

PRODUCT DATASHEET CA16206_SURI-RS

SURI-RS

 ${\sim}6^\circ$ real spot beam. Assembly with holder and installation tape.

SPECIFICATION:

Dimensions	Ø 37.8 mm
Height	24 mm
Fastening	tape, pin
ROHS compliant	yes 🛈



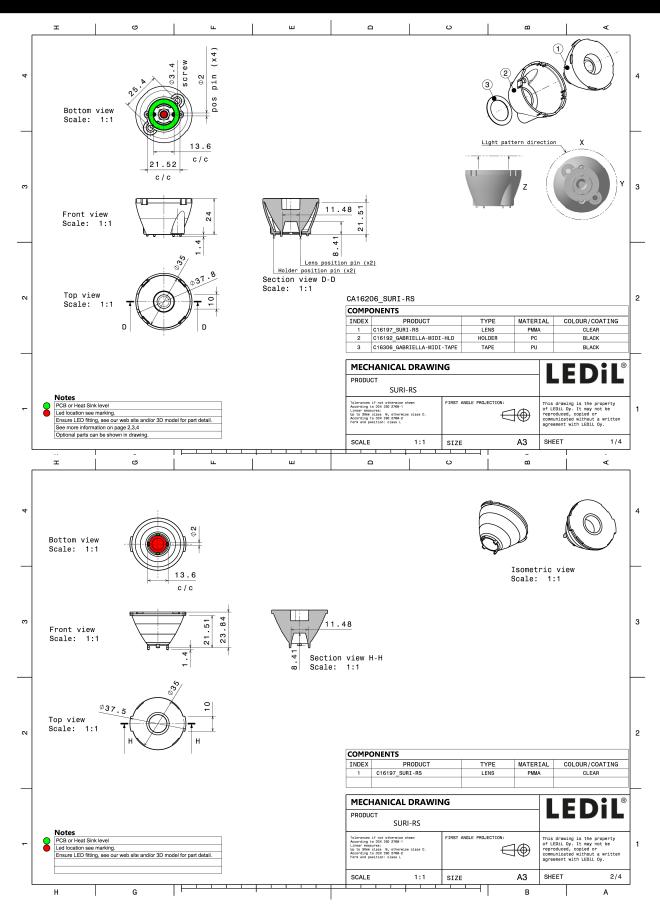
MATERIALS:

Component	Туре	Material	Colour	Finish
SURI-RS	Single lens	PMMA	clear	
GABRIELLA-MIDI-HLD	Assembly	PC	black	

ORDERING INFORMATION:

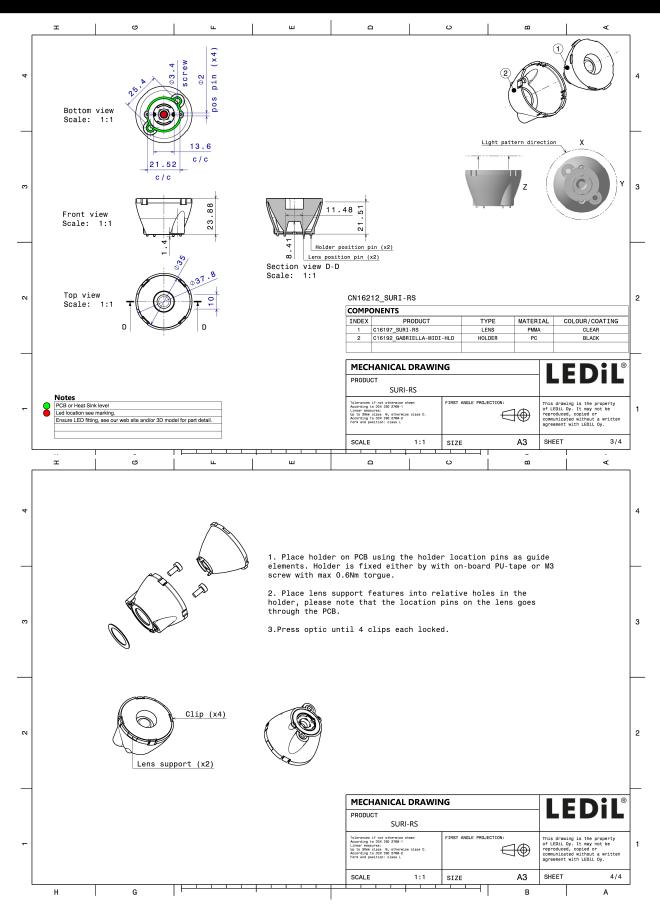
Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA16206_SURI-RS	Single lens	500	100	50	11.7
» Box size: 476 x 273 x 292 mm					

