

## Load of measured file (HITACHI U-4100 spectrometer)

### Function Load UDS file

It is necessary to convert U-4100 measured file into a usable format for FILMSTAR, because the measured file is saved as binary format. It is possible to display measured data and convert that data into the target data in optimization of thin film design in FILMSTAR. However, it is possible to load only Ver.1, impossible to Ver. 2.

### Preparation Copy of macro file (.BAS) and initial file (.fbi) to default directory, and configuration FILMSTAR to use this macro program

To use this macro program, it is necessary to copy following 2 files to the directory “Winfilm\Basic32” and configure FILMSTAR.

Macro file ( .BAS ) : T\_Read\_UDS08.BAS

Initial file ( .fbi ) : T\_Ini\_Read\_UDS.fbi

### Step 1 Select UDS file

Execute this macro program, and then “Load UDS file” window is opened (fig.1). Select UDS file you want to load.

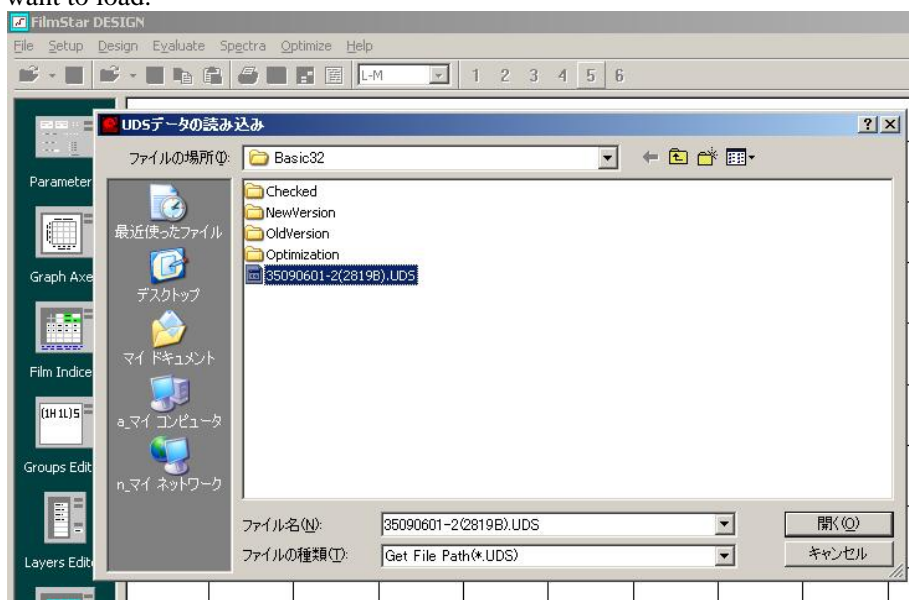


Fig.1 “Load UDS file” window

## Step2 Input parameter

After step 1, “Load UDS” window is opened, and input parameters and click “OK” button (fig.2).

Output to...  
A file is loaded as Target or Spectra

**New**  
When a loaded file is appended to present target, clear this box.

Plot Spectra  
Changing the plot color, plot the Spectra.

**Double under line parameters** is active, only when “Target” is selected.

**Load UDS**

Output to ...  
☒ Target ☐ Spectra

☒ New

Type: Transmittance Tolerance: 1

Wavelength[nm]: Min 300 Max 750 Step 0.5

AOI[deg]: 0

Polarization: ☐ P ☐ S ☒ A

Plot Spectra ( Color ) Cancel OK

**are automatically set depending on the loaded data.**

**Type**  
Data is loaded as transmittance or reflectance. When “Spectra” is selected in , this “Type” should be matched to graph’s vertical axis.

**Tolerance**  
**Wavelength[nm]**  
Min and max wavelength should be in the range of measured data.

**AOI[deg]**  
Angle Of Incidence

**Polarization**

Fig.2 “Load UDS” window

## Result

Fig.3 shows the result of loading UDS file as “Target” in step 2 and fig.4 is as “Spectra”. In fig.3 and fig.4, the target and the spectra are displayed by macro program respectively.

