

# PRODUCT DATASHEET C15960\_STRADELLA-8-HV-T4B

# STRADELLA-8-HV-T4B

Wide IESNA Type IV forward-throw beam for wide area lighting like car parks. Variant with improved creepage distance for high voltage circuit designs.

#### **SPECIFICATION:**

Dimensions	49.5 x 49.5 mm
Height	5.8 mm
Fastening	pin, screw
ROHS compliant	yes 🛈



#### **MATERIALS:**

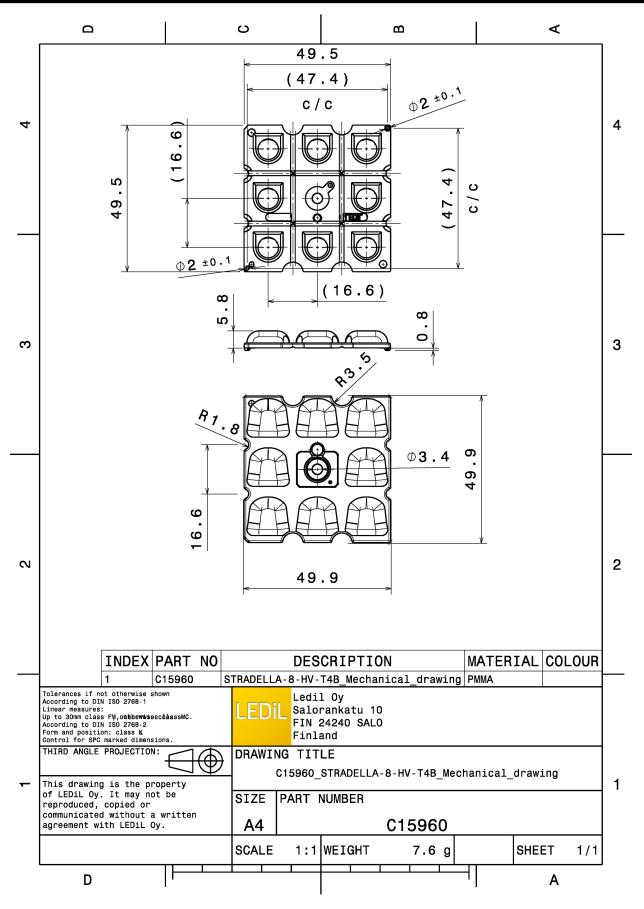
Component	Туре	Material	Colour	Finish
STRADELLA-8-HV-T4B	Multi-lens	PMMA	clear	

#### **ORDERING INFORMATION:**

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C15960_STRADELLA-8-HV-T4B	800	160	160	7.0
» Box size: 480 x 280 x 300 mm				



