

# **K9AY Antenna Tuning Coil Tests – 2010-11-07**

Coil Tap	Ftest	XL	L uH	C pF Resonance
160M	1.8 MHz	284.5	25.16	310.73
160M	2.0 MHz	318.4	25.34	249.91
160M	3.5 MHz	644.9	29.33	70.50
160M	4.0 MHz	789.7	31.42	50.39
80M	3.5 MHz	309.3	14.06	147.02
80M	4.0 MHz	364.6	14.51	109.11
60M	5.3305 MHz	425.6	12.71	70.14
60M	5.4035 MHz	329.0	9.69	89.53
40M	7.0 MHz	480.2	10.92	47.35
40M	7.3 MHz	520.0	11.34	41.92
30M	10.1 MHz	537.0	8.46	29.34
30M	10.15 MHz	500.2	7.84	31.35



Fc (KH

Z (ohms)

A (deg

R (ohm)

X (ohm

SWR

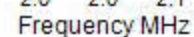
RL (db)

Reflection Co

### Reflection A

Q

◀ ▶ Freq. Curso



SWR	<input checked="" type="checkbox"/>
Impedance	<input checked="" type="checkbox"/>
Reactance	<input checked="" type="checkbox"/>
Resistance	<input checked="" type="checkbox"/>
PhaseAngle	<input checked="" type="checkbox"/>
ReturnLoss	<input checked="" type="checkbox"/>
Reflection Coef	<input checked="" type="checkbox"/>
Reflection Angle	<input checked="" type="checkbox"/>

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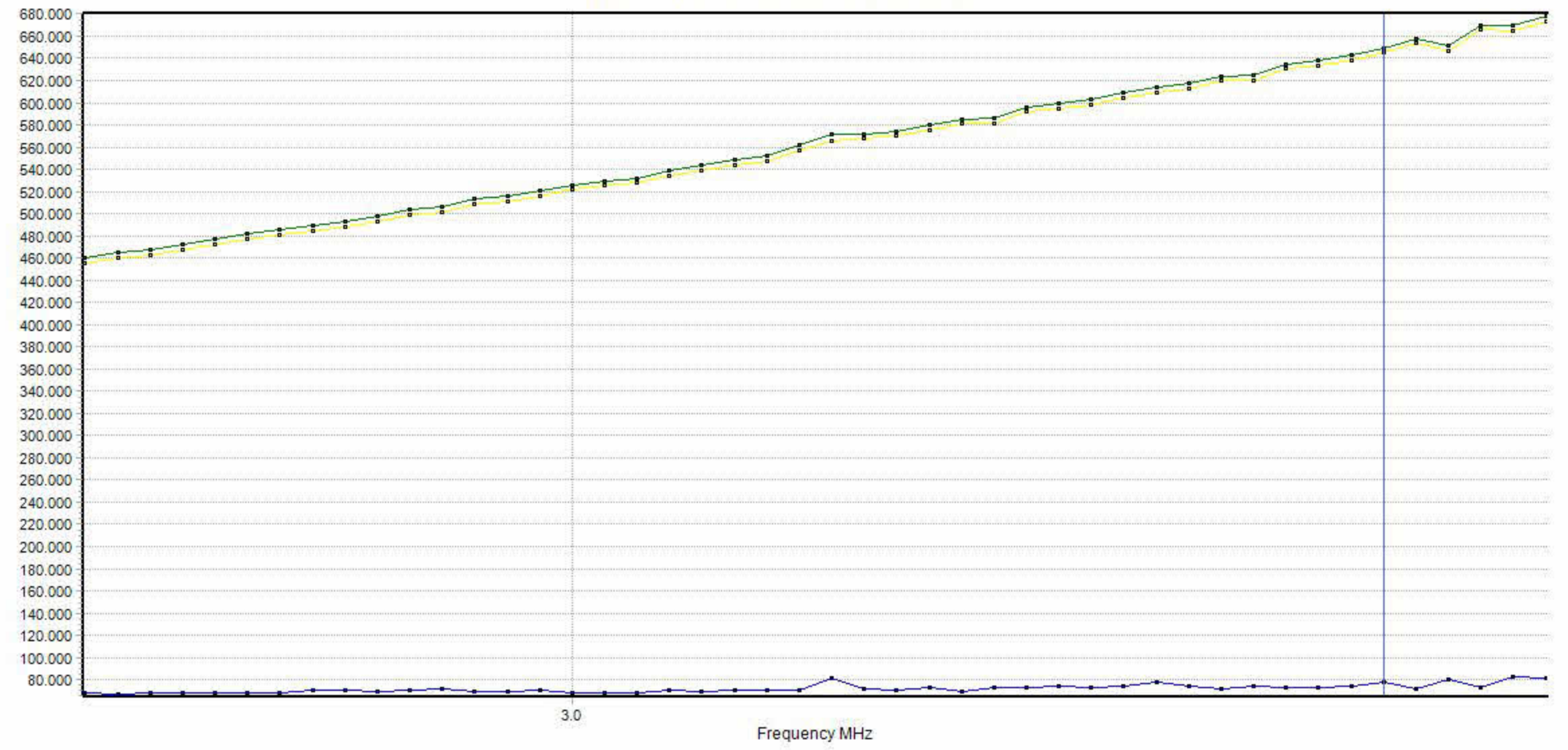
SWR	-----	
Impedance	-----	
Reactance	-----	
Resistance	-----	
PhaseAngle	-----	
ReturnLoss	-----	
Reflection Coef	-----	
Reflection Angle	-----	

