



Javascript Electronic Notebook
480 MHz Yagi Design Details (Metric)
7 Elements, 9.8 dBd Estimated Gain
by Martin E. Meserve

Design Synopsis

480 MHz, 7 Elements, 9.818 dBd Estimated Gain

Warning: The specified Boom Length of 30 Inches is to *Small*. Boom Length should be greater than 2.2 Wavelengths.

44.1 Degrees *Horizontal* Beam Width

47.6 Degrees *Vertical* Beam Width

31.75 mm Diameter, *Metalic* Boom with *Insulated* Elements. Boom Correction of 0.345 applied.

Electrical Boom Length of 762.0 mm.
 Allow for overhang when cutting boom to length.

4.762 mm Driven Element Diameter.

9.525 mm Parasitic Element Diameter.

Suggested Stacking Distance for 2 Yagis:

723.0 mm Horizontally

669.7 mm Vertically

1.9 mm Dimensional tolerance required for element lengths.

Antenna Dimensions

Cumulative Spacing (mm)	Element	Element Length (mm)
Zero	REFL	312.65
124.91	D.E.	298.13
171.76	D1	271.75
284.18	D2	267.97
418.46	D3	263.96
574.6	D4	260.21
749.48	D5	256.94