

# PRODUCT DATASHEET C12481\_MIRELLA-50-M-PIN

# **MIRELLA-50-M-PIN**

~30° medium beam

## **TECHNICAL SPECIFICATIONS:**

Dimensions	Ø 49.9 mm
Height	23.9 mm
Fastening	pin
ROHS compliant	yes 🛈



## **MATERIAL SPECIFICATIONS:**

Component MIRELLA-50-M-PIN

**Type** Reflector

Colour	Finish	Coating
metal		lacquer

#### **ORDERING INFORMATION:**

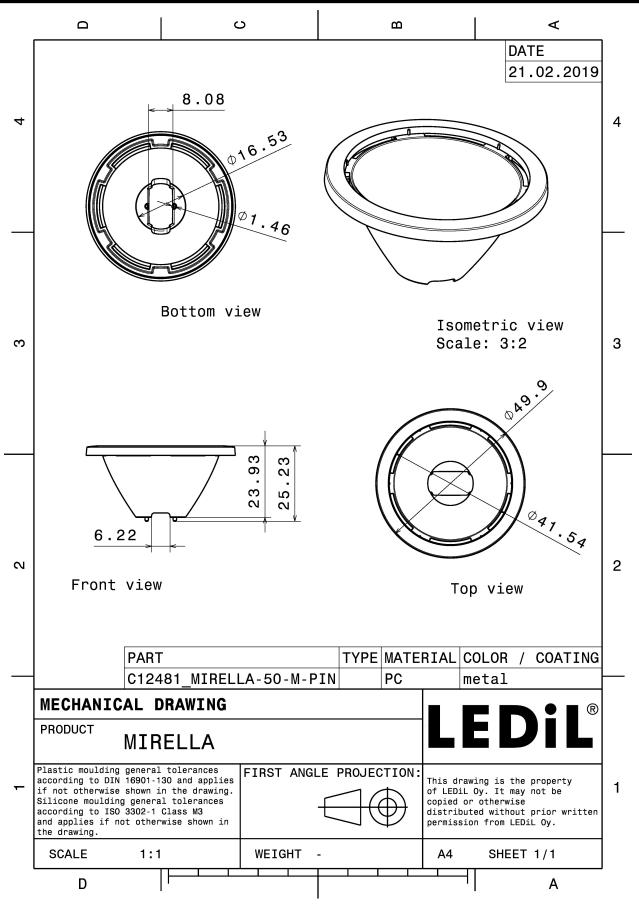
Component	Qty in box	MOQ	MPQ	Box weight (kg)
C12481_MIRELLA-50-M-PIN	336	112	28	3.1
» Box size: 480 x 280 x 300 mm				

Material

PC



# PRODUCT DATASHEET C12481\_MIRELLA-50-M-PIN



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



bridgelux.			90* 90
LED	SM4		
FWHM / FWTM	29.0° / 68.0°		
Efficiency	80 %		60*
Peak intensity	2.2 cd/lm		
LEDs/each optic	1		
Light colour	White		5°
Required compone	ents:		1630
C13333_MIREL	LA-CL		
			364 155 3460 15°
bridgelux.			50 <sup>4</sup>
LED	SM4		
EED FWHM / FWTM	35.0° / 73.0°		73*
Efficiency	78 %		
Peak intensity	1.7 cd/lm		60° × 60
LEDs/each optic	1		
Light colour	White		gr e
Required compone			1200
C12479_MIREL			
_			
			1630
			15 <sup>°</sup> 0 <sup>°</sup> 15 <sup>°</sup>
CREE -	ты		90*
LED	MHB-A/B		
FWHM / FWTM	35.0° / 76.0°		73*
Efficiency	83 %		
Peak intensity	1.8 cd/lm		
LEDs/each optic	1		
Light colour	White		47 <sup>2</sup> 42
Required compone			
C12479_MIREL	LA-DL		
			1600
			304 37 04 35
CREE -			
LED	MHB-A/B		
FWHM / FWTM	28.0° / 80.0°		
Efficiency	88 %		
	2.5 cd/lm		
Peak intensity			
Peak intensity LEDs/each optic	1		
	1 White		
LEDs/each optic	White		
LEDs/each optic Light colour	White		
LEDs/each optic Light colour	White		
LEDs/each optic Light colour	White		



