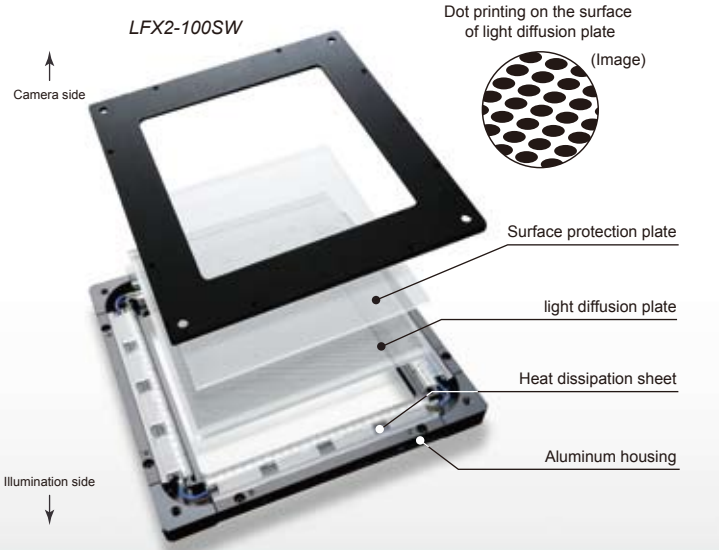
Indirect Lighting

Flat-Dome Lights
LFX2 Series

High Output, uniform diffused light
Reproduce the effects of both coaxial and dome illumination.

Unique lighting technology achieves uniform omni directional diffused light

The special dotted-pattern reproduces the characteristics of a coaxial light or a dome light.



* Under certain conditions dots may be focused by lens or produce an interference pattern with reflections from some highly reflective surfaces. These effects are not defects and testing should be done to ensure this light is appropriate for your application.

The LFX2 Series is a completely new type of light product enabled by CCS's cutting research and development capabilities. The pattern of dots on the surface of the light diffusion plate controls light diffusion and transmission making uniform, omni-directional light possible.

High output, uniform diffused light

The high output enables use with high-speed cameras. There is more than enough illumination for imaging at a shutter speed of 1/4,000.

Previous Model(LFX-100RD)

The output of the previous model was too low for some applications.

LFX2-100RD

With the LFX2, the output is sufficient for proper imaging at a shutter speed of 1/4,000.

Wavelengths from Visible Light to Infrared

Use these lights for a wide range of applications from visible light to invisible infrared light. The peak wavelength for Infrared lights is 850 nm.

Red Light

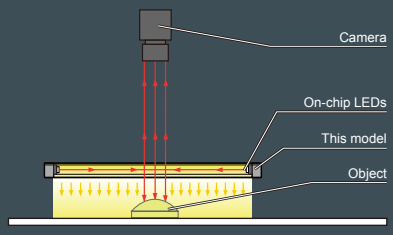
The printed pattern is still visible, making it difficult to see the surface condition.

Infrared Light

The printed pattern is completely eliminated so that the surface condition can be easily inspected.

Illumination structure of LFX2-100

The dot pattern on the surface of the light diffusion plate controls illumination diffusion and transmission. The result is uniformly diffused light over the workpiece. The high output also enables the use of high-speed cameras.



Examples of Flat-Dome Light Images

Application Examples in Packaging

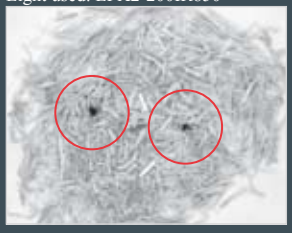
The products are uniformly lighted without showing the printed pattern on the packages.

Light used: LFX2-200RD

Application Examples in Food Industry

Light is transmitted though tea leaves to detect only foreign objects.

