

PRODUCT DATASHEET CA16672_OLGA-RS

OLGA-RS

~9° spot beam beam. Optimized for high-power 3535 size LED packages. Assembly with holder and installation tape.

SPECIFICATION:

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



MATERIALS:

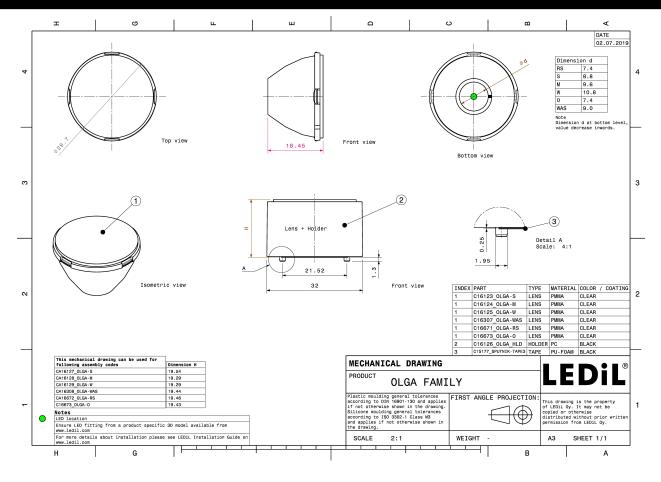
Component
OLGA-RS
OLGA-HLD
SPUTNIK-TAPE3

Туре	Material	Colour	Finish
Single lens	PMMA	clear	
Holder	PC	black	
Таре	Acrylic foam	black	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA16672_OLGA-RS	Single lens	792	132	66	9.8
» Box size: 476 x 273 x 292 mm					

