



TEST REPORT
ON
100 MHz TO 20GHz,
PORT TO PORT PHASE MATCHED TO $\pm 10^\circ$ & ± 1.2 dB INSERTION LOSS
SINGLE POLE THIRTY TWO THROW
ABSORPTIVE SWITCH MODULE

AMC MODEL No:
MSN-32DT-05-DEC-MP
OPTION 100M20, PM10

Serial Number: 32MS801001

DESIGNED
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TESTED
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REPORTED
BY
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January 31, 2008

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ISO9001 : 2000 CERTIFIED



TABLE OF CONTENTS

● PRODUCT FEATURE	PAGE 3
● OUTLINE DRAWING	PAGE 5
● LOGIC TABLE	PAGE 6
● FINAL DATA	PAGE 7
● ISOLATION, VSWR AND INSERTION LOSS BOTTOM 16 WAY	PAGE 14
● ISOLATION, VSWR AND INSERTION LOSS TOP 16 WAY	PAGE 47
● PHASE PLOTS	PAGE 79
● PORT TO PORT ISOLATION	PAGE 112

**SINGLE POLE THIRTY TWO THROW
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AMC MODEL No:
MSN-32DT-05-DEC-MP OPTION 100M20, PM10**

FEATURES:

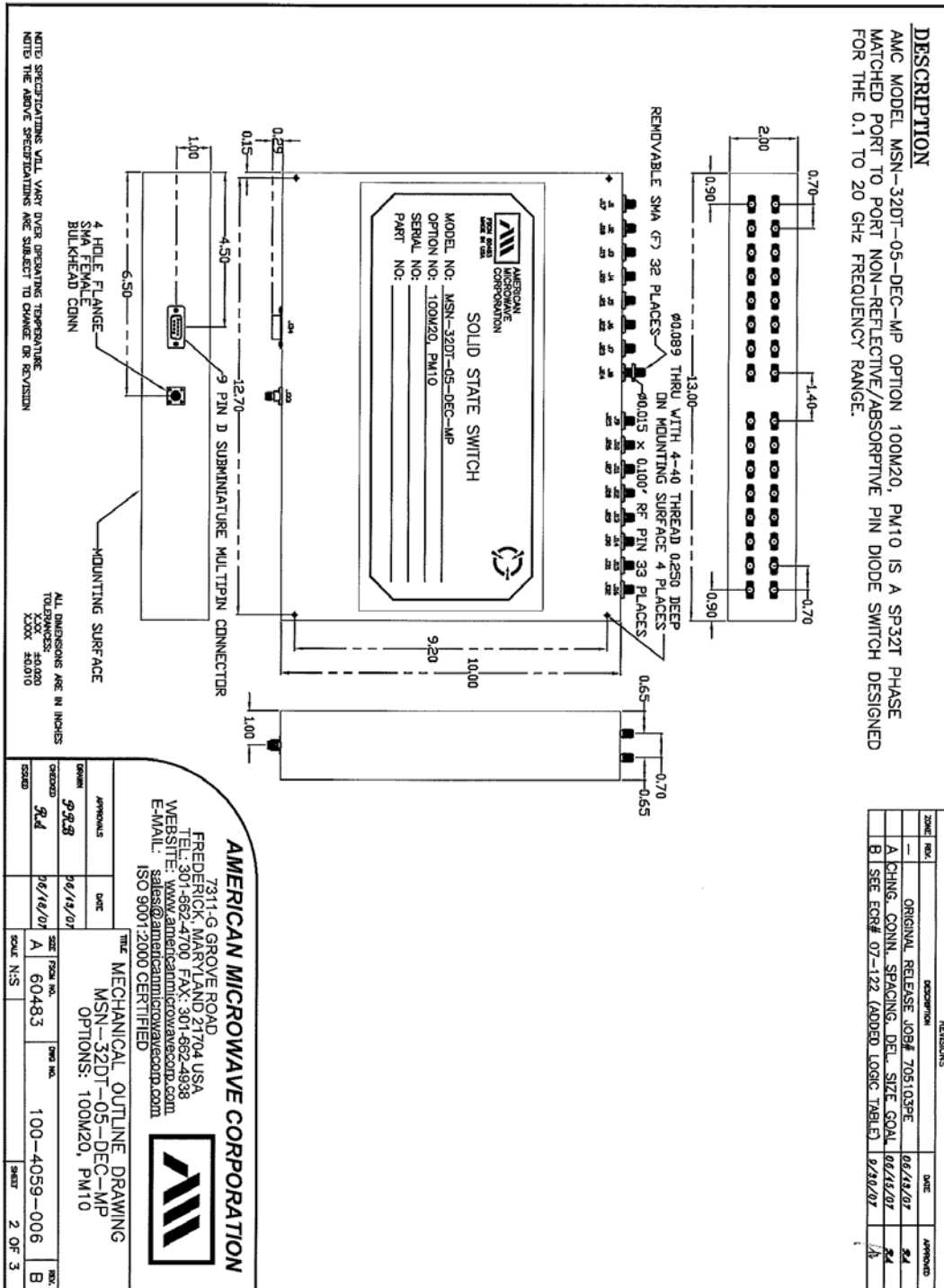
- **100 MHz TO 20 GHz FREQUENCY RANGE**
- **PHASE MATCHED PORT TO PORT NON-REFLECTIVE/ABSORPTIVE**

SPECIFICATIONS:

- FREQUENCY : 0.1 – 20GHz
- INSERTION LOSS : 14 dB MAXIMUM
- ISOLATION : 70 dB MINIMUM
- AMPLITUDE BALANCE (BASED ON WORSE CASE INSERTION LOSS DATA) : +/-1.1 dB MAX
- PHASE : +/- 10° MAX
- VSWR : 2.0:1
- SPEED : RISE: 165 ns MAXIMUM
FALL: 165 ns MAXIMUM
- POWER INPUT : +20 dBm, CW, MAX.
- CONTROL : 5 BIT BINARY, TTL COMPATIBLE
- POWER SUPPLY : +/-5V @ 1.75/-0.25 A, MAXIMUM
- CONNECTORS
- RF : PRECISION SMA FEMALE
- CONTROL : 9 PIN SUBMINIATURE CONNECTOR
- SIZE : 13”(L) x 10”(W) x 2”(H)



OUTLINE DRAWING





LOGIC TABLE

DESCRIPTION

AMC MODEL MSN-32DT-05-DEC-MP OPTION 100M20, PM10 IS A SP32T PHASE MATCHED PORT TO PORT NON-REFLECTIVE/ABSORPTIVE PIN DIODE SWITCH DESIGNED FOR THE 0.1 TO 20 GHz FREQUENCY RANGE.

LOGIC TABLE					
OUTPUT PORT	E1	E2	E3	E4	E5
J1	L	L	L	L	L
J2	H	L	L	L	L
J3	L	H	L	L	L
J4	H	H	L	L	L
J5	L	L	H	L	L
J6	H	L	H	L	L
J7	L	H	H	L	L
J8	H	H	H	L	L
J9	L	L	L	H	L
J10	H	L	L	H	L
J11	L	H	L	H	L
J12	H	H	L	H	L
J13	L	L	H	H	L
J14	H	L	H	H	L
J15	L	H	H	H	L
J16	H	H	H	H	L


LOGIC TABLE CONTINUED					
OUTPUT PORT	E1	E2	E3	E4	E5
J17	L	L	L	L	H
J18	H	L	L	L	H
J19	L	H	L	L	H
J20	H	H	L	L	H
J21	L	L	H	L	H
J22	H	L	H	L	H
J23	L	H	H	L	H
J24	H	H	H	L	H
J25	L	L	L	H	H
J26	H	L	L	H	H
J27	L	H	L	H	H
J28	H	H	L	H	H
J29	L	L	H	H	H
J30	H	L	H	H	H
J31	L	H	H	H	H
J32	H	H	H	H	H

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE JOB# 7051039PE	06/19/07	RA
	A	CHNG. CONN. SPACING, DEL. SIZE GOAL	06/15/07	RA
	B	SEE ECR# 07-122 (ADDED LOGIC TABLE)	9/29/07	RA

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE.
 NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION.

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 XXXX ±0.020
 XXXX ±0.010

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 ISO 9001:2000 CERTIFIED



MECHANICAL OUTLINE DRAWING
 MSN-32DT-05-DEC-MP
 OPTIONS: 100M20, PM10

DATE	06/19/07	SCALE	N/S
APPROVALS	DATE	DESIGN NO.	60483
DESIGN	09-28	TRW NO.	100-4059-006
ORDERED	06-04	SHEET	3 OF 3
REVISION	06/19/07	REV.	B

FINAL TEST DATA

FINAL TEST DATA SHEETS

FOR

AMC MODEL NUMBER

MSN-32DT-05-DEC-MP
OPTION 100M20, PM10

Serial Number:

32MS801001



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**FINAL TEST DATA
 ON
 MICROWAVE SWITCH**

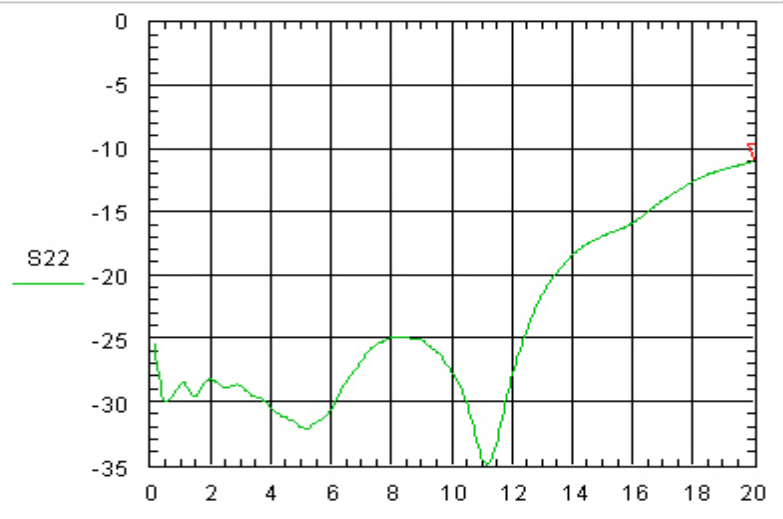
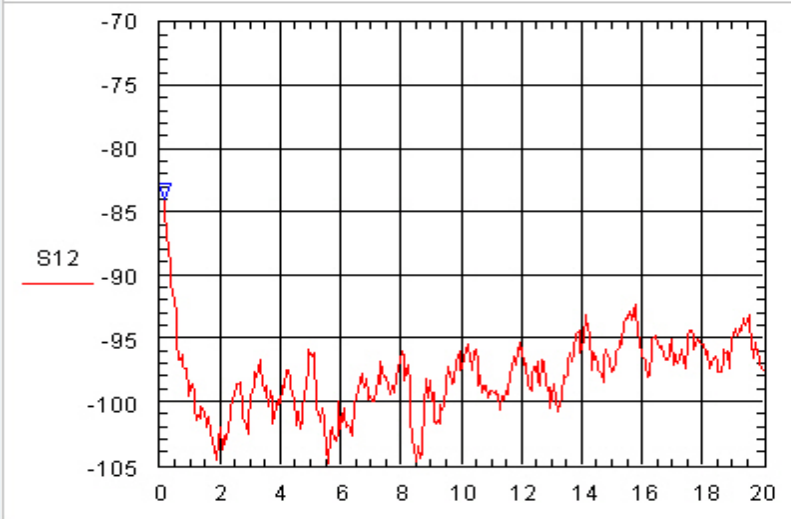
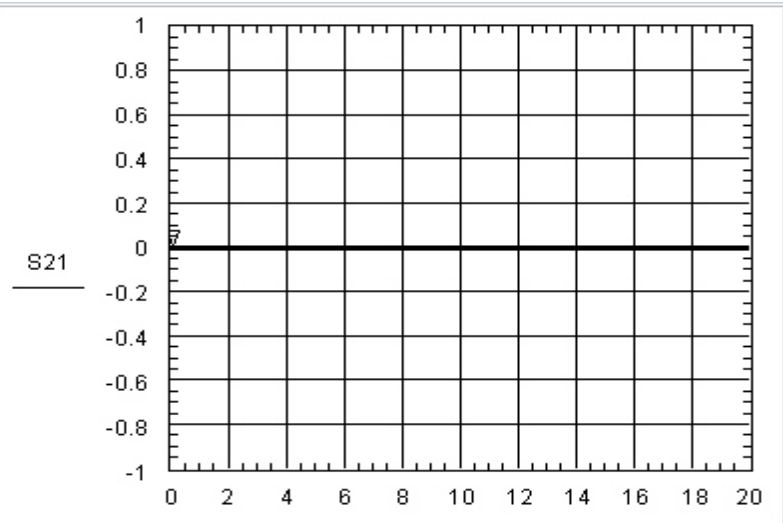
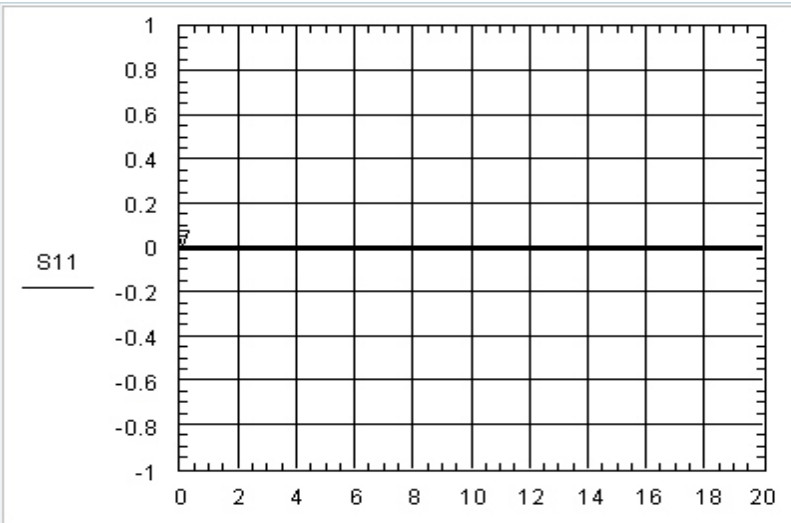
CUSTOMER:	MI TECH	TECHNICIAN:	L.C.
JOB NO:	705103PE	CUSTOMER PART NO:	
MODEL NO:	MSN-32DT-05-DEC-MP	OPTION NO:	100M20, PM10
SERIAL NO:	32MS 801001	SPECIFICATION:	MIL-STD-454
CURRENT DRAW:	+ 5 VDC @ 1490 mA; - 5 VDC @ 180 mA	FREQUENCY RANGE:	0.1 GHz - 20 GHz

INSERTION LOSS (WORST CASE)	RETURN LOSS (WORST CASE)						
	INPUT dB	INPUT VSWR	OUTPUT ON db	OUTPUT ON VSWR	OUTPUT OFF db	OUTPUT OFF VSWR	
J33-J17 12.59 dB @ 0.1-20 GHz	9.78 dB	1.96 : 1	9.03 dB	2.09 : 1	10.93 dB	1.79 : 1	
J33-J18 12.94 dB @ 0.1-20 GHz	10.56 dB	1.84 : 1	10.41 dB	1.86 : 1	13.09 dB	1.57 : 1	
J33-J19 13.04 dB @ 0.1-20 GHz	10.70 dB	1.82 : 1	10.32 dB	1.88 : 1	14.50 dB	1.46 : 1	
J33-J20 13.06 dB @ 0.1-20 GHz	10.58 dB	1.84 : 1	10.19 dB	1.90 : 1	12.73 dB	1.60 : 1	
J33-J21 12.91 dB @ 0.1-20 GHz	11.11 dB	1.77 : 1	10.15 dB	1.90 : 1	14.16 dB	1.49 : 1	
J33-J22 12.89 dB @ 0.1-20 GHz	11.17 dB	1.76 : 1	12.01 dB	1.67 : 1	15.43 dB	1.41 : 1	
J33-J23 12.38 dB @ 0.1-20 GHz	11.24 dB	1.76 : 1	10.93 dB	1.79 : 1	16.48 dB	1.35 : 1	
J33-J24 12.60 dB @ 0.1-20 GHz	11.20 dB	1.76 : 1	11.19 dB	1.76 : 1	12.83 dB	1.59 : 1	
ISOLATION	PHASE (WORST CASE) RELATIVE TO J33-J1						
J33-J17 80.61dB @ 0.1-20 GHz		J33-J17	-8.9°	@ 16.77Ghz			
J33-J18 84.70dB @ 0.1-20 GHz		J33-J18	8.3°	@ 16.40Ghz			
J33-J19 87.58dB @ 0.1-20 GHz		J33-J19	9.4°	@ 9.330Ghz			
J33-J20 81.92dB @ 0.1-20 GHz		J33-J20	9.1°	@ 9.330Ghz			
J33-J21 80.49dB @ 0.1-20 GHz		J33-J21	8.2°	@ 19.35Ghz			
J33-J22 81.74dB @ 0.1-20 GHz		J33-J22	7.5°	@ 5.720Ghz			
J33-J23 81.82dB @ 0.1-20 GHz		J33-J23	6.9°	@ 9.372Ghz			
J33-J24 84.16dB @ 0.1-20 GHz		J33-J24	6.4°	@ 9.378Ghz			

* DENOTES A FAILURE

FINAL TEST DATA PLOTS
SERIAL NUMBER: 32MS801001

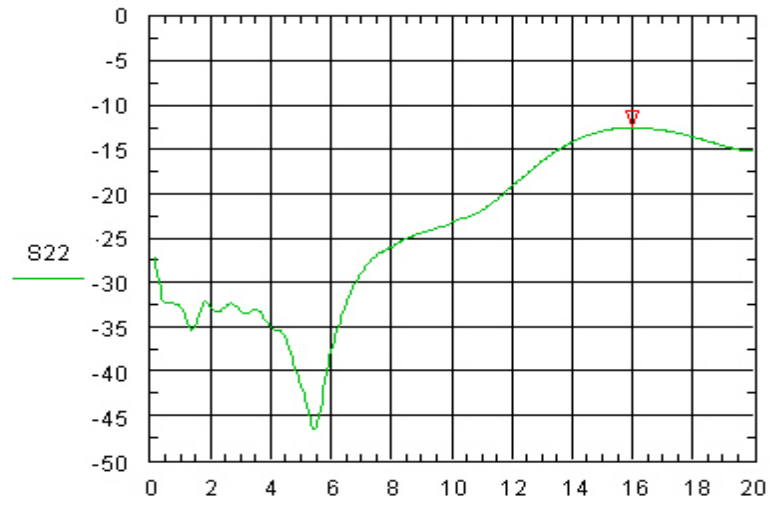
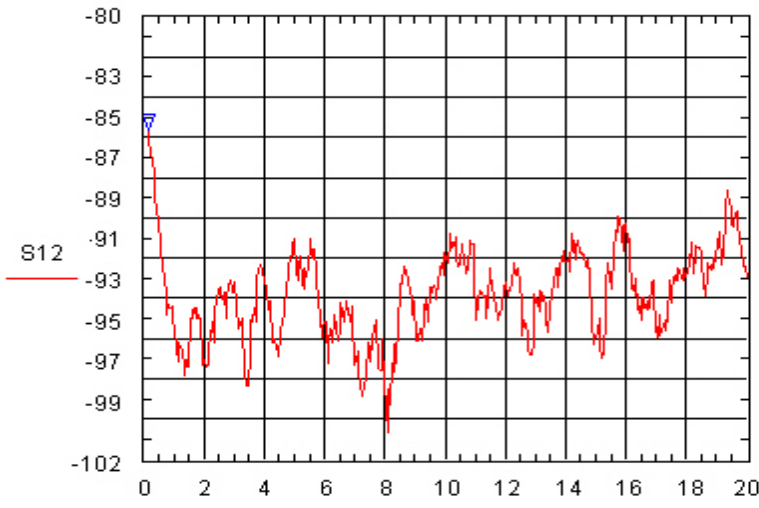
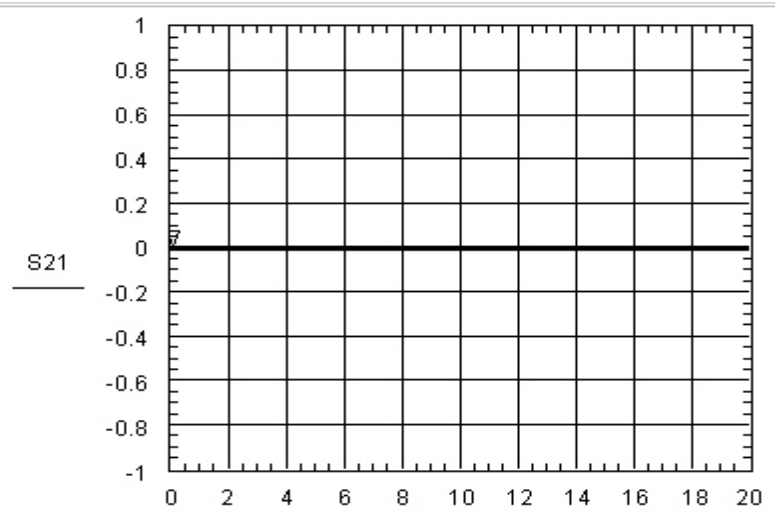
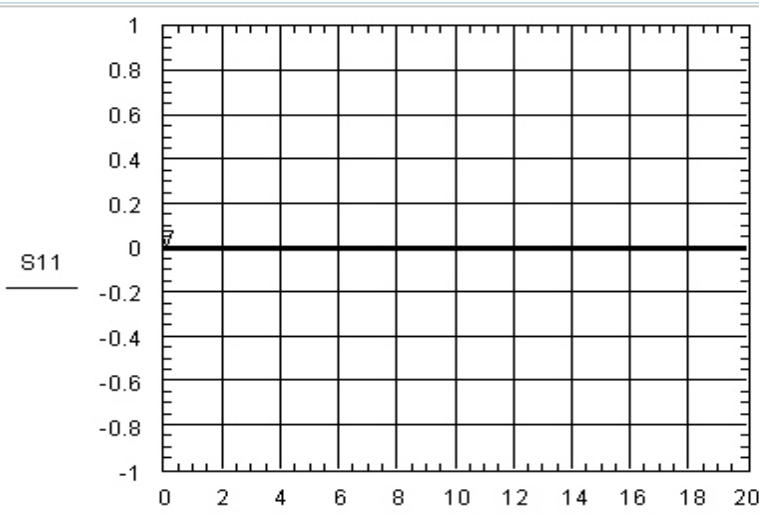
J33-J1 OFF



ISOLATION

VSWR

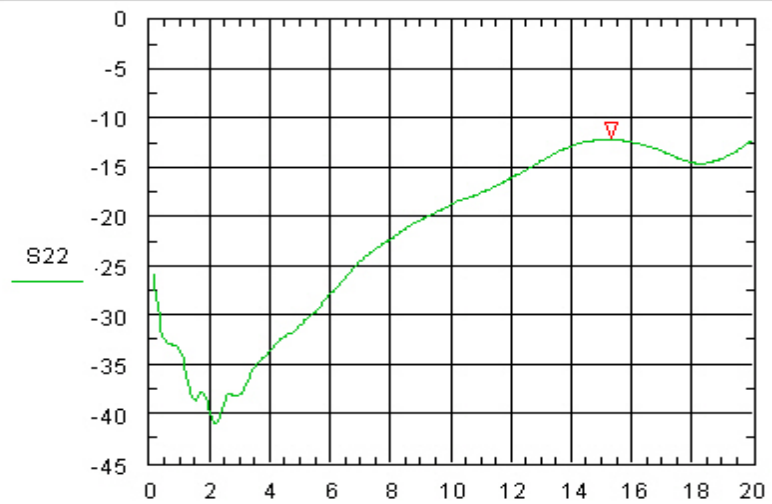
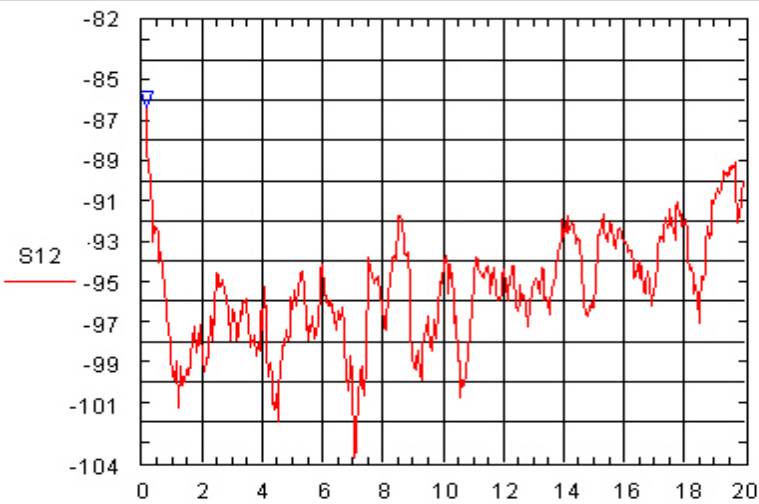
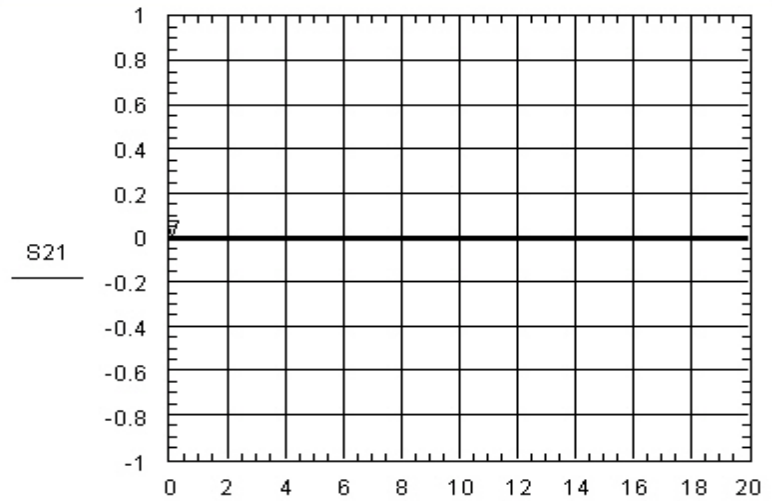
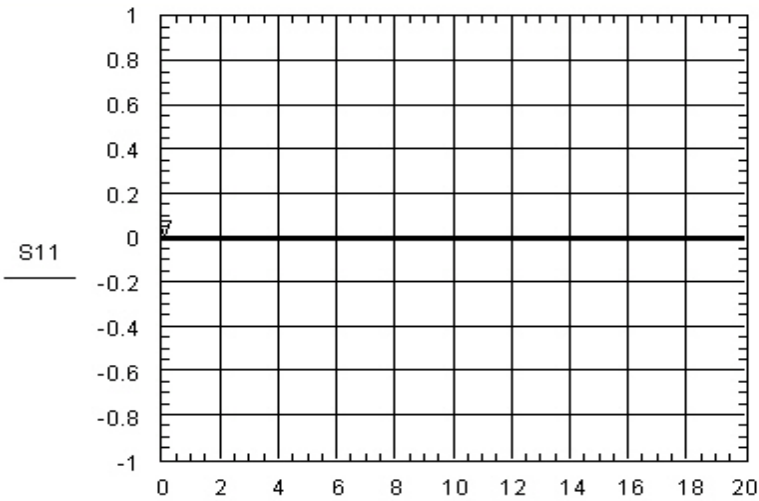
J33-J2 OFF



ISOLATION

VSWR

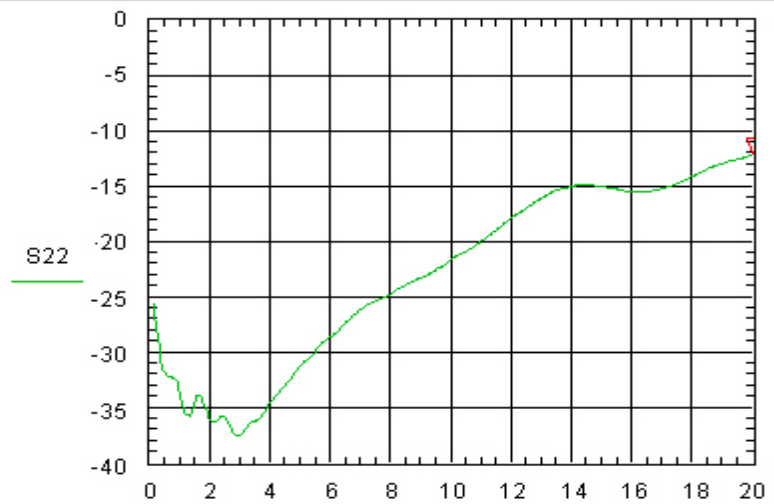
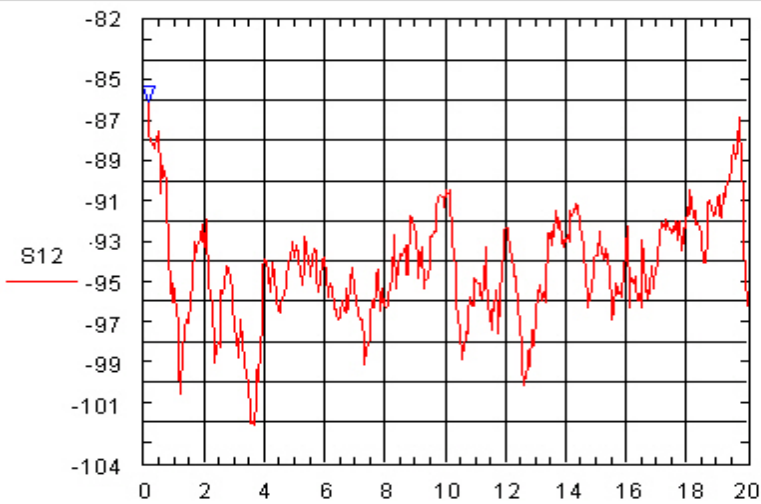
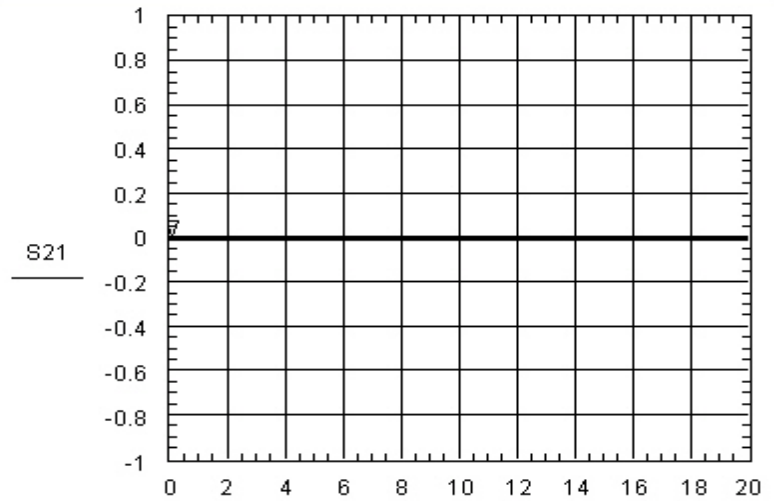
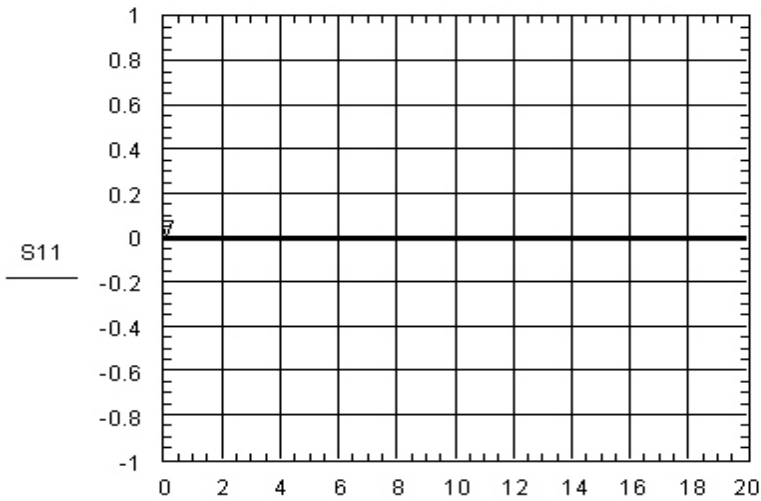
J33-J3 OFF



ISOLATION

VSWR

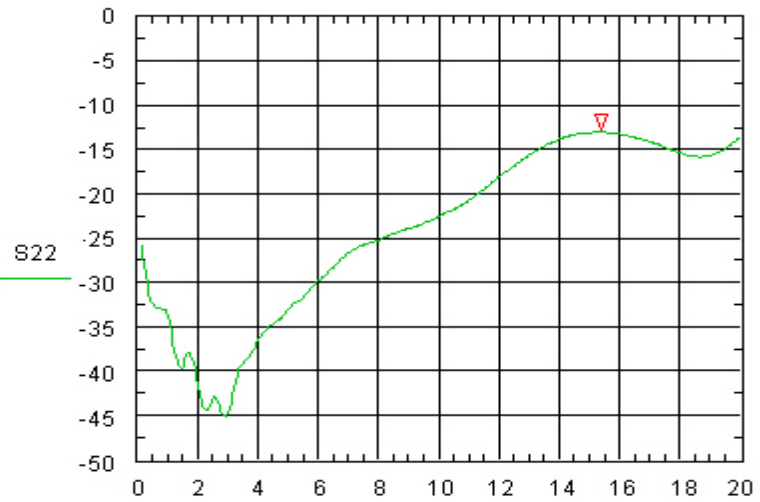
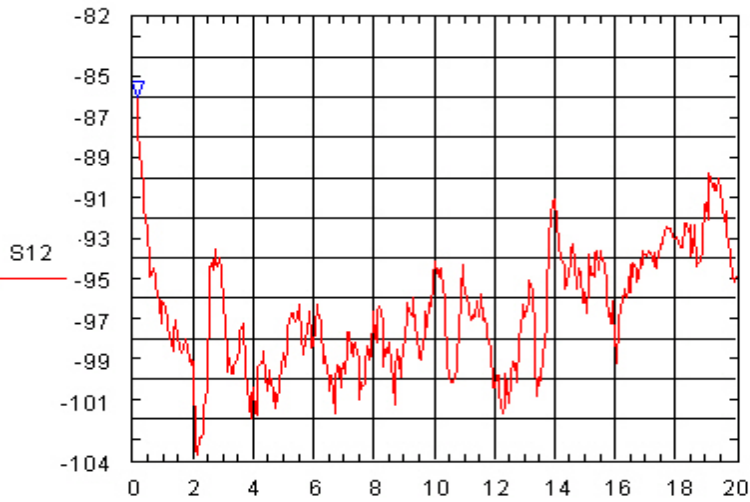
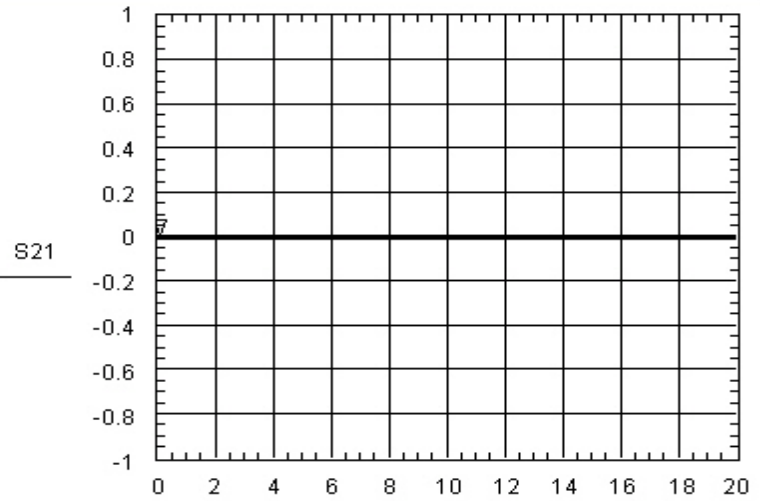
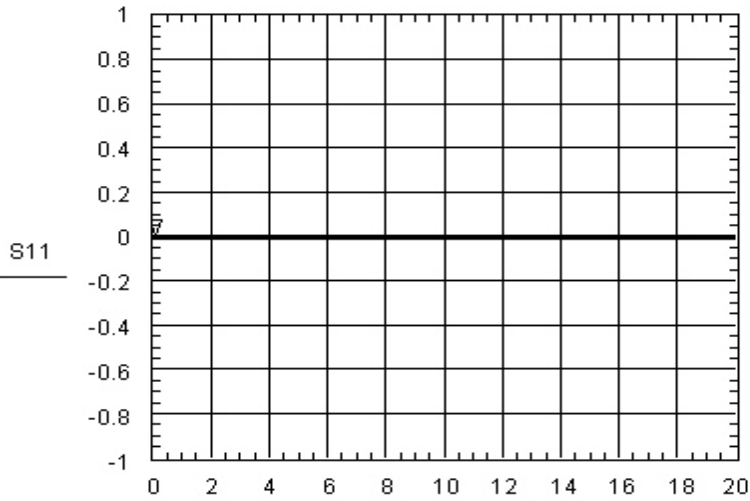
J33-J4 OFF



ISOLATION

VSWR

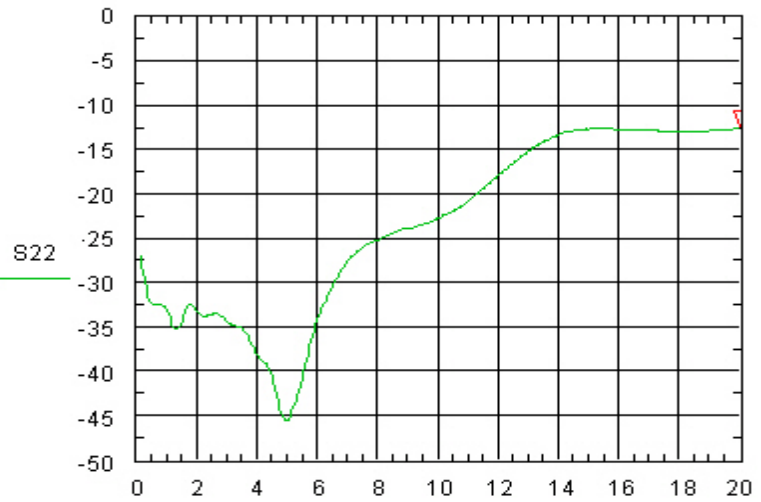
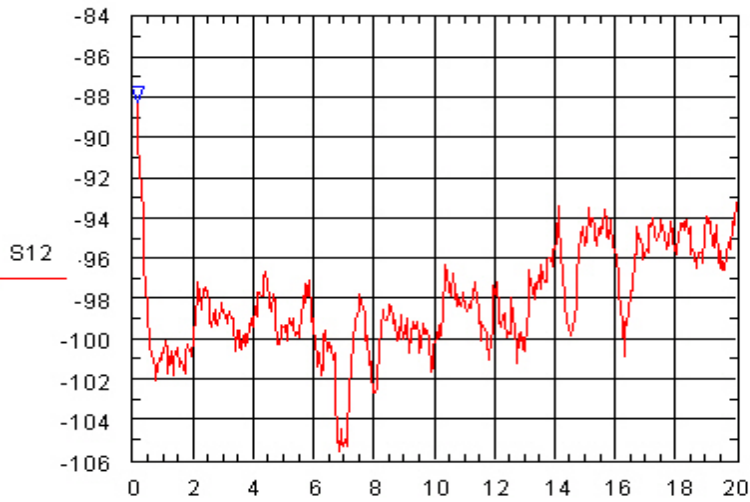
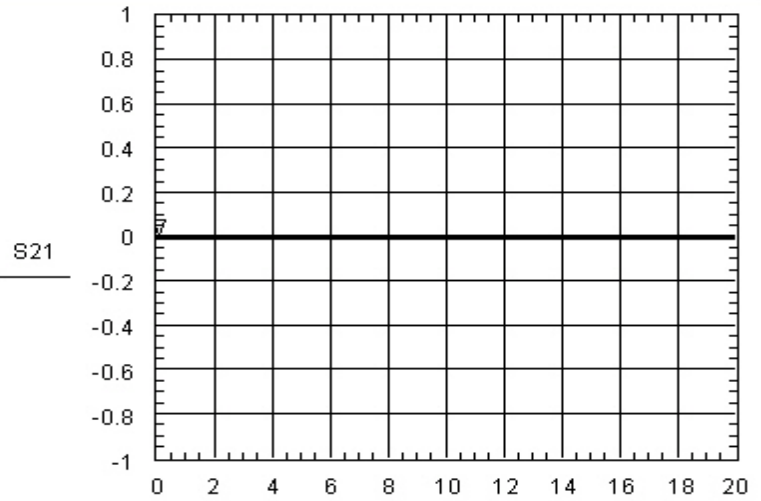
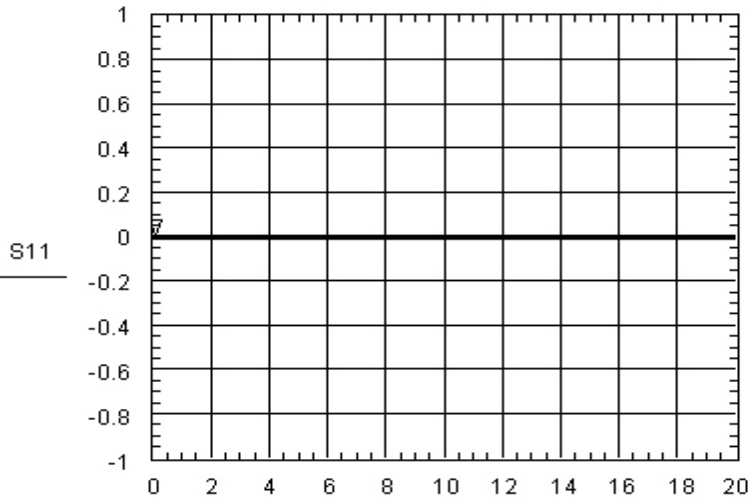
J33-J4 OFF



