

### HEIDI-O-90

~13° x 45° oval beam optimized for Luxeon Rebel. Variant with beam direction rotated 90°.

#### SPECIFICATION:

Dimensions	Ø 21.6 mm
Height	11.7 mm
Fastening	tape, pin
ROHS compliant	yes ⓘ



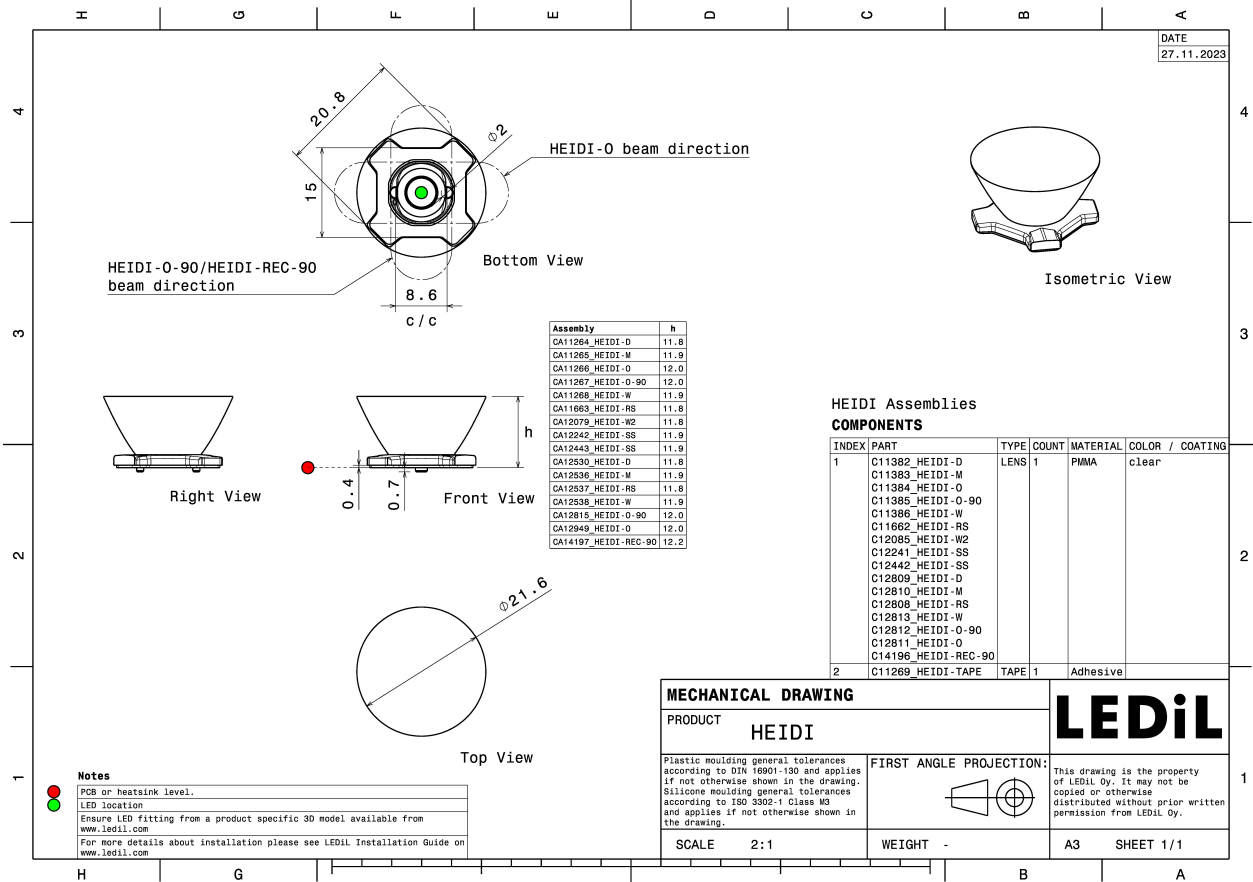
LEDiL<sup>®</sup>

#### MATERIALS:

Component	Type	Material	Colour	Finish	Length
HEIDI-O-90	Single lens	PMMA	clear		21.6
HEIDI-TAPE	Tape	Acrylic foam	black		

#### ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA12815_HEIDI-O-90	Single lens	3264	204	204	11.1
» Box size: 480 x 280 x 300 mm					



See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### OPTICAL RESULTS (MEASURED):



