

PRODUCT DATASHEET C13604_STRADA-2X2-FN

STRADA-2X2-FN

Narrow forward throw beam for area lighting. Excellent for lighting stadiums and airports from high masts.

SPECIFICATION:

Dimensions Height Fastening ROHS compliant 50.0 x 50.0 mm 10 mm glue, pin, screw yes ①



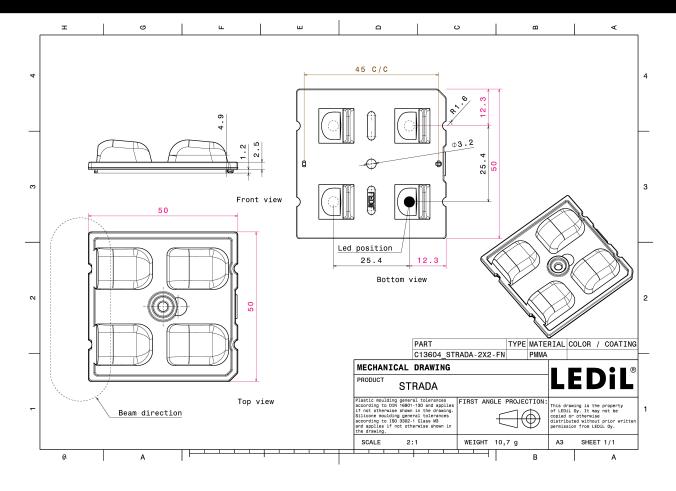
MATERIALS:

Component	Туре	Material	Colour	Finish
STRADA-2X2-FN	Multi-lens	PMMA	clear	

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C13604_STRADA-2X2-FN	800	160	160	8.8
» Box size: 480 x 280 x 300 mm				

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



		90*
LED	J Series 5050C 6V E Class	
FWHM / FWTM	Asymmetric	73°
Efficiency	96 %	
Peak intensity	1.2 cd/lm	60°
LEDs/each optic	1	000
Light colour	White	(5° (5°)
Required compone	ents:	1220
		\times / \setminus \times
		1690
		10 ⁵ 15 ⁵ 0 ⁶ 15 ⁶
		30* 9*
LED	XD16	54 P
FWHM / FWTM	Asymmetric	73%
Efficiency	94 %	500
Peak intensity	1.1 cd/lm	60 ⁴ 604
LEDs/each optic	1	
Light colour	White	45° 800 65°
Required compone	ents:	1000
		200
		1400
		15° 0° 15°
		90°
CREE ÷	XD16	90*
	XD16 Asymmetric	90 [*]
LED		90° 90° 191 - 100 100
LED FWHM / FWTM	Asymmetric	90° 90° 201 900 70° 60° 60°
LED FWHM / FWTM Efficiency	Asymmetric 94 %	90° 90° 72° 90° 60° 90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 4 White	90° 90° 73° 00 60° 00 6
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.1 cd/lm 4 White	20°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 4 White	12.9 6, 6, 12,9 6, 6, 6, 6, 6, 6, 6, 6, 12,9 6, 12,9 6, 12,9 6, 12,9 12,9 12,9 10,0 12,0 10,0 10,0 10,0 10,0 10,0 10,0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 4 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 4 White	1252
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 94 % 1.1 cd/lm 4 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 4 White ents:	1252
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 94 % 1.1 cd/lm 4 White ents:	1252
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 94 % 1.1 cd/lm 4 White ents:	1252
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 94 % 1.1 cd/lm 4 White ents: XM-L Asymmetric 94 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 94 % 1.1 cd/lm 4 White ents: XM-L Asymmetric 94 % 1.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.1 cd/lm 4 White ents: XM-L Asymmetric 94 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 4 White ents: XM-L Asymmetric 94 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.1 cd/lm 4 White ents: XM-L Asymmetric 94 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 4 White ents: XM-L Asymmetric 94 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 4 White ents: XM-L Asymmetric 94 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 4 White ents: XM-L Asymmetric 94 % 1.2 cd/lm 1 White	



CREE ≑		
LED	XM-L2	90* 90*
FWHM / FWTM	Asymmetric	75°
Efficiency	94 %	400
Peak intensity	94 /0 1.2 cd/lm	60* 60*
LEDs/each optic	1	000
Light colour	' White	
Required compone		45* 45*
		30° 15° 30°
		90°
LED	XP-G3	47
FWHM / FWTM	Asymmetric	730 750 750
Efficiency	96 %	40
Peak intensity	1 cd/lm	60 ⁴
LEDs/each optic	1	50
Light colour	White	45* 310 45*
Required compone	nts:	1000
		1230
		1420
1		30-
		12 ² 0 ⁴ 12 ⁴
		22 ⁵ 0 ⁶ 15 ⁴
	XP-G3	90°
LED	XP-G3 Asymmetric	
LED FWHM / FWTM	XP-G3 Asymmetric 80 %	22° 2° 12° 29° 29° 29° 29° 29° 29° 29° 29° 29° 2
LED FWHM / FWTM Efficiency	Asymmetric 80 %	22° 2° 12° 92° 93° 60° 60°
LED FWHM / FWTM	Asymmetric	20° 0° 10° 90° 90° 90° 90° 90° 90° 90° 90° 90° 9
LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 80 % 1.1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 80 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 80 % 1.1 cd/lm 1 White	22° 2° 13° 92° 92° 92° 92° 92° 92° 92° 92° 92° 92
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 80 % 1.1 cd/lm 1 White nts:	22° 2° 13° 29° 60° 60° 60° 60° 60° 60° 60° 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 80 % 1.1 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C17677_STRAE	Asymmetric 80 % 1.1 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C17677_STRAE	Asymmetric 80 % 1.1 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C17677_STRAE	Asymmetric 80 % 1.1 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C17677_STRAE	Asymmetric 80 % 1.1 cd/lm 1 White nts: VA-2X2-SHD-BLK	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C17677_STRAE	Asymmetric 80 % 1.1 cd/lm 1 White nts: VA-2X2-SHD-BLK XP-G3	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C17677_STRAD	Asymmetric 80 % 1.1 cd/lm 1 White nts: VA-2X2-SHD-BLK XP-G3 Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C17677_STRAE	Asymmetric 80 % 1.1 cd/lm 1 White nts: VA-2X2-SHD-BLK XP-G3 Asymmetric 90 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C17677_STRAE CTEE ED FWHM / FWTM Efficiency Peak intensity	Asymmetric 80 % 1.1 cd/lm 1 White nts: DA-2X2-SHD-BLK XP-G3 Asymmetric 90 % 1.1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C17677_STRAE CREECS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 80 % 1.1 cd/lm 1 White nts: XP-G3 Asymmetric 90 % 1.1 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C17677_STRAE CREECS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 80 % 1.1 cd/lm 1 White nts: DA-2X2-SHD-BLK XP-G3 Asymmetric 90 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C17677_STRAE CREECS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 80 % 1.1 cd/lm 1 White nts: XP-G3 Asymmetric 90 % 1.1 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C17677_STRAE CREECS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 80 % 1.1 cd/lm 1 White nts: XP-G3 Asymmetric 90 % 1.1 cd/lm 1 White nts:	



		90° 90°
LED	XP-G3	
FWHM / FWTM	Asymmetric	750 780
Efficiency	89 %	400
Peak intensity	1.1 cd/lm	60 ⁴ 604
LEDs/each optic	1	
Light colour	White	ar
Required componer		
		1220
Protective	plate, glass	\times
		1630
		(30* 30* 30* 30*
LED	XP-L HD	4
FWHM / FWTM	Asymmetric	750 730
Efficiency	94 %	400
Peak intensity	1 cd/lm	60 ⁴ 60 ⁴
LEDs/each optic	1	
Light colour	White	45* 800
Required componer		1000
		1430
		30° 15° 0° 15° 30°
CREE ÷		
	XD-1 HI	8°
LED	XP-L HI Asymmetric	20
LED FWHM / FWTM	Asymmetric	20
LED FWHM / FWTM Efficiency	Asymmetric 94 %	100 100 100 100 100 100 100
LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 94 % 1.1 cd/lm	20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.1 cd/Im 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 1 White	60° 000 00°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 1 White	60° 000 00°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 1 White	6° 00 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	Asymmetric 94 % 1.1 cd/lm 1 White	6° 60 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	Asymmetric 94 % 1.1 cd/lm 1 White	6° 60 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	Asymmetric 94 % 1.1 cd/lm 1 White tts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	Asymmetric 94 % 1.1 cd/lm 1 White hts: XP-L2	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	Asymmetric 94 % 1.1 cd/lm 1 White hts: XP-L2 Asymmetric	60° 60° 60° 60° 50° 60° 1000 100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	Asymmetric 94 % 1.1 cd/lm 1 White its: XP-L2 Asymmetric 94 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer CREEE LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 94 % 1.1 cd/lm 1 White tts: XP-L2 Asymmetric 94 % 1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer CREEE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.1 cd/lm 1 White tts: XP-L2 Asymmetric 94 % 1 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer Required componer EED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 1 White tts: XP-L2 Asymmetric 94 % 1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer CREEE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.1 cd/lm 1 White tts: XP-L2 Asymmetric 94 % 1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer Required componer EED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 1 White tts: XP-L2 Asymmetric 94 % 1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer Required componer EED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 1 White tts: XP-L2 Asymmetric 94 % 1 cd/lm 1 White	