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



		90° 90°
LED	XHP35 HD	
FWHM / FWTM	13.0° / 29.0°	75 75
Efficiency	84 %	
Peak intensity	9.8 cd/lm	60 ⁴
LEDs/each optic	1	
Light colour	White	g [*]
Required componer		600
		\times / \times
		A A A A A A A A A A A A A A A A A A A
		30° 30° 30° 15°
		90* A 50*
LED	XHP35 HI	
FWHM / FWTM	9.0° / 22.0°	75
Efficiency	87 %	
Peak intensity	18.8 cd/lm	
LEDs/each optic	1	$ \times / / \wedge \times $
Light colour	White	45 ² 45 ⁴
Required componer		12000
		\times / \mid / \times
		30 1200 10
		15° 0° 15°
CREE ÷		90* 90*
LEDS	XHP50 2	<u>95</u> *
LED	XHP50.2 17 0° / 41 0°	90°
LED FWHM / FWTM	17.0° / 41.0°	90 ⁴ 90 ⁴
LED LED FWHM / FWTM Efficiency	17.0° / 41.0° 78 %	90° 90° 93° 90° 900 90°
LEDs LED FWHM / FWTM Efficiency Peak intensity	17.0° / 41.0° 78 % 5.1 cd/lm	90° 90° 90°
LEDs FWHM / FWTM Efficiency Peak intensity LEDs/each optic	17.0° / 41.0° 78 % 5.1 cd/lm 1	5°. 5°.
LEDs Efficiency Peak intensity LEDs/each optic Light colour	17.0° / 41.0° 78 % 5.1 cd/lm 1 White	90* 90* 92* 94* 250 200 200 200 200 200
LEDs FWHM / FWTM Efficiency Peak intensity LEDs/each optic	17.0° / 41.0° 78 % 5.1 cd/lm 1 White	
LEDs Efficiency Peak intensity LEDs/each optic Light colour	17.0° / 41.0° 78 % 5.1 cd/lm 1 White	
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LEDs Efficiency Peak intensity LEDs/each optic Light colour Required componer	17.0° / 41.0° 78 % 5.1 cd/lm 1 White	
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LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	17.0° / 41.0° 78 % 5.1 cd/lm 1 White tts:	200 200 200 200 200 200 200 200 200 200
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	17.0° / 41.0° 78 % 5.1 cd/lm 1 White tts: XM-L3	200 200 200 200 200 200 200 200 200 200
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	17.0° / 41.0° 78 % 5.1 cd/lm 1 White tts: XM-L3 11.0° / 25.0°	<u>90³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u>
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer CREE LED FWHM / FWTM Efficiency	17.0° / 41.0° 78 % 5.1 cd/lm 1 White tts: XM-L3 11.0° / 25.0° 86 %	<u>90³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u>
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer CREE LED FWHM / FWTM Efficiency Peak intensity	17.0° / 41.0° 78 % 5.1 cd/lm 1 White tts: XM-L3 11.0° / 25.0° 86 % 13.6 cd/lm	<u>90³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u> <u>10³</u>
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LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	17.0° / 41.0° 78 % 5.1 cd/lm 1 White tts: XM-L3 11.0° / 25.0° 86 % 13.6 cd/lm 1 White	200 200 200 200 200 200 200 200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	17.0° / 41.0° 78 % 5.1 cd/lm 1 White tts: XM-L3 11.0° / 25.0° 86 % 13.6 cd/lm 1 White	200 200 200 200 200 200 200 200
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CREES LED XP-G2 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 28 cd/lm LEDs/each optic 1 Light colour White Required components: ************************************			ED XP-E2 WHM / FVTM 4.9° / 11.6° fificiency 86% eak intensity 50.2 cd/lm EDs/seach optic 1 ight colour White equired components: ED XP-G2 WHM / FVTM 7.0° / 17.0° fificiency 86% eak intensity 28 cd/lm EDs/seach optic 1 ight colour White lequired components: ED XP-G2 WHM / FVTM 7.0° / 17.0° fificiency 86% eak intensity 28 cd/lm EDs/seach optic 1 ight colour White lequired components: ED XP-G3 WHM / FVTM 8.0° / 20.0° fificiency 85% eak intensity 21.8 cd/lm	LED XP-E2 FWHM / FWTM 4.9° / 11.0° Efficiency 86 % Peak intensity 50.2 cd/m LEDs/each optic 1 Light colour White Required components: CREE ÷ LED XP-G2 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 28 cd/m LEDs/each optic 1 Light colour White Required components: CREE ÷ LED XP-G2 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 28 cd/m LEDs/each optic 1 Light colour White Required components: CREE ÷ LED XP-G3 FWHM / FWTM 8.0° / 20.0° Efficiency 85 % Peak intensity 21.8 cd/m	FWHM / FWTM 5.0 / 12.0° Efficiency 87% Required components: CREE ÷ LED XP-E2 EFficiency 86% Peak intensity 90.2 col/m LED/seach optic 1 Light colour White Required components: CREE ÷ LED XP-E2 EFficiency 86% Peak intensity 80.2 col/m LED/seach optic 1 Light colour White Required components: CREE ÷ LED XP-G2 FWHM / FWTM 8.0 / 12.0° Efficiency 86% Peak intensity 28 col/m LED/seach optic 1 Light colour White Required components: CREE ÷ LED XP-G2 FWHM / FWTM 8.0 / 20.0° Efficiency 85% Peak intensity 28 col/m LED/seach optic 1 Light colour White Required components: CREE ÷ LED XP-G2 FWHM / FWTM 8.0 / 20.0° Efficiency 85% Peak intensity 21.8 col/m	reak tintensity 45 6 cd/m EDs/each optio 1 light colour White Required components:	NVML/ FWTM 6.07 / 12.0° Efficiency 87 % Reak Intensity 85.6 c/lm LEDvisech optio 1 Jipt colour White Required components: Image: Components EDV XP-E2 WML / FWTM 4.97 / 11.6° Fillionovy 86 % Peak Intensity 9.02 cold/m LEDvisech optio 1 Jipt colour White Required components: Image: Cold/m CREE Cold XP-62 WML / FWTM 28 cold/m LEDvisech optio 1 Jipt colour White Required components: Image: Cold/m CREE Cold XP-62 WML / FWTM 8.7 / 17.0° Efficiency 86 % Peak Intensity 28 cold/m Lebvisech optio 1 Jipt colour White Required components: Image: Cold/m CREE Cold XP-63 WML / FWTM 8.07 / 20.0° Ifficiency 85 % Weak Intensity 21.8 cold/	LEDs/each optic Light colour Required componer	xP-G3 M 8.0° / 20.0° 85 % 21.8 cd/lm		2000 2007 00 2007 00 2000 2000 2000 200
