

## **FLORENTINA-HLD-O**

~35° + 12° oval beam

### **SPECIFICATION:**

| Dimensions     | 285.6 x 19.5 mm |
|----------------|-----------------|
| Height         | 9.7 mm          |
| Fastening      | screw           |
| ROHS compliant | yes 🛈           |



### **MATERIALS:**

Component TINA2-XP-O FLORENTINA-HLD

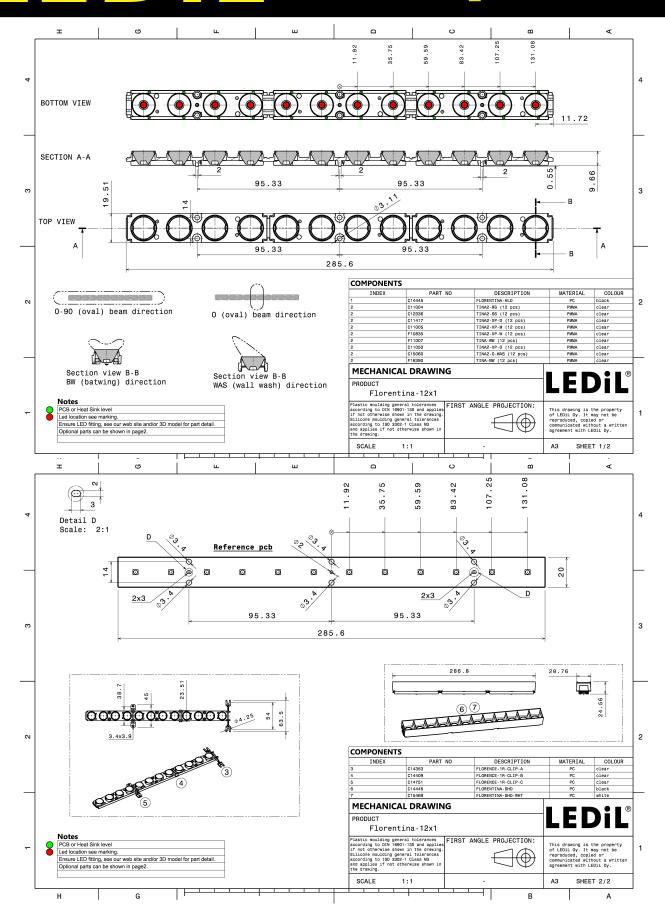
### Туре Single lens Holder

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

#### **ORDERING INFORMATION:**

| Component                      |             | Qty in box | MOQ | MPQ | Box weight (kg) |
|--------------------------------|-------------|------------|-----|-----|-----------------|
| CP14995_FLORENTINA-HLD-O       | Single lens | 160        | 32  | 16  | 5.4             |
| » Box size: 398 x 298 x 140 mm |             |            |     |     |                 |

x size: 398 x 298 x 140 mm



R

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



| LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone<br>C14446_FLORE         |  |
|---|--|
| CREE<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone<br>C14446_FLORE |  |
| CREE<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone<br>C14446_FLORE |  |
| CREE<br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone<br>C14446_FLORE |  |



