

ANGELETTE-WAS

Asymmetric wall-washer beam

TECHNICAL SPECIFICATIONS:

Dimensions

Fastening

Height

Ø 97.2 x 83.4 mm 84.1 mm socket

yes 🛈

MATERIAL SPECIFICATIONS:

Component ANGELETTE-WAS

ROHS compliant

Type Reflector **Material** PC



C14346_ANGELETTE-WAS

PRODUCT DATASHEET

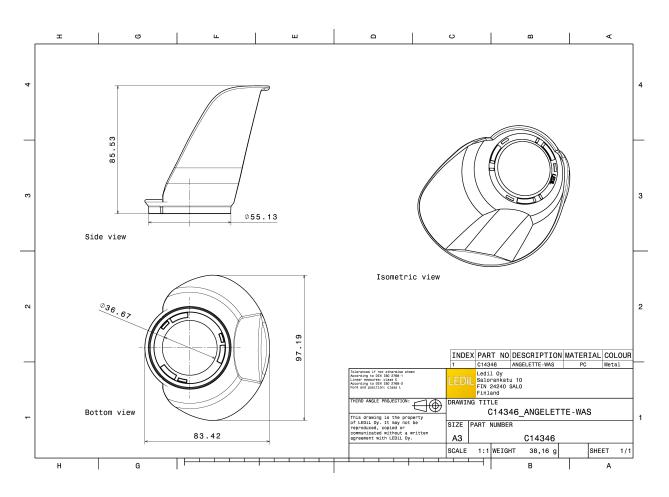
Colour	Finish	Coating
metal		lacquer

ORDERING INFORMATION:

Component C14346_ANGELETTE-WAS » Box size: 480 x 280 x 300 mm

Qty in box	MOQ	MPQ	Box weight (kg)
90			5.4





PRODUCT DATASHEET



bridgelux.	N40 Cor7	90 ⁴
LED	V10 Gen7	73*
FWHM	Asymmetric	
Efficiency	90 %	50°
Peak intensity	1.2 cd/lm	
LEDs/each optic		
Light colour	White	40°
Required compor		
C13658_CLAM		
Bender Wirth: 4	134 Typ L1	1220
		30° 30° 30°
bridgelux.		90° 90°
LED	V10 Gen7	75*
FWHM	Asymmetric	
Efficiency	86 %	50 ¹ 60 ¹
Peak intensity	1.1 cd/lm	
LEDs/each optic		
Light colour	White	2×
Required compor		
C13584_CLAN		
F13671_ANGE		
Bender Wirth: 4	I34 Typ L1	34° 139 6° 13° 36°
bridgelux.		90 ⁺
bridgelux. LED	V13 Gen7	90°
	V13 Gen7 Asymmetric	27 27 27
LED FWHM Efficiency	Asymmetric 91 %	51 ⁴ 27 27 29 29
LED FWHM Efficiency Peak intensity	Asymmetric 91 % 1.3 cd/lm	60
LED FWHM Efficiency Peak intensity LEDs/each optic	Asymmetric 91 % 1.3 cd/lm 1	64
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 91 % 1.3 cd/lm 1 White	5° 000 5°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White vents:	00 00 00 00 00 00
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White	5°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White vents:	5°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White vents:	20° 0° 12° 0° 20° 0°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White vents:	94. 96. 97. 96. 96. 96. 96. 96. 96. 96. 97. 96. 97. 96. 97. 97. 97. 97. 97. 97. 97. 97
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2	Asymmetric 91 % 1.3 cd/lm 1 White vents:	20° 20° 20° 20° 20° 20° 20° 20°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2	Asymmetric 91 % 1.3 cd/lm 1 White tents: + OPTIC CLIP Z50 TYPE1 2213194-1	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2	Asymmetric 91 % 1.3 cd/lm 1 White eents: + OPTIC CLIP Z50 TYPE1 2213194-1 V15 Gen6	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 bridgetux. LED FWHM Efficiency Peak intensity	Asymmetric 91 % 1.3 cd/lm 1 White ents: + OPTIC CLIP Z50 TYPE1 2213194-1 V15 Gen6 Asymmetric 93 % 1.3 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 bridgetux, LED FWHM Efficiency Peak intensity LEDs/each optic	Asymmetric 91 % 1.3 cd/lm 1 White tents: + OPTIC CLIP Z50 TYPE1 2213194-1 V15 Gen6 Asymmetric 93 % 1.3 cd/lm 1	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 bridgetux. LED FWHM Efficiency Peak intensity	Asymmetric 91 % 1.3 cd/lm 1 White ents: + OPTIC CLIP Z50 TYPE1 2213194-1 V15 Gen6 Asymmetric 93 % 1.3 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 bridgetux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White vents: + OPTIC CLIP Z50 TYPE1 2213194-1 V15 Gen6 Asymmetric 93 % 1.3 cd/lm 1 White vents:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 bridgetux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAW	Asymmetric 91 % 1.3 cd/lm 1 White eents: + OPTIC CLIP Z50 TYPE1 2213194-1 V15 Gen6 Asymmetric 93 % 1.3 cd/lm 1 White eents: IP-VERO13-18	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 bridgetux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White eents: + OPTIC CLIP Z50 TYPE1 2213194-1 V15 Gen6 Asymmetric 93 % 1.3 cd/lm 1 White eents: IP-VERO13-18	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 bridgetux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAW	Asymmetric 91 % 1.3 cd/lm 1 White eents: + OPTIC CLIP Z50 TYPE1 2213194-1 V15 Gen6 Asymmetric 93 % 1.3 cd/lm 1 White eents: IP-VERO13-18	



bridgelux LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon IDEAL: 50-2204	White	24° 25° 27° 27° 27° 27° 27° 27° 27° 27° 27° 27
bridgelux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C16402_CLAM	White	
bridgetux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C16402_CLAM	White	27 64 64 65 66 66 66 66 66 66 67 66 67 67
bridgelux LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM	White ents:	

PRODUCT DATASHEET



bridgelux LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM	White ents:	
bridgelux LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM	White ents:	22 ² 25 ² 2 ² 24 25 26 26 26 26 26 26 27 26 26 26 26 26 26 26 26 26 26
bridgelux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM F13671_ANGE	White ents: P-VERO29	90° 90° 72° 00° 00° 60° 00° 60° 00° 60° 00° 80° 80° 80° 80° 80° 80° 80° 80° 80°
bridgelux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM	White ents:	

