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TECHSPEC® 1.75X LS Series Line Scan Lens



LS Series Line Scan Lenses



Stock **#35-441** [CONTACT US](#)

- 1 + **\$\$5,621⁰⁰**

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General

LS Series **Product Family:**

Note:
Beamsplitter is included. Length includes beamsplitter. Specifications are at primary magnification.

Line Scan **Type:**

Yes **Beamsplitter / Line Scan:**

Line Scan **Special Type of Lens:**

Physical & Mechanical Properties

Variable **Iris Option:**

122.00 **Length (mm):**

95 **Maximum Diameter (mm):**

95 **Outer Diameter (mm):**

1122 **Weight (g):**

0 **Maximum Rear Protrusion (mm):**

379.6 **Lens Total Track Length (mm):**

379.60 **Total Track (mm):**

Optical Properties

46.9mm **Horizontal Field of View @ Max Sensor Format:**

Diagonal: 47mm - 16.7° **Field of View at Max Sensor Format:**

46.9mm **Field of View, 82mm Sensor:**

35.7mm **Field of View, 62.5mm Sensor:**

33mm **Field of View, 57.7mm Sensor:**

16.4mm **Field of View, 28.7mm Sensor:**

0.10 **Numerical Aperture NA:**

82.00 **Maximum Image Circle (mm):**

0.0973 **Numerical Aperture NA, Object Side:**

12 (7) **Number of Elements (Groups):**

99.00 **Focal Length FL (mm):**

1.65X - 1.85X **Primary Magnification PMAG:**

65.9 **Working Distance (mm):**

f/3.2 - f/22 **Aperture (f/#):**

425 - 675 BBAR VIS **Coating:**

425 - 675nm BBAR **Coating Specification:**

90.62 **Entrance Pupil Position (mm):**

88.34 **Object Space Principal Plane (mm):**

-79.41 **Image Space Principal Plane (mm):**

0.05 **Maximum Distortion (%):**

>97% **Relative Illumination:**

-76.74 **Exit Pupil Position (mm):**

VIS **Lens Wavelength Range:**

Sensor

62.5mm **Optimized Sensor Format:**

Maximum Sensor Format:
82mm (Image Circle)

Pixel Size (μm):
5.00

Threading & Mounting

Filter Thread:
M52 x0.75

Mounting Diameter (mm):
75

Mount:
V-70 Mount

Regulatory Compliance

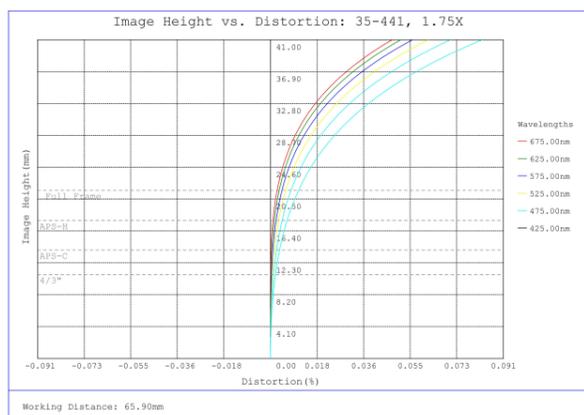
Certificate of Conformance:
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Product Details

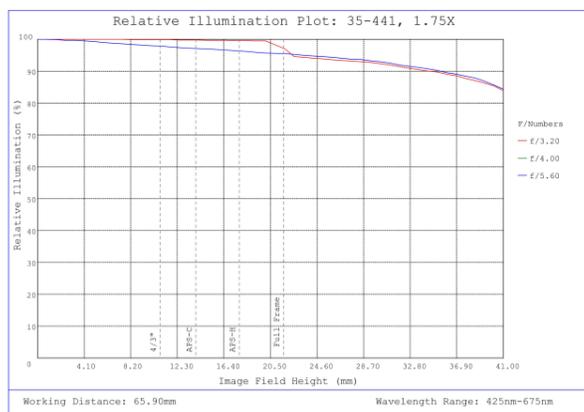
- 82mm Line Scan (LS), V-70 Mount
- Up to 16k, 5 μm Pixel Size Line Scan Sensors
- High Resolution, Low Distortion, Uniform Field Performance
- 1.65X to 2.65X Primary Magnification

