# LAURA-M-PIN

**~30° medium beam optimized for CREE XP-E. Assembly with white holder, installation tape and location pins.**


## SPECIFICATION:

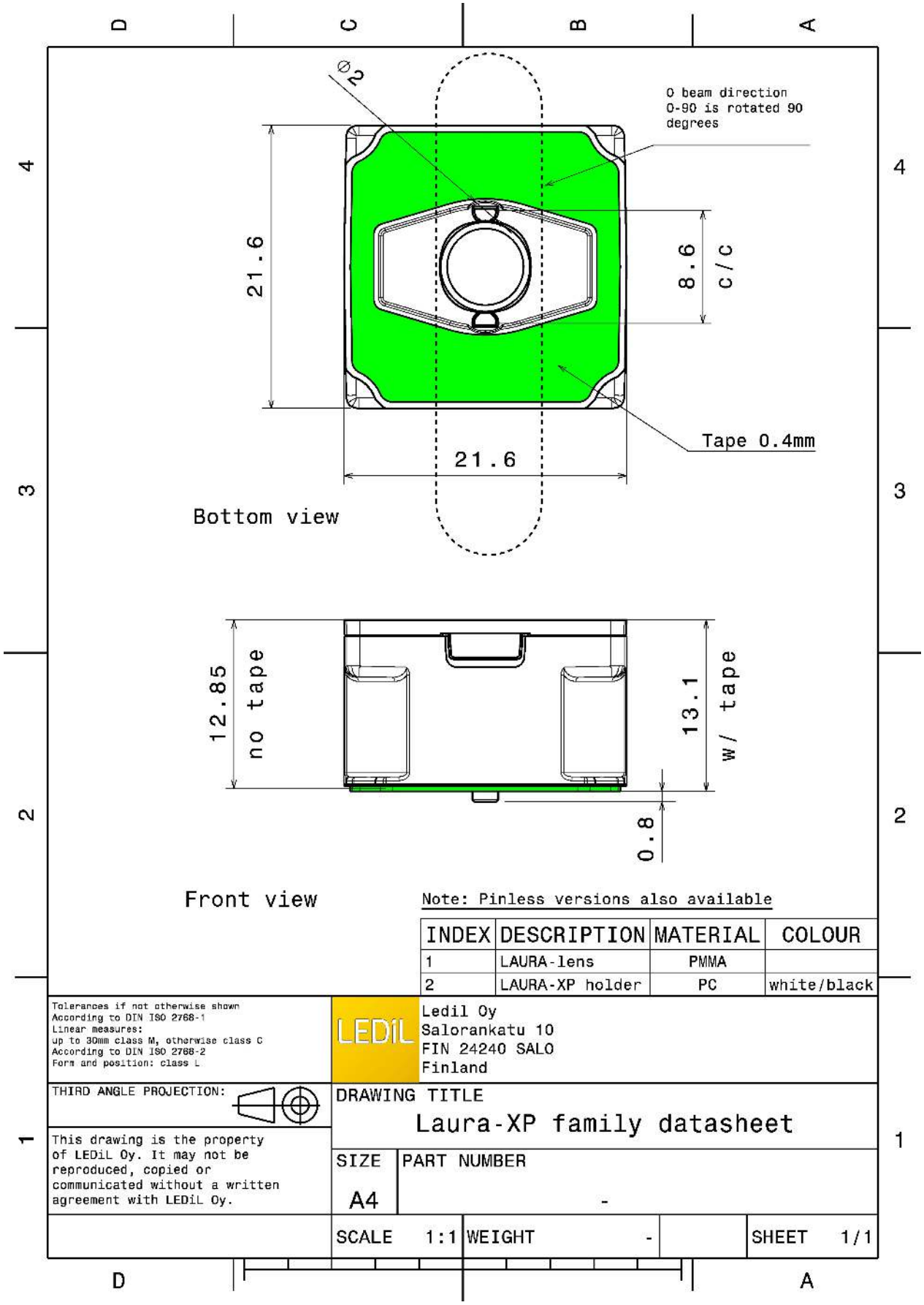
| | |
|---|---|
| Dimensions | 21.6 x 21.6 mm |
| Height | 13.1 mm |
| Fastening | tape, pin |
| ROHS compliant | yes |

## MATERIALS:

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

## ORDERING INFORMATION:

| Component | | Qty in box | MOQ | MPQ | Box weight (kg) |
|---|---|---|---|---|---|
| CA11837_LAURA-M-PIN<br>» Box size: 460 x 260 x 200 mm | Single lens | 1440 | 360 | 180 | 8.0 |