PRODUCT DATASHEET C14346_ANGELETTE-WAS



bridgelux.		90* 90*
LED	Vesta TW 15mm DP	
FWHM	Asymmetric	
Efficiency	88 %	
Peak intensity	1 cd/lm	60
LEDs/each optic		
Light colour	White	93° 43°
Required compor		
C13658_CLAM		800
F13671_ANGE		
Bender Wirth: 4		
		30° 15° 0° 35°
bridgelux.		90* 90*
LED	Vesta TW 15mm DP	
FWHM	Asymmetric	
Efficiency	92 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic		
Light colour	White	₽ [×]
Required compor	ents:	800
C13658_CLAM		
Bender Wirth: 4	182 Typ L2	
		30"
		15° 200 15° 0° 15°
bridgelux.		90° 90°
LED	Vesta TW 18mm (31W) DP	
FWHM	Asymmetric	200
FWHM Efficiency		84- 200 33
	Asymmetric	60* 60* 60* 520 500 50*
Efficiency	Asymmetric 86 % 1 cd/lm	604
Efficiency Peak intensity	Asymmetric 86 % 1 cd/lm	27 00 07 73 00 07 73 00 07
Efficiency Peak intensity LEDs/each optic	Asymmetric 86 % 1 cd/lm 1 Tunable White	20 00 00 20 00 20 00 20 20 20 20
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM	Asymmetric 86 % 1 cd/lm 1 Tunable White ents: IP-VERO29	900 524 600 604 604 500 500 500 500
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM F13671_ANGE	Asymmetric 86 % 1 cd/lm 1 Tunable White ents: IP-VERO29 -RZ-LENS	600
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM	Asymmetric 86 % 1 cd/lm 1 Tunable White ents: IP-VERO29 -RZ-LENS	200 100 100 200 100
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW F13671_ANGE Bender Wirth: 4	Asymmetric 86 % 1 cd/lm 1 Tunable White ents: IP-VERO29 -RZ-LENS	30* 300 40° 30* 500 40° 30* 500 40°
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM F13671_ANGE Bender Wirth: 4	Asymmetric 86 % 1 cd/lm 1 Tunable White eents: IP-VERO29 -RZ-LENS I83 Typ L3	30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30.
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM F13671_ANGE Bender Wirth: 4	Asymmetric 86 % 1 cd/lm 1 Tunable White ents: IP-VERO29 -RZ-LENS I83 Typ L3 Vesta TW 18mm (31W) DP	2
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM F13671_ANGE Bender Wirth: 4 bridgelux LED FWHM	Asymmetric 86 % 1 cd/lm 1 Tunable White ents: IP-VERO29 -RZ-LENS I83 Typ L3 Vesta TW 18mm (31W) DP Asymmetric	32. 23. 24. 25. 26. 26. 26. 26. 26. 26. 26. 27. 26. 27. 26. 27. 27. 27. 27. 27. 27. 27. 27
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM F13671_ANGE Bender Wirth: 4 bridgelux LED FWHM Efficiency	Asymmetric 86 % 1 cd/lm 1 Tunable White ents: IP-VERO29 -RZ-LENS I83 Typ L3 Vesta TW 18mm (31W) DP Asymmetric 92 %	60 60 60 60 60 60 60 60 60 60
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM F13671_ANGE Bender Wirth: 4 bridgelux LED FWHM Efficiency Peak intensity	Asymmetric 86 % 1 cd/lm 1 Tunable White eents: IP-VERO29 -RZ-LENS I83 Typ L3 Vesta TW 18mm (31W) DP Asymmetric 92 % 1.1 cd/lm	60 60 60 60 60 60 60 60 60 60
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM F13671_ANGE Bender Wirth: 4 bridgelux LED FWHM Efficiency Peak intensity LEDs/each optic	Asymmetric 86 % 1 cd/lm 1 Tunable White eents: IP-VERO29 -RZ-LENS I83 Typ L3 Vesta TW 18mm (31W) DP Asymmetric 92 % 1.1 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW F13671_ANGE Bender Wirth: 4 bridgelux LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 86 % 1 cd/lm 1 Tunable White eents: IP-VERO29 -RZ-LENS 183 Typ L3 Vesta TW 18mm (31W) DP Asymmetric 92 % 1.1 cd/lm 1 Tunable White	25- 200 25- 200 25- 200 25- 200 25- 25- 25- 25- 25- 25- 25- 25-
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW F13671_ANGE Bender Wirth: 4 bridgetux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 86 % 1 cd/lm 1 Tunable White eents: IP-VERO29 -RZ-LENS I83 Typ L3 Vesta TW 18mm (31W) DP Asymmetric 92 % 1.1 cd/lm 1 Tunable White eents:	5 5 5 5 5 5 5 5 5 5 5 5 5 5
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM F13671_ANGE Bender Wirth: 4 bridgetux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM	Asymmetric 86 % 1 cd/lm 1 Tunable White eents: IP-VERO29 -RZ-LENS 83 Typ L3 Vesta TW 18mm (31W) DP Asymmetric 92 % 1.1 cd/lm 1 Tunable White eents: IP-VERO29	22. 60. 60. 60. 60. 60. 60. 60. 60
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW F13671_ANGE Bender Wirth: 4 bridgetux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 86 % 1 cd/lm 1 Tunable White eents: IP-VERO29 -RZ-LENS 83 Typ L3 Vesta TW 18mm (31W) DP Asymmetric 92 % 1.1 cd/lm 1 Tunable White eents: IP-VERO29	200 200 200 200 200 200 200 200
Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW F13671_ANGE Bender Wirth: 4 bridgelux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW	Asymmetric 86 % 1 cd/lm 1 Tunable White eents: IP-VERO29 -RZ-LENS 83 Typ L3 Vesta TW 18mm (31W) DP Asymmetric 92 % 1.1 cd/lm 1 Tunable White eents: IP-VERO29	30, 12, 150, 15, 62, 00 05, 33, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 36, 00 05, 37, 00, 05, 36, 00, 05, 37, 00, 05, 38, 00, 05, 39, 00, 05, 30, 00, 05, 30, 00, 05, 30, 00, 05, 30, 00, 05, <



