

TECHSPEC® 4.5mm, f/8 Ci Series Fixed Focal Length Lens



4.5mm Focal Length

Stock #87-555 **1 In Stock**

− 1 + €355⁰⁰

ADD TO CART

| Volume Pricing | |
|----------------|-------------------------------|
| Qty 1-24 | €355,00 each |
| Qty 25+ | €320,00 each |
| Need More? | Request Quote |

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Ci Series **Product Family:**
Fixed Focal Length Lens **Type:**

Physical & Mechanical Properties

Fixed **Iris Option:**

| | |
|-------|-------------------------------|
| 32.14 | Length (mm): |
| 40 | Maximum Diameter (mm): |
| 40 | Outer Diameter (mm): |
| 66 | Weight (g): |
| 3.4 | Maximum Rear Protrusion (mm): |
| 26.50 | Diameter (mm): |

Optical Properties

| | |
|---|---|
| 72.0mm - 84.7° | Horizontal Field of View @ Max Sensor Format: |
| Horizontal: 72mm - 84.7° Vertical: 50.5mm - 66.1° Diagonal: 98.3mm - 100° | Field of View at Max Sensor Format: |
| 72.0mm - 84.7° | Horizontal Field of View, 1/1.8" Sensor: |
| 53.9mm - 69.4° | Horizontal Field of View, 1/2" Sensor: |
| 44.0mm - 59.2° | Horizontal Field of View, 1/3" Sensor: |
| 32.0mm - 45.2° | Horizontal Field of View, 1/4" Sensor: |
| 9.00 | Maximum Image Circle (mm): |
| 0.0071 | Numerical Aperture NA, Object Side: |
| 7 (6) | Number of Elements (Groups): |
| 4.50 | Focal Length FL (mm): |
| 25 - ∞ | Working Distance (mm): |
| f/8 | Aperture (f/#): |
| 425 - 675nm BBAR | Coating: |
| 425 - 675nm BBAR | Coating Specification: |
| 14.4 | Entrance Pupil Position (mm): |
| 17.89 | Object Space Principal Plane (mm): |
| 6.51 | Image Space Principal Plane (mm): |
| -15.83 | Maximum Distortion (%): |
| -9 | Exit Pupil Position (mm): |
| VIS | Lens Wavelength Range: |

Sensor

| | |
|--------|------------------------|
| 1/1.8" | Maximum Sensor Format: |
| 2.74 | Pixel Size (µm): |

Threading & Mounting

| | |
|------------------------------------|------------------------|
| M58 x 0.75 (Male) | Filter Thread: |
| #87-425 (Required) | Filter Thread Adapter: |
| M40.0 x 0.5 (Male) | Front Thread: |
| C-Mount | Mount: |

Environmental & Durability Factors

| | |
|--|---------------------------|
| | Storage Temperature (°C): |
|--|---------------------------|

Regulatory Compliance

[View](#)

Certificate of Conformance:

Product Details

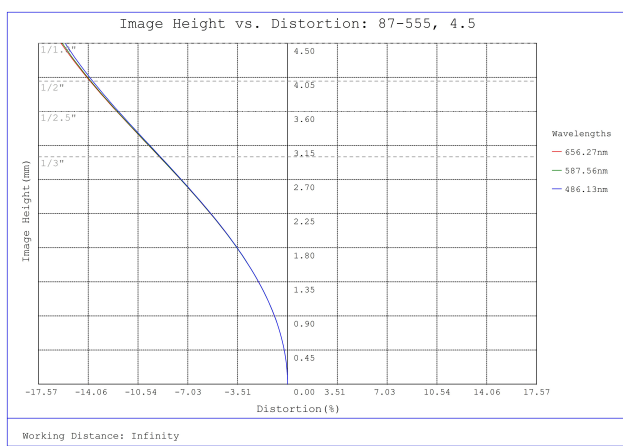
- Up to 2/3", C-Mount Lens
- Up to 7.5 MegaPixels, 2.8µm Pixel Size Sensors
- Instrumentation (Ci) Versions of our C Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 3.5mm to 50mm Focal Length
- **Ruggedized (Cr) Designs** Also Available

TECHSPEC® Ci Series Fixed Focal Length Lenses are a streamlined version of our C Series Fixed Focal Length Lenses. They feature the same low lens-to-lens variation and broadband anti-reflection (BBAR) coating for maximum light transmission, while offering reduced weight and size. An adjustable, lockable focus allows for setting and locking the best focus position for instrumentation integration. TECHSPEC® Ci Series Fixed Focal Length Lenses are designed specifically for volume integration into applications such as factory inspection and automation to benchtop biomedical devices. The Ci Series offers a wide range of aperture options, ensuring maximum flexibility of resolution, throughput, and depth of field.

