

PRODUCT DATASHEET CA13631_G2-LAURA-O-P

G2-LAURA-O-P

~40° x 13° oval beam. Assembly with thinner white holder, installation tape and location pins.

SPECIFICATION:

Dimensions	21.6 x 21.6 mm
Height	13.1 mm
Fastening	tape, pin
ROHS compliant	yes 🛈



MATERIALS:

Component LAURA-O LAURA-LT-PIN-XP-HLD-WHT ROSE-TAPE

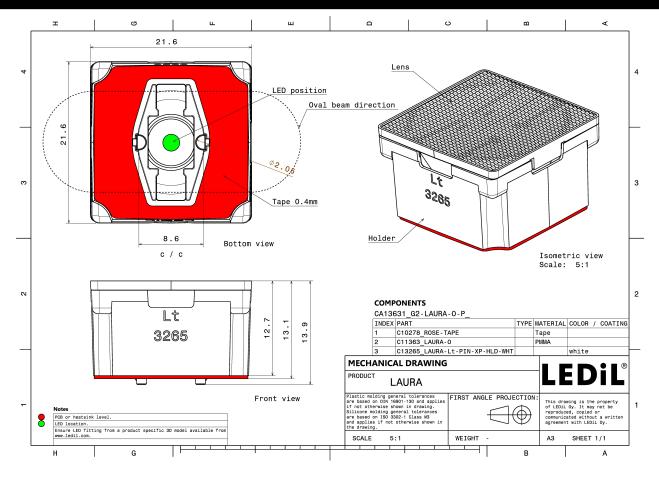
Туре	
Single lens	
Holder	
Tape	

Material	Colour	Finish
PMMA	clear	
PC	white	
Acrylic foam	black	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA13631_G2-LAURA-O-P	Single lens	1440	360	180	6.0
» Box size: 451 x 254 x 152 mm					

PRODUCT DATASHEET CA13631_G2-LAURA-O-P



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



CREE 🚖		7
LEDS		90° 90°
LED	XB-D	7
FWHM / FWTM	41.0 + 13.0° / 57.0 + 26.0°	
Efficiency	86 %	60 - 1600 1600 1600 1600 1600 1600 1600
Peak intensity	4.8 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	ints:	
		30° 0° 35°
		90°
LED	ХВ-Н	
FWHM / FWTM	41.0 + 13.0° / 58.0 + 26.0°	
Efficiency	87 %	
Peak intensity	4.6 cd/lm	
LEDs/each optic	1	
Light colour	White	er er
Required compone		
		NO 400
		155 [°] 0 ⁶ 15 ⁵
LED	XP-E	
FWHM / FWTM	40.0 + 13.0° / 55.0 + 24.0°	
Efficiency	91 %	
Peak intensity	4.8 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	ints:	
		50* 50*
LED	XP-E2	73
FWHM / FWTM	41.0 + 11.0° / 55.0 + 22.0°	
Efficiency	88 %	67
Peak intensity	5.8 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	nts:	
		(43)
		30. 30
		15° 6490 15°



