



Blue line: $k \approx 0.414 \left(\omega_1 = \frac{\pi}{8} \right)$

Orange line: $k = 1 \left(\omega_1 = \frac{\pi}{4} \right)$

Green line: $k \approx 2.414 \left(\omega_1 = \frac{3\pi}{8} \right)$

$\alpha = 0 \left(\omega_2 + \omega_1 = \pi \right)$

$\theta_p = \frac{\pi}{2}$

