

TECHSPEC® 0.345X In-Line CobaltTL Telecentric Lens

#15-871



TECHSPEC® CobaltTL Telecentric Lenses are designed for semiconductor and electronics inspection, measurement, and gauging applications. These telecentric lenses achieve high light throughput with industry leading low $f/\#$ s. Featuring less than 0.015° telecentricity and low 0.013% distortion, these lenses are ideal for image stitching applications. These 17.6mm diagonal sensor format lenses are compatible with the Sony IMX304 1.1" sensors and other similar format sensors such as the Sony IMX183. TECHSPEC® CobaltTL Telecentric Lenses produce unparalleled levels of contrast yielding maximum image quality with the highest degree of measurement accuracy. In-line versions provide the ability to rotate/reposition the inline illumination port to allow for maximum flexibility when machine building. TECHSPEC® CobaltTL Telecentric Lenses are compatible with high vibration environments and feature a removable recessed set screw for securely locking the iris in place.

Flange Distance (mm):	17.5
Coating:	426 - 675nm BBAR
Depth of Field (mm):	±8.87mm at f/10 (20% @ 20 lp/mm)

Optical

Horizontal Field of View, 1/2" Sensor:	23.22mm
Horizontal Field of View, 2/3" Sensor:	31.93mm
Horizontal Field of View, 1" Sensor:	46.44mm
Numerical Aperture NA, Object Side:	0.034
Horizontal Field of View, 1.1" Sensor:	40.88mm
Horizontal Field of View, 1/1.8" Sensor:	26.12mm
Typical Telecentricity @ 588nm (°):	<0.094
Typical Distortion @ 588nm (%):	<0.088
Primary Magnification PMAG:	0.345X
Maximum Sensor Format:	1.1"
Working Distance (mm):	114
Aperture (f/#):	f/5 - f/16
FOV @ Max Sensor Format, H x V (mm):	40.88 x 30.65
Lens Wavelength Range:	VIS

Mechanical

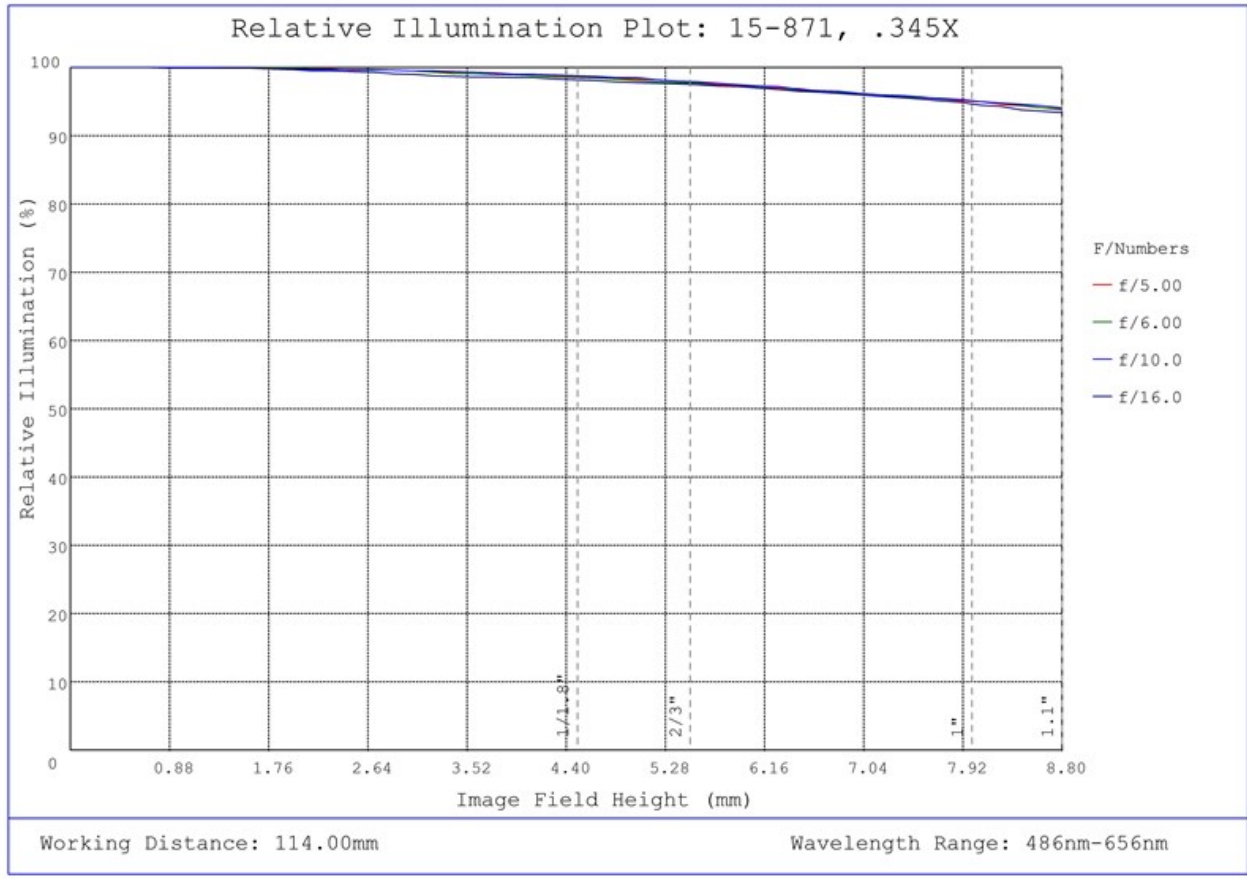
Length (mm):	195.50
Filter Thread:	M67 x 0.75 (Female)
Maximum Diameter (mm):	70.0
Number of Elements (Groups):	9 (7)
Mount:	C-Mount

