

## **MIRELLA-50-W-PF**

~40° wide beam

#### **TECHNICAL SPECIFICATIONS:**

DimensionsØ 49.9 mmHeight24 mmFasteningsocketROHS compliantyes <sup>①</sup>

#### **MATERIAL SPECIFICATIONS:**

**Component** MIRELLA-50-W-PF

**Type** Reflector **Material** PC



C13087\_MIRELLA-50-W-PF

PRODUCT DATASHEET

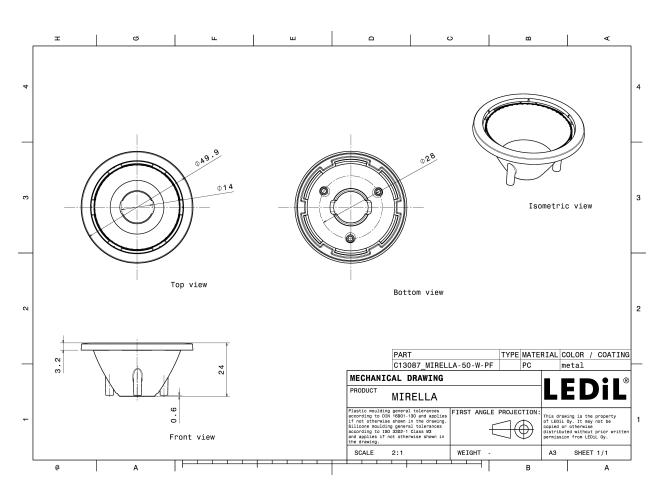
Colour	Finish	Coating
metal		lacquer

#### **ORDERING INFORMATION:**

Component C13087\_MIRELLA-50-W-PF » Box size: 480 x 280 x 300 mm

Qty in box	MOQ	MPQ	Box weight (kg)
336	112	28	2.8





PRODUCT DATASHEET



bridgelux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C14115_PF-SC	White	get         get
bridgetux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-SC C13333_MIRE	White ents: DCKET-VERO13-18	21 0 10 20 20 20 20 20 20 20 20 20 2
bridgelux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-SC C12479_MIRE	White ents: DCKET-VERO13-18	20° 20° 20° 20° 20° 20° 20° 20° 20° 20°
bridgelux LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-S0	White	20 20 20 20 20 20 20 20 20 20

PRODUCT DATASHEET



bridgelux.		99°
LED	V6 Gen6	
FWHM	44.0°	
Efficiency	81 %	60 <sup>4</sup>
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	g- c-
Required compon	ents:	
C13761_PF-SC		
C12479_MIREI		
		30 <sup>4</sup> 20 <sup>2</sup> 0 <sup>4</sup> 30 <sup>4</sup>
bridgelux.		
LED	V6 Gen6	
FWHM	31.0°	
Efficiency	74 %	
Peak intensity	2.1 cd/lm	
LEDs/each optic		
Light colour	White	
Required compon		
	ICKET-VERO13-18	
C12479_MIRE		
Bender Wirth: 4		
Dender Wirtin.		
bridgelux.		
LED	V6 Gen6	
FWHM	27.0°	
Efficiency	82 %	
Peak intensity	2.7 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compon	ents:	
	OCKET-VERO13-18	
Bender Wirth: 4	60 Typ L1	
bridgelux.		51 <sup>4</sup> 51 <sup>4</sup>
LED	V6 Gen6	
FWHM	44.0°	8.
Efficiency	81 %	
Peak intensity	1.3 cd/lm	
LEDs/each optic		
Light colour	White	ar ar
Required compon		
C13761_PF-SC		
C13333_MIRE		
		1220
		30° 30° 30°
l		



bridgetux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13761_PF-S0	White	20° 20° 20° 20° 20° 20° 20° 20°
bridgelux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-S0 C12479_MIRE Bender Wirth:	White nents: DCKET-VERO13-18	
bridgelux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13761_PF-S0 C13333_MIRE	White nents: DCKET-CXA15	90° 90° 90° 90° 90° 90° 90° 90° 90° 90°
bridgelux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13761_PF-S0	White	

PRODUCT DATASHEET



FWHM Efficiency Peak intensity LEDs/each optic	White ents: VCKET-CXA15	20° - 00 - 0° 21° - 0° 2
FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	White ents: VCKET-VERO10	22° 00 12° 25° 120 120 25° 150 25° 1
FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	White ents: ICKET-VERO10	
FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	White	27. 27. 27. 27. 27. 27. 27. 27.



bridgelux LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-S0 C12479_MIRE	White ents: DCKET-VERO13-18	59° 59° 60° 60° 50° 50° 50° 50° 50° 50° 50° 5
bridgetux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-S0	White	20. 20. 20. 20. 20. 20. 20. 20.
bridgelux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-S0 C13333_MIRE	White ents: DCKET-VERO13-18	20. 20. 20. 20. 20. 20. 20. 20.
bridgelux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-S0 C12479_MIRE	White ents: DCKET-VERO13-18	27 69 60 60 60 60 60 60 60 60 60 60

PRODUCT DATASHEET



bridgelux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-S0	White	25 27 27 27 27 20 20 20 27 27 27 27 27 27 27 27 27 27
bridgelux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-S0 C13333_MIRE	White ents: DCKET-VERO13-18	20 20 20 20 20 20 20 20 20 20
CITIZE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0	CLL01x 36.0° 90 % 1.8 cd/lm 1 White vents:	
CITTIZE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0 C12479_MIRE	CLL01x 44.0° 86 % 1.4 cd/lm 1 White eents: DCKET	

PRODUCT DATASHEET



CITIZE	N	
LED	CLL01x	
FWHM	42.0°	
Efficiency	86 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic		
Light colour	White	
Required compor	ients:	
C13083_PF-S0		
C13333_MIRE		
CITIZE	CN13907_MIRELLA-50-V-PE-EZL_(CLL020)	
CITIZE		
LED	CLL02x/CLU02x (LES10)	
FWHM	46.0°	
Efficiency	%	
Peak intensity	0.7 cd/lm	
LEDs/each optic		
Light colour	White	
Required compor		
C13083_PF-S0		
C13723_MIRE	LLA-RZL	
CITIZE	NT	
		90° 90°
LED	CLL02x/CLU02x (LES10)	75'
FWHM	41.0°	
Efficiency	76 %	60° 60°
Peak intensity	1.3 cd/lm	
LEDs/each optic		
Light colour	White	\$7°
Required compor		
	DCKET-VERO13-18	
C12479_MIRE		1200
Bender Wirth: 4	I34 Typ L1	30° 23° 0 35°
CITIZE	N	
LED	CLL02x/CLU02x (LES10)	
FWHM	41.0°	
Efficiency	90 %	
Peak intensity	1.8 cd/lm	
LEDs/each optic		
Light colour	White	
Required compor		
C13083_PF-S0		

PRODUCT DATASHEET



	-	
CITIZE	N Contraction of the second se	
LED	CLL02x/CLU02x (LES10)	
FWHM	46.0°	
Efficiency	86 %	
Peak intensity	1.5 cd/lm	
LEDs/each optic		
Light colour	White	
Required compon	ents:	
C13083_PF-SC		
C12479_MIREI	LA-DL	
CITIZE	J	50° 50°
FWHM	CLL02x/CLU02x (LES10) 36.0°	73.
Efficiency	84 %	400
Peak intensity	1.7 cd/lm	60°
LEDs/each optic		
Light colour	White	9°
Required compon		
	CKET-VERO13-18	
Bender Wirth: 4		
		2600
		255 0° 725°
CITIZE	N	
LED	CLL02x/CLU02x (LES10)	
FWHM	46.0°	
Efficiency	86 %	
Peak intensity	1.5 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compon	ents:	
C13083_PF-SC	CKET	
C13333_MIREI	LA-CL	
CITIZE	N	90* 90*
LED	CLL02x/CLU02x (LES10)	
FWHM	39.0°	73.
Efficiency	78 %	400
	1.5 cd/lm	
Peak intensity		
Peak intensity LEDs/each optic	1	
LEDs/each optic	1 White	er
	White	a
LEDs/each optic Light colour Required compon	White	er 62
LEDs/each optic Light colour Required compon	White ents: CKET-VERO13-18	90 - v
LEDs/each optic Light colour Required compon C13709_PF-SC	White ents: CKET-VERO13-18 LA-CL	67 00 07 07 07 07 07 07 07 07 07 07 07 07

PRODUCT DATASHEET



CITIZE	N	90° 90°
LED	CLU700/701/702	
FWHM	29.0°	78.
Efficiency	80 %	
Peak intensity	2.1 cd/lm	60 <sup>10</sup>
LEDs/each optic		
Light colour	White	95" 43"
Required compor		
	DCKET-VERO13-18	1600
C13333_MIRE		
Bender Wirth:		344 344
CITIZE	N	
	CLU700/701/702	75
FWHM	42.0°	
Efficiency Peak intensity	81 %	50° × / 60°
	1.3 cd/lm	
LEDs/each optic Light colour	White	45*
Required compor		
C13083_PF-S		
C13063_FF-5		
013723_WIRE		1220
		30° 30° 30°
CITIZE	N	90° 90°
LED	CLU700/701/702	
FWHM	34.0°	73. 73.
Efficiency	81 %	
Peak intensity	1.8 cd/lm	
LEDs/each optic		
Light colour	White	g
Required compor	nents:	- 1239
C13083_PF-S		
C13333_MIRE	LLA-CL	1630
		30*
CITIZE	N	90° 90°
	CLU700/701/702	
FWHM	31.0°	75'
Efficiency	77 %	
Peak intensity	1.8 cd/lm	605 607
LEDs/each optic		
LEDS/each oplic	White	47%
Required compo		
	DCKET-VERO13-18	
C13709_PF-S C12479_MIRE		
Bender Wirth:		
	ו∟ קעו דטד	30° 35° 35°



