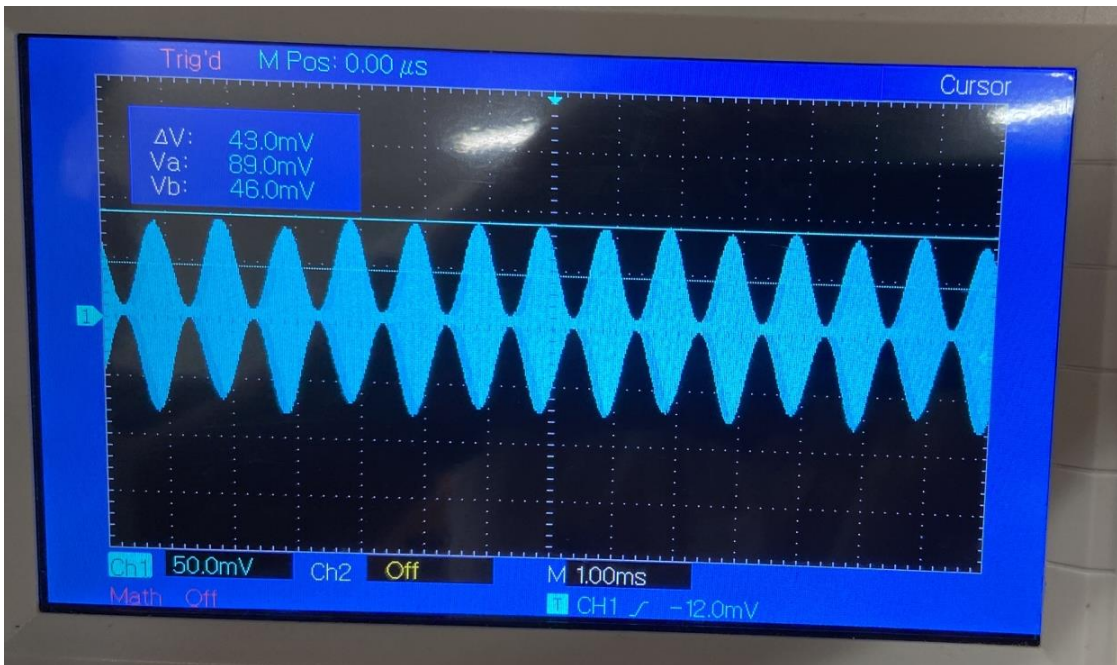


Practica 3.1

$KaAm=1$

$A_m = 1$ para todas las mediciones

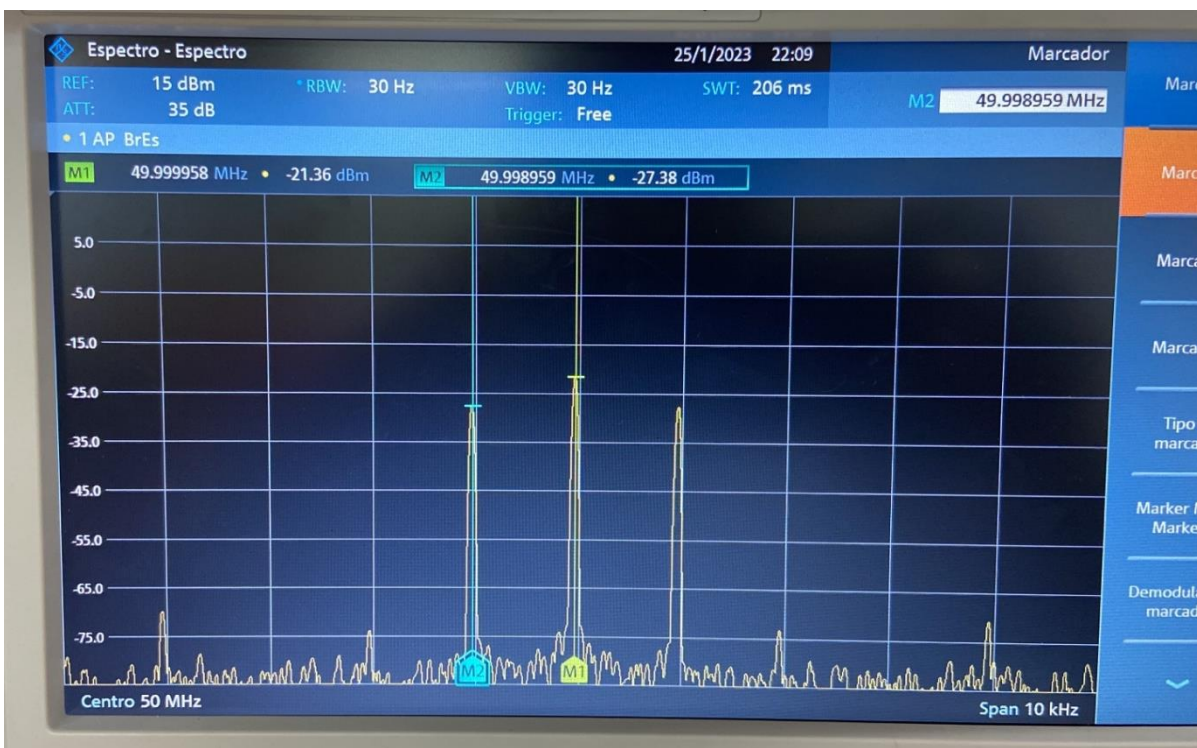


$$Ka = 1$$

$$Ac = 46mV$$

$$\Delta R = 43mV$$

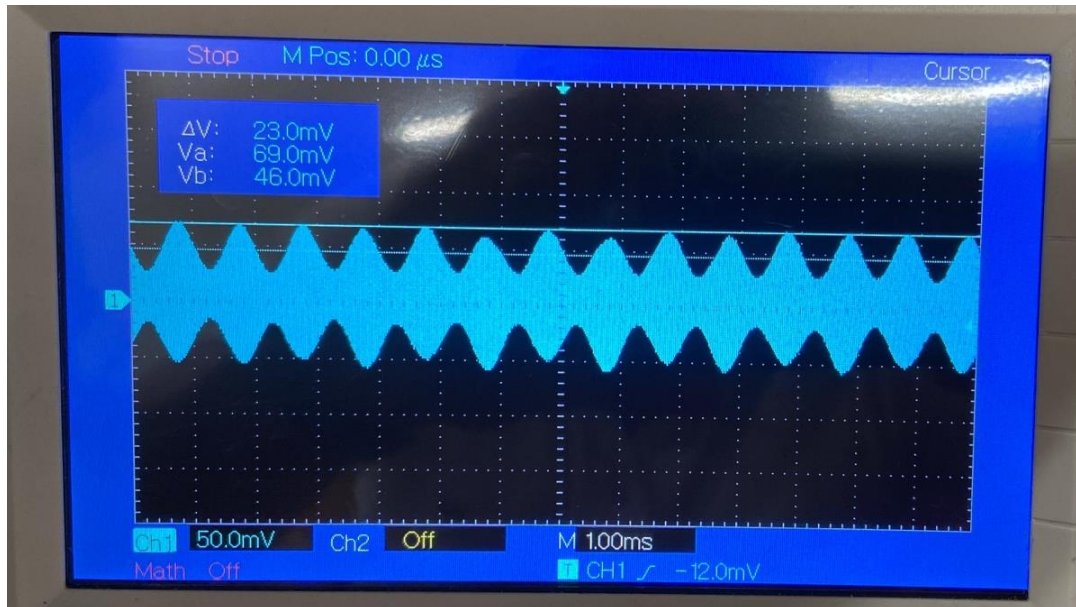
$$\text{índice de modulación } (\mu) = \frac{\Delta R}{Ac} = 0,94$$



$$Potencia\ señal\ (P_s) = \frac{Ac^2}{2} \left[1 + \frac{Ka^2 * Am^2}{2} \right]$$

$$(P_s) = \frac{(46m)^2}{2} \left[1 + \frac{(1)^2 * (1)^2}{2} \right] = 1.587\ mW$$

