

D3+ Design Details:

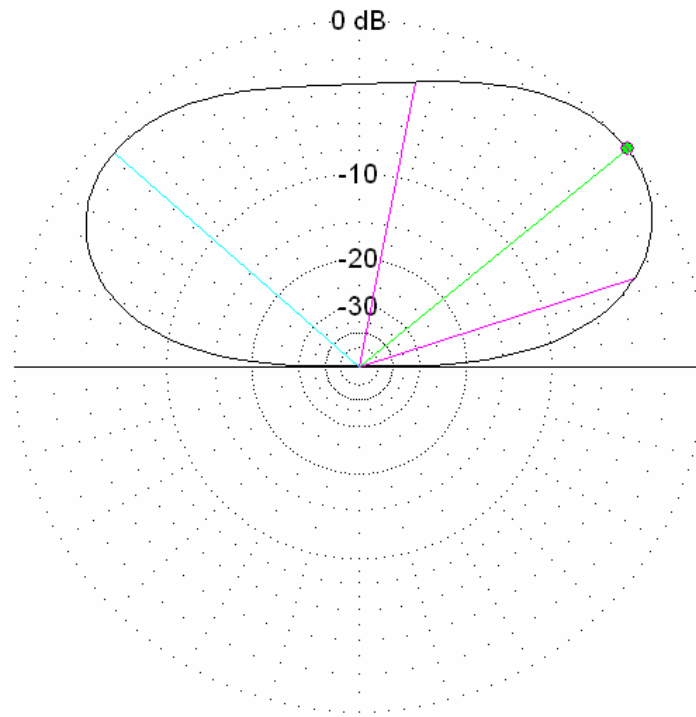
Leg Length: 52 feet

Apex: 120 degrees

Height above ground: 35 feet

At 14.2 MHz, D3+ gain is 9.9 dBi @ 26 degrees elevation

Half-wave dipole at same height is 7.34 dBi @ 30 degrees

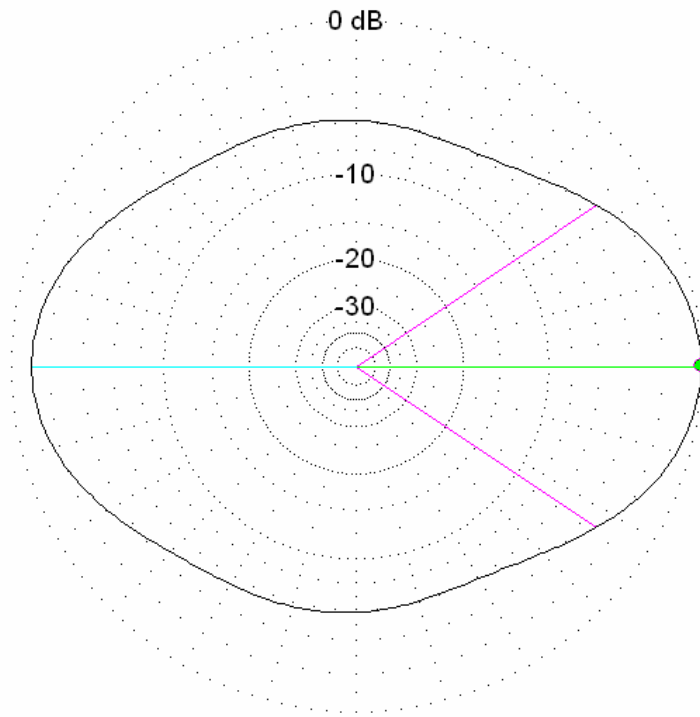


10.1 MHz

Elevation Plot
Azimuth Angle 0.0 deg.
Outer Ring 7.04dBi

Cursor Elev 39.0 deg.
Gain 7.04 dBi
0.0 dBmax

Slice Max Gain 7.04 dBi @ Elev Angle = 39.0 deg.
Beamwidth 61.0 deg.; -3dB @ 17.8, 78.8 deg.
Sidelobe Gain 6.01 dBi @ Elev Angle = 139.0 deg.
Front/Sidelobe 1.03 dB

