On the Ring Loading Problem

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ABSTRACT

In this paper, we consider the Ring Loading Problem, which arises in the design of SONET bidirectional rings. The issue of demand splitting divides the ring loading problem into the two kinds. One allows a demand to be split and routed in two different directions and the other doesn't. The former kind becomes a relaxation of the latter. We present an efficient exact solution procedure for the case with demand splitting, and a 2-approximation algorithm for the case without demand splitting.