bridgelux.		<u>30⁴</u>
LED	Vesta TW 22mm DP	75*
FWHM	Asymmetric	
Efficiency	87 %	60*
Peak intensity	0.9 cd/lm	
LEDs/each optic		
Light colour	Tunable White	45"
Required compon		
C13584_CLAM		
F13671_ANGE		
Bender Wirth: 4		
		30° 300 30° 30° 30°
bridgelux.		90° 90°
LED	Vesta TW 22mm DP	
FWHM	Asymmetric	
Efficiency	91 %	
Peak intensity	1.1 cd/lm	400
LEDs/each optic		
Light colour	Tunable White	95*
Required compon		
C13584_CLAM		
Bender Wirth: 4		
	· · · / ·	$K / \vee X$
		30° 135° 0° 25° 36°
CITIZE	N	80°
LED	CLL03x/CLU03x	
FWHM	Asymmetric	75*
Efficiency	89 %	
Peak intensity	1 cd/lm	400
LEDs/each optic		
Light colour	White	93 ⁴ (87
Required compon		
C16791_CLAM		
F13671_ANGE		
TE: 2325807-3		
12.202007-0		30° 0° 15° 30°
CITIZE	N	90*
LED	CLL03x/CLU03x	
FWHM	Asymmetric	
Efficiency	93 %	
		400 60*
Peak intensity	1.2 cd/lm	
Peak intensity LEDs/each optic	1.2 cd/lm 1	
LEDs/each optic	1	
LEDs/each optic Light colour	1 White	g
LEDs/each optic Light colour Required compon	1 White ents:	g
LEDs/each optic Light colour Required compon C16791_CLAM	1 White ents:	g
LEDs/each optic Light colour Required compon	1 White ents:	g. 00
LEDs/each optic Light colour Required compon C16791_CLAM	1 White ents:	20 ⁻ 12 ⁵ 0 ² 22 ⁻ 20 ⁻



PHOTOMETRIC DATA (MEASURED):

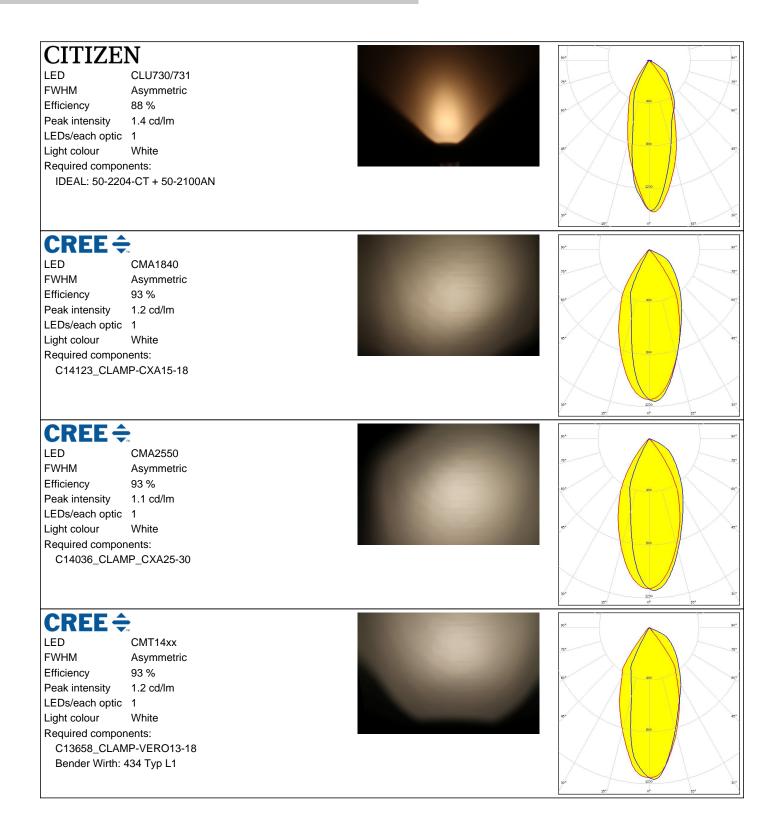
CITIZE	NT	
CITTIZE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2	CLL03x/CLU03x Asymmetric 91 % 1.4 cd/lm 1 White	5 5 60 60 60 60 60 60 60 60 60 60 60 60 60
CITIZE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor IDEAL: 50-210	CLL03x/CLU03x Asymmetric 92 % 1.5 cd/lm 1 White	54 54 54 54 55 56 56 56 56 56 56 56 56 56
CITTIZE ED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM Bender Wirth: 4	CLL04x/CLU04x Asymmetric 91 % 1.3 cd/lm 1 White tents: IP-VERO29	
CITIZE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor IDEAL: 50-220	CLL04x/CLU04x Asymmetric 88 % 1.2 cd/lm 1 White	24- 15 ⁴ 15 ⁴

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OTHICT	T	
CITIZE		90* 90*
LED	CLL04x/CLU04x	75' 75'
FWHM	Asymmetric	
Efficiency	88 %	60° 60°
Peak intensity	1.2 cd/lm	\times / \wedge \times
LEDs/each optic Light colour	White	454 454
Required compor		
	I-CT + 50-2100AN	
IDEAL 30 220		
		36* 35
	. .	15% 0 ⁸ 15%
CITIZE	N	90 ⁴ 90 ⁴
LED	CLU700/701/702	75*
FWHM	Asymmetric	
Efficiency	92 %	60° 60°
Peak intensity	1.4 cd/lm	
LEDs/each optic		
Light colour	White	
Required compor		
C13658_CLAM		4230
Bender Wirth: 4	34 Typ L1	
		300 155 00 155 360
CITIZE	N	90* 90*
	CLU720/721	
FWHM	Asymmetric	75*
Efficiency	92 %	400
Peak intensity	1.4 cd/lm	60° 60°
LEDs/each optic	1.1.00/111	
	1	
	1 White	g+
Light colour	White	g. 90 g.
Light colour Required compor	White	gr 600 67
Light colour Required compor	White ents:	e ^r e ^r
Light colour Required compor	White ents:	er 80 er
Light colour Required compor IDEAL: 50-210	White ents: 3CT + 50-2100AN	er
Light colour Required compor IDEAL: 50-2103	White ents: BCT + 50-2100AN	er
Light colour Required compor IDEAL: 50-2103 CITTIZE	White ents: BCT + 50-2100AN N CLU720/721	er 000 er 1239 127 0° 127 0° 129 129 129 129 129 129 129 129 129 129
Light colour Required compor IDEAL: 50-2103 CITTIZE LED FWHM	White ents: BCT + 50-2100AN N CLU720/721 Asymmetric	er
Light colour Required compor IDEAL: 50-2103 CITTIZE LED FWHM Efficiency	White ents: BCT + 50-2100AN CLU720/721 Asymmetric 93 %	er 800 er 1233 - 557 er 92 1233 - 557 er 92 1234 - 557 er 92 1
Light colour Required compor IDEAL: 50-2103 CITTIZE LED FWHM Efficiency Peak intensity	White ents: BCT + 50-2100AN CLU720/721 Asymmetric 93 % 1.3 cd/lm	er 20 20 20 20 20 20 20 20 20 20
Light colour Required compor IDEAL: 50-2103 CITTIZE LED FWHM Efficiency Peak intensity LEDs/each optic	White ents: 3CT + 50-2100AN N CLU720/721 Asymmetric 93 % 1.3 cd/lm 1	er
Light colour Required compor IDEAL: 50-210: CITTIZE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	White ents: 3CT + 50-2100AN N CLU720/721 Asymmetric 93 % 1.3 cd/lm 1 White	g*
Light colour Required compor IDEAL: 50-2103 CITTIZE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	White ents: 3CT + 50-2100AN N CLU720/721 Asymmetric 93 % 1.3 cd/lm 1 White ents:	gr gr gr gr gr gr gr gr gr gr gr gr gr g
Light colour Required compor IDEAL: 50-2103 CITTIZE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	White ents: 3CT + 50-2100AN N CLU720/721 Asymmetric 93 % 1.3 cd/lm 1 White	gr gr gr gr gr gr gr gr gr gr
Light colour Required compor IDEAL: 50-2103 CITTIZE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	White ents: 3CT + 50-2100AN N CLU720/721 Asymmetric 93 % 1.3 cd/lm 1 White ents:	er 6 6 6 6 6 6 6 6 6 6 6 6 6





