-18 Bender Writt: 438 Typ L1 C LUMILEDS LED LUXEON CGB 12022 FWHM /FVTM 9.0° / 18.0° Efficiency 90% Peak Intensity 19.8 cd/im Light colour White Required components: C 13761_PF-SOCKET-CXA15			
Peak intensity 10.6 cd/m LEDviench optic 1 LeDviench optic 0 White Required components: C14037_PF.NSX.SOCKET			
LEDeleach optic 1 Light colour White Required components: C 14037_PF-NSX-SOCKET C LUNILEDS LED L LUKEON COB 1202/1203 FWHM / FWTM 14.0° / 30.0° Elliclency 88 % Peak Intensity 7.3 cd/m LEDeleach optic 1 Light colour White Required components: C 13709_PF-SOCKET-VERO13-18 Bender With: 438 Typ L1 C LUMILEDS ED LUXEON COB 12028 FWHM / FWTM 90 / 18.0° Elliclency 90 % Peak Intensity 91 6 cd/m LEDeleach optic 1 LEDeleach optic 1 LEDeleach optic 1 LEDeleach optic 1 LEDeleach optic 1 LEDeleach optic 2 Elliclency 91 % Peak Intensity 4.7 cd/m LEDeleach optic 1 LEDeleach optic 1 L			99 ¹⁻⁷
Light color While Required components: C HA37_PF-NSX-SOCKET ED LLOXENN CoB 1202/1003 EVHM / FVTM 14.0° (30.0° Ellidency 38 % Peak Intensity 7.3 cd/m ELDBéech optie 1 LLDBéech optie 1 LLDBéech optie 1 LLDBéech optie 1 LLDACONCOB 12028 FVHM / FVTM 14.0° Ellidency 90 % Peak Intensity 4.7 cd/m LEDBéech optie 1 Llght color While Required components: C 13761_PF-SOCKET-CXA15 Ellidency 91 % Peak Intensity 4.7 cd/m LEDBéech optie 1 LLDBéech optie 1 LLDP COB J-Type FVHM / FVTM 18.0° (44.0° Ellidency 91 % Peak Intensity 4.7 cd/m LEDBéech optie 1 LLDBéech optie 1			
Required components: C14037_PF-NSX-SOCKET			8 ⁴ (600)
C14037_PF-NSX-SOCKET			
LED LUXEON CoB 1202/1203 FVHM / FVTM 14.0° / 30.0° Efficiency 88 % Peak intensity 7.3 cd/m LEDS/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VER013-18 Bender Wirth: 438 Typ L1 ED LUXEON CoB 1202s FVHM / FVTM 9.0° / 18.0° Efficiency 99 % Peak intensity 19.8 cd/m LEDS/each optic 1 Light colour White Required components: C13701_PF-SOCKET-CXA15 Efficiency 91 % Peak intensity 4.7 cd/m LEDS/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET			
LED LUXEON CoB 1202/1203 FVHM / FVTM 14.0° / 30.0° Efficiency 88 % Peak intensity 7.3 cd/m LEDS/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VER013-18 Bender Wirth: 438 Typ L1 ED LUXEON CoB 1202s FVHM / FVTM 9.0° / 18.0° Efficiency 99 % Peak intensity 19.8 cd/m LEDS/each optic 1 Light colour White Required components: C13701_PF-SOCKET-CXA15 Efficiency 91 % Peak intensity 4.7 cd/m LEDS/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET			36- 36- 30
FWHM/FWTM 14.0° / 30.0° Efficiency 88 % Peak intensity 7.3 cd/m LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VER013-18 Bender Wirth: 438 Typ L1	UMIL	EDS	50* 50
Efficiency 88 % Peak intensity 7.3 col/m LED × color White Required components: C13709_PF-SOCKET-CXER013-18 Bender Wirth: 438 Typ L1	LED	LUXEON CoB 1202/1203	
Peak intensity 7.3 cd/m LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VER013-18 Bender With: 438 Typ L1	FWHM / FWTM	14.0° / 30.0°	
LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VER013-18 Bender Wirth: 438 Typ L1 COLUMILEDS LED LUXEON CoB 12025 FWHM / FWTM 9.0° / 18.0° Efficiency 90% Peak intensity 19.6 col/m LEDs/each optic 1 Light colour White Required components: C13761_PF-SOCKET-CXA15	Efficiency		
Light colour White Required components: C13709_PF-SOCKET-VER013-18 Bender Wirkt: 438 Typ L1	Peak intensity	7.3 cd/lm	
Required components: C13709_PF-SOCKET-VERO13-18 Bender Wirth: 438 Typ L1	LEDs/each optic		
C13709_PF-SOCKET-VER013-18 Bender Wirth: 438 Typ L1	Light colour		e ^y
Bender Wirth: 438 Typ L1			
Image: Contract of the second seco			
Image: Control of the second secon	Bender Wirth: 43	38 Typ L1	
LED LUXEON CoB 1202s FWHM / FWTM 9.0° / 18.0° Efficiency 90 % Peak intensity 19.6 cd/m LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET			39 ⁴
FWHM / FWTM 9.0° / 18.0° Efficiency 90 % Peak intensity 19.6 cd/lm LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET	UMIL	EDS	
Efficiency 90 % Peak intensity 19.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13761_PF-SOCKET-CXA15	LED	LUXEON CoB 1202s	
Peak intensity 19.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13761_PF-SOCKET-CXA15	FWHM / FWTM	9.0° / 18.0°	
LEDs/each optic 1 Light colour White Required components: C13761_PF-SOCKET-CXA15	Efficiency	90 %	
Light colour White Required components: C13761_PF-SOCKET-CXA15	Peak intensity	19.6 cd/lm	
Required components: C13761_PF-SOCKET-CXA15	LEDs/each optic	1	
C13761_PF-SOCKET-CXA15			
Image: Constraint of the second se			
LED COB J-Type FWHM / FWTM 19.0° / 44.0° Efficiency 91 % Peak intensity 4.7 cd/m LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET	C13761_PF-SO	CKET-CXA15	
LED COB J-Type FWHM / FWTM 19.0° / 44.0° Efficiency 91 % Peak intensity 4.7 cd/m LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET	~~~~~		
FWHM / FWTM 19.0° / 44.0° Efficiency 91 % Peak intensity 4.7 cd/lm LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET			59*
Efficiency 91 % Peak intensity 4.7 cd/lm LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET	LED		787
Peak intensity 4.7 cd/m LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET	FWHM / FWTM		
LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET	Efficiency		100
Light colour White Required components: C14037_PF-NSX-SOCKET	Peak intensity	4.7 cd/lm	
Required components: C14037_PF-NSX-SOCKET	LEDs/each optic		
Required components: C14037_PF-NSX-SOCKET			95 ⁴
34			
	C14037_PF-NS	X-SOCKET	
345 3			