	EDC	
		90* 90*
LED	LUXEON 5050 Round LES	
FWHM / FWTM	Asymmetric	400
Efficiency	94 %	50*
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	\times / \wedge \times
Light colour	White	45* 45
Required compone	ints:	1200
		1630
		30* 1 <u>5</u> ° 0° 1 <u>5</u> ° 30*
	EDS	
LED	LUXEON MZ	90* 90*
FWHM / FWTM	Asymmetric	730 750
Efficiency	94 %	400
Peak intensity	1.2 cd/lm	507 507
LEDs/each optic	1	
Light colour	White	45'
Required compone		1200
i ioquilou compone		
		1630
		30° 13 ⁵ 0° 15° 30°
COMIL	EDS	90°
		8° 99
LED	LUXEON Q	
LED FWHM / FWTM		An A
LED FWHM / FWTM Efficiency	LUXEON Q Asymmetric	90° 92° 70° 700 72° 60° 60°
LED FWHM / FWTM Efficiency Peak intensity	LUXEON Q Asymmetric 94 %	50° 500 50° 50° 50° 50° 50° 50° 50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON Q Asymmetric 94 % 1 cd/lm	
LED FWHM / FWTM Efficiency	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White	91 92 71 60 61 61 60 60 60 60 61 61 61 61 61 61 61 61 61 61 61 61 61
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White	92* 92 74 60 64 60 65 67 100 100 100 100 100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White	1000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White ents:	1000 1220 144 1500
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White ents:	1000 1200 1200 1200 100 100 100 100 100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White ents:	1000 1220 144 1500
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White ents: EDS LUXEON T Asymmetric	1000 1200 1200 1200 100 100 100 100 100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White ents: EDS LUXEON T Asymmetric 94 %	500 1200 50° 150° 150° 150° 150° 150° 150° 150
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White ents: EDS LUXEON T Asymmetric 94 % 1.1 cd/lm	500 1200 50° 150° 150° 150° 150° 150° 150° 150
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White ents: EDS LUXEON T Asymmetric 94 % 1.1 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White ents: EDS LUXEON T Asymmetric 94 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White ents: EDS LUXEON T Asymmetric 94 % 1.1 cd/lm 1 White	500 120 50° 50° 50° 50° 50° 50° 50° 50° 50° 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White ents: EDS LUXEON T Asymmetric 94 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Q Asymmetric 94 % 1 cd/lm 1 White ents: EDS LUXEON T Asymmetric 94 % 1.1 cd/lm 1 White	



	EDS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON TX Asymmetric 94 % 1.1 cd/lm 1 White	
🖉 LUMIL	EDS EDS	<u>85</u> ,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON V Asymmetric 94 % 1 cd/lm 1 White nts:	
MST Your solut	ions	20° 120 20° 120 20° 120 20° 120 20° 120
	RecLED 122x50mm 1900lm 730 2x4 Opt G1	20°
FWHM / FWTM	Asymmetric	750 400 750
Efficiency	97 %	
Peak intensity	1.4 cd/lm	20 ⁻ 200
LEDs/each optic	1	
Light colour Required compone	White nts:	6° 6' 6' 10' 80'
ØNICHI		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVSW219F Asymmetric 94 % 1.1 cd/lm 1 White	
Required compone		1390 19 ⁴ 19 ⁴ 19 ⁵ 19 ⁵ 19 ⁵ 19 ⁵ 19 ⁵ 19 ⁵



ØNICHI A		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	NVSW319B Asymmetric 94 % 1 cd/lm 1 White	20 60 60 60 60 60 60 60 60 60 6
ØNICHI		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	NVSW3x9A Asymmetric 94 % 1.1 cd/lm 1 White	
Ж NICHIA		320 327 30° 322 6 ¹ 33° 30°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	NVSxE21A Asymmetric 94 % 1.5 cd/lm 1 White	
Maria		1290 1949 1500 1949 1500 1940 1940 1500 1940 1940 1500 1940
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	NVSxx19B/NVSxx19C Asymmetric 94 % 1.1 cd/lm 1 White	5° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6
		12 ⁴ 12 ⁵ 0 ⁴ 12 ⁵ 2



OSRAN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	PL-BRICK HP 3800 2x8 SSG Asymmetric 96 % 1.3 cd/lm 1 White	30, 30, 10, 30, 61, 1000 61, 1000 1000 62, 1000 61, 1000
OSRAM		
^{opto Semiconductors} LED FWHM / FWTM Efficiency LEDs/each optic	Duris S8 Asymmetric % 1	
Light colour	White	
Required compone	nts:	
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	OSLON Square PC Asymmetric 94 % 1.2 cd/lm 1 White nts:	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo FastFlex LED 2x8 DA G4 Asymmetric 94 % 1.2 cd/Im 1 White	2 ¹ , ² , ¹ , ²



PHILIF	20	
LED	Fortimo FastFlex LED 2x8 DA G4+	90* 90*
ED FWHM / FWTM	Asymmetric	754 751
Efficiency	97 %	400
Peak intensity	1.1 cd/lm	504 804
LEDs/each optic	1	80
Light colour	White	55* 65
Required compone		
		1690
		130° 15° 0° 15°
PHILIF	PS S	90* 90*
LED	Fortimo FastFlex LED 2x8 DA G5	79
FWHM / FWTM	Asymmetric	734
Efficiency	97 %	
Peak intensity	1.2 cd/lm	60*
LEDs/each optic	1	
Light colour	White	-6°
Required compone	nts:	1200
		30* 30*
		INV VVII
PHILIF	PS	80'
		90° 92°
LED	Fortimo FastFlex LED 2x8 DAX G4	20 F
LED FWHM / FWTM	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric	60° 60 72° 60 61° 60
LED FWHM / FWTM Efficiency	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 %	
LED FWHM / FWTM Efficiency LEDs/each optic	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1	50° 50° 50° 50° 50° 50° 50° 50°
LED FWHM / FWTM Efficiency LEDs/each optic Light colour	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White	5°
LED FWHM / FWTM Efficiency LEDs/each optic	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White	5° 10 10 10 10 100 100 100
LED FWHM / FWTM Efficiency LEDs/each optic Light colour	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White	5°
LED FWHM / FWTM Efficiency LEDs/each optic Light colour	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White	
LED FWHM / FWTM Efficiency LEDs/each optic Light colour	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White	500
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required compone	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White nts:	100
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required compone	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White Ints:	100
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required compone	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White Ints:	100
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required compone	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White Ints:	100
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required compone	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White nts:	100
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required compone SANSU LED FWHM / FWTM Efficiency Peak intensity	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White nts:	100
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White Ints:	
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White nts:	100
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White nts:	
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White nts:	
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric 94 % 1 White nts:	



S ΛΜS	INC	
		90* 90*
LED	HILOM RH12 Z (LH351C)	254
FWHM / FWTM	Asymmetric	400
Efficiency	97 %	504
Peak intensity	1.3 cd/lm	00
LEDs/each optic	1	
Light colour	White	6° 120 6'
Required compone	nts:	
		1600
		30* 2000 30* 12 ⁰ 0 ⁰ 12* 30*
<u> </u> S M S I 	ING	
LED		90* 90*
ED FWHM / FWTM	HiLOM RH16 (LH351C)	75°
Efficiency	Asymmetric 94 %	400
Peak intensity	1.3 cd/lm	50°
LEDs/each optic	1	00
Light colour	White	\$7°
Required compone		•\$* 1220
Required compone		
		1000
		\times / \setminus \times
		30* <u>15*</u> 39*
SAMSL	JNG	94 ¹
SAMSU		90*
LED	HiLOM RM12 Z (LH502C)	30* 92* 30* 75*
LED FWHM / FWTM	HiLOM RM12 Z (LH502C) Asymmetric	94° 95 75° 757
LED FWHM / FWTM Efficiency	HiLOM RM12 Z (LH502C) Asymmetric 97 %	95° 95 75° 95 95° 95° 95° 95° 95° 95° 95° 95° 95° 95°
LED FWHM / FWTM Efficiency Peak intensity	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm	90* 92* 73* 02* 75* 50* 00*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	HiLOM RM12 Z (LH502C) Asymmetric 97 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White	129
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White nts:	1239
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HILOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White Ints:	109
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White Its:	1239
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White nts: HiLOM RM16 Z (LH502C) Asymmetric	1239
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White nts:	1239
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSE LED FWHM / FWTM Efficiency Peak intensity	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White nts:	109
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White nts:	109
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSE EMHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM RM12 Z (LH502C) Asymmetric 97 % 1.2 cd/lm 1 White nts:	



SAMSL	JNG	90* 90*
LED	HILOM RM8 Z (LH502C)	
FWHM / FWTM	Asymmetric	730 70
Efficiency	98 %	400
Peak intensity	1.2 cd/lm	60 ⁴ 60 ⁴
LEDs/each optic	1	800
Light colour	White	45* 45*
Required compone	nts:	1200
		\times
		1590
00000		
SAMSL	JNG	90* 90*
LED	LH351B	7
FWHM / FWTM	Asymmetric	75°
Efficiency	95 %	400
Peak intensity	1.1 cd/lm	60 bor
LEDs/each optic	1	90
Light colour	White	er er
Required compone	nts:	1000
		1230
		30* 30*
СЛЛАСІ		
SVWSI	JNG	90°
LED	LH351B	9.°
LED FWHM / FWTM	LH351B Asymmetric	¥1 81
LED FWHM / FWTM Efficiency	LH351B Asymmetric 90 %	24
LED FWHM / FWTM Efficiency Peak intensity	LH351B Asymmetric 90 % 1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351B Asymmetric 90 % 1 cd/lm 1	50° 669 664
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351B Asymmetric 90 % 1 cd/lm 1 White	6° 69
LED FWHM / FWTM Efficiency	LH351B Asymmetric 90 % 1 cd/lm 1 White	63 ⁴ 60 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LH351B Asymmetric 90 % 1 cd/lm 1 White nts:	er
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LH351B Asymmetric 90 % 1 cd/lm 1 White	6° 60 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Protective	LH351B Asymmetric 90 % 1 cd/lm 1 White nts:	61° 660 67° 000 67°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Protective	LH351B Asymmetric 90 % 1 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Protective	LH351B Asymmetric 90 % 1 cd/lm 1 White nts: plate, glass	6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Protective	LH351B Asymmetric 90 % 1 cd/lm 1 White Ints: plate, glass	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Protective	LH351B Asymmetric 90 % 1 cd/lm 1 White Ints: plate, glass	61° 660 61° 600 61° 600 1200 1200 1200 1200 1200 1200 1200 1200 1200 1200 1200 1200 1200 100 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Protective	LH351B Asymmetric 90 % 1 cd/lm 1 White nts: plate, glass LED-Pa-L15c2W11c2-xxx-C050-01 Asymmetric 97 %	60° 60° 60° 60° 60° 60° 10° 10° 10° 10° 10° 10° 10° 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Protective Protective	LH351B Asymmetric 90 % 1 cd/lm 1 White Ints: plate, glass	60 60 60 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Protective Protective	LH351B Asymmetric 90 % 1 cd/lm 1 White nts: plate, glass LED-Pa-L15c2W11c2-xxx-C050-01 Asymmetric 97 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Protective Protective Electronic GmbH LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351B Asymmetric 90 % 1 cd/lm 1 White nts: plate, glass LED-Pa-L15c2W11c2-xxx-C050-01 Asymmetric 97 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Protective Protective	LH351B Asymmetric 90 % 1 cd/lm 1 White nts: plate, glass LED-Pa-L15c2W11c2-xxx-C050-01 Asymmetric 97 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Protective Protective Electronic GmbH LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351B Asymmetric 90 % 1 cd/lm 1 White nts: plate, glass LED-Pa-L15c2W11c2-xxx-C050-01 Asymmetric 97 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Protective Protective Electronic GmbH LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351B Asymmetric 90 % 1 cd/lm 1 White nts: plate, glass LED-Pa-L15c2W11c2-xxx-C050-01 Asymmetric 97 % 1.2 cd/lm 1 White	



