# ANEXO

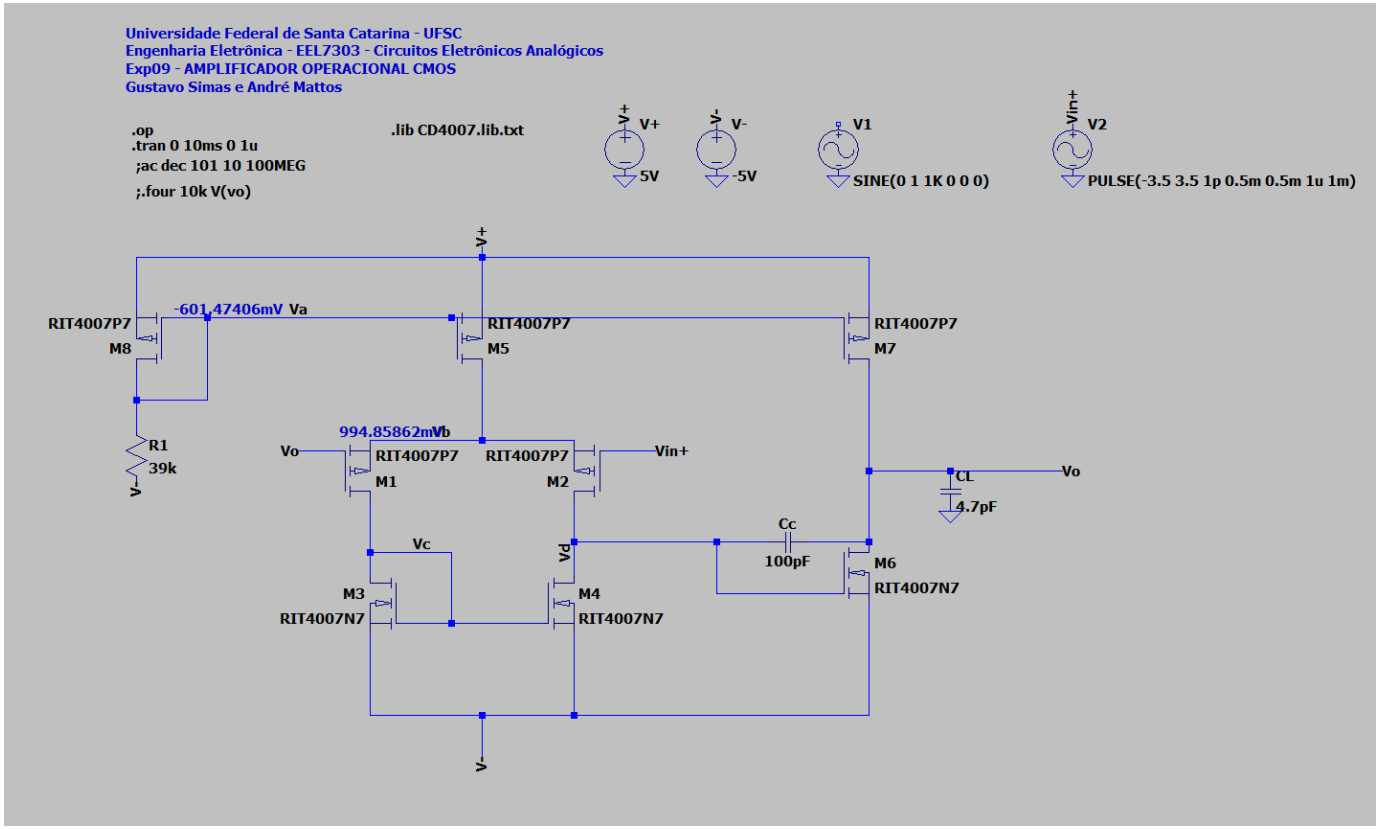


Figura 1 - Circuito Simulado em LTSpice

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--- Operating Point ---

V(va):          -0.601474       voltage
V(v-):          -5              voltage
V(v+):          5               voltage
V(vd):          -1.46633        voltage
V(vc):          -2.34914        voltage
V(vo):          0.0589049       voltage
V(vb):          3.76964         voltage
V(vin+):        0               voltage
