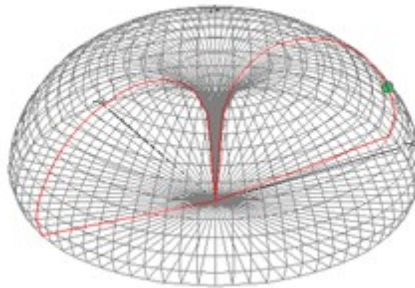
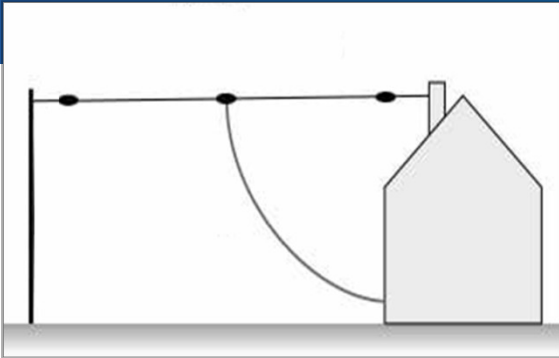


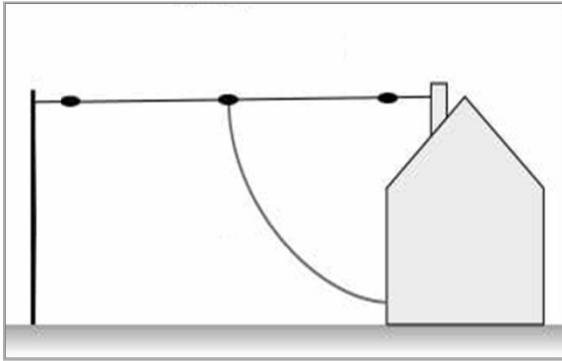
Super Vätyksen antenniklinikka



SRAL Kesäleiri 2023 Vierumäki
Matti Hohtola OH7SV

Super Vätyksen antenniklinikka

Tervetuloa antenniklinikalle!



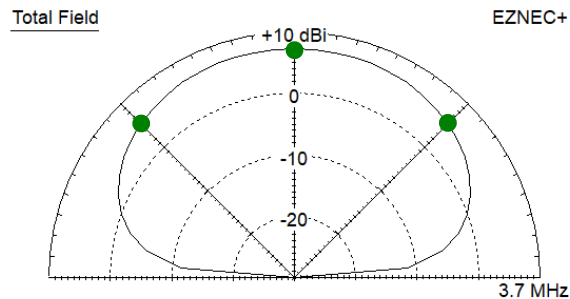
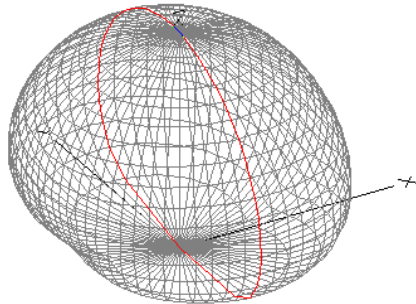
Alustuksen jälkeen sana on vapaa ja kysymykset ovat tervetulleita.

Yritetään yhdessä löytää vastauksia askarruttaviin antennikysymyksiin.

Super Vätyksen antenniklinikka

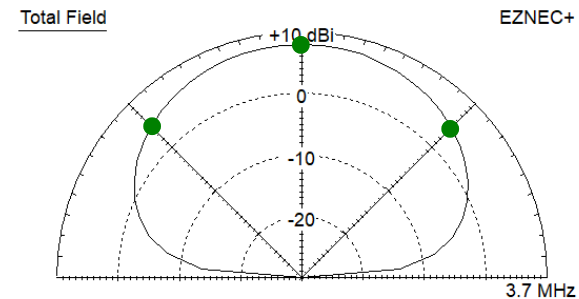
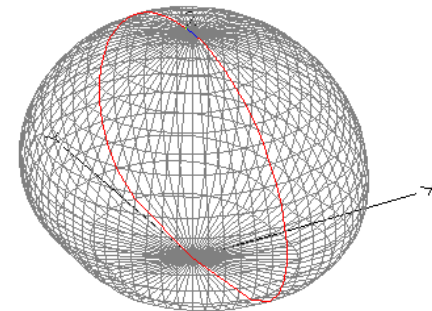
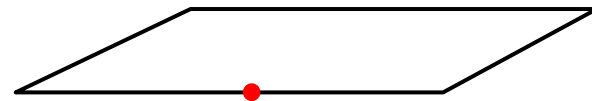
1. Kumpi on parempi 80 metrin kotimaan antenni?