CREES LED XP-G2 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 28 cd/lm LEDs/each optic 1 Light colour White Required components: Image: CREES Efficiency 85 % Peak intensity 21.8 cd/lm LED XP-G3 FWHM / FWTM 8.0° / 20.0° Efficiency 85 % Peak intensity 21.8 cd/lm LEDs/each optic 1			ED XP-E2 WHM / FWTM 4.9' / 116° fificiency 86 % eak intensity 50.2 cd/lm EDs/each optic 1 ight colour White equired components: ED XP-G2 WHM / FWTM 7.0' / 17.0° fificiency 86 % eak intensity 28 cd/m EDs/each optic 1 ight colour White equired components: ED XP-G2 WHM / FWTM 7.0' / 17.0° fificiency 86 % eak intensity 28 cd/m EDs/each optic 1 ight colour White equired components: ED XP-G3 WHM / FWTM 8.0' / 20.0° fificiency 85 % eak intensity 21.8 cd/m EDs/each optic 1	LED XP-E2 FWHM / FWTM 4.9" / 11.6" Efficiency 86 % Peak intensity 50.2 cd/lm LEDs/each optic 1 Light colour White Required components: CREE \Rightarrow LED XP-G2 FWHM / FWTM 7.0" / 17.0" Efficiency 86 % Peak intensity 28 cd/lm LEDs/each optic 1 LED XP-G3 FWHM / FWTM 8.0" / 20.0" Efficiency 85 % Peak intensity 21.8 cd/lm LED XP-G3 FWHM / FWTM 8.0" / 20.0" Efficiency 85 % Peak intensity 21.8 cd/lm	EWHM // EVTM 50 / 12.0° Efficiency 87 % Peak Intensity 85.6 ddm LEDSeech optic 1 Light colour White Required components: Image: Components in the image: Component in	Peak intensity 45.6 cd/m EDs/lach optic 1 jight colour White Required components:	New Mark Part Table 2007 Efficiency 87% Reak intensity 87% Required components: EDS Accordin LEDS Accordin LEDS Accordin EDS Accordin LEDS Accordin	LEDs/each optic Light colour Required componer CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	xP-G3 M 8.0° / 20.0° 85 % 21.8 cd/lm ttic 1		2000 2007 00 2007 00 2000 2000 2000 200
CREES LED XP-G2 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 28 cd/m LEDs/each optic 1 Light colour White Required components: CREES LED XP-G3 FWHM / FWTM 8.0° / 20.0° Efficiency 85 % Peak intensity 21.8 cd/m LEDs/each optic 1 Light colour White			ED XP-E2 WHM / FWTM 4.9° / 11.0° filiciency 86 % eak intensity 50.2 cd/lm EDs/each optic 1 ight colour White equired components:	LED XP-E2 FWHM / FWTM 4.9° / 11.6° Efficiency 86 % Peak intensity 50.2 cd/lm LEDs/each optic 1 Light colour White Required components: CREE ÷ LED XP-G2 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 28 cd/lm LEDs/each optic 1 Light colour White Required components: CREE ÷ LED XP-G3 FWHM / FWTM 8.0° / 20.0° Efficiency 85 % Peak intensity 21.8 cd/lm LEDs/each optic 1 Light colour White	PVHH / PVTN 5 0° / 12 0° Efficiency 87% Required components: ED XP-E2 EFD XP-E2 EFD XP-E2 EFD XP-E2 EFD XP-E2 EFD XP-E2 Efficiency 86% Peak intensity 0.2 colim LED Xeech optic 1 Light colour White Required components: EFFICIENCE 1 EED XP-G2 FWHM / FVTTM 5.9° / 10.° EFFICIENCE 1 Light colour White Required components: EFFICIENCE 1 EFFICIENCE 1	Peak Intensity 45.6 col/m EDs/each optio 1 Biglic colour White tequired components:	NVMH / FVTM 5.0° / 12.0° EBGRANCY 87 % Assessment optic 1 EDGWach optic 1 EDWind Components: Image: Component is in the image: Com	LEDs/each optic Light colour Required componer	28 cd/lm tic 1 White uponents: XP-G3 M 8.0° / 20.0° 85 % 21.8 cd/lm tic 1 White		2000 2007 00 2007 00 2000 2000 2000 200
CREES LED XP-G2 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 28 cd/lm LEDs/each optic 1 Light colour White Required components: Image: CREES LED XP-G3 FWHM / FWTM 8.0° / 20.0° Efficiency 85 % Peak intensity 21.8 cd/lm LEDs/each optic 1			ED XP-E2 WHM / FWTM 4.9° / 11.0° filiciency 86 % eak intensity 50.2 cd/lm EDs/each optic 1 ight colour White equired components:	LED XP-E2 FWHM / FWTM 4.9' / 11.6° Efficiency 86 % Peak intensity 50.2 cd/lm LEDs/each optic 1 Light colour White Required components: CREE ÷ LED XP-G2 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 28 cd/lm LEDs/each optic 1 Light colour White Required components: CREE ÷ LED XP-G3 FWHM / FWTM 8.0° / 20.0° Efficiency 85 % Peak intensity 21.8 cd/lm LEDs/each optic 1 Light colour White	PVHH / PVTN 5 0° / 12 0° Efficiency 87% Required components: ED XP-E2 EFD XP-E2 EFD XP-E2 EFD XP-E2 EFD XP-E2 EFD XP-E2 Efficiency 86% Peak intensity 0.2 colim LED Xeech optic 1 Light colour White Required components: EFFICIENCE 1 EED XP-G2 FWHM / FVTTM 5.9° / 10.° EFFICIENCE 1 Light colour White Required components: EFFICIENCE 1 EFFICIENCE 1	Peak Intensity 45.6 col/m EDs/each optio 1 Biglic colour White tequired components:	NVMH / FVTM 5.0° / 12.0° EBGRANCY 87 % Assessment optic 1 EDGWach optic 1 EDWind Components: Image: Component is in the image: Com	LEDs/each optic Light colour Required componer	28 cd/lm tic 1 White uponents: XP-G3 M 8.0° / 20.0° 85 % 21.8 cd/lm tic 1 White		2000 2007 00 2007 00 2000 2000 2000 200