V(nc_01):       0               voltage
Id(M2):         -3.45254e-005   device_current
Ig(M2):         -0              device_current
Ib(M2):         5.24597e-012    device_current
Is(M2):         3.45254e-005    device_current
Id(M1):         -3.37266e-005   device_current
Ig(M1):         -0              device_current
Ib(M1):         6.12878e-012    device_current
Is(M1):         3.37266e-005    device_current
Id(M5):         -6.82519e-005   device_current
Ig(M5):         -0              device_current
Ib(M5):         1.24036e-012    device_current
Is(M5):         6.82519e-005    device_current
Id(M7):         -0.0001105      device_current
Ig(M7):         -0              device_current
Ib(M7):         4.9511e-012     device_current
Is(M7):         0.0001105       device_current
Id(M8):         -0.000112783    device_current
Ig(M8):         -0              device_current
Ib(M8):         5.61147e-012    device_current
Is(M8):         0.000112783     device_current
Id(M6):         0.0001105       device_current
Ig(M6):         0               device_current
Ib(M6):         -5.0689e-012    device_current
Is(M6):         -0.0001105      device_current
Id(M3):         3.37266e-005    device_current
Ig(M3):         0               device_current
Ib(M3):         -2.66087e-012   device_current
Is(M3):         -3.37266e-005   device_current
Id(M4):         3.45254e-005    device_current
Ig(M4):         0               device_current
