TFCOMPANION SOFTWARE
Release build 07032017

New software release adds correction for finite wavelength resolution and focused light aperture that can be used in the data analysis. Values of the wavelength resolution and aperture depend on the system and specific configuration (below please find the table with details for each system). This correction is only used with the curve fitting (FFT/ thick film algorithm does need this correction). The correction has, typically, a small effect on measured thickness value. However, there are situation when this correction is important for very accurate measurement:

1. Thickness measurement of relatively thick film (few microns or more) using curve fitting. For example, when both thickness and optical constants need to be determined.
2. MSP system with high magnification (e.g. 50x) when curve fitting is used.

Configuration Lens	Angle cone, deg	MProbe systems
VisACH	8.2º	Vis, VisHR, NIR
Quartz	15.8º	UvVis, UVVisNIR
8x UVNIR	18º	MSP systems
10x Vis	18.5º	Vis, VisHR MSP
20x Vis	20.3º	Vis, VisHR MSP
50x Vis	30.7º	Vis, VisHR MSP

Table 1. Angle apertures for different configurations

MProbe system	Wavelength resolution
Vis	2 nm
UvVis	1 nm
VisHR	0.3 nm
NIR	3.5nm

Table 2. Wavelength resolution of different systems

83 Pine Hill Rd. Southborough, MA 01772
Phone +1.617.388.6832 Fax. +1.508.858.5473
email: info@semiconsoft.com http://www.semiconsoft.com

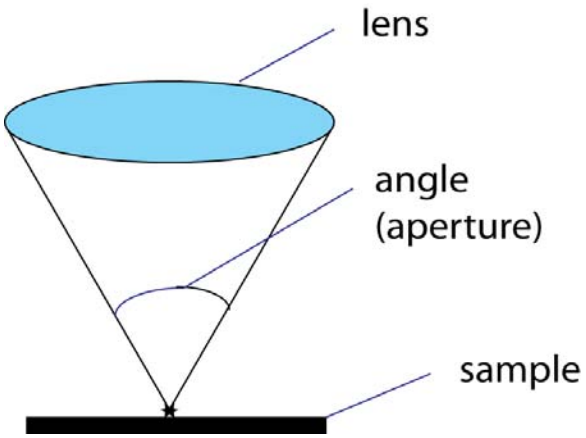


Fig. 1 Angle (aperture) of collected reflectance in MProbe system.

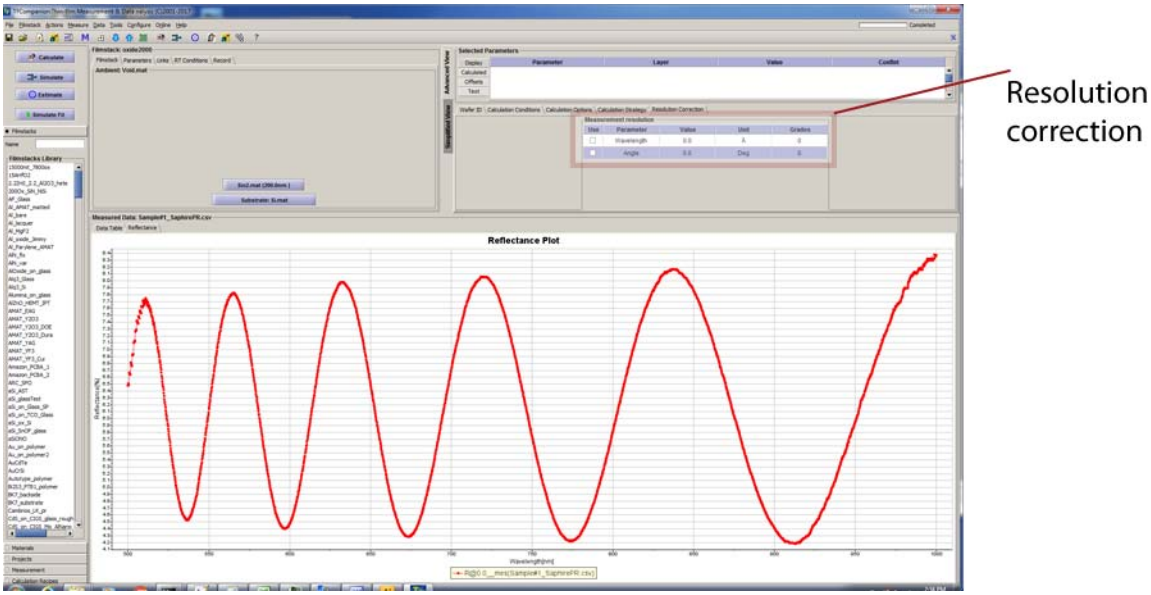


Fig. 2 Resolution correction setting

To activate relevant correction – check the box in the table, input the values of angle aperture or wavelength resolution and set the number of grades (normally 10). Number of grades determine the number of calculations done before averaging.

83 Pine Hill Rd. Southborough, MA 01772
Phone +1.617.388.6832 Fax. +1.508.858.5473
email: info@semiconsoft.com http://www.semiconsoft.com