## PHOTOMETRIC DATA (MEASURED):

CITIZE	N	90* 90*
LED	CLU700/701/702	
FWHM	26.0°	73.
Efficiency	83 %	
Peak intensity	2.4 cd/lm	69 <sup>1</sup> 60°
LEDs/each optic		
Light colour	White	45*
Required compor		1630
	DCKET-VERO13-18	
Bender Wirth: 4		
Dender Witth.	199 L1	
		36° 36° 36° 35°
CITIZE	N	90° 90°
LED	CLU700/701/702	
FWHM	33.0°	75* 25*
Efficiency	88 %	
Peak intensity	1.9 cd/lm	60°
LEDs/each optic		
Light colour	White	45° 45°
Required compor		
C13083_PF-S0		
C13003_FF-30	JORET	
		30° 2000 30°
		15° 0° 15°
CITIZE	N	90° 90° 90° 90°
		90 <sup>4</sup> 95 <sup>4</sup>
LED	CLU700/701/702	35         35           86         86           122,         04
LED FWHM	CLU700/701/702 39.0°	33.         33.           30.         35.           122.         0.
LED FWHM Efficiency	CLU700/701/702 39.0° 82 %	60, 32, 36, 36, 36, 36, 36, 36, 36, 36, 36, 36
LED FWHM Efficiency Peak intensity	CLU700/701/702 39.0° 82 % 1.4 cd/lm	60. 61. 63. 64. 60. 65. 75. 75. 75. 75. 75. 75. 75. 7
LED FWHM Efficiency Peak intensity LEDs/each optic	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1	20°         20°           30°         30°           30°         30°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White	80         80           90         90           90         90
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White tents:	0         0         0           0         0         0           0         0         0           00         00         0           00         00         0
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White tents: DCKET	1         127°         6°         12°         1           1         127°         6°         12°         1           1         127°         6°         12°         1           1         127°         12°         1         1           1         127°         12°         1         1           1         127°         12°         1         1           1         127°         12°         1         1           1         127°         12°         1         1           1         127°         12°         1         1           1         127°         12°         1         1           1         127°         12°         1         1           1         127°         12°         1         1           1         127°         12°         1         1           1         127°         12°         1         1           1         127°         12°         1         1           1         127°         12°         1         1           1         127°         12°         1         1           <
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White tents: DCKET	27.         20.           26.         20.           27.         20.           28.         25.           29.         25.
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0 C12479_MIRE	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White vents: DCKET LLA-DL	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White vents: DCKET LLA-DL	30*         30*           30*         30*
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0 C12479_MIRE	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White vents: DCKET LLA-DL	30.         30.         30.           30.         30.         30.           30.         30.         30.           30.         30.         30.           30.         30.         40.           30.         30.         40.           30.         30.         30.           30.         30.         30.
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0 C12479_MIRE	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White hents: DCKET LLA-DL N	32.         32.         32.           33.         33.         33.
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C12479_MIRE	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White hents: DCKET LLA-DL N CLU720/721	90.         90.         90.           30.         90.         90.           50.         90.         60.           50.         90.         60.           50.         90.         60.           50.         90.         60.           50.         90.         60.           50.         90.         60.
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C12479_MIRE CITTIZE LED FWHM	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White N CLU720/721 43.0°	60° 90° 90° 90° 90° 90° 90° 90° 9
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C12479_MIRE CITTIZE LED FWHM Efficiency	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White nents: DCKET LLA-DL N CLU720/721 43.0° 76 % 1.3 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C12479_MIRE CITIZED LED FWHM Efficiency Peak intensity	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White nents: DCKET LLA-DL N CLU720/721 43.0° 76 % 1.3 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C12479_MIRE CITTIZE LED FWHM Efficiency Peak intensity LEDs/each optic	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White nents: DCKET LLA-DL N CLU720/721 43.0° 76 % 1.3 cd/lm 1 White	137     6 <sup>4</sup> 13 <sup>4</sup> 90 <sup>4</sup> 60 <sup>1</sup> 60 <sup>2</sup> 90 <sup>4</sup> 60 <sup>1</sup> 60 <sup>2</sup> 90 <sup>4</sup> 13 <sup>4</sup> 90 <sup>4</sup> 90 <sup>4</sup> 60 <sup>1</sup> 60 <sup>2</sup> 90 <sup>4</sup> 13 <sup>4</sup> 90 <sup>4</sup> 90 <sup>4</sup> 60 <sup>1</sup> 60 <sup>2</sup> 90 <sup>4</sup> 60 <sup>1</sup> 60 <sup>2</sup> 90 <sup>4</sup> 60 <sup>1</sup> 60 <sup>2</sup>
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C12479_MIRE CITTIZE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White nents: DCKET LLA-DL N CLU720/721 43.0° 76 % 1.3 cd/lm 1 White	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C12479_MIRE CITTIZE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White nents: DCKET LLA-DL N CLU720/721 43.0° 76 % 1.3 cd/lm 1 White nents: DCKET-VERO13-18	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C12479_MIRE CITTIZE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-SC	CLU700/701/702 39.0° 82 % 1.4 cd/lm 1 White N CLU720/721 43.0° 76 % 1.3 cd/lm 1 White N N N N N N N N N N N N N	

Last update: 08/12/2019Subject to change without prior noticePublished: 03/05/2018LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.12/42



CITIZE	Ν	90 <sup>4</sup> 90 <sup>4</sup>
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	CLU720/721 44.0° 74 % 1.1 cd/lm 1 White ents: DCKET-VERO13-18 LLA-DL	20, 100 100 10, 100 40, 400 51, 400 51, 52, 55 51,
CITTIZE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13709_PF-SC Bender Wirth: 4	CLU720/721 40.0° 81 % 1.4 cd/lm 1 White ents: DCKET-VERO13-18	
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13761_PF-SC C12479_MIRE	CXA/B 13xx 43.0° 81 % 1.4 cd/lm 1 White ents: DCKET-CXA15	
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13761_PF-SC C13333_MIREI	CXA/B 13xx 42.0° 81 % 1.5 cd/lm 1 White ents: DCKET-CXA15	



CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	CXA/B 13xx 37.0° 86 % 1.8 cd/lm 1 White	994 994 735 400 904 904 904 904 904 904 904 904 905 904 905 904 905 904 905 904 905 904 905 904 905 904 905
C13761_PF-SC		30 <sup>4</sup> 12 <sup>5</sup> 0 <sup>4</sup> 13 <sup>3</sup> 35 <sup>6</sup>
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13761_PF-SC C13723_MIRE	CXA/B 15xx 47.0° 81 % 1.2 cd/lm 1 White eents: DCKET-CXA15	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13709_PF-SC C13333_MIREI Bender Wirth: 4	CXA/B 15xx 37.0° 79 % 1.6 cd/lm 1 White the sents: DCKET-VERO13-18 LLA-CL	
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13761_PF-SC C12479_MIRE	CXA/B 15xx 47.0° 85 % 1.2 cd/lm 1 White tents: DCKET-CXA15	

PRODUCT DATASHEET



## PHOTOMETRIC DATA (MEASURED):

CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13709_PF-SC C12479_MIREI Bender Wirth: 4	CXA/B 15xx 39.0° 75 % 1.3 cd/lm 1 White ents: DCKET-VERO13-18 LA-DL	94° 94° 97° 969 97° 97° 969 97° 97° 969 97° 97° 969 97° 97° 97°
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13709_PF-SC Bender Wirth: 4	CXA/B 15xx 34.0° 82 % 1.8 cd/lm 1 White ents: CKET-VERO13-18	
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13761_PF-SC C13333_MIREI	CXA/B 15xx 46.0° 85 % 1.4 cd/lm 1 White ents: DCKET-CXA15	
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13761_PF-SC	CXA/B 15xx 41.0° 90 % 1.4 cd/lm 1 White ents:	20 20 20 20 20 20 20 20 20 20

Last update: 08/12/2019Subject to change without prior noticePublished: 03/05/2018LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.15/42



CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C14115_PF-S0	CXA/B 1816 & CXA/B 1820 & CXA 1850 45.0° 84 % 1.3 cd/lm 1 White	21- 21- 21- 21- 21- 21- 21- 21-
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor IDEAL: 50-210	CXA/B 1816 & CXA/B 1820 & CXA 1850 43.0° 87 % 1.4 cd/lm 1 White	20 20 20 20 20 20 20 20 20 20
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0 C13723_MIRE	MHD-E/G 45.0° 82 % 1.1 cd/lm 1 White tents: DCKET	2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup>
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0 C13333_MIRE	MHD-E/G 44.0° 84 % 1.3 cd/lm 1 White eents: DCKET	2 <sup>1</sup> 2 <sup>1</sup>

PRODUCT DATASHEET

C13087\_MIRELLA-50-W-PF

Last update: 08/12/2019Subject to change without prior noticePublished: 03/05/2018LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.16/42



CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC	MHD-E/G 38.0° 89 % 1.5 cd/lm 1 White thents:	50° 50° 50° 50° 50° 50° 50° 50°
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0 C12479_MIRE	MHD-E/G 45.0° 84 % 1.2 cd/lm 1 White tents: DCKET	
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C12479_MIRE	MK-R 34.0° 80 % 1.7 cd/lm 1 White tents: DCKET	90° 90° 90° 90° 90° 90° 90° 90° 90° 90°
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0	MK-R 30.0° 85 % 2.1 cd/lm 1 White ments:	



	MT-G	
FWHM	52.0°	
Efficiency	86 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic		
Light colour	White	
Required compor		
C13083_PF-S		
C13333_MIRE		
CREE <del>\$</del>	•	
LED	MT-G	
FWHM	52.0°	
Efficiency	86 %	
Peak intensity	00 % 1.2 cd/lm	
LEDs/each optic		
Light colour	White	
Light colour Required compor		
C13083_PF-S		
C12479_MIRE	LLA-DL	
rdff 🔺	•	
CREE 🗧	TM	
	MT-G	
LED	MT-G	
LED FWHM	MT-G 48.0°	
LED FWHM Efficiency	MT-G 48.0° 90 % 1.4 cd/lm	
LED FWHM Efficiency Peak intensity	MT-G 48.0° 90 % 1.4 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	MT-G 48.0° 90 % 1.4 cd/lm 1 White	
LED FWHM Efficiency Peak intensity LEDs/each optic	MT-G 48.0° 90 % 1.4 cd/lm 1 White hents:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	MT-G 48.0° 90 % 1.4 cd/lm 1 White hents:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-St	MT-G 48.0° 90 % 1.4 cd/lm 1 White hents: OCKET	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-St	MT-G 48.0° 90 % 1.4 cd/lm 1 White hents: OCKET	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-St CREEC	MT-G 48.0° 90 % 1.4 cd/lm 1 White hents: DCKET	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-St CREEE LED FWHM	MT-G 48.0° 90 % 1.4 cd/lm 1 White hents: DCKET MT-G2 51.0°	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-St CREE LED FWHM Efficiency	MT-G 48.0° 90 % 1.4 cd/lm 1 White nents: DCKET MT-G2 51.0° 87 %	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-St CREEE LED FWHM Efficiency Peak intensity	MT-G 48.0° 90 % 1.4 cd/lm 1 White hents: DCKET MT-G2 51.0° 87 % 1.2 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-St CREEE LED FWHM Efficiency Peak intensity LEDs/each optic	MT-G 48.0° 90 % 1.4 cd/lm 1 White hents: OCKET MT-G2 51.0° 87 % 1.2 cd/lm 1	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-St CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	MT-G 48.0° 90 % 1.4 cd/lm 1 White hents: OCKET MT-G2 51.0° 87 % 1.2 cd/lm 1 White	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-St CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	MT-G 48.0° 90 % 1.4 cd/lm 1 White hents: OCKET MT-G2 51.0° 87 % 1.2 cd/lm 1 White hents:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-Se CREE ED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-Se	MT-G 48.0° 90 % 1.4 cd/lm 1 White hents: OCKET MT-G2 51.0° 87 % 1.2 cd/lm 1 White hents: OCKET	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-St CREE ED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	MT-G 48.0° 90 % 1.4 cd/lm 1 White hents: OCKET MT-G2 51.0° 87 % 1.2 cd/lm 1 White hents: OCKET	