Dipoli



7.2 dBi @ 90°
5.3 dBi @ 45°

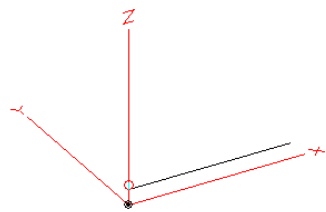
Vaaka looppi



7.7 dBi @ 90°
4.5 dBi @ 45°

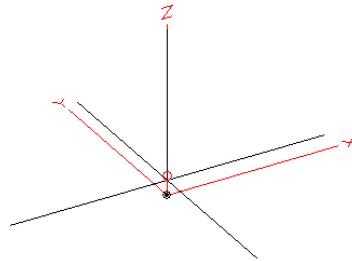
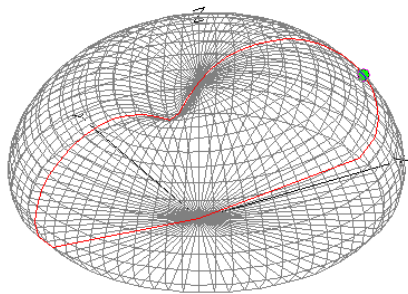
Super Vätyksen antenniklinikka

2. Kuinka monta radiaalia? **Huono maa 0.002 S/m**



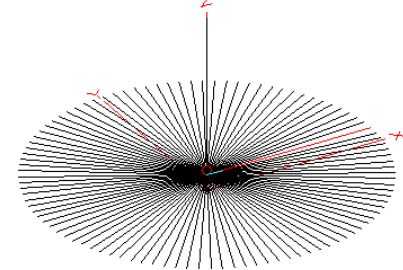
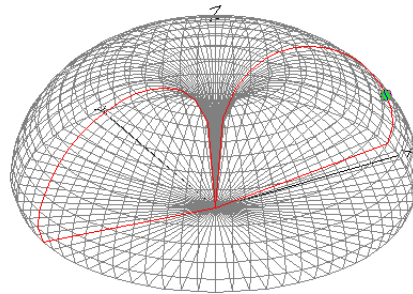
1 radiaali

EZNEC+



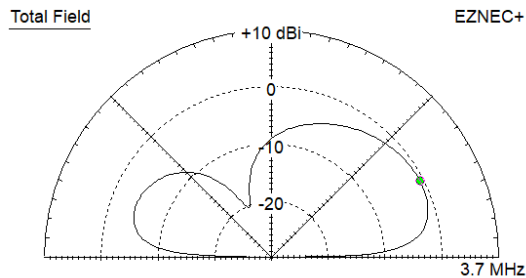
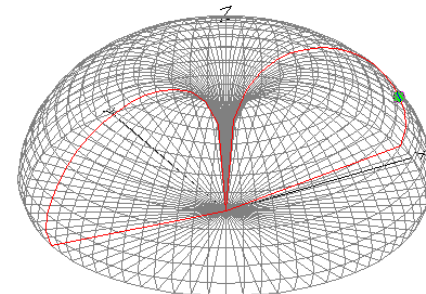
4 radiaalia

