

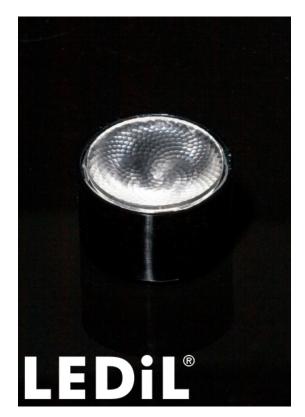
PRODUCT DATASHEET CA16128_OLGA-M

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:

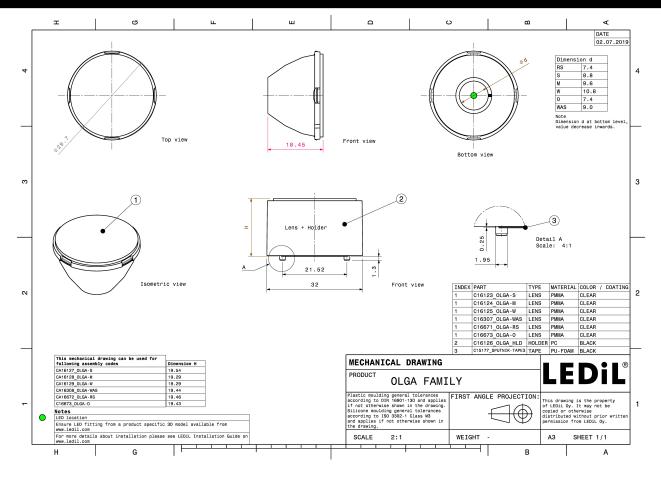
Component OLGA-M OLGA-HLD SPUTNIK-TAPE3 **Type** Single lens Holder Tape

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>



CDEE A MER			
	D		90*
LED			
FWHM / FWTM	26.0° / 48.0°		
Efficiency	80 %		
Peak intensity	3.2 cd/lm		
LEDs/each optic	1		
Light colour	White		97
Required compone			
			30-
	_		(15° 0° 15°
			90°
LED	XHP35 HD		75*
FWHM / FWTM	32.0° / 58.0°		
Efficiency	80 %		50°
Peak intensity	2.1 cd/lm		
LEDs/each optic	1		
Light colour	White		5× / /
Required compone	nts:		1600
			30° 155 0° 155
	0		909
LED	XHP35 HI		
FWHM / FWTM			
	28.0° / 51.0°		
	28.0° / 51.0° 84 %		80
Efficiency	84 %		90 90
Efficiency Peak intensity			9
Efficiency	84 % 2.8 cd/lm		50 60 60 60 60 60 60 60 60 60 60 60 60 60
Efficiency Peak intensity LEDs/each optic	84 % 2.8 cd/lm 1 White		9
Efficiency Peak intensity LEDs/each optic Light colour	84 % 2.8 cd/lm 1 White		9
Efficiency Peak intensity LEDs/each optic Light colour	84 % 2.8 cd/lm 1 White		9
Efficiency Peak intensity LEDs/each optic Light colour	84 % 2.8 cd/lm 1 White		9
Efficiency Peak intensity LEDs/each optic Light colour Required component	84 % 2.8 cd/lm 1 White nts:		9
Efficiency Peak intensity LEDs/each optic Light colour Required component	84 % 2.8 cd/lm 1 White nts:		
Efficiency Peak intensity LEDs/each optic Light colour Required component	84 % 2.8 cd/lm 1 White nts:		
Efficiency Peak intensity LEDs/each optic Light colour Required component CREE LED LED FWHM / FWTM	84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0°		
Efficiency Peak intensity LEDs/each optic Light colour Required component CREE (LED FWHM / FWTM Efficiency	84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0° 81 %		
Efficiency Peak intensity LEDs/each optic Light colour Required component CREE LED EWHM / FWTM Efficiency Peak intensity	84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0° 81 % 2.1 cd/lm		
Efficiency Peak intensity LEDs/each optic Light colour Required component CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0° 81 % 2.1 cd/lm 1		
Efficiency Peak intensity LEDs/each optic Light colour Required component CREEC/LED LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0° 81 % 2.1 cd/lm 1 White		
Efficiency Peak intensity LEDs/each optic Light colour Required component CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0° 81 % 2.1 cd/lm 1 White		
Efficiency Peak intensity LEDs/each optic Light colour Required component CREEC/LED LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0° 81 % 2.1 cd/lm 1 White		
Efficiency Peak intensity LEDs/each optic Light colour Required component CREEC/LED LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	84 % 2.8 cd/lm 1 White nts: XHP50 32.0° / 60.0° 81 % 2.1 cd/lm 1 White		



