

PRODUCT DATASHEET C16927_STRADA-2X2-LW1

STRADA-2X2-LW1

Excellent longitudinal luminance uniformity for EN13201 M-class where road width is wider than the pole height.

SPECIFICATION:

Dimensions Height Fastening ROHS compliant 50.0 x 50.0 mm 7.2 mm pin, screw yes ()



Component STRADA-2X2-LW1

Туре
Multi-lens

LEDiĽ			

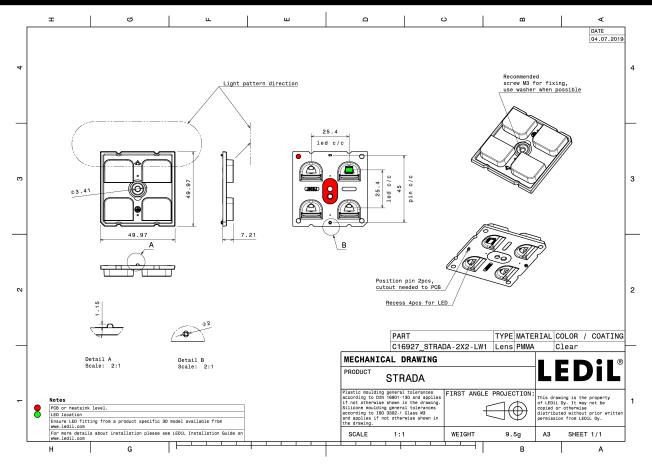
N	laterial	Colour	Finish
Р	MMA	clear	

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C16927_STRADA-2X2-LW1	800	160	160	8.4
» Box size: 480 x 280 x 300 mm				



PRODUCT DATASHEET C16927_STRADA-2X2-LW1



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



OPTICAL RESULTS (MEASURED):

		90 ⁺
LED	XP-G3	
FWHM / FWTM	Asymmetric	750
Efficiency	80 %	
Peak intensity	0.6 cd/lm	504 X 700 X
LEDs/each optic	1	30
Light colour	White	$X \times (X)$
Required compone		400
	NA-2X2-SHD-BLK	500
OTTOT _OTTAL		
		600
		30* 15 ⁵ 300 15°
CREE ≑		MA KH
LEDS		90*
LED	XP-G3	75%
FWHM / FWTM	Asymmetric	
Efficiency	91 %	504 X X
Peak intensity	0.6 cd/lm	300
LEDs/each optic	1	$X \times (X)$
Light colour	White	40
Required compone		500
C17580_STRAL	DA-2X2-SHD-WHT	
		600
		30° 25 ⁵ 700 15°
CREE ≑		THY YH
		80*
LED	XP-G3	20 ⁴
LED FWHM / FWTM	Asymmetric	Be 200
LED FWHM / FWTM Efficiency	Asymmetric 98 %	200 200 200
LEDs LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 98 % 0.7 cd/lm	50 ⁺ 20 ⁺ 20 ⁺ 20 ⁺ 20 ⁺
LEDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 98 % 0.7 cd/lm 1	84 ⁴ 30 64 ⁴ 60
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 0.7 cd/lm 1 White	6°. 80 90 90 90 90 90 90 90 90 90 90 90 90 90
LEDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 98 % 0.7 cd/lm 1 White	50 50 50 50 50 50
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 0.7 cd/lm 1 White	
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 0.7 cd/lm 1 White	
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 0.7 cd/lm 1 White	
LEDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 98 % 0.7 cd/lm 1 White nts:	
LEDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 98 % 0.7 cd/lm 1 White nts:	
LEDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 98 % 0.7 cd/lm 1 White nts: ions RecLED 122x50mm 1900lm 730 2x4 Opt G1	
LEDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 98 % 0.7 cd/lm 1 White nts: tors RecLED 122x50mm 1900lm 730 2x4 Opt G1 Asymmetric	
LEDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone WSST Vour solut LED FWHM / FWTM Efficiency	Asymmetric 98 % 0.7 cd/lm 1 White nts:	
LEDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Your solut LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 98 % 0.7 cd/lm 1 White nts: RecLED 122x50mm 1900lm 730 2x4 Opt G1 Asymmetric 97 % 0.6 cd/lm	
LEDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone WIST Vour solut LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 98 % 0.7 cd/lm 1 White nts:	
LEDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone WIST Your solut LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 0.7 cd/lm 1 White nts:	
LEDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MSST Vour solut LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 98 % 0.7 cd/lm 1 White nts:	
LEDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MSST Your solut LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 0.7 cd/lm 1 White nts:	
LEDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MSST Your solut LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 0.7 cd/lm 1 White nts:	
LEDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MSST Your solut LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 0.7 cd/lm 1 White nts:	



OPTICAL RESULTS (MEASURED):

