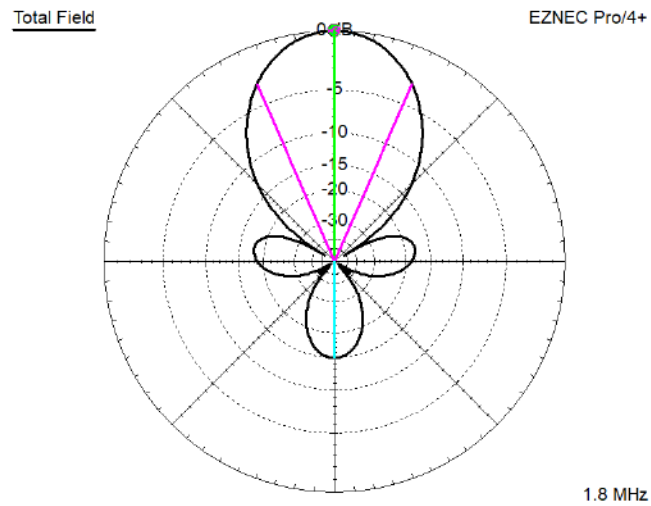
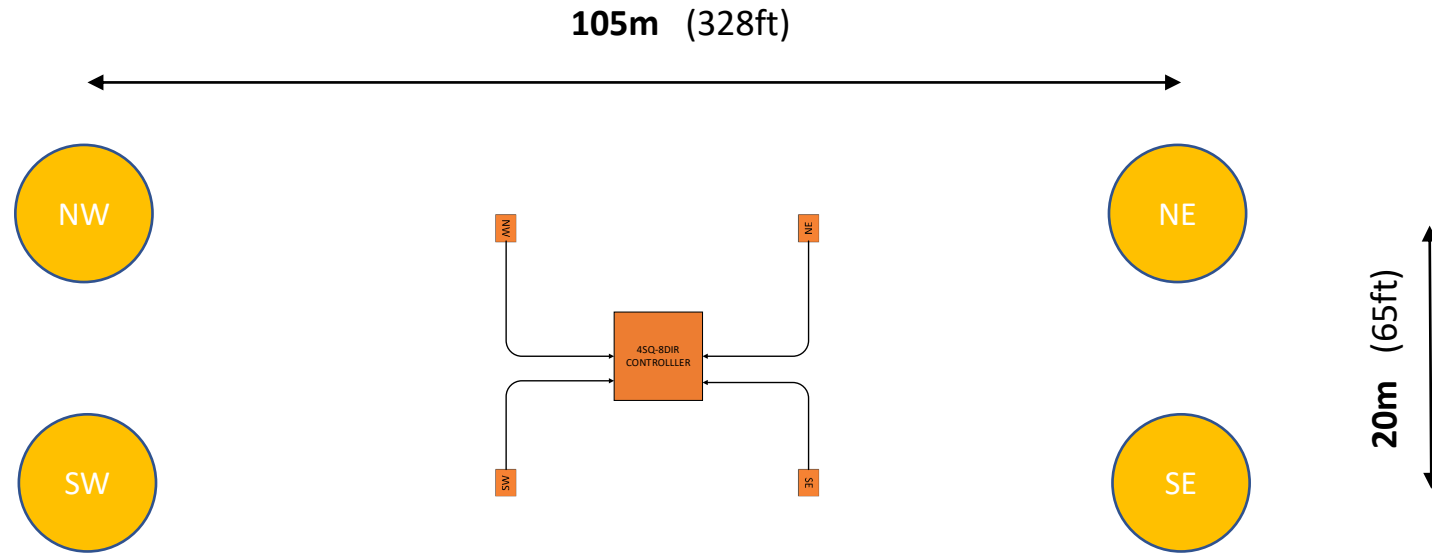
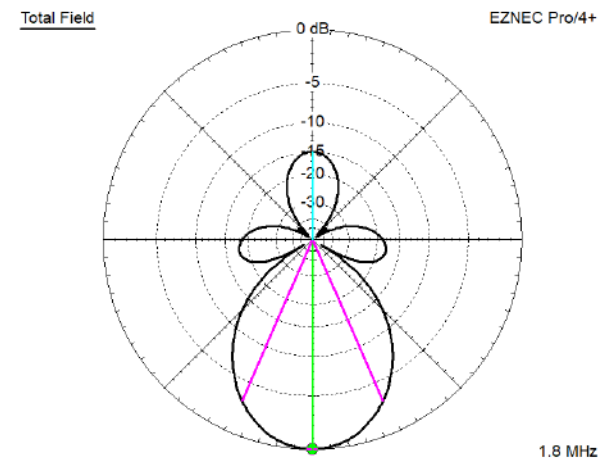