CREE -			
LED	MHB-A/B		
FWHM / FWTM	34.0° / 78.0°		
Efficiency	83 %		
Peak intensity	2 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required compone			
C13333_MIREL			
CREE -			50°
LED	XHP50	and the second	
FWHM / FWTM	32.0° / 74.0°		
Efficiency	86 %		
Peak intensity	1.8 cd/lm		
LEDs/each optic	1	and the second second	
Light colour	White		95
Required compone	ents:		
C12479_MIREL	LA-DL		
			1600
			30*
			133 0 <sup>0</sup> 35*
CREE <del>(</del>	TM		90*
LED	XHP50		
FWHM / FWTM	37.0° / 78.0°		
Efficiency	83 %		60° 60
Peak intensity	1.4 cd/lm		$  \times / /   \times   \times  $
LEDs/each optic	1	and the second se	
Light colour	White		
Required compone			
C13723_MIREL	LA-RZL		1200
			364
CREE <del>(</del>			90° 98
			9 <u>9</u>
LED	XHP50		75
FWHM / FWTM	25.0° / 77.0°		
Efficiency	90 %		60 <sup>3</sup>
Peak intensity	2.5 cd/lm		
LEDs/each optic	1		
Light colour	White		<sup>67</sup>
Required compone	ents:		
			2100
			3/6 36
			L



CREE 4			90° 9
LED	XHP50		
FWHM / FWTM	32.0° / 76.0°		75
Efficiency	85 %		
Peak intensity	1.9 cd/lm		60 <sup>1</sup>
LEDs/each optic	1		
Light colour	White		
Required compone			
C13333_MIREL			
			1600
			305
			15°
CREE 4	тм		90*
LED	XM-L		75
FWHM / FWTM	24.0° / 56.0°		
Efficiency	89 %		50 <sup>4</sup>
Peak intensity	2.9 cd/lm		
LEDs/each optic	1		1600
Light colour	White		
Required compone	ents:		
			2430
			305
CREE 4	<u> </u>		2 335 <sup>7</sup> 3890 15°
			90* 9
	XM-L		75
LED FWHM / FWTM	35.0° / 76.0°		79
FWHM / FWTM Efficiency	35.0° / 76.0° 80 %		75
FWHM / FWTM Efficiency Peak intensity	35.0° / 76.0° 80 % 1.5 cd/lm		50 50 50
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	35.0° / 76.0° 80 % 1.5 cd/lm 1		57 60 70
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	35.0° / 76.0° 80 % 1.5 cd/lm 1 White		51. 61. 62.
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	35.0° / 76.0° 80 % 1.5 cd/lm 1 White ints:		27. 67. 68. 000 67. 1222
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	35.0° / 76.0° 80 % 1.5 cd/lm 1 White ints:		601 600 C
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	35.0° / 76.0° 80 % 1.5 cd/lm 1 White ints:		60 97 97 1222
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIREL	35.0° / 76.0° 80 % 1.5 cd/lm 1 White ints: LA-DL		601 600 C
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIREL	35.0° / 76.0° 80 % 1.5 cd/lm 1 White ints: LA-DL		61 61 62 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIREL	35.0° / 76.0° 80 % 1.5 cd/lm 1 White Ints: LA-DL		61 61 61 61 61 61 61 61 61 61 61 61 61 6
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIREL	35.0° / 76.0° 80 % 1.5 cd/lm 1 White Ints: LA-DL		61 61 61 61 61 61 61 61 61 61 61 61 61 6
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIREL	35.0° / 76.0° 80 % 1.5 cd/lm 1 White Ints: LA-DL		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIREL	35.0° / 76.0° 80 % 1.5 cd/lm 1 White mts: LA-DL XM-L 28.0° / 72.0°		61 61 61 61 61 61 61 61 61 61 61 61 61 6
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIREL	35.0° / 76.0° 80 % 1.5 cd/lm 1 White mts: LA-DL XM-L 28.0° / 72.0° 84 %		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIREL CI2479_MIREL CI2479_MIREL ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	35.0° / 76.0° 80 % 1.5 cd/lm 1 White ints: LA-DL XM-L 28.0° / 72.0° 84 % 2.3 cd/lm		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIREL CI2479_MIREL CI2479_MIREL EDS/EACH OPTIC Efficiency Peak intensity LEDS/each optic Light colour	35.0° / 76.0° 80 % 1.5 cd/lm 1 White ints: LA-DL XM-L 28.0° / 72.0° 84 % 2.3 cd/lm 1 White		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIREL CI2479_MIREL CI2479_MIREL ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	35.0° / 76.0° 80 % 1.5 cd/lm 1 White ints: LA-DL XM-L 28.0° / 72.0° 84 % 2.3 cd/lm 1 White ints:		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIREL CI2479_MIREL CI2479_MIREL EDS/EACH OPTIC LEDS/each optic Light colour	35.0° / 76.0° 80 % 1.5 cd/lm 1 White ints: LA-DL XM-L 28.0° / 72.0° 84 % 2.3 cd/lm 1 White ints:		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIREL CI2479_MIREL CI2479_MIREL EDS/Each optic Light colour Required compone	35.0° / 76.0° 80 % 1.5 cd/lm 1 White ints: LA-DL XM-L 28.0° / 72.0° 84 % 2.3 cd/lm 1 White ints:		



