

## FLORENTINA-HLD-O-90

~35° + 15° oval beam. Variant with beam direction rotated 90°.

### SPECIFICATION:

Dimensions	285.6 x 19.5 mm
Height	9.7 mm
Fastening	screw
ROHS compliant	yes ⓘ

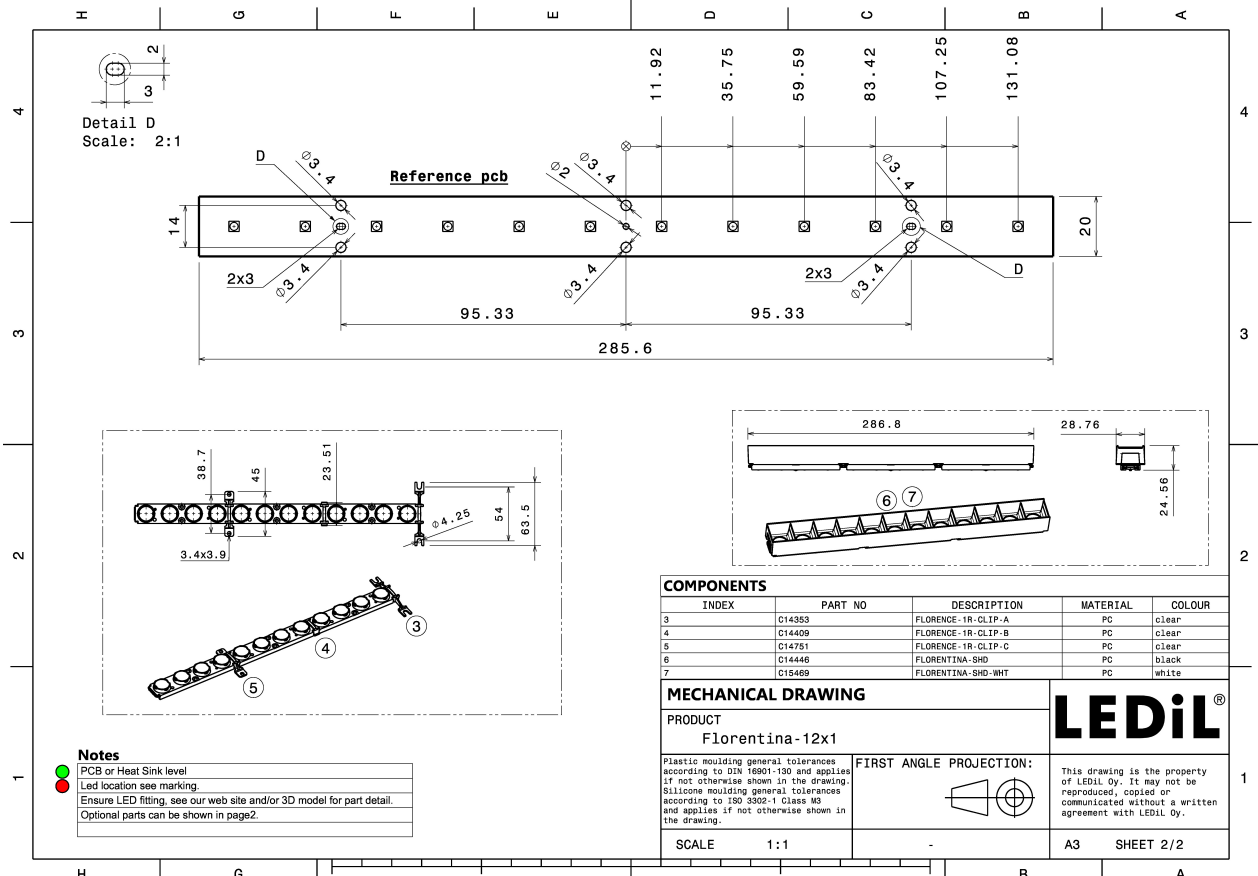
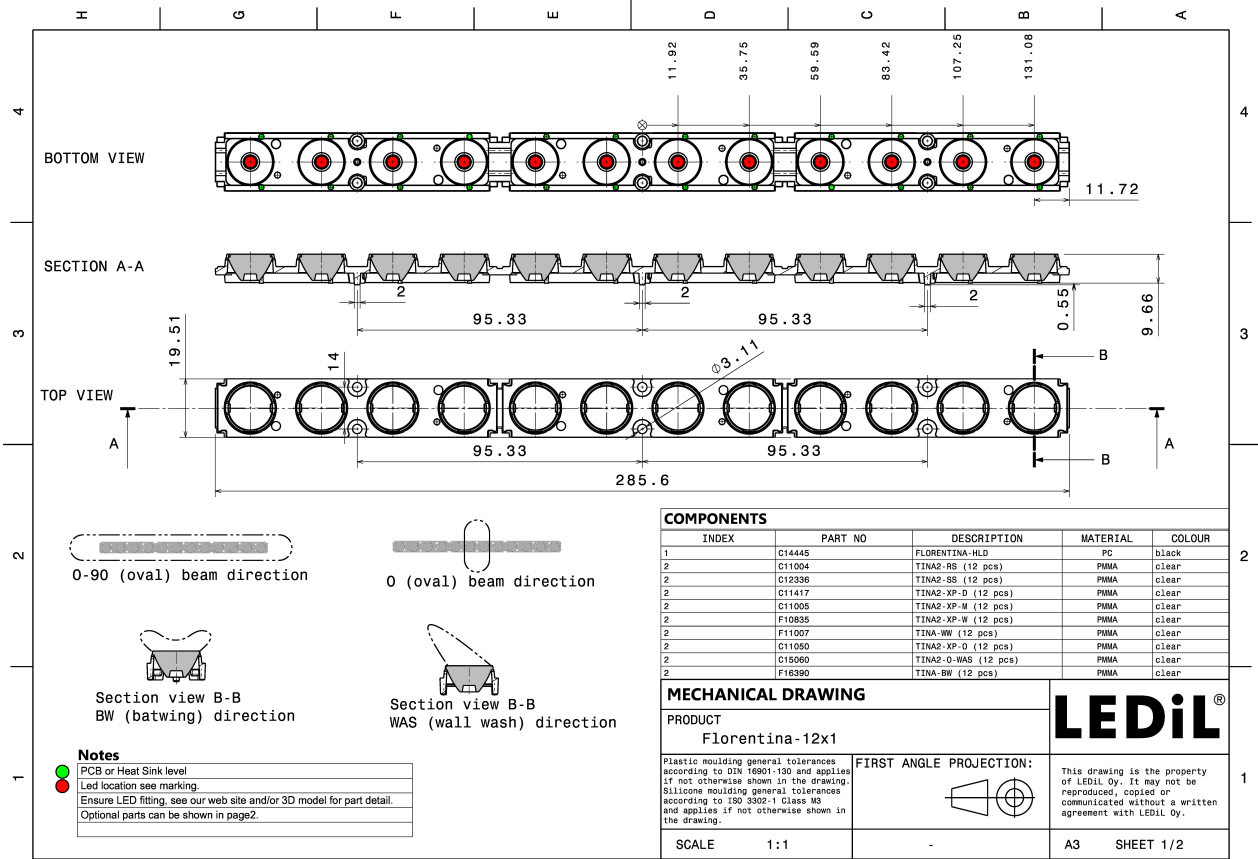


