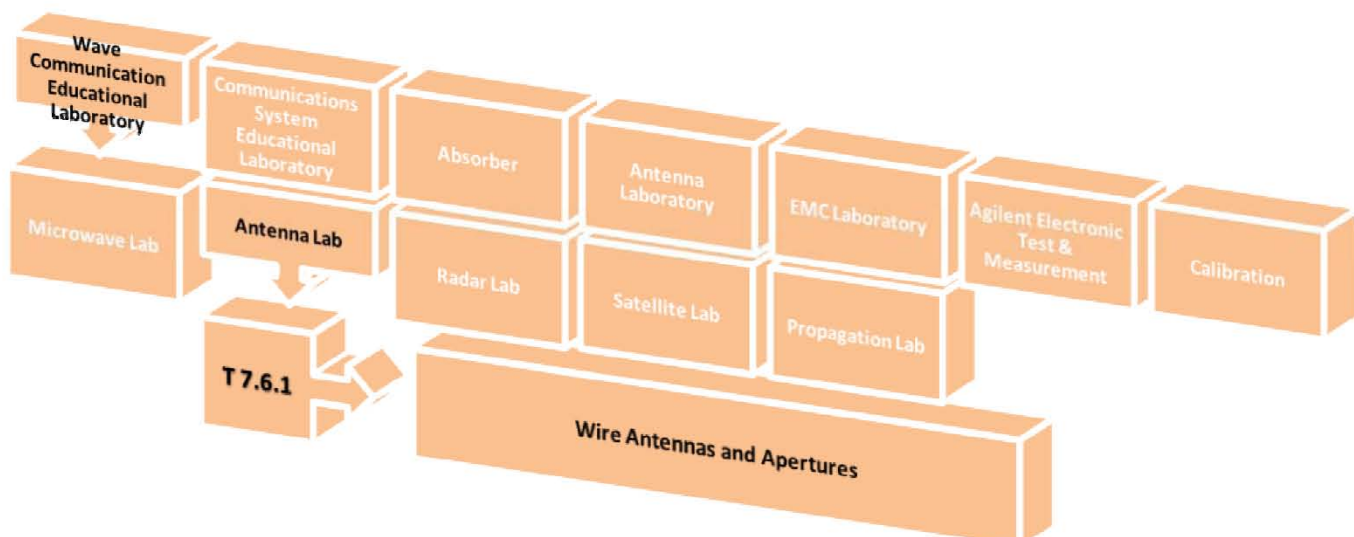


A collection of important test antennas.

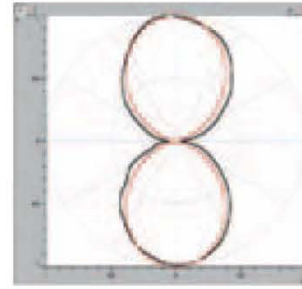
### Topics

- Dipole antennas, variation of antenna length
- Yagi antennas, the influence of reflectors and directors
- Waveguides and horn antennas
- Diffraction on reflector edges
- Cross-talk between cross-polarized channels
- Polarization attenuation



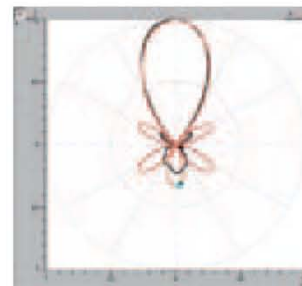
**Fundamental Knowledge**

This basic equipment set introduces into the handling of the antenna measurement station. Topics are the radiation properties of well known standard antennas.



**Dipole**

Horizontal directional diagram of a  $\lambda/2$  dipole in polar coordinates, linear presentation. Short dipoles exhibit practically no directional effect. They are therefore particularly vulnerable to reflections. Strongly bundled antennas, e.g. Yagis, are not sensitive in this respect.



**Yagi**

Horizontal directional diagram pattern of a 5-element Yagi antenna in polar coordinates, linear presentation.

EQUIPMENT SET LIST

Wire Antennas and Apertures

QUANTITY	CAT. NO	DESCRIPTION
1	737 01	Gunn Oscillator
1	737 03	Coax Detector
1	737 035	Transition Waveguide/Coax
1	737 05	PIN Modulator
1	737 06	Isolator
1	737 12	Waveguide 200 mm
1	737 135	3-Screw Transformer
1	737 20	Small Horn Antenna
2	737 21	Large Horn Antenna
1	737 390	Set of Microwave Absorbers
1	737 405	Rotating Antenna Platform
1	737 406	3D-Plotter for Directional Diagrams
1	737 412	Dipole Antenna Kit
1	737 420	Reflector for Slit Diaphragms
1	737 432	Yagi Antenna Kit
1	568 702	Book: Antenna Technology