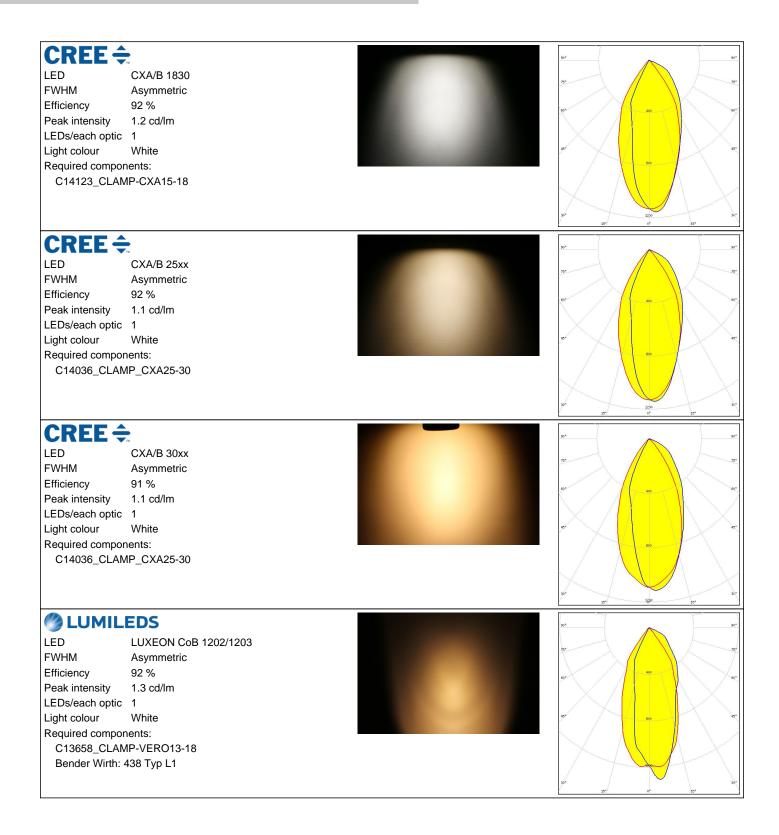
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CREE \$		50* 50*
LED	CMT19xx	
FWHM	Asymmetric	75* 25*
Efficiency	93 %	
Peak intensity	1.2 cd/lm	60°
LEDs/each optic		
Light colour	White	g*
Required compor		
C13658_CLAM		
Bender Wirth:		
Bender Wirth.		
		36° 1230 36° 15° 0° 15°
CREE ≑		90* 90*
LED	CMT28xx	
FWHM	Asymmetric	75'
Efficiency	92 %	
Peak intensity	1.1 cd/lm	60*** - 400
LEDs/each optic		
Light colour	White	gr
Required compor		
C13584_CLAM		
Bender Wirth:		
Bondor Wirdi.		
		15° 0° 15°
CREE \$		90°
LED	CXA/B 1816 & CXA/B 1820 & CXA 1850	25°
LED FWHM	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric	90 ⁴ 90 ⁷
LED FWHM Efficiency	CXA/B 1816 & CXA/B 1820 & CXA 1850	00 ⁴ 000 000
LED FWHM	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric	60° 60°
LED FWHM Efficiency	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm	gy
LED FWHM Efficiency Peak intensity	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm	62 62 63 64 100 100 100 100 100 100 100 10
LED FWHM Efficiency Peak intensity LEDs/each optic	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White	62- 62- 63- 52- 53- 55- 55- 55- 55- 55- 55- 55- 55- 55
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White ments:	6, 00 6, 00 6, 00 72 72 72 72 72 72 72
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White tents: IP-VERO13-18	g, 00 g, 00 g, 00 00 00 00 00 00 00 00 00 00
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAM	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White tents: IP-VERO13-18	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAM Bender Wirth: 4	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White hents: IP-VERO13-18 437 Typ L1	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAM Bender Wirth: 4	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White hents: IP-VERO13-18 437 Typ L1	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAM Bender Wirth: 4	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White tents: IP-VERO13-18 t37 Typ L1 CXA/B 1816 & CXA/B 1820 & CXA 1850	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAM Bender Wirth: 4	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White tents: IP-VERO13-18 137 Typ L1 CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAM Bender Wirth: 4 CREE LED FWHM Efficiency	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White tents: IP-VERO13-18 137 Typ L1 CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 %	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAM Bender Wirth: 4 CREE LED FWHM Efficiency Peak intensity	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White tents: IP-VERO13-18 137 Typ L1 CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.4 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAM Bender Wirth: 4 CREE LED FWHM Efficiency Peak intensity LEDs/each optic	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White tents: IP-VERO13-18 137 Typ L1 CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.4 cd/lm 1	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAM Bender Wirth: 4 CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White tents: IP-VERO13-18 t37 Typ L1 CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.4 cd/lm 1 White	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAM Bender Wirth: 4 CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White tents: IP-VERO13-18 t37 Typ L1 CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.4 cd/lm 1 White tents:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAM Bender Wirth: 4 CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White tents: IP-VERO13-18 t37 Typ L1 CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.4 cd/lm 1 White	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAM Bender Wirth: 4 CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White tents: IP-VERO13-18 t37 Typ L1 CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.4 cd/lm 1 White tents:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAM Bender Wirth: 4 CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.3 cd/lm 1 White tents: IP-VERO13-18 t37 Typ L1 CXA/B 1816 & CXA/B 1820 & CXA 1850 Asymmetric 91 % 1.4 cd/lm 1 White tents:	





