KE8USA Antennas
40m End Fed Half Wave Performance

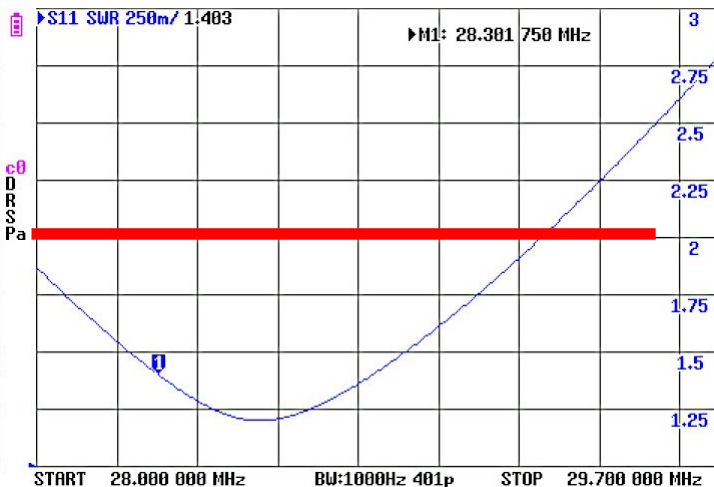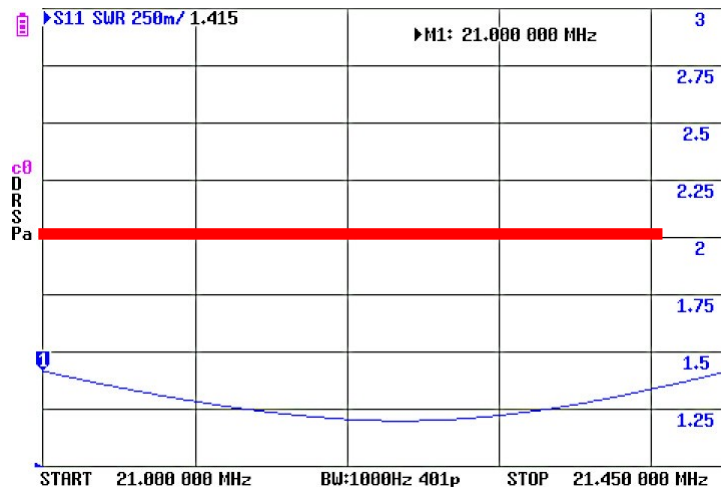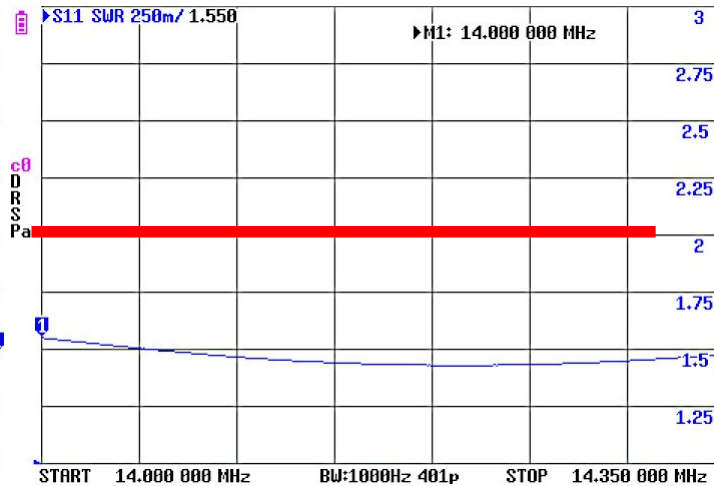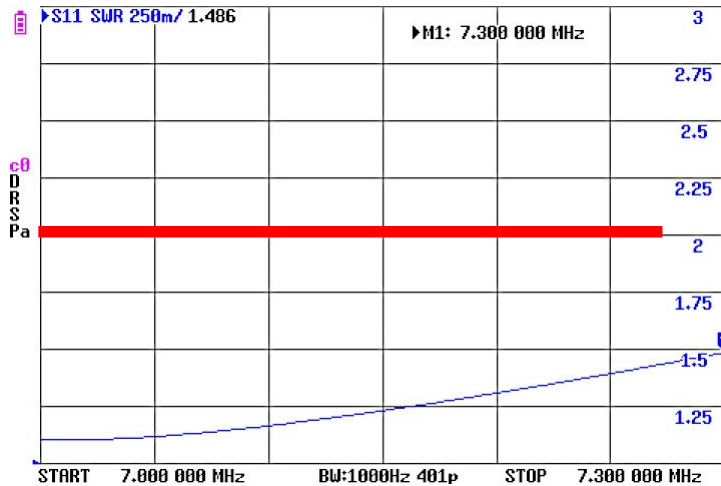

KE8USA ANTENNAS

40M EFHW Antenna
40m, 20m 15m, 10m

Max Power
600W SSB
200W FT8

Made in
USA

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Chart 1 (top left):
S11 SWR 250m/ 1.486
M1: 7.300 000 MHz
3 / 2.75 / 2.5 / 2.25 / 2 / 1.75 / 1.5 / 1.25
START 7.000 000 MHz   BW:1000Hz 401p   STOP 7.300 000 MHz

Chart 2 (top right):
S11 SWR 250m/ 1.550
M1: 14.000 000 MHz
3 / 2.75 / 2.5 / 2.25 / 2 / 1.75 / 1.5 / 1.25
START 14.000 000 MHz   BW:1000Hz 401p   STOP 14.350 000 MHz

Chart 3 (bottom left):
S11 SWR 250m/ 1.415
M1: 21.000 000 MHz
3 / 2.75 / 2.5 / 2.25 / 2 / 1.75 / 1.5 / 1.25
START 21.000 000 MHz   BW:1000Hz 401p   STOP 21.450 000 MHz

Chart 4 (bottom right):
S11 SWR 250m/ 1.403
M1: 28.301 750 MHz
3 / 2.75 / 2.5 / 2.25 / 2 / 1.75 / 1.5 / 1.25
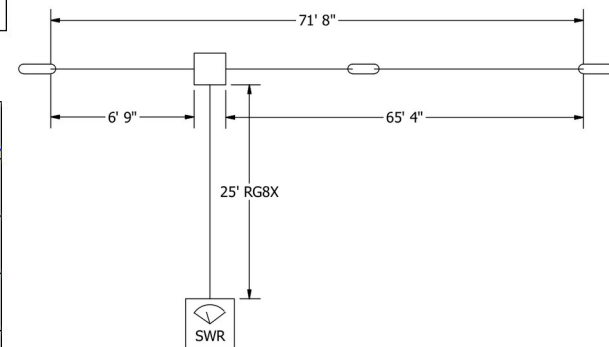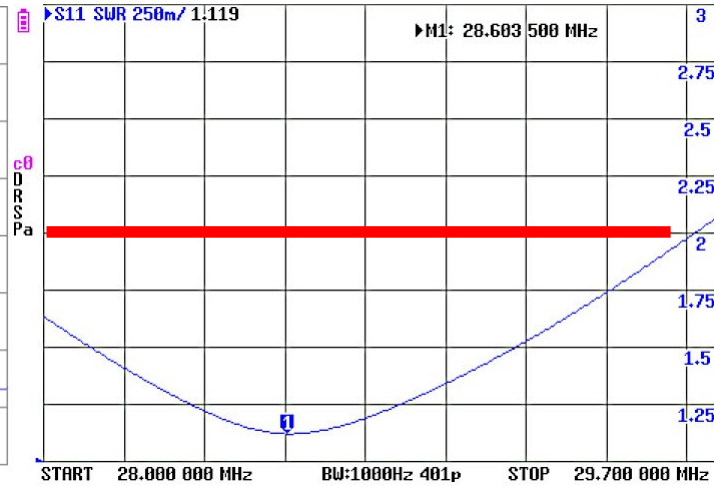START 28.000 000 MHz   BW:1000Hz 401p   STOP 29.700 000 MHz

