$$\langle \widetilde{\ell}_R \rangle - 1 \sim -\left(\frac{1}{T}\right) \mathcal{C}_R g^2 \int \frac{d^3k}{k^2 + m_{Debye}^2} \sim (-) C_R g^2 (-) (m_{Debye}^2)^{1/2}$$