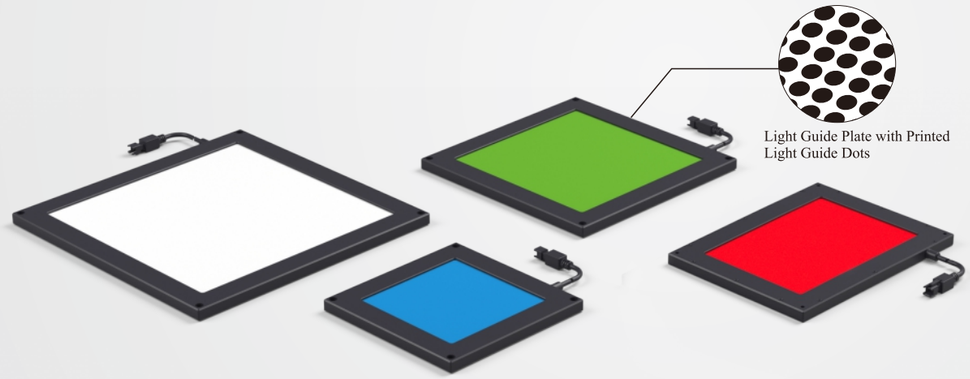
Flat Shadow-Free Light Source OPT-FC-H Series New Arrivals



Product Features

Main Features

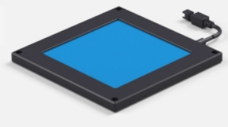
- Scattered light emission with excellent uniformity
- Lightweight, Compact Design, Easy to Install, and Space-saving
- Coaxial planar light source, providing shadow-free and coaxial lighting effects
- Uses a high-transparency light guide plate for superior imaging performance

Application Cases

- Inspection of packaging for food, tobacco, and daily chemical products
- Inspection and measurement of electrical casings and components
- Detection, measurement, and recognition of characters and graphics on highly reflective or uneven surfaces

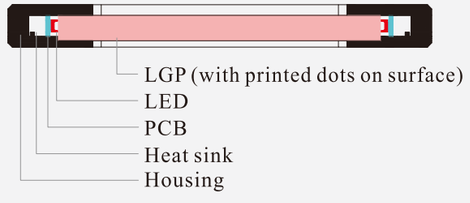
Selection Guide

Customizable Items

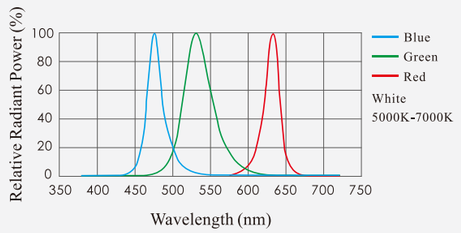


Color, Mounting, Connector, Size, Polygon, Uniformity

Section Structure Drawing



Spectrum Chart



Note: The data is for reference only.

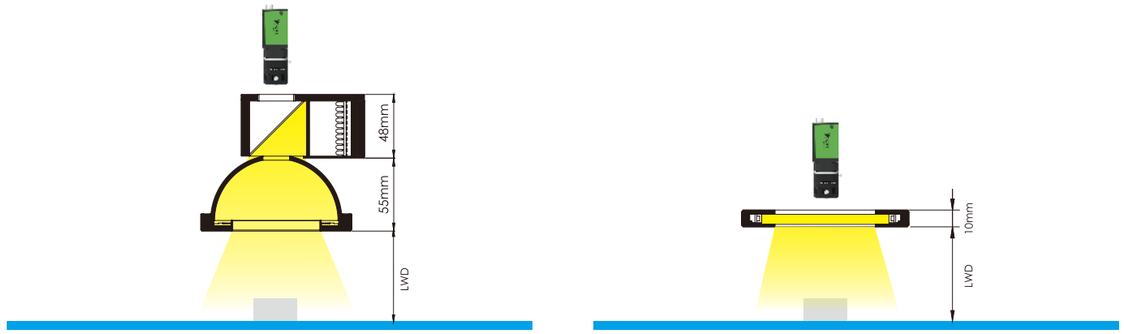
Application Cases

- Character recognition on daily chemical product packaging

Size Comparison

Coaxial light source OPT-CO50 + Integrating sphere light source OPT-RID100

OPT-FC140H Flat Shadow-free Light Source OPT-FC140H



Comparison: Compared to the coaxial light source + integrating sphere light source combination, the flat shadow-free light source has a more compact structure , and requires less installation space.

Series Features

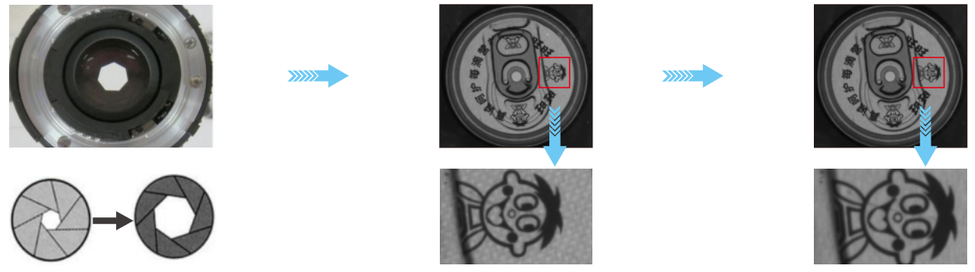
Accurate Imaging Performance

Since the light-emitting surface is a printed dot pattern, there may be slight non-uniformities in imaging. The following methods help reduce image inconsistencies caused by dot patterns