			90* 90
LED	XHP50.2		
FWHM / FWTM	31.0° / 58.0°		75
Efficiency	81 %		
Peak intensity	2.3 cd/lm		60° - 800 - 60°
LEDs/each optic	1		
Light colour	White		43 ¹ 45
Required compone			1600
			364 2450 36
			125 ⁷ 0 ⁶ 135 ⁴
			90* 90'
LED	XHP70		7.
FWHM / FWTM	33.0° / 63.0°		400
Efficiency	82 %		
Peak intensity	2 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required compone	nts:		
			30° 2000 30° 30°
	_		
			90° 80°
		and the second sec	90 ⁴
LED	XHP70.2		20°
LED FWHM / FWTM			757
LED FWHM / FWTM Efficiency	XHP70.2 34.0° / 64.0°		757
LED FWHM / FWTM	XHP70.2 34.0° / 64.0° 81 %		71 400 72 60 60 60
LED FWHM / FWTM Efficiency Peak intensity	XHP70.2 34.0° / 64.0° 81 % 1.9 cd/lm		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XHP70.2 34.0° / 64.0° 81 % 1.9 cd/lm 1 White		71 400 72 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XHP70.2 34.0° / 64.0° 81 % 1.9 cd/lm 1 White		75 40 57 6° 200 60 ° 220 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XHP70.2 34.0° / 64.0° 81 % 1.9 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XHP70.2 34.0° / 64.0° 81 % 1.9 cd/lm 1 White		75 40 57 6° 200 60 ° 220 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP70.2 34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts:		50° 500 500 500 500 500 500 500 500 500
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP70.2 34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP70.2 34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP70.2 34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts: XM-L 31.0° / 55.0°		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP70.2 34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts: XM-L 31.0° / 55.0° 83 %		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP70.2 34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts: XM-L 31.0° / 55.0° 83 % 2.4 cd/lm		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP70.2 34.0° / 64.0° 81 % 1.9 cd/lm 1 White nts: XM-L 31.0° / 55.0° 83 % 2.4 cd/lm 1		
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	XHP70.2 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		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP70.2 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		
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	XHP70.2 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		
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	XHP70.2 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		



			90* 90*
LED	 XM-L3		
FWHM / FWTM	33.0° / 57.0°		75-
Efficiency	81 %		
Peak intensity	2.2 cd/lm		60 ⁵
LEDs/each optic	1		
Light colour	White		gyr
Required compone			
			306 30
			15 ⁹ 2860 15 ⁹
			90° 90°
LED	XP-G2		73.
FWHM / FWTM	30.0° / 53.0°		
Efficiency	83 %		60° 50°
Peak intensity	2.7 cd/lm		
LEDs/each optic	1		1500 at
Light colour	White		
Required compone	nts:		
			200
			30° 0° 35°
			50° 50°
	XP-G3		90°
			90 ⁴
LED	XP-G3		60° 000 26° 000 26° 000
LED FWHM / FWTM Efficiency Peak intensity	XP-G3 31.0° / 54.0°		60 000 60 20 000 000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1		64
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White		6° - 100 - 6°
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	XP-G3 31.0° / 54.0° 82 % 2.5 cd/lm 1 White nts:		0.0° (0°) 0° (0°) 00 (0°) 100 (0°) 100 (0°) 100 (0°) 100 (0°)
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		00 ⁴ 0 0 0 0 0 0 0 0 0 0 0 0 0
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°		0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0
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 %		00 ⁴ 0 0 0 0 0 0 0 0 0 0 0 0 0
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°		0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0
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	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	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		