| UMIL  | EDS   | 90* 90   |
|---|---|--|
| LED   | LUXEON Rebel ES   |  |
| FWHM / FWTM   | 33.0 + 17.0° / 56.0 + 38.0°   | 75* 75   |
| Efficiency  | 79 %  |  |
| Peak intensity  | 3.6 cd/lm   | 60 <sup>2</sup>  |
| LEDs/each optic   | 1   |  |
| Light colour  | White   | 43*  |
| Required compone  | nts:  | 200  |
| C14446_FLORE  |   |  |
|   |   | 200  |
|   |   | 30- 00 100 30  |
|   | EDS   | 90*90  |
| LED   | LUXEON Rebel Plus   |  |
| FWHM / FWTM   | 33.0 + 15.0° / 55.0 + 33.0°   | 75   |
| Efficiency  | 81 %  |  |
| Peak intensity  | 4.3 cd/lm   | 60 <sup>8</sup> 60   |
| LEDs/each optic   | 1   |  |
| Light colour  | White   | 5 <sup>-</sup>   |
| Required compone  | nts:  |  |
| C14446_FLORE  |   |  |
|   |   |  |
|   |   | 300 00 00 30   |
|   | EDS   | 50° 500  |
| LED   | LUXEON TX   |  |
| FWHM / FWTM   | 34.0 + 16.0° / 57.0 + 36.0°   | 75 75  |
| Efficiency  | 81 %  |  |
| Peak intensity  | 3.8 cd/lm   |  |
| LEDs/each optic   | 1   |  |
| Light colour  | White   | 47" 43   |
| Required compone  | nts:  |  |
| C14446_FLORE  | INTINA-SHD  | 3200   |
|   |   | X / X / X  |
|   |   |  |
|   |   | 30° 4000 30<br>15° 0° 15°  |
|   | EDS   | 20" 4000 20"   |
|   | EDS<br>LUXEON Z ES  | 13° 0° 135°  |
|   |   | 13° 0° 135°  |
| LED   | LUXEON Z ES   | 13° 0° 13°   |
| LED<br>FWHM / FWTM  | LUXEON Z ES<br>34.0 + 13.0° / 54.0 + 27.0°  | 13° 0° 13°   |
| LED<br>FWHM / FWTM<br>Efficiency  | LUXEON Z ES<br>34.0 + 13.0° / 54.0 + 27.0°<br>82 %                                    | 13° 0° 13°   |
| LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity  | LUXEON Z ES<br>34.0 + 13.0° / 54.0 + 27.0°<br>82 %<br>5.1 cd/lm                       | 12° 0° 15°   |
| LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic                                       | LUXEON Z ES<br>34.0 + 13.0° / 54.0 + 27.0°<br>82 %<br>5.1 cd/lm<br>1<br>White         | 60° 500 500 500 50° 50° 50° 50° 50° 50° 5  |
| LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour                       | LUXEON Z ES<br>34.0 + 13.0° / 54.0 + 27.0°<br>82 %<br>5.1 cd/lm<br>1<br>White<br>nts: | 60°<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1 |
| LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required component | LUXEON Z ES<br>34.0 + 13.0° / 54.0 + 27.0°<br>82 %<br>5.1 cd/lm<br>1<br>White<br>nts: | 60° 500 500 50° 50°  |
| LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required component | LUXEON Z ES<br>34.0 + 13.0° / 54.0 + 27.0°<br>82 %<br>5.1 cd/lm<br>1<br>White<br>nts: | 60°<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1 |



| ØNICHI/  |   |               |
|--|---|---------------|
| LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone<br>C14446_FLORE                        | NCSxx19B<br>34.0 + 14.0° / 55.0 + 33.0°<br>79 %<br>4.2 cd/lm<br>1<br>White<br>ints: |               |
|  | •   | 200 et 200 00 |
| LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required compone<br>C14446_FLORE                        |   |               |
| OSRAM<br>Opto Semiconductors   |   |               |
| 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 |   |               |
| 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 |   |               |



| OSRAM<br>Opto Semiconductors      |                                     | 50° 30°   |
|-----------------------------------|-------------------------------------|---|
| LED                               | OSLON SSL 150                       |   |
| FWHM / FWTM                       | 34.0 + 12.0° / 54.0 + 27.0°         |   |
| Efficiency                        | 84 %                                | 80 Store 10 |
| Peak intensity                    | 4.9 cd/lm                           |   |
| LEDs/each optic                   | 1                                   |   |
| Light colour                      | White                               | ar 200  |
| Required compone                  | ents:                               |   |
|                                   |                                     | 24 <sup>4</sup> 30 <sup>4</sup> 30 <sup>4</sup>   |
| OSRAM<br>Opto Semiconductors      |                                     | 20 <sup>3</sup> A 20 <sup>2</sup>   |
| LED                               | OSLON SSL 80                        |   |
| FWHM / FWTM                       | 33.0 + 15.0° / 56.0 + 35.0°         |   |
| Efficiency                        | 79 %                                |   |
| Peak intensity                    | 4.1 cd/lm                           |   |
| LEDs/each optic                   | 1                                   |   |
| Light colour                      | White                               | gr det  |
| Required compone                  | ents:                               |   |
| C14446_FLORE                      |                                     | 320   |
|                                   |                                     |   |
|                                   |                                     |   |
| SAMSI                             |                                     | 10 <sup>1</sup> 10 <sup>1</sup> 10 <sup>1</sup>   |
|                                   |                                     |   |
| LED<br>FWHM / FWTM                | LH351B                              | 72  |
|                                   | 34.0 + 18.0° / 60.0 + 40.0°<br>94 % |   |
| Efficiency                        |                                     |   |
| Peak intensity                    | 3.5 cd/lm                           |   |
| LEDs/each optic<br>Light colour   | 1<br>White                          |   |
| Required compone                  |                                     |   |
| C14446_FLORE                      |                                     |   |
|                                   |                                     | 94 <sup>-</sup> 35 <sup>-</sup> 4 <sup>-</sup> 35 <sup>-</sup>  |
| TOSHIBA<br>Leading Innovation >>> |                                     | 90 <sup>4</sup> 90  |
| LED                               | TL1L4                               |   |
| FWHM / FWTM                       | 34.0 + 17.0° / 57.0 + 38.0°         | 73  |
| Efficiency                        | 79 %                                |   |
| Peak intensity                    | 3.6 cd/lm                           |   |
| LEDs/each optic                   | 1                                   |   |
| Light colour                      | White                               | gr de   |
| Required compone                  | ents:                               |   |
| C14446_FLOR                       |                                     | 300   |
|                                   |                                     | 30 00 20 00   |

