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TECHSPEC® 0.5X, 28.7mm TFL-Mount PlatinumTL™ Telecentric Lens



PlatinumTL™ Telecentric Lenses



Stock **#16-749** **2 In Stock**

⊖ 1 ⊕ **\$\$4,012⁰⁰**

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Qty 1+	\$\$4,012.00 each
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General

Product Family:
PlatinumTL™ Series

Stock No. of Mounting Clamp:
[#63-441](#) Sold Separately

Type:
Telecentric Lens

Physical & Mechanical Properties

Variable	Iris Option:
172.33	Length (mm):
90.0	Maximum Diameter (mm):
17.5	Flange Distance (mm):

Optical Properties

44.8mm	Horizontal Field of View, APS-C Sensor:
57.4mm	Field of View, 28.7mm Sensor:
34.6mm	Horizontal Field of View, 4/3" Sensor:
28.4mm	Horizontal Field of View, 1.1" Sensor:
25.6mm	Horizontal Field of View, 1" Sensor:
17.70mm	Horizontal Field of View, 2/3" Sensor:
12.8mm	Horizontal Field of View, 1/2" Sensor:
28.70	Maximum Image Circle (mm):
0.041	Numerical Aperture NA, Object Side:
10 (7)	Number of Elements (Groups):
<0.055	Typical Telecentricity @ 588nm (°):
<0.020	Typical Distortion @ 588nm (%):
0.5X	Primary Magnification PMAG:
0.50	Telecentric Lens Magnification:
175.00	Working Distance (mm):
44.8 x 33.6	FOV @ Max Sensor Format, H x V (mm):
f/6 - f/22	Aperture (f/#):
425 - 675nm BBAR	Coating:
±2.05 at f/10 (20% @ 20 lp/mm)	Depth of Field (mm):
0.5X	Magnification:
VIS	Lens Wavelength Range:

Sensor

APS-C	Maximum Sensor Format:
2.74	Pixel Size (µm):

Threading & Mounting

M86 x 1.00 (Female)	Filter Thread:
TFL-Mount	Mount:

Regulatory Compliance

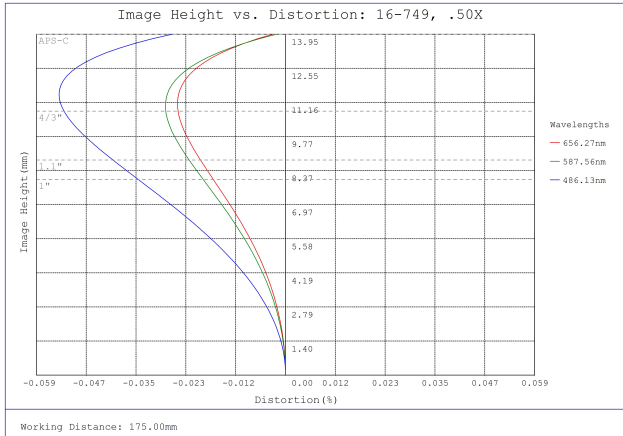
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

Product Details

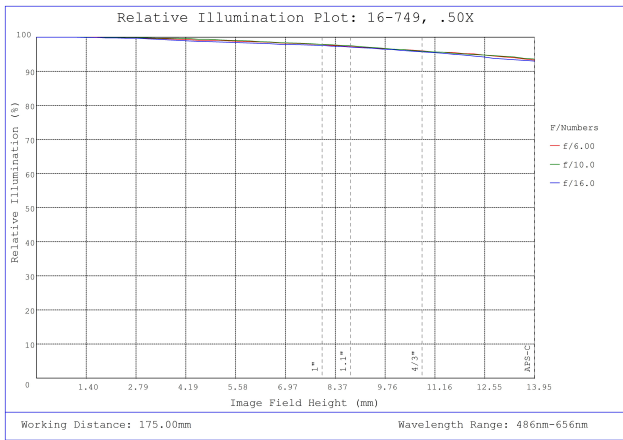
- High Resolution f/6 Bi-Telecentric Lens for Measurement
- Up to 35 MegaPixels, 2.8µm Pixel Size Sensors
- APS-C, C-Mount, T-Mount, F-Mount Telecentric Lens
- Magnification from 0.28X to 1.7X