Para $KaAm < 1$

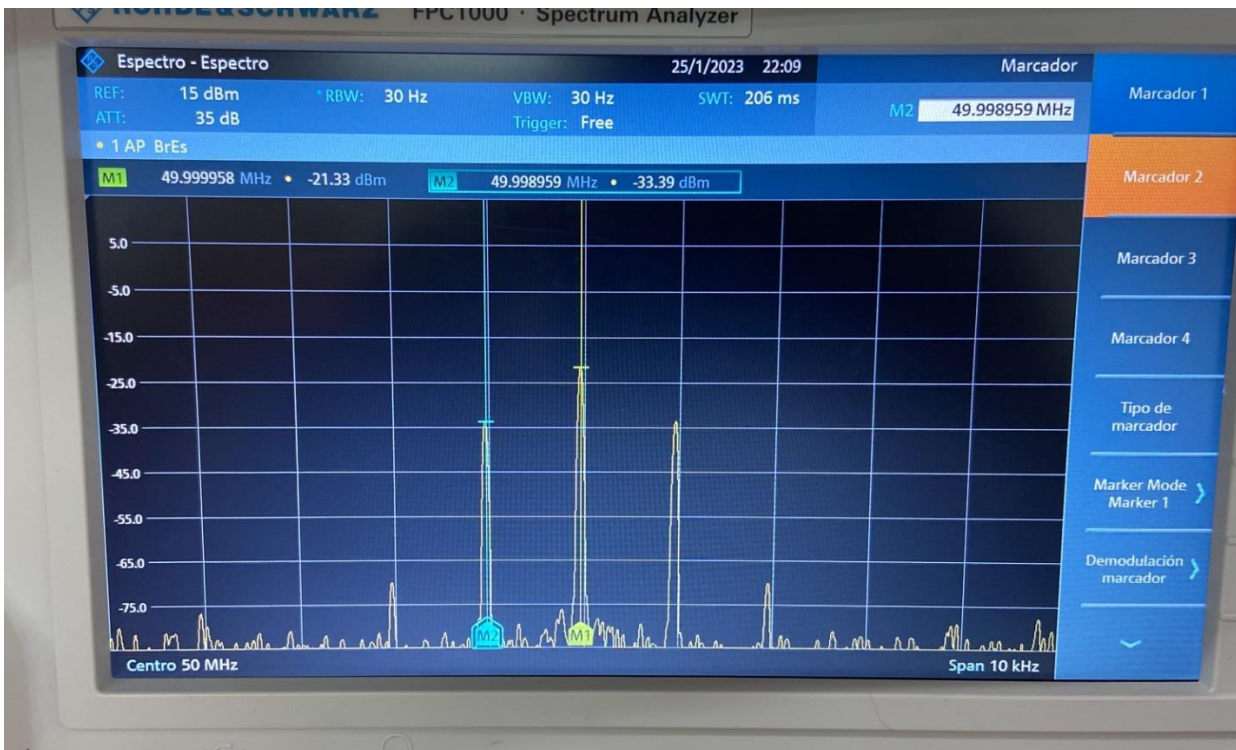


$$Ka = 0.5$$

$$Ac = 46mV$$

$$\Delta R = 23mV$$

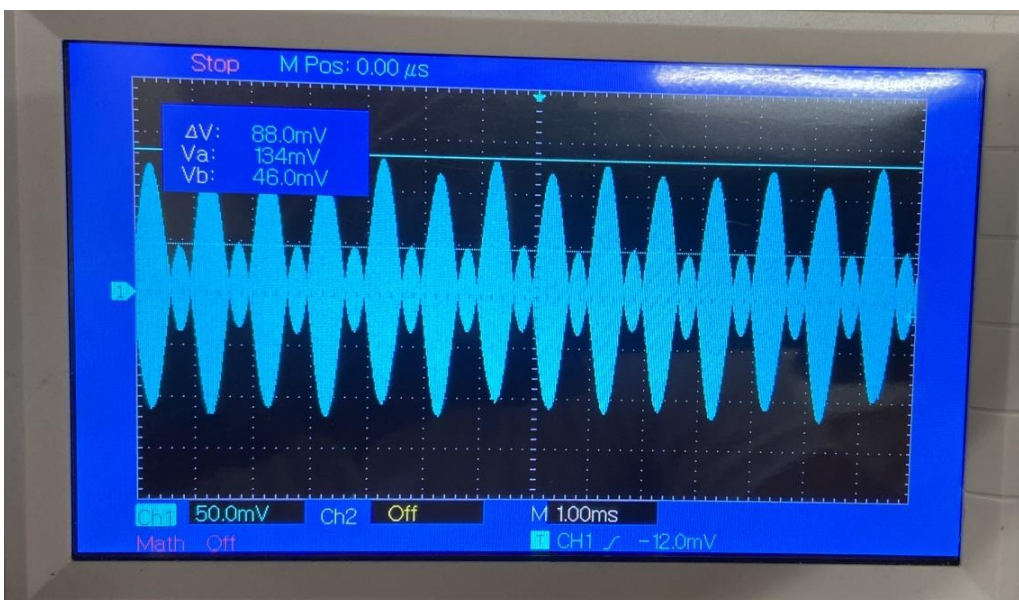
$$indice\ de\ modulación\ (\mu) = \frac{\Delta R}{Ac} = 0,5$$



$$Potencia\ se\tilde{n}al\ (P_s) = \frac{Ac^2}{2} \left[1 + \frac{Ka^2 * Am^2}{2} \right]$$

$$(P_s) = \frac{(46m)^2}{2} \left[1 + \frac{(0.5)^2 * (1)^2}{2} \right] = 1.19025\ mW$$

