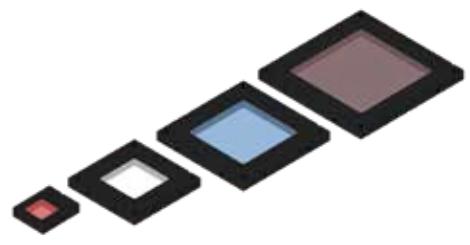


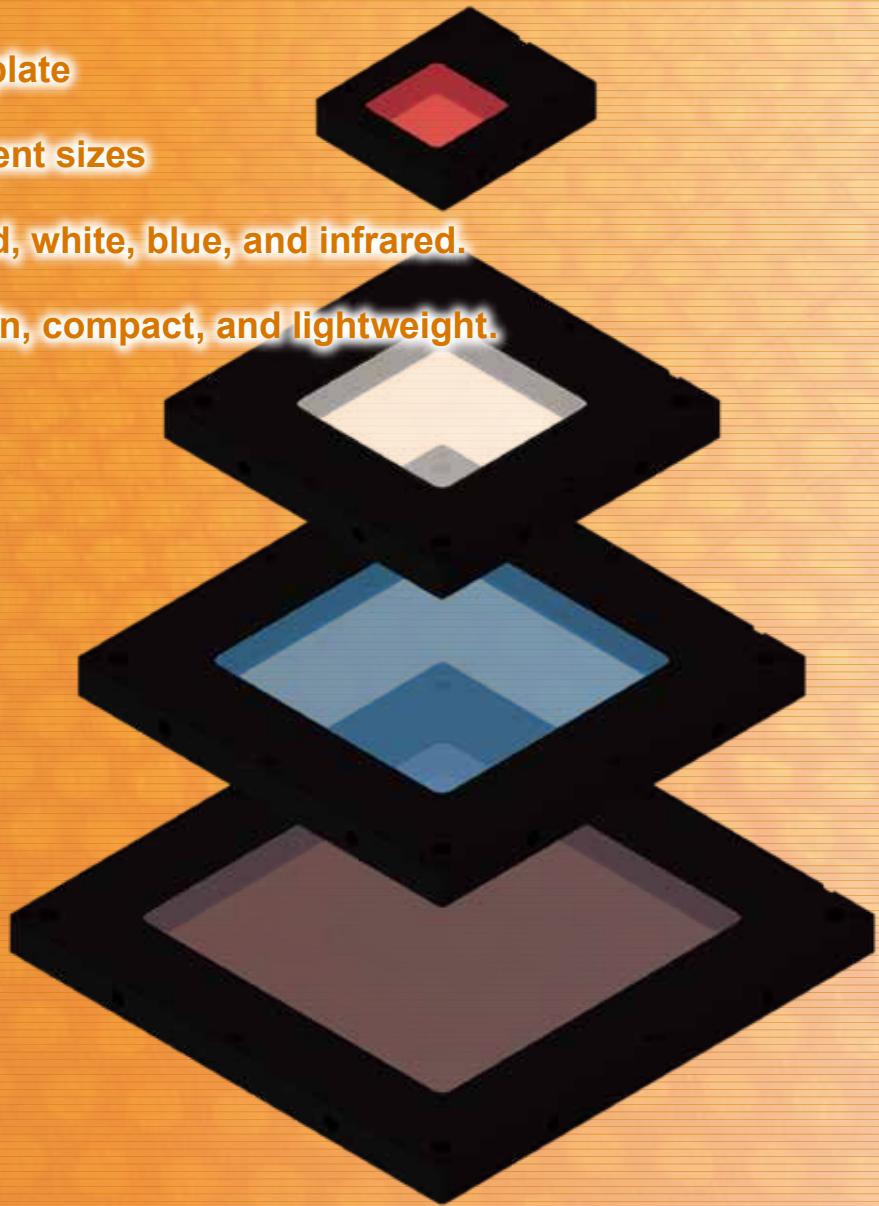
Flat Dome Lights

LFXV Series



Industry Leading Flat Dome Light with a Clear Field of View

- Newly developed light-guiding plate
- Total of 16 models in four different sizes
- Available in four LED colors: red, white, blue, and infrared.
- Space-saving case design is thin, compact, and lightweight.

