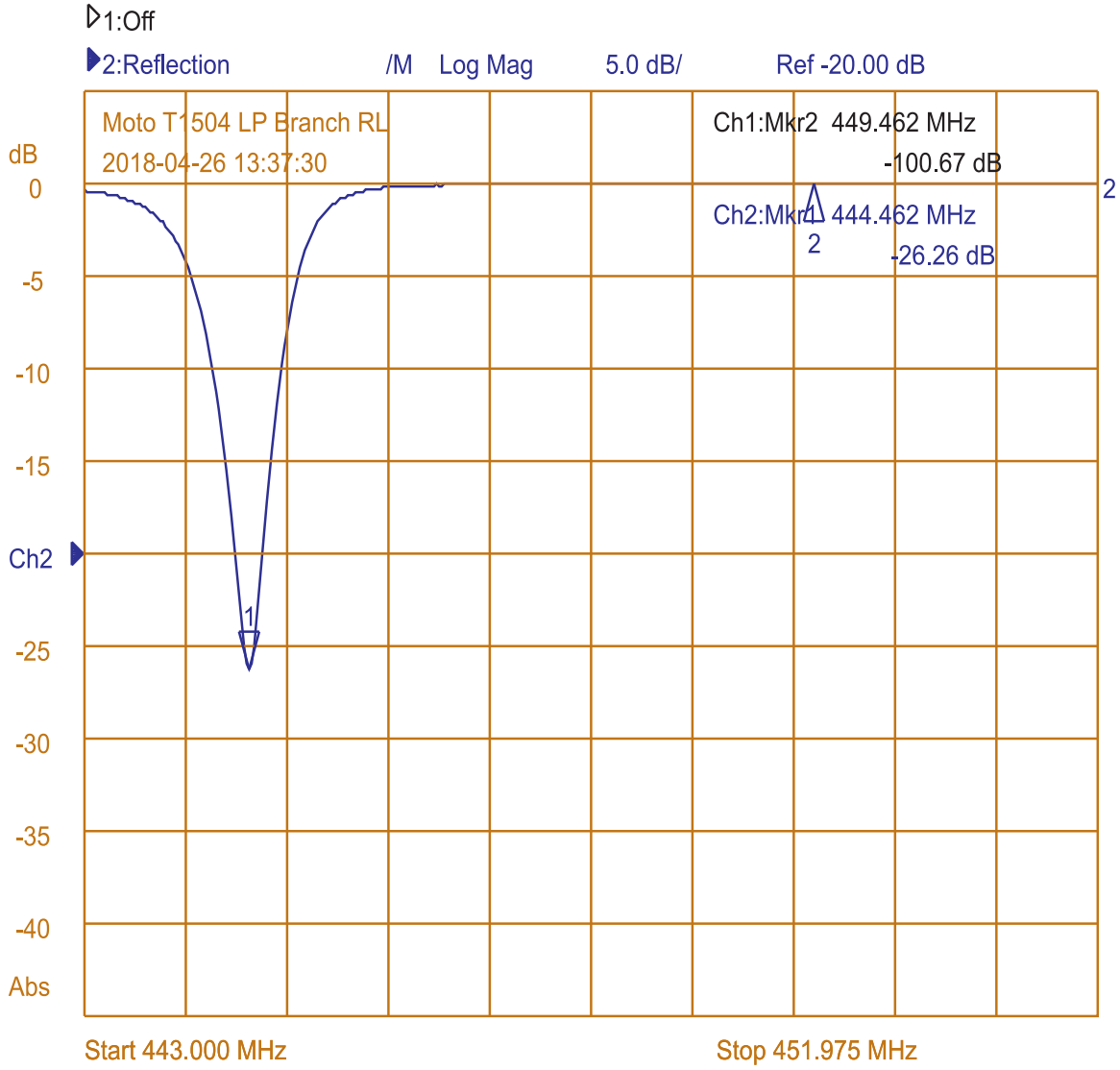
Motorola T-1504 Duplexer Refurb / AI6BX

Low Pass Branch Return Loss



