

D-Optimal Fractional Factorial Designs for Location Main Effects with Two Dispersion Factors

Chao-Ping Ting

Department of Statistics, National Chengchi University Taipei, Taiwan, R.O.C.

The problem of finding D-optimal designs, with two dispersion factors, for the estimation of all location main effects is investigated in the class of regular unreplicated two-level fractional factorial designs of resolution III. Tables of the factors that should be named as the ones that are responsible for the dispersion effects are provided. Examples are given to show how different values of the dispersion effects affect the optimality property of the designs.

[Chao-Ping Ting, Department of Statistics, National Chengchi University Taipei, Taiwan, R.O.C. ; cpting@nccu.edu.tw]