

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

	Part Number	Color	24V Current	All Other Controls
Electrical Specifications	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

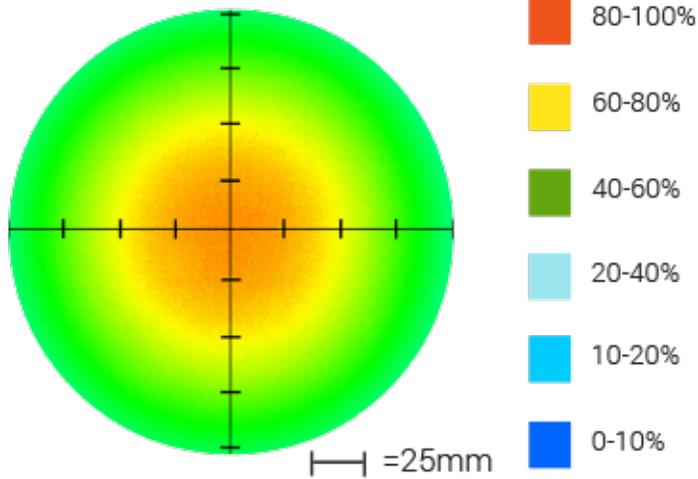
Weight	DF198-050: 61.7g (2.18oz) DF198-115: 128.8g (4.54oz) DF198-180: 227.7g (8.03oz) DF198-280: 358.3g (12.64oz)
Standard Cable Information	2 m long -0/+150 mm (80" -0/+6") - 105°C rated PVC jacket, foil shield with drain.
Photobiological Risk Factor	Group 1 (Low-Risk) Applicable Wavelengths: 455,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

Part Number Key

Model	—	Size (mm)	Spectral Wavelength	Connector/Control	—	Alternative Connector
DF198	—	XXX	XXXX	XX	—	XXX
DF198		050 ⁴ 115 180 280	455 (royal blue) 530 (green) 625 (red) WHI (white) RGB ³	C1 C5 Q1 Q4 IC I3 I3S 24 ²		M12 ¹
Ex: DF198-115WHI3 DF198-180625C1		¹ Available with IC, I3, I3S and 24v options only ² The 24v version will have a lower output intensity by ~10-15% and operate at a temp ~10-15% higher than other options ³ Available with C1 connector only ⁴ Not available with 24v option				

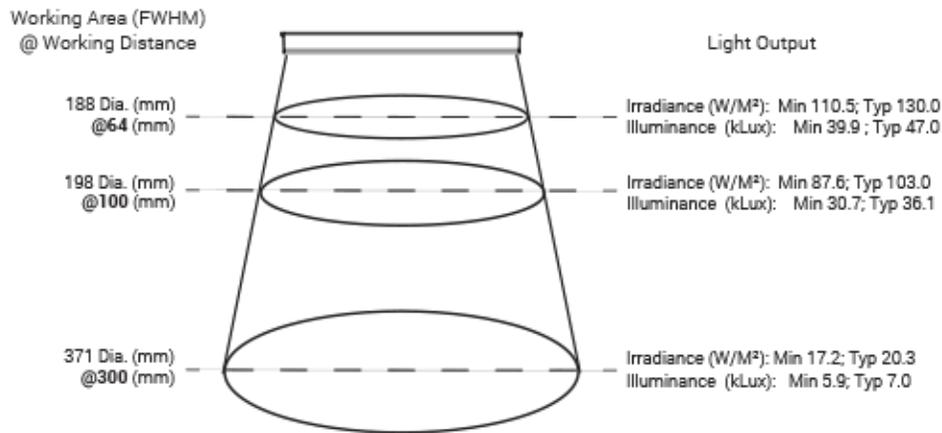
Stock Product: *shipped within 3 days* **Build to Order:** *shipped within 2 weeks*
 DF198-115WHI3

Intensity Distribution



Optical measurement taken using DF198-180WHI13 @ 100mm

Area of Illuminance & Intensity for DF198-180WHI13



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

ICS 2 (IC)

Pin (M12)	Function	Wire Color
1	+24 VDC	Brown
2	0-10 VDC Analog Control	White
3	GND	Blue
4	GLO	Black
5	N/A	Gray

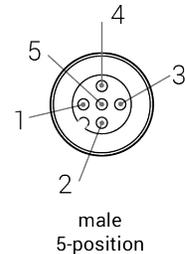
ICS 3 (I3 and I3S)

Pin (M12)	Function	Wire Color
1	+24 VDC	Brown
2	GND	White
3	GND	Blue
4	PNP/Active High Trigger	Black
5	0-10 VDC Analog Control	Gray

