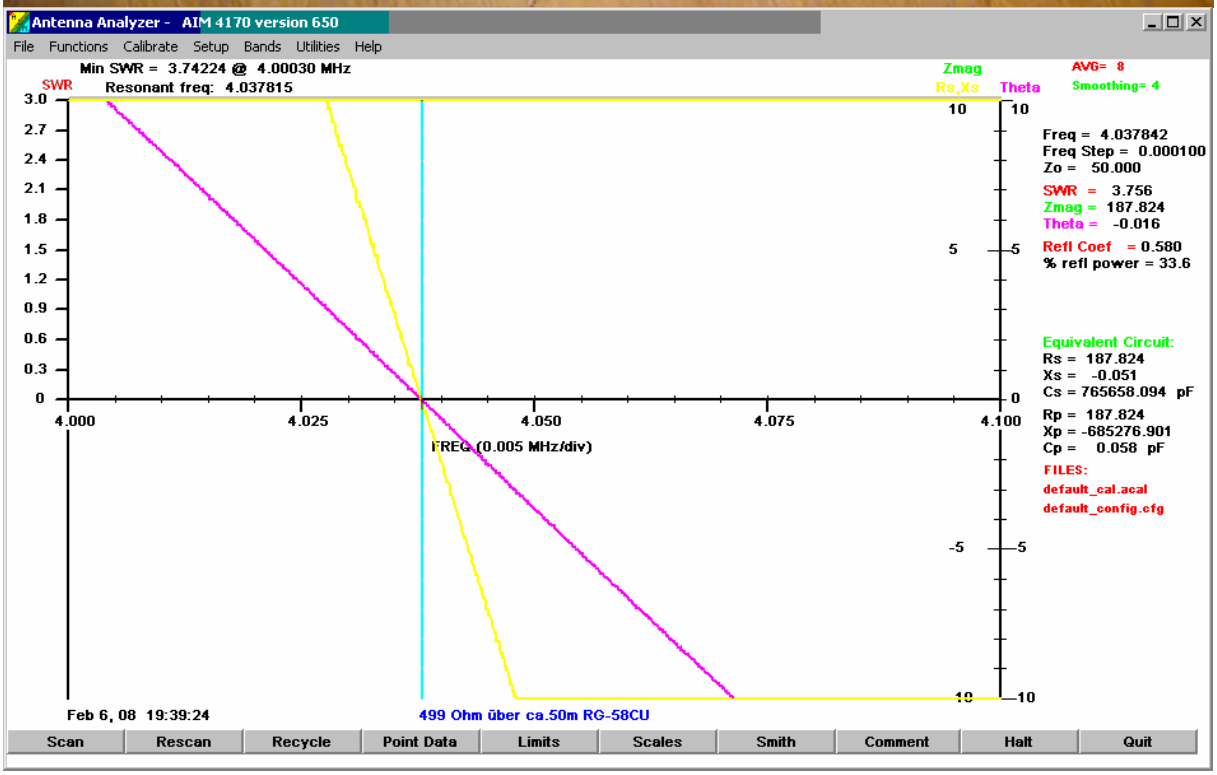
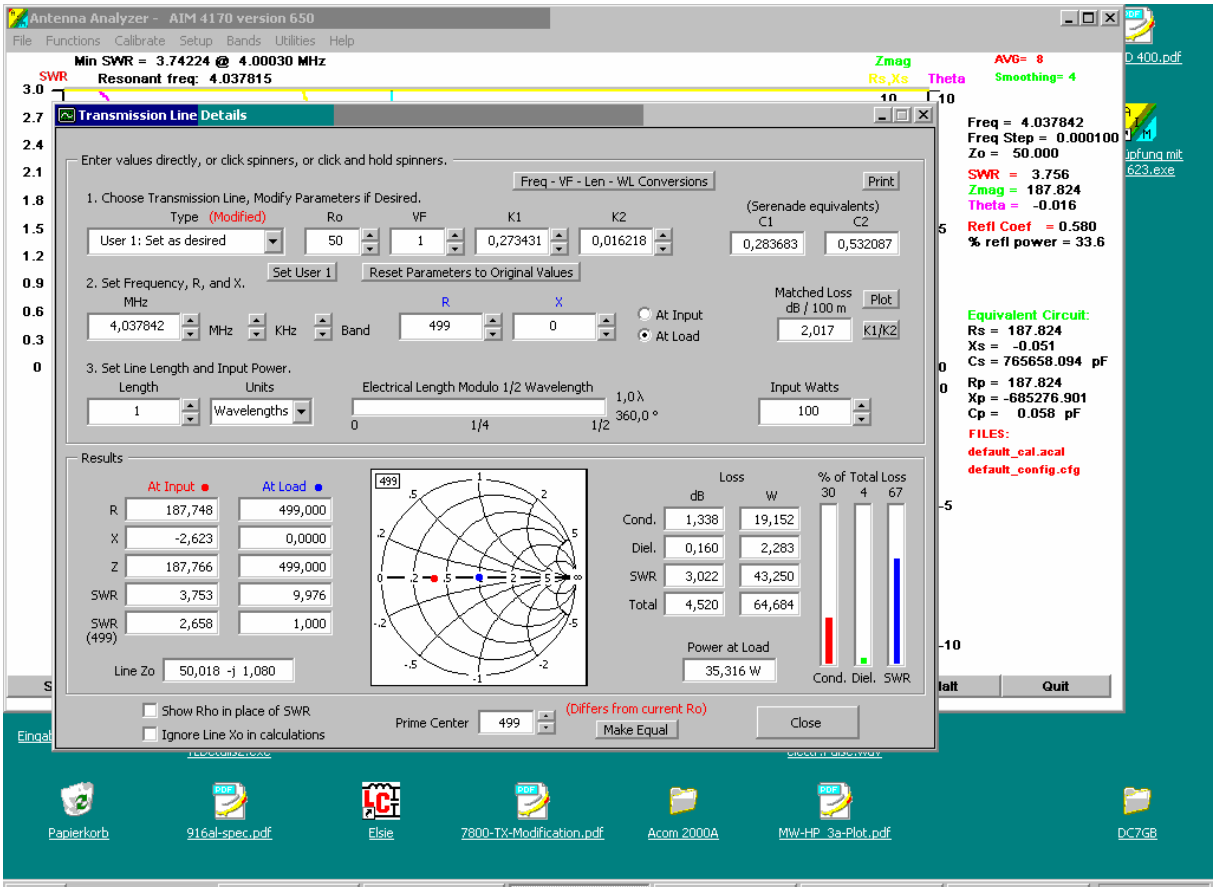