SECUL SECUL SEMICONDUCTOR	Z5M1/Z5M2	92
FWHM / FWTM	Asymmetric	75°
Efficiency	94 %	
Peak intensity	1.2 cd/lm	60*
LEDs/each optic	1	
Light colour	White	45*
Required compone		
		1230
		X X
		1650
		30* 30° 30° 30°
SEOUL		
	75140	90* 90*
LED	Z5M3	775 200 775
FWHM / FWTM	Asymmetric	400
Efficiency	94 %	50* 60*
Peak intensity	1 cd/lm	
LEDs/each optic	1	800
Light colour	White	6, 6,
Required compone	nts:	1000
		1200
		30* <u>1430</u> 30* <u>35</u> <u>0</u> ⁶ <u>15</u> ⁶ <u>30</u> *
SEOUL		
SEOUL SEOUL SEMICONDUCTOR		90° -
	Z8Y22	97 97 97
SEOUL SEMICONDUCTOR	Asymmetric	90°
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency	Asymmetric 94 %	92 92 73 60 67
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 94 % 1.2 cd/lm	92 134 654 654 654
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.2 cd/lm 1	92° 73° 40° 60°
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.2 cd/lm 1 White	
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.2 cd/lm 1 White	
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.2 cd/lm 1 White	50°
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.2 cd/lm 1 White	997 737 607 607 607 607 607 607 607 607
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.2 cd/lm 1 White	39
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 94 % 1.2 cd/lm 1 White	$X/T \setminus X$
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.2 cd/lm 1 White	39
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 94 % 1.2 cd/lm 1 White	301
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SEOUL SEMICONDUCTOR	Asymmetric 94 % 1.2 cd/lm 1 White nts:	301
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SEOUL SEMICONDUCTOR LED	Asymmetric 94 % 1.2 cd/lm 1 White nts: Z8Y22P	301
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SEOUL SEMICONDUCTOR LED FWHM / FWTM	Asymmetric 94 % 1.2 cd/lm 1 White nts: Z8Y22P Asymmetric	20 20 20 20 20 20 20 20 20 20 20 20 20 2
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency	Asymmetric 94 % 1.2 cd/lm 1 White nts: Z8Y22P Asymmetric 94 %	301
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.2 cd/lm 1 White nts: Z8Y22P Asymmetric 94 % 1 cd/lm	20 20 20 20 20 20 20 20 20 20 20 20 20 2
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 94 % 1.2 cd/lm 1 White nts: Z8Y22P Asymmetric 94 % 1 cd/lm 1 White	20 ²
stout stanconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stout stanconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.2 cd/lm 1 White nts: Z8Y22P Asymmetric 94 % 1 cd/lm 1 White	
stout stanconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stout stanconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.2 cd/lm 1 White nts: Z8Y22P Asymmetric 94 % 1 cd/lm 1 White	20 ²
stout stanconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stout stanconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.2 cd/lm 1 White nts: Z8Y22P Asymmetric 94 % 1 cd/lm 1 White	



TOSHIBA Leading Innovation >>>		
	TL1L3	**************************************
FWHM / FWTM	Asymmetric	79 (200) / (200)
Efficiency	94 %	
Peak intensity	94 % 0.9 cd/lm	60 ⁴ (64
LEDs/each optic	1	
Light colour	White	é é
Required compone	ints:	500
		1220
		30° 400 30°
TOSHIBA		
Leading Innovation »»		W* W*
LED	TL1L4	
FWHM / FWTM	Asymmetric	77*
Efficiency	91 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	nts:	120
		1500
		30" 30" 30"
TRIDON	1IC	
LED	RLE 2x4 2000lm HP EXC2 OTD	
FWHM / FWTM	Asymmetric	
Efficiency	94 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
Required compone	ins.	
TRIDO	1IC	2014
LED	RLE 2x8 4000lm HP EXC2 OTD	
EED FWHM / FWTM	Asymmetric	728 722
Efficiency	94 %	400
		50 ⁴ 60 ⁴
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	á, (a)
Required compone	nts:	2200
		30* 30



TRIDON		
LED	RLE G1 49x121mm 2000lm xxx EXC OTD	10°
FWHM / FWTM	Asymmetric	73%
Efficiency	94 %	800
Peak intensity		.60*
-	1.3 cd/lm	1500
LEDs/each optic	1	\land
Light colour	White	-45° - 45'
Required componer	IIS.	
		300
		30* 30* 30*
TDIDON		
TRIDON		90* 90*
LED	RLE G1 49x133mm 2000lm xxx EXC OTD	
FWHM / FWTM	Asymmetric	
Efficiency	94 %	
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	1500
Light colour	White	45' 45'
Required componer	nts:	2430
		\times \land \times
		3300
		are are
		113 ³ 0 ⁶ 15 ⁴
TRIDON	lic	90* 90*
	RLE G1 49x223mm 4000lm xxx EXC OTD	<u>87</u>
		50° 50° 72°
LED	RLE G1 49x223mm 4000lm xxx EXC OTD	99° 99° 751 000 78°
LED FWHM / FWTM Efficiency	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric	99* 73* 60* 99 60* 60*
LED FWHM / FWTM	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 %	90° - 90° -
LED FWHM / FWTM Efficiency Peak intensity	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/m	55
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White	$ \times / \top \setminus \times$
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White	$ \times / \top \setminus \times$
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White hts:	\times / / T \ \times
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White hts:	5° 0° 0°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White hts:	-5°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White hts:	5° 0° 0°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White hts:	-5°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer TRIDON LED FWHM / FWTM Efficiency	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White hts:	-5°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer TRIDON LED FWHM / FWTM Efficiency Peak intensity	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White hts: RLE G1 49x245mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm	-5°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White hts: RLE G1 49x245mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White hts: RLE G1 49x245mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White	64° 200 200 200 200 200 200 200 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White hts: RLE G1 49x245mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White hts: RLE G1 49x245mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	RLE G1 49x223mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White hts: RLE G1 49x245mm 4000lm xxx EXC OTD Asymmetric 94 % 1.3 cd/lm 1 White	



		90* 90*
LED	J Series 5050 Round LES	
FWHM / FWTM	Asymmetric	75 75
Efficiency	84 %	400
Peak intensity	1.2 cd/lm	607 609
LEDs/each optic	1	
Light colour	White	
Required components:	White	45* 45*
Required components.		
Protective plate	, glass	1690
		\times / T \ λ
		30° 15° 30°
LED	J Series 5050 Round LES	90° 90°
FWHM / FWTM	Asymmetric	730 700
Efficiency	95 %	
Peak intensity	1.3 cd/lm	60* 80*
LEDs/each optic	1	
Light colour	White	1200
Required components:	Wille	45°
Required components.		1500
		\times / \wedge \times
		2000
		30° 135° 0° 15° 30°
		90° 90°
LED	XP-G2 HE	
		73°
FWHM / FWTM	Asymmetric	751 600 752
Efficiency	92 %	20 00 00
Efficiency Peak intensity	92 % 1.2 cd/lm	29
Efficiency Peak intensity LEDs/each optic	92 % 1.2 cd/lm 1	61 ⁵ 00 00
Efficiency Peak intensity LEDs/each optic Light colour	92 % 1.2 cd/lm	92. <u>1750</u> 64, 91, <u>66</u> 56 <u>105</u> 64, 26 <u>105</u> 75, 26 <u>105</u> 75, 27 <u>105</u>
Efficiency Peak intensity LEDs/each optic	92 % 1.2 cd/lm 1	67. 150 81. 150 20. 100 20. 150 20. 10
Efficiency Peak intensity LEDs/each optic Light colour	92 % 1.2 cd/lm 1	100 100 100 100 100 100 100 100
Efficiency Peak intensity LEDs/each optic Light colour	92 % 1.2 cd/lm 1	100 100 100 100 100 100 100 100
Efficiency Peak intensity LEDs/each optic Light colour	92 % 1.2 cd/lm 1	100
Efficiency Peak intensity LEDs/each optic Light colour Required components:	92 % 1.2 cd/lm 1	22
Efficiency Peak intensity LEDs/each optic Light colour Required components:	92 % 1.2 cd/lm 1 White	100
Efficiency Peak intensity LEDs/each optic Light colour Required components:	92 % 1.2 cd/lm 1 White XP-G3	100
Efficiency Peak intensity LEDs/each optic Light colour Required components:	92 % 1.2 cd/lm 1 White XP-G3 Asymmetric	1000 20 ¹⁰ 20 ¹⁰ 20 ¹⁰ 20 ¹⁰
Efficiency Peak intensity LEDs/each optic Light colour Required components:	92 % 1.2 cd/lm 1 White XP-G3 Asymmetric 78 %	109 30 ⁴ 10 ⁴ 10 ⁴ 30 300 109
Efficiency Peak intensity LEDs/each optic Light colour Required components:	92 % 1.2 cd/lm 1 White XP-G3 Asymmetric	200 30* 55 [*] 0 [*] 15* 30 [*] 30 10 [*] 15 [*] 1
Efficiency Peak intensity LEDs/each optic Light colour Required components:	92 % 1.2 cd/lm 1 White XP-G3 Asymmetric 78 %	109 109 20 ³ 10 ³ 10 ³ 20 ³ 10 ³ 10 ³ 10 ³
Efficiency Peak intensity LEDs/each optic Light colour Required components:	92 % 1.2 cd/lm 1 White XP-G3 Asymmetric 78 % 1 cd/lm	109 109 20 ³ 12 ³ 0 ³ 13 ³ 30 20 20 20 20 20 20 20 20 20 20 20 20 20
Efficiency Peak intensity LEDs/each optic Light colour Required components:	92 % 1.2 cd/lm 1 White XP-G3 Asymmetric 78 % 1 cd/lm 1 White	20 ¹ 20 ¹
Efficiency Peak intensity LEDs/each optic Light colour Required components:	92 % 1.2 cd/lm 1 White XP-G3 Asymmetric 78 % 1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required components: CREEES LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C17580_STRADA-2X	92 % 1.2 cd/lm 1 White XP-G3 Asymmetric 78 % 1 cd/lm 1 White 2-SHD-WHT	65 109 109 109 109 109 109 109 109
Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE EDS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	92 % 1.2 cd/lm 1 White XP-G3 Asymmetric 78 % 1 cd/lm 1 White 2-SHD-WHT	