ØNICHI	k i i i i i i i i i i i i i i i i i i i	90* 90
LED	COB J-Type	
FWHM / FWTM	17.0° / 45.0°	10 10 10 10 10 10 10 10 10 10 10 10 10 1
Efficiency	88 %	
Peak intensity	4.6 cd/lm	60° 60
LEDs/each optic	1	
Light colour	White	gr a
Required compone		330
	CKET-VERO13-18	
Bender Wirth: 46		\times / \setminus \times
		30° 4000 30
		95 ⁴ 99
LED	COB L-Type (LES 11)	
FWHM / FWTM	14.0° / 35.0°	75
Efficiency	86 %	
Peak intensity	6.1 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
	CKET-VERO13-18	4000
Bender Wirth: 43		
		15° 0° 15°
- 1		
		90*
	COB L-Type (LES 11)	99 ⁴ 99
LED		90 ⁴ 75 ⁻ 100 1
LED	COB L-Type (LES 11)	
LED FWHM / FWTM	COB L-Type (LES 11) 15.0° / 33.0°	25 Jacob 23
LED FWHM / FWTM Efficiency	COB L-Type (LES 11) 15.0° / 33.0° 90 %	94 75 84 84 80 80 80 80 80 80 80 80 80 80 80 80 80
LED FWHM / FWTM Efficiency Peak intensity	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm	25 Jacob 23
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White	25 Jacob 23
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White ints:	27 - 27 ex - 20 g
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White ints:	27 - 27 ex - 20 g
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White ints:	27 - 27 ex - 20 g
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14037_PF-NS)	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White ints: X-SOCKET	27 - 27 ex - 20 g
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White ints: X-SOCKET	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14037_PF-NS2	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White ints: X-SOCKET	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14037_PF-NS2	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White Ints: X-SOCKET	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14037_PF-NS2	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White Ints: X-SOCKET COB L-Type (LES 9) 13.0° / 26.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14037_PF-NS2	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White Ints: X-SOCKET COB L-Type (LES 9) 13.0° / 26.0° 90 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14037_PF-NS2 C14037_PF-NS2 C14037_PF-NS2 C14037_PF-NS2 FWHM / FWTM Efficiency Peak intensity LEDs/each optic	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White I White I COB L-Type (LES 9) 13.0° / 26.0° 90 % 10.1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14037_PF-NS;	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White I White COB L-Type (LES 9) 13.0° / 26.0° 90 % 10.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14037_PF-NS2	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White ints: X-SOCKET COB L-Type (LES 9) 13.0° / 26.0° 90 % 10.1 cd/lm 1 White ints:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14037_PF-NS;	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White ints: X-SOCKET COB L-Type (LES 9) 13.0° / 26.0° 90 % 10.1 cd/lm 1 White ints:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14037_PF-NS2	COB L-Type (LES 11) 15.0° / 33.0° 90 % 6.8 cd/lm 1 White ints: X-SOCKET COB L-Type (LES 9) 13.0° / 26.0° 90 % 10.1 cd/lm 1 White ints:	