3,500 Fc (KH)  
 649.5 Z (ohms)  
 83.2 A (deg)  
 77.4 R (ohm)  
 644.9 X (ohm)  
 100.00 SWR  
 -0.2 RL (db)  
 0.982 Reflection Co  
 8.7 Reflection A

0.00 Q

Point No. = 40  
 Freq. Cursor

### K9AY Reactance - Full Coil - 3.5 MHz



<b>Left Axis</b> SWR <input checked="" type="checkbox"/> Impedance <input checked="" type="checkbox"/> Reactance <input checked="" type="checkbox"/> Resistance <input checked="" type="checkbox"/> PhaseAngle <input checked="" type="checkbox"/> ReturnLoss <input checked="" type="checkbox"/> Reflection Coef <input checked="" type="checkbox"/> Reflection Angle <input checked="" type="checkbox"/>	<b>Plot On/Off</b> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<b>Points On/Off</b> <input checked="" type="checkbox"/> RealTime Data On/Off <input type="checkbox"/> Noise Filter On/Off <input type="checkbox"/> Min. Zoom scale On/Off <input checked="" type="checkbox"/>	<b>Right Axis</b> SWR <input type="checkbox"/> Impedance <input type="checkbox"/> Reactance <input type="checkbox"/> Resistance <input type="checkbox"/> PhaseAngle <input type="checkbox"/> ReturnLoss <input type="checkbox"/> Reflection Coef <input type="checkbox"/> Reflection Angle <input type="checkbox"/>
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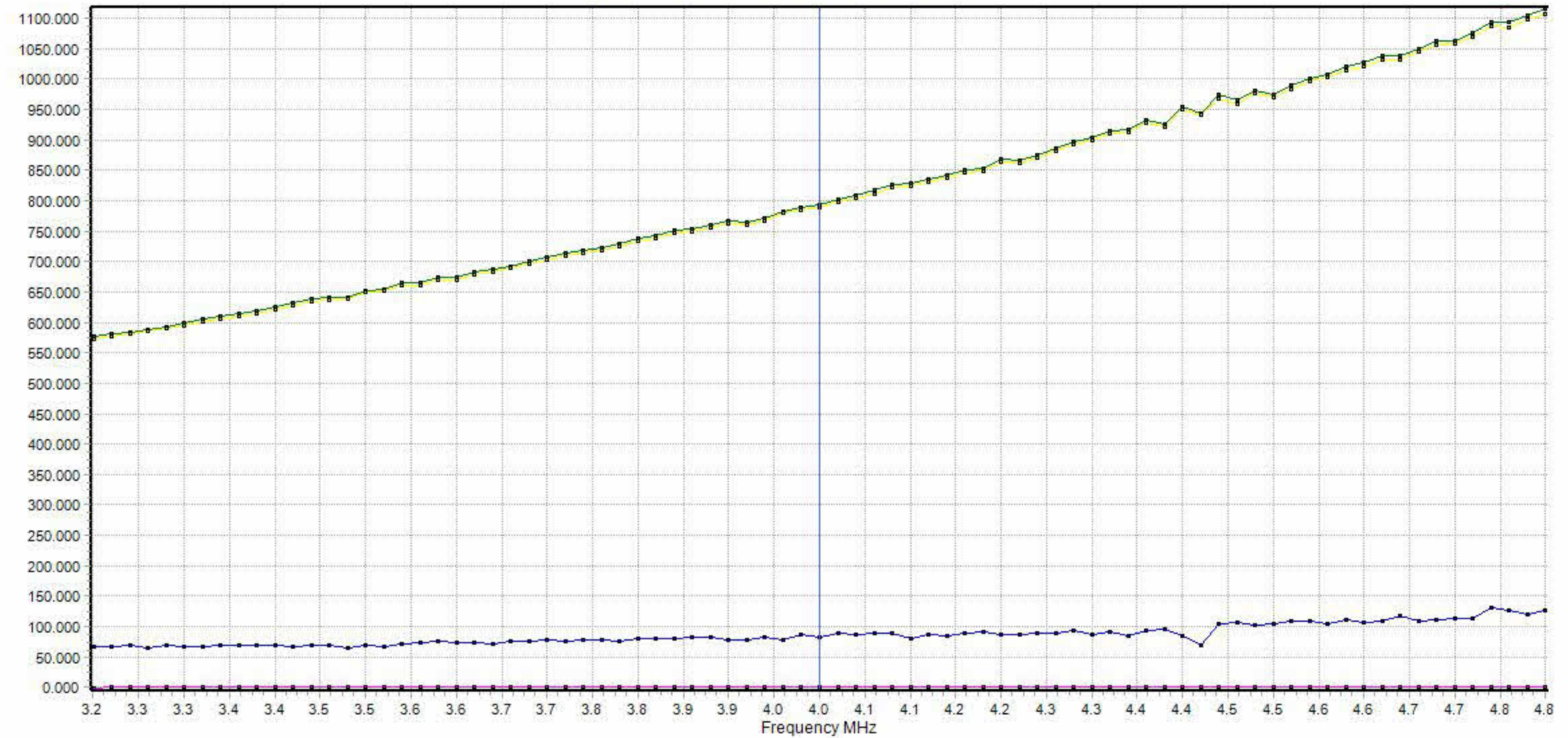