CREE ÷ LED XP-Q2 PMM/ FWTM 40.0 ± 10.0 ± 10.0 * 50.0 ± 27.0° Ellipsicology 87 % Pack Intensity 48.0 dtm LED2asch optic 1 LUpt cology White Required components: Image: Components: CREE ÷ ElD LED XP-G3 FVMM / FVTM 38.0 ± 13.0° / 58.0 ± 23.0° Elmicency 39 % Peak Intensity 4.0 dtm LED2asch optic 1 LED4 Kinessity 4.0 dtm LED5 kinessity 3.0 dtm LED6 Second optic 1 LED Kinessity 3.8 ddm LED2asch optic 1 LED Kinessity 3.8 ddm LED2asch optic 1 LED Kinessity 3.8 ddm LED2asch optic 1 LED4 Kinessity 3.8 ddm LED2asch optic 1 LED2asch optic			
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Elficiency 97% Peak intensity 4.8 cd/m Light colour White Required components: CREE ÷ ELD XP-G3 EVMH // FVTM 39.0 + 13.0 ' 56.0 + 29.0" Elficiency 39.% Peak intensity 4.3 cd/m Light colour White Required components: CREE ÷ ELD XP-L4D FVMH // FVTM 38.0 + 16.0" / 60.0 + 34.0" Elficiency 69.% Peak intensity 3.3 cd/m LED/seach optic 1 LED/seach optic 1 L		XP-G2	
Peak intensity 4.8 od/m LEDs/each optic 1 LED viried components: CREE ÷ LED XP-03 FVHM / FVTM 30.0 + 13.0 / 58.0 + 29.0 ' Efficiency 93 % Peak intensity 3.3 cd/m LEDs/each optic 1 LED xP-LHD FVHM / FVTM 38.0 + 16.0 / 60.0 + 34.0 ' Efficiency 89 % Peak intensity 3.8 cd/m LEDs/each optic 1 LEDs/each opti	FWHM / FWTM	41.0 + 14.0° / 58.0 + 27.0°	
Peak intensity 4.8 od/m LEDs/each optic 1 LED xP-03 FVHM / FVTM 30.0 + 13.0 / 58.0 + 29.0' Efficiency 93 % Peak intensity 3.3 cd/m LEDs/each optic 1 LEDs xP-LHD FVHM / FVTM 38.0 + 16.0 / 60.0 + 34.0' Efficiency 89 % Peak intensity 3.8 cd/m LEDs/each optic 1 LEDs/each		87 %	
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Light colour White Required componentis: CREE 4: LED XP-03 PWHM / FWTM 39.0 + 13.0° / 55.0 + 29.0° Efficiency 93 % Peak intensity 3.3 coldm LED/each optic 1 Light colour White Required componentis: CREE 5: LED XP-L HD FWHM / FWTM 30.0 + 16.0° / 60.0 + 34.0° Efficiency 88 % Peak intensity 3.3 coldm LED/each optic 1 Light colour White Required componentis:	LEDs/each optic	1	
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Peak intensity 4.3 cd/m LEDs/each optic 1 Light colour White Required components: CREE \Rightarrow LED XP-L HD FWHM / FWTM 38.0 + 16.0° / 60.0 + 34.0° Efficiency 89 % Peak intensity 3.8 cd/m LEDs/each optic 1 Light colour White Required components: CREE \Rightarrow LED XP-L2 FWHM / FWTM 38.0 + 17.0° / 64.0 + 38.0° Efficiency 84 % Peak intensity 3.1 cd/m LEDs/each optic 1 Light colour White Required components: CREE \Rightarrow LED XP-L2 FWHM / FWTM 38.0 + 17.0° / 64.0 + 38.0° Efficiency 84 % Peak intensity 3.1 cd/m LEDs/each optic 1 Light colour White Required components:		93 %	60 ⁴
Light colour White Required components: CREE LED XP-L HD FWHM /FVTM 38.0 + 16.0° / 60.0 + 34.0° Efficiency 89 % Peak intensity 3.8 cd/lm LEDs/each optic 1 Light colour White Required components: CREE EFC FWHM /FWTM 38.0 + 17.0° / 64.0 + 38.0° Efficiency 84 % Peak intensity 3.1 cd/lm LEDs/each optic 1 LED XP-L2 FWHM /FWTM 38.0 + 17.0° / 64.0 + 38.0° Efficiency 84 % Peak intensity 3.1 cd/lm LEDs/each optic 1 LEDs/each optic 1		4.3 cd/lm	
Required components:		1	
$\begin{array}{c c} \hline \textbf{CREE} \\ \hline \textbf{LDS} \\ \textbf{LD} \\ \textbf{LD} \\ \textbf{LD} \\ \textbf{S} 0 + 16.0^{\circ}/60.0 + 34.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 9 \% \\ \textbf{Peak intensity} \\ \textbf{As } 0 + 16.0^{\circ}/60.0 + 34.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 9 \% \\ \textbf{Peak intensity} \\ \textbf{As } 0 + 16.0^{\circ}/60.0 + 34.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 9 \% \\ \textbf{Peak intensity} \\ \textbf{Required components:} \end{array} \\ \begin{array}{c} \textbf{Final intensity} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{Efficiency} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 38.0^{\circ} \\ \textbf{S} 0 + 17.0^{\circ}/64.0 + 18.0^{\circ} \\ \textbf{S} 0 + 10.0^{\circ} \\ \textbf{S} 0 + 10.0^{$			
CREE S LED XP-L HD FWHM / FWTM 38.0 + 16.0° / 60.0 + 34.0° Efficiency 89 % Peak intensity 3.8 cd/m LEDs/each optic 1 Light colour White Required components: CREE S LED XP-L2 FWHM / FWTM 38.0 + 17.0° / 64.0 + 38.0° Efficiency 84 % Peak intensity 3.1 cd/m LEDs/each optic 1 Light colour White Required components:	Required compone	ents:	
CREE S LED XP-L HD FWHM / FWTM 38.0 + 16.0° / 60.0 + 34.0° Efficiency 89 % Peak intensity 3.8 cd/m LEDs/each optic 1 Light colour White Required components: CREE S LED XP-L2 FWHM / FWTM 38.0 + 17.0° / 64.0 + 38.0° Efficiency 84 % Peak intensity 3.1 cd/m LEDs/each optic 1 Light colour White Required components:			
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LED XP-L HD FWHM / FWTM 38.0 + 16.0° / 60.0 + 34.0° Efficiency 89 % Peak intensity 3.8 cd/lm LEDs/each optic 1 Light colour White Required components: LED XP-L2 FWHM / FWTM 38.0 + 17.0° / 64.0 + 38.0° Efficiency 84 % Peak intensity 3.1 cd/lm LEDs/each optic 1 Light colour White Required components:	CREE ÷		50 ¹
FWHM / FWTM 38.0 + 16.0° / 60.0 + 34.0° Efficiency 89 % Peak intensity 3.8 cd/m LEDs/each optic 1 Light colour White Required components: CREE LED XP-L2 FWHM / FWTM 38.0 + 17.0° / 64.0 + 38.0° Efficiency 84 % Peak intensity 3.1 cd/m LEDs/each optic 1 Light colour White Required components:			
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Light colour White Required components: CREE LED XP-L2 FWHM / FWTM 38.0 + 17.0° / 64.0 + 38.0° Efficiency 84 % Peak intensity 3.1 cd/m LEDs/each optic 1 Light colour White Required components:			
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FWHM / FWTM 38.0 + 17.0° / 64.0 + 38.0° Efficiency 84 % Peak intensity 3.1 cd/m LEDs/each optic 1 Light colour White Required components:	LEDS		
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Peak intensity 3.1 cd/lm LEDs/each optic 1 Light colour White Required components:			
LEDs/each optic 1 Light colour White Required components:			
Light colour White Required components:			
Required components:			
		5110.	300
20 ¹⁰ 200 200 200			
			30 ⁴ 35 ⁴ 35 ⁴



