

C4282

! For an efficient use of these tables, first read [HowTo.pdf](#).

C4282

T3.23B. Integrands involving exponentials of hyperbolic functions on the interval $(-\infty, \infty)$.

$$1. \int_{-\infty}^{\infty} \exp(-\alpha x - \beta \cosh x) dx = 2K_{\alpha}(\beta), \quad |\arg \beta| < \frac{\pi}{2}.$$

$$2. \int_{-\infty}^{\infty} \exp(-\nu x + i\beta \cosh x) dx = i\pi e^{i\nu\pi/2} H_{\nu}^{(1)}(\beta), \quad 0 < \arg z < \pi.$$

$$3. \int_{-\infty}^{\infty} \exp(-\nu x - i\beta \cosh x) dx = -i\pi e^{-i\nu\pi/2} H_{\nu}^{(2)}(\beta), \quad -\pi < \arg z < 0.$$

C4282

C4282

C4282

C4282

C4282

C4282