40m EFHW antenna
Covers 40m, 20m, 15m and 10m

SWR under 2.0 on all bands

Tested with 25' of RG8X coax
Horizontal at 25' high

71' 8"
6' 9"   65' 4"
25' RG8X
SWR

These SWR measurements are for reference only and are specific to my location, ground condition, coax and proximity to objects. Installation at your location can be different from what is shown here.
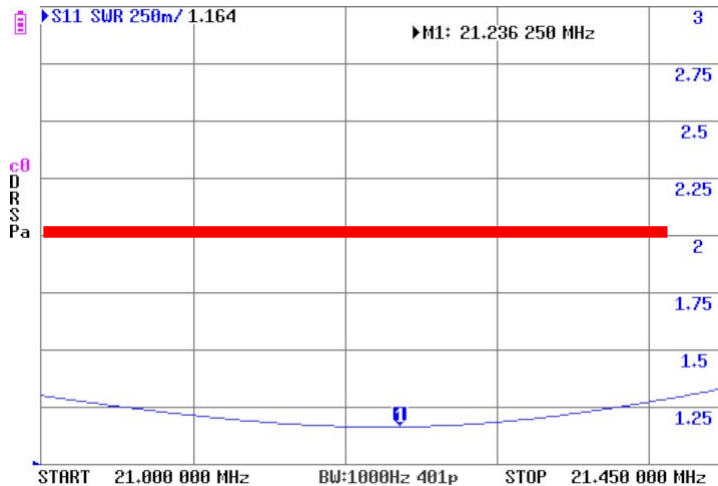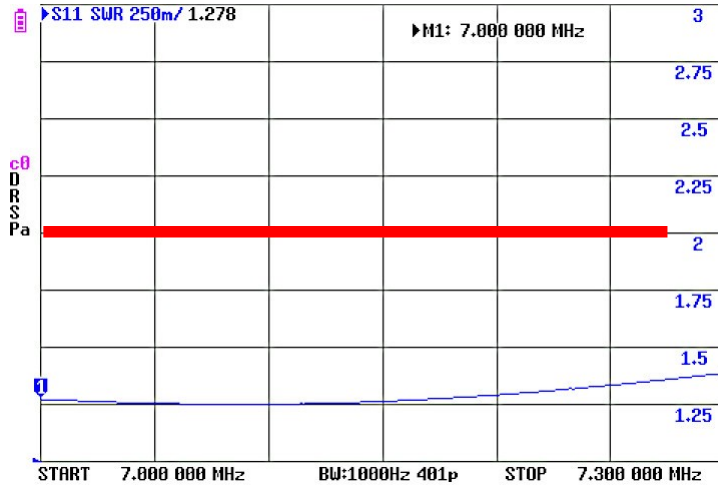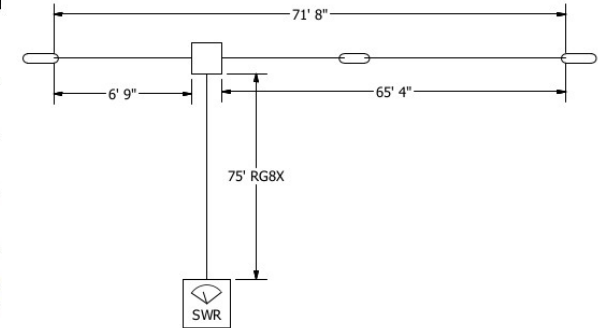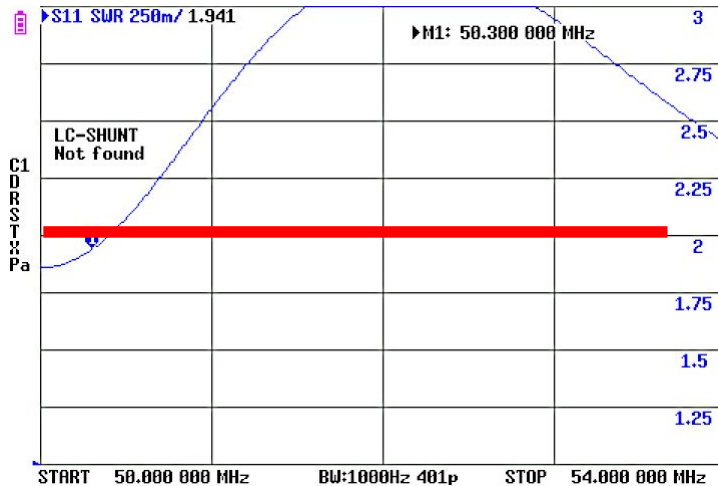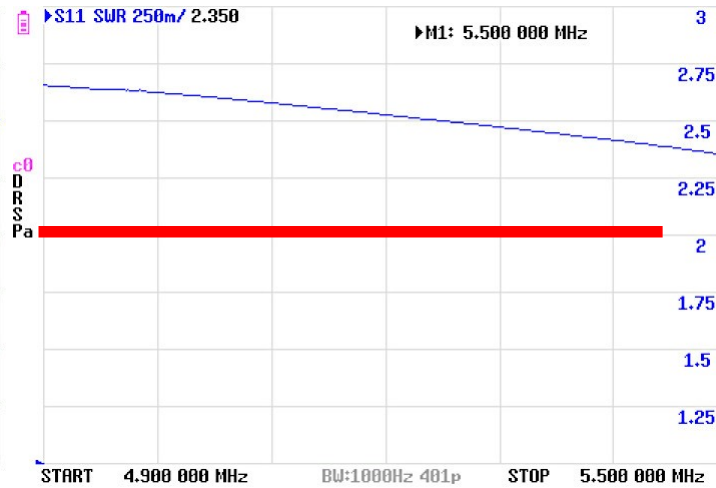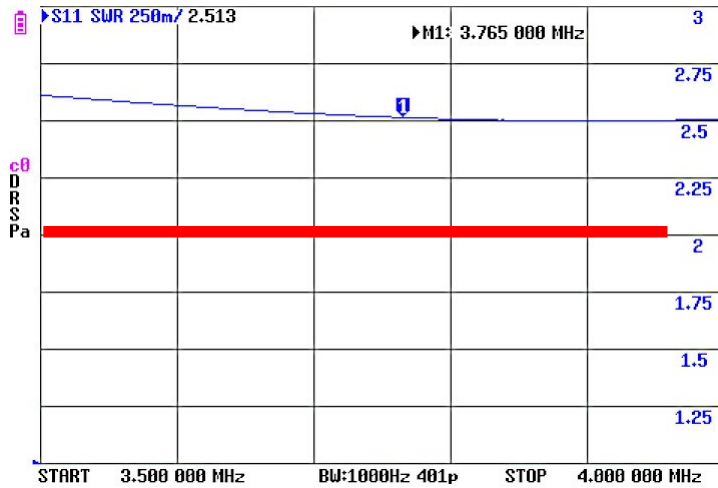
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40m EFHW antenna
Covers 40m, 20m, 15m and 10m

SWR under 2.0 on all bands

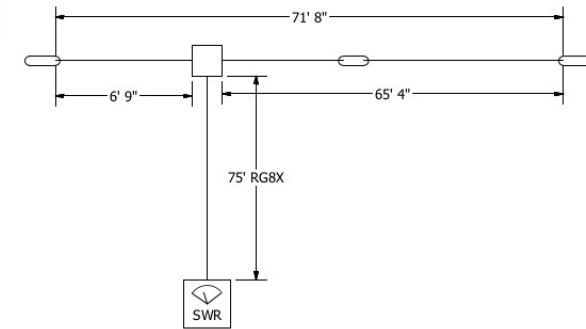Tested with 75' of RG8X coax
Horizontal at 25' high

