

Scilab Manual for  
Antenna Wave Propagation  
by Mr Darshan Modi  
Others  
VESIT<sup>1</sup>

Solutions provided by  
Mr. Prarthan Mehta  
Electronics Engineering  
Dharmsinh Desai University

June 20, 2026

<sup>1</sup>Funded by a grant from the National Mission on Education through ICT, <http://spoken-tutorial.org/NMEICT-Intro>. This Scilab Manual and Scilab codes written in it can be downloaded from the "Migrated Labs" section at the website <http://scilab.in>



# Contents

List of Scilab Solutions	3
1 Radiation pattern of half-lambda dipole	4

# List of Experiments

Solution 1.1	Radiation Pattern of Half Wave Dipole . . . . .	4
--------------	---	---

# Experiment: 1

## Radiation pattern of half-lambda dipole

Scilab code Solution 1.1 Radiation Pattern of Half Wave Dipole

```
1 //radiation pattern for the half wave dipole antenna
2
3 phi=linspace(0,2*%pi,1000);
4 rad=abs(sin(phi));
5 k=1; //the multiplication factor depends on the
      current and the length of the dipole antenna
6 polarplot(phi,k*rad)
7
8
9 //Input Constant==> k-->Depends on the current and
  the length of the dipole
```

---