Ib(M4):         -3.54367e-012   device_current
Is(M4):         -3.45254e-005   device_current
I(C1):          1.94386e-022    device_current
I(Cc):          1.52523e-022    device_current
I(R1):          0.000112783     device_current
I(V2):          0               device_current
I(V1):          0               device_current
I(V-):          0.000291535     device_current
I(V+):          -0.000291535    device_current
```

Figura 2 - Ponto Quiescente Simulado

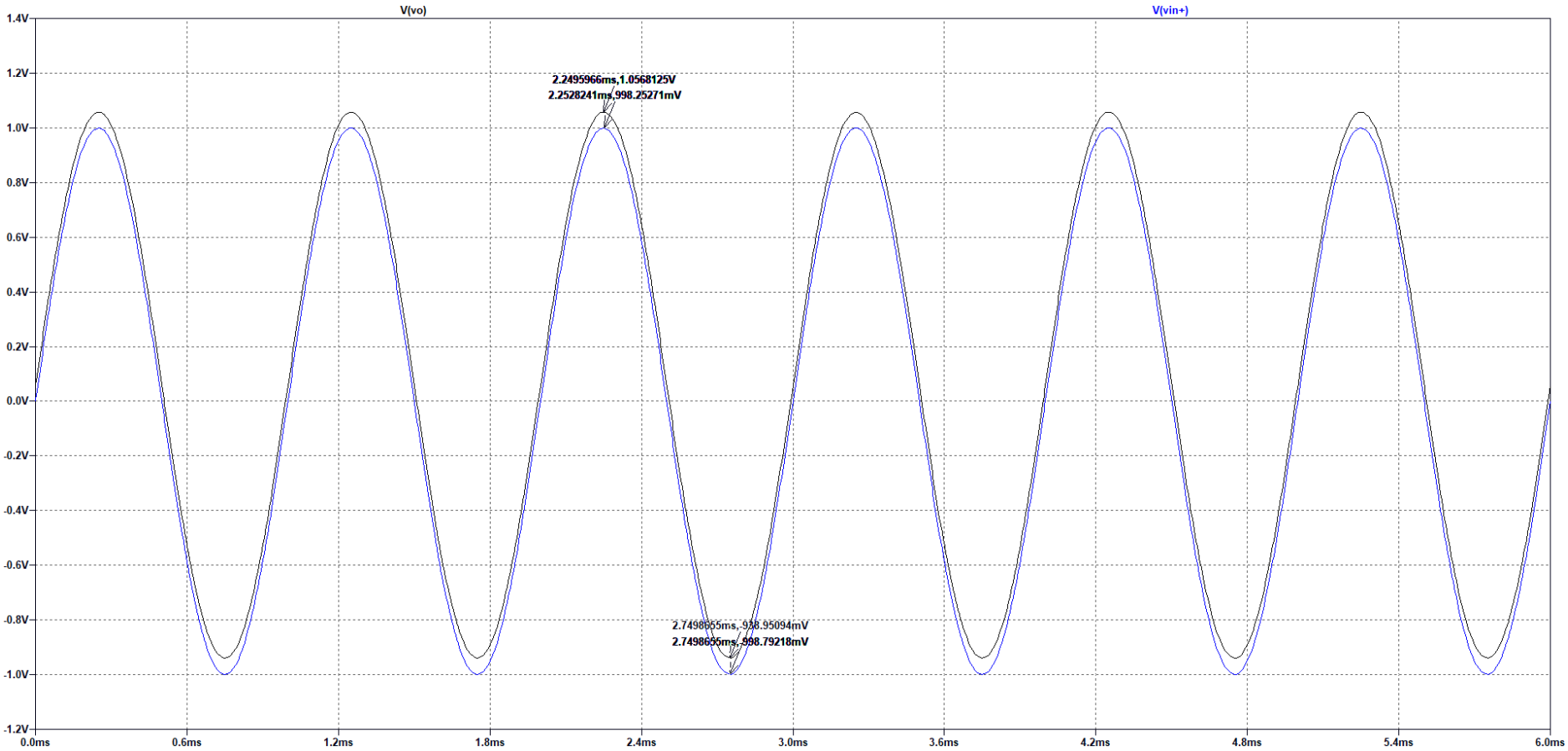


Figura 3 - Sinais de modo Seguidor de Tensão Simulado

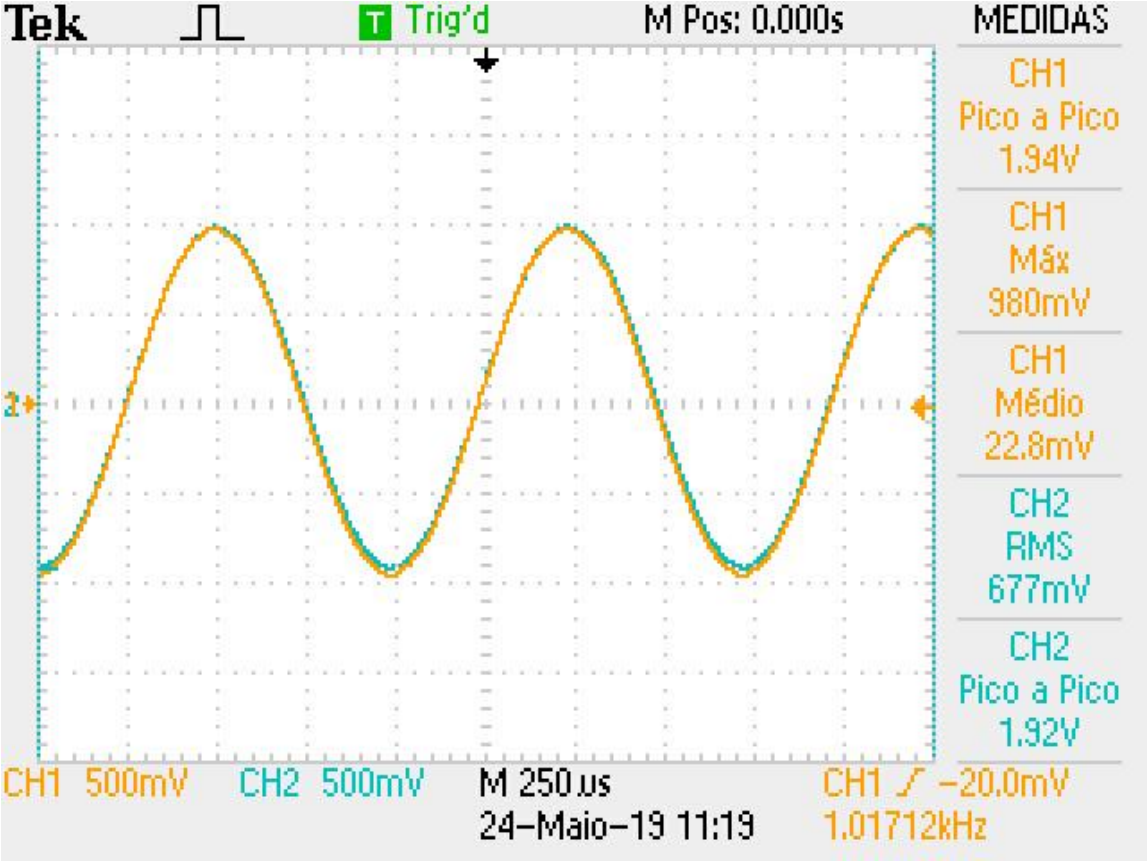


Figura 4 - Sinais de modo Seguidor de Tensão Experimental

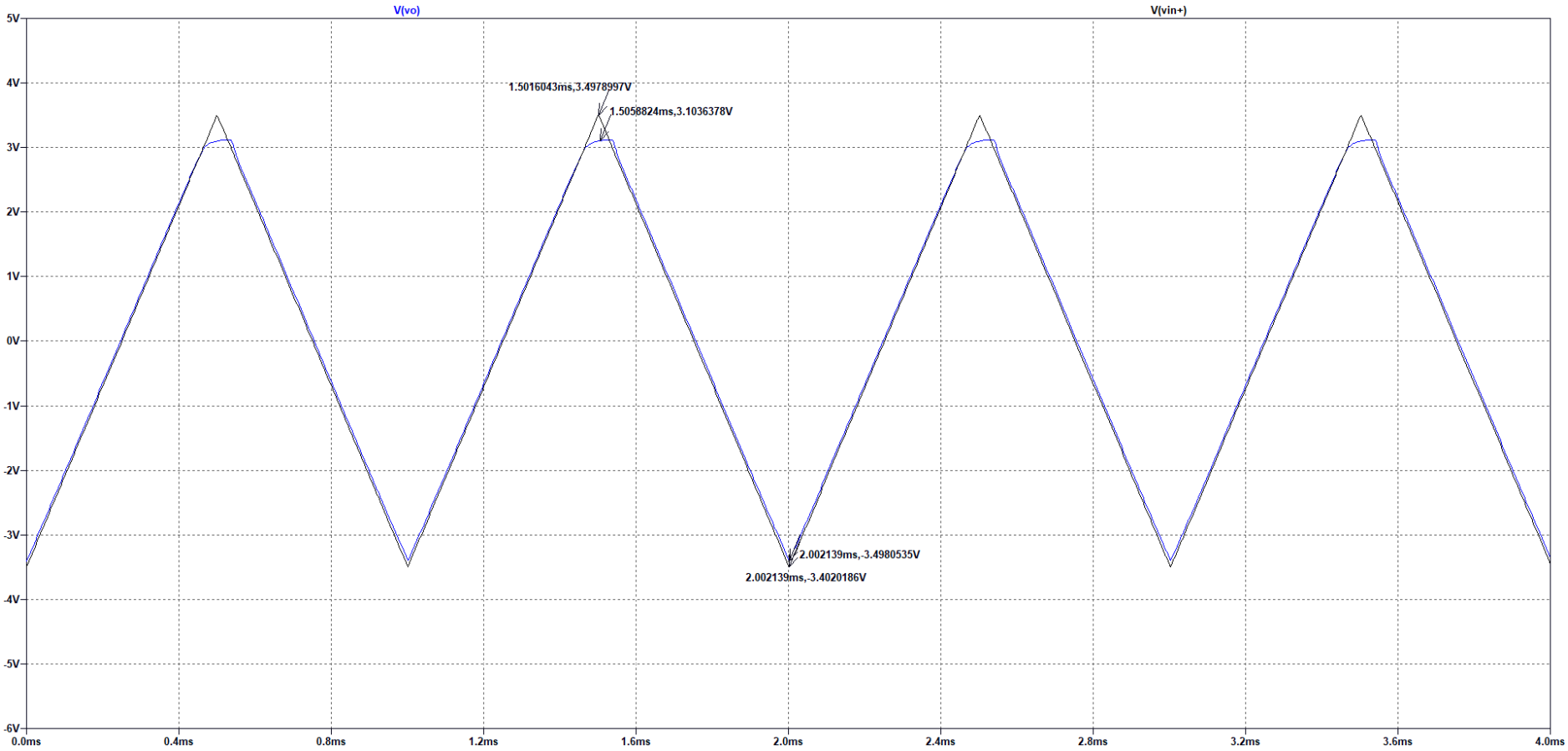


Figura 5 - Intervalo Linear em Modo YT Simulado

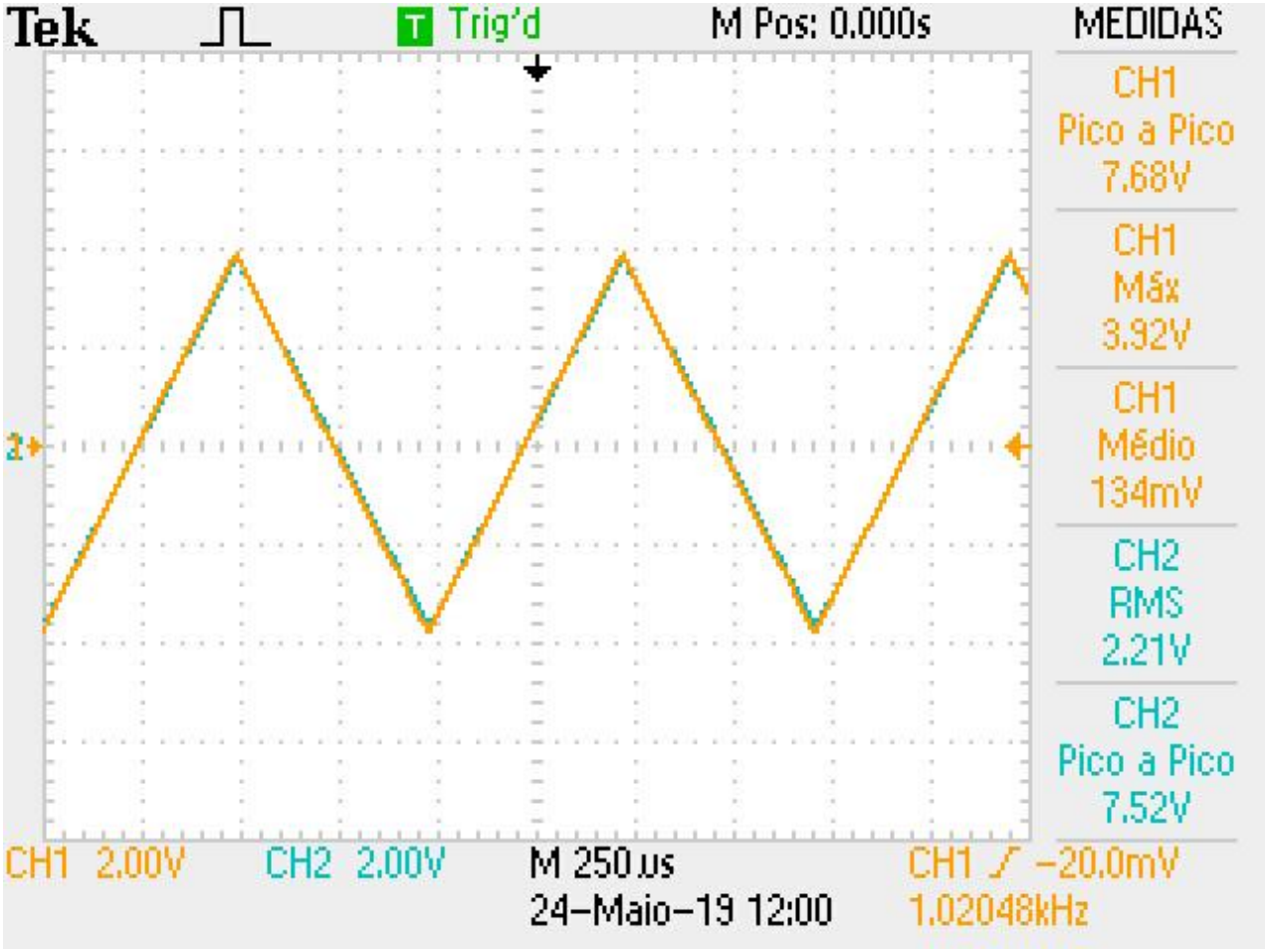


Figura 6 - Intervalo Linear em Modo YT Experimental

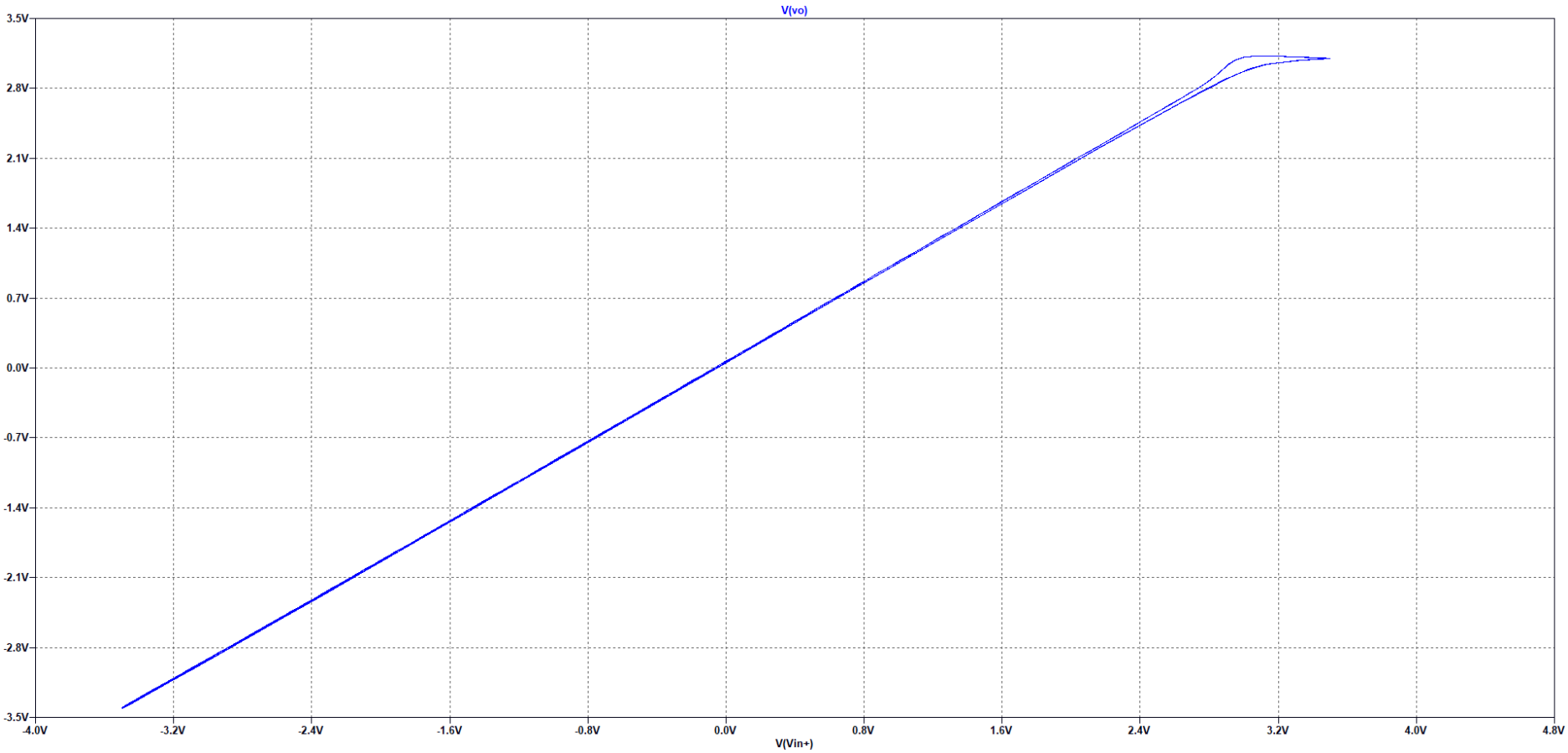


Figura 7 - Intervalo Linear em Modo XY Simulado

