

## LAURA-O-PIN

~40° x 12° oval beam optimized for CREE XP-E.  
Assembly with white holder, installation tape  
and location pins.

### SPECIFICATION:

|                |                |
|----------------|----------------|
| Dimensions     | 21.6 x 21.6 mm |
| Height         | 13.1 mm        |
| Fastening      | tape, pin      |
| ROHS compliant | yes ⓘ          |

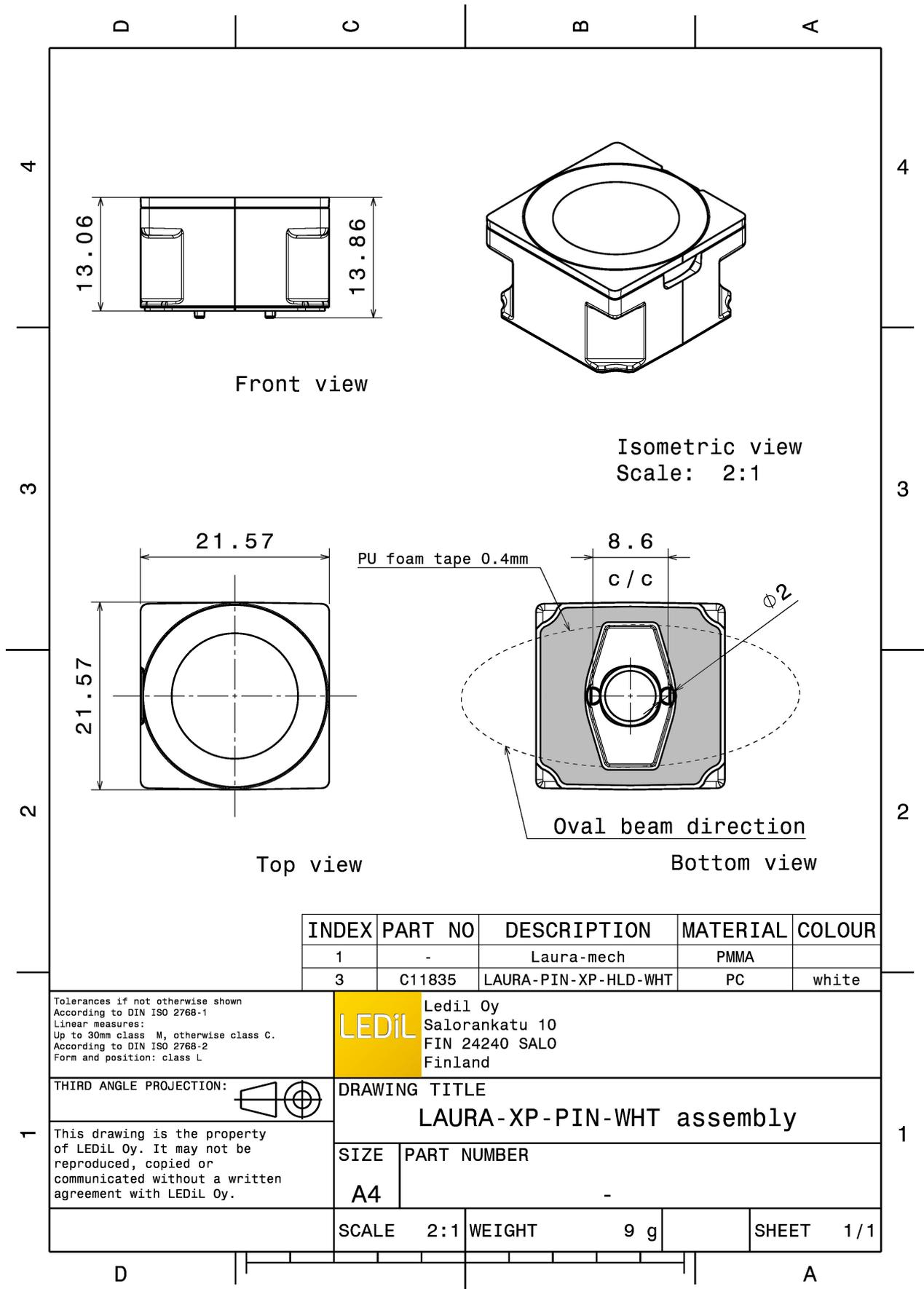


### MATERIALS:

| Component            | Type        | Material     | Colour | Finish |
|----------------------|-------------|--------------|--------|--------|
| LAURA-O              | Single lens | PMMA         | clear  |        |
| LAURA-PIN-XP-HLD-WHT | Holder      | PC           | white  |        |
| ROSE-TAPE            | Tape        | Acrylic foam | black  |        |

