Equivalent displacement noise due to slow path current noise

Displacement noise [$\mathrm{m}/\sqrt{\mathrm{Hz}}$]

10^{-16}
10^{-17}
10^{-18}
10^{-19}
10^{-20}
10^{-21}
10^{-22}
10^{-23}

10^{2}
10^{3}
10^{4}

Frequency [Hz]

$\mathrm{I_{drive}} = 2.5\,\mathrm{mA}$
$\mathrm{I_{drive}} = 9.5\,\mathrm{mA}$
$\mathrm{I_{drive}} = -2.5\,\mathrm{mA}$
$\mathrm{I_{drive}} = -9.5\,\mathrm{mA}$
Input Grounded
$\mathrm{I_{drive}} = 0\,\mathrm{mA}$
Contribution from Johnson noise of 4.5 kΩ