

Ring Lights

LKR series

Provides diffused light from an angled emitting surface

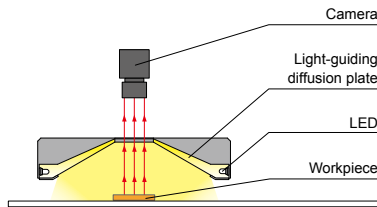


Applications Soldering inspection, parts identification with color, inspection for stains on glossy surfaces, character recognition on metal parts, dent inspection on metal parts, etc.

Features

LEDs embedded around a circular light-guiding diffusion plate.
Uniformly diffused light from an emitting surface angled with respect to the workpiece.

Example configuration (LKR-125)



We accept custom orders.
Please feel free to inquire.

- Shape modifications
- Brightness increases
- Changes in wavelength, etc.

Imaging example: Imaging of soldering at the cap of a light bulb

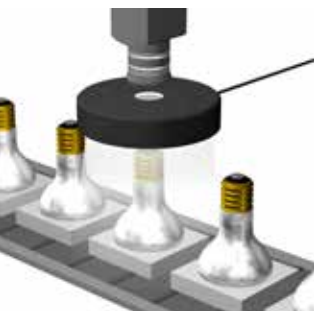


Workpiece: Light bulb

LED Diffused Lighting



It is difficult to evenly illuminate the whole solder.



LKR-125SW2



It is possible to evenly illuminate the whole solder, including the cap.

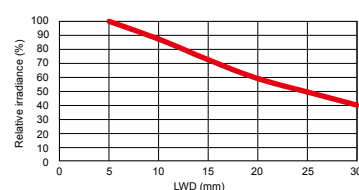
Data: Relative irradiance graph and uniformity (Representative example)

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

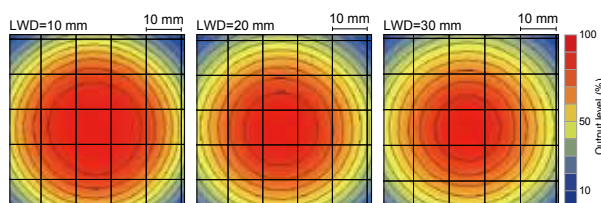
LKR-70RD2

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

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



Uniformity (Relative irradiance)



LDR2	Direct Lighting
LDR2-LA	Direct Lighting
LDR-LA1	Direct Lighting
SQR	Direct Lighting
SQR-TP	Direct Lighting
HPR2	Diffused Lighting
LFR	Diffused Lighting
LKR	Diffused Lighting
FPR	Diffused Lighting
FPQ2	Diffused Lighting
LDL2	Direct Lighting
LDLB	Direct Lighting
HLDL2	Direct Lighting
HL	Direct Lighting
TH2 (5 types)	Direct Lighting
TH	Direct Lighting
LFL	Direct Lighting
HPD2	Diffused Lighting
LDM2	Diffused Lighting
LAV	Diffused Lighting
PDM	Diffused Lighting
LFX3	Diffused Lighting
LFX3-PT	Diffused Lighting
LFX2	Diffused Lighting
LFV3	Diffused Lighting
MSU	Collimated Lighting
MFU	Collimated Lighting
PF	Strobe Lighting
HLDR-IP/ IQ/HSL-PCL	Water-proof
UV2	Ultraviolet Lighting
UV	Ultraviolet Lighting
LNSP-UV-FN	Ultraviolet Lighting
IR2	Infrared Lighting
IU	Intensity Control
HLV2	Spot Lighting, Etc.
LV	Spot Lighting, Etc.
LSP	Spot Lighting, Etc.
HFS/HFR	Spot Lighting, Etc.
HLV2-NR	Spot Lighting, Etc.
HLV2-3M-RGB-3W	Spot Lighting, Etc.
PFBR	Spot Lighting, Etc.
PFB2	Spot Lighting, Etc.
LNLP	Convergent Lighting
LNSP2	Convergent Lighting
LNSP	Convergent Lighting
Coaxial Units	Convergent Lighting
LNSP-FN	Convergent Lighting
LN/LN-HK	Convergent Lighting
LNSD	Convergent Lighting
LND2	Diffused Lighting
HLND	Diffused Lighting
LT	Diffused Lighting
LNV/HLDN	Diffused Lighting
LNDG	Oblique Angled Lighting
LNIS	Oblique Angled Lighting
LNIS-FN	Oblique Angled Lighting
Telecentric Lens	Lenses
Macro Lens	Lenses

