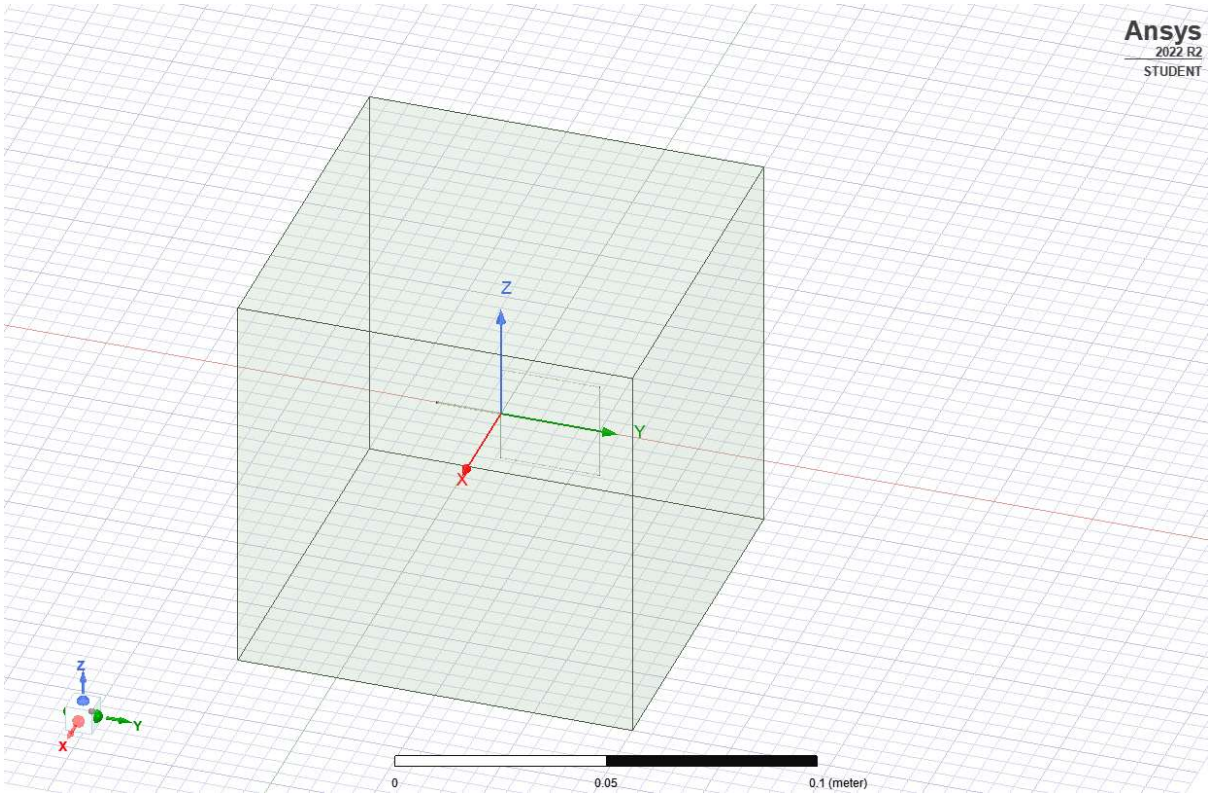
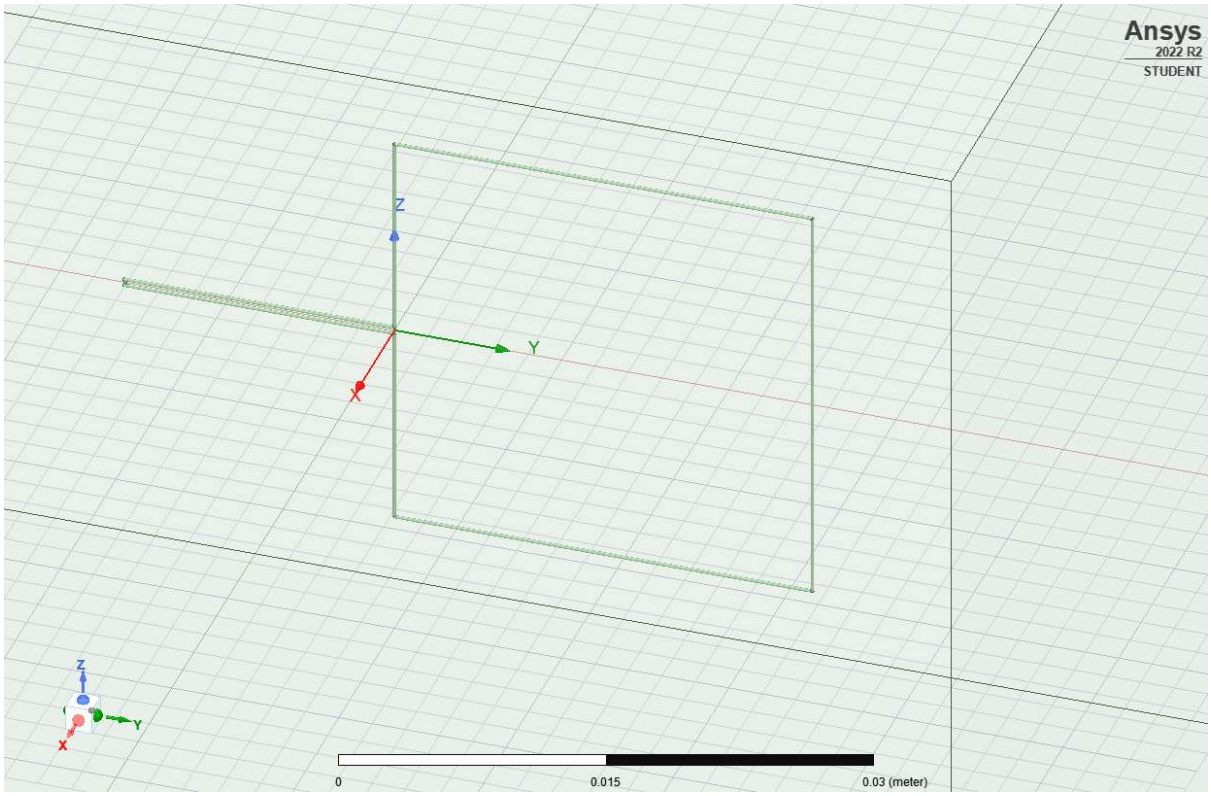
Project Results