PRODUCT DATASHEET C15960\_STRADELLA-8-HV-T4B



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



#### **OPTICAL RESULTS (MEASURED):**

LED	J Series 3030	95" 95"
FWHM / FWTM	Asymmetric	73°
Efficiency	97 %	20
Peak intensity	0.6 cd/lm	60* 60*
LEDs/each optic	1	
Light colour	White	400
Required component		50 50
		700
		30* 13 <sup>5</sup> 880 15* 30*
LED	XD16	R R R R R R R R R R R R R R R R R R R
FWHM / FWTM	Asymmetric	776 200 776 0
Efficiency	93 %	200
Peak intensity	0.7 cd/lm	20 <sup>4</sup> 20
LEDs/each optic	1	
Light colour	White	40 40
Required component		
		600
		710
		30° 33° 33° 33°
LEDS	XT-F	10 <sup>1</sup>
LED	XT-E Asymmetric	50° 50' 210 70
LED FWHM / FWTM	Asymmetric	94* 95* 75* 100 200
LED FWHM / FWTM Efficiency	Asymmetric 94 %	
LEDs LED FWHM / FWTM Efficiency Peak intensity	Asymmetric	
LEDs EWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 0.6 cd/lm	
LEDs LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 94 % 0.6 cd/lm 1 White	
LEDs EWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 0.6 cd/lm 1 White	
LEDs EWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 0.6 cd/lm 1 White	
LEDs EWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 0.6 cd/lm 1 White	
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	Asymmetric 94 % 0.6 cd/lm 1 White nts:	
LEDs EWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 0.6 cd/lm 1 White nts:	
LEDs EWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	Asymmetric 94 % 0.6 cd/lm 1 White hts:	50° 50° 60°. 50° 60°. 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	Asymmetric 94 % 0.6 cd/lm 1 White hts: EDS LUXEON 3030 2D (Round LES)	
LEDs EWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Component LED ED	Asymmetric 94 % 0.6 cd/lm 1 White hts:	50° 50° 60°. 50° 60°. 50
LEDs LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Component LED FWHM / FWTM Efficiency	Asymmetric 94 % 0.6 cd/lm 1 White hts: EDS LUXEON 3030 2D (Round LES) Asymmetric 94 %	50° 50° 60°. 50° 60°. 50
LEDs EWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Mequired component EleD FWHM / FWTM Efficiency Peak intensity	Asymmetric 94 % 0.6 cd/lm 1 White hts: EDS LUXEON 3030 2D (Round LES) Asymmetric	50° 50° 60°. 50° 60°. 50
LEDs EWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Component LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 0.6 cd/lm 1 White hts: EDS LUXEON 3030 2D (Round LES) Asymmetric 94 % 0.7 cd/lm	50° 50° 60°. 50° 60°. 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Comp</b>	Asymmetric 94 % 0.6 cd/m 1 White hts: EDS LUXEON 3030 2D (Round LES) Asymmetric 94 % 0.7 cd/m 1 White	
LEDs EWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Component LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 0.6 cd/m 1 White hts: EDS LUXEON 3030 2D (Round LES) Asymmetric 94 % 0.7 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Comp</b>	Asymmetric 94 % 0.6 cd/m 1 White hts: EDS LUXEON 3030 2D (Round LES) Asymmetric 94 % 0.7 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Composed</b> <b>Comp</b>	Asymmetric 94 % 0.6 cd/m 1 White hts: EDS LUXEON 3030 2D (Round LES) Asymmetric 94 % 0.7 cd/m 1 White	



#### **OPTICAL RESULTS (MEASURED):**

🥙 LUMIL	EDS	90.
LED	LUXEON V2	4
FWHM / FWTM	Asymmetric	78 200 70*
Efficiency	94 %	20
Peak intensity	0.6 cd/lm	50 <sup>4</sup> 60 <sup>4</sup>
LEDs/each optic	1	
Light colour	White	-6°
Required componer	nts:	
		700
<i>(</i>		13 <sup>5</sup> 0 <sup>6</sup> 13 <sup>6</sup>
ØNICHIA		90° 90°
LED	NVSW219D	6
FWHM / FWTM	Asymmetric	751
Efficiency	94 %	
Peak intensity	0.5 cd/lm	
LEDs/each optic	1	
Light colour	White	45* 440 45*
Required componer	nts:	
		30* 15 <sup>5</sup> 290 10* 30*
		13, 4, 13,
<b>ØNICHIA</b>		
LED	NVSW319B	
LED FWHM / FWTM	NVSW319B Asymmetric	
LED FWHM / FWTM Efficiency	NVSW319B Asymmetric 94 %	
LED FWHM / FWTM Efficiency Peak intensity	NVSW319B Asymmetric 94 % 0.5 cd/lm	
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	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White	20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White	20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White	20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White	20
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 componer	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White nts: OSCONIQ S 3030 (QSLR31)	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer OSERAM Opto Semiconductors LED FWHM / FWTM	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White nts: OSCONIQ S 3030 (QSLR31) Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White nts: OSCONIQ S 3030 (QSLR31) Asymmetric 94 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer Semiconductors LED FWHM / FWTM Efficiency Peak intensity	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White nts: OSCONIQ S 3030 (QSLR31) Asymmetric 94 % 0.6 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer Required componer Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White nts: OSCONIQ S 3030 (QSLR31) Asymmetric 94 % 0.6 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component 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 (QSLR31) Asymmetric 94 % 0.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Destruction Required component Efficiency Peak intensity LEDs/each optic	NVSW319B Asymmetric 94 % 0.5 cd/lm 1 White nts: OSCONIQ S 3030 (QSLR31) Asymmetric 94 % 0.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component 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 (QSLR31) Asymmetric 94 % 0.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component 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 (QSLR31) Asymmetric 94 % 0.6 cd/lm 1 White	