These SWR measurements are for reference only and are specific to my location, ground condition, coax and proximity to objects. Installation at your location can be different from what is shown here.
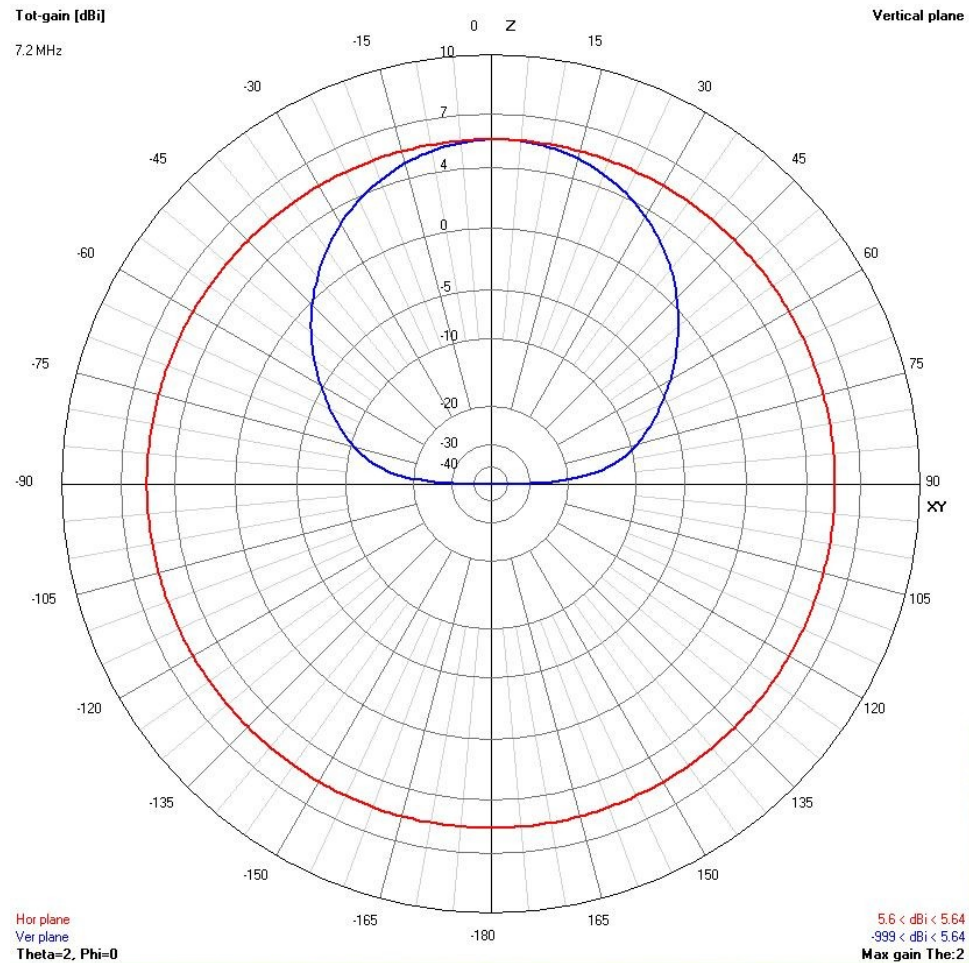
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40m EFHW antenna
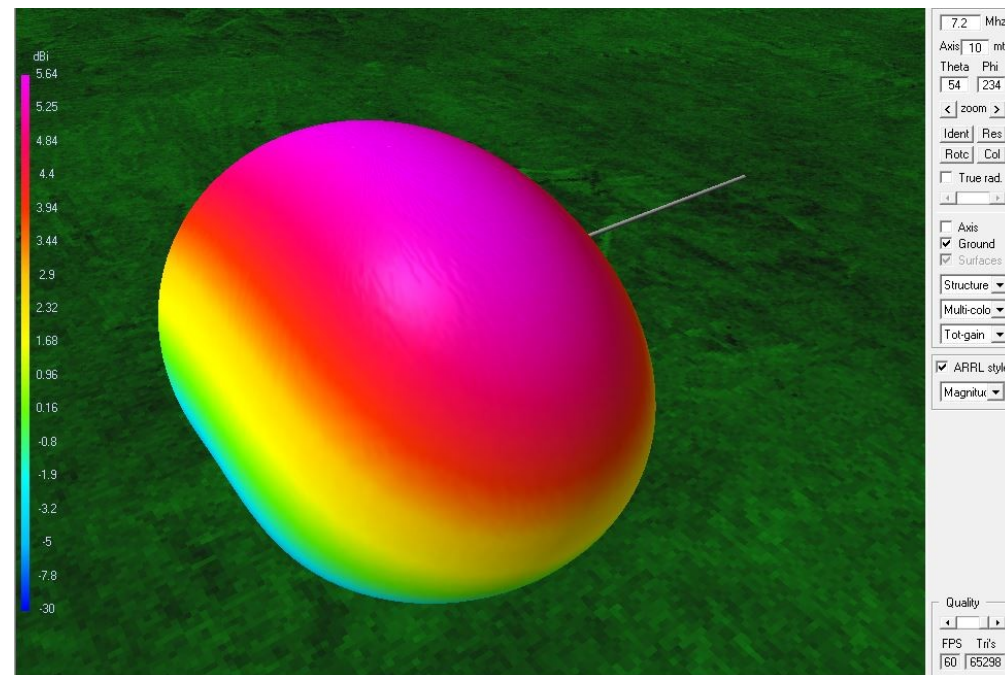80m, 60m, and 6m

SWR under 3.0

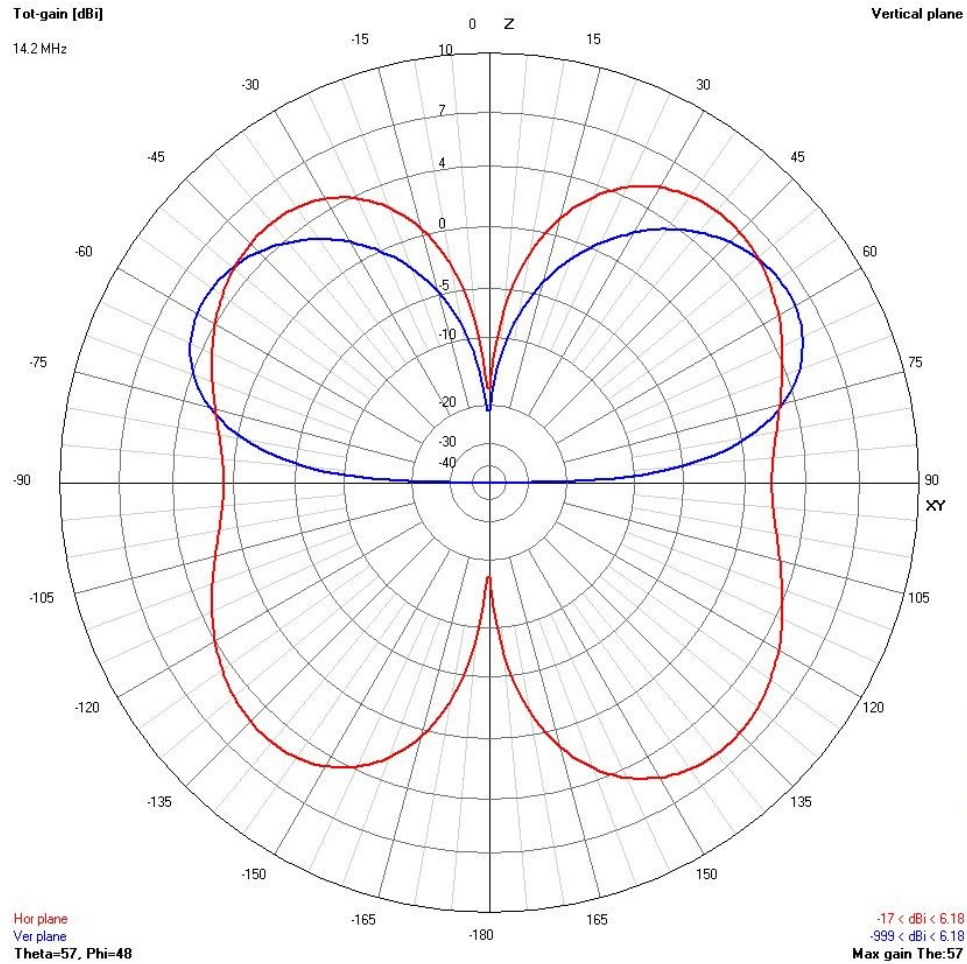Tested with 75' of RG8X coax
Horizontal at 25' high

These SWR measurements are for reference only and are specific to my location, ground condition, coax and proximity to objects. Installation at your location can be different from what is shown here.
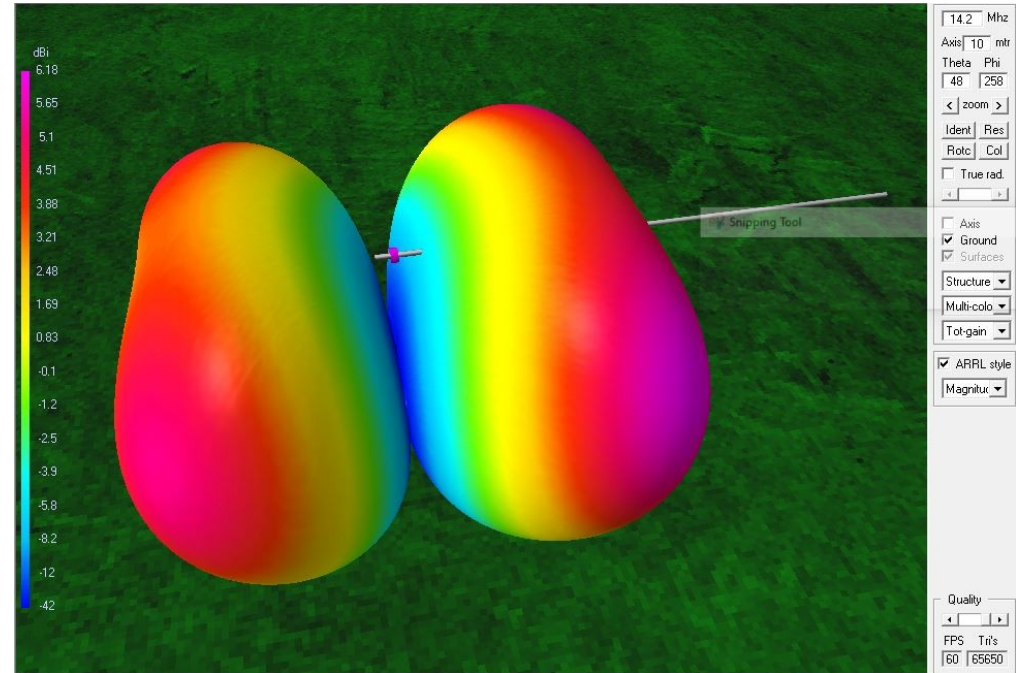
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Tot-gain [dBi]

7.2 MHz

Vertical plane

Hor plane   5.6 < dBi < 5.64
Ver plane   -999 < dBi < 5.64
Theta=2, Phi=0   Max gain The:2

40m EFHW Antenna
40m Band Radiation pattern
Horizontal at 25'
Max Gain 5.64 dBi

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40m EFHW Antenna
20m Band Radiation pattern
Horizontal at 25'
Max Gain 6.18 dBi

