

## **FLORENTINA-HLD-D**

~18° diffused spot beam

### **SPECIFICATION:**

| Dimensions     | 285.6 x 19.5 mm |
|----------------|-----------------|
| Height         | 9.5 mm          |
| Fastening      | screw           |
| ROHS compliant | yes 🛈           |



### MATERIALS:

**Component** TINA2-XP-D FLORENTINA-HLD

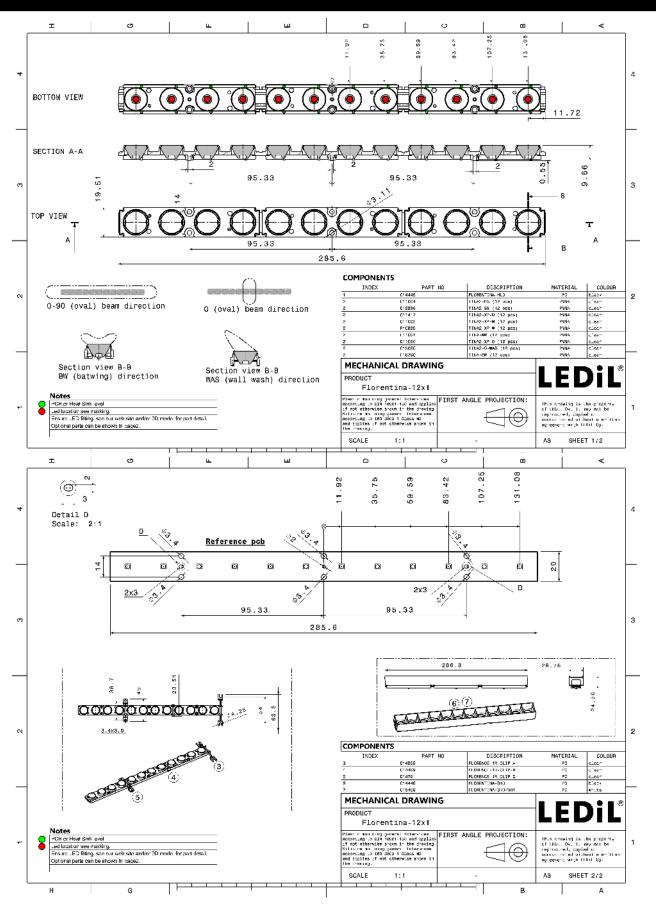
### **Type** Single lens Holder

| Material | Colour | Finish |
|----------|--------|--------|
| PMMA     | clear  |        |
| PC       | black  |        |

### **ORDERING INFORMATION:**

| Component                      |             | Qty in box | MOQ | MPQ | Box weight (kg) |
|--------------------------------|-------------|------------|-----|-----|-----------------|
| CP14996_FLORENTINA-HLD-D       | Single lens | 160        | 32  | 16  | 5.2             |
| » Box size: 398 x 298 x 140 mm |             |            |     |     |                 |

## PRODUCT DATASHEET CP14996\_FLORENTINA-HLD-D



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



| LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required componen<br>C14446_FLORE      | NTINA-SHD   |  |
|---|---|--|
| CREE LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required componen<br>C14446_FLORE | XP-E2<br>13.0° / 30.0°<br>84 %<br>9.6 cd/lm<br>1<br>White<br>tts: |  |
| CREE LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required componen<br>C14446_FLORE | XP-G2<br>17.0° / 37.0°<br>82 %<br>6.2 cd/lm<br>1<br>White<br>tts: |  |
| CREE LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required componen<br>C14446_FLORE | XP-G3<br>19.0° / 42.0°<br>81 %<br>4.7 cd/lm<br>1<br>White<br>tts: |  |



