

Neptune version 4.3 Freespace Antenna DBI gain measurements
 Measured at the Kennesaw Georgia SATIMO Chamber 20Dec06 by Roger Meline

Frequency	Neptune board #1	Neptune board #1	Neptune board #2	Neptune board #2	Overall Antenna Gain (dbi)		
	Antenna 1	Antenna 2	Antenna 1	Antenna 2	Max	Average	Min
	E Total. dB	E Total. dB	E Total. dB	E Total. dB			
2402000000	2.3464	1.4500	2.4468	1.6430	2.4468	1.9716	1.4500
2420000000	2.4786	1.6742	2.7579	1.7732	2.7579	2.1710	1.6742
2440000000	2.5604	1.9020	2.8019	1.9989	2.8019	2.3158	1.9020
2460000000	2.6900	1.8336	2.8385	1.9264	2.8385	2.3221	1.8336
2483000000	2.5228	1.7386	2.8155	1.8058	2.8155	2.2207	1.7386
2500000000	2.4459	1.6997	2.7068	1.7691	2.7068	2.1554	1.6997
Max gain per antenna	2.6900	1.9020	2.8385	1.9989			

Test Summary

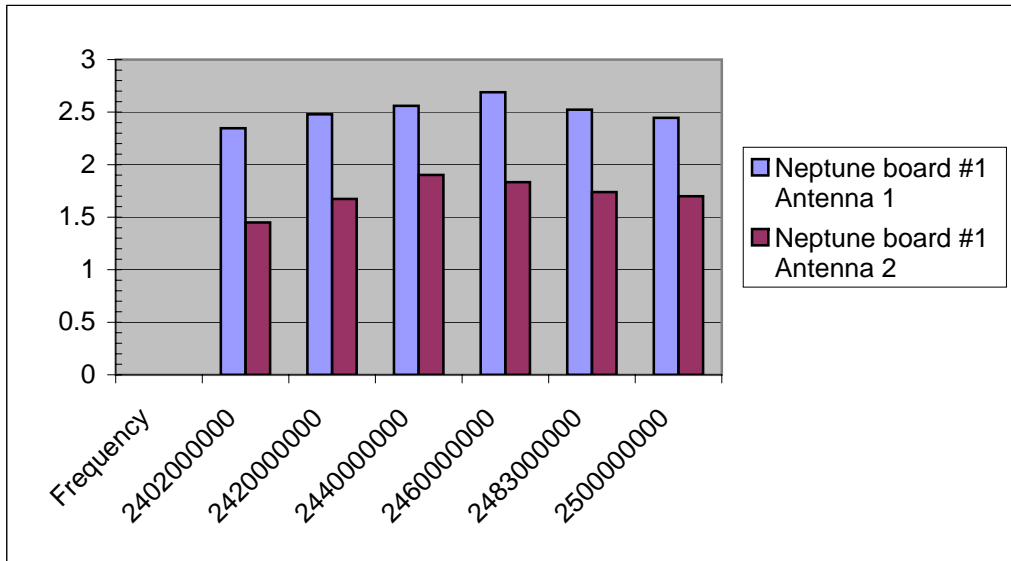
The four version 4.3 Neptune board S11 match performance is shown on the next tab. Coax was attached at the antenna matching network. Pictures on tab

Peak gain among the 4 boards was measured as 2.838 dbi at 2460 Mhz.