		50°
LED	XP-L2	
FWHM / FWTM	30.0° / 54.0°	
Efficiency	81 %	
Peak intensity	2.5 cd/lm	
LEDs/each optic	1	
Light colour	White	g. 150
Required componer	nts:	
		30*
	7	25 ⁵ 0 ⁴ 15 ⁵
LED	XQ-E HD	
LED FWHM / FWTM	28.0° / 51.0°	
Efficiency	28.0 7 51.0 76 %	
Peak intensity	2.8 cd/lm	
LEDs/each optic	1	
Light colour	White	gy 1500
Required componer		
		2400
		50°
	XQ-E HI	
		39*
LED	XQ-E HI	
LED FWHM / FWTM	XQ-E HI 27.0° / 49.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XQ-E HI 27.0° / 49.0° 83 %	
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	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White	
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	
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	
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	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White nts:	275
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White hts: XT-E 29.0° / 53.0° 79 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White hts: XT-E 29.0° / 53.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer Required componer LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XQ-E HI 27.0° / 49.0° 83 % 3.1 cd/lm 1 White hts: XT-E 29.0° / 53.0° 79 % 2.6 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	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 componer Required componer 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 componer Required componer 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 componer Required componer 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 ⁴
LEDs/each optic	1	200
Light colour	White	gr .
Required compone	nts:	200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 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 ⁴ 25 ⁴ 0 ⁴ 25 ⁴
🥙 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 ⁴ 00
Peak intensity	2.3 cd/lm	
LEDs/each optic Light colour	1 White	
Required compone		



	EDS	90*
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	907
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	
	EDS	
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 ents:	
Control Contro	LUXEON V 29.0° / 54.0° 82 % 2.6 cd/lm 1 White	



	EDS	9°
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	99°
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 ints:	
	EDS	50° 500
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 Its:	
CONTRACT OF CONTRACT.	LUXEON Z ES 27.0° / 49.0° 85 % 3.3 cd/lm 1 White	



ED 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/Im 1 White		
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSW319B 34.0° / 56.0° 84 % 2.3 cd/Im 1 White		94 ⁴ 95 ⁴ 96 ⁵ 96 ⁶ 96 ⁶ 96 ⁶ 96 ⁶ 96 ⁶ 96 ⁶ 96 ⁶ 96 ⁶ 96 ⁷ 96 ⁶ 96 ⁷ 96 ⁶ 96 ⁷ 96 ⁷ 9
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		2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 200 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2



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 ents:	
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 ⁻
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



0000444		
OSRAM Opto Semiconductors		501 50
LED	OSLON Square PC	
FWHM / FWTM	29.0° / 52.0°	
Efficiency	82 %	
Peak intensity	2.8 cd/lm	
LEDs/each optic	1	
Light colour	White	g* (g* (g* (g* (g*))))
Required compone	nts:	
		30
0000444		47
OSRAM Opto Semiconductors		50 ¹
LED	OSLON SSL 150	
FWHM / FWTM	30.0° / 51.0°	
Efficiency	82 %	
Peak intensity	2.7 cd/lm	
LEDs/each optic	1	
Light colour	White	g* <mark>- 100 - 1</mark> 0
Required compone	nts:	
		300
i i i i i i i i i i i i i i i i i i i		
OSRAM		
OSRAM Opto Semiconductors		30 ⁵ 0 ⁴ 12 ⁵
Opto Semiconductors	OSLON SSL 80	
opto Semiconductors LED FWHM / FWTM	28.0° / 51.0°	9 ¹
opto Semiconductors LED FWHM / FWTM Efficiency	28.0° / 51.0° 82 %	397 95
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	28.0° / 51.0° 82 % 2.9 cd/lm	397 95
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	28.0° / 51.0° 82 % 2.9 cd/lm 1	397 95
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 51.0° 82 % 2.9 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	28.0° / 51.0° 82 % 2.9 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 51.0° 82 % 2.9 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 51.0° 82 % 2.9 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 51.0° 82 % 2.9 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 51.0° 82 % 2.9 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	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 compone OSRAM Opto Semiconductors LED	28.0° / 51.0° 82 % 2.9 cd/lm 1 White nts: OSTAR Stage (S2WN)	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED FWHM / FWTM	28.0° / 51.0° 82 % 2.9 cd/lm 1 White nts: OSTAR Stage (S2WN) 26.0° / 50.0°	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM 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 %	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM 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	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSSRAM 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 compone OSCRAM 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 compone OSSRAM 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 compone OSCRAM 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 compone OSCRAM 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	



