

Sample Test

Test Conditions

Test wavelength: 1000-400 nm; wavelength interval 5 nm, integration time 0.3 sec, test transmittance T%.

Test Process

During the test, no pre-treatment is required. After sweeping the air background, the sample is fixed at the entrance of the instrument, and the transmission curve of the sample at 400-1000 nm is obtained for transmittance values of the sample at different wavelengths. The spectrum is shown in Figure 5. The same sample was tested multiple times, and the resulting transmittance curves were completely identical. The instrument test was highly reproducible and stable, and the spectrum is shown in Figure 6.

Conclusion

PerkinElmer LAMBDA series spectrophotometer is equipped with a 150 mm integrating sphere detector for accurate testing and simple operation. The integrating sphere detector is coated with Teflon material, with high reflectivity, low light energy loss, high test accuracy and high stability. Teflon coating has good chemical stability, long-term durability, and is resistant to acidic and alkaline solutions. The 150 mm integrating sphere also has a small opening ratio, resulting in very low light leakage and high measurement accuracy.

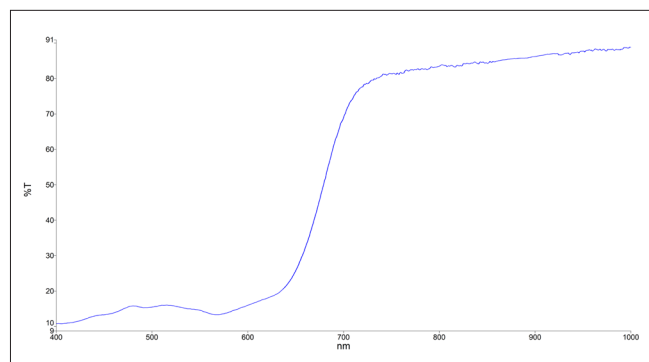


Figure 4. Mobile phone IR hole test spectrum.

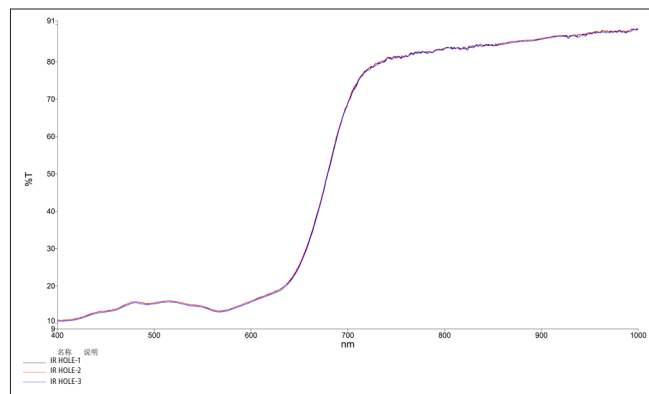


Figure 5. Mobile phone IR hole spectrum from three tests.