



Microscope Lens

For High-Resolution Imaging of Small Features

Applications

- High-resolution imaging of extremely small features
- Evaluation of display pixels and pixel structures
- Evaluation of individual LEDs
- End-of-line measurement for quality control

Benefits

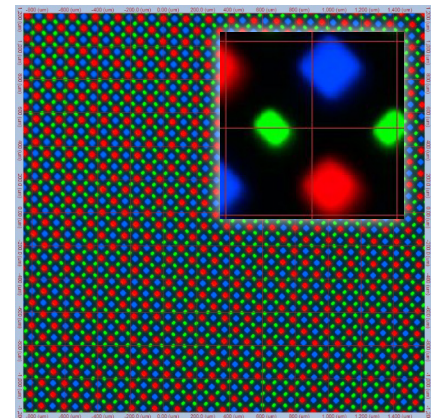
- Magnify details captured by high-resolution image sensors (16 megapixels and higher) for extended image resolution
- Capture display pixels and subpixels over several sensor pixels for increased measurement precision
- Combination of value, high performance, and flexibility

Key Features

- 5X (to 10X) microscope
- Add-on 2X teleconverter (converts 5X to 10X lens)
- Pairs with ProMetric Imaging Colorimeters and Photometers
- Easy-to-use measurement control and analysis software

Image magnification solution for extremely high-resolution light and display testing

The Radiant Vision Systems microscope lens enables high-resolution imaging of extremely small components and features, such as individual LEDs and display pixels. Provides 5X and 10X magnification, capturing a greater number of image sensor pixels per display pixel or component feature for fine-detail measurement. The lens mounts directly to a Radiant ProMetric® Imaging Colorimeter or Photometer, and features ProMetric or TrueTest™ Software for intuitive system setup and configurable automated measurement sequences. Extensive data analysis and display functions are also supported, including isometric plots, cross-sectional graphs, radar plots, and bitmaps.



OLED phone measured with ProMetric Imaging Colorimeter at approximately 10X magnification.

Specifications*

Parameter	Microscope Lens (5X)	Microscope Lens (10X)
Primary application	High-resolution measurement of small display & component features	
Working distance to front of lens	40 mm	42 mm
Approx. Field of View (by camera sensor size)	2MP: 1.7 x 1.3 mm 8MP: 3.6 x 2.7 mm 16MP: 5.4 x 3.6 mm 29MP: 6.5 x 4.3 mm 43MP: 6.5 x 4.3 mm	2MP: 0.8 x 0.6 mm 8MP: 1.8 x 1.4 mm 16MP: 2.7 x 1.8 mm 29MP: 3.4 x 2.2 mm 43MP: 3.4 x 2.2 mm
Spatial Resolution**	Up to 29MP: 1.10 μm / sensor pixel 43MP: 0.90 μm / sensor pixel	Up to 29MP: 0.55 μm / sensor pixel 43MP: 0.45 μm / sensor pixel
Approx. Effective F-Stop	F/20	F/40
Measurement capabilities**	Luminance, Radiance, Illuminance, Irradiance, Luminous Intensity, Radiant Intensity, Power, Radiant Flux	
Units**	foot-lambert, cd/m ² , nit, W/sr/m ² , foot-candles, lux, lux-s, W/m ² , W-s/m ² , candela, W/sr	

* Specifications subject to change without notice.

** Paired with Radiant ProMetric® imaging system.