OSRAM Opto Semiconductors		90*
LED	OSLON Square CSSRM2/CSSRM3	
FWHM / FWTM	Asymmetric	73* 100 72*
Efficiency	96 %	200
Peak intensity	0.7 cd/lm	60* 60*
LEDs/each optic	1	***
Light colour	White	451 400 53"
Required compone		
		500
		600
		30* 13 ⁵ 0 ⁶ 15 [*] 30 ^{4°}
PHILIF	S	
LED	Fortimo FastFlex LED 2x8 DA G4+	90* 90*
EED FWHM / FWTM		75* 300 75*
	Asymmetric 98 %	
Efficiency	96 % 0.6 cd/lm	.50*
Peak intensity LEDs/each optic		30
LEDs/each optic	1 White	
Required compone		6° 400 67
Required compone	113.	540
		600
		30° 15° 30°
PHILIP	S	
LED	Fortimo FastFlex LED 2x8 DA G5	90° 90°
FWHM / FWTM	Asymmetric	755 100 757
Efficiency	97 %	
Peak intensity	0.6 cd/lm	60° 60°.
LEDs/each optic	1	30
Light colour	White	45* 400 55*
Required compone		
riequired compone		50
		600
		30° 700 30° 30° 30°
S ΛΜSI	ING	
LED	LH351D	90* 90*
LED FWHM / FWTM	Asymmetric	730 700 770
Efficiency	Asymmetric 96 %	
Peak intensity	90 % 0.5 cd/lm	50° 200 50°
LEDs/each optic	0.5 cd/im 1	
LEDs/each optic	ı White	5°
Required compone		6°. 6°.
	no.	
		540
		30° <u>600</u> 30° 30°



		90*
LED	XP-G	
FWHM / FWTM	150.0 + 42.0° / 156.0 + 122.0°	75%
Efficiency	83 %	
Peak intensity	0.4 cd/lm	60* 210
LEDs/each optic	1	
Light colour	White	300
Required components:	White	45° 400
Required components.		$\times / \top \setminus \times$
Protective plate	, glass	500
		500
		130° 135 ⁵ 0 ⁶ 15°
		90*
LED	XP-G2	100
FWHM / FWTM	Asymmetric	
Efficiency	94 %	
Peak intensity	0.6 cd/lm	90. 300
LEDs/each optic	1	400
Light colour	White	45* 500
Required components:		
		700
		-
		130 152 0° 18°
		50*
LED	XP-G2 HE	
FWHM / FWTM	Asymmetric	750 (100
Efficiency	93 %	
Peak intensity	0.5 cd/lm	504
LEDs/each optic	1	
Light colour	White	45" 440
Required components:		
		XTX
		X tere
		190°
		20° 10° 10°
LEDS	XP-G2 HE	8°
LED	XP-G2 HE Asymmetric	8° 23° 0° 13°
LEDs LED FWHM / FWTM	Asymmetric	
LEDS LED FWHM / FWTM Efficiency	Asymmetric 85 %	
LEDs LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 85 % 0.4 cd/lm	B1 10
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 85 % 0.4 cd/lm 1	B1 10
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 85 % 0.4 cd/lm	B1 10
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 85 % 0.4 cd/lm 1	B1 10
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 85 % 0.4 cd/lm 1 White	B1 10
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 85 % 0.4 cd/lm 1 White	20 100 100 100 100 100 100 100 100 100 1



CREE ≑		TAT
LEDs	XP-G3	30*
		750
FWHM / FWTM	Asymmetric	
Efficiency	85 %	604 200
Peak intensity	0.4 cd/lm	
LEDs/each optic	1	X
Light colour	White	45*
Required components:		
Protective plate	e, glass	500
		30* 15 ⁵ 89 15*
		90°
LED	XP-G3	
FWHM / FWTM	Asymmetric	750
Efficiency	78 %	
Peak intensity	0.5 cd/lm	60 ⁴ 210
LEDs/each optic	1	
Light colour	White	45'
Required components:		
C17580_STRADA-2X	(2-SHD-WHT	
_		200
Protective plate	e, glass	
		15 ² 600 10*
		I TAY YAT
		90*
	XP-G4	90*
LED	XP-G4 Asymmetric	90* 751
LED FWHM / FWTM	XP-G4 Asymmetric 94 %	92°
LED FWHM / FWTM Efficiency	Asymmetric 94 %	92° 73° 60°
LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 94 % 0.5 cd/lm	92 730 640 600 800 800
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 0.5 cd/lm	80° 73° 80° 80° 80° 80° 80° 80° 80° 80°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1	20 60 60 70 70 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1 White	20 60 60 70 70 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1 White	20 60 60 70 70 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1 White XP-G4 Asymmetric	25° 40° 40° 40° 40° 40° 40° 40° 40
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREECS LED FWHM / FWTM Efficiency	Asymmetric 94 % 0.5 cd/lm 1 White XP-G4 Asymmetric 83 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREECS LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 94 % 0.5 cd/lm 1 White XP-G4 Asymmetric 83 % 0.4 cd/lm	25° 40° 40° 40° 40° 40° 40° 40° 40
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 0.5 cd/lm 1 White XP-G4 Asymmetric 83 % 0.4 cd/lm 1	20 40 40 40 40 40 40 40 40 40 4
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	Asymmetric 94 % 0.5 cd/lm 1 White XP-G4 Asymmetric 83 % 0.4 cd/lm	25° 40° 40° 40° 40° 40° 40° 40° 40
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1 White XP-G4 Asymmetric 83 % 0.4 cd/lm 1	25° 40° 40° 40° 40° 40° 40° 40° 40
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	Asymmetric 94 % 0.5 cd/lm 1 White XP-G4 Asymmetric 83 % 0.4 cd/lm 1 White	25° 40° 40° 40° 40° 40° 40° 40° 40
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 Required components:	Asymmetric 94 % 0.5 cd/lm 1 White XP-G4 Asymmetric 83 % 0.4 cd/lm 1 White	25° 40° 40° 40° 40° 40° 40° 40° 40