CREE ≑		THY H
LEDs	XP-G4	90*
FWHM / FWTM		750 46
	Asymmetric 96 %	
Efficiency	96 % 1.7 cd/lm	60* 200
Peak intensity		1200
LEDs/each optic	1	\times \times $/$ \wedge λ
Light colour	White	45* 1600
Required components:		
		2400
		30* 35 ⁵ 2850 15*
LEDs	XP-G4	90°
FWHM / FWTM	Asymmetric	75%
Efficiency	86 %	
Peak intensity	1.4 cd/lm	50* 000
LEDs/each optic	1	
Light colour	White	1250 1250
Required components:	White	
Required components.		1600
Protective plate	e, glass	
		2000
		30* <u>15</u> * 300 15*
		90*
LED	XP-L2	
FWHM / FWTM	Asymmetric	750
Efficiency	85 %	400
Peak intensity	1.1 cd/lm	for X
LEDs/each optic	1	800
Light colour		
	White	45*
	White	45* 1220
	White	
Required components:		
Required components: Protective plate		
Required components: Protective plate CREE		220 30* 23 30* 15*
Required components: Protective plate CREE	ə, glass	1000 1000 100 100 100 100 100 100 100 1
Required components: Protective plate CREE \$ LEDs LED	e, glass XP-P	220 30* 23 30* 15*
Required components: Protective plate CREE \$ LED FWHM / FWTM	e, glass XP-P Asymmetric	1270 1600 39* 12 ³ 0* 13* 70* 70* 00
Required components: Protective plate CREE LED ED FWHM / FWTM Efficiency	A, glass XP-P Asymmetric 85 %	1270 1600 30* 12 ³ 0* 13*
Required components: Protective plate Protective plate CREE LED FWHM / FWTM Efficiency Peak intensity	XP-P Asymmetric 85 % 1.5 cd/lm	1270 1600 191* 123' 0* 13* 13* 13* 13* 13* 13* 13* 13*
Required components: Protective plate Protective plate CREE ÷ LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XP-P Asymmetric 85 % 1.5 cd/lm 1	
Required components: Protective plate Protective plate CREE ÷ LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-P Asymmetric 85 % 1.5 cd/lm	1270 1600 191* 123' 04' 100 00 00 00
Required components: Protective plate Protective plate CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XP-P Asymmetric 85 % 1.5 cd/lm 1	100 100 100 100 100 100 100 100
Required components: Protective plate Protective plate CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XP-P Asymmetric 85 % 1.5 cd/lm 1 White	100 100 100 100 100 100 100 100
Required components: Protective plate Protective plate CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-P Asymmetric 85 % 1.5 cd/lm 1 White	100 100 100 100 100 100 100 100



r		
		90°
LED	XT-E	750 400 750
FWHM / FWTM	Asymmetric	
Efficiency	%	604 800 604
LEDs/each optic	1	
Light colour	White	45* 1220
Required components:		
		1000
		2000
		\times / / \times
		30* 15 ⁵ 2400 15* 30*
UMILEC	DS Contraction of the second se	507 507
LED	LUXEON 3030 2D (Round LES)	
FWHM / FWTM	Asymmetric	75° 400 78°
Efficiency	83 %	
Peak intensity	1.4 cd/lm	-60" <u>80</u> 0 66"
LEDs/each optic	1	
Light colour	White	45° 12200 55°
Required components:		1600
Brotostivo plot		\times / \times
Protective plate	, glass	2000
		30* 15 ³ 0 ⁴ 15 ³ 30*
)S	907 907
LED	LUXEON 3030 2D (Round LES)	
FWHM / FWTM	Asymmetric	75° 400 75°
Efficiency	94 %	000
Peak intensity	1.6 cd/lm	60°
LEDs/each optic	1	120
Light colour	White	65* 1000 65*
Required components:		
		2000
		30* 30* 30*
	S	20 ⁴ 22 ³ 0 ⁴ 13 ⁵ 33 ⁴
		200 200 200 200 200 200 200 200 200 200
LED	LUXEON 5050 Round LES	200 200 200 200 200 200 200 200 200 200
LED FWHM / FWTM	LUXEON 5050 Round LES Asymmetric	2009 2019 2019 2019 2019 2019 2019 2019
LED FWHM / FWTM Efficiency	LUXEON 5050 Round LES Asymmetric 85 %	2000 2000 2000 2000 2000 2000 2000 200
LED FWHM / FWTM Efficiency Peak intensity	LUXEON 5050 Round LES Asymmetric 85 % 1.2 cd/m	200 200 200 200 200 200 200 200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON 5050 Round LES Asymmetric 85 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 5050 Round LES Asymmetric 85 % 1.2 cd/m	8×6*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 5050 Round LES Asymmetric 85 % 1.2 cd/lm 1 White	67 69
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 5050 Round LES Asymmetric 85 % 1.2 cd/lm 1 White	67 69
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 5050 Round LES Asymmetric 85 % 1.2 cd/lm 1 White	67 69