### MATERIALS:

Component	Type	Material	Colour	Finish	Length
TINA2-XP-O	Single lens	PMMA	clear		16.1
FLORENTINA-HLD	Holder	PC	black		285.6

### ORDERING INFORMATION:

Component	Type	Qty in box	MOQ	MPQ	Box weight (kg)
CP15678_FLORENTINA-HLD-O-90	Single lens	160	32	16	5.4
» Box size: 390 x 300 x 130 mm					

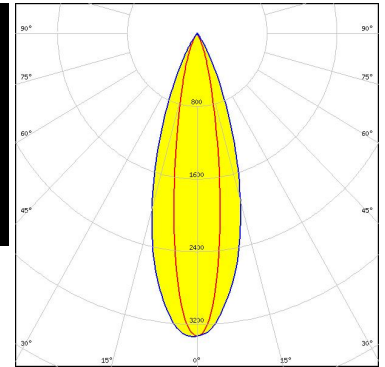
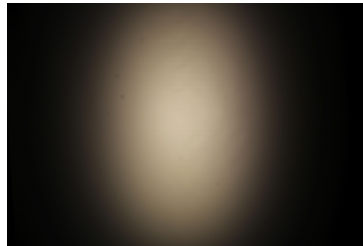


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### OPTICAL RESULTS (MEASURED):



LED QUICK FLUX LED FL-XG 1x12 xxx  
FWHM / FWTM 18.0 + 34.0° / 40.0 + 58.0°  
Efficiency 79 %  
Peak intensity 3.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14446\_FLORENTINA-SHD



Light distribution files



LED XP-E2  
FWHM / FWTM 35.0 + 12.0° / 83.0°  
Efficiency 83 %  
Peak intensity 5.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14446\_FLORENTINA-SHD

Light distribution files



LED XP-G2  
FWHM / FWTM 34.0 + 15.0° / 91.0°  
Efficiency 83 %  
Peak intensity 4.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14446\_FLORENTINA-SHD

Light distribution files

#### OPTICAL RESULTS (MEASURED):

##### LUMILEDS

LED LUXEON Rebel ES  
FWHM / FWTM 33.0 + 17.0° / 94.0°  
Efficiency 79 %  
Peak intensity 3.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14446\_FLORENTINA-SHD

[Light distribution files](#)

