

# Indirect Dome Lights LDM2 Series

## For inspection of workpieces with curved and glossy surfaces

Perfectly suited for character inspection on a workpiece with a rippled and glossy surface or for illuminating bowl-shaped metal surfaces.



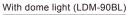
#### **Even light emission with** all direction illumination

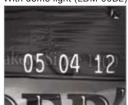
Light generation without unevenness radiated in every direction. A high-intensity type of diffused light illumination. Allows shadowless radiation in applications with fast checking speeds as well.

Suitable for character inspection of workpieces with glossy surface and illuminating bowl-shaped metal surface such as can bottoms and workpieces with mirror finished surface such as ball bearings.

With direct light (LDR-70A-W)







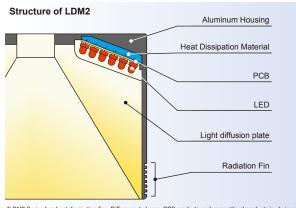


LDM2 Series illuminates light from a wide diffusion area to encompass the entire workpiece.

Curved metal surfaces etc. can be illuminated evenly. The bottom of aluminum cans can be illuminated evenly to highlight the letters only.

#### A heat dissipating architecture is adopted

Utilizing our original heat dissipating architecture, the rise in temperature is suppressed and degradation of intensity is reduced. (Refer to page 103.)



\*LDM2 Series has heat dissipating fins. Difference between CCS products and competitors' products is obvious.

With the conventional construction, the light was not able to dissipate heat with total efficiency due to the gap between the PCB and aluminum housing.

By employing a special heat dissipating enclosure between the PCB and the housing in the new construction, there is substantial absorption of heat generation from LED, and efficient heat conductivity into the housing. This new construction suppresses the temperature rise of LED sharply, providing stable images for a long period of time.

#### **Illumination Structure of LDM2-90**

It irradiates from all the directions of large diffusion side without any lighting unevenness.

#### **Examples of Dome Light Images**

**Electronic Parts Inspection** with ambient light



With direct light, the glare from bumpy and glossy surface disturb the pattern image.

Light used:LDR2-90RD



The diffused light illumination of the dome light emphasize patterns, and eliminates glare.

Light used:LDM2-90RD



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
LDM2	1005542	LDM2-50RD2	•	24V / 3.6W	_	1
	1000994	LDM2-50RD	•	12V / 3.9W		
	1004306	LDM2-50SW2	0	24V / 5.0W		
	1000992	LDM2-50BL		24V / 5.3W		
	1000993	LDM2-50GR				
	1005543	LDM2-90RD2		24V / 14W	_	2
	1001000	LDM2-90RD		12V / 14W		
	1004299	LDM2-90SW2	0	24V / 18W		
	1000997	LDM2-90BL				
	1000999	LDM2-90GR				

Existing RD-type Red Lights will be discontinued at the April 15, 2013. RD2-type Red Lights is recommended as replacement.

The RD-type and RD2-type Lights have different input voltages. Always use a 24-VDC Control Unit with RD2-type Lights. For a comparison between the RD-type and RD2-type Lights, refer to page 1.

#### Dimension Diagrams (Unit: mm)