ISOLATION

VSWR

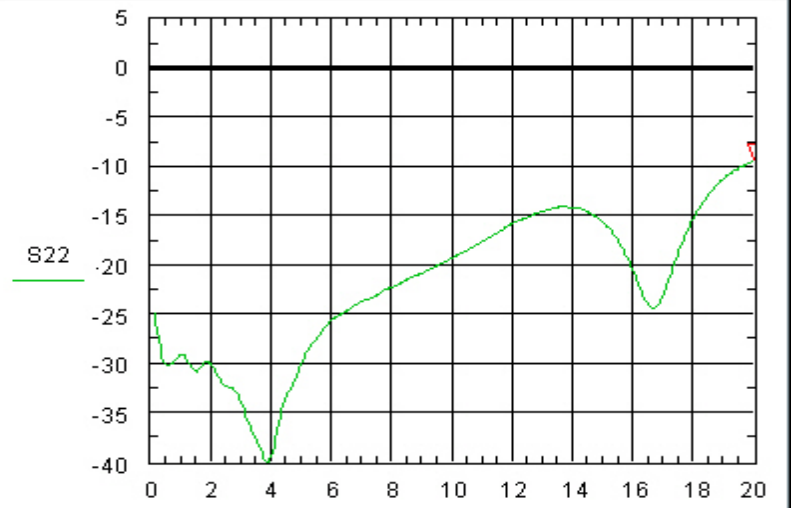
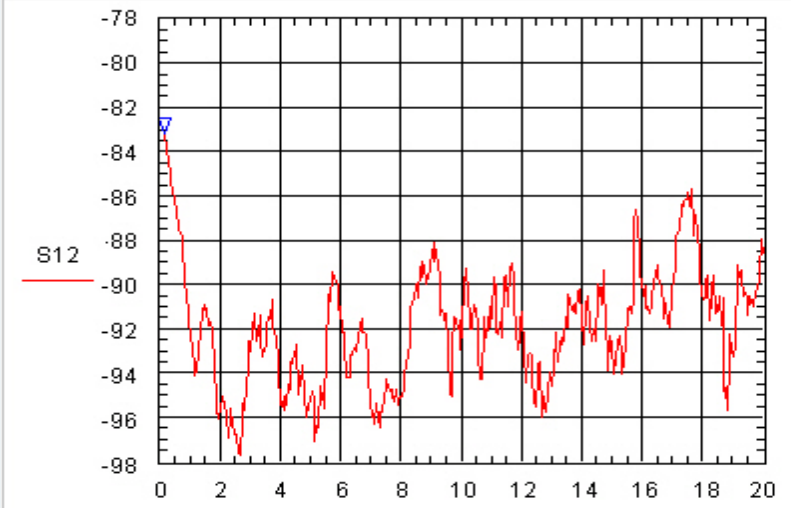
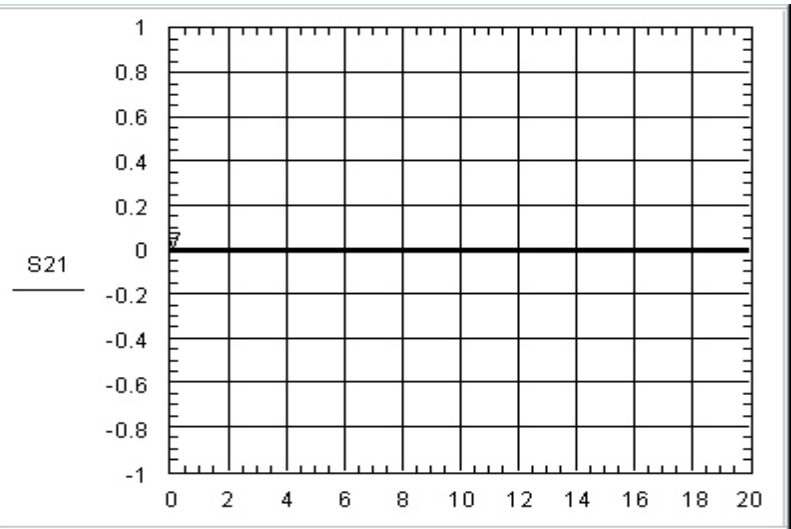
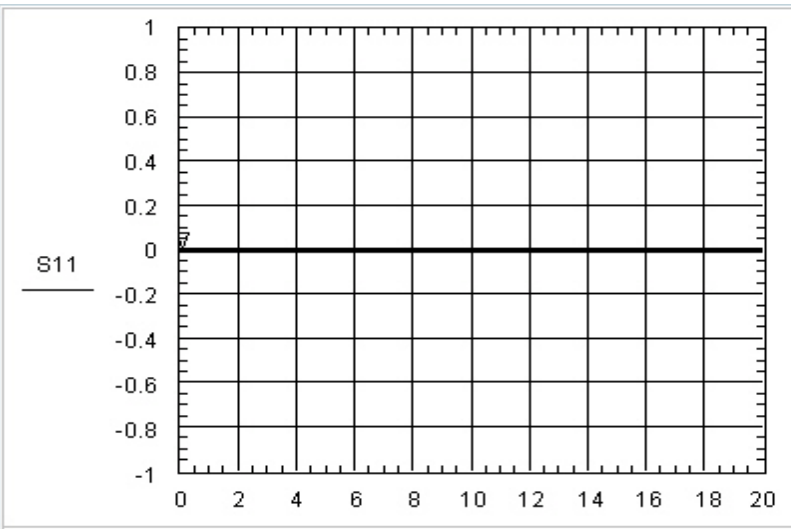
J33-J5 OFF



ISOLATION

VSWR

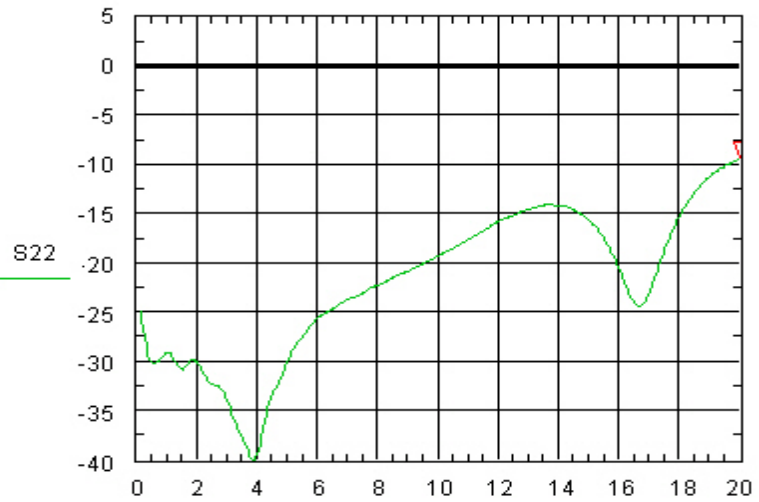
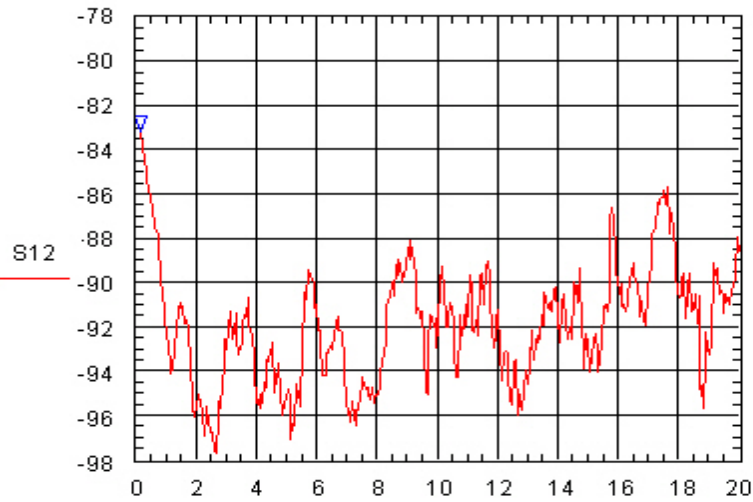
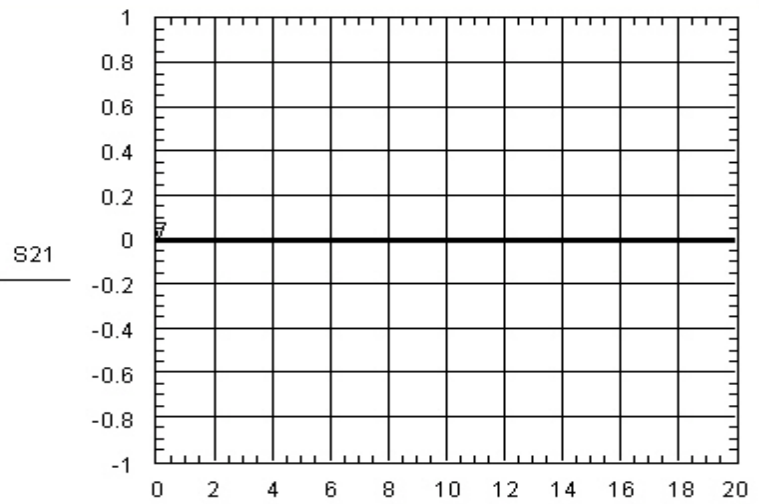
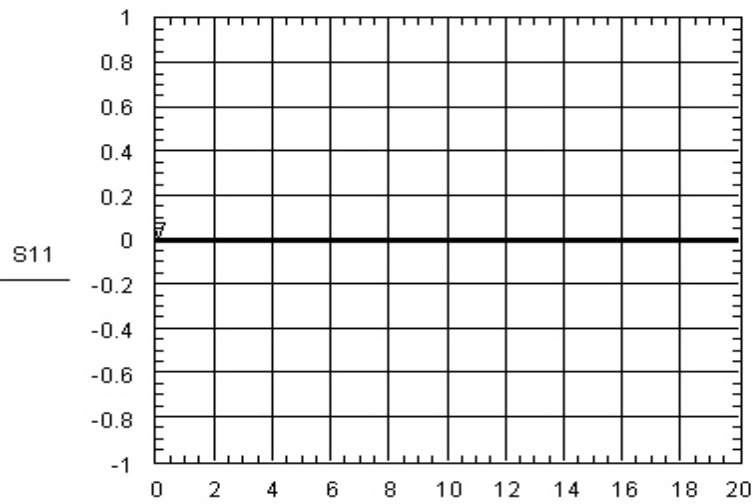
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ISOLATION

VSWR

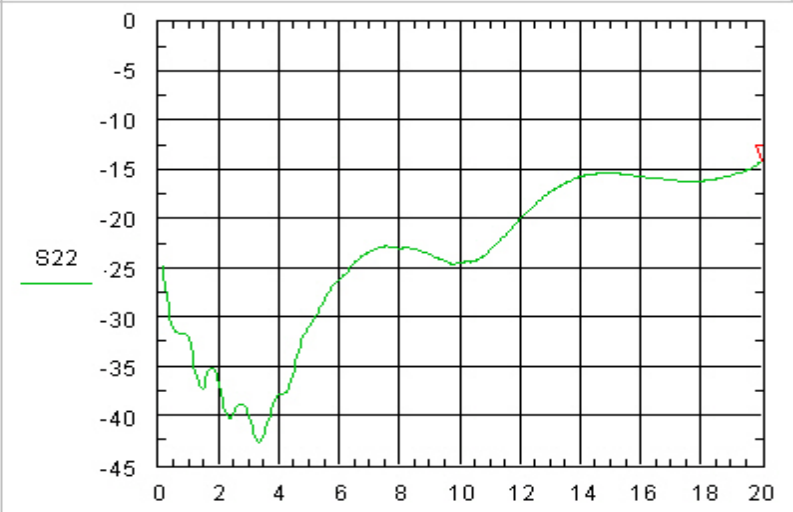
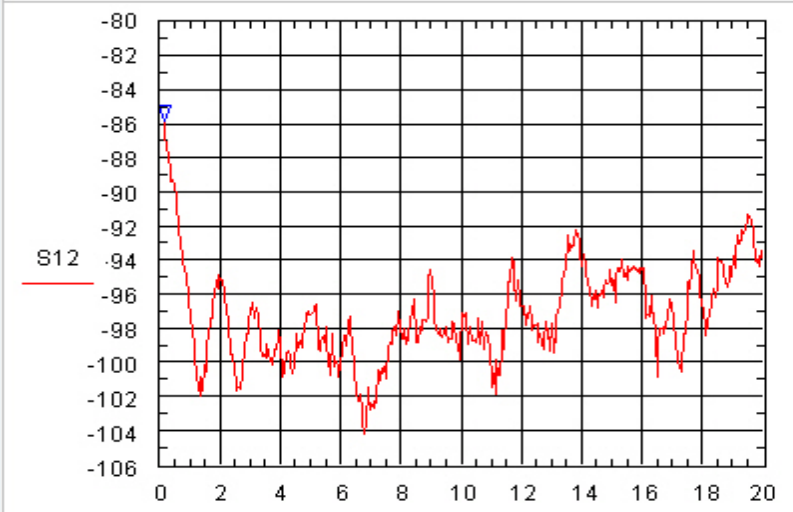
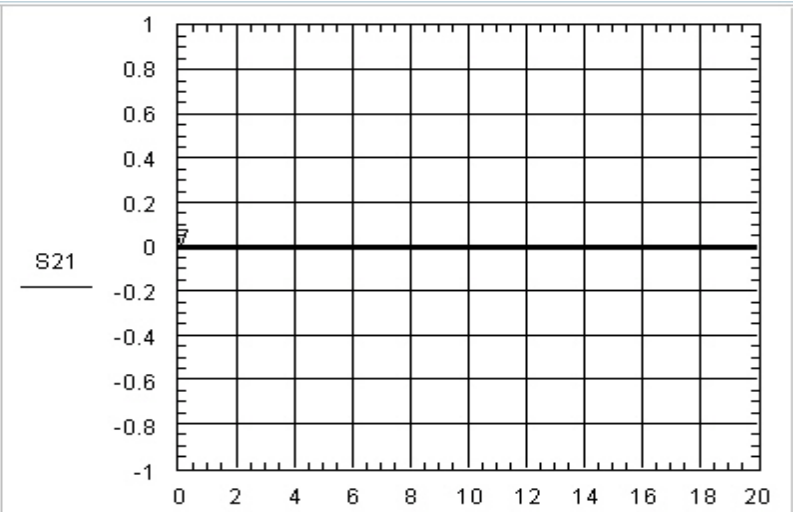
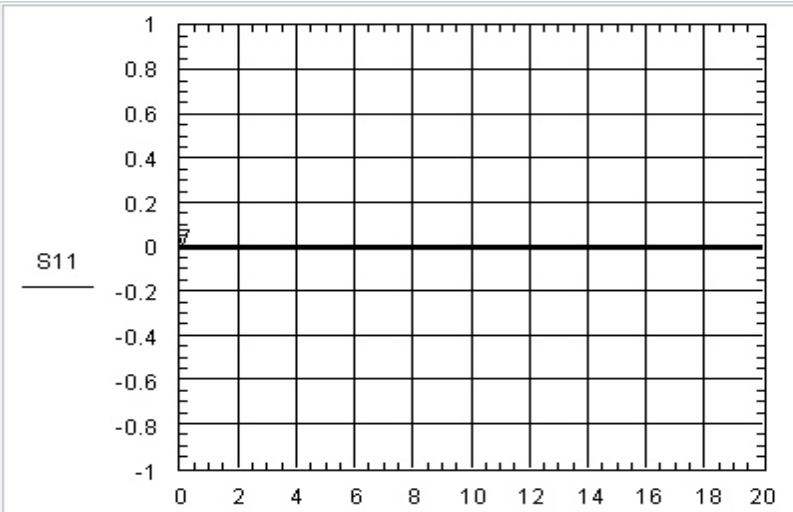
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ISOLATION

VSWR

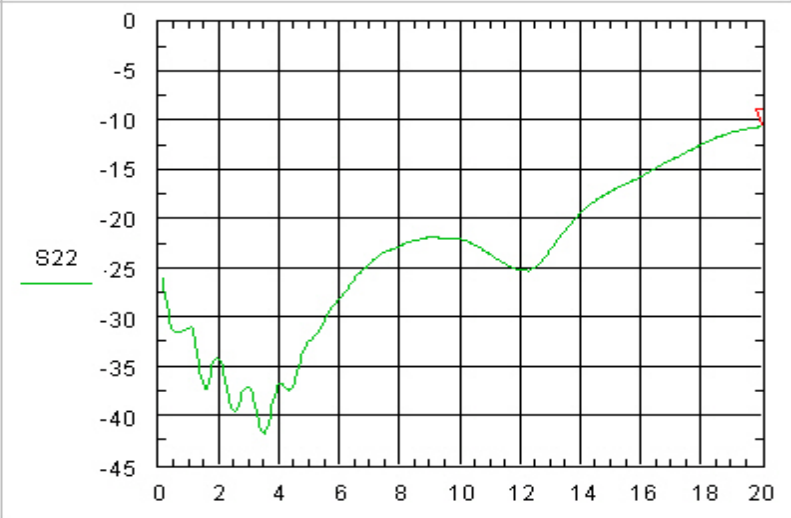
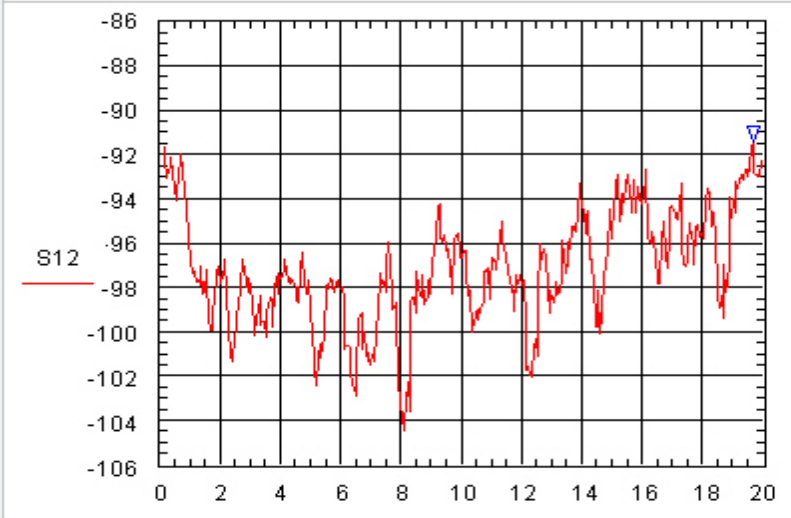
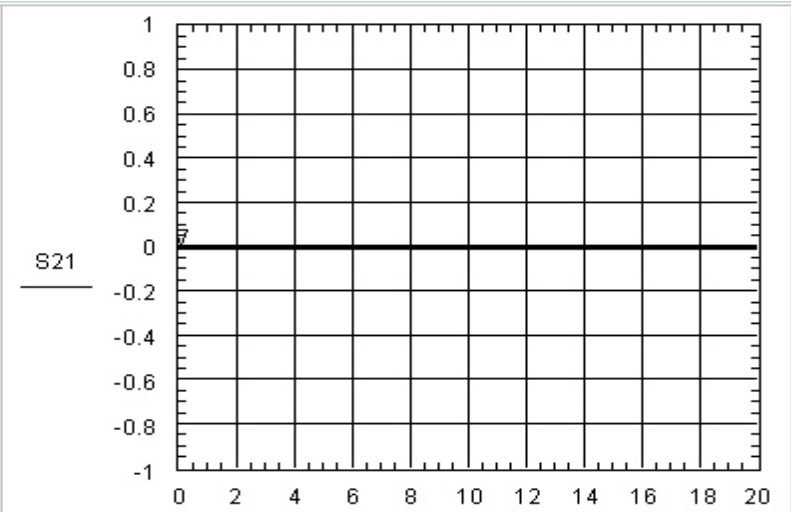
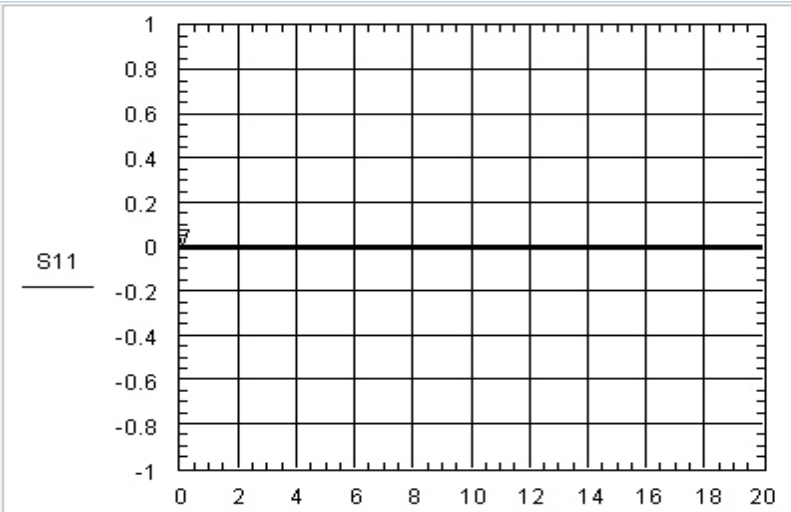
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ISOLATION

VSWR

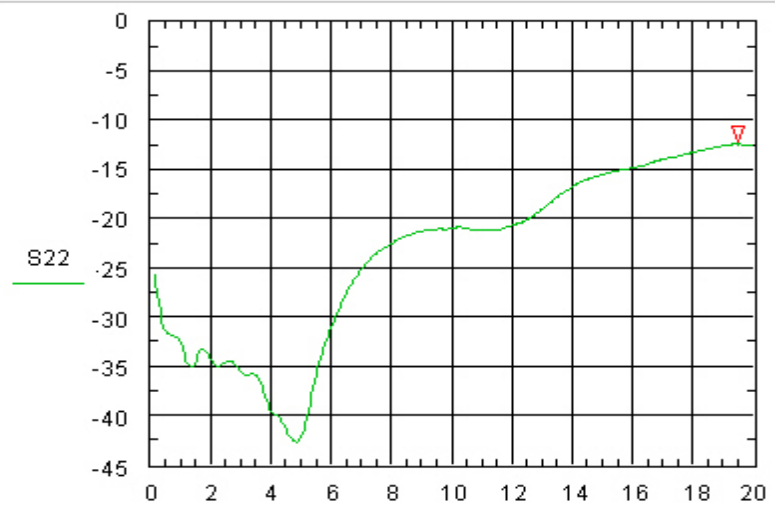
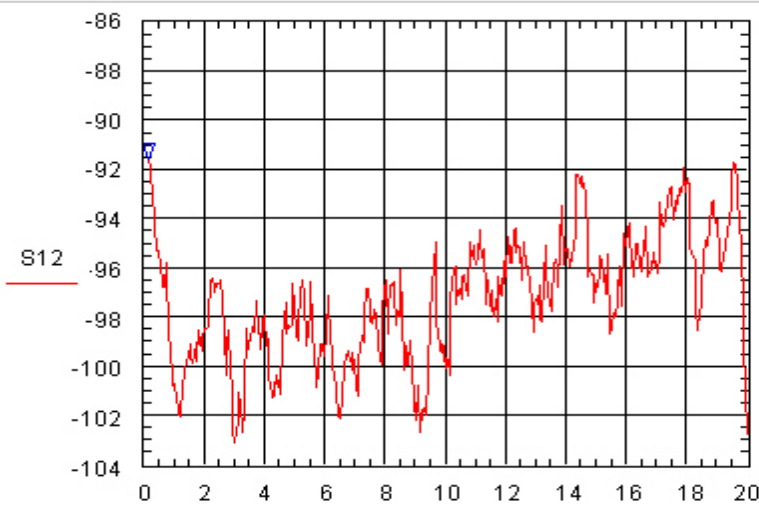
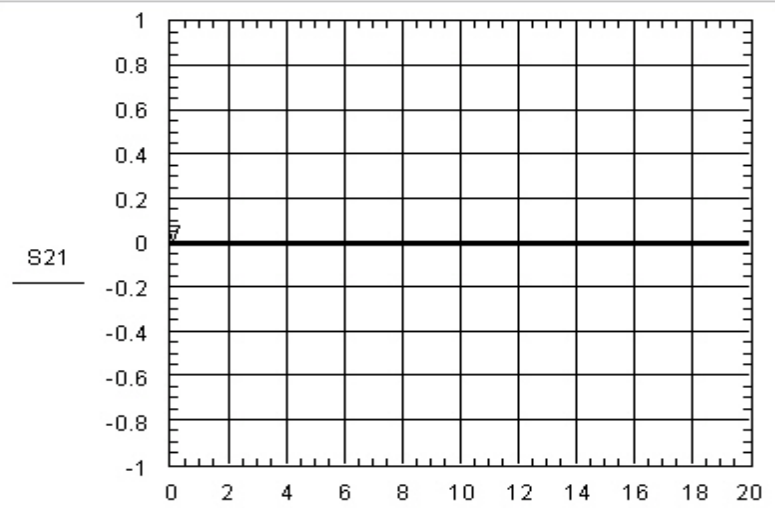
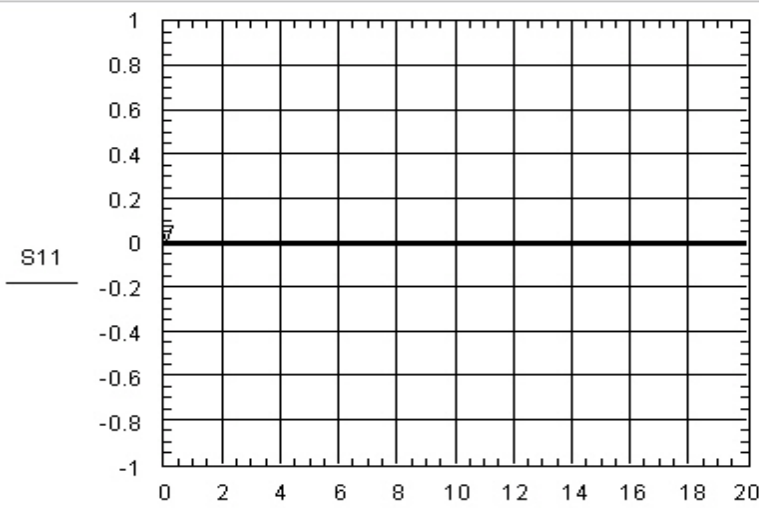
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ISOLATION

VSWR

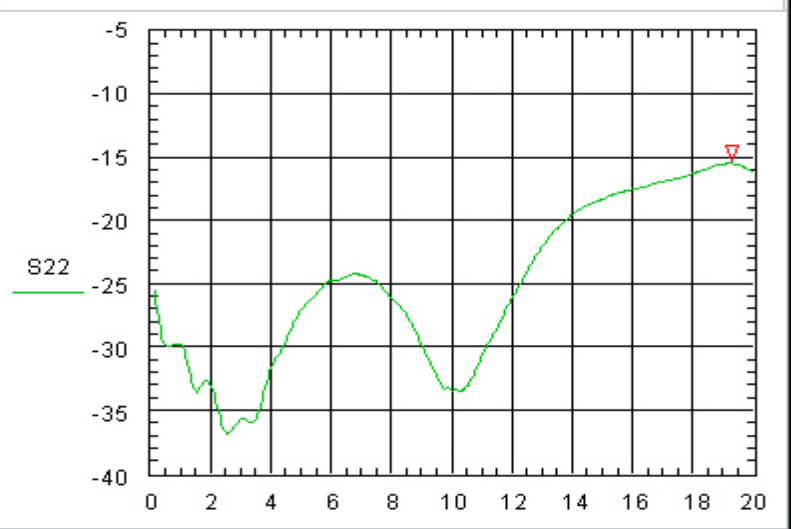
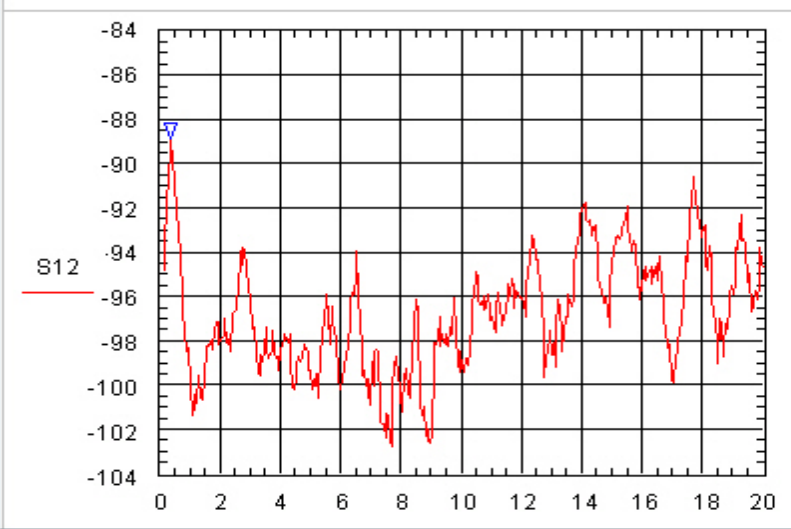
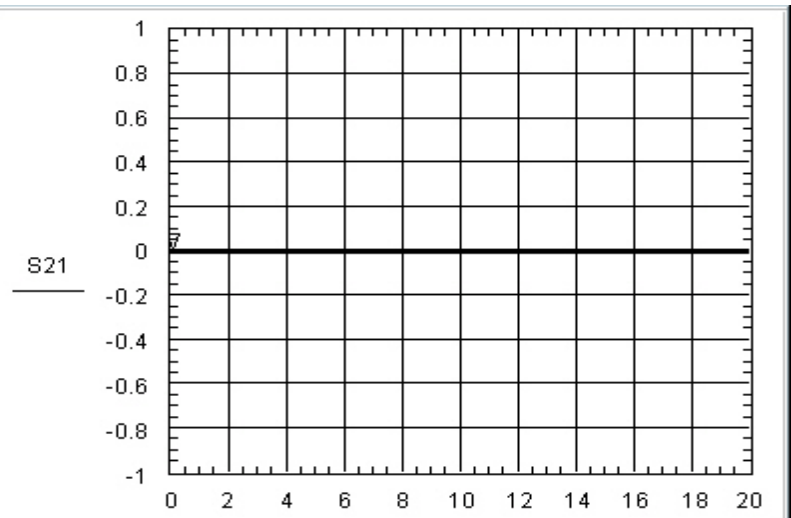
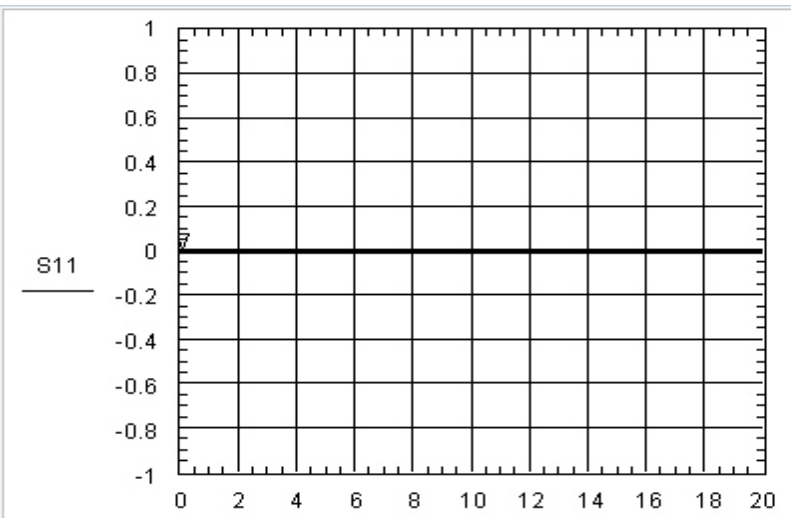
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ISOLATION

VSWR

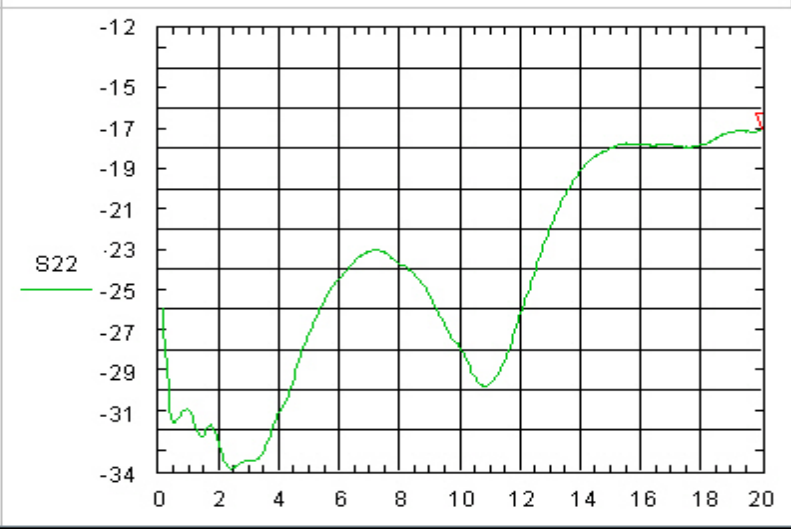
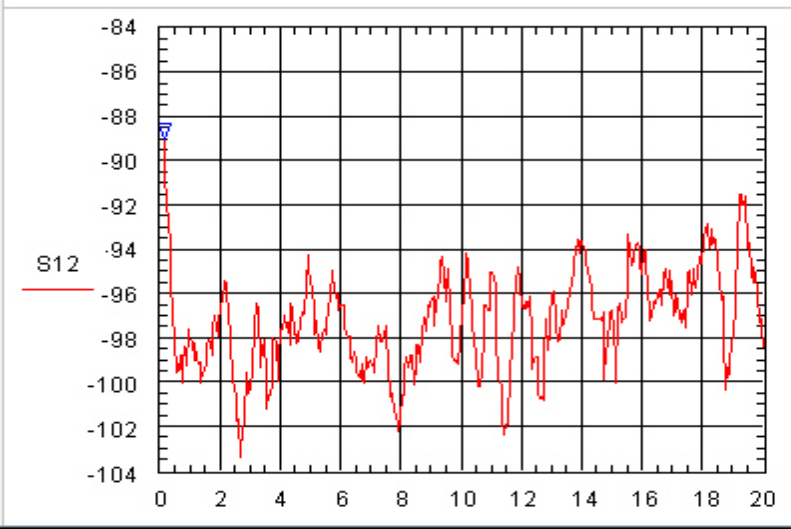
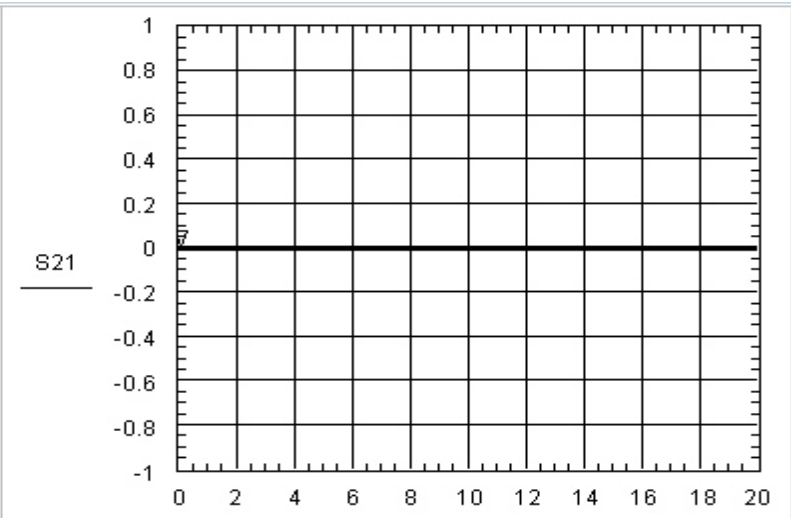
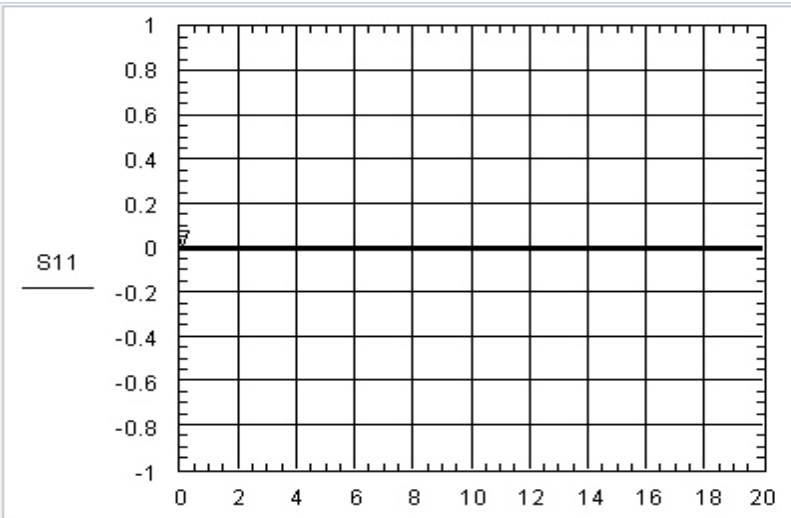
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ISOLATION

VSWR

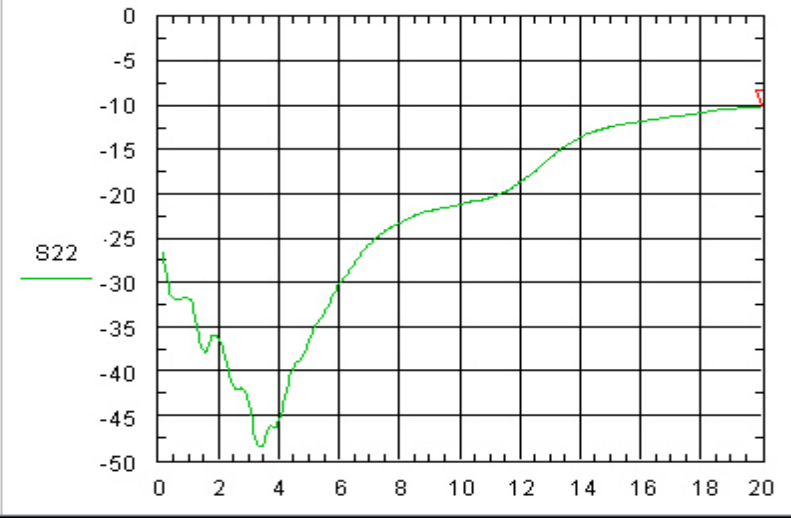
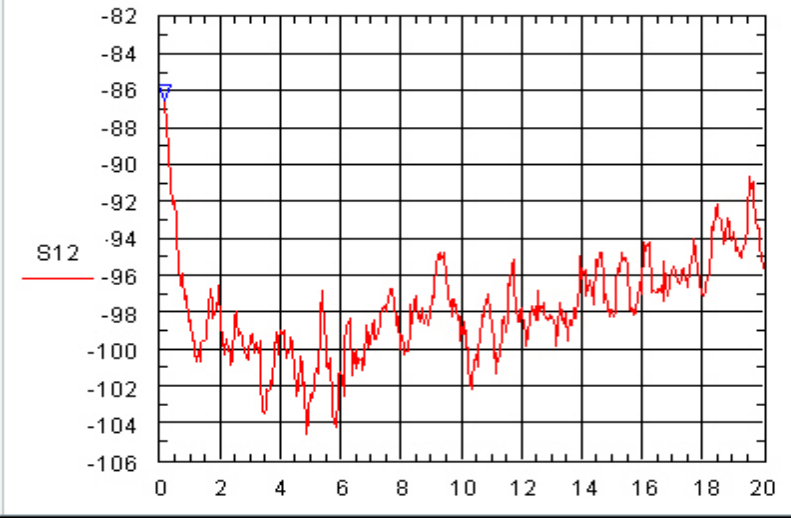
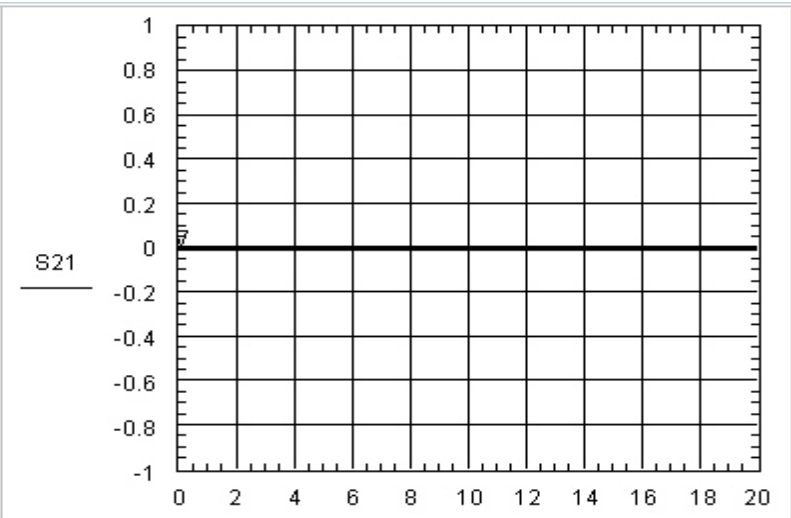
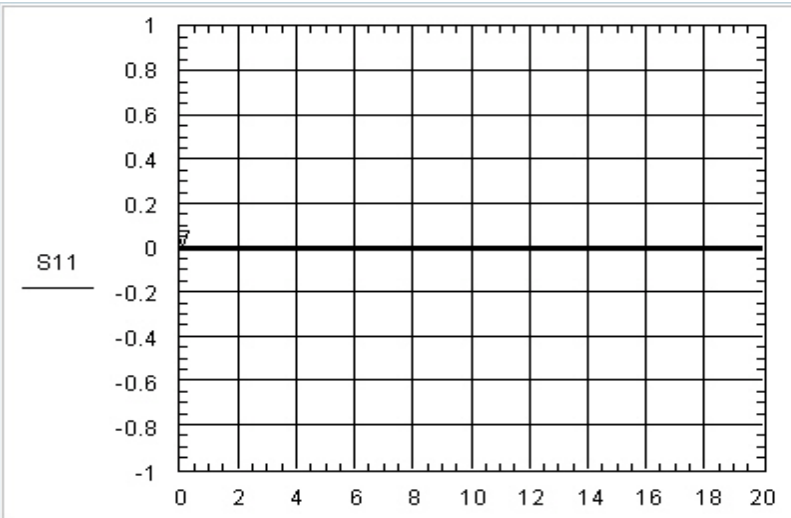
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ISOLATION

