

### STRADA-2X2MX-8-VSM

**IESNA** Type V (square) for wide areas lighting such as car parks. New revision.

#### **SPECIFICATION:**

Dimensions	90.0 x 90.0 mm
Height	13.1 mm
Fastening	screw
Ingress protection classes	IP67
ROHS compliant	yes 🛈



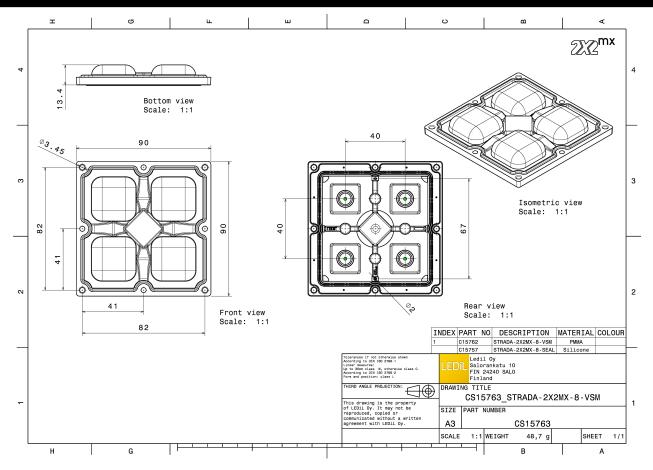
#### MATERIALS:

Component	Туре	Material	Colour	Finish
STRADA-2X2MX-8-VSM	Multi-lens	PMMA	clear	
STRADA-2X2MX-8-SEAL	Seal	Silicone	clear	

#### **ORDERING INFORMATION:**

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CS15763_STRADA-2X2MX-8-VSM	Multi-lens	156	52	52	8.6
» Box size: 480 x 280 x 300 mm					





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



1		
LED	XHP50.2	
FWHM / FWTM	151.0° / 159.0°	730 770 770
Efficiency	94 %	
Peak intensity	0.4 cd/lm	60° 60°.
LEDs/each optic	1	
Light colour	White	
Required componer		42, 42,
Required componer	lio.	400
		$\times$ / $\top$ / $\times$
		500
		30° 15° 0° 15° 30°
LED	XT-E HE	
FWHM / FWTM	148.0° / 156.0°	75.
Efficiency	94 %	
Peak intensity	0.4 cd/lm	60%
LEDs/each optic	1	200
Light colour	White	
Required componer		30
rioquiroù componol		
		460
		30° 500 30° 30°
UMIL	EDS	94* 97*
LED	LUXEON M/MX	
FWHM / FWTM	Asymmetric	75* 75*
Efficiency	94 %	
Peak intensity	0.5 cd/lm	60° 200 60°
	1	
LEDs/each optic		-6° - 30 - 6°
	1 White	er 30
LEDs/each optic Light colour	1 White	67. 300 07.
LEDs/each optic Light colour	1 White	40°
LEDs/each optic Light colour	1 White	6°
LEDs/each optic Light colour Required componer	1 White Its:	
LEDs/each optic Light colour	1 White Its:	40 50 10 10 10 10 10 10 10 10 10 1
LEDs/each optic Light colour Required component	1 White Its:	6°
LEDs/each optic Light colour Required componen	1 White Its:	5° 50 50° 5° 50° 5° 50° 5° 5° 5° 5° 5° 5° 5° 5° 5° 5° 5° 5° 5° 5
LEDs/each optic Light colour Required component	1 White tts: EDS LUXEON XR-7070 (L224-xxxx004MLU010)	
LEDS/each optic Light colour Required componen LUMIL LED FWHM / FWTM	1 White its: EDS LUXEON XR-7070 (L224-xxxx004MLU010) 147.0° / 156.0°	6 <sup>1</sup> 6 <sup>1</sup> 6 <sup>1</sup> 6 <sup>1</sup> 6 <sup>1</sup> 10 <sup>0</sup> 10 <sup>0</sup>
LEDs/each optic Light colour Required componen LUMIL LED FWHM / FWTM Efficiency	1 White tts: EDS LUXEON XR-7070 (L224-xxxx004MLU010) 147.0° / 156.0° 97 %	
LEDs/each optic Light colour Required componen LUMIL LED FWHM / FWTM Efficiency Peak intensity	1 White tts: EDS LUXEON XR-7070 (L224-xxxx004MLU010) 147.0° / 156.0° 97 % 0.4 cd/lm	
LEDs/each optic Light colour Required component LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	1 White tts: EDS LUXEON XR-7070 (L224-xxxx004MLU010) 147.0° / 156.0° 97 % 0.4 cd/lm 1 White	
LEDs/each optic Light colour Required component LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	1 White tts: EDS LUXEON XR-7070 (L224-xxxx004MLU010) 147.0° / 156.0° 97 % 0.4 cd/lm 1 White	
LEDs/each optic Light colour Required component LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	1 White tts: EDS LUXEON XR-7070 (L224-xxxx004MLU010) 147.0° / 156.0° 97 % 0.4 cd/lm 1 White	
LEDs/each optic Light colour Required component LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	1 White tts: EDS LUXEON XR-7070 (L224-xxxx004MLU010) 147.0° / 156.0° 97 % 0.4 cd/lm 1 White	



