

## Exercício 2

$$\alpha_{MAX} = 0,02 \text{ dB}$$

$$\omega = 1$$

$$\alpha_{MIN} = 48 \text{ dB}$$

$$\omega = 2,2$$



$$E_L = 10^{\frac{\alpha_{MAX}}{10}} - 1 = 0,0046$$

$$E = 0,067$$

$$\alpha_{MIN} = 20 \log \sqrt{1 + E^2 \omega^{2m}}$$

$$\alpha_{MIN} = 20 \log \sqrt{1 + 0,067 \cdot (2,2)^{2m}}$$

ITERO

$$\left[ N = 11 ; \alpha_{MIN} \rightarrow 51,975 \text{ dB} > 48 \text{ dB} \right]$$

N	$\alpha_{MIN} \text{ [dB]}$
1	0,096
2	0,446
3	1,828
4	5,431
5	11,225
6	17,806
7	24,597
8	31,433
9	38,279
10	45,127
11	51,975