Antenna 1 peak gain 2.84 dbi

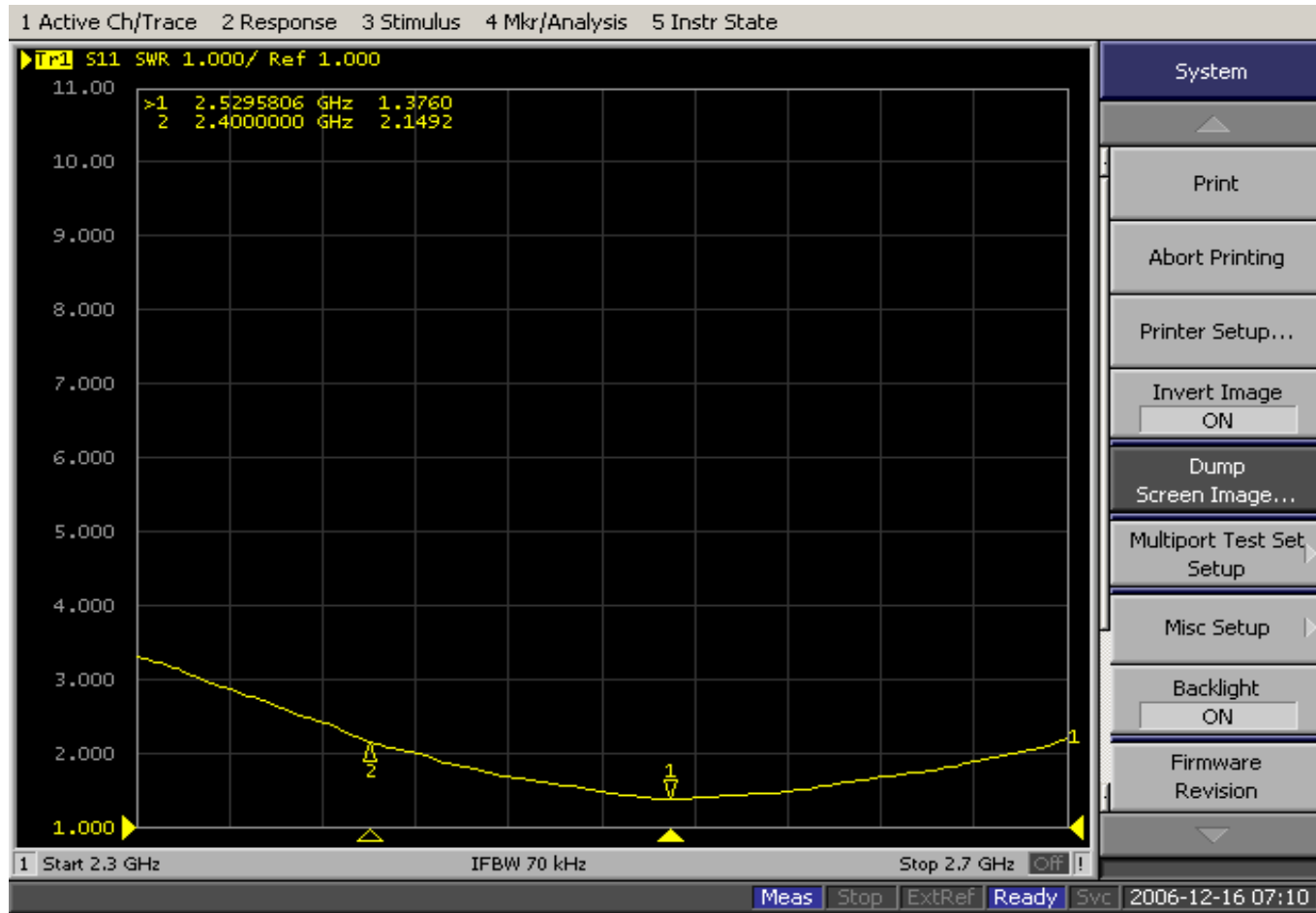
Antenna 2 peak gain 1.998 dbi

Question - How does this Neptune test data compare with the last SATIMO test data? Data on tab 5. Gain values are consistant with the tuned Fractal 2 de

