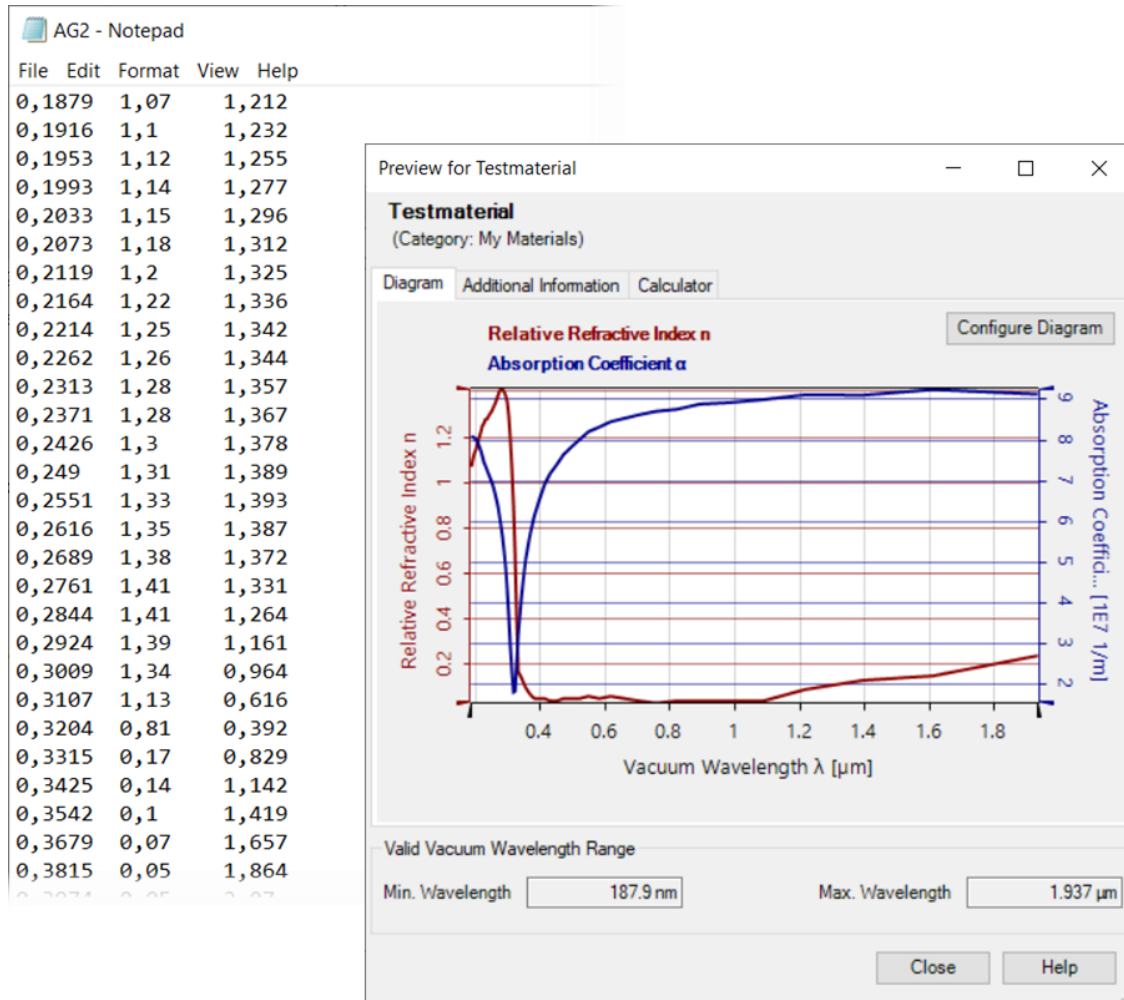


# **Import of Material Data into VirtualLab Fusion**



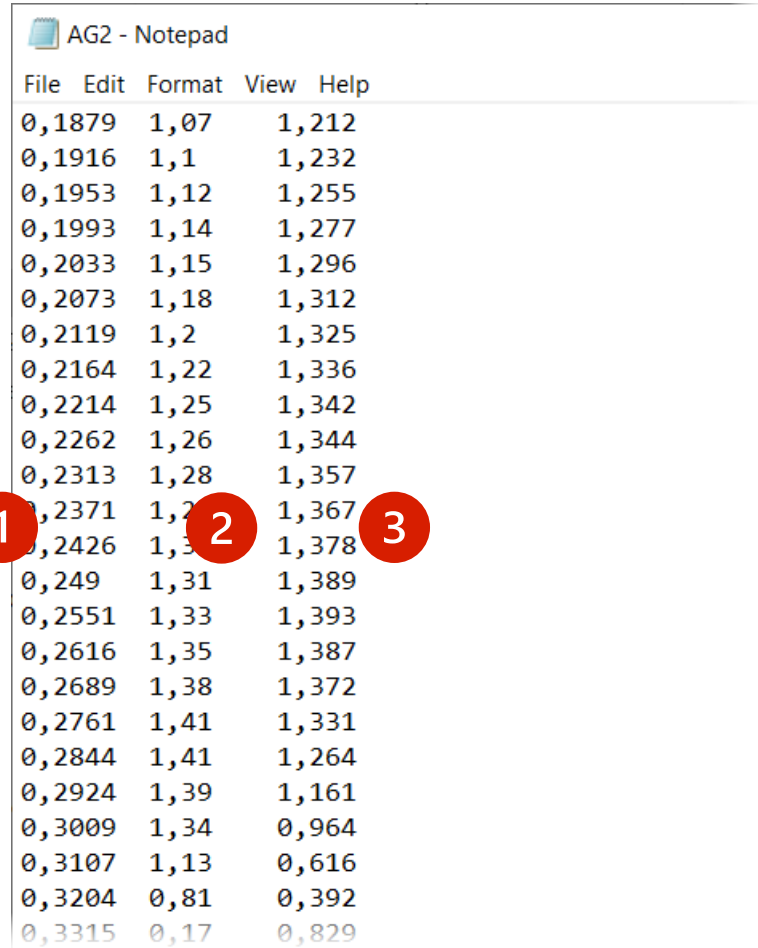
# Abstract



In order to model an optical system accurately, it is necessary to apply accurate material properties. In case of thin layers or more complex materials, the real refractive index can differ from values in the literature. Hence it is required to measure the complex refractive index of the regarding material and import the data into VirtualLab Fusion. The workflow to import complex material data is shown in this document.