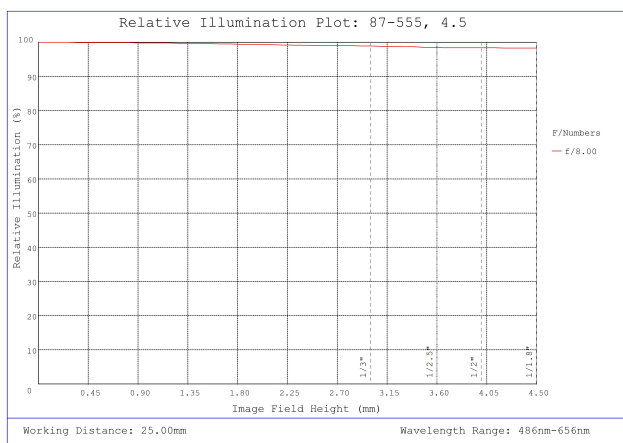
Edmund Optics has created a family of high performance optical designs (the C Series family) and developed 6 customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the C Series lenses providing the same optical performance in a variety of optomechanical solutions to meet your application requirements:

- **C Series:** Features locking cam focus and iris adjustment and is the most adjustable version of these optical designs; they are the typical high quality machine vision lenses. Also available with a **VIS-NIR Broadband Anti-Reflection (BBAR) Coating**.
- **Ci Series:** Simplified mechanics featuring fixed apertures with compact housing. **Industrial Ruggedization** for reduced size, cost, and locked focus.
- **Cr Series:** All optics glued in place and a locking C-clamp focus ring. **Stabilized Ruggedization** for reduced pixel shift and improved focus stability.
- **Cx Series:** Modular, flexible mechanics allows lenses to be taken apart for easy integration of accessories such as liquid lenses, apertures, and more.
- **Liquid Lens Cx Series:** Designed with an integrated liquid lens for quick autofocus.
- **Cw Series:** Waterproof, designed to meet IEC **Ingress Protection** Code IPX7 and IPX9K.

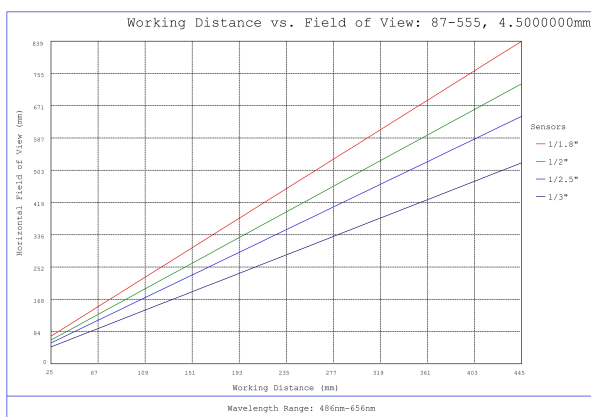
Technical Information



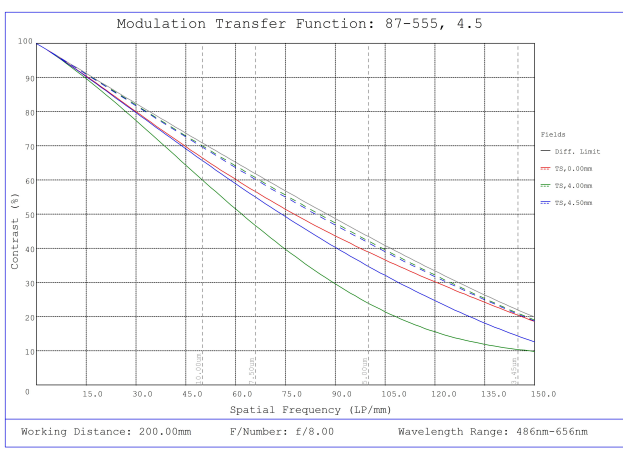
#87-555, 4.5mm, f/8 Ci Series Fixed Focal Length Lens, Distortion Plot