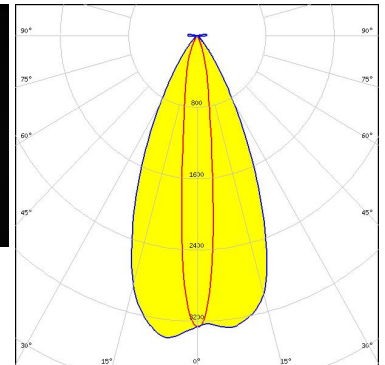
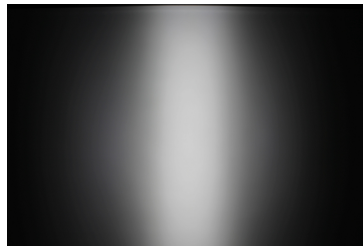
LED XHP35 HD  
FWHM / FWTM 17.0 + 38.0° / 44.0 + 68.0°  
Efficiency 84 %  
Peak intensity 3.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



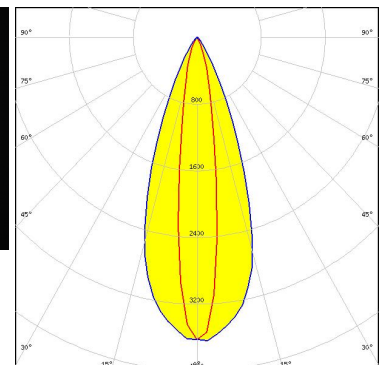
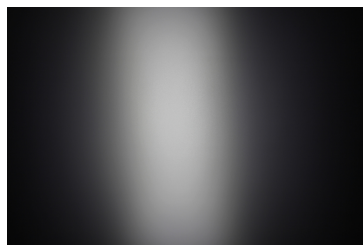
LED XHP35 HI  
FWHM / FWTM 13.0 + 47.0° / 36.0 + 73.0°  
Efficiency 94 %  
Peak intensity 3.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED XP-L HD  
FWHM / FWTM 16.0 + 40.0° / 38.0 + 63.0°  
Efficiency 88 %  
Peak intensity 3.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

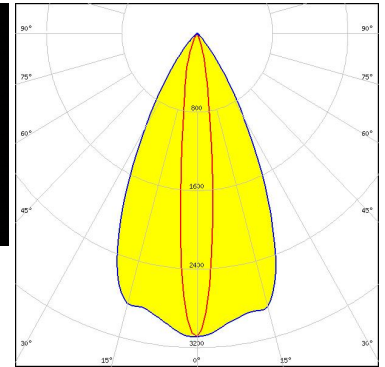
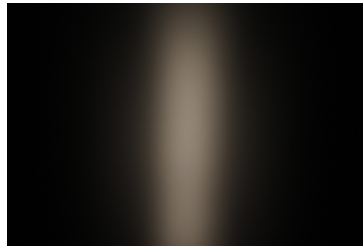


Light distribution files

### OPTICAL RESULTS (MEASURED):



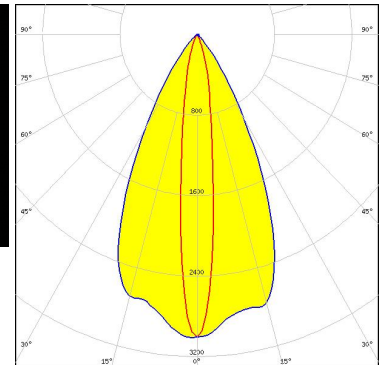
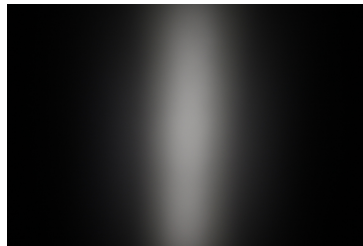
LED LUXEON A  
FWHM / FWTM 14.0 + 54.0° / 34.0 + 79.0°  
Efficiency 82 %  
Peak intensity 3.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