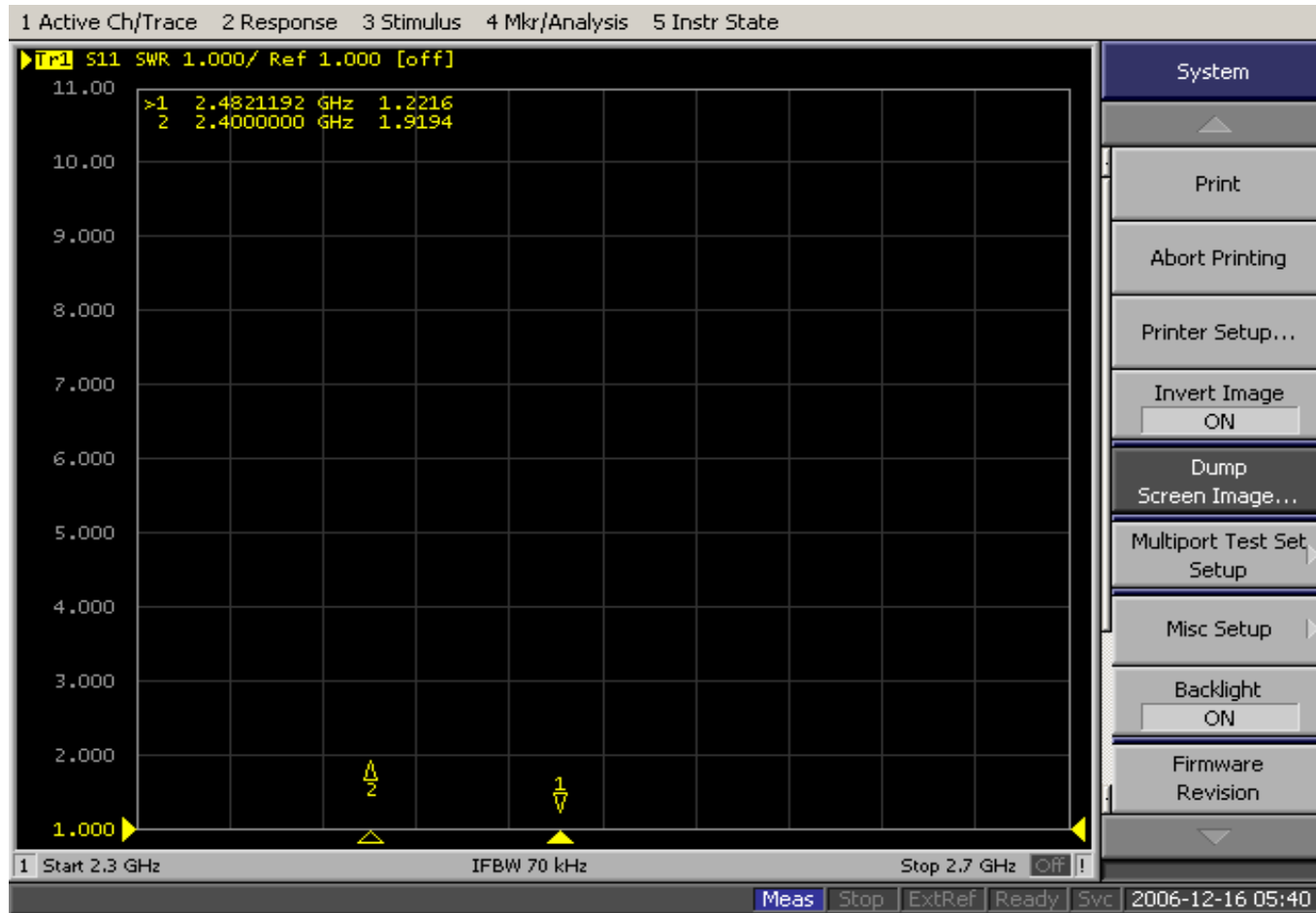


S11 measurements on Version 4.3 Neptune boards.

