

# **VERONICA-SQ-MINI-O**

~15° + 50° oval beam

## **TECHNICAL SPECIFICATIONS:**

Dimensions	13.9 x 13.9 mm
Height	8.9 mm
Fastening	tape, pin
ROHS compliant	yes 🛈



## **MATERIAL SPECIFICATIONS:**

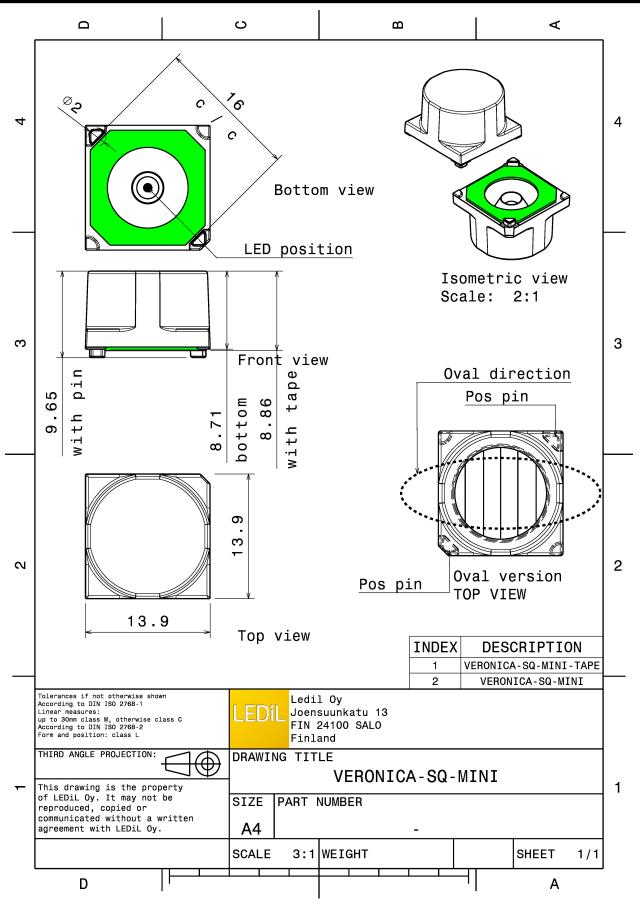
**Component** VERONICA-SQ-MINI-O VERONICA-SQ-MINI-TAPE **Type** Single lens Tape

Material	Colour	Finish
PMMA	clear	
Acrylic foam	clear	

### **ORDERING INFORMATION:**

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA14602_VERONICA-SQ-MINI-O	Single lens	5544	252	252	7.8
» Box size: 480 x 280 x 300 mm					





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



### **PHOTOMETRIC DATA (MEASURED):**

CREE -		50 <sup>4</sup>	90*
LED	XD16		
FWHM / FWTM	41.0 + 18.0° / 68.0 + 43.0°	73	
Efficiency	89 %		
Peak intensity	2.2 cd/lm	60	
LEDs/each optic	1		
Light colour	White	w.	
Required compone			
	ino.		1630
		$\sim$	
		30*	15° 2950 15° 30
CREE -		50°	90'
LED	XP-E2		
FWHM / FWTM	42.0 + 14.0° / 61.0 + 34.0°	The second se	77
Efficiency	92 %		
Peak intensity	3.8 cd/lm	894	1600
LEDs/each optic	1		
Light colour	White		
Required compone			2430
		<sup>30*</sup>	4000 30* 15° 0° 15°
CREE -		go*	90*
LED	XP-G2		
FWHM / FWTM	45.0 + 20.0° / 75.0 + 50.0°	73	
Efficiency	92 %		
Peak intensity	2.3 cd/lm	60**	
LEDs/each optic	1		
Light colour		951	
	White		
			1630
Required compone			369
			15.90
Required compone	ents:	44	15 <sup>5</sup> 2055 15 <sup>6</sup> 2055 15 <sup>7</sup> 2057 15 <sup>7</sup>
	ents:	30 <sup>4</sup>	150 2009 157 00 157 00 157 95
Required compone	ents:		157
Required compone	ents:	25° 25°	150
Required compone	xP-G3		157
Required compone	XP-G3 41.0 + 24.0° / 75.0 + 57.0°		157
Required compone	XP-G3 41.0 + 24.0° / 75.0 + 57.0° 92 %		157 et 157
Required compone	XP-G3 41.0 + 24.0° / 75.0 + 57.0° 92 % 1.8 cd/lm		200 30 15 <sup>1</sup> 0 <sup>2</sup> 35 <sup>2</sup> 40 40 50
Required compone	XP-G3 41.0 + 24.0° / 75.0 + 57.0° 92 % 1.8 cd/lm 1 White	73 60 <sup>3</sup>	150
Required compone	XP-G3 41.0 + 24.0° / 75.0 + 57.0° 92 % 1.8 cd/lm 1 White	73 60 <sup>3</sup>	200 200 200 200 200 200 200 200 200 200
Required compone	XP-G3 41.0 + 24.0° / 75.0 + 57.0° 92 % 1.8 cd/lm 1 White	73 60 <sup>3</sup>	200 200 200 200 200 200 200 200 200 200
Required compone	XP-G3 41.0 + 24.0° / 75.0 + 57.0° 92 % 1.8 cd/lm 1 White	73 60 <sup>3</sup>	200 200 200 200 200 200 200 200 200 200