|                                  | EDC .             |                        |
|----------------------------------|-------------------|------------------------|
|                                  |                   | a                      |
| LED                              | LUXEON Rebel ES   |                        |
| FWHM / FWTM                      | 18.0° / 39.0°     |                        |
| Efficiency                       | 81 %              | en / 100 / 100 / 100   |
| Peak intensity                   | 5.5 cd/lm         |                        |
| LEDs/each optic                  | 1                 |                        |
| Light colour                     | White             |                        |
| Required compone                 |                   |                        |
| C14446_FLORE                     | NTINA-SHD         |                        |
|                                  |                   |                        |
|                                  |                   |                        |
| <b>OLUMIL</b>                    | EDS               |                        |
| LED                              | LUXEON Rebel Plus |                        |
| FWHM / FWTM                      | 15.0° / 33.0°     |                        |
| Efficiency                       | 82 %              |                        |
| Peak intensity                   | 7.5 cd/lm         |                        |
| LEDs/each optic                  | 1                 | $(X / I_{1}) \times X$ |
| Light colour                     | White             |                        |
| Required compone                 | nts:              |                        |
| C14446_FLORE                     |                   |                        |
| -                                |                   |                        |
|                                  |                   |                        |
|                                  | EDS               |                        |
| LED                              | LUXEON TX         |                        |
| FWHM / FWTM                      | 17.0° / 37.0°     |                        |
| Efficiency                       | 82 %              |                        |
| Peak intensity                   | 6 cd/lm           |                        |
| LEDs/each optic                  | 1                 |                        |
| Light colour                     | White             |                        |
| Required compone                 |                   |                        |
| C14446_FLORE                     |                   |                        |
| -                                |                   |                        |
|                                  |                   |                        |
|                                  |                   |                        |
|                                  | EDS               | e.v.                   |
| LED                              | LUXEON Z ES       |                        |
| FWHM / FWTM                      | 15.0° / 31.0°     |                        |
| Efficiency                       | 82 %              |                        |
| Peak intensity                   | 8.5 cd/lm         |                        |
| LEDs/each optic                  | 1                 |                        |
| Light colour                     | White             |                        |
|                                  |                   |                        |
| Required compone                 | nts:              |                        |
| Required compone<br>C14446_FLORE |                   | A mit A                |
|                                  |                   |                        |
|                                  |                   |                        |



