

LDR2	Direct Lighting
LDR2-LA	Direct Lighting
LDR-LA1	Direct Lighting
SQR	Direct Lighting
SQR-TP	Direct Lighting
HLDR-IP	Convergent Lighting
HPR2	Convergent Lighting
HPR	Convergent Lighting
LFR	Diffused Lighting
LKR	Diffused Lighting
FPR	Diffused Lighting
FPQ2	Diffused Lighting
LDL2	Direct Lighting
LDLB	Direct Lighting
HLDL2	Direct Lighting
TH	Direct Lighting
LFL	Direct Lighting
HPD2	Diffused Lighting
HPD	Diffused Lighting
LDM2	Diffused Lighting
LAV	Diffused Lighting
PDM	Diffused Lighting
LFX2	Diffused Lighting
LFX3	Diffused Lighting
LFV2	Diffused Lighting
MSU	Collimated Lighting
MFU	Collimated Lighting
UV2	Ultraviolet Lighting
UV	Ultraviolet Lighting
LNSP-UV-FN	Ultraviolet Lighting
IR2	Infrared Lighting
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.
PFB2	Spot Lighting, Etc.
PFBR	Spot Lighting, Etc.
LNSP	Convergent Lighting
CU-LNSP	Convergent Lighting
LNSP-FN	Convergent Lighting
LN/LN-HK	Convergent Lighting
LNSD	Diffused Lighting
LND2	Diffused Lighting
HLND	Diffused Lighting
LT	Diffused Lighting
LNW/HLDN	Diffused Lighting
LNIS	Oblique Angled Lighting
LNIS-FN	Oblique Angled Lighting
Telecentric Lens	Lenses
Macro Lens	Lenses

Ring Lights

LFR series

Refer to our website for product details.

CCS LFR

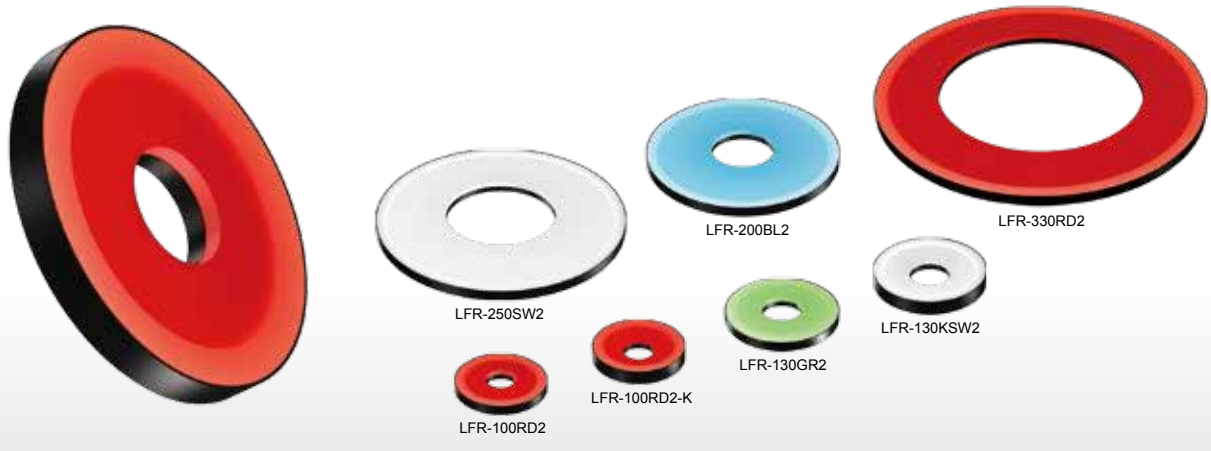
Search



You can also use your smartphone or cell phone.

Use a search engine.

Diffused illumination from a flat emitting surface

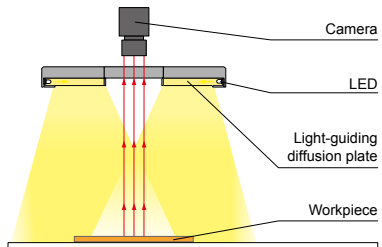


Applications Inspection for parts mounted on circuit boards, surface inspection for metal parts, inspection for faults on bottle tops, character recognition, text inspection, and color determination inspection, etc.

Characteristics

LEDs embedded around a circular light-guiding diffusion plate. Uniformly diffused light is illuminated from a flat emitting surface.