### **PHOTOMETRIC DATA (MEASURED):**

	EDC	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Rebel 42.0 + 20.0° / 71.0 + 50.0° 90 % 2.1 cd/lm 1 White	
	EDS	90 <sup>1</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Rebel ES 50.0 + 23.0° / 71.0 + 51.0° 80 % 2.1 cd/lm 1 White	
	EDS	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON TX 42.0 + 22.0° / 73.0 + 54.0° 90 % 2.1 cd/lm 1 White ents:	
<b>∕</b> NICHI∕		90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxE17A 40.0 + 20.0° / 69.0 + 44.0° 89 % 2.1 cd/lm 1 White	



### **PHOTOMETRIC DATA (MEASURED):**

ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSxx19B/NVSxx19C 41.0 + 23.0° / 74.0 + 56.0° 90 % 1.9 cd/lm 1 White	
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	Duris S5 (2 chip) 76.0 + 22.0° / 79.0 + 61.0° 74 %	90 <sup>4</sup> 72 60 60
Peak intensity LEDs/each optic Light colour Required compone	1.6 cd/lm 1 White nts:	00 00 00 00 00 00 00 00 00 00 00 00 00
OSPAM		200 00 200 3
OSERAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	OSLON Square EC 42.0 + 20.0° / 72.0 + 49.0° 89 % 2.2 cd/lm 1 White Its:	
OSRAM Opto Semiconductors		
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required compone	SFH 4170S 40.0 + 12.0° / 60.0 + 33.0° % 1 IR ints:	



### **PHOTOMETRIC DATA (MEASURED):**

#### OSRAM

LED	SFH 4180S
FWHM / FWTM	38.0 + 11.0° / 58.0 + 31.0°
Efficiency	%
LEDs/each optic	1
Light colour	IR
Required componer	nts:

SAMS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH181A 42.0 + 22.0° / 77.0 + 54.0° 88 % 1.5 cd/lm 1 White ents:	
SAMS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH181B 22.0 + 41.0° / 54.0 + 75.0° 91 % 1.8 cd/lm 1 White	
seou semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Z8Y22P 46.0 + 23.0° / 80.0 + 62.0° 90 % 1.5 cd/lm 1 White ents:	



## PHOTOMETRIC DATA (SIMULATED):

#### CREE ≑ LED XP-G2 HE FWHM / FWTM $50.0 + 26.0^{\circ} / 88.0 + 59.0^{\circ}$ Efficiency 90 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components: CREE 🚖 LED XQ-E HD FWHM / FWTM 54.0 + 16.0° / 80.0 + 34.0° Efficiency 90 % Peak intensity 2.7 cd/lm LEDs/each optic 1 White Light colour Required components: LED LUXEON 5050 Round LES FWHM / FWTM 54.0 + 36.0° / 118.0 + 106.0° Efficiency 86 % Peak intensity 0.8 cd/lm LEDs/each optic 1 Light colour White Required components: UMILEDS LED LUXEON C FWHM / FWTM 53.0 + 17.0° / 81.0 + 34.0° Efficiency 87 % Peak intensity 2.6 cd/lm LEDs/each optic 1 White Light colour Required components:



CONTRACTOR OF CO	LUXEON CZ 54.0 + 12.0° / 78.0 + 25.0° 91 % 3.5 cd/lm 1 Red	50 50 50 50 50 50 50 50 50 50
<b>A</b>	-	20° 10° 10°
	)5	90° 90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON CZ 56.0 + 13.0° / 79.0 + 26.0° 91 % 3.3 cd/lm 1 PC Amber	72 60 60 100 100 100 100
	05	
LED	LUXEON Z ES	90* 90*
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	53.0 + 16.0° / 82.0 + 35.0° 92 % 2.6 cd/lm 1 White	22) 00 00 00 00 00 00 00 00 00 0
Opto Semiconductors LED FWHM / FWTM Efficiency	Duris E 2835 18.0 + 52.0° / 48.0 + 82.0° 88 %	90 <sup>4</sup> 75 60 <sup>4</sup> 00 00
Peak intensity LEDs/each optic Light colour Required components:	2 cd/lm 1 White	



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OSRAM Opto Semiconductors		90° 90°
LED	OSCONIQ P 3737 (2W version)	
FWHM / FWTM	49.0 + 22.0° / 80.0 + 49.0°	75 75
Efficiency	83 %	
Peak intensity	1.9 cd/lm	60°
LEDs/each optic	1	
Light colour	White	e7 1220 e7
Required components:		
		1699
		300
		2000 15° 0° 15°
OSRAM Opto Semiconductors		90* 90*
LED	OSCONIQ P 3737 (3W version)	
FWHM / FWTM	24.0 + 48.0° / 48.0 + 80.0°	25'
Efficiency	84 %	400
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	5° 000 63°
Required components:		
		1200
		300 360
OSPAM		15 <sup>9</sup> 0 <sup>9</sup> 25 <sup>9</sup>
OSRAM Opto Semiconductors		90° 90° 90°
Opto Semiconductors	OSLON Square CSSRM2/CSSRM3	25. 25. 25. 25. 25. 25.
Opto Semiconductors LED FWHM / FWTM	48.0 + 20.0° / 82.0 + 44.0°	25° d° 35°
Opto Semiconductors LED FWHM / FWTM Efficiency	48.0 + 20.0° / 82.0 + 44.0° 81 %	125 0 <sup>1</sup> 125   90 <sup>4</sup> 25 <sup>4</sup> 25 <sup>4</sup>
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm	10% 00 10%   90% 25 25
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1	15% 0% 15%   90% 00% 00%
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm	95° 0° 15° 95° 00 0° 95° 0° 0°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1	994 994 994 994 994 996 900 900 900 900 900 900 900 900
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1	15% 0 15%   90* 90* 90*   75* 000 00*   100* 000 00*
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1	99° 99° 99° 99° 99° 99° 90° 90° 90° 90°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1	120 00 120   90* 90* 90*   90* 90* 90*
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1 White OSLON SSL 150	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1 White OSLON SSL 150 55.0 + 16.0° / 82.0 + 34.0°	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1 White OSLON SSL 150 55.0 + 16.0° / 82.0 + 34.0° 89 %	25 26 26 27 27 27 27 27 27
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1 White OSLON SSL 150 55.0 + 16.0° / 82.0 + 34.0° 89 % 2.6 cd/lm	25 26 26 27 27 27 27 27 27
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1 White OSLON SSL 150 55.0 + 16.0° / 82.0 + 34.0° 89 % 2.6 cd/lm 1	60 60 90 90 90 90 90 90 90 90 90 9
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1 White OSLON SSL 150 55.0 + 16.0° / 82.0 + 34.0° 89 % 2.6 cd/lm	64 000 65° 25° 26° 25° 25° 25° 25° 25°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1 White OSLON SSL 150 55.0 + 16.0° / 82.0 + 34.0° 89 % 2.6 cd/lm 1	60 90 90 90 90 90 90 90 90 90 9
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1 White OSLON SSL 150 55.0 + 16.0° / 82.0 + 34.0° 89 % 2.6 cd/lm 1	20 00 05   33 00 05   36 00 05   36 00 05   36 12,2 35
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	48.0 + 20.0° / 82.0 + 44.0° 81 % 2 cd/lm 1 White OSLON SSL 150 55.0 + 16.0° / 82.0 + 34.0° 89 % 2.6 cd/lm 1	60 90 90 90 90 90 90 90 90 90 9



