RADIANT
VISION SYSTEMS

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

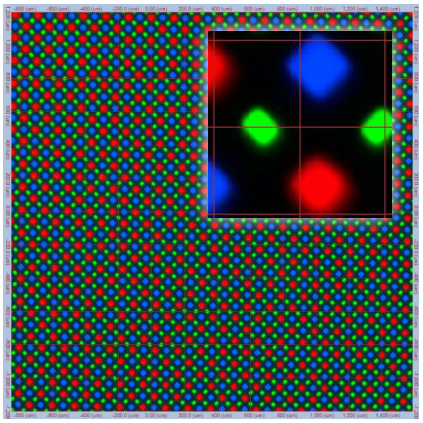
- Magnify details captured by high-resolution image sensors (up to 61 megapixels) for extended image resolution
- Capture display pixels and subpixels over several sensor pixels for increased measurement precision
- Combination of value, high performance, and flexibility

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 29MP: 6.5 x 4.3 mm 45MP: 5.4 x 3.6 mm 61MP: 6.5 x 4.3 mm	2MP: 0.8 x 0.6 mm 8MP: 1.8 x 1.4 mm 29MP: 3.4 x 2.2 mm 45MP: 2.6 x 1.7 mm 61MP: 3.4 x 2.2 mm
Spatial Resolution (by camera sensor size)	Up to 29MP: 1.10 µm / sensor pixel 45MP: 0.64 µm / sensor pixel 61MP: 0.74 µm / sensor pixel	Up to 29MP: 0.55 µm / sensor pixel 45MP: 0.32 µm / sensor pixel 61MP: 0.37 µm / sensor pixel
Approx. Effective F-Stop	F/20	F/40
Measurement Capabilities	Luminance, Radiance, Luminous Intensity, Radiant Intensity, Power, Radiant Flux, CIE Chromaticity Coordinates, Correlated Color Temperature (CCT)	
Units	foot-lambert, cd/m², nit, W/sr/m², foot-candles, candela, W/sr, CIE (x, y) and (u', v'), Kelvin (CCT)	

Specifications subject to change without notice. Color measurement available with I-series only.

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