24 Volt

Pin (M12)	Function	Wire Color
1	+24 VDC	Brown
2	N/A	White
3	-24 VDC	Blue
4	N/A	Black
5	N/A	Gray

Optional M12 Pinout



Control Specs

C1 CONNECTOR

For use with:

**DCS-100E &
DCS-103E**

Strobe/Continuous
Controllers

Ordered Separately

C5 CONNECTOR

For use with:

Pulsar 320

High 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

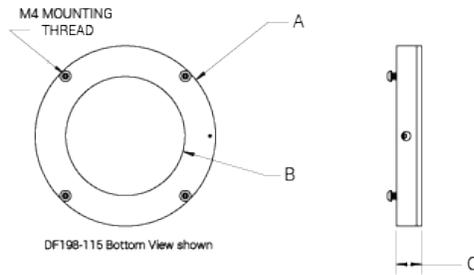
Flying/Tinned
Leads

No Control Features

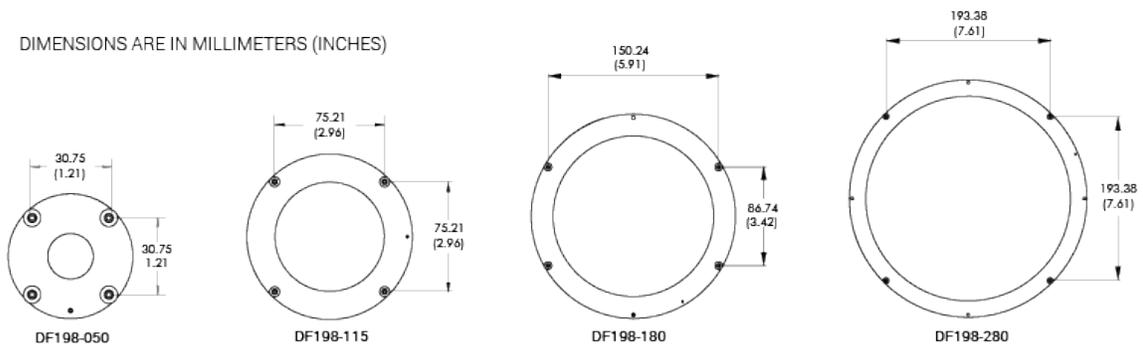
Powered with:
24V Power Supply

Mechanical Specs

Part Number	(A) Outer Diameter	(B) Inner Diameter	(C) Height
DF198-050	50.0 (1.97)	18.3 (0.72)	14.1 (0.55)
DF198-115	113.3 (4.46)	74.9 (2.95)	15.7 (0.62)
DF198-180	180.0 (7.09)	141.9 (5.59)	15.7 (0.62)
DF198-280	280.0 (11.02)	241.4 (9.50)	15.7 (0.62)



DIMENSIONS ARE IN MILLIMETERS (INCHES)



Warranty Information

Every Advanced illumination, Inc. (Ai) product is thoroughly inspected and tested before leaving the factory. Products are warranted to be free of defects in workmanship and materials for a period of FIVE YEARS from the original date of purchase. Should a defect develop during this period, customers may return the complete product, freight prepaid, to one of Ai's distributors or to the Ai factory. All product warranty returns require a Return Merchandise Authorization (RMA) number which is obtained from Customer Service. The RMA number must be clearly marked on the outside of the package. Ai will inspect the unit, and if a defect is found will, at our option, repair or replace the product without charge. Ai disclaims liability for any implied warranties, including implied warranties of "merchantability" and "fitness for a specific purpose." For products under warranty that have since been discontinued, Ai will make an effort to replace with equivalent parts; for circumstances that do not allow for equivalent replacement, Ai reserves the right to repair or replace these products with an updated version. Ai cannot be held responsible for the unauthorized or inappropriate use of its products. Any unauthorized repair or modifications will result in a voided warranty.

No Liability for Consequential Damages: In no event shall Ai be liable for any consequential, special, incidental, or indirect damages of any kind arising from the sale or use of the products.

Electromagnetic Compatibility

This product was tested and complies with the regulatory requirements and limits for electromagnetic compatibility (EMC) as stated in the product specifications. These requirements and limits are designed to provide reasonable protection against harmful interference only when the product is operated in its intended industrial electromagnetic environment. To minimize the potential for electromagnetic interference or unacceptable performance degradation, install and use this product in strict accordance with the instructions in the product documentation.

Customer Service

For information on existing orders, or to make an order adjustment, contact us Monday through Friday 8:00 am to 5:00 pm ET or send an email to orders@advancedillumination.com.

Company Information

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