CREE ≑		
LEDs	XP-L HD	90° 90°
		730 700
FWHM / FWTM	Asymmetric	
Efficiency	83 %	. 60 ⁴ 60 ⁴ .
Peak intensity	0.4 cd/lm	
LEDs/each optic	1	
Light colour	White	45*
Required components:		440
Protective plate	a dass	\times / \times
		510
		30° 15° 30°
LED	XT-E HE	~
FWHM / FWTM	146.0 + 42.0° / 154.0 + 116.0°	75%
Efficiency	85 %	
Peak intensity	0.5 cd/lm	. 60* <u>210</u> 60*
LEDs/each optic	1	
Light colour	White	
Required components:	White	400
required components.		
Protective plate	e, glass	500
		010
		30° 15° 30°
		90° 90°
LED	XT-E HE	
FWHM / FWTM	147.0 + 41.0° / 154.0 + 117.0°	73°
Efficiency	95 %	200
Peak intensity	0.6 cd/lm	- 50 ⁻ 300 60 ⁺
LEDs/each optic	1	
Light colour	White	457
Required components:		500
		000
		30* 300 10* 30*
	DS	91 ⁴
LED	LUXEON HL2X	
FWHM / FWTM	149.0 + 42.0° / 157.0 + 118.0°	73°
Efficiency	83 %	
Peak intensity	0.4 cd/lm	604 604 604
LEDs/each optic	1	
Light colour	White	30 30
Required components:		
required components.		
Protective plate	, yiass	
Protective plate	, gidos	
Protective plate	, gidos	20° 30° 10 [°] 10° 30°



MUMILEC)S	90° 90°
LED	LUXEON HL2X	
FWHM / FWTM	Asymmetric	73*
Efficiency	93 %	
Peak intensity	0.5 cd/lm	. 60 ⁴
LEDs/each optic	1	
Light colour	White	451 400 454
Required components:		500
		600
		30* 700 30*
	JS	90* 90*
LED	LUXEON HL2X-D	710 710
FWHM / FWTM	Asymmetric	
Efficiency	96 %	604 200 604
Peak intensity	0.5 cd/lm	310
LEDs/each optic	1	$X \times / T \setminus X \times$
Light colour	White	45* 400 45*
Required components:		200
		30*
		15' 700 15*
)S	
		30 ⁻¹
LED	LUXEON HL2X-D	10 ² 10 ² 10 ²
LED FWHM / FWTM	LUXEON HL2X-D Asymmetric	
LED FWHM / FWTM Efficiency	LUXEON HL2X-D Asymmetric 82 %	
LED FWHM / FWTM Efficiency Peak intensity	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON HL2X-D Asymmetric 82 %	200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1 White a, glass	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1 White a, glass	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1 White a, glass S LUXEON HL2X-P Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate CONTINUED ED FWHM / FWTM Efficiency	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1 White a, glass LUXEON HL2X-P Asymmetric 82 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate Protective plate ED FWHM / FWTM Efficiency Peak intensity	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1 White e, glass LUXEON HL2X-P Asymmetric 82 % 0.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate Vertice plate ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1 White e, glass S LUXEON HL2X-P Asymmetric 82 % 0.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate While Composed LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1 White e, glass LUXEON HL2X-P Asymmetric 82 % 0.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate Vertice plate ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1 White e, glass S LUXEON HL2X-P Asymmetric 82 % 0.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate White Composed State LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1 White e, glass LUXEON HL2X-P Asymmetric 82 % 0.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate WIM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON HL2X-D Asymmetric 82 % 0.4 cd/lm 1 White e, glass LUXEON HL2X-P Asymmetric 82 % 0.4 cd/lm 1 White	