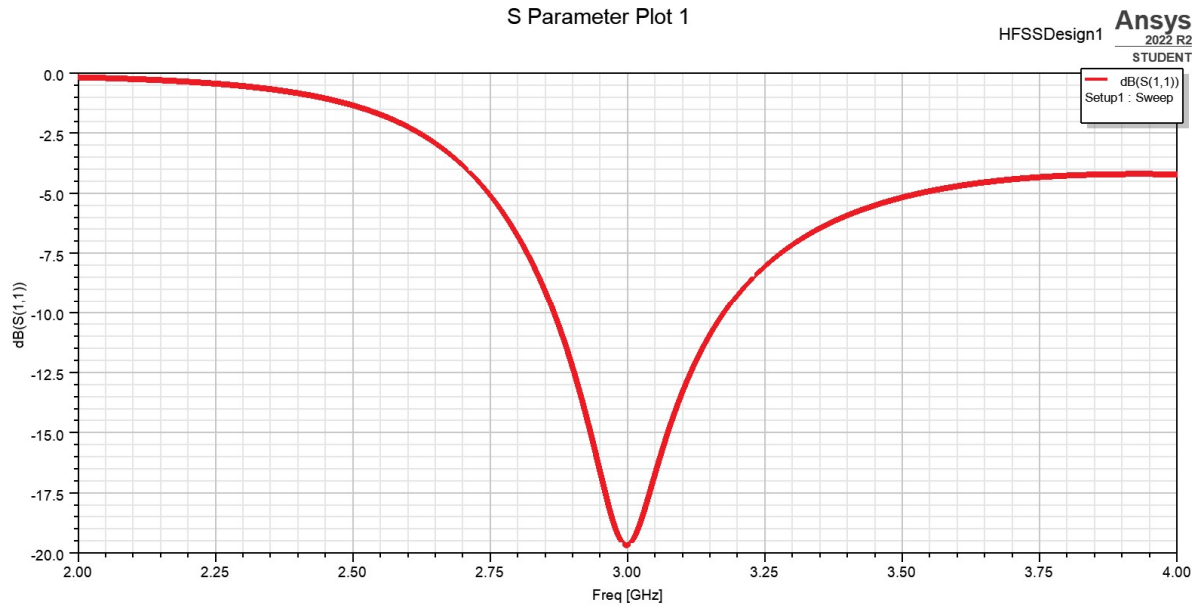
3D Model including radiation boundary:



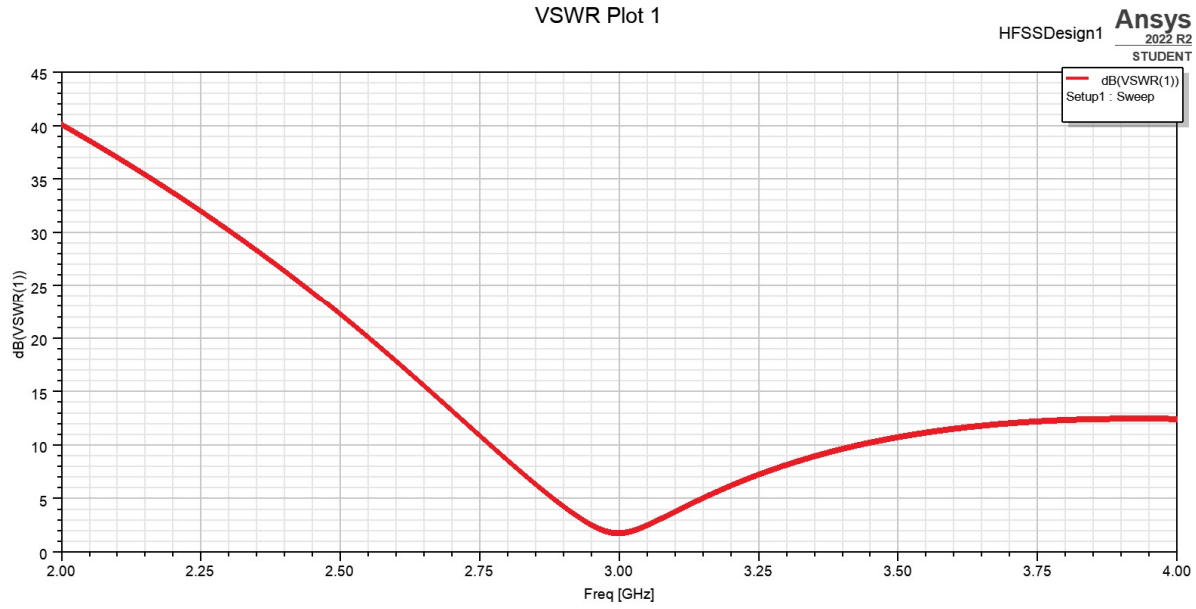
3D Model of Loop Antenna:



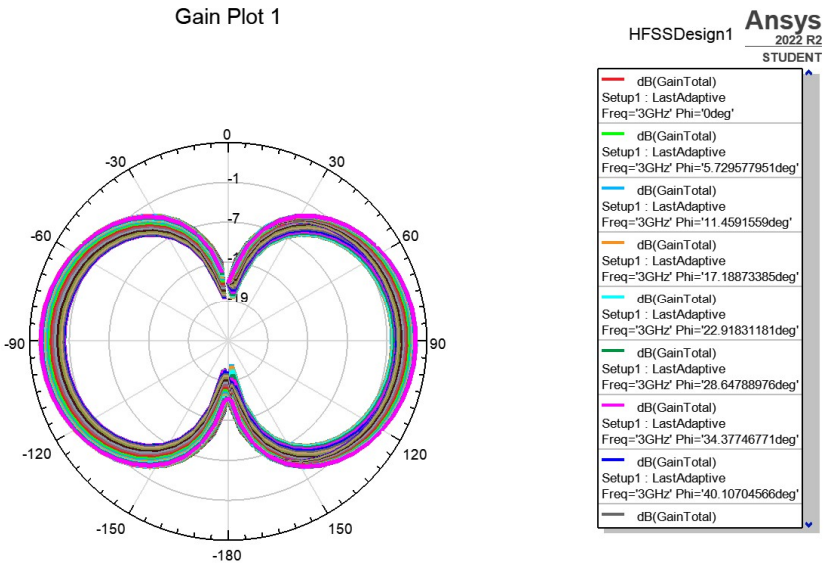
S Parameter plot:



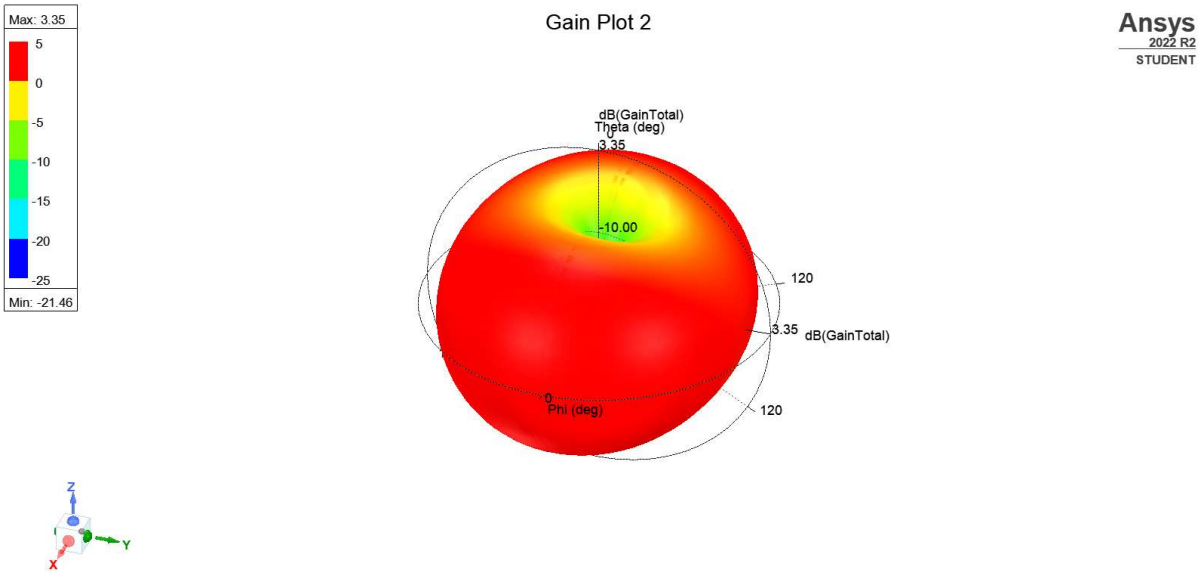
VSWR Plot:



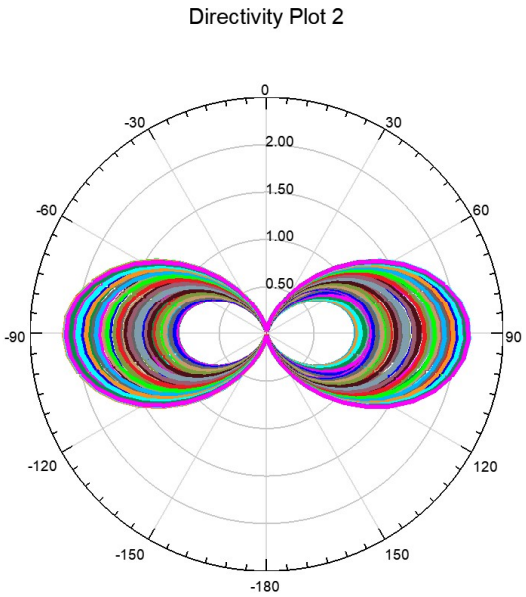
2D Gain Plot:

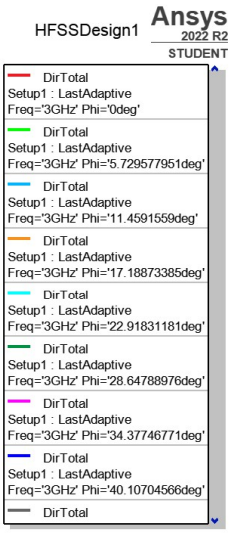


3D Gain Plot:

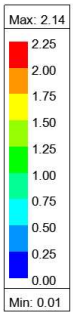


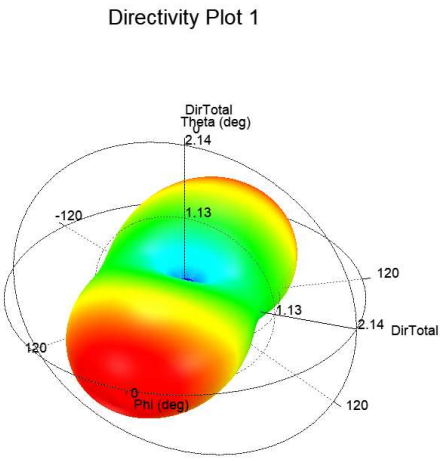
2D Directivity Plot:





3D Directivity Plot:





Ansys
2022 R2
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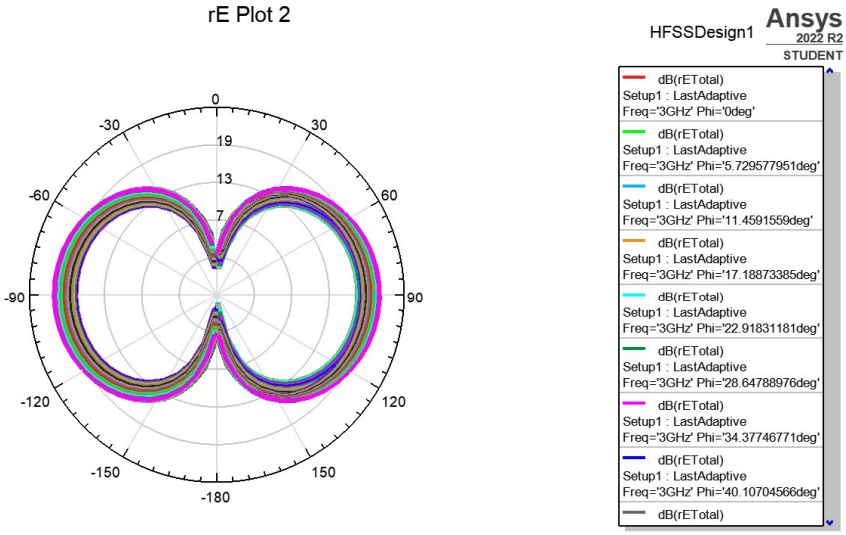
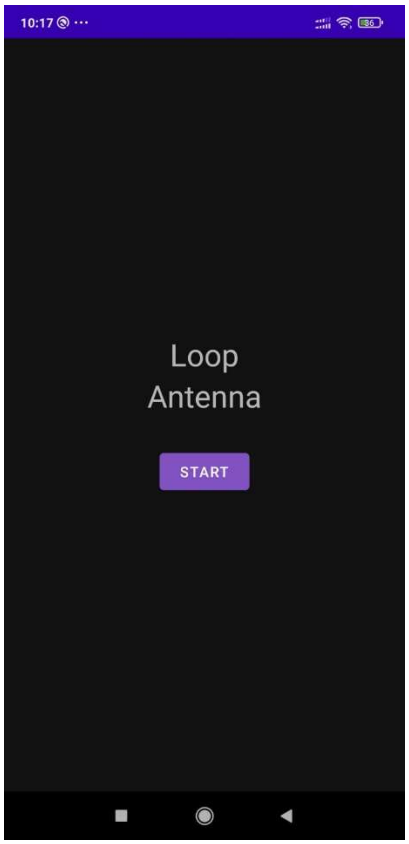
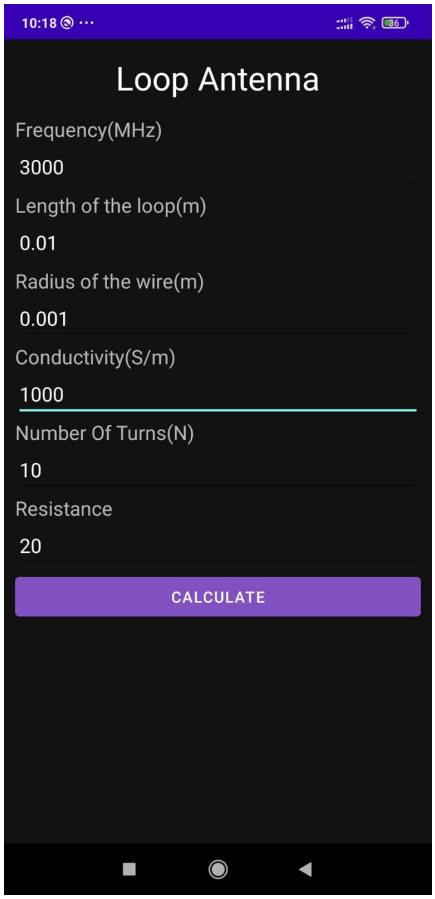
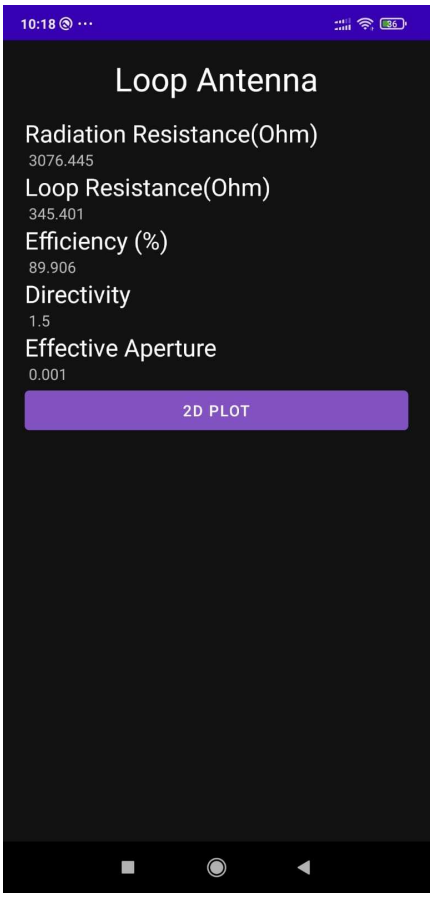
Radiation Pattern:

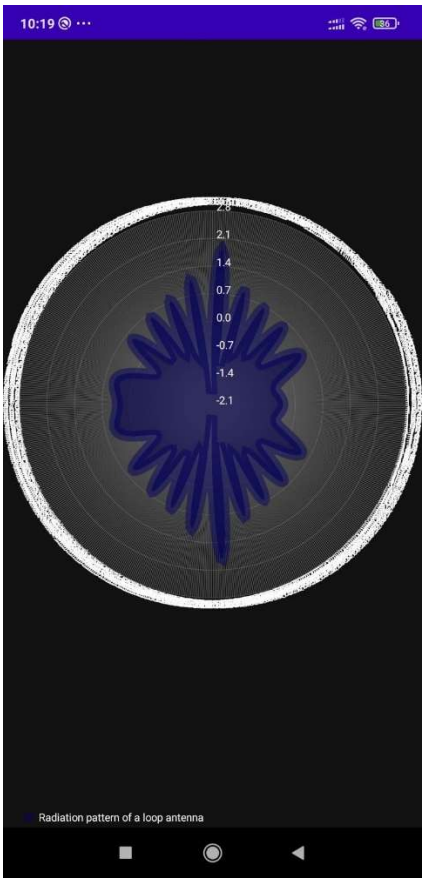


Screenshots of Mobile Application:




10:18
Loop Antenna
Frequency(MHz)
3000
Length of the loop(m)
0.01
Radius of the wire(m)
0.001
Conductivity(S/m)
1000
Number Of Turns(N)
10
Resistance
20
CALCULATE


10:18
Loop Antenna
Radiation Resistance(Ohm)
3076.445
Loop Resistance(Ohm)
345.401
Efficiency (%)
89.906
Directivity
1.5
Effective Aperture
0.001
2D PLOT


10:19
2.8
2.1
1.4
0.7
0.0
-0.7
-1.4
-2.1
Radiation pattern of a loop antenna