CREE 4		50*
LED	XM-L RGB	
FWHM / FWTM	37.0° / 76.0°	73.
Efficiency	83 %	400
Peak intensity	1.5 cd/lm	60 <sup>1</sup> 60 <sup>2</sup>
LEDs/each optic	1	
Light colour	White	45
Required compone		
C13723_MIREL		1200
010720_1011(22)		
		36° 35° 35°
CREE 4		90*
	XM-L2	75
FWHM / FWTM	22.0° / 58.0°	800
Efficiency	91 %	60° / / 60°
Peak intensity	3.1 cd/lm	
LEDs/each optic	1	40 <sup>-1</sup>
Light colour	White	
Required compone	nts:	2120
		30° 3250 30° 30°
CREE 4		
LED	XM-L2	73'
FWHM / FWTM	33.0° / 74.0° 82 %	
Efficiency		60* 60*
Peak intensity LEDs/each optic	1.9 cd/lm 1	
Light colour	l White	45*
Required compone		- 1230
C12479_MIREL		
012473_WII(EL		1600
		30°
CREE 4		
		125 300 135
LED	XP-G	125 300 135
LED FWHM / FWTM	XP-G 24.0° / 53.0°	127 - 137 - 137 - 137
LED FWHM / FWTM Efficiency	XP-G 24.0° / 53.0° 86 %	127 25°
LED FWHM / FWTM Efficiency Peak intensity	XP-G 24.0° / 53.0° 86 % 3.3 cd/lm	127 25°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XP-G 24.0° / 53.0° 86 % 3.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G 24.0° / 53.0° 86 % 3.3 cd/lm 1 White	0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XP-G 24.0° / 53.0° 86 % 3.3 cd/lm 1 White	200 300 400 400 400 400 400 400 400 400 4
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G 24.0° / 53.0° 86 % 3.3 cd/lm 1 White	0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G 24.0° / 53.0° 86 % 3.3 cd/lm 1 White	0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
ED WHM / FWTM fficiency Peak intensity EDs/each optic .ight colour	XP-G 24.0° / 53.0° 86 % 3.3 cd/lm 1 White	0. 0. 0. 0. 0. 0. 0. 0. 0. 0.



	<b>L</b>		
CREE C LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIRELI	XP-G 34.0° / 74.0° 81 % 1.6 cd/lm 1 White nts:		597 75 60 60 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
			994
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13333_MIRELI			
CREE 4	XP-G2 30.0° / 74.0°		35 <sup>-</sup> 0 <sup>2</sup> 35 <sup>-</sup>
Efficiency Peak intensity LEDs/each optic Light colour Required compone			
C12479_MIREL		-	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G2 22.0° / 76.0° 88 % 2.9 cd/lm 1 White		



