

Shadowless light source (FRS)

LS-FRS series · Shadowless lights · 5 models

Shadowless ring light suitable for large round objects or small irregularly shaped objects, with higher uniformity and shadow-free illumination.



Features

- Suitable for large round objects or small irregularly shaped objects
- Higher uniformity
- Uniform illumination without shadow

Applications

- Contour extraction of circular metal parts
- Low angle uniform illumination
- Low angle feature extraction
- Various character recognition
- Inspection of parts on substrate
- Label inspection
- Foreign matter inspection on wafer

Colours

R	620-630 nm
G	520-530 nm
B	465-475 nm
W	6000-6500 K

Common specifications

Wavelength red	620-630 nm
Wavelength green	520-530 nm
Wavelength blue	465-475 nm
Colour temperature white	6000-6500 K
Wavelength IR	850-940 nm
Wavelength UV	365-405 nm
Storage temperature	20 to 60 °C
Operating temperature	0 to 40 °C
Humidity	20-85 %RH (non-condensing)
Optional accessories	Extension cable
Controller	LS-DPS series, LS-APS series, LS-SPS series (the selected controller should match the power of the light source)
Service life (red)	60000 h continuous at 25 °C, 50% illumination, to 50% decrement
Service life (white)	30000 h continuous at 25 °C, 50% illumination, to 50% decrement
Warranty	1 year from shipment (faults not caused by the user: free repair or replacement)
Illuminance chart reference	LS-FRS88-W; uniformity LS-FRS180-R, FOV 80 x 80 mm at LWD 50/70/90 mm

Ordering code: LS-FRS<OD mm>-<R/G/B/W> (e.g. LS-FRS100-R)

Models

Model	Power R (W)	Power G/B/W (W)	Emitting area (mm)	Overall OD (mm)	Overall ID (mm)	Overall H (mm)
LS-FRS50-R/G/B/W colours: R, G, B, W	2.4	3.2	42	50	21	40
LS-FRS88-R/G/B/W colours: R, G, B, W	4	5.9	78	88	60	38
LS-FRS100-R/G/B/W colours: R, G, B, W	4.8	7.1	92	100	71	40
LS-FRS150-R/G/B/W colours: R, G, B, W	19	23	142	150	80	40
LS-FRS180-R/G/B/WTY colours: R, G, B, W	8.3	14	172	180	151	40

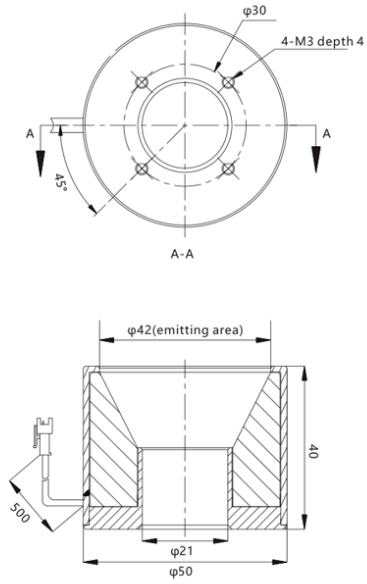
More values per model (Recommended controller) are on each product page.