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40m EFHW Antenna
15m Band Radiation pattern
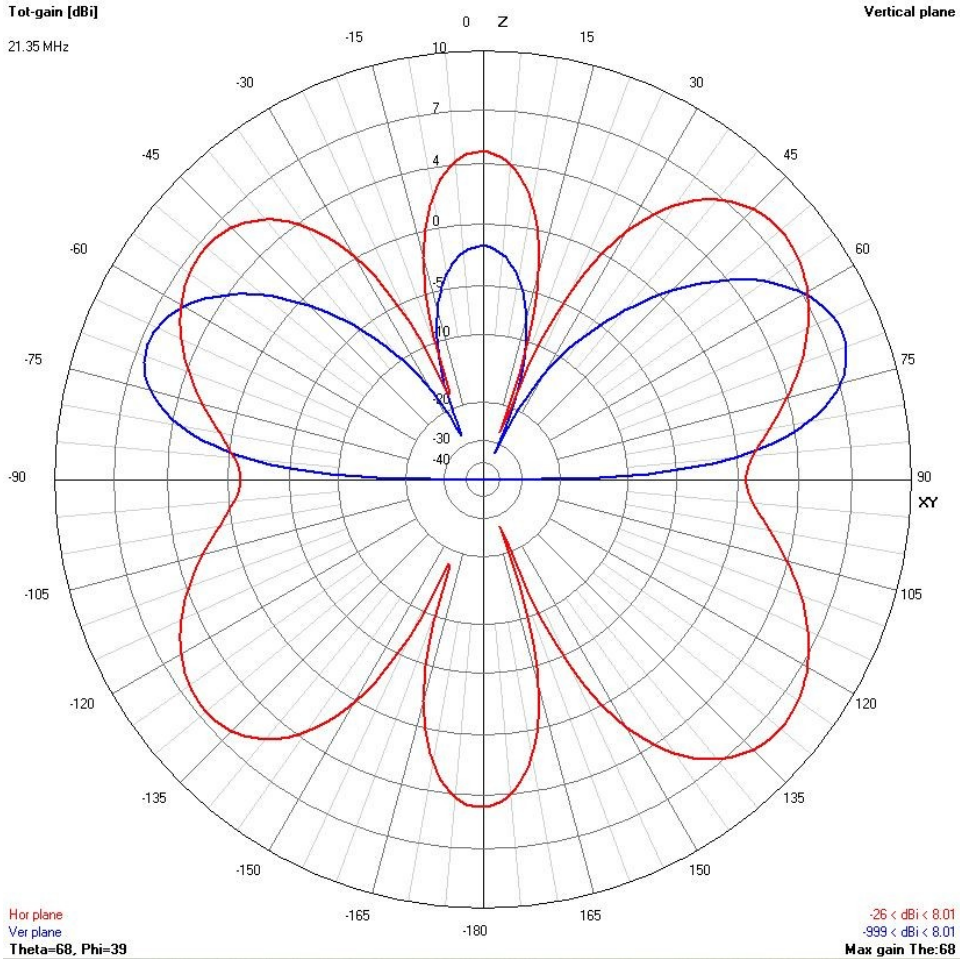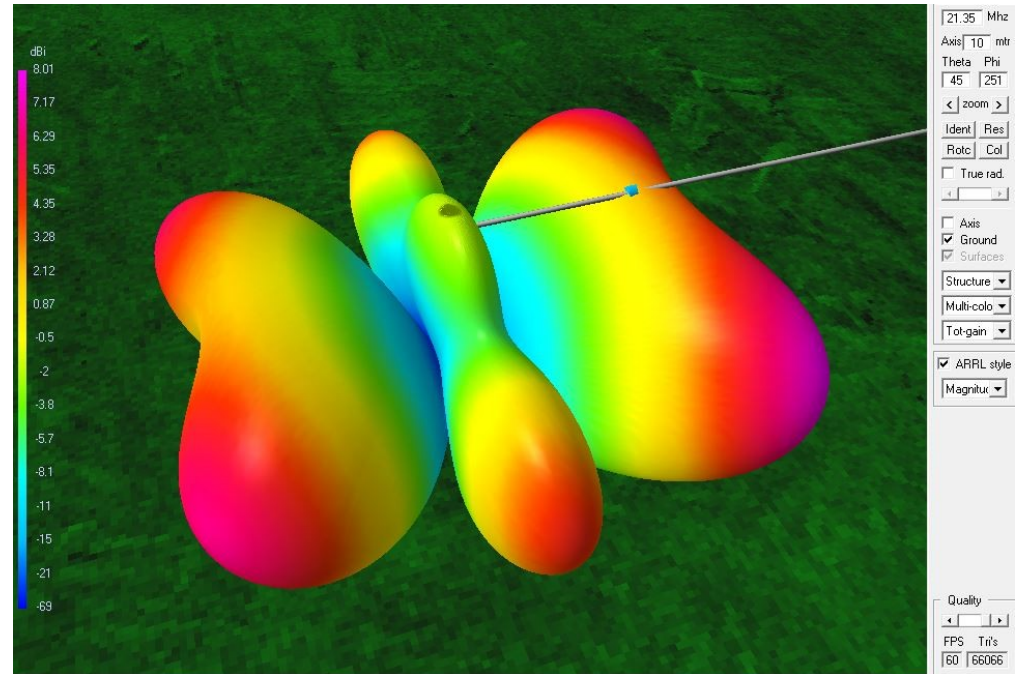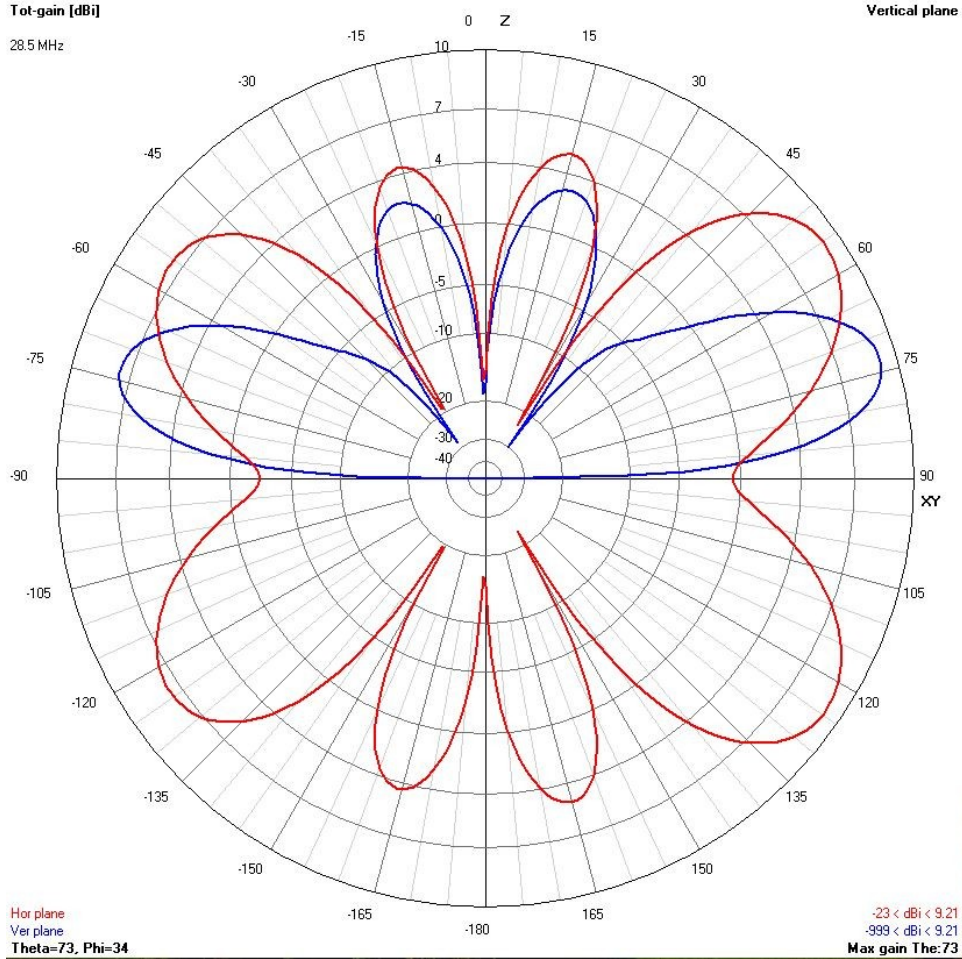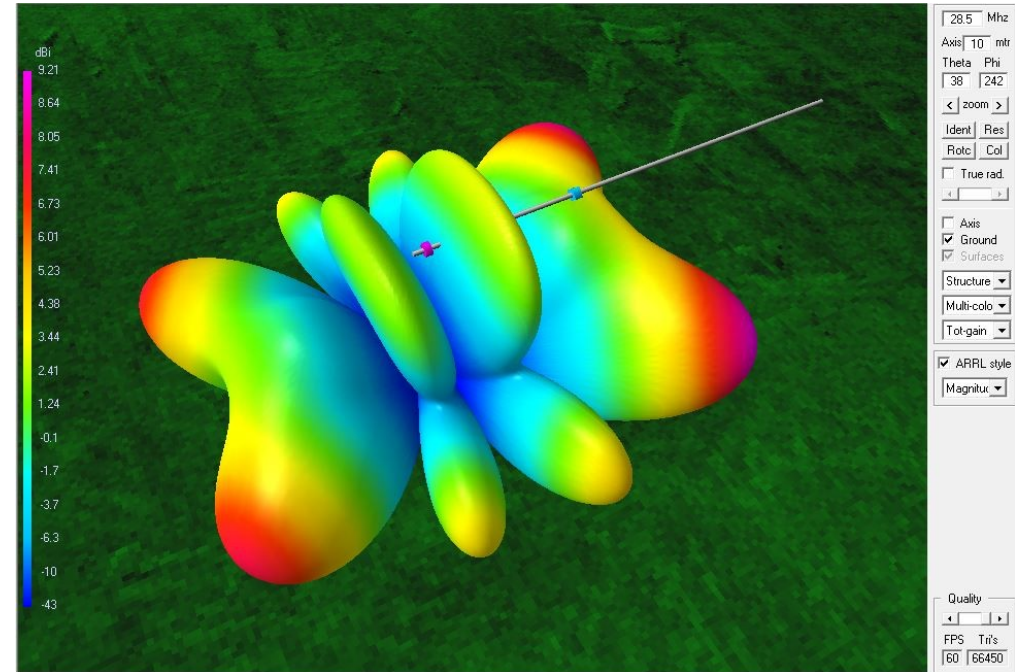Horizontal at 25'
Max Gain 8.01 dBi