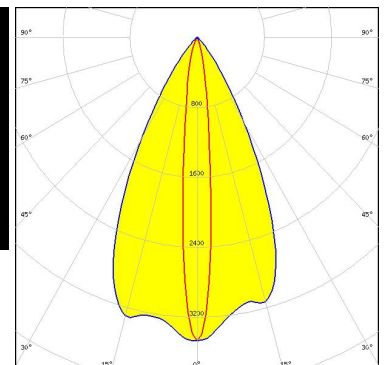
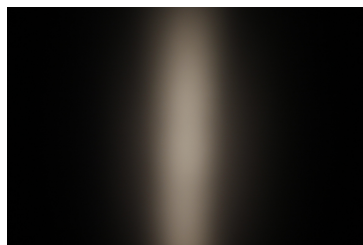
LED LUXEON R  
FWHM / FWTM 13.0 + 54.0° / 35.0 + 78.0°  
Efficiency 82 %  
Peak intensity 3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED LUXEON Rebel  
FWHM / FWTM 12.0 + 54.0° / 30.0 + 78.0°  
Efficiency 82 %  
Peak intensity 3.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

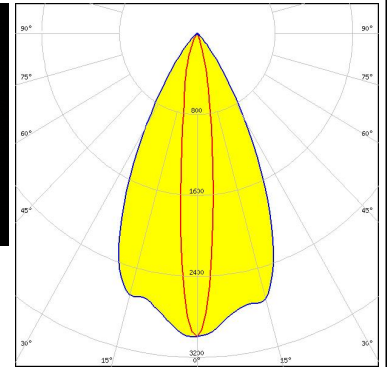
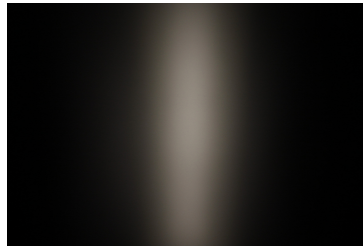


Light distribution files

#### OPTICAL RESULTS (MEASURED):



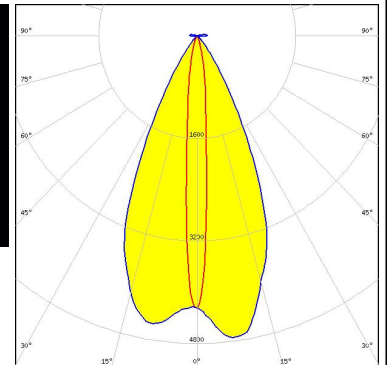
LED LUXEON Rebel ES  
 FWHM / FWTM 13.0 + 53.0° / 35.0 + 79.0°  
 Efficiency 81 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



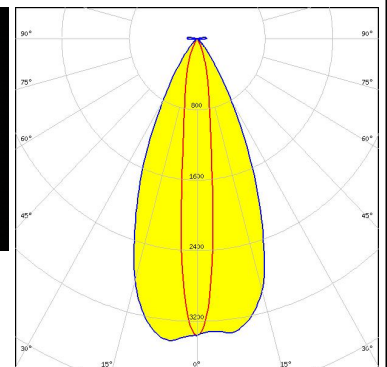
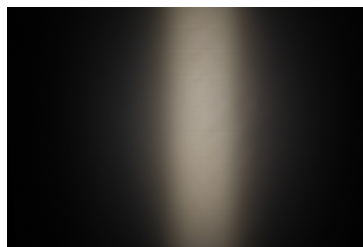
LED SST-10-B130  
 FWHM / FWTM 9.0 + 49.0° / 27.0 + 71.0°  
 Efficiency 93 %  
 Peak intensity 4.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type Blue  
 Required components:



Light distribution files



LED NVSW219D  
 FWHM / FWTM 12.0 + 46.0° / 37.0 + 73.0°  
 Efficiency 94 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

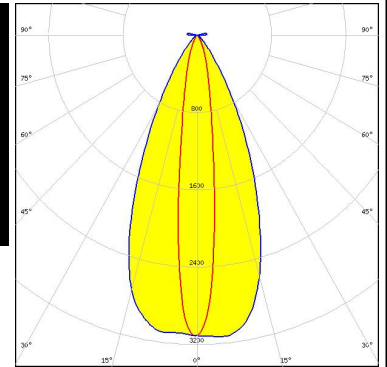
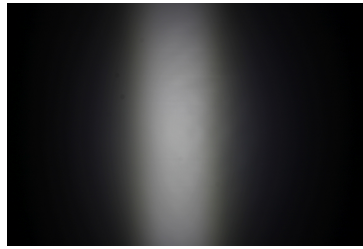


