```
ClearAll["Global'*"]
lambda = 500 * 10^(-9); d = 10^(-3);
yscale = 0.0008; dy = 0.000005;
x = Table[Y, {Y, -yscale, yscale, dy}];
yresult[D_] := Table[(Abs[NIntegrate[Exp[I (2 Pi / lambda) Sqrt[(Y - y)^2 + D^2]], {y, -d / 2, d / 2}]])^2, {Y, -yscale, yscale, dy}];
result = yresult[10 * 10^(-3)];
dataOne = Transpose@{x, result};
ListLinePlot[dataOne, PlotRange → {0, 0.8 * 10^(-8)}]
```