		90 ⁴
LED	XT-E	
FWHM / FWTM	40.0 + 14.0° / 59.0 + 29.0°	
Efficiency	87 %	
Peak intensity	4.4 cd/lm	1500
LEDs/each optic	1	
Light colour	White	95"
Required compone		320
		30°
		15% 48%0 15%
COMIL	EDS	90*5
LED	LUXEON 3030 2D (Round LES)	
FWHM / FWTM	40.0 + 13.0° / 58.0 + 26.0°	75
Efficiency	88 %	
Peak intensity	4.7 cd/lm	60* 1000 s
LEDs/each optic	1	
Light colour	' White	
Required compone		3270
Required compone		
		36° 4000 3 15° 0° 15°
	EDS	90* 9
LED	LUXEON T	
EED FWHM / FWTM		78.
Efficiency	40.0 + 15.0° / 60.0 + 28.0° 90 %	
Peak intensity	4.7 cd/lm	60 ⁵ 1600 e
LEDs/each optic	1	
Light colour	White	45*
Required compone		3230
Required compone	ano.	
		30° 4800 3 15° 0° 15°
	EDS	90° 9
LED	LUXEON TX	
LED FWHM / FWTM		78.
Efficiency	41.0 + 14.0° / 59.0 + 27.0° 87 %	
Peak intensity	87 % 4.6 cd/lm	601
	4.6 ca/im 1	
LEDs/each optic	1 White	
Light colour Required compone		
required compone	nuə.	
		30 ⁶ 4800 5

Last update: 12/12/2023Subject to change without prior noticeLEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.