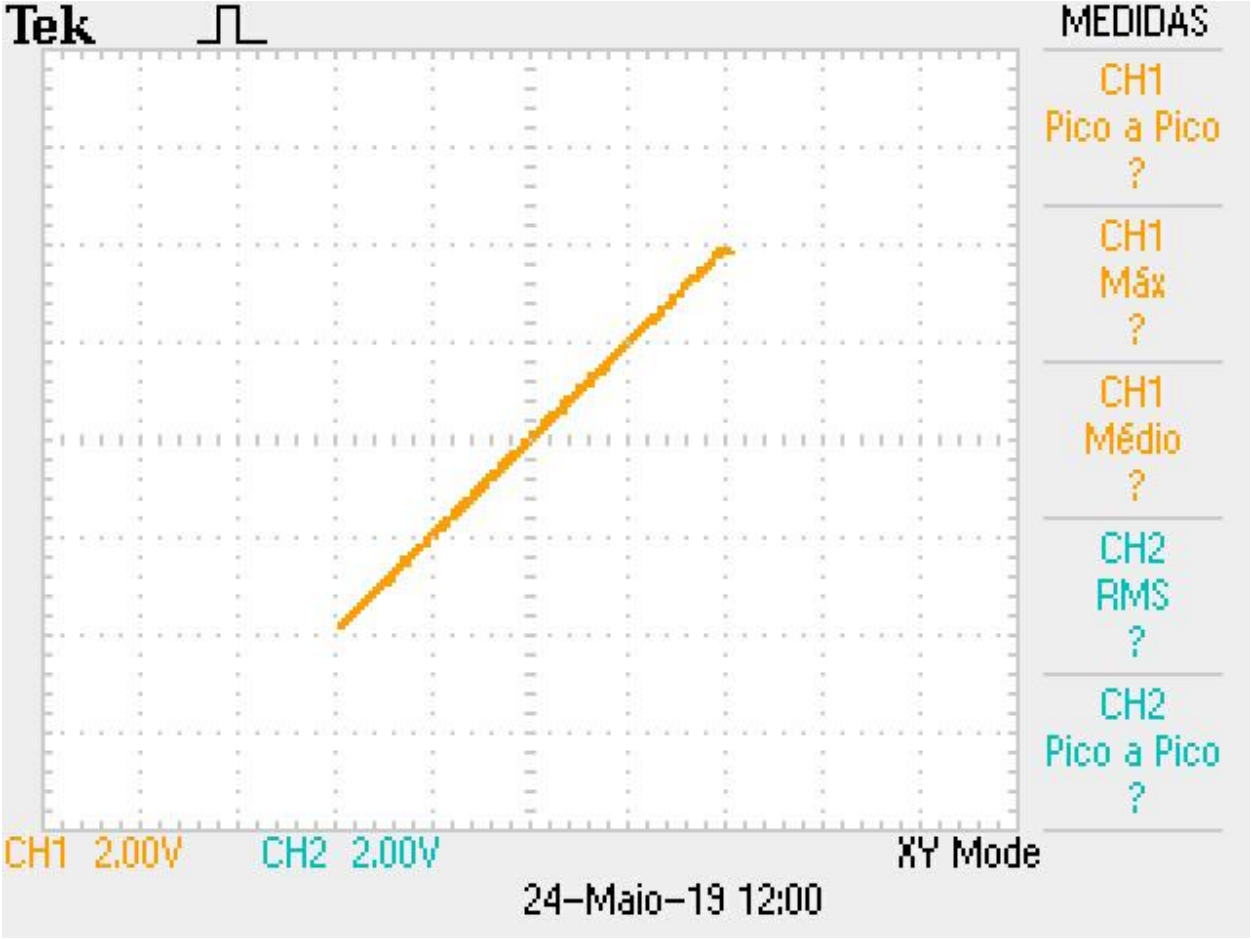


Figura 8 - Intervalo Linear em Modo XY Experimental

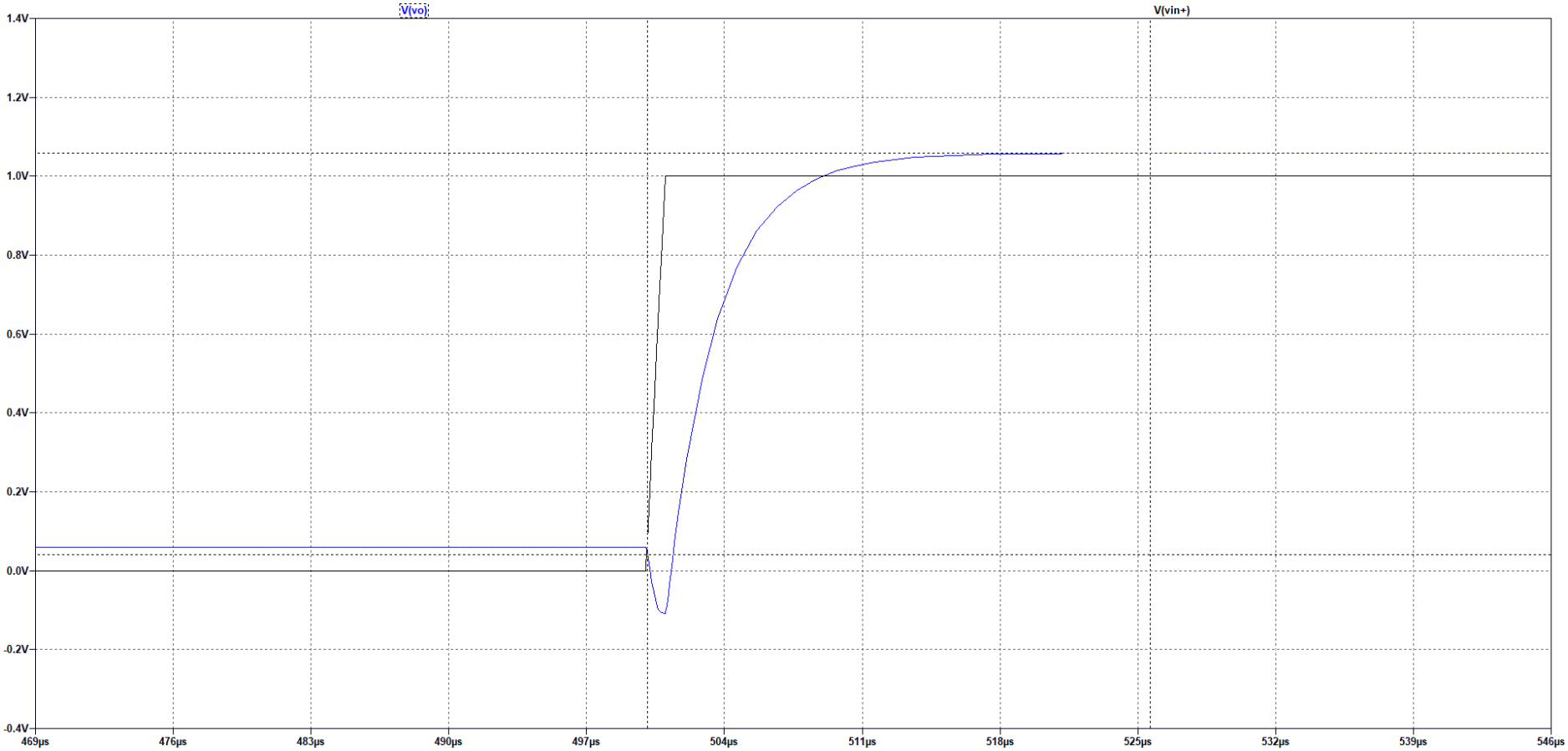


Figura 9 - Settling Time Configuração i) Simulado

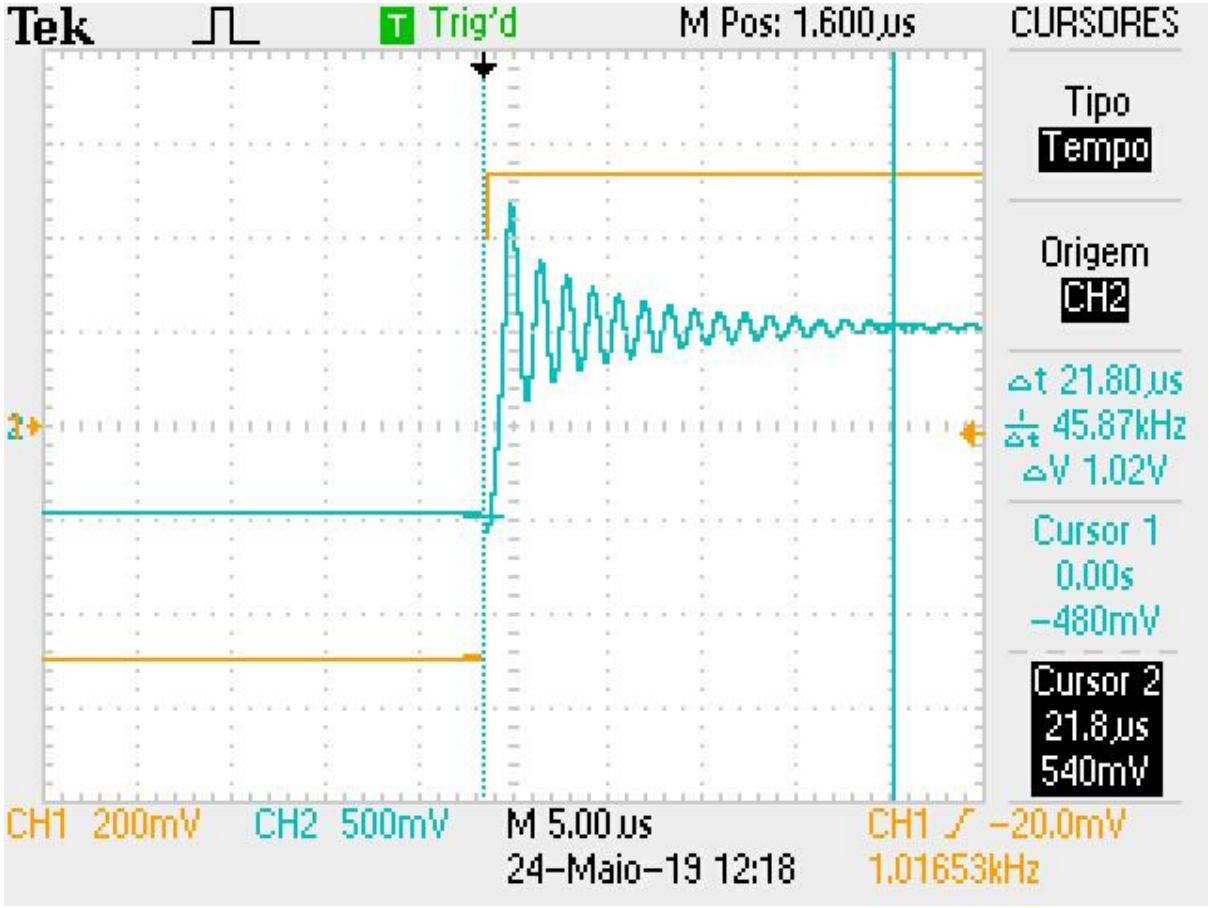


Figura 10 - Settling Time Configuração i) Experimental

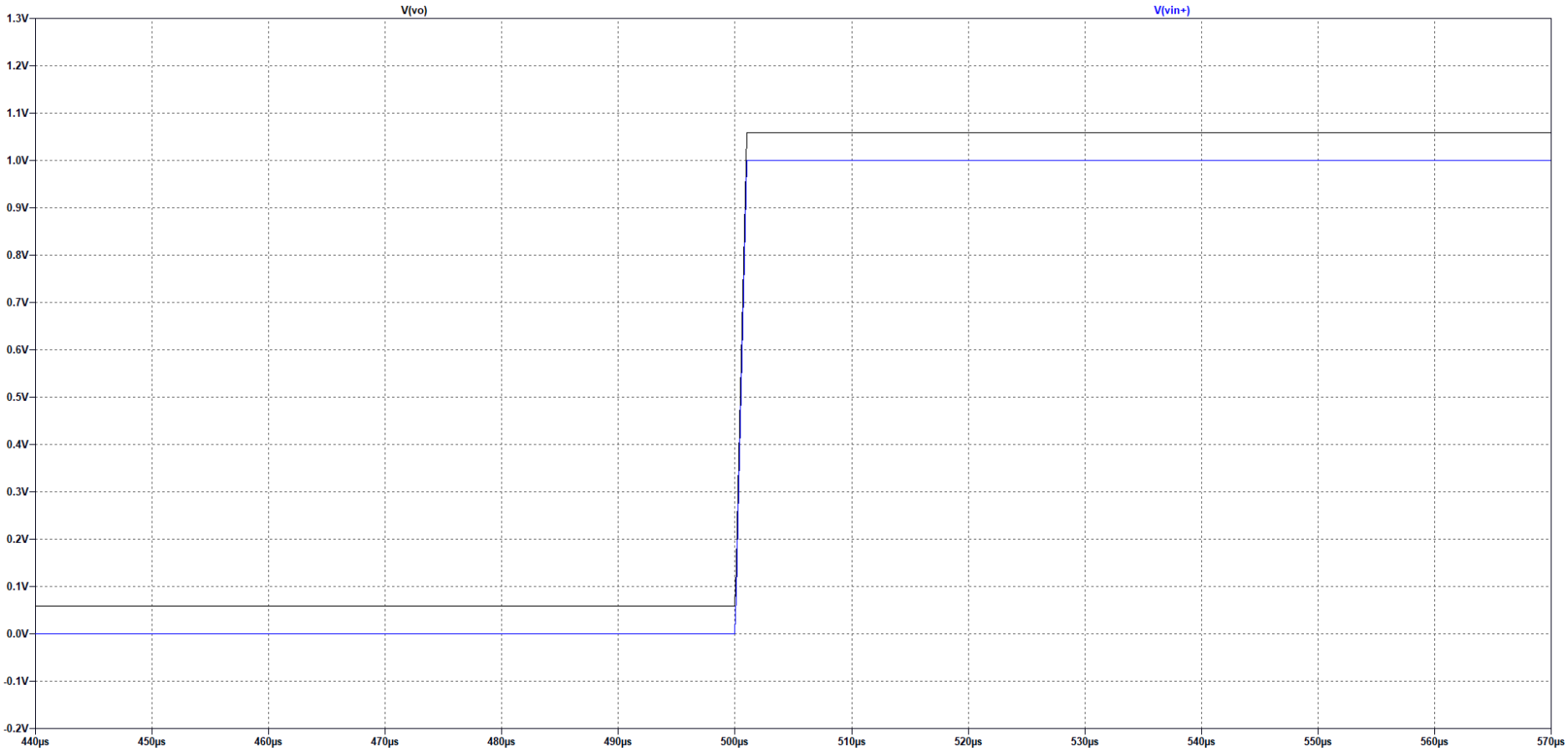


Figura 11 - Settling Time Configuração ii) Simulado

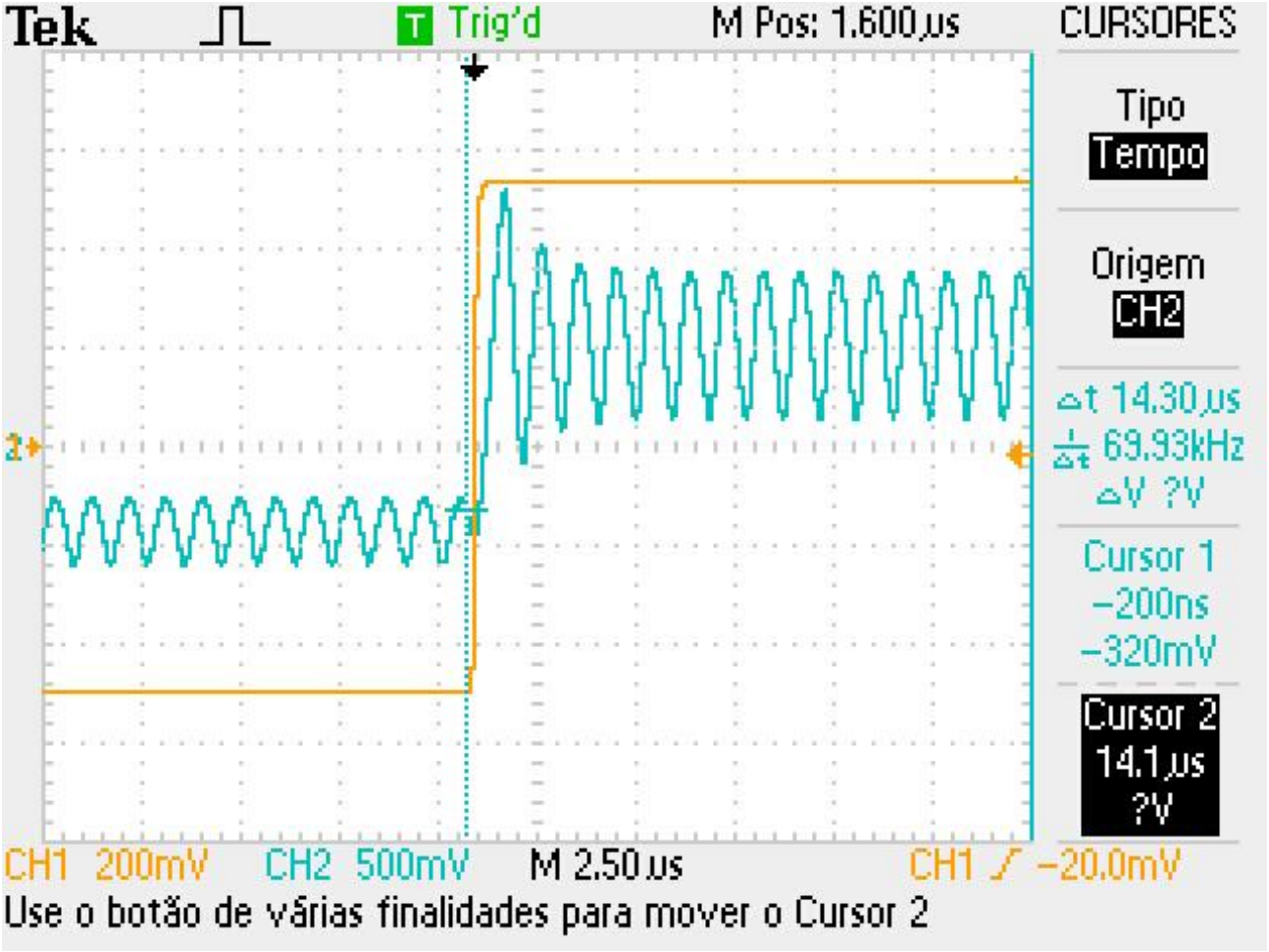


Figura 12 - Settling Time Configuração ii) Experimental

