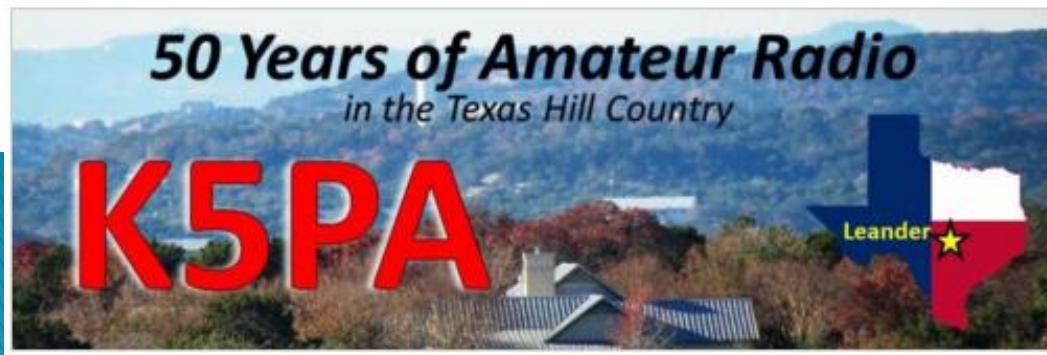


MyAntenna's EFHW 8010-1K Frequency Sweep Curves 80-10 Meters

January 4, 2017



MyAntennas

EFHW-8010 80-10m Dipole



End Fed Half Wave
EFHW-8010-1k
(Height About 20 Feet)

www.MyAntennas.com

User Manual

MyAntennas.com

Date: 11/2015

EFHW-8010-1K

End Fed Half Wave - EFHW
Antenna for
80/40/30/20/17/15/12/10m



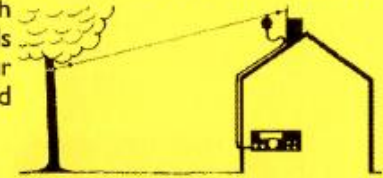
Specifications

- Frequency coverage: 3-30MHz
- Wire length: 130 feet (39.6m)
- Power Handling: 1kW I.C.A.S max.
- Weight: 2.25lbs. (1.02kg)
- Hardware: Stainless Steel
- Connector: Silver/Teflon SO-239

EFHW-8010-1K EFHW ANTENNA

This is perfect antenna for DXing, EMCOM, ALE HF-link stations, NVIS, MARS, ARES, RACES ...

Various installations such as horizontal, vertical, as inverted V, as inverted L, zigzag etc. are possible. Measured VSWRs are taken with antenna in inverted V shape with center of wire at 20 feet and ends at few feet above ground, your values could vary with way and height of installation.



Assembly

Just install the box on any surface such as wall, wooden post, tower or hang it from tree or any other structure. String the wire in any way you have room for and attach the coaxial line and grounding.

Always make sure that wire is at least 20 feet high above ground at the middle portion of 130 feet long wire. Extra foot of wire is left on the end insulator of antenna for fine tuning if needed. If resonant point on 80m (should be 3.55-3.6MHz) is too low for you, just cut the wire a bit to move that point upward in frequency. Note that resonant points on other bands will move too. This antenna will not need radials and in most cases NO Tuner at all.

Grounding at the lug next to the SO239 connector is recommended! Long wires tend to collect electrostatic charge (usually when weather is stormy) which can produce ESD (electrostatic discharge) at the end of your cable and damage your equipment.