	EDC	
EUMIL LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON V2 39.0 + 13.0° / 58.0 + 29.0° 93 % 4.4 cd/lm 1 White	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxx19A 41.0 + 13.0° / 58.0 + 27.0° 87 % 4.7 cd/lm 1 White	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxx19B 40.0 + 12.0° / 56.0 + 24.0° 87 % 4.9 cd/lm 1 White	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSW219D 38.0 + 14.0° / 59.0 + 29.0° 94 % 4.4 cd/lm 1 White	



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ØNICHI ∕			90* 90
LED	NVSxx19A		
FWHM / FWTM	40.0 + 15.0° / 60.0 + 30.0°		
Efficiency	87 %		
Peak intensity	4.3 cd/lm	and the second	1600
LEDs/each optic	1		
Light colour	White	A REAL PROPERTY AND ADDRESS OF TAXABLE PARTY.	ggv a
Required compone			
			3320
			435 [°] 0 ⁶ 35 ⁵
ØNICHI∕			
LED	NVSxx19B/NVSxx19C		
FWHM / FWTM	37.0 + 12.0° / 62.0 + 28.0°		
Efficiency	89 %		
Peak intensity	5.3 cd/Im		
LEDs/each optic	1		
Light colour	White		
Required compone	nts:		
OSRAM Opto Semiconductors			90 ⁴
Opto Semiconductors	OSLON Square CSSRM2/CSSRM3		90 ⁴
Opto Semiconductors LED FWHM / FWTM	39.0 + 12.0° / 57.0 + 25.0°		90°
opto Semiconductors LED FWHM / FWTM Efficiency	39.0 + 12.0° / 57.0 + 25.0° 94 %		94 ⁴ 74 64 1000
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm		94
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1		94 90 75 75 64 90 97 90 90 90 90 90 90 90 90 90 90 90 90 90 9
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White		71 60 1000
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White		21 60 5000 60
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White		21 60 5000 60
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White		71 60 1000
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White		21 60 5000
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White Ints:		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White Ints:		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED FWHM / FWTM	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White ints: OSLON Square EC 40.0 + 13.0° / 58.0 + 27.0°		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White ints: OSLON Square EC 40.0 + 13.0° / 58.0 + 27.0° 87 %		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White ints: OSLON Square EC 40.0 + 13.0° / 58.0 + 27.0°		
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	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White ints: OSLON Square EC 40.0 + 13.0° / 58.0 + 27.0° 87 % 4.8 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	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White ints: OSLON Square EC 40.0 + 13.0° / 58.0 + 27.0° 87 % 4.8 cd/lm 1 White		
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	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White ints: OSLON Square EC 40.0 + 13.0° / 58.0 + 27.0° 87 % 4.8 cd/lm 1 White		
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	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White ints: OSLON Square EC 40.0 + 13.0° / 58.0 + 27.0° 87 % 4.8 cd/lm 1 White		
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	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White ints: OSLON Square EC 40.0 + 13.0° / 58.0 + 27.0° 87 % 4.8 cd/lm 1 White		
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	39.0 + 12.0° / 57.0 + 25.0° 94 % 4.9 cd/lm 1 White ints: OSLON Square EC 40.0 + 13.0° / 58.0 + 27.0° 87 % 4.8 cd/lm 1 White		



SAMS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH351D 37.0 + 17.0° / 63.0 + 34.0° 92 % 3.6 cd/lm 1 White	
seour SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Z5M1/Z5M2 40.0 + 12.0° / 57.0 + 26.0° 86 % 4.6 cd/lm 1 White ents:	
stout staniconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Z5M3 39.0 + 15.0° / 60.0 + 32.0° 94 % 4 cd/lm 1 White ents:	



