

Ring Lights

LDR2 series

Refer to our website for product details.

CCS LDR2

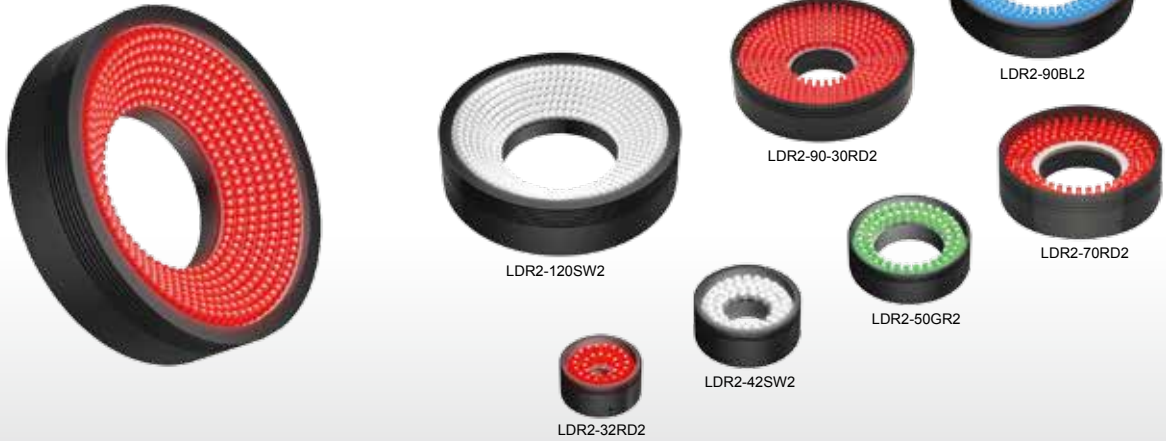
Search



You can also use your smartphone or cell phone.

Use a search engine.

Provides direct light from an angled emitting part



Applications

Character recognition, visual inspection, inspections for damage or stains, reading 2-dimensional code, and inspecting parts on boards, etc.

Standard Ring Lights

Uses a flexible circuit board to achieve the functions needed for a Ring Light. It can illuminate workpieces at an angle and can illuminate the whole workpiece. This alleviates the influence of slight position or inclination deviations in the workpiece and enables stable imaging.

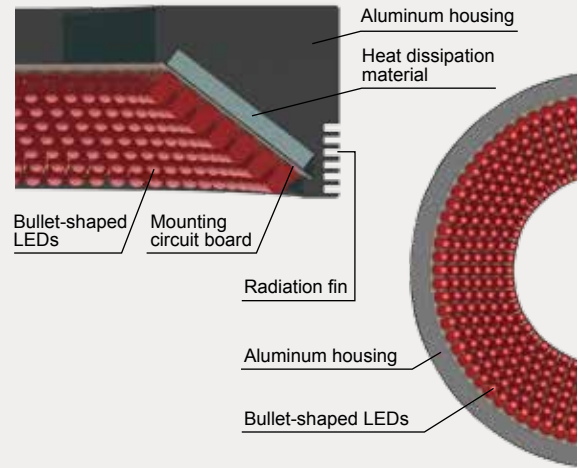
Flexible circuit board



Succeeds in greatly reducing LED's heat

Heat dissipation material is used between the board and the aluminum housing, absorbing heat produced by the LEDs. This succeeds in greatly reducing the creation of heat, which causes the LEDs to deteriorate.

Cross-section image of the LDR2-120



Custom orders

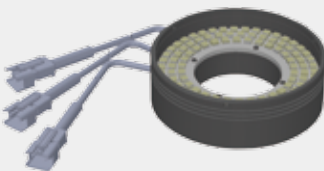
Please contact your CCS sales representative.

E.g.: Different color

Wavelength/Color Creating a full color (RGB) Light Unit

Customizable items

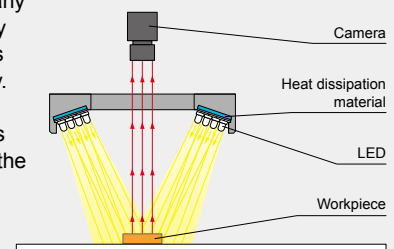
- External/internal diameter
- Wavelength/Color
- Increase output
- Cable length
- Illuminating angle
- Format/material
- Connector format
- Installation/mounting



Example configuration

Bend the flexible circuit board to any shape necessary and mount LEDs with high density. Illuminates so that direct light is concentrated in the center.