FWHM / FWTM Asymmetric Efficiency 95 % Pask Intensity 1.3 cd/m LEDWach optic 1 Light colour 87 % Pask Intensity 1.2 cd/m LeDewach optic 1 Light colour White Required components: Protective plate; glass IED L/XEON 7070 FWHM / FWTM Asymmetric Efficiency 33 % Pask Intensity 3 Light colour White Required components: Image: Colour White EED L/XEON 1070 FWH / FWTM Asymmetric Efficiency 30 % Light colour Wh	UMILE	DS	50° 90
Efficiency 95% Peak intensity 13 ddm Light colour White Required components: PULNILEDS LED WEEN 5050 Square LES FWHM / FWTM Asymmetric Efficiency 67% Peak intensity 12 ddm Light colour White Required components: Protective pitat. glas Puter S LED LUXEEN 57070 FUMM / EVTM Asymmetric Efficiency 33% Peak intensity 1 ddm Light colour White Required components: Protective pitat. Jack S Puter S LED LUXEEN 57070 FUMM / EVTM Asymmetric Efficiency 33% Peak intensity 1 ddm Light colour White Required components: Puter S LED LUXEEN 57070 FUMM / EVTM Asymmetric Efficiency 33% Peak intensity 1 ddm Light colour White Required components:	LED	LUXEON 5050 Square LES	
Peak intensity 1.3 cd/m LEDo/sexh.optio 1 LEDo/sexh.optio 2 White Required components:	FWHM / FWTM	Asymmetric	12.0
LEDeleach optic 1 Light colour White Required components: PUNILEDS LED LUXEEN D050 Square LES EVMM / FWTM Asymmetric Elificiency 37% Peak Intensity 1.2 cdfm Light colour White Required components: Protective plato. glass PUNILEDS ELD LUXEEN FOR Required components: Protective plato. glass PUNILEDS Elificiency 33% Peak Intensity 34 Light colour White Required components: PUNILEDS Elificiency 33% Peak Intensity 4.2 cdfm LEDS/each optic 1 Light colour White Required components: PUNILEDS Elificiency 33% Peak Intensity 4.2 cdfm LEDS/each optic 1 Light colour White Required components: PUNILEDS Elificiency 33% Peak Intensity 4.2 cdfm LEDS/each optic 1 Light colour White Required components: Elificiency 32% Peak Intensity 4.2 cdfm LEDS/each optic 1 Light colour White Required components: PUNILEDS	Efficiency	95 %	
light colour White Required components: White Components: ELD LUXEON 5050 Square LES PWHM / PWTM Asymmetric EDG LUXEON 7050 Square LES PWHM / PWTM Asymmetric ELDS each optic 1 LEDS each optic 1 LEDS each optic 3 FUENCEDS LED LUXEON 7070 PWHM / FWTM Asymmetric ETG LUXEON 14 / Advin LEDS Asymmetric ETG	Peak intensity	1.3 cd/lm	50 ⁻
Required components: CUMILEDS LED LUKEON 50:60 Square LES Ericiency 87 % Peak intensity 1.2 cd/m LUbit colour White Required components: Protective plate , glass CUMILEDS LED LUKEON 7070 FVHM / FVTM Asymmetric Ericiency 93 % Peak intensity 1. cd/m LEDS/each optic 1 LUP components: CUMILEDS ELD VINIE ED VINIE E	LEDs/each optic	1	
Image: Constraint of the second of the se	Light colour	White	45* 1220
LED LUXEON 5050 Square LES FWH./ FVTM Asymmetric Efficiency 27% Peak intensity 1.2 cd/lm LEDSteach optic 1 LEDsteach optic 1 LEDsteach optic 2 FVtHc/ FVTM Asymmetric Efficiency 39% Peak intensity 1 cd/m LEDSteach optic 1 Light colour White Required components: EFD LUXEON HL2X FWHM / FVTM Asymmetric Efficiency 29% Peak intensity 1 cd/m LEDSteach optic 1 Light colour White Required components: EFD LUXEON HL2X FWHM / FVTM Asymmetric Efficiency 29% Peak intensity 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH LEX FWHM / FVTM Asymmetric Efficiency 29% Peak intensity 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH LEX FWHM / FVTM Asymmetric Efficiency 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH CON HL2X FWHM / FVTM Asymmetric Efficiency 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH CON HL2X FWHM / FVTM Asymmetric Efficiency 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH CON HL2X FWHM / FVTM Asymmetric Efficiency 20% FWHM / FVTM Asymmetric Efficiency 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH CON HL2X FWHM / FVTM Asymmetric Efficiency 20% FWHM / FVTM Asymmetric FWHM / FVTM Asymetric FWHM / FVTM Asymetric	Required components:		X X
LED LUXEON 5050 Square LES FWH./ FVTM Asymmetric Efficiency 27% Peak intensity 1.2 cd/lm LEDSteach optic 1 LEDsteach optic 1 LEDsteach optic 2 FVtHc/ FVTM Asymmetric Efficiency 39% Peak intensity 1 cd/m LEDSteach optic 1 Light colour White Required components: EFD LUXEON HL2X FWHM / FVTM Asymmetric Efficiency 29% Peak intensity 1 cd/m LEDSteach optic 1 Light colour White Required components: EFD LUXEON HL2X FWHM / FVTM Asymmetric Efficiency 29% Peak intensity 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH LEX FWHM / FVTM Asymmetric Efficiency 29% Peak intensity 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH LEX FWHM / FVTM Asymmetric Efficiency 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH CON HL2X FWHM / FVTM Asymmetric Efficiency 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH CON HL2X FWHM / FVTM Asymmetric Efficiency 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH CON HL2X FWHM / FVTM Asymmetric Efficiency 20% FWHM / FVTM Asymmetric Efficiency 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH CON HL2X FWHM / FVTM Asymmetric Efficiency 20% FWHM / FVTM Asymmetric FWHM / FVTM Asymetric FWHM / FVTM Asymetric			1690
LED LUXEON 5050 Square LES FWH./ FVTM Asymmetric Efficiency 27% Peak intensity 1.2 cd/lm LEDS/each optic 1 LEDs/each optic 1 Light colour White Required components: EVENILLEDS ELD LUXEON 7070 FWH./ FVTM Asymmetric Efficiency 39.% Peak intensity 1 cd/m LEDs/each optic 1 Light colour White Required components: ELD LUXEON HL2X FWH./ FVTM Asymmetric Efficiency 29.% Peak intensity 1.4 cd/m LEDs/each optic 1 Light colour White Required components: ELD LUXEON HL2X FWH./ FVTM Asymmetric Efficiency 29.% Peak intensity 1.4 cd/m LEDs/each optic 1 Light colour White Required components: Efficiency 1.4 cd/m LEDs/each optic 1 Light colour White Required components: FVH./ FVTM Asymmetric Efficiency 29.% Peak intensity 1.4 cd/m LEDs/each optic 1 Light colour White Required components: FVH./ FVTM Asymmetric Efficiency 29.% Peak intensity 1.4 cd/m LEDs/each optic 1 Light colour White Required components: FVH./ FVTM Asymmetric Efficiency 29.% Peak intensity 1.4 cd/m LEDs/each optic 1 Light colour White Required components: FVH./ FVTM Asymmetric Efficiency 20.% Peak intensity 1.4 cd/m LEDs/each optic 1 Light colour White Required components: FVH./ FVTM Asymmetric Efficiency 20.% Peak intensity 2.4 cd/m LEDs/each optic 1 Light colour White Required components: FVH./ FVTM Asymmetric Efficiency 2.8 % FVH./ FVTM Asymmetric Efficiency 2.8 % FVH./ FVTM Asymmetric Efficiency 2.8 % FVH./ FVTM Asymmetric Efficiency 3.8 % FVH./ FVTM Asymmetric Efficiency 4.8 % FVH./ FVTM Asymmetric FVH./ FVTM Asymmetric FVH./ FVTM Asymetric FVH./ FVTM Asymmetric FVH./ FVTM Asymm			X X
LED LUXEON 5050 Square LES FWH./ FWTM Asymmetric Efficiency 87% Peak intensity 12 cd/m LEDsteach optic 1 LEDsteach optic 1			2000
LED LUXEON 5050 Square LES FWH./ FVTM Asymmetric Efficiency 27% Peak intensity 1.2 cd/lm LEDSteach optic 1 LEDsteach optic 1 LEDsteach optic 2 FVtHc/ FVTM Asymmetric Efficiency 39% Peak intensity 1 cd/m LEDSteach optic 1 Light colour White Required components: EFD LUXEON HL2X FWHM / FVTM Asymmetric Efficiency 29% Peak intensity 1 cd/m LEDSteach optic 1 Light colour White Required components: EFD LUXEON HL2X FWHM / FVTM Asymmetric Efficiency 29% Peak intensity 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH LEX FWHM / FVTM Asymmetric Efficiency 29% Peak intensity 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH LEX FWHM / FVTM Asymmetric Efficiency 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH CON HL2X FWHM / FVTM Asymmetric Efficiency 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH CON HL2X FWHM / FVTM Asymmetric Efficiency 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH CON HL2X FWHM / FVTM Asymmetric Efficiency 20% FWHM / FVTM Asymmetric Efficiency 1 cd/m LEDSteach optic 1 Light colour White Required components: FUTH CON HL2X FWHM / FVTM Asymmetric Efficiency 20% FWHM / FVTM Asymmetric FWHM / FVTM Asymetric FWHM / FVTM Asymetric			13 ⁵ 0 ⁶ 13 ⁵
FWHM / FWTM Asymmetric Efficiency 87 % Peak intensity 1.2 cd/m LEDs/each optic 1 Light colour White Required components: Image: Components Potective plate, glass Image: Components ELD LUXEON 7070 FWHM / FWTM Asymmetric Efficiency 93 % Peak intensity 1 cd/m LEDs/each optic 1 Light colour White Required components: Image: Components Image: Components Image: Components <			90*
Efficiency 87 % Peak intensity 1.2 cd/m LEDs/each optic 1 LEDs/each optic 2 Protective plate, glass			256
Peak intensity 1.2 colm LEDS-each optic 1 Light colour White Required components: Protective plate. glass Protective plate. glass Protective plate. glass Protective plate. glass Public EDS ELED LUXEON 7070 FWHM / FWTM Asymmetric Efficiency 93 % Peak intensity 1 colm LEDS-each optic 1 Light colour White Required components: ELED LUXEON HL2X FWHM / FWTM Asymmetric Efficiency 93 % Peak intensity 1.4 colm LEDS-each optic 1 Light colour White Required components: ELED LUXEON HL2X FWHM / FWTM Asymmetric Efficiency 93 % Peak intensity 1.4 colm LEDS-each optic 1 Light colour White Required components:			400
LEDs/each optic 1 Light colour White Required components: Protective plate, glass Protective plate, glass Postice DS LED LUXEON 7070 FWHM / FWTM Asymmetric Efficiency 93% Peak intensity 1 cd/m LEDs/each optic 1 Light colour White Required components: ED LUXEON HL2X FWH / FWTM Asymmetric EID LUXEON HL2X FWH / FWTM Asymmetric EID LUXEON HL2X FWH / FWTM Asymmetric EID LUXEON HL2X FWH / WTM Asymmetric EID / Asymmetric			
Light colour White Required components: Protective plate, glass ED LUXEEDS LED LUXEON 7070 FWHM / FWTM Asymmetric Efficiency 93% Peak intensity 1 cd/m LEDs/each optic 1 Light colour White Required components: EVENILEEDS LED LUXEON HL2X FWHM / FWTM Asymmetric Efficiency 93% Plant intensity 1 cd/m LEDs/each optic 1 Light colour White Required components: EVENILEEDS LED LUXEON HL2X FWHM / FWTM Asymmetric Efficiency 91.4 cd/m LEDs/each optic 1 Light colour White Required components:			
Required components: Protective plate, glass ELD LUXEON 7070 FWHM / FWTM Asymmetric Ethiciency 93% Peak intensity 1 cd/m LEDs/each optic 1 LEDs/each optic 1			
Protective plate, glass		White	45* 4200
Image: Construction of the symmetric efficiency 93 % Peak intensity 1 cd/m LED LUXEON 7070 Peak intensity 1 cd/m Light colour White Required components: Image: Construction of the symmetric efficiency Pask intensity 1.4 cd/lm LED LUXEON HL2X FWHM / FWTM Asymmetric efficiency Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components: Image: Construction of the symmetric efficiency Set Construction UXEON HL2X FWHM / FWTM Asymmetric efficiency Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components: Image: Construction of the symmetric efficiency Required components: Image: Construction of the symmetric efficiency Required components: Image: Construction of the symmetric efficiency Required components: Image: Construction of the symmetrice efficiency <th>Required components:</th> <th></th> <th></th>	Required components:		
Image: Construction of the symmetric efficiency 93 % Peak intensity 1 cd/m LED LUXEON 7070 Peak intensity 1 cd/m Light colour White Required components: Image: Construction of the symmetric efficiency Pask intensity 1.4 cd/lm LED LUXEON HL2X FWHM / FWTM Asymmetric efficiency Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components: Image: Construction of the symmetric efficiency Set Construction UXEON HL2X FWHM / FWTM Asymmetric efficiency Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components: Image: Construction of the symmetric efficiency Required components: Image: Construction of the symmetric efficiency Required components: Image: Construction of the symmetric efficiency Required components: Image: Construction of the symmetrice efficiency <th>Protective plat</th> <th>e. glass</th> <th></th>	Protective plat	e. glass	
LED LUXEON 7070 FWHM / FWTM Asymmetric Efficiency 93 % Peak intensity 1 cd/lm LEDs/each optic 1 Light colour White Required components: ED LUXEON HL2X FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:			1000
LED LUXEON 7070 FWHM / FWTM Asymmetric Efficiency 93 % Peak intensity 1 cd/lm LEDs/each optic 1 Light colour White Required components: ED LUXEON HL2X FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:			30* <u>45</u> 0 ⁴ 30
FWHM / FWTM Asymmetric Efficiency 93 % Peak intensity 1 cd/lm LEDs/each optic 1 Light colour White Required components:			
Efficiency 93 % Peak intensity 1 cd/lm LEDs/each optic 1 Light colour White Required components: CUMILEDS LED LUXEON HL2X FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:		DS	90°
Peak intensity 1 cd/lm LEDs/each optic 1 Light colour White Required components: CUMILEDS LED LUXEON HL2X FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:			8°
LEDs/each optic 1 Light colour White Required components:		LUXEON 7070	92 ⁻
Light colour White Required components: White CUMILEDS LED LUXEON HL2X FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.4 col/m LEDS/each optic 1 Light colour White Required components:	LED	LUXEON 7070 Asymmetric	23-
Required components:	LED FWHM / FWTM	LUXEON 7070 Asymmetric 93 %	
Image: Second	LED FWHM / FWTM Efficiency	LUXEON 7070 Asymmetric 93 % 1 cd/lm	
Image: Second	LED FWHM / FWTM Efficiency Peak intensity	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1	
LED LUXEON HL2X FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1	
LED LUXEON HL2X FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1	97 75 66 ⁴ 900 900 900 900
LED LUXEON HL2X FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1	997 73 66 ⁴ 67 1270
LED LUXEON HL2X FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1	
LED LUXEON HL2X FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1 White	
FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1 White	30 ⁴ 10 ⁵ 10 ⁵⁰ 20 ⁴
Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1 White	30 ⁴ 10 ⁵ 10 ⁵⁰ 20 ⁴
Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1 White	30 ⁴ 10 ⁵ 10 ⁵⁰ 20 ⁴
LEDs/each optic 1 Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1 White	30 ⁴ 10 ⁵ 10 ⁵⁰ 20 ⁴
Light colour White Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1 White S LUXEON HL2X Asymmetric 92 %	30 ⁴ 10 ⁵ 10 ⁵⁰ 20 ⁴
Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1 White S LUXEON HL2X Asymmetric 92 % 1.4 cd/lm	
200	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1 White S LUXEON HL2X Asymmetric 92 % 1.4 cd/lm 1	
200	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1 White S LUXEON HL2X Asymmetric 92 % 1.4 cd/lm 1	20 ³ 10 ³ 10 ³ 10 ³
	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1 White S LUXEON HL2X Asymmetric 92 % 1.4 cd/lm 1	
	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 7070 Asymmetric 93 % 1 cd/lm 1 White S LUXEON HL2X Asymmetric 92 % 1.4 cd/lm 1	



