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## 50mm, Blue 455nm, MicroBrite Diffuse Darkfield Ring Lights

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Advanced Illumination MicroBrite Diffuse Darkfield Ring Lights

Stock **#18-559** **1 In Stock**

⊖ 1 ⊕ **S\$959<sup>00</sup>**

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### Product Downloads

### General

DF198-050455IC **Model Number:**

50,000 **LED Lifetime (hours):**

LED Illuminator **Type of Illumination:**

**Note:**  
Optional Manual Intensity Adjustment [#86-887](#) and [#89-555](#) are Available

Advanced Illumination **Manufacturer:**

Ring Light **Geometry:**

Constant **Illumination Mode:**

## Physical & Mechanical Properties

14.1 **Height (mm):**

18.3 **Inner Diameter (mm):**

50 **Outer Diameter (mm):**

50.0 x 18.3 x 14.1 **Dimensions (mm):**

61.7 **Weight (g):**

## Optical Properties

Blue **Color:**

455 **Wavelength (nm):**

## Electrical

0.22A **Maximum Input Current:**

## Hardware & Interface Connectivity

Flying Leads **Connector:**

24V **Input Voltage (V):**

**Power Supply:**  
Power Supply Required and Sold Separately.  
USA: [#66-855](#)  
Europe: [#66-855](#)  
Japan: [#89-513](#)  
Korea: [#33-773](#)  
China: [#66-855](#)

## Threading & Mounting

M4 x4 **Mounting Threads:**

## Environmental & Durability Factors

0 - 60 **Operating Temperature (°C):**

IP40 **Environmental Rating:**

## Regulatory Compliance

[Exempt](#) **RoHS 2015:**

[View](#) **Certificate of Conformance:**

[Contains SVHC\(s\)](#) **Reach 233:**

## Product Details

- Ideal for Visually Enhancing Surface Defects
- High Light Output up to 47,000 Lux
- Multiple Working Distances Between Darkfield and Brightfield
- Required Power Supply and Optional Manual Intensity Adjustment Sold Separately

Advanced Illumination MicroBrite Diffuse Darkfield Ring Lights provide high performance diffuse illumination at narrow angles in a compact form factor. At short working distances, the curved, diffuse lens allows for darkfield illumination while longer working distances allow for both darkfield and brightfield illumination. These ring lights can be used with optional potentiometers to manually adjust LED intensity and can be used to produce a brightfield effect when the working distance is greater than the ring light's outer diameter. Advanced Illumination MicroBrite Diffuse Darkfield Ring Lights are available in multiple sizes and are ideal for applications requiring visual enhancements of surface defects.

**Note:** Requires 24V power supply [#66-855](#). See specific product notes for compatibility with Manual Intensity Adjustment ([#89-555](#)) or DC-100E Single Output Controller ([#18-645](#))



Ring Light Configuration

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Designed for use with the [Articulating Arm Mounting Systems](#), these 3D-printed mounts allow easy positioning of lights in brightfield or darkfield setups. The design is based on mounting illumination to 1/4-20" breadboards or into 80/20 extrusion systems, but can be adapted based on user needs. Mounts are available for ring, bar, line, and inline spot lights.



[Application Note](#)

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[Assembly of 3D Printed Mounts for Common Illumination Geometries](#)

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