LDR2-90



We have various materials.

PDF Drawings

DXF Drawings

3D CAD

Instruction Guides

Product Filers

Imaging Samples

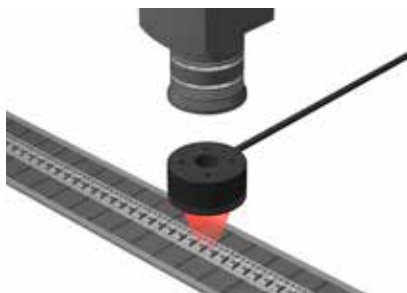
Data Sheets

Examples of Custom Ordered Products

Download here.

<http://www.ccs-grp.com/dl/>

Imaging example : Electrode imaging of electronic parts



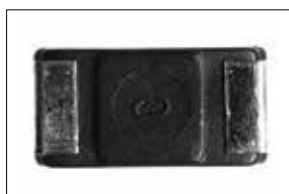
Description	Visual inspection
Workpiece	Electronic parts
Before the proposal	LED Bar Light
After the proposal	LDR2-32RD2
Result	Improved uniformity

Workpiece image



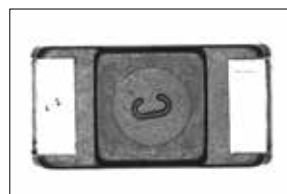
Electronic part

LED Bar Light



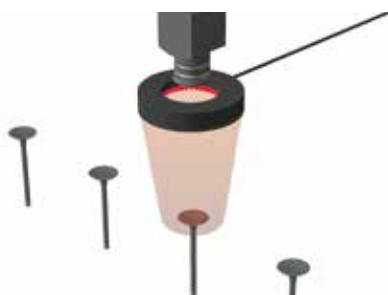
It's difficult to make an image of the electrode part using a Bar Light.

LDR2-32RD2



A Ring Light can illuminate the electrode part evenly and make an image.

Imaging example : Imaging text on an intake valve



Description	Character recognition
Workpiece	Intake valve (automobile part)
Before the proposal	LED Ring Light
After the proposal	LDR2-50RD2
Result	Emphasized characters

Workpiece image



Intake valve

LED Ring Light



It's difficult to clearly recognize the text due to the inner indentation.

LDR2-50RD2



Allows for image that makes the character edges stand out.

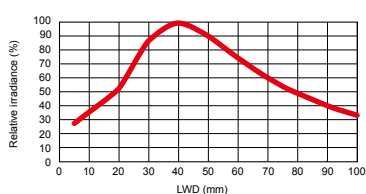
Data: Relative irradiance graph/Uniformity graph (Representative example)

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

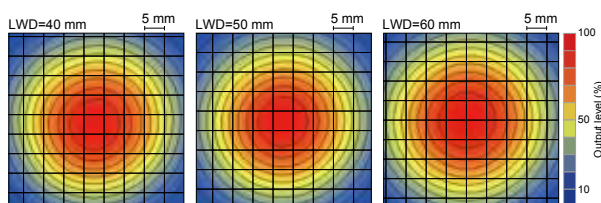
LDR2-50RD2

Relative irradiance graph^{*1} (LWD Characteristics)^{*2}

*1: Irradiance on the optical axis
*2: Illuminating distance from the Light Unit to the workpiece



Uniformity graph (Relative irradiance)



LDR2 series



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CCS LDR2 Search

Use a search engine.



You can also use your smartphone or cell phone.