Light distribution files

#### OPTICAL RESULTS (MEASURED):



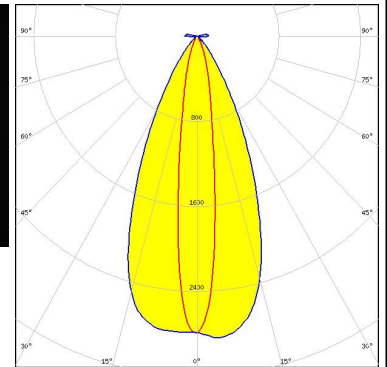
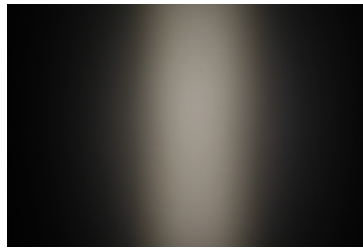
**LED** NVSW319B  
**FWHM / FWTM** 14.0 + 47.0° / 37.0 + 74.0°  
**Efficiency** 94 %  
**Peak intensity** 3.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



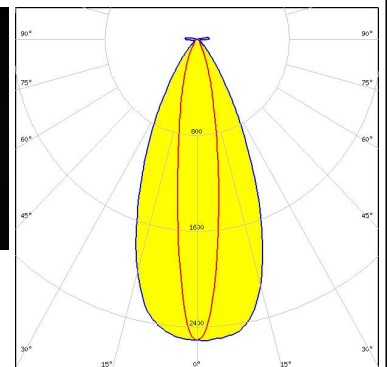
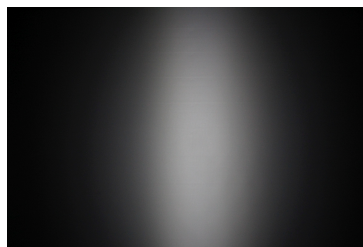
**LED** NVSW3x9A  
**FWHM / FWTM** 15.0 + 47.0° / 38.0 + 75.0°  
**Efficiency** 90 %  
**Peak intensity** 2.8 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



**LED** NVSW519A  
**FWHM / FWTM** 16.0 + 46.0° / 44.0 + 76.0°  
**Efficiency** 90 %  
**Peak intensity** 2.5 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**

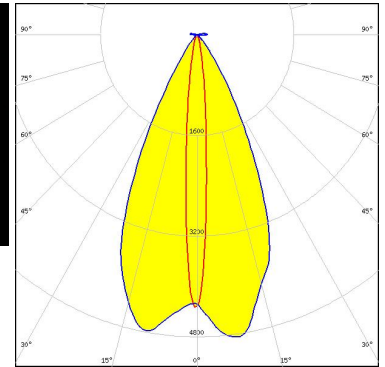
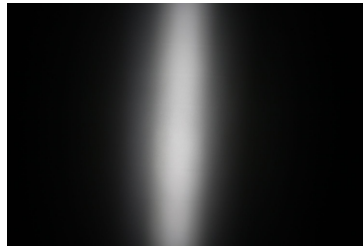


Light distribution files

#### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

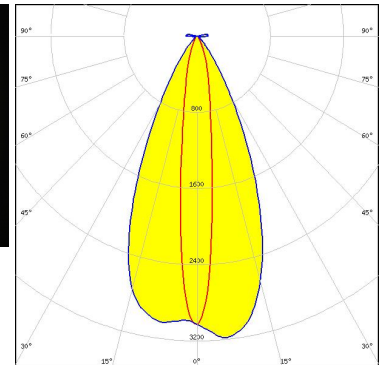
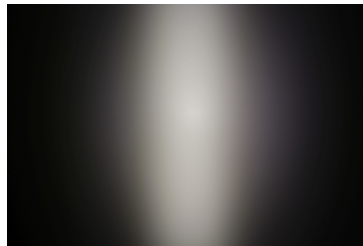
LED OSLON SSL 150  
 FWHM / FWTM 9.0 + 50.0° / 23.0 + 71.0°  
 Efficiency 93 %  
 Peak intensity 4.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

**SEOL**  
SEOUL SEMICONDUCTOR

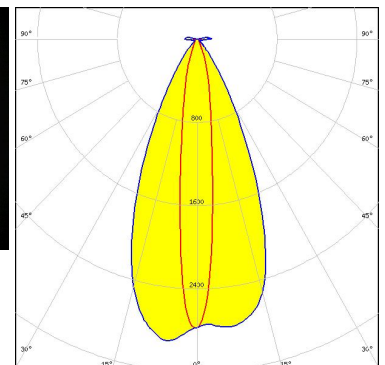
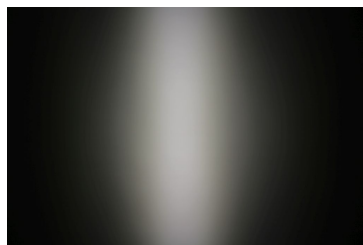
LED Z5M3  
 FWHM / FWTM 13.0 + 47.0° / 38.0 + 73.0°  
 Efficiency 94 %  
 Peak intensity 3.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

