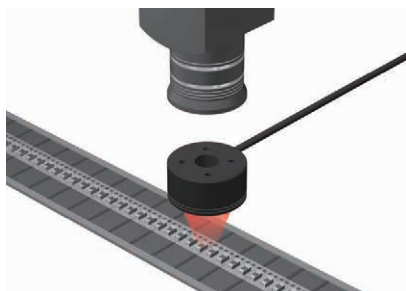


➤ Imaging Example: Imaging Electrodes of Electronic Parts



Description	Visual inspection
Workpiece	Electronic parts
Conventional lighting	LED Bar Light
New lighting	LDR2-32RD2
Result	Improved uniformity

Workpiece image



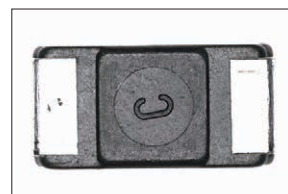
Electronic parts

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 Intake Valves



Description	Character recognition
Workpiece	Intake valves (automobile parts)
Conventional lighting	LED Ring Light
New lighting	LDR2-50RD2
Result	Emphasized characters

Workpiece image



Intake valves

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 and Uniformity (Representative Example)

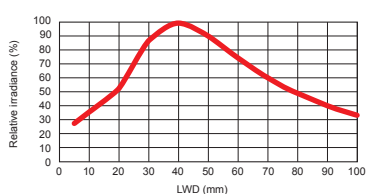
The data included is for reference only. Actual values may vary.

LDR2-50RD2

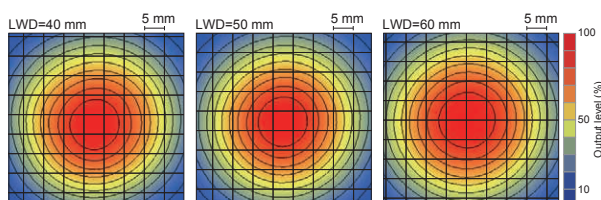
Relative irradiance graph^{*1}
(LWD characteristics)^{*2}

^{*1} Irradiance on the optical axis

^{*2} Illuminating distance from the light unit to the workpiece



Uniformity (Relative irradiance)



You can inquire
using our website.

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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/>

LDR2	Ring (Direct)
LDR2-LA	
LDR-LA1	
SQR	
SQR-TP	
HLDR3	Ring (Convergent / Diffused)
HPR2	
LFR	
LKR	
FPR	
FPQ3	Square
LDL2	Bar
LDLB	
HLDL3	
LB	
TH2 (5 types)	Flat
LFL	
HPD2	Dome
LDM2	
LAV	
PDM	
LFV3	
LFV3-PT	
LFV3	Coaxial
LFV3-G	
MSU	Coaxial
MFU	
PF	Strobe
HLDR-IP	Water-proof
HSL-PCL	
Small COB Lights	COB
UV3/VL3	UV / Violet
UV	
LNSP-UV3-FN	
IR2 (Under 1000-nm Type)	Infrared
IR (Over 1000-nm Type)	
CIR	
IU	Intensity Control
HLV3	Spot, Etc.
LV	
LSP	
HFS/HFR	
HLV3-22-4-NR	
HLV3-3M-RGB-4	
PFBR-600SW2	
PFBR-150	
PFBR3	
LNLP	Line (Convergent)
LNLP2	
Coaxial Units	
LNLP-FN	
LN/LN-HK	
LNLD	Line (Diffused)
LNLD2	
LT	
LNLD	
LFV3 (Rectangular Type)	
TH2 (Rectangular Type)	
LNLDG	Line (Oblique Angled)
LNIS2	
LNIS	
LNIS-FN	
Telecentric Lens	Lenses
Macro Lens	



Introduction to Half Ring Lights (Custom Order Example)

LDR2-HF Series

It has a space-saving design that can be installed and used in a limited space

- The contrast can be increased by illuminating only the required parts
- Can be installed in a device with limited space and illuminates the area to be observed in pinpoint
- Can be customized according to the application such as emission color and size



LDR2-50SW2-HF

Custom order products

The warranty period of the custom order product is different from that of the CCS standard products. Contact our local sales office for details.

