

MICROSCAN®

NERLITE® DF-150-1

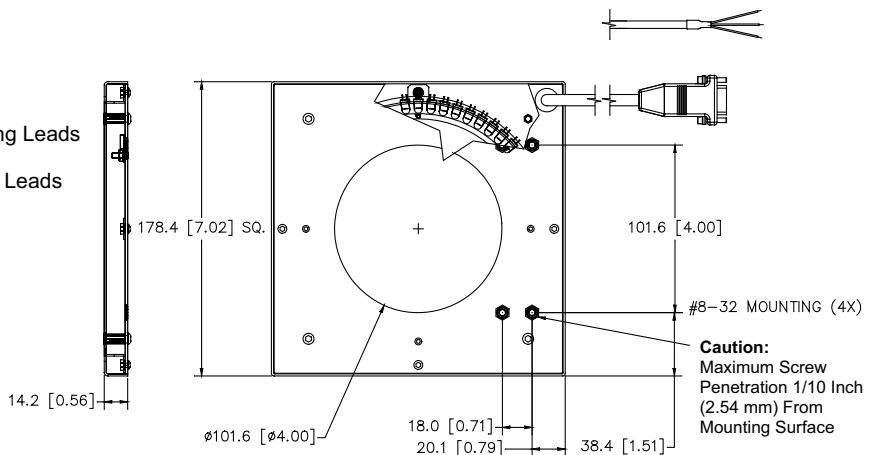
The **DF-150-1** provides low-angle illumination to the region of interest. The unit uses a single tier of LEDs mounted 90° to the optical axis. The light enhances the contrast of surface features such as laser, embossed or engraved marks or surface defects. The light is particularly suited for applications such as BGA ball placement, laser-etched symbologies and surfaces with geometric contours.



Model #	Description
NER-010600001	DF-150-1, R LED-D, 12V-C, 2.0' Cable
NER-010600002	DF-150-1, R LED-ND, 12V-C, 6.6' Cable
NER-010600004	DF-150-1, R LED-ND, 24V-S, 6.6' Cable
NER-010600005	DF-150-1, R LED-D, 24V-S, 1.5' Cable
NER-010600006	DF-150-1, R LED-ND, 24V-S, 1.5' Cable
NER-010600007	DF-150-1, R LED-D, 24V-S, 6.6' Cable
NER-010600021	DF-150-1, R LED-D, 24V-C, 6.6' Cable
010-600022	DF-150-1, R LED-ND, 24V-C, 6.6' Cable
NER-010600032	DF-150-1, W LED-ND, 24V-S, 6.6' Cable
NER-010600041	DF-150-1, W LED-D, 24V-C, 6.6' Cable
NER-010600042	DF-150-1, W LED-D, 24V-S, 6.6' Cable
NER-010600020	DF-150-1, R LED-ND, 24V-C, 15' Cable w/Flying Leads
NER-010600071	DF-150-1, G LED-ND, 24V-C, 6.6' Cable
010-600060	DF-150-1, B LED-D, 12V-C, 15' Cable w/Flying Leads

Dx-xxx-x, R LED-D, 12V-C

Ring Dia.-LED Tiers (DF's) Approx. Aperture (DLA's)	Color: R-Red W-White B-Blue G-Green I-Infrared U-Ultraviolet	Source: FO-Fiber Optic FL-Fluorescent LED- Light Em. Diode	Voltage (DC): C-Continuous S-Strobe
Family Designation: DF-Dark Field Ring DLA-Dual Line Array		Delivery: D-Diffused ND- Non-Diffused F-Focused	



Illumination & Electrical:

Lighting Technique:	Dark-field
Light Aperture:	101.6 mm (4 in.)
Field Of View x Stand-Off:	76.0 mm x 12.7 mm (3 in. x 0.5 in.)
Light Characteristics:	

Source	Color (nm)	Exp. Life	Voltage/Current (max.) ¹		
			12V-C	24V-C	24V-S ²
LED	Red (636)	60k hrs.	568 mA	100 mA	2.0 A pk.
LED	Green (533)	10k hrs.	n/a	220 mA	n/a
LED	Blue (470)	10k hrs.	400 mA	n/a	n/a
LED	White – 6500 Kelvin	10k hrs.	n/a	196 mA	4.0 A pk.