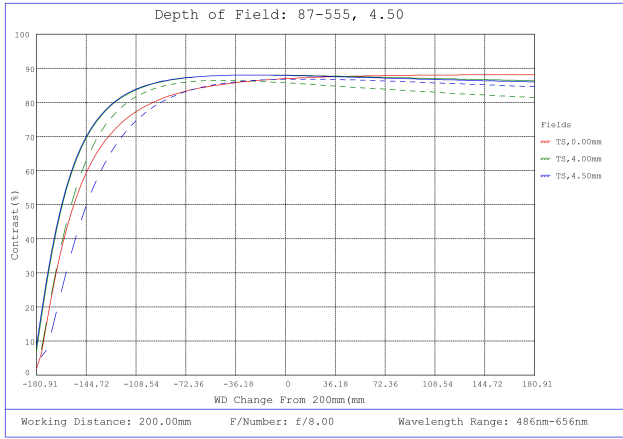
#87-555, 4.5mm, f/8 Ci Series Fixed Focal Length Lens, Relative Illumination Plot



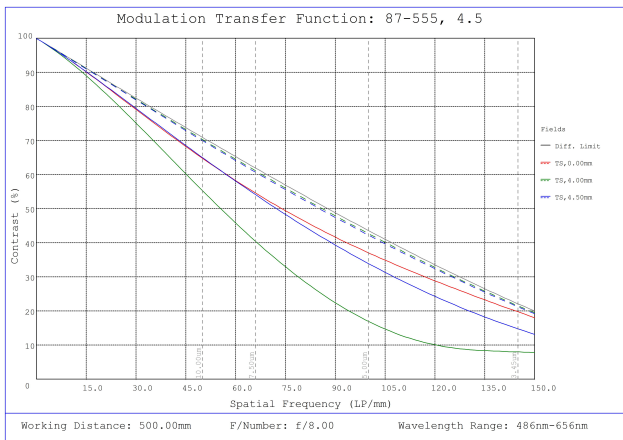
#87-555, 4.5mm, f/8 Ci Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



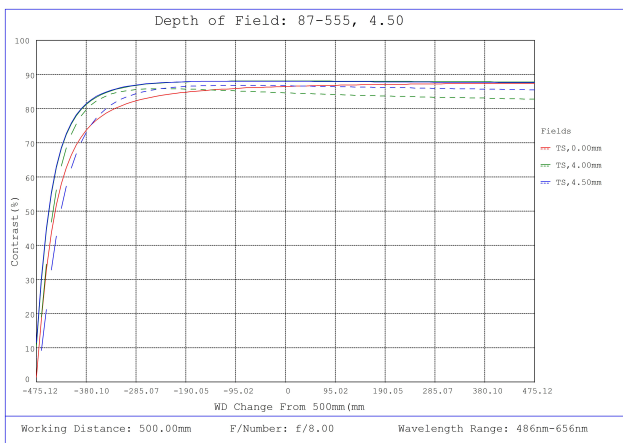
#87-555, 4.5mm, f/8 Ci Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 200mm Working Distance, f8



#87-555, 4.5mm, f/8 Ci Series Fixed Focal Length Lens, Depth of Field Plot, 200mm Working Distance, f8



#87-555, 4.5mm, f/8 Ci Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f8



#87-555, 4.5mm, f/8 Ci Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f8

| Focal Length | A | B | C | D |
|--------------|--------------|--------|--------|--------|
| 6mm | M34.0 x 0.5 | 47.8mm | 34mm | 1.17mm |
| 12mm | M22.0 x 0.75 | 29.0mm | 22mm | 0.96mm |
| 16mm | M22.0 x 0.75 | 40.8mm | 22mm | 1.09mm |
| 25mm | M22.0 x 0.75 | 29.9mm | 22mm | 1.33mm |
| 35mm | M25.5 x 0.5 | 41mm | 22.5mm | 3.82mm |
| 50mm | M30.5 x 0.5 | 49.5mm | 30.5mm | 2.06mm |



Compatible Cameras

;