<b>ØNICHI</b> Λ		
LED	NV9W149AM	
FWHM / FWTM	Asymmetric	
Efficiency	94 %	100
Peak intensity	0.5 cd/lm	60° 150 60°
LEDs/each optic	1	20
Light colour	White	4° 20 4°
Required compone		300
		400
		30° 450 15° 30°
OSRAM		91 <sup>4</sup>
LED	PrevaLED Brick HP 2x2MX	~ ~ ~
FWHM / FWTM	145.0° / 153.0°	750 100 75.
Efficiency	96 %	
Peak intensity	0.4 cd/lm	.00° 200 60°
LEDs/each optic	4	$\vee \times / \wedge \times \vee$
Light colour	White	45* 3%
Required compone	nts:	
		XITX
		200
		130° 15 <sup>3</sup> 980 15° 30°
SΛMSL	JNG	90*
LED	HiLOM SC16 (LH181B)	
FWHM / FWTM	140.0° / 147.0°	75* 100 78*
Efficiency	94 %	
Peak intensity	0.5 cd/lm	60 <sup>4</sup> 200 60 <sup>4</sup>
LEDs/each optic	1	
Light colour	White	45* 20
Required compone	nts:	
		$\times$
		200
		30* 30*
		15° 60 10°
SCIO	LUX	90° 90°
LED	PAL-LK-4950-740-48	
FWHM / FWTM	150.5 + 151.0° / 159.5 + 159.0°	234 200 785
Efficiency	97 %	50 <sup>6</sup>
Peak intensity	0.4 cd/lm	
LEDs/each optic	1	$X \times I \setminus X \setminus$
Light colour	White	65° 300 65°
Required compone	nts:	$\times$
		460
		30° 30
1		15° 0° 15°