Lineup * End of the model name: -WD: Wide type

Model name	LED color	Power consumption	Peak wavelength/ correlated color temperature	Options	Recommended Control Units	Weight
LDR2-32RD2	Red	24 V / 1.6 W	630 nm	<input type="checkbox"/> Diffusion plate <input type="checkbox"/> Polarization plate <input type="checkbox"/> Adapter <input type="checkbox"/> Lens attachment ring	<input type="checkbox"/> PD3 <input type="checkbox"/> CC-ST-1024 <input type="checkbox"/> PSB <input type="checkbox"/> PTU2	30 g
LDR2-32SW2	White	24 V / 1.9 W	5,500 K			
LDR2-32BL2	Blue		470 nm			
LDR2-32GR2	Green		525 nm			
LDR2-42RD2	Red	24 V / 2.1 W	630 nm	<input type="checkbox"/> Diffusion plate <input type="checkbox"/> Polarization plate <input type="checkbox"/> Adapter	<input type="checkbox"/> PD3 <input type="checkbox"/> CC-ST-1024 <input type="checkbox"/> PSB <input type="checkbox"/> PTU2	50 g
LDR2-42SW2	White	24 V / 2.7 W	5,500 K			
LDR2-42BL2	Blue		470 nm			
LDR2-42GR2	Green		525 nm			
LDR2-50RD2	Red	24 V / 3.1 W	630 nm	<input type="checkbox"/> Diffusion plate <input type="checkbox"/> Polarization plate <input type="checkbox"/> Adapter <input type="checkbox"/> Lens attachment ring	<input type="checkbox"/> PD3 <input type="checkbox"/> CC-ST-1024 <input type="checkbox"/> PSB <input type="checkbox"/> PTU2	50 g
LDR2-50RD2-WD						
LDR2-50SW2	White	24 V / 3.8 W	5,500 K			
LDR2-50BL2	Blue		470 nm			
LDR2-50GR2	Green		525 nm			
LDR2-70RD2	Red	24 V / 6.1 W	630 nm			
LDR2-70RD2-WD						
LDR2-70SW2	White	24 V / 7.6 W	5,500 K			
LDR2-70BL2	Blue		470 nm			
LDR2-70GR2	Green		525 nm			
LDR2-90RD2	Red	24 V / 11 W	630 nm	<input type="checkbox"/> Diffusion plate <input type="checkbox"/> Polarization plate <input type="checkbox"/> Adapter	<input type="checkbox"/> PD3 <input type="checkbox"/> PSB <input type="checkbox"/> PTU2	170 g
LDR2-90RD2-WD						
LDR2-90SW2	White	24 V / 14 W	5,500 K			
LDR2-90BL2	Blue		470 nm			
LDR2-90GR2	Green		525 nm			
LDR2-90-30RD2	Red	24 V / 14 W	630 nm			
LDR2-90-30SW2	White	24 V / 18 W	5,500 K			
LDR2-90-30BL2	Blue	24 V / 17 W	470 nm			
LDR2-90-30GR2	Green		525 nm			
LDR2-120RD2-WD	Red	24 V / 24 W	630 nm	<input type="checkbox"/> Diffusion plate <input type="checkbox"/> Polarization plate <input type="checkbox"/> Adapter	<input type="checkbox"/> PD3 <input type="checkbox"/> PSB <input type="checkbox"/> PTU2*	510 g
LDR2-120SW2	White	24 V / 28 W	5,500 K			
LDR2-120BL2	Blue	24 V / 26 W	470 nm			
LDR2-120GR2	Green		525 nm			

Extension Cables ▶ P.222

Control Unit Selection Guide ▶ P.181

Control Unit Page ▶ P.185

LED properties

Light spectrum

If using a sharp-cut filter, please use the R60 (option). For details about the sharp-cut filter, refer to P.215.

Directional characteristics

Directional characteristics

Directional characteristics

Directional characteristics

Directional characteristics

Be sure to read the "Instruction Guide" included with the product before use and observe cautionary information. The data included is for reference only and does not guarantee the quality of this product.

We have various materials.

- PDF Drawings
- DXF Drawings
- 3D CAD
- Instruction Guides
- Product Filers
- Imaging Samples
- Data Sheets
- Examples of Custom Ordered Products

Download here. <http://www.ccs-grp.com/dl/>

Options



Can prevent glare, which is a problem when making images of glossy workpieces.

Diffusion plate

An adapter is required when installing a diffusion plate.

Model name	Applicable Light Unit (Common for all colors)
DF-LDR-32	LDR2-32
DF-LDR-42	LDR2-42
DF-LDR-50	LDR2-50
DF-LDR-70*	LDR2-70
DF-LDR-90	LDR2-90
DF-LDR-120-45	LDR2-120

* The DF-LDR-70 does not require an adapter. Directly affix it to the Light Unit.

► P.216



Use with a polarization filter to remove the light's surface reflection.

Polarization plate

An adapter is required when installing a polarization plate.

Model name	Applicable Light Unit (Common for all colors)
PL-LDR-32	LDR2-32
PL-LDR-42	LDR2-42
PL-LDR-50	LDR2-50
PL-LDR2-70*	LDR2-70
PL-LDR-90	LDR2-90
PL-LDR-120-40	LDR2-120

* The PL-LDR2-70 includes an adapter for attachment.

► P.217



Use when installing a diffusion plate or polarization plate to the Light Unit.

