

Application Scenario G.014: Rigorous Analysis of Diffractive 1:6 Beam Splitter

Abstract

The application scenario shows how to perform a rigorous analysis of a diffractive 1:6 beam splitter optimized by the diffractive optics toolbox.

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Keywords:	Grating, Grating Component, Fourier Modal Method, Diffractive Beam Splitter, Computer Generated Hologram (CGH), Phase Plate
Requirements:	VirtualLab version 5.2.1 or higher – Grating Toolbox
Scenario Version:	5.0
Sample Files:	Corresponding files can be found here .
Related Scenarios:	246.01
Related Tutorials:	G.001a (Usage of Grating Components) Tutorial_144.01 (Structure Design)

This application scenario analyses the same 1:6 beam splitting element scaled to different periods ($126.5\ \mu\text{m}$, $50\ \mu\text{m}$, $30\ \mu\text{m}$, $20\ \mu\text{m}$, $10\ \mu\text{m}$ and $6\ \mu\text{m}$) with the rigorous Fourier Modal Method (FMM). For each period a Light Path Diagram as well as the result diagram is provided. Further information can be found in the included slides.

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.