General

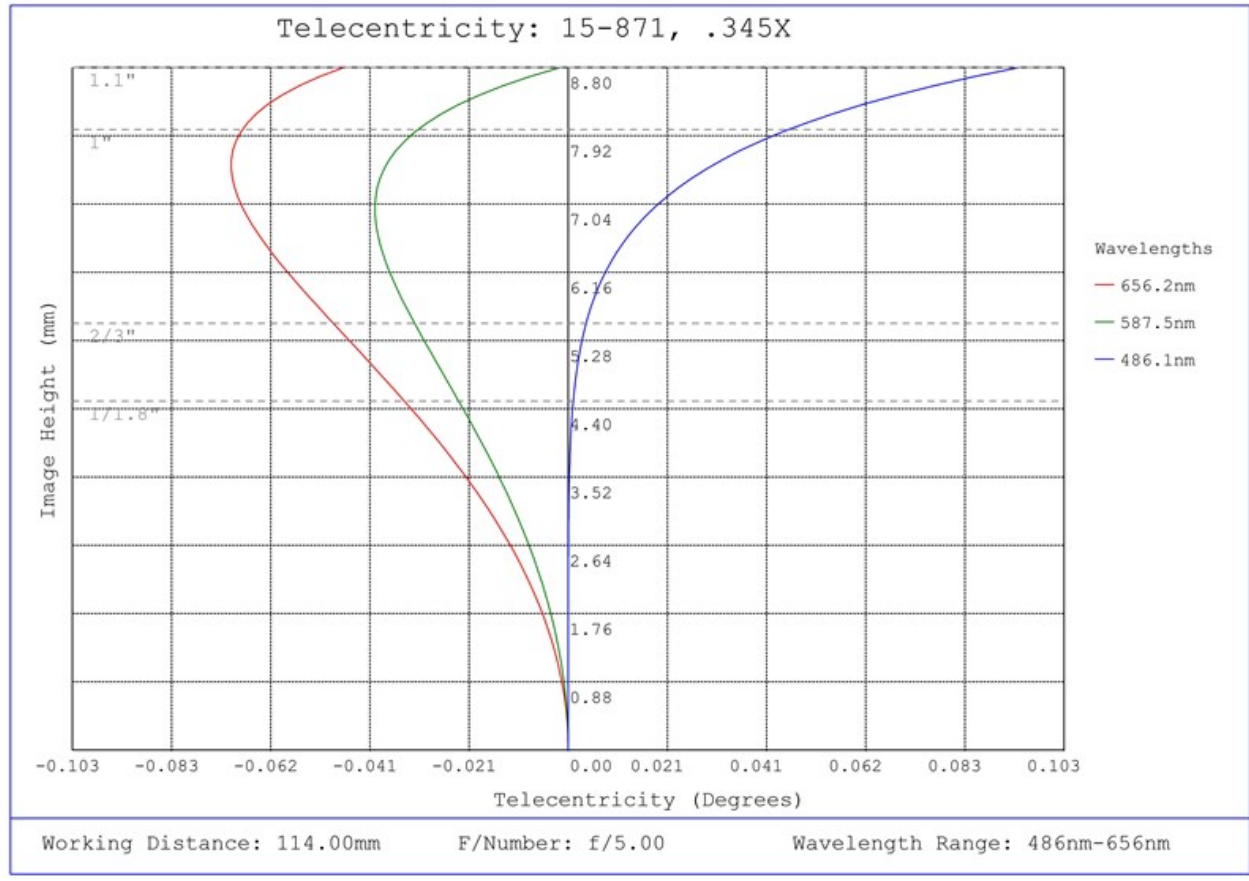
Stock No. of Mounting Clamp:	#63-233 - Sold Separately
Type:	Telecentric Lens
Style:	In-Line Illumination



