

FORMULA 4.257.1

$$\int_0^{\infty} \frac{x^{\nu}}{(x+b)(x+c)} \ln\left(\frac{x}{b}\right) dx = \frac{\pi}{(c-b)\sin\pi\nu} \left[c^{\nu} \ln\frac{c}{b} + \pi(b^{\nu} - c^{\nu}) \cot\pi\nu \right]$$