



Fig. 21 STAGS prediction of the linear buckling mode and load factor ($pcr = 3.36769$) for the optimized curved panel. The applied axial load is $N_x = -100$ lb/in. PANDA2 predicts 3.1375. The PANDA2 model is based on simple support conditions along the two curved edges at $x = 0$ and $x = L$ ($L = \text{ring spacing} = 9.7793$ inches) with no rings along those two edges. From this figure it appears that clamping along $x = 0$ and $x = L$ is more likely than simple support. PANDA2 predicts that the critical buckling mode has six axial halfwaves. The STAGS linear buckling mode shown above is used next as an initial imperfection shape with amplitude, $W_{imp} = 0.001$ inch, in the nonlinear static equilibrium STAGS analysis ($INDIC = 3$) that follows. (See Table 24 for the run stream.)