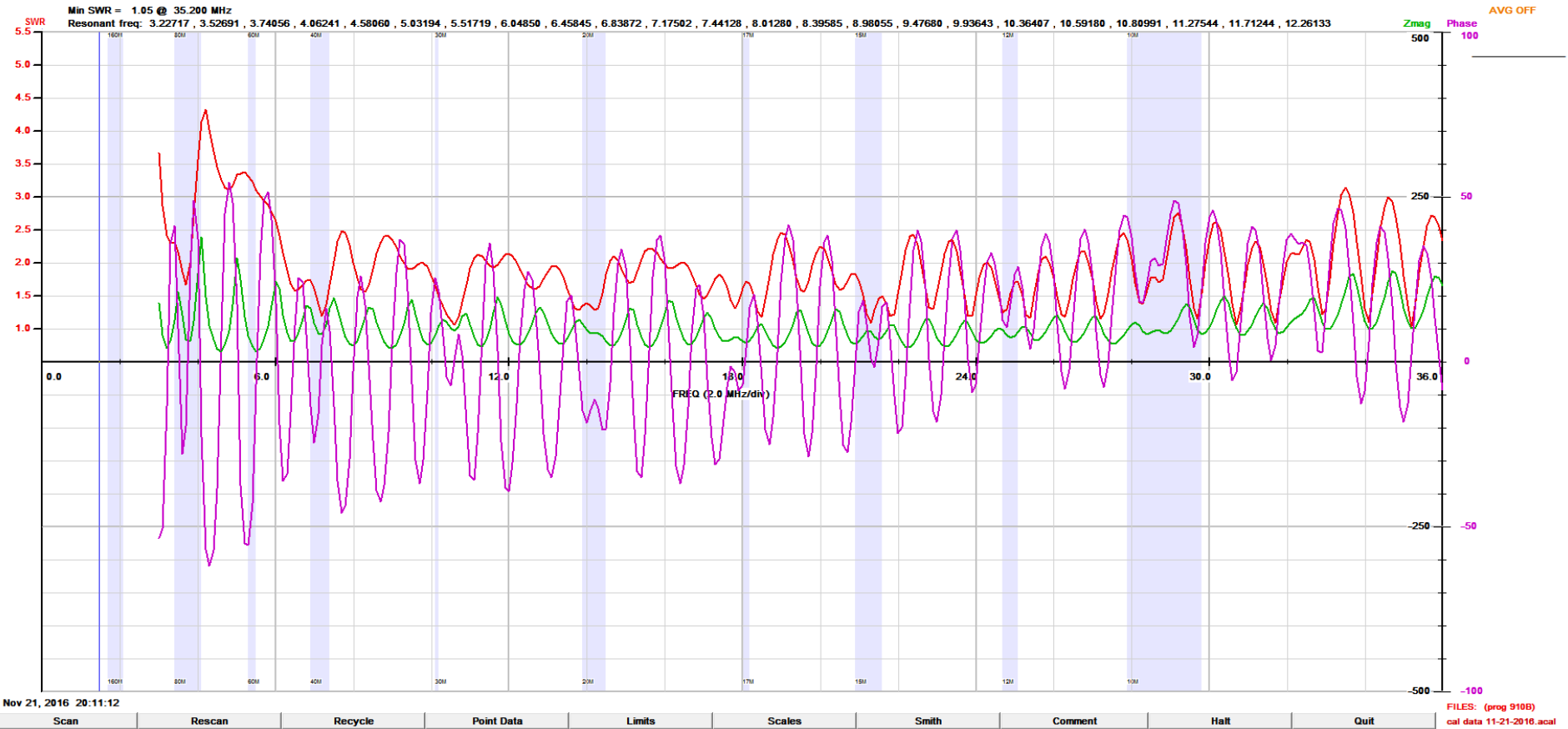
MEF-330-1K transformer box is sealed to avoid tempering with tuned circuit inside.

