

LINDA-UP

~145° + 100° extra wide beam for uplighting

SPECIFICATION:

Dimensions	25.7 x 1140.0 mm
Height	7.8 mm
ROHS compliant	yes 🛈



MATERIALS:

Component LINDA-UP **Type** Linear lens

Material	Colour	Finish
PMMA		

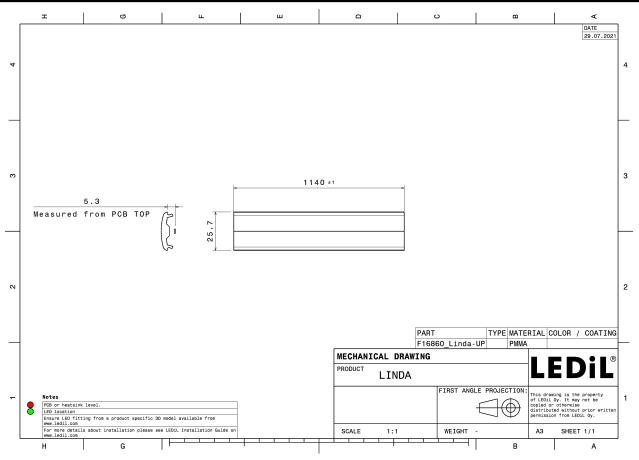
ORDERING INFORMATION:

Component F16860_LINDA-UP » Box size: 1185 x 150 x 115 mm

Qty in box	MOQ	MPQ	Box weight (kg)
100	100	100	12.6



PRODUCT DATASHEET F16860_LINDA-UP



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



OTTICT	N.T.			1 1
CITIZE	N		90*	90*
LED	CLUC11			
FWHM / FWTM	Asymmetric		.75*	780
Efficiency	85 %			
Peak intensity	0.3 cd/lm			
LEDs/each optic	1		X/T	200
Light colour	White		45*	6*
Required compone	nts:		N/T-	30
			1/ 1-	60
			30-	30*
CREE ÷				
LED LEDS	XP-G3		90*	90*
FWHM / FWTM	Asymmetric		750	75*
Efficiency	84 %			100
Peak intensity	0.2 cd/lm		60*	600
LEDs/each optic	1			
Light colour	White		45"	
Required compone				
				**
			\times	
				400
			/30*	30*
			15	2 19 ⁻
🖉 LUMIL	EDS		15°	2 13°
			90*	30*
	EDS LUXEON 3030 2D (Round LES) Asymmetric		99°	2 13°
LED	LUXEON 3030 2D (Round LES)		32°	
LED FWHM / FWTM	LUXEON 3030 2D (Round LES) Asymmetric		32" 32"	
LED FWHM / FWTM Efficiency	LUXEON 3030 2D (Round LES) Asymmetric 86 %		30°	
LED FWHM / FWTM Efficiency Peak intensity	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm		5°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White		91 ⁴ 35 ¹ 6 ¹⁴	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White		91 ⁴ 35 ¹ 6 ¹⁴	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White		91 ⁴ 35 ¹ 6 ¹⁴	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White		91 ⁴ 35 ¹ 6 ¹⁴	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White nts:		91 ⁴ 35 ¹ 6 ¹⁴	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White nts:		91 ⁴ 35 ¹ 6 ¹⁴	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White nts: NF2W757G-MT (Tunable White)		91 ⁴ 35 ¹ 6 ¹⁴	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White nts: NF2W757G-MT (Tunable White) Asymmetric		30 ¹ 50 ¹ 5	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component EED FWHM / FWTM Efficiency	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White nts: NF2W757G-MT (Tunable White) Asymmetric 87 %		30 ¹ 50 ¹ 5	20 00 00 00 00 00 00 00 00 00 00 00 00 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Efficiency Peak intensity	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White nts: NF2W757G-MT (Tunable White) Asymmetric 87 % 0.3 cd/lm		30 ¹ 50 ¹ 5	20 00 00 00 00 00 00 00 00 00 00 00 00 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Efficiency Peak intensity LEDs/each optic	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White nts: NF2W757G-MT (Tunable White) Asymmetric 87 % 0.3 cd/lm 1		8. 8. 8. 8. 8.	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component MICHIO Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White nts: NF2W757G-MT (Tunable White) Asymmetric 87 % 0.3 cd/lm 1 Tunable White		30 ¹ 50 ¹ 5	20 00 00 10 ³ 10 ³ 10 ³ 10 ³
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Efficiency Peak intensity LEDs/each optic	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White nts: NF2W757G-MT (Tunable White) Asymmetric 87 % 0.3 cd/lm 1 Tunable White		8. 8. 8. 8. 8.	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component MICHIO Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White nts: NF2W757G-MT (Tunable White) Asymmetric 87 % 0.3 cd/lm 1 Tunable White		8. 8. 8. 8. 8.	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component MICHIO LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 3030 2D (Round LES) Asymmetric 86 % 0.3 cd/lm 1 White nts: NF2W757G-MT (Tunable White) Asymmetric 87 % 0.3 cd/lm 1 Tunable White		8. 8. 8. 8. 8.	



