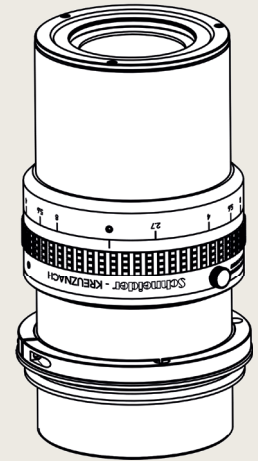


# Xenon-Diamond 2.7/111

This high resolution 2.6x line scan lens is optimized for the use with 12k (62.5 mm) line scan sensors with 5  $\mu\text{m}$  pixel, but can also be used with 16k / 5  $\mu\text{m}$  (82 mm) lines. This lens resolves 2  $\mu\text{m}$  in object space and plus less than 0.1% distortion secures a homogeneous high MTF over the entire line.

This is an important feature for high demanding OLED inspection systems. The lens is broadband AR coated and can be used from 400 nm in VIS up to 1000 nm in NIR spectrum, ideal for PCB inspection. The V-Mount makes it easy to install and rotate into the desired azimuth position for a wide range of line scan applications. The Xenon-Diamond is also available with 3.5x magnification; both lenses are offered with and without beam splitter.



Xenon-Diamond 2.7/111

## Key features

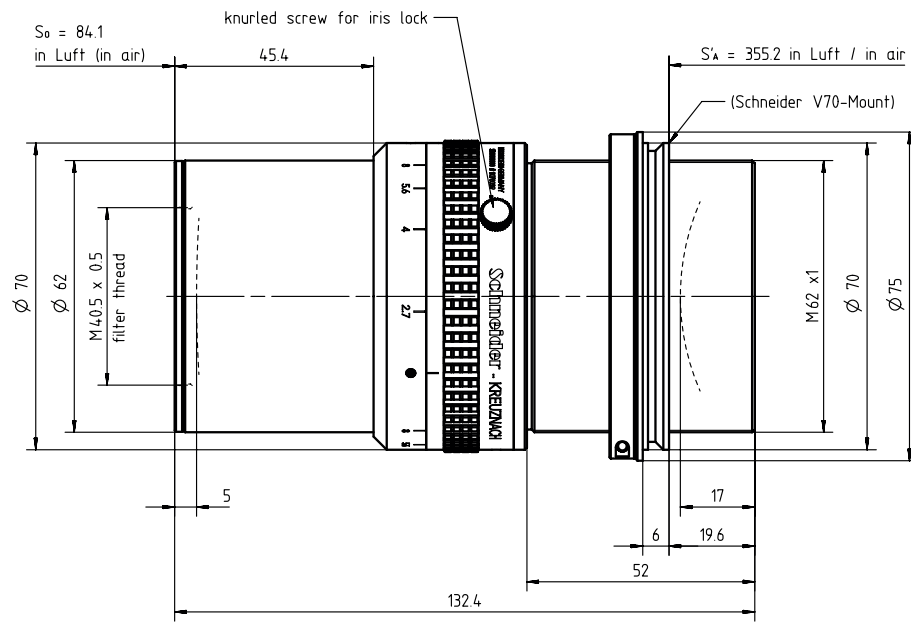
- For 12k and 16k line scan sensors with 5  $\mu\text{m}$  pixel sizes
- Resolves 2  $\mu\text{m}$  in object space
- Best azimuth marking
- 400 nm to 1000 nm broadband AR coating
- Lockable distance and aperture settings
- V-Mount connection

## Applications

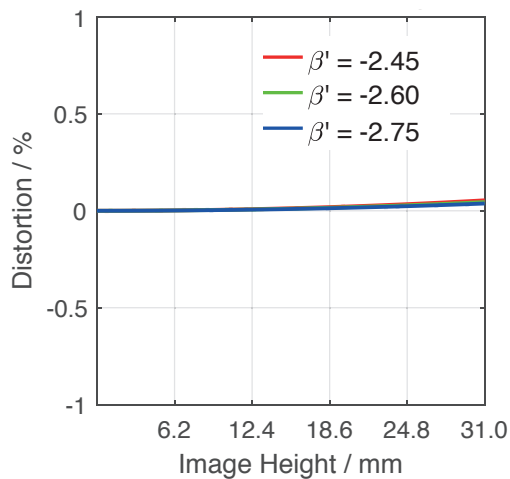
- OLED inspection
- PCB inspection
- Wafer inspection

Name	Xenon-Diamond 2.7/111
Type	-0001
Focal Length [mm]	111
Magnification	-2.6
Image circle [mm]	62
Resolution [ $\mu\text{m}$ ]	7
F/# range	2.7 ... 8
NA	0.19
Interface	V70-Mount
Working distance [mm]	91
AoV [°]	9
Focus control	manual
Transmission [nm]	400 - 1000
Filter thread [mm]	M40.5 x 0.5
Dimensions L x D [mm]	132.4 x 75.0