PRODUCT DATASHEET



CREE <del>(</del>	тм			
LED	MT-G2			
FWHM	46.0°			
Efficiency	91 %			
Peak intensity	0.8 cd/lm			
LEDs/each optic				
Light colour	White		- C.	
Required compo				
C13083_PF-S				
C13003_FF-3	OCKLI			
CREE <del>(</del>	ти			
LED	MT-G2		1000	
FWHM	50.0°		1000	
Efficiency	87 %		1000	
Peak intensity	1.2 cd/lm			
LEDs/each optic			1000	
Light colour	White		1000	
Required compo				
C13083_PF-S				
C13333_MIRE				
0.0000				
CREE <del>4</del>	ты			90 <sup>4</sup> 90 <sup>4</sup>
LED	XHP50	and the second se		
FWHM	39.0°			
Efficiency	82 %			60 <sup>6</sup> 60 <sup>4</sup>
Peak intensity	1.4 cd/lm			$r \times / / \rightarrow \times \uparrow$
LEDs/each optic	1			
Light colour	White			er et
Required compo	nents:			
C13083_PF-S				
C12479_MIRE				12200
				30. 30. 30.
CREE -				
LED	XHP50			
FWHM	38.0°			73
Efficiency	80 %			
Peak intensity	1.3 cd/lm			60*
LEDs/each optic				X / X
Light colour	' White			45* 65*
Required compo				
C13083_PF-S				
C13723_MIRE	LLA-KZL			1200
				300 300
				107 0" 15"

PRODUCT DATASHEET

C13087\_MIRELLA-50-W-PF

Last update: 08/12/2019Subject to change without prior noticePublished: 03/05/2018LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.19/42



CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13083_PF-SC C13333_MIREI	XHP50     39.0°       81 %     1.5 cd/lm       1     White       ents:     0	27 29 29 29 29 20 20 20 20 20 20 20 20 20 20
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13083_PF-SC	XHP50       33.0°         33.0°       37 %         1.8 cd/lm       1         1       White         ents:	20 20 20 20 20 20 20 20 20 20
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13083_PF-SC C12479_MIREI	XHP70 43.0° 81 % 1.3 cd/lm 1 White ents: OCKET	30° 97° 97° 72° 72° 72° 72° 72° 72° 72° 72° 72° 7
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13083_PF-SC C13723_MIREI	XHP70 44.0° 79 % 1.2 cd/lm 1 White ents: OCKET	25° 6° 15° 30° 9° 40° 9° 30° 40° 9° 30° 30° 30° 30° 30° 30° 30° 30



## PHOTOMETRIC DATA (MEASURED):

CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0 C13333_MIRE	XHP70 42.0° 81 % 1.3 cd/lm 1 White vents: DCKET	30° 0° 13° 0° 0° 13° 0° 0° 0° 3° 0° 0°
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0	XHP70 39.0° 86 % 1.5 cd/lm 1 White tents:	57 67 57 59 67 50 60 50 67 50 7 50 7
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0 C13723_MIRE	XM-L RGB 41.0° 80 % 1.3 cd/lm 1 White tents: DCKET	30,         6,         12,         7,           20,         20,         20,         20,           20,         00,         0,         0,           20,         00,         0,         0,           21,         00,         0,         0,           22,         00,         0,         0,           24,         00,         0,         0,           25,              26,              26,              26,               26,               26,               26,               26,               26,
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0 C13723_MIRE	XQ-E HI 42.0° 87 % 1.4 cd/lm 4 RGBW hents: DCKET	

Last update: 08/12/2019Subject to change without prior noticePublished: 03/05/2018LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.21/42



<b>UED</b> FWHM Efficiency	ek COB 4W 38.0° 89 %	
Peak intensity	1.7 cd/lm	
LEDs/each optic		
Light colour	White	
Required compon		
C13083_PF-SC		
🕒 LG Innot	ek	
LED	COB 4W	
FWHM	44.0°	
Efficiency	83 %	
	1.4 cd/lm	
LEDs/each optic		
U	White	
Required compon		
C13083_PF-SC		
C12479_MIREL	LA-DL	
🕑 LG Innot	ek	
LED	COB 4W	
FWHM	40.0°	
	83 %	
Peak intensity	1.6 cd/lm	
LEDs/each optic		
Light colour	White	
Required compon		
C13083_PF-SC		
C13333_MIREL		
	EDS	50°
LED	LUXEON CoB 1202/1203	
FWHM	35.0°	10°
Efficiency	83 %	60%
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	5r
Required compon		
C13709_PF-SC	CKET-VERO13-18	
Bender Wirth: 4	38 Typ L1	1600
		34.
		15° 0° 15°

PRODUCT DATASHEET



Image: Classical systems of the system sy			
FWHM 410° Efficiency 81% Peak intensity 1.4 cd/m LEDs/each optic 1 Light colour White Required components: C12479_MIRELLA-DL IDEAL: 50-2100MR Efficiency 77% Peak intensity 1.5 cd/m LEDs/each optic 1 Light colour White Required components: C1333_MIRELA-CL Bender Wint: 438 Typ L1 Efficiency 86 % Peak intensity 1.6 cd/m LEDS/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET Efficiency 86 % Peak intensity 1.6 cd/m LEDS/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET Efficiency 87 % Peak intensity 1.6 cd/m LEDS/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET Efficiency 87 % Peak intensity 1.7 cd/m LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET	UMILI	EDS States and the second s	90*
Efficiency 81 % Peak intensity 1.4 cd/m LEDs/each optic 1 Light colour White Required components: C12479_MIRELA-DL IDEAL: 50-2100MC +50-2100MR	LED	LUXEON CoB 1202/1203	
Peak intensity 14 dolim LEDs/each optic 1 Light colour White Required components: C12473 MIRELLA-DL IDEAL: 50-2100NC +50-2100MR	FWHM	41.0°	
LEDSeach optic 1 Light colour White Required components: C12479_MIRELA-DL IDEAL: 50-2100NC +50-2100MR CLUMILEDS LED LUXEON CoB 1202/1203 FWHM 37.0° Efficiency 77% Peak intensity 1.5 cd/m LEDS/each optic 1 Light colour White Required components: C13708_PF-SOCKET +ER013-18 C13333_MIRELA-CL Bender Wirth: 438 Typ L1 CLUMILEDS LED LUXEON CoB 1202/1203 FWHM 39.0° Efficiency 86% Peak intensity 1.5 cd/m LEDS/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET CLUMILEDS LED LUXEON CoB 1202/1203 FWHM 37.0° Efficiency 86% Peak intensity 1.5 cd/m LEDS/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET		81 %	400
Light colour White Required components: C12479_MRELLA-DL IDEAL: 50-2100NC +50-2100MR CLUMILEDS LED LUXEON CoB 1202/1203 FWHM 37.0° Efficiency 77 % Peak intensity 1.5 col/m LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VERO13-18 C13333_MRELLA-CL Bender Wirth: 438 Typ L1 CLUMILEDS LED LUXEON CoB 1202/1203 FWHM 39.0° Efficiency 86 % Peak intensity 1.5 col/m LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET			$[ \times / ] \to \times ]$
Required components: C12479_MIRELA-DL IDEAL: 50-2100MR       Image: Classical and the second se			
C12479_MIRELLA-DL IDEAL: 50-2100NC +50-2100MR CUMILEDS LED LUXEON CoB 1202/1203 FWHM 37.0° Efficiency 77 % Peak intensity 1.5 cd/m LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VERO13-18 C13333_MIRELA-CL Bender Wirth: 438 Typ L1 CUMILEDS ELD LUXEON CoB 1202/1203 FWHM 39.0° Efficiency 86 % Peak intensity 1.6 cd/m LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET C1000 LUXEON CoB 1202/1203 FWHM 37.0° EED LUXEON CoB 1202/1203 FWHM 37.0° EID LUXEON COB 1202/1203 FWHM 17.0° EID LUXEON COB 1202/100 FWHM 17.0° EID LU			45°
IDEAL: 50-2100NC +50-2100MR			
Image: Constraint of the second se			12%)
LED LUXEON CoB 1202/1203 FWHM 37.0° Efficiency 77 % Peak intensity 1.5 col/m LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VER013-18 C13333_MIRELLA-CL Bender Wirth: 438 Typ L1 CLUXEON CoB 1202/1203 FWHM 39.0° Efficiency 86 % Peak intensity 1.6 col/m LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET CLUXEON CoB 1202/1203 FWHM 37.0° Efficiency 87 % Peak intensity 1.7 col/m LEDS/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET	IDEAL: 50-210	JNC +50-2100MIR	
LED LUXEON CoB 1202/1203 FWHM 37.0° Efficiency 77 % Peak intensity 1.5 col/m LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VER013-18 C13333_MIRELLA-CL Bender Wirth: 438 Typ L1 CLUXEON CoB 1202/1203 FWHM 39.0° Efficiency 86 % Peak intensity 1.6 col/m LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET CLUXEON CoB 1202/1203 FWHM 37.0° Efficiency 87 % Peak intensity 1.7 col/m LEDS/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET			30°
FWHM       37.0°         Efficiency       77 %         Peak intensity       1.5 cd/m         LEDs/aach optic       1         Light colour       White         Required components:       C13333_MIRELLA-CL         Bender Wirth:       438 Typ L1         Image: Components:       Image: Components:         C13333_MIRELLA-CL       Bender Wirth:         Bender Wirth:       438 Typ L1         Image: Components:       Image: Components:         FWHM       39.0°         Efficiency       86 %         Peak intensity       1.6 cd/m         LEDs/each optic       1         Light colour       White         Required components:       Image: Colour         C14037_PF-NSX-SOCKET       Image: Colour         Image: Colour       Image: Colour         <		EDS STATES	90° 90°
Efficiency 77 % Peak intensity 1.5 cd/m LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VERO13-18 C13333_MRELLA-CL Bender Wirth: 438 Typ L1	LED	LUXEON CoB 1202/1203	
Peak intensity 1.5 cd/lm LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VERO13-18 C13333_MIRELLA-CL Bender Wirth: 438 Typ L1	FWHM	37.0°	
LEDs/each optic 1 Light colour White Required components: C13709_PF-SOCKET-VERO13-18 C13333_MIRELLA-CL Bender Wirth: 438 Typ L1 CLUMILEDS LED LUXEON CoB 1202/1203 FWHM 39.0° Efficiency 86 % Peak intensity 1.6 cd/m LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET CUMILEDS LED LUXEON CoB 1202/1203 FWHM 37.0° Efficiency 87 % Peak intensity 1.7 cd/m LEDs/each optic 1 Light colour White Required components:	Efficiency	77 %	601 002
Light colour White Required components: C13709_PF-SOCKET-VERO13-18 C13333_MIRELA-CL Bender Wirth: 438 Typ L1			
Required components: C13709_PF-SOCKET-VERO13-18 C13333_MIRELLA-CL Bender Wirth: 438 Typ L1			
C13709_PF-SOCKET-VER013-18 C13333_MIRELLA-CL Bender Wirth: 438 Typ L1			gr 65
C13333_MIRELLA-CL Bender Wirth: 438 Typ L1			
Bender Wirth: 438 Typ L1			
Image: Second			
LED LUXEON CoB 1202/1203 FWHM 39.0° Efficiency 86 % Peak intensity 1.6 cd/m LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET CLUMILEDS LED LUXEON CoB 1202/1203 FWHM 37.0° Efficiency 87 % Peak intensity 1.7 cd/m LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET	Bender Wirth. 2		36* 35% 35* 35*
FWHM       39.0°         Efficiency       86 %         Peak intensity       1.6 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       C14037_PF-NSX-SOCKET <b>©</b> LUMILEDS         LED       LUXEON CoB 1202/1203         FWHM       37.0°         Efficiency       87 %         Peak intensity       1.7 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       1.7 cd/lm		EDS EDS	90°
Efficiency 86 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET	LED	LUXEON CoB 1202/1203	77
Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET			400
LEDs/each optic 1 Light colour White Required components: C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET C14037_PF-NSX-SOCKET CUMILEDS LED LUXEON CoB 1202/1203 FWHM 37.0° Efficiency 87 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White Required components:			50° 50°
Light colour White Required components: C14037_PF-NSX-SOCKET			
Required components: C14037_PF-NSX-SOCKET			
C14037_PF-NSX-SOCKET	-		
Image: Second state of the second s			12%
LED LUXEON CoB 1202/1203 FWHM 37.0° Efficiency 87 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White Required components:		SA-SOCKET	
LED LUXEON CoB 1202/1203 FWHM 37.0° Efficiency 87 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White Required components:			
LED LUXEON CoB 1202/1203 FWHM 37.0° Efficiency 87 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White Required components:			30" 30" 30" 30"
FWHM       37.0°         Efficiency       87 %         Peak intensity       1.7 cd/lm         LEDs/each optic       1         Light colour       White         Required components:	M LUMILI	EDS and a second s	50° 90°
FWHM       37.0°         Efficiency       87 %         Peak intensity       1.7 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       1000000000000000000000000000000000000	LED	LUXEON CoB 1202/1203	
Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White Required components:	FWHM	37.0°	
LEDs/each optic 1 Light colour White Required components:			500 500
Light colour White Required components:			
Required components:			$ \times / $
			a, e.
IDEAL: 50-2100INC +50-2100MR			120
	IDEAL: 50-210	JNG +50-2100MK	
100			1570
30*			30°



