Aufgabe 25

$L_p = 92\,dB$, $L_{TW} = 120\,dB$ $\left(I_0 = 10^{-12}\,\frac{W}{m^2}\right)$

$L = 10\,dB \cdot \lg \frac{I}{I_0}$ $\rightsquigarrow$ $I = I_0 \cdot 10^{L/10\,dB}$

$I_p = 10^{-12}\,\frac{W}{m^2} \cdot 10^{9,2} = 1,585 \cdot 10^{-3}\,\frac{W}{m^2}$

$I_{TW} = 10^{-12}\,\frac{W}{m^2} \cdot 10^{12} = 1\,\frac{W}{m^2}$

$n = \frac{I_{TW}}{I_p} = 631,0$