RF Sweep Plots for Antennae

- »» Vector Network Analyzer Plots
Array Solutions Model AIM 4170D
Software Version *AIM 900B*

End Fed Half Wave, 3-33 MHz

MyAntennas EFHW-8010

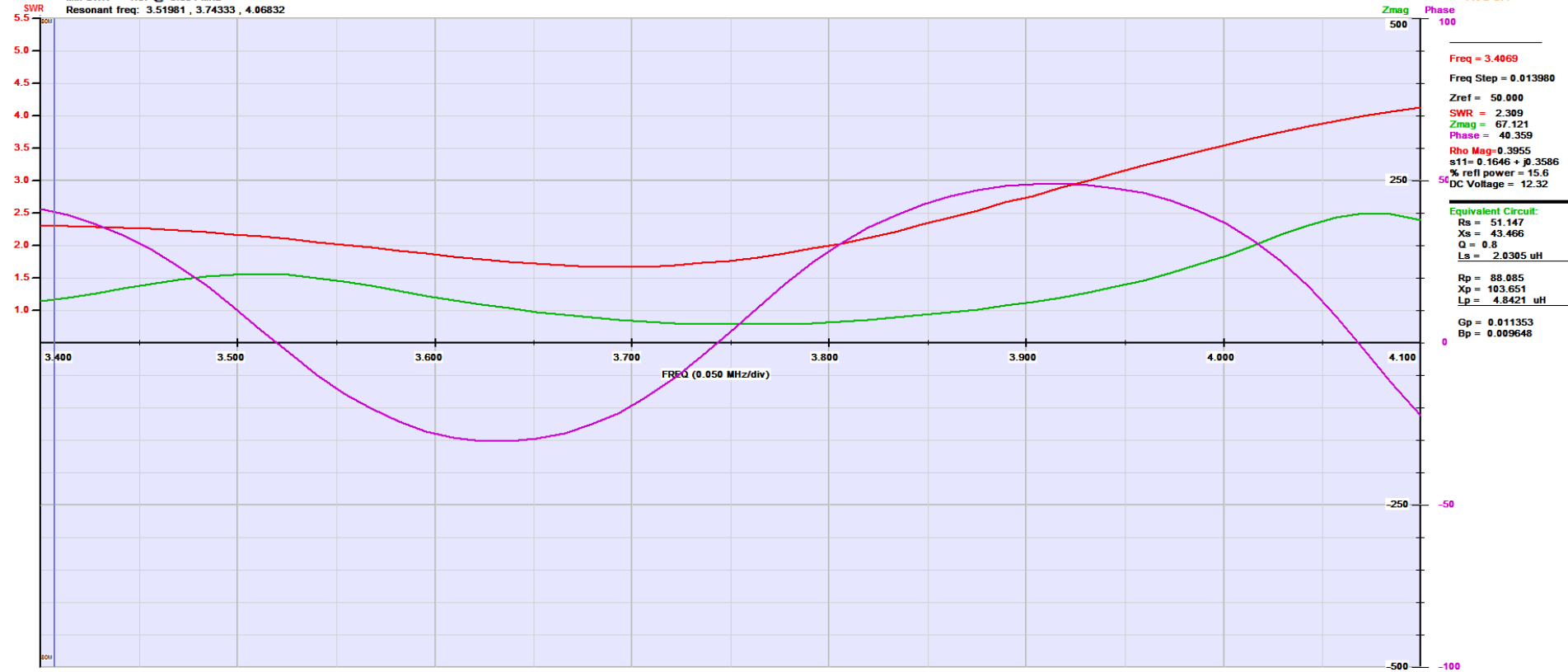


80m EFHW Response

MyAntennas EFHW-8010

Min SWR = 1.67 @ 3.694 MHz
 Resonant freq: 3.51981, 3.74333, 4.06832

AVG OFF



Freq = 3.4069
 Freq Step = 0.013980
 Zref = 50.000
 SWR = 2.309
 Zmag = 67.121
 Phase = -40.359
 Rho Mag = 0.3955
 s11 = 0.1646 + j0.3586
 % refl power = 15.6
 DC Voltage = 12.32

Equivalent Circuit:
 Rs = 51.147
 Xs = 43.466
 Q = 0.8
 Ls = 2.0305 uH
 Rp = 88.085
 Xp = 103.651
 Lp = 4.8421 uH
 Gp = 0.011353
 Bp = 0.009648