CREE <del>\$</del>			
	TM		90* 90
LED	XP-L HI		
FWHM / FWTM	17.0° / 48.0°		73.
Efficiency	88 %		
Peak intensity	4.5 cd/lm		60 <sup>57</sup> 1630
LEDs/each optic	1		
Light colour	White		45 2130 45
Required componer			
			320
			30*
	<u>.</u>		( <u>139</u> ) of <u>139</u>
CREE <del>\$</del>	TM		90* 90
LED	XT-E		75
FWHM / FWTM	32.0° / 73.0°		
Efficiency	78 %		64
Peak intensity	1.8 cd/lm		
LEDs/each optic	1		
Light colour	White		45 <sup>4</sup> 45
Required componer			
C12479_MIRELL	_A-DL		
			1670
			304 359 04 359 36
CREE ≑			
			90° 90
			90* 90
LED	XT-E		
LED FWHM / FWTM	XT-E 23.0° / 51.0°		
LED FWHM / FWTM Efficiency	XT-E 23.0° / 51.0° 85 %		
LED FWHM / FWTM Efficiency Peak intensity	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White		273 664 5629
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White		77 64 64 2000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White		77 64 64 2000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White		77 64 64 2000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White hts:		77 64 64 2000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White hts:		77
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White hts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White hts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White hts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White hts: XT-E 22.0° / 64.0°		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen Required componen Efficiency Peak intensity	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White hts: XT-E 22.0° / 64.0° 81 %		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White hts: XT-E 22.0° / 64.0° 81 % 2.9 cd/lm		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen Required componen Efficiency Peak intensity LEDs/each optic	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White hts: XT-E 22.0° / 64.0° 81 % 2.9 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer Required componer Efficiency Peak intensity LEDs/each optic Light colour	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White hts: XT-E 22.0° / 64.0° 81 % 2.9 cd/lm 1 White hts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer CREEE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White hts: XT-E 22.0° / 64.0° 81 % 2.9 cd/lm 1 White hts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer CREEE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XT-E 23.0° / 51.0° 85 % 3.4 cd/lm 1 White hts: XT-E 22.0° / 64.0° 81 % 2.9 cd/lm 1 White hts:		



	EDC	
CUMIL LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON 5050 Round LES 22.0° / 59.0° 90 % 3.2 cd/lm 1 White	
	.EDS	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIREL	LUXEON A 34.0° / 75.0° 80 % 1.6 cd/lm 1 White ents:	
	EDS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13333_MIREL	LUXEON A 24.0° / 69.0° 84 % 2.6 cd/lm 1 White ents:	
Control Contro	LUXEON A 22.0° / 52.0° 87 % 3.4 cd/lm 1 White	



	.EDS	90 <sup>4</sup> 97
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL		
	EDS	50 <sup>4</sup> 59
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C12479_MIREL	LUXEON M/MX 38.0° / 78.0° 81 % 1.5 cd/lm 1 White ents:	
	.EDS	90 <sup>4</sup> 950
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON M/MX 24.0° / 63.0° 87 % 2.6 cd/lm 1 White	
UMIL	.EDS	90° 90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13333_MIREL	LUXEON M/MX 33.0° / 74.0° 84 % 2 cd/lm 1 White ents:	



M LUMIL	EDS	90* 90*
LED FWHM / FWTM Efficiency Peak intensity	LUXEON MZ 27.0° / 69.0° 84 % 2.4 cd/lm	90 <sup>4</sup> 900 60 <sup>4</sup>
LEDs/each optic	2.4 cu/iiii 1	
LEDS/each optic	u White	45 <sup>4</sup> 45 <sup>4</sup>
Required compone		1630
C12479_MIRELI		364 127 07 127 30
UMIL	EDS	90 <sup>4</sup> 90 <sup>4</sup>
LED	LUXEON MZ	
FWHM / FWTM	20.0° / 47.0°	
Efficiency	88 %	60°
Peak intensity	4 cd/lm	1600
LEDs/each optic	1	
Light colour	White	a.
Required compone	nts:	300
		10 <sup>4</sup> 10 <sup>7</sup> 70 <sup>4</sup> 10 <sup>4</sup>
UMIL	EDS	90°
LED	LUXEON Z	
FWHM / FWTM	31.0° / 71.0°	400
Efficiency	83 %	50° 00°
Peak intensity	1.7 cd/lm	
LEDs/each optic	4	
Light colour	RGBW	0°* 60*
Required compone C13723_MIRELI		209
<b>∕∕</b> NICHI∧		15 <sup>7</sup> 0 <sup>4</sup> 15 <sup>5</sup>
LED	NS9x383	
LED FWHM / FWTM	NS9X383 32.0° / 74.0°	75
Efficiency	83 %	
Peak intensity	1.7 cd/lm	60°
LEDs/each optic	1	
Light colour	White	gy
Required compone		
C12479_MIRELI		