4,000 Fc (KH)  
794.0 Z (ohms)  
84.1 A (deg)  
82.3 R (ohm)  
789.7 X (ohm)  
100.00 SWR  
-0.1 RL (db)  
0.987 Reflection Co  
7.2 Reflection A

0.00 Q

Point No. = 40  
Freq. Cursor

K9AY Reactance - Full Coil - 4.0 MHz



<b>Left Axis</b>	<b>Plot On/Off</b>	<b>Points On/Off</b>	<b>Right Axis</b>
SWR ----- <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SWR ----- <input type="checkbox"/>
Impedance ----- <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Impedance ----- <input type="checkbox"/>
Reactance ----- <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Reactance ----- <input type="checkbox"/>
Resistance ----- <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Resistance ----- <input type="checkbox"/>
PhaseAngle ----- <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PhaseAngle ----- <input type="checkbox"/>
ReturnLoss ----- <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ReturnLoss ----- <input type="checkbox"/>
Reflection Coef ----- <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Reflection Coef ----- <input type="checkbox"/>
Reflection Angle ----- <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Reflection Angle ----- <input type="checkbox"/>

☐ RealTime Data On/Off

☐ Noise Filter On/Off

☒ Min. Zoom scale On/Off

Fc (KH

Z (ohms)

A (deg

R (ohm)

X (ohm

SWR

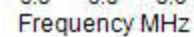
RL (db)

Reflection Co

### Reflection A

Q

◀ ▶ Freq. Curso



SWR	-----	<input checked="" type="checkbox"/>
Impedance	-----	<input checked="" type="checkbox"/>
Reactance	-----	<input checked="" type="checkbox"/>
Resistance	-----	<input checked="" type="checkbox"/>
PhaseAngle	-----	<input checked="" type="checkbox"/>
ReturnLoss	-----	<input checked="" type="checkbox"/>
Reflection Coef	-----	<input checked="" type="checkbox"/>
Reflection Angle	-----	<input checked="" type="checkbox"/>