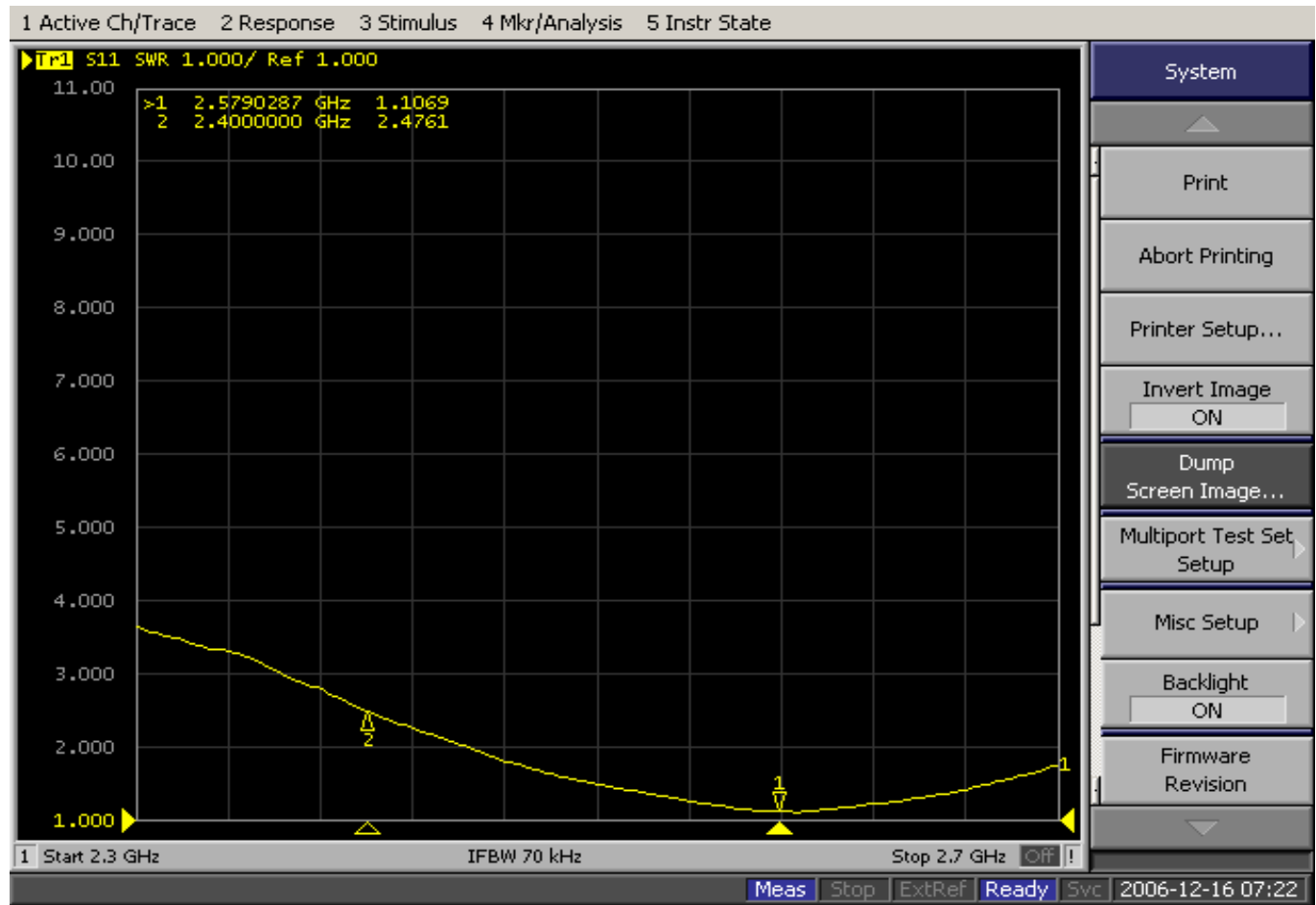
Neptune N34A1 (323)