Dimensions



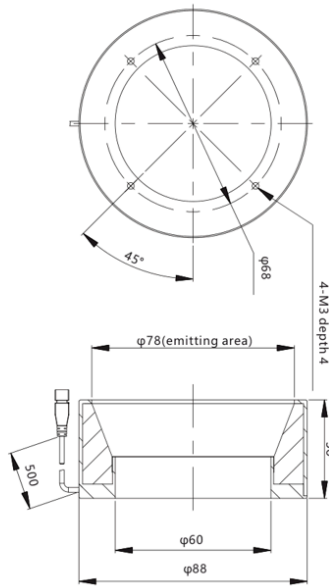
LS-FRS50

1



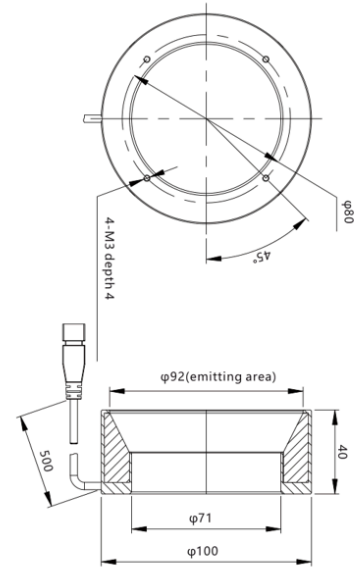
LS-FRS88

2



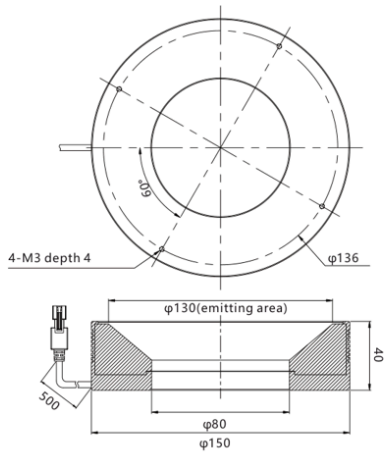
LS-FRS100

3



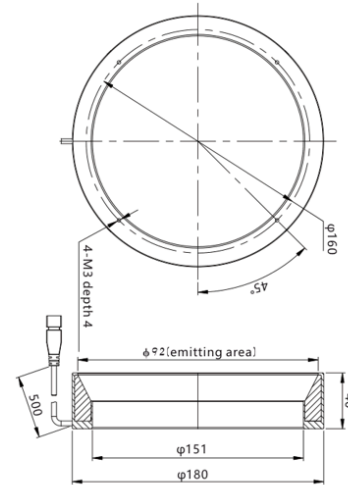
LS-FRS150

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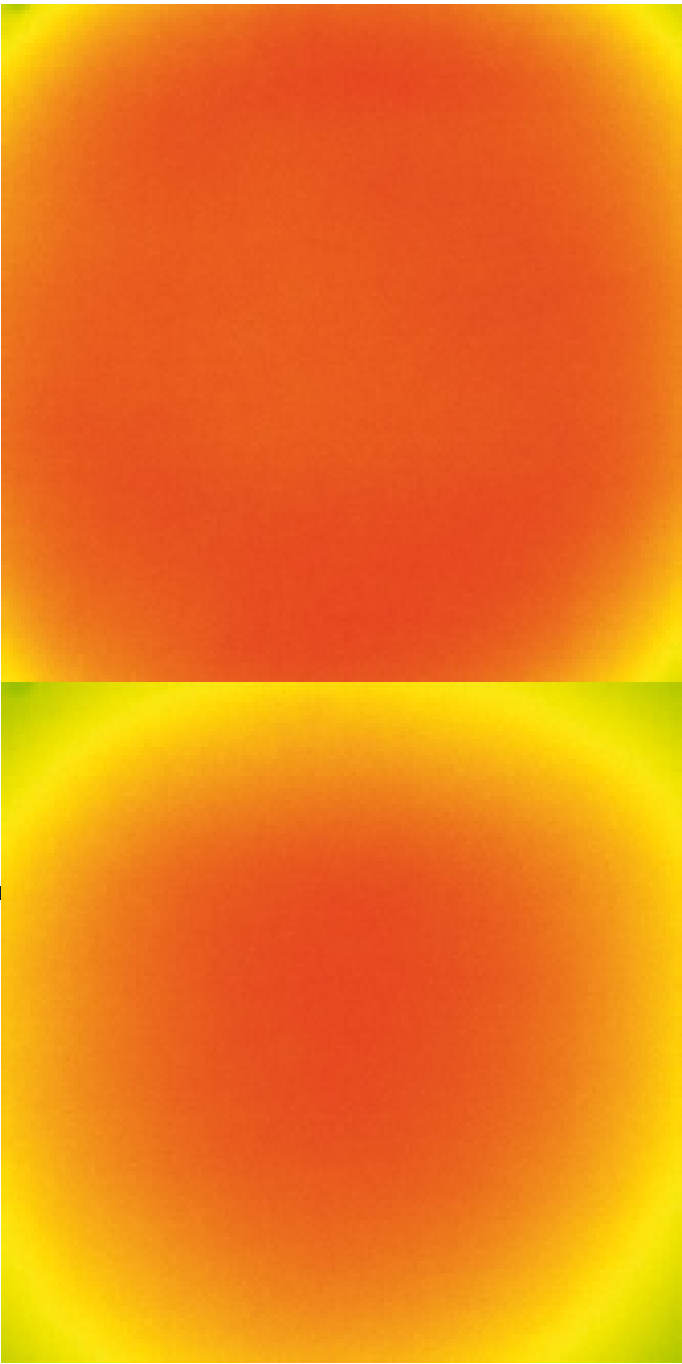
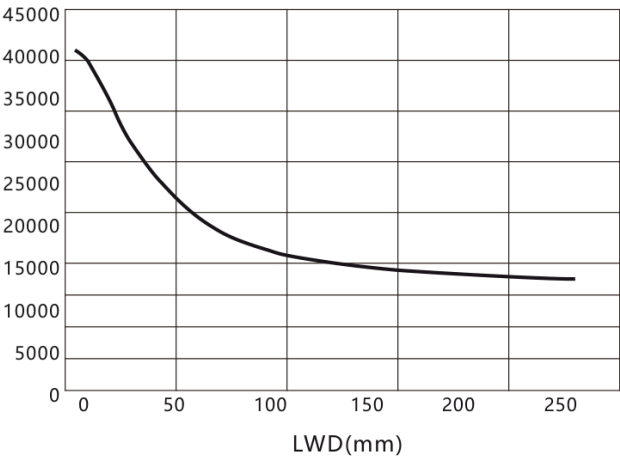
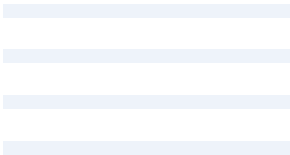


LS-FRS180-TY

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Performance



Product views



