NERLITE® SCDI®

Available In Two Colors

MICROSCAN

Available In Three Sizes

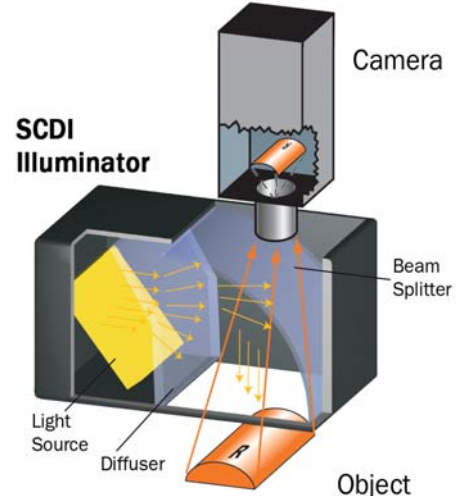## Square Continuous Diffuse Illuminator

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

SCDI illuminators provide enhanced diffuse lighting performance. The patented design makes it ideal for inspecting moderately faceted and undulating reflective surfaces. SCDI illumination allows products to be inspected in the package and prevents non-uniform light reflections from causing a vision system to see defects where none exist.

SCDI: At a Glance

· *Excellent uniformity*

· *Extraordinary diffuse illumination*

· *Economical and low maintenance*

· *Reliable, solid state LED illumination*

Illumination Example:

Object   Resulting Image

Data Matrix on a gear shaft: Diffuse illumination allows clear image capture of marked symbol.

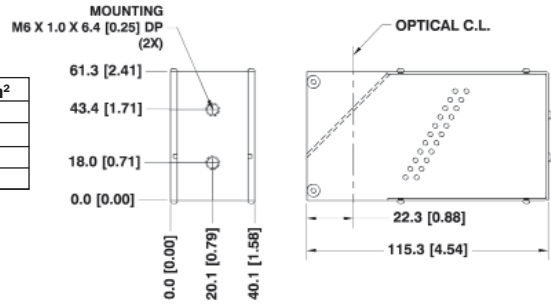*For more information on this product, visit* **www.microscan.com.**

Application Examples

· Differentiate specular, diffuse, or absorptive features on moderately curved surfaces

· Reduce shadows

· Diminish clear overcoats or coverings

· Packaged product inspection (pharmaceuticals, computer chips)

· Inspect solder patterns on circuit boards

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SCDI 25

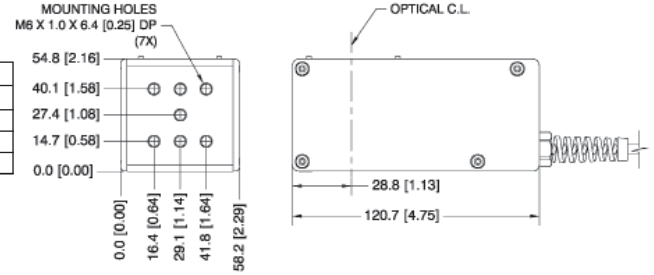| DESCRIPTION	nm/K	CONT. CURRENT		STROBE CURRENT	mcd/cm²
		LIGHTING	FAN		
SCDI-25, Red Continuous	636 nm	105 mA	80 mA		1400
SCDI-25, Red Strobe	636 nm			1.8 A pk	14000
SCDI-25, White Continuous	6500 K	180 mA	80 mA		2850

Light Aperture: 1.3" x 1.3" (34 mm x 32 mm) **Field of View:** 0.50" (13 mm)
Stand Off: 1" (25 mm) **Weight:** 9 oz. (255 g)
Dimensions: H 2.41" (61.3 mm) x W 4.54" (115.3 mm) x D 1.58" (40.1 mm)

SCDI 50

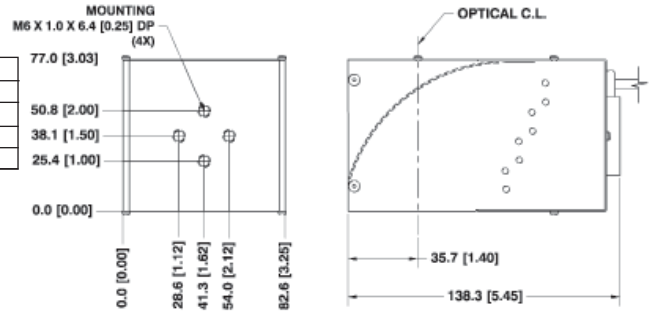| DESCRIPTION	nm/K	CONT. CURRENT	STROBE CURRENT	mcd/cm²
SCDI-50, Red Continuous	640 nm	200 mA		15550
SCDI-50, Red Strobe	640 nm		4.0 A pk	155500
SCDI-50, White Continuous	6500 K	200 mA		2670
SCDI-50, White Strobe	6500 K		4.0 A pk	26700

Light Aperture: 2" x 1.5" (52 mm x 39 mm) **Field of View:** 1" (25 mm)
Stand Off: 0.50" (13 mm) **Weight:** 14 oz. (408 g)
Dimensions: H 2.16" (54.8 mm) x W 4.75" (120.7 mm) x D 2.29" (58.2 mm)

SCDI 75

DESCRIPTION	nm/K	CONT. CURRENT		STROBE CURRENT	mcd/cm²
		LIGHTING	FAN		
SCDI-75, Red Continuous	636 nm	240 mA	62 mA		1400
SCDI-75, Red Strobe	636 nm			4.8 A pk	14000
SCDI-75, White Continuous	6500 K	480 mA	62 mA		2840

Light Aperture: 3" x 2.3" (76 mm x 59 mm) **Field of View:** 1.5" (38 mm)
Stand Off: 1" (25 mm) **Weight:** 16 oz. (454 g)
Dimensions: H 3.03" (77 mm) x W 5.45" (138.3 mm) x D 3.25" (82.6 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
Light Aperture Defined: Area of light output from the coaxial illuminator.
Field of View Defined: Largest recommended evenly illuminated area as seen from the camera (also know as Area of Interest [AOI]).
Stand Off Defined: Recommended distance between the bottom of the light and the surface of the object being illuminated.

LIGHT SOURCE
Type: High output LEDs
Light Output: Millicandelas per square centimeter (mcd/cm²)
Expected Life: 50,000 hours (Red LEDs)
Expected Life: 10,000 hours (White LEDs)
Eye Safety: EN 60825-1: Class 1

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

ELECTRICAL
Power (Continous 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

MICROSCAN®

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