Abstracts

Boundary Conditions for the Four Vector Potential (Correspondence)

L.F. Jelsma, E.D. Tweed, R.L. Phillips and R.W. Taylor. "Boundary Conditions for the Four Vector Potential (Correspondence)." 1970 Transactions on Microwave Theory and Techniques 18.9 (Sep. 1970 [T-MTT]): 648-650.

Boundary conditions describing perfectly conducting surfaces are developed for the four-component vector potential. The boundary conditions are nonunique and are shown to depend on the choice of the gauge. A physical interpretation is developed for the nonunique property. The results shown herein provide boundary conditions for the development of a computer approach to field problems in terms of the four-component vector potential.

❑ Return to main document.