Comparing the throughput performance for star topology with varying number of stations, both schemes show a sharp drop to about 0.8Mbps in throughput. But AARF degrades severely even with 5 nodes, it is because ARF cannot differentiate collision from channel errors, a wireless station may decrease its frame transmission rate over-aggressively [1]. ARRF also has this drawback since it is modified version of ARF. Since CARA using RTS/CTS when first transmission fail, situations of rate decreasing caused by collisions are reduced efficiently, so in this case, CARA is better.

Also, since the 802.11 DCF is designed to offer equal transmission opportunities to all stations, the throughput of high-rate station is also bounded below the lowest transmissions rate in the network. That is the reason that both schemes share same throughput (about 0.8Mbps) in more than 20 stations.