# **OPTICAL RESULTS (MEASURED):**

PHILIF	25	99*
LED	Fortimo FastFlex LED 4x8up PR G5	7 100
FWHM / FWTM	Asymmetric	73%
Efficiency	94 %	
Peak intensity	0.6 cd/lm	.504 300
LEDs/each optic	1	XX
Light colour	White	5
Required compone		
		700
		X 100
		30° 15° 0° 15°
SEOUL		
		90*
	SEOUL DC 3030C	750 100
FWHM / FWTM	Asymmetric	
Efficiency Peak intensity	94 % 0.6 cd/lm	
LEDs/each optic	1	400
Light colour	White	45* 500
Required compone	nts.	
		700
		36° 300 15°
SEOUL		MAY YA
SEOUL SEMICONDUCTOR		90*
LED	Z5M3	200 400
FWHM / FWTM	Asymmetric	
Efficiency	94 %	50* 200
Peak intensity	0.5 cd/lm	300
LEDs/each optic	1	$X \times / T \setminus X >$
Light colour	White	45* 400
Required compone	nts:	500
		X   X
		00
		30° 15 <sup>5</sup> 700 15*
		Las 2 3 3
SEOUL		THY VM
SEOUL SEMICONDUCTOR		90°
	Z5M4	
SEOUL SEMICONDUCTOR	Z5M4 Asymmetric	50°
seoul semiconductor LED FWHM / FWTM		
seoul semiconductor LED FWHM / FWTM Efficiency	Asymmetric	
seoul semiconductor	Asymmetric 97 %	50° 20° 40° 40°
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 97 % 0.5 cd/lm	50° 50° 60°
stoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 97 % 0.5 cd/lm 1 White	
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 97 % 0.5 cd/lm 1 White	
scoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 97 % 0.5 cd/lm 1 White	
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 97 % 0.5 cd/lm 1 White	



LED	XP-G2 HE	
FWHM / FWTM	Asymmetric	
Efficiency	90 %	
Peak intensity	0.4 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
		90* 90*
LED	XP-G3	
FWHM / FWTM	Asymmetric	100 75°
Efficiency	75 %	X
Peak intensity	0.3 cd/lm	50* 60*.
LEDs/each optic	1	$\times// \times$
Light colour	White	-5° - 3% - 6°
Required components:		
Protective plate	e, glass	400
		30* 500 30* 15 <sup>5</sup> 0 <sup>6</sup> 15*
CREE ≑		
LEDS		90* 90*
LED	XP-G3	75° 100 75°
FWHM / FWTM	Asymmetric	
Efficiency	92 %	.614 604 604
Peak intensity	0.4 cd/lm	
LEDs/each optic	1	
Light colour	White	45* 400 45*
Required components:		
		× ***
		000
		30* 30*
CREE ≑		1
LEDS		90 <sup>+</sup> 90 <sup>+</sup>
LED	XP-G4	9 200
FWHM / FWTM	Asymmetric	700 700
Efficiency	94 %	
Peak intensity	0.5 cd/lm	80°. 300 60 <sup>4</sup>
LEDs/each optic	1	$X \times I = X \times I$
Light colour	White	400 400
Required components:		500
		000
		× 770 × ×
		30° 13 <sup>2</sup> 0° 15 <sup>2</sup> 30°