EZNEC+

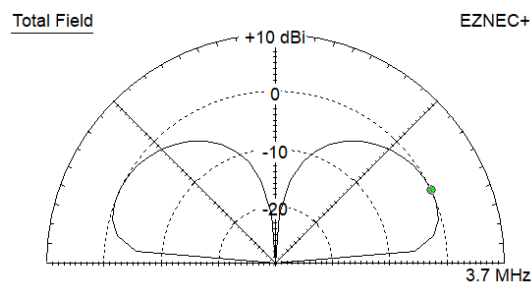


100 radiaalia

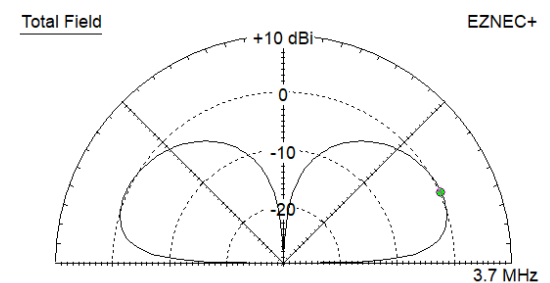
EZNEC+



-0.56 dBi @ 27°



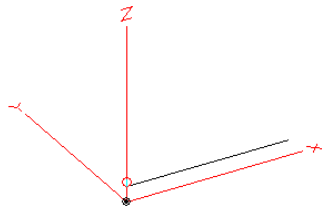
0.21 dBi @ 24°



0.38 dBi @ 24°

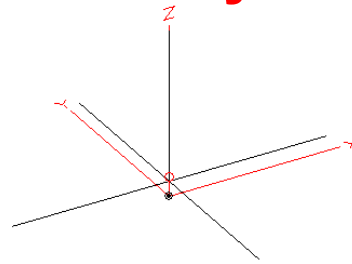
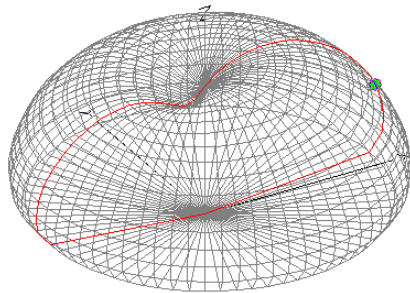
Super Vätyksen antenniklinikka

2. Kuinka monta radiaalia? Hyvä maa 0.05 S/m



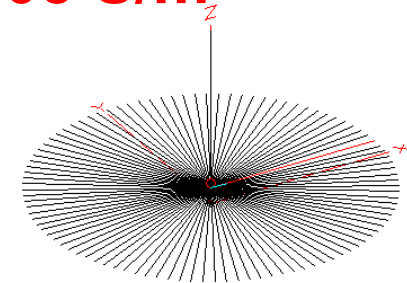
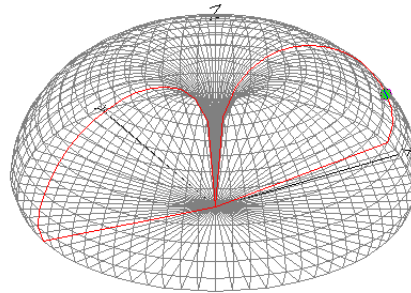
1 radiaali

EZNEC+



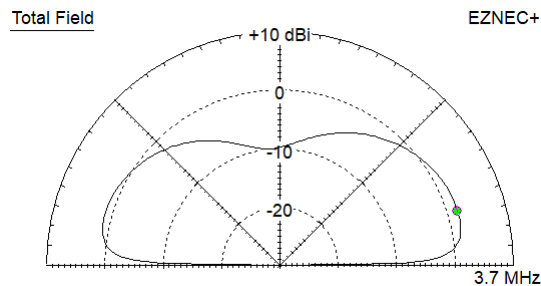
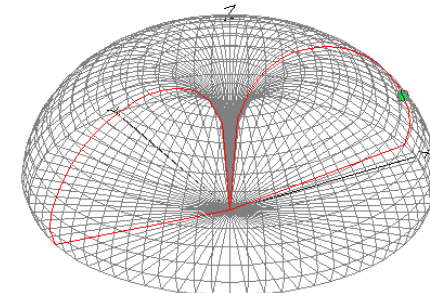
4 radiaalia