Lineup

End of the model name: -WD: Wide type

Classification	Model Name *1	Input Voltage	Power Consumption				Options		Extension Cables	Recommended Control Units	Weight	
			RD (Red)	SW (White)	BL (Blue)	GR (Green)						
Standard products	LDR2-32 □□ 2	24 V	1.6 W	1.9 W	1.9 W	1.9 W	Diffusion Plate Adapter	Polarizing Plate Lens attachment ring	FCB*4 Straight Cable FCB-W*5 2-Branch Cable FCB-F 4-Branch Cable FRCB Robot Cable	PD4 PD3 CC-ST-1024 POD*2	30 g	
	LDR2-42 □□ 2	24 V	2.1 W	2.7 W	2.7 W	2.7 W	Diffusion Plate Adapter	Polarizing Plate		PD4 PD3	50 g	
	LDR2-50 □□ 2	24 V	3.1 W	3.8 W	3.8 W	3.8 W	Diffusion Plate Adapter	Polarizing Plate Lens attachment ring		CC-ST-1024	50 g	
	LDR2-50RD2-WD	24 V	3.1 W	—	—	—					120 g *RD is 110 g	
	LDR2-70 □□ 2	24 V	6.1 W	7.6 W	7.6 W	7.6 W					110 g	
	LDR2-70RD2-WD	24 V	6.1 W	—	—	—	Diffusion Plate Polarizing Plate					
	LDR2-90 □□ 2	24 V	11 W	14 W	14 W	14 W	Diffusion Plate Adapter Polarizing Plate			*4 The cables with a model name that ends with "-ME7*","-EL2*","-PF*", or "-PF-EL9" are not included. *5 The cables with a model name that ends with "-EL2" are not included.	PD4 PD3 POD*2	170 g
	LDR2-90RD2-WD	24 V	11 W	—	—	—						220 g
	LDR2-90-30 □□ 2	24 V	14 W	18 W	17 W	17 W						500 g
	LDR2-120 □□ 2	24 V	—	28 W	26 W	26 W						510 g
LDR2-120RD2-WD	24 V	24 W	—	—	—							
Custom order products	LDR2-32 □□ 2-HF	24 V	*3	1.2 W	*3	*3	*3			PD4 PD3 CC-ST-1024 POD	*3	
	LDR2-50 □□ 2-HF	24 V	*3	1.9 W	1.9 W	*3						
	LDR2-70 □□ 2-HF	24 V	*3	3.5 W	3.5 W	*3						

Extension Cables ▶ P.371

Control Unit Selection Guide ▶ P.305

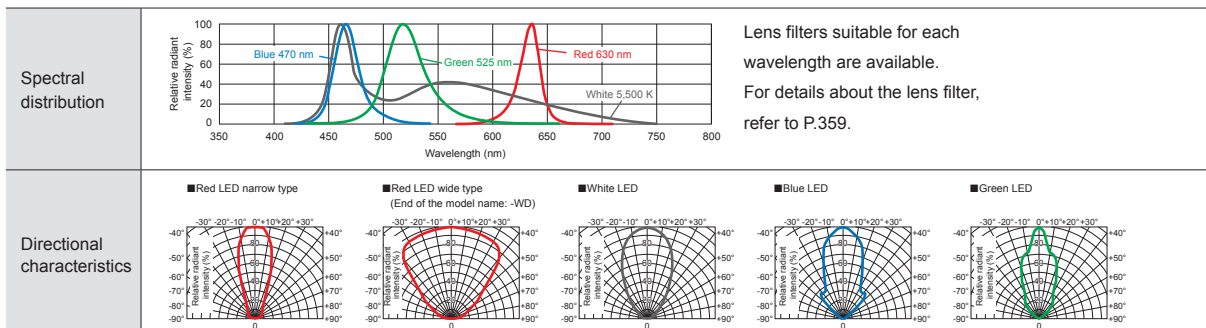
List of Control Unit Specifications ▶ P.307

*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/qv/pod>

*3 This product is custom-made. Contact our local sales office for details.

LED Properties



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.

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*1	LDR2-70
DF-LDR-90	LDR2-90
DF-LDR-90-H28*2	LDR2-90-30
DF-LDR-120-45	LDR2-120

*1 DF-LDR-70 does not require an adapter. It is fixed to direct lighting.

*2 This is a custom order product. Contact our local sales office for details.

▶ P.363



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

Polarizing plate

An adapter is required when installing a polarizing 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*1	LDR2-70
PL-LDR-90	LDR2-90
PL-LDR-90-H28*2	LDR2-90-30
PL-LDR-120-40	LDR2-12

*1 PL-LDR2-70 comes with a mounting adapter.

*2 This is a custom order product. Contact our local sales office for details.

▶ P.365



Use when installing a diffusion plate or polarizing 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 LDR2-90-30
AD-LDR-120	LDR2-120

▶ P.368



Light can be directly mounted to the filter thread of the lens. Suitable for environments with limited installation space.