UMIL	EDS	90* 90*
LED	LUXEON CoB 1202/1203	
FWHM	40.0°	75
Efficiency	75 %	60° 400 60*
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	aze 000 aze
Required compor	ients:	
	DCKET-VERO13-18	
C12479_MIRE		1200
Bender Wirth: 4	438 Typ L1	30 <sup>4</sup> 30 <sup>4</sup> 30 <sup>4</sup>
	EDS	90 <sup>+</sup>
LED	LUXEON CoB 1202/1203	
FWHM	39.0°	75*
Efficiency	80 %	400
Peak intensity	1.5 cd/lm	$ \times / $
LEDs/each optic		
Light colour	White	er et
Required compor	ents:	
C13333_MIRE	LLA-CL	1230
IDEAL: 50-210	0NC +50-2100MR	
		30- 30- 30-
	EDS EDS	90° 90°
LED	LUXEON CoB 1202s	
FWHM	25.0°	
Efficiency	85 %	60° 50°
Peak intensity	2.6 cd/lm	
LEDs/each optic		
Light colour	White	5° (* 1000
Required compor		
	DCKET-VERO13-18	
Bender Wirth:	152 Typ L1	200
		30° 35° 36°
UMIL	EDS States and states	
LED	LUXEON CoB 1202s	
FWHM	41.0°	
Efficiency	82 %	
Peak intensity	1.5 cd/lm	
LEDs/each optic		
Light colour	White	
Required compor		
C13761_PF-S0		
C13333_MIRE	LLA-CL	

PRODUCT DATASHEET



#### LUMILEDS LED LUXEON CoB 1202s FWHM 35.0° Efficiency 88 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components: C13761\_PF-SOCKET-CXA15 LED LUXEON CoB 1202s FWHM 28.0° 81 % Efficiency 2.2 cd/lm Peak intensity LEDs/each optic 1 Light colour White Required components: C13709\_PF-SOCKET-VERO13-18 C13333\_MIRELLA-CL Bender Wirth: 452 Typ L1 9 LED LUXEON CoB 1202s FWHM 32.0° Efficiency 77 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13709\_PF-SOCKET-VERO13-18 C12479\_MIRELLA-DL Bender Wirth: 452 Typ L1 LUMILEDS LED LUXEON CoB 1202s FWHM 40.0° 82 % Efficiency 1.5 cd/lm Peak intensity LEDs/each optic 1 White Light colour Required components: C13761\_PF-SOCKET-CXA15 C12479\_MIRELLA-DL

PRODUCT

DATASHEET



Classical Content of C	LUXEON Z 36.0° 79 % 1.5 cd/lm 4 RGBW ents: DCKET	25° 0° 12° 30° 0° 60° 50° 0° 50° 0° 50° 0° 50° 0° 50° 0° 50° 0° 50° 0° 50°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13083_PF-SC	CxM-6 (12x13) 36.0° 85 % 1.8 cd/lm 1 White ents:	30, 100 100 100 100 100 100 100 1
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13083_PF-SC	CXM-7 (13x13) 38.0° 86 % 1.6 cd/lm 1 White ents:	30° 50° 60° 10° 50°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13083_PF-SC	CxM-9 (13.5x13.5) 44.0° 88 % 1.3 cd/lm 1 White ents:	



## PHOTOMETRIC DATA (MEASURED):

<b>C</b> LUMI	NUS	90*
LED	CxM-9 (13.5x13.5)	
FWHM	49.0°	73*
Efficiency	83 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	g+
Required compor	ients:	800
C13083_PF-S0		
C12479_MIRE	LLA-DL	
		30° 1200 30°
	NUS	9°
LED	CxM-9 (13.5x13.5)	
FWHM	48.0°	73
Efficiency	80 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic		
Light colour	White	95*
Required compor	ients:	
C13083_PF-S0		
C13723_MIRE		
		34
() LUMI	NUS	50°
<b>ED</b>		50 <sup>4</sup>
	NUS CxM-9 (13.5x13.5) 48.0°	37 <sup>-</sup> 37 <sup>-</sup>
LED FWHM	CxM-9 (13.5x13.5)	27 27 29 94
LED	CxM-9 (13.5x13.5) 48.0°	91 <sup>4</sup> 91 <sup>4</sup>
LED FWHM Efficiency	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm	91 <sup>4</sup> 73 <sup>4</sup> 91 92 90 90 90 90 90 90 90 90 90 90
LED FWHM Efficiency Peak intensity	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm	5°- 60) 10°- 700 20°- 700 20°- 70°
LED FWHM Efficiency Peak intensity LEDs/each optic	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White	8 <sup>1</sup> 8 <sup>1</sup>
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White tents:	59 <sup>4</sup> 59 <sup>4</sup> 60 <sup>4</sup>
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White therefore the second secon	91 <sup>4</sup> 91 <sup>4</sup> 92 <sup>4</sup> 90 90 90 90 90 90 90 91 91 91
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White therefore the second secon	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White tents: DCKET LLA-CL	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C13333_MIRE	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White nents: DCKET LLA-CL	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C13333_MIREI	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White nents: DCKET LLA-CL COB L-Type (LES 11)	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C13333_MIREI	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White vents: DCKET LLA-CL COB L-Type (LES 11) 46.0°	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C13333_MIREI	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White vents: DCKET LLA-CL COB L-Type (LES 11) 46.0° 84 %	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C13333_MIREI	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White eents: DCKET LLA-CL COB L-Type (LES 11) 46.0° 84 % 1.3 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C13333_MIREI	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White eents: DCKET LLA-CL COB L-Type (LES 11) 46.0° 84 % 1.3 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C13333_MIRE C13333_MIRE MICHIA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White nents: DCKET LLA-CL COB L-Type (LES 11) 46.0° 84 % 1.3 cd/lm 1 White	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C13333_MIRE C13333_MIRE MICHIA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White the the the the the the the the the the	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C13333_MIRE C13333_MIRE MICHIA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White the the the the the the the the the the	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC C13333_MIRE C13333_MIRE MICHIA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	CxM-9 (13.5x13.5) 48.0° 83 % 1.2 cd/lm 1 White the the the the the the the the the the	

Last update: 08/12/2019Subject to change without prior noticePublished: 03/05/2018LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.27/42



