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Number: 1152325

The Code:

```
%Anas Tomazieh 1152325
l=0:20:1500;%Length of T.L
SIL=702.2693*10^6;%Sorgue impedance load.
Vspu=500;%Voltage sending
Vrpu=400;%Voltage recving
x=1500*10^3;%0.25*6000Km(wave length at 50Hz)
Pmax=(Vspu.*Vrpu.*SIL)./sin((2.*pi.*l)./x))
plot(l,Pmax,'LineWidth',3)
xlabel('length of T.L');
ylabel('SIL PU');
title('loadability curve when the length 1/4 wavelength')
```

The result:

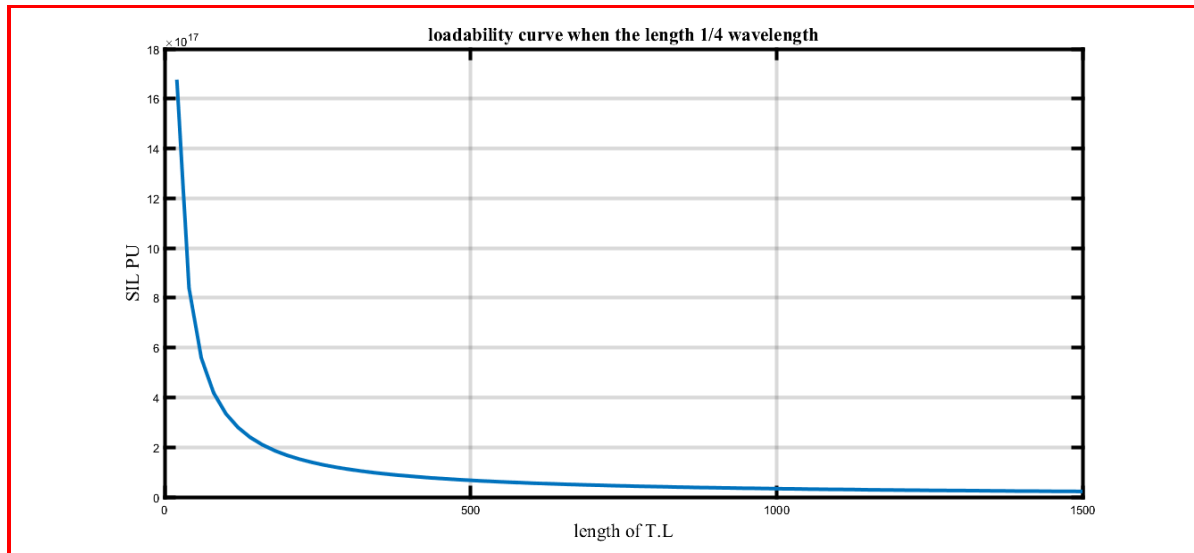


Figure 1: loadability Curve when the length $\frac{1}{4}$ wavelength