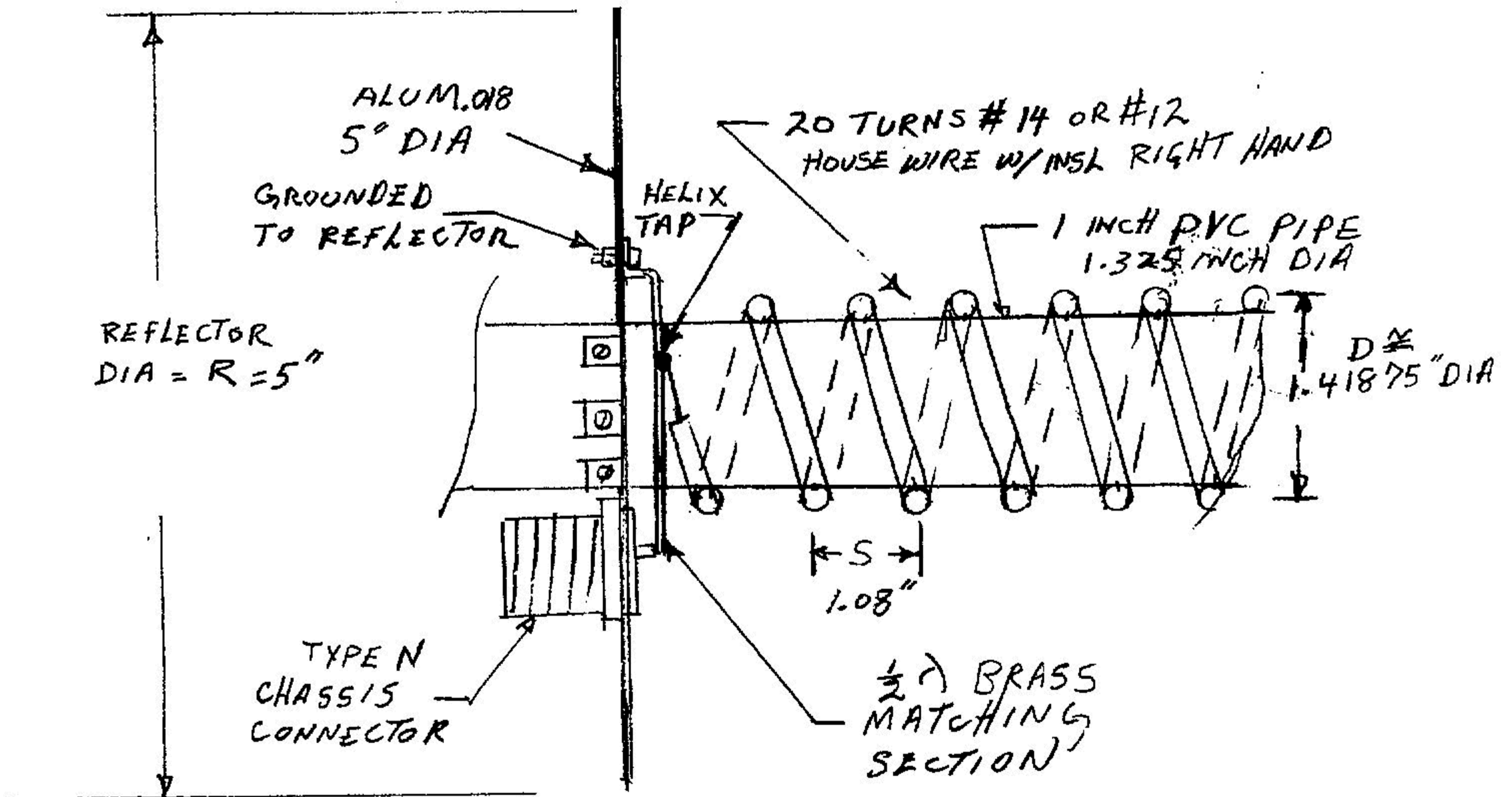
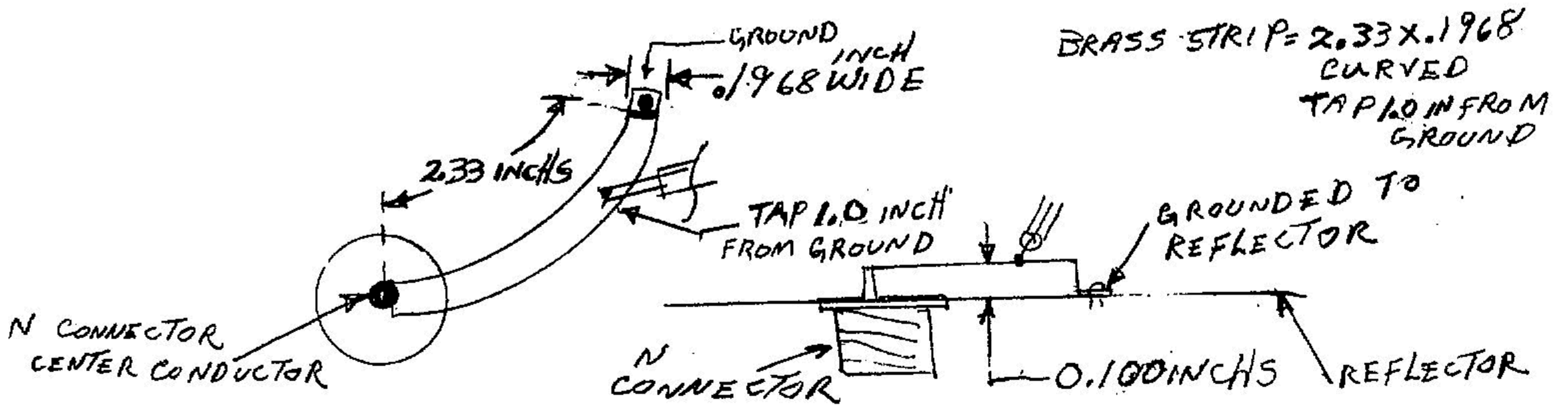


2400 Mhz HELIX

Rev A
Feb 20, 1998
W00QC



MATCHING SECTION DETAILS



$$1\lambda = 11800/2400 = 4.91666 \text{ inch} \quad D = 4.91666/\pi = 1.565 \text{ inch}$$

With the dia of 1 in PVC pipe of 1.325 in and the house wire insulation of 3/32 in D for the helix is 1.41875.

$$\text{Spacing } S = 0.22\lambda = 1.08 \text{ inch} \quad \text{Turns } n = 20$$

Reflector dia = greater than 0.6 (I used 5 inchs)

$$\text{Approx. Gain} \approx 11.8 + 10 \log (.22 \times 20) \approx 18.23 \text{ dbi}$$