	DS	90* 90*
LED	LUXEON HL2X-P	
FWHM / FWTM	Asymmetric	75°
Efficiency	95 %	
Peak intensity	0.4 cd/lm	60* 66*
LEDs/each optic	1	30
Light colour	White	(5°) (5°)
Required components:		40
		200
		20 ⁴
<i>•</i>		
	05	90*
LED	LUXEON TX	
FWHM / FWTM	146.0 + 42.0° / 154.0 + 114.0°	750 750
Efficiency	84 %	200
Peak intensity	0.5 cd/lm	
LEDs/each optic	1	30
Light colour	White	451 400 451
Required components:		
Protective plate		560
	, 903	600
		214
1		15 ¹ 25 ⁴ 15 ⁴
)S	
		20 20 20 20 20 20 20 20 20 20 20 20 20 2
LUMILEC	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0°	20 20 20 20 20 20 20 20 20 20 20 20 20 2
LED	LUXEON V2	20 20 20 20 20 20 20 20 20 20 20 20 20 2
LED FWHM / FWTM Efficiency	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0°	20 20 20 20 20 20 20 20 20 20 20 20 20 2
LED FWHM / FWTM	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 %	20 20 20 20 20 20 20 20 20 20 20 20 20 2
LED FWHM / FWTM Efficiency Peak intensity	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm	20 20 20 20 20 20 20 20 20 20 20 20 20 2
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1	20 30 30
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1 White	20 30 30
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1 White	20 30 30
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1 White	20 30 30
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1 White	20 (p).
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1 White a, glass	20 (p).
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1 White a, glass LUXEON V2	20 (p).
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1 White a, glass LUXEON V2 146.0 + 42.0° / 152.0 + 112.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate Who protective plate ED FWHM / FWTM Efficiency	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1 White e, glass LUXEON V2 146.0 + 42.0° / 152.0 + 112.0° 95 %	20 67 67 60 50 50 50 50 50 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate Who Protective plate ED FWHM / FWTM Efficiency Peak intensity	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1 White a, glass LUXEON V2 146.0 + 42.0° / 152.0 + 112.0°	20 67 67 60 50 50 50 50 50 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate Who components: Protective plate ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1 White e, glass LUXEON V2 146.0 + 42.0° / 152.0 + 112.0° 95 % 0.6 cd/lm 1	20 67 67 60 50 50 50 50 50 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate While Compose State FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1 White e, glass LUXEON V2 146.0 + 42.0° / 152.0 + 112.0° 95 % 0.6 cd/lm	20 67 67 60 50 50 50 50 50 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate Who components: Protective plate ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1 White e, glass LUXEON V2 146.0 + 42.0° / 152.0 + 112.0° 95 % 0.6 cd/lm 1	20 67 67 60 50 50 50 50 50 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate While Compose State FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1 White e, glass LUXEON V2 146.0 + 42.0° / 152.0 + 112.0° 95 % 0.6 cd/lm 1	20 67 67 60 50 50 50 50 50 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate While Composed LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON V2 146.0 + 43.0° / 152.0 + 111.0° 86 % 0.5 cd/lm 1 White e, glass LUXEON V2 146.0 + 42.0° / 152.0 + 112.0° 95 % 0.6 cd/lm 1	



UMILE	DS	907
LED	LUXEON XR-HL2X (L2H2-xxxxxxMLU010)	4
FWHM / FWTM	Asymmetric	720
Efficiency	95 %	200
Peak intensity	0.5 cd/lm	
LEDs/each optic	1	
Light colour	White	457 400
Required components:	:	
		200
		00
		30* 30° 30° 30°
	DS	
LED	LUXEON XR-HL2X (L2H2-xxxxxxMLU010)	
FWHM / FWTM	Asymmetric	750 / 100 /
Efficiency	82 %	
Peak intensity	0.4 cd/lm	.60* 200
LEDs/each optic	1	
Light colour	White	157 300
Required components	:	
Protective pla	ite, glass	500
		20* 22 Or 23
Μ ΝΙCΗΙΛ		90*
LED	NFSx757G	
FWHM / FWTM	Asymmetric	756
Efficiency	83 %	20 miles
Peak intensity	0.5 cd/lm	
LEDs/each optic	1	
Light colour	White	67 400
Required components:		
Deste stire als		50
Protective pla	le, glass	00
		20* <u>13</u> 0* 13
Μ ΝΙCΗΙΛ		907
LED	NVSW219F	
FWHM / FWTM	Asymmetric	73*
	85 %	
Efficiency		60° × 7 7
	0.5 cd/lm	
Efficiency		
Efficiency Peak intensity	0.5 cd/lm	
Efficiency Peak intensity LEDs/each optic	0.5 cd/lm 1 White	67 00
Efficiency Peak intensity LEDs/each optic Light colour	0.5 cd/lm 1 White	57 400 500
Efficiency Peak intensity LEDs/each optic Light colour Required components:	0.5 cd/lm 1 White	5° 400 500