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CUMILI LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon TE: 2213382-2	LUXEON CoB 1204HD Asymmetric 92 % 1.3 cd/lm 1 White	2°
WHM Efficiency Peak intensity LEDs/each optic Light colour Required compon TE: 2213382-2	LUXEON CoB 1205HD Asymmetric 92 % 1.2 cd/lm 1 White	
WHM Efficiency Peak intensity LEDs/each optic Light colour Required compon TE: 2213130-2	LUXEON CoB 1208 Asymmetric 91 % 1.4 cd/lm 1 White	
Why Etherica Composition Content of the second seco	LUXEON CoB 1208 Asymmetric 89 % 1.4 cd/lm 1 White	

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ED ENTRY ENT	LUXEON CoB 1211 Asymmetric 92 % 1.3 cd/lm 1 White ents:	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
C13584_CLAM Bender Wirth: 4	31 Typ L3	204 204 200 200 200 200 200 200 200 200
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon IDEAL: 50-2204	White	
CUMILI LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon IDEAL: 50-2204	LUXEON CoB 1216/1812 Asymmetric 89 % 1.2 cd/lm 1 White	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM F13671_ANGE Bender Wirth: 4	CDM-14 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White ents: P-VERO13-18 -RZ-LENS	



	NUS	50° 50
LED	CDM-14 (Dim-To-Warm)	
FWHM	Asymmetric	
Efficiency	91 %	60° 60°
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	a, a
Required compon	ients:	80
C13658_CLAM	IP-VERO13-18	
Bender Wirth: 4	191 Typ L2	
		30° <u>1220</u> 30
	NUS	50 ⁴ 90
LED	CDM-18 (Dim-To-Warm)	
FWHM	Asymmetric	75
Efficiency	92 %	
Peak intensity	1.2 cd/lm	60 ⁶
LEDs/each optic		
Light colour	White	43" 43
Required compon		800
C13658_CLAM		
Bender Wirth: 4		
		30° 2000
	NUS	90* 90
		90*
LED FWHM	CDM-18 (Dim-To-Warm)	94 ³
LED FWHM		39*
LED FWHM Efficiency	CDM-18 (Dim-To-Warm) Asymmetric	90 ⁴ 90 95 ⁴ 50
LED FWHM	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm	90 ³ 90 73 ³ 22 69 ³ 60
LED FWHM Efficiency Peak intensity	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm	93 ⁴ 93 ⁴ 94 94 94 94 94 94 96 94 96 96 96 96 96 96 96 96 96 96 96 96 96
LED FWHM Efficiency Peak intensity LEDs/each optic	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White	95 ⁴ 95 ⁴ 9
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White tents:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM F13671_ANGE	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White hents: IP-VERO13-18 -RZ-LENS	9) ⁴ 9) ⁴ 9) ⁴ 9) ⁴ 400 60 9) ⁴ 60 60 60 60 60 60 60 60 60 60
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White hents: IP-VERO13-18 -RZ-LENS	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM F13671_ANGE	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White vents: IP-VERO13-18 S-RZ-LENS 491 Typ L2	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM F13671_ANGE Bender Wirth: 4	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White hents: IP-VERO13-18 4-RZ-LENS 491 Typ L2	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM F13671_ANGE Bender Wirth: 4	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White hents: IP-VERO13-18 -RZ-LENS 491 Typ L2 NUS CDM-9 (Dim-To-Warm)	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM F13671_ANGE Bender Wirth: 4	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White enents: IP-VERO13-18 -RZ-LENS 491 Typ L2 NUS CDM-9 (Dim-To-Warm) Asymmetric	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM F13671_ANGE Bender Wirth: 4	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White enents: IP-VERO13-18 -RZ-LENS 491 Typ L2 NUS CDM-9 (Dim-To-Warm) Asymmetric 85 %	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM F13671_ANGE Bender Wirth: 4	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White ents: IP-VERO13-18 -RZ-LENS 491 Typ L2 NUS CDM-9 (Dim-To-Warm) Asymmetric 85 % 1.2 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM F13671_ANGE Bender Wirth: 4	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White enents: IP-VERO13-18 -RZ-LENS 491 Typ L2 NUS CDM-9 (Dim-To-Warm) Asymmetric 85 % 1.2 cd/lm 1	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM F13671_ANGE Bender Wirth: 4	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White hents: IP-VERO13-18 -RZ-LENS 491 Typ L2 NUS CDM-9 (Dim-To-Warm) Asymmetric 85 % 1.2 cd/lm 1 White	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM F13671_ANGE Bender Wirth: 4	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White enents: IP-VERO13-18 -RZ-LENS 491 Typ L2 NUS CDM-9 (Dim-To-Warm) Asymmetric 85 % 1.2 cd/lm 1 White enents:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM F13671_ANGE Bender Wirth: 4 CED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White enents: IP-VERO13-18 -RZ-LENS 491 Typ L2 NUS CDM-9 (Dim-To-Warm) Asymmetric 85 % 1.2 cd/lm 1 White enents: IP-VERO13-18	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM F13671_ANGE Bender Wirth: 4 CEC LUMI LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	CDM-18 (Dim-To-Warm) Asymmetric 87 % 1 cd/lm 1 White hents: IP-VERO13-18 -RZ-LENS 491 Typ L2 NUS CDM-9 (Dim-To-Warm) Asymmetric 85 % 1.2 cd/lm 1 White hents: IP-VERO13-18 -RZ-LENS	