VSWR

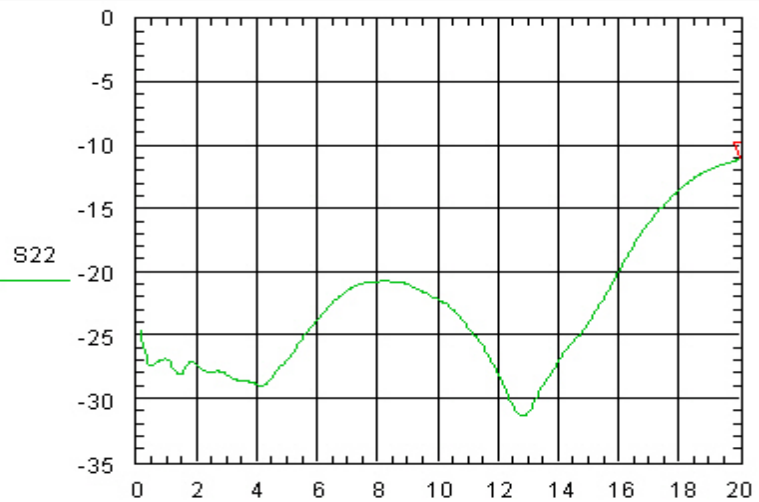
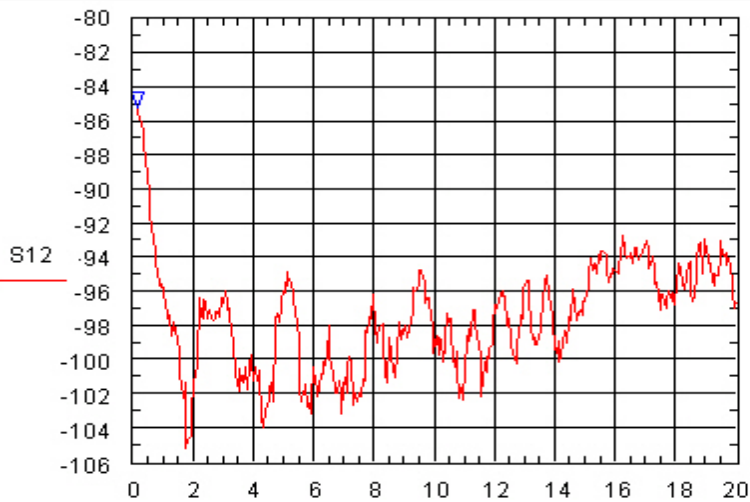
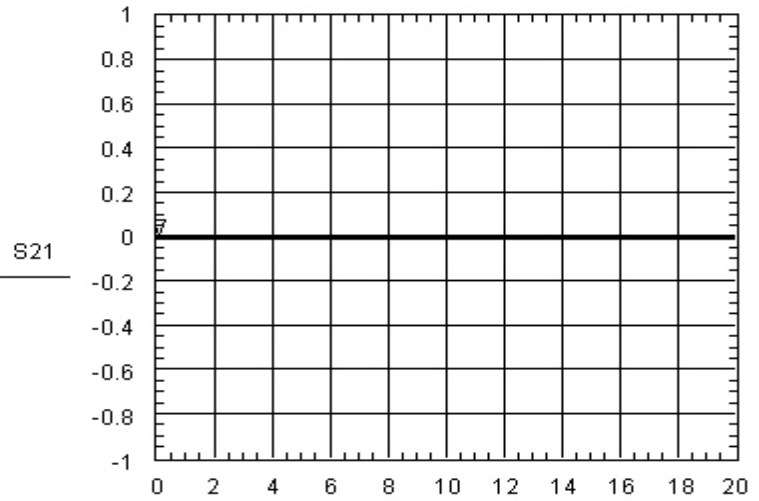
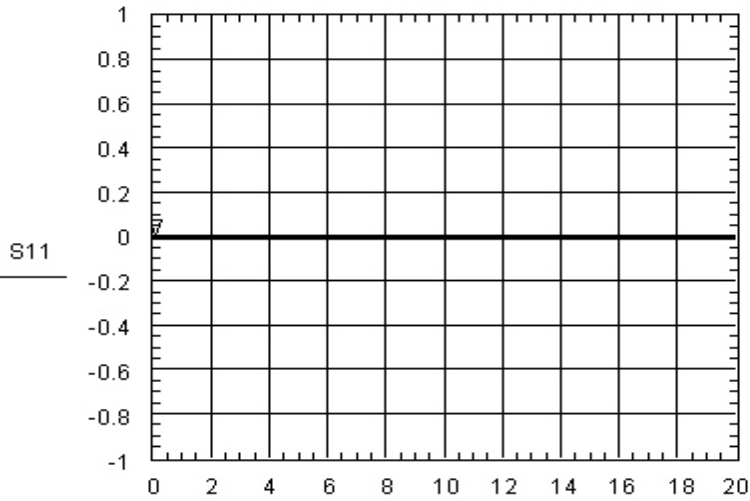
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ISOLATION

VSWR

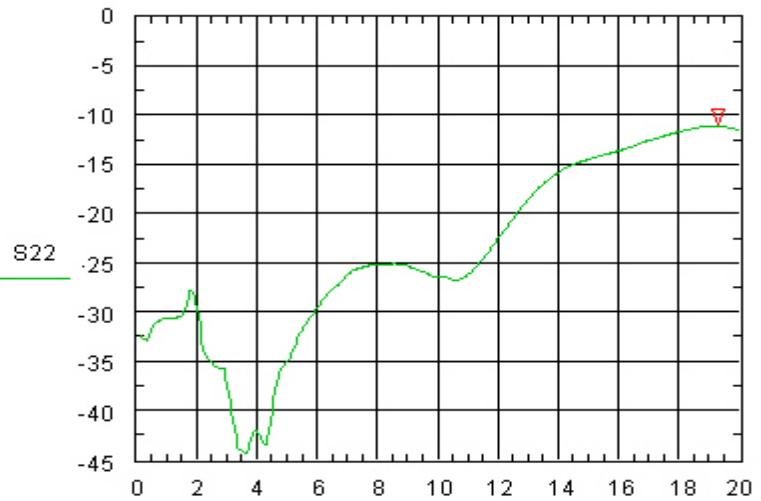
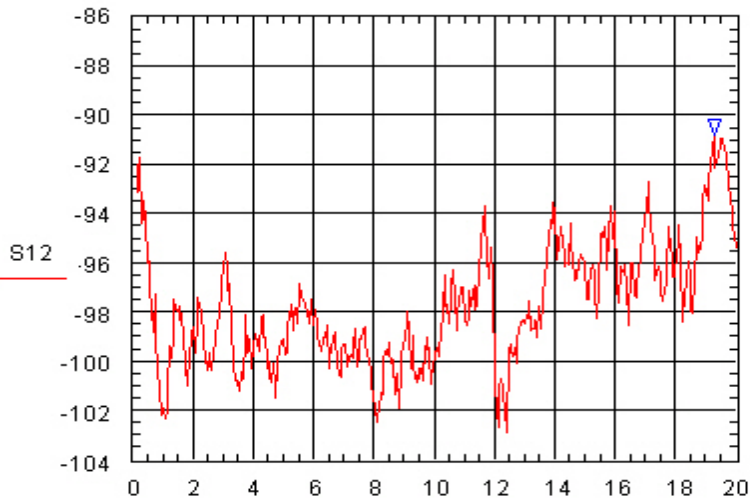
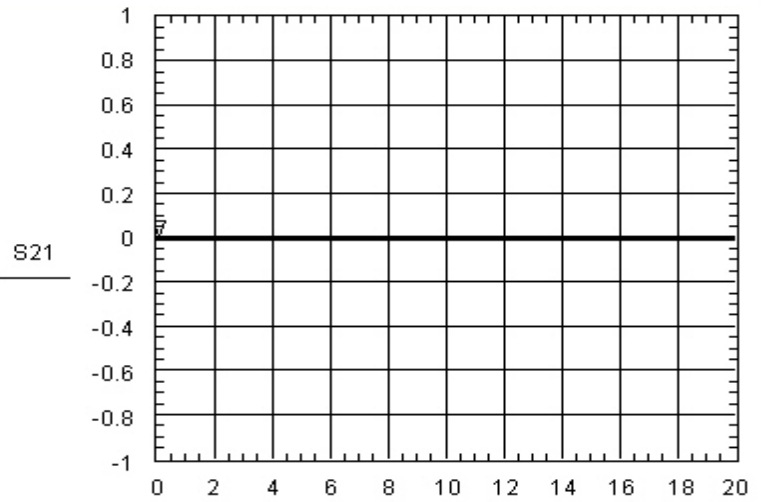
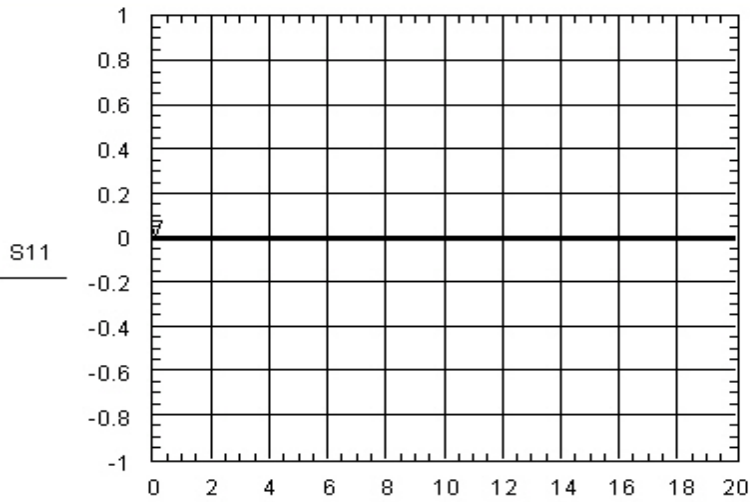
J33-J14 OFF



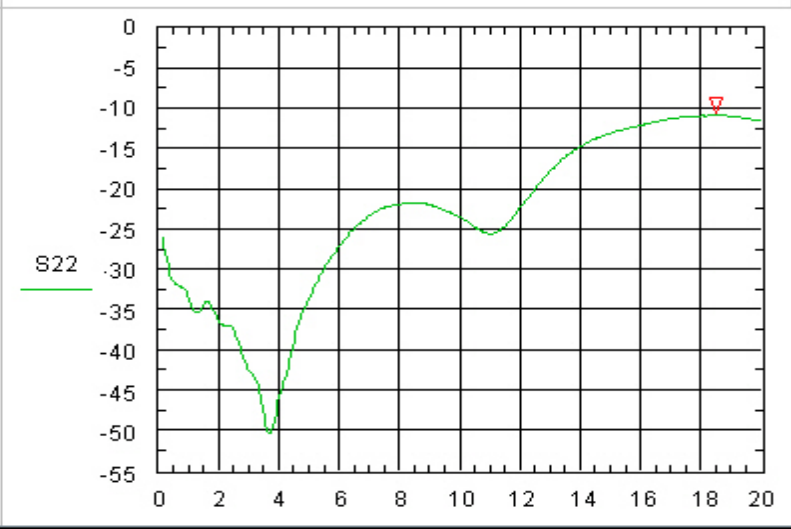
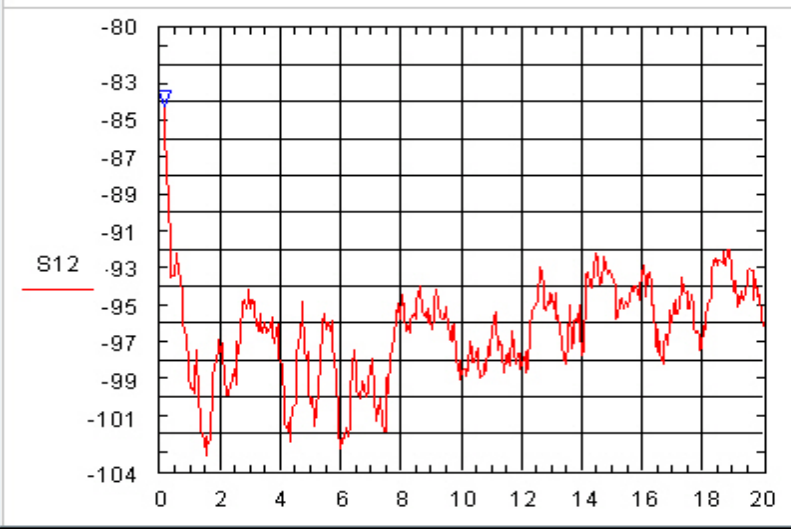
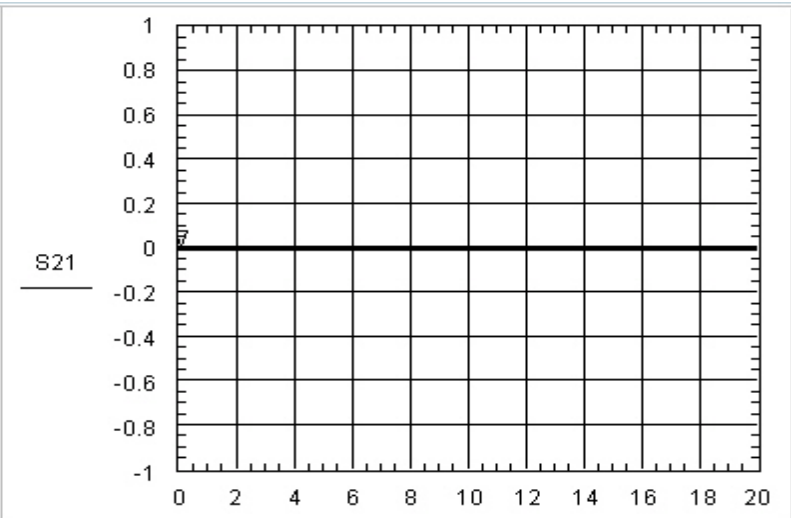
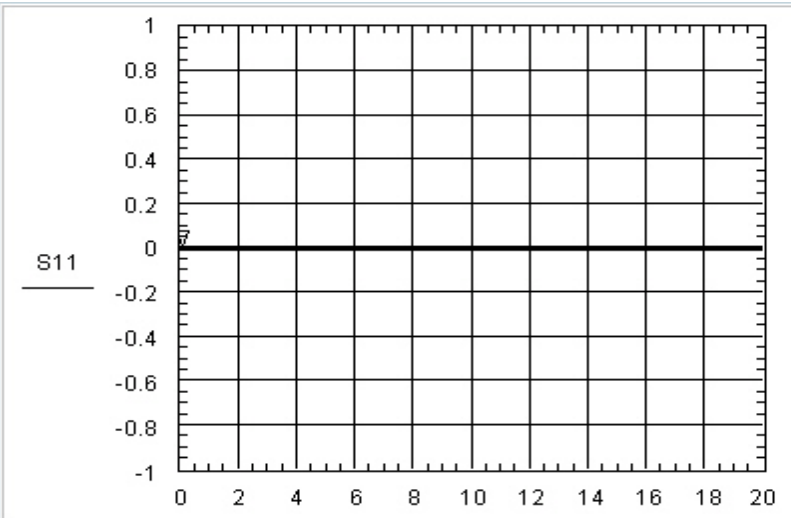
ISOLATION

VSWR

J33-J15 OFF



J33-J16 OFF

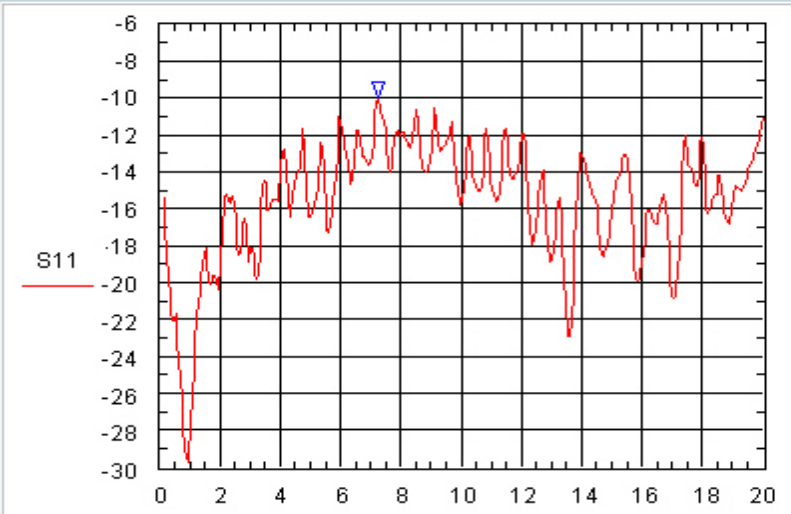


ISOLATION

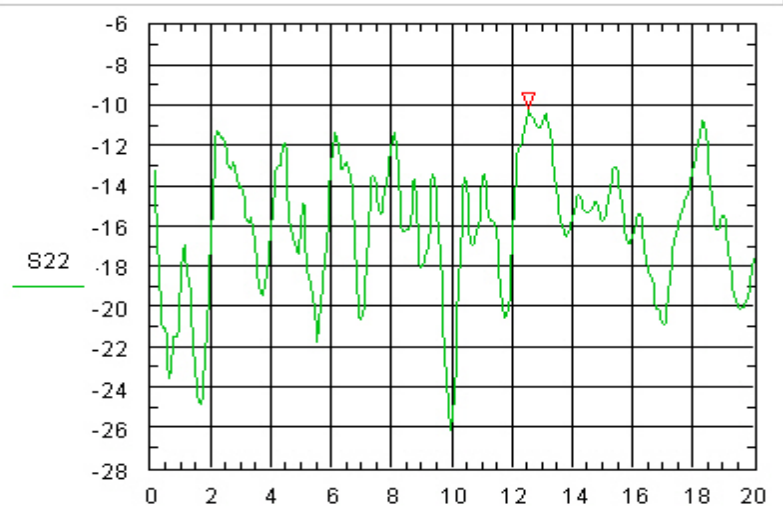
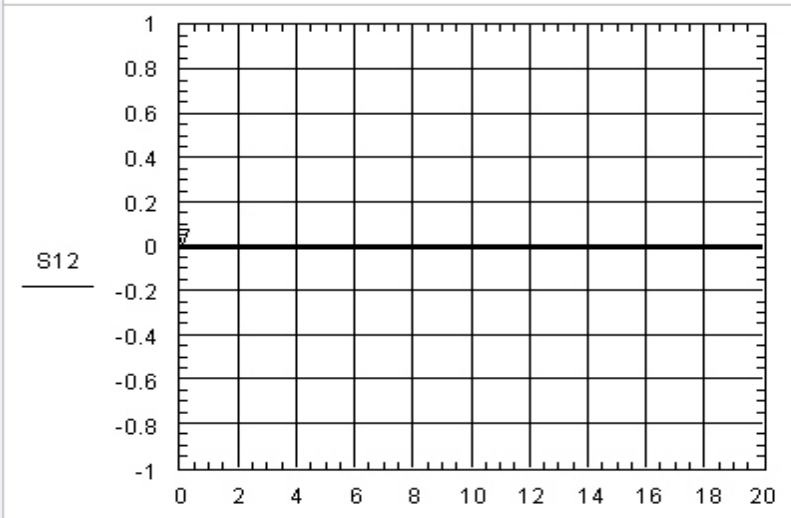
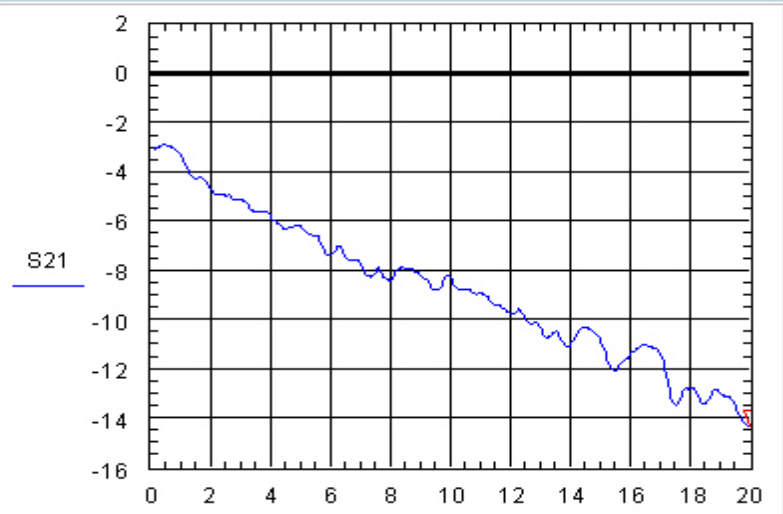
VSWR

J33-J1 ON

INPUT VSWR



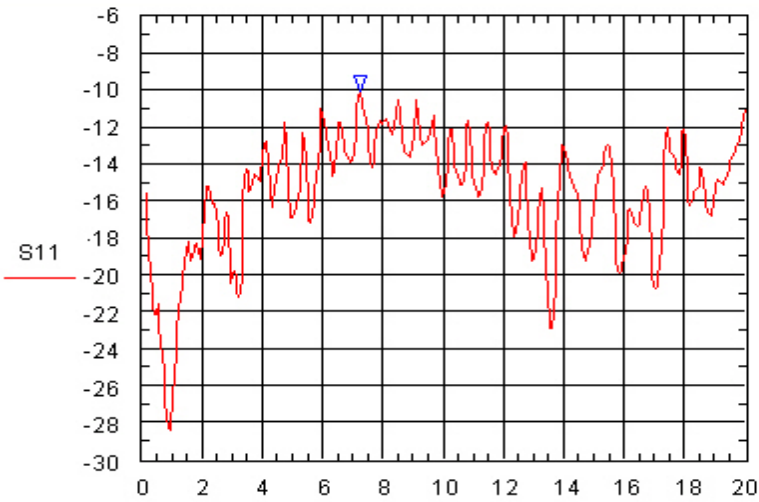
INSERTION LOSS



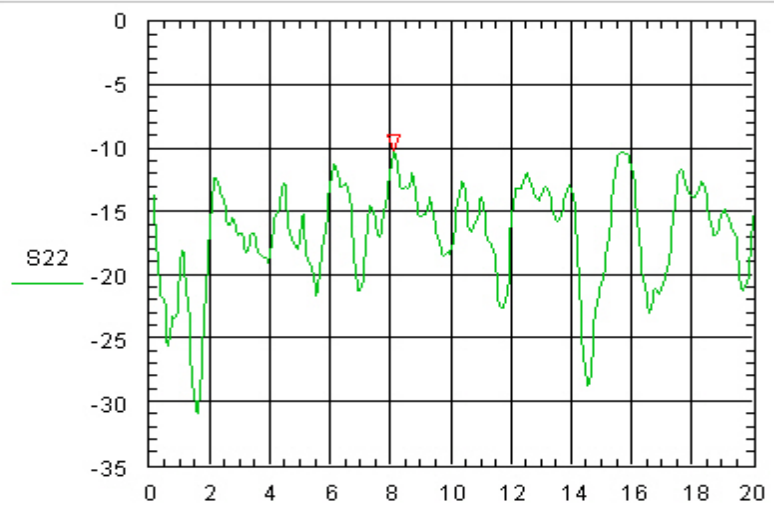
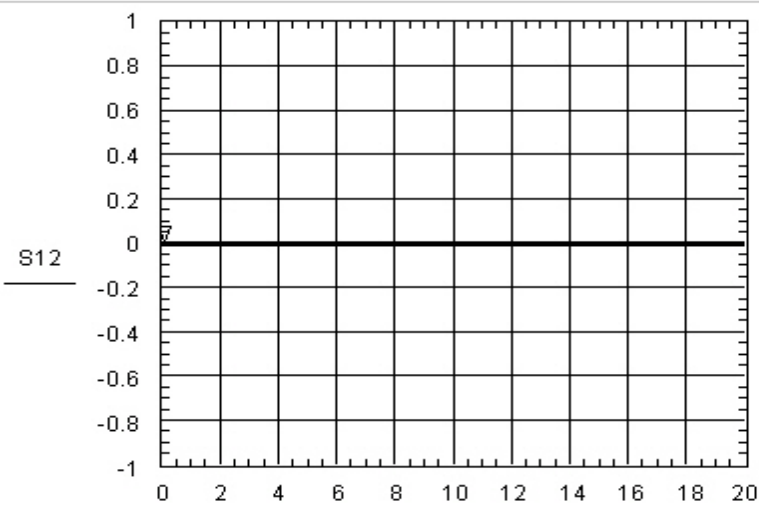
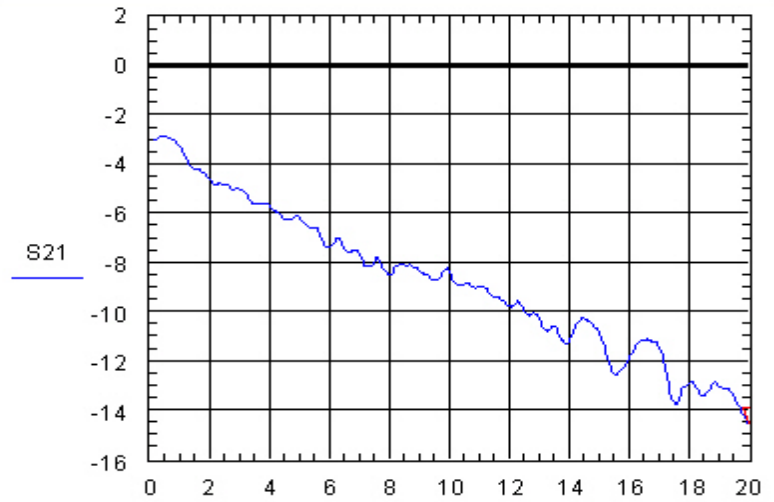
OUTPUT VSWR

J33-J2 ON

INPUT VSWR



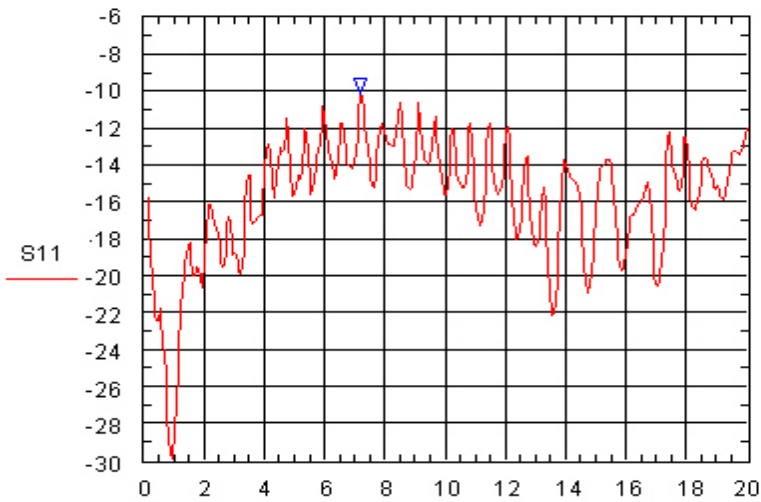
INSERTION LOSS



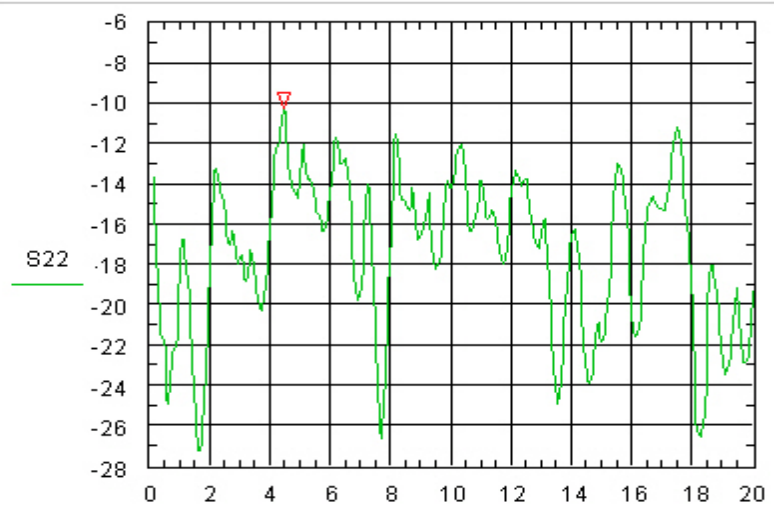
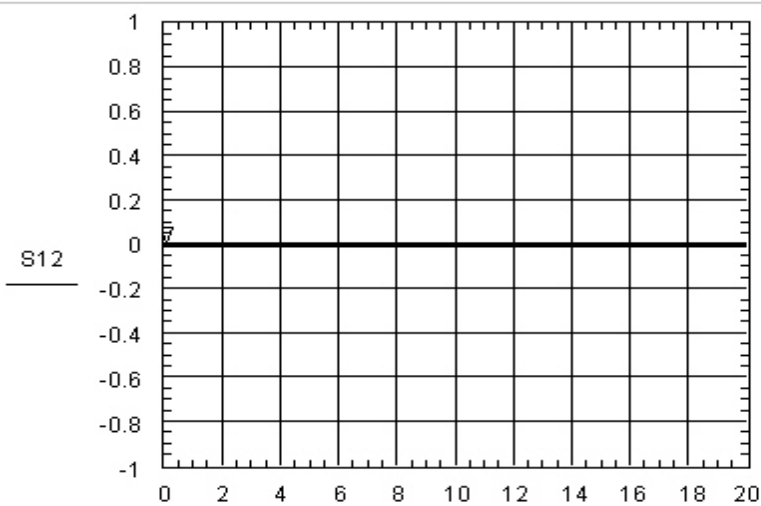
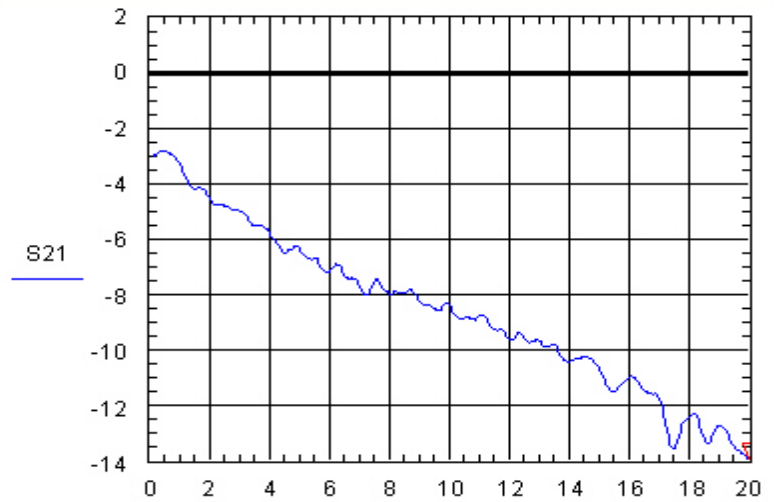
OUTPUT VSWR

J33-J3 ON

INPUT VSWR



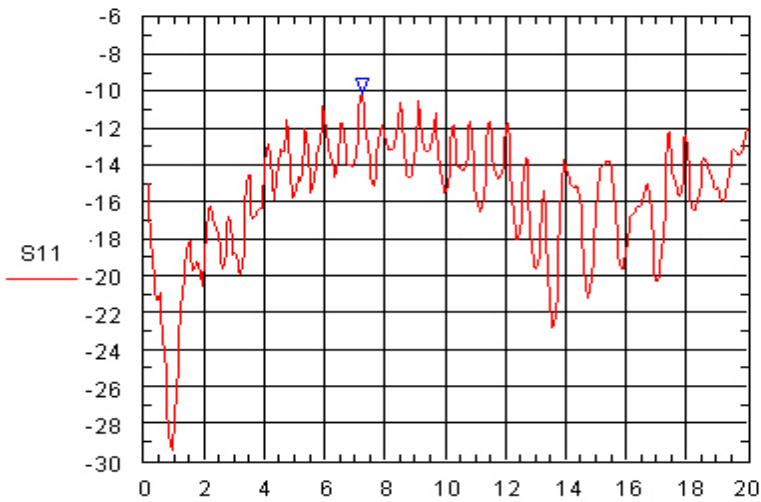
INSERTION LOSS



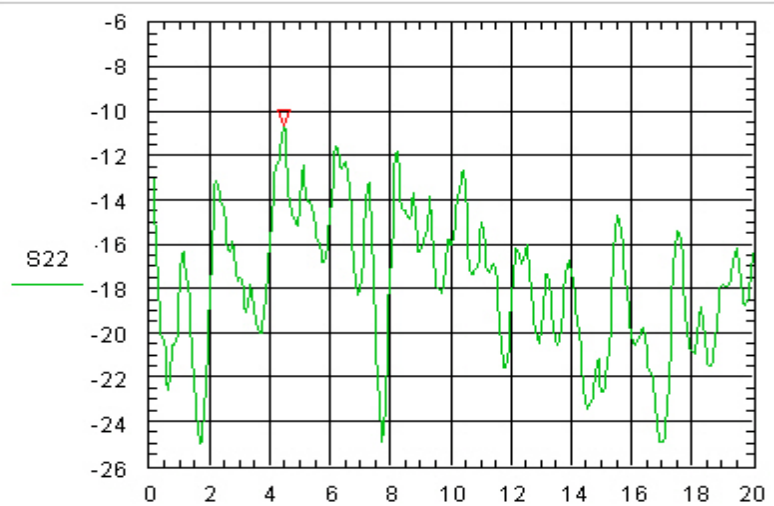
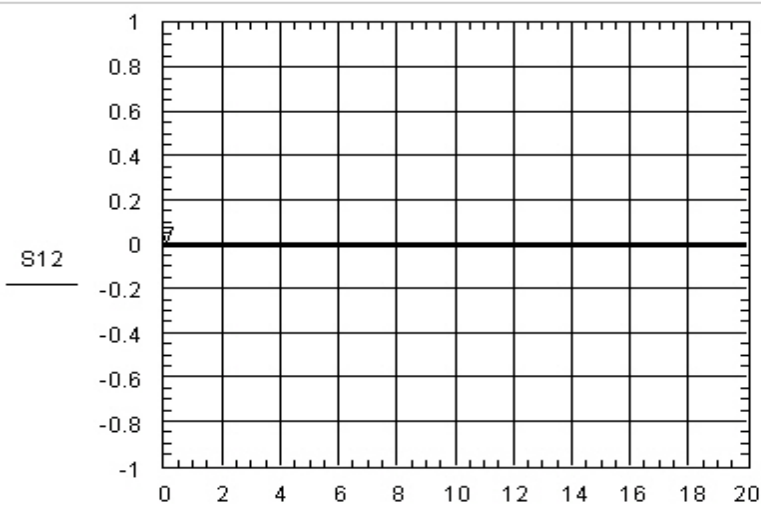
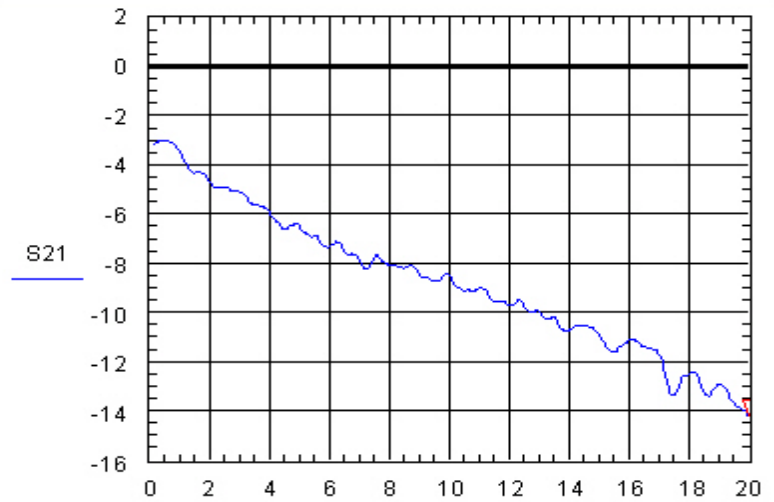
OUTPUT VSWR

J33-J4 ON

INPUT VSWR



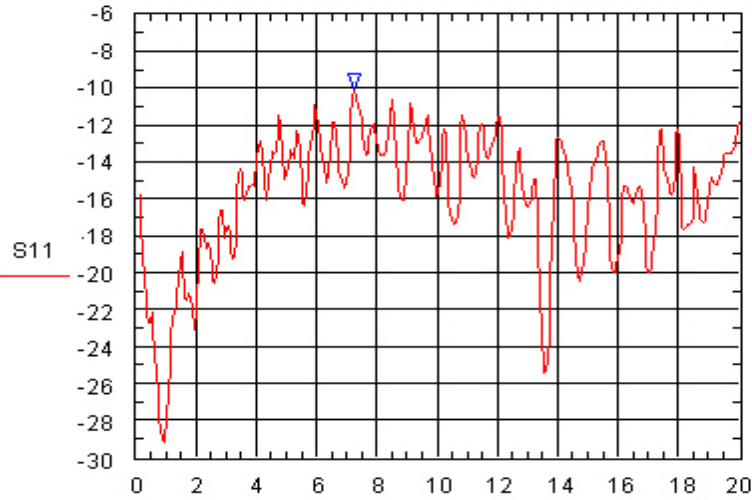
INSERTION LOSS



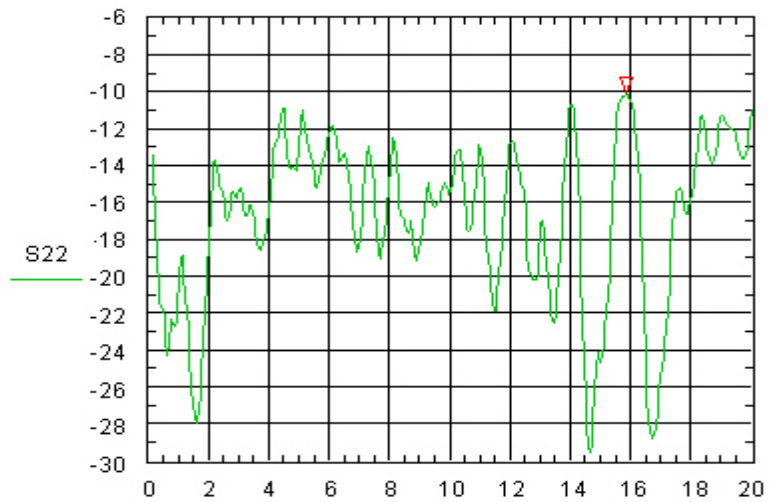
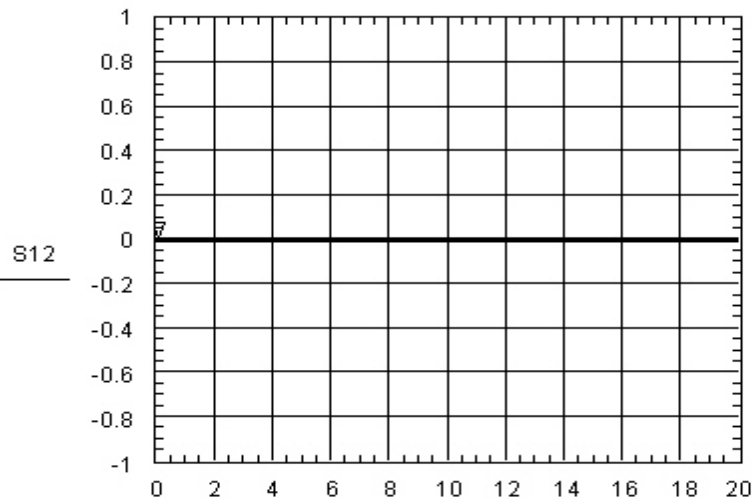
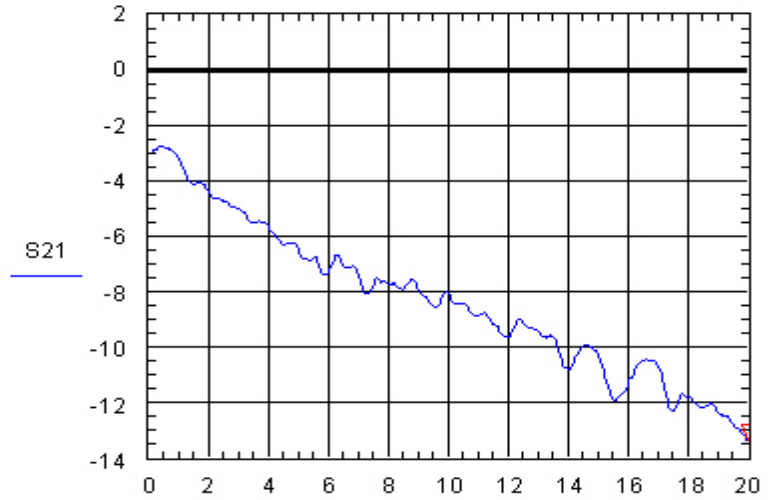
OUTPUT VSWR