1.Increase the lens aperture

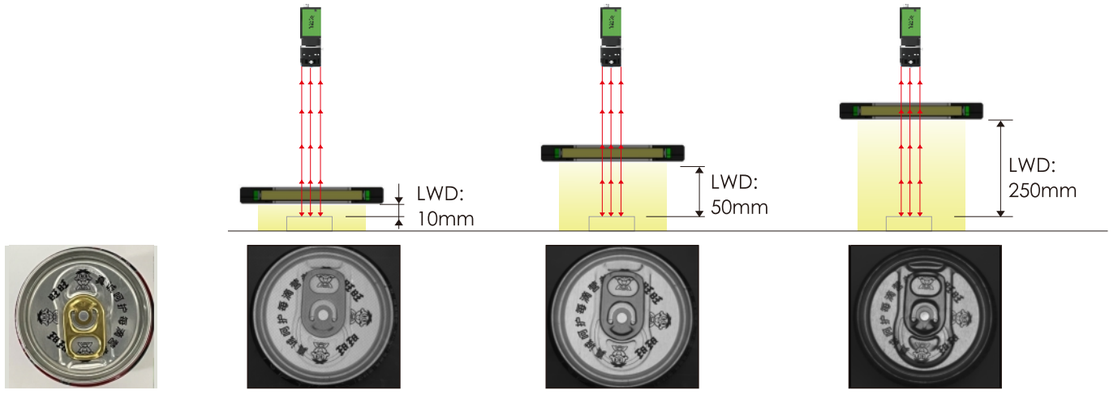
2.Place the test object under the lens and adjust the focus. If the dot pattern is visible, fine-tune the imaging position

3.Adjust the exposure settings to optimize the test results



Applicable for Low to High Angle Applications

Imaging effects at different working distances



Bottle Cap Testing

WD = 10mm ,The entire surface is evenly illuminated, and surface characters are clear

WD = 50mm, The raised parts and pull-tab are clearly visible

WD = 250mm, The raised parts and pull-tab contrast distinctly with the surrounding area

Note: Camera: OPT-CM600-GL-04, 2.4 μm, 3072×2048, Lens: 25 mm, 5 MP, Camera WD: 350 mm, Test light source: FC140H-W
Data is for reference only. Actual results may vary.

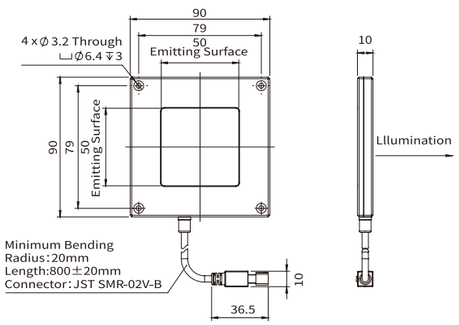
Model Table

No.	Model	∗Power ○	∗Power 🔴	∗Power 🟢	∗Power 🔵	Recommended controller
1	OPT-FC90H	8.6W@24V	5.0W@24V	6.1W@24V	8.6W@24V	OPT-DPA2024E
2	OPT-FC115H	10W@24V	9.6W@24V	7.2W@24V	10W@24V	
3	OPT-FC140H	12.9W@24V	10.8W@24V	9.2W@24V	12.9W@24V	
4	OPT-FC190H	17.3W@24V	15.8W@24V	12.2W@24V	17.3W@24V	
5	OPT-FC240H	25.9W@24V	21.1W@24V	18.4W@24V	25.9W@24V	

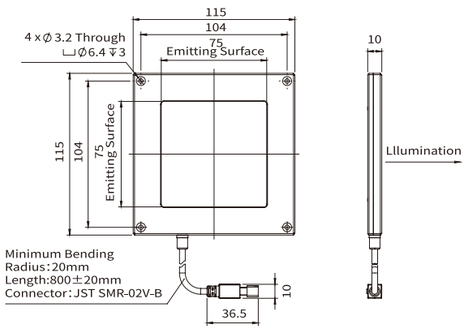
Note: Data is for reference only and may vary in actual situations.

Dimensions (mm)

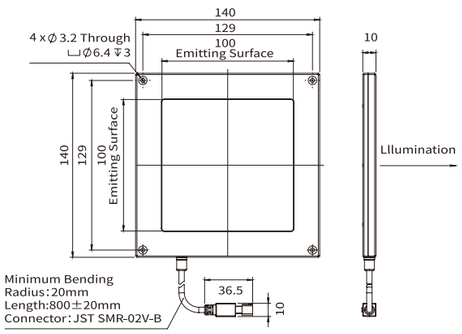
1.OPT-FC90H



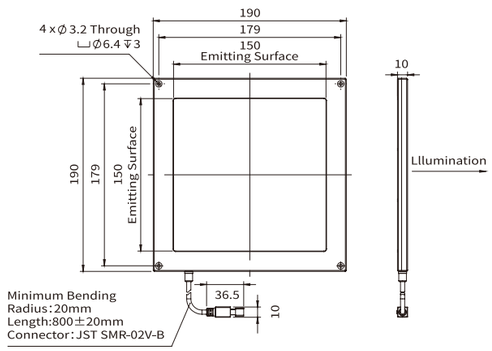
2.OPT-FC115H



3.OPT-FC140H



4.OPT-FC190H



5.OPT-FC240H