TECHSPEC® PlatinumTL™ Telecentric Lenses are designed for semiconductor and electronics inspection, measurement, and gauging applications. The precision designs feature high telecentricity (<math><0.1^\circ</math>), low distortion (<math><0.1\%</math>), and high light throughput with an adjustable aperture that achieves f/6 when fully open. Capable of supporting large format 28.7mm diagonal sensors, these lenses are compatible with the Sony IMX342 APS-C sensor and other similar format sensors such as the Sony IMX530. TECHSPEC® PlatinumTL™ Telecentric Lenses produce unparalleled levels of contrast yielding maximum image quality with the highest degree of measurement accuracy. These lenses are suitable for high vibration environments and feature a removable recessed set screw for securing the iris in place.

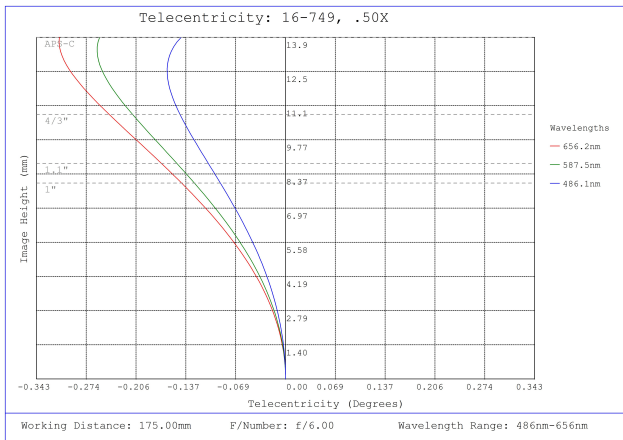
Technical Information



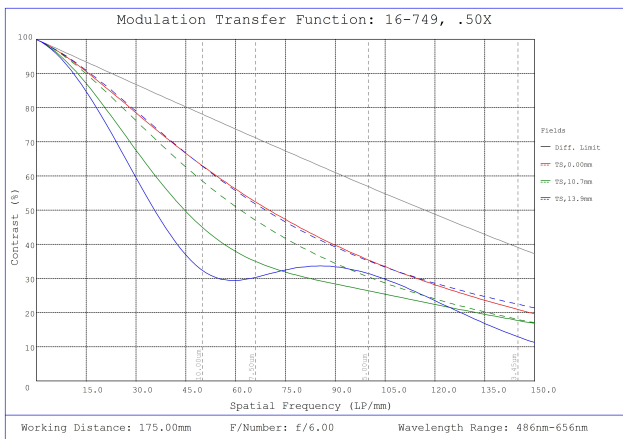
#16-749, 0.5X, 28.7mm TFL-Mount PlatinumTL™ Telecentric Lens, Distortion Plot



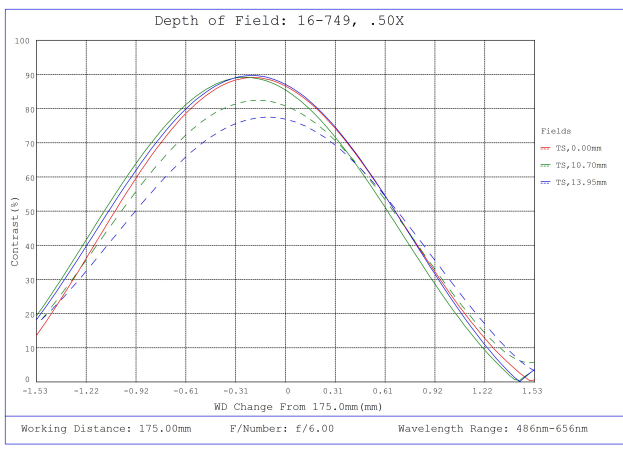
#16-749, 0.5X, 28.7mm TFL-Mount PlatinumTL™ Telecentric Lens, Relative Illumination Plot