¹ Exceeding max. current, pulse width, frequency or voltage voids product warranty.

² Maximum pulse width = 1ms, maximum frequency = 60Hz

CE Conformity: Yes

Mechanical:

L x W x H (mm/in.):	178.4 mm x 178.4 mm x 14.2 mm (7.02 in. x 7.02 in. x 0.56 in.)
Mounting:	(4) 8-32, 0.10" depth, top of unit
Housing Material:	Black Anodized Aluminum
Weight:	504 grams (1.1 lbs.)

Environmental

Max. Operating Humidity	95% non-condensing
Operating Temp.	40°C (104°F)
Storage Temp.	50°C (122°F)

Cables/Connectors:

Connector	Length	Pin#	1	2	3	4	5	6	7	8	9
12V-C Models ¹	9 pin D-sub Male ¹	See note below ¹	n/a	n/a	GND	+12VDC	n/a	n/a	n/a	n/a	n/a
24V-C Models ¹	9 pin D-sub Male ¹	See note below ¹	n/a	n/a	n/a	n/a	n/a	n/a	+24VDC	n/a	GND
24V-S Models	9 pin D-sub Male	See note below	V-	n/a	n/a	+24VDC	n/a	n/a	n/a	n/a	n/a

Cable Lengths: Model NER-010600001 = 0.6 M (2.0 ft.); Models NER-010600002, NER-010600004, NER-010600007, NER-010600021, 010-600022, NER-010600032, NER-010600041, NER-010600042 & NER-010600071 = 2.0 M (6.6 ft.); Models NER-010600005 & NER-010600006 = 0.45 M (1.5 ft.)

¹ Note: 12V-C & 24V-C Models w/"Flying Leads" have a 4.5 M (15 ft.) cable with two (2) tinned leads and no connector; leads are labeled GND and V+ (+12 or 24VDC respectively)

Accessories:

Part #	Description	Models Used On
NER-010500301	CPS-12 3.5A, 12VDC, US Cord	12V-C ²
NER-010500303	CPS-12 3.5A, 12VDC, EU Cord	12V-C ²
NER-010501402	CPS-24, 24VDC, US cord	24V-S ¹
NER-010501401	CPS-24, 24VDC, EU cord	24V-S ¹
NER-010502601	CPS-24T, 24VDC US w/9-pin D-sub	24V-C & 24V-S ¹
NER-010502602	CPS-24T, 24VDC EU w/9-pin D-sub	24V-C & 24V-S ¹
NER-010502700	ICM-1, M/D Intensity Cntrl, 12V-C	12V-C ²
NER-010502701	ICM-1, M/D Intensity Cntrl, 24V-C	24V-C ²
NER-010502702	SCM-1, 1 Channel M/D Strobe Cntrl.	24V-S
NER-010901900	SCM-2, 2 Channel Strobe Cntrl.	24V-S
NER-010503500	VPS-II, 2 Ch. Variable PS, US Cord	12V-C ²
NER-010503501	VPS-II, 2 Ch. Variable PS, EU Cord	12V-C ²
NER-030003702	Ext. Cable, Cont., 1.8 M (6 ft.)	12V-C & 24V-C ²
NER-030003703	Ext. Cable, Cont., 3.0 M (10 ft.)	12V-C & 24V-C ²
NER-030003601	Y cable, 2 Lights, 9 pin D-sub Cont.	12V-C & 24V-C ²
NER-030007006	Ext. Cable, Strobe, 1.8 M (6 ft.)	24V-S
NER-030007010	Ext. Cable, Strobe, 3.0 M (10 ft.)	24V-S
NER-030006900	Y cable, 2 Lights, 9 pin D-sub Strb.	24V-S

¹ NER-01050140x used only with NER-010901900;

NER-01050260x used with either NER-010502702 or 24V-C lights with DB-9 connectors

² 12V-C and 24V-C accessories are not available for "Flying Leads" configurations