CREE ÷ LED XP-G2 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 28 cd/m LEDs/each optic 1 Light colour White Required components: # CREE ÷ # LED XP-G3 FWHM / FWTM 8.0° / 20.0° Efficiency 85 % Peak intensity 21.8 cd/m LEDs/each optic 1 Light colour White			ED XP-E2 WHM / FWTM 4.9° / 11.0° filiciency 86 % eak intensity 50.2 cd/lm EDs/each optic 1 ight colour White equired components:	LED XP-E2 FWHM / FWTM 4.9*/11.6* Efficiency 86 % Peak intensity 50.2 cd/lm LEDs/each optic 1 Light colour White Required components: CREE ÷ LED XP-G2 FWHM / FWTM 7.0*/17.0* Efficiency 86 % Peak intensity 28 cd/lm LEDs/each optic 1 LIght colour White Required components: CREE ÷ FWHM / FWTM 8.0*/20.0* Efficiency 85 % Peak intensity 21.8 cd/lm LEDs/each optic 1 LIght colour White	PVHH / PVTN 5 0° / 12 0° Efficiency 87% Required components: ED XP-E2 EFD XP-E2 EFD XP-E2 EFD XP-E2 EFD XP-E2 EFD XP-E2 Efficiency 86% Peak intensity 0.2 colim LED Xeech optic 1 Light colour White Required components: EFFICIENCE 1 EED XP-G2 FWHM / FVTTM 5.9° / 10.° EFFICIENCE 1 Light colour White Required components: EFFICIENCE 1 EFFICIENCE 1	Peak Intensity 45.6 col/m EDs/each optio 1 Biglic colour White tequired components:	NVMH / FVTM 5.0° / 12.0° EBGRANCY 87 % Assessment optic 1 EDGWach optic 1 EDWind Components: Image: Component is in the image: Com	LEDs/each optic Light colour Required componer	28 cd/lm tic 1 White uponents: XP-G3 M 8.0° / 20.0° 85 % 21.8 cd/lm tic 1 White		2000 2007 00 2007 00 2000 2000 2000 200
CREE ÷ LED XP-G2 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 28 cd/m LEDs/each optic 1 Light colour White Required components: # CREE ÷ # LED XP-G3 FWHM / FWTM 8.0° / 20.0° Efficiency 85 % Peak intensity 21.8 cd/m LEDs/each optic 1 Light colour White			ED XP-E2 WHM / FWTM 4.9° / 11.0° filiciency 86 % eak intensity 50.2 cd/lm EDs/each optic 1 ight colour White equired components:	LED XP-E2 FWHM / FWTM 4.9*/11.6* Efficiency 86 % Peak intensity 50.2 cd/lm LEDs/each optic 1 Light colour White Required components: CREE ÷ LED XP-G2 FWHM / FWTM 7.0*/17.0* Efficiency 86 % Peak intensity 28 cd/lm LEDs/each optic 1 LIght colour White Required components: CREE ÷ FWHM / FWTM 8.0*/20.0* Efficiency 85 % Peak intensity 21.8 cd/lm LEDs/each optic 1 LIght colour White	PVHH / PVTN 5 0° / 12 0° Efficiency 87% Required components: ED XP-E2 EFD XP-E2 EFD XP-E2 EFD XP-E2 EFD XP-E2 EFD XP-E2 Efficiency 86% Peak intensity 0.2 colim LED Xeech optic 1 Light colour White Required components: EFFICIENCE 1 EED XP-G2 FWHM / FVTTM 5.9° / 10.° EFFICIENCE 1 Light colour White Required components: EFFICIENCE 1 EFFICIENCE 1	Peak Intensity 45.6 col/m EDs/each optio 1 Biglic colour White tequired components:	NVMH / FVTM 5.0° / 12.0° EBGRANCY 87 % Assessment optic 1 EDGWach optic 1 EDWind Components: Image: Component is in the image: Com	LEDs/each optic Light colour Required componer	28 cd/lm tic 1 White uponents: XP-G3 M 8.0° / 20.0° 85 % 21.8 cd/lm tic 1 White		2000 2007 00 2007 00 2000 2000 2000 200
	150 30	34			FWHM / FWTM 5.0° / 12.0° Efficiency 87 % Peak intensity 45.6 cd/lm LEDs/each optic 1	Peak intensity 45.6 cd/lm EDs/each optic 1	FWHM / FWTM 5.0° / 12.0° Efficiency 87 % Peak intensity 45.6 cd/lm LEDs/each optic 1				$\times / 1 \setminus X$
CREE ÷	137 36	x	required components:	Required components:	FWHM / FWTM 5.0° / 12.0° Efficiency 87 % Peak intensity 45.6 cd/lm	Peak intensity 45.6 cd/lm	FWHM / FWTM 5.0° / 12.0° Efficiency 87 % Peak intensity 45.6 cd/lm			Ψ.	
Light colour White Required components:	330	x [*]	ight colour White	Light colour White	FWHM / FWTM 5.0° / 12.0° Efficiency 87 %		FWHM / FWTM 5.0° / 12.0° Efficiency 87 %				
LEDs/each optic 1 Light colour White Required components:	8	v	EDs/each optic 1 ight colour White	LEDs/each optic 1 Light colour White	FWHM / FWTM 5.0° / 12.0°		FWHM / FWTM 5.0° / 12.0°				
Peak intensity 45.6 cd/lm LEDs/each optic 1 Light colour White Required components:	- <u>10</u> - <u>10</u> - <u>10</u>		eak intensity 45.6 cd/lm EDs/each optic 1 ight colour White	Peak intensity 45.6 cd/lm LEDs/each optic 1 Light colour White			75				
Efficiency 87 % Peak intensity 45.6 cd/lm LEDs/each optic 1 Light colour White Required components:	g d d d d	51 97 97 97	fficiency 87 % eak intensity 45.6 cd/lm EDs/each optic 1 ight colour White	Efficiency 87 % Peak intensity 45.6 cd/lm LEDs/each optic 1 Light colour White		755	ED YP.E			25	
FWHM / FWTM 5.0° / 12.0° Efficiency 87 % Peak intensity 45.6 cd/lm LEDs/each optic 1 Light colour White Required components:		200 200 200 200 200 200 200 200	WHM / FWTM 5.0° / 12.0° fficiency 87 % eak intensity 45.6 cd/lm EDs/each optic 1 ight colour White	FWHM / FWTM 5.0° / 12.0° Efficiency 87 % Peak intensity 45.6 cd/lm LEDs/each optic 1 Light colour White				LED	XP-E		
FWHM / FWTM 5.0° / 12.0° Efficiency 87 % Peak intensity 45.6 cd/lm LEDs/each optic 1 Light colour White Required components: CREE C		200 200 200 200 200 200 200 200	WHM / FWTM 5.0° / 12.0° fficiency 87 % eak intensity 45.6 cd/lm EDs/each optic 1 ight colour White	FWHM / FWTM 5.0° / 12.0° Efficiency 87 % Peak intensity 45.6 cd/lm LEDs/each optic 1 Light colour White			LEDS	LED	XP-E		