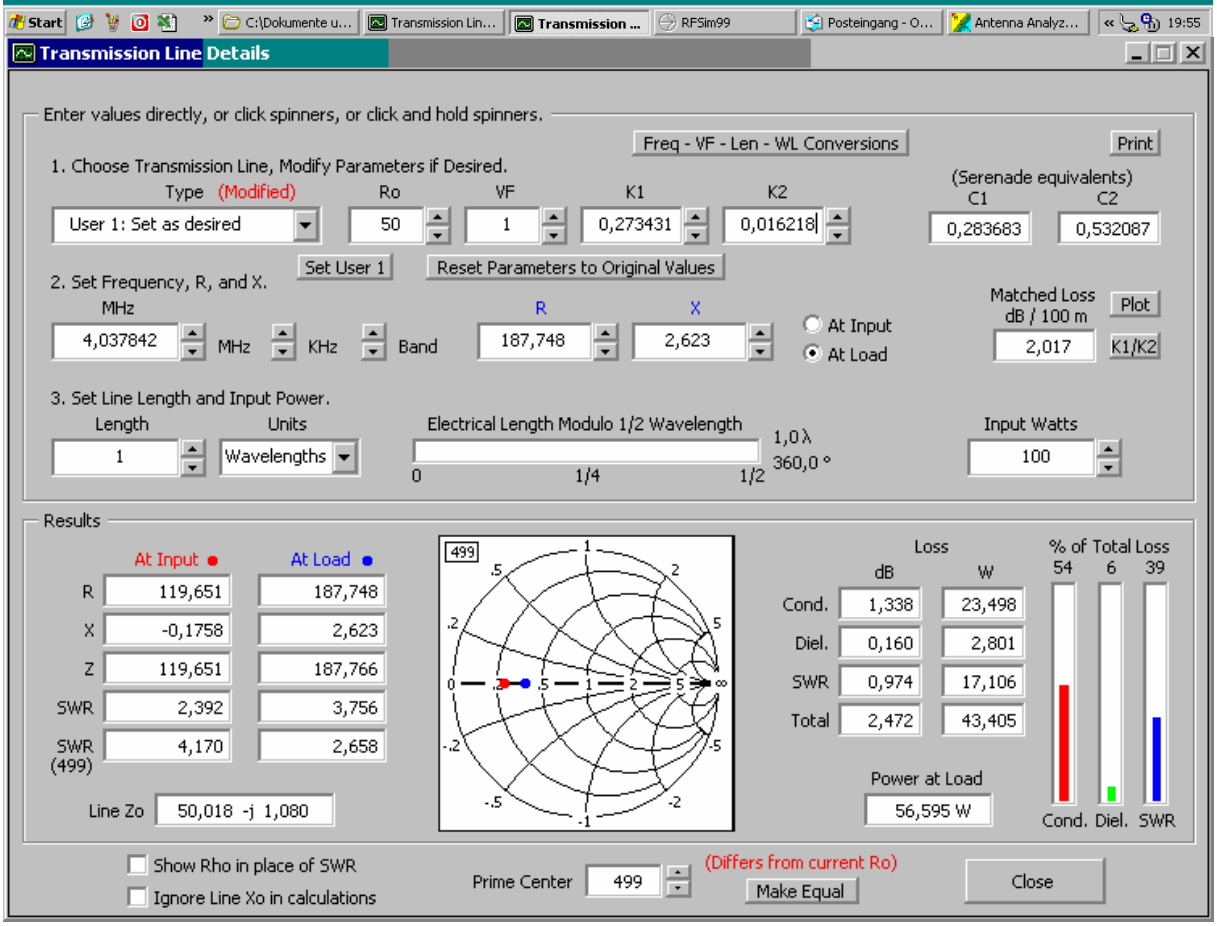
2008/02/06