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



			90* 90
LEDs FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP35 HI 8.0° / 13.0° 91 % 41 cd/lm 1 White mts:		
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XHP70.2 20.0° / 32.0° 87 % 6.6 cd/lm 1 White mts:		51 ⁴ 52 51 ⁴
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XP-E2 5.0° / 9.0° 93 % 101 cd/lm 1	•	
Light colour Required compone	Green ints:		20 ¹⁰ 10 ¹⁰⁰ 20 ¹⁰ 20 ¹⁰ 20 ¹⁰
LEDS FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G2 7.0° / 11.0° 94 % 63.1 cd/lm 1 White mts:	٠	gr
· ·			30° 300 30° 30° 30°



CREEXP-L HIFWHM / FWTM8.0° / 17.0°Efficiency90 %Peak intensity30.6 cd/lmLEDs/each optic1Light colourWhiteRequired components:Protective glassProtective Jate, glassCREELEDXP-L HIFWHM / FWTM7.0° / 12.0°Efficiency91 %Peak intensity52.4 cd/lmLEDs/each optic1Light colourWhiteRequired components:EEDLEDUNEONEfficiency91 %Peak intensity26 cd/lmLEDLUXEON VFWHM / FWTM10.0° / 17.0°Efficiency88 %Peak intensity26 cd/lmLEDs/each optic1Light colourWhiteRequired components:FWHM / FWTM8.0° / 13.0°Efficiency91 %Peak intensity41 cd/lmLEDNVSW219FFWHM / FWTM8.0° / 13.0°Efficiency91 %Peak intensity41 cd/lmLEDs/each optic1Light colourWhiteRequired components:1Light colourWhiteRequired components:1Light colourWhiteRequired components:1Light colourWhiteRequired components:1Light colourWhiteRequired components:1		
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FWHM / FWTM8.0° / 17.0°Efficiency90 %Peak intensity30.6 cd/lmLEDs/each optic1Light colourWhiteRequired componertisImage: Second S		XP-L HI
Peak intensity 30.6 cd/lm LEDs/each optic 1 Light colour White Required components Protective glass Protective glass CREES LED XP-L HI FWHM / FWTM 7.0° / 12.0° Efficiency 91 % Peak intensity 52.4 cd/lm LEDs/each optic 1 Light colour White Required components UXEON V FWHM / FWTM 10.0° / 17.0° Efficiency 88 % Peak intensity 26 cd/lm LED LUXEON V FWHM / FWTM 10.0° / 17.0° Efficiency 88 % Peak intensity 26 cd/lm LEDs/each optic 1 Light colour White Required components Sintensity EED NVSW219F FWHM / FWTM 8.0° / 13.0° Efficiency 91 % Peak intensity 41 cd/lm LED NVSW219F FWHM / FWTM 8.0° / 13.0° Eff	FWHM / FWTM	8.0° / 17.0°
LEDs/each optic1Light colourWhiteRequired components:Protective plats, glassCREE€LEDXP-L HIFWHM / FWTM7.0° / 12.0°Efficiency91 %Peak intensity52.4 cd/lmLEDs/each optic1Light colourWhiteRequired components:VICHIVELUXEON VFWHM / FWTM10.0° / 17.0°Efficiency88 %Peak intensity26 cd/lmLEDLUXEON VFWHM / FWTM10.0° / 17.0°Efficiency88 %Peak intensity26 cd/lmLEDWhiteRequired components:FWHM / FWTM10.0° / 17.0°Efficiency88 %Peak intensity26 cd/lmLEDs/each optic1Light colourWhiteRequired components:VICCHIVKVSW219FFWHM / FWTM8.0° / 13.0°Efficiency91 %Peak intensity41 cd/lmLEDs/each optic1Light colourWhite	-	
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Required components: Protective plate, glass CREEES LED XP-L HI FWHM / FWTM 7.0° / 12.0° Efficiency 91 % Peak intensity 52.4 cd/lm LEDs/each optic 1 Light colour White Required components: CED LUXEON V FWHM / FWTM 10.0° / 17.0° Efficiency 88 % Peak intensity 26 cd/lm LEDs/each optic 1 Light colour White Required components: EED LUXEON V FWHM / FWTM 10.0° / 17.0° Efficiency 88 % Peak intensity 26 cd/lm LEDs/each optic 1 Light colour White Required components: EED NVSW219F FWHM / FWTM 8.0° / 13.0° Efficiency 91 % Peak intensity 41 cd/lm LEDs/each optic 1 Light colour V FWHM / FWTM 8.0° / 13.0° Efficiency 91 % Peak intensity 41 cd/lm LEDs/each optic 1 Light colour V FWHM / FWTM 8.0° / 13.0° Efficiency 91 % Peak intensity 41 cd/lm LEDs/each optic 1 Light colour V FWHM / FWTM 8.0° / 13.0° Efficiency 91 % Peak intensity 41 cd/lm LEDs/each optic 1 Light colour V FWHM / FWTM 8.0° / 13.0° Efficiency 91 % Peak intensity 41 cd/lm LEDs/each optic 1 Light colour V FWHM / FWTM 8.0° / 13.0° Efficiency 91 % Peak intensity 41 cd/lm LEDs/each optic 1 Light colour V FWHM / FWTM 8.0° / 13.0° Efficiency 91 % Peak intensity 41 cd/lm LEDs/each optic 1 Light colour V FWHM / FWTM 8.0° / 13.0° Efficiency 91 % Peak intensity 41 cd/lm LEDs/each optic 1 Light colour V FWHM / FWTM 8.0° / 13.0° Efficiency 91 % Peak intensity 41 cd/lm LEDs/each optic 1 Light colour V FWHM / FWTM 8.0° / 13.0° Efficiency 91 % Peak intensity 41 cd/lm LEDS/each optic 1 Light colour V FWHM / FWTM 8.0° / 13.0° Efficiency 91 % Peak intensity 41 cd/lm EDS/each optic 1 Light colour V FWHM / FWTM 8.0° / 13.0° Efficiency 91 % PEAK INTENT 8.0° / 13.0° Efficiency 9		
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Peak intensity 26 cd/lm LEDs/each optic 1 Light colour White Required components ************************************		
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Light colour White Required componential Secondary Secondary Secon	Peak intensity	26 cd/lm
Required components: ED NVSW219F FWHM / FWTM 8.0° / 13.0° Efficiency 91 % Peak intensity 41 cd/lm LEDs/each optic 1 Light colour White		
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Efficiency91 %Peak intensity41 cd/lmLEDs/each optic1Light colourWhite		
Peak intensity41 cd/lmLEDs/each optic1Light colourWhite		
Light colour White		
	LEDs/each optic	1
Required components:		
	Required compone	ents:



Ø NICHI∕		30*
LED	NVSW719AC	
FWHM / FWTM	7.0° / 12.0°	37
Efficiency	91 %	
Peak intensity	50.5 cd/lm	
LEDs/each optic	1	
Light colour	White	gr at
Required compone	ents:	
		20 ⁴ 22 ² 0 21
OSRAM Opto Semiconductors		
LED	Duris S8	
EED FWHM / FWTM	14.0° / 24.0°	73.
Efficiency	90 %	
Peak intensity	13 cd/lm	60× 64
LEDs/each optic	1	
Light colour	' White	g
Required compone		
Required compone		
		30° 137' Q ^b 15°
OSRAM Opto Semiconductors		50° 50°
LED	OSLON Square CSSRM2/CSSRM3	
FWHM / FWTM	7.0° / 12.0°	77
Efficiency	91 %	
Peak intensity	53 cd/lm	$(\land \land$
LEDs/each optic	1	
Light colour	White	at at
Required compone	ents:	364
Required compone	ents:	
Required compone	ents:	
Required compone	ents:	
Required compone	ents:	tet to let
OSRAM Opto Semiconductors		
OSRAM Opto Semiconductors LED	OSLON Square EC	
OSRAM Opto Semiconductors LED FWHM / FWTM	OSLON Square EC 6.0° / 12.0°	99° 99' 99'
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	OSLON Square EC 6.0° / 12.0° 90 %	99° 99' 99'
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	OSLON Square EC 6.0° / 12.0° 90 % 56 cd/lm	99° 99' 99'
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	OSLON Square EC 6.0° / 12.0° 90 % 56 cd/lm 1	55 [°] 0 [°] 55 [°]
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	OSLON Square EC 6.0° / 12.0° 90 % 56 cd/lm 1 White	
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OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	OSLON Square EC 6.0° / 12.0° 90 % 56 cd/lm 1 White	
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	OSLON Square EC 6.0° / 12.0° 90 % 56 cd/lm 1 White	



SAMSI LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH351B 8.0° / 13.0° 93 % 45.6 cd/lm 1 White	
SAMS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LM302A 7.0° / 13.0° 92 % 47 cd/lm 1 White	
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Z5M3 8.0° / 15.0° 88 % 32.8 cd/lm 1 White ents:	



