

Measurements with the 4133 Microphone

$$S_o := -38.6 \quad M_o := 10^{\frac{S_o}{20}} \quad M_o \cdot 1000 = 11.749$$

Frequency of 10 kHz, 0° plane wave incidence (Δf available on cal chart)

$$\Delta_f := 0.25 \quad S_f := S_o + \Delta_f \quad S_f = -38.35 \quad M_f := 10^{\frac{S_f}{20}} \quad M_f 1000 = 12.092$$

$$K_f := 4 \quad \Delta_p := -4 \quad S_p := S_o + \Delta_p \quad S_f := S_p + K_f \quad S_f = -38.6 \quad M_f := 10^{\frac{S_f}{20}} \\ M_f 1000 = 11.749$$

Frequency of 10 kHz, Random Incidence (Δ_f unavailable on cal chart)

$$K_f := 0.7 \quad \Delta_p := -4 \quad S_p := S_o + \Delta_p \quad S_f := S_p + K_f \quad S_f = -41.9 \quad M_f := 10^{\frac{S_f}{20}} \\ M_f 1000 = 8.035$$