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 cal data 11-21-2016.acal
 AIM_confio.cfg

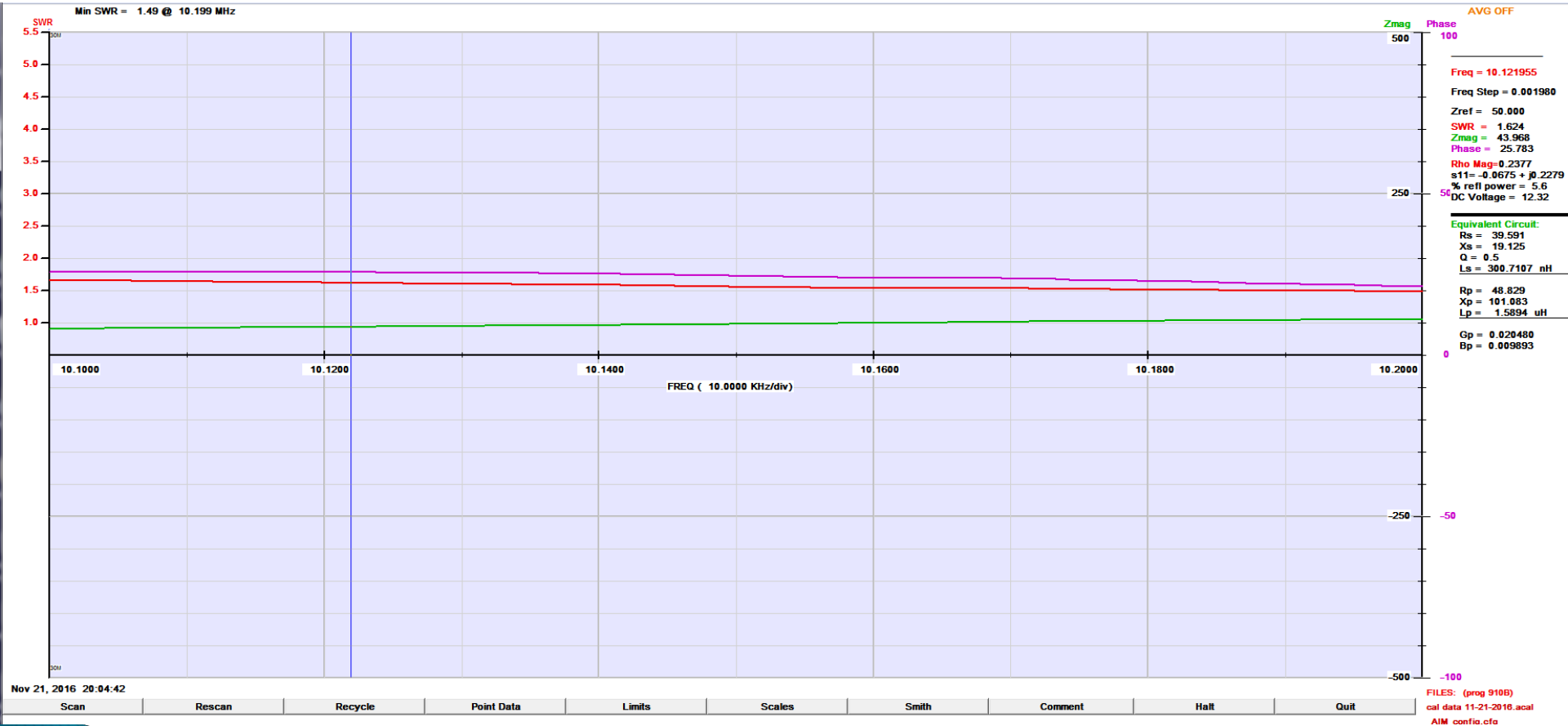
40m EFHW Response

MyAntennas EFHW-8010



30m EFHW Response

MyAntennas EFHW-8010