J33-J5 ON

INPUT VSWR



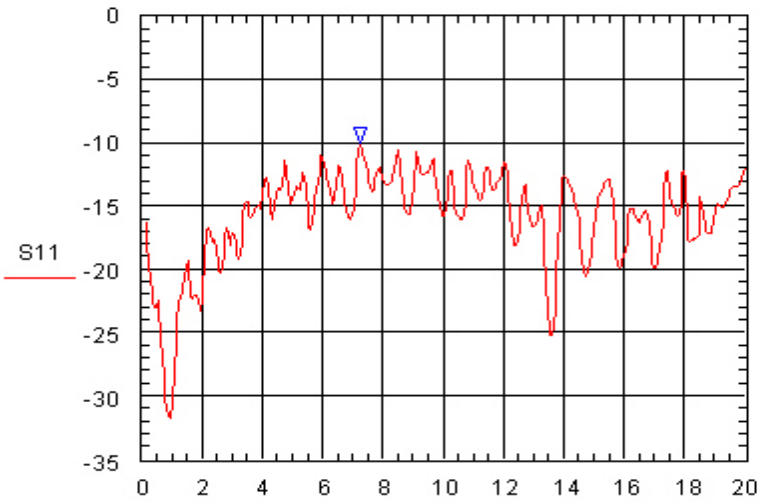
INSERTION LOSS



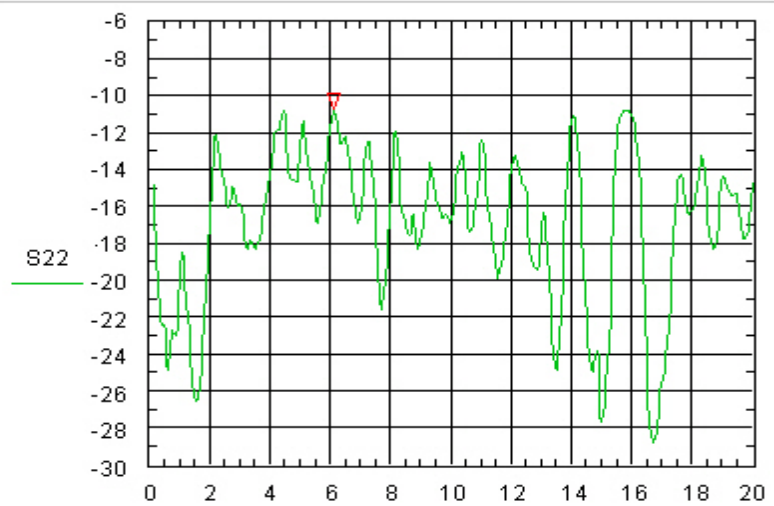
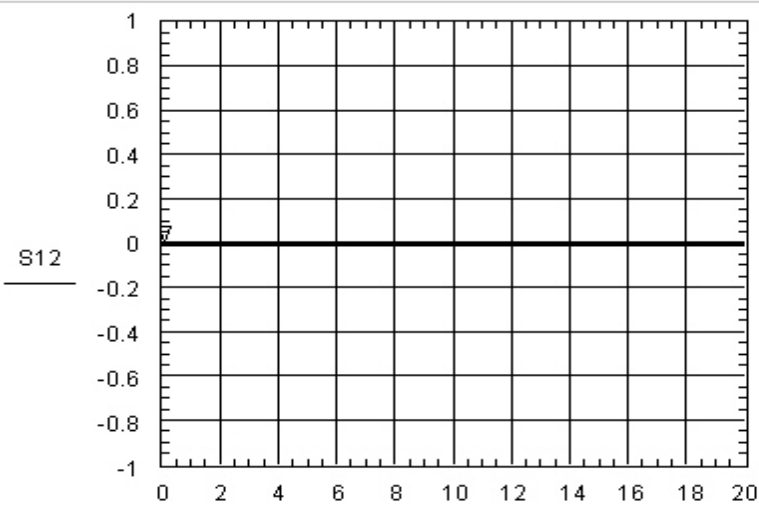
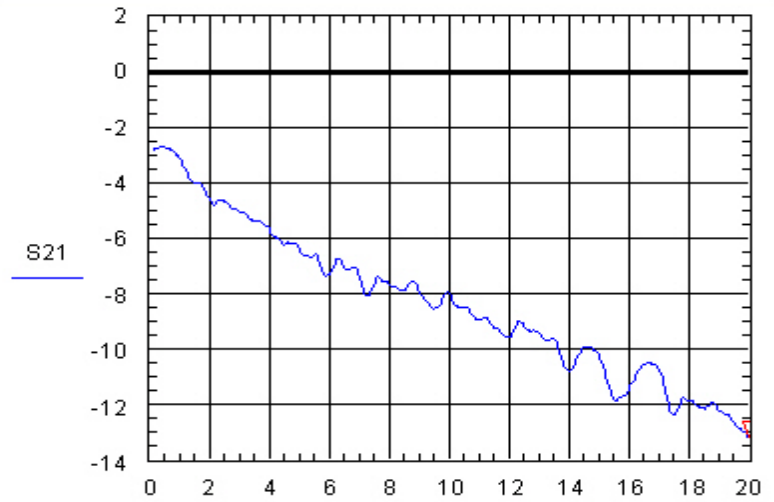
OUTPUT VSWR

J33-J6 ON

INPUT VSWR



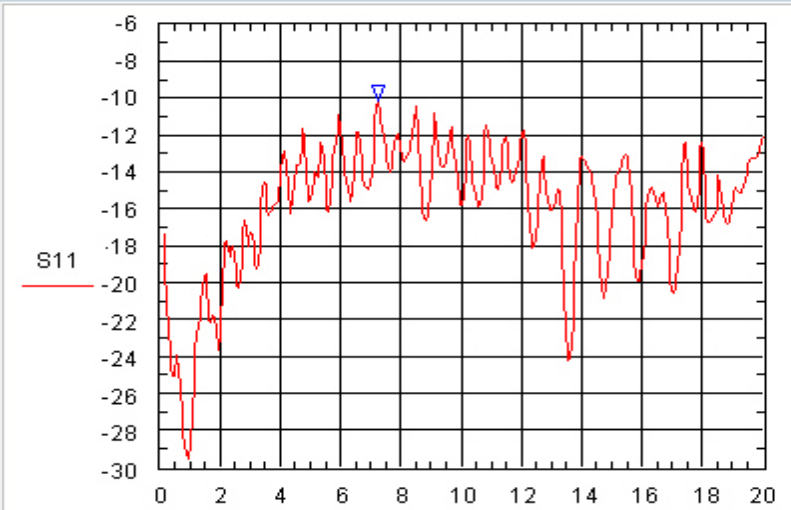
INSERTION LOSS



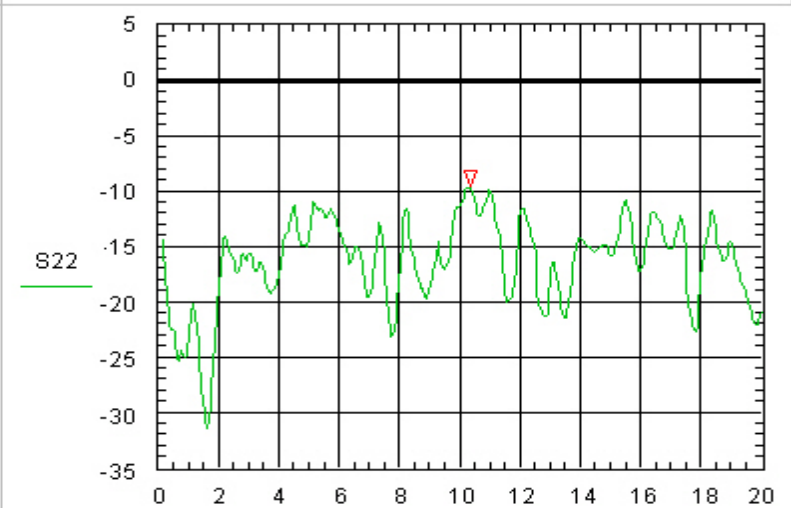
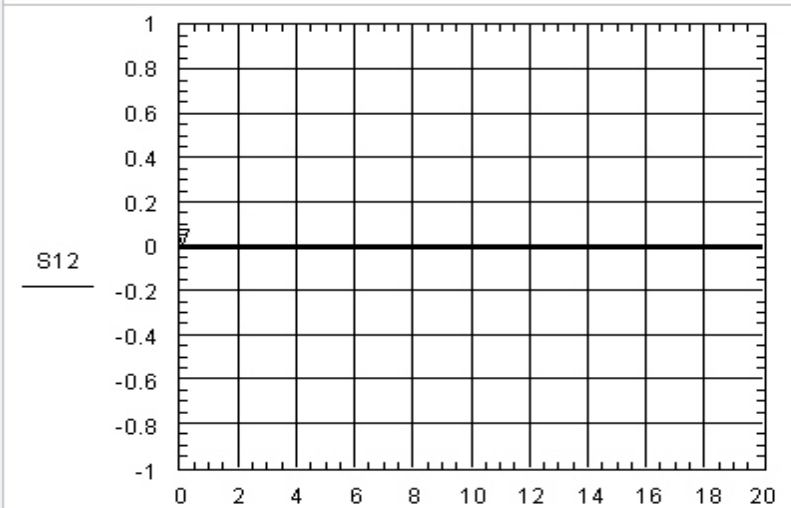
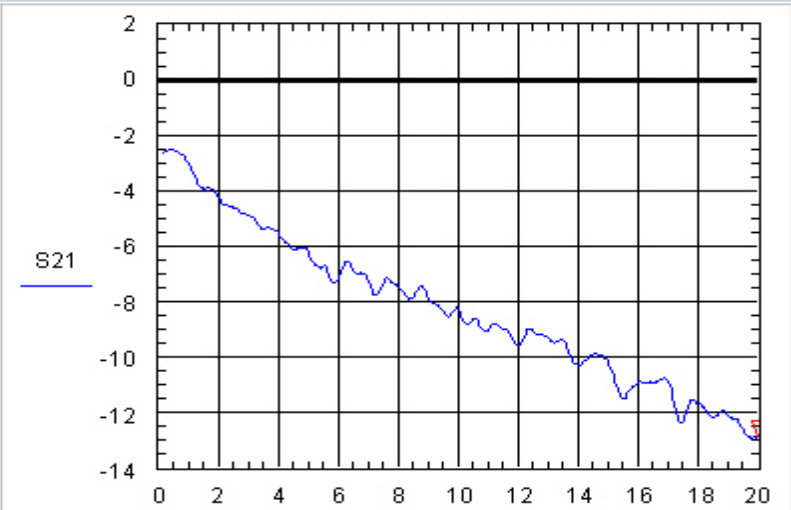
OUTPUT VSWR

J33-J7 ON

INPUT VSWR



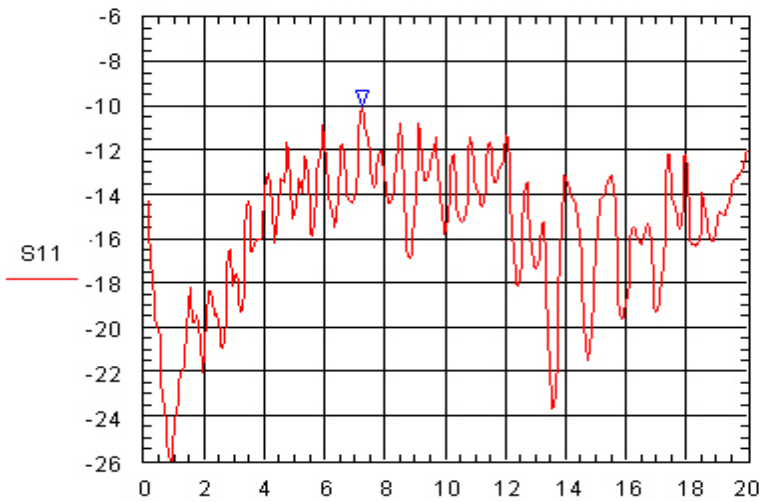
INSERTION LOSS



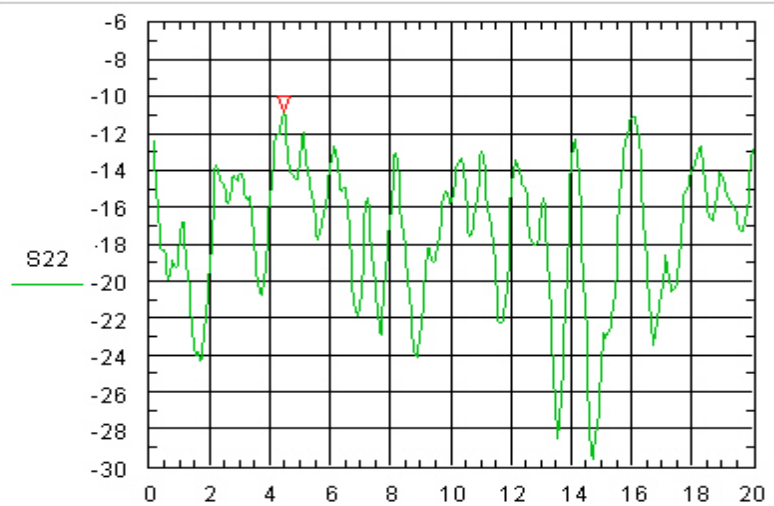
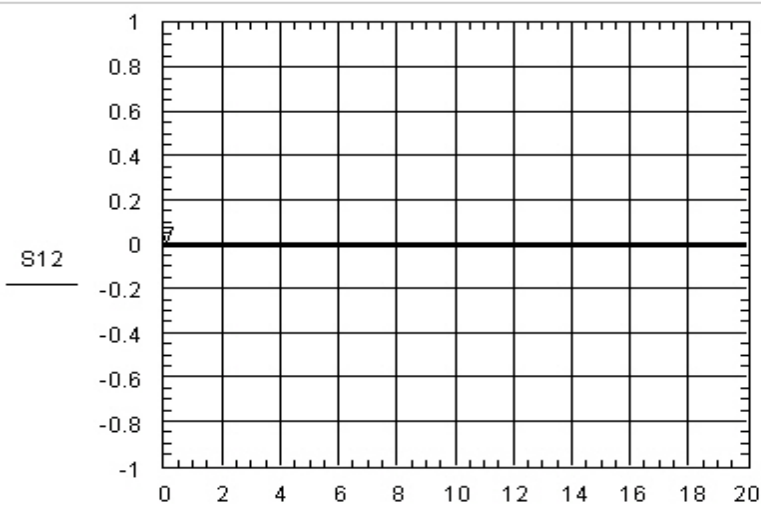
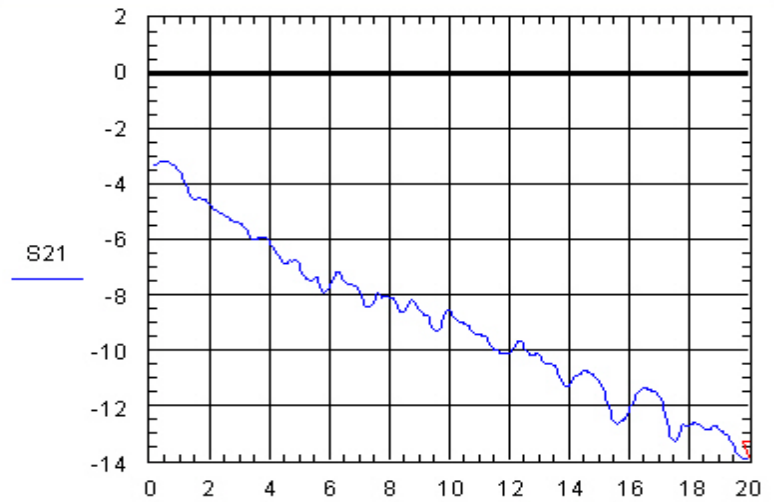
OUTPUT VSWR

J33-J8 ON

INPUT VSWR



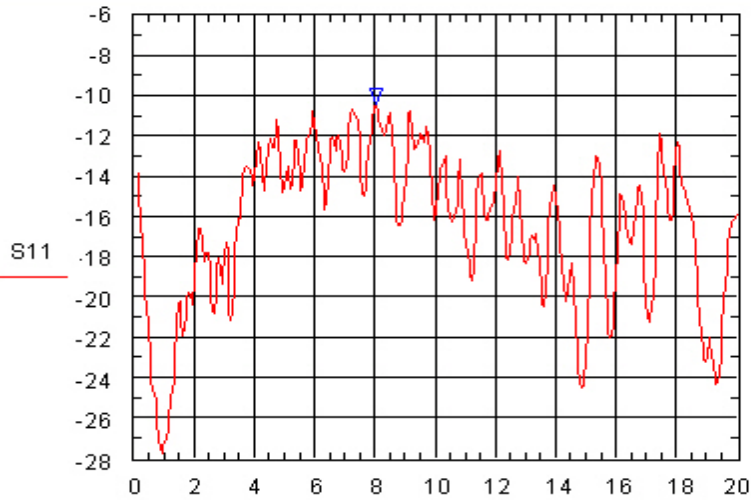
INSERTION LOSS



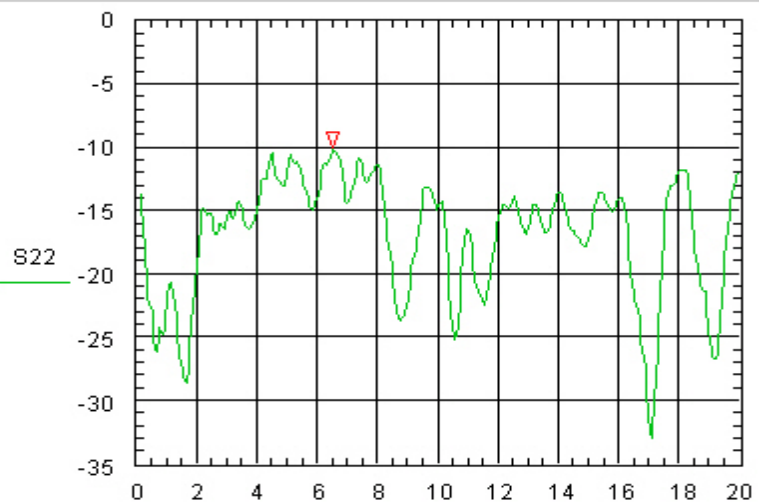
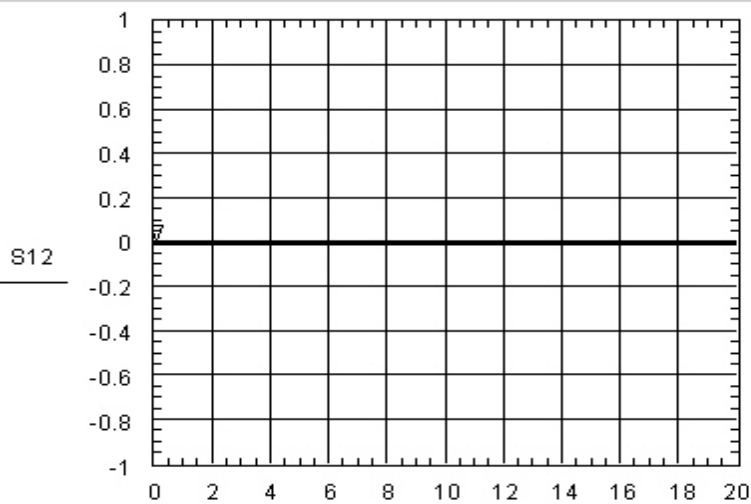
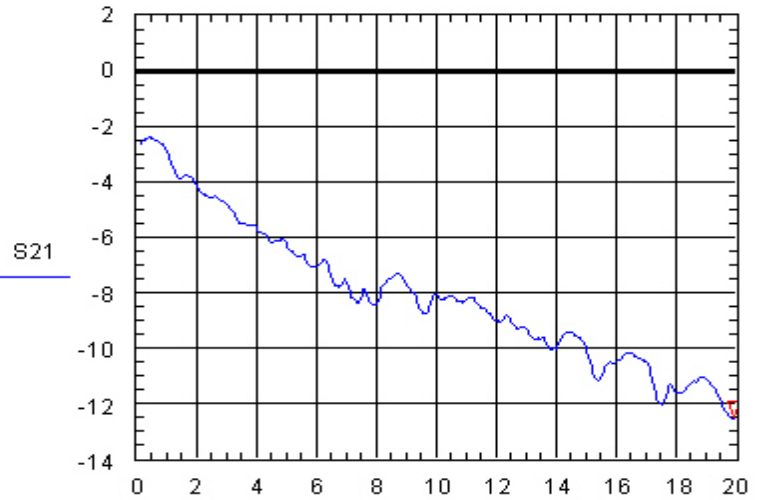
OUTPUT VSWR

J33-J9 ON

INPUT VSWR



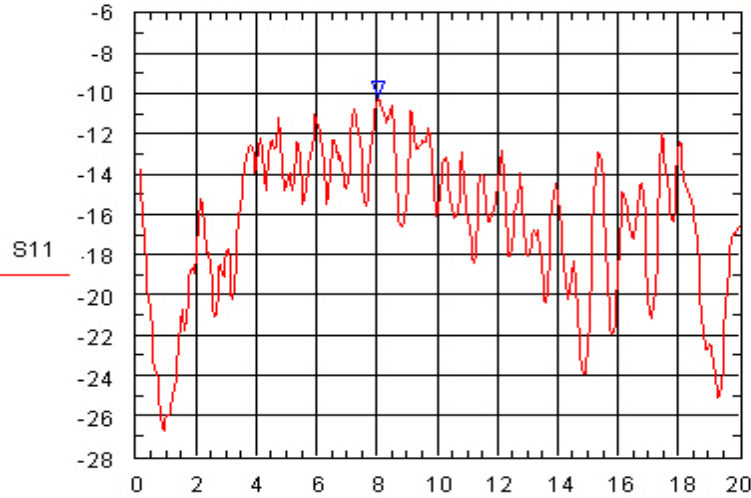
INSERTION LOSS



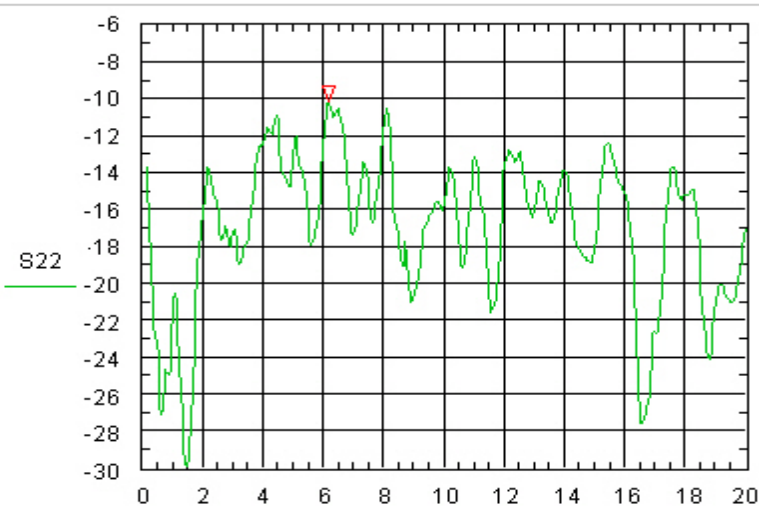
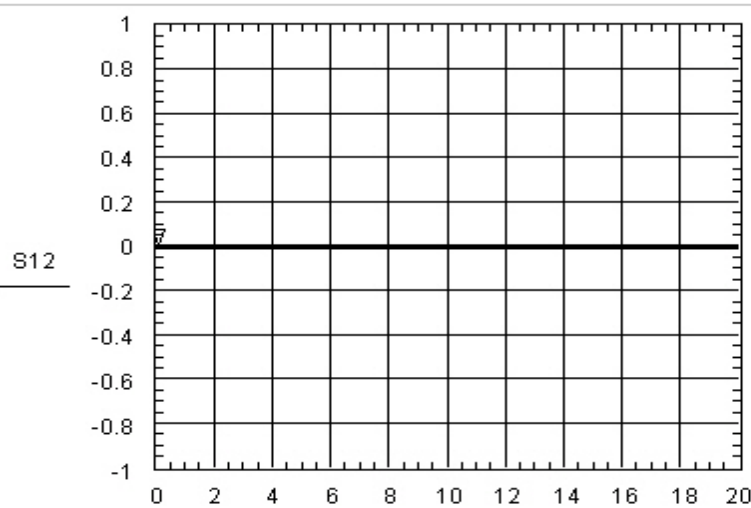
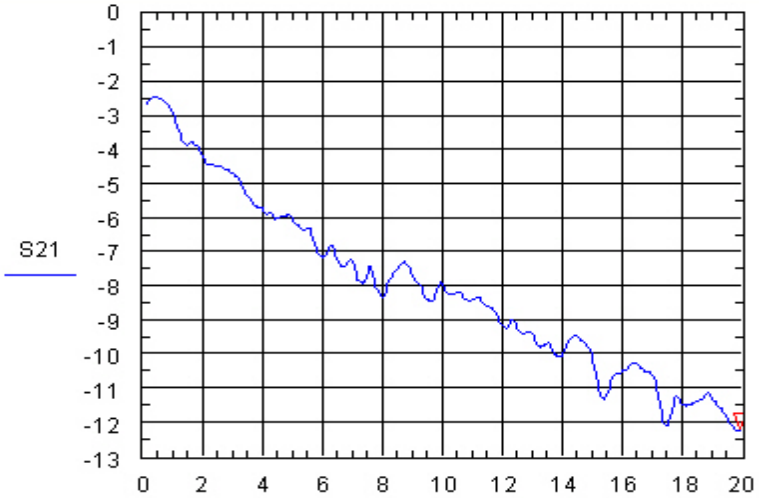
OUTPUT VSWR

J33-J10 ON

INPUT VSWR



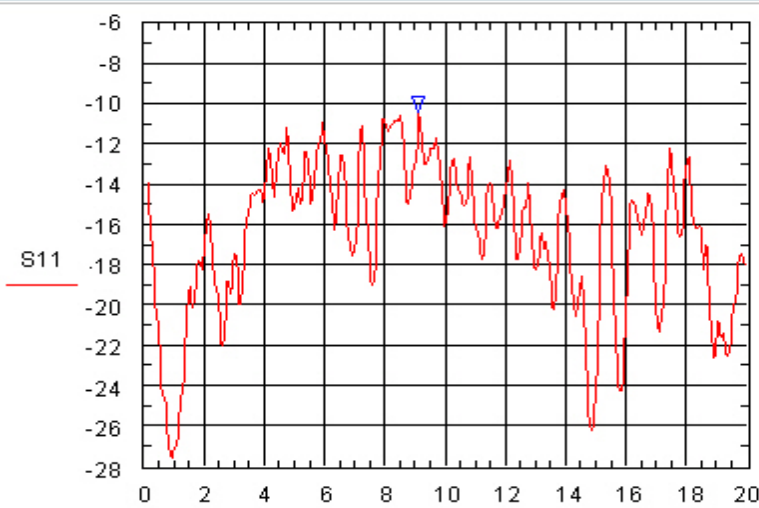
INSERTION LOSS



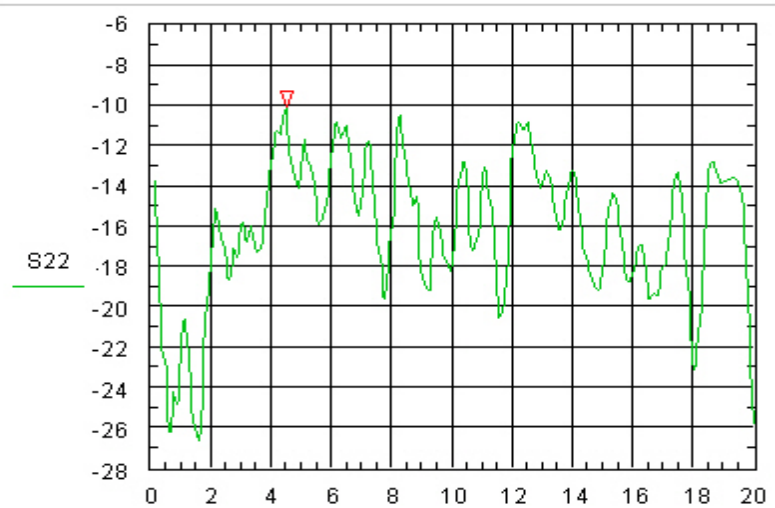
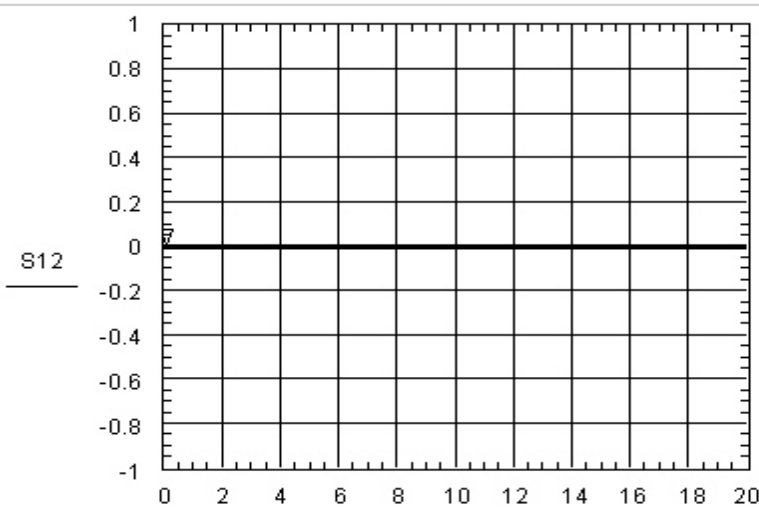
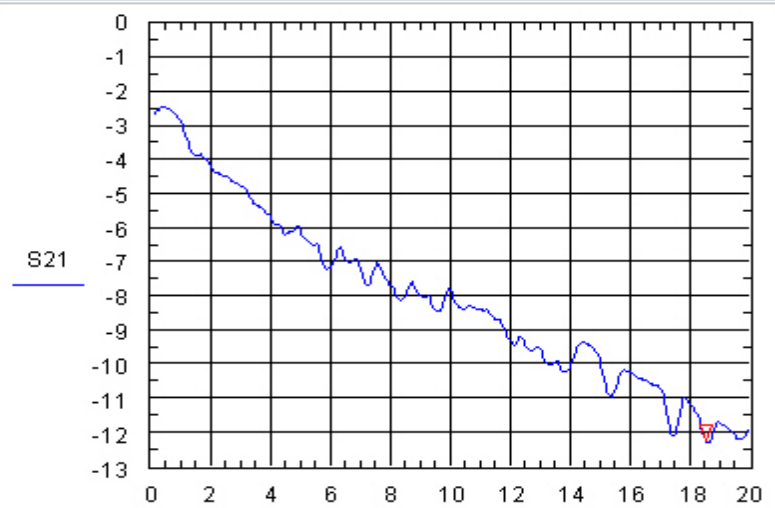
OUTPUT VSWR

J33-J11 ON

INPUT VSWR



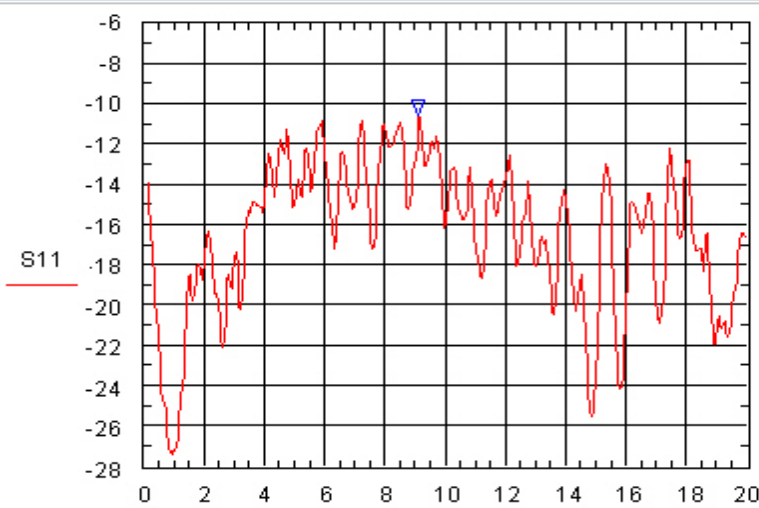
INSERTION LOSS



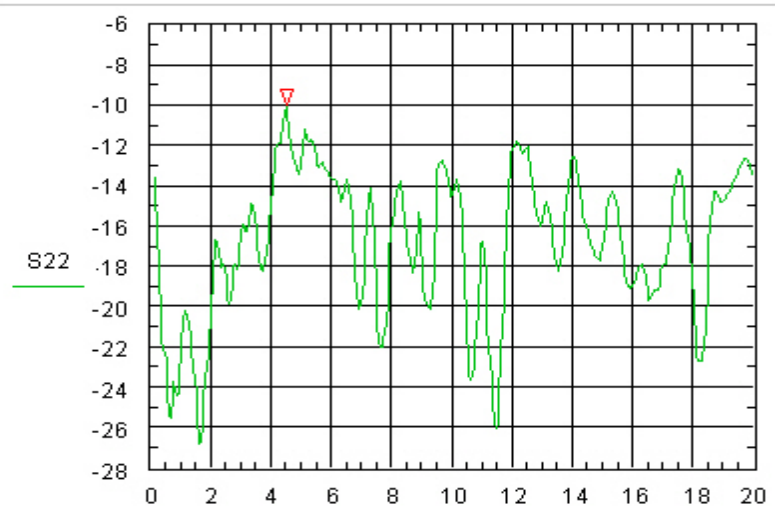
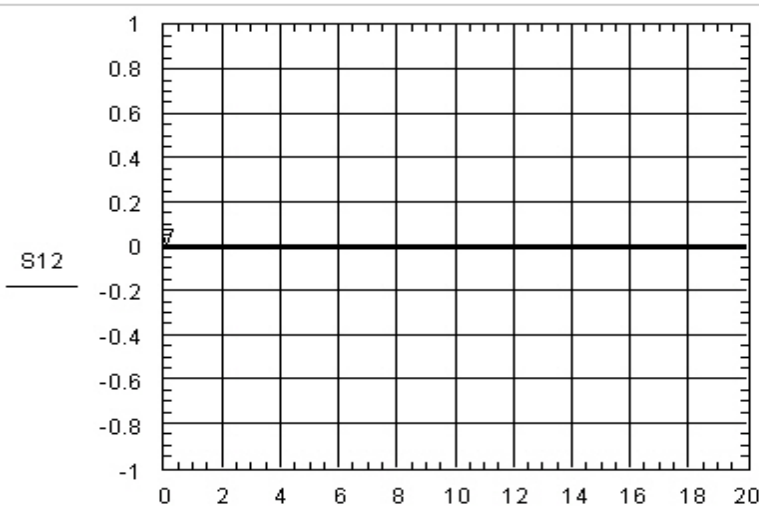
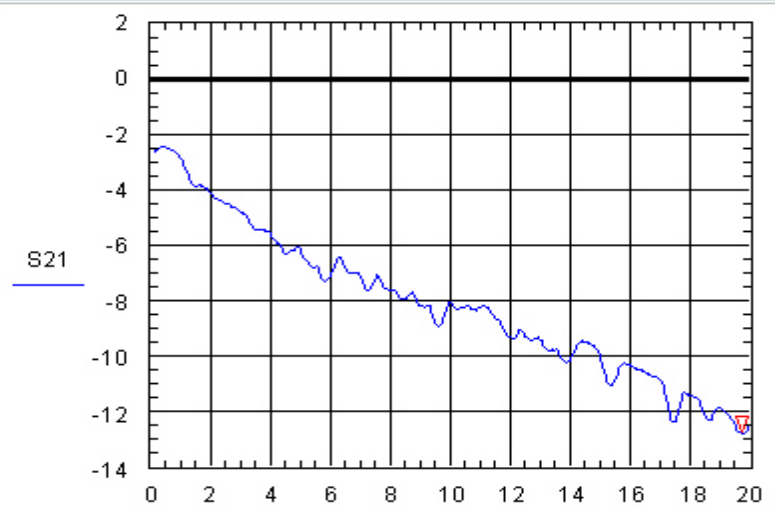
OUTPUT VSWR

J33-J12 ON

INPUT VSWR



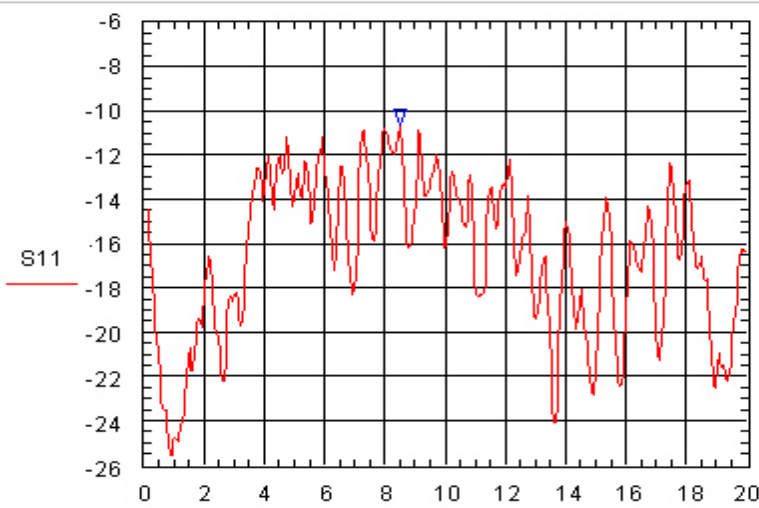
INSERTION LOSS



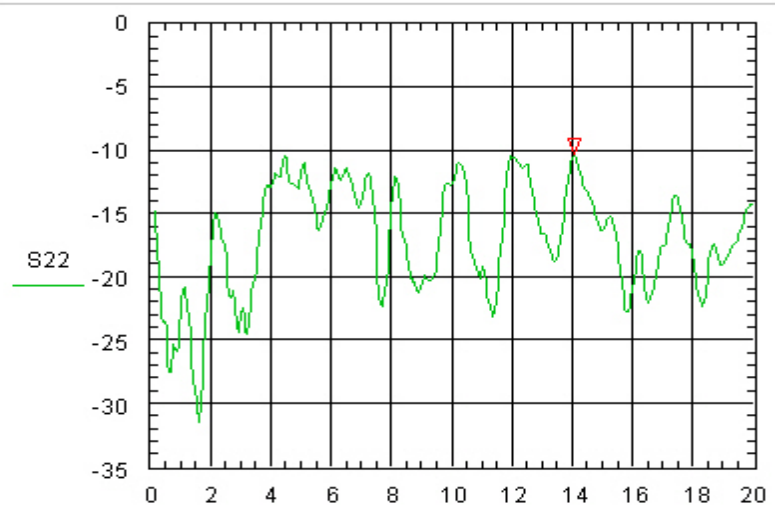
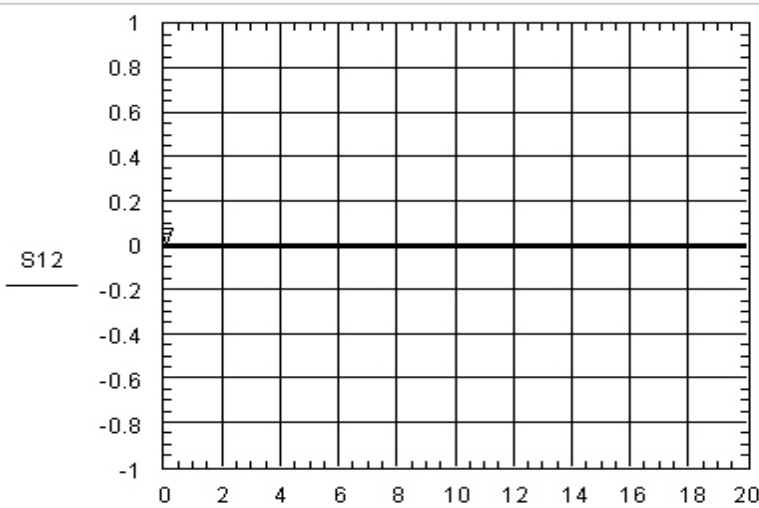
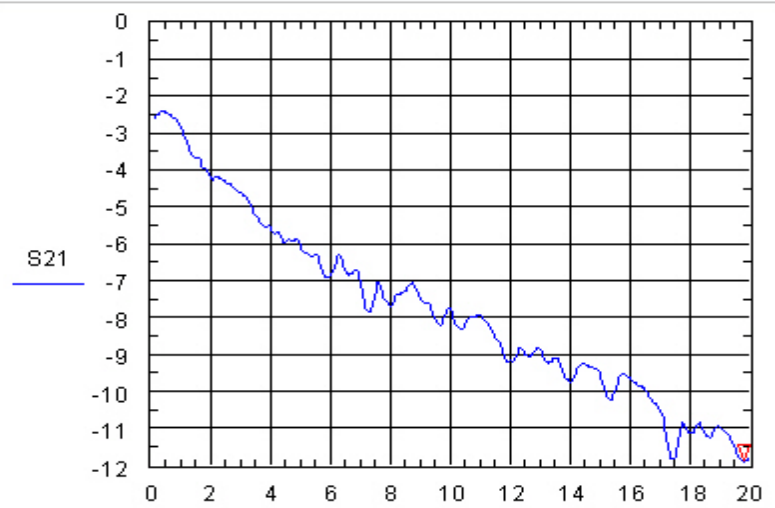
OUTPUT VSWR