Ø NICHI∕		90* 90*
LED	NFSW757H	»
FWHM / FWTM	Asymmetric	751 782
Efficiency	88 %	
Peak intensity	0.3 cd/lm	60° 60¢
LEDs/each optic	1	
Light colour	White	40° 40°
Required compone		300
		\times / \times
		100
		\times / \setminus \times
		30° 13° 30°
OSRAM		
LED	PL-LIN-Z5 1100 280x20	90* 90*
FWHM / FWTM	Asymmetric	75* 75*
Efficiency	82 %	
Peak intensity	0.3 cd/lm	600 600
LEDs/each optic	1	200
Light colour	White	
Required compone		300
		400
		30° 15 ⁵ 0° 15° 30°
OSRAN	1	
OSRAM		50°
LED	PL-LIN-Z5 2000 280x20	39 ⁴ 37 ³
LED FWHM / FWTM	PL-LIN-Z5 2000 280x20 Asymmetric	99 ⁴ 75 ⁵ 300
LED FWHM / FWTM Efficiency	PL-LIN-Z5 2000 280x20 Asymmetric 80 %	59 ⁵ 73 ¹ 66 ⁴ 60 ⁴
LED FWHM / FWTM Efficiency Peak intensity	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	PL-LIN-Z5 2000 280x20 Asymmetric 80 %	. 607 607
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White	200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White	. 607 607
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White	. 607 607
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White	. 607 607
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White	. 607 607
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White	. 607 607
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White nts:	554 504 504 504 504 504 504 504
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED FWHM / FWTM	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White nts: Duris E 2835 Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White nts: Duris E 2835 Asymmetric 82 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSERAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White nts: Duris E 2835 Asymmetric 82 % 0.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSERAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White nts: Duris E 2835 Asymmetric 82 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White nts: Duris E 2835 Asymmetric 82 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White nts: Duris E 2835 Asymmetric 82 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	PL-LIN-Z5 2000 280x20 Asymmetric 80 % 0.3 cd/lm 1 White nts: Duris E 2835 Asymmetric 82 % 0.3 cd/lm 1 White	