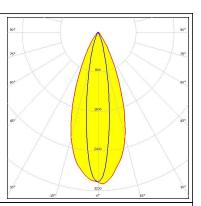


### **OPTICAL RESULTS (SIMULATED):**

### 

| LED                  | J Seri |
|----------------------|--------|
| FWHM / FWTM          | 40.0 + |
| Efficiency           | 87 %   |
| Peak intensity       | 3.1 cc |
| LEDs/each optic      | 1      |
| Light colour         | White  |
| Required components: |        |
|                      |        |

Series 3030 0.0 + 18.0° / 68.0 + 40.0° 7 % 1.1 cd/lm Vhite



# 

 LED
 J Series 3030

 FWHM / FWTM
 40.0 + 18.0° / 64.0 + 38.0°

 Efficiency
 82 %

 Peak intensity
 3.1 cd/lm

 LEDs/each optic
 1

 Light colour
 White

 Required components:
 C14446\_FLORENTINA-SHD

| <b>Ø</b> ΝΙCΗΙΛ   |  | 90 <sup>4</sup> 90                |
|---|--|-----------------------------------|
| LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required component | NCSxE17A<br>40.0 + 13.0° / 62.0 + 27.0°<br>94 %<br>5.2 cd/lm<br>1<br>White<br>s: |                                   |
| <b>Μ</b> ΝΙCΗΙΛ   |  | 90 <sup>*</sup> 90                |
| LED   | NCSxE17A   |                                   |
| FWHM / FWTM   | 40.0 + 13.0° / 61.0 + 27.0°  | $\Lambda \Lambda \Lambda \Lambda$ |
| Efficiency  | 94 %   | 500 State                         |
| Peak intensity  | 5.3 cd/lm  |                                   |
| LEDs/each optic   | 1  |                                   |
| Light colour  | White  | 9 <sup>4</sup> 320                |
| Required component  | s:   |                                   |
| C14446_FLOREN   | TINA-SHD   | 34" 357 0° 35                     |



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

| <b>WICHIA</b><br>LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required components:    | NVSxE21A<br>38.0 + 14.0° / 64.0 + 31.0°<br>94 %<br>4.8 cd/lm<br>1<br>White           | 5  |
|---|--|--|
| <b>Ø</b> ΝΙCΗΙΛ   |  |  |
| LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required components:<br>C14446_FLORENTIN | NVSxE21A<br>40.0 + 15.0° / 61.0 + 31.0°<br>94 %<br>5.3 cd/lm<br>1<br>White<br>NA-SHD | 32,         60         32,         32,           22,         32,0         91,         92,           24,         32,0         91,         92,           24,         32,0         91,         92,           24,         32,0         91,         92,           24,         32,0         92,         92,           25,         32,0         92,         92,           26,         32,0         92,         92,           26,         32,0         92,         92, |
| <b>MNICHIA</b>  |  |  |
| LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required components:<br>C14446_FLORENTIN | NVSxx19A<br>39.0 + 18.0° / 66.0 + 38.0°<br>84 %<br>3.2 cd/lm<br>1<br>White<br>NA-SHD | 94 96 97 97 96 97 97 96 97 97 97 97 97 97 97 97 97 97 97 97 97   |
| <b>ØNICHIA</b>  |  | 90* 90*  |
| LED<br>FWHM / FWTM<br>Efficiency<br>Peak intensity<br>LEDs/each optic<br>Light colour<br>Required components:<br>C14446_FLORENTIN | NWSx229A<br>38.0 + 23.0° / 69.0 + 47.0°<br>81 %<br>2.4 cd/lm<br>1<br>White<br>NA-SHD |  |



#### **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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#### 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

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