		90° 90°
LED	MHD-E/G	
FWHM / FWTM	18.0° / 30.0°	25*
Efficiency	91 %	
Peak intensity	8.6 cd/lm	60° 60°
	1	
LEDs/each optic	ı White	ar
Light colour Required components:	white	(X X)
Required components.		6132
		\times / \vee \times
		36° 35° 35°
		50° 50°
LED	ХВ-Н	
FWHM / FWTM	6.0° / 12.0°	75'
Efficiency	90 %	
Peak intensity	59.2 cd/lm	60°
LEDs/each optic	1	X / T
Light colour	White	gr
Required components:		
		\times / \vee \times
		30°
		90* 90*
	XD16	90°
LED	XD16	90°
LED FWHM / FWTM	5.9° / 11.0°	
LED FWHM / FWTM Efficiency	5.9° / 11.0° 89 %	
LED FWHM / FWTM Efficiency Peak intensity	5.9° / 11.0° 89 % 65 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	5.9° / 11.0° 89 % 65 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	5.9° / 11.0° 89 % 65 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	5.9° / 11.0° 89 % 65 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	5.9° / 11.0° 89 % 65 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	5.9° / 11.0° 89 % 65 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	5.9° / 11.0° 89 % 65 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	5.9° / 11.0° 89 % 65 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	5.9° / 11.0° 89 % 65 cd/lm 1 White	25 27 27 27 27 27 27 27 27 27 27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LEDs LED FWHM / FWTM	5.9° / 11.0° 89 % 65 cd/lm 1 White XE-G 6.0° / 10.0°	25 27 27 27 27 27 27 27 27 27 27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency	5.9° / 11.0° 89 % 65 cd/lm 1 White XE-G 6.0° / 10.0° 89 %	25 27 27 27 27 27 27 27 27 27 27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE ED FWHM / FWTM Efficiency Peak intensity	5.9° / 11.0° 89 % 65 cd/lm 1 White XE-G 6.0° / 10.0° 89 % 79.7 cd/lm	25 27 27 27 27 27 27 27 27 27 27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	5.9° / 11.0° 89 % 65 cd/lm 1 White XE-G 6.0° / 10.0° 89 % 79.7 cd/lm 1	25 27 27 27 27 27 27 27 27 27 27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	5.9° / 11.0° 89 % 65 cd/lm 1 White XE-G 6.0° / 10.0° 89 % 79.7 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	5.9° / 11.0° 89 % 65 cd/lm 1 White XE-G 6.0° / 10.0° 89 % 79.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	5.9° / 11.0° 89 % 65 cd/lm 1 White XE-G 6.0° / 10.0° 89 % 79.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	5.9° / 11.0° 89 % 65 cd/lm 1 White XE-G 6.0° / 10.0° 89 % 79.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	5.9° / 11.0° 89 % 65 cd/lm 1 White XE-G 6.0° / 10.0° 89 % 79.7 cd/lm 1	



CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XHP35 HD 10.0° / 18.0° 91 % 23.7 cd/lm 1 White	20 - 200 - 12 - 20 20 - 200 - 12 - 20 20 - 20
CREE LED FWHM / FWTM Efficiency Peak intensity	XHP35.2 HD 8.0° / 18.0° 87 % 27.8 cd/lm	1000 1000 100 100 100 100 100 100 100 1
LEDs/each optic Light colour Required components:	1 White	300 - 300 -
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XHP50.3 HI 10.0° / 18.0° 96 % 23.3 cd/lm 1 White	2000 101 2000 101 01 01 01 01 01 01 01 01 01
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XHP70.3 HI 20.0° / 30.0° 95 % 7.7 cd/lm	20 20 20 20 20 20 20 20 20 20 20 20 20 2



		90° 90°
LED FWHM / FWTM	XP-E 6.0° / 12.0°	75*
Efficiency	92 %	60° 2000 60°
Peak intensity	75.7 cd/lm	
LEDs/each optic Light colour	1 White	g*
Required components:	Wille	
Required components.		
		74400
		30° 30° 30°
		90°
LED	XP-E2	
FWHM / FWTM	5.0° / 10.0°	73
Efficiency	91 %	200
Peak intensity	85 cd/lm	
LEDs/each optic	1	
Light colour	White	57° 2200 67°
Required components:		
		7800
		300 300
		13 ³ 0 ⁶ 13 ⁵
		90 ⁴ 90 ⁴ 90 ⁴
CREE ÷	XP-E2	90°
	XP-E2 6.0° / 12.0°	35. 04. 35. 94. 36. 36.
LED		22. 23. 24. 25. 25. 25. 25. 25. 25. 25. 25. 25. 25
LED FWHM / FWTM	6.0° / 12.0°	201 00 00 00 00 00 00 00 00 00 00 00 00 0
LED FWHM / FWTM Efficiency	6.0° / 12.0° 90 %	500 500 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency Peak intensity	6.0° / 12.0° 90 % 70.2 cd/lm	22, 00, 00, 00, 00, 00, 00, 00, 00, 00,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	6.0° / 12.0° 90 % 70.2 cd/lm 1	75° 72° 65° 700 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	6.0° / 12.0° 90 % 70.2 cd/lm 1	75° 72° 65° 700 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	6.0° / 12.0° 90 % 70.2 cd/lm 1	75° 72° 65° 700 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	6.0° / 12.0° 90 % 70.2 cd/lm 1	25° 200 6°.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	6.0° / 12.0° 90 % 70.2 cd/lm 1	75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	6.0° / 12.0° 90 % 70.2 cd/lm 1 Red	75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	6.0° / 12.0° 90 % 70.2 cd/lm 1 Red	5. 6. 2.00 0. 2.00 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM	6.0° / 12.0° 90 % 70.2 cd/lm 1 Red XP-G2 HE 8.0° / 14.0°	50 ¹ 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Required components: LED FWHM / FWTM Efficiency	6.0° / 12.0° 90 % 70.2 cd/lm 1 Red XP-G2 HE 8.0° / 14.0° 90 %	50 ¹ 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Required components: LED FWHM / FWTM Efficiency Peak intensity	6.0° / 12.0° 90 % 70.2 cd/lm 1 Red XP-G2 HE 8.0° / 14.0° 90 % 38.5 cd/lm	50 ¹ 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Required components: LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	6.0° / 12.0° 90 % 70.2 cd/lm 1 Red XP-G2 HE 8.0° / 14.0° 90 % 38.5 cd/lm 1	50 ¹ 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	6.0° / 12.0° 90 % 70.2 cd/lm 1 Red XP-G2 HE 8.0° / 14.0° 90 % 38.5 cd/lm	50 ¹ 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Required components: LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	6.0° / 12.0° 90 % 70.2 cd/lm 1 Red XP-G2 HE 8.0° / 14.0° 90 % 38.5 cd/lm 1	50 ¹ 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	6.0° / 12.0° 90 % 70.2 cd/lm 1 Red XP-G2 HE 8.0° / 14.0° 90 % 38.5 cd/lm 1	75 75 95 70 95 70 95 70 95 70 95 70 95 70 95 70 95 70
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	6.0° / 12.0° 90 % 70.2 cd/lm 1 Red XP-G2 HE 8.0° / 14.0° 90 % 38.5 cd/lm 1	75 75 95 70 95 70 95 70 95 70 95 70 95 70 95 70 95 70



