

Product Highlights

- Our MicroBrite™ DF198 Series provides diffuse illumination at a low angle to cast shadows used to identify surface defects, embossed text, etc.
- This ring light is more diffuse and less directional than the DF196.
- Can be used to produce a bright field effect when the outer diameter is smaller than the working distance.



General Specifications

Electrical Specifications	Part Number	Color	24V Current	All Other Controls
	DF198-050	625	N/A	0.13A Max
	DF198-050	455, 530, WHI	N/A	0.22A Max
	DF198-050	RGB	N/A	0.65A Max
	DF198-115	625	0.32A	0.32A Max
	DF198-115	455, 530, WHI	0.32A	0.54A Max
	DF198-115	RGB	N/A	0.95A Max
	DF198-180	625	0.64A	0.58A Max
	DF198-180	455, 530, WHI	0.64A	0.97A Max
	DF198-180	RGB	N/A	2.55A Max
	DF198-280	625	0.96A	0.58A Max
	DF198-280	455, 530, WHI	0.96A	0.97A Max
	DF198-280	RGB	N/A	3.60A Max

Normal Operating Temperature 0 - 60°C

Weight	DF198-050: 61.7g (2.18oz) DF198-115: 128.8g (4.54oz) DF198-180: 227.7g (8.03oz) DF198-280: 358.3g (12.64oz)
Standard Cable Information	2 m long -0/+150 mm (80" -0/+6") - 105°C rated PVC jacket, foil shield with drain.
Photobiological Risk Factor	Group 1 (Low-Risk) Applicable Wavelengths: 455, 530, 625, WHI, RGB
Compliance	CE, RoHS, IEC 62471
IP Rating	IP40
Lumen Maintenance	L70 = 50,000 Hours

Part Number Key

Model	—	Outer Diameter (mm)	Illuminated Field of View (mm)	Connector/Control	—	Alternative Connector
DF198	—	XXX	XXX	XX	—	XXX
DF198		050	455 (royal blue)	C1		M8 ¹
		115	530 (green)	C5		M12 ¹
		180	625 (red)	Q1		
		280	WHI (white)	Q4		
			RGB (all colors) ³	IC		
				I3		
				I3S		
				24 ²		
EX: DF198-115WHI3 DF198-180625C1						
¹ Available with IC, I3, I3S, and 24 V options only ² The 24 V version will have a lower output intensity by ~10-15% and operate at a temperature ~10-15% higher than other options; not available in 50 mm outer diameter ³ Available with C1 connector only						

See website product page for in-stock product numbers.

Shipping:

Stock Products: within three days

Build-to-Order Products: within one to three weeks

Change Notice

PCN No: 167

Date Issued: October 10, 2022

Notice Type: LED Change

Product Type: DF196-RGB and DF198-RGB Lights

Change Notification Summary

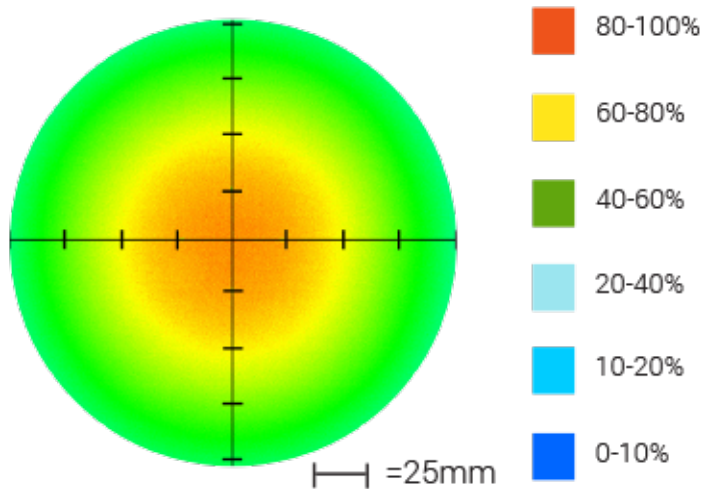
Due to the discontinuation of the LEDs used in these products, Advanced illumination (Ai) needs to update the LED to a current model. This change will occur immediately.

Please contact your Ai Sales Representative if you have any questions.

