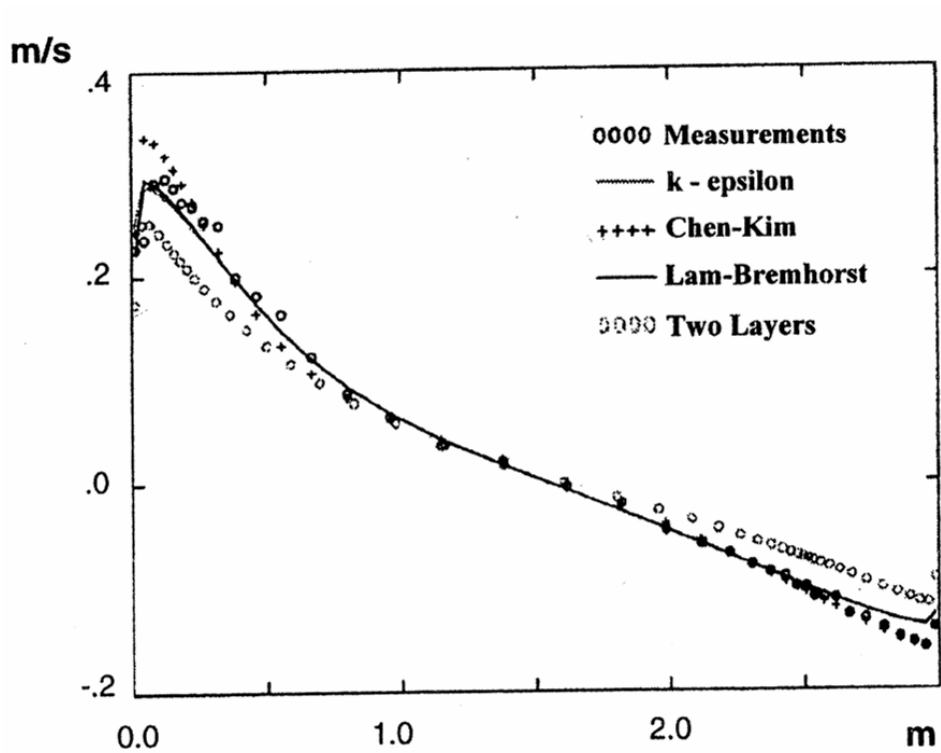


Collignan, B. and J. Ribéron, A Numerical Study on Pollutant Removal Effectiveness of a Room, Air Distribution in Rooms, (ROOMVENT 2000), Elsevier 2000.

The two-dimensional IEA Annex 20 test case is used to make a numerical study of pollutant removal effectiveness. Measurements in the $x = H$ vertical plane are compared with predictions based on four different turbulence models, namely $k-\epsilon$ standard, two-layer model, Chen-Kim low Reynolds model and Lam-Bremhorst low Reynolds model, see the figure.



The benchmark test is now used for the prediction of contaminant distribution with different locations of the contaminant source and different locations of the return opening.