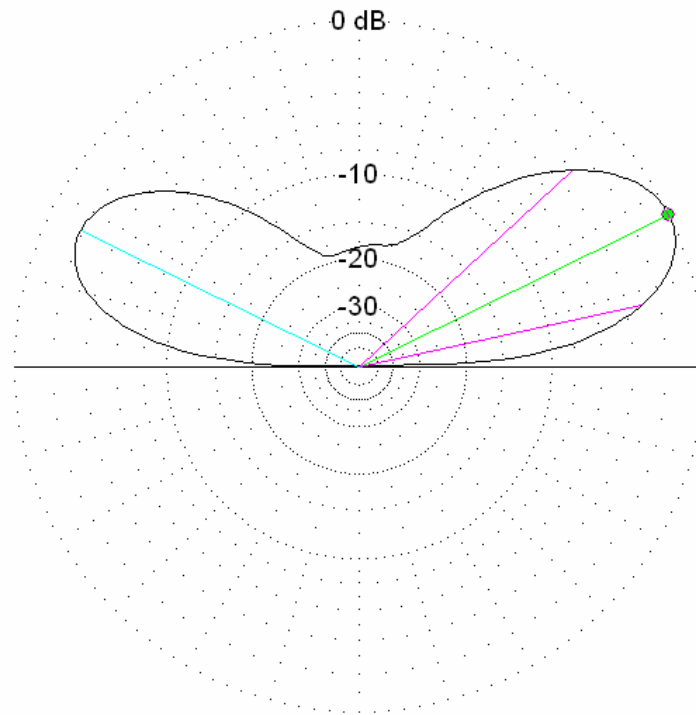


Azimuth Plot
Elevation Angle 39.0 deg.
Outer Ring 7.04dBi

Slice Max Gain 7.04 dBi @ Az Angle = 0.0 deg.
Front/Back 1.05 dB
Beamwidth 67.6 deg.; -3dB @ 326.2, 33.8 deg.
Sidelobe Gain 6.0 dBi @ Az Angle = 180.0 deg.
Front/Sidelobe 1.05 dB

10.1 MHz

Cursor Az 0.0 deg.
Gain 7.04 dBi
0.0 dBmax

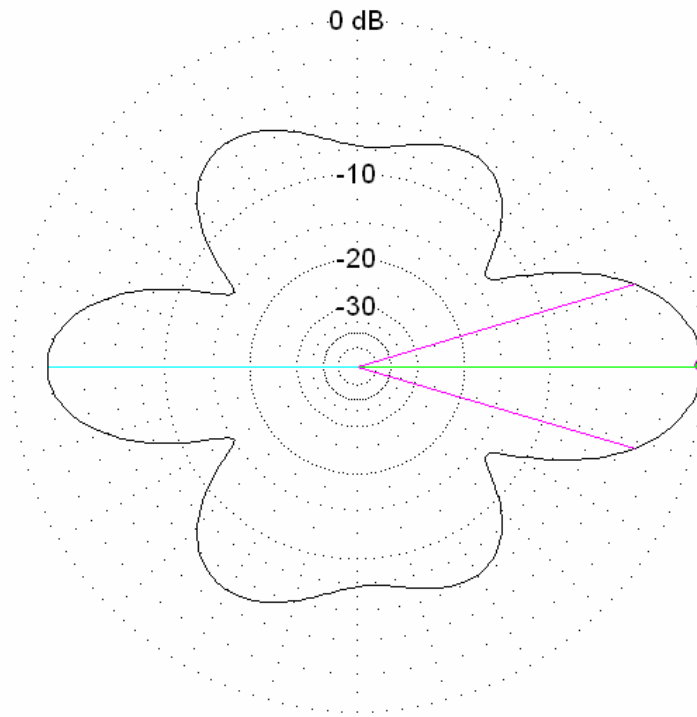


Elevation Plot
Azimuth Angle 0.0 deg.
Outer Ring 9.93dBi

Slice Max Gain 9.93 dBi @ Elev Angle = 26.0 deg.
Beamwidth 30.4 deg.; -3dB @ 12.2, 42.6 deg.
Sidelobe Gain 8.1 dBi @ Elev Angle = 154.0 deg.
Front/Sidelobe 1.83 dB