	DS	90 ⁺ 90 ⁺
LED	LUXEON HL2X-D	
FWHM / FWTM	Asymmetric	73° 400 73°
Efficiency	96 %	
Peak intensity	1.4 cd/im	50 ⁴ 800 50 ⁴ .
LEDs/each optic	1	
Light colour	White	45* 12209 45*
Required components:	White	
		1000
		30* <u>152</u> 0 ⁰ <u>158</u> 30 ⁴
)S	90° 90°
LED	LUXEON HL2X-D	
FWHM / FWTM	Asymmetric	73.0 400
Efficiency	85 %	
Peak intensity	1.2 cd/lm	ed.
LEDs/each optic	1	
Light colour	White	45* 45*
Required components:		1200
Protective plate	e, glass	1530
		13 ⁵ 2080 15*
	05	80.
	LUXEON HL2X-P	×
		8° 70 10
LED	LUXEON HL2X-P	90 ¹ 20 ² 00 00
LED FWHM / FWTM	LUXEON HL2X-P Asymmetric	9° 727 60° 800 80°
LED FWHM / FWTM Efficiency	LUXEON HL2X-P Asymmetric 93 %	97 73 60 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm	45° 60° 75° 75° 600 600 600 600 600 600 600 600 600 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1	6° 123 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1	97 99 60 60 60 60 60 60 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1	97 97 90 1120 100 100 100 100 100 100 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1 White	200 200 40, 200 200 200 200 200 200 200 200 200 2
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1 White	200 200 40, 200 200 200 200 200 200 200 200 200 2
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1 White	90° 90° 90° 10° 10° 10° 10° 10° 10° 10° 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1 White S LUXEON IR Domed 150 (L1I0-0xxx15000000) Asymmetric	90° 90° 90° 10° 10° 10° 10° 10° 10° 10° 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1 White S LUXEON IR Domed 150 (L1I0-0xxx15000000) Asymmetric 93 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1 White S LUXEON IR Domed 150 (L1I0-0xxx15000000) Asymmetric 93 % 1.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: WIM / COMPARENT LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1 White S LUXEON IR Domed 150 (L1I0-0xxx15000000) Asymmetric 93 % 1.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1 White S LUXEON IR Domed 150 (L1I0-0xxx15000000) Asymmetric 93 % 1.4 cd/lm 1	109 109 109 109 109 109 109 109
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1 White S LUXEON IR Domed 150 (L1I0-0xxx15000000) Asymmetric 93 % 1.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON HL2X-P Asymmetric 93 % 1.3 cd/lm 1 White S LUXEON IR Domed 150 (L1I0-0xxx15000000) Asymmetric 93 % 1.4 cd/lm 1	



	DS	80°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON IR Domed 90 (L1I0-0xxx09000000) Asymmetric 95 % 1.7 cd/lm 1 White	23 ¹ 100 75 ²
	DS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON V2 Asymmetric 94 % 1.5 cd/m 1 White	20 20 20 20 20 20 20 20 20 20
		13 ⁵ 0 ⁶ 13 ⁶
CUMILEE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON XR-HL2X (L2H2-xxxxxxMLU010) Asymmetric 96 % 1.4 cd/lm 1 White	
COMILEC	DS	90* 90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON XR-HL2X (L2H2-xxxxxMLU010) Asymmetric 85 % 1.2 cd/lm 1 White	
Protective plate	a, glass	109 30* 20 20 20* 30*



MNICHIA		99 ⁴
LED	NF2x757G	
FWHM / FWTM	Asymmetric	400
Efficiency	85 %	50* 500 50*
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	1220
Light colour	White	6. 6t
Required components:		1600
Protective plate	e, glass	2000
		30* 15 ⁵ 30 ⁴
Μ ΝΙCΗΙΛ		90° -
LED	NFSx757G	
FWHM / FWTM	Asymmetric	75° 400 75°
Efficiency	85 %	
Peak intensity	1.5 cd/lm	50° 900 60°
LEDs/each optic	1	120
Light colour	White	45*
Required components:		1630
Protective plate		
	, giass	2000
		30° 28% 15° 30°
Μ ΝΙCΗΙΛ		90°
LED	NV4WB35AM	
FWHM / FWTM	Asymmetric	75° 400 75°
Efficiency	95 %	50* 50*
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	1220
Light colour	White	6° 6
Required components:		1600
		2000
		30° 15° 0° 15° 30°
Μ ΝΙCΗΙΛ		90* 90*
LED	NVSW519A	
FWHM / FWTM	Asymmetric	755 400 755
Efficiency	93 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	$X \times I \setminus X \setminus$
Light colour	White	45° 1220 45°
Required components:		
		1600
		30* 2000 30* 15 ² 0 ⁶ 15* 30 ⁴



Μ ΝΙCΗΙΛ		
LED	NVSW519A	
FWHM / FWTM	Asymmetric	750 781
Efficiency	88 %	400
Peak intensity	1.1 cd/lm	av av
LEDs/each optic	1	200
Light colour	White	
Required components:	White	1200
r toquiroù componentei		\times
Protective plate	e, glass	1690
		\times
		130* 132 0* 10* 30*
ΜΝΙCΗΙΛ		90° 90°
LED	NVSxE21A	
FWHM / FWTM	Asymmetric	75° 400 75°
Efficiency	83 %	
Peak intensity	1.5 cd/lm	
LEDs/each optic	1	1200
Light colour	White	6. 6 ³
Required components:		1500
Protective plate		X X
Fiblective plate	a, yiass	2000
		30* <u>33</u> ⁵
ΜΝΙCΗΙΛ		NY M
	NIMO-2004	50"
LED	NWSx229A	99° 90°
LED FWHM / FWTM	Asymmetric	5° 73° (0) (0)
LED FWHM / FWTM Efficiency	Asymmetric 93 %	
LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 93 % 1.2 cd/lm	99° 99° 72° 000 72° 60° 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 93 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 93 % 1.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 93 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 93 % 1.2 cd/lm 1	50° 120 150 150 150 150 150 150 150 15
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 93 % 1.2 cd/lm 1	99° 17° 60° 60° 60° 60° 60° 60° 60° 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 93 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 93 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 93 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM LED	Asymmetric 93 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM LED FWHM / FWTM	Asymmetric 93 % 1.2 cd/lm 1 White PrevaLED Brick HP 2x8	99
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM LED FWHM / FWTM Efficiency	Asymmetric 93 % 1.2 cd/lm 1 White PrevaLED Brick HP 2x8 Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 93 % 1.2 cd/lm 1 White PrevaLED Brick HP 2x8 Asymmetric 91 %	53 ¹ 56 ¹ 56 ¹
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM LED FWHM / FWTM	Asymmetric 93 % 1.2 cd/lm 1 White PrevaLED Brick HP 2x8 Asymmetric 91 % 1.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 93 % 1.2 cd/lm 1 White PrevaLED Brick HP 2x8 Asymmetric 91 % 1.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 93 % 1.2 cd/lm 1 White PrevaLED Brick HP 2x8 Asymmetric 91 % 1.5 cd/lm 1	99° 72° 60° 900 60° 60° 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 93 % 1.2 cd/lm 1 White PrevaLED Brick HP 2x8 Asymmetric 91 % 1.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 93 % 1.2 cd/lm 1 White PrevaLED Brick HP 2x8 Asymmetric 91 % 1.5 cd/lm 1	



