

STRADELLA-IP-28-SCL

Type II/III (long) beam for very wide pole to pole distances. Ideal for pedestrian paths and residential roads. EN13201 P-classes.

TECHNICAL SPECIFICATIONS:

Dimensions	100.0 x 100.0 mm
Height	9.5 mm
Fastening	screw
Ingress protection classes	IP67
ROHS compliant	yes 🛈

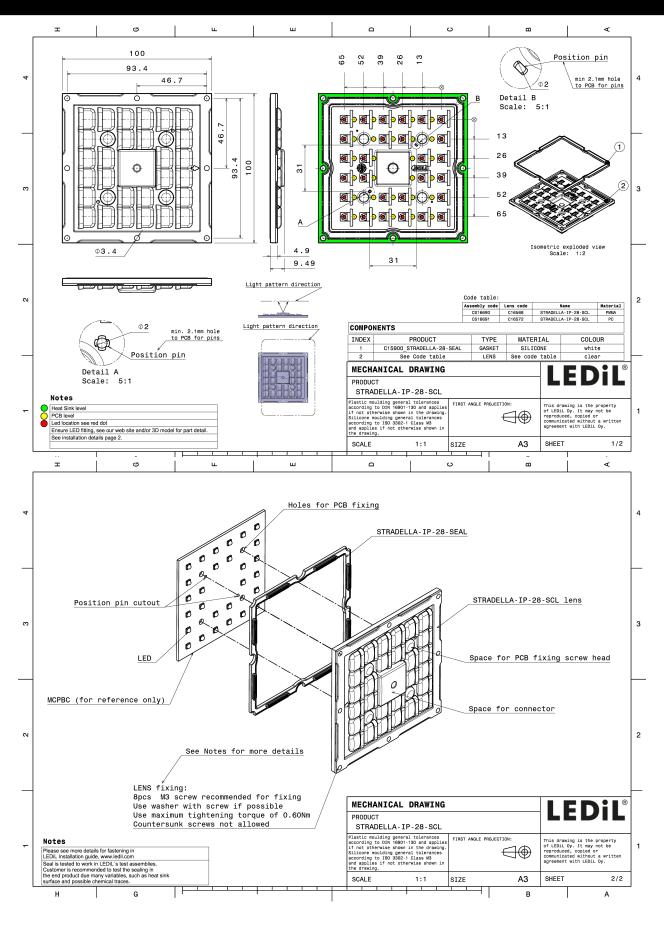


MATERIAL SPECIFICATIONS:

Component	Туре	Material	Colour	Finish
STRADELLA-IP-28-SCL	Multi-lens			
STRADELLA-28-SEAL	Seal	Silicone	white	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CS16690_STRADELLA-IP-28-SCL	Multi-lens	156	78	78	6.5
» Box size: 476 x 273 x 247 mm					



R

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



LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	HiQLED STR28 CR JE2835 4x7 xxx Asymmetric 93 % 0.8 cd/lm 1 White hts:	23° 0° 13° 29°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	HiQLED STR28 CR JК3030 4x7 xxx Asymmetric 92 % 0.8 cd/m 1 White nts:	97 75 60 60 60 60 60
LED FWHM / FWTM Efficiency	QUICK FLUX STR28 XD2x14 xxx G8 Asymmetric 93 %	
Peak intensity LEDs/each optic Light colour Required componen	0.7 cd/lm 1 White nts:	6* <u>30</u> 6* 40 6* 00 70 60
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	QUICK FLUX STR28 XP2x14 xxx G7 Asymmetric 93 % 0.5 cd/lm 1 White nts:	20 20 20 20 20 20 20 20 20 20
		90 710 30* 15* 50* 15* 30*