FWHM / FWTM 148.0° / 156.0° Efficiency 94 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components: SCIOLUX LED XLE-S22XHP50B (XHP50.2) FWHM / FWTM 151.0° / 159.0° Efficiency 94 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components: SUCOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/m LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/m			
LED XLE-S22XNP50B (XLP50.2) FMM / FWTM Asymmetric Efficiency 84% Pack Intensity 0.5 cd/m Light colour White Regulated components:	SCIO		
PWINK / PVTM Asymmetric Endinemy 94% Peak Intensity 0.5 colfm LEDWatch optic 4 LEDWatch optic 4 LEDWatch optic 4 LEDWatch optic 5 SCIOLUX LED XLE-3226XTEHE (KTE HE) PWINK / 150.0° Endinemy 94% Peak Intensity 0.4 colfm LEDWatch optic 1 LEDWatch optic 1 LEDWatch optic 1 LEDWatch optic 1 Light colour White Required components: EED XLE-322XHP505 (XHP50.2) PWINK / 151.0° / 151.0° Endinemy 94% Peak Intensity 0.4 colfm LEDWatch optic 1 Light colour White Required components: EED XLE-322XHP505 (XHP50.2) PWINK / 151.0° / 151.0° EED XLE-322XHP505 (XHP50.2) PWINK / VTM 151.0° / 151.0° EED XLE-322XHP505 (XHP50.2) PWINK / 151.0° / 151.0° EED XLE-322XHP505 (XHP50.2) PWINK / VTM 151.0° PWINK / VTM 151.0° EED XLE-322XHP505 (XHP50.2) PWINK / VTM 151.0° PWINK / VTM 150.0° PWINK / VTM 1			90° 90°
Efficiency 9 4'% Peak intensity 0.5 colim Light colour White Required components: SCIOLUX LED XLES22CXTEHE (XT.E.HE) PMHA /FWTM 140 0' 156.0' Efficiency 94 % Peak intensity 0.4 colim Light colour White Required components: SCIOLUX LED XLES22XHP06B (XHP50.2) FMHA /FWTM 151.0' 159.0' Efficiency 94 % Peak intensity 0.4 colim LED XLES22XHP06B (XHP50.2) FMHA /FWTM 151.0' 159.0' Efficiency 94 % Peak intensity 0.4 colim LED XLES22XHP06B (XHP50.2) FMHA /FWTM 151.0' 159.0' Efficiency 94 % Peak intensity 0.4 colim LED WICOP 5050 FWHA /FWTM 150.0' Efficiency 95 % Peak intensity 0.4 colim LED WICOP 5050 FWHA /FWTM 150.0' Efficiency 95 % Peak intensity 0.4 colim LED WICOP 5050 FWHA /FWTM 150.0' FMHA /FWTM 150.0' Efficiency 95 % Peak intensity 0.4 colim LED WICOP 5050 FWHA /FWTM 150.0' Efficiency 95 % Peak intensity 0.4 colim LED WICOP 5050 FWHA /FWTM 150.0' FMHA /FWTM 150.0' Efficiency 95 % Peak intensity 0.4 colim LED WICOP 5050 FWHA /FWTM 150.0' Efficiency 95 % Peak intensity 0.4 colim LED WICOP 5050 FWHA /FWTM 150.0' Efficiency 95 % Peak intensity 0.4 colim LED WICOP 5050 FWHA /FWTM 150.0' Efficiency 95 % Peak intensity 0.4 colim LED WICOP 5050 FWHA /FWTM 150.0' Efficiency 95 % Peak intensity 0.4 colim LED WICOP 5050 FWHA /FWTM 150.0' FWHA /FWTM 150.			73' 77
Peak Intensity 0.5 cd/m LED Alexandro optic 4 Upt colour White Required components: SCIOLUX LED XLE-322CAYTEHE (XT-E HE) FWHM / FWTM 148.0° / 158.0° Efficiency 94 % Required components: SCIOLUX LED XLE-322CAYTEHE (XT-E HE) FWHM / FWTM 148.0° / 158.0° Efficiency 94 % Required components: SCIOLUX LED XLE-322CAYTEHE (XT-E HE) FWHM / FWTM 148.0° / 158.0° Efficiency 94 % Required components: SCIOLUX LED XLE-322CAYTEHE (XT-E HE) FWHM / FWTM 148.0° / 158.0° Efficiency 94 % Deak Intensity 0.4 cd/m LED XLE-322CHF508 (XHP50.2) FWHM / FWTM 150.0° / 159.0° Efficiency 94 % Deak Intensity 0.4 cd/m LED XLE-322CHF508 (XHP50.2) FWTM / FWTM 150.0° / 159.0° Efficiency 94 % Deak Intensity 0.4 cd/m LED XLE-322CHF508 (XHP50.2) FWTM / FWTM 150.0° / 159.0° FWTM / FWTM 150.0° / 159.0° ELD XLE-322CHF508 (XHP50.2) FWTM / FWTM 150.0° / 159.0° FWTM / FWTM 150.0° FW		-	
LEDStand point 4 Light colour White Required components: SCIOLUX LED XLE-S22CH/TEHE (XT-E HE) FWHM / FWTM 145,0° / 156,0° Elicitony 94 % Peak Intensity 0.4 col/m LEDStand point 1 Light colour White Required components: SCIOLUX LED XLE-S22XHF508 (XHP50.2) FWHM / FWTM 151,0° / 159,0° Elicitony 94 % Required components: Elicitony 94 % Required components: Elicitony 94 % Required components: SECOLUX LED XLE-S22XHF508 (XHP50.2) FWHM / FWTM 151,0° / 159,0° Elicitony 94 % Required components: SECOLUX LED XLE-S22XHF508 (XHP50.2) FWHM / FWTM 151,0° / 159,0° Elicitony 94 % Required components: SECOLUX LED XLE-S22XHF508 (XHP50.2) FWHM / FWTM 150,0° / 159,0° Elicitony 94 % Required components: SECOLUX LED XLE-S22XHF508 (XHP50.2) FWHM / FWTM 150,0° / 159,0° Elicitony 94 % Required components: SECOLUX LED XLE-S22XHF508 (XHP50.2) FWHM / FWTM 150,0° / 159,0° Elicitony 94 % Peak Intensity 0.4 col/m LED XLE-S22XHF508 (XHP50.2) FWHM / FWTM 150,0° / 150,0° Elicitony 96 % Peak Intensity 0.4 col/m LED XLE-S22XHF508 (XHP50.2) FWHM / FWTM 150,0° / 150,0° Elicitony 96 % Peak Intensity 0.4 col/m LED XLE-S22XHF508 (XHP50.2) FWHM / FWTM 150,0° / 150,0° Elicitony 96 % Peak Intensity 0.4 col/m LED XLE-S22XHF508 (XHP50.2) FWHM / FWTM 150,0° / 150,0° Elicitony 96 % Peak Intensity 0.4 col/m LED XLE-S22XHF508 (XHP50.2) FWTM / FWTM 150,0° / 150,0° Elicitony 96 % Peak Intensity 0.4 col/m LED XLE-S22XHF508 (XHP50.2) FWTM / FWTM 150,0° / 150,0° Elicitony 96 % Peak Intensity 0.4 col/m LED XLE-S22XHF508 (XHP50.2) FWTM / FWTM 150,0° / 150,0° Elicitony 96 % Peak Intensity 0.4 col/m LED XLE-S22XHF508 (XHP50.2) FWTM / FWTM 150,0° / 150,0° Elicitony 96 % Peak Intensity 0.4 col/m LED XLE-S22XHF508 (XHP50.2) FWTM / FWTM 150,0° / 150,0° Elicitony 96 % PAU / 150,0° Elicitony 96 % PAU / 150,0° Elicitony			604 604