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40m EFHW Antenna
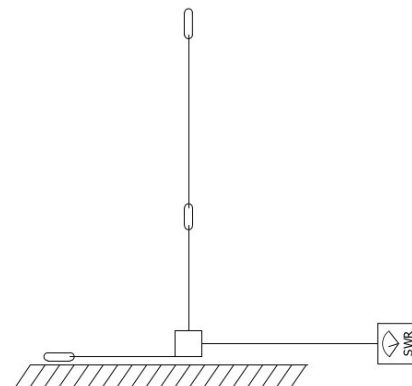10m Band Radiation pattern
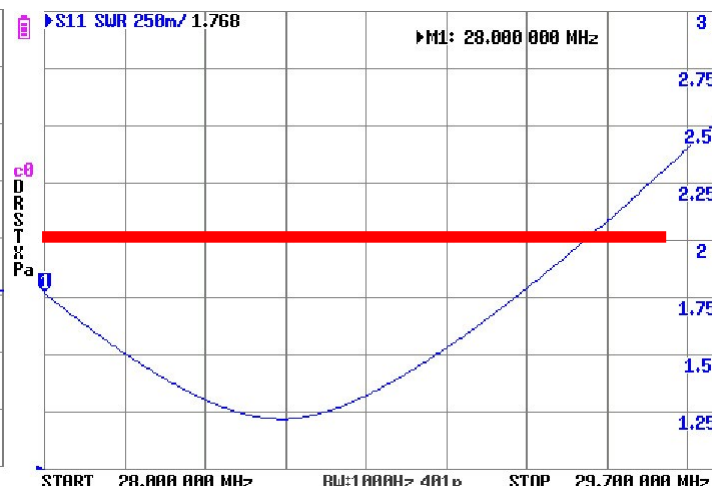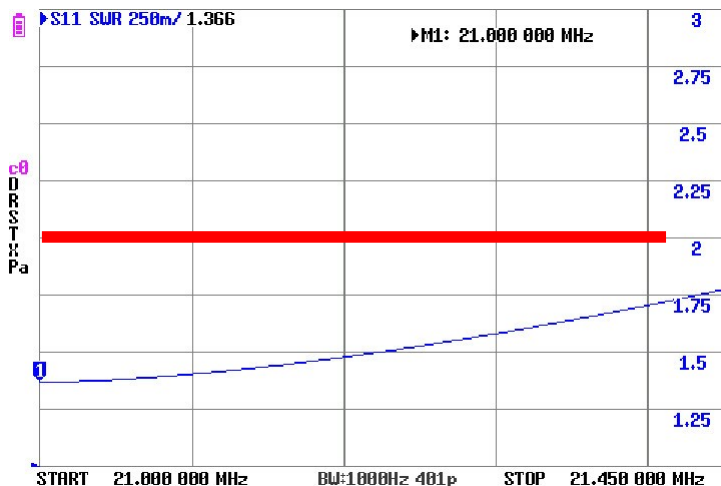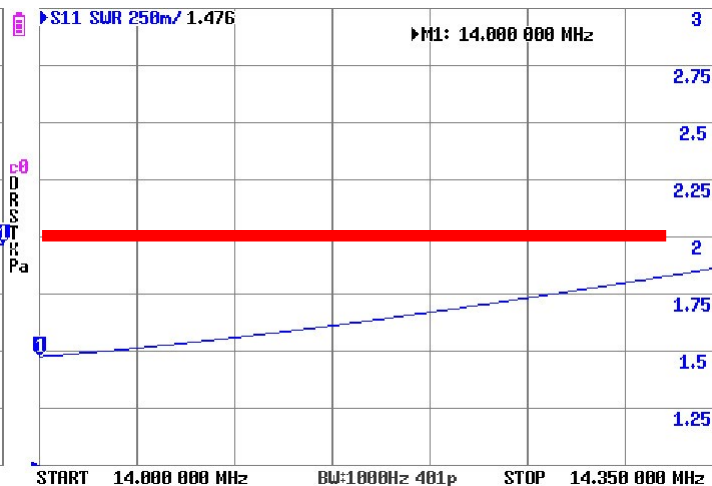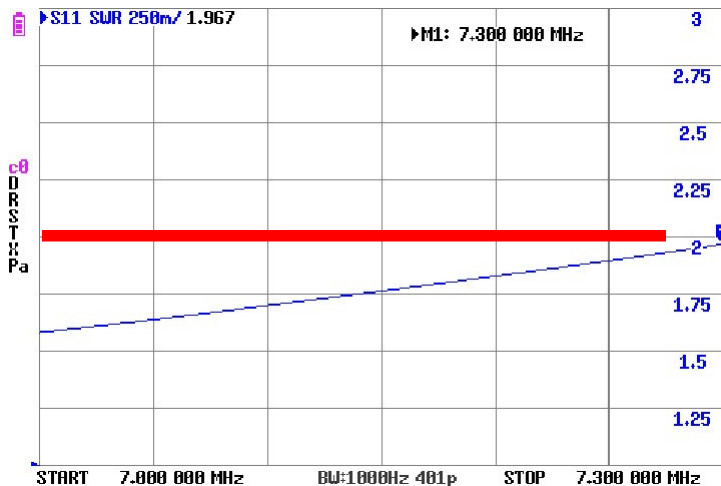Horizontal at 25'
Max Gain 9.21 dBi

