

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

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

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

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

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