J33-J13 ON

INPUT VSWR



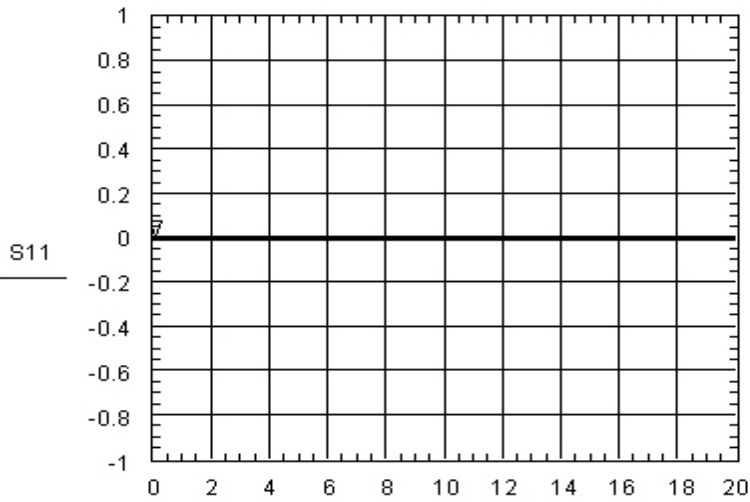
INSERTION LOSS



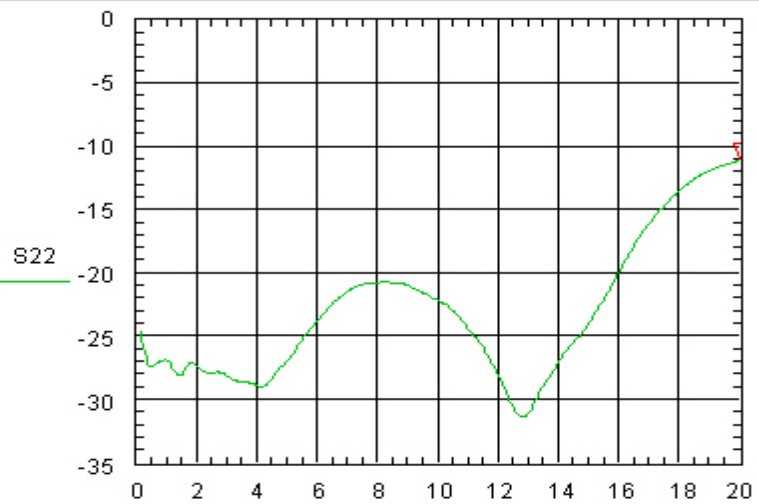
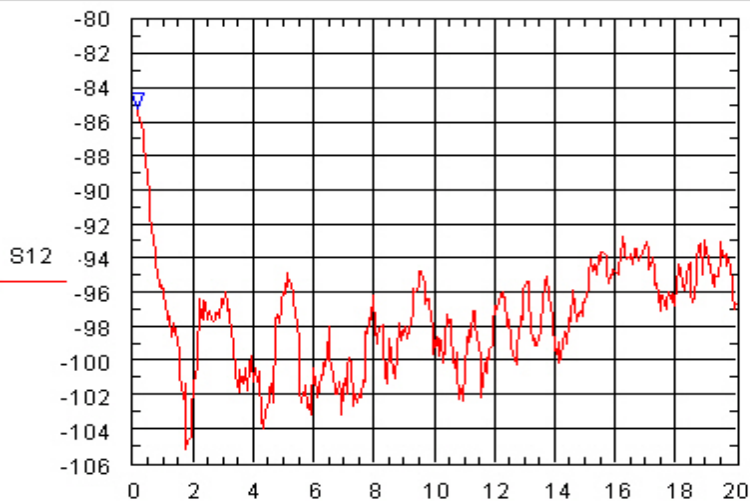
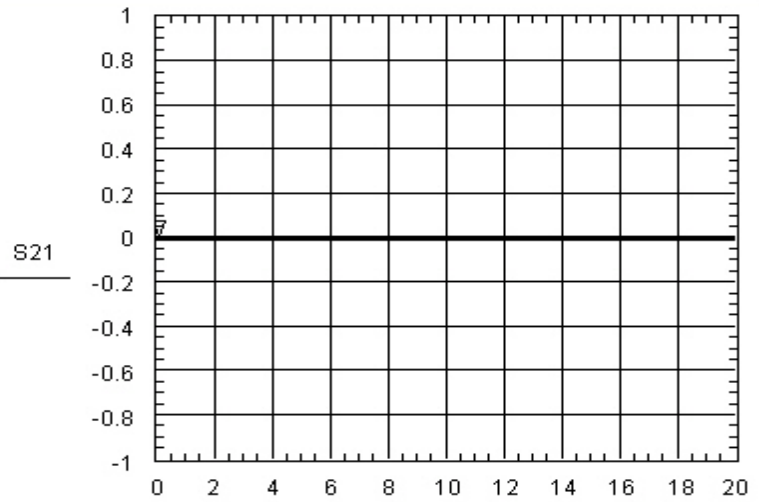
OUTPUT VSWR

J33-J14 ON

INPUT VSWR



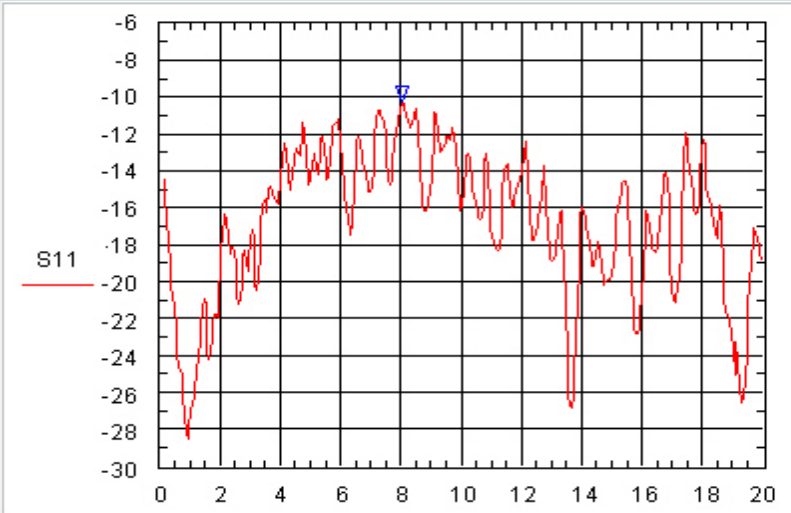
INSERTION LOSS



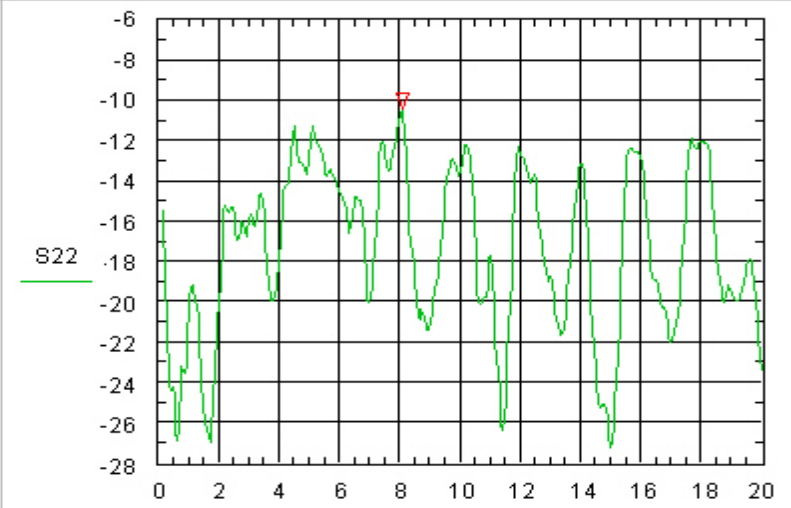
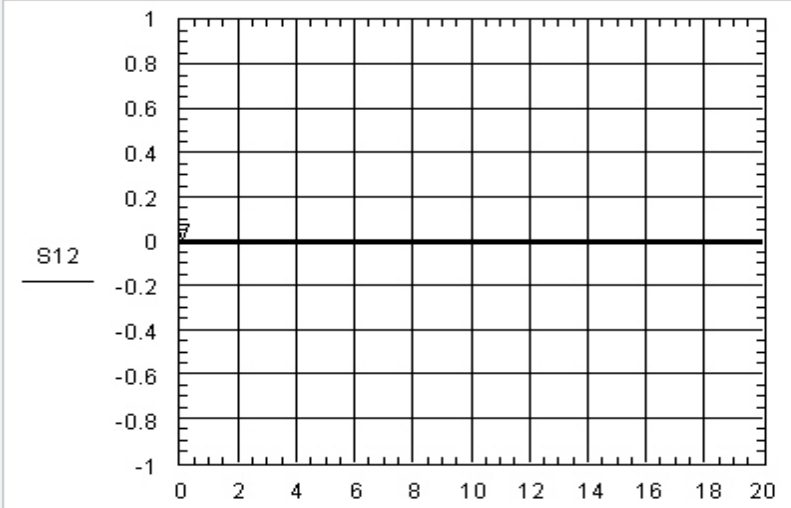
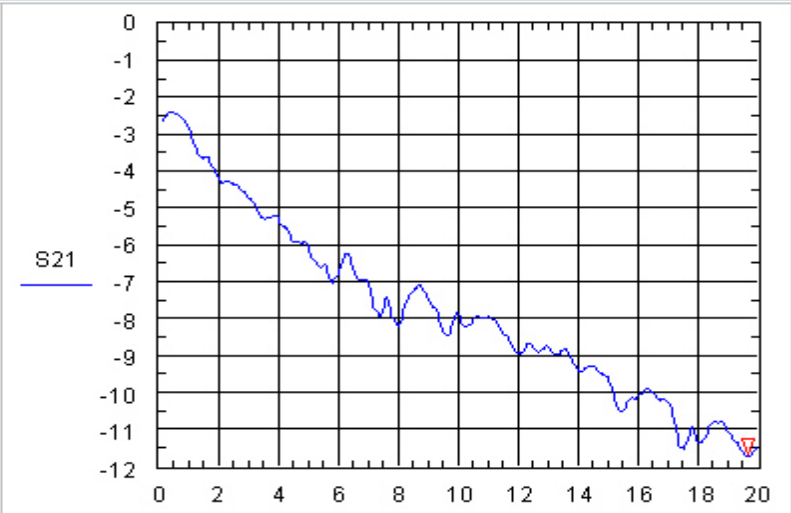
OUTPUT VSWR

J33-J15 ON

INPUT VSWR



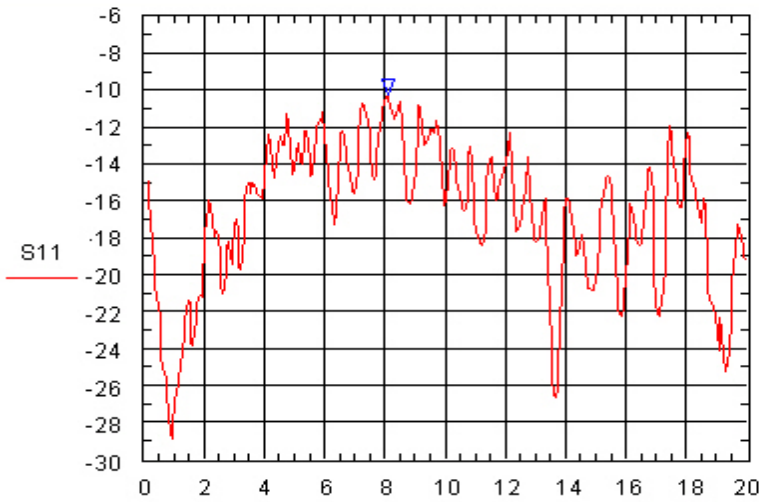
INSERTION LOSS



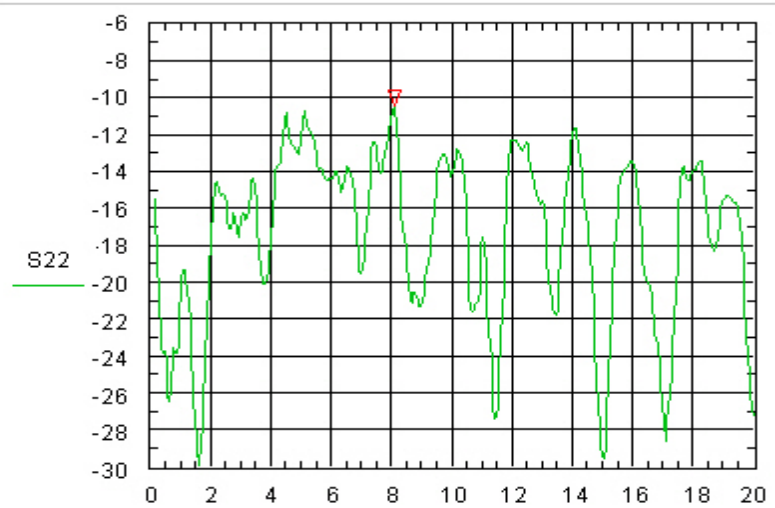
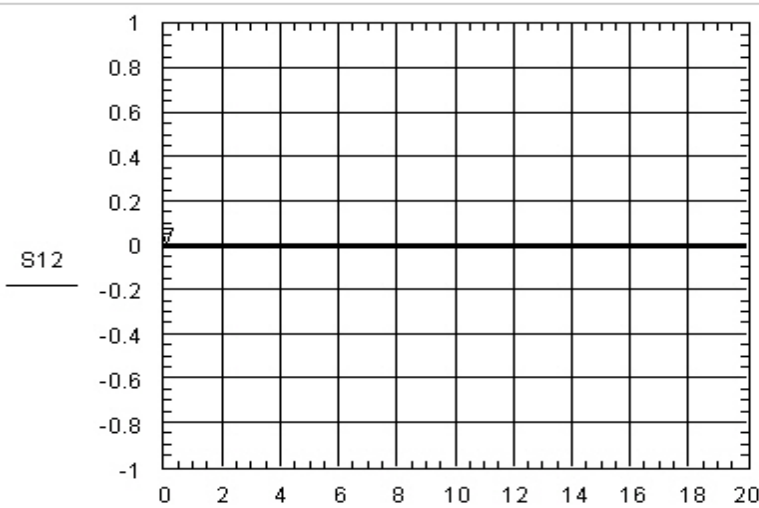
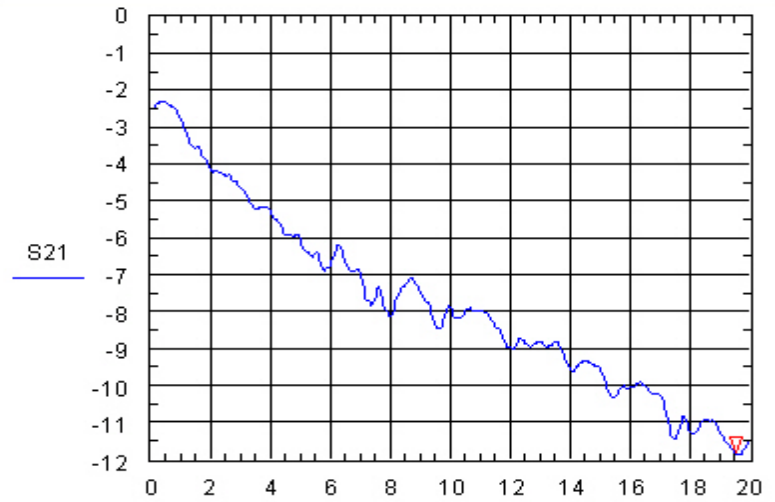
OUTPUT VSWR

J33-J16 ON

INPUT VSWR

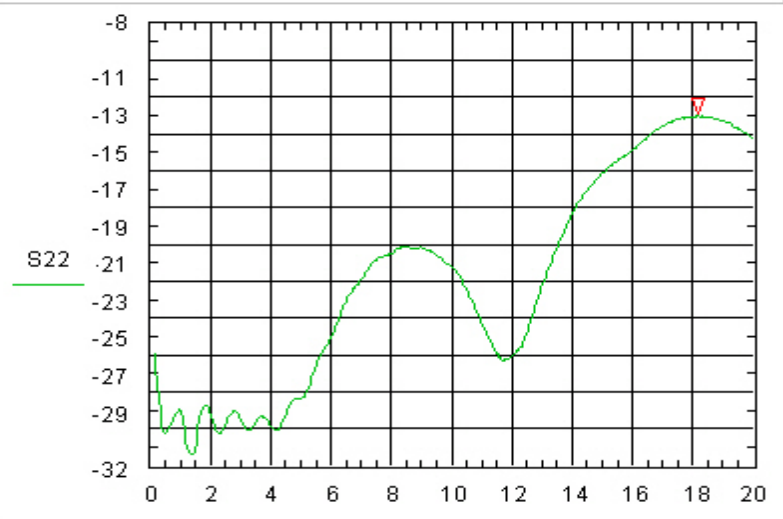
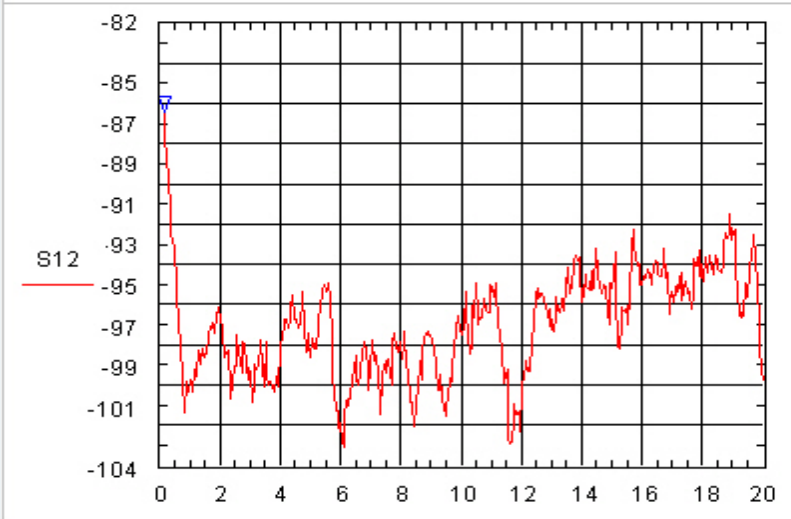
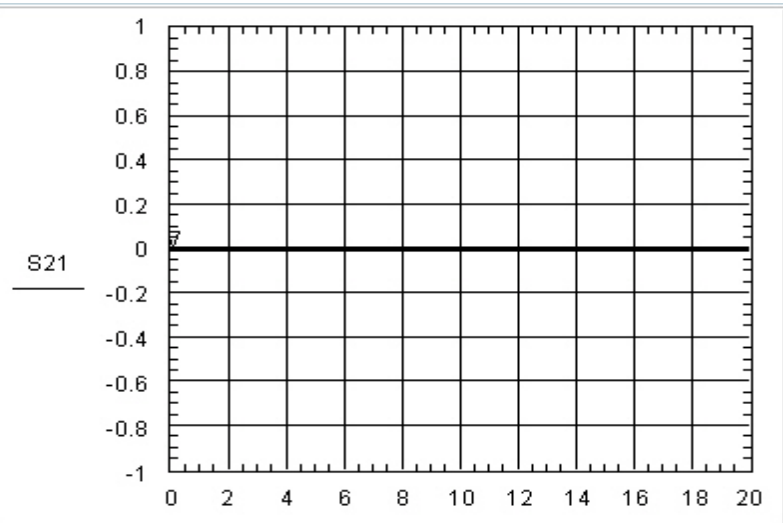
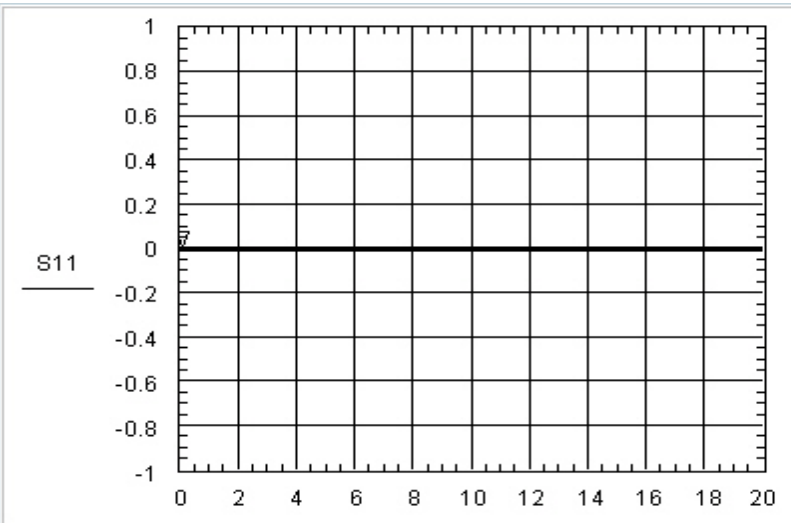


INSERTION LOSS



OUTPUT VSWR

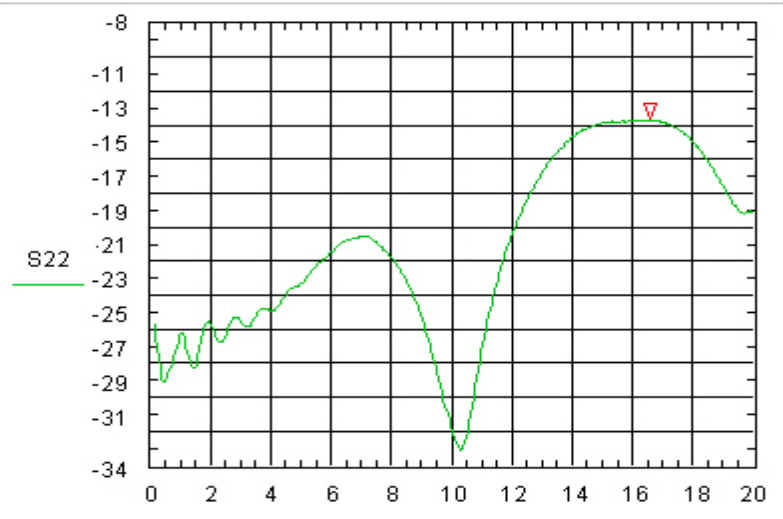
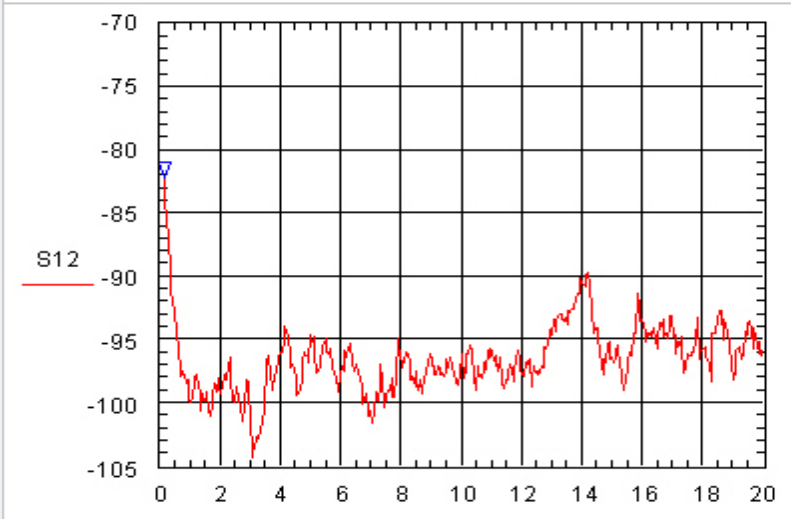
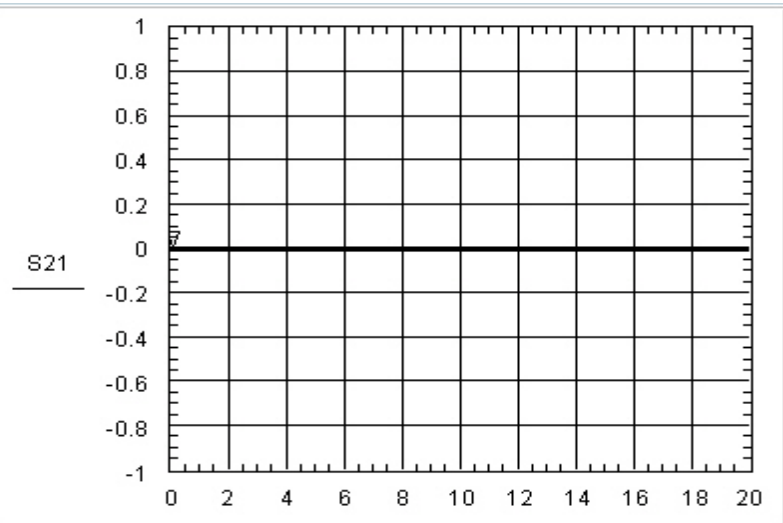
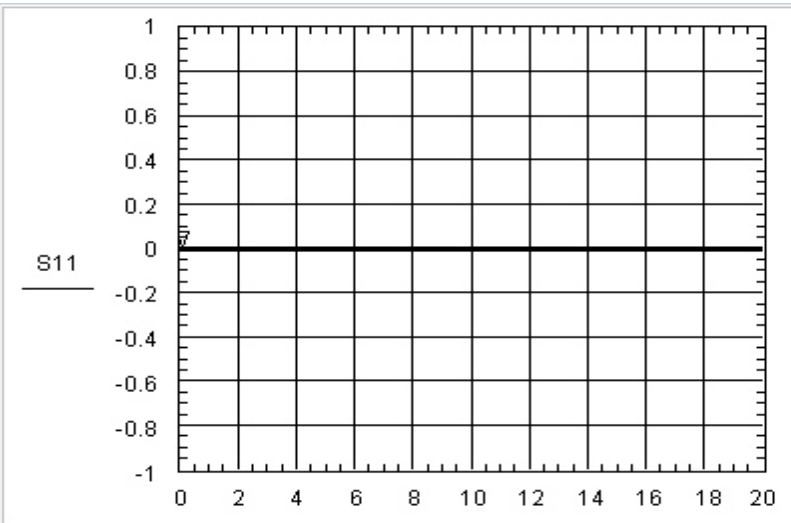
J33-J17 OFF



ISOLATION

VSWR

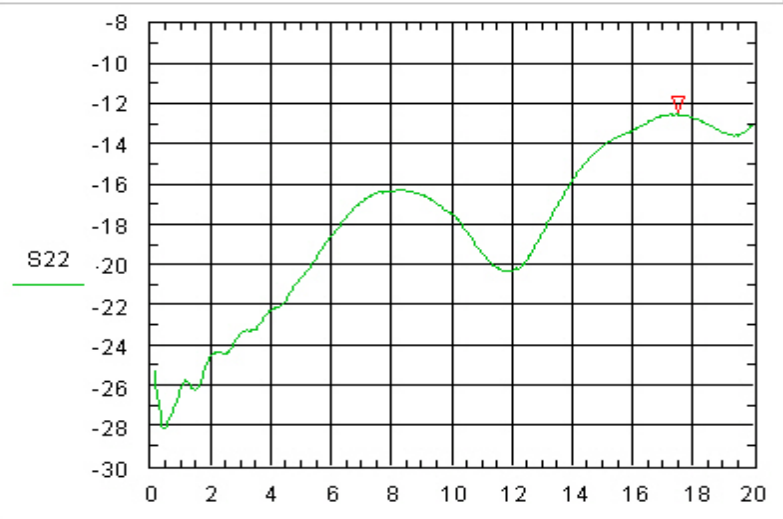
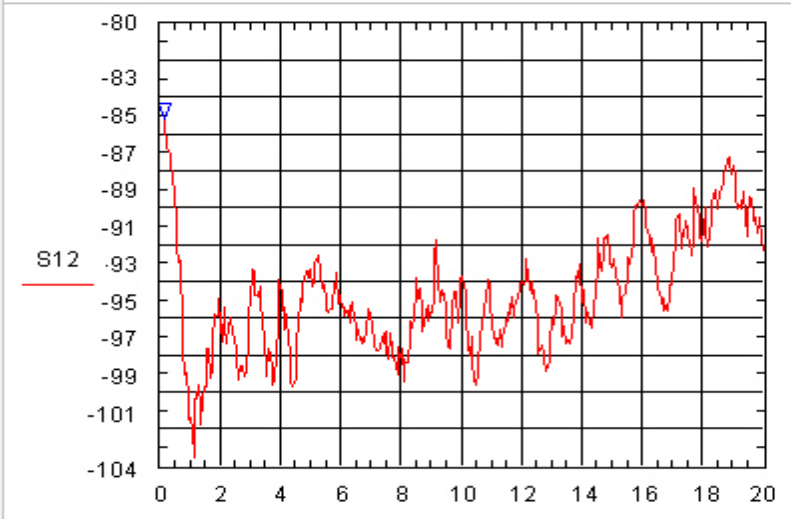
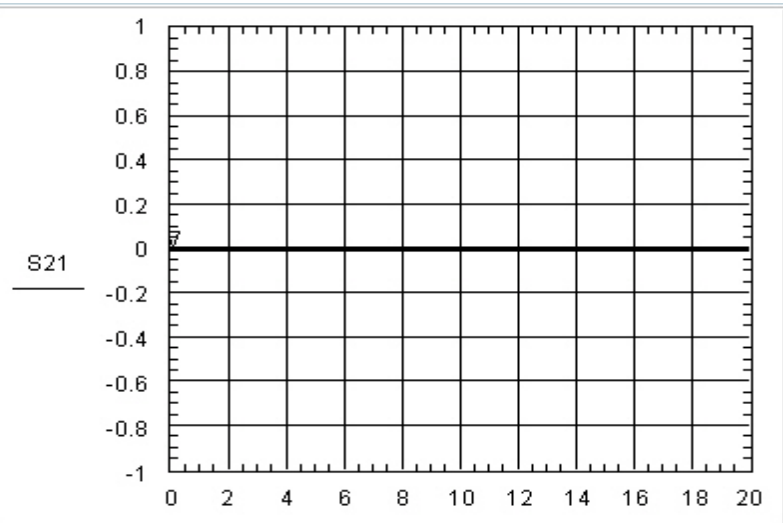
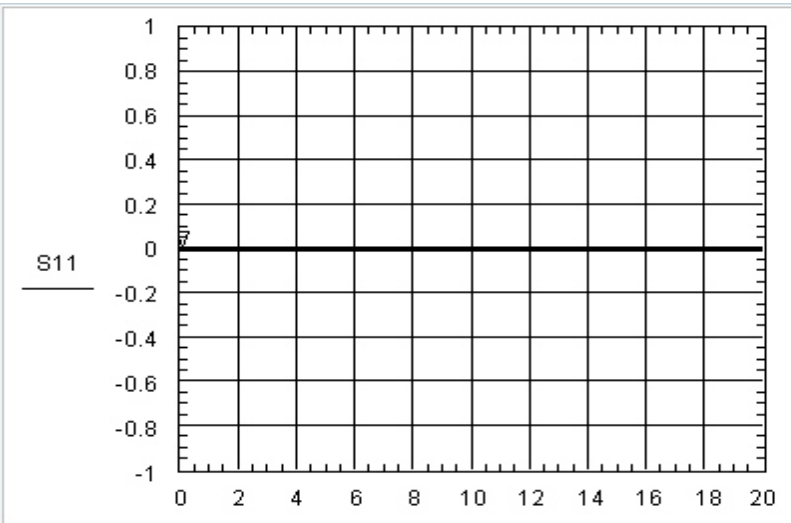
J33-J18 OFF



ISOLATION

VSWR

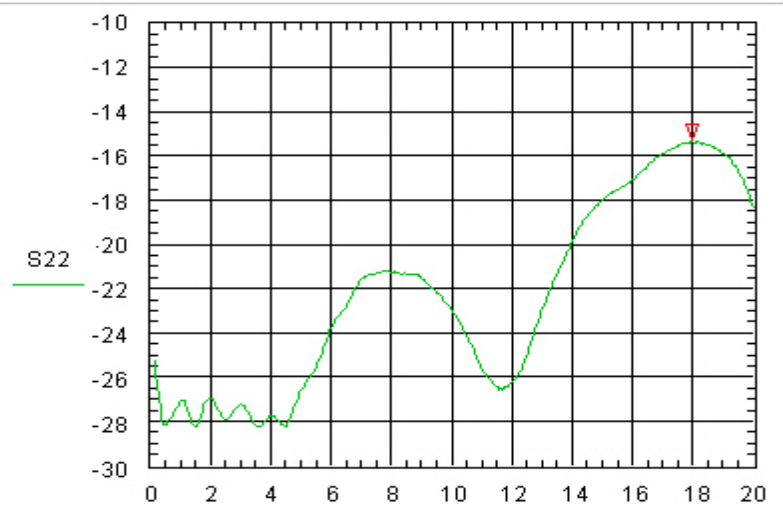
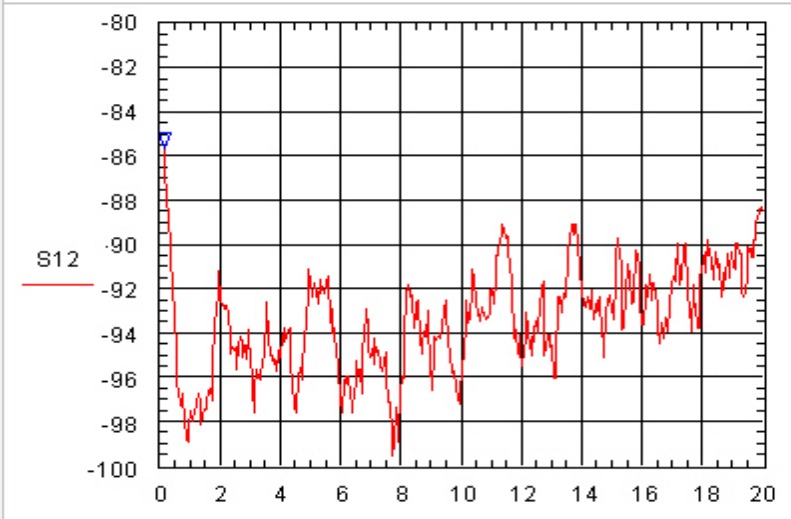
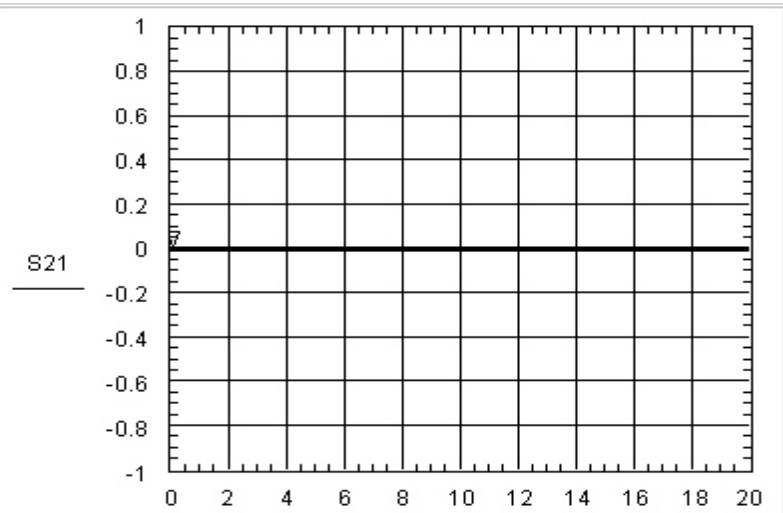
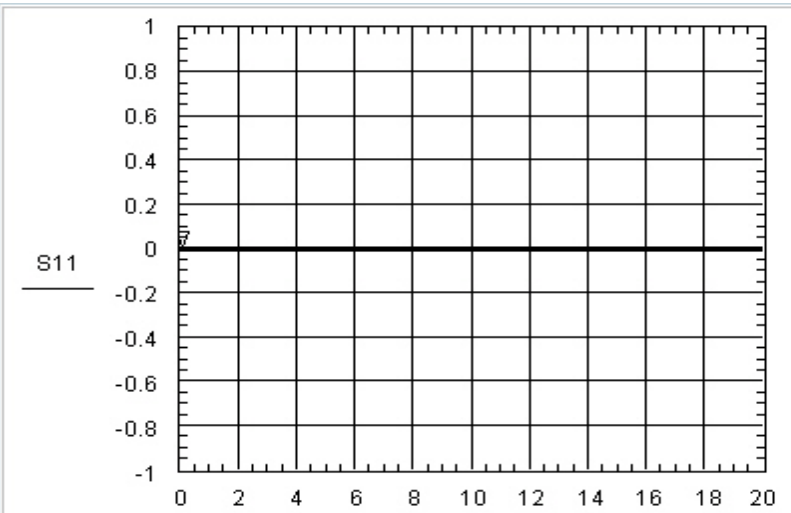
J33-J19 OFF



ISOLATION

VSWR

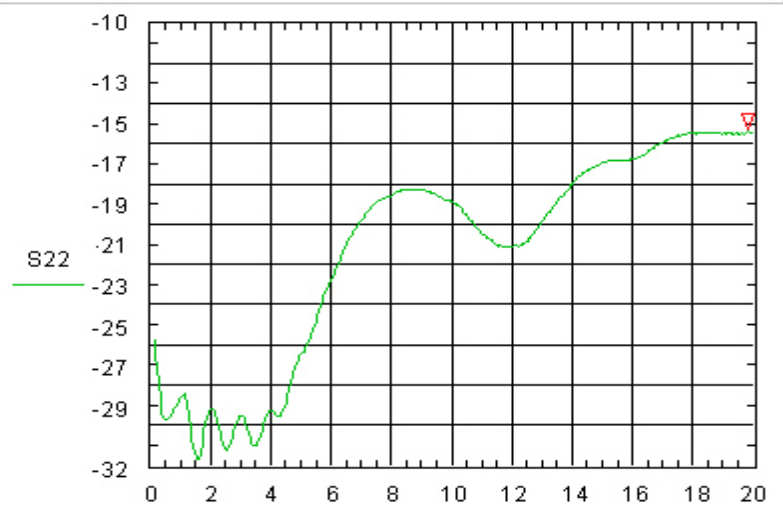
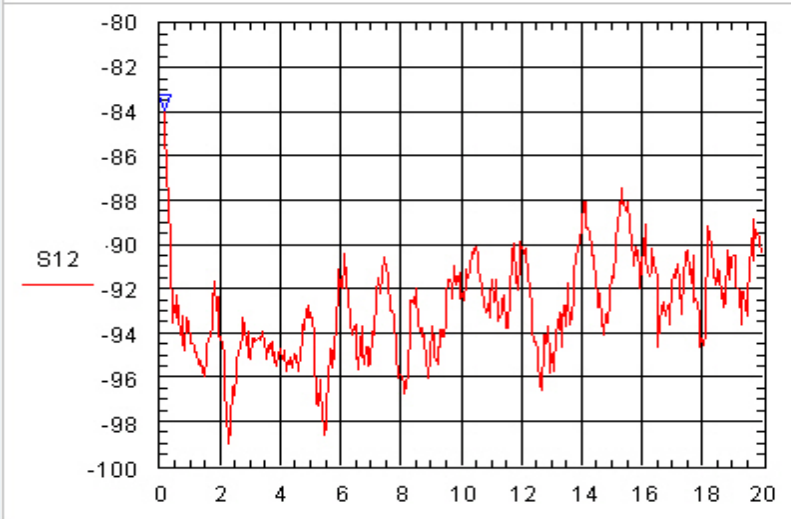
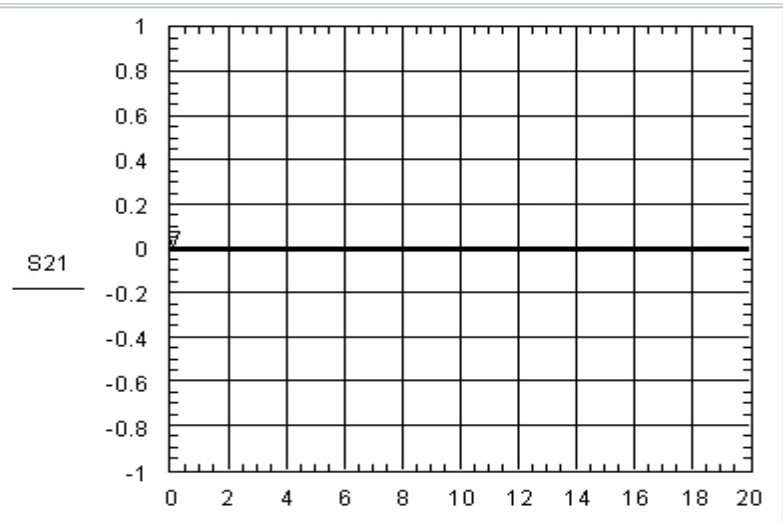
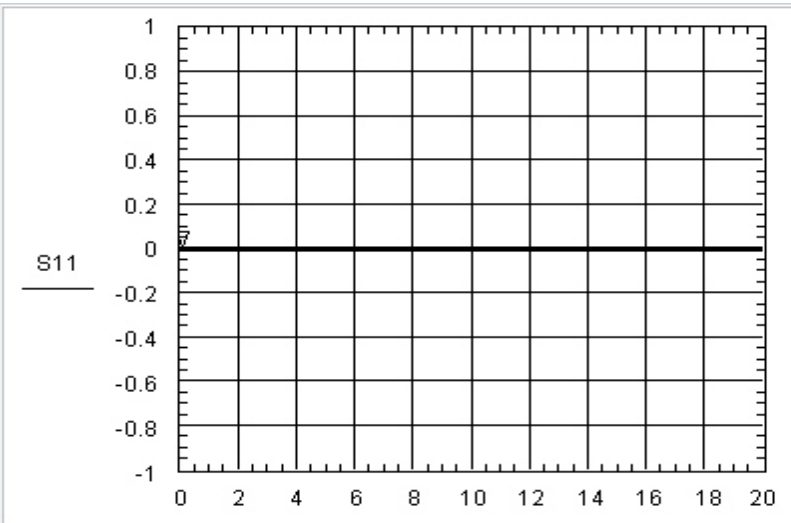
J33-J20 OFF