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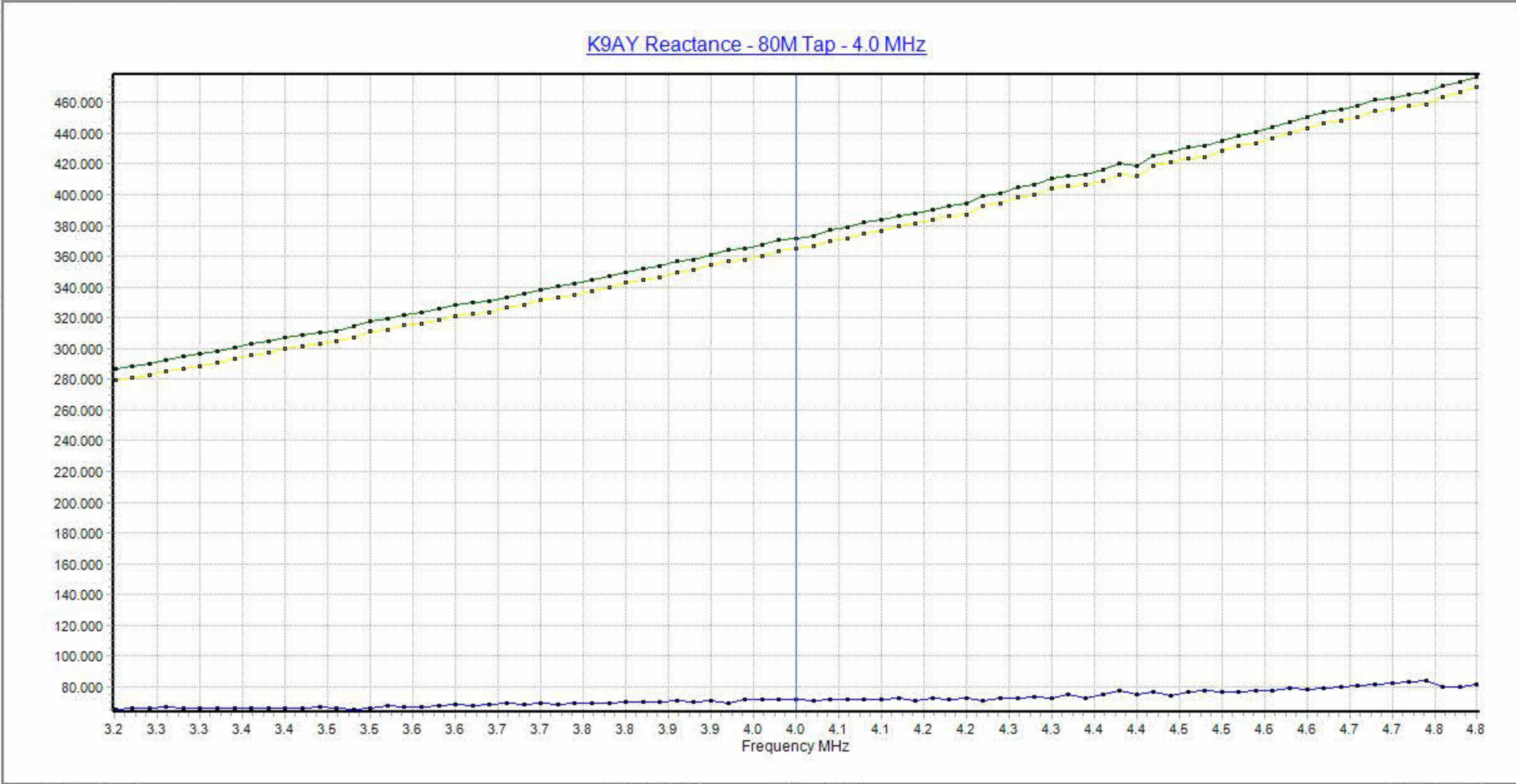
SWR	-----	<input type="checkbox"/>
Impedance	-----	<input type="checkbox"/>
Reactance	-----	<input type="checkbox"/>
Resistance	-----	<input type="checkbox"/>
PhaseAngle	-----	<input type="checkbox"/>
ReturnLoss	-----	<input type="checkbox"/>
Reflection Coef	-----	<input type="checkbox"/>
Reflection Angle	-----	<input type="checkbox"/>



4,000	Fc (KH)
371.6	Z (ohms)
78.9	A (deg)
71.6	R (ohm)
364.6	X (ohm)
39.24	SWR
-0.4	RL (db)
0.950	Reflection Co
15.1	Reflection A

0.00 Q

Point No. = 40  
 Freq. Cursor



<div>Left Axis</div> <div> <div>SWR</div><input checked="" type="checkbox"/> <div>Impedance</div><input checked="" type="checkbox"/> <div>Reactance</div><input checked="" type="checkbox"/> <div>Resistance</div><input checked="" type="checkbox"/> <div>PhaseAngle</div><input checked="" type="checkbox"/> <div>ReturnLoss</div><input checked="" type="checkbox"/> <div>Reflection Coef</div><input checked="" type="checkbox"/> <div>Reflection Angle</div><input checked="" type="checkbox"/> </div>	<div>Plot On/Off</div> <div> <input type="checkbox"/>  <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/> </div>	<div>Points On/Off</div> <div> <input checked="" type="checkbox"/>  <div>RealTime Data On/Off</div><input type="checkbox"/>  <div>Noise Filter On/Off</div><input type="checkbox"/>  <div>Min. Zoom scale On/Off</div><input checked="" type="checkbox"/> </div>	<div>Right Axis</div> <div> <div>SWR</div><input type="checkbox"/> <div>Impedance</div><input type="checkbox"/> <div>Reactance</div><input type="checkbox"/> <div>Resistance</div><input type="checkbox"/> <div>PhaseAngle</div><input type="checkbox"/> <div>ReturnLoss</div><input type="checkbox"/> <div>Reflection Coef</div><input type="checkbox"/> <div>Reflection Angle</div><input type="checkbox"/> </div>
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5,331 Fc (KH)

434.1 Z (ohms)

78.7 A (deg)

85.3 R (ohm)

425.6 X (ohm)

44.74 SWR

-0.4 RL (db)