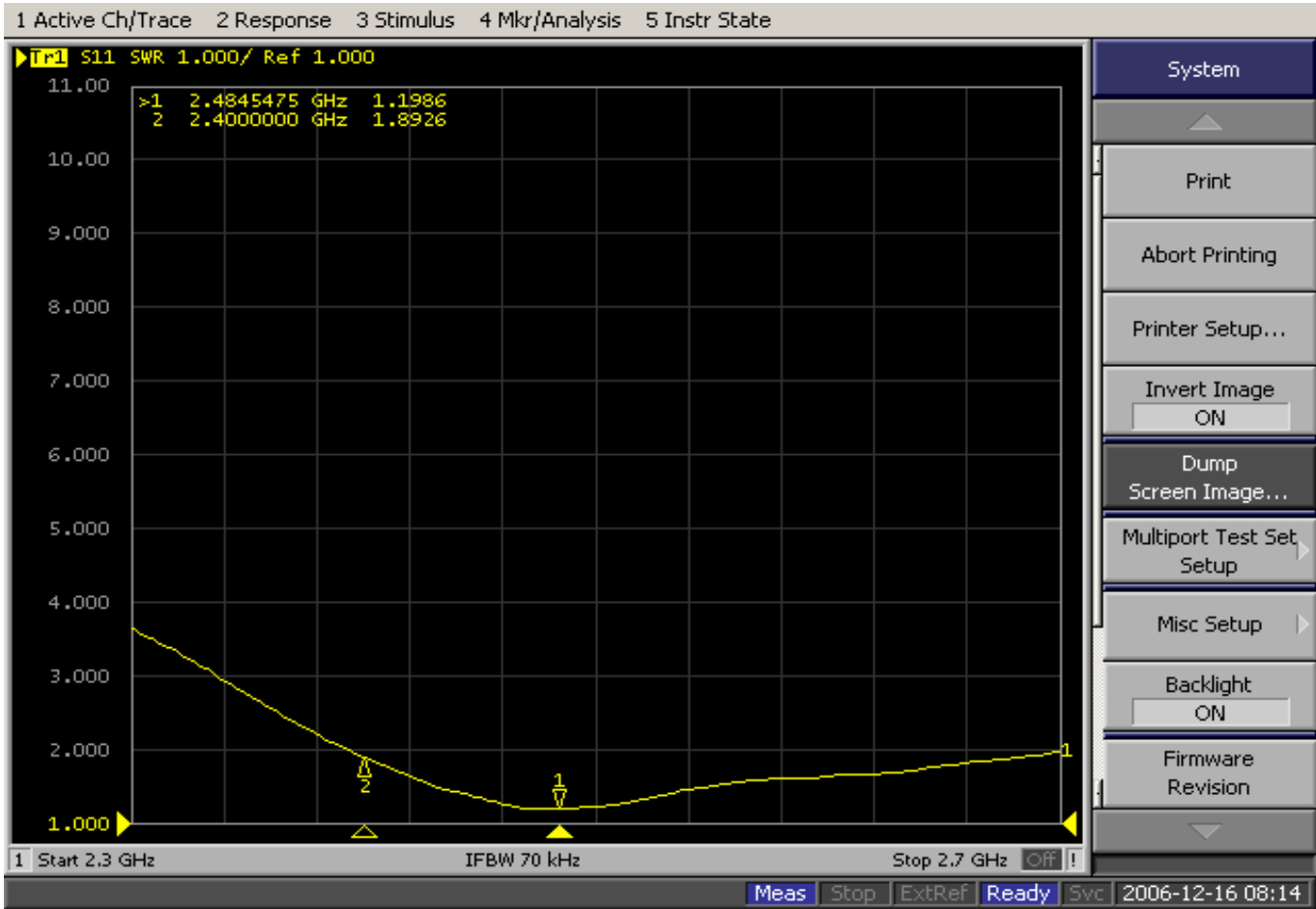
Neptune N43B1 (324)



Neptune N43A2 (325)