LEDS	XP-G4	90* 90*
FWHM / FWTM	Asymmetric	730 700 780
Efficiency	79 %	. 60° 200 60°
Peak intensity	0.3 cd/lm	
LEDs/each optic	1	X Joo X
Light colour	White	45°
Required components:		400
Protective plate	alass	
		$\times$
		30° 15° 86° 10° 30°
	)S	90° 90°
LED	LUXEON 5050 Square LES	
FWHM / FWTM	Asymmetric	25° 500
Efficiency	94 %	
Peak intensity	0.4 cd/lm	60 <sup>4</sup> 60 <sup>4</sup>
LEDs/each optic	1	$\times$
Light colour	White	
Required components:	White	45.
Required components.		
		30° - 15° 0° 15°
	S	
LED	LUXEON C	80.
FWHM / FWTM	Asymmetric	73° A 100 78°
Efficiency	74 %	
Peak intensity	0.4 cd/lm	.50 <sup>4</sup> 200 50 <sup>4</sup>
LEDs/each optic	1	
Light colour	White	X
	Wille	6°, 6°,
Required components:		400
Protective plate	e, glass	
		200
		30* <u>15</u> * <u>66</u> <u>15</u> * 30*
	)S	90 <sup>+</sup>
LED	LUXEON CZ	
FWHM / FWTM	Asymmetric	75*
Efficiency	94 %	
Peak intensity	0.6 cd/lm	50% 300 60*
LEDs/each optic	1	
Light colour	White	400
Required components:	winte	457 500 457
		760
		30° 000 30° 30°
		10. 0. 10.



UMILED	DS	99* 92*
LED	LUXEON TX	6
FWHM / FWTM	Asymmetric	
Efficiency	93 %	
Peak intensity	0.5 cd/lm	200 00
LEDs/each optic	1	$X \times I \times X$
Light colour	White	400 45
Required components:		20
		600
		700 30* 15 <sup>5</sup> 0 <sup>8</sup> 15* 30*
	DS	
LED	LUXEON TX	
FWHM / FWTM	Asymmetric	175
Efficiency	80 %	
Peak intensity	0.4 cd/lm	.60 <sup>4</sup> 200 60 <sup>4</sup>
LEDs/each optic	1	
Light colour	White	61 6 <sup>+</sup>
Required components:		400
Protective plate	e, glass	200
		30* <u>15</u> <u>600</u> 15* 30*
<b>Μ</b> ΝΙCΗΙΛ		
	NE2x757G	90* 91*
LED	NF2x757G Asymmetric	94* 94* 75* 250 95*
LED FWHM / FWTM	Asymmetric	30* 9*
LED FWHM / FWTM Efficiency	Asymmetric 94 %	200 734 200 200 200 200 200 200 200 200 200 20
LED FWHM / FWTM Efficiency Peak intensity	Asymmetric	2% 7% 6/* 500 500 6/*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 0.5 cd/lm	
LED FWHM / FWTM Efficiency	Asymmetric 94 % 0.5 cd/lm 1	25° - 200 - 5°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 0.5 cd/lm 1	2% 2% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4% 4%
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1 White NVSW219F	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1 White NVSW219F Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1 White NVSW219F Asymmetric 92 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1 White NVSW219F Asymmetric 92 % 0.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1 White NVSW219F Asymmetric 92 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1 White NVSW219F Asymmetric 92 % 0.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1 White NVSW219F Asymmetric 92 % 0.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1 White NVSW219F Asymmetric 92 % 0.5 cd/lm 1	235 - 100 - 77 80 <sup>5</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 0.5 cd/lm 1 White NVSW219F Asymmetric 92 % 0.5 cd/lm 1	235 - 100 - 77 80 <sup>5</sup>