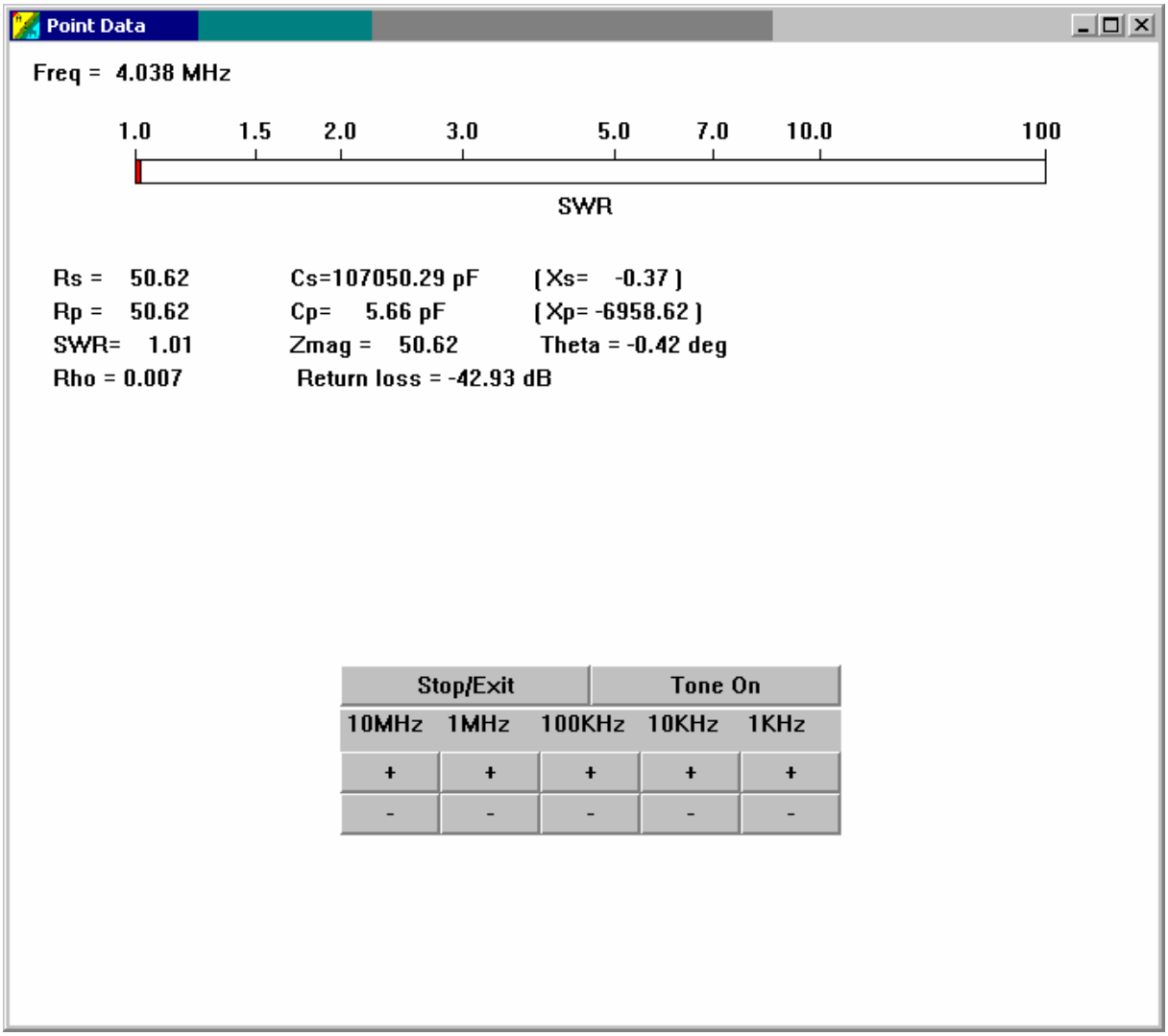

Antenna Analyzer - AIM 4170 version 650
File Functions Calibrate Setup Bands Utilities Help
Min SWR = 3.74224 @ 4.00030 MHz
Resonant freq: 4.037815
SWR
Zmag
Rs,Xs
Theta
AVG= 8
Smoothing= 4
3.0
2.7
2.4
2.1
1.8
1.5
1.2
0.9
0.6
0.3
0
10
5
-5
-10
4.000
4.025
4.050
4.075
4.100
FREQ (0.005 MHz/div)
Freq = 4.037842
Freq Step = 0.000100
Zo = 50.000
SWR = 3.756
Zmag = 187.824
Theta = -0.016
Refl Coef = 0.580
% refl power = 33.6
Equivalent Circuit:
Rs = 187.824
Xs = -0.051
Cs = 765658.094 pF
Rp = 187.824
Xp = -685276.901
Cp = 0.058 pF
FILES:
default_cal.acal
default_config.cfg
Feb 6, 08 19:39:24
499 Ohm über ca.50m RG-58CU
Scan
Rescan
Recycle
Point Data
Limits
Scales
Smith
Comment
Halt
Quit

436A POWER METER
HEWLETT · PACKARD
OVER RANGE
UNDER RANGE
- 1.49
W
mW
µW
nW
dBm
dB(REL)
ZERO
REMOTE
MODE
WATT
dBm
dB(REF)
RANGE HOLD
SENSOR ZERO
POWER REF
ON
SENSOR
DO NOT EXCEED SENSOR MAX POWER
CAL FACTOR %
CAL ADJ
OUTPUT
2008/02/04

436A POWER METER
HEWLETT · PACKARD
OVER RANGE
UNDER RANGE
- 2.20
W
mW
µW
nW
dBm
dB(REL)
ZERO
REMOTE
MODE
WATT
dBm
dB(REF)
RANGE HOLD
SENSOR ZERO
POWER REF
ON
SENSOR
DO NOT EXCEED SENSOR MAX POWER
CAL FACTOR %
CAL ADJ
OUTPUT
2008/02/04


Antenna Analyzer - AIM 4170 version 650
File Functions Calibrate Setup Bands Utilities Help
Min SWR = 3.74224 @ 4.00030 MHz
Resonant freq: 4.037815
Transmission Line Details