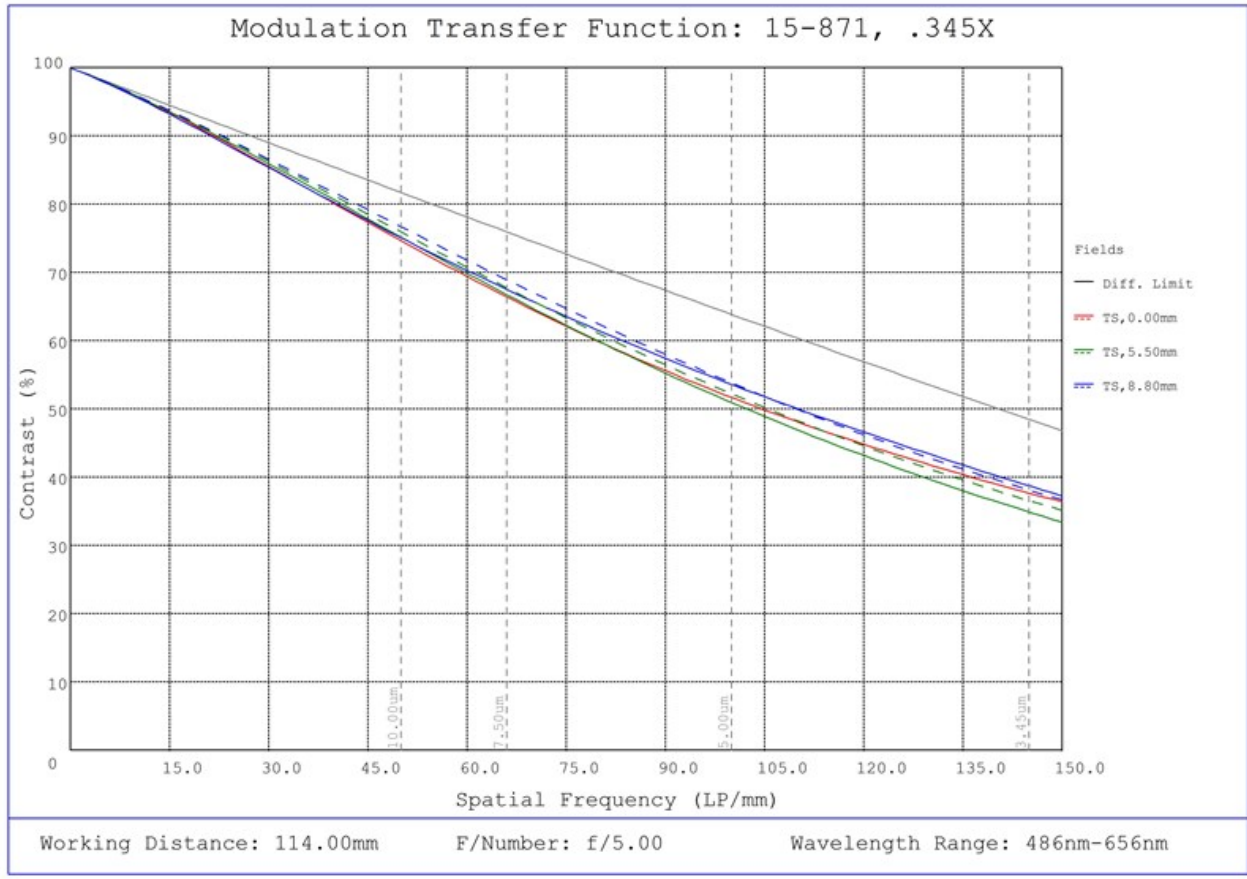
#15-871, 0.345X In-Line CobaltTL Telecentric Lens, Distortion Plot



