

# Low Angle Shadowless Light FPR Series

3LINH	Line scan illumination
3LNL	
3LIN	
2LINS	
2LIN	
2COXL	
2LINM	
SDL	
STL	Structured light
RN	
RNH	
SRN	
HPR	
FPR	
DML	
LFR	
3DM	
2DM	
LFX	
FPQ	
RIH	
DL	
3BRH	
2BR	
2BRS	
2BRM	
3COH	
3CON	
COXR	
3COX	
COPA	
HSL	
2SL	
SL	
RNMU	
AOI	Mult-angle illumination
2FTB/2FTR	
FTC	
2FT/3FT	
2PFT/3PFT	
LIP	Waterproof illumination
IP	
IR	Infrared light
UV	Ultraviolet light
Custimized	Custimized
PS	
PD	
2DRC	
3STU	
APC	
DPC	
2APC	
DPA	
2ACC	
2DPC	
Area scan	
Line scan	Lenses

- ◆ Special emitting structure, emitting uniformly.
- ◆ Efficient low angle illumination, strengthen surface characteristic.
- ◆ Highlight defect contrast.
- ◆ Reduce the reflect light or flare.

## Applications

BGA\QFP position inspection / integrated circuit material strap inspection / connection lead pin pitch & excursion inspection / bottle cap crack inspection

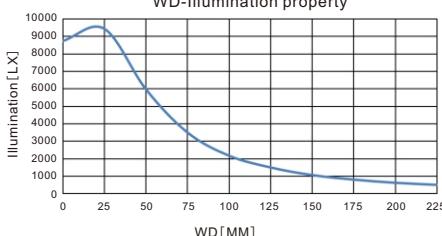


Illumination property diagram

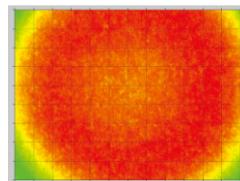
Uniformity (Relative irradiance)

Model : LTS-FPR80-W

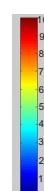
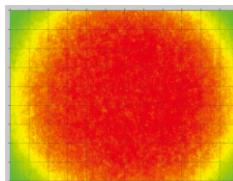
WD-Illumination property



LWD=20 FOV: 60x45mm



LWD=30 FOV: 60x45mm



\*Above diagram only for reference.

## → Customized



## → Wire jacket



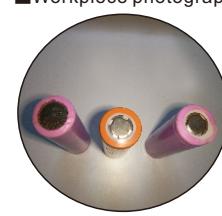
Cover wire jacket, anti-pulls.

## → Imaging instance: packing inspection



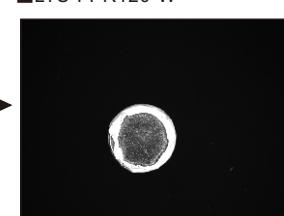
Content	packing inspection
Workpiece	battery
Light model	LTS-FPR120-W
Result	obvious defect

## ■ Workpiece photograph



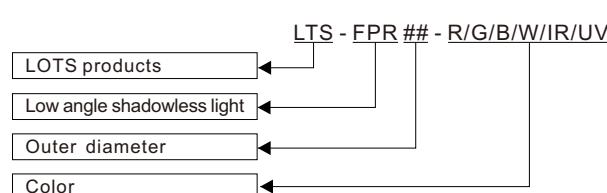
Packing inspection

## ■ LTS-FPR120-W



Low angle emitting to reduce the reflect light of metal.

## → Coding rule



<http://www.lotsmv.com>

Customized color

On-site technical support

Sample free rent service

# Low Angle Shadowless Light FPR Series

## → Light parameters

Product	Model	Voltage	Power	Color		Weight	Option	Adapted controller	Dimension	Common	Remark
Low angle shadowless light	LTS-FPR80	24V	1.2W 1.9W	Red Green Blue White	Red: 620-630nm Green: 525-530nm Blue: 465-470nm White: 6600K (color temperature)	120g 501g 210g 253g 329g 354g 404g	—	Strobe controller (P146) Analog controller (P152) Digital controller (P159)	1	Y	
	LTS-FPR94	24V	5.8W 8.6W	Red Green Blue White					2	N	
	LTS-FPR100	24V	2.2W 3.6W	Red Green Blue White					3	Y	
	LTS-FPR120	24V	3.4W 5.0W	Red Green Blue White					4	Y	
	LTS-FPR150	24V	11.5W 19.2W	Red Green Blue White					5	Y	
	LTS-FPR160	24V	4.1W 6.7W	Red Green Blue White					6	Y	
	LTS-FPR180	24V	5.0W 8.4W	Red Green Blue White					7	N	

