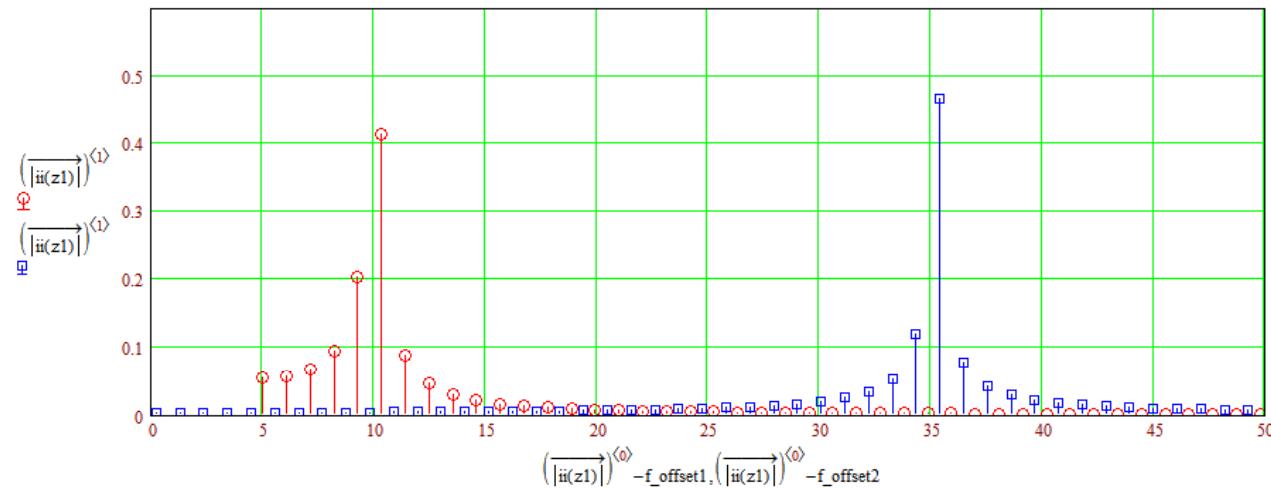


Try these values for z1:    5.00    500  
                       5.3285    502.885  
                       5.2165    503

$z1 := 5$      $f\_offset1 := \text{round}(z1 - 10)$   
 $f\_offset2 := \text{round}(z1 + \delta1 - 35)$     keeps both spectral sections within graph plot.

+



Number of cycles over full sampling interval (  $N0 \cdot \Delta k$  repeat interval).  
 spectral "leakage occurs when this is not an integer.

$$z1 = 5 \quad \frac{10 \cdot \Delta k \cdot z1}{\pi} = 4.69 \quad \text{for } z1 \text{ component}$$

$$\delta1 = 228.16$$

$$(z1 + \delta1) = 233.16 \quad \frac{10 \cdot \Delta k \cdot (z1 + \delta1)}{\pi} = 218.8 \quad \text{for } z1 + \delta1 \text{ component}$$

Number of samples per cycle (want >2 to prevent aliasing)

$$\frac{N0 \cdot \pi}{10 \cdot \Delta k \cdot z0} \text{ samples per cycle} \quad \frac{N0 \cdot \pi}{10 \cdot \Delta k \cdot z1} = 873 \quad \text{for } z1 \text{ component}$$

$$\frac{N0 \cdot \pi}{10 \cdot \Delta k \cdot (z1 + \delta1)} = 18.72 \quad \text{for } z1 + \delta1 \text{ component}$$