	NUS	90° 90°
LED	CDM-9 (Dim-To-Warm)	
FWHM	Asymmetric	
Efficiency	90 %	60° 400 00°
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	95* 65*
Required compor	nents:	
C13658_CLAN		
Bender Wirth: 4	490 Typ L1	
		20° 20° 0° 10°
	NUS	90* 90*
LED	CTM-14 (Tunable White)	
FWHM	Asymmetric	75'
Efficiency	87 %	
Peak intensity	1.1 cd/lm	400
LEDs/each optic		
Light colour	White	g
Required compor	nents:	
C13584_CLAN		
F13671_ANGE		
Bender Wirth: 4	442 Typ L3	30* 34
		23° 0 [°] 33°
		9 ⁴ 9 ⁵ 9 ⁵
LED	CTM-14 (Tunable White)	25% 0 ⁴ 357
LED FWHM	CTM-14 (Tunable White) Asymmetric	25°, 0 ⁴ 35°
LED FWHM Efficiency	CTM-14 (Tunable White) Asymmetric 92 %	25° 0° 25°
LED FWHM Efficiency Peak intensity	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White nents:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White events: IP-VERO29	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White events: IP-VERO29	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW Bender Wirth: 4	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White hents: IP-VERO29 442 Typ L3	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW Bender Wirth: 4	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White hents: IP-VERO29 442 Typ L3	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW Bender Wirth: 4	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White hents: IP-VERO29 442 Typ L3	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW Bender Wirth: 4	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White hents: IP-VERO29 442 Typ L3 NUS CTM-22 (Tunable White) Asymmetric	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW Bender Wirth: 4 WED LED FWHM Efficiency	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White hents: IP-VERO29 442 Typ L3 NUS CTM-22 (Tunable White) Asymmetric 90 %	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW Bender Wirth: 4 Ender Wirth: 4 LED FWHM Efficiency Peak intensity	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White hents: IP-VERO29 442 Typ L3 NUS CTM-22 (Tunable White) Asymmetric 90 % 1.2 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW Bender Wirth: 4 Ender Wirth: 4 LED FWHM Efficiency Peak intensity LEDs/each optic	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White hents: IP-VERO29 442 Typ L3 NUS CTM-22 (Tunable White) Asymmetric 90 % 1.2 cd/lm 1	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW Bender Wirth: 4 WITH: 4 Ender Wirth: 4 Efficiency Peak intensity LEDs/each optic Light colour	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White nents: IP-VERO29 142 Typ L3 NUS CTM-22 (Tunable White) Asymmetric 90 % 1.2 cd/lm 1 White	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW Bender Wirth: 4 Ender Wirth: 4 CLED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White nents: IP-VERO29 142 Typ L3 NUS CTM-22 (Tunable White) Asymmetric 90 % 1.2 cd/lm 1 White nents:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW Bender Wirth: 4 Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White nents: IP-VERO29 442 Typ L3 NUS CTM-22 (Tunable White) Asymmetric 90 % 1.2 cd/lm 1 White nents: IP-VERO29	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAW Bender Wirth: 4 Ender Wirth: 4 CLED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White nents: IP-VERO29 442 Typ L3 NUS CTM-22 (Tunable White) Asymmetric 90 % 1.2 cd/lm 1 White nents: IP-VERO29	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM Bender Wirth: 4 Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM	CTM-14 (Tunable White) Asymmetric 92 % 1.2 cd/lm 1 White nents: IP-VERO29 442 Typ L3 NUS CTM-22 (Tunable White) Asymmetric 90 % 1.2 cd/lm 1 White nents: IP-VERO29	

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XICHIA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon IDEAL: 50-2103	COB J-Type Asymmetric 89 % 1.5 cd/lm 1 White	20, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1
		The second secon
XICHIA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13658_CLAM Bender Wirth: 4	COB J-Type Asymmetric 92 % 1.3 cd/lm 1 White ents: P-VERO13-18	Th On Th Out
Ø NICHIΛ		50* 50*
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	COB L-Type (LES 11) Asymmetric 93 % 1.5 cd/lm 1 White	27 27 27 27 20 20 20 20 20 20 20 20 20 20
ΜΝΙCΗΙΛ		90 ⁴
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	White	24 Ba Contraction (1997) 24 Ba Contraction (1997) 25 Ba Contraction (1997) 26 Contraction (1997) 27 Contraction (1997) 28 Contraction (1997) 29 Contraction (1997) 29 Contraction (1997) 20 Contractio

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PHOTOMETRIC DATA (MEASURED):

ΜΝΙCΗΙΛ LED COB L-Type (LES 11) FWHM Asymmetric 91 % Efficiency Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components: IDEAL: 50-2100NC + 50-2100AN *Μ***NICHIA** LED COB L-Type (LES 11) FWHM Asymmetric 91 % Efficiency Peak intensity 1.3 cd/lm LEDs/each optic 1 White Light colour Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 438 Typ L1 **ΜΝΙCΗΙΛ** LED COB L-Type (LES 9) FWHM Asymmetric Efficiency 93 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 438 Typ L1 **Μ**ΝΙCΗΙΛ LED NVCWJ024Z-V1MT: COB J-Type Tunable White FWHM Asymmetric Efficiency 91 % 1.3 cd/lm Peak intensity LEDs/each optic 1 White Light colour Required components: C13658_CLAMP-VERO13-18 Bender Wirth: 498 Typ L2



PHOTOMETRIC DATA (MEASURED):

ØΝΙCΗΙΛ		30* 30*
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13658_CLAW F13671_ANGE Bender Wirth: 4	NVCWJ024Z-V1MT: COB J-Type Tunable White Asymmetric 86 % 1.1 cd/lm 1 White hents: IP-VERO13-18 -RZ-LENS	31, 150 13, 150 31, 150 31, 150 31, 150 40 40 40 40 40 40 40 40 40 4
OSRAM LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C16685_CLAM F13671_ANGE	PrevaLED Core G7 L15 H1 Asymmetric 89 % 1.1 cd/lm 1 White leents: IP-PRV-A	
OSRAM LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C16685_CLAM	PrevaLED Core G7 L15 H1 Asymmetric 93 % 1.2 cd/lm 1 White nents:	
OSRAM LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: OPTIC CLI	PrevaLED Core Z4 LES19 Asymmetric 91 % 1.4 cd/lm 1 White	

