1060-05-219 C L Suffel* (csuffel@stevens.edu), Castle Point Terrace, EAS Building (Rm 409), Hoboken, NJ 07030, and L Iswara Chandra, A Suhartomo and D Gross. On the Weighted Component Line Connectivity of Trees and Unicycles.

Given n and k such that 2 < n < k and a graph on n nodes with positive weights on the nodes, the k-weighted component line connectivity of the graph is the minimum number of lines that must be removed from the graph so that each component of the resulting subgraph has total weight no greater than k-1. We present efficient algorithms for determining the value of this parameter for trees and unicycles. (Received March 30, 2010)