IED   NVSW219F     FWHM / FWTM   Asymmetric     Efficiency   75 %     Peak intensity   0.3 cd/lm     LEDs/each optic   1     Light colour   White     Required components:   Protective plate, glass     Image: NICHIA   NVSW519A     FWHM / FWTM   Asymmetric     EED   NVSW519A     FWHM / FWTM   Asymmetric     Efficiency   90 %	95 50 60 60 63 63 63 63 64 64 65 65 65 65 65 65 65 65 65 65 65 65 65
LED NVSW219F   FWHM / FWTM Asymmetric   Efficiency 75 %   Peak intensity 0.3 cd/lm   LEDs/each optic 1   Light colour White   Required components: Protective plass   Protective plass Image: state	5 7 60 60 61 62 63
FWHM / FWTM Asymmetric   Efficiency 75 %   Peak intensity 0.3 cd/lm   LEDs/each optic 1   Light colour White   Required components:   Protective plate, glass   Protective plate, glass	
Efficiency 75 % Peak intensity 0.3 cd/lm LEDs/each optic 1 Light colour White Required components: Protective plate, glass Protective plate,	
Peak intensity 0.3 cd/lm LEDs/each optic 1 Light colour White Required components: Protective plate, glass Protective plate, glass Protectiv	
LEDs/each optic 1 Light colour White Required components: Protective plate, glass Protective	,
Light colour White Required components: Protective plate, glass Protective plate, glass	
Required components: Protective plate, glass	. a
Protective plate, glass	. 30
LED NVSW519A FWHM / FWTM Asymmetric	. 30
LED NVSW519A FWHM / FWTM Asymmetric	. 30
LED NVSW519A FWHM / FWTM Asymmetric	* x
LED NVSW519A FWHM / FWTM Asymmetric	90
FWHM / FWTM Asymmetric	
	2
Efficiency 90 %	$\sim$
	6
Peak intensity 0.4 cd/lm	
LEDs/each optic 1	
Light colour White	< /s
Required components:	
50	
50	
20 <sup>1</sup> 10 <sup>2</sup>	• 30
	94
LED NVSW519A	
FWHM / FWTM Asymmetric	~
Efficiency 80 %	$\sim$
Peak intensity 0.3 cd/lm	64
LEDs/each optic 1	
Light colour White	-
Required components:	
Protective plate, glass	
Trotective plate, glass	
200	• 30
20 <sup>4</sup> 12 <sup>5</sup> 0 <sup>5</sup> 2	
	,
NICHIA LED NVSxE21A	,
IED NVSxE21A   FWHM / FWTM Asymmetric	
ILED NVSxE21A   FWHM / FWTM Asymmetric   Efficiency 93 %	
ILED NVSxE21A   FWHM / FWTM Asymmetric   Efficiency 93 %   Peak intensity 0.6 cd/lm	
IED   NVSxE21A     FWHM / FWTM   Asymmetric     Efficiency   93 %     Peak intensity   0.6 cd/lm     LEDs/each optic   1     Light colour   White	
IED   NVSxE21A     FWHM / FWTM   Asymmetric     Efficiency   93 %     Peak intensity   0.6 cd/lm     LEDs/each optic   1	
IED   NVSxE21A     FWHM / FWTM   Asymmetric     Efficiency   93 %     Peak intensity   0.6 cd/lm     LEDs/each optic   1     Light colour   White	
IED   NVSxE21A     FWHM / FWTM   Asymmetric     Efficiency   93 %     Peak intensity   0.6 cd/lm     LEDs/each optic   1     Light colour   White	