LED XP-L2 FWHM / FWTM 10.0° / 18.0° Efficiency 89 % Peak intensity 24.4 cd/m LEDs/each optic 1 Light colour White Required components: CREE \$ LED XP-P FWHM / FWTM 4.0° / 8.0° Efficiency 90 % Peak intensity 136.5 cd/m LEDs/each optic 1 Light colour White Required components: CREE \$ LED XP-P FWHM / FWTM 4.0° / 8.0° Efficiency 90 % Peak intensity 136.5 cd/m LEDs/each optic 1 Light colour White Required components:			
LED XP-03 FMHM / FVTM 7.7*/14.0* Efficiency 90% Peak intensity 40.5 od/m LEDSeeah optic LED XP-L2 FVHM / FVTM 10.0*/18.0* Efficiency 89% Peak intensity 24.4 od/m LEDSeeah optic LED XP-L2 FVHM / FVTM 10.0*/18.0* Efficiency 89% Peak intensity 24.4 od/m LEDSeeah optic LED XP-P FVHM / FVTM 4.0*/8.0* Efficiency 90% Peak intensity 10.55 od/m LEDSeeah optic LED XP-P FVHM / FVTM 4.0*/8.0* Efficiency 90% Peak intensity 10.55 od/m LEDSeeah optic LED XP-P FVHM / FVTM 5.2*/9.5* Efficiency 90% Peak intensity 10.55 od/m LEDSeeah optic LED XP-P FVHM / FVTM 5.2*/9.5* Efficiency 90% Peak intensity 10.55 od/m LEDSeeah optic 1 LEDSeeah optic 1 LEDSeea	CREE ≑		90° 90°
FWHM / FVTM 7.7 / 14.0° Efficiency 90 % Peak intensity 40.5 od/m LEDSeach optic 1 Light colour While Required components:		VD C2	
Efficiency 90 % Peak intensity 40.5 cd/m LED/each optic 1 Light colour White Required components: CREE C: LED XP-L2 EVM-M / FVTTM 10.0° / 18.0° Peak intensity 24.4 cd/m LED/each optic 1 LED/each optic 1 LIght colour White Required components:			75'
Peak intensity 40.5 colfm LED vector optic 1 LED vector optic 1 LED VFLZ FVHM / FVTM 10.0° / 18.0° Efficiency 89 % Peak intensity 24.4 colfm LED vector optic 1 Light colour White Required components: CREE C LED VP.P PWHM / FVTM 4.0° / 8.0° Efficiency 90 % Peak intensity 138.5 colfm LED vector optic 1 Light colour White Required components: CREE C Efficiency 90 % Peak intensity 138.5 colfm LED vector optic 1 Light colour White Required components:			
LED2veach optic 1 Light colour White Required components: CREE C LED XP-L2 FWHM 100'/ 18.0' Efficiency 89% Peak intensity 24.4 cd/m LED2veach optic 1 Light colour White Required components: CREE C LED XP-P FWHM / FWTM 4.0'/ 8.0' Efficiency White Required components: CREE C LED XP-P FWHM / FWTM 4.0'/ 8.0' Efficiency 90% Peak intensity 136.5 cd/m LED2veach optic 1 LED2veach optic 1 LED4 XQ-E HD FWHM / FWTM 5.2'/ 9.5' Efficiency 92% Peak intensity 96.1 cd/m Required components: CREE C LED XQ-E HD FWHM / FWTM 5.2'/ 9.5' Efficiency 92% Peak intensity 96.1 cd/m LED3veach optic 1 LED5veach optic 1 LED5vea			60° 2300 60°
Light colour White Required components: LED XP-L2 EVMM / FVTM 10.0° / 18.0° Efficiency 89 % Peak intensity 24.4 col/m LEDs/each optic 1 Light colour White Required components: Efficiency 90 % Peak intensity 13.65 col/m LEDS XP-P EVMM / FVTM 4.0° / 8.0° Efficiency 90 % Peak intensity 13.65 col/m LEDS to the total t			\times / \wedge \times
Required components: LED XP-L2 FVHM / FVTM 10.0° / 18.0° Efficiency 99 % Peak intensity 24.4 cd/m LED/each optic 1 LED/ XP-P FVHM / FVTM 4.0° / 8.0° Efficiency 90 % Peak intensity 136.5 cd/m LED/ VMte Required components: Efficiency 90 % Peak intensity 136.5 cd/m LED/ White Required components: Efficiency 90 % Peak intensity 136.5 cd/m LED/ SZ / 9.5° Efficiency 92 % Peak intensity 96.1 cd/m Required components: ED/ XO-E HD FVHM / FVTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/m LED/ SZ / 9.5°			
CREE : LED XP-L2 FVHM / FVTM 10.0° / 18.0° Efficiency 89 % Peak intensity 24.4 cd/m LED/each optic 1 Light colour White Required components: Image: Component in the image:		White	
LED XP-L2 FWHM / FWTM 10.0° / 18.0° Efficiency 99 % Peak intensity 24.4 cd/im LEDs/each optic 1 Light colour White Required components: CREE & LED XP-P FWHM / FWTM 4.0° / 8.0° Efficiency 90 % Peak intensity 136.5 cd/im LEDs/each optic 1 Light colour White Required components: CREE & LED XD-F HD FWHM / FWTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/im LEDs/each optic 1 Light colour White Required components:	Required components:		
LED XP-L2 FWHM / FWTM 10.0° / 18.0° Efficiency 99 % Peak intensity 24.4 cd/im LEDs/each optic 1 Light colour White Required components: CREE & LED XP-P FWHM / FWTM 4.0° / 8.0° Efficiency 90 % Peak intensity 136.5 cd/im LEDs/each optic 1 Light colour White Required components: CREE & LED XD-F HD FWHM / FWTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/im LEDs/each optic 1 Light colour White Required components:			X X
