

TECHSPEC® 1.75X LS Series Area Scan Lens



1.75XLS Series Area Scan Lens

Stock **#35-451** [CONTACT US](#)

⊖ 1 ⊕ MRP ₹4,26,393

📌 Price inclusive of all taxes

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General

LS Series **Product Family:**

Note:
Window is included. Length includes window.
Specifications are at primary magnification.

Fixed Focal Length Lens **Type:**

No **Beamsplitter / Line Scan:**

Area Scan **Special Type of Lens:**

Physical & Mechanical Properties

Variable **Iris Option:**

125.30 **Length (mm):**

75 **Maximum Diameter (mm):**

75 **Outer Diameter (mm):**

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

379.60 **Total Track (mm):**

Optical Properties

Horizontal Field of View @ Max Sensor Format:
46.9mm

Field of View at Max Sensor Format:
Horizontal: 37.6mm - 13.2°
Vertical: 28.2mm - 10°
Diagonal: 47mm - 16.7°

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

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

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

20.6mm **Horizontal Field of View, 35mm Sensor:**

16.7mm **Horizontal Field of View, APS-H 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:**

62.6 **Working Distance (mm):**

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

425 - 675 BBAR MS **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:
N/A

Mounting Diameter (mm):
75

Mount:
V-70 Mount

Regulatory Compliance

Certificate of Conformance:
[View](#)

Country of Origin:
China

Imported By:
Edmund Optics India Private Limited
267, Greystone Building, Second Floor,
6th Cross Rd, Binnamangala,
Stage 1, Indiranagar, Bengaluru,
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Product Details

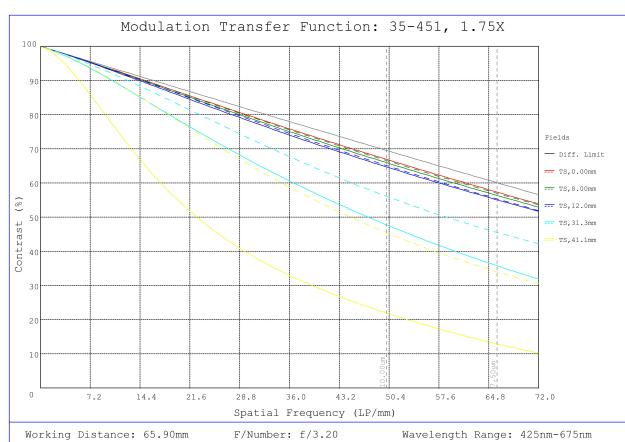
- 82mm Line Scan (LS), V-70 Mount
- Up to 16k, 5µm Pixel Size Line Scan Sensors
- High Resolution, Low Distortion, Uniform Field Performance
- 1.65X to 2.65X Primary Magnification

TECHSPEC® LS Series Line Scan Fixed Focal Length Lenses are low distortion lenses designed for 82mm 16k line scan cameras with 5µm pixels and 62.5mm 12k line scan cameras with 5µm 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.

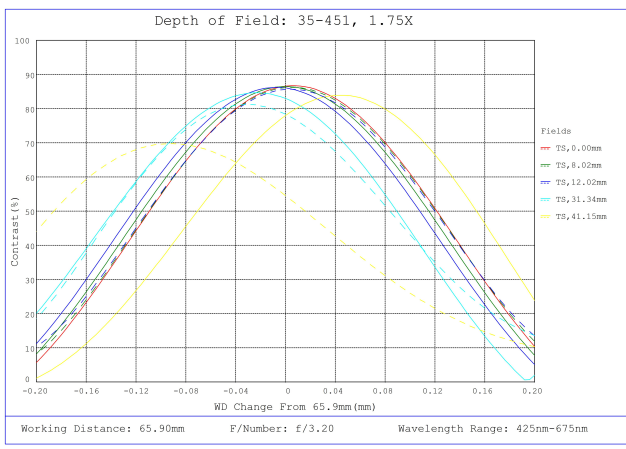
Technical Information



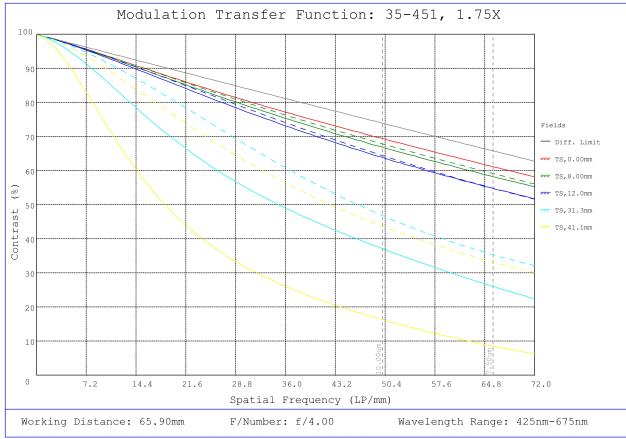
#35-451, 1.75X LS Series Area Scan Lens, Distortion Plot



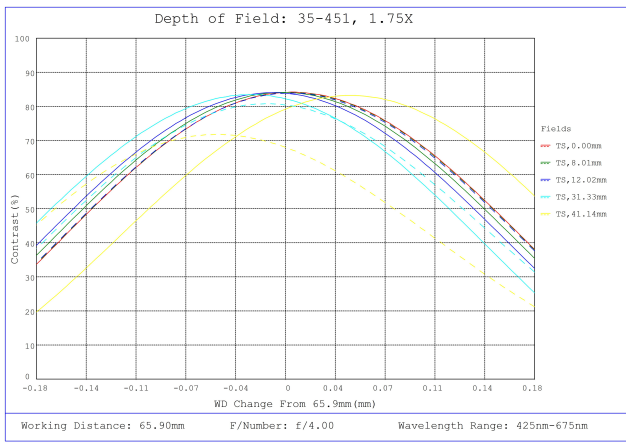
#35-451, 1.75X LS Series Area Scan Lens, Modulated Transfer Function (MTF) Plot, 65mm Working Distance, $f/3.2$



#35-451, 1.75X LS Series Area Scan Lens, Depth of Field Plot, 66mm Working Distance, f3.2



#35-451, 1.75X LS Series Area Scan Lens, Modulated Transfer Function (MTF) Plot, 65mm Working Distance, f4



#35-451, 1.75X LS Series Area Scan Lens, Depth of Field Plot, 66mm Working Distance, f4