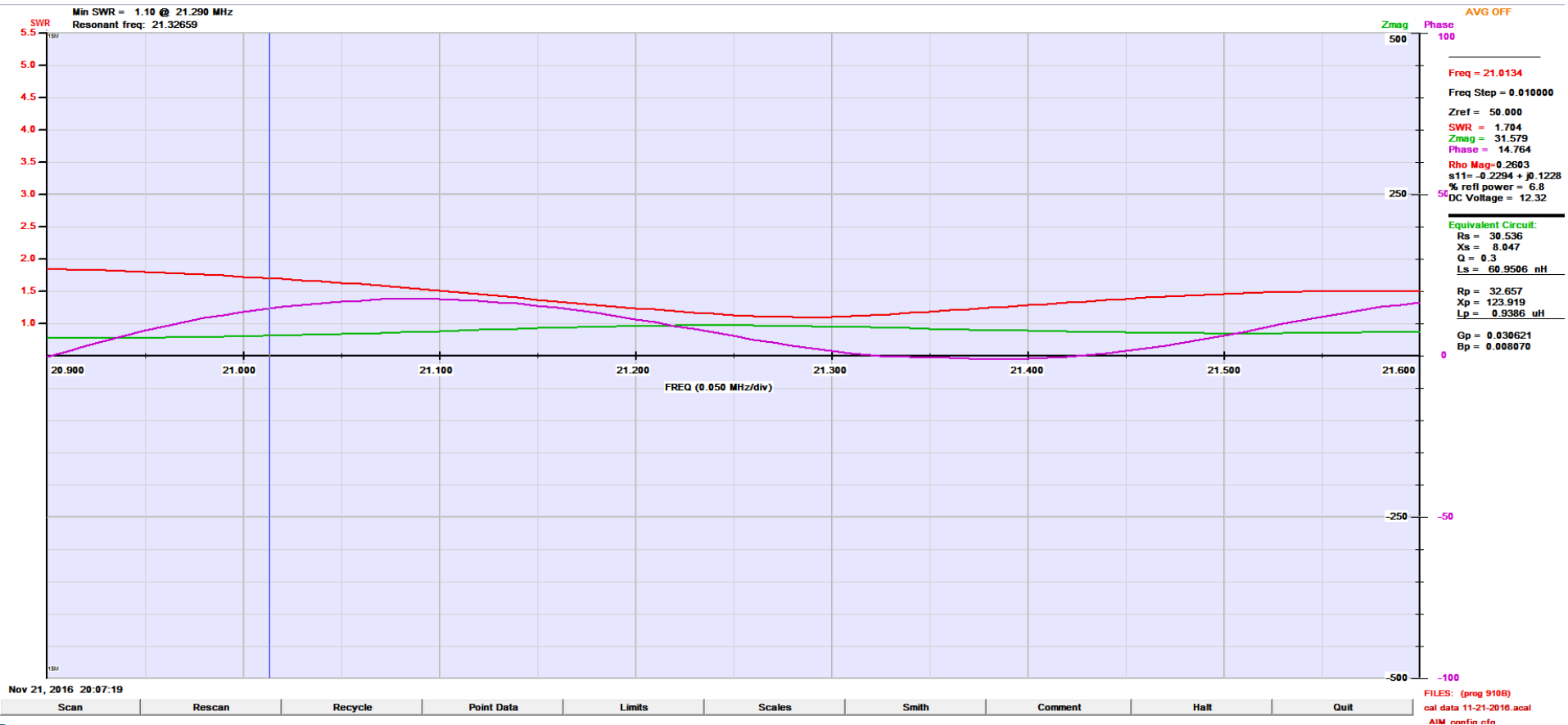
20m EFHW Response

MyAntennas EFHW-8010



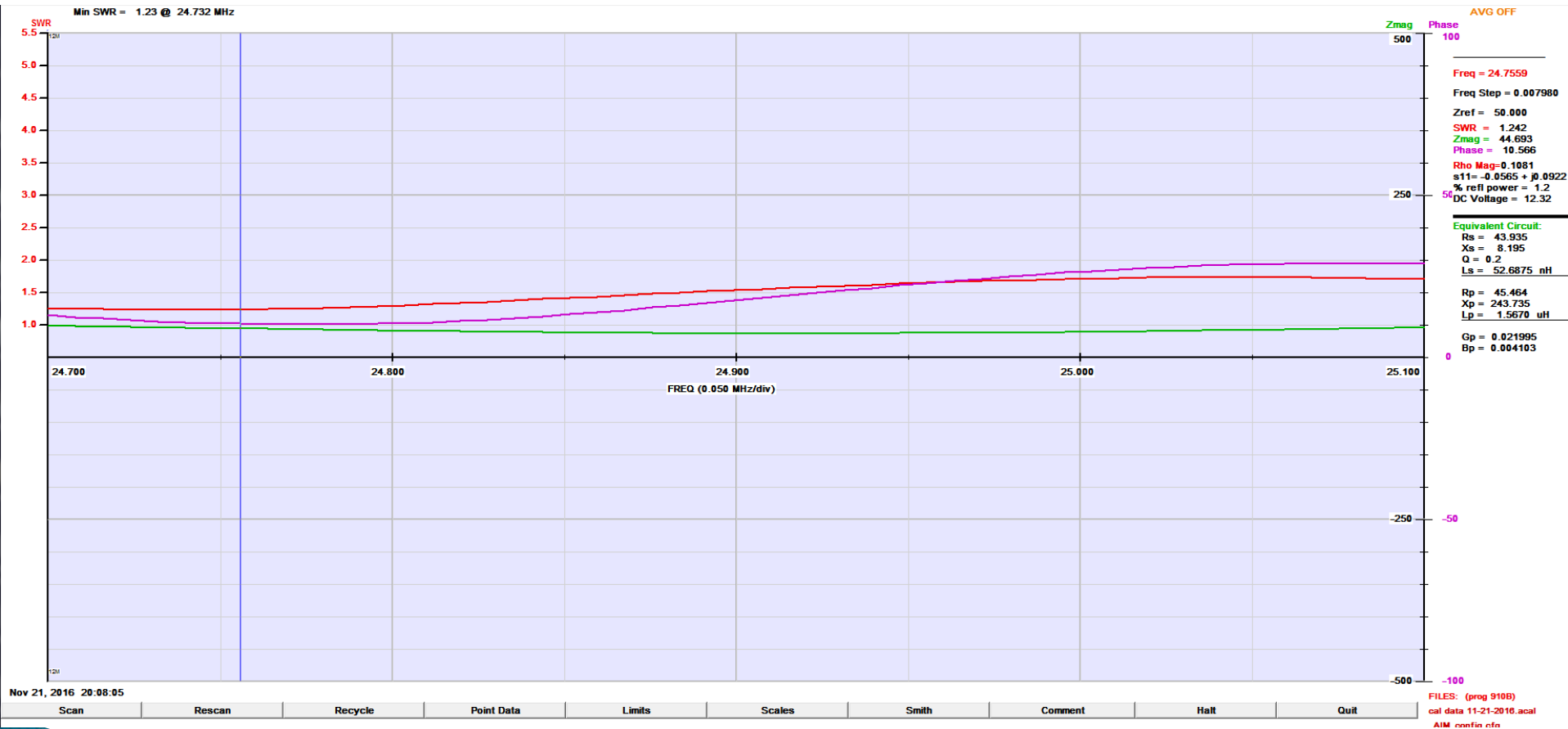
15m EFHW Response

MyAntennas EFHW-8010



12m EFHW Response

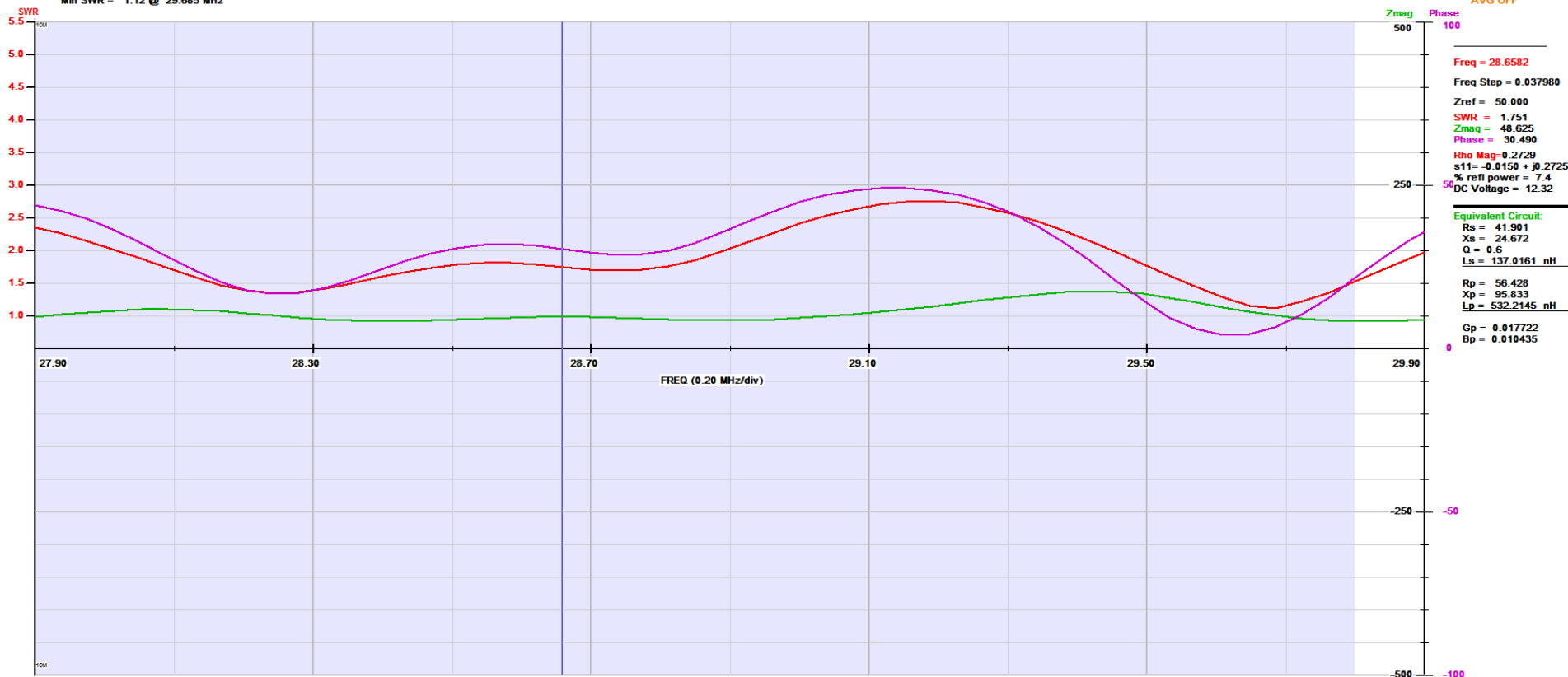
MyAntennas EFHW-8010



10m EFHW Response

MyAntennas EFHW-8010

Min SWR = 1.12 @ 29.685 MHz



AVG OFF

Equivalent Circuit:
 Rs = 41.901
 Xs = 24.672
 Q = 0.6
 Ls = 137.0161 nH
 Rp = 56.428
 Xp = 95.833
 Lp = 532.2145 nH
 Gp = 0.017722
 Bp = 0.010435

FILES: (prog 910B)
 cal data 11-21-2016.acal
 AIM confio.cfa

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Scan Rescan Recycle Point Data Limits Scales Smith Comment Halt Quit