Μ ΝΙCΗΙΛ		90*	90*
LED	NVSW219F		
FWHM / FWTM	Asymmetric	75%	7
Efficiency	82 %	× >	
Peak intensity	0.5 cd/lm	60* 200	
LEDs/each optic	1	X X 300	
Light colour	White		
Required components:		400	
C17677_STRADA-22	(2-SHD-BLK		
		300	
		60	
		30° 15° 0°	15* 30*
ΜΝΙCΗΙΛ			FF
LED	NVSW219F		90*
FWHM / FWTM	Asymmetric	750 100	
Efficiency	73 %	$1 \times \times /$	
Peak intensity	0.4 cd/lm	50 ⁴ 200	604
LEDs/each optic	1		
Light colour	' White		
Required components:	THE STREET		
C17580_STRADA-22	(2-SHD-WHT	X	
011000_0110.05725		50	
Protective plate	e, glass		
		15° 600	12.4 20
			YTT
MICHIΛ		90*	90*
LED	NVSW219F	90°	90*
LED FWHM / FWTM	148.0 + 42.0° / 156.0 + 115.0°	90° 78°	99
LED FWHM / FWTM Efficiency	148.0 + 42.0° / 156.0 + 115.0° 85 %	50° 70° 60°	50°
LED FWHM / FWTM Efficiency Peak intensity	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm	50° 70° 60° 200	99 ⁴ 99 ⁴ 99 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1	50° 130° 60° 200 200	997
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm	90° 170° 1,60° 40°	997 757 607
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1	90° 73° 60° 90° 90° 90° 90° 90° 90° 90° 90°	67
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1 White	90° 70° 60° 90° 90° 90° 90° 90° 90° 90° 9	99 ⁷ 64 ⁷
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1 White	90° 73° 64° 90° 90° 90° 90°	597 75 664
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1 White	50° 73° 60° 60° 700 700 700 700 700 700 700 700 700 7	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plat	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1 White		997 997 694 694 694 694 694 694 694 694 694 694
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1 White e, glass		99 97 97 97 97 97 97 97 97 97 97 97 97 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1 White e, glass		10° - 20°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plat	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1 White e, glass NVSW219F Asymmetric	90°	597 757 647 647 647 647 647 647 647 647 647 64
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate Protective plate	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1 White e, glass NVSW219F Asymmetric 71 %	90°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate Protective plate VICHIA LED FWHM / FWTM Efficiency Peak intensity	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1 White e, glass NVSW219F Asymmetric 71 % 0.4 cd/lm	90°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate Protective plate VICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1 White e, glass NVSW219F Asymmetric 71 % 0.4 cd/lm 1	90°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate VICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1 White e, glass NVSW219F Asymmetric 71 % 0.4 cd/lm	90°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate VICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1 White e, glass NVSW219F Asymmetric 71 % 0.4 cd/lm 1 White	90°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate Protective plate Pro	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1 White e, glass NVSW219F Asymmetric 71 % 0.4 cd/lm 1 White K2-SHD-BLK	90°	597 597 597 597 597 597 597 597 597 597
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate VICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	148.0 + 42.0° / 156.0 + 115.0° 85 % 0.4 cd/lm 1 White e, glass NVSW219F Asymmetric 71 % 0.4 cd/lm 1 White K2-SHD-BLK	90°	25 25 25 25 25 25 25 25 25 25 25 25 25 2



ΜΝΙCΗΙΛ		
LED	NVSW219F	
FWHM / FWTM	Asymmetric	75°
Efficiency	93 %	200
Peak intensity	0.5 cd/lm	
LEDs/each optic	1	
Light colour	White	400
Required components:		
		700
		30* 15 ⁵ 8 ⁶ ₀ 15* 3
MICHIA		90 ⁴
LED	NVSW219F	
FWHM / FWTM	148.0 + 41.0° / 154.0 + 115.0°	75°
Efficiency	95 %	20
Peak intensity	0.5 cd/lm	50 ⁴
LEDs/each optic	1	
Light colour	White	45*
Required components:		500
		20* 23
\sim		
MICHIΛ		90* 9
LED	NVSW319B	
FWHM / FWTM	Asymmetric	
Efficiency	82 %	
Peak intensity	0.4 cd/lm	200 bi
LEDs/each optic	1	
Light colour	White	45* 300
Required components:		400
		\times $/$ \times $/$ \times
Protective plate	, glass	500
		30* 30
Μ ΝΙCΗΙΛ		
LED	NVSW519A	9
LED FWHM / FWTM		78 100
Efficiency	Asymmetric 84 %	
Peak intensity	84 % 0.4 cd/lm	.50 ⁴ 6
LEDs/each optic	1	
Light colour	White	43" 300
Required components:	WING .	
Required components:		400
Protective plate	, glass	X X
		X