40m EFHW antenna
Covers 40m, 20m, 15m and 10m

Tested with 25' of RG8X coax

Vertical with Counterpoise
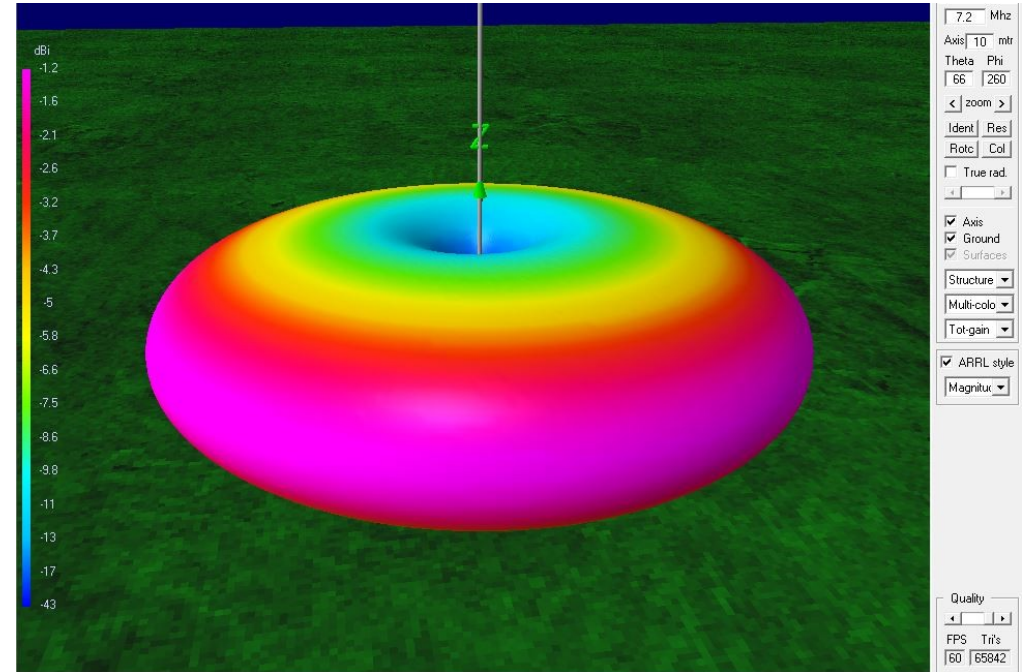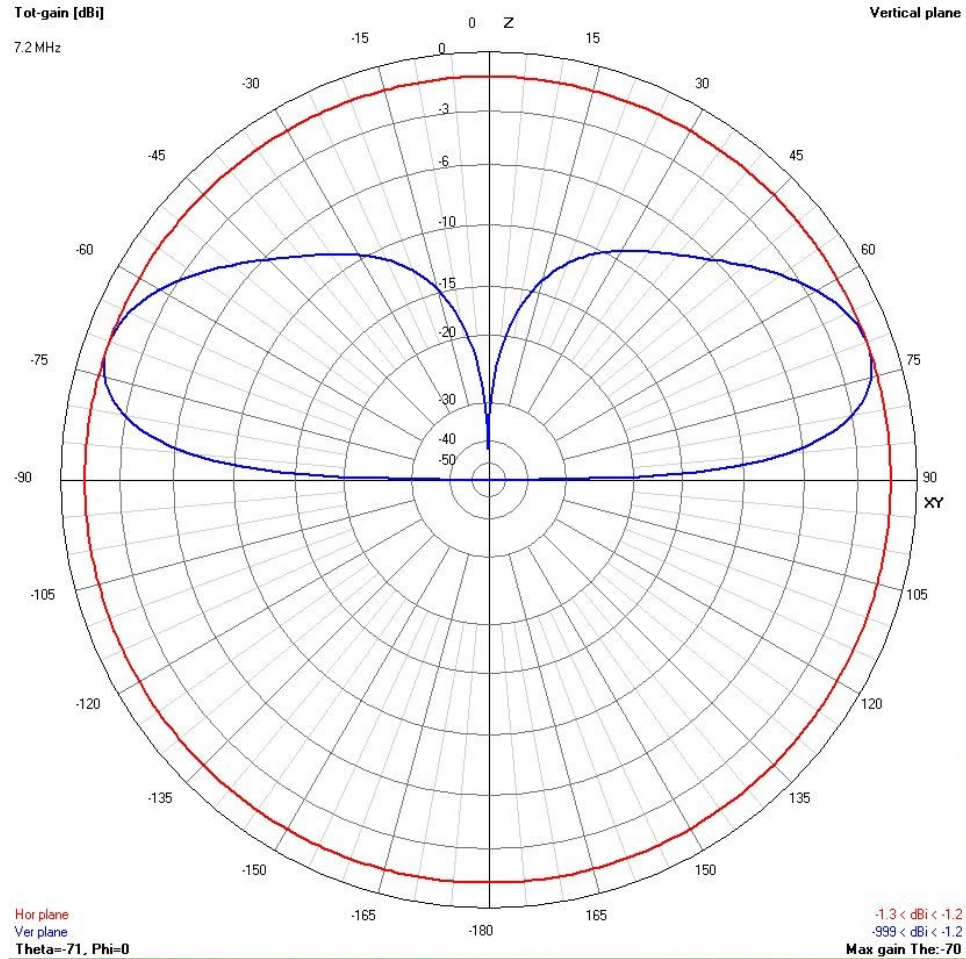And Transformer on the ground

These SWR measurements are for reference only and are specific to my location, ground condition, coax and proximity to objects. Installation at your location can be different from what is shown here.

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40m EFHW Antenna
40m Band Radiation pattern

Vertical with Counterpoise on ground

Tot-gain [dBi]
7.2 MHz

Vertical plane

Hor plane
Ver plane
Theta=-71, Phi=0

-1.3 < dBi < -1.2
-999 < dBi < -1.2
Max gain The:-70

7.2 Mhz
Axis 10 mtr
Theta Phi
66 260
< zoom >
Ident Res
Rotc Col
True rad.
Axis
Ground
Surfaces
Structure
Multi-colo
Tot-gain
ARRL style
Magnitud
Quality
FPS Tri's
60 65842

dBi
-1.2
-1.6
-2.1
-2.6
-3.2
-3.7
-4.3
-5
-5.8
-6.6
-7.5
-8.6
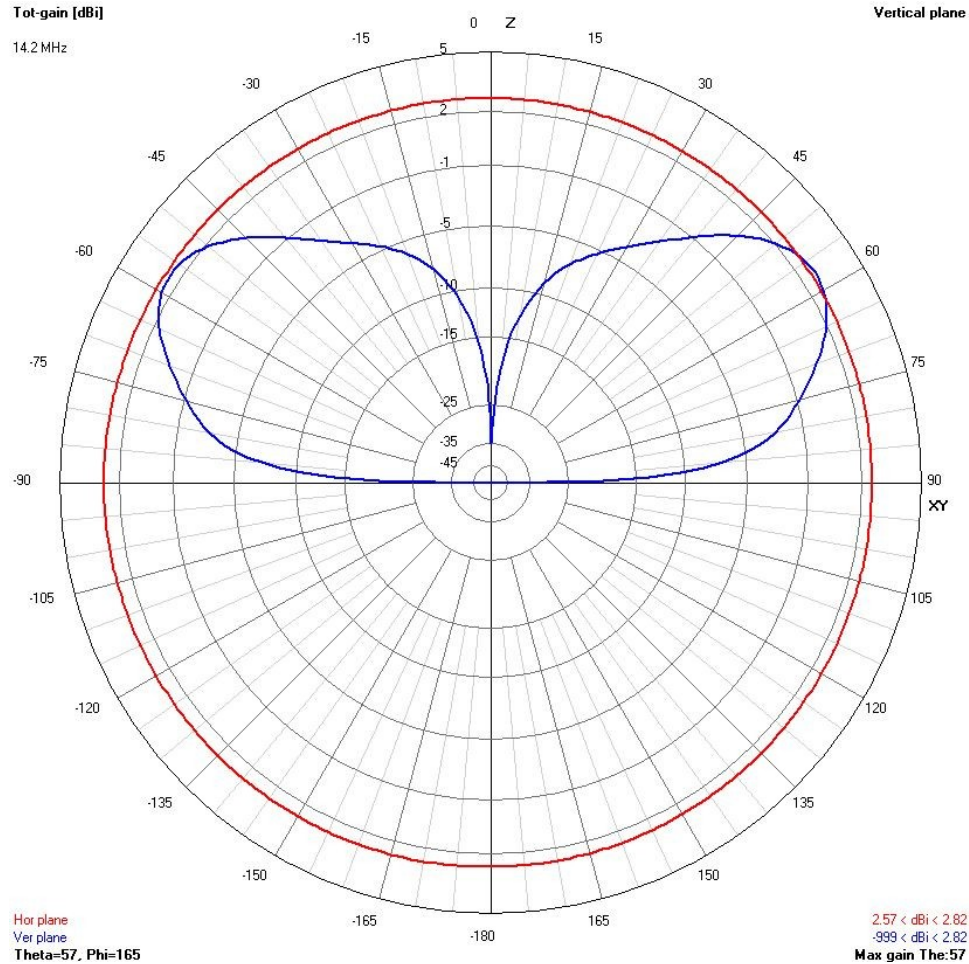-9.8
-11
-13
-17
-43

