local efficiency of atomization, $\varepsilon_{\rm a}$

in flame spectrometry

The substance fraction of atomized component in the component consumed. The efficiency of atomization is measured in a given part of the flame, usually the observation space; $\varepsilon_{\rm a}=\varepsilon_{\rm n}~\chi_{\rm s}~\chi_{\rm v}~\chi_{\rm a}$. The signal is a function of the product $q_{\rm v}~\varepsilon_{\rm a}$, but $\varepsilon_{\rm a}$ is also a function of $q_{\rm v}$, usually decreasing at high volume rates.

Source:

PAC, 1986, 58, 1737 (Quantities and units in clinical chemistry: Nebulizer and flame properties in flame emission and absorption spectrometry (Recommendations 1986)) on page 1741

Orange Book, p. 169