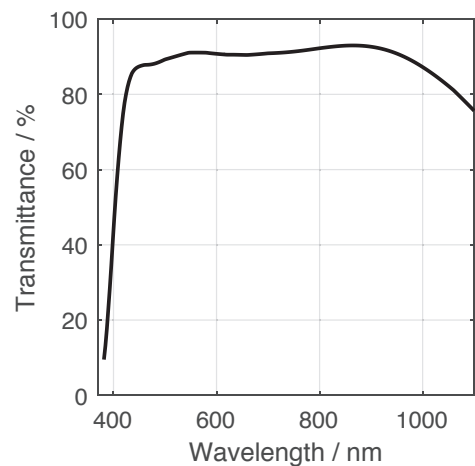
Name	Xenon-Diamond 2.7/111
Weight [g]	950
Storage temperature [°C]	-25 ... +70
$f'_{\text{eff}}$ [mm]	111.16
$S_F$ [mm]	-46.37
$S'_{F'}$ [mm]	58.50
HH' [mm]	-6.87
$\beta'_p$	0.950
$S_{EP}$ [mm]	70.61
$S'_{AP}$ [mm]	-47.19
$\Sigma d$ [mm]	110.57
ID	1078039



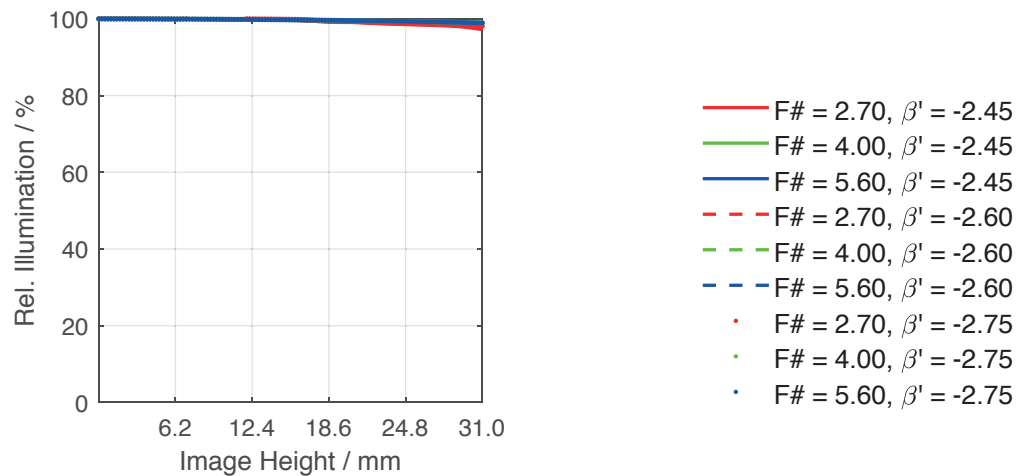
Distortion vs. Image Height



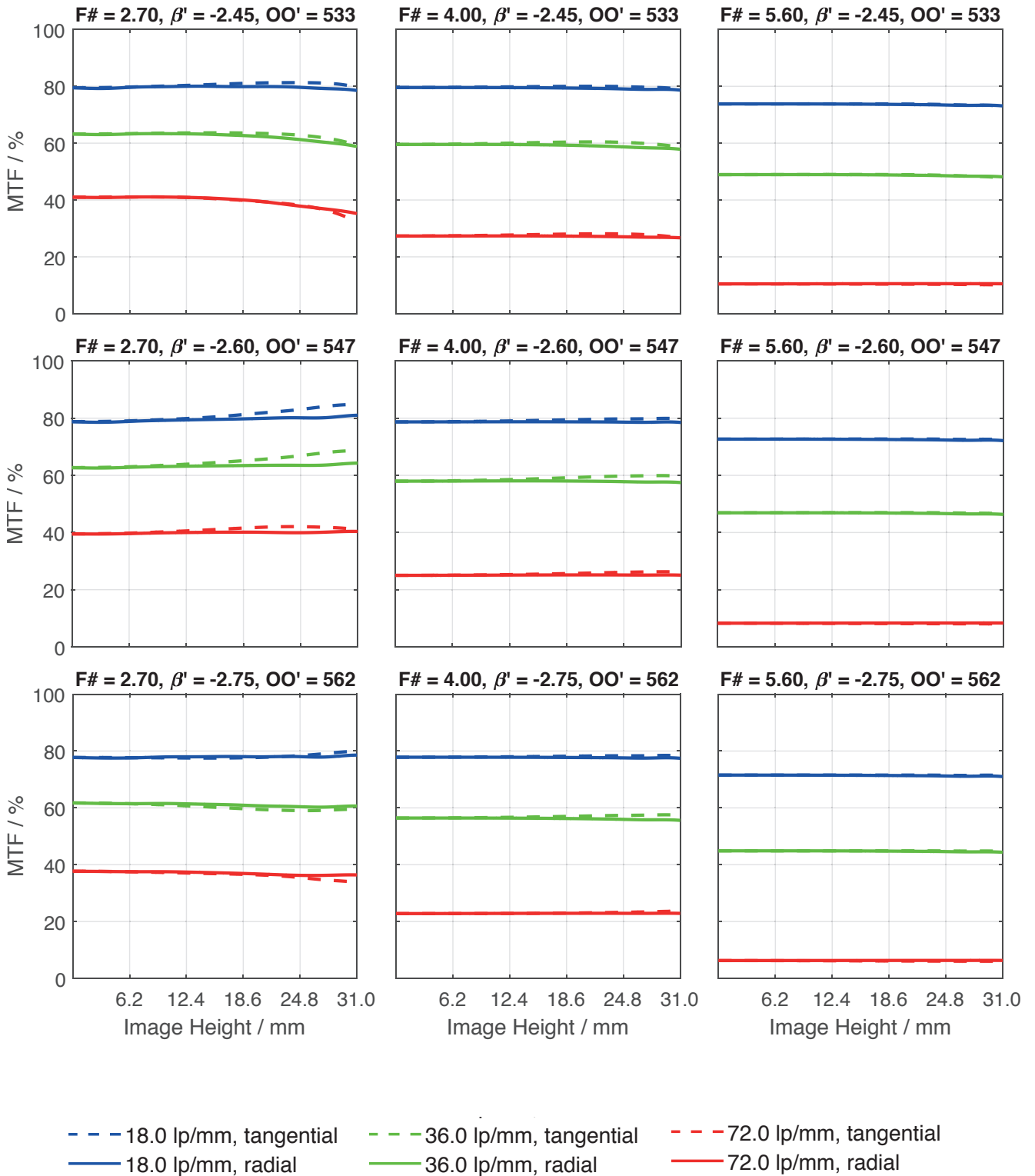
Transmittance vs. Wavelength



Relative Illumination vs. Image Height



Spectrum Name	VIS2					
Wavelengths [nm]	436	475	525	575	625	656
Weights	9.76	16	23	22	19	15.28



Accessories	Mount	Length	ID
Adapter	V90 / M95 x 1	10 mm	1077293
	Tilt M72 / 4 x M3 (M4)	-	1071925
	M72 x 0.75 / M95 x 1	4 mm	1077013
	M72 x 0.75 / M58 x 0.75	6 mm	1075556
	M72 x 0.75 / M42 x 1	6 mm	1079515
	M72 x 0.75 / M90 x 1	-	1084879
	M58 x 0.75 / M90 x 1	-	1084880
	M95 x 1 / M90 x 1	-	1084889
	M95 x 1 / M72 x 0.75	6.6 mm	1077295
Ext. Tube	M90 x 1	10 mm	1084875
	M90 x 1	25 mm	1084876