<b>ΜΝΙCΗΙΛ</b>		90* 90*
LED	COB L-Type (LES 11)	
FWHM	46.0°	
Efficiency	80 %	60 <sup>4</sup>
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	424 43*
Required compor	ents:	800
C12479_MIRE	LLA-DL	
IDEAL: 50-210	ONC +50-2100MR	
		36" <u>1270</u> 30" 30"
ØNICHIA		90* 90*
LED	COB L-Type (LES 11)	
FWHM	45.0°	75
Efficiency	77 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic		
Light colour	White	gi gi
Required compor	ents:	800
C13709_PF-S0	DCKET-VERO13-18	
C13333_MIRE	LLA-CL	
Bender Wirth: 4	I38 Typ L1	30* 32*
		15" 0" 15"
<b>Μ</b> ΝΙCΗΙΛ		90* 99*
LED	COB L-Type (LES 11)	92 97 97
LED FWHM	COB L-Type (LES 11) 43.0°	90° 90° 90° 90° 90° 90° 90° 90° 90° 90°
LED FWHM Efficiency	COB L-Type (LES 11) 43.0° 86 %	64
LED FWHM Efficiency Peak intensity	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm	9°
LED FWHM Efficiency Peak intensity LEDs/each optic	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm	g
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White	90 97 97 97 97 97 97 97 97 97 97 97 97 97
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White	97 97 70 64 67 67 80 80 67 67
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White tents:	gr 550 gr
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White tents:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White tents: DNC +50-2100MR	30°         30°         50°         50°           30°         60°         60°         60°           80°         60°         60°         60°           80°         60°         60°         60°           80°         60°         60°         60°           80°         60°         60°         60°           80°         60°         60°         60°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor IDEAL: 50-210	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White tents: DNC +50-2100MR	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor IDEAL: 50-2100	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White tents: DNC +50-2100MR COB L-Type (LES 11)	34         25           26         25           26         25           26         25           26         26           26         26           26         26           26         26           26         26           26         26           26         26           26         26           26         26           26         26           26         26           26         26           26         26           26         26           26         26           27         26           28         26           29         26           26         26           27         26           28         26           29         26           20         27           26         26           27         26           28         27           29         26
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor IDEAL: 50-2100	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White vents: DNC +50-2100MR COB L-Type (LES 11) 46.0°	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor IDEAL: 50-2100	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White ents: DNC +50-2100MR COB L-Type (LES 11) 46.0° 75 %	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor IDEAL: 50-2100	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White ents: DNC +50-2100MR COB L-Type (LES 11) 46.0° 75 % 1.1 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor IDEAL: 50-2100 MICHIA LED FWHM Efficiency Peak intensity LEDs/each optic	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White ents: DNC +50-2100MR COB L-Type (LES 11) 46.0° 75 % 1.1 cd/lm 1	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor IDEAL: 50-210 MICHIA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White ents: DNC +50-2100MR COB L-Type (LES 11) 46.0° 75 % 1.1 cd/lm 1 White	73° 75° 64° 400 60°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor IDEAL: 50-210 MICHIA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White tents: DNC +50-2100MR COB L-Type (LES 11) 46.0° 75 % 1.1 cd/lm 1 White tents:	73° 75° 64° 400 60°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor IDEAL: 50-210 MICHIA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-SC	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White tents: DNC +50-2100MR COB L-Type (LES 11) 46.0° 75 % 1.1 cd/lm 1 White tents: DCKET-VERO13-18	73° 75° 64° 400 60°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor IDEAL: 50-210 MICHIA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	COB L-Type (LES 11) 43.0° 86 % 1.4 cd/lm 1 White eents: DNC +50-2100MR COB L-Type (LES 11) 46.0° 75 % 1.1 cd/lm 1 White eents: DCKET-VERO13-18 LLA-DL	7° - 7° 6° - 60 - 70°



<b>Ø</b> NICHIΛ		90* 90*
LED	COB L-Type (LES 11)	
FWHM	47.0°	75
Efficiency	81 %	400
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	45° 43°
Required compor		
C13333_MIRE		
IDEAL: 50-210	0NC +50-2100MR	
		30° 15° 0° 15°
ØNICHIA		90° 90°
LED	COB L-Type (LES 11)	
FWHM	41.0°	
Efficiency	81 %	60 <sup>1</sup> 60°
Peak intensity	1.4 cd/lm	$f \times / / \longrightarrow \times$
LEDs/each optic		
Light colour	White	42+ 42+
Required compor		
	DCKET-VERO13-18	
Bender Wirth: 4	438 Typ L1	
		305
		15° 0° 15°
ØNICHIA		× × × × × × × × × × × × × × × × × × ×
	COB L-Type (LES 9)	39*         9*           9*         9*
LED FWHM	COB L-Type (LES 9) 40.0°	
LED FWHM Efficiency	COB L-Type (LES 9) 40.0° 76 %	60. 10. 10. 10. 10. 10. 10. 10. 1
LED FWHM Efficiency Peak intensity	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm	60 60 70 70 70 60 70 70 70 70 70 70 70 70 70 7
LED FWHM Efficiency Peak intensity LEDs/each optic	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1	60° 50° 50° 50° 50° 50° 50° 50° 50° 50° 5
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White	gr         go         gr           gr         go         gr           gr         go         gr
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White nents:	57° 6° 15° 59° 99° 59° 60° 60° 60° 60° 60°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-S0	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White nents: DCKET-VERO13-18	G.         00         G.           B.         00         00           D.         00         00
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-S0 C12479_MIRE	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White hents: DCKET-VERO13-18 LLA-DL	60° 60° 60° 60° 60° 60° 60° 60°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-S0	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White hents: DCKET-VERO13-18 LLA-DL	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-S0 C12479_MIRE Bender Wirth: 4	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White hents: DCKET-VERO13-18 LLA-DL 438 Typ L1	30+         30+         30+         30+           30+         30+         30+         30+           30+         30+         30+         30+           30+         30+         30+         30+
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-SC C12479_MIRE Bender Wirth: 4	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White hents: DCKET-VERO13-18 LLA-DL 438 Typ L1 COB L-Type (LES 9)	25° 6° 6° 6° 6° 6° 7° 7° 7° 7° 7°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-SC C12479_MIRE Bender Wirth: 4	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White hents: DCKET-VERO13-18 LLA-DL 438 Typ L1 COB L-Type (LES 9) 39.0°	30,         40,         40,
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-SC C12479_MIRE Bender Wirth: 4 <b>MICHIA</b> LED FWHM Efficiency	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White hents: DCKET-VERO13-18 LLA-DL 438 Typ L1 COB L-Type (LES 9) 39.0° 80 %	30,         40,         40,
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-SC C12479_MIRE Bender Wirth: 4 <b>MICHIA</b> LED FWHM Efficiency Peak intensity	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White nents: DCKET-VERO13-18 LLA-DL 438 Typ L1 COB L-Type (LES 9) 39.0° 80 % 1.4 cd/lm	30,         40,         40,
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-SC C12479_MIRE Bender Wirth: 4 <b>WICHIA</b> LED FWHM Efficiency Peak intensity LEDs/each optic	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White nents: DCKET-VERO13-18 LLA-DL 438 Typ L1 COB L-Type (LES 9) 39.0° 80 % 1.4 cd/lm 1	00         00         00           00         00         00           00         00         00           00         00         00           00         00         00
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-SC C12479_MIRE Bender Wirth: 4 <b>WICHIA</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White nents: DCKET-VER013-18 LLA-DL 438 Typ L1 COB L-Type (LES 9) 39.0° 80 % 1.4 cd/lm 1 White	30,         30,
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-SC C12479_MIRE Bender Wirth: 4 <b>NICHIA</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White nents: DCKET-VER013-18 LLA-DL 438 Typ L1 COB L-Type (LES 9) 39.0° 80 % 1.4 cd/lm 1 White nents:	00         00         00           00         00         00           00         00         00           00         00         00           00         00         00
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-SC C12479_MIRE Bender Wirth: 4 <b>WICHIA</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C12479_MIRE	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White nents: DCKET-VERO13-18 LLA-DL 438 Typ L1 COB L-Type (LES 9) 39.0° 80 % 1.4 cd/lm 1 White nents: LLA-DL LLA-DL	30,         40,         40,
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-SC C12479_MIRE Bender Wirth: 4 <b>WICHIA</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C12479_MIRE	COB L-Type (LES 9) 40.0° 76 % 1.3 cd/lm 1 White nents: DCKET-VER013-18 LLA-DL 438 Typ L1 COB L-Type (LES 9) 39.0° 80 % 1.4 cd/lm 1 White nents:	30,         40,         40,