Para $KaAm > 1$

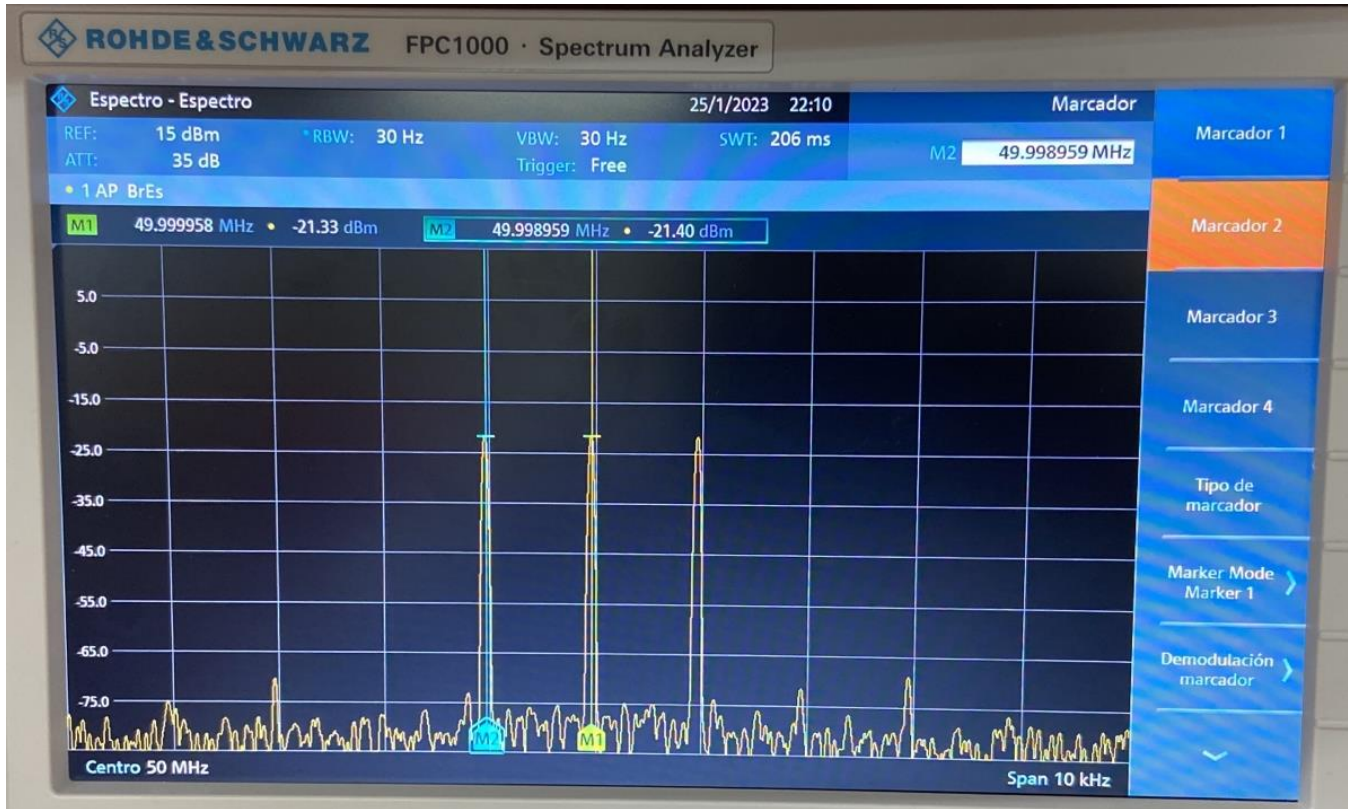


$Ka = 2$

$$A_c = 46mV$$

$$\Delta R = 88mV$$

$$\text{índice de modulación } (\mu) = \frac{\Delta R}{A_c} = 1,92$$



$$Potencia\ se\tilde{n}al\ (P_s) = \frac{A_c^2}{2} \left[1 + \frac{K a^2 * A_m^2}{2} \right]$$

$$(P_s) = \frac{(46m)^2}{2} \left[1 + \frac{(2)^2 * (1)^2}{2} \right] = 3.174\ mW$$