Note: Pinless versions also available

| INDEX | DESCRIPTION | MATERIAL | COLOUR |
|---|---|---|---|
| 1 | LAURA-lens | PMMA | |
| 2 | LAURA-XP holder | PC | white/black |

Tolerances if not otherwise shown
According to DIN ISO 2768-1
Linear measures:
up to 30mm class M, otherwise class C
According to DIN ISO 2768-2
Form and position: class L

Ledil Oy
Salorankatu 10
FIN 24240 SALO
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE
Laura-XP family datasheet



SIZE A4 | PART NUMBER -

SCALE 1:1 | WEIGHT - | SHEET 1/1

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

## OPTICAL RESULTS (MEASURED):

CREE LED

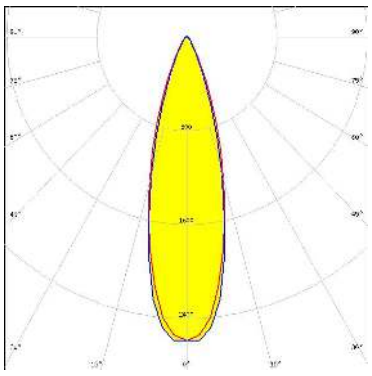
| | |
|---|---|
| LED | XB-D |
| FWHM / FWTM | 28.0° |
| Efficiency | 92 % |
| Peak intensity | 2.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

CREE LED

| | |
|---|---|
| LED | XP-E |
| FWHM / FWTM | 30.0° / 53.0° |
| Efficiency | 92 % |
| Peak intensity | 2.6 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:



CREE LED

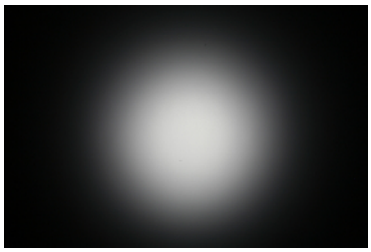
| | |
|---|---|
| LED | XP-E-HEW |
| FWHM / FWTM | 27.0° / 52.0° |
| Efficiency | 85 % |
| Peak intensity | 2.6 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

CREE LED

| | |
|---|---|
| LED | XP-E2 |
| FWHM / FWTM | 28.0° / 54.0° |
| Efficiency | 88 % |
| Peak intensity | 3 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

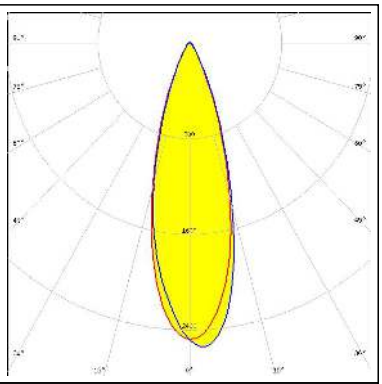


## OPTICAL RESULTS (MEASURED):

CREE LED

| | |
|---|---|
| LED | XP-G |
| FWHM / FWTM | 30.0° |
| Efficiency | 93 % |
| Peak intensity | 2.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:



LUMILEDS

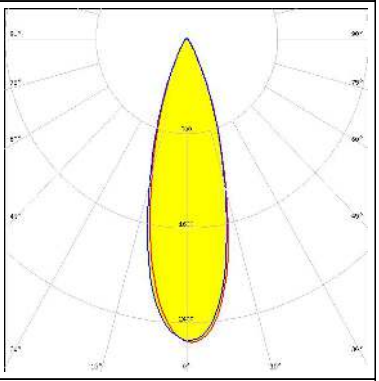
| | |
|---|---|
| LED | LUXEON Rebel |
| FWHM / FWTM | 27.0° / 52.0° |
| Efficiency | 88 % |
| Peak intensity | 2.9 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

LUMILEDS

| | |
|---|---|
| LED | LUXEON T |
| FWHM / FWTM | 30.0° / 56.0° |
| Efficiency | 89 % |
| Peak intensity | 2.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:



LUMILEDS

| | |
|---|---|
| LED | LUXEON Z ES |
| FWHM / FWTM | 26.0° / 50.0° |
| Efficiency | 92 % |
| Peak intensity | 3.6 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

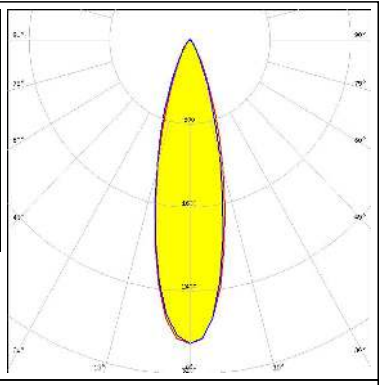
Required components:

## OPTICAL RESULTS (MEASURED):

NICHIA

| | |
|---|---|
| LED | NCSxx19B |
| FWHM / FWTM | 28.0° / 54.0° |
| Efficiency | 86 % |
| Peak intensity | 2.9 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

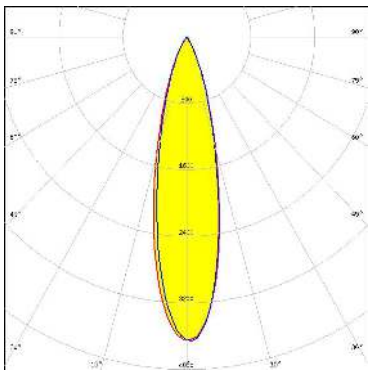
Required components:



NICHIA

| | |
|---|---|
| LED | NF2x757D |
| FWHM / FWTM | 25.0° / 51.0° |
| Efficiency | 88 % |
| Peak intensity | 3.7 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:



OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | OSLON Square EC |
| FWHM / FWTM | 27.0° / 54.0° |
| Efficiency | 86 % |
| Peak intensity | 2.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | OSLON SSL 150 |
| FWHM / FWTM | 26.0° / 50.0° |
| Efficiency | 87 % |
| Peak intensity | 2.7 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

## OPTICAL RESULTS (MEASURED):

OSRAM Opto Semiconductors

| | |
|---|---|
| LED | OSLON SSL 80 |
| FWHM / FWTM | 30.0° / 56.0° |
| Efficiency | 88 % |
| Peak intensity | 2.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

OSRAM Opto Semiconductors

| | |
|---|---|
| LED | SFH 4725S |
| FWHM / FWTM | 22.0° / 48.0° |
| Efficiency | % |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

SEOUL SEMICONDUCTOR

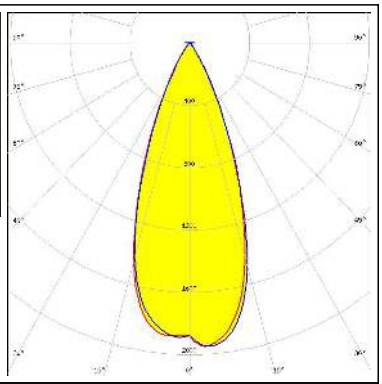
| | |
|---|---|
| LED | Z5 |
| FWHM / FWTM | 29.0° |
| Efficiency | % |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

## OPTICAL RESULTS (SIMULATED):

CREE LED

| | |
|---|---|
| LED | XP-G3 |
| FWHM / FWTM | 39.0° / 62.0° |
| Efficiency | 93 % |
| Peak intensity | 2 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



LUMILEDS

| | |
|---|---|
| LED | LUXEON H50-2 |
| FWHM / FWTM | 32.5° / 52.0° |
| Efficiency | 85 % |
| Peak intensity | 2.6 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

LUMILEDS

| | |
|---|---|
| LED | LUXEON IR Domed 150 (L1I0-0xxx150000000) |
| FWHM / FWTM | 20.0° / 41.0° |
| Efficiency | 0 % |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

LUMILEDS

| | |
|---|---|
| LED | LUXEON IR Domed 60 (L1I0-0xxx060000000) |
| FWHM / FWTM | 25.0° / 44.0° |
| Efficiency | 94 % |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

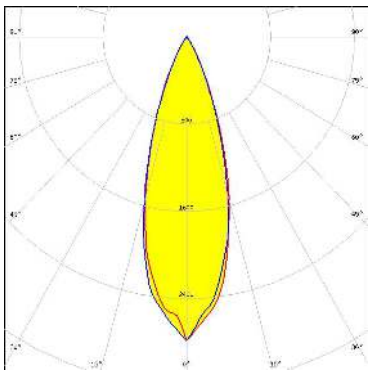
## OPTICAL RESULTS (SIMULATED):

LUMILEDS

| | |
|---|---|
| LED | LUXEON IR Domed 90 (L1I0-0xxx090000000) |
| FWHM / FWTM | 25.0° / 48.0° |
| Efficiency | 94 % |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

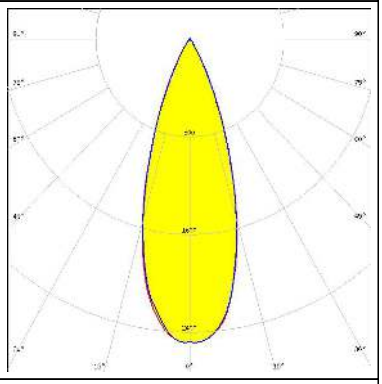
NICHIA

| | |
|---|---|
| LED | NV4WB35AM |
| FWHM / FWTM | 32.0° / 56.0° |
| Efficiency | 96 % |
| Peak intensity | 2.8 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



