

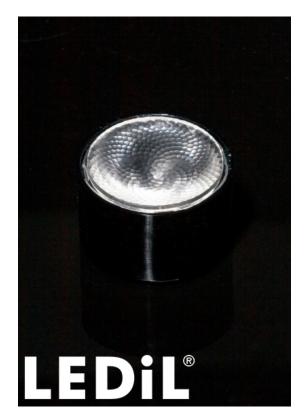
# PRODUCT DATASHEET CA16128\_OLGA-M

# OLGA-M

 ${\sim}30^\circ$  wide beam. Assembly with holder and installation tape.

#### **TECHNICAL SPECIFICATIONS:**

Dimensions	Ø 32.0 mm
Height	19.1 mm
Fastening	tape, pin
ROHS compliant	yes 🛈



#### MATERIAL SPECIFICATIONS:

Component OLGA-M OLGA-HLD SPUTNIK-TAPE3 **Type** Single lens Holder Tape

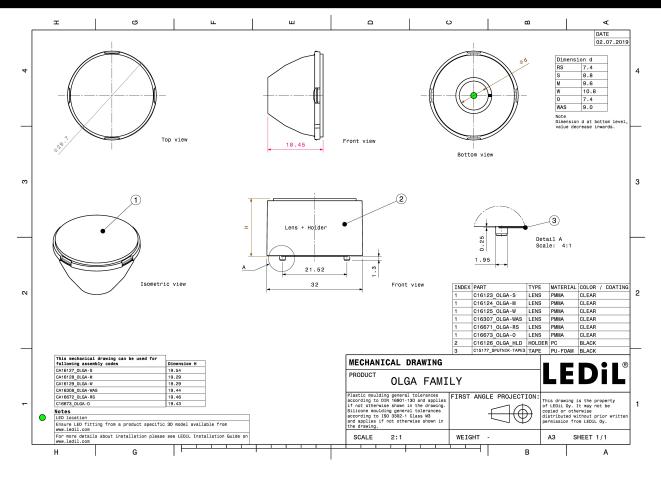
Material	Colour	Finish
PMMA	clear	
PC	black	
Acrylic foam	black	

#### **ORDERING INFORMATION:**

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA16128_OLGA-M	Single lens	792	132	66	9.8
» Box size: 476 x 273 x 292 mm					

# 

# PRODUCT DATASHEET CA16128\_OLGA-M



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



		50°
LED	XD16	
FWHM / FWTM	26.0° / 48.0°	8
Efficiency	80 %	
Peak intensity	3.2 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
		30.
		15 <sup>5</sup> 0 <sup>6</sup> 15 <sup>5</sup>
		50°
LED	XHP35 HD	
FWHM / FWTM	32.0° / 58.0°	
Efficiency	80 %	607 607
Peak intensity	2.1 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	nts:	150
		30*
		452 0 353
		<u>101</u> 00 100 100 100 100 100 100 100 100
	ХНР35 НІ	90 <sup></sup>
		20 <sup>4</sup>
LED	XHP35 HI	
LED FWHM / FWTM Efficiency Peak intensity	XHP35 HI 28.0° / 51.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0° 81 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE Component LED FWHM / FWTM Efficiency Peak intensity	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0° 81 % 2.1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0° 81 % 2.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0° 81 % 2.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0° 81 % 2.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XHP35 HI 28.0° / 51.0° 84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0° 81 % 2.1 cd/lm 1 White	