OSRAM		
Opto Semiconductors	OSCONIQ C 2424	90* 90*
FWHM / FWTM	Asymmetric	75°
Efficiency	94 %	
Peak intensity	0.6 cd/lm	501 501
LEDs/each optic	1	
Light colour	White	400
Required components:		20
		000
		700
		30° <u>900</u> 15° 0° 15° <u>90°</u>
OSRAM Opto Semiconductors		90* 90*
LED	OSCONIQ C 2424	4
FWHM / FWTM	Asymmetric	75°
Efficiency	81 %	
Peak intensity	0.4 cd/lm	
LEDs/each optic	1	
Light colour	White	65° 400 65°
Required components:		
Protective plate		× 1 ×
Fiblective plate	, yiass	600
		30° 45° 0° 15° 30°
OSRAM Opto Semiconductors		
Opto Semiconductors	OSCONIQ P 3030	90° 90°
FWHM / FWTM	Asymmetric	750 750 750
Efficiency	94 %	<u> </u>
Peak intensity	0.6 cd/lm	604 604.
LEDs/each optic	1	× / - × /
Light colour	White	45* 440 45*
Required components:		X/T/X
		200
		30* 32*
OSRAM		15 <sup>0</sup> 15 <sup>0</sup> 5 <sup>0</sup>
Opto Semiconductors		907 907
LED	OSLON Square CSSRM2/CSSRM3	9 100
FWHM / FWTM	Asymmetric	730
Efficiency	93 %	
Peak intensity	0.5 cd/lm	60 <sup>4</sup> 60 <sup>4</sup>
LEDs/each optic	0.5 cd/lm 1	20 <sup>5</sup> 30
LEDs/each optic Light colour	0.5 cd/lm	515 67 
LEDs/each optic	0.5 cd/lm 1	65 67 67 67 69 67 67
LEDs/each optic Light colour	0.5 cd/lm 1	65 60 67 67 60 60 67
LEDs/each optic Light colour	0.5 cd/lm 1	
LEDs/each optic Light colour	0.5 cd/lm 1	50° 500 60° 60° 60° 60° 60° 60° 60° 60° 60° 60°



OSRAM		
Opto Semiconductors	ACLAN STUDIE COORNO/COORNO	90* 90*
	OSLON Square CSSRM2/CSSRM3	750 750
FWHM / FWTM	Asymmetric 93 %	
Efficiency		60*
Peak intensity	0.5 cd/lm	X 730
LEDs/each optic	1	$X \times I \setminus X \times$
Light colour	White	400 65*
Required components:		
		500
		30° <u>15</u> <sup>5</sup> 700 15° 30°
OSRAM		
Opto Semiconductors		90. 90.
LED	OSLON Square CSSRM2/CSSRM3	70 50 70
FWHM / FWTM	Asymmetric	
Efficiency	77 %	60* 601
Peak intensity	0.3 cd/lm	200
LEDs/each optic	1	
Light colour	White	45° 65°
Required components:		400
Protective plate	dass	$\times$ / $\wedge$ $\times$
	, 9.00	
		30* 13 <sup>5</sup> 0° 15 <sup>*</sup> 30*
PHILIPS		
LED	Fortimo FastFlex LED 4x8up PR G5	
FWHM / FWTM	Asymmetric	75° 100 75°
Efficiency	84 %	
Peak intensity	0.4 cd/lm	200 604
LEDs/each optic	1	X / 300 X
Light colour	White	
Required components:	Willo	400
required components.		
Protoctivo slat		
Protective plate	e, glass	
	e, glass	60
		50° - 50° - 50° - 50°
		80° - 10° - 20° - 20°
SAMSUN LED		90 <sup>4</sup> 19 <sup>2</sup> 2 <sup>3</sup> 39 <sup>4</sup>
SAMSUN	IG	60 30* 30 30* 30* 30* 30* 90* 30* 90* 30* 90*
SAMSUN LED	<b>G</b> LH181A	90° 10° 10° 10° 10° 10° 10° 10° 1
<b>SAMSUN</b> LED FWHM / FWTM Efficiency	G LH181A Asymmetric 94 %	60 20 20 20 20 20 20 20 20 20 2
SAMSUN LED FWHM / FWTM Efficiency Peak intensity	G LH181A Asymmetric	00 20 20 20 20 20 20 20 20 20 20 20 20 2
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	G LH181A Asymmetric 94 % 0.5 cd/m	
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	G LH181A Asymmetric 94 % 0.5 cd/lm 1	00 00 00 00 00 00 00 00 00 00
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	G LH181A Asymmetric 94 % 0.5 cd/lm 1	
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	G LH181A Asymmetric 94 % 0.5 cd/lm 1	
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	G LH181A Asymmetric 94 % 0.5 cd/lm 1	



