

**FORMULA 3.636.3**

$$\int_0^{\pi/2} \frac{\tan^{2\mu} x}{\cos x} dx = \int_0^{\pi/2} \frac{\cot^{2\mu} x}{\sin x} dx = \frac{\Gamma(\mu + 1/2) \Gamma(-\mu)}{2\sqrt{\pi}}$$