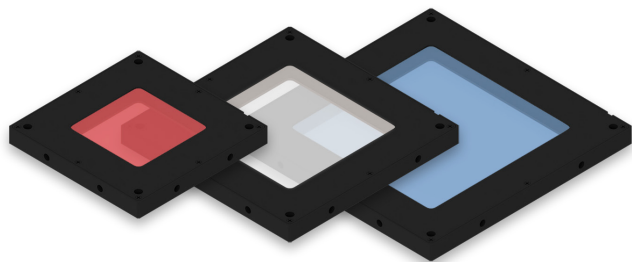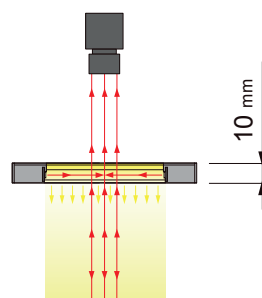# LFXV Series

Product Introduction

CCS Inc., the leading manufacturer of LED Lighting Solutions for Machin Vision, has released the LFXV Series, a renewal of its industry-leading LED Flat Dome Light. This unique flat dome light is uses a dot pattern printed on the light-guiding diffusion plate, giving illumination effects similar to that of coaxial lights and dome lights.

With the new LFXV Series, CCS redesigned the dot pattern, making it barely visible in the acquired images. The series is able to illuminate parts with a high uniform light output, which makes it ideal for inspecting parts with high reflective surfaces or irregularities.
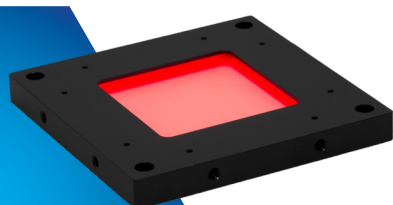
Main Features

- Redesigned light-guiding diffusion plate
- Dot pattern less visible during image capture
- Available in:
  - Red, White, Blue, and IR860
  - Emtting surface up to 200x200mm
- New space-saving design for housing
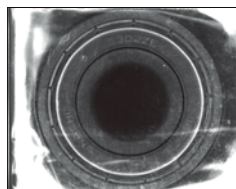
10 mm

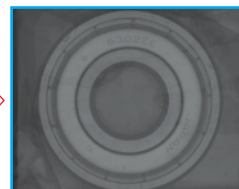## Application Example

LFXV-100RD

▼ **Workpiece**

Bearings

● **Diffuse Ring Light (Red)**

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.

Product Lineup

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	—		PD3	CC-ST-1024	80 g
LFXV-25SW	White	24 V / 1.3 W	5,500 K			PSB	POD *1	
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			PD3	CC-ST-1024	190 g
LFXV-50SW	White	24 V / 9.9 W	5,500 K			PSB	POD *1	
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		FCB *3 Straight Cable	PD3		290 g
LFXV-75SW	White	24 V / 15 W	5,500 K			PSB	POD *1	
LFXV-75BL	Blue	24 V / 14 W	465 nm		FCB-W *4 2-Branch Cable			
LFXV-75IR860	Infrared	24 V / 12 W	855 nm					
LFXV-100RD	Red	24 V / 16 W	630 nm		FCB-F 4-Branch Cable	PD3		400 g
LFXV-100SW	White	24 V / 20 W	5,500 K			PSB	POD *1	
LFXV-100BL	Blue	24 V / 19 W	465 nm		FRCB Robot Cable			
LFXV-100IR860	Infrared	24 V / 12 W	855 nm					
LFXV-150RD	Red	24 V / 28 W	630 nm			PD3		870 g
LFXV-150SW	White	24 V / 30 W	5,500 K			PSB	POD *1	
LFXV-150BL	Blue	24 V / 28 W	465 nm					
LFXV-150IR860	Infrared	24 V / 17 W	855 nm					
LFXV-200X100RD	Red	24 V / 23 W	630 nm			PD3		870 g
LFXV-200X100SW	White	24 V / 30 W	5,500 K			PSB	POD *1	
LFXV-200X100BL	Blue	24 V / 28 W	465 nm					
LFXV-200X100IR860	Infrared	24 V / 17 W	855 nm					
LFXV-200RD	Red	24 V / 31 W	630 nm			PD3		1,300 g
LFXV-200SW	White	24 V / 40 W	5,500 K			PSB *2	POD *1	
LFXV-200BL	Blue	24 V / 38 W	465 nm					
LFXV-200IR860	Infrared	24 V / 23 W	855 nm					

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

*2 Only infrared can be used.