СЛЛАСИА	10	
SAMSUN		90* 90
LED	LH181B	200
FWHM / FWTM	Asymmetric	
Efficiency	94 %	
Peak intensity	0.5 cd/lm	30
LEDs/each optic	1	400
Light colour	White	-67 - 20 - 65'
Required components:		
		700
		30 <sup>4</sup> 13 <sup>5</sup> 0 <sup>6</sup> 13 <sup>4</sup> 30 <sup>4</sup>
SAMSUN	IG	THY EFT
		90* 90*
	LH351B	735 7 100 752
FWHM / FWTM	Asymmetric	
Efficiency Peak intensity	93 % 0.4 cd/lm	504 504 504
LEDs/each optic	1	30
Light colour	u White	
Required components:	white	400 45*
required components.		500
		$\times$
		30° <u>15°</u> 0° <u>15°</u> 30°
O A BA O I - B		
2VIN20V	16	90* 90*
	LH351B	50° - 50°
LED	LH351B	90 <sup>1</sup> 75 100
LED FWHM / FWTM		29 <sup>1</sup> 20 <sup>1</sup>
LED FWHM / FWTM Efficiency	LH351B Asymmetric	
LED FWHM / FWTM Efficiency	LH351B Asymmetric 80 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351B Asymmetric 80 % 0.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351B Asymmetric 80 % 0.3 cd/lm 1	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH351B Asymmetric 80 % 0.3 cd/lm 1 White	507 507 507 507 507 507 507 507 507 507
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351B Asymmetric 80 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH351B Asymmetric 80 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	LH351B Asymmetric 80 % 0.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	LH351B Asymmetric 80 % 0.3 cd/lm 1 White a, glass	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SAMSUN LED	LH351B Asymmetric 80 % 0.3 cd/lm 1 White e, glass	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SAMSUN LED FWHM / FWTM	LH351B Asymmetric 80 % 0.3 cd/lm 1 White e, glass IG LH351C Asymmetric	400 506 506 507 507 507 507 507 507 507 507 507 507
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SAMSUN LED FWHM / FWTM Efficiency	LH351B Asymmetric 80 % 0.3 cd/lm 1 White e, glass LH351C Asymmetric 93 %	201 - 12 <sup>3</sup> - 2 <sup>3</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SANNSUN LED FWHM / FWTM Efficiency Peak intensity	LH351B Asymmetric 80 % 0.3 cd/lm 1 White e, glass LH351C Asymmetric 93 % 0.4 cd/lm	400 506 506 507 507 507 507 507 507 507 507 507 507
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SAMSSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351B Asymmetric 80 % 0.3 cd/lm 1 White e, glass LH351C Asymmetric 93 % 0.4 cd/lm 1	400 506 506 507 507 507 507 507 507 507 507 507 507
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SANNSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351B Asymmetric 80 % 0.3 cd/lm 1 White e, glass LH351C Asymmetric 93 % 0.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SAMSSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351B Asymmetric 80 % 0.3 cd/lm 1 White e, glass LH351C Asymmetric 93 % 0.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SANNSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351B Asymmetric 80 % 0.3 cd/lm 1 White e, glass LH351C Asymmetric 93 % 0.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate SAMSSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351B Asymmetric 80 % 0.3 cd/lm 1 White e, glass LH351C Asymmetric 93 % 0.4 cd/lm 1	