# BSEF (Broad side end fire) 20x105m on 160m RDF 13.22dB

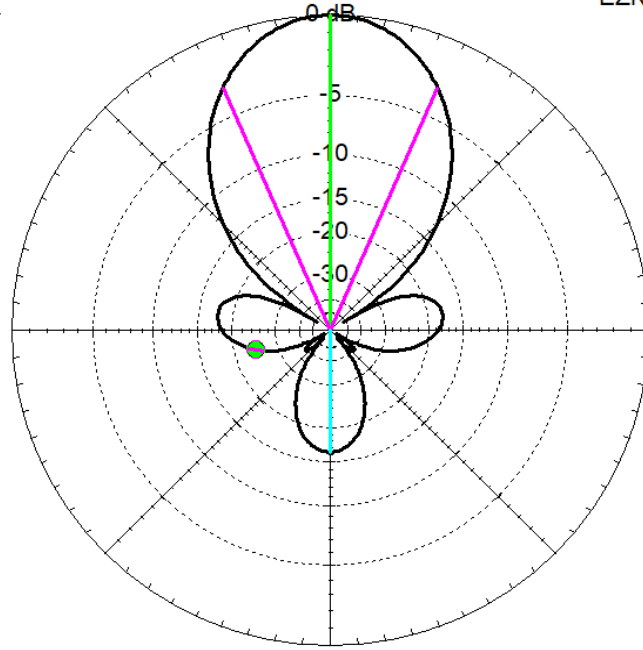


instant  
reverse



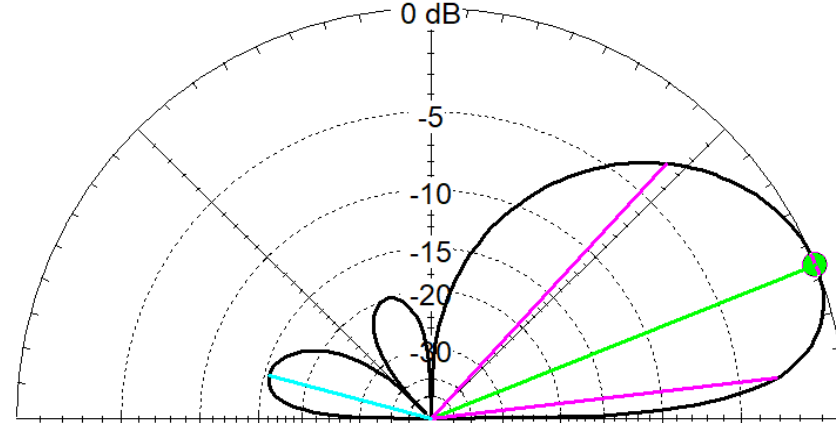
# BSEF (Broad side end fire) 20x105m on 160m RDF 13.22dB

Total Field



EZNEC Pro/4+

Total Field



EZNEC Pro/4+

1.8 MHz

1.8 MHz

Azimuth Plot  
Elevation Angle 22.0 deg.  
Outer Ring -8.27 dBi

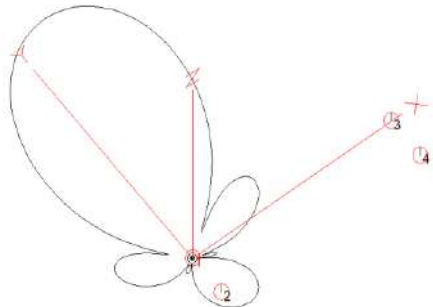
Cursor Az 195.0 deg.  
Gain -32.73 dBi  
-24.46 dBmax

