# Diffused Lighting

# Flat Lights

## TH2 Series Rectangular Type

## Flat Light Units with a 300 x 75 mm emitting surface. Applicable to inspection of rectangular workpieces and imaging with a line sensor camera.

TH2-300X75SW TH2-300X75RD

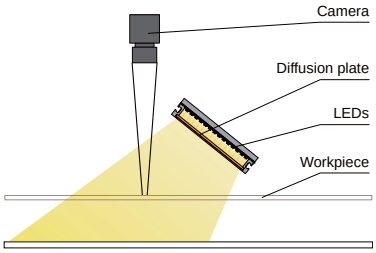
**Applications** Inspection of the appearance of cylindrical containers or square-shaped workpieces, inspection for stains and foreign material on non woven fabrics, fault inspection of films, inspection of the appearance of glass, etc.

## Features

These Flat Lights are optimum for inspecting rectangular workpieces.
Also applicable to inspections with a line sensor camera.

Inspection with a line sensor camera

### Example configuration (TH2-300X75)




We accept custom orders. Please feel free to inquire.
- Shape modifications
- Brightness increases
- Changes in wavelength, etc.

### Imaging example:
**Imaging the appearance of cylindrical containers**

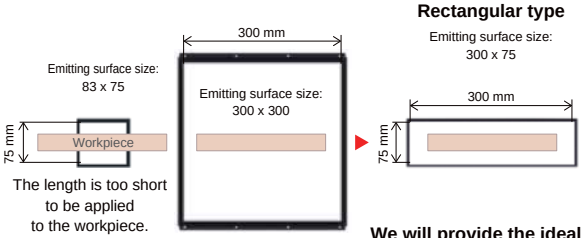
Workpiece:
Cylindrical containers
(cosmetics)

TH2-300X75SW


The state of the surface can be images. Also the printed text is clearly recognized.

## Comparison of Emitting Surface Sizes

**Ideal for inspecting rectangular workpieces.**
(For use with area sensor cameras)

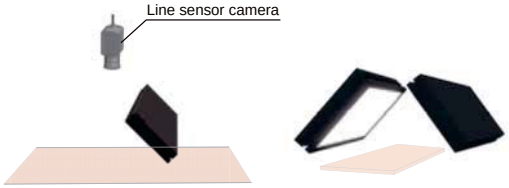



The length is too short to be applied to the workpiece.

The length is suitable, but there are large unused areas.

**We will provide the ideal size for the workpiece to help you save space.**

**Also applicable to inspection with a line sensor camera**




Sheet-shaped workpieces which are easy to flap

Reproducing the effect of Dome Lights

**Can be used for a wide range of applications.**

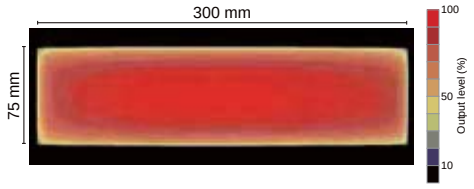
Various technical documents available. PDF Drawings | DXF Drawings | Product Brochures | Instruction Guides | 3D CAD | Data Sheets | Imaging Examples | Digital Catalogs

## Data (Representative Example)

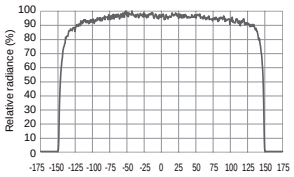
The data included is for reference only. Actual values may vary.

### TH2-300X75SW

#### Uniformity (Relative radiance)

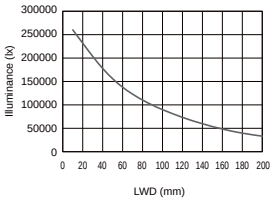



#### Relative radiance distribution




#### Illuminance graph (LWD characteristics)

*1 Illuminance on the optical axis
*2 Illuminating distance from the Light Unit to the workpiece

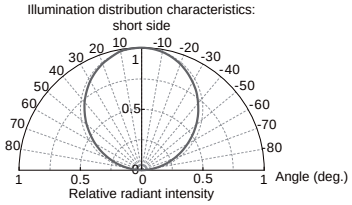



#### Characteristic of the illumination distribution

Measuring direction: long side

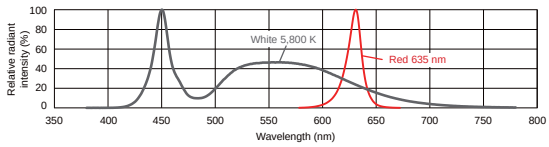
Measuring direction: short side

Illumination distribution characteristics:




## LED Properties

Spectral distribution




Offers you the most suitable lens filter for each wavelength. For details about the lens filter, refer to P.299.

Be sure to read the "Instruction Guide" included with the product before use and follow the safety precautions upon use.
The data included is for reference only. Actual values may vary.

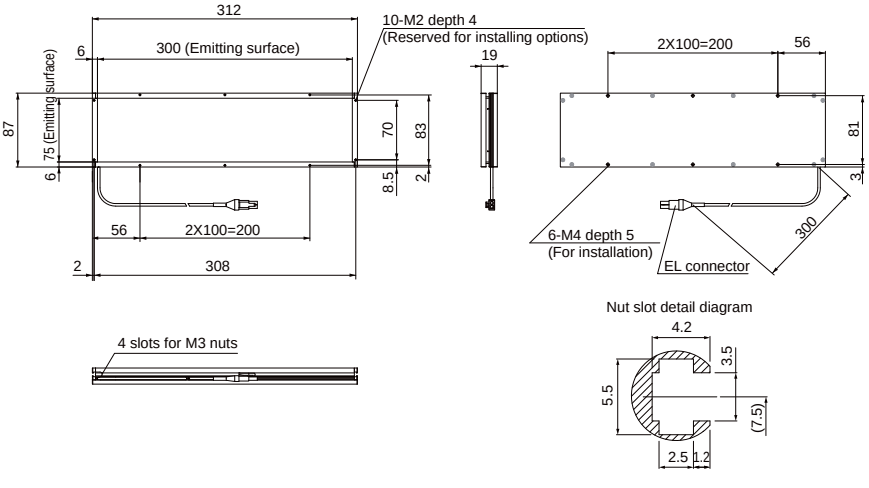
## Lineup

| Model name | LED color | Power consumption | Peak wavelength / correlated color temperature | Options | Extension cables | Recommended Control Units | Weight |
|---|---|---|---|---|---|---|---|
| TH2-300X75RD | Red | 24 V / 54 W | 635 nm | – | FCB-EL2 Straight Cable<br>FCB-W-EL2 2-branch Cable | PD3-10024-8<br>POD-22024-4-PEI*1<br>PSB4-30024-PEI | 650 g |
| TH2-300X75SW | White | 24 V / 68 W | 5,800 K | | | | |

Extension Cables ► P.308 | Control Unit Selection Guide ► P.251 | List of Control Unit Specifications ► P.253

## Dimensions (mm)

TH2-300X75RD/SW







Nut slot detail diagram




You can change the connectors of the Light Unit cable. Choose between M12 connectors and flying leads. Refer to P.5 for details.