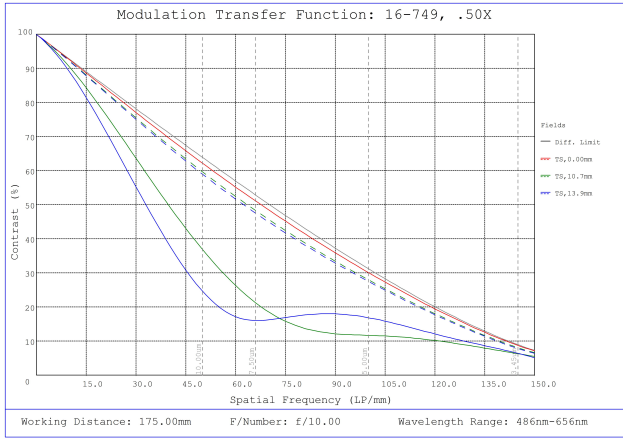
#16-749, 0.5X, 28.7mm TFL-Mount PlatinumTL™ Telecentric Lens, Telecentricity Plot



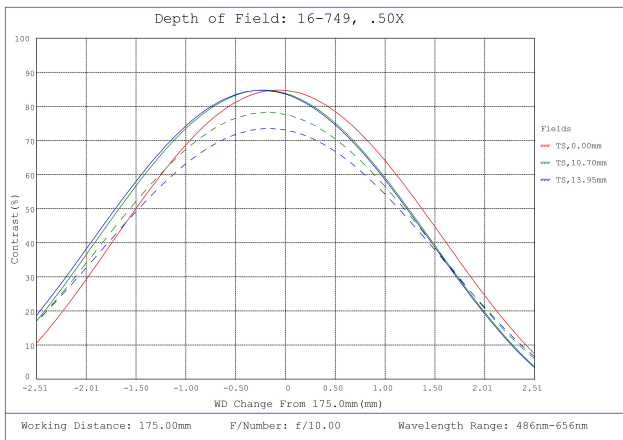
#16-749, 0.5X, 28.7mm TFL-Mount PlatinumTL™ Telecentric Lens, Modulated Transfer Function (MTF) Plot, 175mm Working Distance, f6



#16-749, 0.5X, 28.7mm TFL-Mount PlatinumTL™ Telecentric Lens, Depth of Field Plot, 175mm Working Distance, f6



#16-749, 0.5X, 28.7mm TFL-Mount PlatinumTL™ Telecentric Lens, Modulated Transfer Function (MTF) Plot, 175mm Working Distance, f10



#16-749, 0.5X, 28.7mm TFL-Mount PlatinumTL™ Telecentric Lens, Depth of Field Plot, 175mm Working Distance, f10

Description		Stock No.	Flange	Length (A)	Front Diameter (B)	Back Diameter (C)
0.28X	C-Mount	#62-933	17.5mm	230.8mm	60.5mm	33.5mm
0.5X	C-Mount	#62-932	17.5mm	174.9mm	50mm	33.5mm
1.7X	C-Mount	#63-232	17.5mm	189.5mm	60mm	46mm
0.28X	F-Mount	#62-922	46.5mm	167.6mm	138.6mm	55mm
	M42 x 1.0	#62-923	6.56mm	208.5mm	138.6mm	50mm
	M42 x 1.0	#62-924	19.53mm	195.5mm	138.6mm	50mm
0.5X	F-Mount	#62-912	46.5mm	143mm	90mm	55mm
	M42 x 1.0	#62-913	6.56mm	184mm	90mm	50mm
	M42 x 1.0	#62-914	19.53mm	171.1mm	90mm	50mm
0.9X	F-Mount	#62-902	46.5mm	170.8mm	65mm	55mm
	M42 x 1.0	#62-903	6.56mm	210.7mm	65mm	53mm
	M42 x 1.0	#62-904	19.53mm	197.8mm	65mm	53mm