OSRAM Opto Semiconductors		
LED	Duris E 2835	*
FWHM / FWTM	Asymmetric	73*
Efficiency	88 %	
Peak intensity	0.3 cd/lm	eur () eur
LEDs/each optic	1	
	u White	
Light colour		6° 6°
Required compone	115.	
		30° 45° 0° 15° 30°
OSRAM		
Opto Semiconductors		90° 90°
LED	Duris E 2835	
FWHM / FWTM	Asymmetric	25*
Efficiency	80 %	
Peak intensity	0.3 cd/lm	
LEDs/each optic	1	200
Light colour	White	45°
Required compone	nts:	30
		\times / \times
		400
		100 NO
		15 ⁵ 0° 15 ⁴
PHILIP	DS Contraction of the second	00 ⁺
		81 ⁴ 81 ⁴
LED	Fortimo LED Strip 1ft 1100Im FC HV4 & LV4	94 97 70 70 70
LED FWHM / FWTM	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric	90° 90° 70° 70°
LED FWHM / FWTM Efficiency	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 %	90° 90° 70° 200 80° 00°
LED FWHM / FWTM Efficiency Peak intensity	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm	81° 10° 10° 10° 10° 10° 10° 10° 10° 10° 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1	e ²
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White	614 604
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White	e ²
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White	e ²
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White	e ²
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White	er
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White nts:	e ²
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White Ints:	er
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White Ints:	er
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White Ints:	e ²
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White nts: S Fortimo LED Strip 1ft 1100lm FC HV5 & LV5 Asymmetric 88 %	20 0 0 0 0 0 0 0 0 0 0 0 0 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone PHILLIC LED FWHM / FWTM Efficiency Peak intensity	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White nts: S Fortimo LED Strip 1ft 1100lm FC HV5 & LV5 Asymmetric 88 % 0.3 cd/lm	20 0 0 0 0 0 0 0 0 0 0 0 0 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone PHILLE FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White nts: S Fortimo LED Strip 1ft 1100lm FC HV5 & LV5 Asymmetric 88 % 0.3 cd/lm 1	20 0 0 0 0 0 0 0 0 0 0 0 0 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone PHILLIC FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White nts: S Fortimo LED Strip 1ft 1100lm FC HV5 & LV5 Asymmetric 88 % 0.3 cd/lm 1 White	20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone PHILLE FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White nts: S Fortimo LED Strip 1ft 1100lm FC HV5 & LV5 Asymmetric 88 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone PHILLIC FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White nts: S Fortimo LED Strip 1ft 1100lm FC HV5 & LV5 Asymmetric 88 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone PHILLIC FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White nts: S Fortimo LED Strip 1ft 1100lm FC HV5 & LV5 Asymmetric 88 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone PHILLIC FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo LED Strip 1ft 1100lm FC HV4 & LV4 Asymmetric 82 % 0.3 cd/lm 1 White nts: S Fortimo LED Strip 1ft 1100lm FC HV5 & LV5 Asymmetric 88 % 0.3 cd/lm 1 White	



PHILIF	S	
LED	Fortimo LED Strip 1ft 650lm FC HV4 & LV4	30" 30"
FWHM / FWTM	Asymmetric	75* 75'
Efficiency	83 %	
Peak intensity	0.3 cd/lm	en en
LEDs/each optic	1	200
Light colour	White	
Required compone	nts:	
		\times / \times
		400
		30* 30
PHILIF	S	
LED	Fortimo LED Strip 1ft 650lm FC HV5 & LV5	90° 90'
ED FWHM / FWTM	Asymmetric	75* 75
Efficiency	87 %	_100
Peak intensity	0.3 cd/lm	60
LEDs/each optic	1	
Light colour	White	-6° - 60'
Required compone		300
		400
		30° 15° 0° 15° 50°
S ΛΜS	JNG	ant
LED	LM28xB Series	
FWHM / FWTM	Asymmetric	750 750
Efficiency	88 %	300
Peak intensity	0.3 cd/lm	
LEDs/each optic	1	
Light colour	White	5°. 65
Required compone	nts:	
		400
		30" 300
<u> รлмรเ</u>	ING	1 330 0° - 1394
		90* 90
	LM301B	75%
FWHM / FWTM	Asymmetric	
Efficiency Peak intensity	87 % 0.3 cd/lm	
LEDs/each optic	0.3 cd/im 1	200
Light colour	ı White	
Required compone		45° et
		400
		30° 15° 3°