			90*	•	90*
LED		and the second se		$ \land $	
FWHM / FWTM	31.0° / 58.0°		25*		75
Efficiency	81 %				
Peak intensity	2.3 cd/lm		60°		60,
LEDs/each optic	1				
Light colour	White		954		45*
Required compone				1600	
			$\sim$		
			30*	2450	34.
			/	15° 0° 15'	
			90°		90*
LED	XHP70		75*		7-25
FWHM / FWTM	33.0° / 63.0°			400	
Efficiency	82 %		60.6		60.
Peak intensity	2 cd/lm				
LEDs/each optic	1			$\times$	
Light colour	White			1230	$\backslash$
Required compone	nts:				
			$\sim$	1600	
			36*	12° 0° 12.	, 30°
			90 <sup>6</sup>		90°
LED	XHP70.2				
LED FWHM / FWTM	XHP70.2 34.0° / 64.0°		73*	400	7 25
FWHM / FWTM	XHP70.2 34.0° / 64.0° 81 %	160	735	400	7
FWHM / FWTM Efficiency	34.0° / 64.0°		73° 69*	40	
FWHM / FWTM Efficiency Peak intensity	34.0° / 64.0° 81 %		173 69*	$\times$	
FWHM / FWTM Efficiency	34.0° / 64.0° 81 % 1.9 cd/lm		62. 64. 12.	80	6.
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	34.0° / 64.0° 81 % 1.9 cd/lm 1 White		6. 84	$\times$	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	34.0° / 64.0° 81 % 1.9 cd/lm 1 White			20	63
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	34.0° / 64.0° 81 % 1.9 cd/lm 1 White			80	6
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	34.0° / 64.0° 81 % 1.9 cd/lm 1 White		24 27 27	90 120 160	6
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts:		24. 24. 24. 25. 26. 26. 26. 26. 26. 26. 27.	80	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts:		84. 249 64. 64. 52.	90 120 160	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts:		25 26 26 20 20 20 20 20 20 20 20 20 20 20 20 20	90 120 160	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component CREE LED ED FWHM / FWTM	34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts: XM-L 31.0° / 55.0°		24 24 26 27 26 27 26 27 27 27 27 27 27 27 27 27 27 27 27 27	80 123 105 257 267 257	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component CREE (LED FWHM / FWTM Efficiency	34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts: XM-L 31.0° / 55.0° 83 %		90°	90 120 160	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component CREE (LED FWHM / FWTM Efficiency Peak intensity	34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts: XM-L 31.0° / 55.0° 83 % 2.4 cd/lm			00 1239 105 257 267 257	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Efficiency Peak intensity LEDs/each optic	34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts: XM-L 31.0° / 55.0° 83 % 2.4 cd/lm 1			00 1239 105 257 267 257	99
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts: XM-L 31.0° / 55.0° 83 % 2.4 cd/lm 1 White		9. 9. 9. 9.	00 1239 105 257 267 257	99
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Efficiency Peak intensity LEDs/each optic	34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts: XM-L 31.0° / 55.0° 83 % 2.4 cd/lm 1 White		64 64 64 64 64 64 64 64 64 64 64 64 64 6		99
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts: XM-L 31.0° / 55.0° 83 % 2.4 cd/lm 1 White		62 25 26 26 26 26 26 26 26 26 26 26 26 26 26		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts: XM-L 31.0° / 55.0° 83 % 2.4 cd/lm 1 White				99



			90*
LED	XM-L3		
FWHM / FWTM	33.0° / 57.0°		75°
Efficiency	81 %		
Peak intensity	2.2 cd/lm		60 <sup>55</sup>
LEDs/each optic	1		
Light colour	White		5*
Required compone			1630
			306
			15" 28% 15"
			90*
LED	XP-G2		73
FWHM / FWTM	30.0° / 53.0°		
Efficiency	83 %		60*
Peak intensity	2.7 cd/lm		
LEDs/each optic	1		43%
Light colour	White		
Required compone	ms.		
			2400
			30° 15° 0° 15°
			30*
	XP-G3		<u>9</u> ;*
			35. 89.
LED	XP-G3		604 904
LED FWHM / FWTM	XP-G3 31.0° / 54.0°		60 <sub>4</sub> 900 22 20
LED FWHM / FWTM Efficiency	XP-G3 31.0° / 54.0° 82 %		64 64 25 10 10 10 10 10 10 10 10 10 10 10 10 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White		62. 64. 900 92. 900
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White nts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White nts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White nts: XP-L HI		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White nts: XP-L HI 28.0° / 50.0°		200 10 10 10 10 10 10 10 10 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White nts: XP-L HI 28.0° / 50.0° 85 %		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White nts: XP-L HI 28.0° / 50.0°		200 10 10 10 10 10 10 10 10 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White nts: XP-L HI 28.0° / 50.0° 85 % 3 cd/lm		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White nts: XP-L HI 28.0° / 50.0° 85 % 3 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White nts: XP-L HI 28.0° / 50.0° 85 % 3 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White nts: XP-L HI 28.0° / 50.0° 85 % 3 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White nts: XP-L HI 28.0° / 50.0° 85 % 3 cd/lm 1 White		