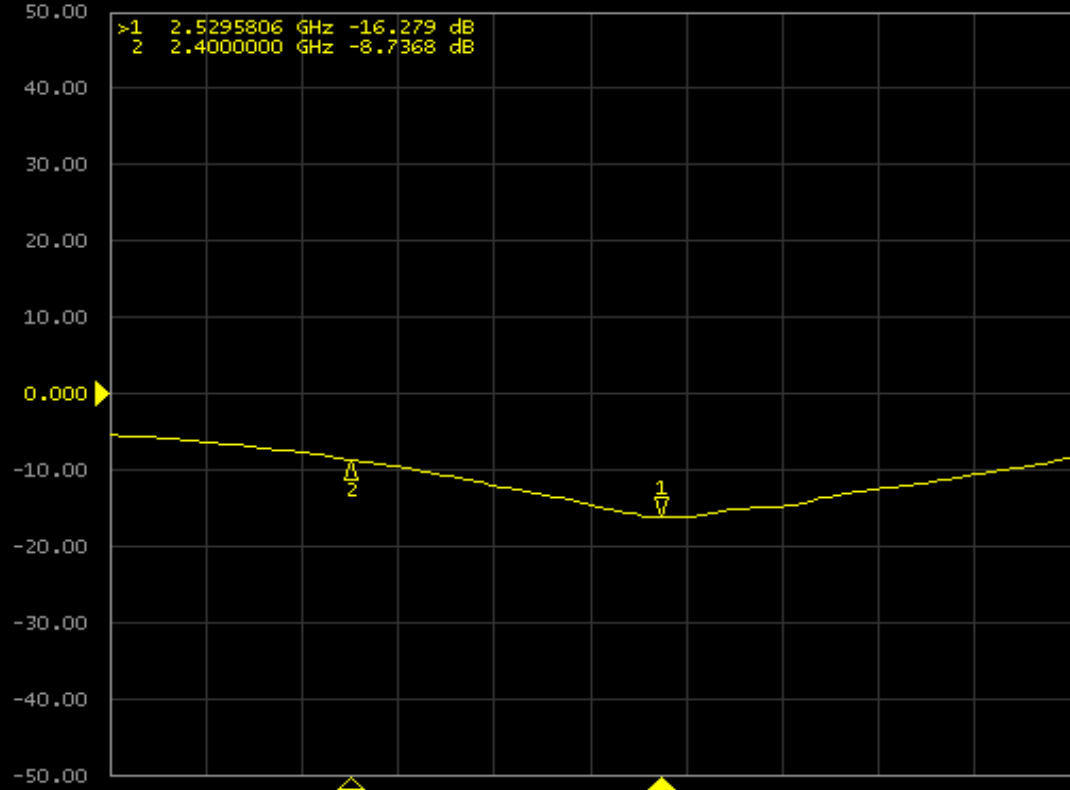


Neptune N43B2 (326)



1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

▶ Tr1 S11 Log Mag 10.00dB/ Ref 0.000dB



>1 2.5295806 GHz -16.279 dB
2 2.4000000 GHz -8.7368 dB

1 Start 2.3 GHz IFBW 70 kHz Stop 2.7 GHz Off

Meas Stop ExtRef Ready Svc 2006-12-16 07:10

System

Print

Abort Printing

Printer Setup...

Invert Image
ON

Dump
Screen Image...

