

## STRADELLA-8-HV-HB-S

~25° spot beam for industrial applications. Variant with improved creepage distance for high voltage circuit designs.

### **SPECIFICATION:**

Dimensions	49.5 x 49.5 mm
Height	7.5 mm
Fastening	screw
ROHS compliant	yes 🛈



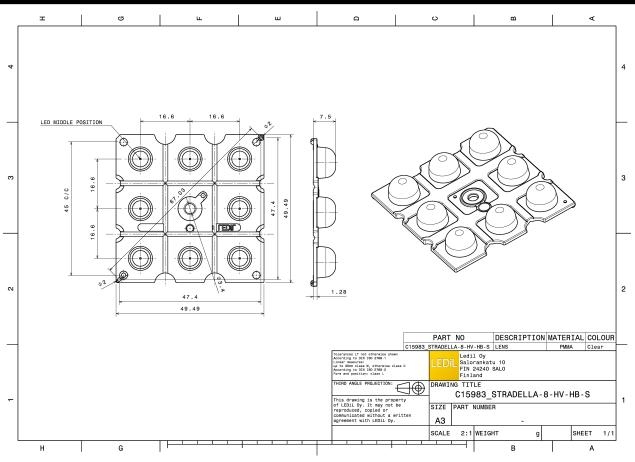
### **MATERIALS:**

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

### **ORDERING INFORMATION:**

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C15983_STRADELLA-8-HV-HB-S	800	160	160	5.0
» Box size: 480 x 280 x 300 mm				





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



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

		90° 90°
LED	J Series 3030	
FWHM / FWTM	27.0° / 75.0°	75* 75*
Efficiency	96 %	
Peak intensity	1.9 cd/lm	50* 500 F0*
LEDs/each optic	1	
Light colour	White	47 <sup>4</sup> 1220 47 <sup>4</sup>
Required componen		
		1600
		30* 2000 30*
		15 <sup>5</sup> 0 <sup>6</sup> 35 <sup>5</sup>
		90* 90*
LED	XD16	
FWHM / FWTM	21.0° / 74.0°	400
Efficiency	94 %	60°
Peak intensity	1.9 cd/lm	
LEDs/each optic	1	
Light colour	White	177 - 1200 - 474
Required componen	ts:	
		1630
		X (X X
		36* 2000 36*
i		45° 0° 15°
		90° 90°
CREE ÷ LEDs	XT-E	
LED FWHM / FWTM	XT-E 27.0° / 81.0°	27 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency		75
LED FWHM / FWTM Efficiency Peak intensity	27.0° / 81.0° 94 % 1.6 cd/lm	75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	27.0° / 81.0° 94 % 1.6 cd/lm 1	73° 66° 66° 66° 700 700 700 700 700 700 700
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	27.0° / 81.0° 94 % 1.6 cd/lm 1 White	75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	27.0° / 81.0° 94 % 1.6 cd/lm 1 White	73° 66° 600 - 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	27.0° / 81.0° 94 % 1.6 cd/lm 1 White	g. 60 - 67
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	27.0° / 81.0° 94 % 1.6 cd/lm 1 White	g
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	27.0° / 81.0° 94 % 1.6 cd/lm 1 White	g
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	27.0° / 81.0° 94 % 1.6 cd/lm 1 White ts:	20 00 00 00 00 00 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	27.0° / 81.0° 94 % 1.6 cd/lm 1 White ts:	25 64 64 64 66 66 75 75 75 75 75 75 75 75 75 75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	27.0° / 81.0° 94 % 1.6 cd/lm 1 White ts: NUS SST-10-B130	200 200 200 200 200 200 200 200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	27.0° / 81.0° 94 % 1.6 cd/lm 1 White ts: SST-10-B130 23.0° / 75.0°	200 200 200 200 200 200 200 200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component LED FWHM / FWTM Efficiency	27.0° / 81.0° 94 % 1.6 cd/lm 1 White ts: SST-10-B130 23.0° / 75.0° 96 %	200 200 200 200 200 200 200 200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen EED FWHM / FWTM Efficiency Peak intensity	27.0° / 81.0° 94 % 1.6 cd/lm 1 White ts: SST-10-B130 23.0° / 75.0° 96 % 2.1 cd/lm	20 00 00 00 00 00 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen EED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	27.0° / 81.0° 94 % 1.6 cd/lm 1 White ts: SST-10-B130 23.0° / 75.0° 96 % 2.1 cd/lm 1	20 00 00 00 00 00 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen Required componen EED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	27.0° / 81.0° 94 % 1.6 cd/lm 1 White ts: SST-10-B130 23.0° / 75.0° 96 % 2.1 cd/lm 1 Deep Red	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component EED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	27.0° / 81.0° 94 % 1.6 cd/lm 1 White ts: SST-10-B130 23.0° / 75.0° 96 % 2.1 cd/lm 1 Deep Red	20 00 00 00 00 00 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component EED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	27.0° / 81.0° 94 % 1.6 cd/lm 1 White ts: SST-10-B130 23.0° / 75.0° 96 % 2.1 cd/lm 1 Deep Red	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Equired component Efficiency Peak intensity LEDs/each optic Light colour	27.0° / 81.0° 94 % 1.6 cd/lm 1 White ts: SST-10-B130 23.0° / 75.0° 96 % 2.1 cd/lm 1 Deep Red	