### ORDERING INFORMATION:

| Component                      | Type        | Qty in box | MOQ | MPQ | Box weight (kg) |
|--------------------------------|-------------|------------|-----|-----|-----------------|
| CA12012_LAURA-O-PIN            | Single lens | 1440       | 360 | 180 | 7.5             |
| » Box size: 450 x 260 x 160 mm |             |            |     |     |                 |



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

#### OPTICAL RESULTS (MEASURED):

##### CREE ⇄ LED

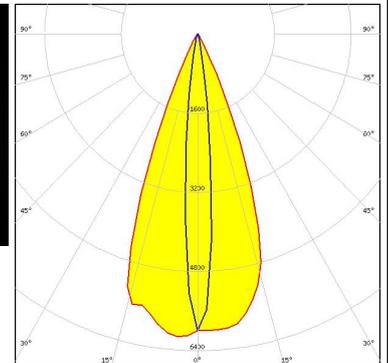
LED XB-D  
 FWHM / FWTM 39.0 + 11.0°  
 Efficiency 94 %  
 Peak intensity 4.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

##### CREE ⇄ LED

LED XP-E  
 FWHM / FWTM 40.0 + 13.0° / 54.0 + 22.0°  
 Efficiency 91 %  
 Peak intensity 4.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

##### CREE ⇄ LED

LED XP-E2  
 FWHM / FWTM 41.0 + 10.0° / 56.0 + 22.0°  
 Efficiency 91 %  
 Peak intensity 6.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### CREE ⇄ LED

LED XP-G  
 FWHM / FWTM 40.0 + 13.0°  
 Efficiency 91 %  
 LEDs/each optic 1  
 Light colour White  
 Required components:

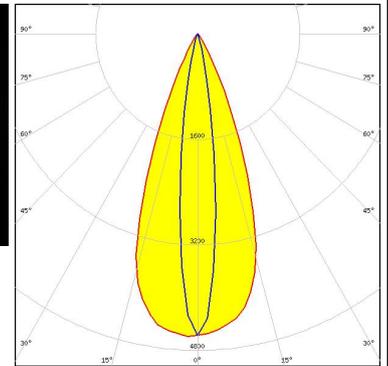
#### OPTICAL RESULTS (MEASURED):

##### LUMILEDS

LED LUXEON Rebel  
 FWHM / FWTM 41.0 + 12.0° / 56.0 + 24.0°  
 Efficiency 90 %  
 Peak intensity 5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

##### LUMILEDS

LED LUXEON Rebel ES  
 FWHM / FWTM 41.0 + 14.0° / 60.0 + 28.0°  
 Efficiency 90 %  
 Peak intensity 4.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



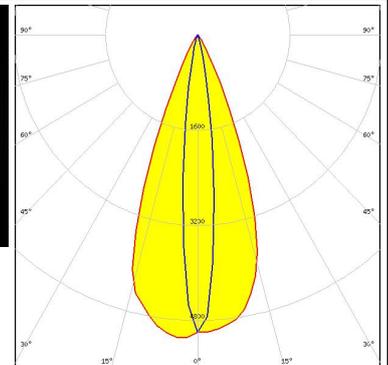
##### LUMILEDS

LED LUXEON Z ES  
 FWHM / FWTM 40.0 + 11.0° / 56.0 + 22.0°  
 Efficiency 91 %  
 Peak intensity 6.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### NICHIA

LED NCSxx19B  
 FWHM / FWTM 41.0 + 13.0° / 58.0 + 26.0°  
 Efficiency 90 %  
 Peak intensity 5.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

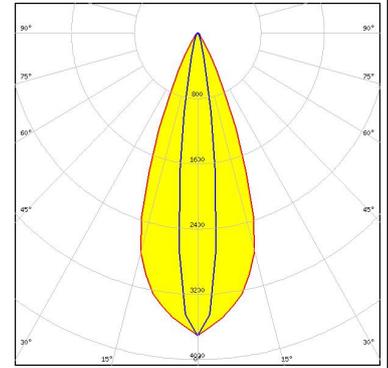


#### OPTICAL RESULTS (MEASURED):

##### OSRAM

Opto Semiconductors

LED OSLON Square EC  
 FWHM / FWTM 39.0 + 14.0° / 57.0 + 31.0°  
 Efficiency 87 %  
 Peak intensity 3.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### OSRAM

