Lab Como

- Seno:

$$P_R = \frac{1\times10^{-11}\ W}{300\ Hz} = 3,3\times10^{-14}\ \frac{W}{Hz} \times 201,7\times10^{3}\ Hz$$

$$P_R = 6,723\times10^{-9}\ W$$

$$P_{ots} = 1,34\mu(2) + 2,06n(2) = 5,20\times10^{-6}\ W$$

$$SNR = \frac{5,20\times10^{-6}\ W}{6,723\times10^{-9}\ W} \quad 774,07$$

$$SNR = 58\ dBm$$

- Cuadrada

$$P_R = \frac{1\times10^{-13}\ W}{300\ Hz} = 3,33\times10^{-16}\ \frac{W}{Hz} \cdot 380,7\times10^{3}\ Hz$$

$$P_R = 1,269\times10^{-10}\ W$$

$$P_{ots} = 2,14\mu(4) + 20,06\mu(4) + 50,58\mu(2) = 1,89\times10^{-4}$$

$$SNR = \frac{1,89\times10^{-4}\ W}{1,269\times10^{-10}\ W} = 1,5M = 91,76\ dBm$$

- Triangular

$$P_2 = \frac{1 \times 10^{-11}}{300\ Hz}\ W = 3,33 \times 10^{-14}\ \frac{W}{Hz} \times 804,6\ KHz$$

$$P_1 = 2,68 \times 10^{-8}\ W$$

$$P_{señal} = 278,09\,n(4) + 1,67\,u(2) + 3,82\,n(9) = 15,2 \times 10^{-3}\ W$$

$$SNR = \frac{15,2 \times 10^{-3}\ W}{2,68 \times 10^{-8}\ W} = 567,3 \times 10^{3} \approx 87,6\ dBm$$

- Coseno

$$P_2 = \frac{2,51 \times 10^{-9}}{300}\ \frac{W}{Hz} = 8,37 \times 10^{-12}\ \frac{W}{Hz} \times 2,21\ MHz = 1,85 \times 10^{-5}\ W$$

$$P_{señal} = 188,6\,n(2) + 205,32\,u(4) = 8,21 \times 10^{-4}\ W$$

$$SNR = \frac{8,21 \times 10^{-4}\ W}{1,85 \times 10^{-5}\ W} = 44,41 \approx 46,5\ dBm$$