SΛMSL	ING	
LED	LM561C	90° 90°
FWHM / FWTM		750 780
	Asymmetric 87 %	100
Efficiency		av C C C C C C C C C C C C C C C C C C C
Peak intensity	0.3 cd/lm	200
LEDs/each optic	1	
Light colour	White	45* 45
Required compone	nts:	
		400
		30" 30"
СЛЛАСІ		
SVWSI	JNG	90° 90°
LED	LT-H282C	
FWHM / FWTM	Asymmetric	300
Efficiency	86 %	
Peak intensity	0.3 cd/lm	6°*
LEDs/each optic	1	$ \times / / \times $
Light colour	White	6° 6°
Required compone	nts:	30
		\times / \times
		400
		50 15 ⁵ 0 ⁶ 15 ⁵ 30
SAMSL	ING	90° 90°
LED	LT-Q282B	
FWHM / FWTM	Asymmetric	75°
Efficiency	88 %	
Peak intensity	0.3 cd/lm	60 60
LEDs/each optic	1	
Light colour	White	45* 45 [*]
Required compone	nts:	
		\times
		400
		30° 15 ² 580 15° 30°
SVWSI	ING	
LED	LT-S282H	90* 90*
EED FWHM / FWTM	Asymmetric	75° 75°
Efficiency	87 %	500
Peak intensity	0.3 cd/lm	eu ^e 604
LEDs/each optic	1	
Light colour	White	
Required compone		42, 30
	lio.	
		400
		30° 45° 0° 15° 30°



SEOUL		
SEOUL SEMICONDUCTOR	SEOUL DC 3528	90° 90°
		75°
FWHM / FWTM	Asymmetric	
Efficiency	88 %	age () age
Peak intensity	0.3 cd/lm	
LEDs/each optic	1	\times / 7 \times
Light colour	White	45°
Required componer	nts:	
		400
		30" 30"
TRIDON		90* 90*
LED	LLE 24x280mm 1250lm HV ADV5	
FWHM / FWTM	Asymmetric	75* 75*
Efficiency	83 %	
Peak intensity	0.3 cd/lm	60° 0°
LEDs/each optic	1	200
Light colour	White	45* 45*
Required componer		30
		400
		30° 15 ⁵ 0° 15° 30°
TRIDON		
		90* 90*
LED	LLE 24x280mm 650lm HV ADV5	740
FWHM / FWTM	Asymmetric	
1	-	100
Efficiency	83 %	509 60 ⁴
Peak intensity	83 % 0.3 cd/lm	50 50 50
Peak intensity LEDs/each optic	83 % 0.3 cd/lm 1	50° 67'
Peak intensity LEDs/each optic Light colour	83 % 0.3 cd/lm 1 White	6°
Peak intensity LEDs/each optic	83 % 0.3 cd/lm 1 White	67 50 67 67
Peak intensity LEDs/each optic Light colour	83 % 0.3 cd/lm 1 White	61
Peak intensity LEDs/each optic Light colour	83 % 0.3 cd/lm 1 White	50 50 67 50 67 67 67 67 67 67
Peak intensity LEDs/each optic Light colour	83 % 0.3 cd/lm 1 White	
Peak intensity LEDs/each optic Light colour Required componen	83 % 0.3 cd/lm 1 White hts:	20
Peak intensity LEDs/each optic Light colour	83 % 0.3 cd/lm 1 White hts:	20
Peak intensity LEDs/each optic Light colour Required componen	83 % 0.3 cd/lm 1 White hts:	40
Peak intensity LEDs/each optic Light colour Required componen	83 % 0.3 cd/lm 1 White hts:	40
Peak intensity LEDs/each optic Light colour Required component	83 % 0.3 cd/lm 1 White hts: LLE FLEX CC 14mm 1250lm ADV1	30° 30° 30° 30° 400 400 400 400 400 400
Peak intensity LEDs/each optic Light colour Required component TRIDON LED FWHM / FWTM	83 % 0.3 cd/lm 1 White hts: LLE FLEX CC 14mm 1250lm ADV1 Asymmetric	30° 30° 30° 30° 400 400 400 400 400 400
Peak intensity LEDs/each optic Light colour Required componen TRIDON LED FWHM / FWTM Efficiency	83 % 0.3 cd/lm 1 White hts: LLE FLEX CC 14mm 1250lm ADV1 Asymmetric 86 %	30°
Peak intensity LEDs/each optic Light colour Required componen TRIDON LED FWHM / FWTM Efficiency Peak intensity	83 % 0.3 cd/lm 1 White hts: LLE FLEX CC 14mm 1250lm ADV1 Asymmetric 86 % 0.3 cd/lm	30°
Peak intensity LEDs/each optic Light colour Required component TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	83 % 0.3 cd/lm 1 White hts: LLE FLEX CC 14mm 1250lm ADV1 Asymmetric 86 % 0.3 cd/lm 1 White	30° 400 30° 30° 400 30° 30° 400 30° 30° 30° 400 30° 30° 30° 400 30° 30° 30° 400 30° 30° 30° 400 30° 30° 400 30° 30° 400 30° 400 30° 400 30° 40° 40° 40° 40° 40° 40° 40° 4
Peak intensity LEDs/each optic Light colour Required component TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	83 % 0.3 cd/lm 1 White hts: LLE FLEX CC 14mm 1250lm ADV1 Asymmetric 86 % 0.3 cd/lm 1 White	30° 400 30° 30° 400 30° 30° 400 30° 30° 30° 400 30° 30° 30° 400 30° 30° 30° 400 30° 30° 30° 400 30° 30° 400 30° 30° 400 30° 400 30° 400 30° 40° 40° 40° 40° 40° 40° 40° 4
Peak intensity LEDs/each optic Light colour Required component TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	83 % 0.3 cd/lm 1 White hts: LLE FLEX CC 14mm 1250lm ADV1 Asymmetric 86 % 0.3 cd/lm 1 White	30° 40° 30° 30° 30° 30° 30° 30° 30° 30° 30° 3
Peak intensity LEDs/each optic Light colour Required component TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	83 % 0.3 cd/lm 1 White hts: LLE FLEX CC 14mm 1250lm ADV1 Asymmetric 86 % 0.3 cd/lm 1 White	30° 40° 30° 30° 30° 30° 30° 30° 30° 30° 30° 3



