F1 and F2 are parameters to characterize the slope of the field at the edges defined as:

F1 = sgn(a)
$$\sqrt{a}$$
, $a = 24 \left(\frac{I_0^2}{2} - I_1 \right)$,
F2 = $I_2 - \frac{I_0^3}{2}$

with $I_n \equiv \int_{\kappa_{1,n}}^{\infty} (s-s0)^n \frac{K_1(s)}{\kappa_{1,n}} ds$, (157)

with
$$I_n = \int_{-\infty}^{\infty} (3-30) \frac{1}{K_{10}} ds$$

where s_0 is the location of the edge where the effective length is defined, and $K_{10} = K1/L$.

(155)

(156)