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OSRAM Opto Semiconductors		90 <sup>4</sup> 90 <sup>4</sup>
LED	OSLON SSL 150	
FWHM / FWTM	54.0 + 15.0° / 80.0 + 30.0°	25*
Efficiency	90 %	
Peak intensity	2.8 cd/lm	60*
LEDs/each optic	1	
Light colour	Green	45° 45°
Required components:		
required components.		
		2430
		30° 15° 0° 15° 30°
OSRAM Opto Semiconductors		90* 90*
LED	OSLON SSL 150	
FWHM / FWTM	53.0 + 16.0° / 80.0 + 30.0°	75'
Efficiency	90 %	000
Peak intensity	2.8 cd/lm	60° 60°
LEDs/each optic	1	
Light colour	Red	43° 45°
Required components:		
		200
		30° 42° 0° 35°
<b>A B B B B B B B B B B</b>		
SAMSUN	IG	90° 90°
SAMSUN		90*
LED	LH351B	77
LED FWHM / FWTM	LH351B 49.0 + 24.0° / 83.0 + 53.0°	
LED FWHM / FWTM Efficiency	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 %	R*
LED FWHM / FWTM Efficiency Peak intensity	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm	77
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1	77
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm	25°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1	g;
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1	g;
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1	g;
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1	ç; 6; 6; 70 70 70 70 70
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1	g; 6; 6; 6; 6; 6; 6; 6; 6; 6; 6; 6; 6; 6;
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1 White	25 25 25 25 25 25 25 25 25 25
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: storus semiconductor LED	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1 White	22. 23. 24. 25. 26. 26. 26. 26. 27. 28. 29. 29. 29. 20. 20. 20. 20. 20. 20. 20. 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: stout.stmiconductor LED FWHM / FWTM	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1 White MJT 3030 50.0 + 20.0° / 82.0 + 48.0°	25 25 25 25 25 25 25 25 25 25
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: stoolu semconductor LED FWHM / FWTM Efficiency	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1 White MJT 3030 50.0 + 20.0° / 82.0 + 48.0° 85 %	64 25 26 26 27 20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1 White MJT 3030 50.0 + 20.0° / 82.0 + 48.0° 85 % 1.9 cd/lm	22. 23. 24. 25. 26. 26. 26. 26. 27. 28. 29. 29. 29. 20. 20. 20. 20. 20. 20. 20. 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1 White MJT 3030 50.0 + 20.0° / 82.0 + 48.0° 85 % 1.9 cd/lm 1	
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	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1 White MJT 3030 50.0 + 20.0° / 82.0 + 48.0° 85 % 1.9 cd/lm	64 25 26 26 27 20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1 White MJT 3030 50.0 + 20.0° / 82.0 + 48.0° 85 % 1.9 cd/lm 1	
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	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1 White MJT 3030 50.0 + 20.0° / 82.0 + 48.0° 85 % 1.9 cd/lm 1	
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	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1 White MJT 3030 50.0 + 20.0° / 82.0 + 48.0° 85 % 1.9 cd/lm 1	
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	LH351B 49.0 + 24.0° / 83.0 + 53.0° 84 % 1.8 cd/lm 1 White MJT 3030 50.0 + 20.0° / 82.0 + 48.0° 85 % 1.9 cd/lm 1	



second semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Z5M1/Z5M2 50.0 + 22.0° / 82.0 + 48.0° 88 % 2 cd/lm 1 White	30 <sup>4</sup> 30 <sup>4</sup> 30 <sup>4</sup> 30 <sup>5</sup> 30
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Z8Y19 22.0 + 52.0° / 51.0 + 84.0° 87 % 1.4 cd/lm 1 White	51 51 51 51 51 51 51 51 51 51
stoul SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Z8Y22T 51.0 + 25.0° / 87.0 + 61.0° 87 % 1.4 cd/lm 1 White	



#### **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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