PCN167

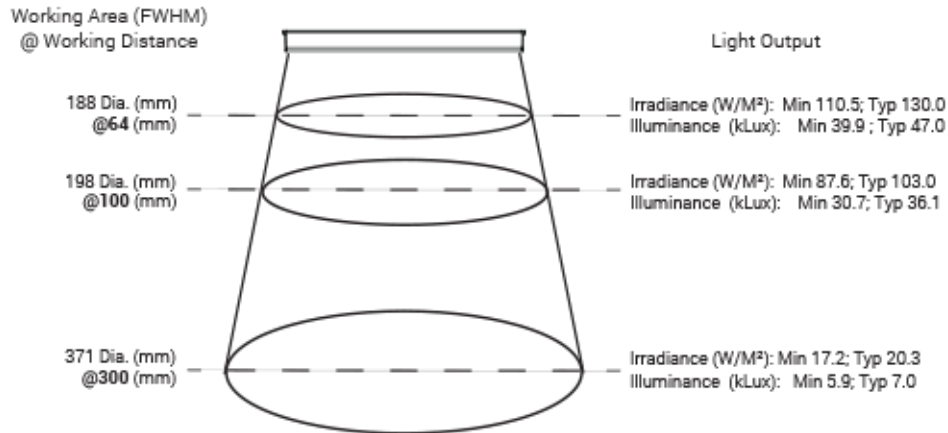
Optical Specs

Intensity Distribution



Optical measurement taken using DF198-180WHI3 @ 100mm

Area of Illuminance & Intensity for DF198-180WHII3

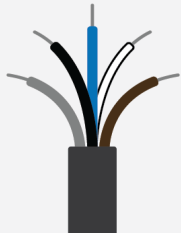


Area of Illuminance & Intensity for All DF198-WHI

Part Number	Working Distance (mm)	Irradiance (klux)	Illuminance (W/m2)	FWHM Diameter (mm)
DF198-050	12.7	703.0	223.0	33.0
	100	37.2	12.3	101.6
	300	4.2	1.5	340.4
DF198-115	50	94.2	32.7	116.8
	100	42.6	14.6	142.2
	300	5.9	2.1	317.5
DF198-180	64	130.0	47.0	188.0
	100	103.0	36.1	198.1
	300	20.3	7.0	370.8
DF198-280	100	62.5	22.7	315.0
	200	41.4	14.5	340.4
	300	23.8	8.2	403.9

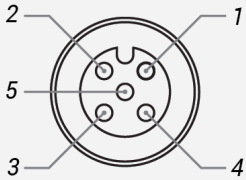
Electrical Specs

Standard Flying Lead Functions for 24V, IC, I3 and I3S Control Options

	COLOR	24V FUNCTIONS	IC FUNCTIONS	I3/I3S FUNCTIONS
	BROWN	24 V DC	24 V DC	24 V DC
	WHITE	N/A	0-10 V ANALOG DIMMING	RESERVED
	BLUE	DC GND	DC GND	DC GND
	BLACK	N/A	PNP/ACTIVE LOW GATE	PNP/ACTIVE HIGH TRIGGER
	GRAY	N/A	N/A	0-10 V ANALOG DIMMING

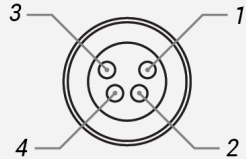
The functions listed above are applicable when this product is configured with built-in 24V, IC, I3, or I3S control, **without** the optional A-coded 5-position Male M12 or A-coded 4-position Male M8 connector.

M12 Connector Pinout Functions for 24V, IC, I3 and I3S Control Options

	PIN	24V FUNCTIONS	IC FUNCTIONS	I3/I3S FUNCTIONS
	1	24 V DC	24 V DC	24 V DC
	2	N/A	0-10 V ANALOG DIMMING	RESERVED
	3	DC GND	DC GND	DC GND
	4	N/A	PNP/ACTIVE LOW GATE	PNP/ACTIVE HIGH TRIGGER
	5	N/A	N/A	0-10 V ANALOG DIMMING

The functions listed above are only applicable when this product is configured with built-in 24V, IC, I3, or I3S control, **with** an A-coded 5-position Male M12 connector.

M8 Connector Pinout Functions for 24V, IC, I3 and I3S Control Options

	PIN	24V FUNCTIONS	IC FUNCTIONS	I3/I3S FUNCTIONS
	1	24 V DC	24 V DC	24 V DC
	2	N/A	0-10 V ANALOG DIMMING	0-10 V ANALOG DIMMING
	3	DC GND	DC GND	DC GND
	4	N/A	PNP/ACTIVE LOW GATE	PNP/ACTIVE HIGH TRIGGER

The functions listed above are only applicable when this product is configured with built-in 24V, IC, I3, or I3S control, **with** an A-coded 4-position Male M8 connector.