Enter values directly, or click spinners, or click and hold spinners.
Freq - VF - Len - WL Conversions
Print
1. Choose Transmission Line, Modify Parameters if Desired.
Type (Modified)
User 1: Set as desired
Ro 50
VF 1
K1 0,273431
K2 0,016218
(Serenade equivalents)
C1 0,283683
C2 0,532087
Set User 1
Reset Parameters to Original Values
2. Set Frequency, R, and X.
MHz 4,037842
R 499
X 0
At Input
At Load
Matched Loss dB / 100 m 2,017
Plot
K1/K2
3. Set Line Length and Input Power.
Length 1
Units Wavelengths
Electrical Length Modulo 1/2 Wavelength
1,0 λ
360,0 °
Input Watts 100
Results
At Input
At Load
R 187,748 499,000
X -2,623 0,0000
Z 187,766 499,000
SWR 3,753 9,976
SWR (499) 2,658 1,000
Line Zo 50,018 -j 1,080
Loss dB W
Cond. 1,338 19,152
Diel. 0,160 2,283
SWR 3,022 43,250
Total 4,520 64,684
% of Total Loss 30 4 67
Cond. Diel. SWR
Power at Load 35,316 W
Show Rho in place of SWR
Ignore Line Xo in calculations
Prime Center 499
(Differs from current Ro)
Make Equal
Close
Freq = 4.037842
Freq Step = 0.000100
Zo = 50.000
SWR = 3.756
Zmag = 187.824
Theta = -0.016
Refl Coef = 0.580
% refl power = 33.6
Equivalent Circuit:
Rs = 187.824
Xs = -0.051
Cs = 765658.094 pF
Rp = 187.824
Xp = -685276.901
Cp = 0.058 pF
FILES:
default_cal.acal
default_config.cfg
Quit
Papierkorb
916al-spec.pdf
Elsie
7800-TX-Modification.pdf
Acom 2000A
MW-HP 3a-Plot.pdf
DC7GB