EZNEC+

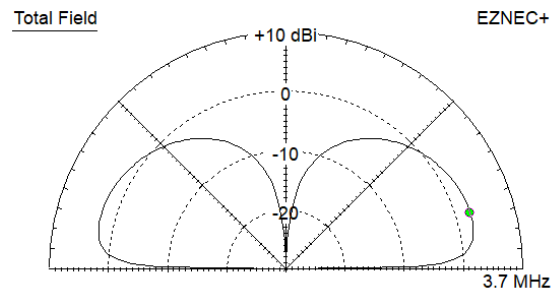


100 radiaalia

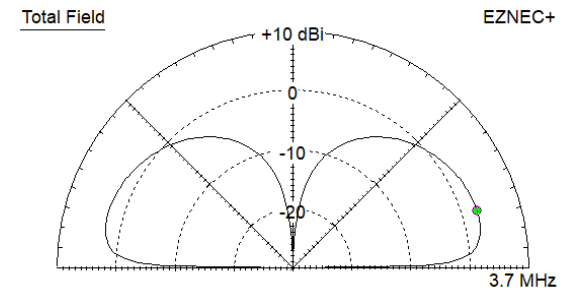
EZNEC+



1.90 dBi @ 17°



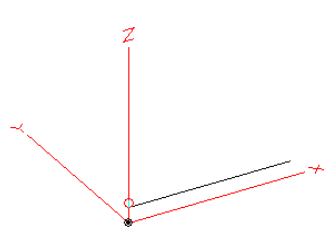
2.57 dBi @ 17°



2.69 dBi @ 17°

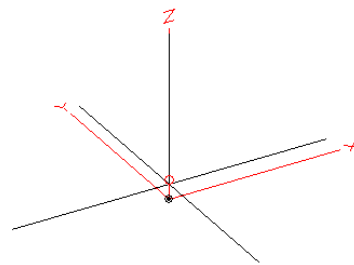
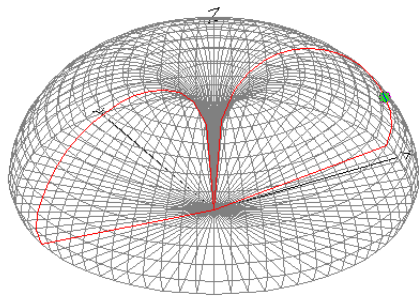
Super Vätyksen antenniklinikka

2. Kuinka monta radiaalia? **Merivesi 5 S/m**



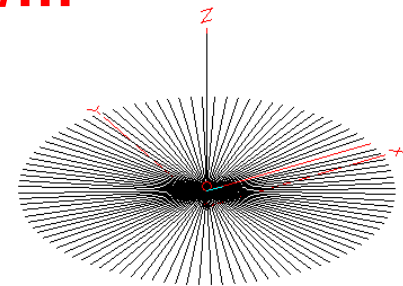
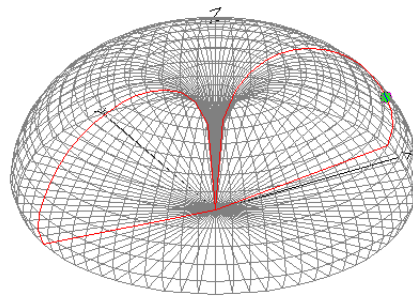
1 radiaali

EZNEC+



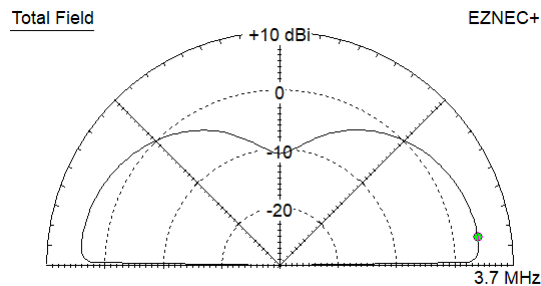
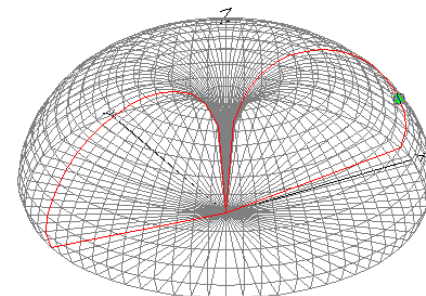
4 radiaalia

