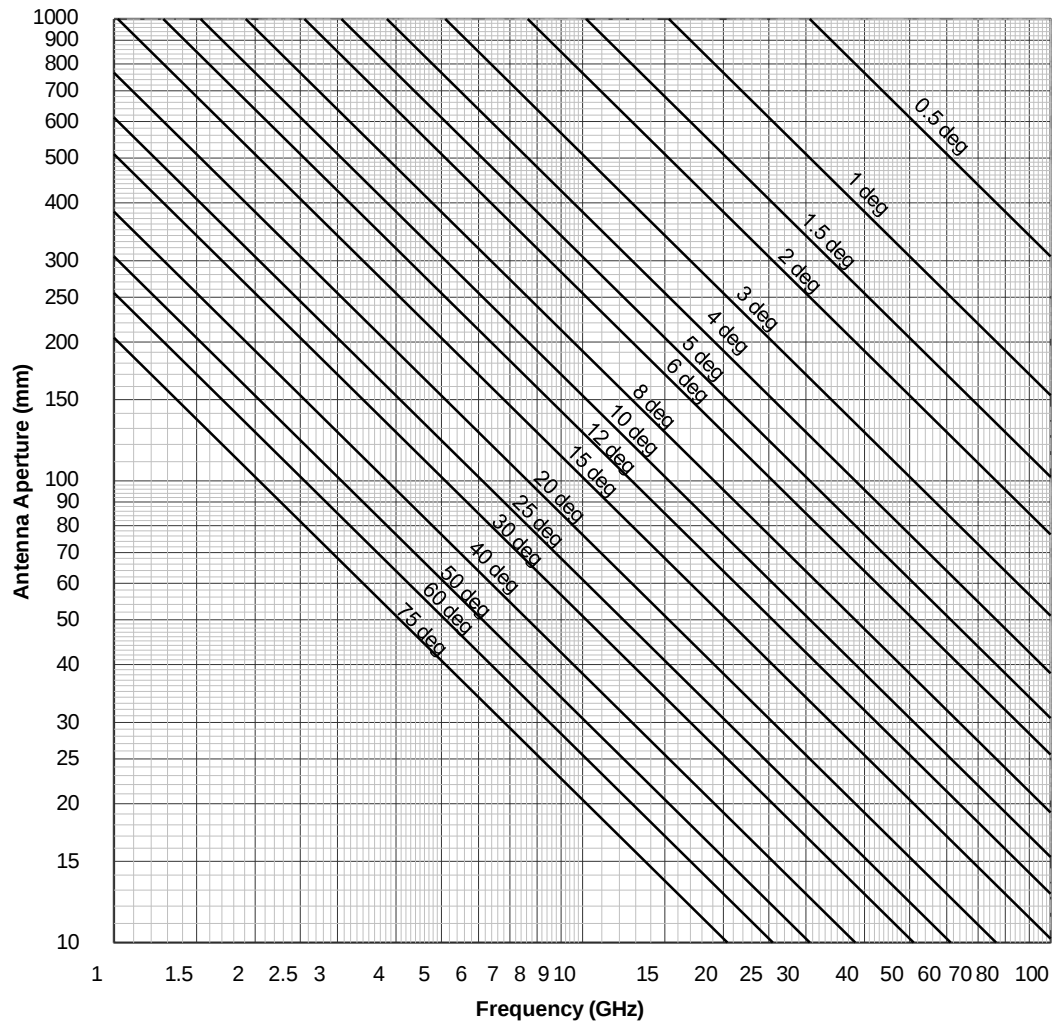


ANTENNA DESIGN AIDS

APERTURE AND BEAMWIDTH



Notes

Beamwidth is given approximately by

$$BW \approx \frac{51\lambda}{L}$$

BW is the full 3 dB beamwidth in degrees, L is the antenna aperture

Chart is for a uniformly illuminated rectangular aperture

Multiply beamwidth by approx 1.3 to estimate the beamwidth of a circular aperture or the H -plane of a waveguide horn.

Appendix A, 'Antennas', JD Kraus, McGraw-Hill 1988