		50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-L2 12.0° / 29.0° 83 % 10.7 cd/lm 1 White ents:	
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XQ-E HD 5.0° / 13.0° 79 % 42 cd/lm 1 White ents:	
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XQ-E HI 3.0° / 9.0° 84 % 70 cd/lm 1 White ents:	
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XT-E 8.0° / 19.0° 83 % 21.2 cd/lm 1 White ents:	



-			
🥙 LUMIL	.EDS	50*	90*
LED	LUXEON 5050 Round LES		$A \land b \downarrow$
FWHM / FWTM	14.0° / 38.0°	73	1600
Efficiency	86 %		
Peak intensity	7.1 cd/lm		
LEDs/each optic	1		
Light colour	White	g-	43*
Required compone		34 394	6° 130 34°
🖉 LUMIL	.EDS	99*	A 90°
LED	LUXEON MZ		
FWHM / FWTM	11.0° / 30.0°	73	
Efficiency	85 %	en	
Peak intensity	11.1 cd/lm		
LEDs/each optic	1		(X)
Light colour	White	g.	6430 45*
Required compone	ents:		
		200	0 ⁶ 32 ⁵
🖉 LUMIL	.EDS	25 ⁴ 25 ⁴	0 ⁰ 15 ⁴
	.EDS LUXEON TX	99 ⁴ 257	0° 13°
		20 ⁴ 20 ⁴ 23	
LED	LUXEON TX	80× 33× 54×	6° 22°
LED FWHM / FWTM	LUXEON TX 7.0° / 18.0°	61. 22. 23. 24. 25. 25. 25. 25. 25. 25.	90, 72, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10
LED FWHM / FWTM Efficiency	LUXEON TX 7.0° / 18.0° 86 %	9 - 25 - 25 - 25 - 25 - 25 - 25 - 25 - 2	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON TX 7.0° / 18.0° 86 % 24.8 cd/lm 1 White	20 ⁴ 20 ⁴	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON TX 7.0° / 18.0° 86 % 24.8 cd/lm 1 White	20 10 10 10 10 10 10 10 10 10 10 10 10 10	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON TX 7.0° / 18.0° 86 % 24.8 cd/lm 1 White ents:	73 54 54 55 55 55 55 55 55 55 55	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON TX 7.0° / 18.0° 86 % 24.8 cd/lm 1 White ents:	34 34	2000 - 200 2000 - 200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON TX 7.0° / 18.0° 86 % 24.8 cd/lm 1 White ents:	73 54 54 55 55 55 55 55 55 55 55	2000 2000 2000 2000 2000 2000 2000 200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON TX 7.0° / 18.0° 86 % 24.8 cd/lm 1 White ents: EDS LUXEON V 11.0° / 28.0°	202 202 202 202 202 202 202	2000 2000 2000 2000 2000 2000 2000 2000 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON TX 7.0° / 18.0° 86 % 24.8 cd/lm 1 White ents: EDS LUXEON V 11.0° / 28.0° 84 %	202 202 202 202 202 202 202	2000 2000 2000 2000 2000 2000 2000 2000 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Model of the second second Required compone Efficiency Peak intensity	LUXEON TX 7.0° / 18.0° 86 % 24.8 cd/lm 1 White ents: LUXEON V 11.0° / 28.0° 84 % 11.7 cd/lm	202 202 202 202 202 202 202	2000 2000 2000 2000 2000 2000 2000 2000 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Mediate Compone Efficiency Peak intensity LEDs/each optic	LUXEON TX 7.0° / 18.0° 86 % 24.8 cd/lm 1 White ents: EDS LUXEON V 11.0° / 28.0° 84 % 11.7 cd/lm 1	202 202 202 202 202 202 202	2000 2000 2000 2000 2000 2000 2000 200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Model of the second second Required compone Efficiency Peak intensity	LUXEON TX 7.0° / 18.0° 86 % 24.8 cd/lm 1 White ents: EDS LUXEON V 11.0° / 28.0° 84 % 11.7 cd/lm 1 White	201 201 201 201 201 201 201	2000 2000 2000 2000 2000 2000 2000 200