	QUICK FLUX STR28 XT2x14 xxx G5	
FWHM / FWTM	Asymmetric	25* 200 -75*
Efficiency	94 %	2 to the
Peak intensity	0.6 cd/lm	605 609
LEDs/each optic	1	
Light colour	White	40
Required componer		6°6°
	10.	
		600
		710
		30* 15* 800 15* 30*
CREE ≑		
		90* 90*
LED	J Series 2835	25*
FWHM / FWTM	Asymmetric	
Efficiency	93 %	60%
Peak intensity	0.8 cd/lm	400
LEDs/each optic	1	\times / / \top / \times
Light colour	White	45* 45*
Required componer	its:	500
		\times
		80
		30° 30°
CREE ≑		90* 90*
LED	J Series 3030	
FWHM / FWTM	Asymmetric	751
Efficiency	92 %	
Peak intensity	0.8 cd/lm	400
LEDs/each optic	1	$X//T \setminus X$
Light colour	White	45' 45'
Required componer	its:	00
		80
		30* 30*
CREE \$		90* 90*
LED	J Series 3030	200
FWHM / FWTM	Asymmetric	735
Efficiency	94 %	
Peak intensity	0.6 cd/lm	50°. 300 66°.
LEDs/each optic	1	400
Light colour	White	45° 500 65°
Required componer	its:	
		700
		× 000
		30° 30°



CREE 4		TAYEFT
LED	× XD16	90° 90°
EED FWHM / FWTM		75* 100 75*
Efficiency	Asymmetric 93 %	1 X - fr
Peak intensity	0.7 cd/lm	63* 300 60*
LEDs/each optic	1	
Light colour	White	
Required component		6°* <u>500</u> 6°*
Required compone	ю.	640
		700
		200
		30° 15° 30°
CREE \$		THY YHI
		90* 90*
LED	XP-G3	25* 100
FWHM / FWTM	Asymmetric	
Efficiency	93 %	60 ⁴ 60 ⁴
Peak intensity	0.5 cd/lm	30
LEDs/each optic	1	40
Light colour	White	
Required compone	11S:	
		000
		740
		30* 19 ⁵ 0 ⁶ 19 ⁵ 30*
		10 10
CREE -		
CREE ÷		12 Ka 25'
LED	XT-E	
LED FWHM / FWTM	XT-E Asymmetric	99° 99°
LED FWHM / FWTM Efficiency	XT-E Asymmetric 94 %	99° 99°
LED FWHM / FWTM Efficiency Peak intensity	XT-E Asymmetric 94 % 0.6 cd/lm	99° 99°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XT-E Asymmetric 94 % 0.6 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E Asymmetric 94 % 0.6 cd/lm 1 White	99° 99°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XT-E Asymmetric 94 % 0.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E Asymmetric 94 % 0.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E Asymmetric 94 % 0.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E Asymmetric 94 % 0.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	XT-E Asymmetric 94 % 0.6 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	XT-E Asymmetric 94 % 0.6 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XT-E Asymmetric 94 % 0.6 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XT-E Asymmetric 94 % 0.6 cd/lm 1 White nts: NF2W585AR Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XT-E Asymmetric 94 % 0.6 cd/lm 1 White nts: NF2W585AR Asymmetric 93 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Efficiency Peak intensity	XT-E Asymmetric 94 % 0.6 cd/m 1 White hts: NF2W585AR Asymmetric 93 % 0.5 cd/m	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componed	XT-E Asymmetric 94 % 0.6 cd/m 1 White hts: NF2W585AR Asymmetric 93 % 0.5 cd/m 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componed WICHIM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E Asymmetric 94 % 0.6 cd/m 1 White hts: NF2W585AR Asymmetric 93 % 0.5 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componed	XT-E Asymmetric 94 % 0.6 cd/m 1 White hts: NF2W585AR Asymmetric 93 % 0.5 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componed WICHIM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E Asymmetric 94 % 0.6 cd/m 1 White hts: NF2W585AR Asymmetric 93 % 0.5 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componed WICHIM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E Asymmetric 94 % 0.6 cd/m 1 White hts: NF2W585AR Asymmetric 93 % 0.5 cd/m 1 White	