Example configuration (LFR-100)



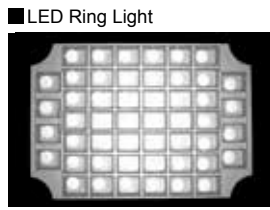
We accept custom orders. Please feel free to inquire.

- Change to format
- Increase brightness
- Change to wavelength, etc.

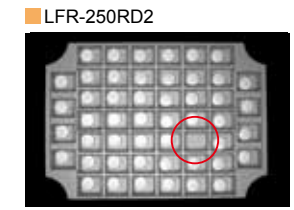
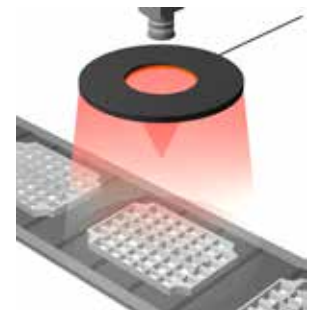
Imaging example: Imaging for detecting contents of a tray



Workpiece: Contents of a tray



Illuminated light converges in the center, making stable inspection difficult.



The whole thing is illuminated evenly, allowing for detection of present contents.

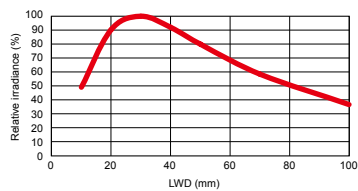
Data: Relative irradiance graph/Uniformity graph (Representative example)

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

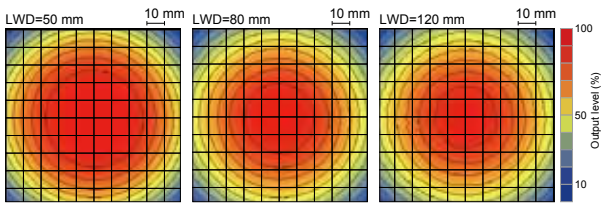
LFR-130RD2

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)



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/>

Lineup

* End of the model name: -K: Type with angled emitting surface

Model name	LED color	Power consumption	Peak wavelength/ correlated color temperature	Options	Recommended Control Units	Weight				
LFR-100RD2	Red	24 V / 3.6 W	630 nm	-	<table border="1"> <tr> <td>PD3</td> <td>CC-ST-1024</td> </tr> <tr> <td>PSB</td> <td>PTU2</td> </tr> </table>	PD3	CC-ST-1024	PSB	PTU2	120 g
PD3	CC-ST-1024									
PSB	PTU2									
LFR-100SW2	White	24 V / 4.6 W	5,500 K							
LFR-100BL2	Blue	24 V / 4.6 W	470 nm							
LFR-100GR2	Green	24 V / 4.5 W	525 nm	-	<table border="1"> <tr> <td>PD3</td> <td>CC-ST-1024</td> </tr> <tr> <td>PSB</td> <td>PTU2</td> </tr> </table>	PD3	CC-ST-1024	PSB	PTU2	170 g
PD3	CC-ST-1024									
PSB	PTU2									
LFR-100RD2-K	Red	24 V / 3.6 W	630 nm							
LFR-100KSW2	White	24 V / 4.6 W	5,500 K							
LFR-100BL2-K	Blue	24 V / 4.6 W	470 nm	-	<table border="1"> <tr> <td>PD3</td> <td>CC-ST-1024</td> </tr> <tr> <td>PSB</td> <td>PTU2</td> </tr> </table>	PD3	CC-ST-1024	PSB	PTU2	140 g
PD3	CC-ST-1024									
PSB	PTU2									
LFR-100GR2-K	Green	24 V / 4.5 W	525 nm							
LFR-130RD2	Red	24 V / 4.6 W	630 nm							
LFR-130SW2	White	24 V / 5.7 W	5,500 K	-	<table border="1"> <tr> <td>PD3</td> <td>CC-ST-1024</td> </tr> <tr> <td>PSB</td> <td>PTU2</td> </tr> </table>	PD3	CC-ST-1024	PSB	PTU2	250 g
PD3	CC-ST-1024									
PSB	PTU2									
LFR-130BL2	Blue	470 nm								
LFR-130GR2	Green	525 nm								
LFR-130RD2-K	Red	24 V / 4.6 W	630 nm	-	<table border="1"> <tr> <td>PD3</td> <td>CC-ST-1024</td> </tr> <tr> <td>PSB</td> <td>PTU2</td> </tr> </table>	PD3	CC-ST-1024	PSB	PTU2	190 g
PD3	CC-ST-1024									
PSB	PTU2									
LFR-130KSW2	White	24 V / 5.7 W	5,500 K							
LFR-130BL2-K	Blue	470 nm								
LFR-130GR2-K	Green	24 V / 5.7 W	525 nm	-	<table border="1"> <tr> <td>PD3</td> <td>CC-ST-1024*</td> </tr> <tr> <td>PSB</td> <td>PTU2</td> </tr> </table> <p>*Can only use red.</p>	PD3	CC-ST-1024*	PSB	PTU2	490 g
PD3	CC-ST-1024*									
PSB	PTU2									
LFR-200RD2	Red	24 V / 8.1 W	630 nm							
LFR-200SW2	White	24 V / 11 W	5,500 K							
LFR-200BL2	Blue	24 V / 11 W	470 nm	-	<table border="1"> <tr> <td>PD3</td> <td>PTU2</td> </tr> <tr> <td>PSB</td> <td>PTU2</td> </tr> </table>	PD3	PTU2	PSB	PTU2	1,080 g
PD3	PTU2									
PSB	PTU2									
LFR-250RD2	Red	24 V / 11 W	630 nm							
LFR-250SW2	White	24 V / 13 W	5,500 K							
LFR-250BL2	Blue	24 V / 13 W	470 nm	-	<table border="1"> <tr> <td>PD3 / PSB / PTU2</td> </tr> </table>	PD3 / PSB / PTU2	1,090 g			
PD3 / PSB / PTU2										
LFR-330RD2	Red	24 V / 14 W	630 nm							