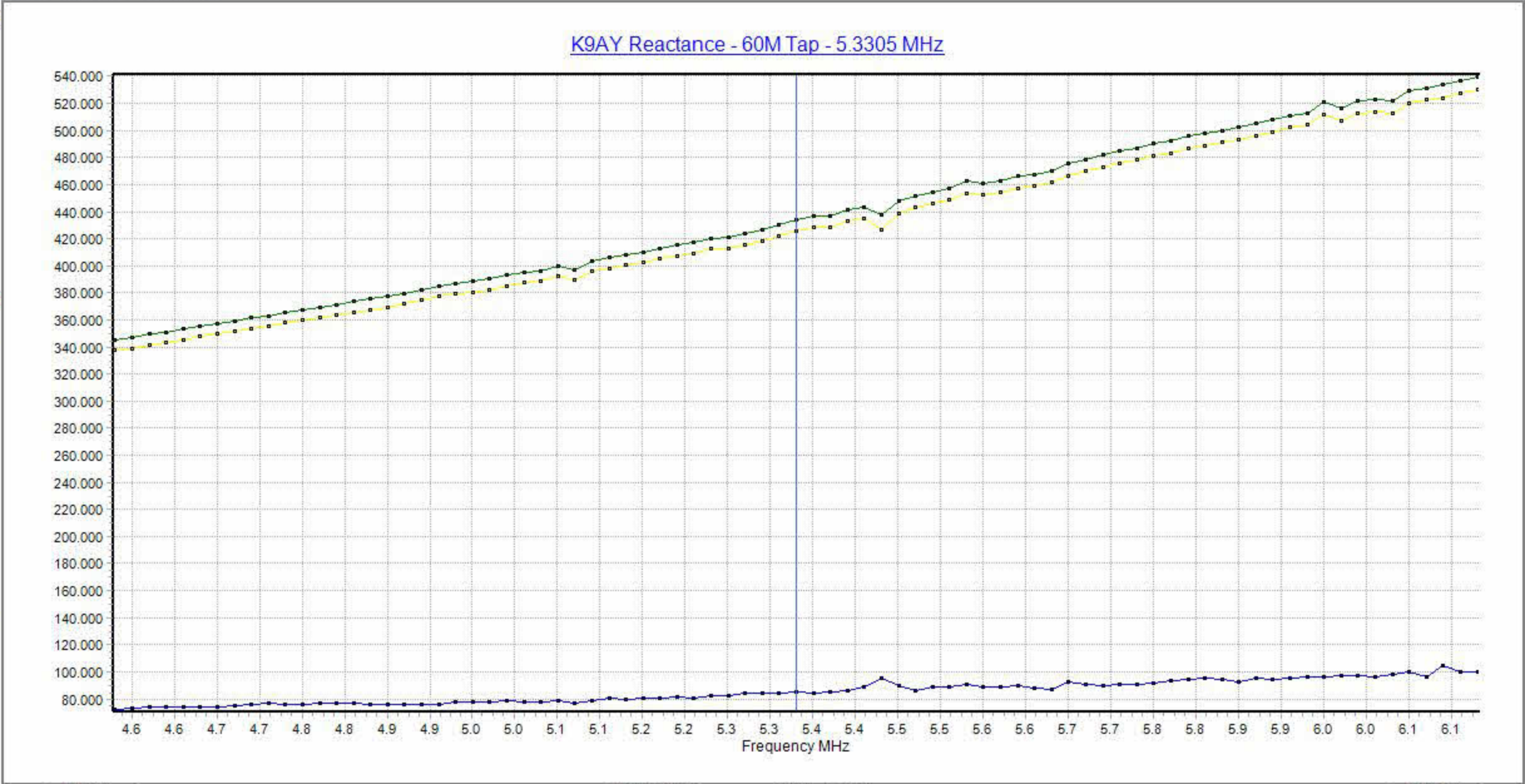
0.956 Reflection Co

12.9 Reflection A

0.00 Q

Point No. = 40

Freq. Cursor



<div>Left Axis</div> <div>SWR <input checked="" type="checkbox"/></div> <div>Impedance <input checked="" type="checkbox"/></div> <div>Reactance <input checked="" type="checkbox"/></div> <div>Resistance <input checked="" type="checkbox"/></div> <div>PhaseAngle <input checked="" type="checkbox"/></div> <div>ReturnLoss <input checked="" type="checkbox"/></div> <div>Reflection Coef <input checked="" type="checkbox"/></div> <div>Reflection Angle <input checked="" type="checkbox"/></div>	<div>Plot On/Off</div> <div><input type="checkbox"/></div> <div><input checked="" type="checkbox"/></div> <div><input checked="" type="checkbox"/></div> <div><input checked="" type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div>	<div>Points On/Off</div> <div><input checked="" type="checkbox"/></div> <div>RealTime Data On/Off</div> <div><input type="checkbox"/></div> <div>Noise Filter On/Off</div> <div><input type="checkbox"/></div> <div>Min. Zoom scale On/Off</div> <div><input checked="" type="checkbox"/></div>	<div>Right Axis</div> <div>SWR <input type="checkbox"/></div> <div>Impedance <input type="checkbox"/></div> <div>Reactance <input type="checkbox"/></div> <div>Resistance <input type="checkbox"/></div> <div>PhaseAngle <input type="checkbox"/></div> <div>ReturnLoss <input type="checkbox"/></div> <div>Reflection Coef <input type="checkbox"/></div> <div>Reflection Angle <input type="checkbox"/></div>
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5,404

