



Fig. 116 Optimization of the “**perfect**” **isogrid-stiffened** equivalent ellipsoidal shell via the second execution of SUPEROPT. The starting design is the best design determined during the first execution of SUPEROPT. The index, IDESIGN, is set equal to 2 in MAINSETUP. IDESIGN = 2 means that “ALMOST FEASIBLE” designs are accepted. “ALMOST FEASIBLE” means that all design margins must be greater than -0.05 . See Item 725 in Table a24 for more information on IDESIGN. The optimum design is listed in Table 33 under the heading, “isogrid-stiffened, perfect”. The design margins of the optimized shell are listed in Table 70, and the local skin and stiffener stresses and local skin and stiffener buckling load factors are listed in Table 71. “Perfect” is in quotes because there is a very small axisymmetric imperfection amplitude, $W_{imp} = 0.0001$ inch, as listed in Table 67.