$$\sigma_{VIX} = 100\sqrt{\left(\omega T_1 \sigma_1^2 + (1-\omega) T_2 \sigma_2^2\right) \frac{525,600}{43,200}}$$

$$\sigma_i^2 = \frac{2}{T} \left(\sum_i \frac{\Delta K_i}{K_i^2} Q(K_i) e^{rT} \right) - \frac{1}{T} \left(\frac{F_0}{K_0} - 1 \right)^2$$