Elevation Plot  
Azimuth Angle 90.0 deg.  
Outer Ring -8.27 dBi

Cursor Elev 22.0 deg.  
Gain -8.27 dBi  
0.0 dBmax

Slice Max Gain -8.27 dBi @ Az Angle = 90.0 deg.  
Front/Back 16.3 dB  
Beamwidth 47.4 deg.; -3dB @ 66.3, 113.7 deg.  
Sidelobe Gain -24.57 dBi @ Az Angle = 270.0 deg.  
Front/Sidelobe 16.3 dB

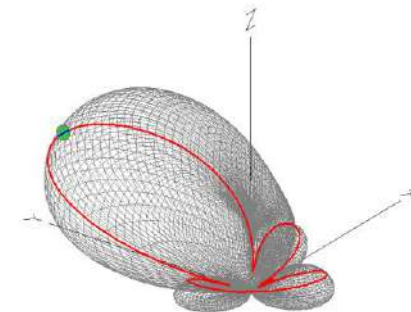
Slice Max Gain -8.27 dBi @ Elev Angle = 22.0 deg.  
Beamwidth 40.9 deg.; -3dB @ 6.8, 47.7 deg.  
Sidelobe Gain -23.81 dBi @ Elev Angle = 165.0 deg.  
Front/Sidelobe 15.54 dB



Sources

Source Edit Other

| Sources |                |             |           |     |           |        |      |  |
|---------|----------------|-------------|-----------|-----|-----------|--------|------|--|
| No.     | Specified Pos. | Actual Pos. |           |     | Amplitude | Phase  | Type |  |
|         | Wire #         | % From E1   | % From E1 | Seg | (V, A)    | (deg.) |      |  |
| 1       | 1              | 0           | 8.33333   | 1   | 1         | 0      | I    |  |
| 2       | 2              | 0           | 8.33333   | 1   | 1         | 150    | I    |  |
| 3       | 3              | 0           | 8.33333   | 1   | 1         | 0      | I    |  |
| 4       | 4              | 0           | 8.33333   | 1   | 1         | 150    | I    |  |