∕∕ NICHI∧		50° 50°
LED	COB L-Type (LES 9)	
FWHM / FWTM	13.0° / 27.0°	2
Efficiency	90 %	
Peak intensity	8.4 cd/lm	
LEDs/each optic	1	
Light colour	White	er et
Required compone		
	CKET-VERO13-18	600
Bender Wirth: 43		
		2)* 12 [*] 2 [*]
		99° (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
LED	NSCxL036A	
FWHM / FWTM	11.0° / 21.0°	73
Efficiency	89 %	
Peak intensity	14.1 cd/lm	
LEDs/each optic	1	
Light colour	White	gr gr
Required compone	nts:	
C14037_PF-NS	K-SOCKET	
		30' 30' 31'
OSRAM Opto Semiconductors		90 ² 92 ²
OSRAM Opto Semiconductors LED	Soleriq S13	<u>50'</u>
Opto Semiconductors	Soleriq S13 14.0° / 35.0°	50° 50°
opto Semiconductors LED FWHM / FWTM		90 ⁴ 99 ⁴
Opto Semiconductors	14.0° / 35.0°	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	14.0° / 35.0° 89 %	200 200 200 200 200 200 200 200
^{opto Semiconductors} LED FWHM / FWTM Efficiency	14.0° / 35.0° 89 % 6.2 cd/lm	50° 50°
^{opto Semiconductors} LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	14.0° / 35.0° 89 % 6.2 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	14.0° / 35.0° 89 % 6.2 cd/lm 1 White	50° 50°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	14.0° / 35.0° 89 % 6.2 cd/lm 1 White nts: CKET-VERO13-18	50° 50°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SOU	14.0° / 35.0° 89 % 6.2 cd/lm 1 White nts: CKET-VERO13-18	60° 50°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SOU	14.0° / 35.0° 89 % 6.2 cd/lm 1 White nts: CKET-VERO13-18 87 Typ L1	50° 50°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SO0 Bender Wirth: 43	14.0° / 35.0° 89 % 6.2 cd/lm 1 White nts: CKET-VERO13-18 87 Typ L1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SOU Bender Wirth: 43	14.0° / 35.0° 89 % 6.2 cd/lm 1 White nts: CKET-VERO13-18 87 Typ L1 UNG	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SOU Bender Wirth: 43 SANSU LED	14.0° / 35.0° 89 % 6.2 cd/lm 1 White nts: CKET-VERO13-18 87 Typ L1 JNG LC026B / 033B / 040B	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SOU Bender Wirth: 43 SANSL LED FWHM / FWTM	14.0° / 35.0° 89 % 6.2 cd/lm 1 White nts: CKET-VERO13-18 87 Typ L1 JNG LC026B / 033B / 040B 20.0° / 57.0°	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SOU Bender Wirth: 43 SAMSU LED FWHM / FWTM Efficiency	14.0° / 35.0° 89 % 6.2 cd/lm 1 White nts: CKET-VERO13-18 37 Typ L1 JNCC LC026B / 033B / 040B 20.0° / 57.0° 88 %	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SOU Bender Wirth: 43 SANSU LED FWHM / FWTM Efficiency Peak intensity	14.0° / 35.0° 89 % 6.2 cd/lm 1 White nts: CKET-VERO13-18 87 Typ L1 JNCG LC026B / 033B / 040B 20.0° / 57.0° 88 % 3.7 cd/lm	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SOU Bender Wirth: 43 SANSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	14.0° / 35.0° 89 % 6.2 cd/lm 1 White nts: CKET-VERO13-18 87 Typ L1 JNCG LC026B / 033B / 040B 20.0° / 57.0° 88 % 3.7 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SOU Bender Wirth: 43 SANNSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	14.0° / 35.0° 89 % 6.2 cd/lm 1 White nts: CKET-VERO13-18 87 Typ L1 JNCG LC026B / 033B / 040B 20.0° / 57.0° 88 % 3.7 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SOU Bender Wirth: 43 SANNSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	14.0° / 35.0° 89 % 6.2 cd/lm 1 White nts: CKET-VERO13-18 BT Typ L1 CC26B / 033B / 040B 20.0° / 57.0° 88 % 3.7 cd/lm 1 White nts: CKET-VERO13-18	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SOU Bender Wirth: 43 SANNSL LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13709_PF-SOU	14.0° / 35.0° 89 % 6.2 cd/lm 1 White nts: CKET-VERO13-18 BT Typ L1 CC26B / 033B / 040B 20.0° / 57.0° 88 % 3.7 cd/lm 1 White nts: CKET-VERO13-18	