		90* 90*
LED	XP-G4	
FWHM / FWTM	62.0 + 12.0° / 84.0 + 26.0°	75-
Efficiency	89 %	600
Peak intensity	2.9 cd/lm	
LEDs/each optic	1	
Light colour	White	45* 45*
Required components:		30°
		90° 90°
LED	XQ-E HD	
FWHM / FWTM	66.0 + 9.0° / 89.0 + 18.0°	
Efficiency	94 %	60 ⁵ 60°
Peak intensity	4 cd/lm	
LEDs/each optic	1	
Light colour	White	ø.
Required components:		
		30° 30°
•		
MUMILEC	DS S	90*
	LUXEON 3535L	
LUMILED		27 29 29
LED	LUXEON 3535L	
LED FWHM / FWTM	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0°	
LED FWHM / FWTM Efficiency	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 %	
LED FWHM / FWTM Efficiency Peak intensity	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 cd/lm 1	60 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 cd/lm 1	604 135 136 136 136 136 136 136 136 136 136 136
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 cd/lm 1	604 200 200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 cd/lm 1	604 200 200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 cd/lm 1 White	90° 20 00° 00° 00° 00° 00° 00° 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 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:	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 cd/lm 1 White NCSxE17A	No. No. 22. 000 22.0 000 20.0 000 20.0 000 20.0 000 20.0 000 20.0 000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 cd/lm 1 White NCSxE17A 62.0 + 10.0° / 82.0 + 20.0°	No. No. 22. 000 22.0 000 20.0 000 20.0 000 20.0 000 20.0 000 20.0 000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 cd/lm 1 White NCSxE17A 62.0 + 10.0° / 82.0 + 20.0° 90 %	90° 20 00° 00° 00° 00° 00° 00° 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 cd/lm 1 White NCSxE17A 62.0 + 10.0° / 82.0 + 20.0° 90 % 3.3 cd/lm	90° 20 00° 00° 00° 00° 00° 00° 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: EXAMPLANCE EXAMPLANCE FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 cd/lm 1 White NCSxE17A 62.0 + 10.0° / 82.0 + 20.0° 90 % 3.3 cd/lm 1	60° 1000 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 cd/lm 1 White NCSxE17A 62.0 + 10.0° / 82.0 + 20.0° 90 % 3.3 cd/lm 1	60 90 90 90 90 90 90 90 90 90 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 cd/lm 1 White NCSxE17A 62.0 + 10.0° / 82.0 + 20.0° 90 % 3.3 cd/lm 1	60 90 90 90 90 90 90 90 90 90 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 3535L 62.0 + 10.0° / 84.0 + 23.0° 91 % 3.2 cd/lm 1 White NCSxE17A 62.0 + 10.0° / 82.0 + 20.0° 90 % 3.3 cd/lm 1	60 90 90 90 90 90 90 90 90 90 9



XICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NVSW219F 60.0 + 14.0° / 84.0 + 30.0° 88 % 2.7 cd/lm 1 White	30- 12- 12- 100 100 100 100 100 100 100 10
Ø ΝΙCΗΙΛ		50 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NVSxE21A 62.0 + 12.0° / 84.0 + 24.0° 90 % 2.8 cd/lm 1 White	200 0 0 0 0 0 0 0 0 0 0 0 0
OSRAM		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSCONIQ C 2424 61.0 + 12.0° / 82.0 + 24.0° 90 % 3 cd/lm 1 White	121 200 121 31, 200 200 61, 100 61, 62, 000 62, 123, 000 62, 23, 000 63, 23, 000 63, 23, 000 63, 23, 000 93,
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSCONIQ P 3030 66.0 + 10.0° / 85.0 + 19.0° 91 % 3.7 cd/lm 1 White	20 20 20 20 20 20 20 20 20 20