EZNEC+

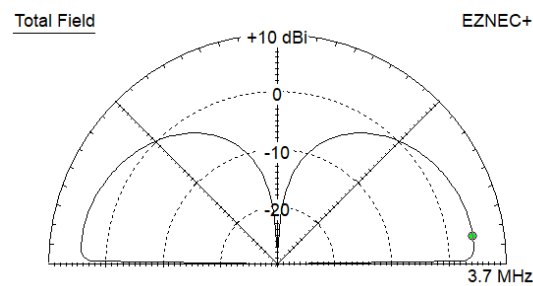


100 radiaalia

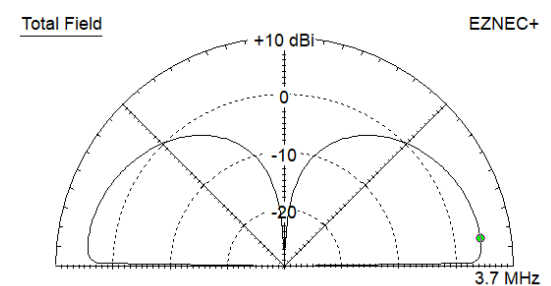
EZNEC+



4.29 dBi @ 8°



4.55 dBi @ 8°



4.64 dBi @ 8°

Super Vätyksen antenniklinikka

Lanka-antennin johtimen materiaali

- Kupari, alumiini, teräs?
- Pelkkä johdin vai muovipäällysteinen?
- Miten paksu johtimen pitää olla?
- Mitä muuta?

Super Vätyksen antenniklinikka

Jatketaan keskustelua antenneista...



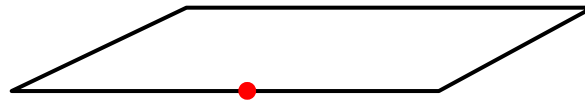
Kysymyksiä...