XICATO)	90 ⁴ 90 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14636_XTM-F	XTM - 19mm LES 20.0° / 58.0° 88 % 3.6 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14636_XTM-F	XTM - 9mm LES 12.0° / 26.0° 90 % 9.3 cd/lm 1 White ents:	



PHOTOMETRIC DATA (SIMULATED):

bridgelux.

 LED
 V10 Gen7

 FWHM / FWTM
 12.0° / 27.0°

 Efficiency
 91 %

 Peak intensity
 9.4 cd/lm

 LEDs/each optic
 1

 Light colour
 White

 Required components:
 C13709_PF-SOCKET-VERO13-18

 Bender Wirth: 486 Ty L1
 Hermite

UMILEDS

LED	LUXEON CoB Compact
FWHM / FWTM	9.0° / 18.0°
Efficiency	90 %
Peak intensity	19.6 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
C13761_PF-SOCKET	-CXA15

 LED
 CxM-9 (13.5x13.5)

 FWHM / FWTM
 12.0° / 27.0°

 Efficiency
 89 %

 Peak intensity
 9.2 cd/lm

 LEDs/each optic
 1

 Light colour
 White

 Required components:
 C13709_PF-SOCKET

 Bender Wirth: 434 Typ L1
 1



PHOTOMETRIC DATA (SIMULATED):