<b>Ø</b> NICHIΛ		90* 90*
LED	COB L-Type (LES 9)	73*
FWHM	34.0°	400
Efficiency	84 %	
Peak intensity	1.8 cd/lm	
LEDs/each optic		
Light colour	White	0°
Required compor		
	DCKET-VERO13-18	
Bender Wirth: 4	138 Typ L1	1600
		36° 15° 0° 15° 30°
ØΝΙCΗΙΛ		90°
LED	COB L-Type (LES 9)	
FWHM	35.0°	400
Efficiency	87 %	
Peak intensity	1.8 cd/lm	
LEDs/each optic		
Light colour	White	45° 45°
Required compor		
IDEAL: 50-210	0NC +50-2100MR	
		30° 31°
		<u>15</u> 9° 15
ØNICHIA		99° 99°
	COB L-Type (LES 9)	90 <sup>4</sup> 90 <sup>4</sup> 90 <sup>4</sup>
LED FWHM	COB L-Type (LES 9) 38.0°	32 34 35 35 35 35 35 35 35 35 35 35
LED FWHM Efficiency	COB L-Type (LES 9) 38.0° 81 %	
LED FWHM Efficiency Peak intensity	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm	60° 60° 60° 60° 60° 60° 72° 60° 72° 72° 72° 72° 72° 72° 72° 72
LED FWHM Efficiency Peak intensity LEDs/each optic	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1	50 <sup>4</sup> 50 <sup>4</sup> 60 <sup>4</sup> 60 <sup>4</sup>
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White	Gr.         Bio           Bit         Bio           J31         Bio           J32         Gr.           Bio         Bio
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White tents:	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13333_MIRE	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White tLA-CL	60 60 60 125 125 125 125 125 125 125 125
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13333_MIRE	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White tents:	97 97 94 90 123
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13333_MIRE IDEAL: 50-210	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White vents: LLA-CL DNC +50-2100MR	20 20 20 20 20 20 20 20 20 20
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13333_MIRE IDEAL: 50-210	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White thenents: LLA-CL DNC +50-2100MR	97 97 94 90 120 120
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13333_MIRE IDEAL: 50-210	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White nents: LLA-CL DNC +50-2100MR COB L-Type (LES 9)	20 20 20 20 20 20 20 20 20 20
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13333_MIRE IDEAL: 50-210	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White vents: LLA-CL DNC +50-2100MR COB L-Type (LES 9) 37.0°	31         32           62         63           63         60           64         65           65         65           66         65           70         65           70         70           70         70
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13333_MIRE IDEAL: 50-210	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White tents: LLA-CL DNC +50-2100MR COB L-Type (LES 9) 37.0° 79 %	31         32           62         63           63         60           64         65           65         65           66         65           70         65           70         70           70         70
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13333_MIRE IDEAL: 50-210	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White tents: LLA-CL DNC +50-2100MR COB L-Type (LES 9) 37.0° 79 % 1.5 cd/lm	31         32           62         63           63         60           64         65           65         65           66         65           70         65           70         70           70         70
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13333_MIRE IDEAL: 50-210 <b>MICHIA</b> LED FWHM Efficiency Peak intensity LEDs/each optic	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White tents: LLA-CL DNC +50-2100MR COB L-Type (LES 9) 37.0° 79 % 1.5 cd/lm 1	31         32           62         63           63         64           64         65           65         65           66         65
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13333_MIRE IDEAL: 50-210 <b>XICHIA</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White nents: LLA-CL ONC +50-2100MR COB L-Type (LES 9) 37.0° 79 % 1.5 cd/lm 1 White	30         30<
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13333_MIRE IDEAL: 50-210 <b>XICHIA</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White tents: LLA-CL DNC +50-2100MR COB L-Type (LES 9) 37.0° 79 % 1.5 cd/lm 1 White tents:	30         30<
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13333_MIRE IDEAL: 50-210 <b>XICHIA</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13709_PF-S0	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White tents: LLA-CL DNC +50-2100MR COB L-Type (LES 9) 37.0° 79 % 1.5 cd/lm 1 White tents: DCKET-VERO13-18	30         30<
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13333_MIRE IDEAL: 50-210 <b>XICHIA</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	COB L-Type (LES 9) 38.0° 81 % 1.5 cd/lm 1 White eents: LLA-CL DNC +50-2100MR COB L-Type (LES 9) 37.0° 79 % 1.5 cd/lm 1 White eents: DCKET-VERO13-18 LLA-CL	30         30<

PRODUCT DATASHEET



# C13087\_MIRELLA-50-W-PF

PRODUCT DATASHEET

<b>Μ</b> ΝΙCΗΙΛ		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C14037_PF-NS	White ents:	20, 20, 21, 22, 23, 24, 25, 40, 12, 40, 12, 40, 12, 40, 12, 12, 12, 12, 12, 12, 12, 12
ED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C14037_PF-NS	White ents:	
OSRAM Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon C13083_PF-SC C13723_MIREI	White ents: DCKET	
OSRAM Opto Semiconductors LED FWHM Efficiency LEDs/each optic Light colour Required compon C13083_PF-SC C13333_MIREI	White ents: DCKET	



All Andrew State Stream Stream State Stream Stream Stre			
ED Duris S10 FWHM 38.0° FWHM 38.0° FWHM 38.0° FWHM 38.0° FWHM 38.0° FWHM S17.7 dd/m EDSreach optic 1 Jight colour White Regulard components: C13083_PF-SOCKET C1308	OSRAM		
WHM       38.0°         Efficiency       87.%         Pask Intensity       17. dd/m         EDPreach optic       1         Light colour       White         Required components:       0         C13083_PF-SOCKET       0         Definition(y)       79.%         Pask intensity       13. dd/m         EDPreach optic       1         Light colour       White         Required components:       0         C13083_PF-SOCKET       0         Statemanne       0         Statemanne       0         EDP optics       0         Statemanne       0         Statemanne       0         Statemanne       0         Statemanne       0         Statemanne       0         EDP optics       0         Statemanne       0         Statemanne       0         Statemanne       0         Statemanne       0         Statemanne       0         Statemanne       0         EDPreach optic       1         Light colour       White         Required components:       0		Duris C10	
Efficiency 87 % Peak intensity 1.7 cd/im EDD/each optic 1 ight colour White Required components: C13083_PF-SOCKET			
Pesk intensity 1.7 cd/m EDS/each optic 1 Statused components: C1303.9F-SOCKET C1303.9C-SOCKET C1303.9C-			
EDSeach optic 1 ight colour White Required components: C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C1307_White Required components: C13083_PF-SOCKET C1307_White Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL			
Ight colour White Required components: C 13083_PF-SOCKET C 1308_PF-SOCKET C 13083_PF-SOCKET C 1308_PF-SOCKET C 1308_PC-SOCKET C 1			
Required components: C13083_PF-SOCKET ED Duris \$10 WHM 45.0° Efficiency 79% Peak intensity 1.3 col/m EDDreach optic 1 C13083_PF-SOCKET C12479_MIRELLA-DL C13083_PF-SOCKET C12479_MIRELLA-DL C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13723_MIRELLA-RZL C1383_PF-SOCKET C13723_MIRELLA-RZL C1383_PF-SOCKET C13972_MIRELLA-RZL C13972_MIRELLA-RZL ED Ostar-SMT RGB WHM 37.0° Efficiency 81% Peak intensity 1.5 col/m ED Ostar-SMT RGB WHM 37.0° Efficiency 81% Peak intensity 1.5 col/m ED Ostar-SMT RGB WHM 37.0° Efficiency 81% Peak intensity 1.5 col/m ED Cotar-SMT RGB WHM 37.0° Efficiency 81% Peak intensity 1.5 col/m ED Cotar-SMT RGB WHM 37.0° Efficiency 81% Peak intensity 1.5 col/m ED Cotar-SMT RGB Efficiency 81% Peak intensity 1.5 col/m ED Cotar-SMT RGB Efficiency 81% Peak intensity 1.5 col/m Efficiency			
C13083_PF-SOCKET			
ED Duris S10 WHM 45.0° Efficiency 79 % Peak intensity 1.3 addm EDDeech optio 1 .ight colour White Required components: C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET			
Astematives ED Duris S10 EVHM 45.0° Efficiency 79% Peak intensity 1.3 cd/m EDS/each optic 1 Light colour White Required components: ED OSTAR Stage (S2WP) EVHM 36.0° Efficiency 83% Peak intensity 1.6 cd/m EDS/each optic 1 Light colour White Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL ED OSTAM ED Ostar-SMT RGB EVHM 37.0° Efficiency 81% Peak intensity 1.5 cd/m EDS/each optic 1 Light colour White Required components: C13083_PF-SOCKET C1372_MIRELLA-RZL ED ED Ostar-SMT RGB EVHM 37.0° Efficiency 81% Peak intensity 1.5 cd/m EDS/each optic 1 Light colour White Required components: C13083_PF-SOCKET C1372_MIRELLA-RZL	C13083_PF-S0	DCKET	
Astematives ED Duris S10 FWHM 45.0° Fficiency 79 % Peak intensity 1.3 cd/m EDS/each optic 1 Light colour White Required components: ED OSTAR Stage (S2WP) FWHM 36.0° Fficiency 83 % Peak intensity 1.6 cd/m EDS/each optic 1 Light colour White Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL			
Astematies ED Duris S10 EVHM 45.0° Efficiency 79% Peak intensity 1.3 cd/m EDS/each optic 1 Light colour White Required components: ED OSTAR Stage (S2WP) Efficiency 83% Peak intensity 1.6 cd/m EDS/each optic 1 Light colour White Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL			
ED Duris S10 WHM 45.0° Hickiency 79 % Peak intensity 1.3 cd/lm EDS/each optic 1 ight colour White Required components: C13083_PF-SOCKET C12479_MIRELLA-DL CI3083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET	OSRAM		
WHM       45.0°         Efficiency       79 %         Peak intensity       1.3 cd/m         EDS/each optic       1         Light colour       White         Required components:       C         C13083_PF-SOCKET       C		Durio 640	
Efficiency 79 % Peak intensity 1.3 cd/lm LED/each optic 1 Light colour White Required components: C13083_PF-SOCKET C12479_MIRELLA-DL COSTAR Stage (S2WP) EVHM 36.0° Efficiency 83 % Peak intensity 1.6 cd/lm LED/each optic 1 Light colour White Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL COSTAR ED Ostar-SMT RGB Efficiency 81 % Peak intensity 1.5 cd/lm LED/each optic 1 Light colour White Required components: C13083_PF-SOCKET			
Peak intensity 1.3 cd/m EDS/each optic 1 ght colour White Required components: C13083_PF-SOCKET C12479_MIRELLA-DL COSTAR Stage (S2WP) WHM 36.0° Efficiency 83 % Peak intensity 1.6 cd/m EDS/each optic 1 ght colour White Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL CI3723_MIRELLA-RZL CI3723_MIRELLA-RZL CI3723_MIRELLA-RZL CI3723_PF-SOCKET C13723_PF-SOCKET C13723_PF-SOCKET C13723_PF-SOCKET C13723_PF-SOCKET C13723_PF-SOCKET			
EDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET C12479_MIRELLA-DL C12479_MIRELLA-DL COSTAR Stage (S2WP) ED OSTAR Stage (S2WP) EVHM 36.0° Efficiency 83 % Peak intensity 1.6 col/m .EDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL C13723_MIRELLA-RZL C13723_MIRELLA-RZL C13723_MIRELLA-RZL C13723_MIRELLA-RZL C13723_MIRELLA-RZL C13723_MIRELLA-RZL C13723_MIRELLA-RZL C13723_MIRELLA-RZL			
Light colour White Required components: C13083_PF-SOCKET C12479_MIRELLA-DL CI3083_PF-SOCKET			
Required components: C13083_PF-SOCKET C12479_MIRELLA-DL CSRAM ED OSTAR Stage (S2WP) =WHM 36.0° =ficiency 83 % Peak intensity 1.6 cd/Im EDS/each optic 1 _ight colour White Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL CSRAM ED Ostar-SMT RGB =WHM 37.0° =fificiency 81 % =Paki intensity 1.5 cd/Im EDS/each optic 1 _ight colour White Required components: C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET			
C13083_PF-SOCKET C12479_MIRELLA-DL			
C12479_MIRELLA-DL			
ED OSTAR Stage (S2WP) EWHM 36.0° Efficiency 83 % Peak intensity 1.6 cd/m LEDs/each optic 1 Light colour White Required components: C13723_MIRELLA-RZL C13723_MIRELLA-RZL COSRAM EED Ostar-SMT RGB EVHM 37.0° Efficiency 81 % Peak intensity 1.5 cd/m LEDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET			
LED OSTAR Stage (S2WP) -WHM 36.0° Efficiency 83 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL C13723_MIRELLA-RZL C13723_MIRELLA-RZL	C12479_MIRE	LA-DL	
LED OSTAR Stage (S2WP) -WHM 36.0° Efficiency 83 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL C13723_MIRELLA-RZL C13723_MIRELLA-RZL			
LED OSTAR Stage (S2WP) -WHM 36.0° Efficiency 83 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL C13723_MIRELLA-RZL	OSPAM		
FWHM       36.0°         Efficiency       83 %         Peak intensity       1.6 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       C13083_PF-SOCKET         C13083_PF-SOCKET       Image: Classical colour	Opto Semiconductors		
Efficiency 83 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET C130723_MIRELLA-RZL COSRAM LED Ostar-SMT RGB EWHM 37.0° Efficiency 81 % Peak intensity 1.5 cd/lm LEDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET C13083_PF-SOCKET	LED	OSTAR Stage (S2WP)	
Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL COSRAM We have been been been been been been been be	FWHM	36.0°	
LEDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET C13083_PF-SOCKET	Efficiency	83 %	
Light colour White Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL C13723_MIRELLA-RZL C13723_MIRELLA-RZL C13723_MIRELLA-RZL C13723_MIRELLA-RZL	Peak intensity	1.6 cd/lm	
Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL C13723_MIRELLA-RZL	LEDs/each optic	1	
Required components: C13083_PF-SOCKET C13723_MIRELLA-RZL C13723_MIRELLA-RZL	Light colour		
C13083_PF-SOCKET C13723_MIRELLA-RZL		ents:	
C13723_MIRELLA-RZL			
OSRAM         Jeb       Ostar-SMT RGB         FWHM       37.0°         Efficiency       81 %         Peak intensity       1.5 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       C13083_PF-SOCKET		JCKE I	
Jobe Semiconductors LED Ostar-SMT RGB FWHM 37.0° Efficiency 81 % Peak intensity 1.5 cd/lm LEDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET			
Jobe Semiconductors LED Ostar-SMT RGB FWHM 37.0° Efficiency 81 % Peak intensity 1.5 cd/lm LEDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET			
FWHM 37.0° Efficiency 81 % Peak intensity 1.5 cd/lm LEDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET	C13723_MIRE		
FWHM 37.0° Efficiency 81 % Peak intensity 1.5 cd/lm LEDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET	C13723_MIRE	LLA-RZL	<u>8</u> 2*
Peak intensity 1.5 cd/m LEDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET	C13723_MIRE	Ostar-SMT RGB	
LEDs/each optic 1 Light colour White Required components: C13083_PF-SOCKET	C13723_MIRE OBSRAM Opto Semiconductors LED FWHM	Ostar-SMT RGB 37.0°	
Light colour White Required components: C13083_PF-SOCKET	C13723_MIRE OSRAM Opto Semiconductors LED FWHM Efficiency	Ostar-SMT RGB 37.0° 81 %	
Required components: C13083_PF-SOCKET	C13723_MIRE OSRAM Opto Semiconductors LED FWHM Efficiency Peak intensity	-LA-RZL Ostar-SMT RGB 37.0° 81 % 1.5 cd/lm	
Required components: C13083_PF-SOCKET	C13723_MIRE Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic	-LA-RZL Ostar-SMT RGB 37.0° 81 % 1.5 cd/lm	
C13083_PF-SOCKET	C13723_MIRE OSRAM Opto Semiconductors LED FWHM Efficiency Peak intensity	-LA-RZL Ostar-SMT RGB 37.0° 81 % 1.5 cd/lm 1	
	C13723_MIRE Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	Ostar-SMT RGB 37.0° 81 % 1.5 cd/lm 1 White	
	C13723_MIRE OSRAM Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	Ostar-SMT RGB 37.0° 81 % 1.5 cd/lm 1 White ents:	
	C13723_MIRE Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0	-LA-RZL Ostar-SMT RGB 37.0° 81 % 1.5 cd/lm 1 White ents: OCKET	
30° 1600 30° 15° 6° 15°	C13723_MIRE Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0	-LA-RZL Ostar-SMT RGB 37.0° 81 % 1.5 cd/lm 1 White ents: OCKET	