	M90 x 1	50 mm	1084877
	M90 x 1	100 mm	1084878
	M72 x 0.75	5 mm	1072420
	M72 x 0.75	10 mm	1072421
	M72 x 0.75	25 mm	26406
	M72 x 0.75	50 mm	1054733
	M72 x 0.75	100 mm	1079483
	M95 x 1	10 mm	1077290
	M95 x 1	25 mm	1062892
	M95 x 1	50 mm	1062893
	M95 x 1	100 mm	1062894

# Get more information

Contact our local offices



## Headquarter Germany

Jos. Schneider Optische Werke GmbH  
Ringstraße 132  
55543 Bad Kreuznach  
☎ +49 671 601 205  
✉ [cs@schneiderkreuznach.com](mailto:cs@schneiderkreuznach.com)  
[www.schneiderkreuznach.com](http://www.schneiderkreuznach.com)

## Offices Worldwide

### China

☎ +86 755 8832 1170  
✉ [shawn.liu@schneider-asiapacific.com](mailto:shawn.liu@schneider-asiapacific.com)

### North America

☎ +1 800 645 7239 (East Coast)  
☎ +1 800 228 1254 (West Coast)  
✉ [info@schneideroptics.com](mailto:info@schneideroptics.com)

### Singapore

☎ +65 9488 0062  
✉ [thongv@schneiderkreuznach.com](mailto:thongv@schneiderkreuznach.com)