Average Gain = 0.007 = -21.49 dB

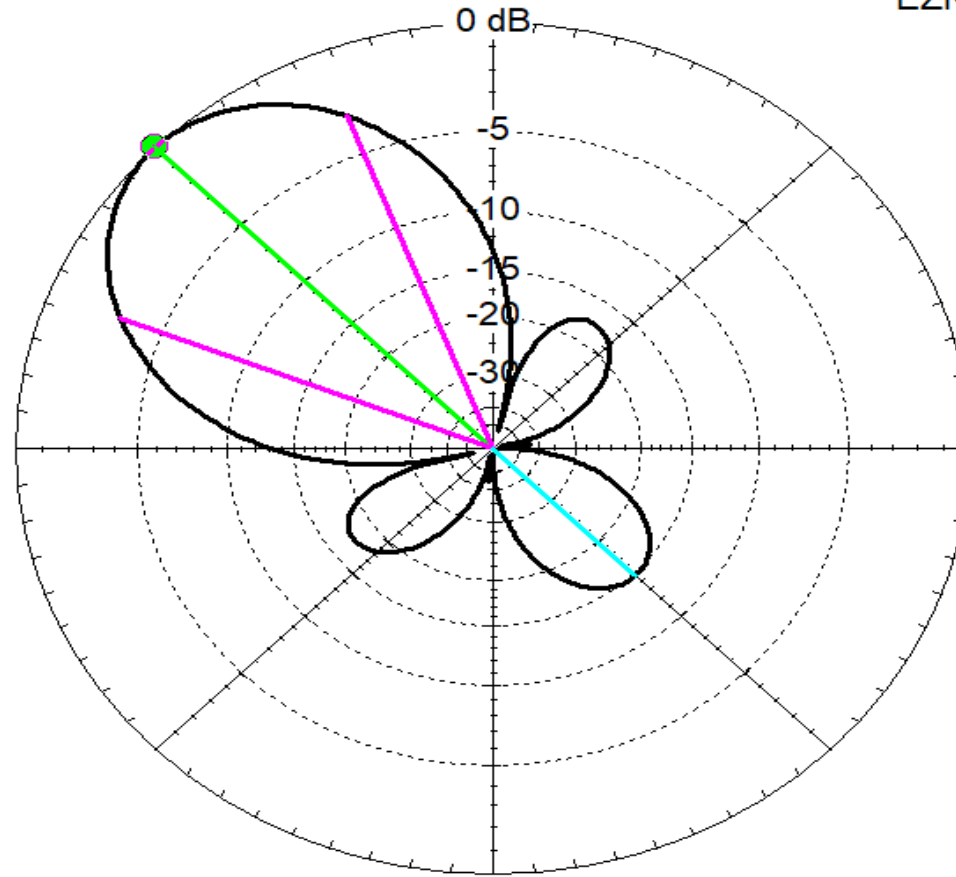
Model contains loss

# BSEF (Broad side end fire) 20x105m HA8A ARRL DX CW 2026 (azimuth 315)

Total Field

EZNEC Pro/4+

**RDF 13.22**



1.8 MHz

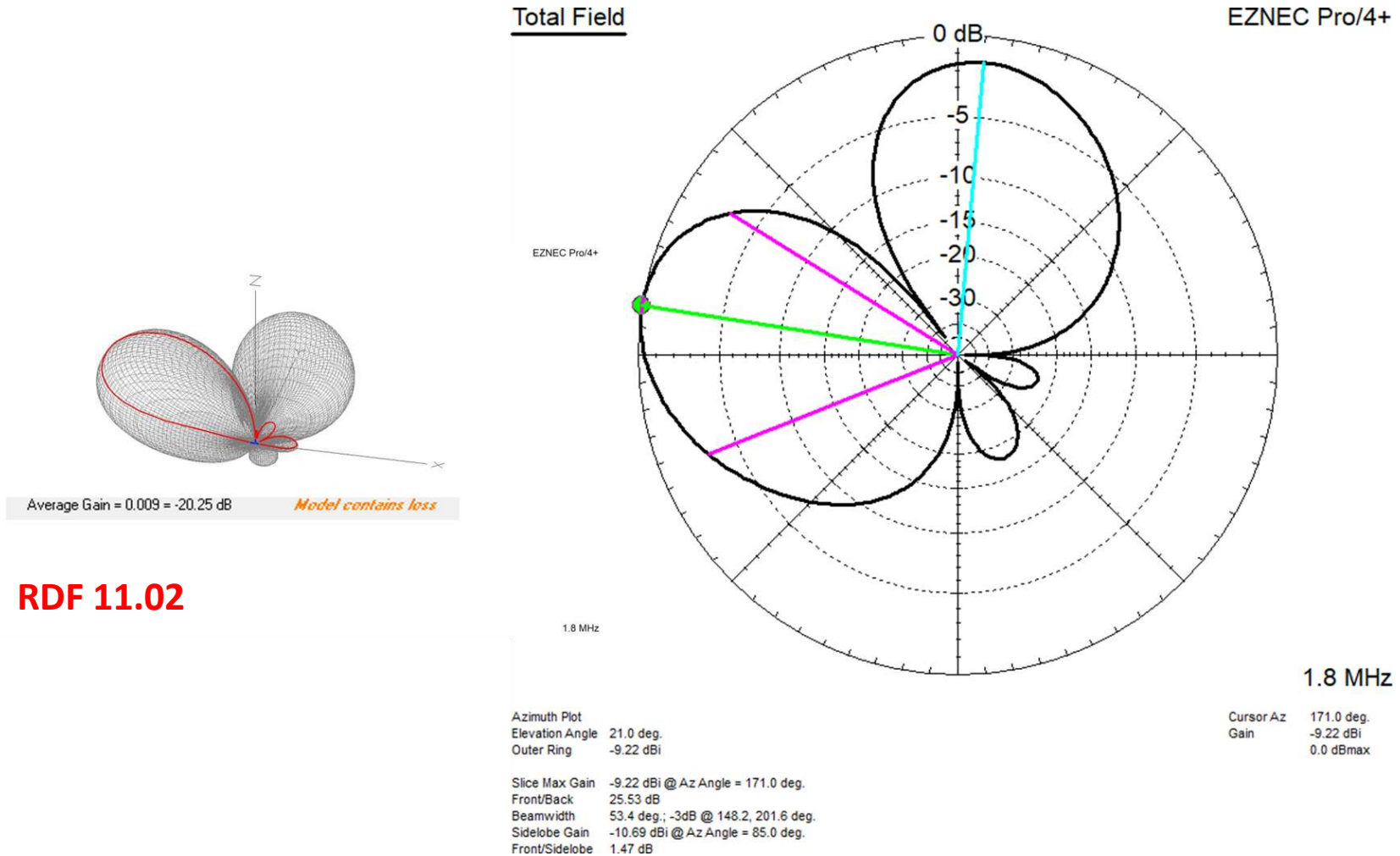
Azimuth Plot  
Elevation Angle 21.0 deg.  
Outer Ring -8.07 dBi