			30*
LED	 XP-L2		
FWHM / FWTM	30.0° / 54.0°		75
Efficiency	81 %		
Peak intensity	2.5 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required compone			
			30*
			133 00 233
			90 <sup>4</sup>
LED	XQ-E HD		
FWHM / FWTM	28.0° / 51.0°		
Efficiency	76 %		50*
Peak intensity	2.8 cd/lm		
LEDs/each optic	1		350
Light colour	White		
Required compone	nts:		
			3430
			36° 157 0° 157
	_		
			90*
	XQ-E HI		
			37
LED	XQ-E HI		
LED FWHM / FWTM	XQ-E HI 27.0° / 49.0°		37
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XQ-E HI 27.0° / 49.0° 83 %		37
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White		57 69
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White		5. 6. 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White		500 SCO
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White		5. 6. 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White		5. 6. 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White nts:		3y- 25 64 90 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White nts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White nts: XT-E		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component CREEC LED LED FWHM / FWTM	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White nts: XT-E 29.0° / 53.0°		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component LED FWHM / FWTM Efficiency	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White nts: XT-E 29.0° / 53.0° 79 %		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component LED FWHM / FWTM Efficiency Peak intensity	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White nts: XT-E 29.0° / 53.0°		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White nts: XT-E 29.0° / 53.0° 79 % 2.6 cd/lm		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Efficiency Peak intensity LEDs/each optic	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White nts: XT-E 29.0° / 53.0° 79 % 2.6 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White nts: XT-E 29.0° / 53.0° 79 % 2.6 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White nts: XT-E 29.0° / 53.0° 79 % 2.6 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White nts: XT-E 29.0° / 53.0° 79 % 2.6 cd/lm 1 White		



🖉 LUMIL	EDS	50*
LED FWHM / FWTM Efficiency Peak intensity	LUXEON 5050 Round LES 27.0° / 52.0° 86 % 3 cd/lm	77 60 <sup>4</sup>
LEDs/each optic	1	200
Light colour	White	gr .
Required compone	nts:	200 - 200 -
🖉 LUMIL	EDS	8×*
LED FWHM / FWTM Efficiency	LUXEON C 29.0° / 52.0° 76 %	
Peak intensity	2.6 cd/lm	
LEDs/each optic	1	
Light colour	White	gr ( 200 )
Required compone		20 <sup>4</sup> 25 <sup>4</sup> 0 <sup>4</sup> 25 <sup>4</sup>
🥙 LUMIL	EDS	50°
LED	LUXEON CZ	75
FWHM / FWTM	26.0° / 47.0°	200
Efficiency	85 %	
Peak intensity LEDs/each optic	3.5 cd/lm 1	
Light colour	White	5.
Required compone		200 200
🖉 LUMIL	EDS	solution testes as a second seco
LED	LUXEON M/MX	
FWHM / FWTM	31.0° / 59.0°	
Efficiency	84 %	60 <sup>4</sup> 00
Peak intensity	2.3 cd/lm	
LEDs/each optic Light colour	1 White	
Required compone		



	EDS	39 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON MZ 26.0° / 50.0° 85 % 3.1 cd/lm 1 White	
	.EDS	90* 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Rebel ES 28.0° / 51.0° 83 % 3 cd/lm 1 White	
	FDS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON TX 29.0° / 51.0° 83 % 2.9 cd/lm 1 White	
WHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON V 29.0° / 54.0° 82 % 2.6 cd/lm 1 White	
		30 <sup>6</sup> 20 <sup>7</sup> 2 <sup>1</sup> 2 <sup>1</sup> 3



	.EDS	90 <sup>4</sup> 90 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON V 28.0° / 53.0° 82 % 2.7 cd/lm 1 White	
	.EDS	57 57
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON V2 29.0° / 51.0° 83 % 2.9 cd/lm 1 White ents:	
	FDS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Z 25.0° / 46.0° 85 % 3.7 cd/lm 1 White ents:	
UMIL	.EDS	50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Z ES 27.0° / 49.0° 85 % 3.3 cd/lm 1 White ents:	