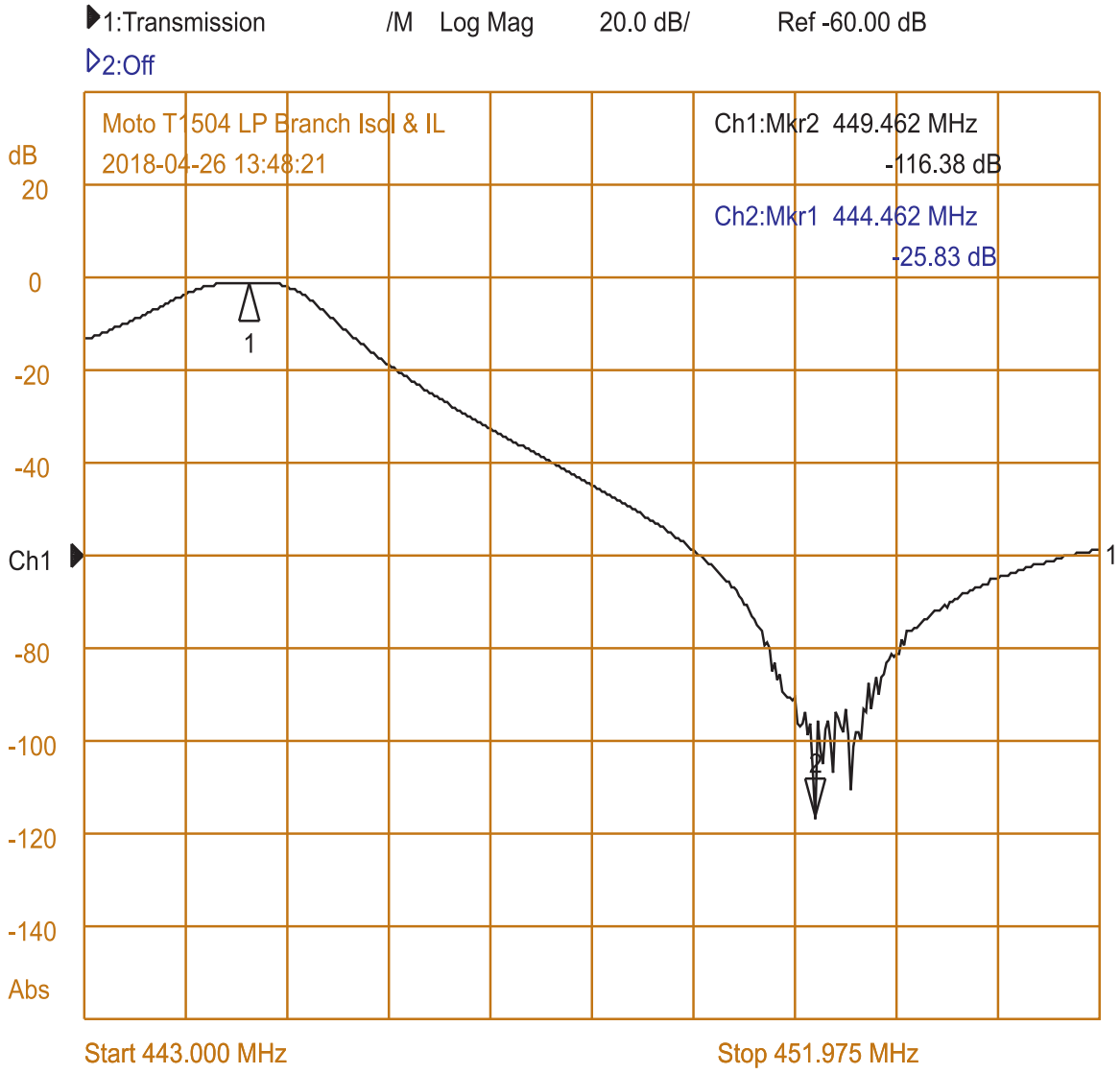
1:Mkr (MHz) dB	2:Mkr (MHz) dB
	1> 444.46 -26.26
	2: 449.46 0.02