ΜΝΙCΗΙΛ		90* F
LED	NVSW519A	
FWHM / FWTM	Asymmetric	750
Efficiency	93 %	
Peak intensity	0.5 cd/lm	604
LEDs/each optic	1	X / 30 / X
Light colour	White	
Required components:	Wine	
required components.		500
		30° 700 15° 15°
Μ ΝΙCΗΙΛ		90*
LED	NVSxE21A	
FWHM / FWTM	Asymmetric	100
Efficiency	93 %	
Peak intensity	0.5 cd/lm	60*
LEDs/each optic	4	
Light colour	White	45* 400
Required components:		X/T/X
		500
		30* 15 ⁵ %6 15*
Μ ΝΙCΗΙΛ		90*
LED	NVSxE21A	
FWHM / FWTM	Asymmetric	75°
Efficiency	94 %	
	0.6 cd/lm	50
Peak intensity		67
Peak intensity LEDs/each optic	0.6 cd/lm	er
Peak intensity LEDs/each optic Light colour Required components:	0.6 cd/lm 1	60° 600
Peak intensity LEDs/each optic Light colour	0.6 cd/lm 1	69 67 60
Peak intensity LEDs/each optic Light colour	0.6 cd/lm 1	40° 40° 40°
Peak intensity LEDs/each optic Light colour	0.6 cd/lm 1	
Peak intensity LEDs/each optic Light colour Required components:	0.6 cd/lm 1	00 00 00 00 00 00 00 00 00 00 00 00 00
Peak intensity LEDs/each optic Light colour Required components:	0.6 cd/lm 1 White	
Peak intensity LEDs/each optic Light colour Required components:	0.6 cd/lm 1 White	
Peak intensity LEDs/each optic Light colour Required components:	0.6 cd/lm 1 White NVSxE21A Asymmetric	
Peak intensity LEDs/each optic Light colour Required components:	0.6 cd/lm 1 White NVSxE21A Asymmetric 82 %	
Peak intensity LEDs/each optic Light colour Required components:	0.6 cd/lm 1 White NVSxE21A Asymmetric 82 % 0.4 cd/lm	
Peak intensity LEDs/each optic Light colour Required components: WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	0.6 cd/lm 1 White NVSxE21A Asymmetric 82 % 0.4 cd/lm 4	
Peak intensity LEDs/each optic Light colour Required components: WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	0.6 cd/lm 1 White NVSxE21A Asymmetric 82 % 0.4 cd/lm	
Peak intensity LEDs/each optic Light colour Required components:	0.6 cd/lm 1 White NVSxE21A Asymmetric 82 % 0.4 cd/lm 4	
Peak intensity LEDs/each optic Light colour Required components: WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	0.6 cd/lm 1 White NVSxE21A Asymmetric 82 % 0.4 cd/lm 4 White	
Peak intensity LEDs/each optic Light colour Required components: WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	0.6 cd/lm 1 White NVSxE21A Asymmetric 82 % 0.4 cd/lm 4 White	



Μ ΝΙCΗΙΛ		
LED	NVSxE21A	
FWHM / FWTM	Asymmetric	750 500 780
Efficiency	84 %	
Peak intensity	0.5 cd/lm	60* 60*
LEDs/each optic	1	
Light colour	White	45* 400 45*
Required components:		
Protective plate	, glass	000
		20° 70 30°
		129 ² 0 ⁴ 12 ⁴
MNICHIA		90* 90*
LED	NVSxx19B/NVSxx19C	
FWHM / FWTM	Asymmetric	
Efficiency	82 %	200 504
Peak intensity	0.4 cd/lm	$ \times / / \times / / \times / /$
LEDs/each optic	1	× × ×
Light colour	White	61 61
Required components:		400
Protective plate		200
FIDIECTIVE plate	, giass	\times
		-30° - 25 ⁵ 0° - 15° - 30°
OSRAM Opto Semiconductors		
LED	OSCONIQ C 2424	Ĩ
FWHM / FWTM	142.0 + 37.0° / 148.0 + 102.0°	75*
Efficiency	86 %	200
Peak intensity	0.5 cd/lm	60 ⁺
LEDs/each optic	1	
Light colour		
	White	455 400 435
	White	6° 6°
Required components:		6 ¹ 60 6 ¹
		60°
Required components:		40 40 40 40 40 40 40 40 40 40 40 40 40 4
Required components: Protective plate		60°
Required components: Protective plate OSRAM Opto Semiconductors	, glass	81. 10. 10. 10. 10. 10. 10. 10. 1
Required components: Protective plate Protective plate OSRAM Opto Semiconductors LED	osconiq c 2424	
Required components: Protective plate Opto Semiconductors LED FWHM / FWTM	OSCONIQ C 2424 142.0 + 35.0° / 148.0 + 102.0°	00 00 00 00 00 00 00 00 00 00 00 00 00
Required components: Protective plate Opto Semiconductors LED FWHM / FWTM Efficiency	OSCONIQ C 2424 142.0 + 35.0° / 148.0 + 102.0° 96 %	
Required components: Protective plate Protective plate OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	OSCONIQ C 2424 142.0 + 35.0° / 148.0 + 102.0° 96 % 0.7 cd/lm	
Required components: Protective plate Protective plate OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	OSCONIQ C 2424 142.0 + 35.0° / 148.0 + 102.0° 96 % 0.7 cd/lm 1	
Required components: Protective plate Protective plate OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	OSCONIQ C 2424 142.0 + 35.0° / 148.0 + 102.0° 96 % 0.7 cd/lm	
Required components: Protective plate Protective plate OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	OSCONIQ C 2424 142.0 + 35.0° / 148.0 + 102.0° 96 % 0.7 cd/lm 1	
Required components: Protective plate Protective plate OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	OSCONIQ C 2424 142.0 + 35.0° / 148.0 + 102.0° 96 % 0.7 cd/lm 1	
Required components: Protective plate Protective plate OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	OSCONIQ C 2424 142.0 + 35.0° / 148.0 + 102.0° 96 % 0.7 cd/lm 1	