PRODUCT DATASHEET



SECUL SEMICONDUCTOR	ZC4/6	32 25 26 26
FWHM	48.0°	
Efficiency Peak intensity	81 % 1.2 cd/lm	60 <sup>0</sup> 60 <sup>0</sup>
LEDs/each optic		$\times$ / / $\times$ $\times$
Light colour	White	gr
Required compor		
C13083_PF-S0		
C12479_MIRE		
		20° 25° 0° 25°
SEOUL SEMICONDUCTOR		90 <sup>4</sup> 90 <sup>4</sup>
LED	ZC4/6	75
FWHM	42.0°	
Efficiency	86 %	505 504
Peak intensity	1.4 cd/lm	
LEDs/each optic		
Light colour Required compor	White	
C13083_PF-S		
C13003_FF-30	JOKET	1220
		30° 30° 30°
SEOUL SEOUL SEMICONDUCTOR		90° 90°
LED	ZC4/6	25'
FWHM	46.0°	
Efficiency	80 %	50° 50°
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	1 White	g
Light colour Required compor	1 White ents:	9 <sup>4</sup> 96
Light colour Required compor C13083_PF-S0	1 White ents: DCKET	9 <sup>7</sup> 86 67
Light colour Required compor	1 White ents: DCKET	5° 000 00 1200 00 1200 00 12°
Light colour Required compor C13083_PF-S0	1 White eents: DCKET LLA-CL	2 <sup>5</sup> 00 2 <sup>5</sup>
Light colour Required compor C13083_PF-St C13333_MIRE	1 White eents: DCKET LLA-CL	200 00 00 120 200 00 00 00 00 00 00 00 00 00
Light colour Required compor C13083_PF-St C13333_MIRE SHA LED FWHM	1 White hents: DCKET LLA-CL Mini Zenigata (GW6BM) 46.0°	200 et 10 <sup>1</sup>
Light colour Required compor C13083_PF-St C13333_MIRE SHAA LED FWHM Efficiency	1 White hents: DCKET LLA-CL Mini Zenigata (GW6BM) 46.0° 81 %	27 00 00 200 200 200 200 200 200 200 200 2
Light colour Required compor C13083_PF-St C13333_MIRE SHAA LED FWHM Efficiency Peak intensity	1 White wents: DCKET LLA-CL Mini Zenigata (GW6BM) 46.0° 81 % 1.3 cd/lm	27 00 27 27 00 27 27 00 27
Light colour Required compor C13083_PF-St C13333_MIRE SHAA LED FWHM Efficiency Peak intensity LEDs/each optic	1 White wents: DCKET LLA-CL Mini Zenigata (GW6BM) 46.0° 81 % 1.3 cd/lm 1	200 000 000 1200 000 700 000 000
Light colour Required compor C13083_PF-SC C13333_MIRE SHAA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	1 White wents: DCKET LLA-CL Mini Zenigata (GW6BM) 46.0° 81 % 1.3 cd/lm 1 White	
Light colour Required compor C13083_PF-SC C13333_MIRE SHAA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	1 White wents: DCKET LLA-CL Mini Zenigata (GW6BM) 46.0° 81 % 1.3 cd/lm 1 White wents:	200 et 100
Light colour Required compor C13083_PF-SC C13333_MIRE SHAA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-SC	1 White eents: DCKET LLA-CL RPP Mini Zenigata (GW6BM) 46.0° 81 % 1.3 cd/lm 1 White eents: DCKET	200 00 00 00 00 00 00 00 00 00 00 00 00
Light colour Required compor C13083_PF-SC C13333_MIRE SHAA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	1 White eents: DCKET LLA-CL RPP Mini Zenigata (GW6BM) 46.0° 81 % 1.3 cd/lm 1 White eents: DCKET	

PRODUCT DATASHEET



SHA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0	Mini Zenigata (GW6BM) 38.0° 88 % 1.5 cd/lm 1 White tents:	20 20 20 20 20 20 20 20 20 20
SHA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C13083_PF-S0 C12479_MIRE	Mini Zenigata (GW6BM) 45.0° 81 % 1.1 cd/lm 1 White tents: DCKET	20 <sup>1</sup> 20
XICATC LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor C14636_XTM-	XTM - 9mm LES 35.0° 83 % 1.7 cd/lm 1 White nents:	200 200 200 200 200 200 200 200



PRODUCT

DATASHEET

C13087\_MIRELLA-50-W-PF

#### PHOTOMETRIC DATA (SIMULATED):

#### LUMILEDS

LED	LUXEON CoB Compact
FWHM	40.0°
Efficiency	82 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components	:
C13761_PF-SOCK	ET-CXA15
C12479_MIRELLA-	DL

#### LUMILEDS

LED	LUXEON CoB Compact
FWHM	35.0°
Efficiency	88 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components	:
C13761_PF-SOCK	ET-CXA15

#### 

LED LUXEON CoB Compact FWHM 32.0° Efficiency 77 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: C13709\_PF-SOCKET-VERO13-18 C12479\_MIRELLA-DL Bender Wirth: 452 Typ L1

#### 

 LED
 LUXEON CoB Compact

 FWHM
 25.0°

 Efficiency
 85 %

 Peak intensity
 2.6 cd/lm

 LEDs/each optic
 1

 Light colour
 White

 Required components:
 C13709\_PF-SOCKET-VERO13-18

 Bender Wirth: 452 Typ L1
 1



#### PHOTOMETRIC DATA (SIMULATED):

#### 

LED LUXEON CoB Compact FWHM 37.0° Efficiency 77 % Peak intensity 1.5 cd/lm LEDs/each optic 1 Light colour White Required components: C13709\_PF-SOCKET-VERO13-18 C13333\_MIRELLA-CL Bender Wirth: 452 Typ L1

#### 

LED	LUXEON CoB Compact
FWHM	41.0°
Efficiency	82 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components	8:
C13761_PF-SOCK	ET-CXA15
C13333_MIRELLA	-CL

