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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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Qty 1+	\$\$5,621.00 each
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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:
47mm - 16.7°	Field of View at Max Sensor Format: 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:
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

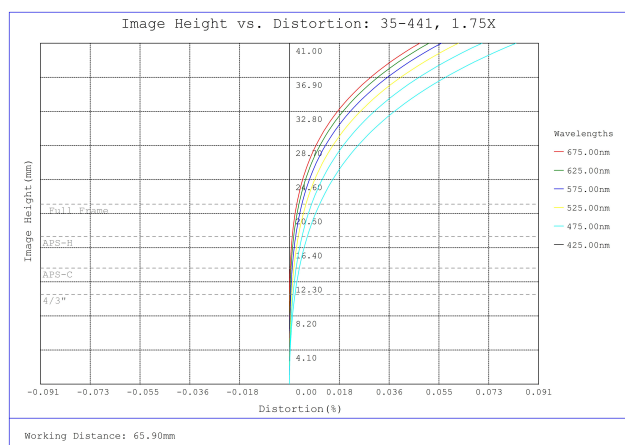
Certificate of Conformance:
[View](#)

Product Details

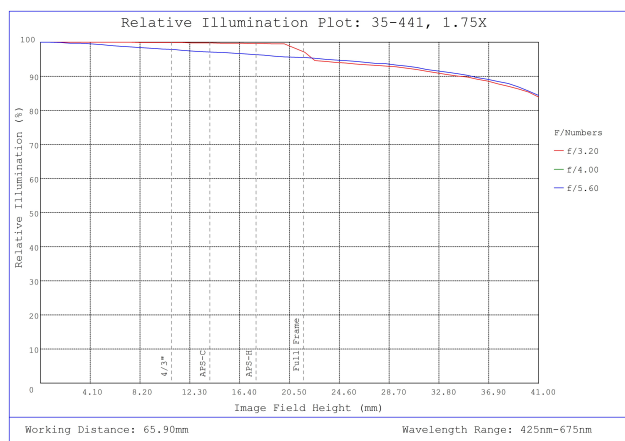
- 82mm Line Scan (LS), V-70 Mount
- Up to 16k, 5 μm Pixel Size Line Scan Sensors
- High Resolution, Low Distortion, Uniform Field Performance
- 1.65X to 2.65X Primary Magnification

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.

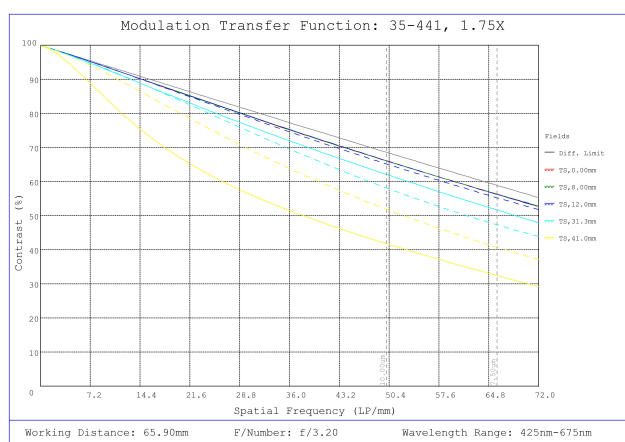
Technical Information



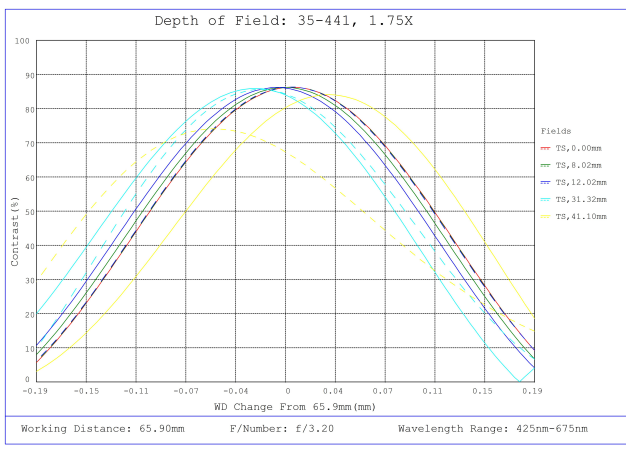
#35-441, 1.75X LS Series Line Scan Lens, Distortion Plot



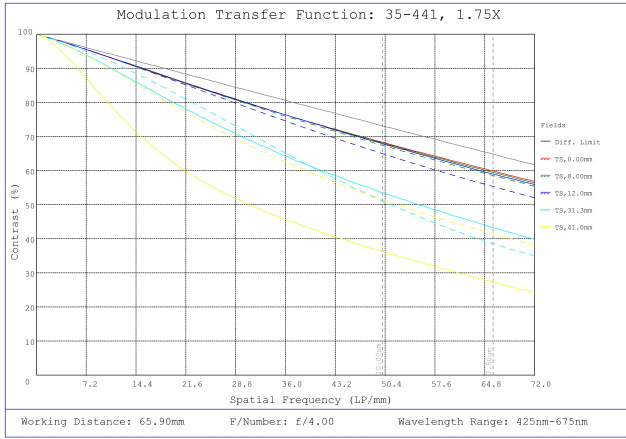
#35-441, 1.75X LS Series Line Scan Lens, Relative Illumination Plot



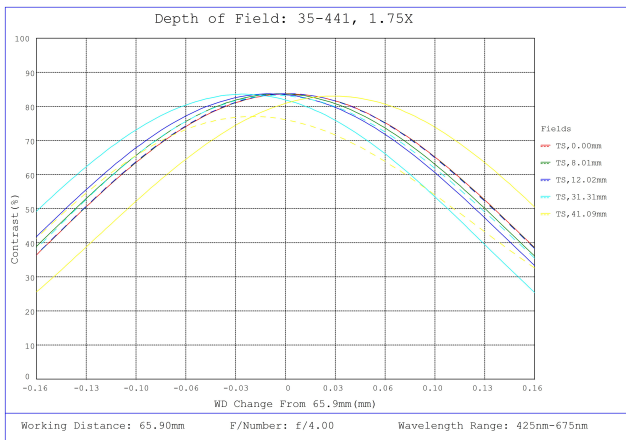
#35-441, 1.75X LS Series Line Scan Lens, Modulated Transfer Function (MTF) Plot, 65mm Working Distance, $f/3.2$



#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