ISOLATION

VSWR

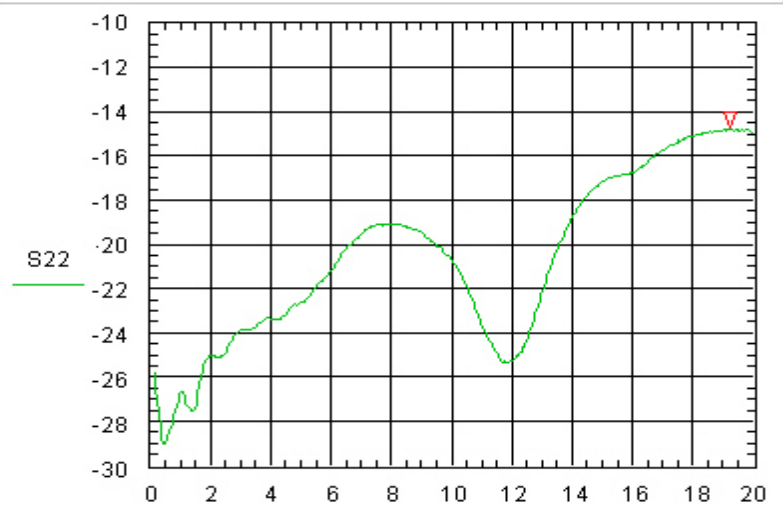
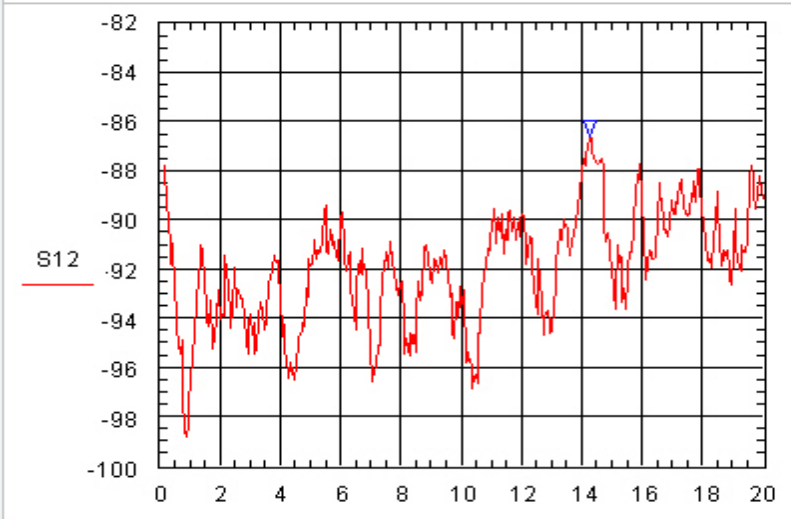
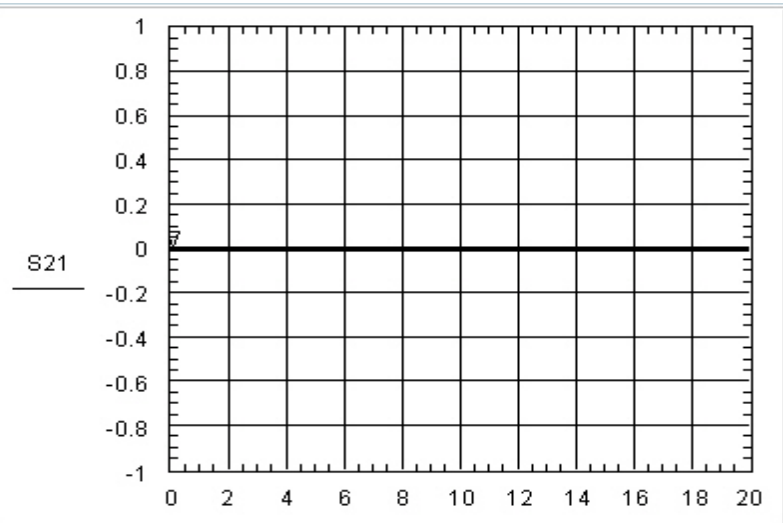
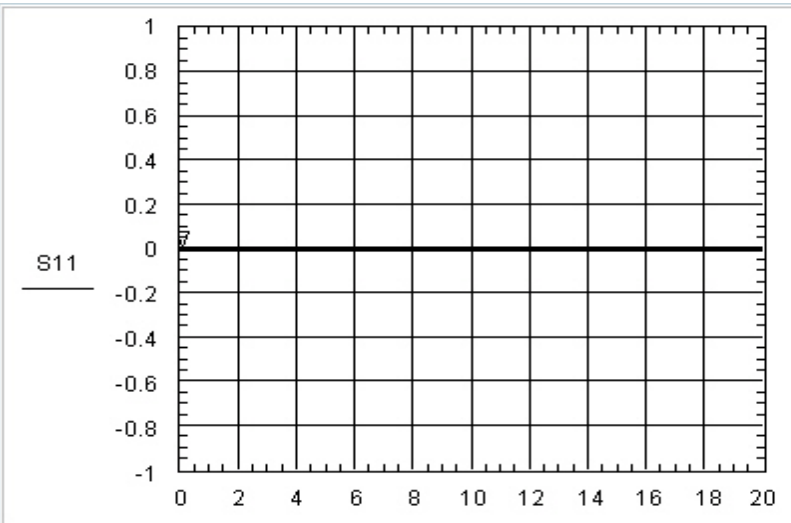
J33-J21 OFF



ISOLATION

VSWR

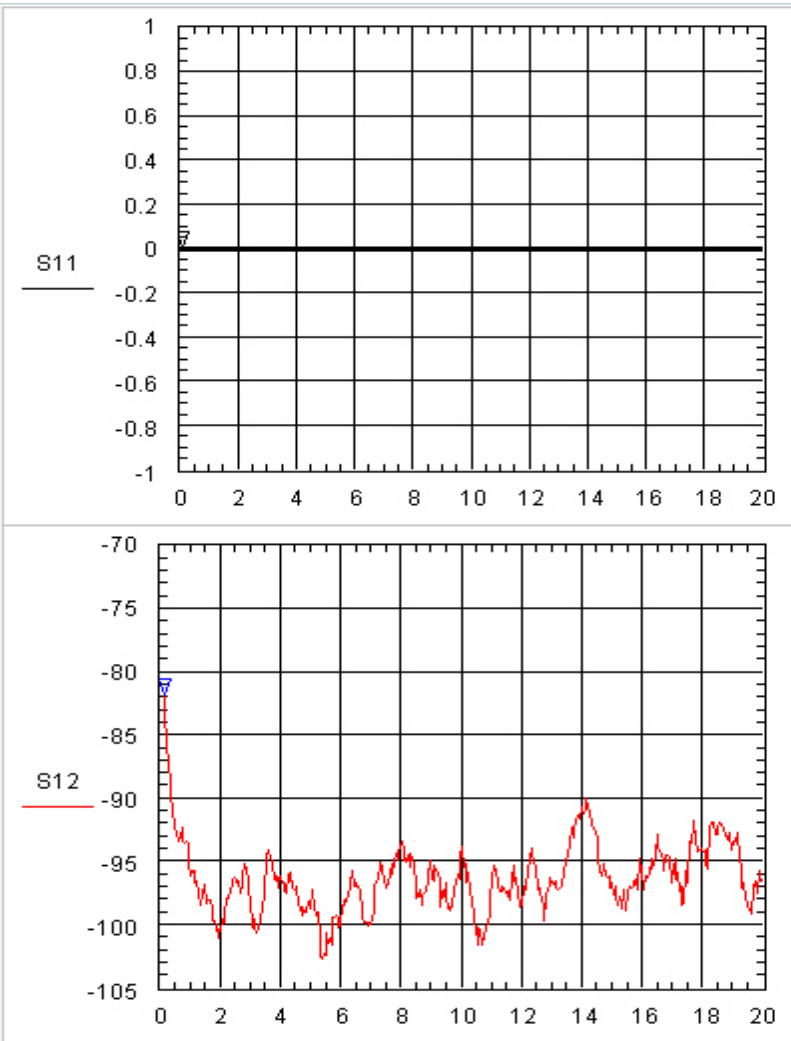
J33-J22 OFF



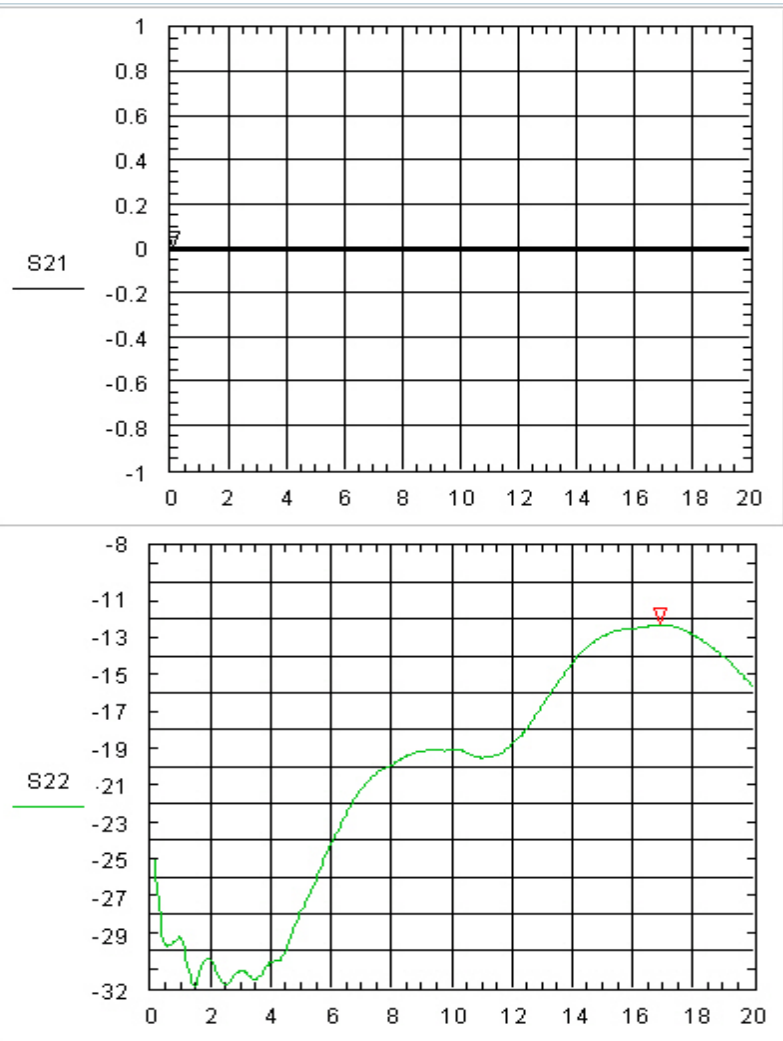
ISOLATION

VSWR

J33-J23 OFF

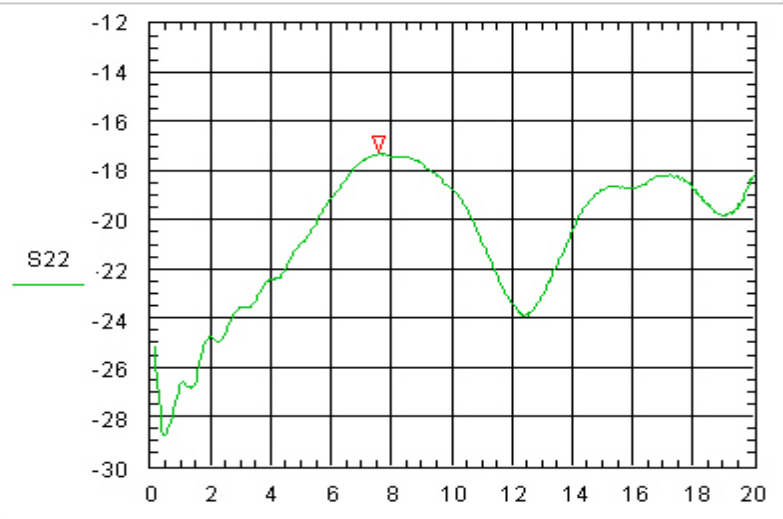
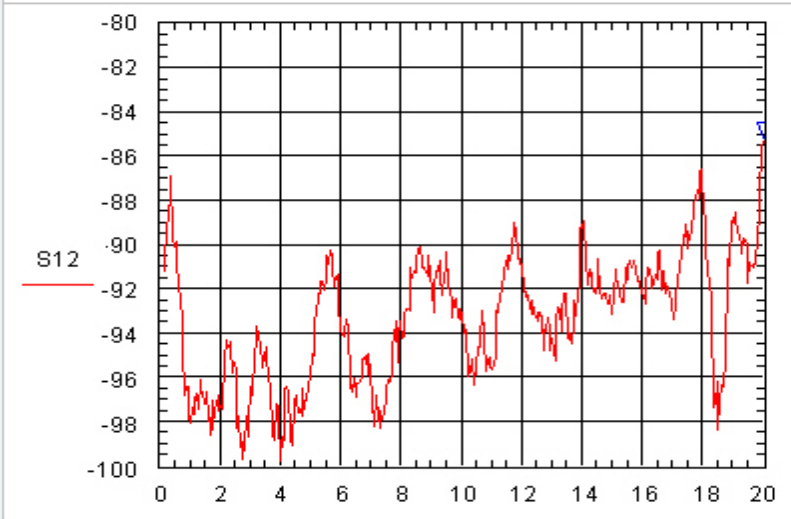
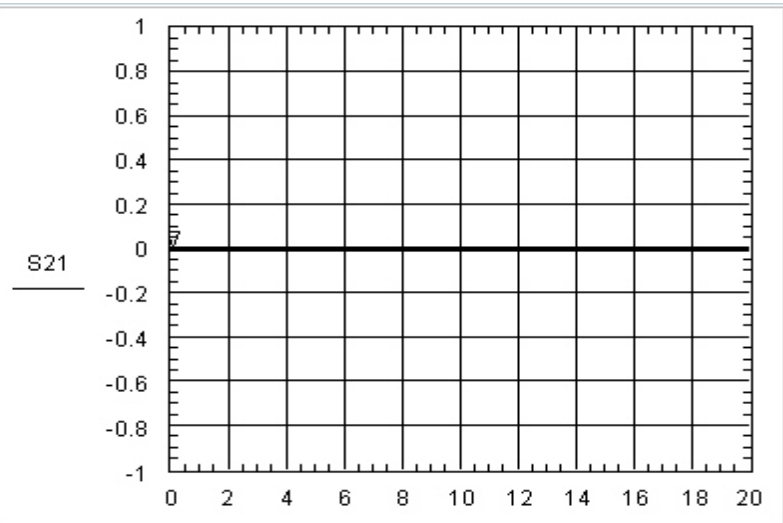
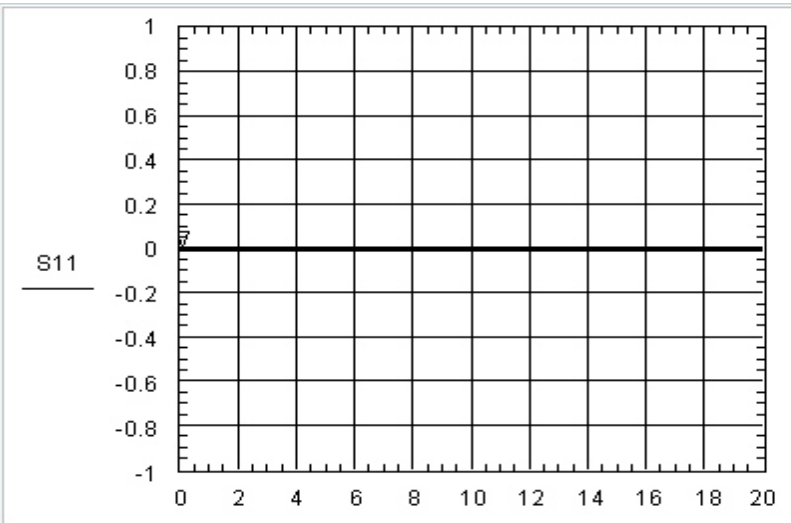


ISOLATION



VSWR

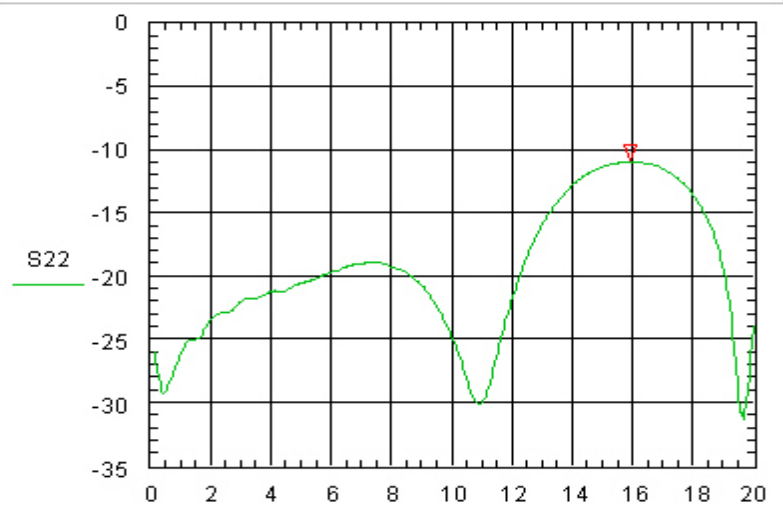
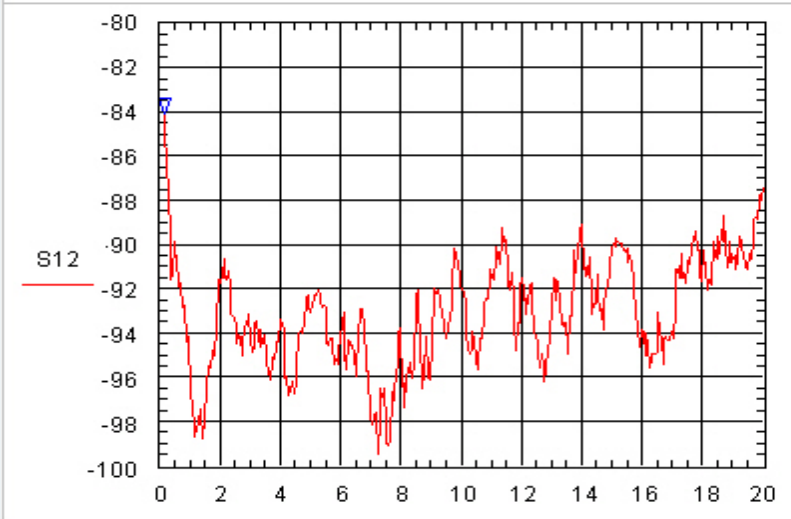
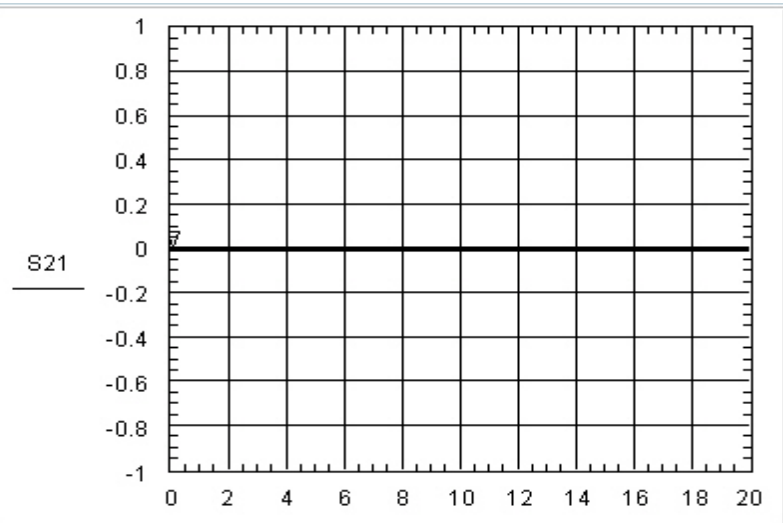
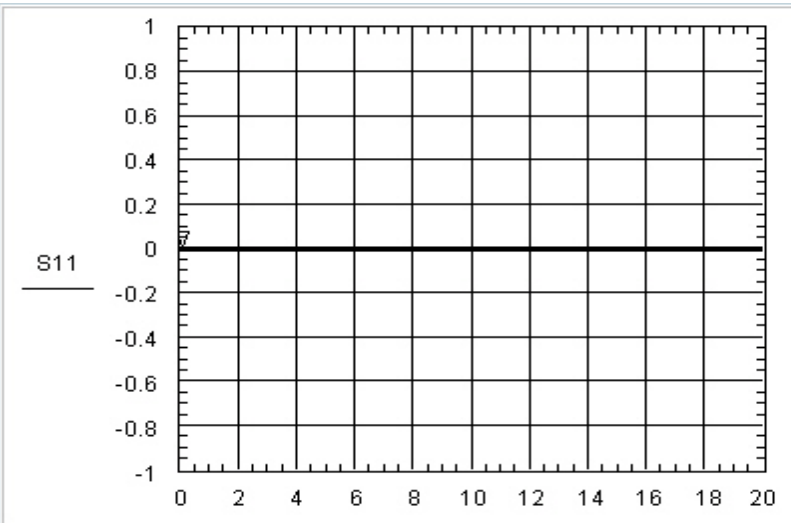
J33-J24 OFF



ISOLATION

VSWR

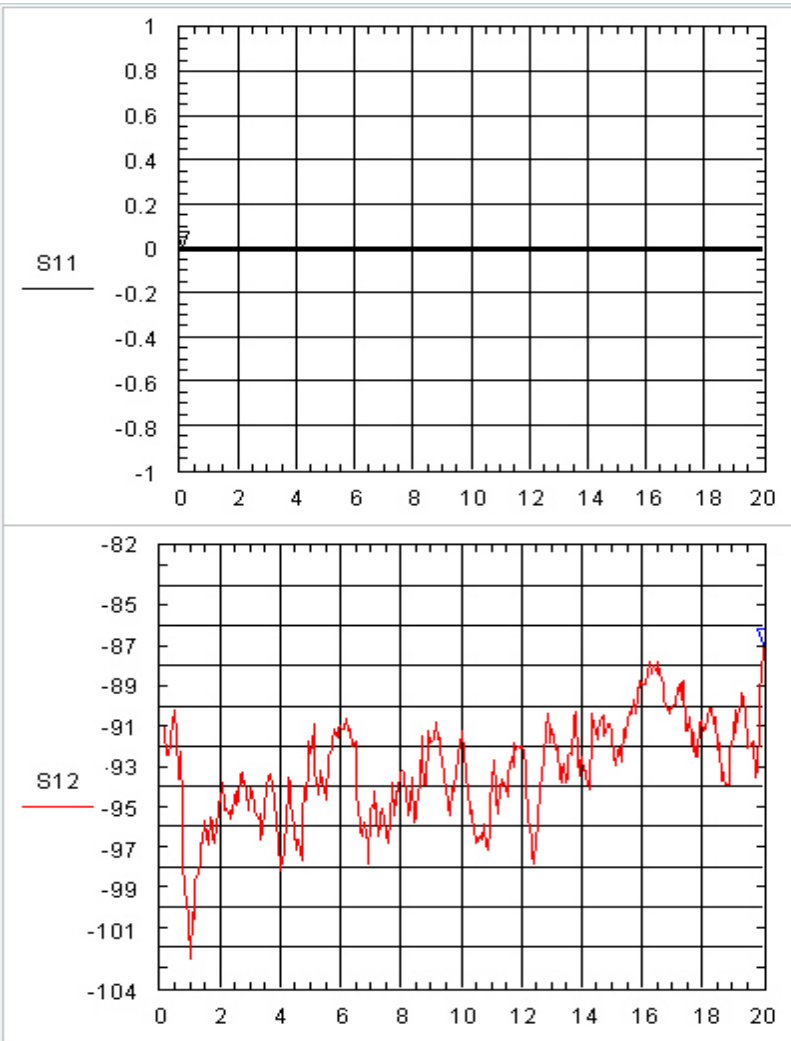
J33-J25 OFF



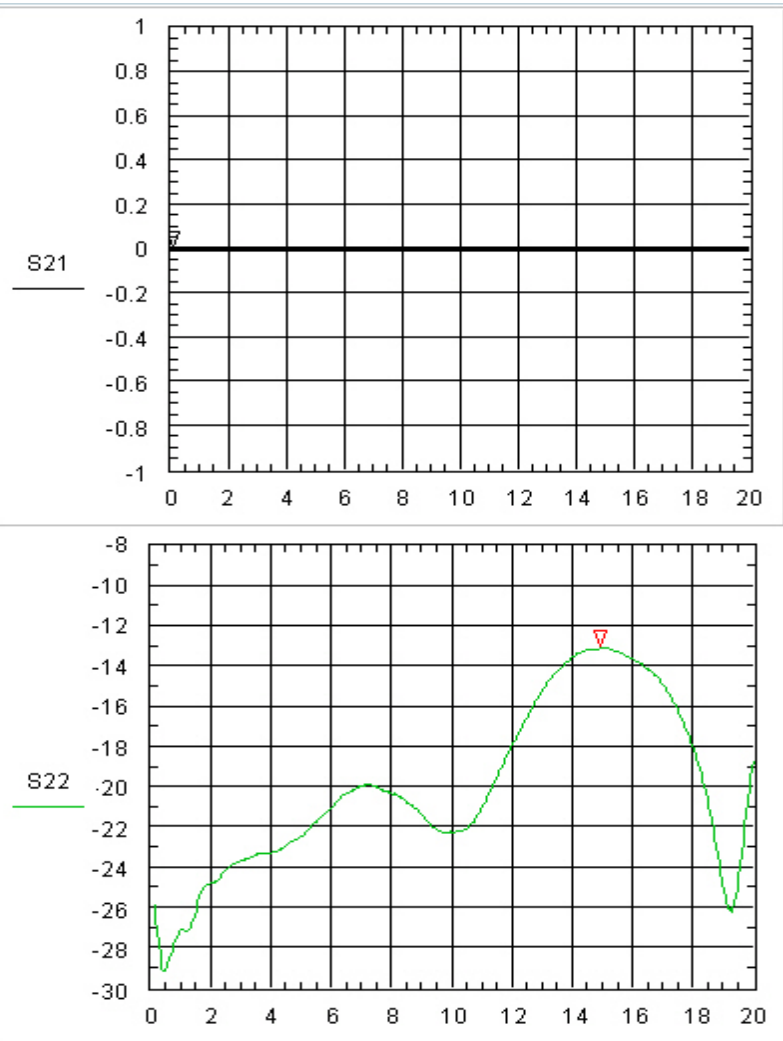
ISOLATION

VSWR

J33-J26 OFF

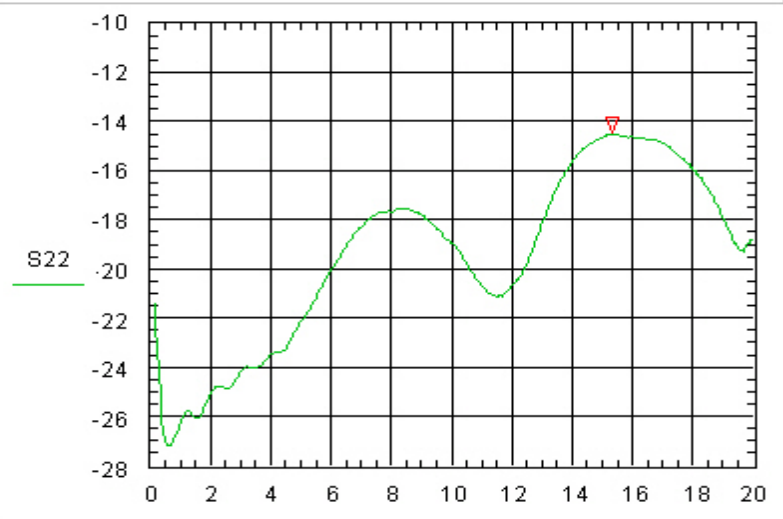
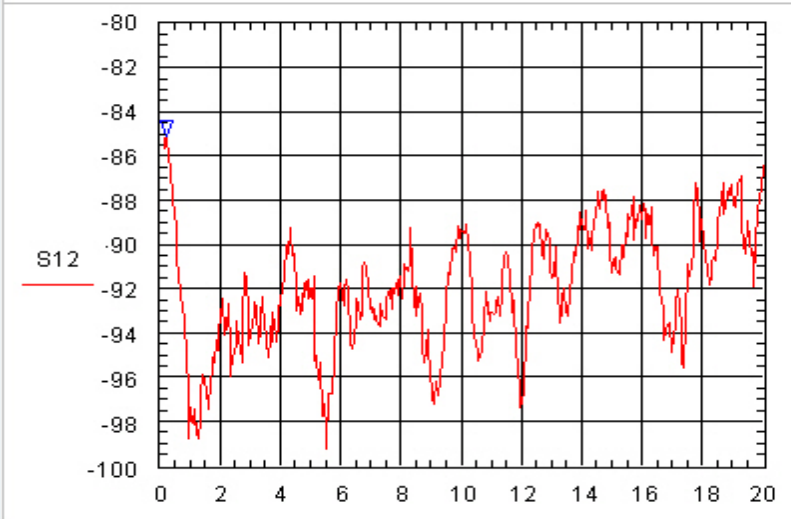
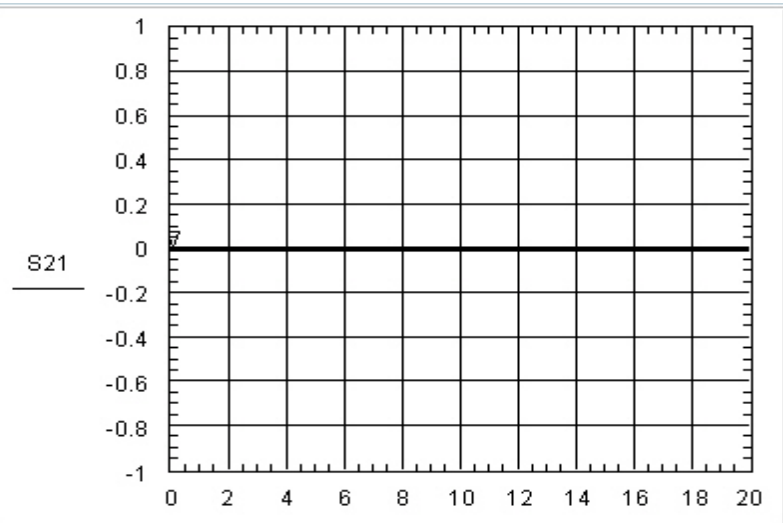
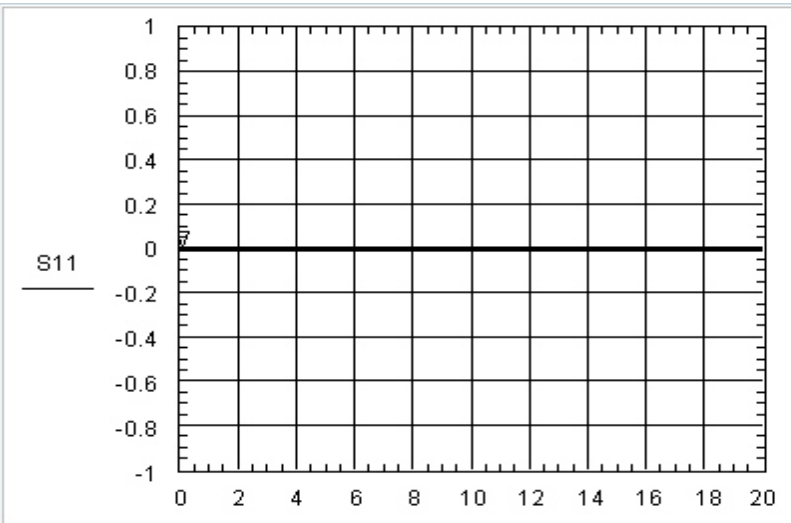


ISOLATION



VSWR

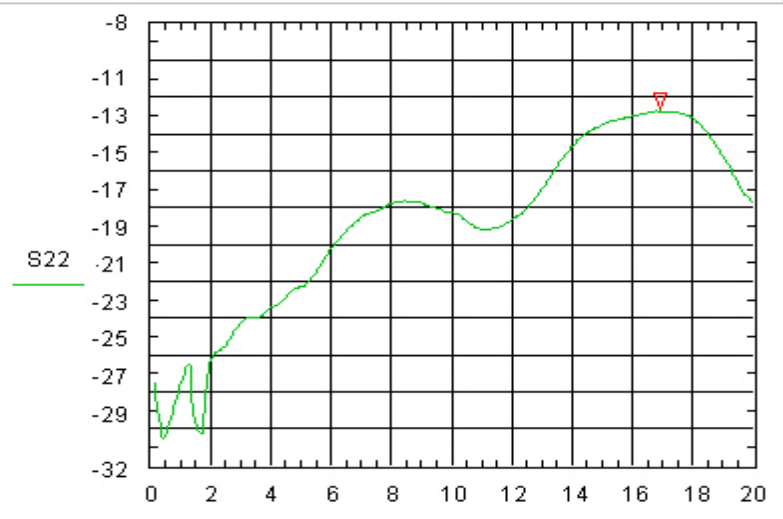
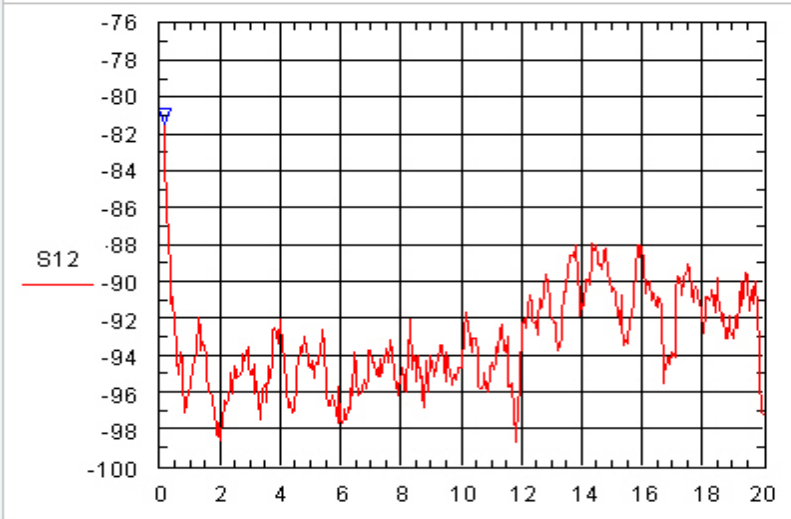
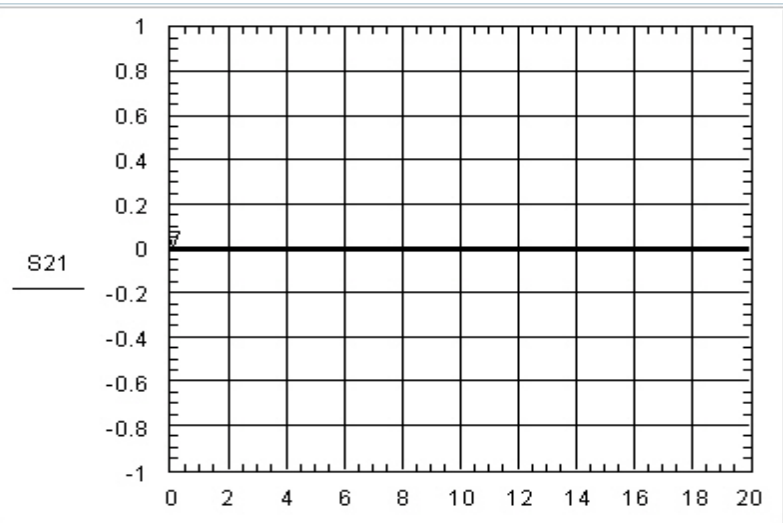
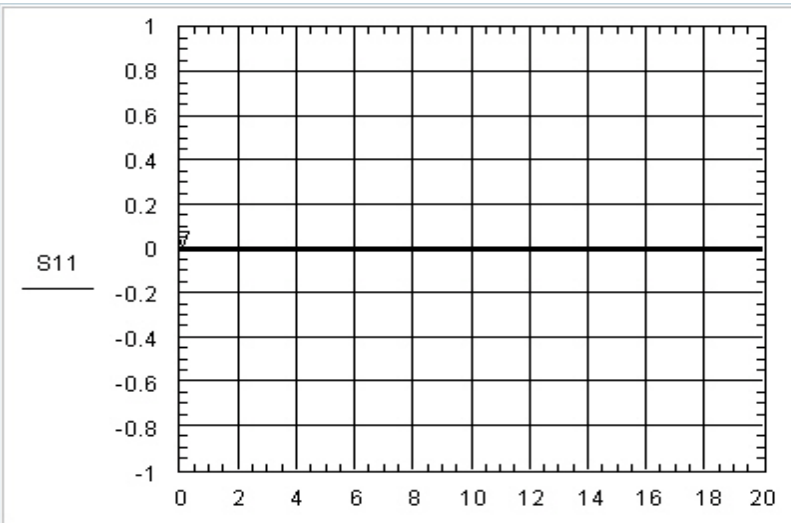
J33-J27 OFF



ISOLATION

VSWR

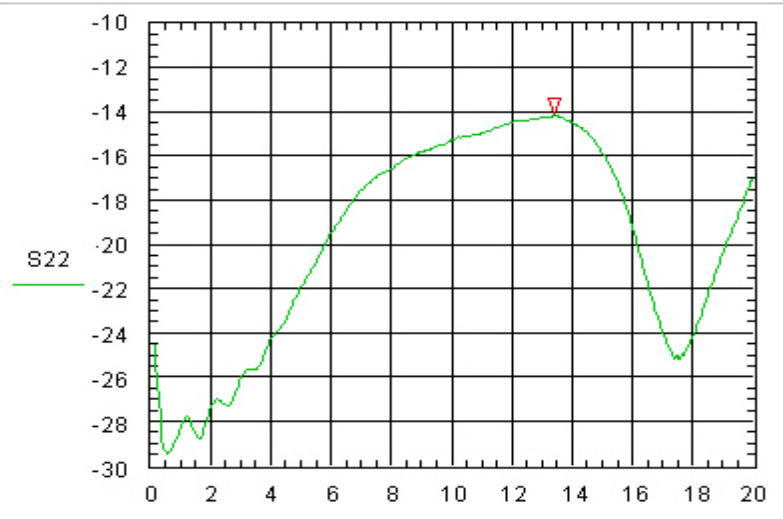
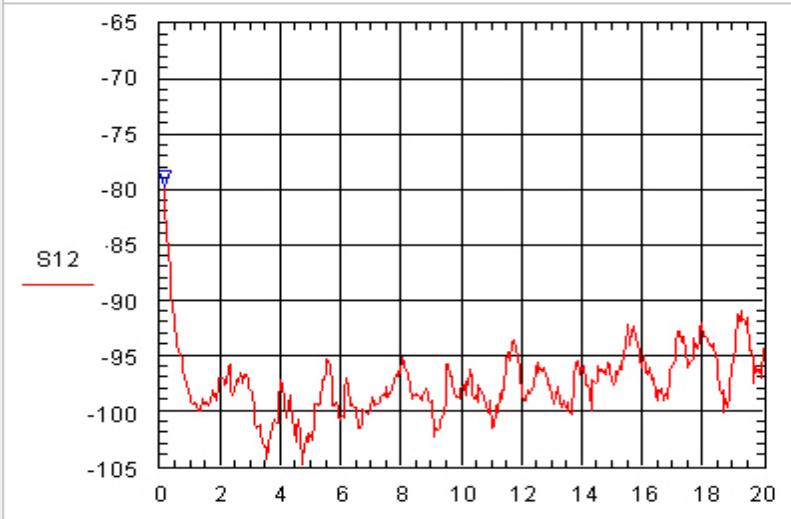
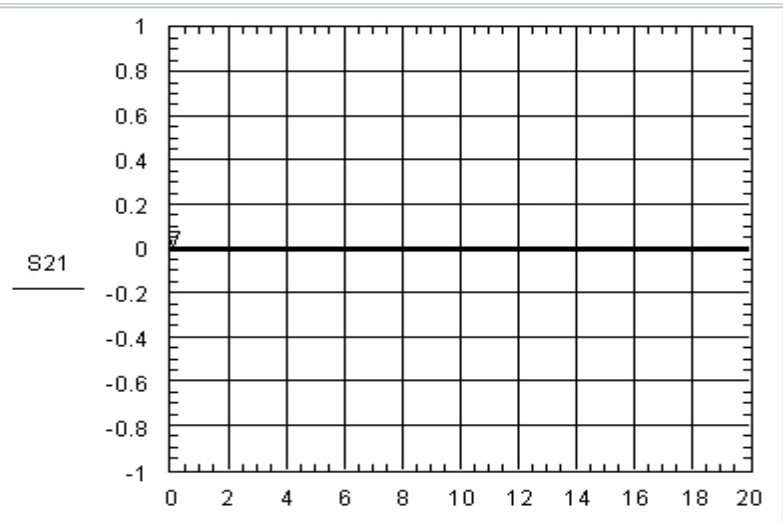
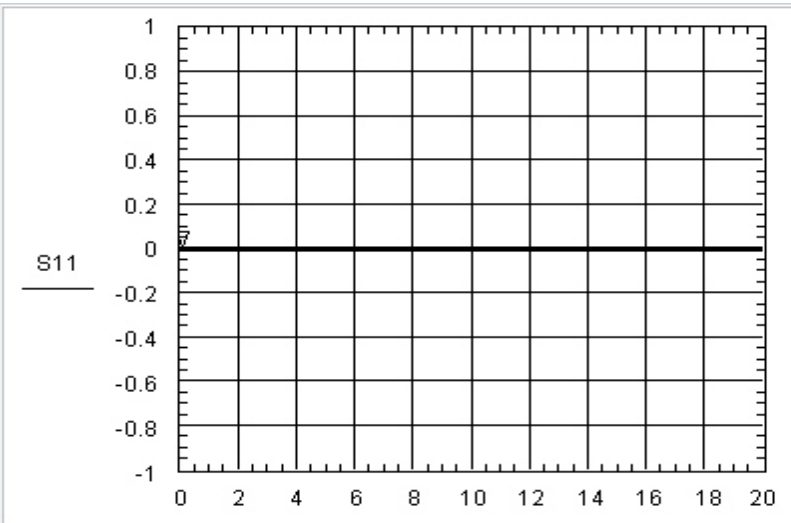
J33-J28 OFF