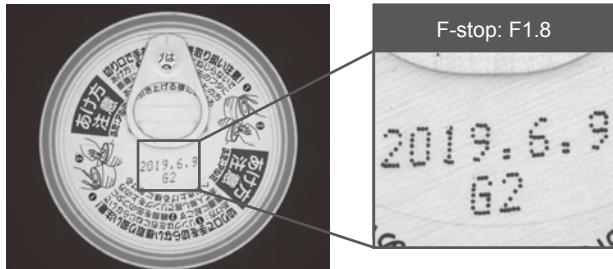


□ Bright and Clear Field of View Brought by New Light-Guiding Plate

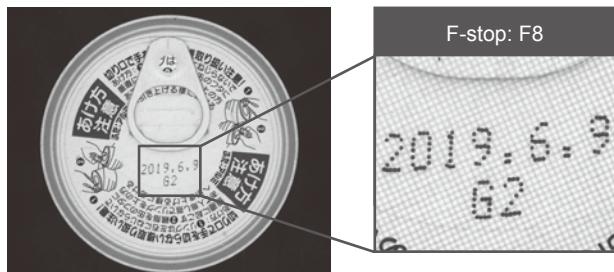
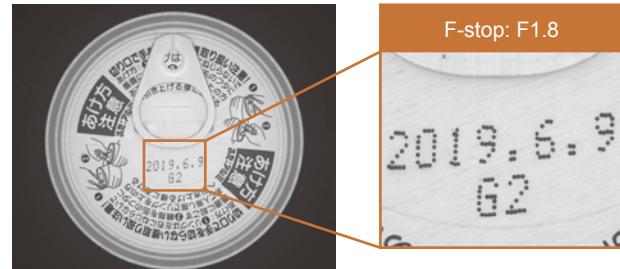
Reduces image irregularities and moire due to the surface dot pattern.

Note: Image irregularities and moire may occur, depending on the capture conditions and the type of the image processing.

● LFX3-100SW (White)



● LFXV-100SW (White)



Imaging environment: 5-megapixel camera (effective pixels: 2448x2048, 3.45x3.45 μ m, 2/3 inch), 5M-compatible lens (focal length: 25 mm, F1.8-16), Distance between the camera and the workpiece: 290 mm, Distance between the Light Unit and the workpiece: 20 mm

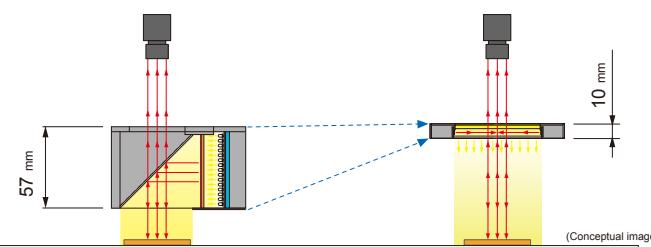
The data included is for reference only. Actual values may vary.

□ 10-mm Thin, Lightweight Case Design for Unparalleled Space-Saving

Achieve illumination similar to Coaxial and Dome Lights in a lighter, more compact unit.

Coaxial Light (LFV3-50)

Flat Dome Light (LFXV-50)



▼ Imaging the Appearance of Button Cell Batteries

● LFV3-50RD (Red)



LWD: 18 mm, Light intensity: 35%

● LFXV-50RD (Red)



LWD: 78 mm, Light intensity: 60%

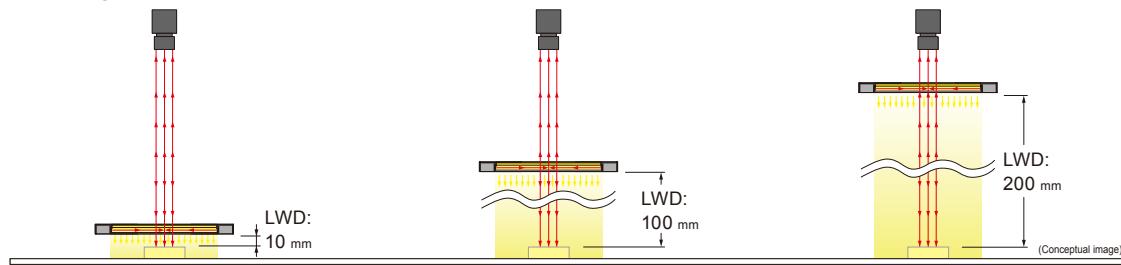
□ Suitable for a Wide Range of Applications

Recreates the effect of Dome Lights when used close to the workpiece.

Recreates the effect of Coaxial Lights when used further from the workpiece.

Imaging Comparison

Changing the distance between the light and the workpiece (LWD) enables optimum imaging for your applications.



▼ Workpiece



At LWD of 10 mm, the whole surface of the workpiece is illuminated uniformly. The bumps are eliminated from the image.



At LWD of 100 mm, the bumps and pull tab are captured.



At LWD of 200 mm, the bumps and pull tab are emphasized.



