

**FORMULA 3.524.21**

$$\int_0^{\infty} x^4 \frac{\cosh ax}{\cosh bx} dx = \left( \frac{\pi}{2b} \sec \frac{\pi a}{2b} \right)^5 \left( 24 - 20 \cos^2 \frac{\pi a}{2b} + \cos^4 \frac{\pi a}{2b} \right)$$