For details on operating configurations without built-in control (C1, C5, Q1, and Q4 control, when available), please refer to Advanced illumination's controller manuals.

Control Specs

C1 CONNECTOR

For use with:

**DCS-100E &
DCS-103E**Strobe/Continuous
Controllers**Ordered Separately****C5 CONNECTOR**

For use with:

Pulsar 320High Power
Strobe Only
Controller**Ordered Separately****Q1 CONNECTOR**

For use with:

**DCS-400E &
DCS-800E**Sequenced
Strobe/Continuous
Controllers**Ordered Separately****Q4 CONNECTOR**

For use with:

**DCS-400E &
DCS-800E**Sequenced
Strobe/Continuous
Controllers**Ordered Separately****ICS 2 (IC)**In-line Continuous
Controller
Included**24V Power Supply
Required**
Flying/Tinned Leads**ICS 3 (I3)**In-line Strobe/
Continuous Controller
Included

Default On

**24V Power Supply
Required**
Flying/Tinned Leads**ICS 3S (I3S)**In-line Strobe/
Continuous Controller
Included

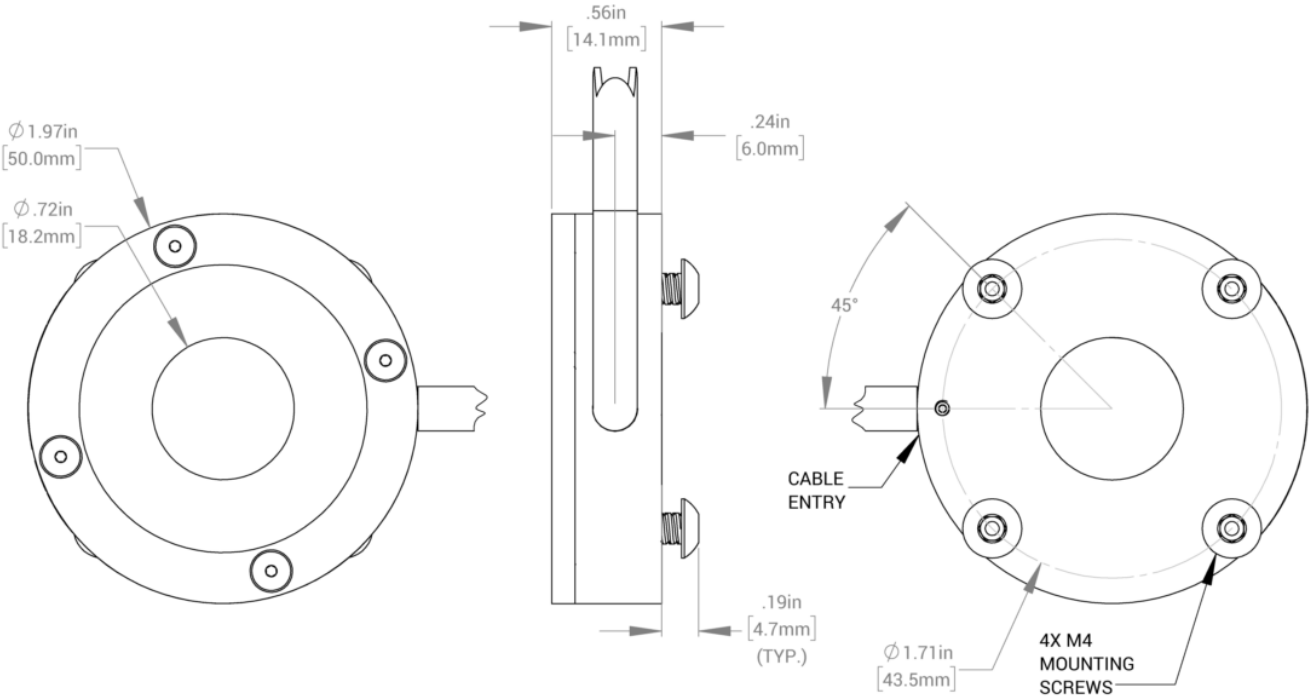
Default Off

**24V Power Supply
Required**
Flying/Tinned Leads**24 VOLT**Flying/Tinned
Leads

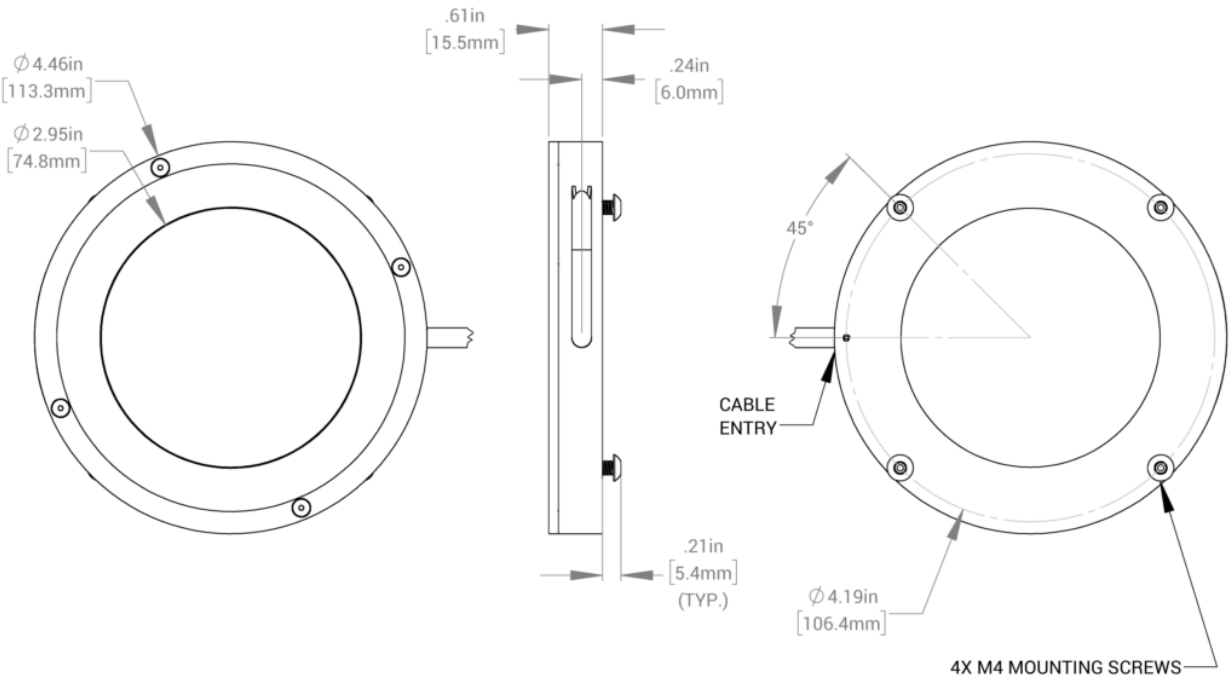
No Control Features

Powered with:
24V Power Supply

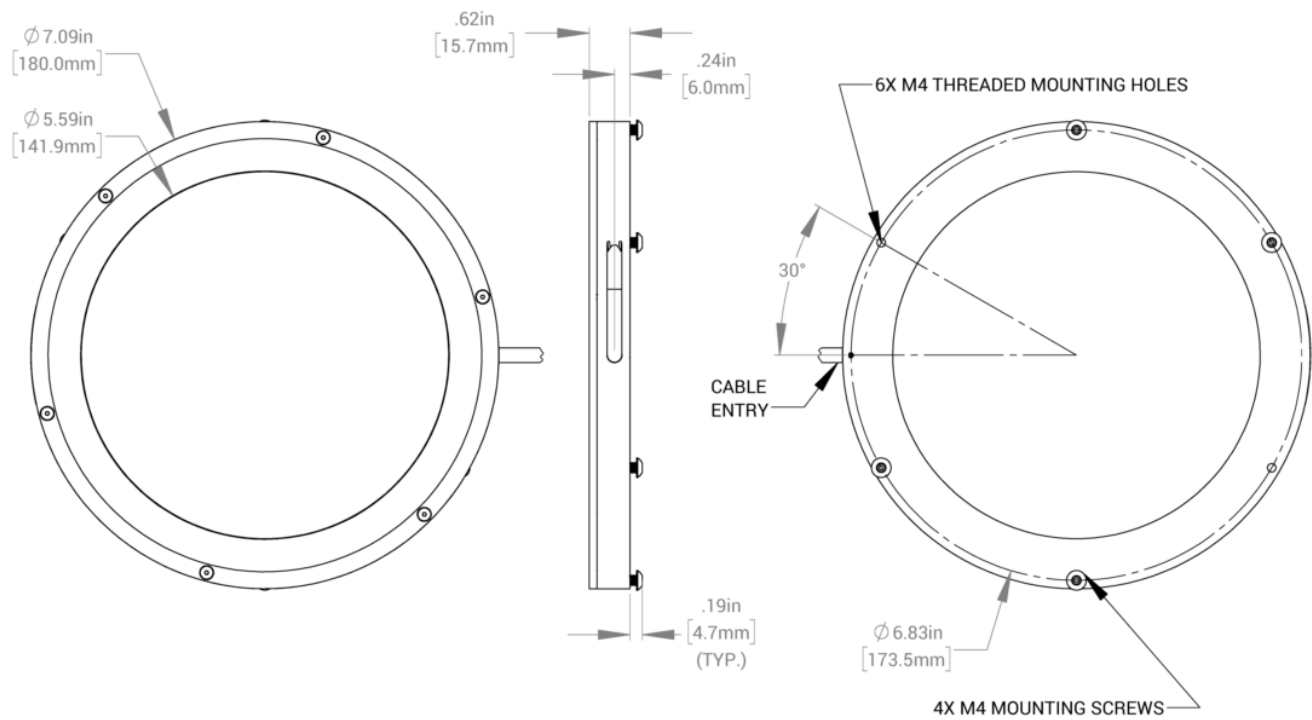
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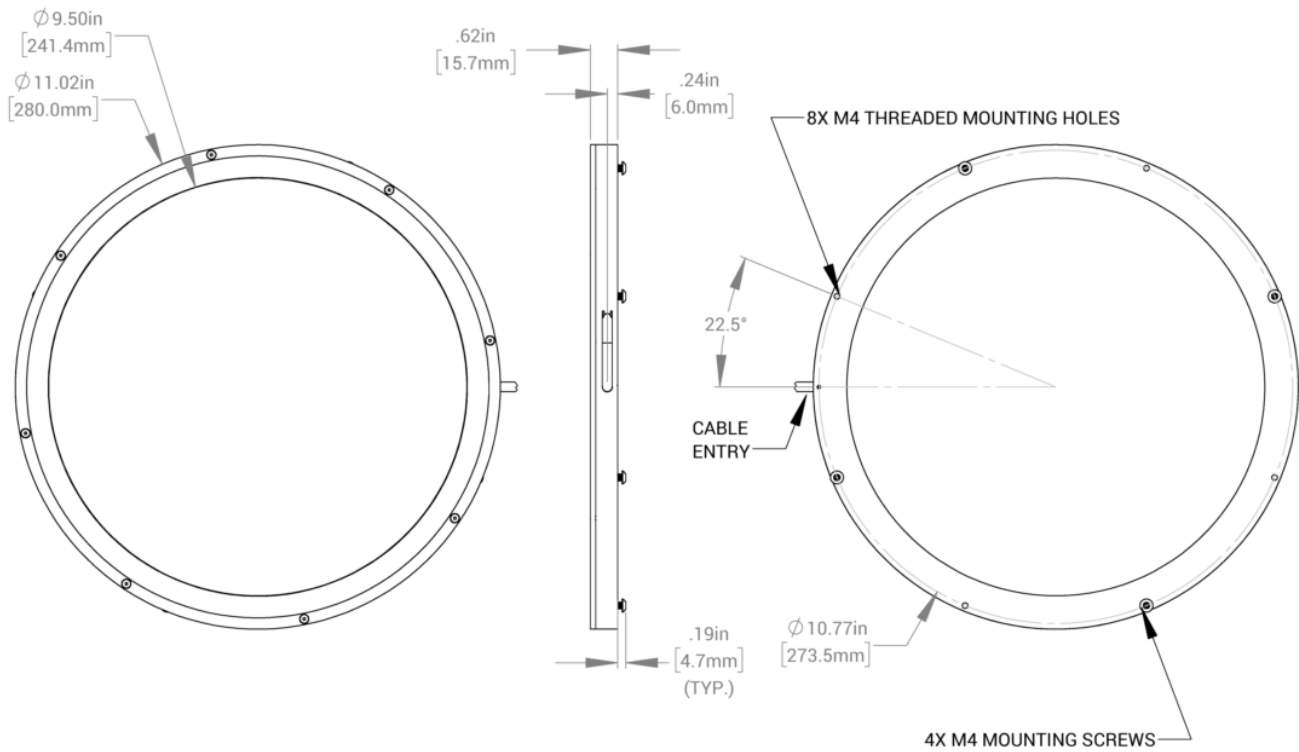
[DF198-115]



[DF198-180]



[DF198-280]



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