VSWR: 1.102:1

Services by DuplexerRepair
(334) 444-6796 www.DuplexerRepair.com

Motorola T-1504 Duplexer Refurb / AI6BX

Low Pass Branch Isolation & Insertion Loss



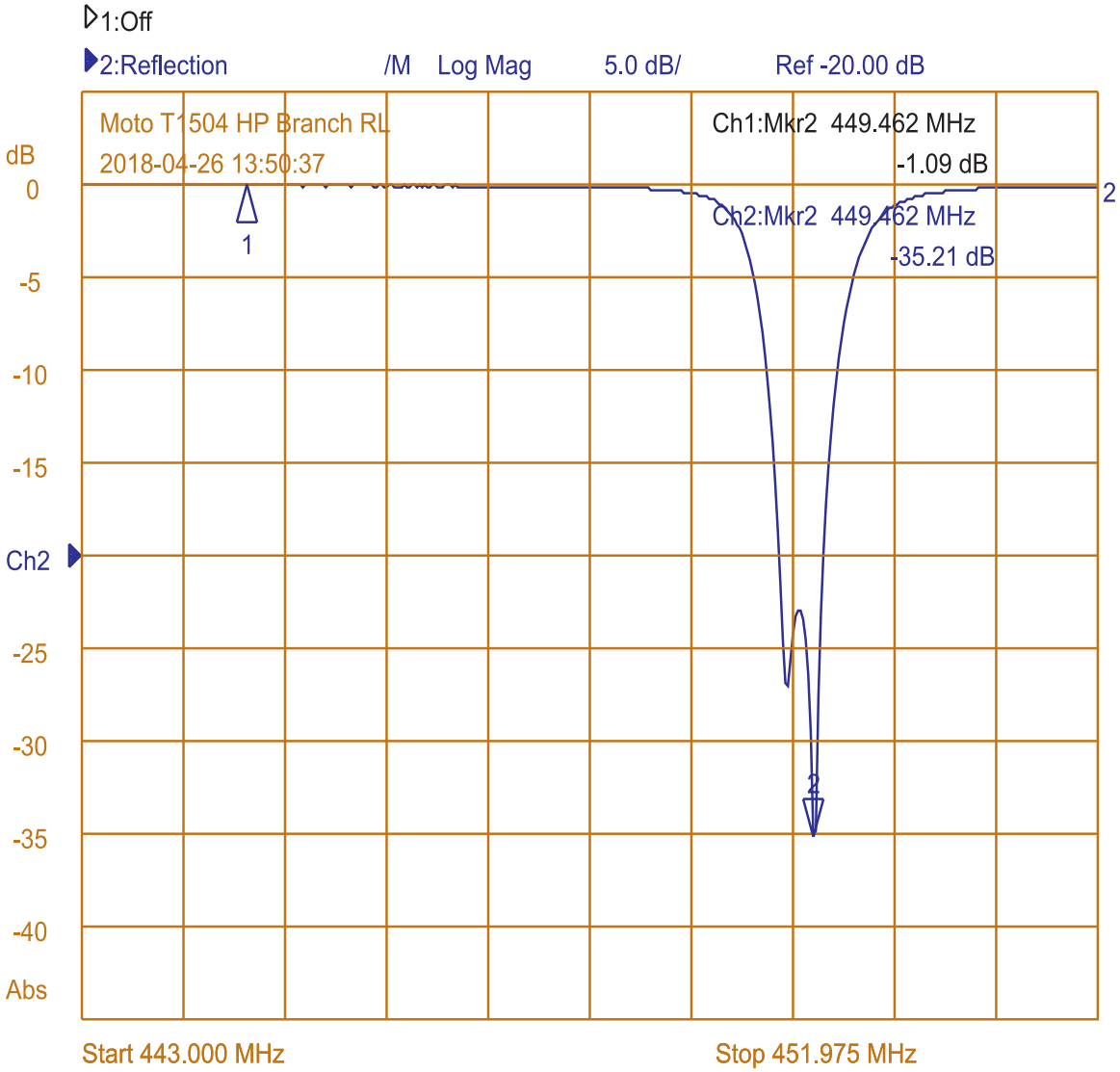
1:Mkr (MHz) dB	2:Mkr (MHz) dB
1: 444.46 -0.99 2> 449.46 -116.38	