LED XP-L2 FWHM / FWTM 10.0° / 18.0° Efficiency 99 % Peak intensity 24.4 cd/im LEDs/each optic 1 Light colour White Required components: CREE & LED XP-P FWHM / FWTM 4.0° / 8.0° Efficiency 90 % Peak intensity 136.5 cd/im LEDs/each optic 1 Light colour White Required components: CREE & LED XD-F HD FWHM / FWTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/im LEDs/each optic 1 Light colour White Required components:			
LED XP-L2 FWHM / FWTM 10.0° / 18.0° Efficiency 99 % Peak intensity 24.4 cd/im LEDs/each optic 1 Light colour White Required components: CREE & LED XP-P FWHM / FWTM 4.0° / 8.0° Efficiency 90 % Peak intensity 136.5 cd/im LEDs/each optic 1 Light colour White Required components: CREE & LED XD-F HD FWHM / FWTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/im LEDs/each optic 1 Light colour White Required components:			30° 30° 30°
LED XP-L2 FWHM / FWTM 10.0° / 18.0° Efficiency 99 % Peak intensity 24.4 cd/im LEDs/each optic 1 Light colour White Required components: CREE & LED XP-P FWHM / FWTM 4.0° / 8.0° Efficiency 90 % Peak intensity 136.5 cd/im LEDs/each optic 1 Light colour White Required components: CREE & LED XD-F HD FWHM / FWTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/im LEDs/each optic 1 Light colour White Required components:	CREE ≑		90* 90*
FWHM / FWTM 10.0° / 18.0° Efficiency 89 % Peak intensity 24.4 cd/lm LEDs/each optic 1 Light colour White Required components:		VDIO	
Efficiency 89 % Peak intensity 244 cd/lm LEDs/each optic 1 Light colour White Required components:			75'
Peak intensity 24.4 cd/lm LEDs/each optic 1 Light colour White Required components:			
LEDs/each optic 1 Light colour White Required components: CREE LED XP-P FWHM / FWTM 4.0° / 8.0° Efficiency 90% Peak intensity 316.5 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XQ-E HD FWHM / FWTM 5.2° / 9.5° Efficiency 92% Peak intensity 96.1 cd/lm LEDs/each optic 1 Light colour White			60°
Light colour White Required components:			
Required components: Image: components of the second s			
CREE Construction Use of the second seco		White	
CREE Image: Construction of the second s	Required components:		1900
CREE Image: Construction of the second s			
CREE Image: Construction of the second s			
CREE LED XP-P FWHM / FWTM 4.0° / 8.0° Efficiency 90 % Peak intensity 136.5 cd/lm LEDs/each optic 1 LED XQ-E HD FWHM / FWTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/m LEDs/each optic 1 Light colour White			
LEDXP-PFWHM / FWTM4.0° / 8.0°Efficiency90 %Peak intensity136.5 cd/lmLEDs/each optic1Light colourWhiteRequired components:	CREE ≑		90* 90*
FWHM / FWTM 4.0° / 8.0° Efficiency 90 % Peak intensity 136.5 cd/lm LEDs/each optic 1 Light colour White Required components: Vite Efficiency 92 % Peak intensity 96.1 cd/lm LEDs/each optic 1 Light colour White Required components: Vite FWHM / FWTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/lm LEDs/each optic 1 Light colour White		VD D	
Efficiency 90 % Peak intensity 136.5 cd/lm LEDs/each optic 1 Light colour White Required components:			75.
Peak intensity 136.5 cd/lm LEDs/each optic 1 Light colour White Required components: Image: Component State			
LEDs/each optic 1 Light colour White Required components: Image: Component State Sta			60° 51290 60°
Light colour White Required components: Image: Component state stat			
Required components: CREE LED XQ-E HD FWHM / FWTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/lm LEDs/each optic 1 Light colour White			43*
CREE IED XQ-E HD FWHM / FWTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/lm LEDs/each optic 1 Light colour White		White	$r \times (\setminus X)$
LEDs XQ-E HD FWHM / FWTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/lm LEDs/each optic 1 Light colour White			19830
LEDs XQ-E HD FWHM / FWTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/lm LEDs/each optic 1 Light colour White			
LEDs XQ-E HD FWHM / FWTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/lm LEDs/each optic 1 Light colour White			\times / \times \times
LEDs XQ-E HD FWHM / FWTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/lm LEDs/each optic 1 Light colour White			30 ⁶ 15 ⁹ 0 ⁸ 35 ⁸
LEDXQ-E HDFWHM / FWTM5.2° / 9.5°Efficiency92 %Peak intensity96.1 cd/lmLEDs/each optic1Light colourWhite			90° 90°
FWHM / FWTM 5.2° / 9.5° Efficiency 92 % Peak intensity 96.1 cd/lm LEDs/each optic 1 Light colour White		XO-E HD	
Efficiency 92 % Peak intensity 96.1 cd/lm LEDs/each optic 1 Light colour White			75'
Peak intensity 96.1 cd/lm LEDs/each optic 1 Light colour White			
LEDs/each optic 1 Light colour White			60° () () () () () () () () () (
Light colour White			
			g:* / #200
		THE STREET	
Aug.			
30° 100°80 40° 10°			30° 100800 30° 30°



