$$t = \frac{3\pi}{4} \mapsto \left(\left(4 + \frac{1}{\sqrt{2}} \right) \frac{-1}{\sqrt{2}}, \left(4 + \frac{1}{\sqrt{2}} \right) \frac{1}{\sqrt{2}} \right)$$

$$t = \frac{\pi}{4} \mapsto \left(\left(4 + \frac{1}{\sqrt{2}} \right) \frac{1}{\sqrt{2}}, \left(4 + \frac{1}{\sqrt{2}} \right) \frac{1}{\sqrt{2}} \right)$$

$$t = 0 \mapsto (4, 0)$$

$$t = 2\pi \mapsto (4, 0)$$