

Lambda 365 Fixed Angle Reflectance Holder Installation Instructions

This instruction sheet describes the installation of this accessory which is used with the Lambda 365 Spectrophotometer.

NOTE: *Read these instructions before you install this accessory.*

Contacting PerkinElmer

Supplies, replacement parts, and accessories can be ordered directly from PerkinElmer, using the part numbers.

See our website:

<http://perkinelmer.com>

PerkinElmer's catalog service offers a full selection of high-quality supplies.

To place an order for supplies and many replacement parts, request a free catalog, or ask for information:

If you are located within the U.S., call toll free 1-800-762-4000, 8 a.m. to 8 p.m. EST. Your order will be shipped promptly, usually within 24 hours.

If you are located outside of the U.S., call your local PerkinElmer sales or service office.

Features

- For measuring the specular reflection of solid sample
- Small and Compact design



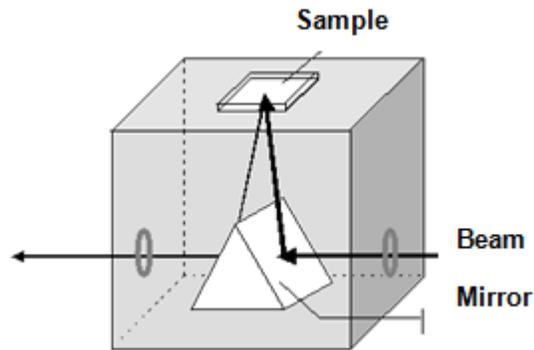
Figure 1 Lambda 365 Fixed Angle Reflectance Holder [P/N: N4101003]



PerkinElmer, 710 Bridgeport Avenue,
Shelton, CT 06484-4794, U.S.A

Produced in the USA.

Mechanism of Fixed Angle Reflectance Holder



Reference (having a specular surface) = I_0

Sample (deposited on the reference) = I

$$\%R = I/I_0 \times 100(\%)$$

Figure 2 Mechanism of Fixed Angle Reflectance Holder

Fixed Angle Reflectance Holder

The Fixed Angle Reflectance Holder allows the measurement of specular reflectance to be made at a fixed angle of 30°.

Dimensions and Specifications

Type	Specification
Incident Angle	30°
Dimensions (mm)	120(W) x 88(H) x 170(D)
Weight (kg)	1.65
Sample Size (mm)	Min. 1.5 mm diameter

Description

Configuration of Fixed Angle Reflectance Holder

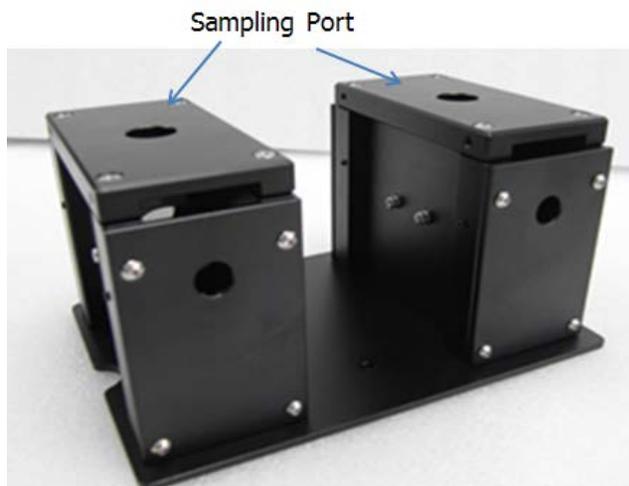


Figure 3 Lambda 365 Fixed Angle Reflectance Holder



Figure 4 Standard Mirror



Figure 5 Knob

Installation

1. Loosen the knob to disassemble the existing cell holder.



Figure 6 Loosening the knob

2. Pull out the cell holder by hand.



Figure 7 Pulling out the cell holder

3. Insert the fixed angle reflectance holder in the sample compartment and tighten the knob.



Figure 8 Inserting the Fixed Angle Reflectance Holder

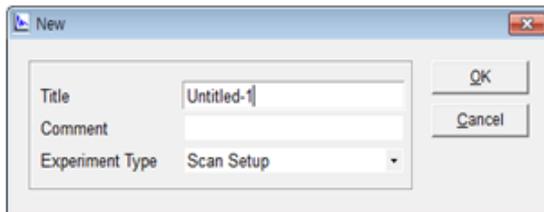
UV Express Software

Reflectance Measurement

NOTE: The Fixed Angle Reflectance Holder should be installed after System Self Test is finished.

