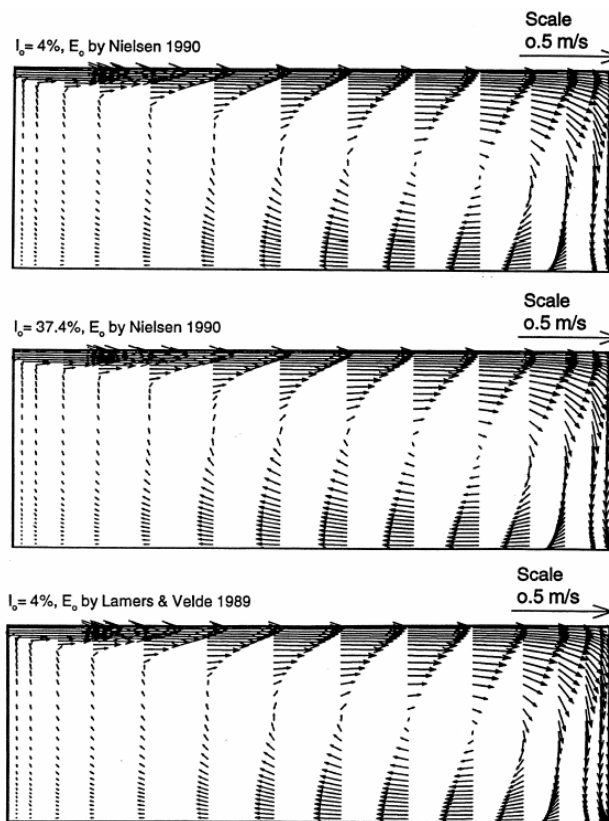


Said, M.N.A., D.B. Jouini and E.G. Plett, Influence of Turbulence Parameters at Supply Inlet on Room Air Distribution, ASME Winter Annual Meeting, New Orleans, 1993.

Air flow conditions at the supply opening which are used as boundary conditions in a numerical simulation, must be applied in order to proceed with the numerical solution of the air flow within a room. The turbulence parameters, including the turbulence kinetic energy or the turbulence intensity and turbulent kinetic energy dissipation rate are among the conditions usually specified. Investigators have used a variety of expressions to estimate these quantities. A review of these expressions is presented in this paper. The focus of this paper is to assess the influence of prescribed turbulence intensity and turbulent kinetic energy dissipation rate at the supply diffuser on the computed air flow pattern, velocity, and turbulence intensity in the space served by the supply diffuser.



Velocity distribution in the symmetry phase. Effect of I_0 and ε_0 is indicated.