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[
OSRAM Opto Semiconductors		90* <u>90*</u>
LED	Soleriq S13	
FWHM	Asymmetric	
Efficiency	91 %	50 ³ 400 50 ⁴
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	93* 43*
Required compor	ents:	
C13658_CLAM	P-VERO13-18	
Bender Wirth: 4	37 Typ L1	4230
		36* 36* 36*
OSRAM Opto Semiconductors		90 ⁴ 90 ⁴
LED	Soleriq S13	
FWHM	Asymmetric	75'
Efficiency	93 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic		
Light colour	White	45° 65*
Required compor	ents:	
	+ OPTIC CLIP Z50 TYPE1 2213194-1	
		134 04 154
OSRAM Opto Semiconductors		80°
OSRAM Opto Semiconductors LED	Soleriq S13 19x19	9 ¹
Opto Semiconductors	Soleriq S13 19x19 Asymmetric	20
Opto Semiconductors LED FWHM Efficiency		90 ⁴ 92 93 94 96 96 96 97 97 97 97 97 97 97 97 97 97
Opto Semiconductors LED FWHM Efficiency Peak intensity	Asymmetric 91 % 1.3 cd/lm	90 ⁴ 92 91 90 90 90 90 90 90 90 90
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic	Asymmetric 91 % 1.3 cd/lm 1	
opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 91 % 1.3 cd/lm 1 White	94 94 94 95 95 95 96 96 97 96 96 97
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White ents:	
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White	
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White ents:	97 97 96 - 00 - 07 120 - 00
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White ents:	94 94 95 95 95 95 95 95 95 95 95 95 95 95 95
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White ents:	
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2	Asymmetric 91 % 1.3 cd/lm 1 White ents: + OPTIC CLIP Z50 TYPE1 2213194-1	304 304 304 304 306 90 90 304 300 90 90 304 900 90 90 304 900 90 90 304 900 90 90 304 900 90 90 304 900 90 90
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 OSRAM Opto Semiconductors LED	Asymmetric 91 % 1.3 cd/lm 1 White ents: + OPTIC CLIP Z50 TYPE1 2213194-1 Soleriq S13 19x19	
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 OSRAM Opto Semiconductors LED FWHM	Asymmetric 91 % 1.3 cd/lm 1 White ents: + OPTIC CLIP Z50 TYPE1 2213194-1 Soleriq S13 19x19 Asymmetric	
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 OSRAM Opto Semiconductors LED FWHM Efficiency	Asymmetric 91 % 1.3 cd/lm 1 White ents: + OPTIC CLIP Z50 TYPE1 2213194-1 Soleriq S13 19x19 Asymmetric 89 %	
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 OSRAM Opto Semiconductors LED FWHM Efficiency Peak intensity	Asymmetric 91 % 1.3 cd/lm 1 White ents: + OPTIC CLIP Z50 TYPE1 2213194-1 Soleriq S13 19x19 Asymmetric 89 % 1.4 cd/lm	
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 OSRAM Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic	Asymmetric 91 % 1.3 cd/lm 1 White ents: + OPTIC CLIP Z50 TYPE1 2213194-1 Soleriq S13 19x19 Asymmetric 89 % 1.4 cd/lm 1	
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 OSRAM Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 91 % 1.3 cd/lm 1 White ents: + OPTIC CLIP Z50 TYPE1 2213194-1 Soleriq S13 19x19 Asymmetric 89 % 1.4 cd/lm 1 White	
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 OSRAM Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White ents: + OPTIC CLIP Z50 TYPE1 2213194-1 Soleriq S13 19x19 Asymmetric 89 % 1.4 cd/lm 1 White ents:	
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 OSRAM Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White ents: + OPTIC CLIP Z50 TYPE1 2213194-1 Soleriq S13 19x19 Asymmetric 89 % 1.4 cd/lm 1 White	
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213254-2 OSRAM Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Asymmetric 91 % 1.3 cd/lm 1 White ents: + OPTIC CLIP Z50 TYPE1 2213194-1 Soleriq S13 19x19 Asymmetric 89 % 1.4 cd/lm 1 White ents:	

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OSRAM opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13584_CLAM Bender Wirth: 4	White ents: IP-VERO29	
OSRAM Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: 2213407-2	White	
PHILIP LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: OPTIC CLI	Fortimo SLM L09 + SLM holder Asymmetric 91 % 1.4 cd/lm 1 White	
PHILIP LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor TE: OPTIC CLI	Fortimo SLM L13 + SLM holder Asymmetric 91 % 1.4 cd/lm 1 White	

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DHILLP LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon TE: 2213130-2	Fortimo SLM L13 CoB Asymmetric 92 % 1.2 cd/lm 1 White	5° 5° 60 60 60 60 60 60 60 60 60 60 60 60 60
PHILIP LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon F13671_ANGE TE: 2213130-2	Fortimo SLM L13 CoB Asymmetric 85 % 1.1 cd/lm 1 White ents:	
PHILIP LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon TE: OPTIC CLI	Fortimo SLM L15 + SLM holder Asymmetric 90 % 1.4 cd/lm 1 White	9 ¹ 9 ¹ 9 ¹ 9 ¹ 9 ¹ 9 ¹ 9 ¹ 9 ¹
PHILIP LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon F13671_ANGE TE: 2213130-2	Fortimo SLM L15 CoB Asymmetric 87 % 1.1 cd/lm 1 White ents:	

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DHILLP LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon TE: 2213130-2	Fortimo SLM L15 CoB Asymmetric 92 % 1.3 cd/lm 1 White	
PHILIP LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon TE: OPTIC CLI	Fortimo SLM L19 + SLM holder Asymmetric 88 % 1.3 cd/lm 1 White	
SAMSU LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM Bender Wirth: 5	LC035T (Tunable white) Asymmetric 92 % 1.1 cd/lm 1 Tunable White ents: P-VERO29	
SAMSU LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM F13671_ANGE Bender Wirth: 5	LC035T (Tunable white) Asymmetric 87 % 1 cd/lm 1 Tunable White ents: P-VERO29 -RZ-LENS	