□ Total of 16 Models in Four Different Sizes

Model name	LED color	Power consumption	Peak wavelength / correlated color temperature	Options	Extension cables	Recommended Control Units	Weight	
LFXV-25RD	Red	24 V / 1.2 W	630 nm	-		 	80 g	
LFXV-25SW	White	24 V / 1.3 W	5,500 K					
LFXV-25BL	Blue	24 V / 1.2 W	465 nm					
LFXV-25IR860	Infrared	24 V / 1.2 W	855 nm					
LFXV-50RD	Red	24 V / 9.1 W	630 nm	-		 	190 g	
LFXV-50SW	White	24 V / 9.9 W	5,500 K					
LFXV-50BL	Blue	24 V / 9.3 W	465 nm					
LFXV-50IR860	Infrared	24 V / 5.7 W	855 nm					
LFXV-75RD	Red	24 V / 14 W	630 nm	-		 	290 g	
LFXV-75SW	White	24 V / 15 W	5,500 K					
LFXV-75BL	Blue	24 V / 14 W	465 nm					
LFXV-75IR860	Infrared	24 V / 12 W	855 nm					
LFXV-100RD	Red	24 V / 16 W	630 nm	-		 	400 g	
LFXV-100SW	White	24 V / 20 W	5,500 K					
LFXV-100BL	Blue	24 V / 19 W	465 nm					
LFXV-100IR860	Infrared	24 V / 12 W	855 nm					

*1 For information on the combination of Light Units and POD-series Control Unit, please refer to our website. <http://www.ccs-grp.com/lnk/qr/pod>

*2 The cables with a model name that ends with "-ME7", "-EL2", "-PF", or "-PF-EL9" are not included.
 *3 The cables with a model name that ends with "-EL2" are not included.

*2 The cables with a model name that ends with "-ME7", "-EL2", "-PF", or "-PF-EL9" are not included.
 *3 The cables with a model name that ends with "-EL2" are not included.

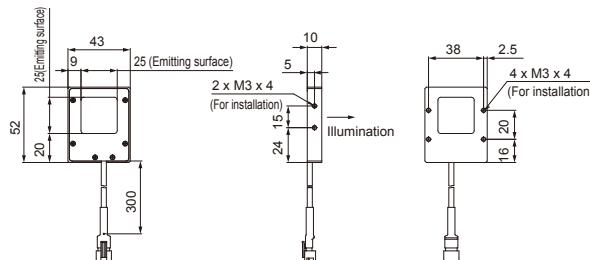
□ Common Specifications

Input voltage (max.)	24 VDC	Operating environment (indoors only)	Temperature: 0 to 40°C, Humidity: 20 to 85%RH (with no condensation)
Connector	SM connector (SMR-03V-B)	Storage environment	Temperature: -20 to 60°C, Humidity: 20 to 85%RH (with no condensation)
Polarity, signal	1: (+), 2: NC, 3: (-)	Cooling method	Natural air-cooling
CE marking	Safety standard: Conforms to EN 62471	Spectral distribution	
Environmental regulations	RoHS compliant		
Case material	Aluminum alloy, Resin (protective plate, light-guiding plate)		
Cable length	300 mm		

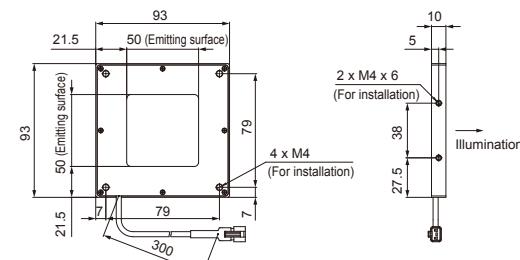
The data included is for reference only. Actual values may vary.

□ Dimensions (mm)

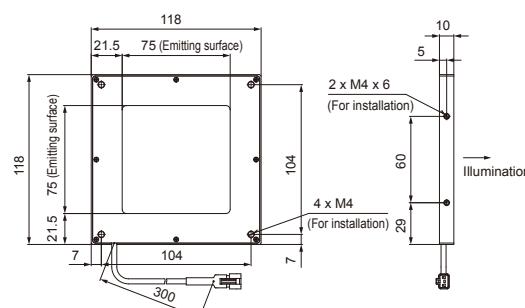
LFXV-25RD/SW/BL/IR860



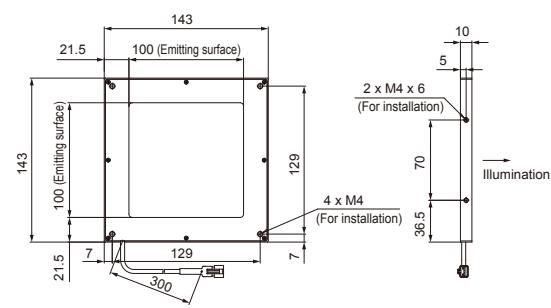
LFXV-50RD/SW/BL/IR860



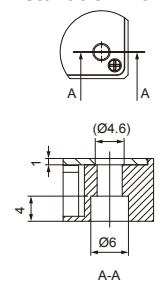
LFXV-75RD/SW/BL/IR860



LFXV-100RD/SW/BL/IR860



Diagrams for 4XM4 Installation Holes



■ Imaging Examples

Imaging the Appearance of Capacitors

■ Workpiece ● Diffuse Ring Light (Red)



Capacitors



Hairline finishing on the surface makes it difficult to read the printed text.