Transmission Line Details
Enter values directly, or click spinners, or click and hold spinners.
Freq - VF - Len - WL Conversions
Print
1. Choose Transmission Line, Modify Parameters if Desired.
Type (Modified)
User 1: Set as desired
Ro 50
VF 1
K1 0,273431
K2 0,016218
(Serenade equivalents)
C1 0,283683
C2 0,532087
Set User 1
Reset Parameters to Original Values
2. Set Frequency, R, and X.
MHz 4,037842
R 187,748
X 2,623
At Input
At Load
Matched Loss dB / 100 m 2,017
Plot
K1/K2
3. Set Line Length and Input Power.
Length 1
Units Wavelengths
Electrical Length Modulo 1/2 Wavelength
1,0 λ
360,0 °
Input Watts 100
Results
At Input
At Load
R 119,651 187,748
X -0,1758 2,623
Z 119,651 187,766
SWR 2,392 3,756
SWR (499) 4,170 2,658
Line Zo 50,018 -j 1,080
Loss dB W
Cond. 1,338 23,498
Diel. 0,160 2,801
SWR 0,974 17,106
Total 2,472 43,405
% of Total Loss 54 6 39
Cond. Diel. SWR
Power at Load 56,595 W
Show Rho in place of SWR
Ignore Line Xo in calculations
Prime Center 499
(Differs from current Ro)
Make Equal
Close


Point Data
Freq = 4.038 MHz
1.0
1.5
2.0
3.0
5.0
7.0
10.0
100
SWR
Rs = 50.62
Cs=107050.29 pF
(Xs= -0.37)
Rp = 50.62
Cp= 5.66 pF
(Xp= -6958.62)
SWR= 1.01
Zmag = 50.62
Theta = -0.42 deg
Rho = 0.007
Return loss = -42.93 dB
Stop/Exit
Tone On
10MHz
1MHz
100KHz
10KHz
1KHz
+
+
+
+
+
-
-
-
-
-

Sender
Ant
2008/02/05

HF-DC MILLIVOLTMETER · URV · 216.3612.02
ROHDE & SCHWARZ
Versorgungs-Nr.
6625-12-162-2569
MADE IN GERMANY
SER. 880 452/19
V
dB
DC-POLARITÄT
NULL [3 mV]
DC
AC
BATT.
MESSKOPF
PROBE
AUS
OFF
EINGANGE · INPUTS
AUSGANG · OUTPUT
PWR
ON
OFF
ATTENUATOR
VOLTCRAFT
2008/02/06

HF-DC MILLIVOLTMETER · URV · 216.3612.02
ROHDE & SCHWARZ
Versorgungs-Nr.
6625-12-162-2569
MADE IN GERMANY
SER. 860 452/19
V
dB
DC-POLARITÄT
NULL (3 mV)
DC
AC
BATT.
AUS
OFF
MESSKOPF
PROBE
0.3 V
−10 dB
1 V
0 dB
3 V
+10 dB
10 V
+20 dB
0.1 V
−20 dB
30 mV
−30 dB
10 mV
−40 dB
3 mV
−50 dB
30 V
1000 V
EINGÄNGE · INPUTS
AUSGANG · OUTPUT
2008/02/06
PWR
ON
OFF
ATTENUATOR
-40dB
-20dB
VOLTCRAFT
GENERATOR
RANGE Hz