

Application Scenario RSI.014: Demonstration of Abbe's Resolution Limit

Abstract

The resolution limit of an imaging system with an ideal lens is investigated. To this end we use an ideal grating object and consider its image for different periods. Abbe's resolution limit is illustrated. The effect of the wavelength on the resolution is also demonstrated.

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Keywords: Imaging, Resolution, Diffraction Limited, Gratings
Requirements: VirtualLab version 4.0.1 or higher – **Starter Toolbox**
Scenario Version: 1.1
Sample Files: Corresponding files can be found [here](#).

Technical Support

If you have any questions, remarks or problems concerning this application scenario, or in using VirtualLab in general, please do not hesitate to contact us by E-Mail support@lighttrans.com.

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To ensure that this application scenario gives the same results as described, set the global settings to the default values. In VirtualLab this can be done in the **Extras > Global Options** dialog with the **Reset All** button.