Isolation: 116.38 dB
Ins. Loss: 0.99 dB

Services by DuplexerRepair
(334) 444-6796 www.DuplexerRepair.com

Motorola T-1504 Duplexer Refurb / AI6BX

High Pass Branch Return Loss



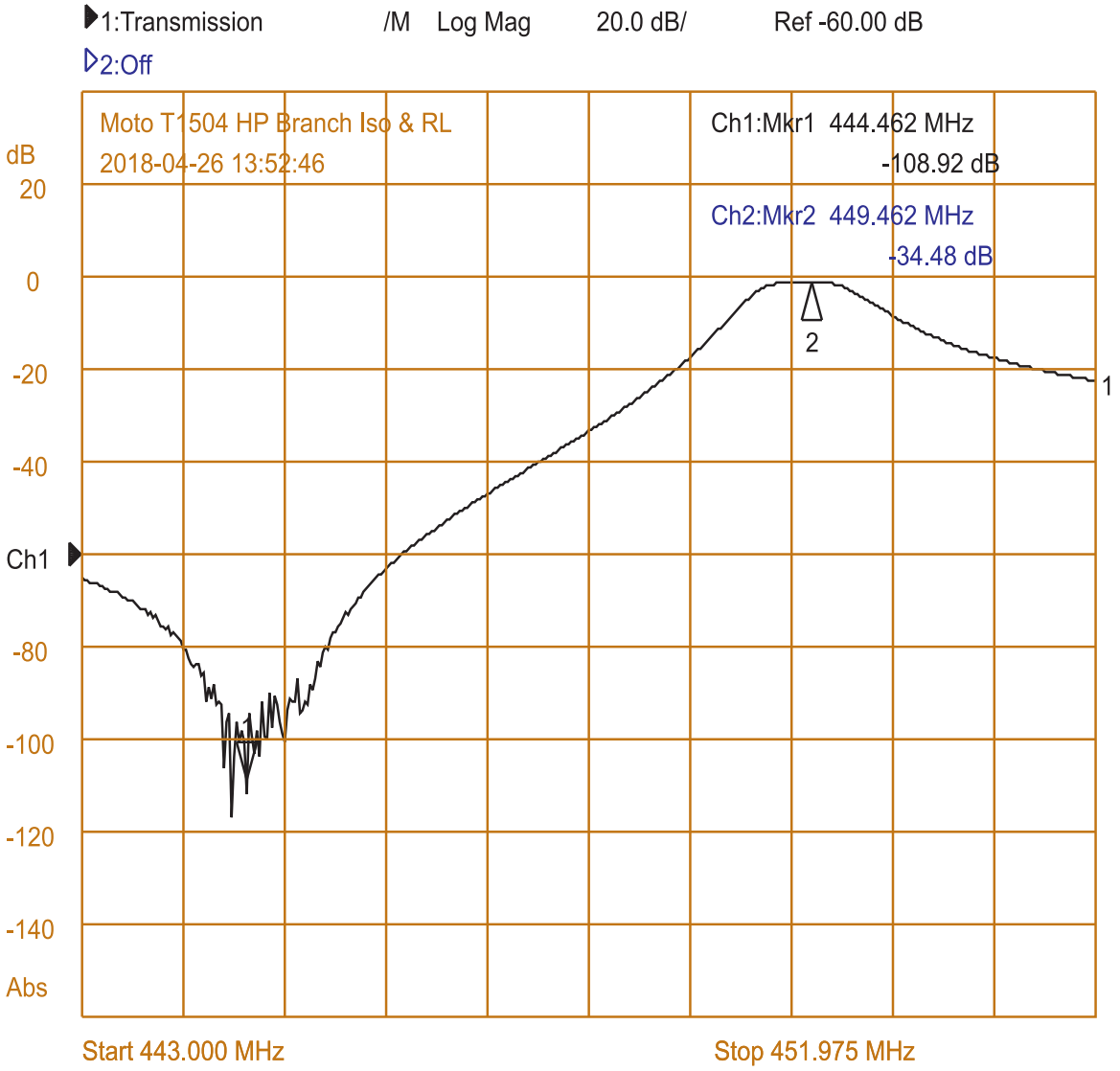
1:Mkr (MHz) dB	2:Mkr (MHz) dB
	1: 444.46 -0.07
	2> 449.46 -35.21

VSWR: 1.035:1

Services by DuplexerRepair
(334) 444-6796 www.DuplexerRepair.com

Motorola T-1504 Duplexer Refurb / AI6BX

High Pass Branch Isolation & Insertion Loss



1:Mkr (MHz) dB	2:Mkr (MHz) dB
1> 444.46 -108.92 2: 449.46 -1.09	

Isolation: 108.92 dB
Ins. Loss: 1.09 dB

Services by DuplexerRepair
(334) 444-6796 www.DuplexerRepair.com

Motorola T-1504 Duplexer Refurb / AI6BX

Photos Taken During Service/Refurbishing

This odd screw (along with the fact that two of the four tuning rod lock nuts are not original parts) leads me to conclude that someone has been inside this cavity before, and that two of the four cavities may not be original to the duplexer assembly. Also, this cavity and the other cavity with incorrect rod locking nuts had considerable corrosion in the copper tuning cylinder and plunger assemblies, evidence of significant moisture ingress at some point in time, as compared to the other two cavites, which appeared to be in overall decent condition with no similar signs of moisture damage.

Corrosion in tuning plunger from moisture incursion in cavity. Also note corrosion on outside of plunger and rusting/corrosion of the steel tuning rod, both seen in the photos below.

Services by DuplexerRepair
(334) 444-6796 www.DuplexerRepair.com

Motorola T-1504 Duplexer Refurb / AI6BX

Photos Taken During Service/Refurbishing

Services by DuplexerRepair
(334) 444-6796 www.DuplexerRepair.com