

Certified Didymium Glass Filter for the NanoPhotometer® NP80/C40

1. Check OF THE ACCURACY OF ABSORPTION (Certificate: scale within section *Ordinate Calibration*)

1st step:

Switch the NanoPhotometer® on and select More Apps and Wavelength Cuvette mode.

Add three wavelengths and enter the following wavelengths: 270nm, 280nm, 320nm, 340nm
Parameter Settings:

Pathlength 10 mm, Baseline Correction Off, Smoothing 1



2nd step:

Blank against air and put the certified Didymium Glass Filter into the cuvette holder.

3rd step:

After the measurement the absorption values are shown within the result window next to the corresponding wavelengths.

The values now have to be compared to those given on the certificate. Next to the values limits of tolerance are given. Within those limits the NanoPhotometer® meets the default specifications.

Standard	Ident-No.	Ordinate Reading (Absorbance) at the following wavelengths:			
		270 nm	280 nm	320 nm	340 nm
666-F7	E498	1.324 ± 0.05	1.163 ± 0.046	0.659 ± 0.046	0.513 ± 0.034

2. Check OF THE ACCURACY OF WAVELENGTHS (Certificate: scale within section *Abscissa Calibration*)

1st step:

Select More Apps/Wavescan. Enter start wavelength 200nm and end wavelength 900nm.

Parameter Settings:

Pathlength 10 mm, Baseline Correction Off, Smoothing 1

2nd step:

Blank against air, put the certified didymium glass filter in the cuvette holder and take a reading.

3rd step:

Check the appearing graph for the certified peaks. At the certified wavelengths a peak maximum should be displayed.

Peak Positions				
approx. position	329 nm	472 nm	512 nm	681 nm
measured position nm	329.72 ± 2.0	472.50 ± 2.0	513.37 ± 2.0	681.73 ± 2.0

Important:

Sometimes not all of the peaks in your certificate are automatically shown within the result table of your NanoPhotometer®. In such cases click on the peak and a pop up will be opened. The peak position can be verified by changing the wavelength around the expected peak position and comparing the absorbance values. If there is no peak visible in the Wavescan measurement screen within the desired area of interest, contact your Implen support team.