

NERLITE® RING LIGHT

Available In
Three Sizes



Available In
Three Colors,
Ultraviolet &
Infrared

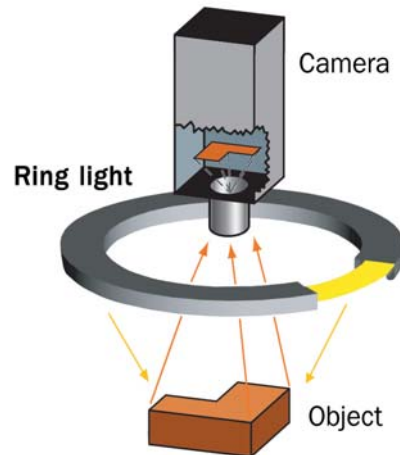
Diffused Surface Lighting Solution

Microscan's wide range of NERLITE products can illuminate any part or mark for successful machine vision and auto ID applications.

Ring lights are a cost-effective, easily integrated solution for illuminating surfaces. As with other incident lighting choices, subtle adjustments to working distance and angle of light delivery can deliver good image contrast for minimal investment. Ring light packaging and mounting advancements emphasize durability and versatility for any diffused surface lighting applications.

Ring Light: At a Glance

- Economical and widely-used general purpose designs
- Optional adapter allows easy, direct attachment to camera lens
- Optional fresnel lens accessories allow the illumination to be focused at various distances
- Illumination sources include a variety of colors and wavelengths
- Continuous or strobed power source options
- Diffuser accessory included

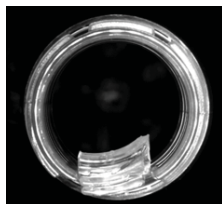


Illumination Example:

Object



Resulting Image



Plastic bottle: Defect on top of a plastic bottle is clearly identified.

Application Examples

- Illuminate flat, diffused surfaces
- Inspection of circular objects (gaskets, washers)
- Label inspection
- Lab use where interchangeable optics such as diffusers or fresnel (focusing) lenses are desired
- When direct attachment to lens is required

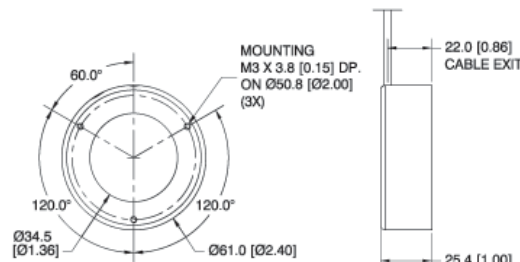
NERLITE® RING LIGHT SPECIFICATIONS AND OPTIONS

R 60

DESCRIPTION	nm/K	CONT. CURRENT	STROBE CURRENT	mcd/cm ²		mw/cm ²	
				DIFFUSE	NON-DIFFUSE	DIFFUSE	NON-DIFFUSE
R-60, Red Continuous	660 nm	92 mA		2100	3900		
R-60, Red Strobe	660 nm		1.6 A	21000	39000		
R-60, White Continuous	6500 K	160 mA		2840	5250		
R-60, White Strobe	6500 K		3.1 A	28400	52500		
R-60, Blue Continuous	470 nm	160 mA		2300	4240		
R-60, Blue Strobe	470 nm		3.1 A	23000	42400		
R-60, Infrared Continuous	880 nm	80 mA				3.7	6.8
R-60, Infrared Strobe	880 nm		1.68 A			38	71

Aperture Diameter: 1.36" (34.5 mm) **Weight:** 5 oz. (133 g)

Dimensions: Ø 2.4" (61 mm) x D 1" (25.4 mm)