Opto Semiconductors

LED OSLON Square PC  
 FWHM / FWTM 40.0 + 12.0° / 60.0 + 26.0°  
 Efficiency 88 %  
 Peak intensity 5.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### OSRAM

Opto Semiconductors

LED OSLON SSL 150  
 FWHM / FWTM 36.0 + 10.0° / 23.0 + 52.0°  
 Efficiency 86 %  
 Peak intensity 4.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

##### OSRAM

Opto Semiconductors

LED OSLON SSL 80  
 FWHM / FWTM 40.0 + 12.0° / 26.0 + 54.0°  
 Efficiency 86 %  
 Peak intensity 4.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

### OPTICAL RESULTS (MEASURED):

|  |                             |
|--|-----------------------------|
| <br>Opto Semiconductors    |                             |
| LED  | SFH 4715S                   |
| FWHM / FWTM  | 41.0 + 14.0°                |
| Efficiency   | %                           |
| LEDs/each optic  | 1                           |
| Light colour   | White                       |
| Required components:   |                             |
| <br>Opto Semiconductors    |                             |
| LED  | SFH 4725S                   |
| FWHM / FWTM  | 40.0 + 14.0° / 58.0 + 24.0° |
| Efficiency   | %                           |
| LEDs/each optic  | 1                           |
| Light colour   | White                       |
| Required components:   |                             |
| <br>SEOUL SEMICONDUCTOR |                             |
| LED  | Z5                          |
| FWHM / FWTM  | 40.0 + 12.0°                |
| Efficiency   | %                           |
| LEDs/each optic  | 1                           |
| Light colour   | White                       |
| Required components:   |                             |

### OPTICAL RESULTS (SIMULATED):

#### LUMILEDS

LED LUXEON H50-2  
FWHM / FWTM 13.0 + 61.0° / 30.0 + 84.0°  
Efficiency 81 %  
Peak intensity 2.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

#### LUMILEDS

LED LUXEON IR Domed 150  
FWHM / FWTM 67.0 + 10.0° / 88.0 + 10.0°  
Efficiency 0 %  
LEDs/each optic 1  
Light colour White  
Required components:

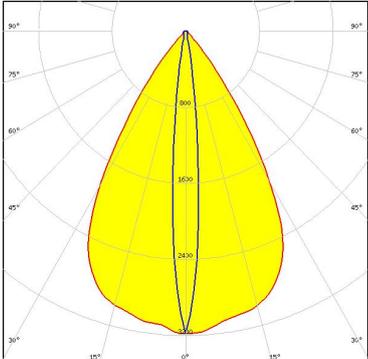
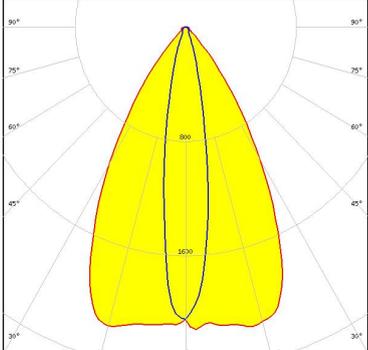
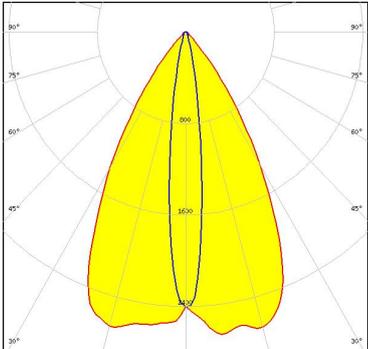
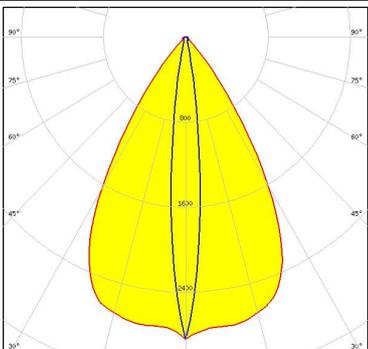
#### LUMILEDS