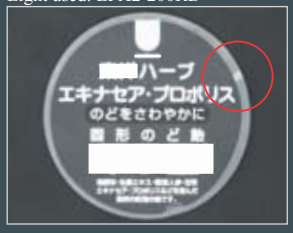
Light used: LFX2-200IR850



Application Examples in Pharmaceuticals

The surface is uniformly lighted to inspect the edge or overlap of transparent film.

Light used: LFX2-200RD



Direct Number : A direct number is a 7-digit number assigned to a CCS product. You can easily access the web page providing information on any desired product by simply entering the direct number in the space provided on the CCS website pages for machine vision. (Refer to the back cover of this brochure.)

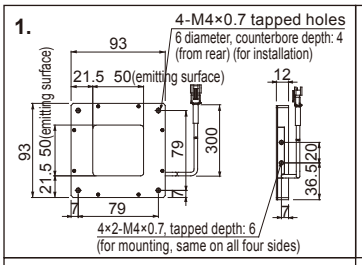
Product Lineup Table

Series	Direct Number	Model Name	Color	Power Consumption	Option	Dimension
LFX2	1004156	LFX2-50RD	●	24V / 11W	—	1
	1004160	LFX2-50SW	○	24V / 6.1W		
	1004164	LFX2-50IR850	●	24V / 6.6W		
	1004157	LFX2-75RD	●	24V / 11W	—	2
	1004161	LFX2-75SW	○	24V / 9.1W		
	1004165	LFX2-75IR850	●	24V / 14W		
	1004158	LFX2-100RD	●	24V / 16W	—	3
	1004162	LFX2-100SW	○	24V / 13W		
	1004166	LFX2-100IR850	●	24V / 14W		
	1004159	LFX2-150RD	●	24V / 21W	—	4
	1004163	LFX2-150SW	○	24V / 19W		
	1004167	LFX2-150IR850	●	24V / 20W		
	1004115	LFX2-200RD	●	24V / 31W	—	5
	1004116	LFX2-200SW	○	24V / 25W		
	1004117	LFX2-200IR850	●	24V / 27W		

*The peak wavelength for Red lights is 635 nm. If a sharp-cut filter is required, use a R60 Filter (optional).
*LFX2 Flat-Dome Lights cannot be used in combination with CCS Strobe Control Unit (PTU2 Series, etc.).
*For further details on these options, refer to page 103.

Dimension Diagrams (Unit: mm)

1.



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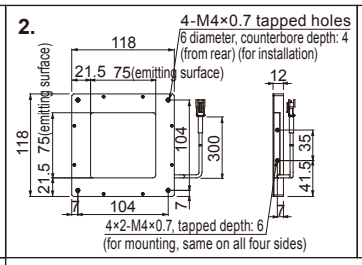

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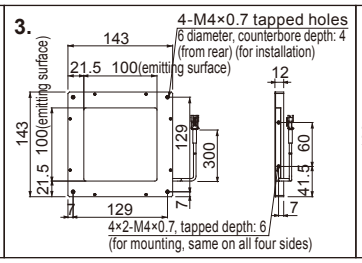

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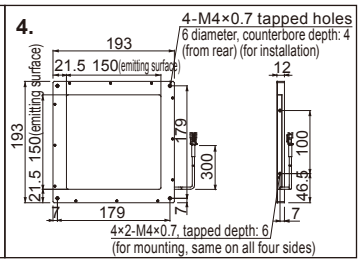

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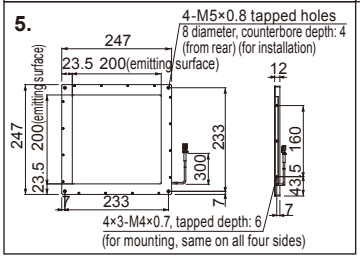

If you register as a CCS member, you can download all materials (such as PDF or DXF drawings and operation manuals) from our website. You can also request us to select the appropriate Light Unit, borrowing demonstration units and to quote the product's price. Please go ahead and register as a member today. (Refer to back cover of this brochure.)