LED Properties: Light Spectrum ► P.234

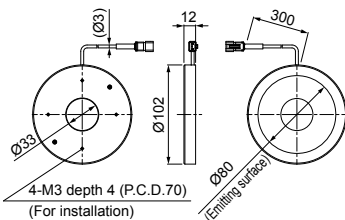
Extension Cables ► P.222

Control Unit Selection Guide ► P.181

Control Unit Page ► P.185

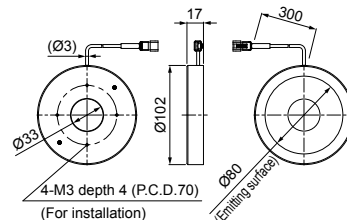
Dimensions (mm)

LFR-100RD2/SW2/BL2/GR2



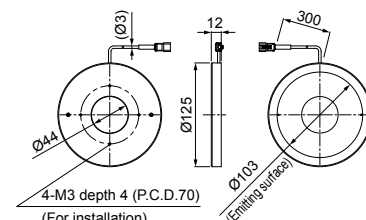
* The emitting surface for the LFR-100SW2/BL2/GR2 is Ø77.

LFR-100RD2-K/KSW2/BL2-K/GR2-K

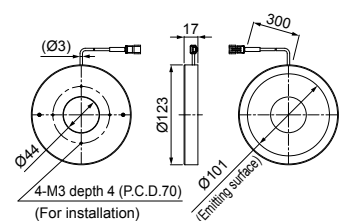


* The emitting surface for the LFR-100KSW2/BL2/GR2 is Ø78.

LFR-130RD2/SW2/BL2/GR2

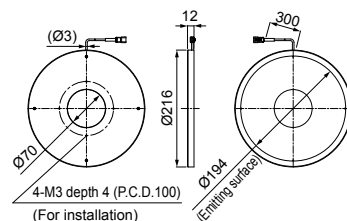


LFR-130RD2-K/KSW2/BL2-K/GR2-K



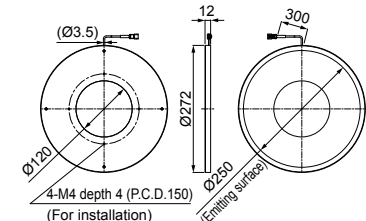
* The emitting surface for the LFR-130KSW2 is Ø99.

LFR-200RD2/SW2/BL2



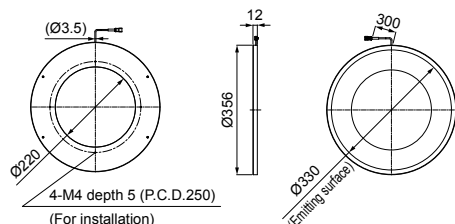
* The emitting surface for the LFR-200SW2/BL2 is Ø193.

LFR-250RD2/SW2/BL2



* The emitting surface for the LFR-250SW2/BL2 is Ø246.

LFR-330RD2



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.

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Light Unit
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<http://www.ccs-grp.com/contact/>