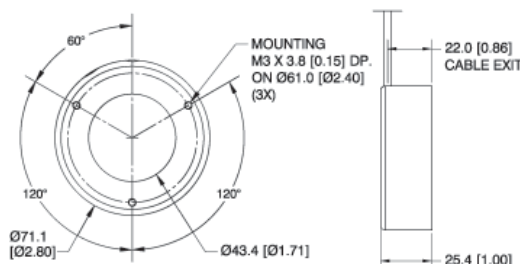


R 70

DESCRIPTION	nm/K	CONT. CURRENT	STROBE CURRENT	mcd/cm ²		mw/cm ²	
				DIFFUSE	NON-DIFFUSE	DIFFUSE	NON-DIFFUSE
R-70, Red Continuous	660 nm	92 mA		1550	2860		
R-70, Red Strobe	660 nm		1.6 A	15500	28600		
R-70, White Continuous	6500 K	160 mA		2100	3860		
R-70, White Strobe	6500 K		3.1 A	21000	38600		
R-70, Blue Continuous	470 nm	160 mA		1680	3100		
R-70, Blue Strobe	470 nm		3.1 A	16800	31000		
R-70, Infrared Continuous	880 nm	80 mA				2.7	5
R-70, Infrared Strobe	880 nm		1.68 A			27	50
R-70, Ultraviolet Continuous	375 nm	40 mA				0.24	0.44
R-70, Ultraviolet Strobe	375 nm		248 mA			0.71	1.4

Aperture Diameter: 1.71" (43.4 mm) **Weight:** 5 oz. (136 g)

Dimensions: Ø 2.8" (71.1 mm) x D 1" (25.4 mm)

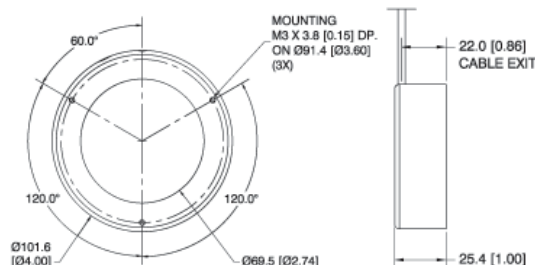


R 100

DESCRIPTION	nm/K	CONT. CURRENT	STROBE CURRENT	mcd/cm ²		mw/cm ²	
				DIFFUSE	NON-DIFFUSE	DIFFUSE	NON-DIFFUSE
R-100, Red Continuous	660 nm	138 mA		1140	2110		
R-100, Red Strobe	660 nm		2.4 A	11400	21100		
R-100, White Continuous	6500 K	240 mA		1530	2840		
R-100, White Strobe	6500 K		4.7 A	15300	28400		
R-100, Blue Continuous	470 nm	240 mA		1240	2300		
R-100, Blue Strobe	470 nm		4.7 A	12400	23000		
R-100, Infrared Continuous	880 nm	120 mA				1.2	3.7
R-100, Infrared Strobe	880 nm		2.52 A			20.8	38.5

Aperture Diameter: 2.74" (69.5 mm) **Weight:** 7 oz. (193 g)

Dimensions: Ø 4" (101.6 mm) x D 1" (25.4 mm)



ENVIRONMENTAL

Operating Temperature: 0° to 40° C (32° to 104° F)

Storage Temperature: 0° to 50° C (32° to 122° F)

Humidity: up to 95% (non-condensing)

LIGHTING PARAMETERS

Aperture Diameter Defined: Diameter of opening through the illuminator

LIGHT SOURCE

Type: High output LEDs

Light Output: Millicandelas per square centimeter (mcd/cm²)

Radiant Output: Milliwatts per square centimeter (mw/cm²)

Expected Life: 50,000 hours (Red, Infrared LEDs)

Expected Life: 10,000 hours (Blue, White, Ultraviolet LEDs)

Eye Safety: EN 60825-1: Class 1 (Red, White, Infrared LEDs);

Class 1M (Ultraviolet LEDs); Class 2 (Blue LEDs)

CONNECTOR

Type: 15 ft. (4.5 m) integrated cable with flying leads

ELECTRICAL

Power (Continuous Models): 24 VDC +/- 1%

Power (Strobe Models): 1 ms max. pulse width, 6% max duty cycle, use of NERLITE

NL-200 Series Lighting Controller is required.

CE COMPLIANT

ISO CERTIFICATION

Certified ISO 9001:2008 Quality Management System

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Microscan Applications Engineering is available to assist with evaluations. Results may vary depending on symbol quality. **Warranty**—One year limited warranty on parts and labor. Free extended three year warranty available with online product registration.

MICROSCAN®

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