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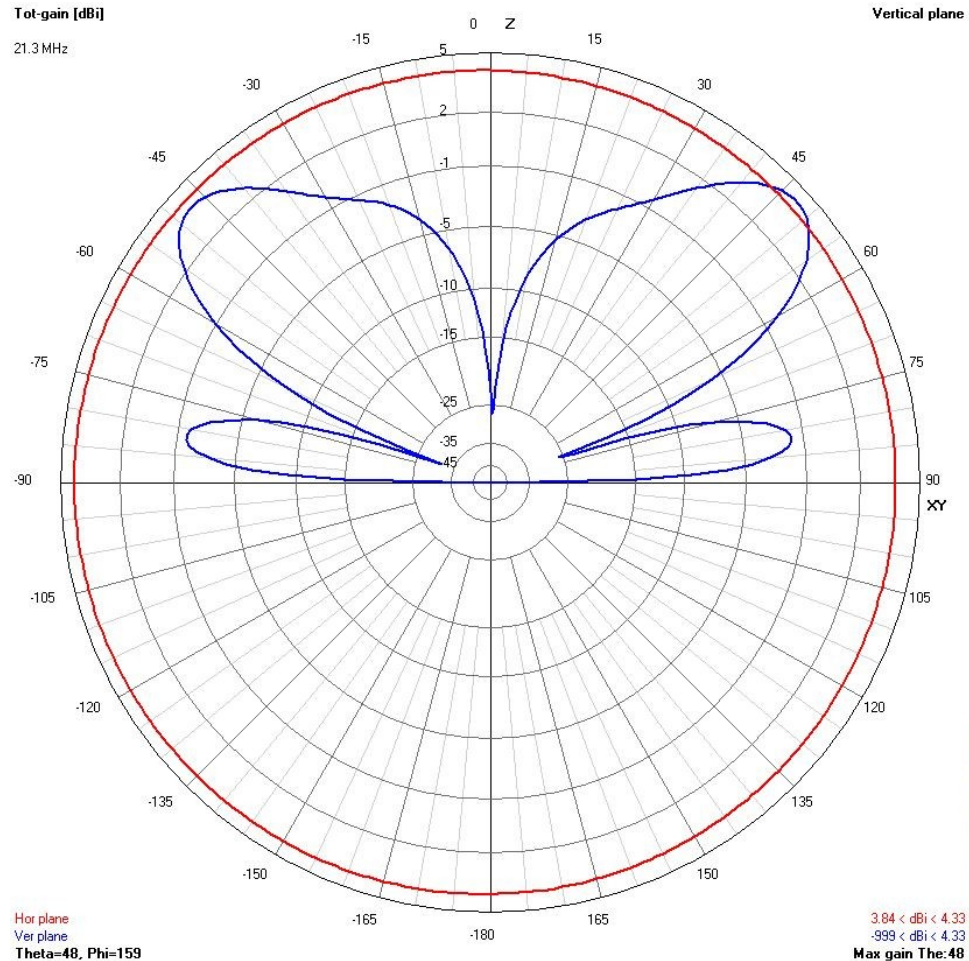
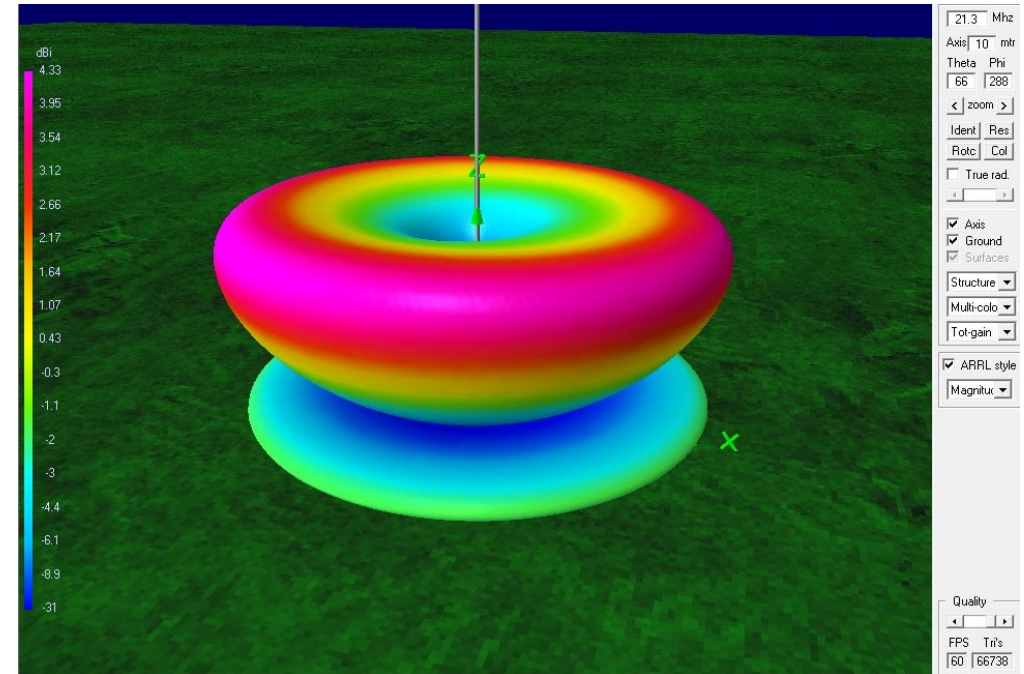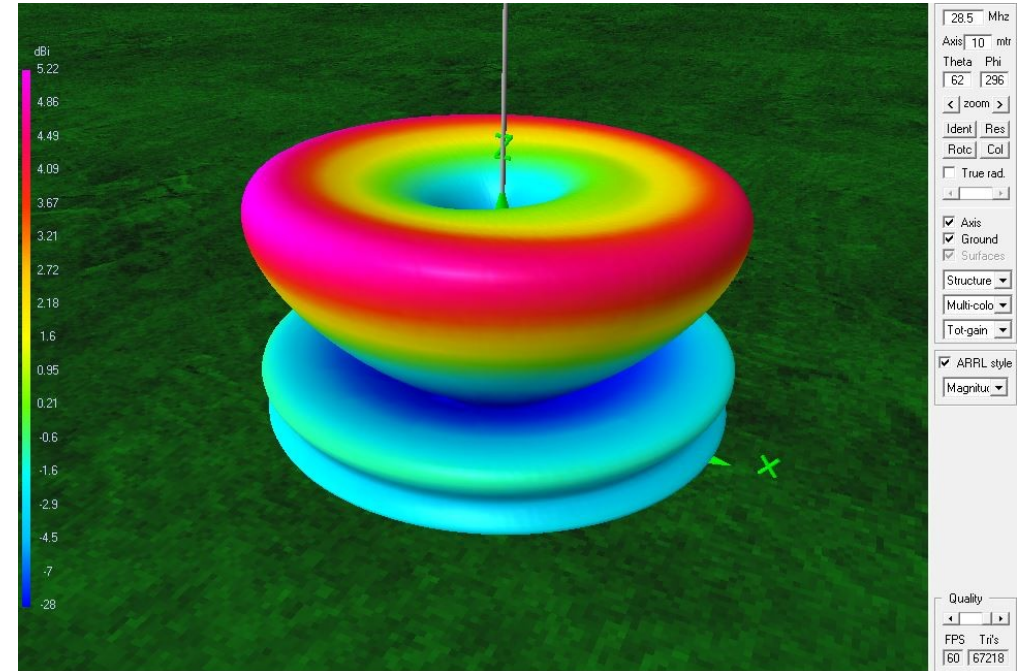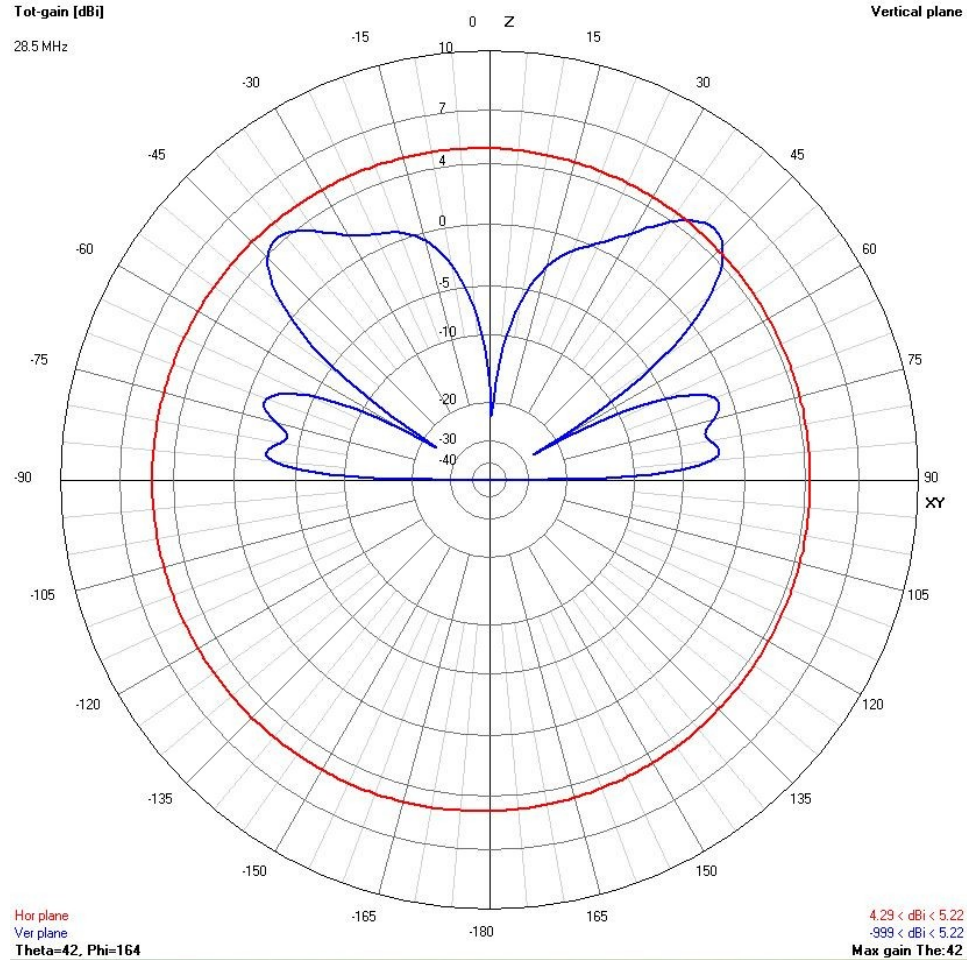40m EFHW Antenna
20m Band Radiation pattern