| <b>MNICHIA</b>  |   |  |      |  |  |
|---|---|--|------|--|--|
| LED   | NCSxx19B  |  |      |  |  |
| FWHM / FWTM   | 15.0° / 34.0°   |  |      |  | VANT.  |
| Efficiency  | 79 %  |  |      | $\sim 11$  | MANN.  |
| Peak intensity  | 6.9 cd/lm   |  |      | $\langle N \rangle$  |  |
| LEDs/each optic   | 1   |  | 100  |  |  |
| Light colour  | White   |  | 1000 | 9 N /  |  |
| Required compone  |   |  |      | a free from the second   |  |
| C14446_FLORE  |   |  |      | NO PI  |  |
|   |   |  |      |  |  |
|   |   |  |      | × / 1  |  |
| <b>ØNICHI</b>   |   |  |      |  | /  |
|   |   |  |      | 407  | <u>،</u>   |
| LED   | NVSxx19B/NVSxx19C   |  |      |  | 1 1-0  |
| FWHM / FWTM   | 19.0° / 40.0°   |  |      |  |  |
| Efficiency  | 78 %  |  |      | $\times$ / $\mathbb{P}$  |  |
| Peak intensity  | 4.9 cd/lm   |  |      | $\sim 10$  |  |
| LEDs/each optic   | 1   |  |      | $\sim 1$   |  |
| Light colour  | White   |  |      |  | · / / *  |
| Required compone  |   |  |      |  |  |
| C14446_FLORE  | NTINA-SHD   |  |      |  | IN X   |
|   |   |  |      | 1  | 1 - to N   |
|   |   |  |      | y  |  |
| OSRAM   |   |  |      | 1 (1   | and the second s |
| Opto Semiconductors   |   |  |      | • (  | A  |
| Opto Semiconductors<br>LED  | OSLON Square EC   |  |      |  |  |
| Opto Semiconductors   | OSLON Square EC<br>17.0° / 37.0°  |  |      | #**  |  |
| Opto Semiconductors   |   |  |      | 10<br>19<br>19   |  |
| Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity   | 17.0° / 37.0°   |  |      | 57<br>16<br>17<br>17   |  |
| Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic  | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1   |  |      |  |  |
| Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour  | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White  |  |      |  |  |
| Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone  | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:  |  |      |  |  |
| Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour  | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:  |  |      |  |  |
| Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone  | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:  |  |      |  |  |
| Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone  | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:  |  |      | 95<br>50<br>50<br>50<br>50<br>50   |  |
| Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone  | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:  |  |      |  |  |
| Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone<br>C14446_FLORE<br>OSERAM<br>Opto Semiconductors   | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:  |  |      |  |  |
| opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone<br>C14446_FLORE  | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:<br>:NTINA-SHD  |  |      |  |  |
| Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone<br>C14446_FLORE<br>OSERAM<br>Opto Semiconductors<br>LED  | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:<br>NTINA-SHD   |  |      |  |  |
| Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone<br>C14446_FLORE<br>Opto Semiconductors<br>LED<br>FWHM / FWTM   | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:<br>NTINA-SHD<br>OSLON SSL 150<br>14.0° / 30.0°   |  |      |  |  |
| Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone<br>C14446_FLORE<br>Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency   | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:<br>NTINA-SHD<br>OSLON SSL 150<br>14.0° / 30.0°<br>80 %                                     |  |      | 25<br>57<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58 |  |
| opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone<br>C14446_FLORE<br>OSRAM<br>Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity                    | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:<br>INTINA-SHD<br>OSLON SSL 150<br>14.0° / 30.0°<br>80 %<br>8.6 cd/lm                       |  |      | 25<br>57<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58 |  |
| Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone<br>C14446_FLORE<br>OSRAM<br>Opto Semiconductors<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:<br>INTINA-SHD<br>OSLON SSL 150<br>14.0° / 30.0°<br>80 %<br>8.6 cd/lm<br>1<br>White         |  |      | 25<br>57<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58 |  |
| Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14446_FLORE OSERAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour                                | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:<br>INTINA-SHD<br>OSLON SSL 150<br>14.0° / 30.0°<br>80 %<br>8.6 cd/lm<br>1<br>White<br>nts: |  |      | 25<br>57<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58 |  |
| Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14446_FLORE Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone                      | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:<br>INTINA-SHD<br>OSLON SSL 150<br>14.0° / 30.0°<br>80 %<br>8.6 cd/lm<br>1<br>White<br>nts: |  |      | 25<br>57<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58<br>58 |  |
| Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C14446_FLORE Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone                      | 17.0° / 37.0°<br>80 %<br>6.1 cd/lm<br>1<br>White<br>nts:<br>INTINA-SHD<br>OSLON SSL 150<br>14.0° / 30.0°<br>80 %<br>8.6 cd/lm<br>1<br>White<br>nts: |  |      |  |  |



| OSRAM                        |                               |   |
|------------------------------|-------------------------------|---|
| Opto Semiconductors          |                               | s.*   |
| LED                          | OSLON SSL 150                 | 72  |
| FWHM / FWTM                  | 14.0° / 31.0°                 |   |
| Efficiency                   | 84 %                          | er / / / / / / / / / / / / / / / / / / /  |
| Peak intensity               | 8.2 cd/lm                     |   |
| LEDs/each optic              | 1                             |   |
| Light colour                 | White                         |   |
| Required compone             | ents:                         |   |
|                              |                               |   |
|                              |                               |   |
|                              |                               |   |
| OSRAM<br>Opto Semiconductors |                               |   |
|                              |                               |   |
| LED<br>FWHM / FWTM           | OSLON SSL 80<br>15.0° / 34.0° |   |
| Efficiency                   | 82 %                          |   |
| Peak intensity               | 7.3 cd/lm                     |   |
| LEDs/each optic              | 1                             |   |
| Light colour                 | White                         |   |
| Required compone             |                               |   |
| C14446_FLOR                  |                               | $\times$ $\wedge$ $\times$  |
|                              |                               |   |
|                              |                               | $\times$ / $\vee$ $\times$  |
|                              |                               |   |
| SAMS                         | ING                           | 1." (A. 1997)   |
| LED                          | LH351B                        |   |
| FWHM / FWTM                  | 20.0° / 41.0°                 |   |
| Efficiency                   | 82 %                          |   |
| Peak intensity               | 5 cd/lm                       |   |
| LEDs/each optic              | 1                             |   |
| Light colour                 | White                         | e / / / *   |
| Required compone             |                               |   |
| C14446_FLORE                 |                               |   |
|                              |                               |   |
|                              |                               |   |
| TOSHIBA                      |                               |   |
| Leading Innovation 33        |                               | a.~   |
| LED                          | TL1L4                         |   |
| FWHM / FWTM                  | 18.0° / 39.0°                 |   |
| Efficiency                   | 80 %                          | 15 (1987) (1987) (1987) (1987) (1987) (1987) (1987) (1987) (1987) (1987) (1987) (1987) (1987) (1987) (1987) (19 |
| Peak intensity               | 5.4 cd/lm                     |   |
| LEDs/each optic              | 1                             |   |
| Light colour                 | White                         |   |
| Required compone             |                               |   |
| C14446_FLORE                 | ENTINA-SHD                    |   |
|                              |                               |   |
|                              |                               |   |
|                              |                               | 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |



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

|   |   | a.7   |
|---|---|---|
| LED                                     | J Series 3030   |   |
| FWHM / FWTM                             | 16.0° / 34.0°   | 15 100  |
| Efficiency                              | 91 %  |   |
| Peak intensity                          | 7.5 cd/lm   |   |
| LEDs/each optic                         | 1   | X / / X   |
| Light colour                            | White   |   |
| Required components:                    |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
| LED                                     | J Series 3030   |   |
| FWHM / FWTM                             | 16.0° / 34.0°   |   |
| Efficiency                              | 88 %  |   |
| Peak intensity                          | 7.5 cd/lm   |   |
| LEDs/each optic                         | 1   | $X / T \land X$   |
| Light colour                            | White   |   |
| Required components:                    |   | NATIV   |
| C14446_FLORENTI                         | NA-SHD  | NUX   |
|   |   |   |
|   |   |   |
|   |   |   |
| <b>WNICHIA</b>                          |   | a   |
| LED                                     | NCSxE17A  |   |
| FWHM / FWTM                             | 15.0° / 29.0°   |   |
| Efficiency                              | 82 %  | et and the second se   |
| Peak intensity                          | 12 cd/lm  |   |
| LEDs/each optic                         | 1   |   |
| Light colour                            |   |   |
|   | White   | 15 No. 10   |
| Required components:                    |   | e de la companya de  |
| Required components:<br>C14446_FLORENTI |   | at the set of the set |
|   |   |   |
|   |   |   |
|   |   |   |
| C14446_FLORENTI                         |   |   |
|   | NA-SHD  |   |
|   | NA-SHD<br>NVSxE21A  |   |
| C14446_FLORENTIN                        | NA-SHD<br>NVSxE21A<br>16.0° / 32.0°                                   |   |
| C14446_FLORENTIN                        | NA-SHD<br>NVSxE21A<br>16.0° / 32.0°<br>82 %<br>10 cd/lm<br>1          |   |
| C14446_FLORENTIN                        | NA-SHD<br>NVSxE21A<br>16.0° / 32.0°<br>82 %<br>10 cd/lm               |   |
| C14446_FLORENTIN                        | NA-SHD<br>NVSxE21A<br>16.0° / 32.0°<br>82 %<br>10 cd/lm<br>1<br>White |   |
| C14446_FLORENTIN                        | NA-SHD<br>NVSxE21A<br>16.0° / 32.0°<br>82 %<br>10 cd/lm<br>1<br>White |   |
| C14446_FLORENTIN                        | NA-SHD<br>NVSxE21A<br>16.0° / 32.0°<br>82 %<br>10 cd/lm<br>1<br>White |   |
| C14446_FLORENTIN                        | NA-SHD<br>NVSxE21A<br>16.0° / 32.0°<br>82 %<br>10 cd/lm<br>1<br>White |   |



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

| <b>ØNICHIA</b>      |               |         |
|---------------------|---------------|---------|
| LED                 | NWSx229A      |         |
| FWHM / FWTM         | 24.0° / 44.0° |         |
| Efficiency          | 86 %          |         |
| Peak intensity      | 3.9 cd/lm     |         |
| LEDs/each optic     | 1             |         |
| Light colour        | White         | 4       |
| Required components | s:            |         |
| C14446_FLOREN       | TINA-SHD      |         |
|                     |               |         |
|                     |               |         |
|                     |               | 14 S 14 |



#### **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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