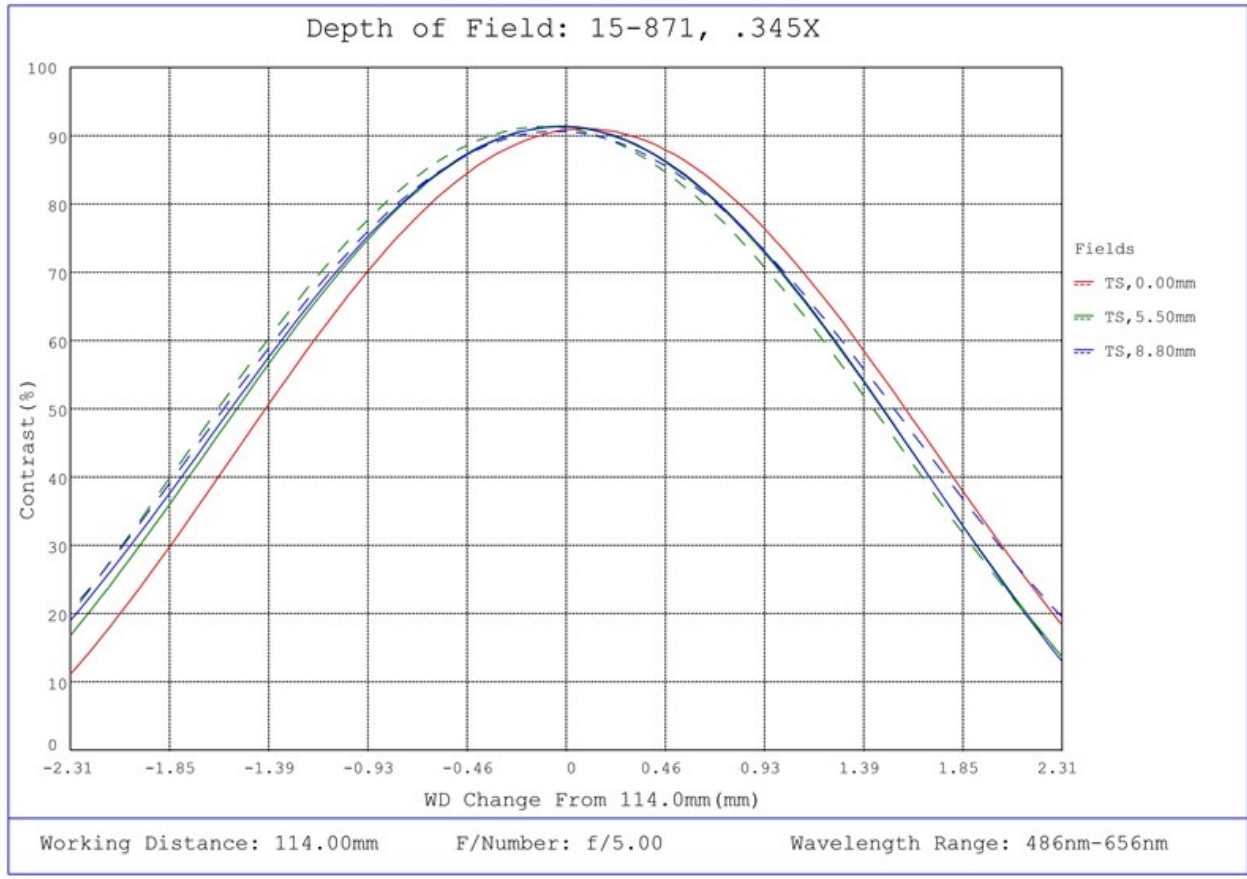
#15-871, 0.345X In-Line CobaltTL Telecentric Lens, Relative Illumination Plot