LED LUXEON IR Domed 60  
FWHM / FWTM 65.0 + 11.0° / 84.0 + 28.0°  
Efficiency 90 %  
LEDs/each optic 1  
Light colour White  
Required components:

#### LUMILEDS

LED LUXEON IR Domed 90  
FWHM / FWTM 63.0 + 11.0° / 83.0 + 24.0°  
Efficiency 90 %  
LEDs/each optic 1  
Light colour White  
Required components:

### OPTICAL RESULTS (SIMULATED):

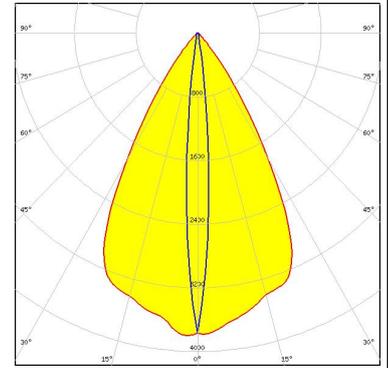
|  |   |
|--|---|
| <p><b>NICHIA</b></p> <p>LED: NCSxE17A<br/>           FWHM / FWTM: 62.0 + 10.0° / 84.0 + 20.0°<br/>           Efficiency: 91 %<br/>           Peak intensity: 3.2 cd/lm<br/>           LEDs/each optic: 1<br/>           Light colour: White<br/>           Required components:</p>  |    |
| <p><b>NICHIA</b></p> <p>LED: NV4WB35AM<br/>           FWHM / FWTM: 60.0 + 18.0° / 86.0 + 38.0°<br/>           Efficiency: 90 %<br/>           Peak intensity: 2.2 cd/lm<br/>           LEDs/each optic: 1<br/>           Light colour: White<br/>           Required components:</p> |   |
| <p><b>NICHIA</b></p> <p>LED: NVSW219F<br/>           FWHM / FWTM: 60.0 + 14.0° / 84.0 + 30.0°<br/>           Efficiency: 89 %<br/>           Peak intensity: 2.7 cd/lm<br/>           LEDs/each optic: 1<br/>           Light colour: White<br/>           Required components:</p>  |  |
| <p><b>NICHIA</b></p> <p>LED: NVSxE21A<br/>           FWHM / FWTM: 62.0 + 12.0° / 84.0 + 24.0°<br/>           Efficiency: 91 %<br/>           Peak intensity: 2.8 cd/lm<br/>           LEDs/each optic: 1<br/>           Light colour: White<br/>           Required components:</p>  |  |

### OPTICAL RESULTS (SIMULATED):

#### OSRAM

Opto Semiconductors

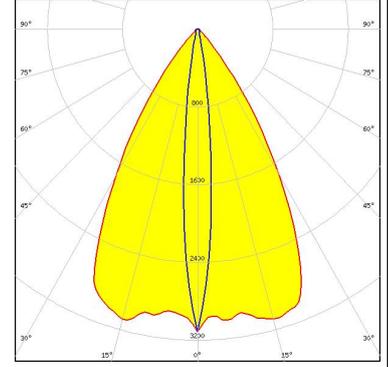
LED OSLO<sup>®</sup>N Signal  
 FWHM / FWTM 60.0 + 8.0° / 80.0 + 18.0°  
 Efficiency 91 %  
 Peak intensity 3.8 cd/lm  
 LEDs/each optic 1  
 Light colour Red  
 Required components:



#### OSRAM

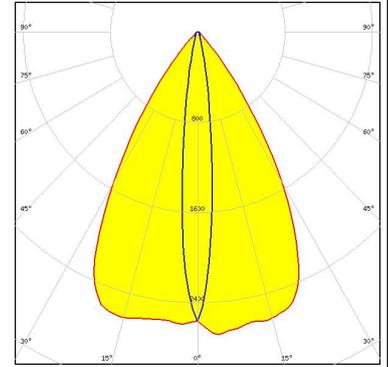
Opto Semiconductors

LED OSLO<sup>®</sup>N Square CSSRM2/CSSRM3  
 FWHM / FWTM 62.0 + 11.0° / 84.0 + 24.0°  
 Efficiency 91 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### SAMSUNG

LED LM302D  
 FWHM / FWTM 63.0 + 12.0° / 84.0 + 28.0°  
 Efficiency 88 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### 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:

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