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SAMSU	ING	90 ⁴
LED	LC040C	
FWHM	Asymmetric	
Efficiency	91 %	60 ¹
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	43 ²
Required compon		
TE: 2213382-2	+ OPTIC CLIP Z50 TYPE1 2213194-1	
		30 ⁴ 15 ⁵ 0 ⁴ 15 ⁵ 30
SEOUL		20 ⁴
	MJT COB LES 14.5	
LED FWHM		73
Efficiency	Asymmetric 91 %	
Peak intensity	1.3 cd/lm	60* 60
LEDs/each optic		
Light colour	White	45* 45
Required compon		
	+ OPTIC CLIP Z50 TYPE1 2213194-1	
12.2215254-2		
		120
		20° 0° 15°
SEOUL		90* 9 0
LED	MJT COB LES 22	
	MJI COB LES ZZ	
FWHM		71
	Asymmetric 89 %	
FWHM Efficiency Peak intensity	Asymmetric	
Efficiency	Asymmetric 89 % 1.1 cd/lm	64 60 7
Efficiency Peak intensity	Asymmetric 89 % 1.1 cd/lm	73° 72 66° 660 60 67° 600 60
Efficiency Peak intensity LEDs/each optic	Asymmetric 89 % 1.1 cd/lm 1 White	73°
Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 89 % 1.1 cd/lm 1 White eents:	9 ¹ 9 ¹ 9 ¹ 9 ¹ 9 ¹ 0 ⁰ 0 ⁰
Efficiency Peak intensity LEDs/each optic Light colour Required compon	Asymmetric 89 % 1.1 cd/lm 1 White ents: IP-VERO29	5° 22
Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM	Asymmetric 89 % 1.1 cd/lm 1 White ents: IP-VERO29	24 1120 120 45 60 60 60 7 60 73 7 72 73 7 72 73
Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM Bender Wirth: 4	Asymmetric 89 % 1.1 cd/lm 1 White eents: IP-VERO29 I31 Typ L3	
Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM Bender Wirth: 4	Asymmetric 89 % 1.1 cd/lm 1 White eents: IP-VERO29 I31 Typ L3 NG ONS	
Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM Bender Wirth: 4	Asymmetric 89 % 1.1 cd/lm 1 White eents: IP-VERO29 I31 Typ L3 NG ONS WU-M-484	
Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM Bender Wirth: 4 CLIGHT LED FWHM	Asymmetric 89 % 1.1 cd/lm 1 White ents: IP-VERO29 I31 Typ L3 MG ONS WU-M-484 Asymmetric	
Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM Bender Wirth: 4 LED FWHM Efficiency	Asymmetric 89 % 1.1 cd/lm 1 White ents: IP-VERO29 I31 Typ L3 MG ONS WU-M-484 Asymmetric 88 %	
Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM Bender Wirth: 4 LED FWHM Efficiency Peak intensity	Asymmetric 89 % 1.1 cd/lm 1 White ents: IP-VERO29 I31 Typ L3 WU-M-484 Asymmetric 88 % 1.4 cd/lm	
Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM Bender Wirth: 4 LED FWHM Efficiency Peak intensity LEDs/each optic	Asymmetric 89 % 1.1 cd/lm 1 White tents: IP-VERO29 I31 Typ L3 NG ONS WU-M-484 Asymmetric 88 % 1.4 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM Bender Wirth: 4 LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 89 % 1.1 cd/lm 1 White tents: IP-VERO29 I31 Typ L3 NG ONS WU-M-484 Asymmetric 88 % 1.4 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM Bender Wirth: 4 LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	Asymmetric 89 % 1.1 cd/lm 1 White vents: IP-VERO29 I31 Typ L3 NG ONS WU-M-484 Asymmetric 88 % 1.4 cd/lm 1 White vents:	
Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM Bender Wirth: 4 LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	Asymmetric 89 % 1.1 cd/lm 1 White tents: IP-VERO29 I31 Typ L3 NG ONS WU-M-484 Asymmetric 88 % 1.4 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required compon C13584_CLAM Bender Wirth: 4	Asymmetric 89 % 1.1 cd/lm 1 White vents: IP-VERO29 I31 Typ L3 NG ONS WU-M-484 Asymmetric 88 % 1.4 cd/lm 1 White vents:	

PRODUCT DATASHEET C14346_ANGELETTE-WAS

Last update: 13/09/2019Subject to change without prior noticePublished: 02/05/2018LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.24/26



PHOTOMETRIC DATA (SIMULATED):

bridgelux.		90*
LED	V10 Gen7	
FWHM	Asymmetric	731
Efficiency	92 %	
Peak intensity	1.3 cd/lm	60°
LEDs/each optic	1	
Light colour	White	45*
Required component		
C13658_CLAMP-		
Bender Wirth: 486	Typ L1	
		30° 30° 30°
bridgelux.		90° 90°
LED	V13 Gen7	
FWHM	Asymmetric	75.
Efficiency	92 %	
Peak intensity	1.6 cd/lm	60°
LEDs/each optic	1	
Light colour	White	45*
Required component		
IDEAL: 50-2103C		1220
IDEAL. 50-2103C	1 + 50-2 TODAN	
		30° 30° 35°
bridgelux.		90° 90°
	V13 Gen7	8°
bridgelux. LED FWHM	V13 Gen7 Asymmetric	39 ⁴ 39 ⁴ 39 ⁵ 39 ⁷
LED FWHM	Asymmetric	
LED FWHM Efficiency	Asymmetric 92 %	64
LED FWHM Efficiency Peak intensity	Asymmetric 92 % 1.3 cd/lm	60°
LED FWHM Efficiency Peak intensity LEDs/each optic	Asymmetric 92 % 1.3 cd/lm 1	2. 60. 60. 51. 51. 51. 51. 51. 52. 52. 53. 53. 53.
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 92 % 1.3 cd/lm 1 White	6, 00 6, 6, 00 6, 2, 25 2, 25
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component	Asymmetric 92 % 1.3 cd/lm 1 White ts:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13658_CLAMP-V	Asymmetric 92 % 1.3 cd/lm 1 White is: /ERO13-18	01 00 00 00 00 00 00 00 00 00 00 00 00 0
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component	Asymmetric 92 % 1.3 cd/lm 1 White is: /ERO13-18	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13658_CLAMP-V	Asymmetric 92 % 1.3 cd/lm 1 White is: /ERO13-18	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13658_CLAMP-V Bender Wirth: 477	Asymmetric 92 % 1.3 cd/lm 1 White ts: /ERO13-18 Typ L1	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13658_CLAMP- Bender Wirth: 477	Asymmetric 92 % 1.3 cd/lm 1 White is: /ERO13-18	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13658_CLAMP-V Bender Wirth: 477	Asymmetric 92 % 1.3 cd/lm 1 White ts: /ERO13-18 Typ L1	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13658_CLAMP-V Bender Wirth: 477	Asymmetric 92 % 1.3 cd/lm 1 White ts: /ERO13-18 Typ L1 V22 Gen7	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13658_CLAMP-V Bender Wirth: 477	Asymmetric 92 % 1.3 cd/lm 1 White ts: /ERO13-18 Typ L1 V22 Gen7 Asymmetric	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13658_CLAMP-V Bender Wirth: 477	Asymmetric 92 % 1.3 cd/lm 1 White ts: /ERO13-18 Typ L1 V22 Gen7 Asymmetric 94 %	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13658_CLAMP-V Bender Wirth: 477	Asymmetric 92 % 1.3 cd/lm 1 White ts: /ERO13-18 Typ L1 V22 Gen7 Asymmetric 94 % 1.2 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13658_CLAMP-\ Bender Wirth: 477 bridgelux LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 92 % 1.3 cd/lm 1 White is: /ERO13-18 Typ L1 V22 Gen7 Asymmetric 94 % 1.2 cd/lm 1 White	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13658_CLAMP-\ Bender Wirth: 477 bridgelux LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component	Asymmetric 92 % 1.3 cd/lm 1 White ts: /ERO13-18 Typ L1 V22 Gen7 Asymmetric 94 % 1.2 cd/lm 1 White ts:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13658_CLAMP-\ Bender Wirth: 477 bridgelux LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13584_CLAMP-\	Asymmetric 92 % 1.3 cd/lm 1 White ts: /ERO13-18 Typ L1 V22 Gen7 Asymmetric 94 % 1.2 cd/lm 1 White ts: /ERO29	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13658_CLAMP-\ Bender Wirth: 477 bridgelux LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component	Asymmetric 92 % 1.3 cd/lm 1 White ts: /ERO13-18 Typ L1 V22 Gen7 Asymmetric 94 % 1.2 cd/lm 1 White ts: /ERO29	



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.

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