Light colour While Required components: ED XLE-S22C4XTFHE (XT-E HE) FWHM /FWTM 148,0° 156,0° Endency 94% Peak intensity 0.4 colm LEDS/sech optic 1 LEDS/sech o			200
Required components:			
ED       XLE-S22C4XTEHE (XT-E HE)         FWHM / FWTM       148,07 / 156,0°         Efficiency       94 %         Peak Intensity       04 od/m         LED/seach optic       1         Light colour       White         Required components:       Image: Components         EED/seach optic       1         Light colour       White         Required components:       Image: Components         EED/seach optic       1         Light colour       White         Required components:       Image: Components         EED/seach optic       1         Light colour       White         Required components:       Image: Components         EED/seach optic       1         Light colour       White         Required components:       Image: Components         EED/seach optic       1         Light colour       White         Required components:       Image: Components         EED/seach optic       1         Light colour       White         Required components:       Image: Components         EED/seach optic       Image: Components         EED/seach optic       Image: Components         <			45* 300 45*
LED XLE-S22C4XTEHE (XT-E HE) FWHM / FVTTM 148,0° / 166,0° Efficiency 94 % Peak intensity 0.4 cd/lm LED&teach optic 1 LED&teach optic 1 LED&teach optic 2 ED XLE-S22XHP50B (XHP50.2) FWHM / FVTTM 151,0° / 159,0° Efficiency 94 % Peak intensity 0.4 cd/lm LED&teach optic 1 LED&teach optic 1	Required componer	its:	$\times$
LED XLE-S22C4XTEHE (XT-E HE) FWHM / FVTTM 148,0° / 166,0° Efficiency 94 % Peak intensity 0.4 cd/lm LED&teach optic 1 LED&teach optic 1 LED&teach optic 2 ED XLE-S22XHP50B (XHP50.2) FWHM / FVTTM 151,0° / 159,0° Efficiency 94 % Peak intensity 0.4 cd/lm LED&teach optic 1 LED&teach optic 1			400
LED XLE-S22C4XTEHE (XT-E HE) FWHM / FVTTM 148,0° / 166,0° Efficiency 94 % Peak intensity 0.4 cd/lm LED&teach optic 1 LED&teach optic 1 LED&teach optic 2 ED XLE-S22XHP50B (XHP50.2) FWHM / FVTTM 151,0° / 159,0° Efficiency 94 % Peak intensity 0.4 cd/lm LED&teach optic 1 LED&teach optic 1			
LED XLE-S22C4XTEHE (XT-E HE) FWHM / FVTTM 148,0° / 166,0° Efficiency 94 % Peak intensity 0.4 cd/lm LED&teach optic 1 LED&teach optic 1 LED&teach optic 2 ED XLE-S22XHP50B (XHP50.2) FWHM / FVTTM 151,0° / 159,0° Efficiency 94 % Peak intensity 0.4 cd/lm LED&teach optic 1 LED&teach optic 1			30° 30°
LED XLE-S22C4XTEHE (XT-E HE) FWHM / FVTTM 148,0° / 166,0° Efficiency 94 % Peak intensity 0.4 cd/lm LED&teach optic 1 LED&teach optic 1 LED&teach optic 2 ED XLE-S22XHP50B (XHP50.2) FWHM / FVTTM 151,0° / 159,0° Efficiency 94 % Peak intensity 0.4 cd/lm LED&teach optic 1 LED&teach optic 1			13, 0, 15,
FWHM / FWTM 148.0° / 156.0° Efficiency 94% Peak intensity LED XLE-S22XHP50B (XHP50.2) FWHM / FWTM 151.0° / 159.0° Efficiency 94% Peak intensity 0.4 cd/m LEDS/each optic 1 Light colour White Required components: WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 94% Peak intensity 0.4 cd/m LEDS/each optic 1 Light colour White Required components: WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/m LEDS/each optic 1 Light colour White Required components: WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/m	SCIO	LUX	90* 90*
FWHM / FWTM 148.0* / 156.0° Efficiency 94 % Peak intensity 0.4 cd/m Light colour White Required components: SCIOLUX LED XLE-S22XHP50B (XHP50.2) FWHM / FWTM 151.0* / 158.0° Efficiency 94 % Peak intensity 0.4 cd/m LEDSeach optic 1 Light colour White Required components: SUBCONCRE LED WICOP 5050 FWHM / FWTM 150.0* / 158.0° Efficiency 96 % Peak intensity 0.4 cd/m LEDSeach optic 1 Light colour White Required components: SUBCONCRE LED WICOP 5050 FWHM / FWTM 150.0* / 158.0° Efficiency 96 % Peak intensity 0.4 cd/m LEDSeach optic 1 Light colour White Required components: SUBCONCRE LED WICOP 5050 FWHM / FWTM 150.0* / 158.0° Efficiency 96 % Peak intensity 0.4 cd/m LEDSeach optic 1 Light colour White Required components:	LED	XLE-S22C4XTEHE (XT-E HE)	
Peak intensity 0.4 cd/m LEDS/each optic 1 LEDS XLE-S22XHP50B (XHP50.2) EVHM / FWTM 151.0° / 158.0° Efficiency 94 % Peak intensity 0.4 cd/m LEDS/each optic 1 Light colour White Required components: WICOP 5050 FWHM / FWTM 150.0° / 158.0° Efficiency 96 % Peak intensity 0.4 cd/m LEDS/each optic 1 Light colour White Required components:	FWHM / FWTM		75*
LEDs/each optic 1 Light colour White Required components: SCIOLUX LED XLE-S22XHP50B (XHP50.2) FWHM / FWTM 151.0* / 159.0* Efficiency 94% Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components: SEREMENTAL LED WICOP 5050 FWHM / FWTM 150.0* / 159.0* Efficiency 96% Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components:	Efficiency	94 %	