# Import Format



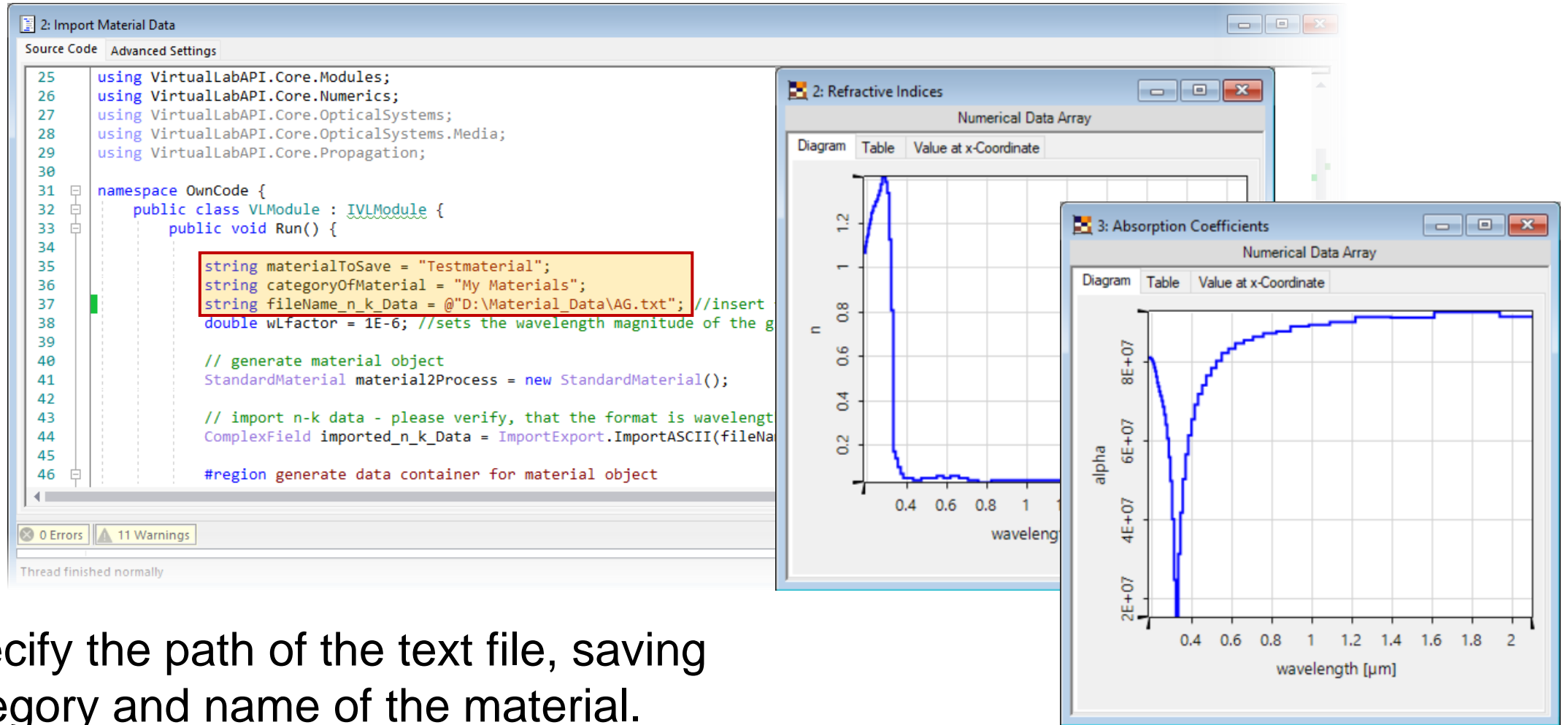
File	Edit	Format	View	Help
0,1879	1,07	1,212		
0,1916	1,1	1,232		
0,1953	1,12	1,255		
0,1993	1,14	1,277		
0,2033	1,15	1,296		
0,2073	1,18	1,312		
0,2119	1,2	1,325		
0,2164	1,22	1,336		
0,2214	1,25	1,342		
0,2262	1,26	1,344		
0,2313	1,28	1,357		
0,2371	1,2	1,367		
0,2426	1,3	1,378		
0,249	1,31	1,389		
0,2551	1,33	1,393		
0,2616	1,35	1,387		
0,2689	1,38	1,372		
0,2761	1,41	1,331		
0,2844	1,41	1,264		
0,2924	1,39	1,161		
0,3009	1,34	0,964		
0,3107	1,13	0,616		
0,3204	0,81	0,392		
0,3315	0,17	0,829		

The import module requires the material data with the following information in the format shown in the left (decimal and column separator can be adapted in the import module later):

- (1) ascending wavelength  $\lambda$
- (2) refractive index  $n$
- (3) absorption coefficient  $k$