##### LUMILEDS

LED LUXEON Rebel Plus  
FWHM / FWTM 33.0 + 15.0° / 88.0°  
Efficiency 81 %  
Peak intensity 4.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14446\_FLORENTINA-SHD

[Light distribution files](#)

##### LUMILEDS

LED LUXEON TX  
FWHM / FWTM 34.0 + 16.0° / 93.0°  
Efficiency 81 %  
Peak intensity 3.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14446\_FLORENTINA-SHD

[Light distribution files](#)

#### OPTICAL RESULTS (MEASURED):

##### LUMILEDS

LED LUXEON Z ES  
FWHM / FWTM 34.0 + 13.0° / 81.0°  
Efficiency 82 %  
Peak intensity 5.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14446\_FLORENTINA-SHD

[Light distribution files](#)

##### NICHIA

LED NCSxx19B  
FWHM / FWTM 34.0 + 14.0° / 88.0°  
Efficiency 79 %  
Peak intensity 4.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14446\_FLORENTINA-SHD

[Light distribution files](#)

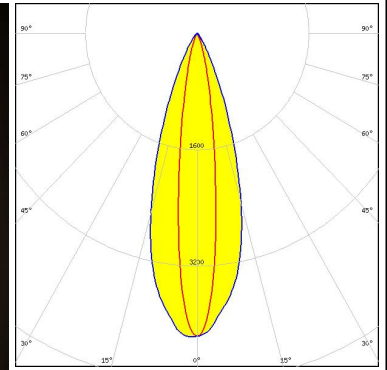
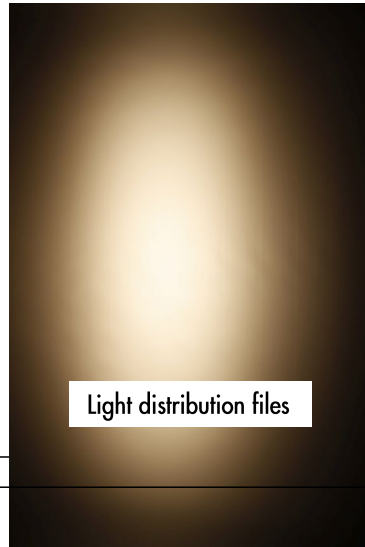
##### NICHIA

LED NVSxx19B/NVSxx19C  
FWHM / FWTM 34.0 + 17.0° / 97.0°  
Efficiency 78 %  
Peak intensity 3.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14446\_FLORENTINA-SHD

#### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

LED OSLON Square EC  
FWHM / FWTM 15.0 + 34.0° / 92.0°  
Efficiency 85 %  
Peak intensity 4.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14446\_FLORENTINA-SHD



**OSRAM**  
Opto Semiconductors

LED OSLON SSL 80  
FWHM / FWTM 33.0 + 15.0° / 91.0°  
Efficiency 79 %  
Peak intensity 4.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14446\_FLORENTINA-SHD

Light distribution files

**SAMSUNG**

LED LH351B  
FWHM / FWTM 34.0 + 18.0° / 100.0°  
Efficiency 94 %  
Peak intensity 3.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14446\_FLORENTINA-SHD

Light distribution files

## OPTICAL RESULTS (MEASURED):

**TOSHIBA**  
Leading Innovation >>>

LED	TL1L4
FWHM / FWTM	34.0 + 17.0° / 95.0°
Efficiency	79 %
Peak intensity	3.6 cd/m
LEDs/each optic	1
Light colour/type	White

Required components:

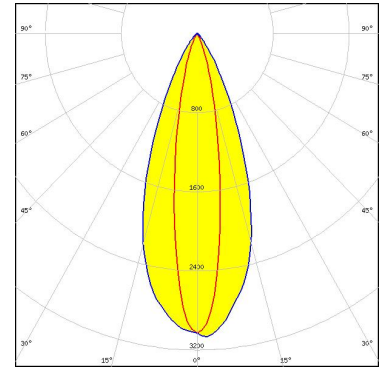
C14446\_FLORENTINA-SHD

Light distribution files

#### OPTICAL RESULTS (SIMULATED):



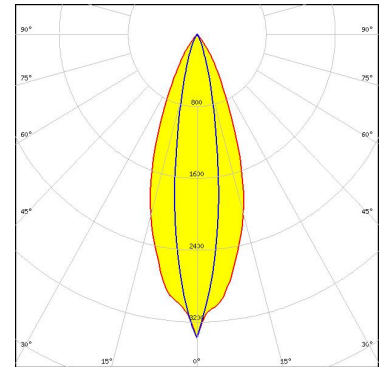
LED J Series 3030  
FWHM / FWTM 18.0 + 40.0° / 40.0 + 68.0°  
Efficiency 87 %  
Peak intensity 3.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED XP-G2 HE  
FWHM / FWTM 36.0 + 18.0° / 66.0 + 39.0°  
Efficiency 84 %  
Peak intensity 3.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:  
C14446\_FLORENTINA-SHD



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)