Super Vätyksen antenniklinikka

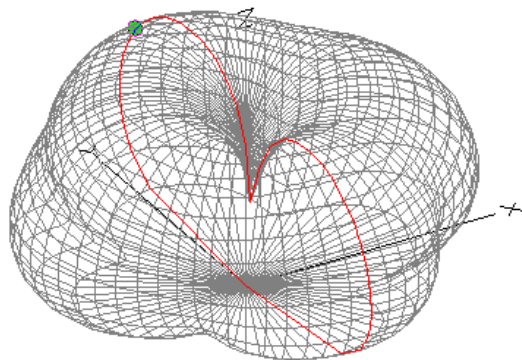
Seuraavilla sivuilla lisämateriaalia

Super Vätyksen antenniklinikka

80 metrin vaaka looppi ylemmillä bandeilla

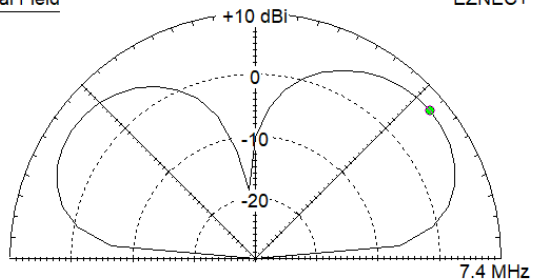


40 metrillä

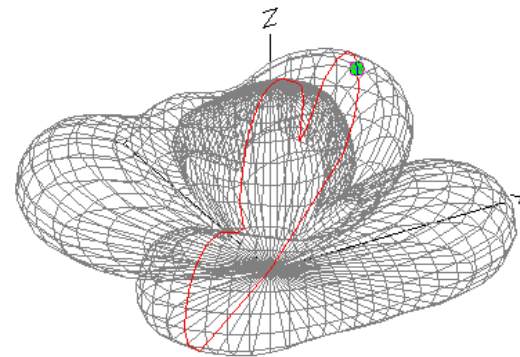


Total Field

EZNEC+

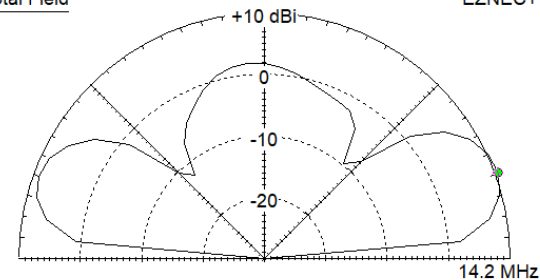


20 metrillä



Total Field

EZNEC+

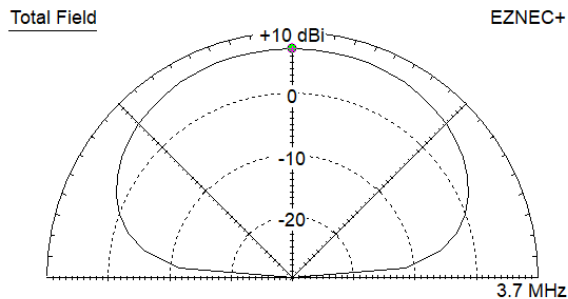
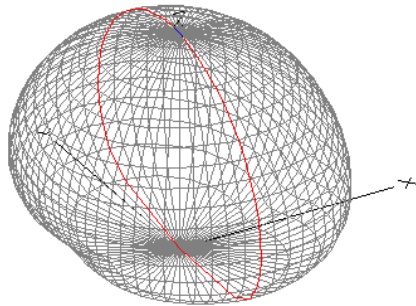


Super Vätyksen antenniklinikka

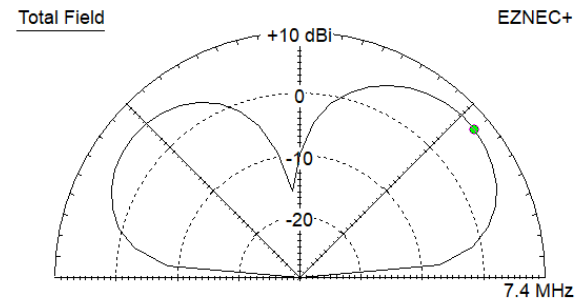
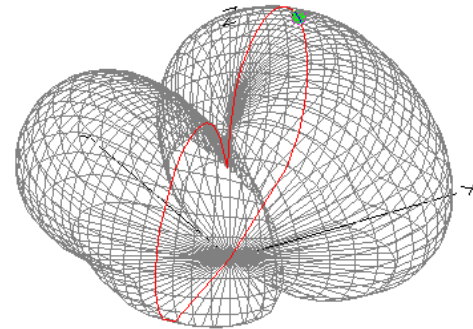
80 metrin OCF dipoli (Windom)



Perustaajuudella 80m



40 metrillä

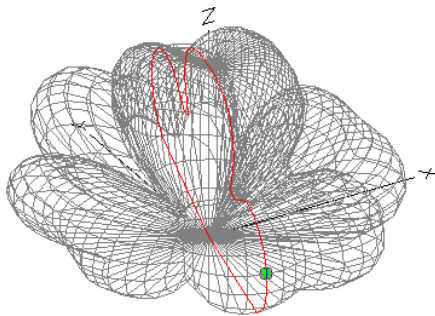


Super Vätyksen antenniklinikka

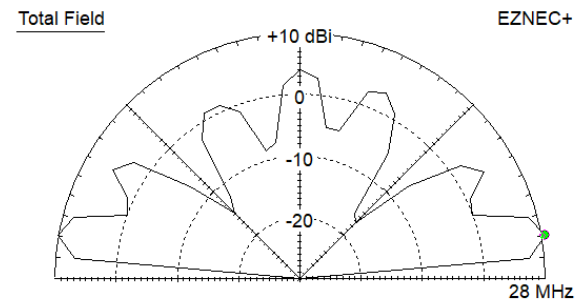
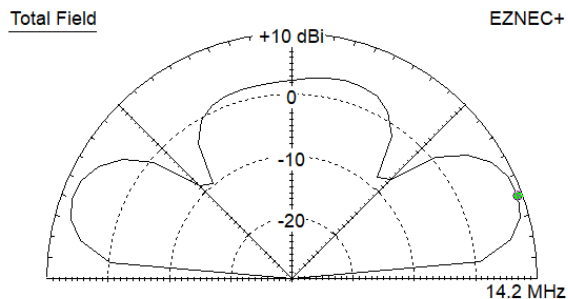
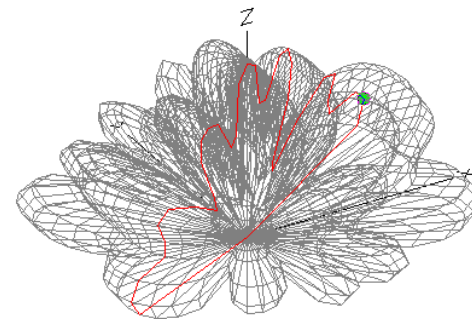
80 metrin OCF dipoli (Windom)