14.2 MHz

Cursor Elev 26.0 deg.
Gain 9.93 dBi
0.0 dBmax

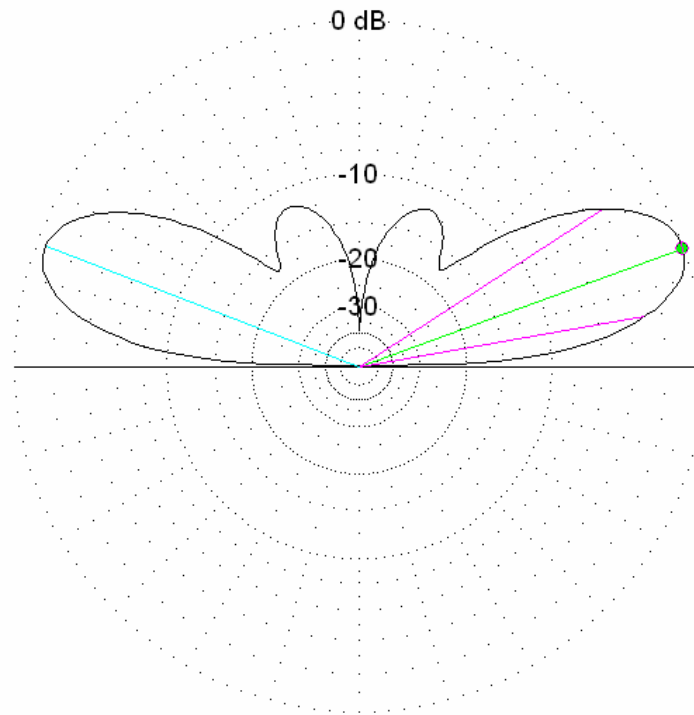


Azimuth Plot
 Elevation Angle 26.0 deg.
 Outer Ring 9.93dBi

Slice Max Gain 9.93 dBi @ Az Angle = 0.0 deg.
 Front/Back 1.83 dB
 Beamwidth 32.8 deg.; -3dB @ 343.6, 16.4 deg.
 Sidelobe Gain 8.1 dBi @ Az Angle = 180.0 deg.
 Front/Sidelobe 1.83 dB

14.2 MHz

Cursor Az 0.0 deg.
 Gain 9.93 dBi
 0.0 dBmax

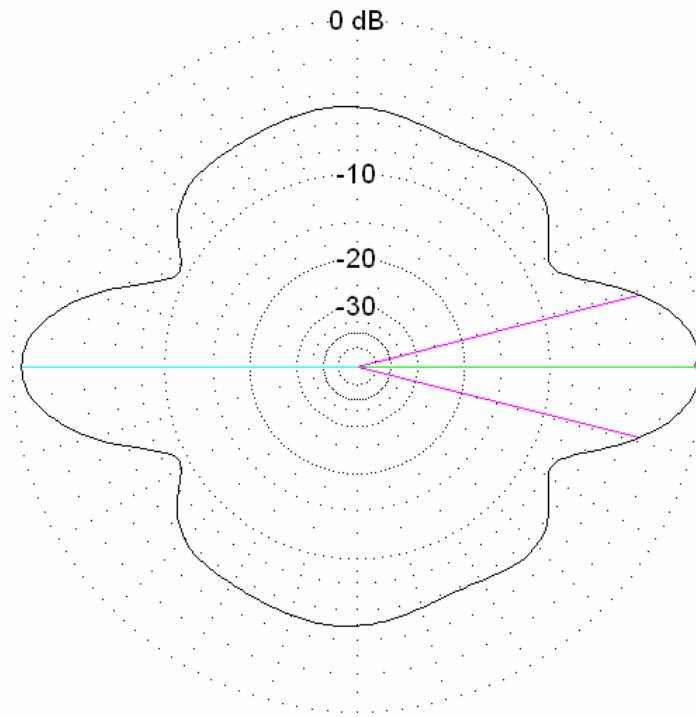


Elevation Plot
Azimuth Angle 0.0 deg.
Outer Ring 9.59dBi

Slice Max Gain 9.59 dBi @ Elev Angle = 20.0 deg.
Beamwidth 23.0 deg.; -3dB @ 9.8, 32.8 deg.
Sidelobe Gain 9.13 dBi @ Elev Angle = 159.0 deg.
Front/Sidelobe 0.46 dB

