

### Abstract

A coated slanted grating is generated with the Programmable Medium of VirtualLab. The reflectance of this grating is then analyzed in the Parameter Run for different orientations of the grating.

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<b>Keywords:</b>	Grating, Coating, Slanted Grating, Programmable Medium, Grating Component, Parameter Run
<b>Requirements:</b>	VirtualLab version 5.4.0 or higher – <b>Grating Toolbox</b>
<b>Scenario Version:</b>	3.0
<b>Sample Files:</b>	Corresponding files can be found <a href="#">here</a> .
<b>Related Scenarios:</b>	<a href="#">G.014</a>
<b>Related Tutorials:</b>	<a href="#">G.001a</a>

The following sample files are provided:

FILE	DESCRIPTION
<b>G.007_Completely_Coated_Slanted_Grating.snp</b>	Snippet for the programmable medium where the coating is applied to all surfaces including the sides of the ridges. This snippet is used in Coated_Slanted_Grating.lpd.
<b>G.007_Partly_Coated_Slanted_Grating.snp</b>	Snippet for the programmable medium where no coating is applied on the sides of the ridges. If you want to exchange the snippets, open the <i>Basic Parameters</i> sub-tab of the edit dialog for the programmable medium, click on the <i>Programming Tools</i> button, and then on <b>Import \ Export Code Snippet &gt; Import Code Snippet</b> .
<b>G.007_Coated_Slanted_Grating.lpd</b>	The Light Path Diagram with the coated slanted grating as programmable medium, correctly configured for analyses with the rigorous Fourier Modal Method.
<b>G.007_Coated_Slanted_Grating_Alpha_Variation.run</b>	The Parameter Run created from the afore mentioned Light Path Diagram, varying the Cartesian angle $\alpha$ .

Further information can be found in the included slides.

### Note

Exchanging the snippets does not work in the Trial version.

## 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](mailto:support@lighttrans.com).

Please use the update service to install the current version of VirtualLab. Alternatively you can use the latest **Trial Version** of VirtualLab which is available at our [download site](#). If you have been registered already for an older trial version, just contact us by [E-Mail](#).

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.