

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

$$F1 = \text{sgn}(a) \sqrt{a}, \quad a \equiv 24 \left(\frac{I_0^2}{2} - I_1 \right),$$

$$F2 = I_2 - \frac{I_0^3}{3}$$

$$\text{with } I_n \equiv \int_{-\infty}^{\infty} (s - s_0)^n \frac{K_1(s)}{K_{10}} ds,$$

where s_0 is the location of the edge where the effective length is defined, and $K_{10} = K_1/L$.