S ΛΜSΙ	JNG	30/*
LED	LH181A	
FWHM / FWTM	22.0° / 44.0°	
Efficiency	81 %	
Peak intensity	4 cd/lm	80 ⁴
LEDs/each optic	1	
Light colour	White	97 300 67
Required compone		
		200
		3/*
0 0 0 0 0 0 0		25 0, 25
SΛMSL	JNG	<u>30</u> *
LED	LH181B	
FWHM / FWTM	23.0° / 45.0°	
Efficiency	85 %	61× 61×
Peak intensity	3.4 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	ents:	
		320
		30
1		
CUWCI	ING	
SAMSI		90* 90*
LED	LH231B	35. 36, 36, 36, 36, 36, 36, 36, 36, 36, 36,
LED FWHM / FWTM	LH231B 24.0° / 47.0°	25- 25- 25- 25- 25-
LED FWHM / FWTM Efficiency	LH231B 24.0° / 47.0° 86 %	6)4 22- 22-
LED FWHM / FWTM Efficiency Peak intensity	LH231B 24.0° / 47.0° 86 % 3.7 cd/lm	90 ⁴ 97 95 96 96 96 96 96 96 96 96 96 96 96 96 96
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH231B 24.0° / 47.0° 86 % 3.7 cd/lm 1	90 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH231B 24.0° / 47.0° 86 % 3.7 cd/lm 1 White	90 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH231B 24.0° / 47.0° 86 % 3.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH231B 24.0° / 47.0° 86 % 3.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH231B 24.0° / 47.0° 86 % 3.7 cd/lm 1 White	
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	
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	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH231B 24.0° / 47.0° 86 % 3.7 cd/lm 1 White	
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:	
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:	
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: JNG LH351B 30.0° / 53.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SANSU LED FWHM / FWTM Efficiency	LH231B 24.0° / 47.0° 86 % 3.7 cd/lm 1 White ents: JNG LH351B 30.0° / 53.0° 84 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SANSU LED FWHM / FWTM Efficiency Peak intensity	LH231B 24.0° / 47.0° 86 % 3.7 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH231B 24.0° / 47.0° 86 % 3.7 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SANNSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH231B 24.0° / 47.0° 86 % 3.7 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH231B 24.0° / 47.0° 86 % 3.7 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH231B 24.0° / 47.0° 86 % 3.7 cd/lm 1 White ents:	



SAMSU	ING		90*	90*
LED	LH351C			\wedge
FWHM / FWTM	31.0° / 53.0°		75*	7
Efficiency	85 %			
Peak intensity	2.7 cd/lm		60*	
LEDs/each optic	1			
Light colour	White		974	1600 47*
Required compone				
			\sim	
				2130
			15°	0° 32°
SAMSU	JNG		90*	90*
LED	LH351D			
FWHM / FWTM	33.0° / 57.0°		75*	
Efficiency	83 %		60.5	50°
Peak intensity	2.2 cd/lm			
LEDs/each optic	1			
Light colour	White		45*	43.
Required compone	nts:			1600
				3(*
1			<i>"</i>	
слисі			157	2800 15*
SNMSI			90*	380 13*
LED	LH508A		20 ⁴	
LED FWHM / FWTM	LH508A 28.0° / 53.0°		32. 26. 26.	20 20 20 20 20 20 20 20 20 20 20 20 20 2
LED FWHM / FWTM Efficiency	LH508A 28.0° / 53.0° 85 %		94 94 75	
LED FWHM / FWTM Efficiency Peak intensity	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm		60 e	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm 1		54 554 73 004	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm 1 White		95 95 77 77 77 77 77	000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm 1 White		20 20 20 20 20 20 20 20 20 20 20 20 20 2	90 - 100 - 67
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm 1 White		97 97 97	000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm 1 White		5°	- 500
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm 1 White		50	90 90 90 90 90 90
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		24 25 25 25 25 25 25 25 25 25 25 25 25 25	- 300
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 Ints:			- 300
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 Ints:			00 00 00 00 00 00 00 00 00 00
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 Ints:			- 300
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm 1 White Ints: JNG LM302A 25.0° / 48.0° 85 %			00 00 00 00 00 00 00 00 00 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency Peak intensity	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm 1 White Ints:			00 00 00 00 00 00 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm 1 White ints:			00 00 00 00 00 00 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm 1 White ints:			00 00 00 00 00 00 00 00 00 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSI LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm 1 White ints:			00 00 00 00 00 00 00 00 00 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSI LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm 1 White ints:			200 200 200 200 200 200 200 200 200 200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH508A 28.0° / 53.0° 85 % 2.9 cd/lm 1 White ints:			00 00 00 00 00 00 00 00 00 00