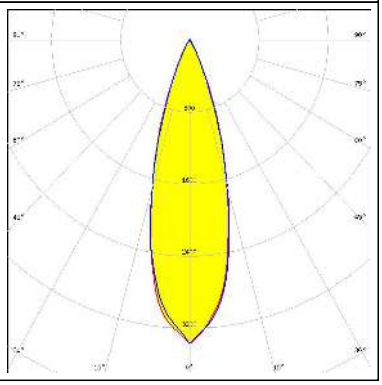
NICHIA

| | |
|---|---|
| LED | NVSxx19B/NVSxx19C |
| FWHM / FWTM | 36.0° / 58.0° |
| Efficiency | 94 % |
| Peak intensity | 2.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



OSRAM
Opto Semiconductors

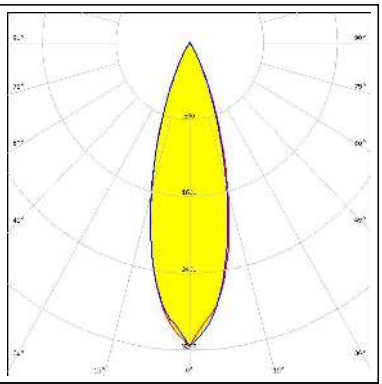
| | |
|---|---|
| LED | OSLON Signal |
| FWHM / FWTM | 30.0° / 51.0° |
| Efficiency | 96 % |
| Peak intensity | 3.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour | Red |
| Required components: | |



## OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | OSLON Square CSSRM2/CSSRM3 |
| FWHM / FWTM | 30.0° / 54.0° |
| Efficiency | 94 % |
| Peak intensity | 3.2 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

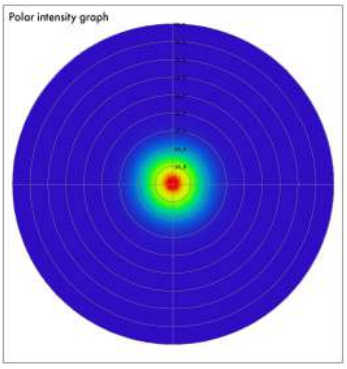


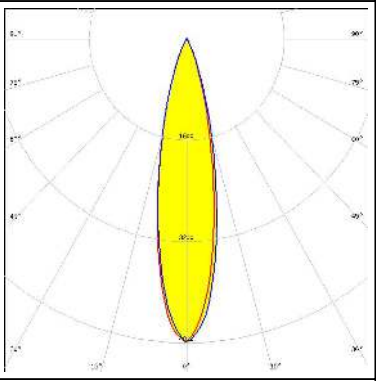
OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | OSLON Square PC |
| FWHM / FWTM | 29.0° |
| Efficiency | % |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | SFH 4715AS |
| FWHM / FWTM | 23.0° / 44.0° |
| Efficiency | 96 % |
| LEDs/each optic | 1 |
| Light colour | IR |
| Required components: | |



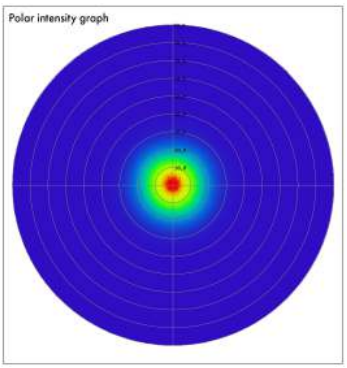
OSRAM
Opto Semiconductors

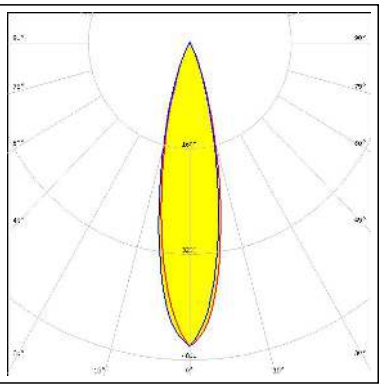
| | |
|---|---|
| LED | SFH 4715S |
| FWHM / FWTM | 30.0° |
| Efficiency | 85 % |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

## OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | SFH 4725AS |
| FWHM / FWTM | 23.0° / 45.0° |
| Efficiency | 96 % |
| LEDs/each optic | 1 |
| Light colour | IR |
| 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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