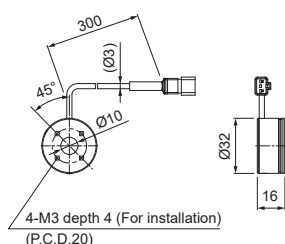
Lens attachment ring

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	

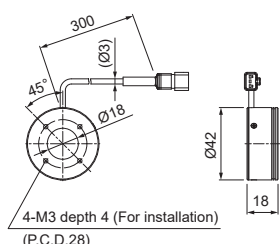
▶ P.368

Dimensions (mm)

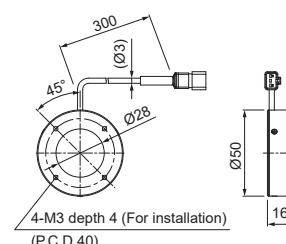
LDR2-32RD2/SW2/BL2/GR2



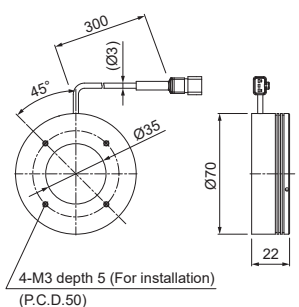
LDR2-42RD2/SW2/BL2/GR2



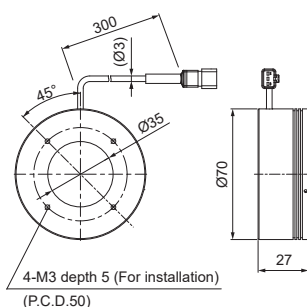
LDR2-50RD2/RD2-WD/SW2/BL2/GR2



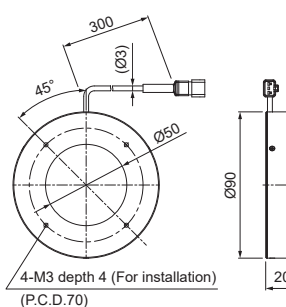
LDR2-70RD2/RD2-WD



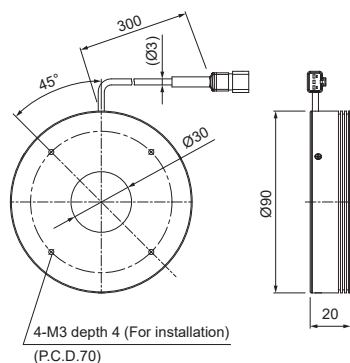
LDR2-70SW2/BL2/GR2



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

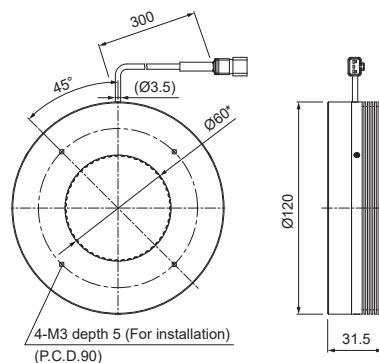


LDR2-90-30RD2/SW2/BL2/GR2



The cable diameter of LDR2-90-30SW2/BL2/GR2 is Ø3.5.

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



* The inside diameter will be around Ø56 mm due to the protruding LED.

You can change the connectors of the light unit cable. Choose between M12 connectors and flying leads. Refer to P.19 for details.

LDR2	Ring (Direct)
LDR2-LA	SQR
SQR-TP	Ring (Convergent/Diffused)
HLDR3	Ring (Convergent/Diffused)
HPR2	Ring (Convergent/Diffused)
LFR	Ring (Convergent/Diffused)
LKR	Ring (Convergent/Diffused)
FPR	Ring (Convergent/Diffused)
FPQ3	Square
LDL2	Bar
LDLB	Bar
HLDL3	Bar
LB	Bar
TH2 (5 types)	Flat
LFL	Flat
HPD2	Dome
LDM2	Dome
LAV	Dome
PDM	Dome
LFV3	Coaxial
LFV3-G	Coaxial
MSU	Coaxial
MFU	Coaxial
PF	Strobe
HLDR-IP	Water-proof
HSL-PCL	Water-proof
Small COB Lights	COB
UV3/VL3	UV / Violet
LNSP-UV3-FN	UV / Violet
IR2 (Under 1000-nm Type)	Infrared
IR (Over 1000-nm Type)	Infrared
CIR	Infrared
IU	Intensity Control
HLV3	Spot, Etc.
LV	Spot, Etc.
LSP	Spot, Etc.
HFS/HFR	Spot, Etc.
HLV3-22-4-NR	Spot, Etc.
HLV3-3M-RGB-4	Spot, Etc.
PFBR-600SW2	Spot, Etc.
PFBR-150	Spot, Etc.
PFBR3	Spot, Etc.
LNLP	Line (Convergent)
LNLP2	Line (Convergent)
Coaxial Units	Line (Convergent)
LNLP-FN	Line (Convergent)
LN/LN-HK	Line (Convergent)
LNLD	Line (Diffused)
LNLD2	Line (Diffused)
LT	Line (Diffused)
LNLD	Line (Diffused)
LFV3 (Rectangular Type)	Line (Diffused)
TH2 (Rectangular Type)	Line (Diffused)
LNLDG	Line (Oblique Angled)
LNLD2	Line (Oblique Angled)
LNLD	Line (Oblique Angled)
LNLD-FN	Line (Oblique Angled)
Telecentric Lens	Lenses
Macro Lens	Lenses

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