

Total reflectance is a spectroscopic method used primarily in the UV-Vis-NIR for simultaneous collection of both the specular and diffuse reflectance from a material. This method involves the use of an integrating sphere and is utilized by several ASTM methods such as E1348 – 22 for color analysis.

Integrating spheres differ from other diffuse reflection accessories in terms of illumination angle, specular reflectance collection and angular distribution of the collected diffuse reflectance. A diffuse reflectance accessory like the Praying Mantis can be used to study similar samples; however, the spectra will differ.