The result for the imaginary part indicates that on the complex plane with coordinates (Re(Γ), Im(Γ)) all the possible impedances with a given normalized reactance x are found on a circle with

$$\text{Center} = \left\{1, \frac{1}{x}\right\} \qquad \text{Radius} = \frac{1}{x}$$

As the normalized reactance x varies from $-\infty$ to ∞, we obtain a family of arcs contained inside the domain of the reflection coefficient $|\Gamma| \leq 1$.