LEDs/each optic 1 Light colour White Required components: SCIOLUX LED XLE-S22XHP50B (XHP50.2) FWHM / FWTM 151.0* / 159.0* Efficiency 94% Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components: SEREMENTAL LED WICOP 5050 FWHM / FWTM 150.0* / 159.0* Efficiency 96% Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components:	Peak intensity	0.4 cd/lm	
Light colour White Required components: SCIOLUX LED XLE-S22XHP50B (XHP50.2) FWHM /FWTM 151.0° / 159.0° Efficiency 94 % Peak intensity 0.4 col/m LEDs/each optic 1 Light colour White Required components: SUSCONCER LED WICOP 5050 FWHM /FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 col/m LEDS/each optic 1 LEDS wicop 5050 FWHM /FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 col/m LEDS/each optic 1 LEDS wicop 5050 FWHM /FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 col/m LEDS/each optic 1 LEDS/each optic 1 LED	LEDs/each optic	1	X//T
Image: Sciolar State St	Light colour	White	45° 300 45°
LED XLE-S22XHP50B (XHP50.2) FWHM / FWTM 151.0° / 159.0° Efficiency 94 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components: SW0.15WCNOTOR LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components:	Required componer	its:	
LED XLE-S22XHP50B (XHP50.2) FWHM / FWTM 151.0° / 159.0° Efficiency 94 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components: SW0.15WCNOTOR LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components:			400
LED XLE-S22XHP50B (XHP50.2) FWHM / FWTM 151.0° / 159.0° Efficiency 94 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components: SW0.15WCNOTOR LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components:			$\times$ / $\top$ / $\times$
LED XLE-S22XHP50B (XHP50.2) FWHM / FWTM 151.0° / 159.0° Efficiency 94 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components: SW0.15WCNOTOR LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components:			
LED XLE-S22XHP50B (XHP50.2) FWHM / FWTM 151.0° / 159.0° Efficiency 94 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components: SW0.15WCNOTOR LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components:			130° 15 <sup>5</sup> 0 <sup>6</sup> 15° 30°
LED XLE-S22XHP50B (XHP50.2) FWHM / FWTM 151.0° / 159.0° Efficiency 94 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components: SW0.15WCNOTOR LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components:	SCIO	LUX	90° 90°
FWHM / FWTM 151.0° / 159.0° Efficiency 94 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components: WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:	LED		
Efficiency 94 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components: STORE LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/lm LEDs/each optic 1 LEDs/each optic 1 LE			75*
Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:			
LEDs/each optic 1 Light colour White Required components: SKOULSONCOULTE LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:		0.4 cd/lm	60° 60°
Light colour White Required components: SKOULSUNCONDUCTOR LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components:	-		
Required components: WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/m LEDs/each optic 1 Light colour White Required components:		White	45* 300 45*.
SROULSEWECHNEL LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:			$\times$ / $\times$ /
seour semiconoucrom LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:			440
seour semiconoucrom LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:			X   X
seour semiconoucrom LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:			500
seour semiconoucrom LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:			130° 15° 0° 15° 30°
LED WICOP 5050 FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:	and the second se		
FWHM / FWTM 150.0° / 159.0° Efficiency 96 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:		WICOP 5050	90° 90°
Efficiency 96 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:			751 752
Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:		100.0 / 103.0	100
LEDs/each optic 1 Light colour White Required components:	Efficiency		
Light colour White Required components:	Efficiency Reak intensity	96 %	50*
Required components:	Peak intensity	96 % 0.4 cd/lm	60 - <u>209</u> - 67.
	Peak intensity LEDs/each optic	96 % 0.4 cd/lm 1	er 200 6A
	Peak intensity LEDs/each optic Light colour	96 % 0.4 cd/lm 1 White	er 20 6A
20° <u>22</u> <u>500</u> <u>1</u> , 30°	Peak intensity LEDs/each optic Light colour	96 % 0.4 cd/lm 1 White	60° 60°. 6° 300 6°.
50° 500 50° 50° 50°	Peak intensity LEDs/each optic Light colour	96 % 0.4 cd/lm 1 White	60 <sup>4</sup> 200 60 <sup>4</sup> . 60 <sup>4</sup> 300 60 <sup>4</sup> .
	Peak intensity LEDs/each optic Light colour	96 % 0.4 cd/lm 1 White	60 <sup>4</sup> 200 60 <sup>4</sup>