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

OSRAM Opto Semiconductors		90°
LED	OSCONIQ S 3030 (QSLR31)	
FWHM / FWTM	27.0° / 74.0°	
Efficiency	94 %	
Peak intensity	2 cd/lm	
LEDs/each optic	1	
Light colour	White	er - 120 - 120 - 1
Required compone	nts:	
		500
		30*
		*ec /o /ret
PHILIF	<b>'</b> 5	50°
LED	Fortimo FastFlex LED 4x8up PR G5	77
FWHM / FWTM	23.0° / 69.0°	
Efficiency	94 %	601 000
Peak intensity	2.2 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	nts:	15%
		30.0
		15° 48% 15°
<b>CUWCI</b>		25 <sup>7</sup> (10)
SAMSI		20 <sup>5</sup> 300 10 <sup>5</sup>
LED	LH151B	20 <sup>3</sup> 30 <sup>4</sup> 10 <sup>4</sup>
LED FWHM / FWTM	LH151B 17.0° / 58.0°	
LED FWHM / FWTM Efficiency	LH151B 17.0° / 58.0° 94 %	75
LED FWHM / FWTM Efficiency Peak intensity	LH151B 17.0° / 58.0° 94 % 3 cd/lm	79 93 93
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1	75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White	79 93 93
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White	79 93 93
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White	737 634 537 500
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White	737 634 537 500
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White	737 634 537 500
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White	75 60 67 60 50 50 50 50 50 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White nts: SEOUL DC 3030C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White nts: SEOUL DC 3030C 26.0° / 73.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White nts: SEOUL DC 3030C 26.0° / 73.0° 94 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stour semiconductor LED FWHM / FWTM Efficiency Peak intensity	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White nts: SEOUL DC 3030C 26.0° / 73.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stous semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White nts: SEOUL DC 3030C 26.0° / 73.0° 94 % 2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stous stanconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White nts: SEOUL DC 3030C 26.0° / 73.0° 94 % 2 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	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White nts: SEOUL DC 3030C 26.0° / 73.0° 94 % 2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stous stanconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White nts: SEOUL DC 3030C 26.0° / 73.0° 94 % 2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stout stanconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH151B 17.0° / 58.0° 94 % 3 cd/lm 1 White nts: SEOUL DC 3030C 26.0° / 73.0° 94 % 2 cd/lm 1 White	



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

seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Z5M3 32.0° / 88.0° 94 % 1.5 cd/lm 1 White	
SEOUL SEMICONDUCTOR		99*
LED	Z5M4	
FWHM / FWTM	33.0° / 82.0°	
Efficiency	97 %	
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	115.	



		90*
LED	XP-G2 HE	
FWHM / FWTM	36.0° / 89.0°	78
Efficiency	93 %	400
Peak intensity	93 /o 1.4 cd/lm	60*
	1	
LEDs/each optic	ı White	47 <sup>4</sup> 800 47
Light colour Required components:	White	
Required components.		
		1270
		30° 15° 36
		80°
LED	XP-G3	
FWHM / FWTM	36.0° / 92.0°	75
Efficiency	92 %	400
Peak intensity	1.3 cd/lm	60* 60
LEDs/each optic	1	
Light colour	White	45* 810 45
Required components:	WIIIG	
Required components.		
		1200
		30 <sup>4</sup> 30 <sup>4</sup> 30 <sup>4</sup>
LED	XP-G3	
FWHM / FWTM	33.0° / 90.0°	
Efficiency	89 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
	)S	
LED	LUXEON 3535L HE	
FWHM / FWTM	20.0° / 65.0°	
Efficiency	90 %	
Peak intensity	2.3 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
1		