OSRAM Opto Semiconductors		90* 90*
LED	OSLON Square CSSRM2/CSSRM3	
FWHM / FWTM	Asymmetric	75°
Efficiency	83 %	
Peak intensity	0.4 cd/lm	60° 200 60°
LEDs/each optic	1	
Light colour	White	45°
Required components:		
		\times
Protective plate	, glass	500
		30* 600 30* 15* 0* 15*
OSRAM Opto Semiconductors		90* 90*
LED	OSLON Square CSSRM2/CSSRM3	
FWHM / FWTM	Asymmetric	73°
Efficiency	86 %	200
Peak intensity	0.5 cd/lm	60" 60"
LEDs/each optic	1	×
Light colour	White	40°
Required components:		400
		50
Protective plate	, glass	
		200
OCDAM		
OSRAM Opto Semiconductors		90* 90*
LED	OSLON Square CSSRM2/CSSRM3	
FWHM / FWTM	Asymmetric	
Efficiency	86 %	
Peak intensity	0.5 cd/lm	60*
LEDs/each optic	1	X 300 X
Light colour	White	45" 45"
Required components:		400
		~~~~~
Protective plate	, glass	X / T / X
		30* 500 30*
PHILIPS		
	Earling EastElay LED 248 DA CAL	90* 90*
LED FWHM / FWTM	Fortimo FastFlex LED 2x8 DA G4+	750
	Asymmetric 70 %	
Efficiency Peak intensity		50 ¹ 200 60*
LEDs/each optic	0.4 cd/lm	
	1 White	X / w X
Light colour	White	-6°
Required components:		40
C17677_STRADA-2X	Z-ƏHD-BLK	X     X
Protective plate	glass	200
	, 9.400	30* 15 ⁵ 0 ⁶ ···· 30*
Protective plate	, glass	500 500 10 ⁴ 15 ⁵ 0 ⁴ 15 ⁴ 30 ⁴



PHILIPS		900 900
LED	Fortimo FastFlex LED 2x8 DA G4+	
FWHM / FWTM	Asymmetric	75
Efficiency	85 %	
Peak intensity	0.4 cd/lm	60" 200 60"
LEDs/each optic	1	
Light colour	White	45* 300 45
Required components:		460
Protective plat	e, glass	200
		30 ⁴ 15 ⁵ 0 ⁶ 15 ⁴ 30 ⁴
PHILIPS		90*
LED	Fortimo FastFlex LED 2x8 DA G4+	
FWHM / FWTM	Asymmetric	754 100 75
Efficiency	78 %	
Peak intensity	0.5 cd/lm	66* 200 66'
LEDs/each optic	1	
Light colour	White	45' 45'
Required components:		
C17677_STRADA-2	(2-SHD-BLK	$\times$
		30* <u>860</u> 30* 30*
PHILIPS		90°
LED	Fortimo FastFlex LED 2x8 DA G5	
FWHM / FWTM	Asymmetric	75°
Efficiency	86 %	
Peak intensity	0.4 cd/lm	60 20 20
LEDs/each optic	1	
Light colour	White	45'
Required components:		
		$\times$
Protective plat	e, glass	500
		30. 00 30.
		30* <u>22³</u> <u>00</u> <u>13</u> * <u>30</u> *
		20 ⁴ 20 ⁶ 20 ⁹ 30
	Fortimo FastFlex LED 2x8 DA HE	30 ⁴ 20 ¹ 0 ⁰ 13 ⁵ 30
LED FWHM / FWTM	Fortimo FastFlex LED 2x8 DA HE Asymmetric	80* 00 12* 22* 00 12*
LED FWHM / FWTM Efficiency	Fortimo FastFlex LED 2x8 DA HE Asymmetric 96 %	80 ⁺ 0 ⁰ 22 ⁺
LED FWHM / FWTM Efficiency Peak intensity	Fortimo FastFlex LED 2x8 DA HE Asymmetric 96 % 0.5 cd/lm	80 ⁺ 0 ⁰ 22 ⁺
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo FastFlex LED 2x8 DA HE Asymmetric 96 % 0.5 cd/lm 1	80 ⁺ 0 ⁰ 22 ⁺
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x8 DA HE Asymmetric 96 % 0.5 cd/lm	80 ⁺ 0 ⁰ 22 ⁺
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo FastFlex LED 2x8 DA HE Asymmetric 96 % 0.5 cd/lm 1	80 ⁺ 0 ⁰ 22 ⁺
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x8 DA HE Asymmetric 96 % 0.5 cd/lm 1	80 ⁺ 0 ⁰ 22 ⁺
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x8 DA HE Asymmetric 96 % 0.5 cd/lm 1	80 ⁺ 0 ⁰ 22 ⁺



PHILIPS		
LED	Fortimo FastFlex LED 2x8 DA HE	30 ⁻