()		
MNICHIA		90 ⁴ 90 ⁵
LED	NF2W585AR	
FWHM / FWTM	Asymmetric	730 770
Efficiency	93 %	
Peak intensity	0.5 cd/lm	50° 60°
LEDs/each optic	1	X
Light colour	White	et
Required componer	nts:	X X T X
		640
		740
		300
MNICHIA		90* 90*
LED	NVSW219F	5
FWHM / FWTM	Asymmetric	75- 75-
Efficiency	94 %	XXXXX
Peak intensity	0.5 cd/lm	50° X 60°
LEDs/each optic	1	400
Light colour	White	457 457
Required componer	nts:	200
		540
		700
		30° 13 ⁵ 000 13° 30°
		10 10 10 10 10 10 10 10 10 10 10 10 10 1
ØNICHI		
LED	NVSW319B	99 ⁴
LED FWHM / FWTM	NVSW319B Asymmetric	THY KHT
LED FWHM / FWTM Efficiency	NVSW319B Asymmetric 94 %	99 ⁴
LED FWHM / FWTM Efficiency Peak intensity	NVSW319B Asymmetric 94 % 0.5 cd/lm	99 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NVSW319B Asymmetric 94 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White	99 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Optio Semiconductors LED FWHM / FWTM	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White nts: OSCONIQ S 3030 Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen Opto Semiconductors LED FWHM / FWTM Efficiency	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White hts: OSCONIQ S 3030 Asymmetric 94 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White nts: OSCONIQ S 3030 Asymmetric 94 % 0.6 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White nts: OSCONIQ S 3030 Asymmetric 94 % 0.6 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White nts: OSCONIQ S 3030 Asymmetric 94 % 0.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White nts: OSCONIQ S 3030 Asymmetric 94 % 0.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White nts: OSCONIQ S 3030 Asymmetric 94 % 0.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White nts: OSCONIQ S 3030 Asymmetric 94 % 0.6 cd/lm 1 White	



OSRAM Opto Semiconductors		
LED	OSLON Square CSSRM2/CSSRM3	9° 9°
FWHM / FWTM	Asymmetric	75* 100
Efficiency	94 %	X to for
Peak intensity	0.6 cd/lm	60° 60°.
LEDs/each optic	1	400
Light colour	White	
Required compone		
		60
		710
		000
		30* 15 ⁵ 0 ⁶ 15* 30*
SAMSI	JNG	90* 90*
LED	HiLOM SC28 (LH181B)	
FWHM / FWTM	Asymmetric	75*
Efficiency	91 %	
Peak intensity	0.7 cd/lm	60% 300 60%
LEDs/each optic	1	400
Light colour	White	67
Required compone	ints:	500
		600
		700
		800 30
		13p ¹ 0 ⁰ 13 ²
SAMSU	JNG	90° 90°
		50° 50°
	HiLOM SM28 (LM301B) Asymmetric	30* 50°
LED	HiLOM SM28 (LM301B)	21 21 20 20 20 20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM	HiLOM SM28 (LM301B) Asymmetric	5° 50 50 50 50 50 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency	HiLOM SM28 (LM301B) Asymmetric 93 %	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White	5° 50 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White	52 60 60 60 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White	5° 5° 6° 60 6° 60 60 70 70 70 70 70 70 70 70 70 70 70 70 70
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White	5° 50 6° 60 70 70
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White	5° 50 6° 6° 70 6° 8° 80 6° 6° 80 6° 8° 80 6° 8° 80 6° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8° 8°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stout stemiconoucror LED	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White Ints:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer stout stemiconductor LED FWHM / FWTM	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White Ints: Z5M3 Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component stout stMiconductor LED FWHM / FWTM Efficiency	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White Ints: Z5M3 Asymmetric 93 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone scoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White ints: Z5M3 Asymmetric 93 % 0.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stous semiconoucror LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White ints: Z5M3 Asymmetric 93 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stous semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White ints: Z5M3 Asymmetric 93 % 0.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stous semiconoucror LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White ints: Z5M3 Asymmetric 93 % 0.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stous semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White ints: Z5M3 Asymmetric 93 % 0.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stous semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White ints: Z5M3 Asymmetric 93 % 0.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stous semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM SM28 (LM301B) Asymmetric 93 % 0.7 cd/lm 1 White ints: Z5M3 Asymmetric 93 % 0.5 cd/lm 1 White	



PHOTOMETRIC DATA (SIMULATED):