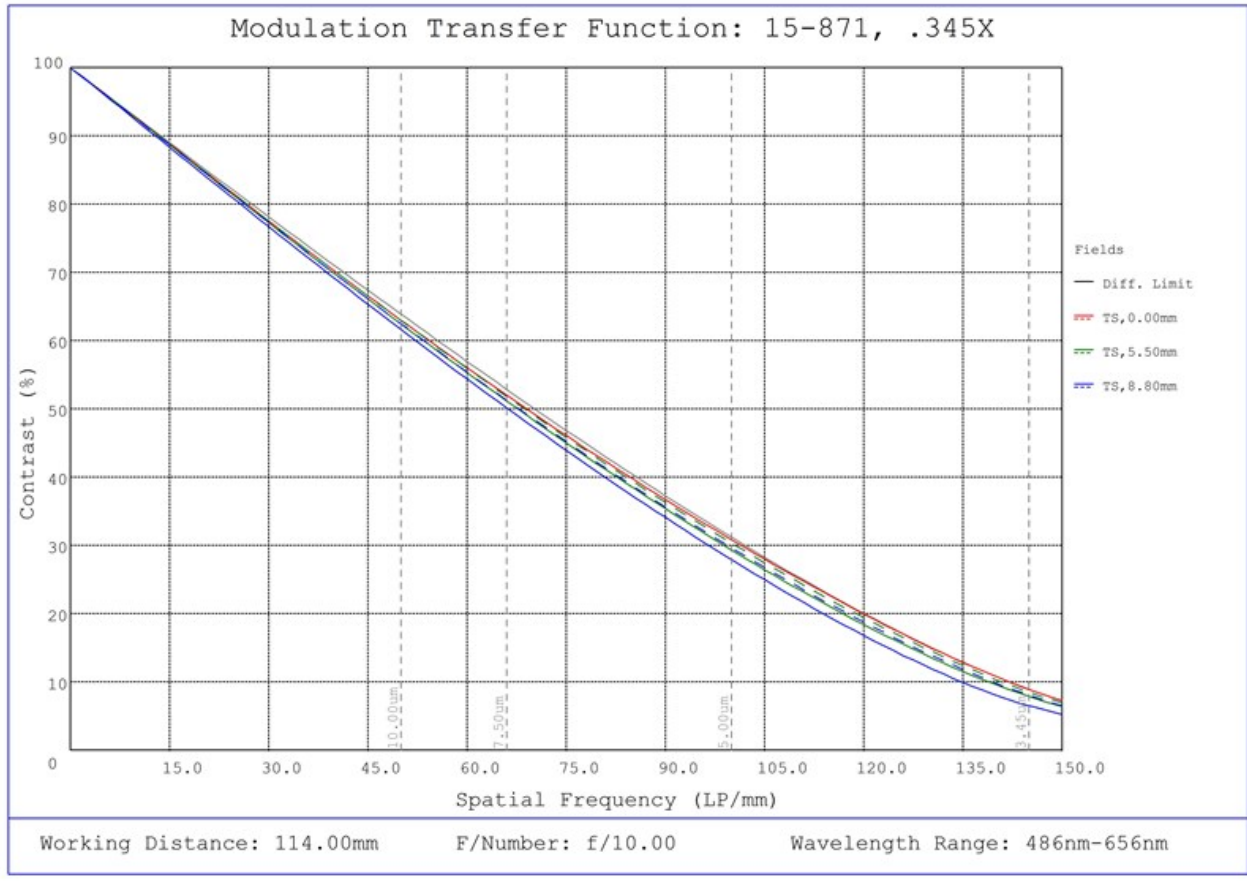
#15-871, 0.345X In-Line CobaltTL Telecentric Lens, Telecentricity Plot