TECHSPEC® LS Series Line Scan Fixed Focal Length Lenses are low distortion lenses designed for 82mm 16k line scan cameras with 5 μm pixels and 62.5mm 12k line scan cameras with 5 μm pixels. For coaxial inline illumination, these lenses are available with a beamsplitter for line scan sensors or with a window for area scan sensors. The locking iris is adjustable from $f/2.9$ to $f/22$, while the V-Mount provides ease of adjustment and alignment. The uniform and high resolution performance across the entire image makes the TECHSPEC® LS Series Line Scan Fixed Focal Length Lenses ideal for applications such as electronics, flat panel display and semiconductor wafer inspections.

Technical Information



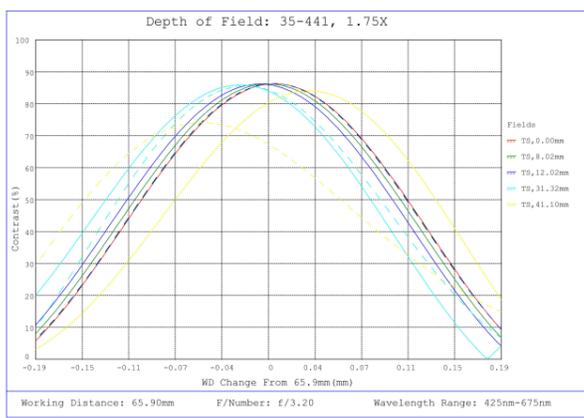
#35-441, 1.75X LS Series Line Scan Lens, Distortion Plot



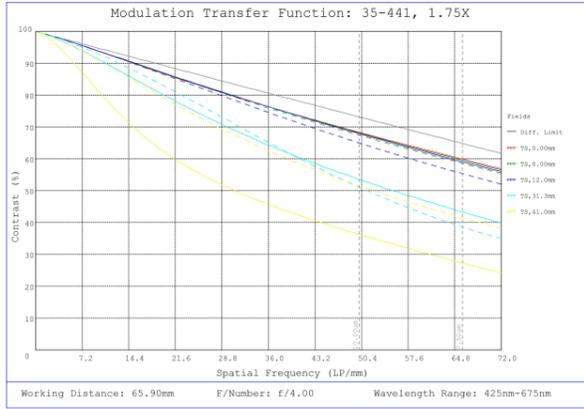
#35-441, 1.75X LS Series Line Scan Lens, Relative Illumination Plot



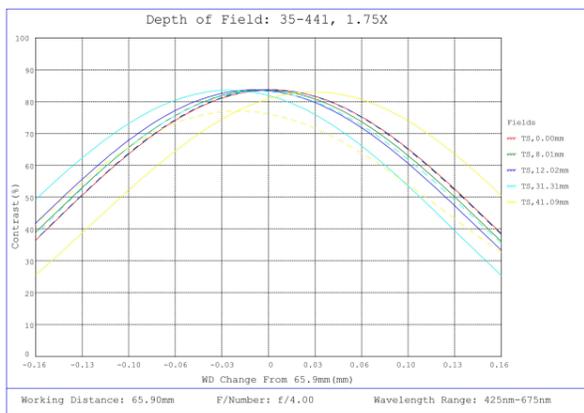
#35-441, 1.75X LS Series Line Scan Lens, Modulated Transfer Function (MTF) Plot, 65mm Working Distance, $f/3.2$



#35-441, 1.75X LS Series Line Scan Lens, Depth of Field Plot, 66mm Working Distance, f3.2



#35-441, 1.75X LS Series Line Scan Lens, Modulated Transfer Function (MTF) Plot, 65mm Working Distance, f4



#35-441, 1.75X LS Series Line Scan Lens, Depth of Field Plot, 66mm Working Distance, f4