*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
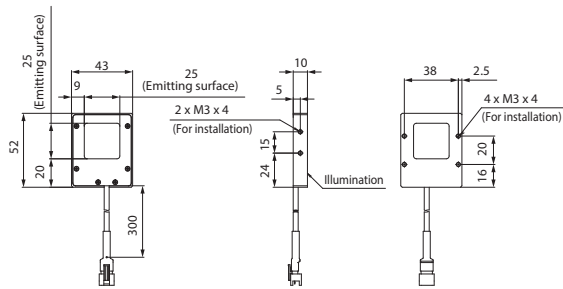
Common specifications

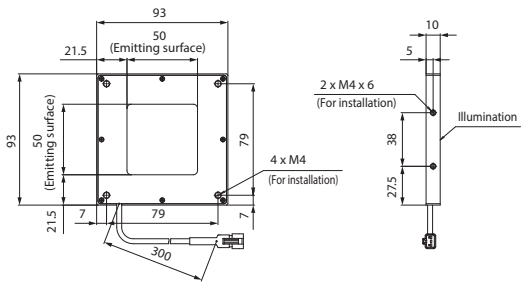|			
Input voltage (max.)	24 VDC	Operating environment (indoors only)	Temperature: 0 to 40°C, Humidity: 20 to 85%RH (with no condensation)
Connector	SM connector (SMR-03V-B)	Storage environment	Temperature: -20 to 60°C, Humidity: 20 to 85%RH (with no condensation)
Polarity, signal	1: (+), 2: NC, 3: (-)	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 diffusion plate)		
Cable length	300 mm		

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

Product Lineup
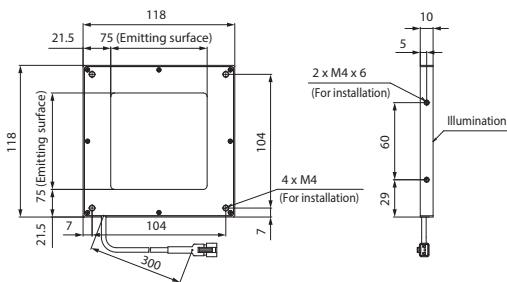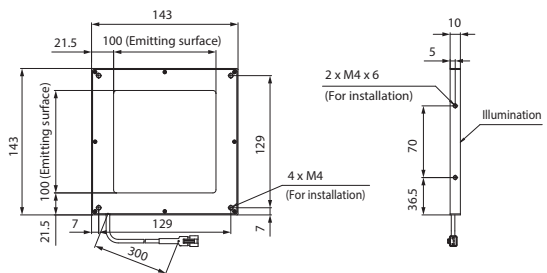
LFXV-25RD/SW/BL/IR860

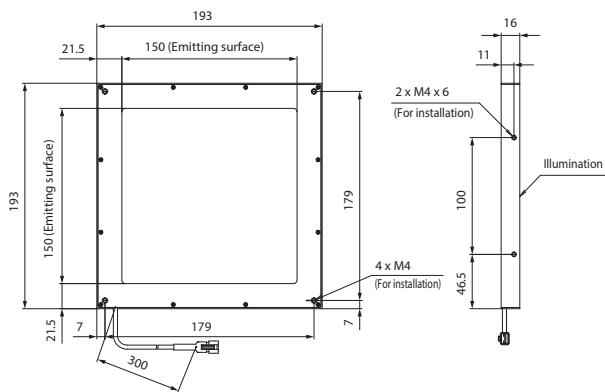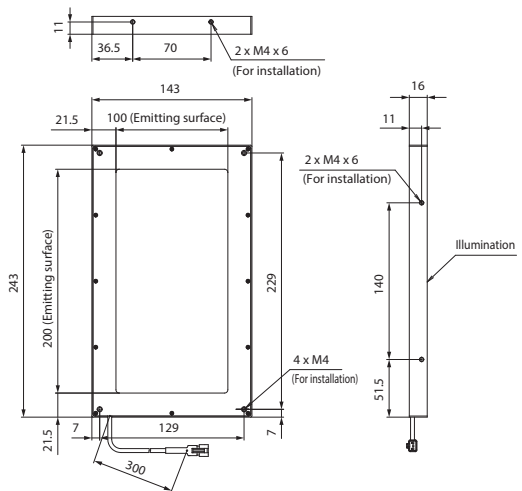LFXV-50RD/SW/BL/IR860
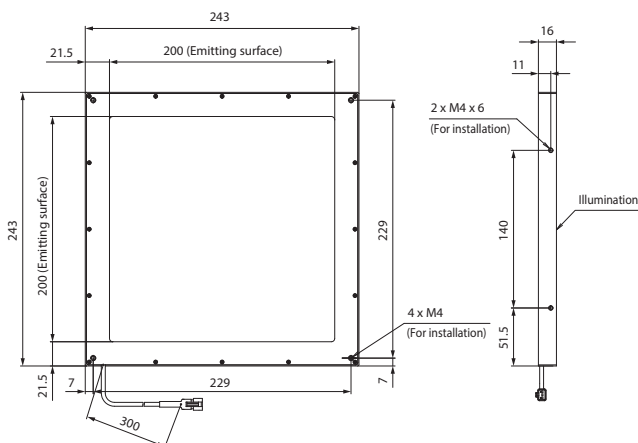

LFXV-75RD/SW/BL/IR860

LFXV-100RD/SW/BL/IR860

LFXV-150RD/SW/BL/IR860

LFXV-200X100RD/SW/BL/IR860

LFXV-200RD/SW/BL/IR860

Diagrams for 4XM4 Installation Holes

4 x M4
(For installation)

LFXV-50/75/100

LFXV-150/200X100/200 *

*Use together with the M4 mounting holes on the sides if securing a heavy lighting fixture.