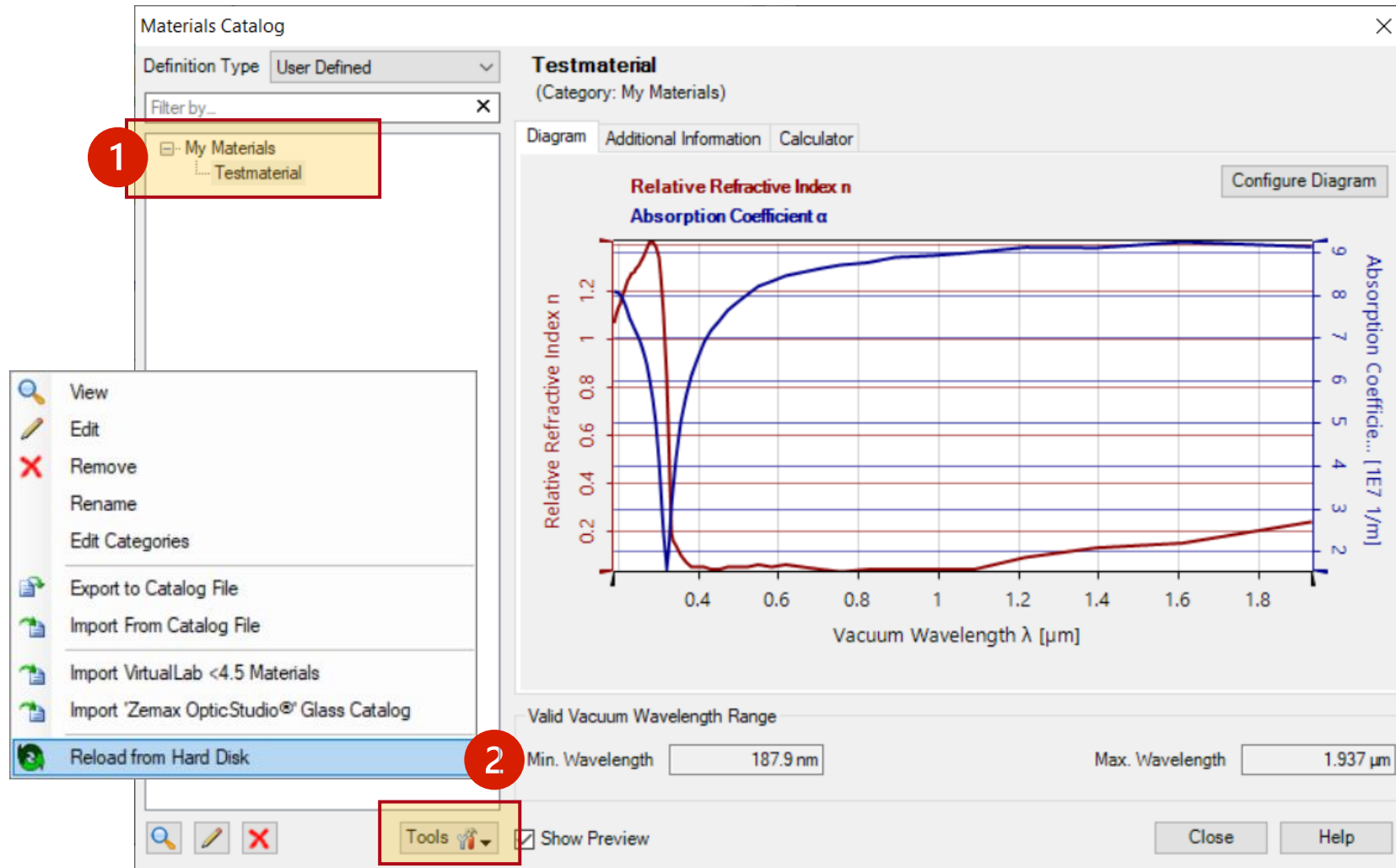
# Module for the Material Import



Specify the path of the text file, saving category and name of the material.



# View in VirtualLab Fusion



Find the imported material in Materials Catalog and use tools to refresh the catalog or edit the materials.



# Document Information

---

title	Import of Material Data into VirtualLab Fusion
document code	SWF.0002
version	1.2
toolbox(es)	VirtualLab Fusion Basic
VL version used for simulations	2023.1 (Build 1.556)
category	Feature UseCase

---