Lorentzian band shape

This band shape is described by the function:

\[
F(\nu - \nu_0) = \frac{1}{\pi} \frac{\gamma}{((\nu - \nu_0)^2 + \gamma^2)^{-1}}
\]

where \( \nu_0 \) is the mean band position, \( \gamma \) is the half band width at half maximum, and \( F (\nu - \nu_0) \) is the frequency distribution function.

See also: Gaussian band shape

Source:
PAC, 1996, 68, 2223 (Glossary of terms used in photochemistry (IUPAC Recommendations 1996)) on page 2252