ISOLATION

VSWR

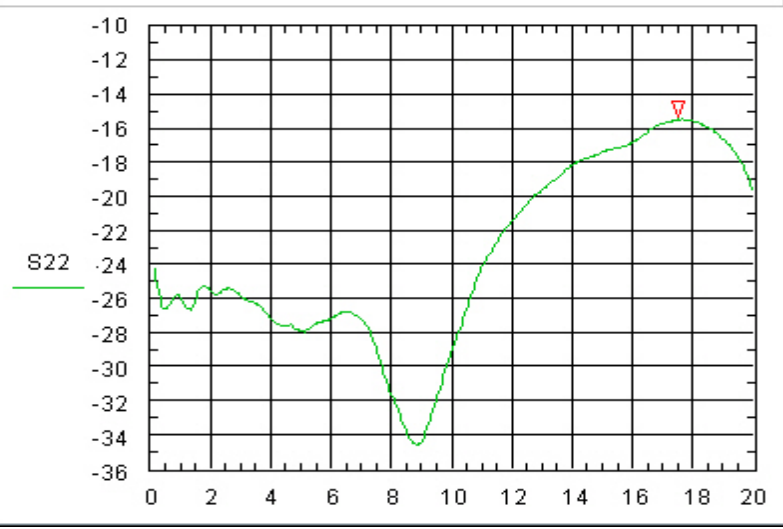
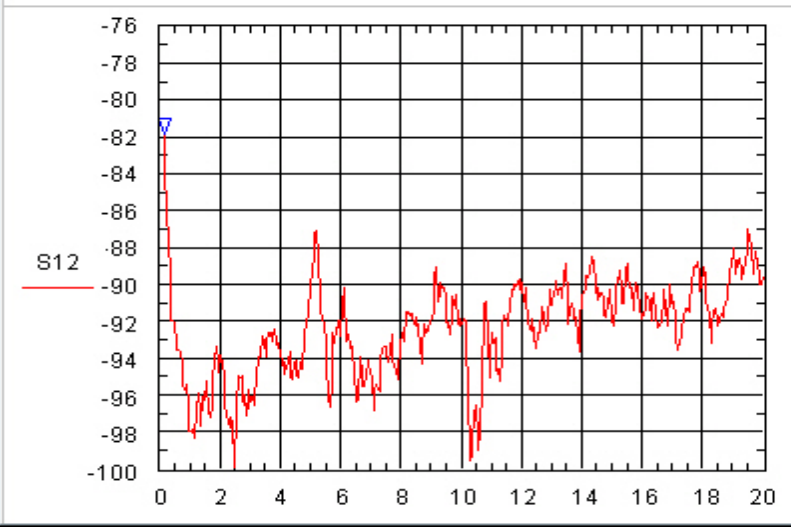
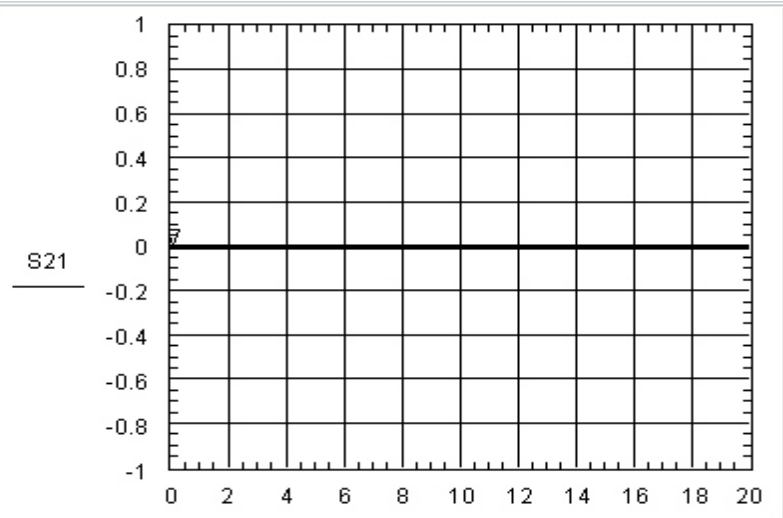
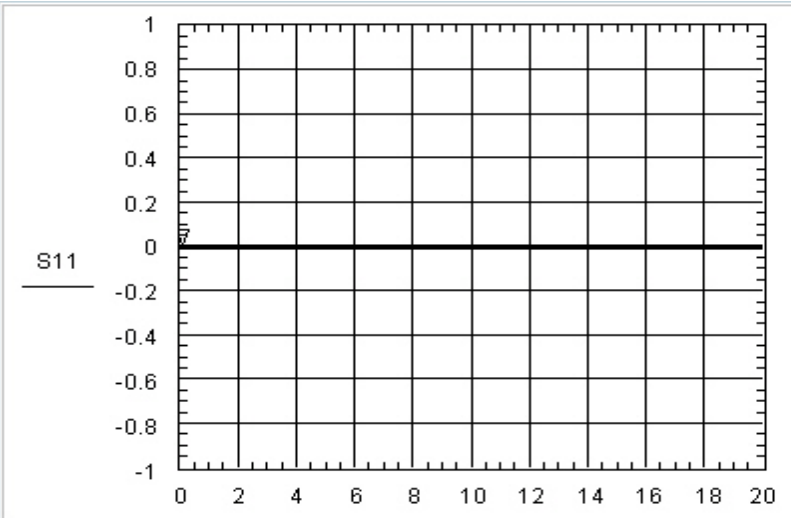
J33-J29 OFF



ISOLATION

VSWR

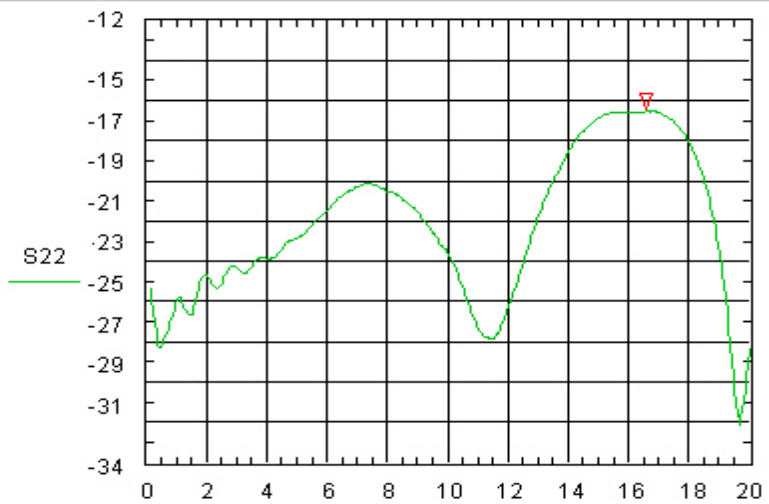
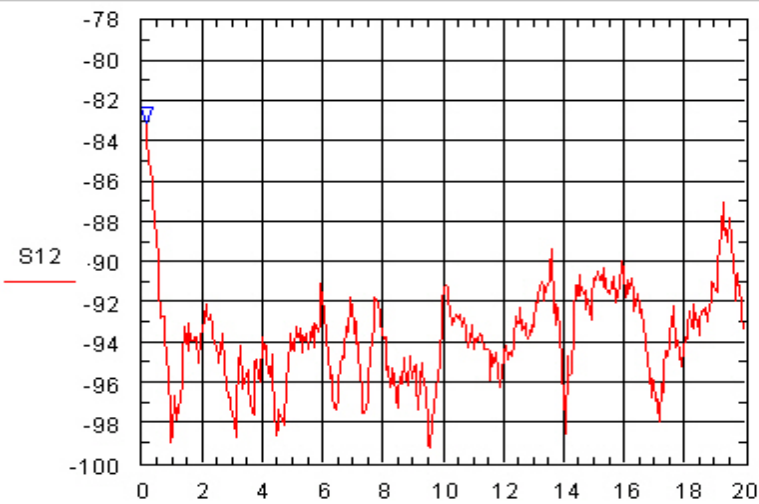
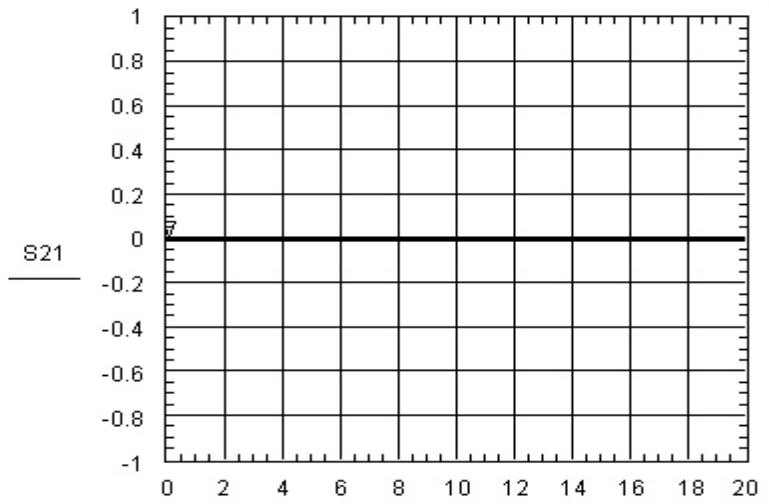
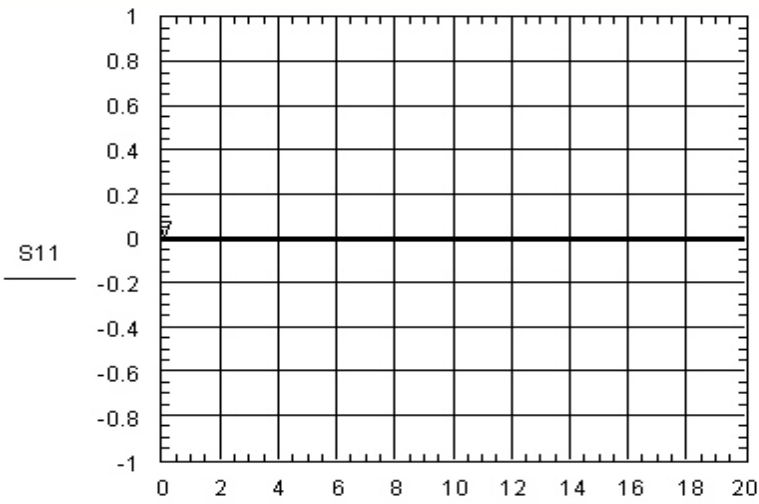
J33-J30 OFF



ISOLATION

VSWR

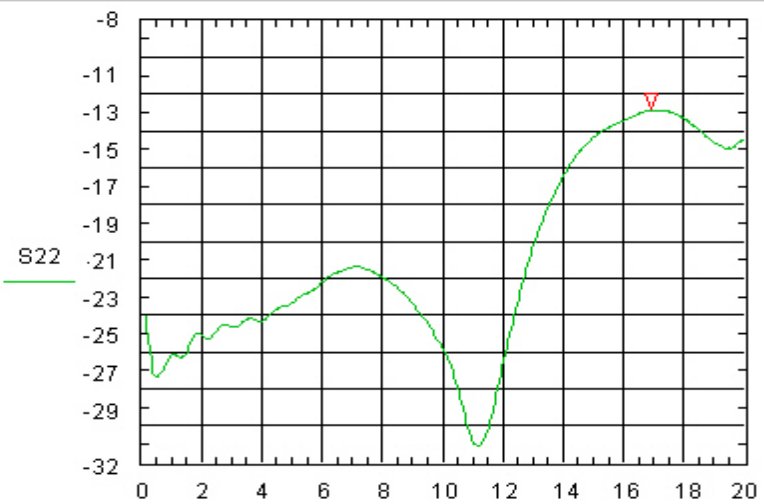
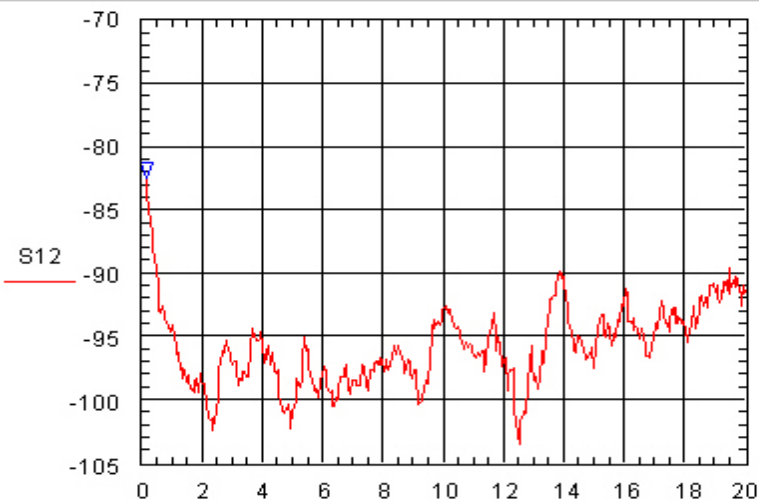
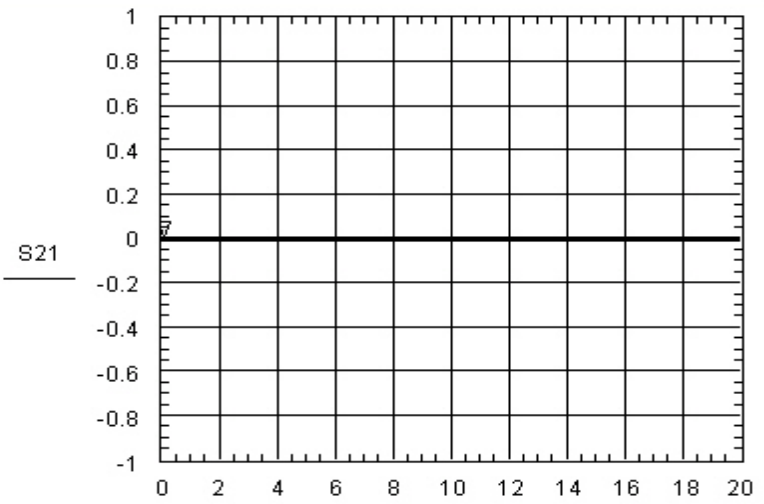
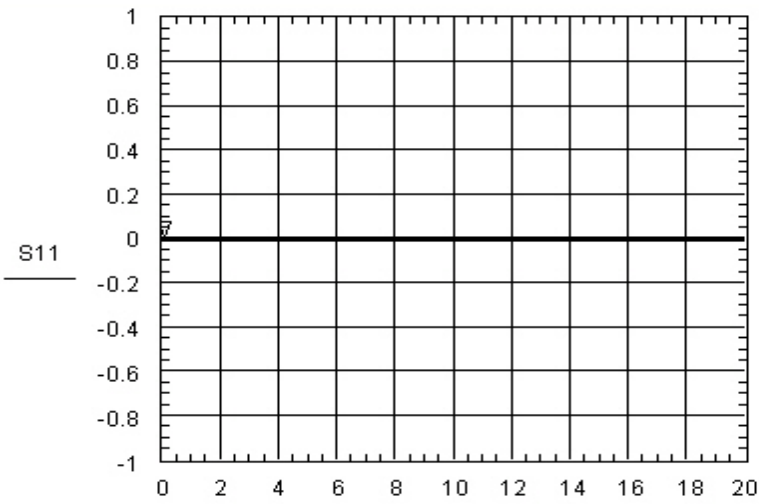
J33-J31 OFF



ISOLATION

VSWR

J33-J32 OFF



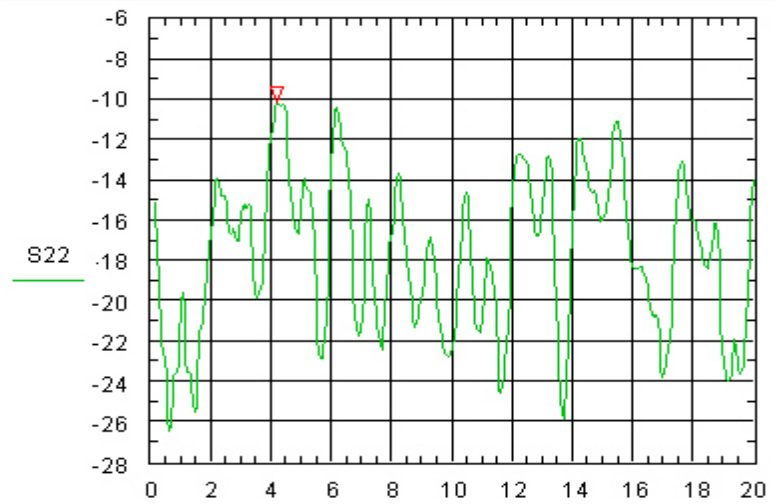
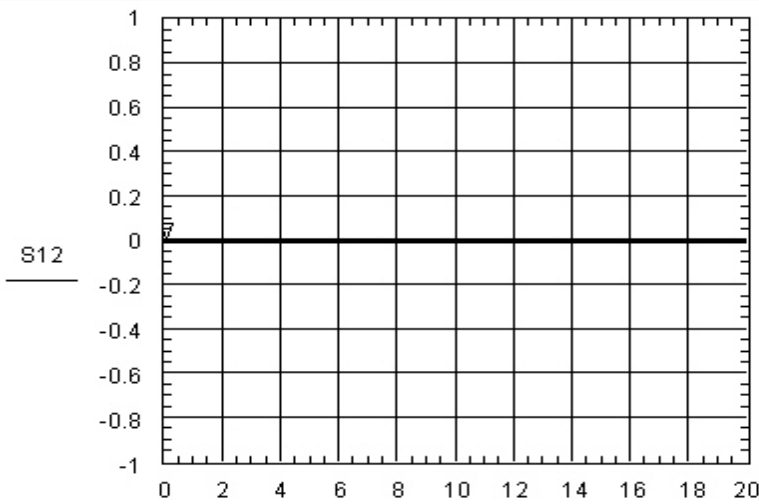
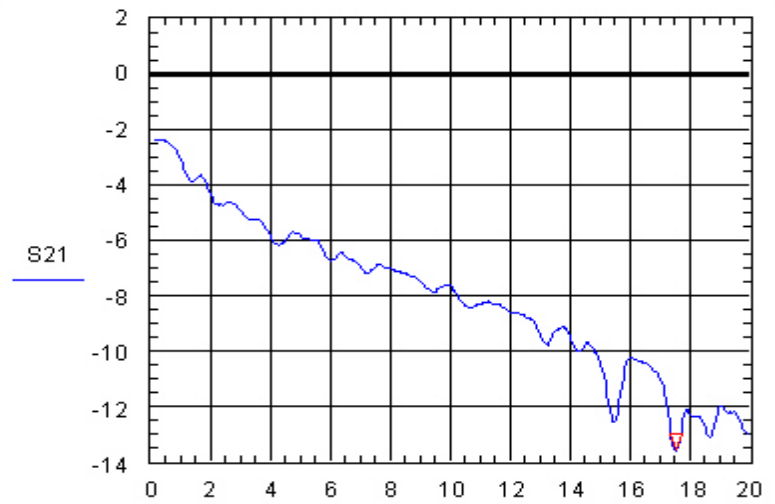
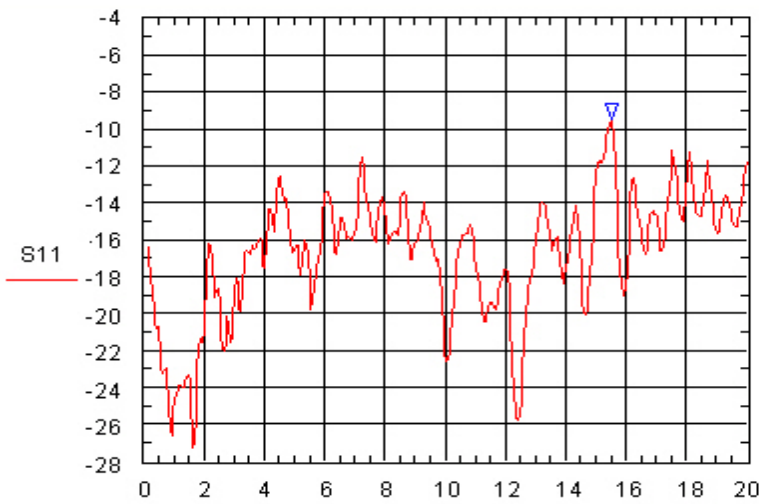
ISOLATION

VSWR

J33-J17 ON

INPUT VSWR

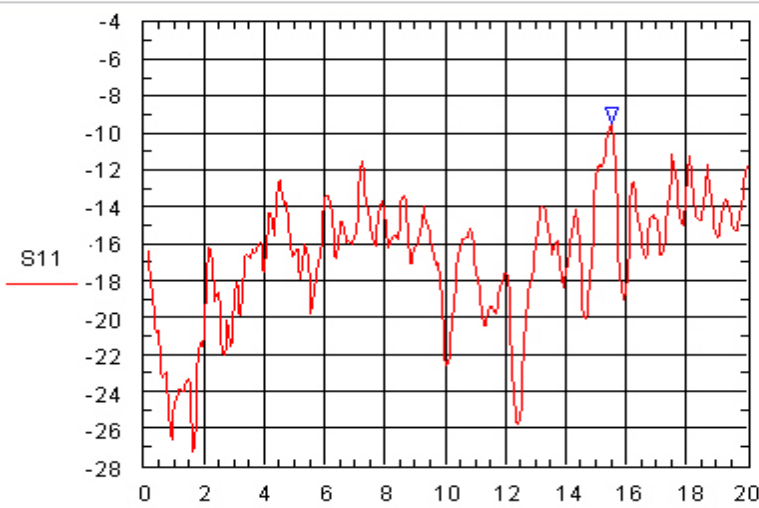
INSERTION LOSS



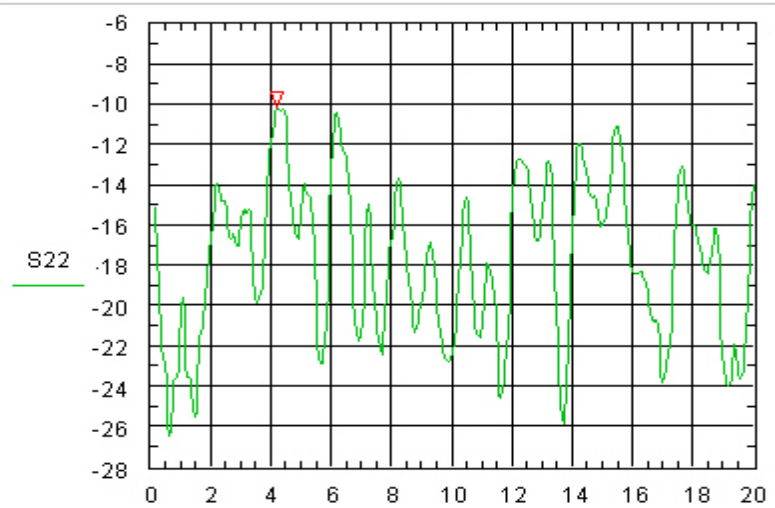
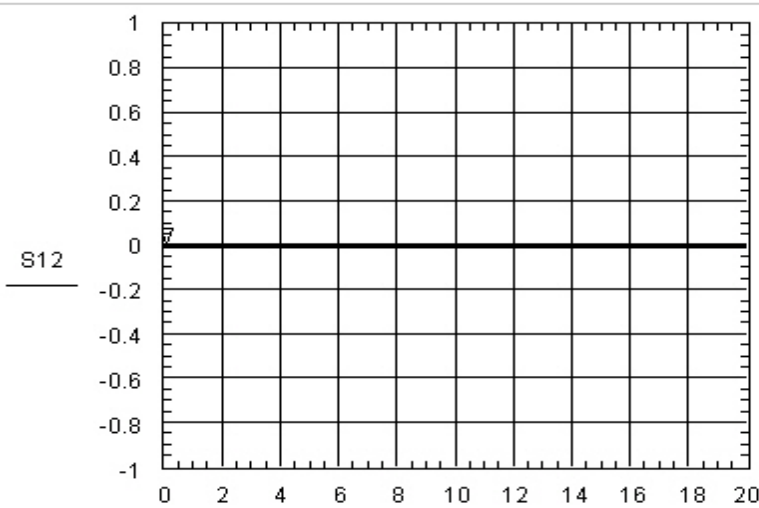
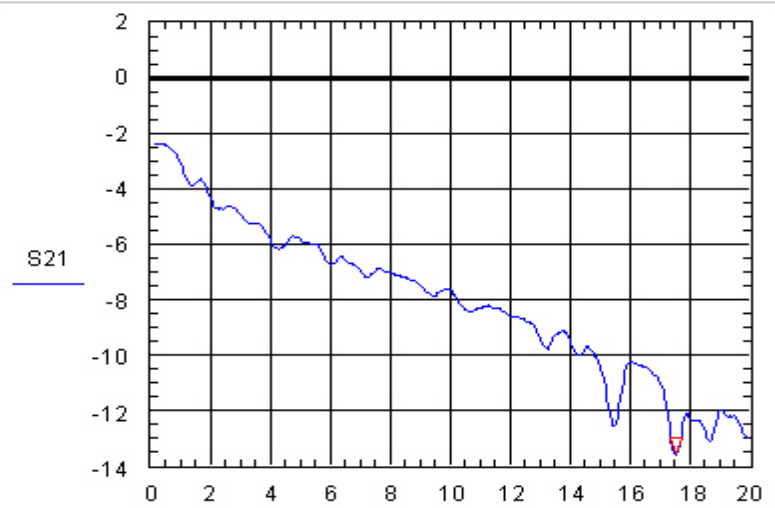
OUTPUT VSWR

J33-J18 ON

INPUT VSWR



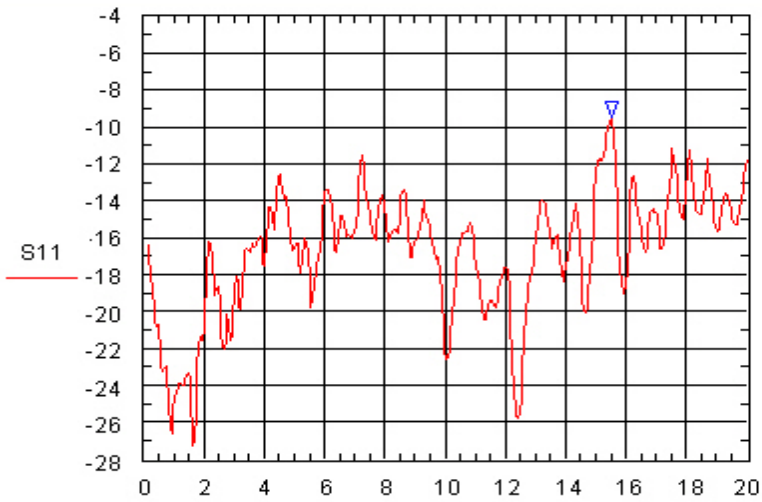
INSERTION LOSS



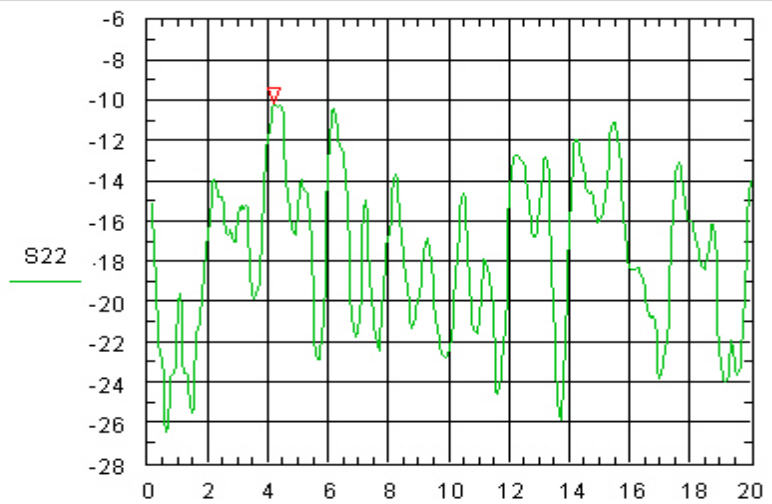
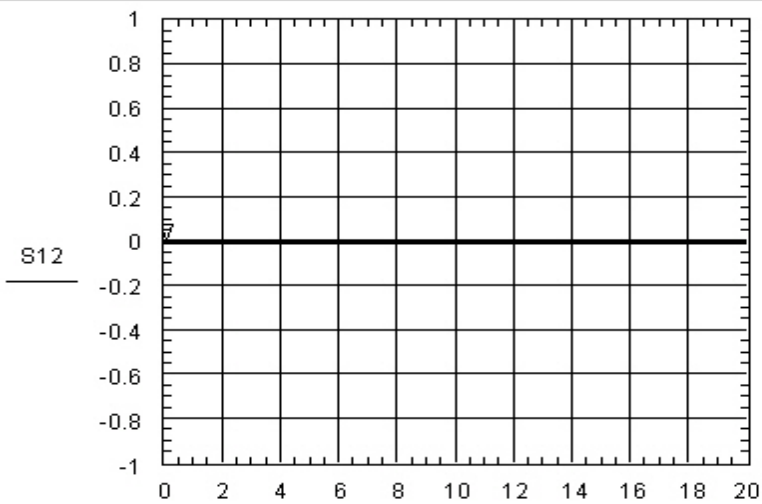
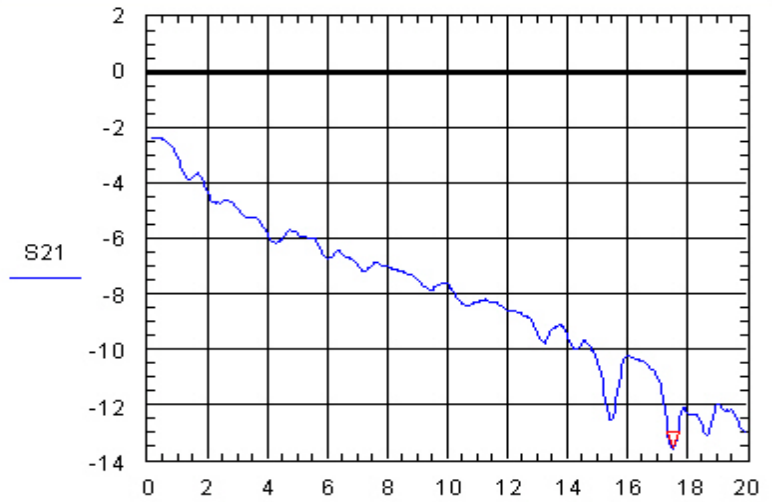
OUTPUT VSWR

J33-J19 ON

INPUT VSWR



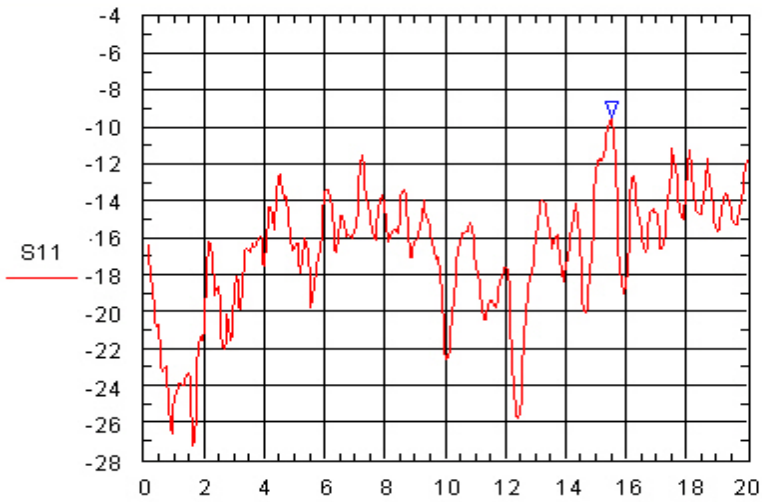
INSERTION LOSS



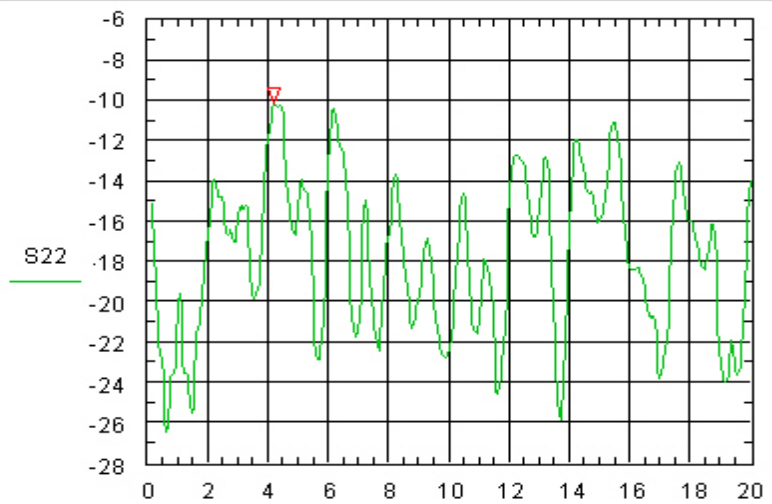
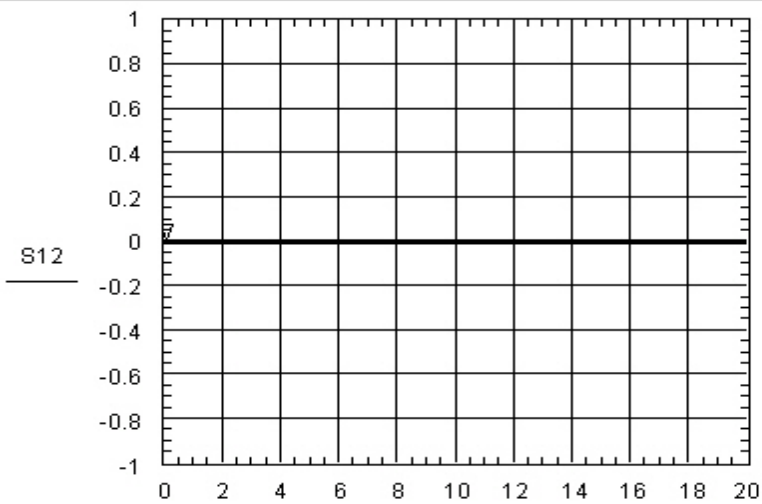
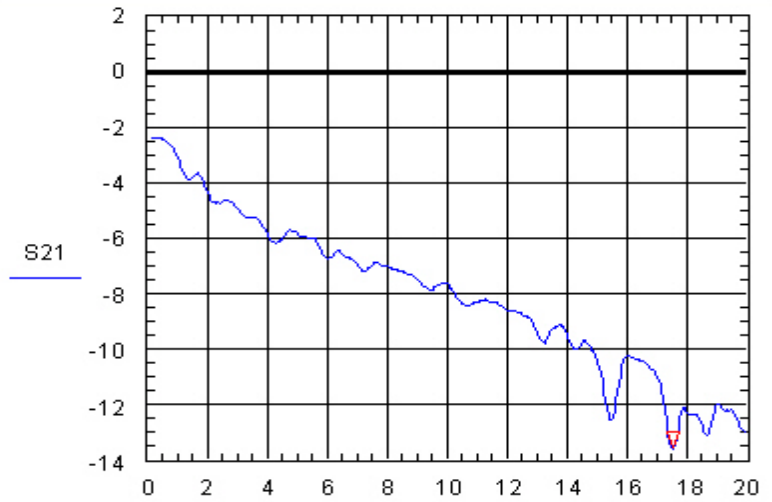
OUTPUT VSWR

J33-J20 ON

INPUT VSWR



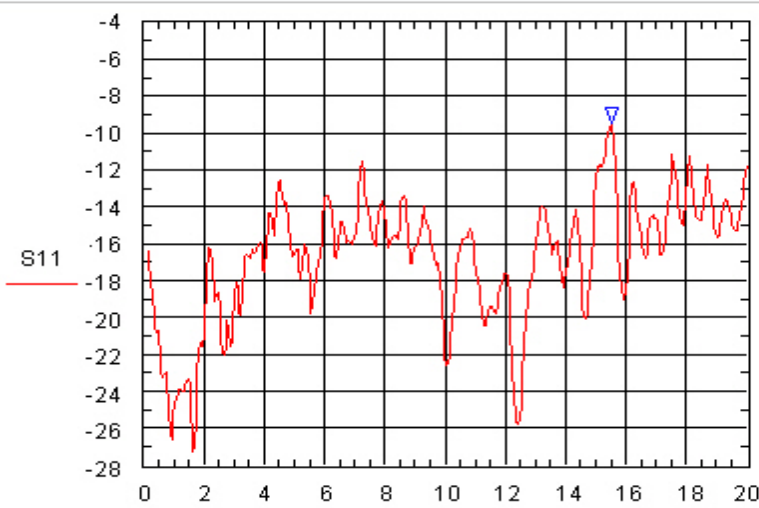
INSERTION LOSS



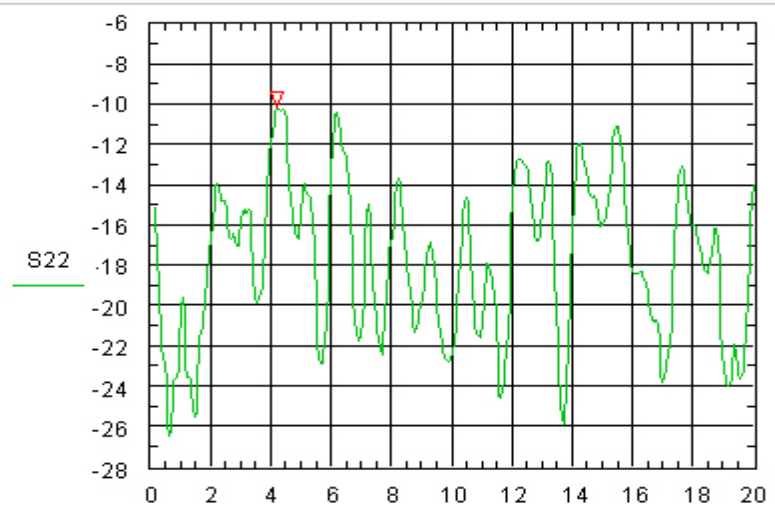
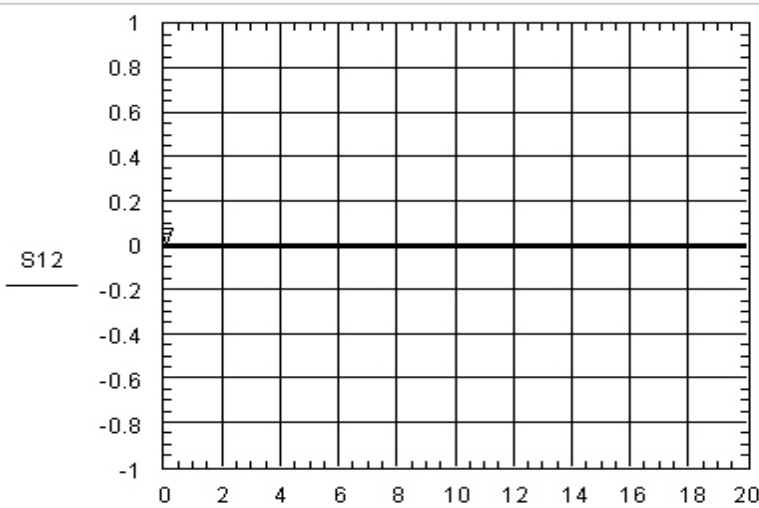
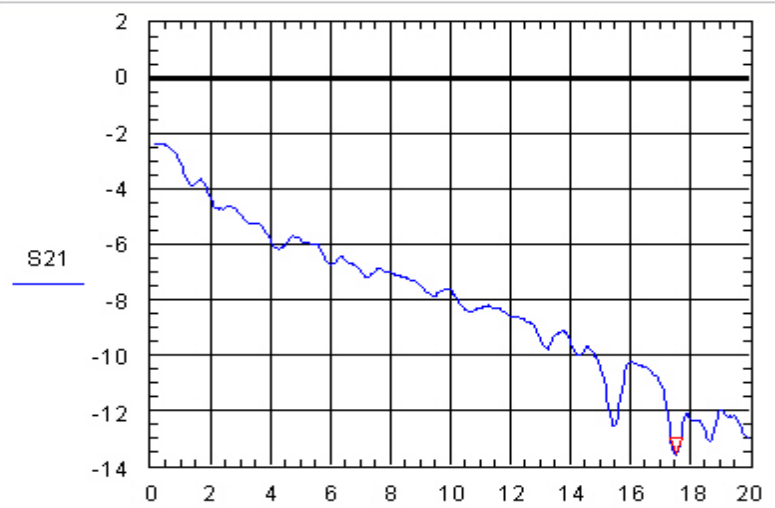
OUTPUT VSWR