Fc (KH)

342.6

Z (ohms)

73.8

A (deg)

95.7

R (ohm)

329.0

X (ohm)

25.02

SWR

-0.7

RL (db)

0.923

Reflection Co

16.0

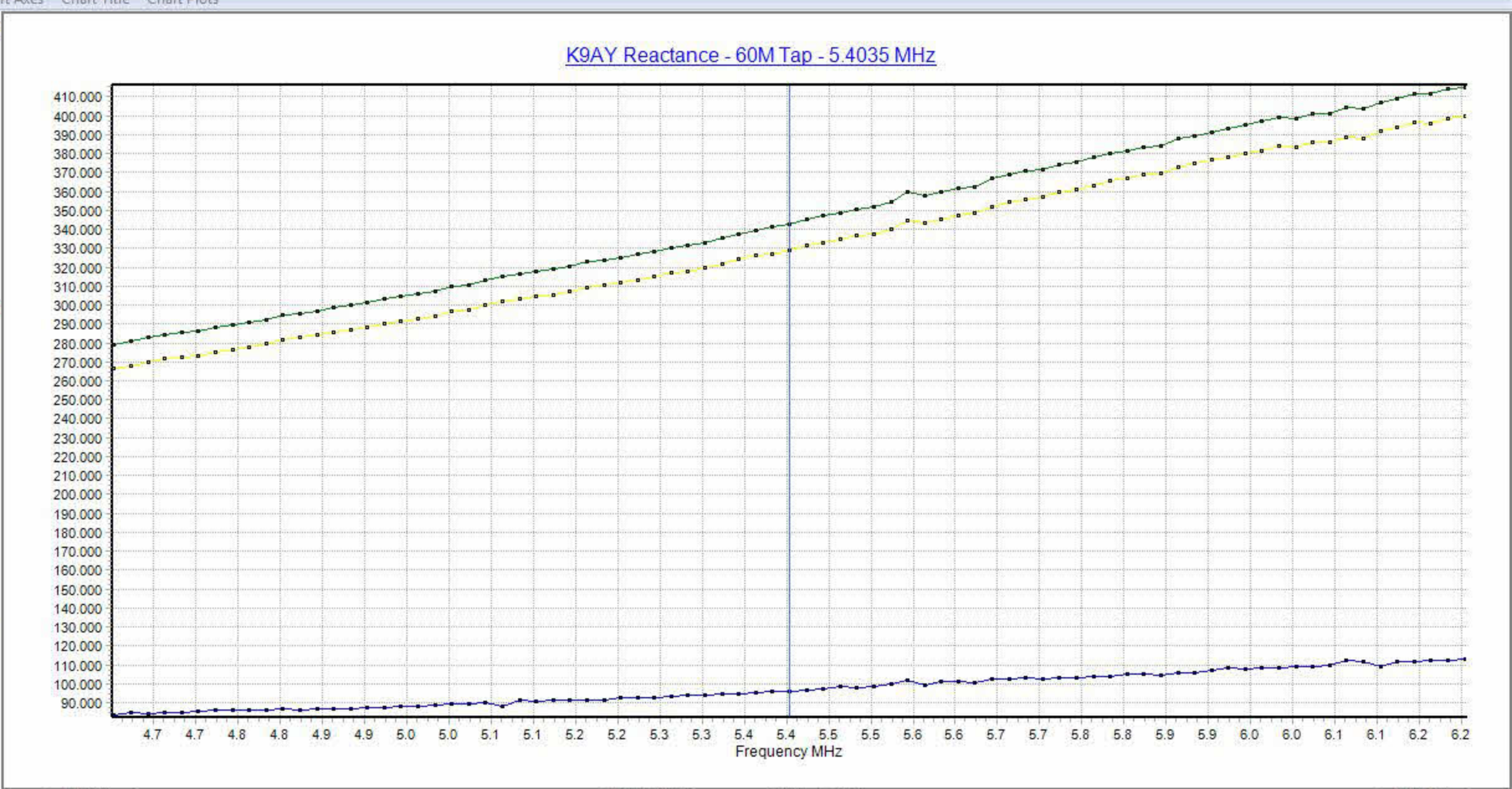
Reflection A

0.00

Q

Point No. = 40

Freq. Cursor



Left Axis

SWR

Impedance

Reactance

Resistance

PhaseAngle

ReturnLoss

Reflection Coef

Reflection Angle

Plot On/Off

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Points On/Off

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RealTime Data On/Off

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Noise Filter On/Off

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Min. Zoom scale On/Off

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Right Axis

SWR

Impedance

Reactance

Resistance

PhaseAngle

ReturnLoss

Reflection Coef

Reflection Angle

Fc (KH

Z (ohms)

A (deg

R (ohm)

X (ohm)

SWR

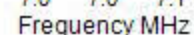
RL (db)