18.1 MHz

Cursor Elev 20.0 deg.
Gain 9.59 dBi
0.0 dBmax

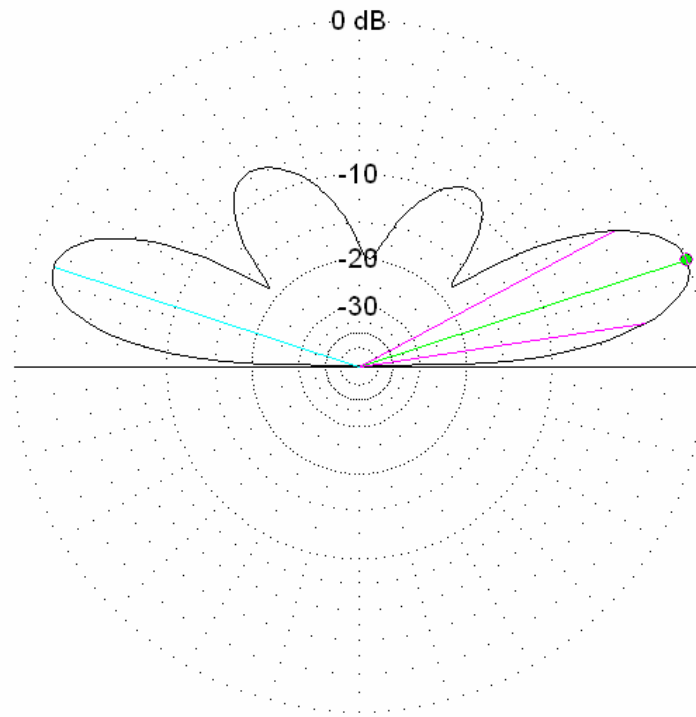


18.1 MHz

Azimuth Plot
Elevation Angle 20.0 deg.
Outer Ring 9.59dBi

Slice Max Gain 9.59 dBi @ Az Angle = 0.0 deg.
Front/Back 0.47 dB
Beamwidth 28.6 deg.; -3dB @ 345.7, 14.3 deg.
Sidelobe Gain 9.13 dBi @ Az Angle = 180.0 deg.
Front/Sidelobe 0.47 dB

Cursor Az 0.0 deg.
Gain 9.59 dBi
0.0 dBmax

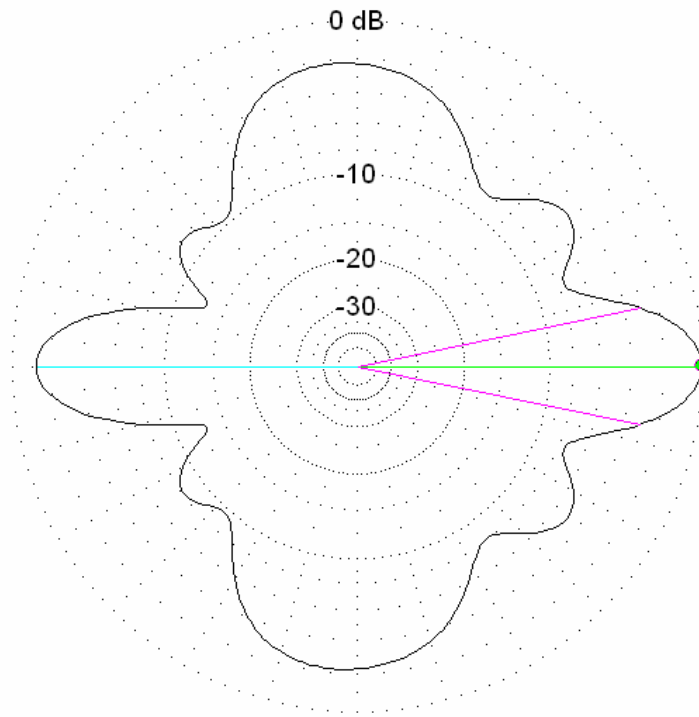


Elevation Plot
Azimuth Angle 0.0 deg.
Outer Ring 9.78dBi

Slice Max Gain 9.78 dBi @ Elev Angle = 18.0 deg.
Beamwidth 19.3 deg.; -3dB @ 8.5, 27.8 deg.
Sidelobe Gain 8.57 dBi @ Elev Angle = 162.0 deg.
Front/Sidelobe 1.22 dB