Vertical with Counterpoise on ground

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40m EFHW Antenna
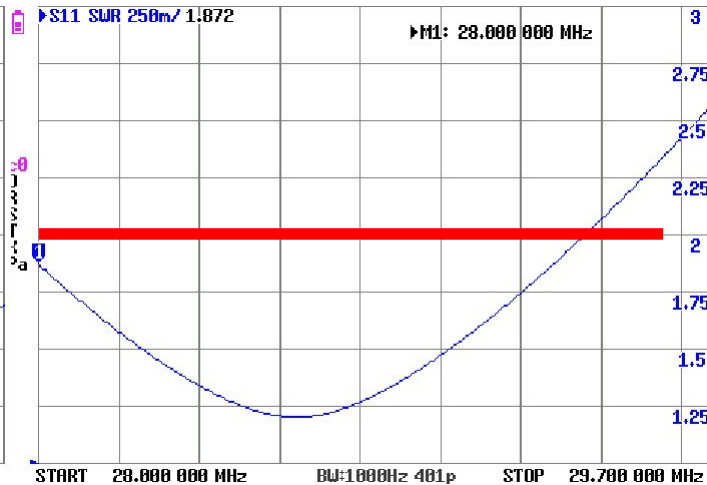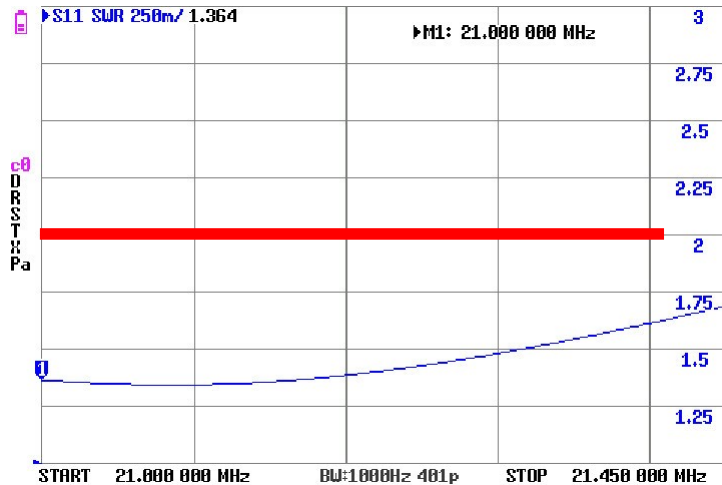15m Band Radiation pattern

Vertical with Counterpoise on ground

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40m EFHW Antenna
10m Band Radiation pattern

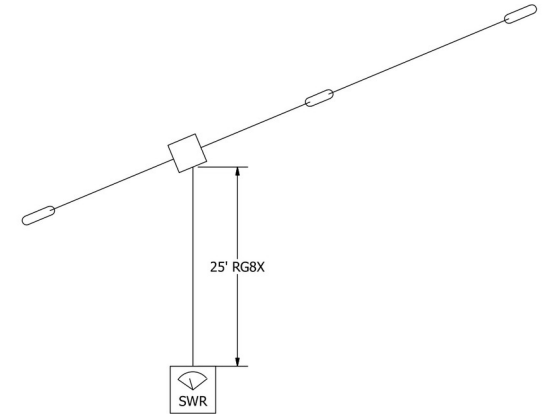Vertical with Counterpoise on ground

www.ke8usa.com
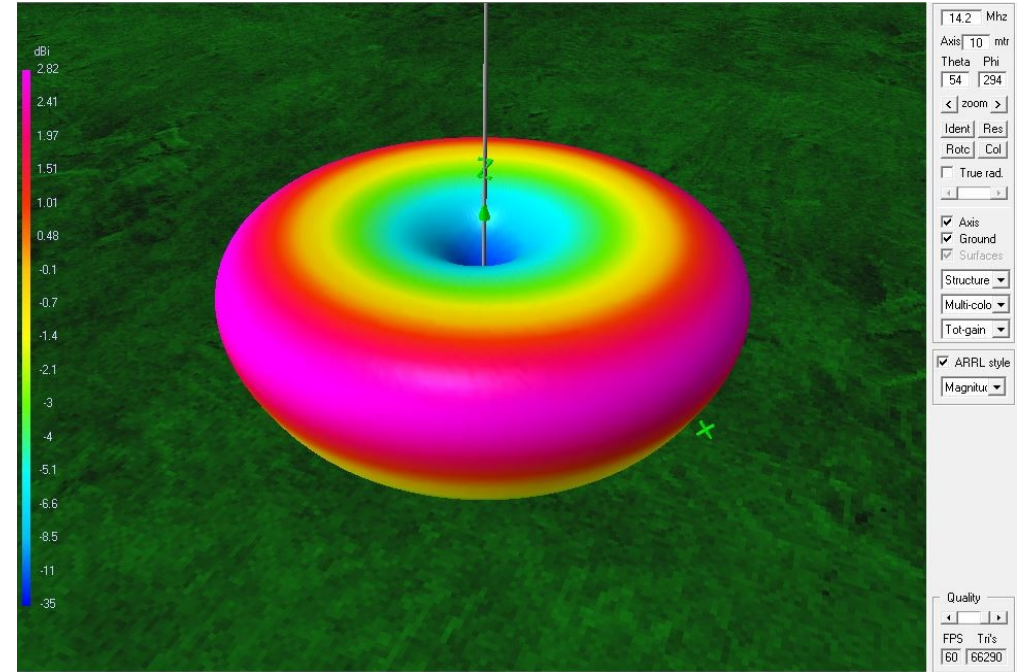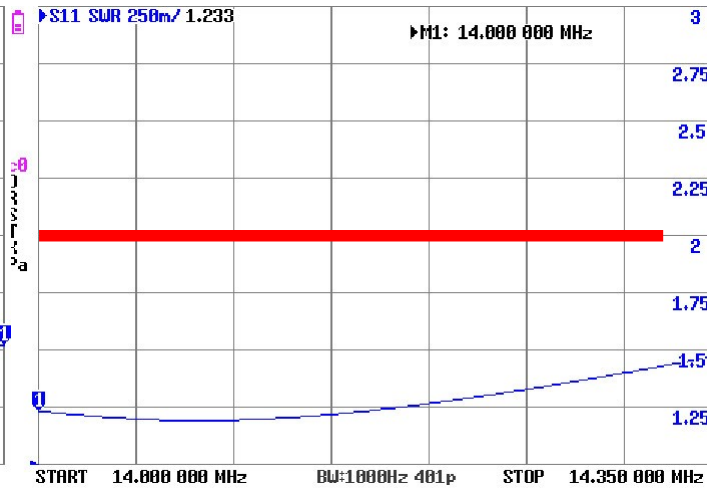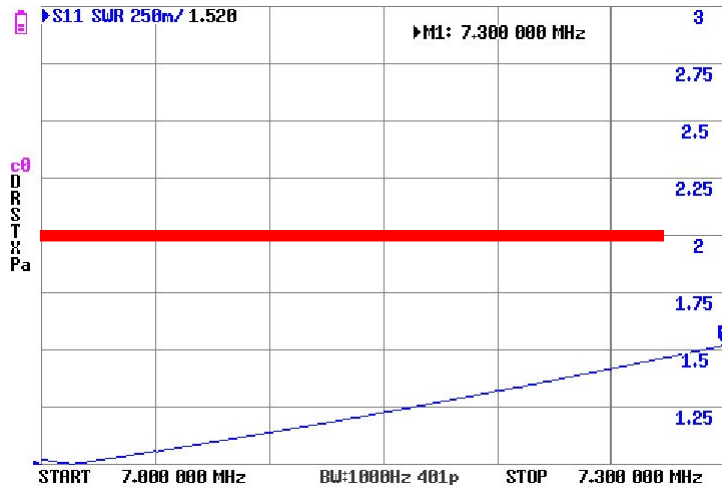
40m EFHW antenna
Covers 40m, 20m, 15m and 10m

Tested with 25' of RG8X coax

Slope, Low side at 7'. High side at 25'

25' RG8X

SWR

These SWR measurements are for reference only and are specific to my location, ground condition, coax and proximity to objects. Installation at your location can be different from what is shown here.

Chart 1 (top left): S11 SWR 250m/ 1.520, M1: 7.300 000 MHz, START 7.000 000 MHz, BW:1000Hz 401p, STOP 7.300 000 MHz

Chart 2 (top right): S11 SWR 250m/ 1.233, M1: 14.000 000 MHz, START 14.000 000 MHz, BW:1000Hz 401p, STOP 14.350 000 MHz

Chart 3 (bottom left): S11 SWR 250m/ 1.364, M1: 21.000 000 MHz, START 21.000 000 MHz, BW:1000Hz 401p, STOP 21.450 000 MHz

Chart 4 (bottom right): S11 SWR 250m/ 1.872, M1: 28.000 000 MHz, START 28.000 000 MHz, BW:1000Hz 401p, STOP 29.700 000 MHz

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40m EFHW antenna
Covers 40m, 20m, 15m and 10m

Tested with 25' of RG8X coax

Horizontal at 25'
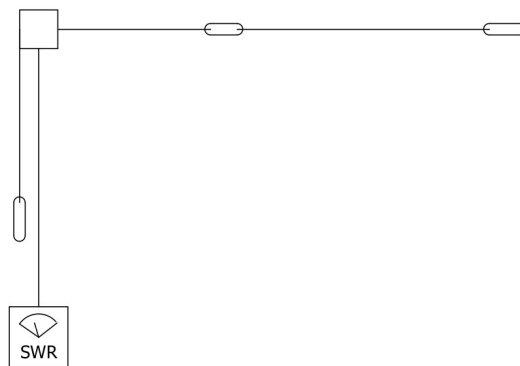Counterpoise hanging down

These SWR measurements are for reference only and are specific to my location, ground condition, coax and proximity to objects. Installation at your location can be different from what is shown here.

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