Lineup

Model name	LED color	Power consumption	Peak wavelength/ correlated color temperature	Options	Extension cables	Recommended Control Units	Weight
LKR-70RD2	Red	24 V / 2.6 W	630 nm	-	<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">FCB*2 Straight Cable</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">FCB-W 2-branch Cable</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">FCB-F 4-branch Cable</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">FRCB Robot Cable</div> <p>*2 The cables with a model name that ends with "-ME7" or "-EL2" are not included.</p>	<div style="border: 1px solid black; padding: 2px; margin-right: 5px;">PD3</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">CC-ST-1024</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">PSB</div> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">POD*1</div>	125 g
LKR-70SW2	White	24 V / 3.8 W	5,500 K				130 g
LKR-70BL2	Blue		470 nm				125 g
LKR-70GR2	Green	24 V / 2.6 W	525 nm				140 g
LKR-70-8RD2	Red		630 nm				
LKR-70-8SW2	White		5,500 K				
LKR-70-8BL2	Blue	24 V / 3.8 W	470 nm				295 g
LKR-70-8GR2	Green		525 nm				
LKR-125RD2	Red	24 V / 4.6 W	630 nm				300 g
LKR-125SW2	White	24 V / 5.7 W	5,500 K				490 g
LKR-125BL2	Blue		470 nm				
LKR-125GR2	Green		525 nm				

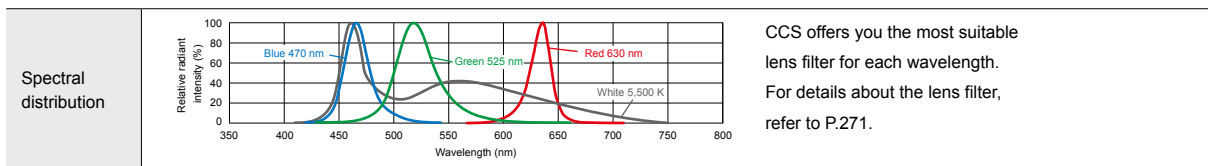
Extension Cables ▶ P.280

Control Unit Selection Guide ▶ P.229

List of Control Unit Specifications ▶ P.231

*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>

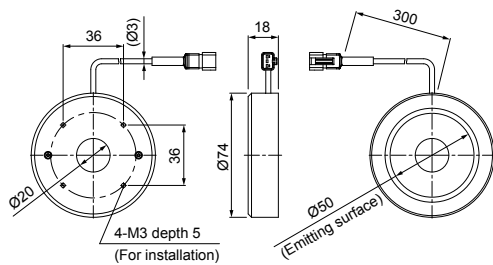
LED properties



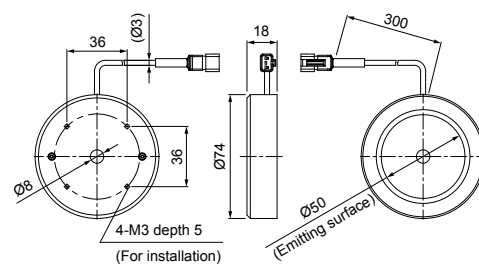
Be sure to read the "Instruction Guide" included with the product before use and follow the safety precautions upon use. The data included is for reference only. Actual values may vary.

Dimensions (mm)

LKR-70RD2/SW2/BL2/GR2

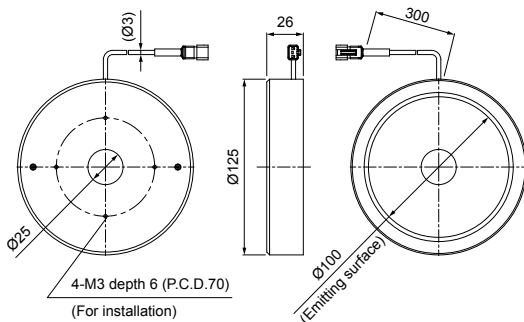


LKR-70-8RD2/SW2/BL2/GR2



The emitting surface for the LKR-70-8SW2/BL2/GR2 is Ø49.2.

LKR-125RD2/SW2/BL2/GR2



You can change the connectors of the Light Unit cable. Choose between M12 connectors and flying leads. Refer to P.5 for details.