O LUMILEDS		90° 90°
LED	LUXEON K4	
FWHM	54.0°	73* 200
Efficiency	83 %	ine the second
Peak intensity	0.9 cd/lm	
LEDs/each optic	1	
Light colour	White	gr gr.
Required compone		
C13761_PF-SOC		
C12479_MIRELL	A-DL	***
		300 300
		15 <sup>2</sup> 0 <sup>0</sup> 15 <sup>3</sup>
UMILEDS		50° 50°
LED	LUXEON K4	
FWHM	46.0°	
Efficiency	88 %	50°
Peak intensity	1.3 cd/lm	$f \sim 2$
LEDs/each optic	1	
Light colour	White	45°
Required components:		
C13761_PF-SOC	CKET-CXA15	
		120
		152 00 152

PRODUCT DATASHEET



PRODUCT DATASHEET

C13087\_MIRELLA-50-W-PF

#### PHOTOMETRIC DATA (SIMULATED):

#### 

LED CxM-14 (19x19) FWHM 51.0° 70 % Efficiency Peak intensity 0.9 cd/lm LEDs/each optic 1 Light colour White Required components: C13709\_PF-SOCKET-VERO13-18 C12479\_MIRELLA-DL Bender Wirth: 433 Typ L1

#### 

 LED
 CxM-14 (19x19)

 FWHM
 49.0°

 Efficiency
 75 %

 Peak intensity
 1 cd/lm

 LEDs/each optic
 1

 Light colour
 White

 Required components:
 C13709\_PF-SOCKET-VERO13-18

 Bender Wirth: 433 Typ L1

#### 

LED CxM-9 (13.5x13.5) FWHM 41.0° Efficiency 76 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White Required components: C13709\_PF-SOCKET-VERO13-18 C12479\_MIRELLA-DL Bender Wirth: 434 Typ L1

#### 

 LED
 CxM-9 (13.5x13.5)

 FWHM
 36.0°

 Efficiency
 84 %

 Peak intensity
 1.7 cd/lm

 LEDs/each optic
 1

 Light colour
 White

 Required components:
 C13709\_PF-SOCKST-VERO13-18

 Bender Wirth: 434 Typ L1
 1



PRODUCT DATASHEET

C13087\_MIRELLA-50-W-PF

#### PHOTOMETRIC DATA (SIMULATED):

#### 

LED CxM-9 (13.5x13.5) FWHM 39.0° 78 % Efficiency Peak intensity 1.5 cd/lm LEDs/each optic 1 Light colour White Required components: C13709\_PF-SOCKET-VERO13-18 C13333\_MIRELLA-CL Bender Wirth: 434 Typ L1

#### **Μ**ΝΙCΗΙΛ

LED COB S-Type (LES 7) FWHM 32.0° 77 % Efficiency Peak intensity 1.6 cd/lm LEDs/each optic 1 White Light colour Required components: C13709\_PF-SOCKET-VERO13-18 C12479\_MIRELLA-DL Bender Wirth: 452 Typ L1

#### **ΜΝΙCΗΙΛ**

 LED
 COB S-Type (LES 7)

 FWHM
 25.0°

 Efficiency
 85 %

 Peak intensity
 2.6 cd/lm

 LEDs/each optic
 1

 Light colour
 White

 Required components:
 C13709\_PF-SOCKET-VERO13-18

 Bender Wirth: 452 Typ L1

#### **ΜΝΙCΗΙΛ**

LED COB S-Type (LES 7) FWHM 28.0° 81 % Efficiency 2.2 cd/lm Peak intensity LEDs/each optic 1 White Light colour Required components: C13709\_PF-SOCKET-VERO13-18 C13333\_MIRELLA-CL Bender Wirth: 452 Typ L1



## PHOTOMETRIC DATA (SIMULATED):

OSRAM		
opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componer	KET-VERO13-18	
OSRAM Opto Semiconductors		50° 30'
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componer	Soleriq S9 38.0° 88 % 1.7 cd/lm 1 White nts: :KET-VERO13-18	24 - 250 26 - 250 26 - 250 26 - 25 26 - 25 27 - 25 27 - 25 28 - 25 29 - 25 20 - 25
OSRAM		125 <sup>°</sup> 0 <sup>°</sup> 12 <sup>°</sup>
Opto Semiconductors		30° 30°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componer C13083_PF-SOC C13333_MIRELL	KET	
OSRAM		
opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componer C13083_PF-SOC C12479_MIRELL	KET	



## PHOTOMETRIC DATA (SIMULATED):

(			
OSRAM Opto Semiconductors			90* 90
LED	Soleriq S9		
FWHM	46.0°		
Efficiency	91 %		400
Peak intensity	1.4 cd/lm		60.0
	1.4 cu/im		
LEDs/each optic			ar
Light colour	White		
Required components:			
C13083_PF-SOCk	KE I		1220
			30° 15° 0° 15° 30
OSRAM Opto Semiconductors			90* 99
	Soleriq S9		
FWHM	50.0°		75
Efficiency	85 %		
Peak intensity	1.2 cd/lm		èq* 60
LEDs/each optic	1.2 cu/im		
Light colour	White		454
Required component			
C13083_PF-SOCk			
C13723_MIRELLA	N-RZL		
			30° 1250 30 15° 0° 15°
SAMSUN	IG		90° 90
LED	LC010C		27
LED FWHM	LC010C 32.0°		
LED FWHM Efficiency	LC010C 32.0° 87 %		27 Ext 00 00
LED FWHM Efficiency Peak intensity	LC010C 32.0° 87 % 2.2 cd/lm		25 61 00 00
LED FWHM Efficiency Peak intensity LEDs/each optic	LC010C 32.0° 87 % 2.2 cd/lm 1		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	LC010C 32.0° 87 % 2.2 cd/lm 1 White		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC010C 32.0° 87 % 2.2 cd/lm 1 White s:		27 6 <sup>4</sup> 90 97 100
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13709_PF-SOCk	LC010C 32.0° 87 % 2.2 cd/lm 1 White ss: KET-VERO13-18		25
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC010C 32.0° 87 % 2.2 cd/lm 1 White ss: KET-VERO13-18		2 <sup>5</sup>
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13709_PF-SOCk Bender Wirth: 479	LC010C 32.0° 87 % 2.2 cd/lm 1 White ss: KET-VERO13-18 Typ L1		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13709_PF-SOCk Bender Wirth: 479	LC010C 32.0° 87 % 2.2 cd/lm 1 White ss: KET-VERO13-18 Typ L1		27 6 <sup>1</sup> 27 30 30 30 30 30 30 30 30 30 30
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13709_PF-SOCK Bender Wirth: 479	LC010C 32.0° 87 % 2.2 cd/lm 1 White ss: KET-VERO13-18 Typ L1		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13709_PF-SOCK Bender Wirth: 479	LC010C 32.0° 87 % 2.2 cd/lm 1 White ss: KET-VERO13-18 Typ L1		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13709_PF-SOCK Bender Wirth: 479	LC010C 32.0° 87 % 2.2 cd/lm 1 White ss: KET-VERO13-18 Typ L1		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13709_PF-SOCH Bender Wirth: 479	LC010C 32.0° 87 % 2.2 cd/lm 1 White ss: KET-VERO13-18 Typ L1		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13709_PF-SOCH Bender Wirth: 479 SAMSUN LED FWHM Efficiency Peak intensity	LC010C 32.0° 87 % 2.2 cd/lm 1 White ss: (ET-VERO13-18 Typ L1 <b>IG</b> LC020C 35.0° 86 % 1.9 cd/lm		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13709_PF-SOCK Bender Wirth: 479 <b>SAMSUN</b> LED FWHM Efficiency Peak intensity LEDs/each optic	LC010C 32.0° 87 % 2.2 cd/lm 1 White ss: KET-VERO13-18 Typ L1 <b>I G</b> LC020C 35.0° 86 % 1.9 cd/lm 1		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13709_PF-SOCK Bender Wirth: 479 <b>SAMSUN</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	LC010C 32.0° 87 % 2.2 cd/lm 1 White ss: KET-VERO13-18 Typ L1 <b>I G</b> LC020C 35.0° 86 % 1.9 cd/lm 1 White		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13709_PF-SOCH Bender Wirth: 479 <b>SAMSUN</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC010C 32.0° 87 % 2.2 cd/lm 1 White is: KET-VERO13-18 Typ L1 <b>I G</b> LC020C 35.0° 86 % 1.9 cd/lm 1 White is:		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13709_PF-SOCK Bender Wirth: 479 <b>SAMSUN</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13709_PF-SOCK	LC010C 32.0° 87 % 2.2 cd/lm 1 White s: KET-VERO13-18 Typ L1 <b>I G</b> LC020C 35.0° 86 % 1.9 cd/lm 1 White s: KET-VERO13-18		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component C13709_PF-SOCH Bender Wirth: 479 <b>SAMSUN</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC010C 32.0° 87 % 2.2 cd/lm 1 White s: KET-VERO13-18 Typ L1 <b>I G</b> LC020C 35.0° 86 % 1.9 cd/lm 1 White s: KET-VERO13-18		



## PHOTOMETRIC DATA (SIMULATED):

SAMSU	NG	900
LED	LC040C	
FWHM	42.0°	73
Efficiency	84 %	400
Peak intensity	1.4 cd/lm	60 <sup>6</sup> 60
LEDs/each optic	1	
Light colour	White	45" 500 65
Required componen		
C13709_PF-SOC		
Bender Wirth: 480		1200
Bender Wirth. 400	, i yp Ei	
		30° 0° 35° 30°
SEOUL		
SEOUL SEMICONDUCTOR		
LED	ZC4/6	
FWHM	36.0°	
Efficiency	84 %	
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required componen		
C13709_PF-SOC		
Bender Wirth: 434	FTyp L1	
SEOUL		
SEOUL SEMICONDUCTOR	70.4/2	
LED	ZC4/6	
FWHM	39.0°	
Efficiency	78 %	
Peak intensity	1.5 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required componen		
C13709_PF-SOC		
C13333_MIRELL		
Bender Wirth: 434	⊧тур ∟1	
SEOUL		
SEOUL SEMICONDUCTOR		
LED	ZC4/6	
FWHM	41.0°	
Efficiency	76 %	
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required component		
C13709_PF-SOC		
C12479_MIRELL		
Bender Wirth: 434	I Typ L1	

PRODUCT DATASHEET



#### **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

#### 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