🕐 LUMIL	EDS	90 ⁴	90*
LED	LUXEON Z ES		
FWHM / FWTM	5.0° / 12.0°	72	25*
Efficiency	87 %		
Peak intensity	44.5 cd/lm		
LEDs/each optic	1		
Light colour	White	gr	45°
Required component			
		20 ⁻ 20 ⁻ 4 ⁻ 20 ⁻	36.0
ØNICHI		90 ⁴	90°
LED	NCSxE17A	25	75*
FWHM / FWTM	4.0° / 13.0°		
Efficiency	83 %	er	60°
Peak intensity	37.1 cd/lm		
LEDs/each optic	1		
Light colour	White	o.	45°
Required compone	nts:	200	
		34 ² 29 of 29	36°
ØNICHI		24	90°
LED	NV4x144A		
LED FWHM / FWTM	NV4x144A 18.0° / 39.0°		75*
		27	
FWHM / FWTM	18.0° / 39.0°	61	
FWHM / FWTM Efficiency	18.0° / 39.0° 83 %	50 - 100 - 1	
FWHM / FWTM Efficiency Peak intensity	18.0° / 39.0° 83 % 5.5 cd/lm	27 54 54 59 59 59 50 50 50 50 50 50 50 50 50 50 50 50 50	75°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	18.0° / 39.0° 83 % 5.5 cd/lm 1 White	27 94 97 97 97 97 97 97 97 97 97 97 97 97 97	60°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	18.0° / 39.0° 83 % 5.5 cd/lm 1 White		60°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	18.0° / 39.0° 83 % 5.5 cd/lm 1 White	27 er 70 70 70 70 70 70 70 70 70 70 70	63°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	18.0° / 39.0° 83 % 5.5 cd/lm 1 White		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	18.0° / 39.0° 83 % 5.5 cd/lm 1 White nts:		80°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	18.0° / 39.0° 83 % 5.5 cd/lm 1 White nts:		00°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	18.0° / 39.0° 83 % 5.5 cd/lm 1 White nts:		90°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component MICHIA LED FWHM / FWTM	18.0° / 39.0° 83 % 5.5 cd/lm 1 White nts: NVSW219D 9.0° / 19.0°		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component MICHIA LED FWHM / FWTM Efficiency	18.0° / 39.0° 83 % 5.5 cd/lm 1 White nts: NVSW219D 9.0° / 19.0° 87 %		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Efficiency Peak intensity	18.0° / 39.0° 83 % 5.5 cd/lm 1 White nts: NVSW219D 9.0° / 19.0° 87 % 21 cd/lm		29 29 29 29 29 29 29 29 29 29 29 29 29 2
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component MICHIO Efficiency Peak intensity LEDs/each optic	18.0° / 39.0° 83 % 5.5 cd/lm 1 White nts: NVSW219D 9.0° / 19.0° 87 % 21 cd/lm 1		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Minimum Component Required component Component Required component Required component Peak intensity LEDs/each optic Light colour	18.0° / 39.0° 83 % 5.5 cd/lm 1 White nts: NVSW219D 9.0° / 19.0° 87 % 21 cd/lm 1 White		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component MICHIO Efficiency Peak intensity LEDs/each optic	18.0° / 39.0° 83 % 5.5 cd/lm 1 White nts: NVSW219D 9.0° / 19.0° 87 % 21 cd/lm 1 White		6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Minimum Component Required component Component Required component Required component Peak intensity LEDs/each optic Light colour	18.0° / 39.0° 83 % 5.5 cd/lm 1 White nts: NVSW219D 9.0° / 19.0° 87 % 21 cd/lm 1 White		
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Efficiency Peak intensity LEDs/each optic Light colour	18.0° / 39.0° 83 % 5.5 cd/lm 1 White nts: NVSW219D 9.0° / 19.0° 87 % 21 cd/lm 1 White		97 97 97 97 97 97 97 97 97 97 97 97 97 9



ØNICHI		30*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSW319B 10.0° / 23.0° 87 % 16.1 cd/lm 1 White ents:	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSW719AC 8.0° / 19.0° 91 % 24.6 cd/lm 1 White	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSxE21A 5.0° / 16.0° 84 % 27.4 cd/lm 1 White	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSxx19B/NVSxx19C 8.0° / 20.0° 85 % 20.7 cd/lm 1 White	



OSRAM Opto Semiconductors	50°
LED OSCONIQ P 3737 (2W version)	
FWHM / FWTM 6.0° / 17.0°	77
Efficiency 86 %	61 ¹
Peak intensity 26.7 cd/lm	$\mathbf{K} \propto (\mathbf{H} \times \mathbf{A})$
LEDs/each optic 1	
Light colour White	gr
Required components:	309
	34
OCDAM	100 - 100 -
OSRAM Opto Semiconductors	50* 50*
LED OSCONIQ P 3737 (3W version)	
FWHM / FWTM 10.0° / 25.0°	
Efficiency 85 %	
Peak intensity 14.5 cd/lm	
LEDs/each optic 1	
Light colour White	er
Required components:	
	30.
	15° 1000 25°
000444	
OSRAM Opto Semiconductors	90° A 90°
OSRAM Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3	
Opto Semiconductors	35°
Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 7.0° / 17.0° Efficiency 86 %	
Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 26.6 cd/lm	
Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 26.6 cd/lm LEDs/each optic 1	79°
Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 26.6 cd/lm LEDs/each optic 1 Light colour White	
Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 26.6 cd/lm LEDs/each optic 1	79°
Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 26.6 cd/lm LEDs/each optic 1 Light colour White	79°
Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 26.6 cd/lm LEDs/each optic 1 Light colour White	79°
Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 26.6 cd/lm LEDs/each optic 1 Light colour White	79
Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 26.6 cd/lm LEDs/each optic 1 Light colour White Required components:	
Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 26.6 cd/lm LEDs/each optic 1 Light colour White Required components:	
Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 26.6 cd/lm LEDs/each optic 1 Light colour White Required components: Image: Component State Sta	
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Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 7.0° / 17.0° Efficiency 86 % Peak intensity 26.6 cd/lm LEDs/each optic 1 Light colour White Required components: Image: Component State Sta	



