$\mathbf{a0 = 1.0063094352008954;}$
$\mathbf{a1 = 9.62881296190228110^{-8};}$
$\mathbf{a2 = 0.0005514410719421048\psi^{0.34};}$
$\mathbf{a3 = -0.004497143206083853\psi^{0.68};}$
$\mathbf{a4 = 0.014661796511084457\psi;}$
$\mathbf{a5 = -0.021507086025525535\psi^{1.36};}$
$\mathbf{a6 = 0.011683817381221 04\psi^{1.7};}$
$\mathbf{a7 = -4.66717043383214710^{-7};}$
$\mathbf{a8 = -0.08754409269479117\psi^{0.34};}$
$\mathbf{a9 = 0.7133541391128998\psi^{0.68};}$
$\mathbf{a10 = -2.3250966647238978\psi;}$
$\mathbf{a11 = 3.786714506237929\psi^{1.36};}$
$\mathbf{a12 = -3.0797308669390273\psi^{1.7};}$
$\mathbf{a13 = \psi^{2};}$

$\mathbf{b0 = \frac{(a1+a2+a3+a4+a5+a6)}{(a7+a8+a9+a10+a11+a12+a13)};}$
$\mathbf{integrand = a0 + b0}$
$1.00631 + (9.62881 \times 10^{-8} + 0.000551441\psi^{0.34} - 0.00449714\psi^{0.68} +$
$0.0146618\psi - 0.0215071\psi^{1.36} + 0.0116838\psi^{1.7})/$
$(-4.66717 \times 10^{-7} - 0.0875441\psi^{0.34} + 0.713354\psi^{0.68} -$
$2.32507\psi + 3.78671\psi^{1.36} - 3.07973\psi^{1.7} + \psi^{2})$
$\mathbf{\int_0^{\pi/2} integrand} d\psi$