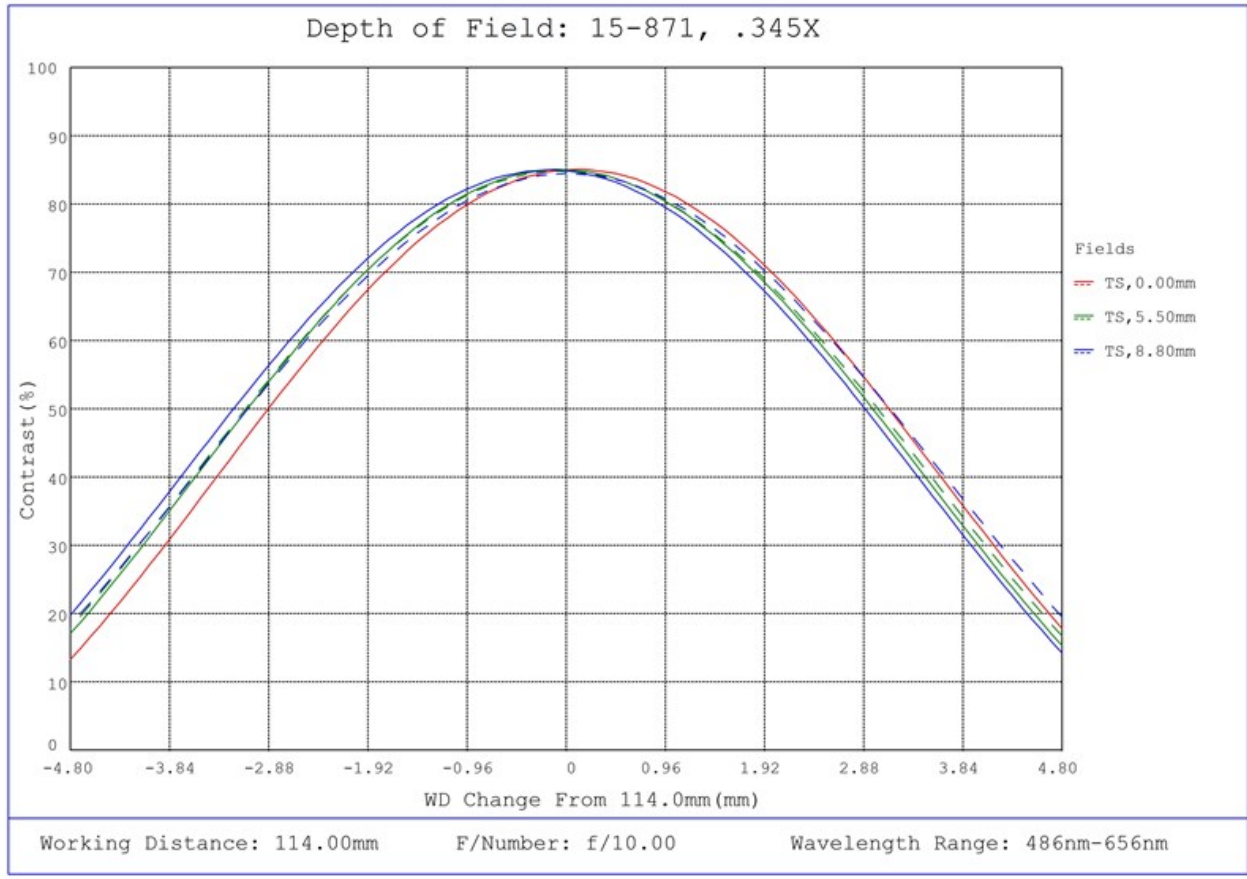
#15-871, 0.345X In-Line CobaltTL Telecentric Lens, Modulated Transfer Function (MTF) Plot, 114mm Working Distance, f5



#15-871, 0.345X In-Line CobaltTL Telecentric Lens, Depth of Field Plot, 114mm Working Distance, f5



#15-871, 0.345X In-Line CobaltTL Telecentric Lens, Modulated Transfer Function (MTF) Plot, 114mm Working Distance, f10



#15-871, 0.345X In-Line CobaltTL Telecentric Lens, Depth of Field Plot, 114mm Working Distance, f10



September 08, 2023

To Whom It May Concern,

This document certifies that the product stated below has been reviewed as requested by Edmund Optics:

<i>Stock No.</i>	<i>Description</i>
15-871	0.345X In-Line CobaltTL Telecentric Lens

This item is EU RoHS (2011/65/EU) compliant without the use of exemptions.

This certification means that:

- EO's suppliers have confirmed the material composition of this product.
- EO has implemented rigorous procedures to document this compliance.
- The information provided may, or may not, be based upon actual test data, or on information from our Vendors, Raw Material Suppliers or Subcontractors.