OSRAM Opto Semiconductors		90* 90*
LED	Duris S10	
FWHM / FWTM	Asymmetric	75%
Efficiency	94 %	
Peak intensity	1.2 cd/lm	60*
LEDs/each optic	1	800
Light colour	White	
Required components:	Wille	45* 45*
Required components.		
		1000
		30 ⁺ 15 ⁵ 0 ⁰ 19 ⁺ 30 ⁺
OSRAM Opto Semiconductors		9/* 9/*
LED	Duris S8	
FWHM / FWTM	Asymmetric	730
Efficiency	87 %	400
Peak intensity	1.1 cd/lm	60* 60*
LEDs/each optic	1	800
Light colour	White	5'
Required components:		1220
Protective plate	, glass	
		1000
		30* 15 ⁵ 0° 15° 30*
OSRAM Opto Semiconductors		90* 90*
LED	OSCONIQ P 3737 (2W version)	
FWHM / FWTM	Asymmetric	73° 400 73°
Efficiency	94 %	
Peak intensity	1.6 cd/lm	60*
LEDs/each optic	1	1220
Light colour	White	457 1600 654
Required components:		1630
		2000
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
		2000 2000 2000
OSRAM		2000 2000 2000 2000 2000 2000 2000 200
Opto Semiconductors		2000 2000 2000 2000 2000 2000 2000 200
Opto Semiconductors	OSCONIQ P 3737 (2W version)	200 200 200 200 200 200 200 200 200 200
^{Opto Semiconductors} LED FWHM / FWTM	Asymmetric	2000 2010 2010 2010 2010 2010 2010 2010
Opto Semiconductors LED FWHM / FWTM Efficiency	Asymmetric 85 %	
^{opto Semiconductors} LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 85 % 1.4 cd/lm	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 85 % 1.4 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 85 % 1.4 cd/lm	
^{opto Semiconductors} LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 85 % 1.4 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 85 % 1.4 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 85 % 1.4 cd/lm 1 White	20° 20° 20° 20° 40° 40° 40° 40° 40° 40° 40° 4



CSERMANDELED       OSCONIQ P 3737 (3W version)         FWHM / FWTM       Asymmetric         Efficiency       94%         Peak intensity       1.4 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       SCONIQ P 3737 Flat         FWHM / FWTM       Asymmetric         Efficiency       94%         Peak intensity       1.5 cd/lm         LED       OSCONIQ P 3737 Flat         FWHM / FWTM       Asymmetric         Efficiency       94%         Peak intensity       1.5 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       Vinite         Required components:       E         CSERMANDELEDs/each optic       1         Light colour       White         Required components:       E         CSERMANDELEDs/each optic       1         Light colour       White         Required components:       E         CSLON Square CSSRM2/CSSRM3       E         FWHM / FWTM       Asymmetric         Efficiency       86 %         Peak intensity       1.3 cd/lm	
LED       OSCONIQ P 3737 (3W version)         FWHM / FWTM       Asymmetric         Efficiency       94 %         Peak intensity       1.4 cd/m         LEDs/each optic       1         Light colour       White         Required components:	30
FWHM / FWTM       Asymmetric         Efficiency       94 %         Peak intensity       1.4 cd/m         LEDs/each optic       1         Light colour       White         Required components:	30
Efficiency 94 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components: CSCONIQ P 3737 Flat FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 1.5 cd/lm LEDs/each optic 1 Light colour White Required components: CSCONIQ P 3737 Flat ED OSCONIQ P 3737 Flat Efficiency 84 % Peak intensity 1.5 cd/lm LEDs/each optic 1 Light colour White Required components:	30
Peak intensity       1.4 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       SCONIQ P 3737 Flat         Communication       Asymmetric         ED       OSCONIQ P 3737 Flat         FWHM / FWTM       Asymmetric         Efficiency       94 %         Peak intensity       1.5 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       Image: CSSRM2/CSSRM3         FWHM / FWTM       Asymmetric         Efficiency       94 %         Peak intensity       1.5 cd/lm         Light colour       White         Required components:       Image: CSSRM2/CSSRM3         FWHM / FWTM       Asymmetric         Efficiency       86 %         Peak intensity       1.3 cd/lm         Light colour       White	30
LEDs/each optic       1         Light colour       White         Required components:	30
Light colour       White         Required components:       Image: Components:         OSCANA       Image: Components:         Version       OSCONIQ P 3737 Flat         FWHM / FWTM       Asymmetric         Efficiency       94 %         Peak intensity       1.5 cd/m         LEDs/each optic       1         Light colour       White         Required components:       Image: Components:         Version       1.5 cd/m         LED       OSLON Square CSSRM2/CSSRM3         FWHM / FWTM       Asymmetric         Efficiency       86 %         Peak intensity       1.3 cd/m         LED       OSLON Square CSSRM2/CSSRM3         FWHM / FWTM       Asymmetric         Efficiency       86 %         Peak intensity       1.3 cd/m         LEDs/each optic       1         LIGH colour       %         Peak intensity       1.3 cd/m         LEDs/each optic       1         LEDs/each optic	30
Required components:       Image: Components:         Components:       SCONIQ P 3737 Flat         ED       OSCONIQ P 3737 Flat         FWHM / FWTM       Asymmetric         Efficiency       94 %         Peak intensity       1.5 cd/m         LEDS/each optic       1         Light colour       White         Required components:       Image: Components         FWHM / FWTM       Sconset (Components)         Components:       Image: Components         FWHM / FWTM       Sconset (Components)         LED       OSLON Square CSSRM2/CSSRM3         FWHM / FWTM       Asymmetric         Efficiency       86 %         Peak intensity       1.3 cd/m         LEDS/each optic       1         LEDS	30
OSRAM yout semicondation         LED       OSCONIQ P 3737 Flat         FWHM / FWTM       Asymmetric         Efficiency       94 %         Peak intensity       1.5 cd/m         LEDs/each optic       1         Light colour       White         Required components:	30
LEDOSCONIQ P 3737 FlatFWHM / FWTMAsymmetricEfficiency94 %Peak intensity1.5 cd/lmLEDs/each optic1Light colourWhiteRequired components:	30
LEDOSCONIQ P 3737 FlatFWHM / FWTMAsymmetricEfficiency94 %Peak intensity1.5 cd/lmLEDs/each optic1Light colourWhiteRequired components:	30
LEDOSCONIQ P 3737 FlatFWHM / FWTMAsymmetricEfficiency94 %Peak intensity1.5 cd/lmLEDs/each optic1Light colourWhiteRequired components:	99
LEDOSCONIQ P 3737 FlatFWHM / FWTMAsymmetricEfficiency94 %Peak intensity1.5 cd/lmLEDs/each optic1Light colourWhiteRequired components:	99
LEDOSCONIQ P 3737 FlatFWHM / FWTMAsymmetricEfficiency94 %Peak intensity1.5 cd/lmLEDs/each optic1Light colourWhiteRequired components:	70
FWHM / FWTM       Asymmetric         Efficiency       94 %         Peak intensity       1.5 cd/lm         LEDs/each optic       1         Light colour       White         Required components:	170
Efficiency       94 %         Peak intensity       1.5 cd/lm         LEDs/each optic       1         Light colour       White         Required components:	~
Peak intensity1.5 cd/lmLEDs/each optic1Light colourWhiteRequired components:	
LEDs/each optic       1         Light colour       White         Required components:	
Light colour       White         Required components:       Image: Components of the second sec	~
Required components:       Image: components in the second s	5
OSRAM Opto Semiconductors         LED       OSLON Square CSSRM2/CSSRM3         FWHM / FWTM       Asymmetric         Efficiency       86 %         Peak intensity       1.3 cd/lm         LEDs/each optic       1         Light colour       White	<b>~</b>
OSRAM Opto Semiconductors     IED     OSLON Square CSSRM2/CSSRM3       FWHM / FWTM     Asymmetric       Efficiency     86 %       Peak intensity     1.3 cd/lm       LEDs/each optic     1       Light colour     White	
OSRAM Opto Semiconductors     IED     OSLON Square CSSRM2/CSSRM3       FWHM / FWTM     Asymmetric       Efficiency     86 %       Peak intensity     1.3 cd/lm       LEDs/each optic     1       Light colour     White	
OSRAM Opto Semiconductors     IED     OSLON Square CSSRM2/CSSRM3       FWHM / FWTM     Asymmetric       Efficiency     86 %       Peak intensity     1.3 cd/lm       LEDs/each optic     1       Light colour     White	
Opto Semiconductors     Peak       LED     OSLON Square CSSRM2/CSSRM3       FWHM / FWTM     Asymmetric       Efficiency     86 %       Peak intensity     1.3 cd/lm       LEDs/each optic     1       Light colour     White	30
LED     OSLON Square CSSRM2/CSSRM3       FWHM / FWTM     Asymmetric       Efficiency     86 %       Peak intensity     1.3 cd/lm       LEDs/each optic     1       Light colour     White	
FWHM / FWTM     Asymmetric       Efficiency     86 %       Peak intensity     1.3 cd/lm       LEDs/each optic     1       Light colour     White	
Efficiency     86 %       Peak intensity     1.3 cd/lm       LEDs/each optic     1       Light colour     White	7 70
Peak intensity     1.3 cd/lm       LEDs/each optic     1       Light colour     White	
LEDs/each optic 1 Light colour White	60
Light colour White	$\geq$
	4
1600	
Protective plate, glass	
20%	
OSRAM	30
Opto Semiconductors	X
LED OSLON Square CSSRM2/CSSRM3	30
FWHM / FWTM Asymmetric	30
Efficiency 91 %	90
Peak intensity 1.5 cd/lm	33
LEDs/each optic 1	32
Light colour White	32
Required components:	32
1220	5 5 5 5 6 7 5 6 7 5
	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
30* 1500 19* 0* 13*	2 99 97 60 60



