refraction effects

The luminescence flux emitted from the interior of a rectangular sample reaching a photodetector place at some distance from the sample is decreased by a factor of approximately n^2 (where n is the refractive index of the medium) compared with a medium whose refractive index is 1.0. Such effects are termed refraction effects.

Source:

PAC, 1984, 56, 231 (Nomenclature, symbols, units and their usage in spectrochemical analysis-Part VI: molecular luminescence spectroscopy) on page 244