$\sim$			
	NS9x383		<u>80*</u>
FWHM / FWTM	24.0° / 78.0°		
Efficiency	88 %		800
Peak intensity	2.5 cd/lm		
LEDs/each optic	1		
Light colour	White		gr (
Required compone	ents:		
			30* 15° 0* 15°
			94 <sup>4</sup> 95
LED	NV4x144A		
FWHM / FWTM	27.0° / 73.0°		
Efficiency	89 %		60 <sup>4</sup>
Peak intensity	2.5 cd/lm		
LEDs/each optic	1		
Light colour	White		97 E50
Required compone	ents:		
			200
OSRAM			
			90° 90
Opto Semiconductors	Duris S8		99 <sup>4</sup>
Opto Semiconductors	Duris S8 26.0° / 70.0°		
opto Semiconductors LED FWHM / FWTM	26.0° / 70.0°		
Opto Semiconductors LED FWHM / FWTM Efficiency	26.0° / 70.0° 84 %		50 X
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	26.0° / 70.0°		59°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	26.0° / 70.0° 84 % 2.6 cd/lm		5°. 100 00 10 <sup>3</sup> 27 100 100 100 100 100 100 100
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	26.0° / 70.0° 84 % 2.6 cd/lm 1 White		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	26.0° / 70.0° 84 % 2.6 cd/lm 1 White ents:		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	26.0° / 70.0° 84 % 2.6 cd/lm 1 White ents:		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	26.0° / 70.0° 84 % 2.6 cd/lm 1 White ents:		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13333_MIRELI	26.0° / 70.0° 84 % 2.6 cd/lm 1 White ents:		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13333_MIRELI OSERAM Opto Semiconductors	26.0° / 70.0° 84 % 2.6 cd/lm 1 White ents: LA-CL		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13333_MIRELI OSRAM Opto Semiconductors LED	26.0° / 70.0° 84 % 2.6 cd/lm 1 White ents: LA-CL		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13333_MIRELI OSRAM Opto Semiconductors LED FWHM / FWTM	26.0° / 70.0° 84 % 2.6 cd/lm 1 White ents: LA-CL Duris S8 28.0° / 69.0°		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13333_MIRELI Opto Semiconductors LED FWHM / FWTM Efficiency	26.0° / 70.0° 84 % 2.6 cd/lm 1 White ents: LA-CL Duris S8 28.0° / 69.0° 84 %		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13333_MIRELI Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	26.0° / 70.0° 84 % 2.6 cd/lm 1 White ents: LA-CL Duris S8 28.0° / 69.0°		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13333_MIRELI Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	26.0° / 70.0° 84 % 2.6 cd/lm 1 White ents: LA-CL Duris S8 28.0° / 69.0° 84 % 2.2 cd/lm 1		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13333_MIRELI OSERAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	26.0° / 70.0° 84 % 2.6 cd/lm 1 White ents: LA-CL Duris S8 28.0° / 69.0° 84 % 2.2 cd/lm 1 White		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13333_MIRELI OSERAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	26.0° / 70.0° 84 % 2.6 cd/lm 1 White ents: LA-CL Duris S8 28.0° / 69.0° 84 % 2.2 cd/lm 1 White ents:		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13333_MIRELI OSERAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	26.0° / 70.0° 84 % 2.6 cd/lm 1 White ents: LA-CL Duris S8 28.0° / 69.0° 84 % 2.2 cd/lm 1 White ents:		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13333_MIRELI OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	26.0° / 70.0° 84 % 2.6 cd/lm 1 White ents: LA-CL Duris S8 28.0° / 69.0° 84 % 2.2 cd/lm 1 White ents:		



