The field of a test current loop placed symmetrically in the equatorial plane around a Kerr black hole has been studied several times and solutions have been published in different forms. We compare these results and determine their limits in important places – in radial infinity, on the outer event horizon, on the static limit, in the equatorial plane and on the axis of symmetry. Furthermore, we show the behaviour of the field corresponding to the extreme black hole and verify Meissner effect. In the end we determine the field of a simple model of a current disc by a superposition of test current loops. This problem has an astrophysical motivation – the description of accretion discs in the vicinity of black holes.