The akara is elaborated with cowpea beans, chopped onion and salt and deep fried in crude palm oil. The aim of the present study was to assess the quality of crude palm oil used in deep frying of akara. Samples were collected from 150 points of sale scattered throughout the 12 sanitary districts in the city of Salvador, Bahia, Brazil. In each point, a sample consisting of crude palm oil was collected, which, in turn, had been used for 4 h. 48 samples with free fatty acids higher than 15 mg KOH/g were selected and analyzed to quantify total polar compounds (TPC), oxidized fatty acid methyl esters (FAME), total carotenoids and to determinate induction period (h). The samples presented low oxidative stability, reflected by low induction periods (1 - 3 h in 64.10 % of them). Total carotenoids ranged from 10.99 - 331.45 ppm, FAME from 2.53 - 8.07 % and TPC from 13.05 - 31.57 %. 16 % of the samples resulted in levels of TPC above the established limits (≥ 25%). It was observed positive correlation between FAME and TPC (r = 0.694) and carotenoids and induction periods (r = 0.492). TPC and FAME showed inverse correlation with induction periods (r = -0.623 and r = -0.429, respectively) and total carotenoids (r = -0.354 and r = -0.436, respectively). These results showed that degradation compounds were formed with the decrease of the oils oxidative stability and total carotenoids content, suggesting that the frying conditions were inappropriate.