



## Javascript Electronic Notebook

594 MHz Yagi Design Details  
(Metric)

11 Elements, 12.3 dBd Estimated  
Gain

by Martin E. Meserve

### Design Synopsis

594 MHz, 11 Elements, 12.293 dBd Estimated  
Gain

35.5 Degrees *Horizontal* Beam Width

37.3 Degrees *Vertical* Beam Width

15.00 mm Diameter, *Metalic* Boom with *Bonded*  
Elements. Boom Correction of 00.547 applied.

Electrical Boom Length of 1400.0 mm.  
Allow for overhang when cutting boom to length.

4.000 mm Driven Element Diameter.

6.000 mm Parasitic Element Diameter.

Suggested Stacking Distance for 2 Yagis:

724.4 mm Horizontally

689.5 mm Vertically

1.5 mm Dimensional tolerance required for  
element lengths.

### Antenna Dimensions

Cumulative Spacing (mm)	Element	Element Length (mm)
Zero	REFL	252.63
100.94	D.E.	240.77
138.79	D1	221.68
229.64	D2	218.65
338.15	D3	215.5
464.33	D4	212.59
605.64	D5	210.04
757.05	D6	207.86
916.03	D7	205.98
1082.59	D8	204.33
1256.71	D9	202.87