

Low angle shadowless light (FPR)

LS-FPR series · Shadowless lights · 7 models



Low-angle shadowless ring light with a special emitting structure for uniform emission; efficient low-angle illumination strengthens surface characteristics, highlights defect contrast and reduces reflections and flare.

Features

- Special emitting structure, uniform emission
- Efficient low-angle illumination, strengthens surface characteristics
- Highlights defect contrast
- Reduces reflected light and flare
- Wire jacket covers the cable exit, anti-pull
- Customizable: Outer & inner diameter, Colour & colour temperature, Cable length, Installation method
- UV & IR versions can be customized as required

Applications

- BGA/QFP position inspection
- Integrated circuit material strap inspection
- Connection lead pin pitch and excursion inspection
- Bottle cap crack inspection
- Imaging example: battery packing inspection (LS-FPR120-W), low-angle emission reduces metal reflection and shows the defect clearly

Colours

R	620-630 nm
G	525-530 nm
B	465-470 nm
W	6600 K

Common specifications

Voltage	24 V
Min. diameter	dia. 80
Max. diameter	dia. 180

Recommended working distance	10~100 mm
FOV	1~150 mm
Colour temperature of white	6600 K
Cable length (drawing)	500 mm
Operating temperature	0-50 °C
Operating humidity	20-85% (non-condensing)
Life-span	50000 h (to 50% of factory default luminance)
Adapted controllers	Strobe controller, analog controller, digital controller
Extension cable options	PVC extension cable (high flexibility, bending and high-temperature resistant, for use inside equipment); high-flexibility extension cable (harder, more abrasion resistant, for drag-chain production lines)

Ordering code: LS-FPR##-R/G/B/W/IR/UV (## = outer diameter; last field = colour)

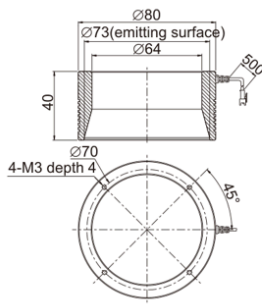
Models

Model	Power (R)	Power (G/B/W)	Weight	Common model	Dimension drawing no.	Emitting surface dia. (mm)
LS-FPR80 colours: R, G, B, W	1.2W	1.9W	120g	Y	1	73
LS-FPR94 colours: R, G, B, W	5.8W	8.6W	501g	N	2	87
LS-FPR100 colours: R, G, B, W	2.2W	3.6W	210g	Y	3	80
LS-FPR120 colours: R, G, B, W	3.4W	5.0W	253g	Y	4	113
LS-FPR150 colours: R, G, B, W	11.5W	19.2W	329g	Y	5	142
LS-FPR160 colours: R, G, B, W	4.1W	6.7W	354g	Y	6	150
LS-FPR180 colours: R, G, B, W	5.0W	8.4W	404g	N	7	170

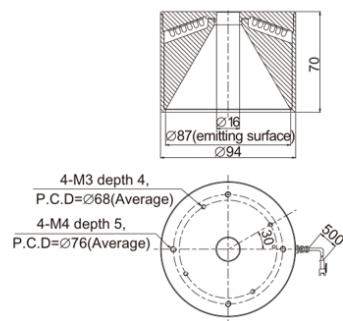
Dimensions



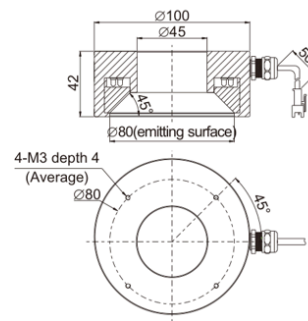
1.LS-FPR80



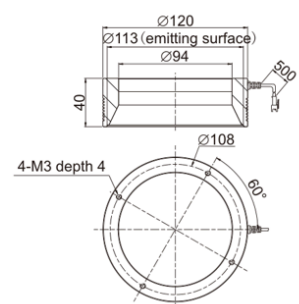
2.LS-FPR94



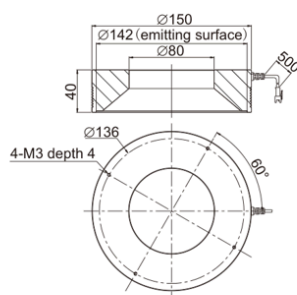
3.LS-FPR100



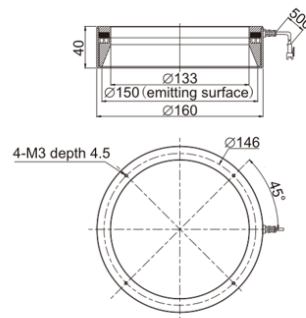
4.LS-FPR120



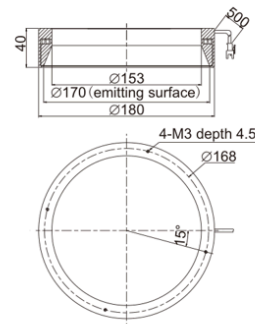
5.LS-FPR150



6.LS-FPR160

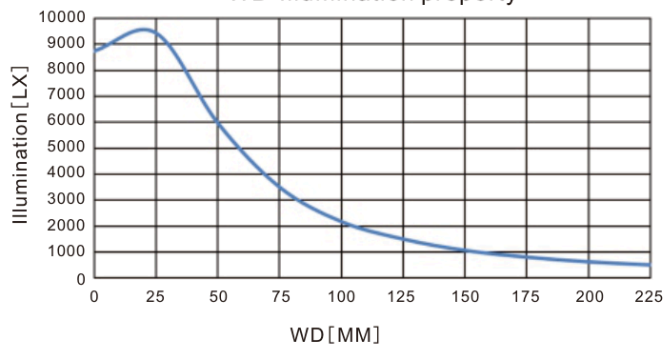


7.LS-FPR180

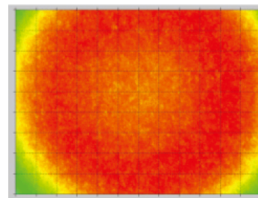


Performance

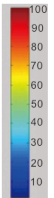
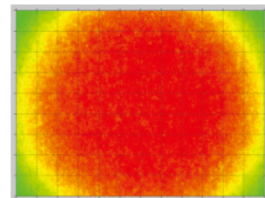
WD-Illumination property



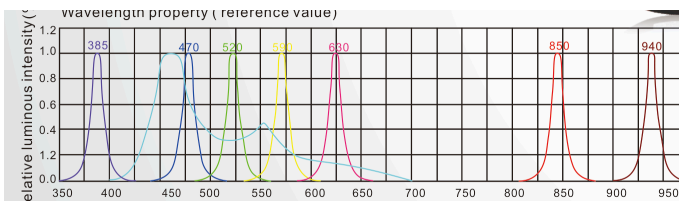
LWD=20 FOV: 60x45mm



LWD=30 FOV: 60x45mm



*Above diagram only for reference.



Product views