FWHM / FWTM	Asymmetric	775
Efficiency	84 %	
Peak intensity	0.4 cd/lm	60 ⁴ 80
LEDs/each optic	1	
Light colour	White	
Required components:		
		400
Protective plate	e, glass	
		540
		30° <u>15</u> ° 0° 15° 3°
SAMSUN	IG	90° 98
LED	LH231B	
FWHM / FWTM	Asymmetric	75%
Efficiency	94 %	200
Peak intensity	0.6 cd/lm	60 ¹⁰ 62
LEDs/each optic	1	400
Light colour	White	45* 42
Required components:		600
		900 900
0.0.0.0.0.0	10	
SAMSUN	IG	90* 90
LED	LH351B	
FWHM / FWTM	147.0 + 38.0° / 155.0 + 113.0°	75%
Efficiency	85 %	200
Peak intensity	0.4 cd/lm	
LEDs/each optic	1	X / w X
Light colour	White	65° e
Required components:		400
Protective plat		
Protective plat	, glass	
		30* 35 ⁵ 0* 15*
SAMSUN	10	
		90* 90
LED	LH351B	730
FWHM / FWTM	148.0 + 37.0° / 154.0 + 114.0°	
Efficiency	96 %	60 ⁴ 2%
Peak intensity	0.5 cd/lm	X / w
LEDs/each optic	1	
Light colour	White	45° 400 et
Required components:		X X X
		600



SAMSUI	NG	
LED	LH351C	90° 9
FWHM / FWTM	148.0 + 41.0° / 156.0 + 113.0°	75%
Efficiency	85 %	
Peak intensity	0.4 cd/lm	50° 200 6
LEDs/each optic	1	30
Light colour	White	
Required components:		400
Protective pla		20
1.0000170 pix		
SAMSUI	NG	
LED	LH351C	
FWHM / FWTM	148.0 + 39.0° / 154.0 + 112.0°	73%
Efficiency	96 %	
Peak intensity	0.5 cd/lm	50 ⁴ 6
LEDs/each optic	1	
Light colour	White	45* 400 4
Required components:		
		60
		710
		30° 15° 3
SAMSUI	NG	
LED	LH351D	
FWHM / FWTM	150.0 + 51.0° / 159.0 + 122.0°	750 7100 7
Efficiency	85 %	
Peak intensity	0.4 cd/lm	504 6
LEDs/each optic	1	
Light colour	White	45* 300 4
Required components:		
		400
Protective pla	le, glass	
		200
		30° 15° 3
SEOUL		
SEOUL SEMICONDUCTOR	Z5M3	90* 9
LED FWHM / FWTM		730
Efficiency	Asymmetric 83 %	
Peak intensity	83 % 0.5 cd/lm	60° 200 6
LEDs/each optic	1	
Light colour	v White	
Required components:	MING .	45" 400
required components:		
Protective pla	e, glass	× 7 5%
		640



<b></b>		
SEOUL		
SEOUL SEMICONDUCTOR	Z5M4	90° 90°
ED FWHM / FWTM		730 200 75°
	141.0 + 43.0° / 150.0 + 104.0°	
Efficiency	87 %	504 504
Peak intensity	0.5 cd/lm	200
LEDs/each optic	1	$X \times / \square X \times$
Light colour	White	45* 400 45*
Required components:		× 200
Protective plate		XITX
Fiblective plate	, yiass	600
		30* <u>15</u> ⁵ 780 15* 30*
SEOUL		25, 0, 23,
SEOUL SEMICONDUCTOR		90* 90*
LED	Z5M4	
FWHM / FWTM	141.0 + 42.0° / 150.0 + 104.0°	73°
Efficiency	96 %	200
Peak intensity	0.6 cd/lm	604
LEDs/each optic	1	400
Light colour	White	45'
Required components:		
		600
		$\times$
		800
		(30 ⁴ 15 ⁵ 0 ⁶ 15 ⁶
SEOUL		THAT AFT
seoul semiconductor	Z8Y22	90* 90*
EED FWHM / FWTM		730 (100 75°
	Asymmetric 94 %	A company of the second of the
Efficiency	94 % 0.7 cd/lm	50* 300 60*
Peak intensity		XXXX
LEDs/each optic	1 White	$X \times T \times X$
Light colour	winte	6° <u>xo</u> 6'
Required components:		600
		710
		X 000
		30* 30
		10. 460 10'



#### **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:

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

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