21.2 MHz

Cursor Elev 18.0 deg.
Gain 9.78 dBi
0.0 dBmax

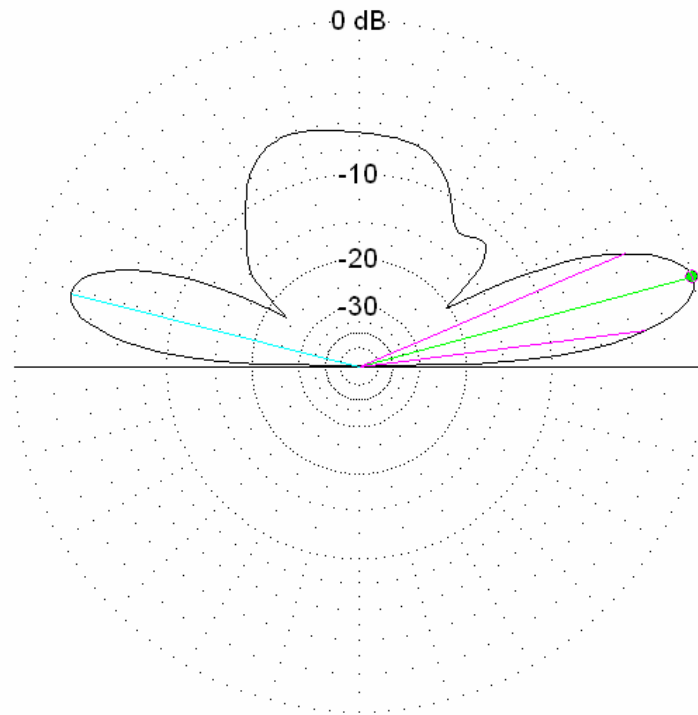


Azimuth Plot
Elevation Angle 18.0 deg.
Outer Ring 9.78dBi

Slice Max Gain 9.78 dBi @ Az Angle = 0.0 deg.
Front/Back 1.22 dB
Beamwidth 23.0 deg.; -3dB @ 348.5, 11.5 deg.
Sidelobe Gain 8.57 dBi @ Az Angle = 180.0 deg.
Front/Sidelobe 1.22 dB

21.2 MHz

Cursor Az 0.0 deg.
Gain 9.78 dBi
0.0 dBmax

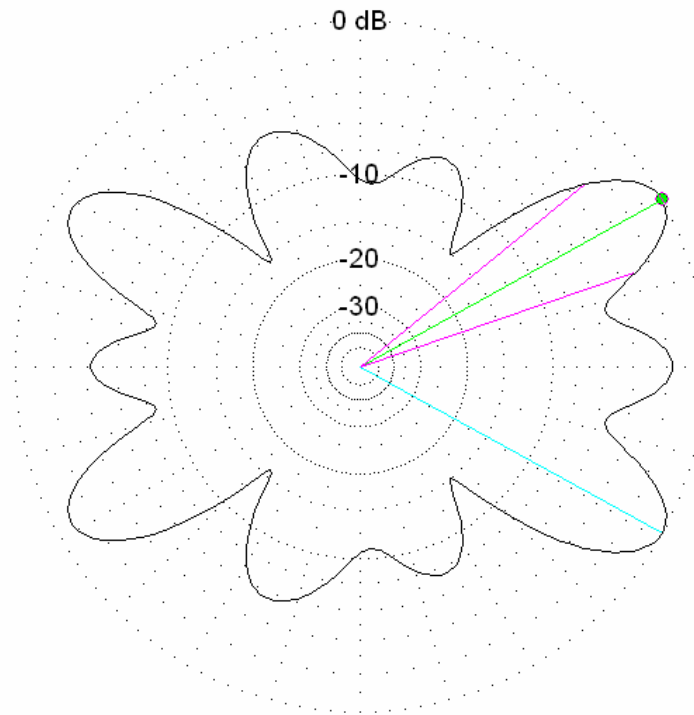


24.93 MHz

Elevation Plot
Azimuth Angle 0.0 deg.
Outer Ring 7.84dBi

Slice Max Gain 7.84 dBi @ Elev Angle = 15.0 deg.
Beamwidth 15.9 deg.; -3dB @ 7.0, 22.9 deg.
Sidelobe Gain 5.31 dBi @ Elev Angle = 166.0 deg.
Front/Sidelobe 2.53 dB