Reflection Co

### Reflection A

Q

◀ ▶ Freq. Curso



Plot On/Off

Points On/Off
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Right Axis

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Fc (KH

Z (ohms)

A (deg

R (ohm)

X (ohm)

SWR

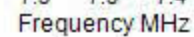
RL (db)

Reflection Co

### Reflection A

Q

◀ ▶ Freq. Curso



### Right Axis

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RealTime Data On/Off



Noise Filter On/Off



Min. Zoom scale On/Off

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10,100

Fc (KH)

553.7

Z (ohms)

75.9

A (deg)

134.9

R (ohm)

537.0

X (ohm)

45.80

SWR

-0.4

RL (db)

0.957

Reflection Co

10.0

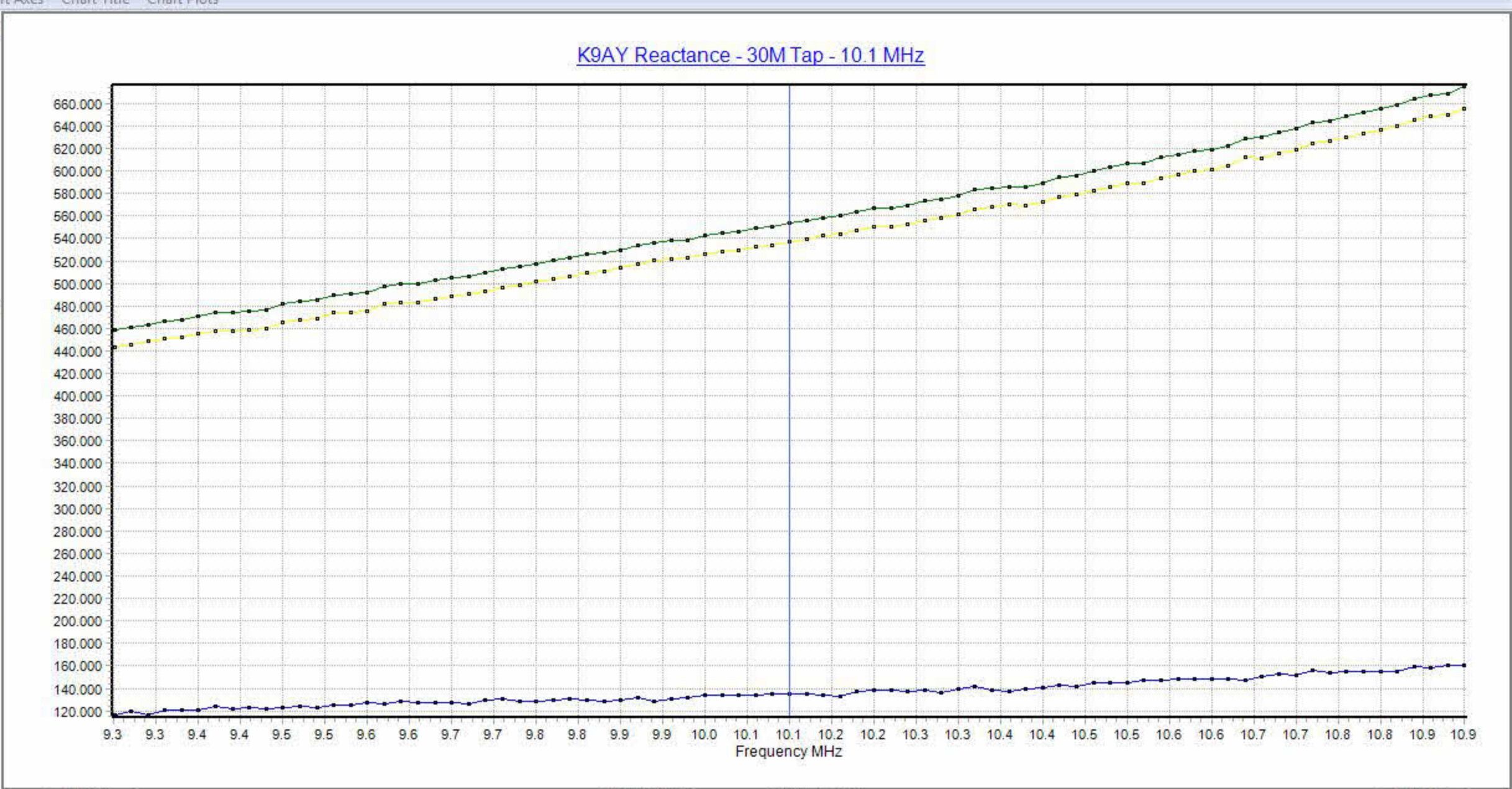
Reflection A

0.00

Q

Point No. = 40

Freq. Cursor



Left Axis

SWR

Impedance

Reactance

Resistance

PhaseAngle

ReturnLoss

Reflection Coef

Reflection Angle

Plot On/Off

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Points On/Off

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RealTime Data On/Off

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Noise Filter On/Off

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Min. Zoom scale On/Off

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Right Axis

SWR

Impedance

Reactance

Resistance

PhaseAngle

ReturnLoss

Reflection Coef

Reflection Angle

10,150

Fc (KH)