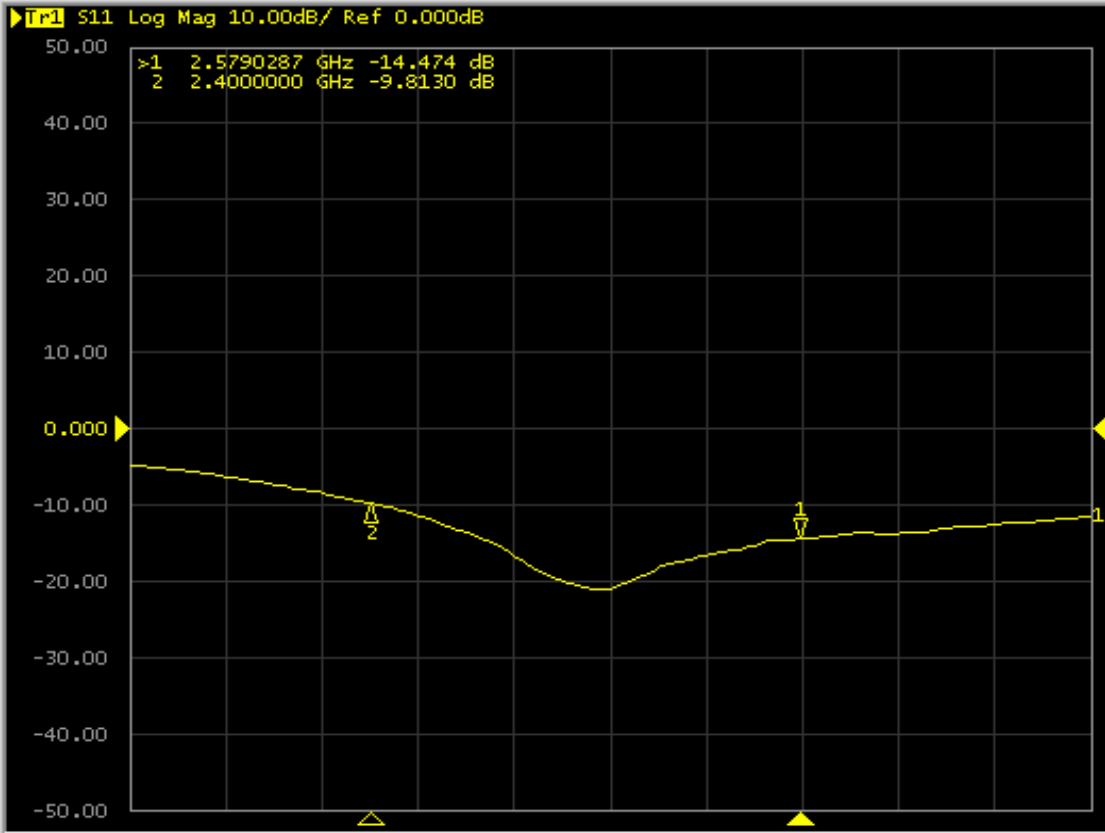
Multiport Test Set
Setup

Misc Setup

Backlight
ON

Firmware
Revision

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State



1 Start 2.3 GHz IFBW 70 kHz Stop 2.7 GHz Off !

Meas Stop ExtRef Ready Svc 2006-12-16 08:13

System

Print

Abort Printing

Printer Setup...

Invert Image
ON

Dump
Screen Image...

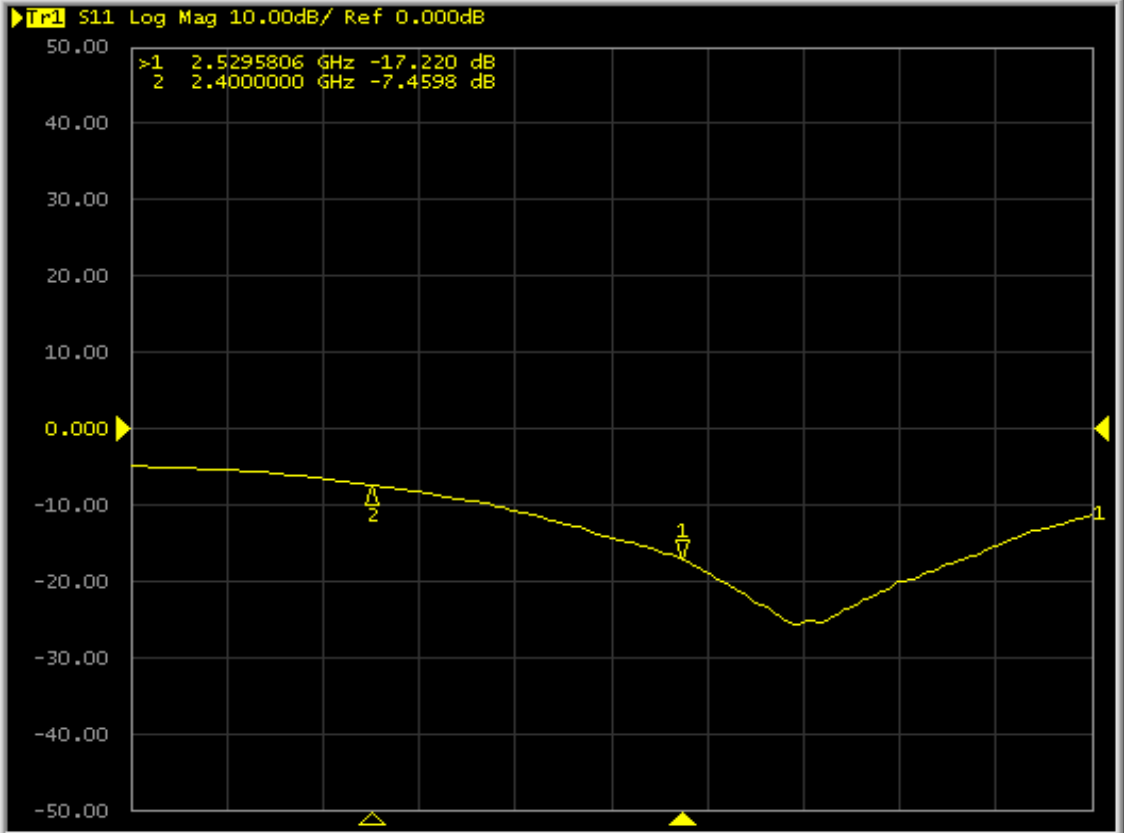
Multiport Test Set
Setup

Misc Setup

Backlight
ON

Firmware
Revision

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State



System

Print

Abort Printing

Printer Setup...

