QEX File

Effects Due To Ground For Small Transmitting Loops

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29 MHz

Capacitor at Top

h = 1.0 m  Outer Arc = -0.1 dBi

h = 1.5 m  Outer Arc = 1.4 dBi

h = 2.0 m  Outer Arc = 1.8 dBi

Capacitor at Bottom

h = 1.0 m  Outer Arc = 2.7 dBi

h = 1.5 m  Outer Arc = 2.9 dBi

h = 2.0 m  Outer Arc = 2.1 dBi
29 MHz

Capacitor at Top

Capacitor at Bottom

\[
\begin{align*}
\text{h} &= 3.0 \quad \text{Outer Arc} = 4.5 \text{ dBi} \\
\text{h} &= 3.0 \quad \text{m} \quad \text{Outer Arc} = 4.5 \text{ dBi} \\
\text{h} &= 4.0 \quad \text{m} \quad \text{Outer Arc} = 5.5 \text{ dBi} \\
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\text{h} &= 5.0 \quad \text{m} \quad \text{Outer Arc} = 4.5 \text{ dBi}
\end{align*}
\]
21 MHz

Capacitor at Top

- $h = 1.0$ m, Outer Arc = -1.0 dBi
- $h = 1.5$ m, Outer Arc = 0.3 dBi
- $h = 2.0$ m, Outer Arc = 1.0 dBi

Capacitor at Bottom

- $h = 1.0$ m, Outer Arc = 1.5 dBi
- $h = 1.5$ m, Outer Arc = 2.2 dBi
- $h = 2.0$ m, Outer Arc = 2.1 dBi
21 MHz

Capacitor at Top

h = 3.0 m  Outer Arc = 1.5 dBi

Capacitor at Bottom

h = 3.0 m  Outer Arc = 1.5 dBi

h = 4.0 m  Outer Arc = 2.3 dBi

h = 4.0 m  Outer Arc = 2.3 dBi

h = 5.0 m  Outer Arc = 4.7 dBi

h = 5.0 m  Outer Arc = 4.7 dBi
14 MHz

Capacitor at Top

h = 1.0  Outer Arc = -2.4 dBi

h = 1.5 m  Outer Arc = -1.6 dBi

h = 2.0 m  Outer Arc = -1.1 dBi

Capacitor at Bottom

h = 1.0 m  Outer Arc = -0.6 dBi

h = 1.5 m  Outer Arc = 0.2 dBi

h = 2.0 m  Outer Arc = 0.6 dBi
14 MHz

Capacitor at Top

Capacitor at Bottom

h = 3.0 m   Outer Arc = -0.7 dBi

h = 3.0 m   Outer Arc = 0.1 dBi

h = 4.0 m   Outer Arc = -0.7 dBi

h = 4.0 m   Outer Arc = -0.3 dBi

h = 5.0 m   Outer Arc = -0.9 dBi

h = 5.0 m   Outer Arc = -0.6 dBi
7 MHz

Capacitor at Top

Capacitor at Bottom

h = 2.0 m    Outer Arc = -6.9 dBi

h = 2.0 m    Outer Arc = -5.9 dBi

(NEC is not accurate below h=2.0 m for 7 MHz.)

h = 3.0 m    Outer Arc = -6.9 dBi

h = 3.0 m    Outer Arc = -5.9 dBi

h = 4.0 m    Outer Arc = -7.2 dBi

h = 4.0 m    Outer Arc = -6.3 dBi