630.8

Z (ohms)

52.5

A (deg)

384.4

R (ohm)

500.2

X (ohm)

20.79

SWR

-0.8

RL (db)

0.908

Reflection Co

7.2

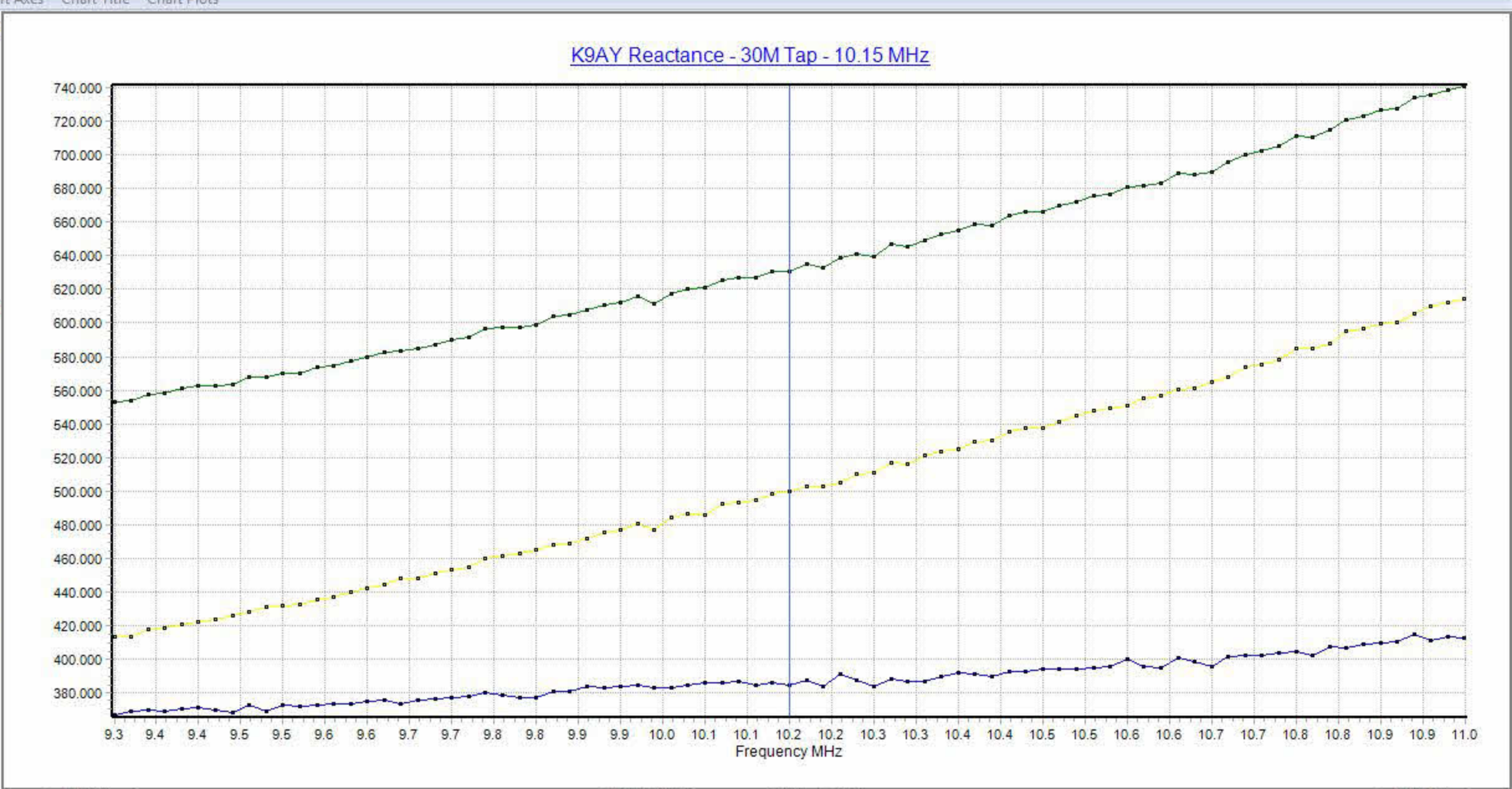
Reflection A

0.00

Q

Point No. = 40

Freq. Cursor



Left Axis

SWR

Impedance

Reactance

Resistance

PhaseAngle

ReturnLoss

Reflection Coef

Reflection Angle

Plot On/Off

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Points On/Off

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RealTime Data On/Off

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Noise Filter On/Off

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Min. Zoom scale On/Off

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Right Axis

SWR

Impedance

Reactance

Resistance

PhaseAngle

ReturnLoss

Reflection Coef

Reflection Angle