	DS	90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 7070 16.0° / 30.0° 90 % 8.6 cd/lm 1 White	31- 61- 61- 61- 230 610- 610- 610- 610- 610- 610- 610- 61
	05	90%
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON HL2X 8.0° / 14.0° 92 % 45.2 cd/lm 1 White	
		30 30 30
COMILEC	DS	90* 90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON MZ 10.5° / 17.8° 94 % 24.3 cd/lm 1 White	20 20 20 20 20 20 20 20 20 20
UMILEC)S	90* 90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON Rebel Plus 6.0° / 11.0° 89 % 71.1 cd/lm 1 White	27 27 27 27 27 27 27 27 27 27



	s	 90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SFT-40-WCS 6.0° / 12.0° 95 % 61.6 cd/lm 1 White	25
	s	90 ⁴ 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SFT-70X-WCS 8.0° / 14.0° 96 % 39.8 cd/lm 1 White	25°
	JS	
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	SST-10-B130 6.0° / 11.0° 91 % 1 IR	
	2L	50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SST-20 6.0° / 12.0° 90 % 54.4 cd/lm 1 White	75



	JS	90°
LED	SST-40	
FWHM / FWTM	10.0° / 18.0°	73°
Efficiency	91 %	
Peak intensity	28.5 cd/lm	
LEDs/each optic	1	
Light colour	White	43° 43°
Required components:		
		\times
		30°
		15° 0° 35°
	JS	90* A 90*
LED	SST-70X-WCS	
FWHM / FWTM	12.0° / 20.0 + 18.0°	
Efficiency	96 %	60°
Peak intensity	21 cd/lm	
LEDs/each optic	1	
Light colour	White	5° 1200 65°
Required components:		
		\times
		15000
		30° 30°
		15° 0° 15°
ΜΝΙCΗΙΛ		90* 90*
	NV4WB35AM	
	NV4WB35AM 10.0° / 18.0°	37 37 37
LED		
LED FWHM / FWTM Efficiency	10.0° / 18.0°	
LED FWHM / FWTM	10.0° / 18.0° 91 %	
LED FWHM / FWTM Efficiency Peak intensity	10.0° / 18.0° 91 % 25.7 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	10.0° / 18.0° 91 % 25.7 cd/lm 1	29 99 99 1300
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	10.0° / 18.0° 91 % 25.7 cd/lm 1	29 99 99 1000 1000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	10.0° / 18.0° 91 % 25.7 cd/lm 1	29 99 99 1000 1000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	10.0° / 18.0° 91 % 25.7 cd/lm 1	77 60 60 77 1000 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	10.0° / 18.0° 91 % 25.7 cd/lm 1	27 27 600 1200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	10.0° / 18.0° 91 % 25.7 cd/lm 1 White	77 60 60 77 1000 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	10.0° / 18.0° 91 % 25.7 cd/lm 1 White	77 60 60 77 1000 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	10.0° / 18.0° 91 % 25.7 cd/lm 1 White NV4WB35AM 10.0° / 18.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	10.0° / 18.0° 91 % 25.7 cd/lm 1 White NV4WB35AM 10.0° / 18.0° 91 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	10.0° / 18.0° 91 % 25.7 cd/lm 1 White NV4WB35AM 10.0° / 18.0° 91 % 25.8 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	10.0° / 18.0° 91 % 25.7 cd/lm 1 White NV4WB35AM 10.0° / 18.0° 91 % 25.8 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	10.0° / 18.0° 91 % 25.7 cd/lm 1 White NV4WB35AM 10.0° / 18.0° 91 % 25.8 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	10.0° / 18.0° 91 % 25.7 cd/lm 1 White NV4WB35AM 10.0° / 18.0° 91 % 25.8 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	10.0° / 18.0° 91 % 25.7 cd/lm 1 White NV4WB35AM 10.0° / 18.0° 91 % 25.8 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	10.0° / 18.0° 91 % 25.7 cd/lm 1 White NV4WB35AM 10.0° / 18.0° 91 % 25.8 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	10.0° / 18.0° 91 % 25.7 cd/lm 1 White NV4WB35AM 10.0° / 18.0° 91 % 25.8 cd/lm 1	



ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NV4x144A 15.0° / 24.0° 89 % 12.6 cd/lm 1 White	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
Μ ΝΙCΗΙΛ		90* 90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NVSxx19B/NVSxx19C 7.5° / 14.4° 91 % 42.9 cd/lm 1 White	200 - 200 - 200
OSRAM Opto Semiconductors		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSLON PURE 1010 12.0° / 22.0° 88 % 17.4 cd/lm 9 White	5° 5° 5° 5° 5° 5° 5° 5° 5° 5° 5° 5° 5° 5
OSRAM Opto Semiconductors		20 ²
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	SFH 4715AS 8.0° / 12.0° 90 % 1 IR	77 00 00 00 00 00 00 00 00 00



OSRAM Opto Semiconductors		90° 90°
Opto Semiconductors		
LED	SFH 4716AS	75' 75'
FWHM / FWTM	6.0° / 10.0°	
Efficiency	90 %	60°
LEDs/each optic	1	
Light colour	IR	gr gr
Required components:		
		\times
		7800
		30° 30° 30° 30° 30°
SAMSUN	IG	90° 90°
LED	LH351C	
FWHM / FWTM	8.0° / 14.0°	3. 2.
Efficiency	92 %	
Peak intensity	39.9 cd/lm	
LEDs/each optic	1	
Light colour	White	57
Required components:		
		30° 3300
		15' 0' 15'
SAMSUN	IG	90 ⁴ 90 ⁴
	LH351D 10.0° / 18.0°	37 37 37 37 37 37 37 37 37 37 37 37 37 3
LED	LH351D	
LED FWHM / FWTM	LH351D 10.0° / 18.0°	
LED FWHM / FWTM Efficiency	LH351D 10.0° / 18.0° 91 %	
LED FWHM / FWTM Efficiency Peak intensity	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1	25°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1	1 <u>1200</u> 664 324
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1	1 <u>1200</u> 664 324
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1	25°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1	1 <u>1200</u> 664 324
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1	25°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1	by by by by by by
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1 White	25°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1 White	30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SECOUL SEMICONDUCTOR LED FWHM / FWTM	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1 White Z8Y22P 8.0° / 14.0°	30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: seoul sewconouctor LED FWHM / FWTM Efficiency	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1 White Z8Y22P 8.0° / 14.0° 87 %	30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1 White Z8Y22P 8.0° / 14.0° 87 % 38.7 cd/lm	30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1 White Z8Y22P 8.0° / 14.0° 87 % 38.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1 White Z8Y22P 8.0° / 14.0° 87 % 38.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: stoul semiconouctor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1 White Z8Y22P 8.0° / 14.0° 87 % 38.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351D 10.0° / 18.0° 91 % 26.4 cd/lm 1 White Z8Y22P 8.0° / 14.0° 87 % 38.7 cd/lm 1	64 95 96 96 96 96 96 96 96 96 96 96



SEOUL SEOUL SEMICONDUCTOR		90° D
LED	Z8Y50P	**
FWHM / FWTM	15.5° / 26.1°	
Efficiency	94 %	90 ⁴
Peak intensity	10.7 cd/lm	
LEDs/each optic	1	
Light colour	White	Q ⁴ 500 Q ⁴
Required component	ts:	
		900
		125 0 125