		90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxE17A 23.0° / 44.0° 85 % 4.1 cd/lm 1 White	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSW219D 31.0° / 54.0° 83 % 2.4 cd/lm 1 White	
	NVSW319B	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	34.0° / 56.0° 84 % 2.3 cd/lm 1 White	
Required compone	ints:	500 30 <sup>16</sup> 30 33 0 <sup>16</sup> 12 <sup>10</sup> 30
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSxE21A 23.0° / 44.0° 85 % 4.2 cd/lm 1 White	



ØNICHI/		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSxx19B/NVSxx19C 30.0° / 52.0° 84 % 2.7 cd/lm 1 White	
OSRAM		94
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Duris S8 27.0° / 53.0° 85 % 3 cd/lm 1 White	
OSRAM		
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	OSCONIQ P 3737 (2W version) 26.0° / 49.0° 83 % 3.2 cd/lm 1 White ents:	
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	OSCONIQ P 3737 (3W version) 28.0° / 51.0° 84 % 3 cd/lm 1 White ents:	



OSRAM Opto Semiconductors		90* 90*
LED	OSCONIQ P 7070	
FWHM / FWTM	29.0° / 55.0°	
Efficiency	83 %	50°
Peak intensity	2.6 cd/lm	
LEDs/each optic	1	
Light colour	White	5° 1530 87°
Required componer	nts:	
OSRAM Opto Semiconductors		90* 0°
LED	OSLON Black Flat	
FWHM / FWTM	24.0° / 45.0°	25 000
Efficiency	85 %	
Peak intensity	3.9 cd/lm	60° 60°
LEDs/each optic	1	
Light colour	White	457 2430 45*
Required componer		
OSDAM		300 - 10 <sup>-</sup>
OSRAM Opto Semiconductors		90*
LED	OSLON Square CSSRM2/CSSRM3	
FWHM / FWTM	30.0° / 52.0°	$\land \land \land \land \land \land$
Efficiency	84 %	60° 60°
Peak intensity	2.7 cd/lm	
LEDs/each optic	1	
Light colour	White	gr <u>1670</u> gr
Required componer	its:	2007 2007
OSRAM Opto Semiconductors		90* 90*
LED	OSLON Square EC	73'
FWHM / FWTM	28.0° / 51.0°	
Efficiency	81 %	60° 000 000
Peak intensity	2.9 cd/lm	
LEDs/each optic	1	1570
Light colour	White	* / / *
Required componer	its:	202