	05	90° 90°
LED	LUXEON CZ	
FWHM / FWTM	20.0° / 62.0°	73
Efficiency	95 %	
Peak intensity	2.7 cd/lm	
LEDs/each optic	1	
Light colour	White	95* a5*
Required components:		200 et 120 xx
UMILEC	DS S	
LED	LUXEON HR30	
FWHM / FWTM	26.0° / 72.0°	
Efficiency	91 %	
Peak intensity	2.1 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
MUMILED	15	
LED	LUXEON TX	
FWHM / FWTM	28.0° / 80.0°	
Efficiency	90 %	
Peak intensity	1.8 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
<b>Μ</b> ΝΙCΗΙΛ		90*
LED	NVSW519A	75*75*
FWHM / FWTM	43.0° / 94.0°	
Efficiency	90 %	60°
Peak intensity	1.2 cd/lm	$\wedge / / / \wedge \wedge /$
LEDs/each optic	1	$  \times /   $
Light colour	White	ar ar
Required components:		30 <sup>3</sup>
		15° 0° 15°



### **OPTICAL RESULTS (SIMULATED):**

### **Μ**ΝΙCΗΙΛ

LED	NVSxx19B/NVSxx19C
FWHM / FWTM	30.0° / 86.0°
Efficiency	88 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSCONIQ C 2424 24.0° / 70.0° 94 % 2.2 cd/lm 1 White	201 201 201 201 201 201 201 201
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSCONIQ P 3030 20.0° / 56.0° 95 % 3.2 cd/lm 1 White	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSLON Square CSSRM2/CSSRM3 30.0° / 76.0° 94 % 1.8 cd/lm 1 White	50° 50° 50° 50° 50° 50° 50° 50° 50° 50°



OSRAM Opto Semiconductors		90°
LED	OSLON Square CSSRM2/CSSRM3	
FWHM / FWTM	25.0° / 72.0°	75'
Efficiency	94 %	
Peak intensity	2.2 cd/lm	60°
LEDs/each optic	1	
Light colour	Far Red	97° (0*
Required components:		
		1000
		30°
		30 15°
SAMSUN	IG	90° 90°
LED	LH181A	
FWHM / FWTM	27.0° / 86.0°	400
Efficiency	94 %	
Peak intensity	1.7 cd/lm	66 <sup>4</sup>
LEDs/each optic	1	
Light colour	White	gr
Required components:		1200
		2004
SAMSUN	IG	90° 90° 90°
SAMSUN		25° 0° 15°
LED	LH181B	73° 73° 93° 25° 0° 15° 30°
LED FWHM / FWTM	LH181B 28.0° / 78.0°	23 24 25 25 27 27 27 27 27 27 27 27 27 27 27
LED FWHM / FWTM Efficiency	LH181B 28.0° / 78.0° 94 %	
LED FWHM / FWTM Efficiency Peak intensity	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm	25° 0° 15° 29° 29° 400 50° 400 60° 50° 400 60° 60° 60° 60° 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1	ge 66
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1	60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1	50 50 50 50 50 50 50 50 50 50 50 50 50 5
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1 White	ge 66
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1 White	yu - 200 - 40
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1 White	yu - 200 - 40
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1 White	yu - 200 - 40
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1 White	30, 30,   30,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1 White LH351C 36.0° / 87.0° 93 %	30, 30, 30,   30, 30, 30,   30, 30,0 30,   40, 17,0 40,   60, 60, 60,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1 White LH351C 36.0° / 87.0° 93 % 1.5 cd/lm	30, 30, 30,   30, 30, 30,   30, 30,0 30,   40, 17,0 40,   60, 60, 60,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1 White LH351C 36.0° / 87.0° 93 % 1.5 cd/lm 1	30, 30, 30,   30, 30, 30,   30, 30,0 30,   40, 17,0 40,   60, 60, 60,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1 White LH351C 36.0° / 87.0° 93 % 1.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1 White LH351C 36.0° / 87.0° 93 % 1.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1 White LH351C 36.0° / 87.0° 93 % 1.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH181B 28.0° / 78.0° 94 % 1.9 cd/lm 1 White LH351C 36.0° / 87.0° 93 % 1.5 cd/lm 1	



SAMSU	NG	50° 50°
LED	LH351D	
FWHM / FWTM	44.0° / 93.0°	75.
Efficiency	92 %	
Peak intensity	1.2 cd/lm	BU BU
LEDs/each optic	1	
Light colour	White	92. 42.
Required components:		
		30° 20°
		15° 0° 15°
SEOUL		
LED	Z8Y19	
FWHM / FWTM	23.0° / 81.0°	
Efficiency	92 %	
Peak intensity	1.8 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
SEOUL		
		90* 90*
LED	Z8Y22T	
FWHM / FWTM	31.0° / 82.0°	73'
Efficiency	93 %	
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	97° 67°
Required components:		1200
		36* 36
		15° 0° 15°



#### **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