Cursor Az 135.0 deg.  
Gain -8.07 dBi  
0.0 dBmax

Slice Max Gain -8.07 dBi @ Az Angle = 135.0 deg.  
Front/Back 14.77 dB  
Beamwidth 47.0 deg.; -3dB @ 111.5, 158.5 deg.  
Sidelobe Gain -22.84 dBi @ Az Angle = 315.0 deg.  
Front/Sidelobe 14.77 dB

# BSEF (Broad side end fire) 20x105m HA8A ARRL DX CW azimuth 315

HA8DZ: I also unintentionally found a combination OM8AW hadn't anticipated. I switched the system to an unusual direction and found a position that, from my QTH, rotated the radiation pattern almost westward

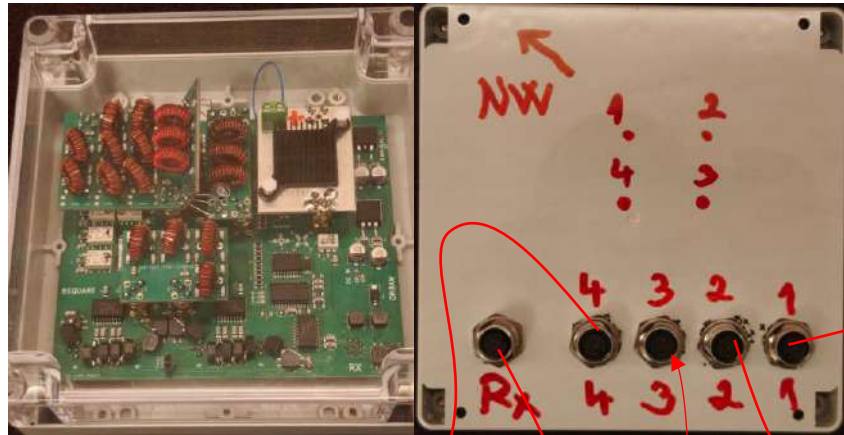




1



2



CAT5E

CAT5E



4

CAT5E

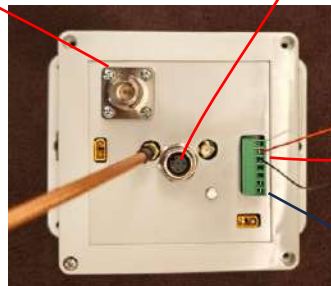


3

CAT5E

North/South

CAT5E



**7,5m HIGH VERTICAL**



**PREAMP to VERTICAL**



## Controller weather-proofing



Not aliens at HA8DZ — just azimuth headings illuminating the protective can. 😊

