**FORMULA 3.623.1**

$$\int_0^{\pi/2} \tan^{\mu-1} x \cos^{2\nu-2} x \, dx = \int_0^{\pi/2} \cot^{\mu-1} x \sin^{2\nu-2} x \, dx = \frac{1}{2} B\left(\frac{\mu}{2}, \nu - \frac{\mu}{2}\right)$$