OPTICAL RESULTS (SIMULATED):

bridgelux.		90* 90*
LED	Bridgelux SMD 5050	
FWHM / FWTM	Asymmetric	75°
Efficiency	80 %	
Peak intensity	0.3 cd/lm	60*
LEDs/each optic	1	
Light colour	White	
Required components:	White	45
		400
		30* 500 30* 15 ³ 0° 15* 30*
)S	
LED	LUXEON CSP HL1	
FWHM / FWTM	93.0 + 135.0° / 163.0 + 167.0°	75°
Efficiency	88 %	20
Peak intensity	0.4 cd/lm	60° 60°
LEDs/each optic	5	30
Light colour	White	40° 400 40°
Required components:	winte	45" 45"
Required components.		
		00
		700
		30* 15 ⁵ 0 ⁶
		TAY VIII
		ant
	NESWE11A	90* 90*
LED	NFSWE11A	20°
LED FWHM / FWTM	Asymmetric	90° 90° 90° 90° 90° 90° 90° 90° 90° 90°
LED FWHM / FWTM Efficiency	Asymmetric 82 %	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 82 % 0.3 cd/lm	50° 50° 70° 200 70° 80° 200 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 82 % 0.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 82 % 0.3 cd/lm	90° 90° 73° 500 60° 60° 60° 60° 60° 60° 60° 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 82 % 0.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 82 % 0.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 82 % 0.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 82 % 0.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 82 % 0.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 82 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 82 % 0.3 cd/lm 1 White OSLON Square CSSRM2/CSSRM3	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM	Asymmetric 82 % 0.3 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	Asymmetric 82 % 0.3 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 87 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Optic Semiconductors LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 82 % 0.3 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 87 % 0.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 82 % 0.3 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 87 % 0.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 82 % 0.3 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 87 % 0.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 82 % 0.3 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 87 % 0.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 82 % 0.3 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 87 % 0.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 82 % 0.3 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 87 % 0.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 82 % 0.3 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 87 % 0.3 cd/lm 1	