SΛMS	UNG	50 ⁴
LED	LH231B	
FWHM / FWTM	7.0° / 24.0°	R. S.
Efficiency	86 %	
Peak intensity	18 cd/lm	
LEDs/each optic	1	
Light colour	White	gr dr
Required compone		1300
		30" 32"
SAMSI		25
		99*
LED	LH351B	22
FWHM / FWTM	8.0° / 19.0°	
Efficiency	86 %	60× 60*
Peak intensity	21.8 cd/lm	
LEDs/each optic	1	
Light colour	White	49 ⁴
Required compone	ents:	
SAMSI	ING	25° ¹⁰ 19° 25
SAMSU		94 [*]
LED	LH351C	20° W 12°
LED FWHM / FWTM	LH351C 9.0° / 21.0°	
LED FWHM / FWTM Efficiency	LH351C 9.0° / 21.0° 87 %	
LED FWHM / FWTM Efficiency Peak intensity	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White ents:	75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White ents: UNG LH351D 12.0° / 26.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSI LED FWHM / FWTM Efficiency	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White ents: UNG LH351D 12.0° / 26.0° 86 %	75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency Peak intensity	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White ents: UNG LH351D 12.0° / 26.0° 86 % 12.1 cd/lm	20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White ents: UNC LH351D 12.0° / 26.0° 86 % 12.1 cd/lm 1 White	50 50 50 32
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	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White ents: UNC LH351D 12.0° / 26.0° 86 % 12.1 cd/lm 1 White	50 50 50 32
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	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White ents: UNC LH351D 12.0° / 26.0° 86 % 12.1 cd/lm 1 White	27
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	LH351C 9.0° / 21.0° 87 % 19.5 cd/lm 1 White ents: UNC LH351D 12.0° / 26.0° 86 % 12.1 cd/lm 1 White	27



SAMS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH508A 14.0° / 38.0° 86 % 7.4 cd/lm 1 White	
seoul SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	WICOP 5050 18.0° / 40.0° 87 % 5.3 cd/lm 1 White ents:	
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Z5M3 9.0° / 23.0° 83 % 16 cd/lm 1 White ents:	



bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	V4 HD Gen 7 16.0° / 31.0° 96 % 9.3 cd/lm 1 White	50° 50° 50° 50° 60° 50° 60° 50° 60° 50° 60° 50° 60°
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	J Series 5050 Round LES 14.0° / 33.0° 93 % 10.1 cd/lm 1 White	27 0° 12 0°
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XHP35.2 HD 16.0° / 30.0° 89 % 9.2 cd/lm 1 White	25
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XHP50.3 HD 16.0 + 18.0° / 32.0° 89 % 7.7 cd/lm 1 White	200 000 12° 20°



CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XM-L 12.0° / 23.0° 94 % 16 cd/lm 1 White	30, 0, 12, 0, 60, 200, 0, 0, 61, 200, 0, 0, 12, 200, 0, 0, 12, 200, 0, 0, 12, 200, 0, 0, 13, 200, 0, 0, 14, 200, 0, 0,
LEDs EWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XP-G2 HE 10.0° / 20.0° 93 % 20.8 cd/lm 1 White	24 U U U U U U U U U U U U U U U U U U U
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XP-L HI 8.0° / 15.0° 92 % 33 cd/lm 1 White	20 20 21 22 22 22 22 22 22 22 22 22 22 22 22
CREE ≑		



	DS	50° A 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 7070 19.0° / 49.0° 95 % 4.3 cd/lm 1 White	2000 60 ⁻
	DS S	90* 90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON C 6.0° / 14.0° 89 % 41 cd/lm 1 White	27 60 67 700 700 700 700 700 80 80 80 80 80 80 80 80 80 80 80 80 8
)S	20 ⁴ 20 ¹ 20 ² 30 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON CZ 6.0° / 12.0° 93 % 63.5 cd/lm 1 White	
		34° 557 6° 357
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SST-40 12.0° / 24.0° 93 % 14.9 cd/lm 1 White	5% 50% 6% 6% 60% 6% 1000 1000 6%