SEOUL SEOUL SEMICONDUCTOR		27 27
LED	Z8Y22	
FWHM / FWTM	Asymmetric	75 100 75
Efficiency	94 %	
Peak intensity	0.5 cd/lm	.60 <sup>4</sup> 200 60 <sup>4</sup> .
LEDs/each optic	4	
Light colour	White	d'
Required compone	ents:	
		40
		500 500 500 500 500 500 500 500 500 500



bridgelux.		
LED	Bridgelux SMD 5050	
FWHM / FWTM	Asymmetric	75°
Efficiency	94 %	
Peak intensity	0.4 cd/lm	60 <sup>4</sup> 200 60 <sup>4</sup> .
LEDs/each optic	1	
Light colour	White	-5° - 300 - 67*.
Required components:		
riedanea compension		400
		560
		30° 13° 30°
CITIZEN		
LED	CLU700/701/702/703	90* 90*
FWHM / FWTM	Asymmetric	75° 100 75°
Efficiency	93 %	
Peak intensity	0.5 cd/lm	.60 <sup>4</sup> 200 60 <sup>4</sup> .
LEDs/each optic	1	
Light colour	White	45°
Required components:	White	
Bender Wirth: 434 Ty	n 2x2MX HV	400
		200
		$\times$ / $\wedge$ $\times$
		30° 15° 80 15° 30°
CREE ≑		
	CMA1202	82
LED	CMA1303	30 <sup>2</sup> 73 <sup>3</sup> 100 75
LED FWHM / FWTM	142.0° / 152.0°	90° 73° 100 100 100 100 100
LED FWHM / FWTM Efficiency	142.0° / 152.0° 95 %	90° 90° 73° 10° 72° 80° 20° 6°
LED FWHM / FWTM Efficiency Peak intensity	142.0° / 152.0° 95 % 0.5 cd/lm	90° 90° 73° 100 75° 60° 200 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	142.0° / 152.0° 95 % 0.5 cd/lm 1	94 
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	142.0° / 152.0° 95 % 0.5 cd/lm	20 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	142.0° / 152.0° 95 % 0.5 cd/lm 1 White	20 67. 30
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	142.0° / 152.0° 95 % 0.5 cd/lm 1 White	20 67. 30
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	142.0° / 152.0° 95 % 0.5 cd/lm 1 White	6° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Bender Wirth: 488 Ty	142.0° / 152.0° 95 % 0.5 cd/lm 1 White	20 67. 30
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Bender Wirth: 488 Ty	142.0° / 152.0° 95 % 0.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Bender Wirth: 488 Ty	142.0° / 152.0° 95 % 0.5 cd/lm 1 White p L4 HV	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Bender Wirth: 488 Ty	142.0° / 152.0° 95 % 0.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Bender Wirth: 488 Ty EED FWHM / FWTM	142.0° / 152.0° 95 % 0.5 cd/lm 1 White p L4 HV	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Bender Wirth: 488 Ty	142.0° / 152.0° 95 % 0.5 cd/lm 1 White p L4 HV J Series 5050B 30V K Class 148.0° / 158.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Bender Wirth: 488 Ty Ender Wirth: 488 Ty ELED FWHM / FWTM Efficiency Peak intensity	142.0° / 152.0° 95 % 0.5 cd/lm 1 White p L4 HV J Series 5050B 30V K Class 148.0° / 158.0° 89 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Bender Wirth: 488 Ty Ender Wirth: 488 Ty LED FWHM / FWTM Efficiency	142.0° / 152.0° 95 % 0.5 cd/lm 1 White p L4 HV J Series 5050B 30V K Class 148.0° / 158.0° 89 % 0.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Bender Wirth: 488 Ty Ender Wirth: 488 Ty ELED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	142.0° / 152.0° 95 % 0.5 cd/lm 1 White p L4 HV J Series 5050B 30V K Class 148.0° / 158.0° 89 % 0.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Bender Wirth: 488 Ty Ender Wirth: 488 Ty EEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	142.0° / 152.0° 95 % 0.5 cd/lm 1 White p L4 HV J Series 5050B 30V K Class 148.0° / 158.0° 89 % 0.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Bender Wirth: 488 Ty Ender Wirth: 488 Ty EEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	142.0° / 152.0° 95 % 0.5 cd/lm 1 White p L4 HV J Series 5050B 30V K Class 148.0° / 158.0° 89 % 0.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Bender Wirth: 488 Ty Ender Wirth: 488 Ty EEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	142.0° / 152.0° 95 % 0.5 cd/lm 1 White p L4 HV J Series 5050B 30V K Class 148.0° / 158.0° 89 % 0.4 cd/lm 1	



