



Fig. 50 Axisymmetric **+mode 4** linear buckling mode shape from BIGBOSOR4 for the **isogrid-stiffened** equivalent ellipsoidal shell with the same design as that optimized with the use of only (+ and -) mode 1 and mode 2 axisymmetric imperfection shapes. Tables 50 and 51 list margins corresponding to this shell with a plus and minus mode 4 axisymmetric imperfection shape with amplitude, $W_{\text{imp}} = 0.2 \text{ inch}$. Some of the margins are significantly negative, indicating the need for further optimization if one wants the shell to survive in the presence of this type and amplitude of mode 4 axisymmetric imperfection.