Jay Budd, Director of Corporate Compliance
September 08, 2023

Edmund Optics Inc. - 101 E Gloucester Pike, Barrington, NJ 08007 | 1-800-363-1992 | Compliance@edmundoptics.com



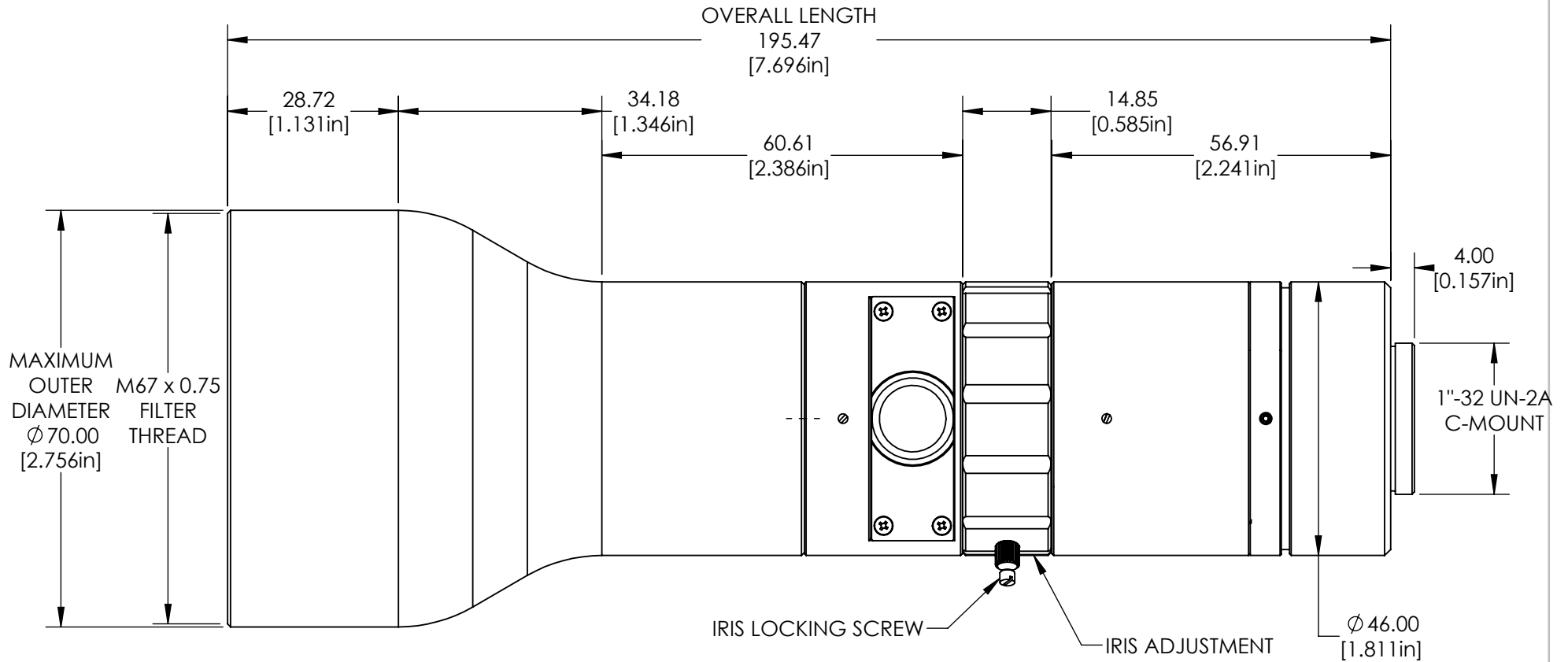
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Edmund Optics certifies that all articles included in this shipment are in compliance with the terms and conditions of this order. The company also certifies that the articles included in this shipment are in accordance to all agreed upon specifications and quality assurance provisions. Please call 1-800-363-1992 should any questions arise from this shipment.



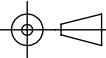
Jeff Harvey- EVP of Operations



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DIMENSIONS ARE FOR
REFERENCE ONLY

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THIRD ANGLE PROJECTION 		TITLE	0.345X 1.1" INLINE TELECENTRIC	
ALL DIMS IN	mm	DWG NO	15871	SHEET 1 OF 1