		90* 90*
LED	MHB-A/B	750 701
FWHM / FWTM	152.0° / 160.0°	
Efficiency	95 %	60°
Peak intensity	0.4 cd/lm	20
LEDs/each optic	1	
Light colour	White	45* 200 45*
Required components:		$\times$
		400
		20* <u>500</u> 30*
CREE ≑		
LEDS	V(UD70.0.UD	90* 90 <sup>*</sup>
LED	XHP70.3 HD	
FWHM / FWTM	152.0° / 160.0°	
Efficiency	94 %	60° 60°.
Peak intensity	0.4 cd/lm	
LEDs/each optic	1	
Light colour	White	-6°
Required components:		40
		$\times$ / $\times$
		560
		30°
1		
CREE 🚖		
LED	XT-E	
LED FWHM / FWTM	148.0° / 180.0°	
LED FWHM / FWTM Efficiency	148.0° / 180.0° 93 %	
LED FWHM / FWTM Efficiency Peak intensity	148.0° / 180.0° 93 % 0.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	148.0° / 180.0° 93 % 0.5 cd/lm 1	20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	148.0° / 180.0° 93 % 0.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	148.0° / 180.0° 93 % 0.5 cd/lm 1	20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	148.0° / 180.0° 93 % 0.5 cd/lm 1	20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	148.0° / 180.0° 93 % 0.5 cd/lm 1	20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	148.0° / 180.0° 93 % 0.5 cd/lm 1	20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 180.0° 93 % 0.5 cd/lm 1 White	6° 40 60 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 180.0° 93 % 0.5 cd/lm 1 White	6° 40 60 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 180.0° 93 % 0.5 cd/lm 1 White	6° 60 60 80 80
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 180.0° 93 % 0.5 cd/lm 1 White S LUXEON 5050 Round LES 146.0° / 154.0°	6° 40 60 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>COMPARENT</b>	148.0° / 180.0° 93 % 0.5 cd/lm 1 White	6° • • • • • • • • • • • • • • • • • • •
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 180.0° 93 % 0.5 cd/lm 1 White UXEON 5050 Round LES 146.0° / 154.0° 95 % 0.5 cd/lm	6° • • • • • • • • • • • • • • • • • • •
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>CONTINUES</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	148.0° / 180.0° 93 % 0.5 cd/lm 1 White UXEON 5050 Round LES 146.0° / 154.0° 95 % 0.5 cd/lm 1	6, 6, 10 10 10 10 10 10 10 10 10 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 180.0° 93 % 0.5 cd/lm 1 White UXEON 5050 Round LES 146.0° / 154.0° 95 % 0.5 cd/lm	6° • • • • • • • • • • • • • • • • • • •
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>CONTINUES</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	148.0° / 180.0° 93 % 0.5 cd/lm 1 White UXEON 5050 Round LES 146.0° / 154.0° 95 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 180.0° 93 % 0.5 cd/lm 1 White UXEON 5050 Round LES 146.0° / 154.0° 95 % 0.5 cd/lm 1	6, 6, 10 10 10 10 10 10 10 10 10 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 180.0° 93 % 0.5 cd/lm 1 White UXEON 5050 Round LES 146.0° / 154.0° 95 % 0.5 cd/lm 1	6, 6, 10 10 10 10 10 10 10 10 10 10