OSRAM Opto Semiconductors		90* 90*
LED	OSLON Black	
FWHM / FWTM	62.0 + 10.0° / 83.0 + 20.0°	73'
Efficiency	%	
Peak intensity	3.2 cd/lm	60°
LEDs/each optic	1	1600
Light colour	White	97°
Required components:		
		2009
		30° 30°
		15° 0° 35°
OSRAM Opto Semiconductors		90* 90*
LED	OSLON Black Flat (LUW HWQP)	
FWHM / FWTM	62.0 + 8.0° / 82.0 + 16.0°	
Efficiency	91 %	605 60°
Peak intensity	4.1 cd/lm	3600
LEDs/each optic	1	
Light colour	White	954 454
Required components:		
		300 360
OSRAM		
OSRAM Opto Semiconductors		99 ⁴ 99 ⁴
Opto Semiconductors	OSLON Signal	25- 29 ⁴ 29 ⁴ 29 ⁴ 29 ⁴
Opto Semiconductors LED FWHM / FWTM	62.0 + 8.0° / 82.0 + 18.0°	39. 39. 99. 99.
Opto Semiconductors LED FWHM / FWTM Efficiency	62.0 + 8.0° / 82.0 + 18.0° 90 %	60* 60* 33* 33* 30* 30*
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm	99 ⁴ 99 ⁴
opto semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm	
opto semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1	27 27 27 27 27 27 27 27 27 27 27 27 27 2
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1	27 27 27 27 27 27 27 27 27 27 27 27 27 2
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1	
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDS/each optic Light colour Required components:	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1 Red	30. 30. 30. 30. 30. 30. 30. 30. 30. 1000 00. 60. 1000 00.
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1 Red OSLON Square Flat	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1 Red	No. No. 30. 32. 04. 30. 42. 300. 05. 05. 64. 3000 05. 05. 13. 3000 05. 05.
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1 Red OSLON Square Flat 61.0 + 10.0° / 82.0 + 23.0°	No. No. 30. 32. 04. 30. 42. 300. 05. 05. 64. 3000 05. 05. 13. 3000 05. 05.
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1 Red OSLON Square Flat 61.0 + 10.0° / 82.0 + 23.0° 89 %	No. No. 30. 32. 04. 30. 42. 300. 05. 05. 64. 3000 05. 05. 13. 3000 05. 05.
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1 Red OSLON Square Flat 61.0 + 10.0° / 82.0 + 23.0° 89 % 3.1 cd/lm	No. No. 30. 32. 04. 30. 42. 300. 05. 05. 64. 3000 05. 05. 13. 3000 05. 05.
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1 Red OSLON Square Flat 61.0 + 10.0° / 82.0 + 23.0° 89 % 3.1 cd/lm 1	30. 30. 30. 30. 30. 30. 30. 30. 30. 1000 00. 60. 1000 00.
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1 Red OSLON Square Flat 61.0 + 10.0° / 82.0 + 23.0° 89 % 3.1 cd/lm 1	30. 30. 30. 30. 30. 30. 30. 30. 30. 1000 00. 60. 1000 00.
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1 Red OSLON Square Flat 61.0 + 10.0° / 82.0 + 23.0° 89 % 3.1 cd/lm 1	No. No. 30. 32. 04. 30. 42. 300. 05. 05. 64. 3000 05. 05. 13. 3000 05. 05.
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	62.0 + 8.0° / 82.0 + 18.0° 90 % 3.9 cd/lm 1 Red OSLON Square Flat 61.0 + 10.0° / 82.0 + 23.0° 89 % 3.1 cd/lm 1	No. No. 30. 32. 04. 30. 42. 300. 05. 05. 64. 3000 05. 05. 13. 3000 05. 05.



OSRAM Opto Semiconductors		50° 50°
LED	OSLON SSL 150	
FWHM / FWTM	62.0 + 10.0° / 83.0 + 20.0°	75
Efficiency	91 %	
Peak intensity	3.5 cd/lm	60^
LEDs/each optic	1	
Light colour	' White	43 ⁴
Required components:	Winte	
Required components.		
		30 ⁴ 25 ⁵ 0 ⁶ 35 ⁵ 36 ⁵
OSRAM Opto Semiconductors		50*
UED	OSLON SSL 80	
FWHM / FWTM	62.0 + 10.0° / 84.0 + 24.0°	75
Efficiency	90 %	
Peak intensity	3.2 cd/lm	605 603
LEDs/each optic	1	1600
Light colour	White	gr
Required components:		
		2433
		300
		30° 25° 0° 35°
OSRAM Opto Semiconductors		
LED	SFH 4770S	
FWHM / FWTM	63.0 + 11.0° / 83.0 + 27.0°	
	88 %	
Efficiency LEDs/each optic	1	
Light colour	' White	
Required components:	Winte	
SEQUE		20* 20j
SEOUL SEMICONDUCTOR	70/007	²⁰
LED	Z8Y22P	75
FWHM / FWTM	60.0 + 12.0° / 84.0 + 30.0°	
Efficiency	93 %	eg* 600
Peak intensity	2.7 cd/lm	
LEDs/each optic	1 White	
Light colour	White	4 ⁹ /
Required components:		
		30° 35



GENERAL INFORMATION:

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

MATERIALS:

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