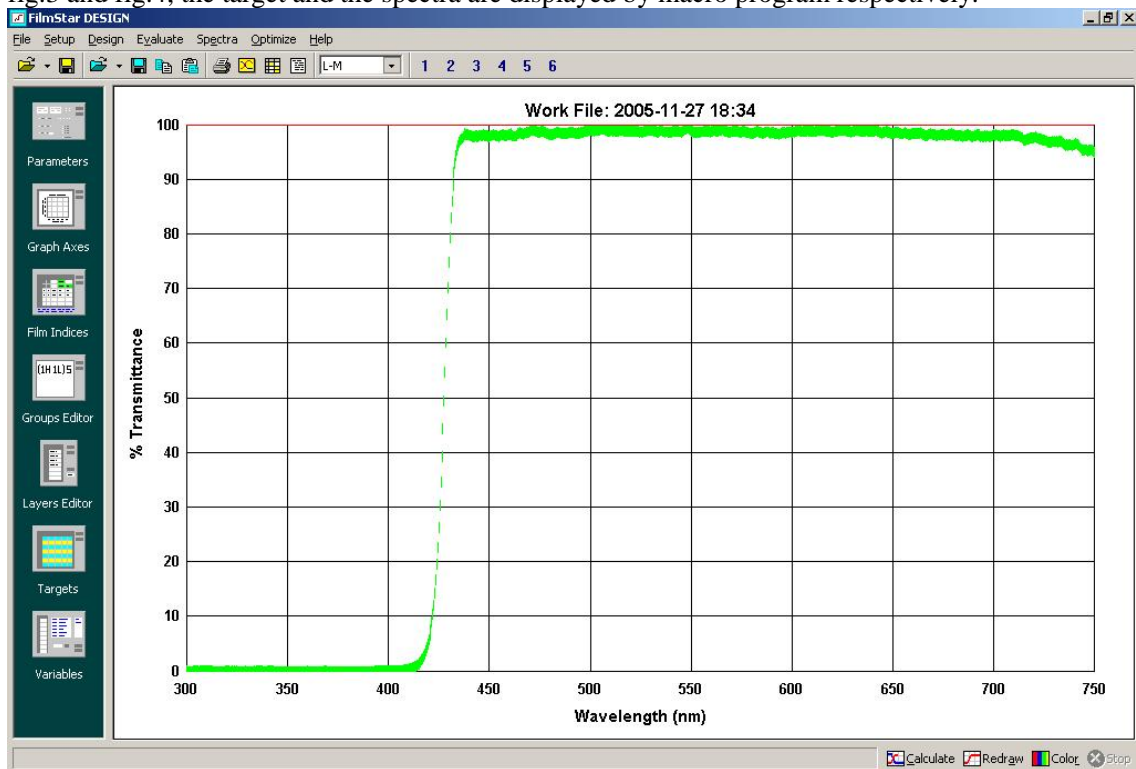


Fig.3 Result of load as “Target”

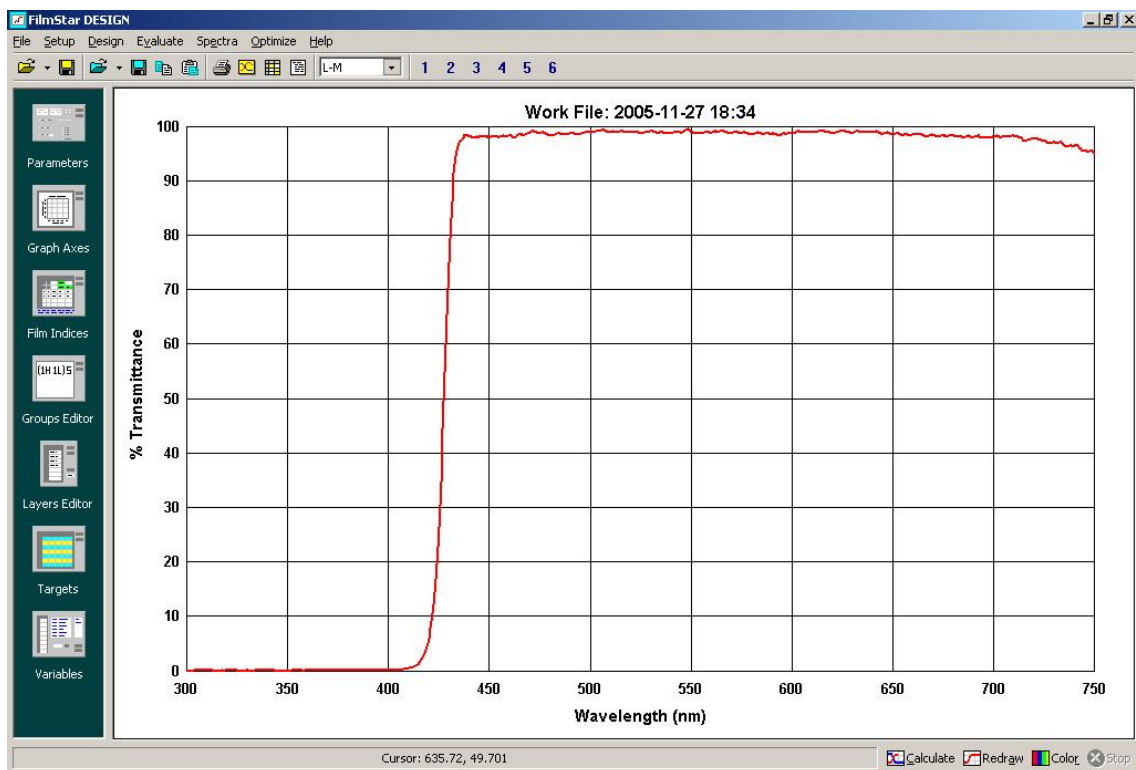


Fig.4 Load as “Spectra”