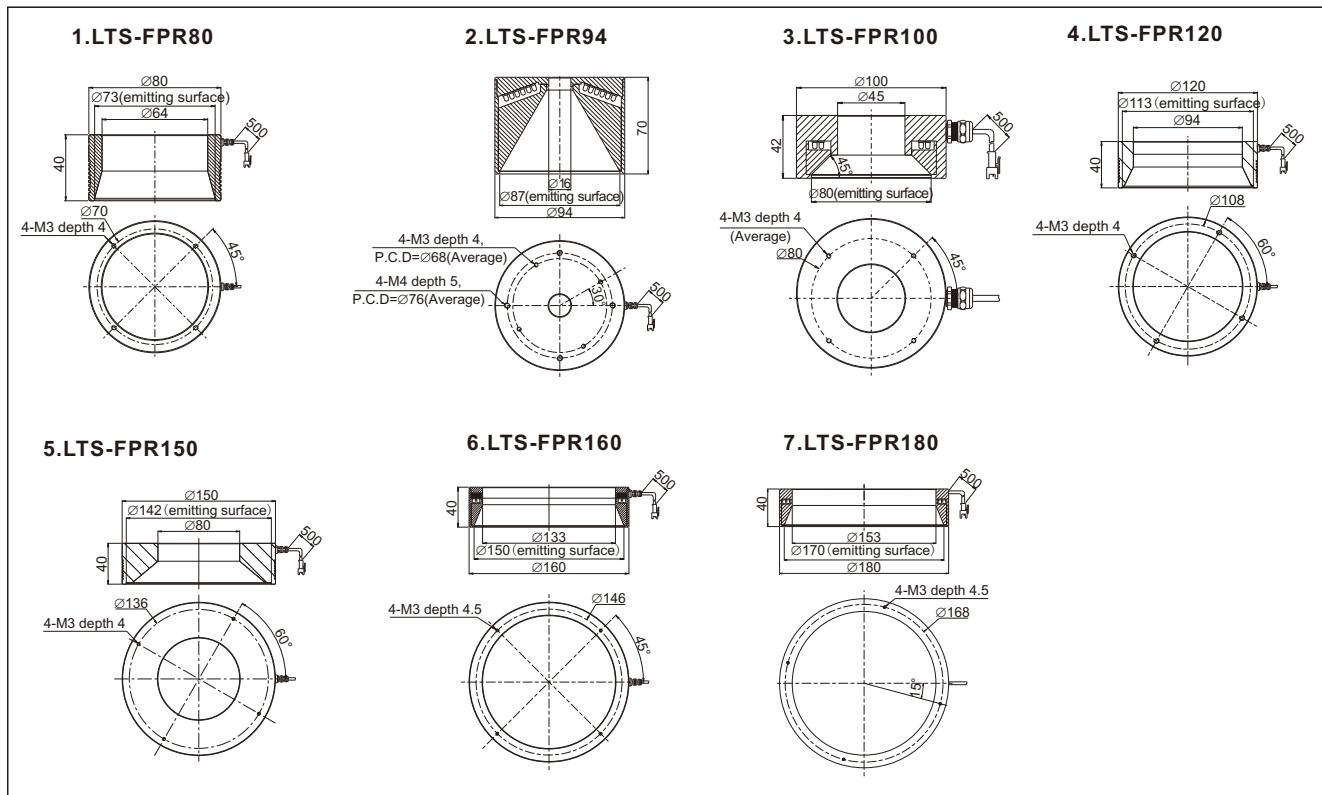
\* UV & IR light can be customized as required.

- ★ 1) Operating environment: Temperature 0-50°C, Humidity 20-85% (Non-condensation)
- 2) Life-span: 50000h(Reduce 50% luminance of factory default)
- 3) Value-added service: One year free technical support, sample free rent

- ※ 1) PVC extension cable: high flexibility, bending resistance, high temperature resistance, apply to use inside of device.
- 2) High flexibility extension cable: harder and more abrasive resistance than PVC, apply to drag chain system production line.



## → Boundary dimension (mm)



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2COXL	
2LNM	
SDL	
STL	Structured light
RN	Ring illumination
RNH	
SRN	
HPR	
FPR	
DML	
LFR	
3DM	
2DM	
LFX	
FPQ	
RIH	
DL	
3BRH	Bar illumination
2BR	
2BRS	
2BRM	
3COH	
3CON	Coaxial illumination
COXR	
3COX	
COPA	
HSL	
2SL	
SL	
RNNU	Muli-angle illumination
AOI	
2FTB/2FTR	
FTC	
2FT/3FT	
2PFT/3PFT	
LIP	Back illumination
IP	
IR	
UV	Waterproof illumination
Ultraviolet light	Infrared light
Customized	Customized
PS	
PD	
2DRC	
3STU	
APC	
DPC	
2APC	
DPA	
2ACC	
2DPC	
Area scan	
Line scan	
Lenses	

Customized color

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