OSRAM Opto Semiconductors		90* 90*
LED	Soleriq S15	
FWHM / FWTM	20.0° / 47.0°	75
Efficiency	88 %	
Peak intensity	4 cd/lm	60° 60°
LEDs/each optic	1	
Light colour	White	47*
	White	
Required components: C13709_PF-SOCKE		
Bender Wirth: 433 Ty	βEI	
		30° 30° 30°
SAMSUN	IG	90° 90°
LED	LC010C	Δ
FWHM / FWTM	9.1° / 19.0°	75. 75.
Efficiency	9.1° / 19.0° 89 %	
-		60° 60°
Peak intensity	16.3 cd/lm	
LEDs/each optic	1 White	
Light colour	White	
Required components:		2200
C13709_PF-SOCKE		
Bender Wirth: 479 Ty	p L1	
		30° 15° 0° 15° 20°
SAMSUN	IG	90* 90*
IFD		
LED FWHM / FWTM	LC020C	78
FWHM / FWTM	LC020C 10.0° / 23.0°	75
FWHM / FWTM Efficiency	LC020C 10.0° / 23.0° 89 %	13 13 13 13 13 14 14 14 14 14 14 14 14 14 14 14 14 14
FWHM / FWTM Efficiency Peak intensity	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm	50 50 70 70 70 70
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1	07 60 70 70 70 70 70 70 70 70 70
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm	6. 6. 5.
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White	60 20 20 20 20 20 20 20 20 20 20 20 20 20
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13709_PF-SOCKE	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White	a. 50 50 50 50 50 50 50 50 50 50
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White	32 64 60 800 800 800 800 800
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13709_PF-SOCKE Bender Wirth: 479 Ty	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White F-VERO13-18 p L1	27 of 12 28 49 59 1250 1250 1250 1250 1250 125 125 125 125 125 125 125 125
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13709_PF-SOCKE Bender Wirth: 479 Ty	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White F-VERO13-18 p L1	3 ¹ 1200 6 ¹
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13709_PF-SOCKE	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White F-VERO13-18 p L1	200
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13709_PF-SOCKE Bender Wirth: 479 Ty SAMSUN LED	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White T-VERO13-18 p L1 IG LC040C	3 ¹ 1200 6 ¹
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13709_PF-SOCKE Bender Wirth: 479 Ty SAMSUN LED FWHM / FWTM	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White T-VERO13-18 p L1 IG LC040C 13.0° / 30.0°	3 ¹ 1200 6 ¹
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13709_PF-SOCKE Bender Wirth: 479 Ty SAMSUN LED FWHM / FWTM Efficiency	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White T-VERO13-18 p L1 IG LC040C 13.0° / 30.0° 85 %	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13709_PF-SOCKE Bender Wirth: 479 Ty SAMSUN LED FWHM / FWTM Efficiency Peak intensity	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White T-VERO13-18 p L1 IG LC040C 13.0° / 30.0°	3 ¹ 1200 6 ¹
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13709_PF-SOCKE Bender Wirth: 479 Ty SAMSSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White T-VERO13-18 p L1 I CO40C 13.0° / 30.0° 85 % 7.3 cd/lm 1	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13709_PF-SOCKE Bender Wirth: 479 Ty SANNSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White T-VERO13-18 p L1 I CO40C 13.0° / 30.0° 85 % 7.3 cd/lm	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13709_PF-SOCKE Bender Wirth: 479 Ty SAMSSUM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White T-VERO13-18 p L1 CO40C 13.0° / 30.0° 85 % 7.3 cd/lm 1 White	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13709_PF-SOCKE Bender Wirth: 479 Ty SAMSSUM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13709_PF-SOCKE	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White T-VERO13-18 p L1 CO40C 13.0° / 30.0° 85 % 7.3 cd/lm 1 White T-VERO13-18	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13709_PF-SOCKE Bender Wirth: 479 Ty SANNSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LC020C 10.0° / 23.0° 89 % 12.3 cd/lm 1 White T-VERO13-18 p L1 CO40C 13.0° / 30.0° 85 % 7.3 cd/lm 1 White T-VERO13-18	



PHOTOMETRIC DATA (SIMULATED):

LED	ZC12/18
FWHM / FWTM	16.0° / 42.0°
Efficiency	88 %
Peak intensity	5.1 cd/lm
LEDs/each optic	1
Light colour	White
Required components	s:
C13709_PF-SOCH	KET-VERO13-18
Bender Wirth: 433	Typ L1
SEOUL SEOUL SEMICONDUCTOR	
LED	ZC4/6
FWHM / FWTM	12.0° / 27.0°
Efficiency	89 %
Peak intensity	9.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components	s:
C13709_PF-SOCH	KET-VERO13-18
Bender Wirth: 434	Typ L1



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:

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