Cursor Elev 15.0 deg.
Gain 7.84 dBi
0.0 dBmax

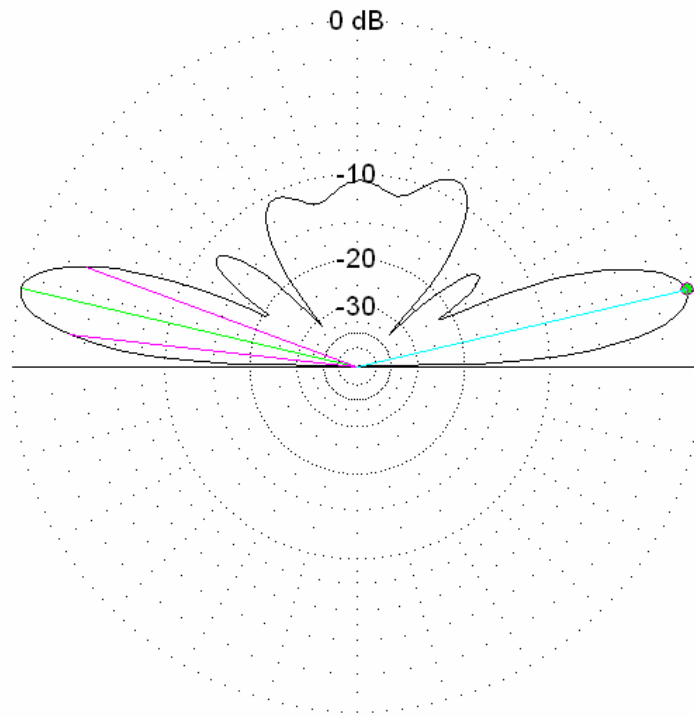


Azimuth Plot
Elevation Angle 15.0 deg.
Outer Ring 9.53dBi

Slice Max Gain 9.53 dBi @ Az Angle = 29.0 deg.
Front/Back 0.85 dB
Beamwidth 20.2 deg.; -3dB @ 18.7, 38.9 deg.
Sidelobe Gain 9.53 dBi @ Az Angle = 331.0 deg.
Front/Sidelobe 0.0 dB

24.93 MHz

Cursor Az 29.0 deg.
Gain 9.53 dBi
0.0 dBmax

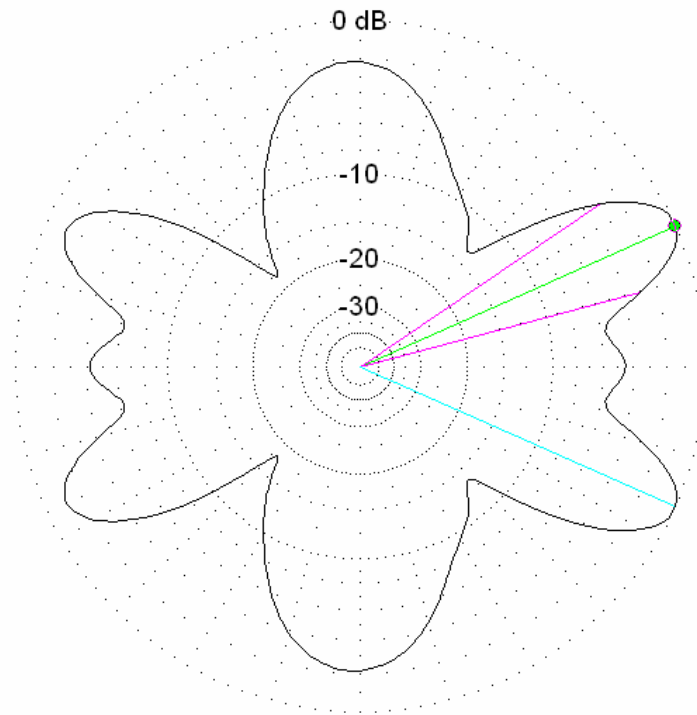


28.35 MHz

Elevation Plot
Azimuth Angle 0.0 deg.
Outer Ring 5.33dBi

Cursor Elev 13.0 deg.
Gain 5.02 dBi
-0.32 dBmax

Slice Max Gain 5.33 dBi @ Elev Angle = 167.0 deg.
Beamwidth 13.8 deg.; -3dB @ 159.9, 173.7 deg.
Sidelobe Gain 5.02 dBi @ Elev Angle = 13.0 deg.
Front/Sidelobe 0.32 dB



28.35 MHz

Azimuth Plot
Elevation Angle 13.0 deg.
Outer Ring 9.51 dBi

Slice Max Gain 9.51 dBi @ Az Angle = 24.0 deg.
Front/Back 1.11 dB
Beamwidth 19.2 deg.; -3dB @ 14.8, 34.0 deg.
Sidelobe Gain 9.51 dBi @ Az Angle = 336.0 deg.
Front/Sidelobe 0.0 dB

Cursor Az 24.0 deg.
Gain 9.51 dBi
0.0 dBmax