OPTICAL RESULTS (SIMULATED):

OSRAM		
Opto Semiconductors	OSLON Square CSSRM2/CSSRM3	90°
FWHM / FWTM	Asymmetric	73* 100 75*
Efficiency	87 %	
Peak intensity	0.3 cd/lm	60°
LEDs/each optic	1	\times
Light colour	u White	300
Required components:	White	45*
		400
		\times / \times
		540
		30 ⁺ 15 ⁵ 0 ⁶ 15 ⁺ 30 ⁺
OSRAM		
Opto Semiconductors		90° 90°
LED	OSLON Square CSSRM2/CSSRM3	77.0
FWHM / FWTM	Asymmetric	
Efficiency	89 %	60° 60°.
Peak intensity	0.3 cd/lm	
LEDs/each optic		200
Light colour	Hyper Red	-65°
Required components:		400
		X X
		30* 15° 30*
OSRAM		
OSRAM Opto Semiconductors		90°
Opto Semiconductors LED	OSLON SSL 150	N*
Opto Semiconductors LED FWHM / FWTM	Asymmetric	39* 9* 75* 100 10*
opto Semiconductors LED FWHM / FWTM Efficiency	Asymmetric 84 %	99* 99* 75* 200 97* 60* 60*
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 84 % 0.3 cd/lm	9° 77° 6° 6°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 84 % 0.3 cd/lm 1	9° 7° 6° 20 60 60
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 84 % 0.3 cd/lm	97 75 60 ⁴ 20 65 67 67
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 84 % 0.3 cd/lm 1	50° 500
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 84 % 0.3 cd/lm 1	50° 500
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 84 % 0.3 cd/lm 1	50° 500
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 84 % 0.3 cd/lm 1	50 ⁴ 200 50 ⁴
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 84 % 0.3 cd/lm 1	6 ³ 20 6 ³
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: seoul semiconductor	Asymmetric 84 % 0.3 cd/lm 1 Far Red	6 ³ 20 6 ³
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: secoul SEMICONDUCTOR LED	Asymmetric 84 % 0.3 cd/lm 1 Far Red SEOUL DC 5050 6V	6° 6° 6°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: seoul semiconouctor LED FWHM / FWTM	Asymmetric 84 % 0.3 cd/lm 1 Far Red SEOUL DC 5050 6V Asymmetric	6° 6° 6°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: seoul semiconductor LED FWHM / FWTM Efficiency	Asymmetric 84 % 0.3 cd/lm 1 Far Red SEOUL DC 5050 6V Asymmetric 80 %	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: seoul semconductor LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 84 % 0.3 cd/lm 1 Far Red SEOUL DC 5050 6V Asymmetric 80 % 0.3 cd/lm	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 84 % 0.3 cd/lm 1 Far Red SEOUL DC 5050 6V Asymmetric 80 % 0.3 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 84 % 0.3 cd/lm 1 Far Red SEOUL DC 5050 6V Asymmetric 80 % 0.3 cd/lm	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 84 % 0.3 cd/lm 1 Far Red SEOUL DC 5050 6V Asymmetric 80 % 0.3 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 84 % 0.3 cd/lm 1 Far Red SEOUL DC 5050 6V Asymmetric 80 % 0.3 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 84 % 0.3 cd/lm 1 Far Red SEOUL DC 5050 6V Asymmetric 80 % 0.3 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 84 % 0.3 cd/lm 1 Far Red SEOUL DC 5050 6V Asymmetric 80 % 0.3 cd/lm 1	