● LFXV-25RD (Red)



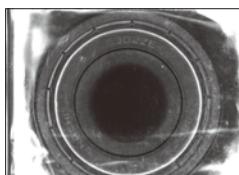
The hairline finishing is no longer visible, making it possible to read the printed text.

Imaging the Appearance of Bearings

■ Workpiece ● Diffuse Ring Light (Red)



Bearings



Due to reflection from the package surface, it is difficult to clearly image the appearance.

● LFXV-100RD (Red)



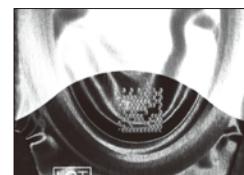
The whole surface of the package is evenly illuminated and the appearance is clearly imaged.

Imaging the Appearance of Contact Lens Packages

■ Workpiece ● Ring Light (Red)



Contact lens



It is difficult to determine the 2-D code due to the glossy and wavy surface.

● LFXV-50RD (Red)



It is possible to determine the 2-D code by evenly illuminating the surface.

Imaging the Printed Text on Food Packages

■ Workpiece ● Diffuse Ring Light (Red)

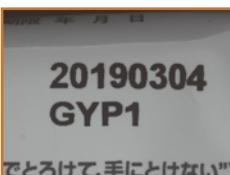


Candies



Due to reflection from the package surface, it is difficult to capture the printed text.

● LFXV-100RD (Red)



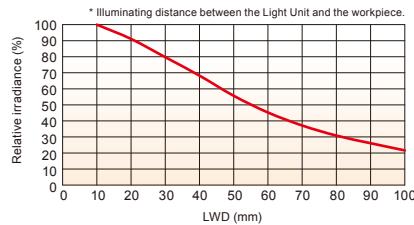
Surface reflection is eliminated and the printed text is cleanly imaged.

■ Data (Representative Examples)

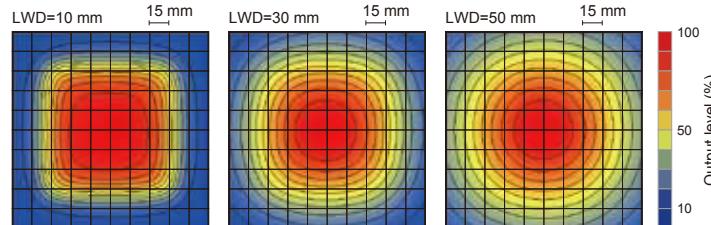
● LFXV-100RD (Red)



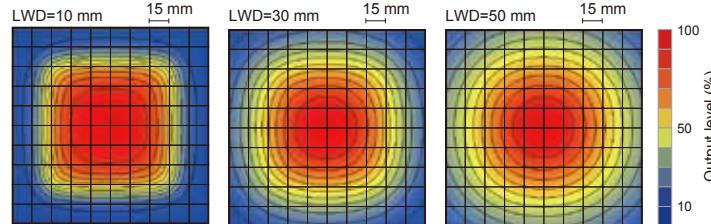
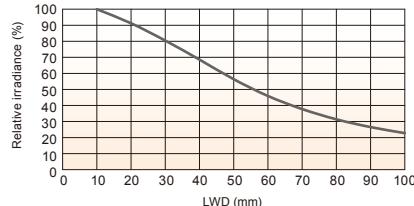
Relative Irradiance Graph (LWD* Characteristics)



Uniformity (Relative Irradiance)



● LFXV-100SW (White)



Dirt or dust on the surface of the emitting surface may affect the captured image.

Handle the emitting surface with care. Make sure no dirt, dust, or fingerprints get on the Light Unit.

- Remove dirt and dust by blowing air rather than touching by hand.
- Use a soft, finely woven cloth to wipe away any marks, such as fingerprints.
- Use a soft, finely woven cloth soaked with diluted neutral detergent to remove any heavy dirt.
- Do not use chemicals such as alcohol to wipe the emitting surface.

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Notes

- To ensure proper and safe use of the product, please read the Instruction Guide completely before using the product.
- The design and specifications of this product are subject to change without notification for product improvement.
- The workpiece imaging examples included in this brochure are intended to serve only as references to help you select a suitable Light Unit. Please verify the functionality and conditions required for your particular application before you make a final selection. The sample workpieces used in this brochure have been processed specifically for sample imaging. They are not intended to represent product quality and performance.



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