



Provides direct light at a low angle from an emitting part directed horizontally



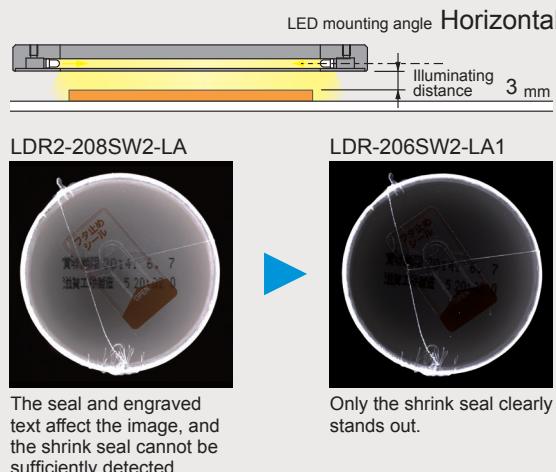
LDR-75RD2-LA1

Applications

Edge detection; inspection for engraving, damage, or stains on metal surfaces; inspection for foreign material on wafers; inspection of bonding on shrink film; engraved character recognition for rubber; etc.

➤ Illuminating Closest to the Workpiece

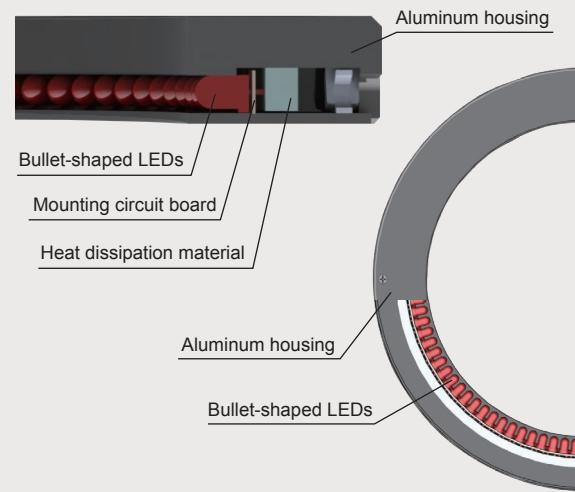
It's capable of illuminating the workpiece from a shorter distance than the LDR2-LA Series. Suitable for imaging fine unevenness, scratches and engraved letters.

Imaging example for the LDR-206SW2-LA1:
Imaging the appearance of food containers

➤ LEDs Mounted Horizontally

Achieved a thin device that is 10 mm thick by mounting LEDs horizontally in one line. Helps save space because it can be installed near the workpiece.

Cross-section image of the LDR-146-LA1



➤ Custom Order Example

Please contact your CCS sales representative.

E.g.: Changed the format to take measures against interference with the device

Format/
materialCreated a light unit with a
shape to match the purposeCut to match the
purpose

Customizable items

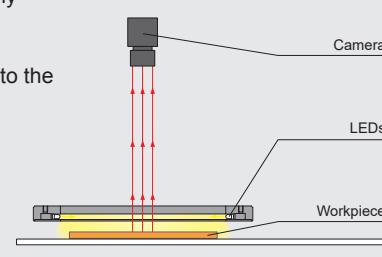
External/internal diameter	Wavelength/ Color
Increase output	Cable length
Illuminating angle	Format/ material
Connector format	Installation/ mounting
Etc.	

➤ Example Configuration

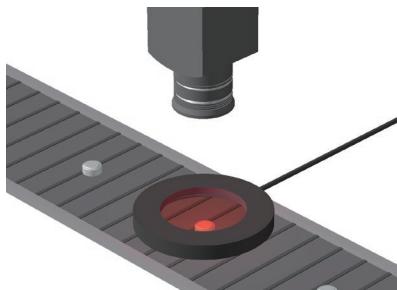
LEDs are arranged
facing horizontally
in a ring shape.

It can be used
extremely close to the
workpiece.

LDR-146-LA1



➤ Imaging Example: Imaging the Appearance of Button Cell Batteries



Workpiece image



Button cell batteries

LED Ring Light

Description	Visual inspection
Workpiece	Button cell batteries
Conventional lighting	LED Ring Light
New lighting	LDR-75RD2-LA1
Result	Extracting the damage

LDR-75RD2-LA1

It is difficult to get an image of the button cell battery outside or damage on the surface.

It is possible to clearly get an image of the outside and damage on the surface.

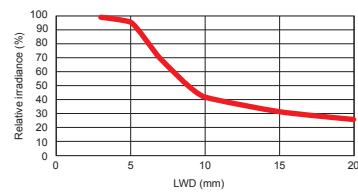
➤ Data: Relative Irradiance Graph and Uniformity (Representative Example)

■ LDR-75RD2-LA1

Relative irradiance graph¹ (LWD characteristics)²

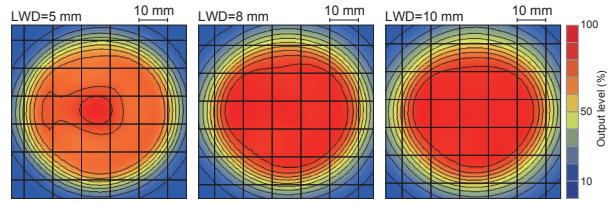
¹ Irradiance on the optical axis

² Illuminating distance from the light unit to the workpiece



The data included is for reference only and does not guarantee the quality of this product.