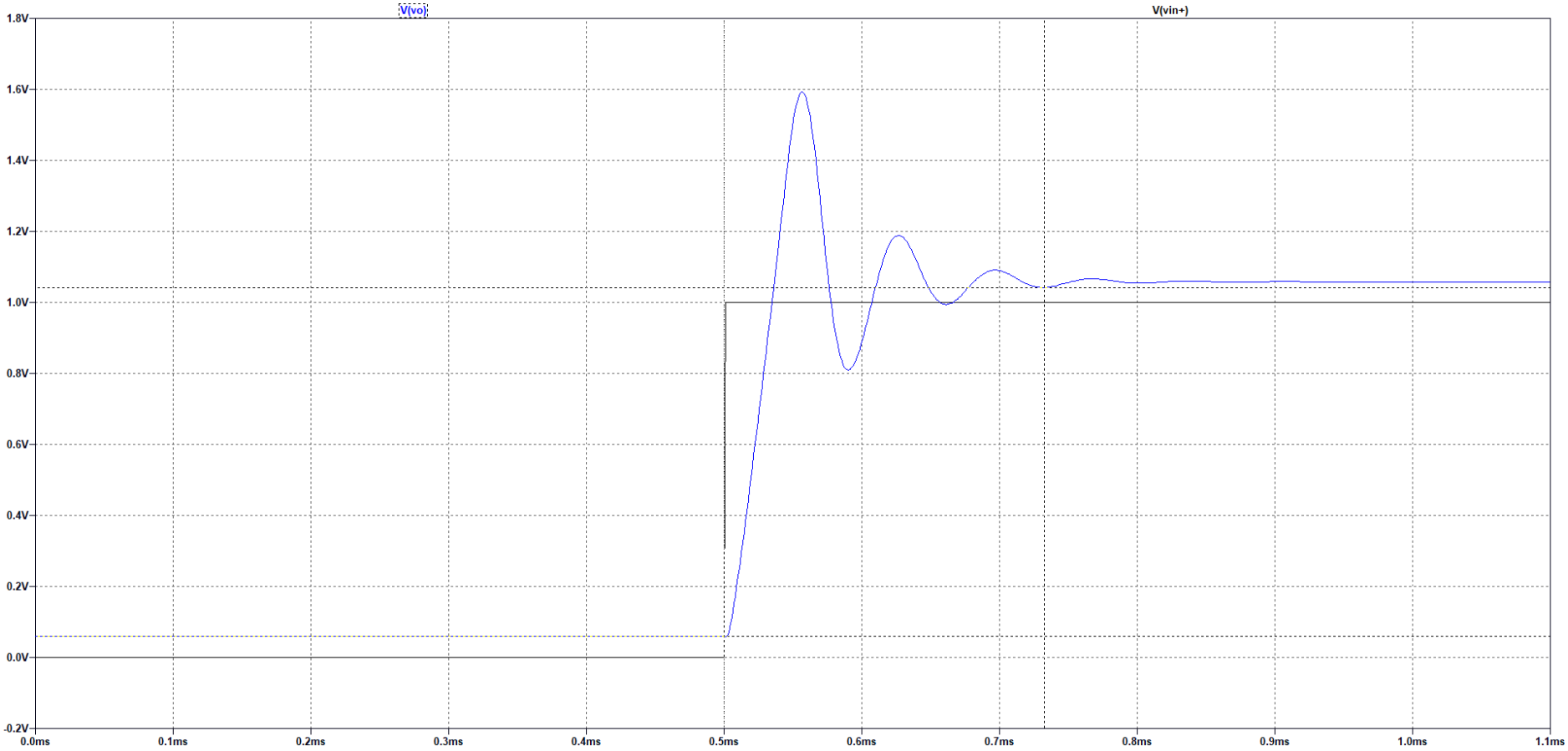


Figura 13 - Settling Time Configuração iii) Simulado

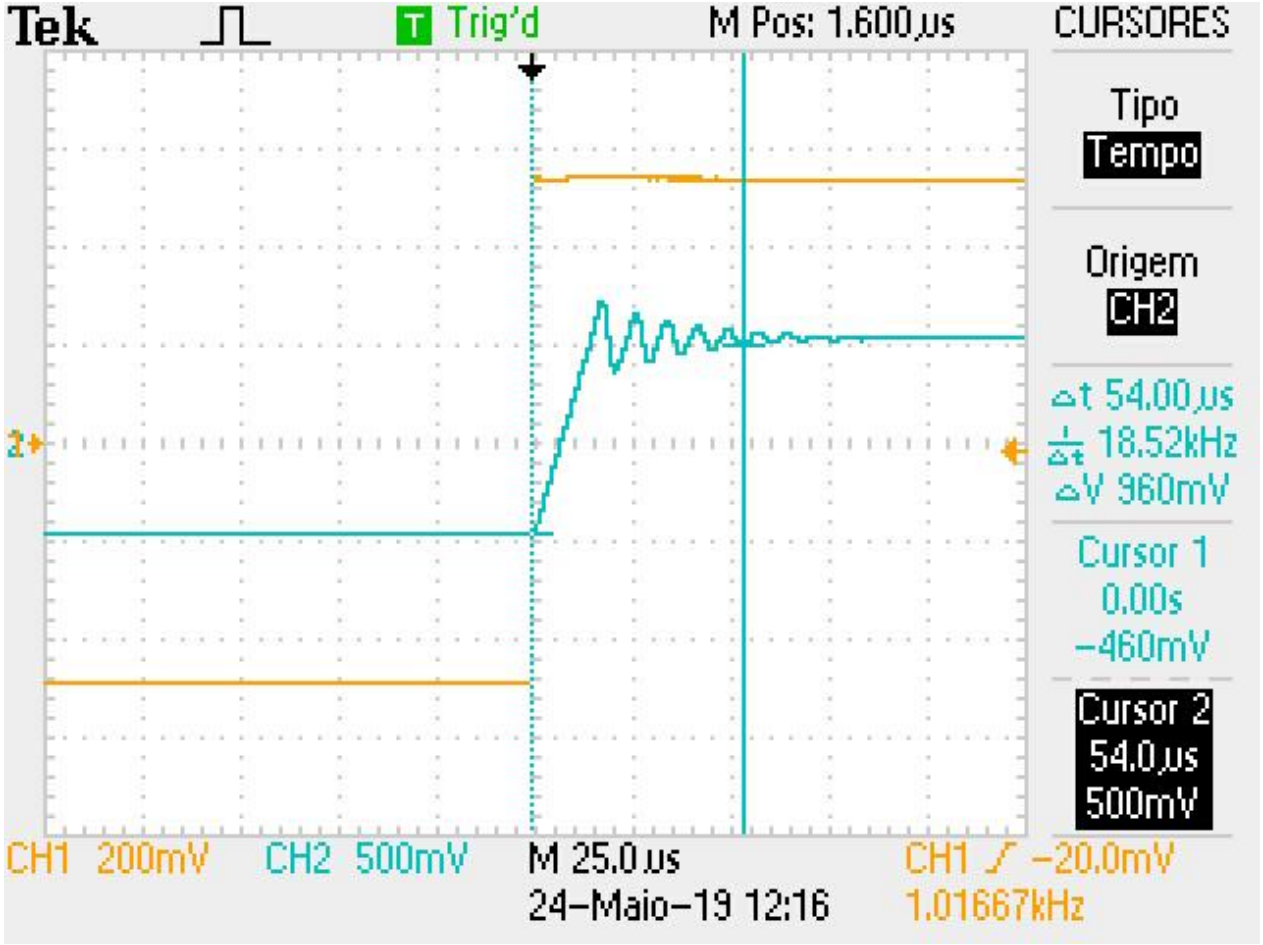


Figura 14 - Settling Time Configuração iii) Experimental

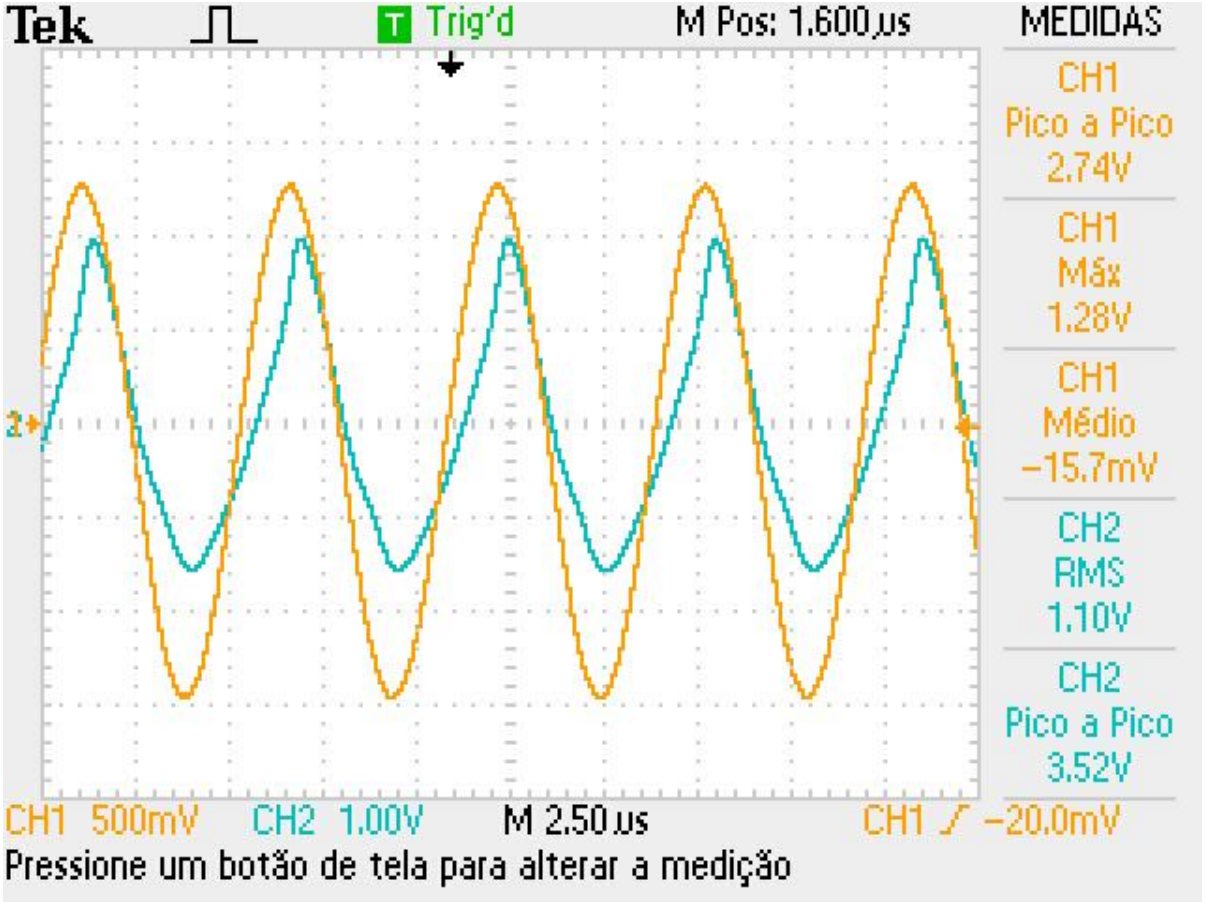


Figura 15 - Sinais para cálculo do Slew Rate Experimental

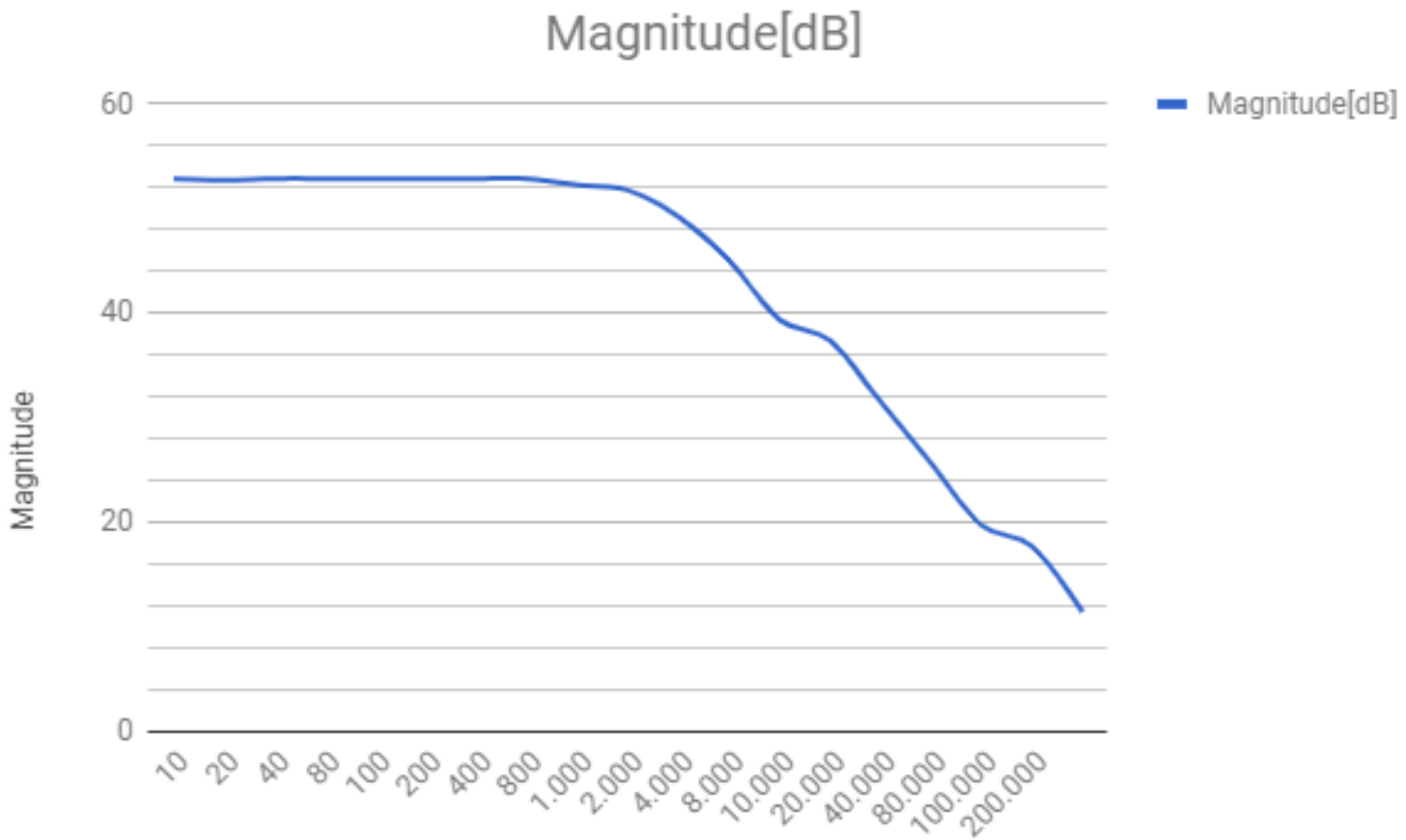


Figura 16 - Diagrama de Bode de Magnitude

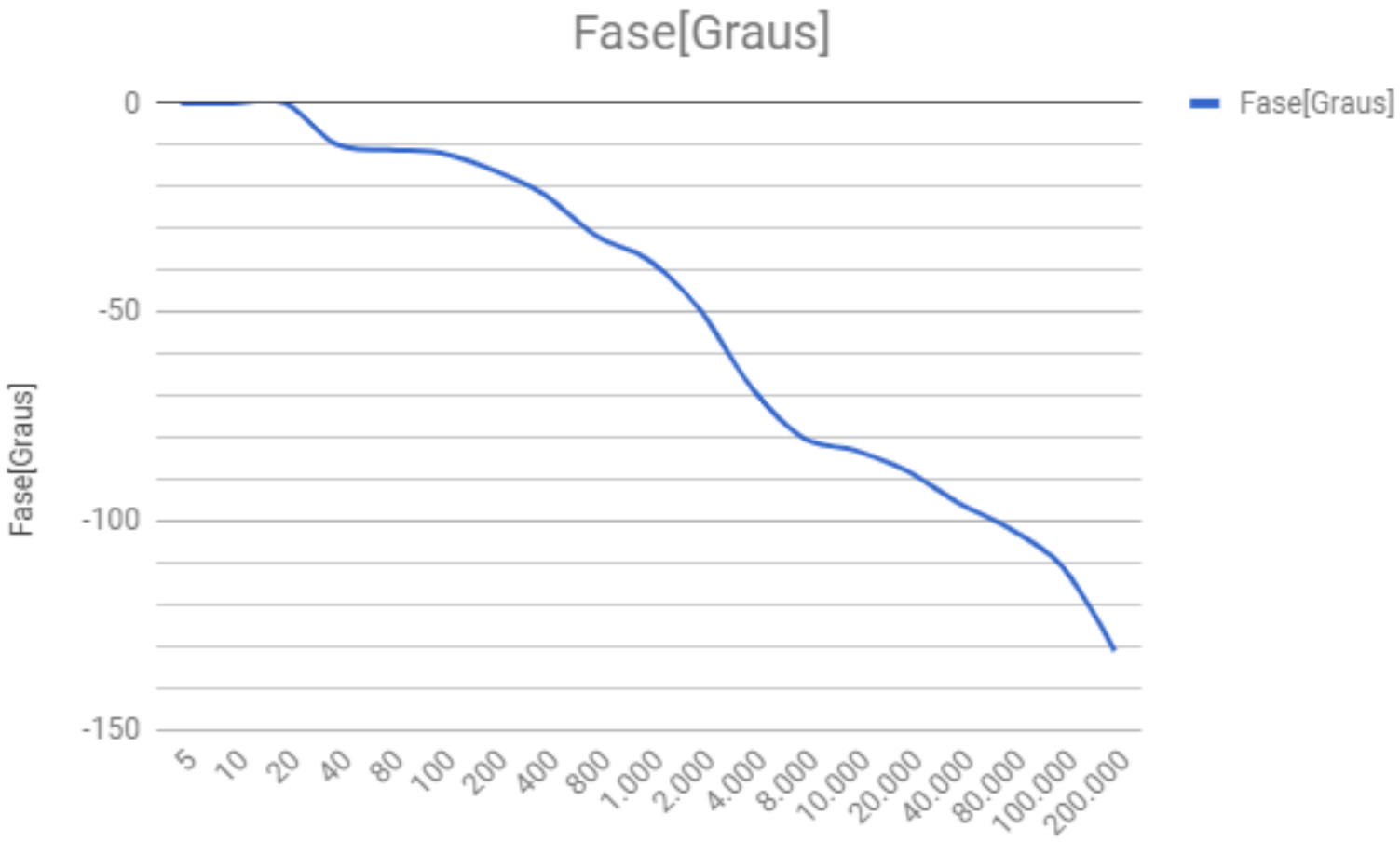


Figura 17 - Diagrama de Bode de Fase