Invert Image
ON

Dump
Screen Image...

Multiport Test Set
Setup

Misc Setup

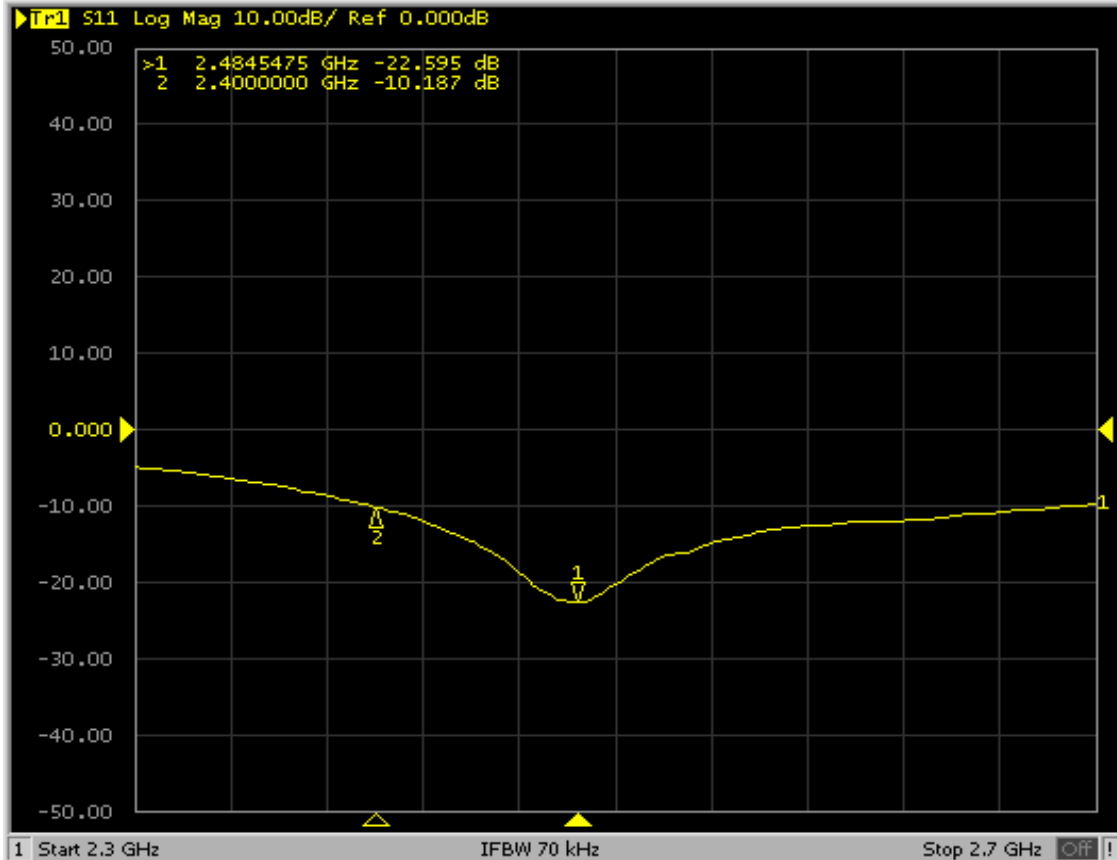
Backlight
ON

Firmware
Revision

1 Start 2.3 GHz IFBW 70 kHz Stop 2.7 GHz Off

Meas Stop ExtRef Ready Svc 2006-12-16 07:21

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State



System

Print

Abort Printing

Printer Setup...

Invert Image
ON

Dump
Screen Image...

Multiport Test Set
Setup

Misc Setup

Backlight
ON

Firmware
Revision

Meas Stop ExtRef Ready Svc 2006-12-16 08:14