UMILEC)S	50° 5
LED	LUXEON 5050 Round LES	
FWHM / FWTM	Asymmetric	73%
Efficiency	89 %	
Peak intensity	0.4 cd/lm	
LEDs/each optic	1	
Light colour	White	45* 310
Required components:		
		440
		\times / \setminus λ
		30* 000
		113 ³ 0 ⁶ 13 ⁴
		80* 5
LED	LUXEON TX	200
FWHM / FWTM	Asymmetric	(The first)
Efficiency	90 %	50°
Peak intensity	0.6 cd/lm	
LEDs/each optic	1	400
Light colour	White	45* 500
Required components:		00
		700
		30* 10 00 100 3
	5	THA KHI
		90* S
	LUXEON V2	230
FWHM / FWTM	Asymmetric 90 %	
Efficiency		
Peak intensity	0.5 cd/lm	100 × 100 ×
Peak intensity LEDs/each optic	0.5 cd/lm 1	
Peak intensity LEDs/each optic Light colour	0.5 cd/lm	40 40 40
Peak intensity LEDs/each optic	0.5 cd/lm 1	
Peak intensity LEDs/each optic Light colour	0.5 cd/lm 1	6° 300 6° 200 60
Peak intensity LEDs/each optic Light colour	0.5 cd/lm 1	6° 390 6° 500 000 000 000
Peak intensity LEDs/each optic Light colour	0.5 cd/lm 1	67 <u>90</u> 67 <u>50</u> 70 70 87 <u>10</u> 80 10 10 10 10 10 10 10 10 10 10 10 10 10
Peak intensity LEDs/each optic Light colour Required components:	0.5 cd/lm 1	
Peak intensity LEDs/each optic Light colour Required components:	0.5 cd/lm 1 White	44 40 40 40 40 40 40 40 40 40
Peak intensity LEDs/each optic Light colour Required components:	0.5 cd/lm 1 White NF2x757G	
Peak intensity LEDs/each optic Light colour Required components:	0.5 cd/lm 1 White NF2x757G Asymmetric	44 49 49 49 49 49 49 49 49 49
Peak intensity LEDs/each optic Light colour Required components:	0.5 cd/lm 1 White NF2x757G Asymmetric 91 %	
Peak intensity LEDs/each optic Light colour Required components:	0.5 cd/lm 1 White NF2x757G Asymmetric 91 % 0.7 cd/lm	
Peak intensity LEDs/each optic Light colour Required components:	0.5 cd/lm 1 White NF2x757G Asymmetric 91 % 0.7 cd/lm 1	
Peak intensity LEDs/each optic Light colour Required components:	0.5 cd/lm 1 White NF2x757G Asymmetric 91 % 0.7 cd/lm	
Peak intensity LEDs/each optic Light colour Required components:	0.5 cd/lm 1 White NF2x757G Asymmetric 91 % 0.7 cd/lm 1	
Peak intensity LEDs/each optic Light colour Required components: WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	0.5 cd/lm 1 White NF2x757G Asymmetric 91 % 0.7 cd/lm 1	
Peak intensity LEDs/each optic Light colour Required components: WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	0.5 cd/lm 1 White NF2x757G Asymmetric 91 % 0.7 cd/lm 1	



PHOTOMETRIC DATA (SIMULATED):