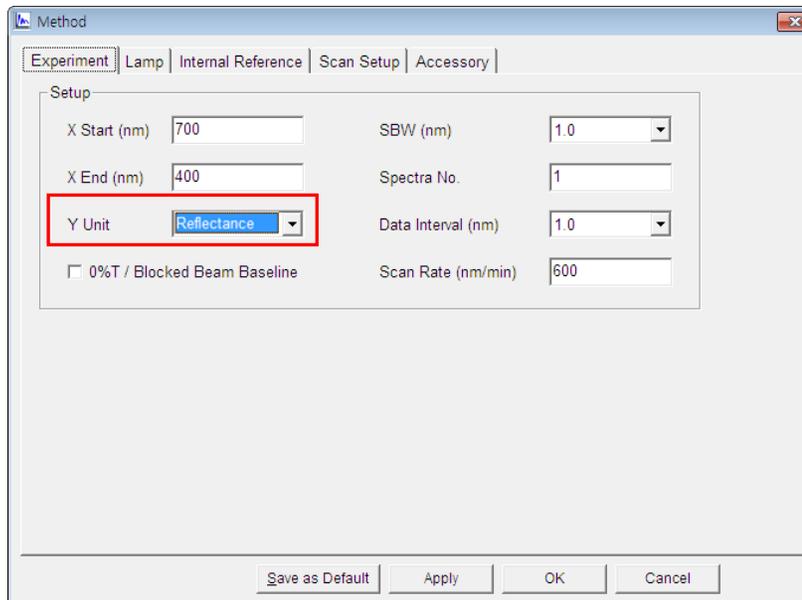
NOTE: Start the System Self Test after warming up the system at least 20 minutes.

1. Double-click the **UV Express Software** folder and select **Scan** modes for starting.
2. Select **OK** after finishing the **System Self Test**.
3. Install the Fixed Angle Reflectance Holder accessory, following the Installation procedure on page 4.
4. Select **New** to open a new window. Select **Experiment Type** and select **OK**.



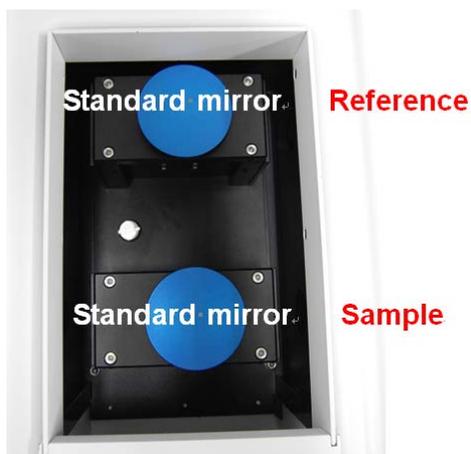
5. Select **Method** and set up the parameters.
6. Select **Reflectance** mode in Y unit.

NOTE: For more detail of the method, refer to UV Express Software Users Guide.

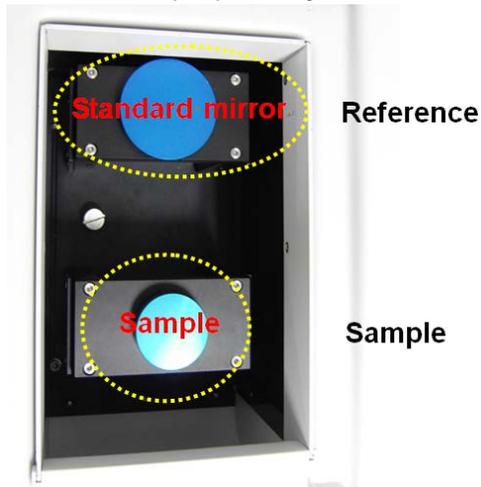


7. Select **Apply** and then **OK** after setting up the parameters.

- Place the standard mirror on the sampling port.



- Close the sample compartment lid and select **Baseline** icon.
- Measure and verify the baseline spectrum.
- Put the sample on the sample side of sampling port. Sample size should be larger enough to cover the sample port fully. Close the sample compartment lid and select **Sample** icon.



NOTE: *The measured reflectance is relative value to the supplied standard mirror. If you need absolute reflectance value, you have to use the reference mirror of which reflectance versus wavelength is certified. You should input the factor in the certification in the software, referring to 4.3 Internal Reference of chapter X-1-1 Scan setup in the UV Express Software Users Guide.*

- Input the sample name and select **OK**.
- Check the spectrum and results. Save or print the data.