SAMSUN	IG	90*
LED	LH351C	
FWHM / FWTM	Asymmetric	750 5 100
Efficiency	80 %	
Peak intensity	0.3 cd/lm	604 6
LEDs/each optic	1	
Light colour	White	45* 300
Required components:		
Protective plate	e, glass	460
		50° 10° 10° 3
SEQUE		
		90* 9
	SEOUL 3030	750 4 100
FWHM / FWTM	Asymmetric	
Efficiency Book intensity	98 %	50 <sup>4</sup> 30 6
Peak intensity	0.5 cd/lm	X X 40 X X
LEDs/each optic	1 White	500
Light colour	white	45
Required components:		
		700
		200
		30* <u>900</u> 15 <sup>2</sup> 0 <sup>6</sup> 15* 3
SEOUL		
		90* 92
LED	SEOUL 3030	
		730 6 0 0 0
	Asymmetric	750 6 6 7 7 7
Efficiency	98 %	
Efficiency Peak intensity	98 % 0.7 cd/lm	50° 600 6
Efficiency Peak intensity LEDs/each optic	98 % 0.7 cd/lm 1	50 <sup>4</sup> 60 6
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	98 % 0.7 cd/lm	57 00 C
Efficiency Peak intensity LEDs/each optic	98 % 0.7 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour	98 % 0.7 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour	98 % 0.7 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour	98 % 0.7 cd/lm 1	20°
Efficiency Peak intensity LEDs/each optic Light colour	98 % 0.7 cd/lm 1	20° 13° 00 13° 13° 13° 13° 13° 13° 13° 13° 13° 13°
Efficiency Peak intensity LEDs/each optic Light colour Required components:	98 % 0.7 cd/lm 1 White	5° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6
Efficiency Peak intensity LEDs/each optic Light colour Required components: stout semiconductor LED	98 % 0.7 cd/lm 1 White SEOUL DC 5050 6V	
Efficiency Peak intensity LEDs/each optic Light colour Required components: seous semiconductor LED FWHM / FWTM	98 % 0.7 cd/lm 1 White SEOUL DC 5050 6V Asymmetric	
Efficiency Peak intensity LEDs/each optic Light colour Required components: seous semiconductor LED FWHM / FWTM Efficiency	98 % 0.7 cd/m 1 White SEOUL DC 5050 6V Asymmetric 94 %	80
Efficiency Peak intensity LEDs/each optic Light colour Required components: stous semiconductor LED FWHM / FWTM Efficiency Peak intensity	98 % 0.7 cd/m 1 White SEOUL DC 5050 6V Asymmetric 94 % 0.3 cd/m	80
Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUS SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	98 % 0.7 cd/m 1 White SEOUL DC 5050 6V Asymmetric 94 % 0.3 cd/m 1	80
Efficiency Peak intensity LEDs/each optic Light colour Required components: stour.stmiconouctor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	98 % 0.7 cd/m 1 White SEOUL DC 5050 6V Asymmetric 94 % 0.3 cd/m	80
Efficiency Peak intensity LEDs/each optic Light colour Required components: SEQUI SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	98 % 0.7 cd/m 1 White SEOUL DC 5050 6V Asymmetric 94 % 0.3 cd/m 1	80
Efficiency Peak intensity LEDs/each optic Light colour Required components: stour.semconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	98 % 0.7 cd/m 1 White SEOUL DC 5050 6V Asymmetric 94 % 0.3 cd/m 1	80
Efficiency Peak intensity LEDs/each optic Light colour Required components: SEQUE SEMECONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	98 % 0.7 cd/m 1 White SEOUL DC 5050 6V Asymmetric 94 % 0.3 cd/m 1	80



SEOUL			
seoul semiconductor	SEOUL DC 5050 6V		90*
EED FWHM / FWTM			750
	Asymmetric		
Efficiency	94 %		60*
Peak intensity	0.4 cd/lm		$\times / T^2$
LEDs/each optic	1		
Light colour	White		45*
Required components:			
			30*
		 	153
SEOUL			90*
LED	Z5M3		
FWHM / FWTM	Asymmetric		750 2 - 1
Efficiency	80 %		
Peak intensity	0.4 cd/lm		50 <sup>4</sup>
LEDs/each optic	1		
Light colour	White		45*
Required components:			
Protective pla	te, glass		
			30° 15 <sup>5</sup>
SEOUL			1 + 7
	Z5M4		90*/
			750 7
FWHM / FWTM	Asymmetric		
Efficiency	81 %		504 2
Peak intensity	0.4 cd/lm		
LEDs/each optic	1		$\times$ $\wedge$
Light colour	White		45*
Required components:			
Protective pla	te, glass		
			X
			30° 15 <sup>5</sup> 6



#### **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

Last update: 18/08/2023Subject to change without prior noticePublished: 15/07/2019LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.15/15