OSRAM Opto Semiconductors		90*
LED	OSCONIQ C 2424	
FWHM / FWTM	Asymmetric	75 77
Efficiency	90 %	
Peak intensity	0.6 cd/lm	50*
	1	400
LEDs/each optic	ı White	
Light colour Required components:	White	45* 000 45*
Required components.		
		000
		30* <u>10%</u> 30* 30*
OSRAM Opto Semiconductors		90* 90*
LED	OSCONIQ P 3030	h i
FWHM / FWTM	Asymmetric	750 750
Efficiency	93 %	
Peak intensity	0.7 cd/lm	50° 50° 50°.
LEDs/each optic	1	
Light colour	White	5° 000 5°
Required components:		
		000
		1000
		30* <u>15</u> * 0° 15* 30*
$\mathbf{S}\mathbf{V}\mathbf{W}\mathbf{S}\mathbf{\Pi}\mathbf{V}$	16	
SAMSUN		50° 50°
LED	LH231B	90 ⁴ 50 ⁵
LED FWHM / FWTM	LH231B Asymmetric	99 ¹ 7 ³ 100 7 ³ 7 ³
LED FWHM / FWTM Efficiency	LH231B Asymmetric 90 %	59° 50° 73° 100 72° 66° 60¢
LED FWHM / FWTM Efficiency Peak intensity	LH231B Asymmetric 90 % 0.5 cd/lm	92° 92° 73° 00° 72° 64° 00° 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH231B Asymmetric 90 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH231B Asymmetric 90 % 0.5 cd/lm	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH231B Asymmetric 90 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH231B Asymmetric 90 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH231B Asymmetric 90 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH231B Asymmetric 90 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH231B Asymmetric 90 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH231B Asymmetric 90 % 0.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH231B Asymmetric 90 % 0.5 cd/lm 1 White SEOUL DC 3030C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH231B Asymmetric 90 % 0.5 cd/lm 1 White SEOUL DC 3030C Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: stool sEMICONDUCTOR LED FWHM / FWTM Efficiency	LH231B Asymmetric 90 % 0.5 cd/lm 1 White SEOUL DC 3030C Asymmetric 91 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	LH231B Asymmetric 90 % 0.5 cd/lm 1 White SEOUL DC 3030C Asymmetric 91 % 0.6 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH231B Asymmetric 90 % 0.5 cd/lm 1 White SEOUL DC 3030C Asymmetric 91 % 0.6 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: seoul semiconouctor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH231B Asymmetric 90 % 0.5 cd/lm 1 White SEOUL DC 3030C Asymmetric 91 % 0.6 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH231B Asymmetric 90 % 0.5 cd/lm 1 White SEOUL DC 3030C Asymmetric 91 % 0.6 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: seoul semiconouctor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH231B Asymmetric 90 % 0.5 cd/lm 1 White SEOUL DC 3030C Asymmetric 91 % 0.6 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: seoul semiconouctor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH231B Asymmetric 90 % 0.5 cd/lm 1 White SEOUL DC 3030C Asymmetric 91 % 0.6 cd/lm 1	



PHOTOMETRIC DATA (SIMULATED):

		80* 90*
LED	Z5M1/Z5M2	2 200
FWHM / FWTM	Asymmetric	the second second second
Efficiency	91 %	
Peak intensity	0.6 cd/lm	50°
LEDs/each optic	1	400
Light colour	White	451 500 455
Required components:		600
		70
		800
		30- 300
		15 ⁵ 0° 15°
SEOUL		
SEOUL SEMICONDUCTOR	78722	50* 50*
seoul semiconductor LED	Z8Y22 Asymmetric	59° 59°
seoul semiconductor LED FWHM / FWTM	Asymmetric	9 ¹ 7 ² 20 20
seoul semiconductor LED FWHM / FWTM Efficiency	Asymmetric 87 %	95°
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 87 % 0.5 cd/lm	5°
seoul semiconouctor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 87 % 0.5 cd/lm 1	55 ⁷ 20 70 70
stout semiconouctor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 87 % 0.5 cd/lm	
seoul semiconouctor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 87 % 0.5 cd/lm 1	64
stout semiconouctor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 87 % 0.5 cd/lm 1	20 20 67 67
stoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 87 % 0.5 cd/lm 1	6,1 ,0 ,0 ,0 ,0 ,0 ,0 ,0 ,0 ,0 ,0



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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

LEDiL Oy

Joensuunkatu 13 FI-24240 SALO Finland

LEDiL Inc. 228 West Page Street Suite D Sycamore IL 60178 USA

Ledil Optics Technology (Shenzhen) Co., Ltd. # 405 , Block B Casic Motor Building Shenzhen 518057 P.R.CHINA

Local sales and technical support www.ledil.com/ where_to_buy

Shipping locations Salo, Finland Hong Kong, China

Distribution Partners www.ledil.com/ where_to_buy