20 metrillä



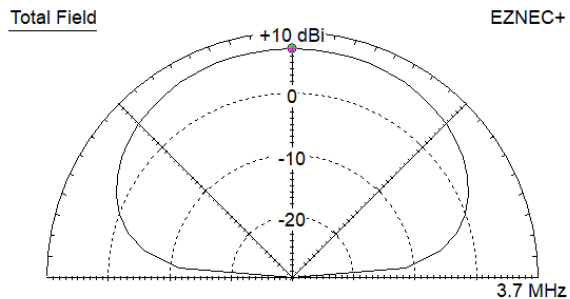
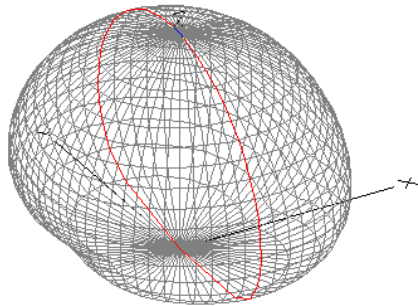
10 metrillä



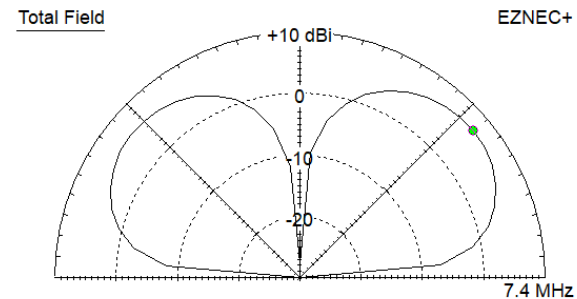
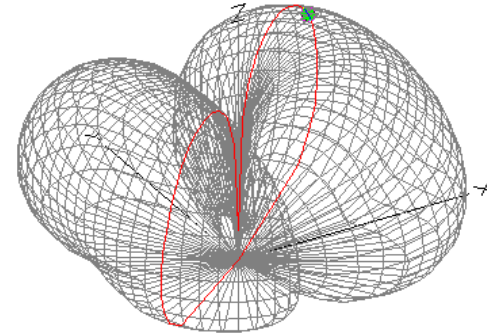
Super Vätyksen antenniklinikka

Päästä syötetty 80m HWEF (Half Wave End fed)

Perustaajuudella 80m



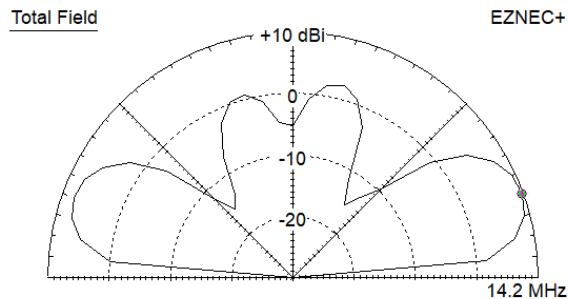
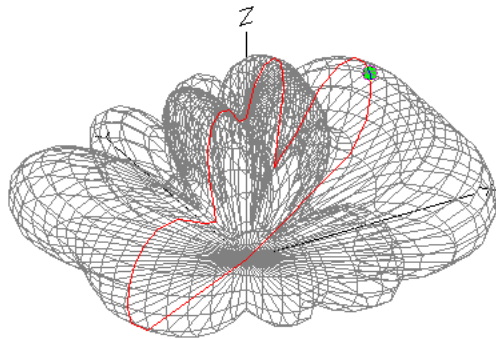
40 metrillä



Super Vätyksen antenniklinikka

Päästä syötetty 80m HWEF (Half Wave End fed)

20 metrillä



10 metrillä

