

The main contribution of the technical note is the statement of equivalence between the existence of quadratic Lyapunov function for nonlinear Lurie systems with several infinite sector constraints and fulfillment of the circle criterion in Yakubovich's version for absolute stability and instability. A side result is the theorem about S-procedure losslessness (S-theorem) for any number of infinite sector constraints in the complex case. Additionally, the relations between two versions of the MIMO circle criterion are established.