	S	90* A 90*
LED FWHM / FWTM	SST-70X-WCS 14.0° / 28.0°	
Efficiency	94 % 10.9 cd/lm	60°
Peak intensity LEDs/each optic	10.9 cd/m	
Light colour	White	67 ⁴ 6430
Required components:		30 ⁴ 0 ⁴ 10 ³ 30 ⁴
Μ ΝΙCΗΙΛ		90*
LED	COB S-Type (LES 7)	
FWHM / FWTM	16.0° / 52.0°	$ \times / $
Efficiency	84 %	60° / / / 60
Peak intensity	3.9 cd/lm	1600
LEDs/each optic	1	$X \times A \to X \times$
Light colour	White	43, 42, 42,
Required components:		
		30° 4000 30° 30°
Μ ΝΙCΗΙΛ		90* 90*
LED	СОВ Т-Туре	
		75°
FWHM / FWTM	16.0° / 48.0°	
Efficiency	16.0° / 48.0° 86 %	
		2- 9- 9-
Efficiency Peak intensity LEDs/each optic	86 %	
Efficiency Peak intensity LEDs/each optic Light colour	86 % 4.7 cd/lm	
Efficiency Peak intensity LEDs/each optic	86 % 4.7 cd/lm 1	100 CO
Efficiency Peak intensity LEDs/each optic Light colour	86 % 4.7 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour	86 % 4.7 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour	86 % 4.7 cd/lm 1	94* 1000 (6) 25* (3)
Efficiency Peak intensity LEDs/each optic Light colour Required components:	86 % 4.7 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour Required components:	86 % 4.7 cd/lm 1	20, 20,
Efficiency Peak intensity LEDs/each optic Light colour Required components:	86 % 4.7 cd/lm 1 White	200 000 000 200 000 200 000
Efficiency Peak intensity LEDs/each optic Light colour Required components:	86 % 4.7 cd/lm 1 White NV4WB35AM	20, 20,
Efficiency Peak intensity LEDs/each optic Light colour Required components:	86 % 4.7 cd/lm 1 White NV4WB35AM 12.0° / 26.0°	
Efficiency Peak intensity LEDs/each optic Light colour Required components:	86 % 4.7 cd/lm 1 White NV4WB35AM 12.0° / 26.0° 94 % 13.8 cd/lm 1	20, 20,
Efficiency Peak intensity LEDs/each optic Light colour Required components:	86 % 4.7 cd/lm 1 White NV4WB35AM 12.0° / 26.0° 94 % 13.8 cd/lm	
Efficiency Peak intensity LEDs/each optic Light colour Required components:	86 % 4.7 cd/lm 1 White NV4WB35AM 12.0° / 26.0° 94 % 13.8 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour Required components:	86 % 4.7 cd/lm 1 White NV4WB35AM 12.0° / 26.0° 94 % 13.8 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour Required components:	86 % 4.7 cd/lm 1 White NV4WB35AM 12.0° / 26.0° 94 % 13.8 cd/lm 1	



Μ ΝΙCΗΙΛ		90° 90°
LED	NV4WB35AM	
FWHM / FWTM	12.0° / 26.0°	25
Efficiency	93 %	
Peak intensity	13.3 cd/lm	50°
LEDs/each optic	1	630
Light colour	White	g
Required components:		
		30 15° 0° 15°
OSRAM Opto Semiconductors		90* 90*
LED	OSLON PURE 1010	
FWHM / FWTM	14.0° / 36.0°	25
Efficiency	88 %	
Peak intensity	8.1 cd/lm	2200
LEDs/each optic	9	
Light colour	White	97 ST
Required components:		
		6130
		300
		15° 0° 15°
OSRAM Onto Semiconductors		90 ⁴ 90 ⁴
OSRAM Opto Semiconductors		9 ⁴
Opto Semiconductors	SFH 4170S	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
Opto Semiconductors	SFH 4170S 6.0° / 12.0°	
Opto Semiconductors LED FWHM / FWTM	6.0° / 12.0°	
^{opto Semiconductors} LED FWHM / FWTM Efficiency		
Opto Semiconductors LED FWHM / FWTM	6.0° / 12.0° 82 %	
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic	6.0° / 12.0° 82 % 1	77 66* 700
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	6.0° / 12.0° 82 % 1	77 66* 700
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	6.0° / 12.0° 82 % 1	77 66* 72*0
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	6.0° / 12.0° 82 % 1	77 66* 72*0
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	6.0° / 12.0° 82 % 1	77 66* 72*0
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	6.0° / 12.0° 82 % 1	77 66* 72*0
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	6.0° / 12.0° 82 % 1	bit bit bit
opto Semiconductors LED FWHM / FWTM Efficiency LEDS/each optic Light colour Required components:	6.0° / 12.0° 82 % 1 IR	77 66* 72*0
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	6.0° / 12.0° 82 % 1 IR SFH 4715AS	bit bit bit
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM	6.0° / 12.0° 82 % 1 IR	bit bit bit
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED	6.0° / 12.0° 82 % 1 IR SFH 4715AS 7.0° / 16.0°	Rot Rot
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	6.0° / 12.0° 82 % 1 IR SFH 4715AS 7.0° / 16.0° 92 %	bit bit bit
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic	6.0° / 12.0° 82 % 1 IR SFH 4715AS 7.0° / 16.0° 92 % 1	
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	6.0° / 12.0° 82 % 1 IR SFH 4715AS 7.0° / 16.0° 92 % 1	
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	6.0° / 12.0° 82 % 1 IR SFH 4715AS 7.0° / 16.0° 92 % 1	
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	6.0° / 12.0° 82 % 1 IR SFH 4715AS 7.0° / 16.0° 92 % 1	



OSRAM Opto Semiconductors		99 ⁴
LED	SFH 4716AS	7
FWHM / FWTM	6.0° / 14.0°	60° 200°
Efficiency	93 %	
LEDs/each optic	1	
Light colour	IR	ay
Required components	S:	24° 25° 0° 15°



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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