

Low Angle Ring Illumination - LR Series

Features

- Lights create dark field of view, suitable for edge detection and scratches on glossy surface.
- High brightness LEDs are mounted on a flexible circuit board in a steep angle.
- Breakthrough wave-soldering technology to improve production quality and efficiency.

Applications

- Substrate and PCB positioning
- Chip component inspection
- LCD alignment
- Plastic container inspection
- Label inspection
- Mounter
- IC marking inspection, etc.

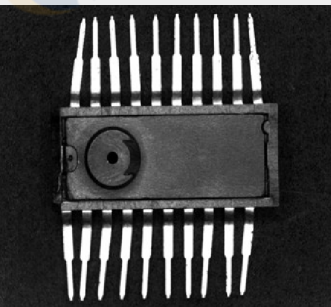


Examples of Low-Angle Ring Light Images

Lights: LR-7440-30R

Inspect IC pins flatness.

Use ring lights illuminated on the pins surface in a specific angle, can light the whole surface in white. Choose the black background. Substantial improved the contrast. Good for software detect.



Lights: LR-170134-20B

Inspect Power Plug Pins.

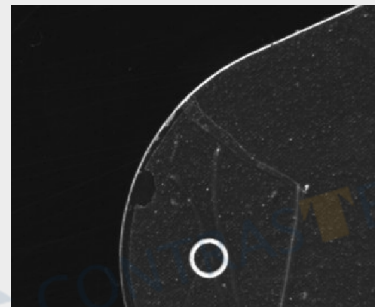
Use LR-100B to illuminate the pins, the top parts of the pins will be lighted and the reflection of the bottom part which will decrease the image contrast can be avoided.



Lights: LR-9660-00W

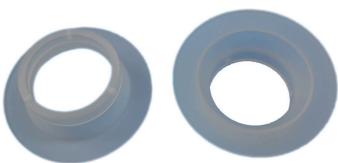
Inspect Mobile Touch Screen MARK Point.

The low angle lights can make the MARK point bright and avoid the light-reflecting problem on the surface caused by high angle lights. Thus the whole field of view is in high contrast which is easier for the computer analysis.



Optional Accessory: Diffusion Plate

Used to create a relatively non-directional light. Reducing glare on specular surfaces.



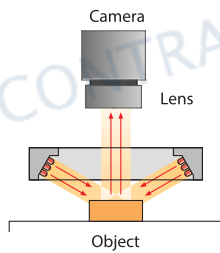
Explanation of Model Code

VT-LT2-LR	4822	-30	(W/B/G/R)
Series	O.D./I.D.	Angle*	Color

*The emission angle refers to the angle between light and horizontal plane.

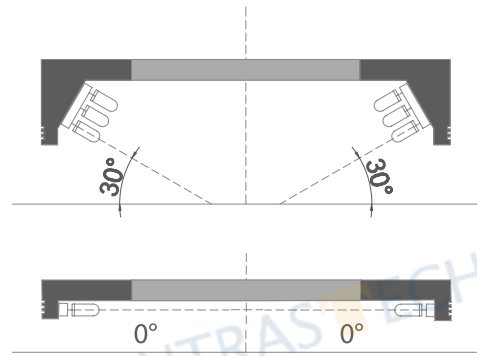
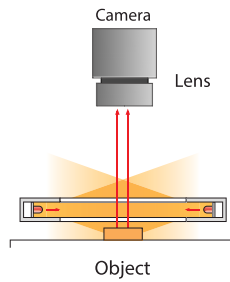
Illumination Structure

LR Series



Illuminating the Object from a low position.

LRXXX-0 Series



Common Specifications

Input voltage	24 VDC
Wavelength range	Red: 620-630nm; Blue: 460-475nm; Green: 520-530nm;
Color temperature (white)	6500-8500K
Operating environment (indoor)	Temperature: 0~40°C Humidity: 20% to 85% RH (with no condensation)
Life time	White:30,000hrs, Red: 60,000hrs (Depends on the operating environment, not a gurantee)
Case material	Aluminum alloy, Resin

Model No.	Optical spec.	Working Distance	Electrical specifications (NIR / UV Accept custom)			Dimensions		
	Emission angle (deg)	Recommended WD (mm)	Supply Voltage (v)	Power cons. (w) ●	Power cons. (w) ● ●	Outer diam. (mm)	Inner diam. (mm)	Height (mm)
VT-LT2-LR5024-30	30°	5	24	2.0	2.6	50	24	16
VT-LT2-LR6630-30	30°	0-10	24	3.2	4.6	66	30	22
VT-LT2-LR7448-30	30°	9-14	24	3.2	4.2	74	48	19
VT-LT2-LR10070-30	30°	12-21	24	7.9	8.3	100	70	22
VT-LT2-LR12088-30	30°	17-27	24	8.4	10.5	120	88	22
VT-LT2-LR13296-15	15°	3-12	24	10.0	12.2	132	96	22
VT-LT2-LR150120-30	30°	15-29	24	14.3	18.5	150	120	22
VT-LT2-LR180132-30	30°	24-34	24	15.0	28.8	180	132	29
VT-LT2-LR208172-25	25°	31-41	24	17.8	18.0	208	172	22

Zero Angle Ring Illumination

VT-LT2-LR5018-0	0°	0-10	24	1.6	1.6	50	18	10
VT-LT2-LR7539-0	0°	0-10	24	2.0	3.5	75	39	10
VT-LT2-LR9660-0	0°	0-10	24	4.6	5.5	96	60	10
VT-LT2-LR12086-0	0°	0-10	24	4.8	4.8	120	86	10
VT-LT2-LR146104-0	0°	0-10	24	5.5	8.8	146	104	10
VT-LT2-LR176134-0	0°	0-10	24	8.8	11.0	176	134	10
VT-LT2-LR206164-0	0°	0-10	24	11.0	13.8	206	164	10

尺寸图 (mm)

VT-LT2-LR5024-30	VT-LT2-LR6630-30	VT-LT2-LR7448-30	VT-LT2-LR10070-30
VT-LT2-LR12088-30	VT-LT2-LR13296-15	VT-LT2-LR150120-30	VT-LT2-LR180132-30
VT-LT2-LR208172-25	VT-LT2-LR5018-0	VT-LT2-LR7539-0	VT-LT2-LR9660-0
VT-LT2-LR12086-0	VT-LT2-LR146104-0	VT-LT2-LR176134-0	VT-LT2-LR206164-0