Adapter

Model name	Applicable Light Unit (Common for all colors)
AD-LDR-32	LDR2-32
AD-LDR-42	LDR2-42
AD-LDR-50	LDR2-50
AD-LDR-90	LDR2-90
AD-LDR-120	LDR2-120

► P.221



Can directly install the Light Unit to the screw section for the lens filter. Perfect for environments with narrow installation spots.

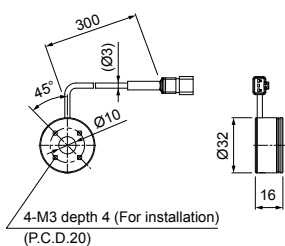
Lens attachment ring

Model name	Note	Applicable Light Unit (Common for all colors)
MR-LDR-32-M25	M25.5 P0.5	LDR2-32
MR-LDR-32-M27	M27.0 P0.5	
MR-LDR-32-M30	M30.5 P0.5	LDR2-50
MR-LDR-50-M25	M25.5 P0.5	
MR-LDR-50-M27	M27.0 P0.5	
MR-LDR-50-M30	M30.5 P0.5	

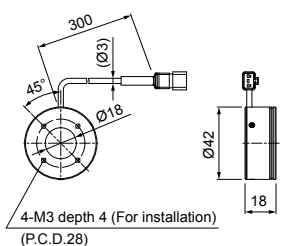
► P.221

Dimensions (mm)

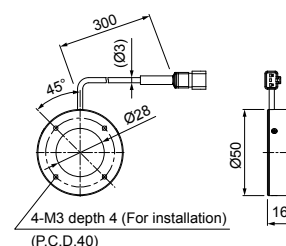
LDR2-32RD2/SW2/BL2/GR2



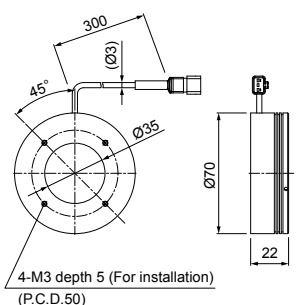
LDR2-42RD2/SW2/BL2/GR2



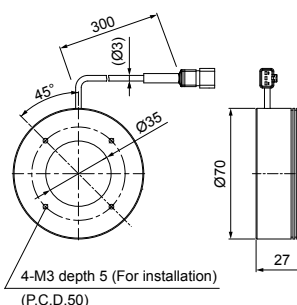
LDR2-50RD2/RD2-WD/SW2/BL2/GR2



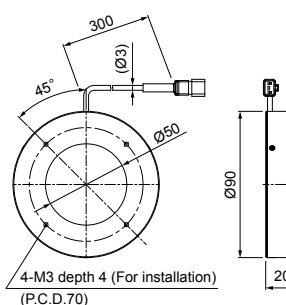
LDR2-70RD2/RD2-WD



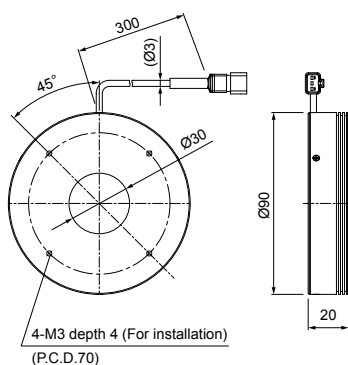
LDR2-70SW2/BL2/GR2



LDR2-90RD2/RD2-WD/SW2/BL2/GR2

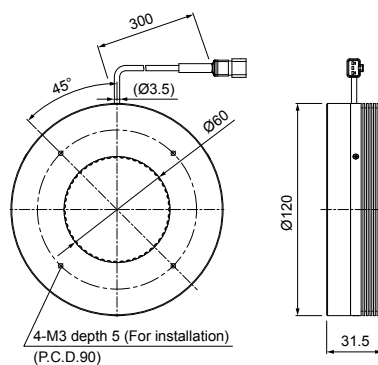


LDR2-90-30RD2/SW2/BL2/GR2



* Cable diameter of LDR2-90-30SW2/BL2/GR2 is Ø3.5.

LDR2-120RD2-WD/SW2/BL2/GR2



You can change the connectors of the Light Unit cable. Choose between M12 connectors and flying leads. Refer to P.125 for details.

You can inquire using our website.

Requests for
Light Unit
Selection

Requests for
Loan
Products

Requests for
Estimates

Requests for
a Catalog

Product
Inquiries

Other
Inquiries

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