OSRAM		THA ATT
Opto Semiconductors		90 ⁺ 90 ⁺
LED	OSLON Square CSSRM2/CSSRM3	200
FWHM / FWTM	Asymmetric	
Efficiency	87 %	50%
Peak intensity	1 cd/lm	600 /
LEDs/each optic	1	
Light colour	White	45*
Required components:		1000
Protective plate	, glass	1200
		1400 30* 40 00 40* 30*
OSRAM Opto Semiconductors		900
Opto Semiconductors	OSLON Square Flat	
FWHM / FWTM	Asymmetric	75° 400 78°
Efficiency	96 %	
Peak intensity	1.6 cd/lm	.60* <u>810</u> 60*
LEDs/each optic	1	1200
Light colour	White	
Required components:	Wine	1650
required components.		
		2430
		30* <u>13</u> * 0° <u>15</u> * 30*
OSRAM Opto Semiconductors		90* 9*
LED	OSTAR Projection Compact (KW.CSLNM1.TG)	
FWHM / FWTM	Asymmetric	73° 400 73°
Efficiency	96 %	
Peak intensity	1.6 cd/lm	504 800 604
LEDs/each optic	1	1290
Light colour	White	
Required components:	WING	42* 42*
Required components.		
		200
		200
		300 300 300 300 300 300 300 300 300 300
PHILIPS		300 300 300 300 300 300 300 300 300 300
		200 200 20 ³ 20 ³ 20 ³ 20 ³
LED	Fortimo FastFlex LED 2x8 DA G4+	500 500 500 500 500 500 500 500 500 500
LED FWHM / FWTM	Fortimo FastFlex LED 2x8 DA G4+ Asymmetric	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
LED FWHM / FWTM Efficiency	Fortimo FastFlex LED 2x8 DA G4+ Asymmetric 74 %	20 ³
LED FWHM / FWTM Efficiency Peak intensity	Fortimo FastFlex LED 2x8 DA G4+ Asymmetric 74 % 1.1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo FastFlex LED 2x8 DA G4+ Asymmetric 74 % 1.1 cd/lm 1	53 [°] 23 [°] 0 [°] 33 [°] 30 [°]
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x8 DA G4+ Asymmetric 74 % 1.1 cd/lm	
PHILIPS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C17677_STRADA-22X	Fortimo FastFlex LED 2x8 DA G4+ Asymmetric 74 % 1.1 cd/lm 1 White	5° 5° 5° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x8 DA G4+ Asymmetric 74 % 1.1 cd/lm 1 White 2-SHD-BLK	5° 5° 5° 50°



PHILIPS		90* 90*
LED	Fortimo FastFlex LED 2x8 DA G4+	
FWHM / FWTM	Asymmetric	75% 78
Efficiency	79 %	
Peak intensity	1.2 cd/lm	60* 60
LEDs/each optic	1	
Light colour	White	45* 1200 4
Required components:		
C17677_STRADA-2>	(2-SHD-BLK	1690
		$\times$ / $\times$
		2000
PHILIPS		1.50 <u>15</u> ⁵ 0 ⁶ 15 ⁵
		90* 90°
LED	Fortimo FastFlex LED 2x8 DA HE	
FWHM / FWTM	Asymmetric	The second secon
Efficiency	96 %	
Peak intensity	1.3 cd/lm	80
LEDs/each optic	1	
Light colour	White	45* 1200 45
Required components:		$\times$ $\times$
		1690
		30° 2000 30° 30°
PHILIPS		
LED	Fortimo FastFlex LED 2x8 DA HE	
FWHM / FWTM		
	Asymmetric	
	Asymmetric 85 %	400
Efficiency	85 %	
Efficiency Peak intensity		
Efficiency Peak intensity LEDs/each optic	85 % 1.1 cd/lm	
Efficiency Peak intensity LEDs/each optic Light colour	85 % 1.1 cd/lm 1	10 ⁻¹ 10 ⁻¹
Efficiency Peak intensity LEDs/each optic Light colour Required components:	85 % 1.1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour	85 % 1.1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required components:	85 % 1.1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	85 % 1.1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	85 % 1.1 cd/lm 1 White a, glass	
Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SAMSUN LED	85 % 1.1 cd/lm 1 White a, glass HILOM RH12 Z (LH351C)	
Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SAMSUN LED FWHM / FWTM	85 % 1.1 cd/lm 1 White a, glass HILOM RH12 Z (LH351C) Asymmetric	
Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SAMSUN LED FWHM / FWTM Efficiency	85 % 1.1 cd/lm 1 White a, glass HiLOM RH12 Z (LH351C) Asymmetric 86 %	120 150 20° 12° 0° 12° 30
Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SAMSUN LED FWHM / FWTM Efficiency Peak intensity	85 % 1.1 cd/lm 1 White a, glass HILOM RH12 Z (LH351C) Asymmetric 86 % 1.2 cd/lm	129 199 19 ¹ 19 ¹ 19 ¹ 19 ² 19 ² 19 ² 19 ² 19 ² 19 ² 19 ² 19 ² 19 ² 19 ²
Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	85 % 1.1 cd/lm 1 White a, glass HILOM RH12 Z (LH351C) Asymmetric 86 % 1.2 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SAMSSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	85 % 1.1 cd/lm 1 White a, glass HILOM RH12 Z (LH351C) Asymmetric 86 % 1.2 cd/lm	
Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate Protective plate SANNSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	85 % 1.1 cd/lm 1 White a, glass HILOM RH12 Z (LH351C) Asymmetric 86 % 1.2 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SAMSSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	85 % 1.1 cd/lm 1 White a, glass HiLOM RH12 Z (LH351C) Asymmetric 86 % 1.2 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SAMSSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	85 % 1.1 cd/lm 1 White a, glass HiLOM RH12 Z (LH351C) Asymmetric 86 % 1.2 cd/lm 1 White	



SAMSUN	G	THY FF
LED		30*
	LH231B	750 400
FWHM / FWTM	Asymmetric	
Efficiency	93 % 1.6 cd/lm	80* 800
Peak intensity		
LEDs/each optic	1 White	120
Light colour Required components:	White	-67* 1500
Required components.		$\times$ / $\times$
		200
		2000 15 ³ 0 ⁴ 15 ⁹
SAMSUN	G	50*
LED	LH231B	
FWHM / FWTM	Asymmetric	73* 400
Efficiency	93 %	
Peak intensity	1.5 cd/lm	50* 90
LEDs/each optic	4	
Light colour	White	45*
Required components:		1590
		2000
		20 15 ⁴ 2000 15 ⁴
SAMSUN	G	8*
LED	LH351C	
FWHM / FWTM	Asymmetric	730 400
Efficiency	93 %	
Peak intensity	1.5 cd/lm	.60 × 00
LEDs/each optic	1	1270
Light colour	White	45'
Required components:		1000
		2000
		30* <u>2009</u> 15 ⁰ 0 ⁴ 15*
SAMSUN	G	
LED FWHM / FWTM	LH351D	
	Asymmetric	
Efficiency	84 %	
Peak intensity	1.1 cd/lm 1	
LEDalaach antia	1 White	
LEDs/each optic	AALUIC .	
Light colour		
LEDs/each optic Light colour Required components:		
Light colour	glass	



SAMSUN		Thy PHT
		90° 90°
LED	LH351D	
FWHM / FWTM	Asymmetric	
Efficiency	92 %	- 60* Pho 60*
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	1230
Light colour	White	65° 65°
Required components:		1530
		2000
		30* 13 ⁵ 2690 15* 30*
SAMSUN	l G	
LED	LH502D	90* 90*
LED FWHM / FWTM	Asymmetric	754 705
Efficiency	Asymmetric 93 %	400
Peak intensity	93 % 1.3 cd/lm	504 504
LEDs/each optic	1	
Light colour	White	
Required components:	WING	1200 50*
Required components.		
		1600
		200 2000 15 ⁵ 0 ⁶ 15 ⁴ 30 ⁴
SAMSUN	16	90° 90°
LED	LM301B	80* 90*
FWHM / FWTM	Asymmetric	75° 400 75°
Efficiency	95 %	
Peak intensity	1.6 cd/lm	504 500
LEDs/each optic	1	1270
Light colour		
	White	67 100 67
Required components:		
Required components:		
Required components:		200
Required components:	White	300
Required components:	White MJT 5050	200
Required components: seout_semiconductor LED FWHM / FWTM	White MJT 5050 Asymmetric	300
Required components:	White MJT 5050 Asymmetric 93 %	200
Required components: stour semiconductor LED FWHM / FWTM Efficiency Peak intensity	White MJT 5050 Asymmetric 93 % 1.2 cd/lm	300
Required components: stout semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	White MJT 5050 Asymmetric 93 % 1.2 cd/lm 1	500 200 200 200 200 200 200 200 200 200
Required components: stout stanconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	White MJT 5050 Asymmetric 93 % 1.2 cd/lm	300
Required components: scour semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	White MJT 5050 Asymmetric 93 % 1.2 cd/lm 1	500 200 200 200 200 200 200 200 200 200
Required components: stout semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	White MJT 5050 Asymmetric 93 % 1.2 cd/lm 1	500 200 200 200 200 200 200 200 200 200
Required components: seous semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	White MJT 5050 Asymmetric 93 % 1.2 cd/lm 1	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°



SEOUL		
SEOUL SEMICONDUCTOR	Z5M5	
FWHM / FWTM	Asymmetric	75% 400
Efficiency	95 %	
Peak intensity	95 % 1.4 cd/lm	50' 000
LEDs/each optic	1.4 cu/im	
Light colour	White	120
Required components		· d''
Required components		100
		2000
		30* <u>15</u> 0* <u>15</u>
SEQUL		
SEOUL SEMICONDUCTOR		<u>80</u> *
LED	Z5M5	
FWHM / FWTM	Asymmetric	
Efficiency	84 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	47 1230
Required components	:	
Protective pla	ate alass	1530
i lotective pie	ite, giass	
		30" 200 10"
SEOUL		
SEOUL SEMICONDUCTOR		80*
LED	Z8Y22T	
FWHM / FWTM	Asymmetric	25-
Efficiency	94 %	21
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	
Light colour	White	57
Required components	:	600
		200
		200
		25 ² 0 ⁴ 12 ⁵



# PRODUCT DATASHEET C13604_STRADA-2X2-FN

#### **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.

#### PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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