**SEOL**  
SEOUL SEMICONDUCTOR

LED Z8Y22P  
 FWHM / FWTM 13.0 + 47.0° / 38.0 + 74.0°  
 Efficiency 92 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

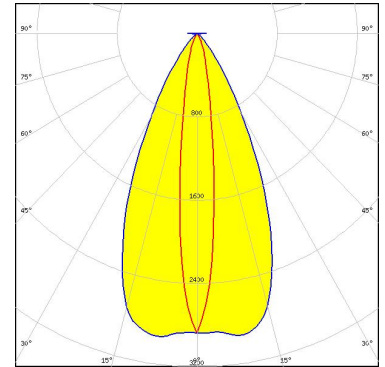


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



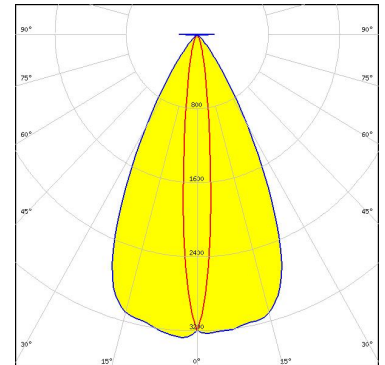
**LED** XP-G2 HE  
**FWHM / FWTM** 14.0 + 50.0° / 34.0 + 78.0°  
**Efficiency** 88 %  
**Peak intensity** 2.9 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



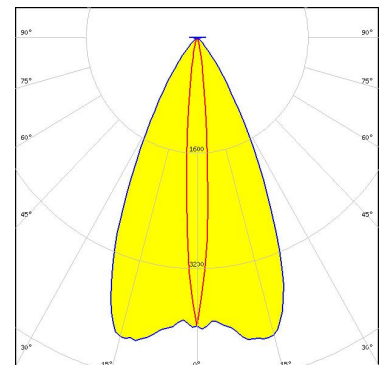
**LED** LUXEON HL2Z  
**FWHM / FWTM** 12.0 + 54.0° / 28.0 + 76.0°  
**Efficiency** 89 %  
**Peak intensity** 3.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



**LED** LUXEON SunPlus 20 Line (150 deg)  
**FWHM / FWTM** 9.0 + 52.0° / 20.0 + 76.0°  
**Efficiency** 88 %  
**Peak intensity** 4.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



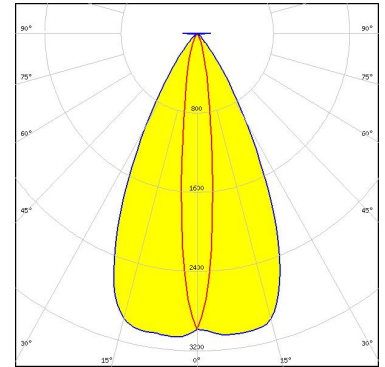
Light distribution files



### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

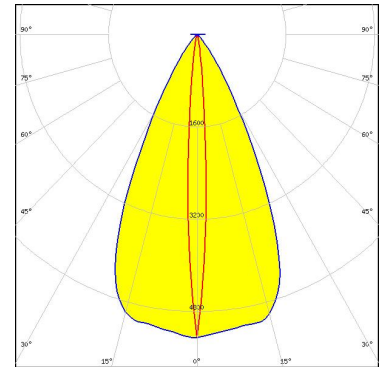
LED OSCONIQ P 3737 Flat  
FWHM / FWTM 12.0 + 54.0° / 32.0 + 78.0°  
Efficiency 91 %  
Peak intensity 3.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSLON Pure 1414  
FWHM / FWTM 8.0 + 52.0° / 16.0 + 73.0°  
Efficiency 93 %  
Peak intensity 5.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

### 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](http://www.ledil.com/where_to_buy)

#### Shipping locations

Poznan, Poland  
Hong Kong, China

#### Distribution Partners

[www.ledil.com/  
where\\_to\\_buy](http://www.ledil.com/where_to_buy)