SAMSI	UNG		90* 90*
LED	LM561B		
FWHM / FWTM	27.0° / 51.0°		23.
Efficiency	85 %		60°- 000
Peak intensity	3.2 cd/lm		
LEDs/each optic	1		1600
Light colour	White		951 43*
Required compone	ents:		
			200
			30* 3220 30*
			15° 0° 15°
			90* 90*
	Z5M3		
SEOUL SEMICONDUCTOR	Z5M3 28.0° / 52.0°		99 ⁴
seoul semiconductor			
seoul semiconductor LED FWHM / FWTM	28.0° / 52.0°		192 100
seoul semiconductor LED FWHM / FWTM Efficiency	28.0° / 52.0° 82 %		25- 69- 72-
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	28.0° / 52.0° 82 % 2.8 cd/lm		192 100
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	28.0° / 52.0° 82 % 2.8 cd/lm 1 White		60° 60°
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 52.0° 82 % 2.8 cd/lm 1 White		90 90 90 90 90 90 90 90 90 90 90 90 90 9
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 52.0° 82 % 2.8 cd/lm 1 White		60° 60°
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 52.0° 82 % 2.8 cd/lm 1 White		90 90 90 90 90 90 90 90 90 90 90 90 90 9



PHOTOMETRIC DATA (SIMULATED):

LED FWHM / FWTM	J Series 5050 Round LES 25.0° / 46.0°	30 ² 30 ²
Efficiency	92 %	60° 50°
Peak intensity	4.3 cd/lm	- 1600
LEDs/each optic	1	
Light colour	White	\$7° (5°
Required components:		300- 200-
		90° 90°
LED	XHP50.3 HD	
FWHM / FWTM	31.0 + 30.0° / 52.0°	
Efficiency	83 %	
Peak intensity	2.7 cd/lm	
LEDs/each optic	1	
Light colour	White	43° - 1630 - 65*
Required components:		29
		30° 125 0° 72° 30°
		90* 5
LED	XHP50.3 HI	
FWHM / FWTM	28.0° / 48.0°	75*
Efficiency	95 %	
Peak intensity	3.4 cd/lm	
LEDs/each optic	1	159
Light colour	White	5° (5°
Required components:		2100 200 200 200 200 200 200 200 200 200
		90° 90°
LED	XHP70.3	
FWHM / FWTM	33.0 + 32.0° / 58.0°	73.
Efficiency	82 %	
Peak intensity	2.3 cd/lm	60 ⁵
LEDs/each optic	1	$ \times / - \setminus \times $
Light colour Required components:	White	gr 60
		304 34.4



PHOTOMETRIC DATA (SIMULATED):

LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XP-G2 HE 33.0° / 50.0° 89 % 2.9 cd/lm 1 White	30 30 30 30 30 30 30 30 30 30
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	COB S-Type (LES 7) 32.0° / 58.0° 91 % 2.5 cd/lm 1 White	200 200 200 200 000 000 000 000
ED 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	594 595 597 597 500 500 500 500 500 500 500 50
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	200



PHOTOMETRIC DATA (SIMULATED):

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	39 32, 6, 72, 9, 22, 32, 9, 9, 9, 32, 30, 9, 9, 9,
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NV4WB35AM 25.0° / 44.0° 91 % 4.4 cd/lm 1 White	94 97 95 96 96 96 96 96 96 97 97 97 97 97 97 97 97 97 97 97 97 97
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NV4x144A 31.0° / 54.0° 86 % 2.7 cd/lm 1 White	200 200 200 200 200 200 200 200



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:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

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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

Local sales and technical support www.ledil.com/ where_to_buy

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