000414			
OSRAM Opto Semiconductors		50*	90*
LED	OSLON Square PC		$\land$
FWHM / FWTM	29.0° / 52.0°	75-	
Efficiency	82 %		800
Peak intensity	2.8 cd/lm		
LEDs/each optic	1		
Light colour	White	gr.	1630 45°
Required compone	nts:		
			2430
		30*	36.
OSRAM			0 <sup>b</sup> 25 <sup>5</sup>
Opto Semiconductors		39*	90°
	OSLON SSL 150	73	/ / / / ·
FWHM / FWTM	30.0° / 51.0° 82 %		800
Efficiency	82 % 2.7 cd/lm	50°	50°
Peak intensity			
LEDs/each optic Light colour	1 White		1600 45°
Required compone			$  \rangle \rangle \rangle$
Required component	1115.		
			2430
		305	0° 15° 36°
OSRAM			
Onto Semiconductors		90*	90°
Opto Semiconductors	OSLON SSL 80	39*	<u>90*</u>
Opto Semiconductors	OSLON SSL 80 28.0° / 51.0°	30 <sup>4</sup>	90*
Opto Semiconductors LED FWHM / FWTM	28.0° / 51.0°	39 <sup>7</sup> 77	$\land$
opto Semiconductors LED FWHM / FWTM Efficiency	28.0° / 51.0° 82 %	39 <sup>4</sup> 73 60	A
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	28.0° / 51.0°	59 <sup>4</sup> 73 <sup>1</sup> 09 <sup>4</sup>	50) 90
opto Semiconductors LED FWHM / FWTM Efficiency	28.0° / 51.0° 82 % 2.9 cd/lm	50 <sup>4</sup> 75 60 <sup>4</sup> 77	A
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	28.0° / 51.0° 82 % 2.9 cd/lm 1 White	50 <sup>4</sup> 73 60 <sup>4</sup> 60 <sup>4</sup>	50) 90
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 51.0° 82 % 2.9 cd/lm 1 White		50) 90
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 51.0° 82 % 2.9 cd/lm 1 White	30 <sup>4</sup> 73 <sup>5</sup> 60 <sup>4</sup>	100
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 51.0° 82 % 2.9 cd/lm 1 White	59 75 64 67 77 77 77	500
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 51.0° 82 % 2.9 cd/lm 1 White		90 90 909 909
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	28.0° / 51.0° 82 % 2.9 cd/lm 1 White nts:		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED	28.0° / 51.0° 82 % 2.9 cd/lm 1 White nts:		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM	28.0° / 51.0° 82 % 2.9 cd/lm 1 White nts: OSTAR Stage (S2WN) 26.0° / 50.0°		200 200 200 200 200 200 200 200 200 200
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency	28.0° / 51.0° 82 % 2.9 cd/lm 1 White nts: OSTAR Stage (S2WN) 26.0° / 50.0° 84 %		200 200 200 200 200 200 200 200 200 200
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	28.0° / 51.0° 82 % 2.9 cd/lm 1 White nts: OSTAR Stage (S2WN) 26.0° / 50.0° 84 % 3.2 cd/lm		200 200 200 200 200 200 200 200 200 200
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto SERAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	28.0° / 51.0° 82 % 2.9 cd/lm 1 White nts: OSTAR Stage (S2WN) 26.0° / 50.0° 84 % 3.2 cd/lm 1		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 51.0° 82 % 2.9 cd/lm 1 White nts: OSTAR Stage (S2WN) 26.0° / 50.0° 84 % 3.2 cd/lm 1 RGBW		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto SERAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	28.0° / 51.0° 82 % 2.9 cd/lm 1 White nts: OSTAR Stage (S2WN) 26.0° / 50.0° 84 % 3.2 cd/lm 1 RGBW		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 51.0° 82 % 2.9 cd/lm 1 White nts: OSTAR Stage (S2WN) 26.0° / 50.0° 84 % 3.2 cd/lm 1 RGBW		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 51.0° 82 % 2.9 cd/lm 1 White nts: OSTAR Stage (S2WN) 26.0° / 50.0° 84 % 3.2 cd/lm 1 RGBW		



SAMS		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH181A 22.0° / 44.0° 81 % 4 cd/lm 1 White	
<b>SAMS</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	UNG LH181B 23.0° / 45.0° 85 % 3.4 cd/lm 1	84 200 85 35 35 35 35 35 35 35 35
Light colour Required compone		200 21 <sup>4</sup> 22 <sup>5</sup> 4 <sup>6</sup> 22 <sup>5</sup> 4 <sup>6</sup> 22 <sup>5</sup> 4 <sup>6</sup> 22 <sup>5</sup>
SAMS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH231B 24.0° / 47.0° 86 % 3.7 cd/lm 1 White ents:	
SAMS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH351B 30.0° / 53.0° 84 % 2.7 cd/lm 1 White	



SAMSI	ING	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH351C 31.0° / 53.0° 85 % 2.7 cd/lm 1 White	
	JNG LH351D	90 <sup>4</sup> 90 <sup>4</sup> 90 <sup>4</sup>
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	33.0° / 57.0° 83 % 2.2 cd/lm 1 White nts:	
SAMS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm 1 White	
SAMS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LM302A 25.0° / 48.0° 85 % 3.4 cd/lm 1 White	



SAMS	UNG		90* 90*
LED	LM561B		27
FWHM / FWTM	27.0° / 51.0°		
Efficiency	85 %		60°
Peak intensity	3.2 cd/lm		
LEDs/each optic	1		
Light colour	White		45 <sup>4</sup>
Required compone	ents:		
			- 300
			20 <sup>4</sup> 2200 30 <sup>4</sup> 30 <sup>4</sup>
SECUL			
SEOUL SEMICONDUCTOR			90° 90°
LED	Z5M3		75
FWHM / FWTM	28.0° / 52.0°		
Efficiency	82 %		60° 60°
Peak intensity	2.8 cd/lm		
LEDs/each optic	1		
Light colour	White		gy <u>5</u>
Required compone	ents:		
			2400
			30° 15° 30°



LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	J Series 5050 Round LES 25.0° / 46.0° 92 % 4.3 cd/lm 1	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
Light colour Required components:	White	200 200 200
		90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XHP50.3 HD 31.0 + 30.0° / 52.0° 83 % 2.7 cd/lm 1 White	20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XHP50.3 HI 28.0° / 48.0° 95 % 3.4 cd/lm 1 White	9° 9° 9° 9° 9° 9° 9° 100 100 100 100 100 100 100 10
CREES LED LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XHP70.3 HD 33.0 + 32.0° / 58.0° 82 % 2.3 cd/lm 1 White	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°



		5000
		2600
LED	XP-G2 HE	2400
FWHM / FWTM	33.0° / 50.0°	2009
Efficiency	89 %	2000
Peak intensity	2.9 cd/lm	1009
LEDs/each optic	1	100
Light colour	White	1200 -
Required components:		1000
		····
		••••
	JS	90* 90*
LED	SST-20	
FWHM / FWTM	26.0° / 42.0°	75*
Efficiency	26.0° / 42.0° 91 %	$  \ \rangle \rangle   \land \rangle   \land \rangle  $
-	4.5 cd/lm	60* 60*
Peak intensity		
LEDs/each optic	1 White	an an a
Light colour	White	
Required components:		3320
		$\times$ / $\vee$ $\times$
		30° 30° 30°
1		10 9 10
	JS	90* 90* 90*
LED	SST-70X-WCS	
LED FWHM / FWTM	SST-70X-WCS 30.0° / 50.0 + 48.0°	90 <sup>4</sup> 90 <sup>4</sup>
LED FWHM / FWTM Efficiency	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 %	30°
LED FWHM / FWTM Efficiency Peak intensity	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1	90° 10° 10° 10° 10° 10° 10° 10° 10° 10° 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1	94 95 95 95 95 95 95 95 95 95 95
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1	20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1	94 95 95 95 95 95 95 95 95 95 95
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1	20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1 White COB S-Type (LES 7)	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1 White COB S-Type (LES 7) 32.0° / 58.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1 White COB S-Type (LES 7) 32.0° / 58.0° 91 %	2100 210 21
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1 White COB S-Type (LES 7) 32.0° / 58.0° 91 % 2.5 cd/lm	2100 210 21
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1 White COB S-Type (LES 7) 32.0° / 58.0° 91 % 2.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1 White COB S-Type (LES 7) 32.0° / 58.0° 91 % 2.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1 White COB S-Type (LES 7) 32.0° / 58.0° 91 % 2.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SST-70X-WCS 30.0° / 50.0 + 48.0° 85 % 3.1 cd/lm 1 White COB S-Type (LES 7) 32.0° / 58.0° 91 % 2.5 cd/lm 1	



<b>WICHIA</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	COB T-Type 30.0° / 56.0° 91 % 2.9 cd/lm 1 White	20 20 20 20 20 20 20 20 20 20
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NCSxE17A 24.0° / 44.0° 88 % 4.5 cd/lm 4 White	10. 20.
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NFMW48xA 25.0° / 47.0° 92 % 4.3 cd/lm 1 White	20° - 22° - 22° - 22° - 22°
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NV4WB35AM 25.0° / 44.0° 91 % 4.4 cd/m 1 White	90° 90° 90° 90° 90° 90° 90° 90° 90° 90°



<b>Ø</b> ΝΙCΗΙΛ		30°
LED	NV4x144A	
FWHM / FWTM	31.0° / 54.0°	
Efficiency	86 %	60 <sup>4</sup> 60 <sup>4</sup>
Peak intensity	2.7 cd/lm	
LEDs/each optic	1	
Light colour	White	47°
Required components:		200



#### **GENERAL INFORMATION:**

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.

#### **MATERIALS:**

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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.

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#### LEDiL Oy

Joensuunkatu 13 FI-24240 SALO Finland

#### LEDiL Inc.

228 West Page Street Suite D Sycamore IL 60178 USA

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

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