Uniformity (Relative irradiance)



➤ Lineup

Model Name ¹	Input Voltage	Power Consumption				Options	Extension Cables	Recommended Control Units	Weight
		RD (Red)	SW (White)	BL (Blue)	GR (Green)				
LDR-75□□2-LA1	24 V	2.6 W	3.8 W	3.8 W	3.8 W		FCB ³ Straight Cable		55 g
LDR-96□□2-LA1	24 V	3.1 W	3.8 W	3.8 W	3.8 W		FCB-W ⁴ 2-Branch Cable		100 g
LDR-146□□2-LA1	24 V	4.6 W	6.0 W	6.1 W	6.1 W	Bracket	FCB-F 4-Branch Cable	PD4 PD3 CC-ST-1024 POD ²	160 g *RD is 170 g
LDR-176□□2-LA1	24 V	6.1 W	7.6 W	7.6 W	7.6 W		FRCB Robot Cable		205 g *RD is 210 g
LDR-206□□2-LA1	24 V	7.1 W	9.1 W	9.1 W	9.1 W				220 g *RD is 250 g

Extension Cables ▶ P.361

Control Unit Selection Guide ▶ P.285

List of Control Unit Specifications ▶ P.287

¹ □□ in the model name contains the LED color. (RD: Red, SW: White, BL: Blue, GR: Green)

² For information on the combination of light units and POD Series control unit, please refer to our website. <https://www.ccs-grp.com/lnk/qr/pod>

You can inquire using our website.

Sample Testing

Light Unit Selection

Free Product Trial

Custom Orders

Product Details

Pricing/Quotation

Discontinued Products

Inquire on our website here.
<https://www.ccs-grp.com/contact/>



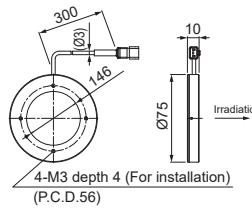
➤ LED Properties

Spectral distribution				
Directional characteristics				

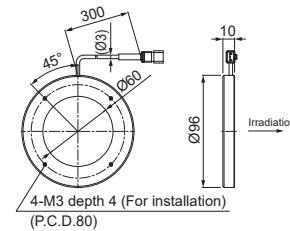
Be sure to read the User Manual included with the product before use and follow the safety precautions upon use.
The data included is for reference only. Actual values may vary.

➤ Dimensions (mm)

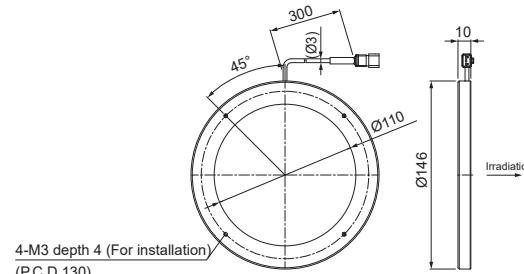
LDR-75RD2-LA1 / SW2-LA1 / BL2-LA1 / GR2-LA1



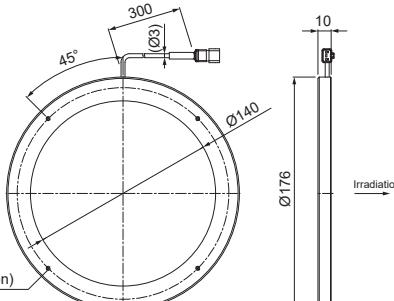
LDR-96RD2-LA1 / SW2-LA1 / BL2-LA1 / GR2-LA1



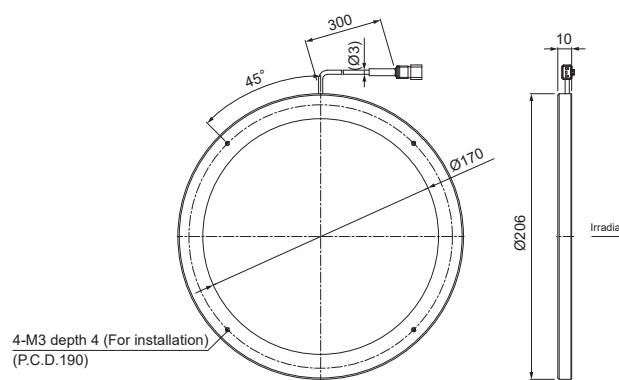
LDR-146RD2-LA1 / SW2-LA1 / BL2-LA1 / GR2-LA1



LDR-176RD2-LA1 / SW2-LA1 / BL2-LA1 / GR2-LA1



LDR-206RD2-LA1 / SW2-LA1 / BL2-LA1 / GR2-LA1



You can change the connectors of the light unit cable. Choose between M12 connectors and flying leads. Refer to P.7 for details.

➤ Options



Combine with the Dome Light HPD2 Series to achieve imaging by light switching and simultaneous lighting.

Light joint bracket

Model name	Applicable Light Unit 1 (Common for all colors)	Applicable Light Unit 2 (Common for all colors)
BK-75-JO	LDR-96-LA1	HPD2-75
BK-100-JO	LDR-146-LA1	HPD2-100
BK-150-JO	LDR-176-LA1	HPD2-150
BK-200-JO	LDR-206-LA1	HPD2-200

▶ P.360