OSRAM Opto Semiconductors		50°
LED	Duris S8	
FWHM / FWTM	22.0° / 58.0°	
Efficiency	88 %	
Peak intensity	3.2 cd/lm	
LEDs/each optic	1	
Light colour	White	et la
Required compone		
		304
		130 00 130
OSRAM Opto Semiconductors		90 <sup>3</sup>
LED	OSLON Square EC	
FWHM / FWTM	32.0° / 75.0°	
Efficiency	79 %	50
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	¢. de
Required compone		
C12479_MIRELI	LA-DL	
		100
		30 <sup>4</sup> 127 0 <sup>4</sup> 127 30 <sup>4</sup>
OSRAM Opto Semiconductors		5)* 507
OSRAM Opto Semiconductors LED	OSLON Square EC	99 <sup>4</sup>
Opto Semiconductors	OSLON Square EC 22.0° / 49.0°	25° 25°
Opto Semiconductors		
Opto Semiconductors LED FWHM / FWTM	22.0° / 49.0°	90 <sup>4</sup> 99 <sup>7</sup> 77 <sup>4</sup> 907 75 <sup>4</sup> 907 65 <sup>4</sup>
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	22.0° / 49.0° 84 %	93 <sup>5</sup> 000 73 <sup>5</sup>
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	22.0° / 49.0° 84 % 3.4 cd/lm 1 White	93 <sup>5</sup> 000 73 <sup>5</sup>
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	22.0° / 49.0° 84 % 3.4 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	22.0° / 49.0° 84 % 3.4 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	22.0° / 49.0° 84 % 3.4 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	22.0° / 49.0° 84 % 3.4 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componed	22.0° / 49.0° 84 % 3.4 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	22.0° / 49.0° 84 % 3.4 cd/lm 1 White ints:	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer OSRAM Opto Semiconductors LED	22.0° / 49.0° 84 % 3.4 cd/lm 1 White Ints:	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componed OSRAM Opto Semiconductors LED FWHM / FWTM	22.0° / 49.0° 84 % 3.4 cd/lm 1 White ints:	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency	22.0° / 49.0° 84 % 3.4 cd/lm 1 White Ints: OSLON Square EC 22.0° / 67.0° 83 %	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	22.0° / 49.0° 84 % 3.4 cd/lm 1 White Ints: OSLON Square EC 22.0° / 67.0°	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	22.0° / 49.0° 84 % 3.4 cd/lm 1 White ints: OSLON Square EC 22.0° / 67.0° 83 % 3 cd/lm	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	22.0° / 49.0° 84 % 3.4 cd/lm 1 White Ints: OSLON Square EC 22.0° / 67.0° 83 % 3 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componed Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componed	22.0° / 49.0° 84 % 3.4 cd/lm 1 White ints: OSLON Square EC 22.0° / 67.0° 83 % 3 cd/lm 1 White ints:	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	22.0° / 49.0° 84 % 3.4 cd/lm 1 White ints: OSLON Square EC 22.0° / 67.0° 83 % 3 cd/lm 1 White ints:	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componed Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componed	22.0° / 49.0° 84 % 3.4 cd/lm 1 White ints: OSLON Square EC 22.0° / 67.0° 83 % 3 cd/lm 1 White ints:	



OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL			22,         0,         22,           20,         20,         60,           60,         00,         60,           35,         00,         60,           36,         00,         90,           36,         00,         90,
SAMS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH508A 24.0° / 78.0° 88 % 2.4 cd/lm 1 White		34, 95, 6, 12, 20, 20, 20, 20, 20, 20, 20, 20, 20, 2
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C13723_MIREL			



## PHOTOMETRIC DATA (SIMULATED):

CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XHP35 HD 28.0° / 77.0° 92 % 2.5 cd/lm 1 White		5°, 100 6°, 100 6°, 100 6°, 6°, 6°, 6°, 6°, 6°, 6°, 6°, 6°, 6°,
	S		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 5258 23.0° / 45.0° 91 % 3.8 cd/lm 1 White		
OCDAM			15° 0° 15°
OUSERMICONDUCTORS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C13333_MIRELLA-C	OSCONIQ P 7070 29.0° / 70.0° 87 % 2.3 cd/lm 1 White	1.563 0 -1.563 -1.5	
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C12479_MIRELLA-D	OSCONIQ P 7070 31.0° / 72.0° 88 % 2.4 cd/lm 1 White	x + 4.24, Y + 121.9, KH + (72 74 0.1) 1.55 1.5	25 66 67 100 100 100 100 100 100 100 10



## PHOTOMETRIC DATA (SIMULATED):

OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSCONIQ P 7070 26.0° / 63.0° 91 % 2.9 cd/lm 1 White	1.5e) 0 1.5e3 0 1.5e3 0 1.5e3 X coordinate value Detector Isage: Illeboard X coordinate value Detector Isage: Illeboard Teleform Telef	200 - 200 - 20 20 - 200 - 20 20 - 20
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	G LH351D 26.0° / 54.0° 90 % 3 cd/lm 1 White		50 50 50 50 50 50 50 50 50 50 50 50 50 5
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Z8Y22P 19.0° / 44.0° 89 % 4.3 cd/lm 1 White		30 B2 C C C C C C C C C C C C C C C C C C



#### **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.

#### MATERIALS:

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