50° 500 50° 50° 50° 50°
20 10 7 50 50 6 50 50
33. 25' 80 15' 3



<b>Μ</b> ΝΙCΗΙΛ		
LED	NVSxE21A	90* 90*
EED FWHM / FWTM	146.0° / 154.0°	73* 100 75*
Efficiency	95 %	
Peak intensity	95 % 0.5 cd/lm	.60°
LEDs/each optic	4 White	X / W / X
Light colour Required components:	white	6°* 65*
Required components.		400
		700
		$\times$ / $\top$ / $\times$
		30* 15 <sup>5</sup> 860 15* 30*
<b>Μ</b> ΝΙCΗΙΛ		90* 90*
LED	NVSxE21A	
FWHM / FWTM	148.0° / 156.0°	75 0 75 0
Efficiency	95 %	
Peak intensity	0.4 cd/lm	50° 50°
LEDs/each optic	9	
Light colour	White	45* 30 45*
Required components:		
		460
		$\times$
		500
		30* 30*
OSRAM Oto Samiconductors		
OSRAM Opto Semiconductors	OSCONIO C 2424	
LED	OSCONIQ C 2424 148.0° / 156.0°	
LED FWHM / FWTM	148.0° / 156.0°	
LED FWHM / FWTM Efficiency	148.0° / 156.0° 95 %	
LED FWHM / FWTM Efficiency Peak intensity	148.0° / 156.0° 95 % 0.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	148.0° / 156.0° 95 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	148.0° / 156.0° 95 % 0.4 cd/lm 4	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	148.0° / 156.0° 95 % 0.4 cd/lm 4	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	148.0° / 156.0° 95 % 0.4 cd/lm 4	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	148.0° / 156.0° 95 % 0.4 cd/lm 4	10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 156.0° 95 % 0.4 cd/lm 4	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	148.0° / 156.0° 95 % 0.4 cd/lm 4	10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM	148.0° / 156.0° 95 % 0.4 cd/lm 4 White	10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 156.0° 95 % 0.4 cd/lm 4	10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 156.0° 95 % 0.4 cd/lm 4 White	10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 156.0° 95 % 0.4 cd/lm 4 White OSCONIQ P 7070 Asymmetric	10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 156.0° 95 % 0.4 cd/lm 4 White OSCONIQ P 7070 Asymmetric 94 %	10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: COSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	148.0° / 156.0° 95 % 0.4 cd/lm 4 White OSCONIQ P 7070 Asymmetric 94 % 0.4 cd/lm	10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 156.0° 95 % 0.4 cd/lm 4 White OSCONIQ P 7070 Asymmetric 94 % 0.4 cd/lm 1	10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 156.0° 95 % 0.4 cd/lm 4 White OSCONIQ P 7070 Asymmetric 94 % 0.4 cd/lm 1	10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 156.0° 95 % 0.4 cd/lm 4 White OSCONIQ P 7070 Asymmetric 94 % 0.4 cd/lm 1	10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0° / 156.0° 95 % 0.4 cd/lm 4 White OSCONIQ P 7070 Asymmetric 94 % 0.4 cd/lm 1	20



SEOUL SEOUL SEMICONDUCTOR		80°
LED	Z8Y19	
FWHM / FWTM	Asymmetric	72° 200 72°
Efficiency	93 %	
Peak intensity	0.5 cd/lm	.60 <sup>4</sup> 200 60 <sup>4</sup> .
LEDs/each optic	4	
Light colour	White	61 300 61.
Required component	s:	
		10 200 200 200 200 200