J33-J21 ON

INPUT VSWR



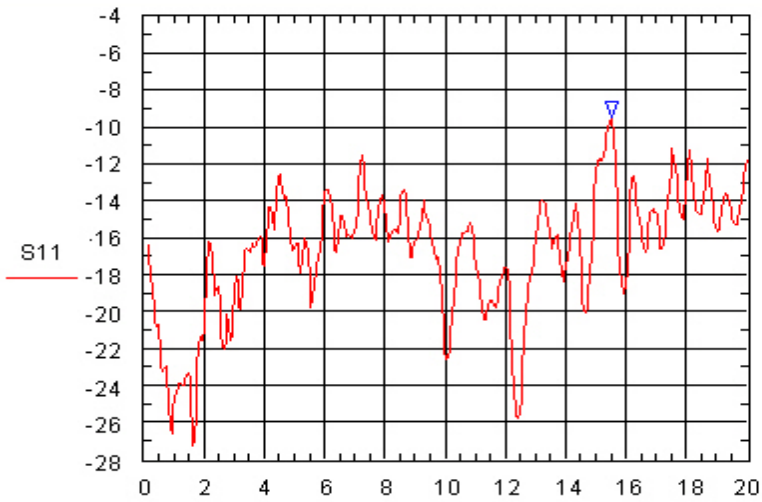
INSERTION LOSS



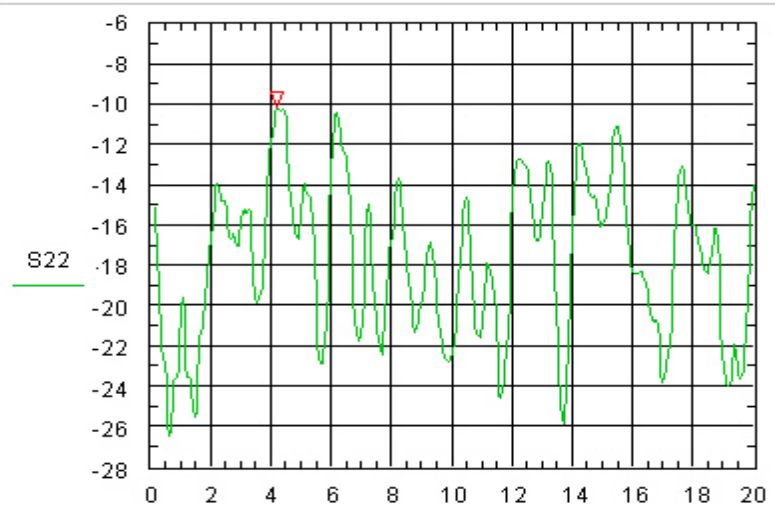
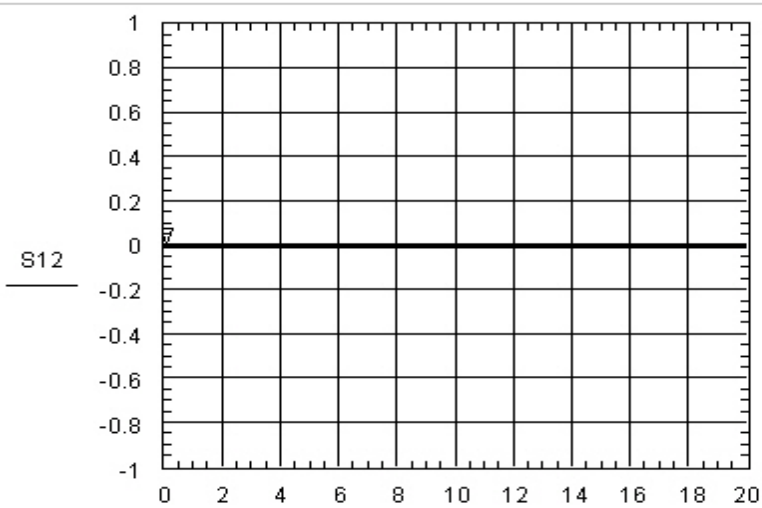
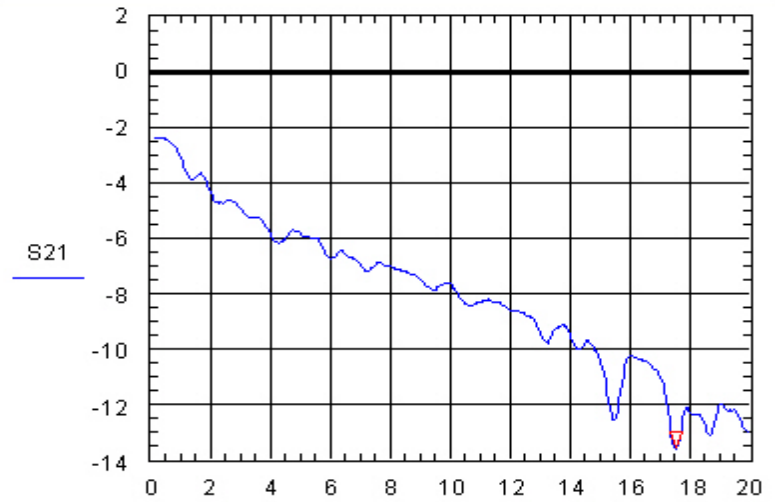
OUTPUT VSWR

J33-J22 ON

INPUT VSWR



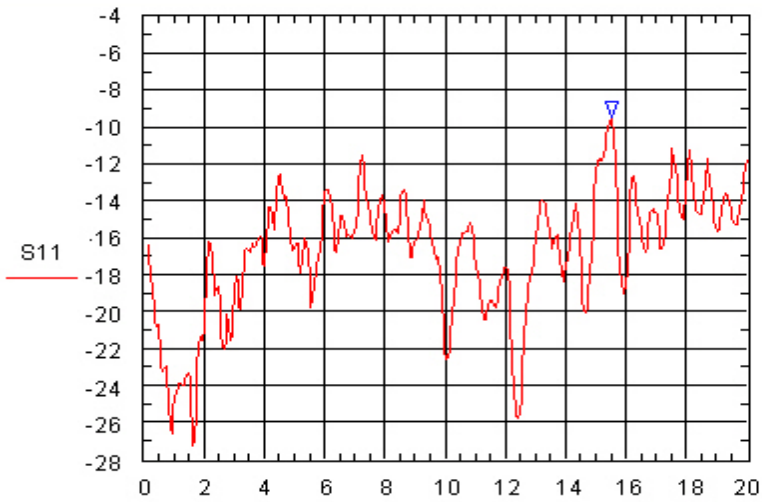
INSERTION LOSS



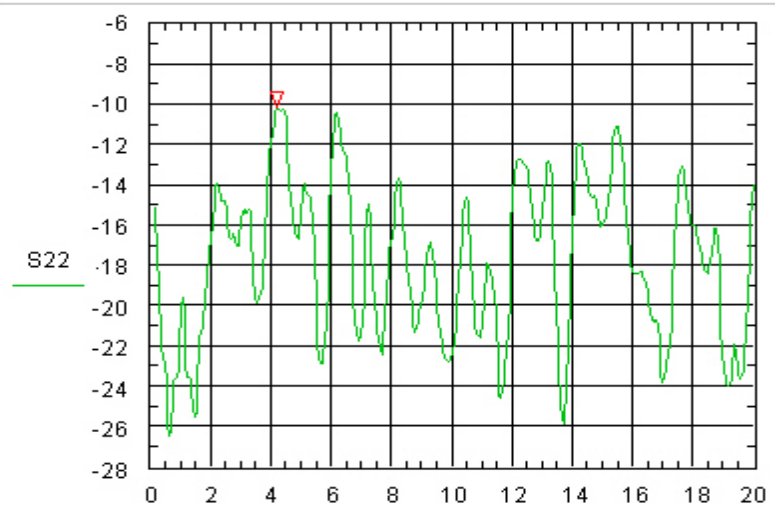
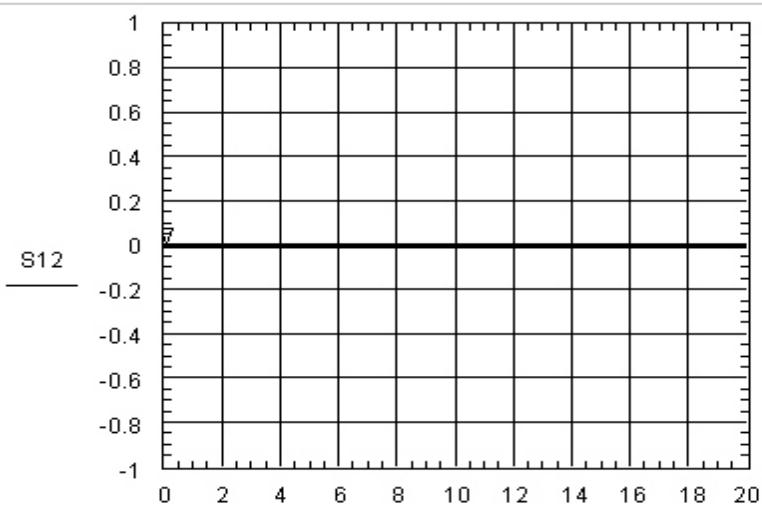
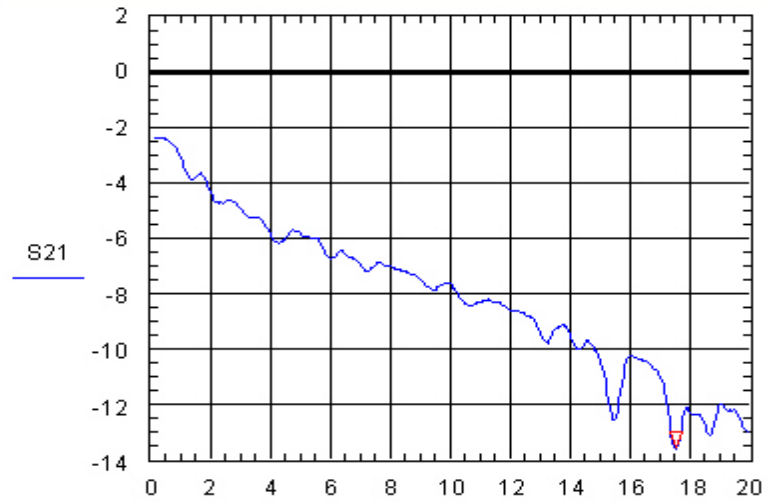
OUTPUT VSWR

J33-J23 ON

INPUT VSWR



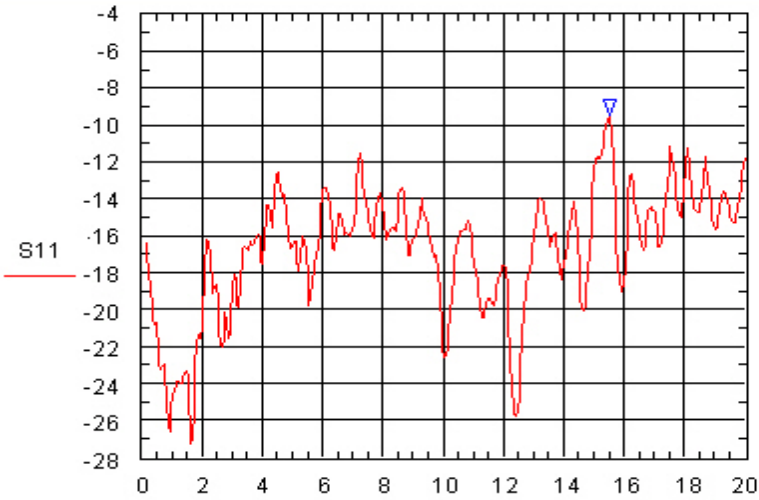
INSERTION LOSS



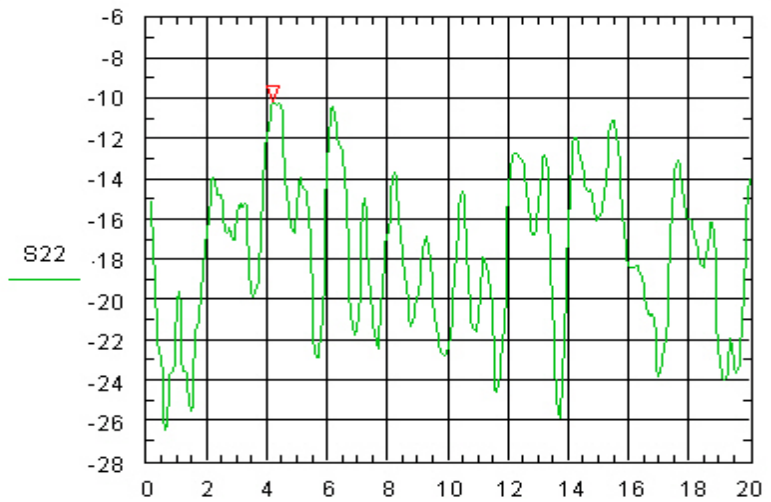
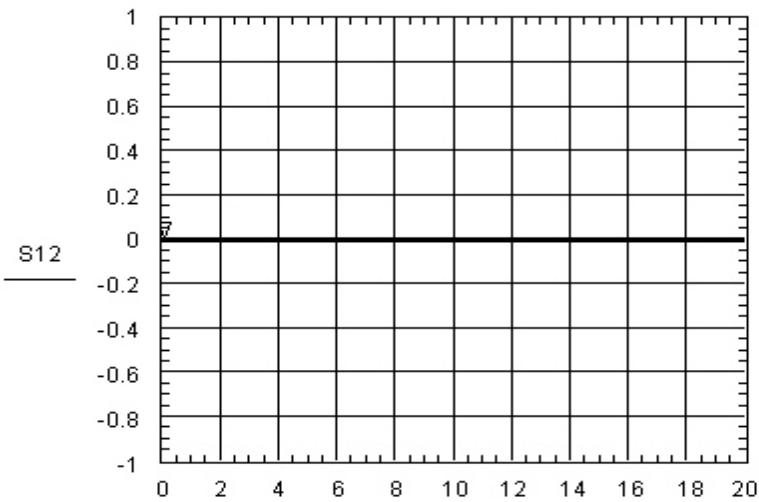
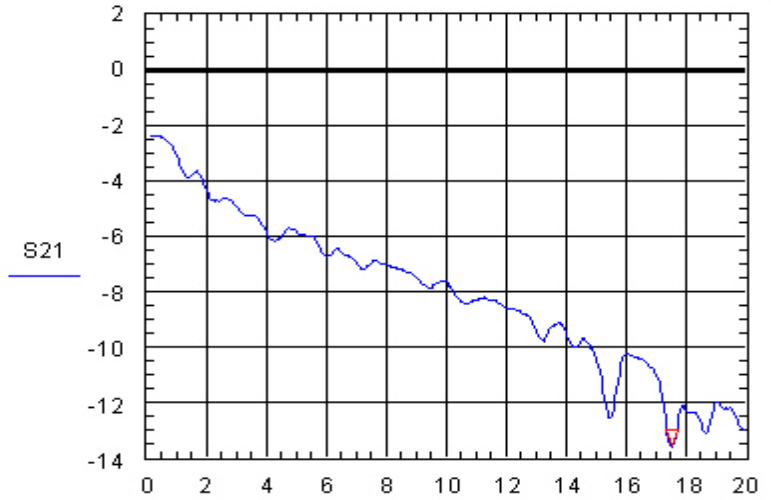
OUTPUT VSWR

J33-J24 ON

INPUT VSWR



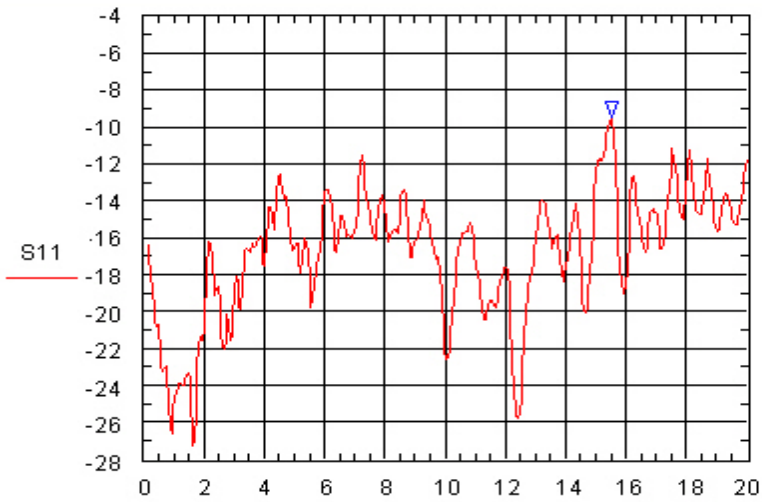
INSERTION LOSS



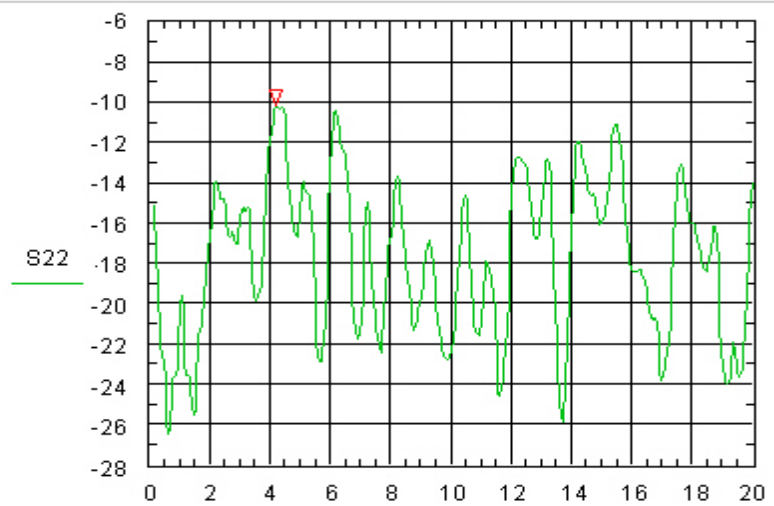
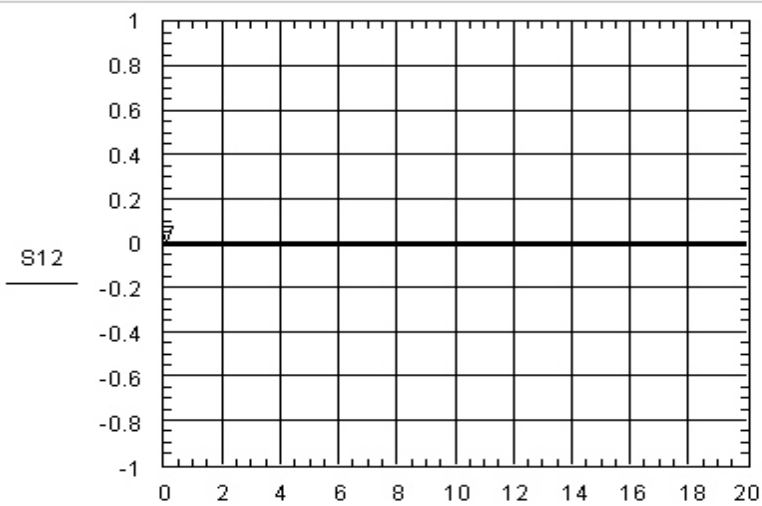
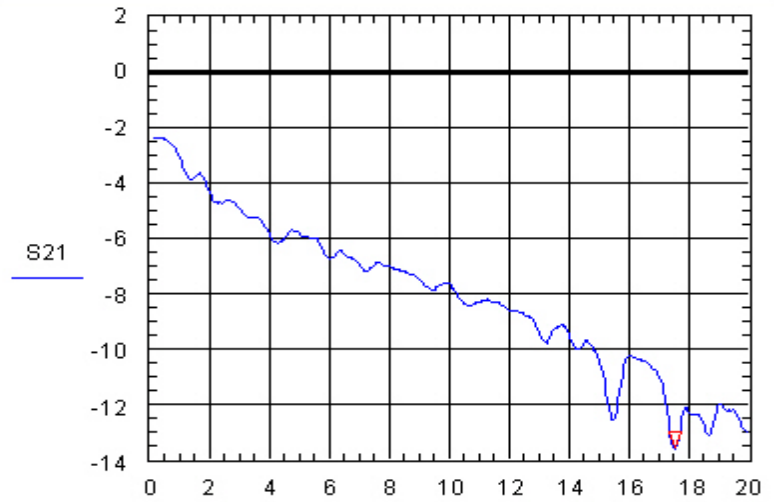
OUTPUT VSWR

J33-J25 ON

INPUT VSWR



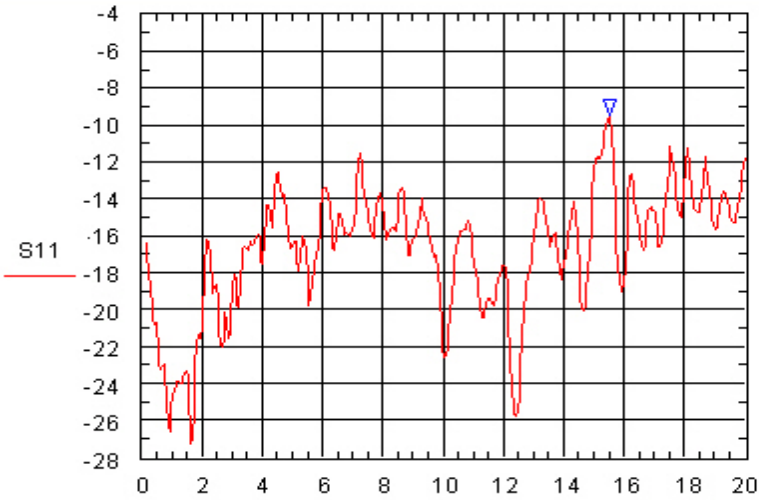
INSERTION LOSS



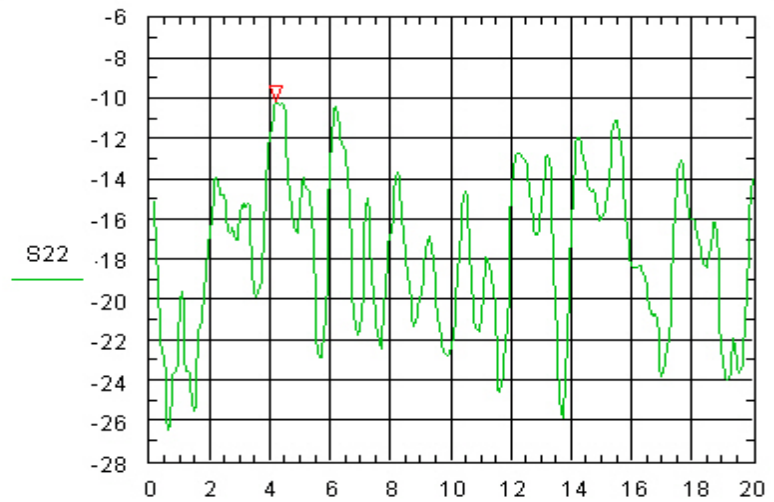
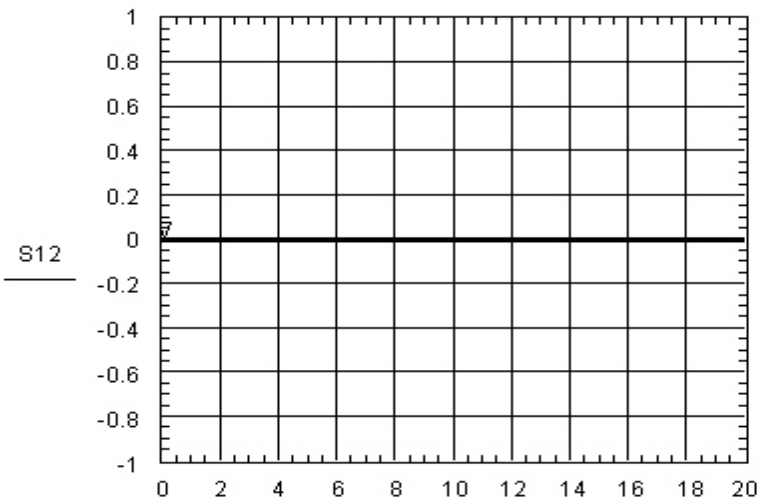
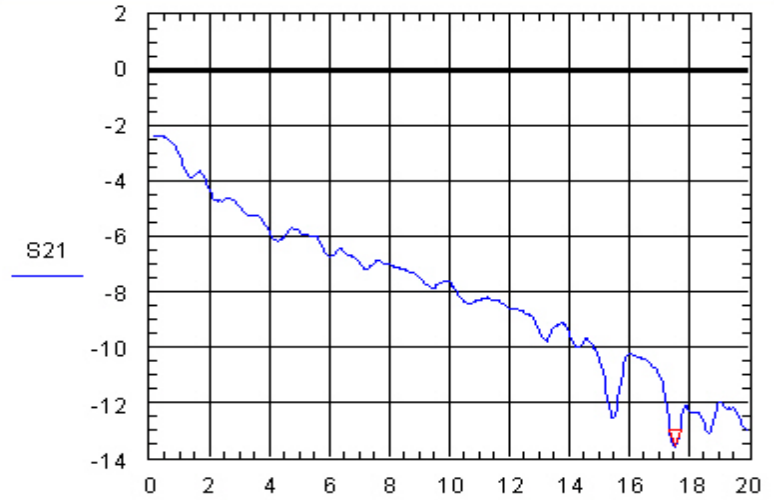
OUTPUT VSWR

J33-J26 ON

INPUT VSWR



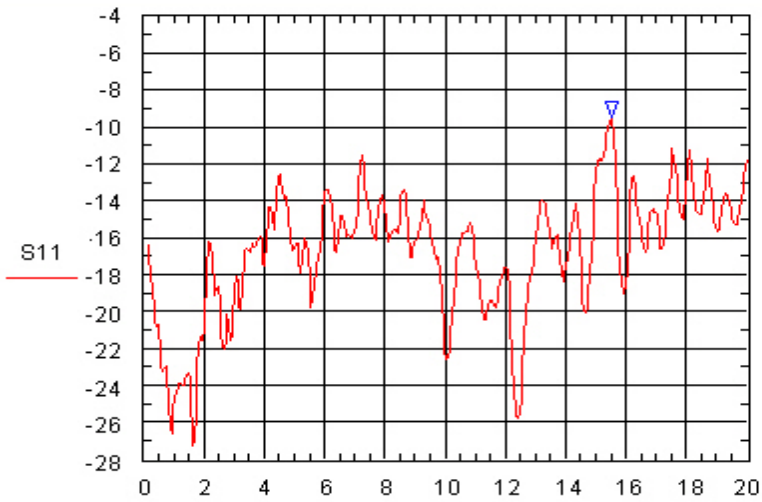
INSERTION LOSS



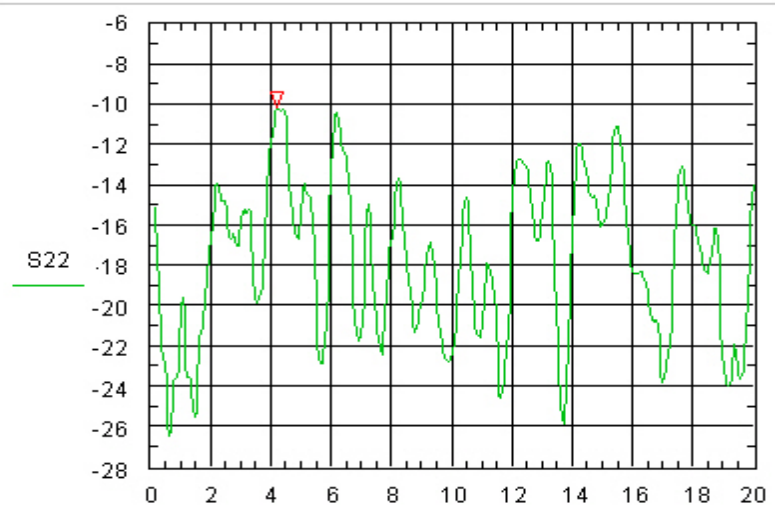
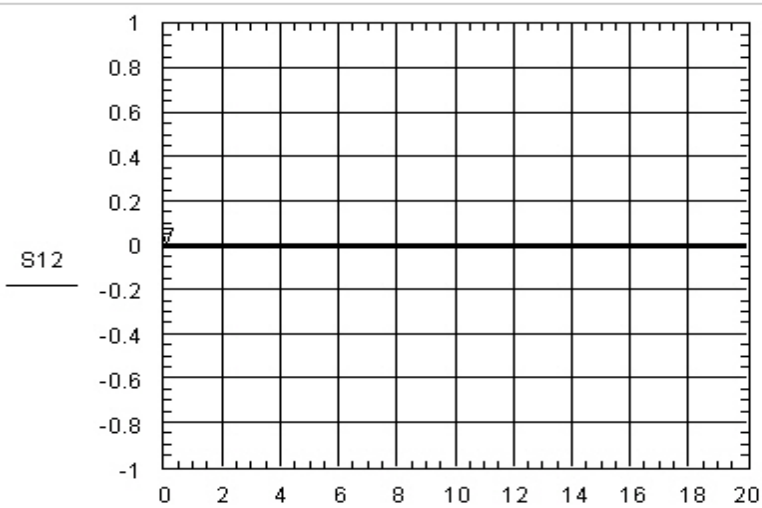
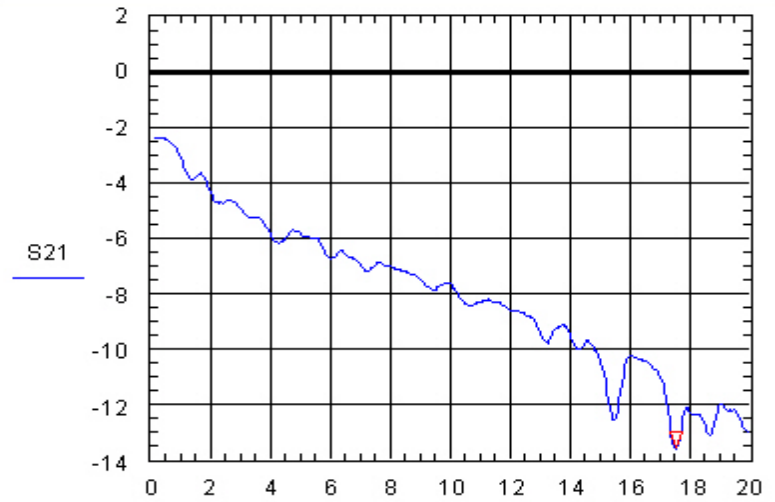
OUTPUT VSWR

J33-J27 ON

INPUT VSWR



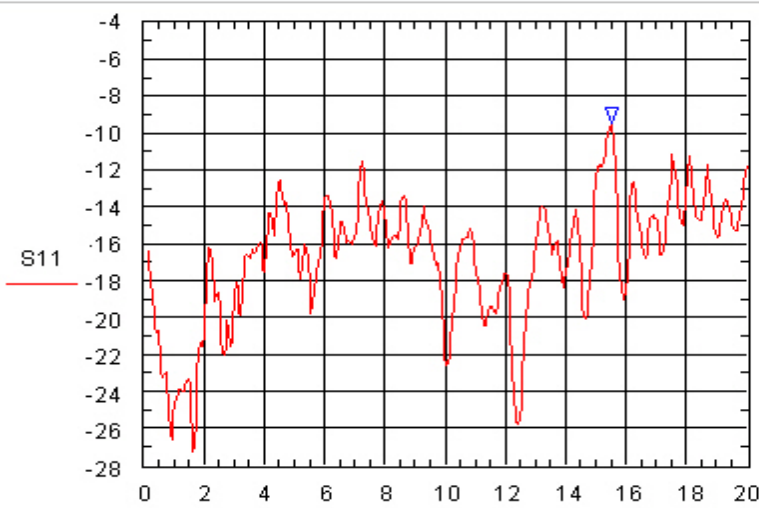
INSERTION LOSS



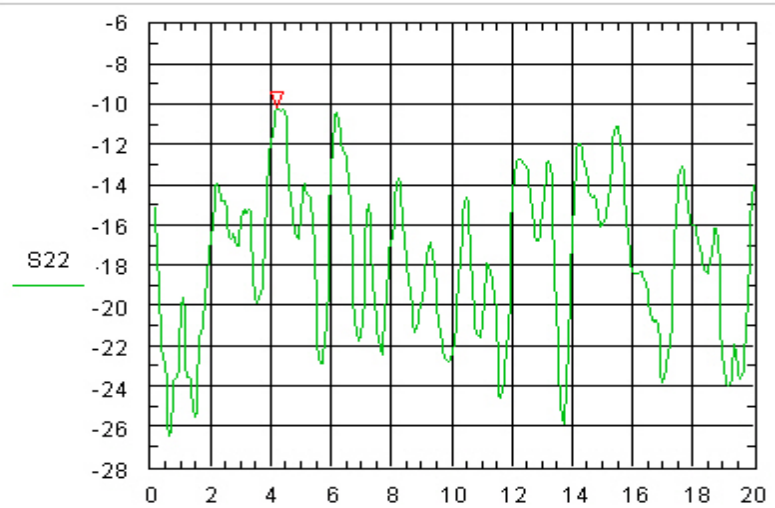
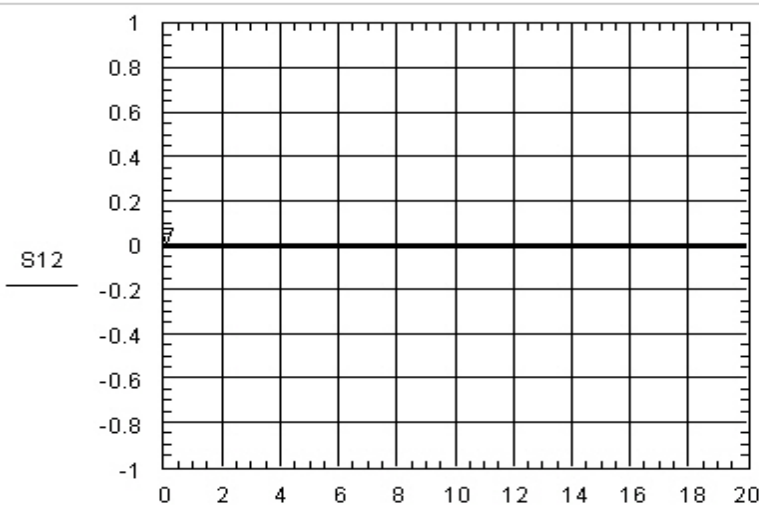
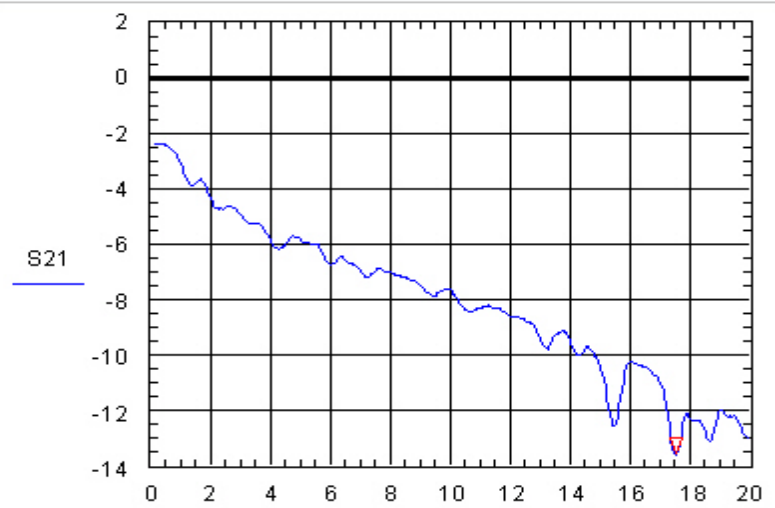
OUTPUT VSWR

J33-J28 ON

INPUT VSWR



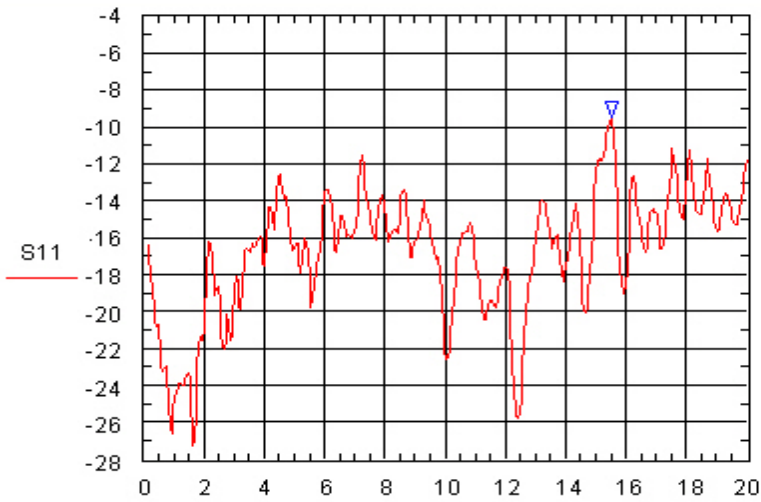
INSERTION LOSS



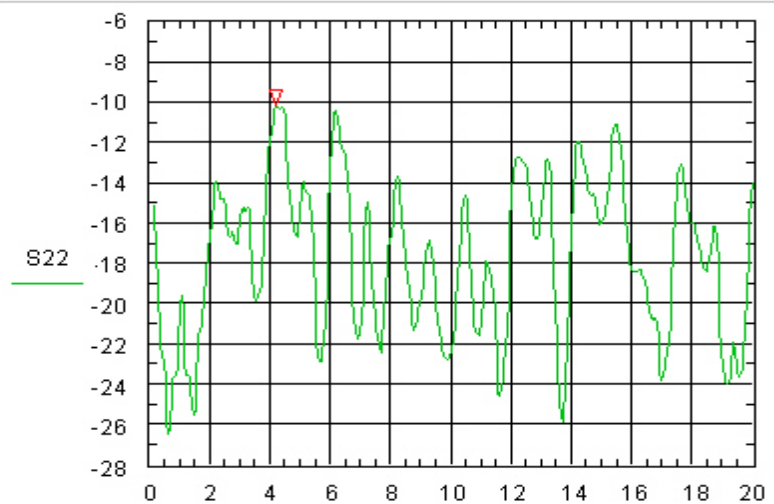
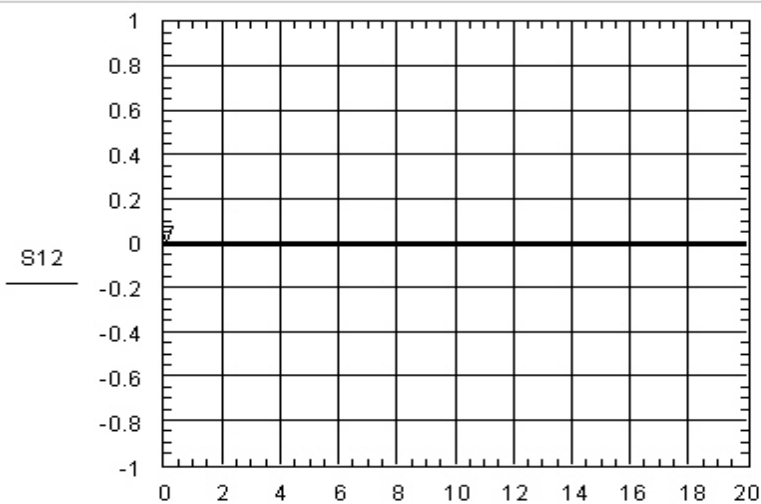
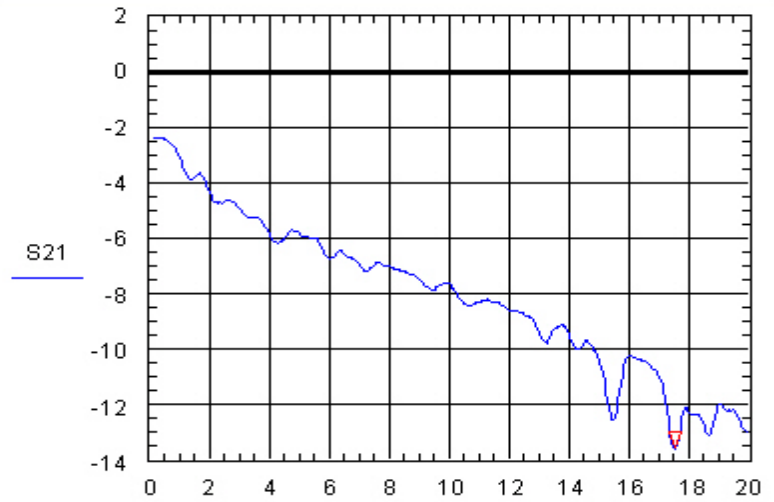
OUTPUT VSWR

J33-J29 ON

INPUT VSWR



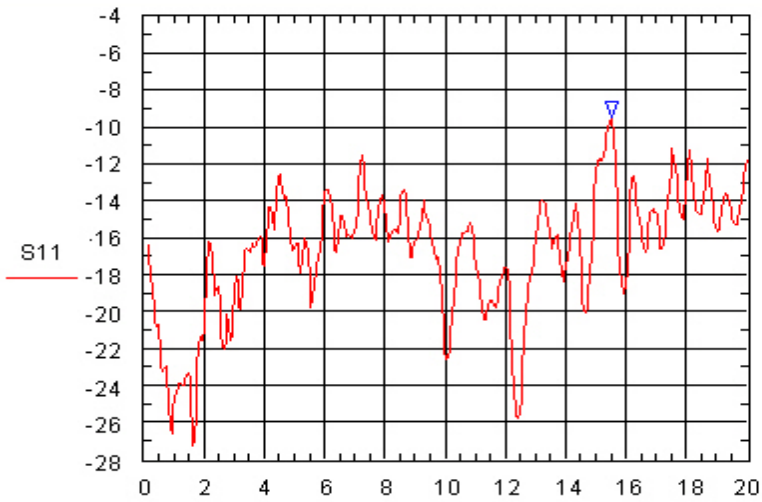
INSERTION LOSS



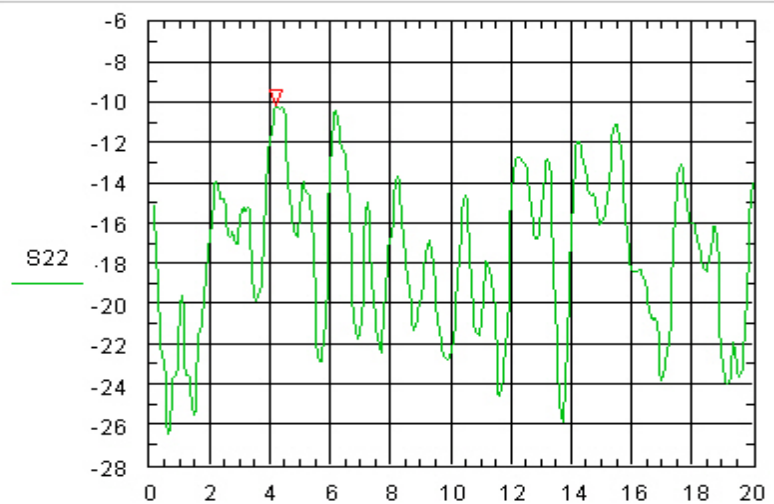
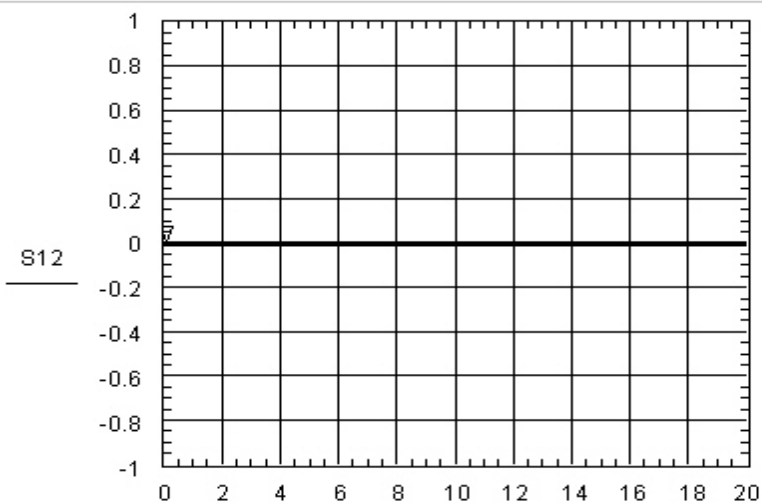
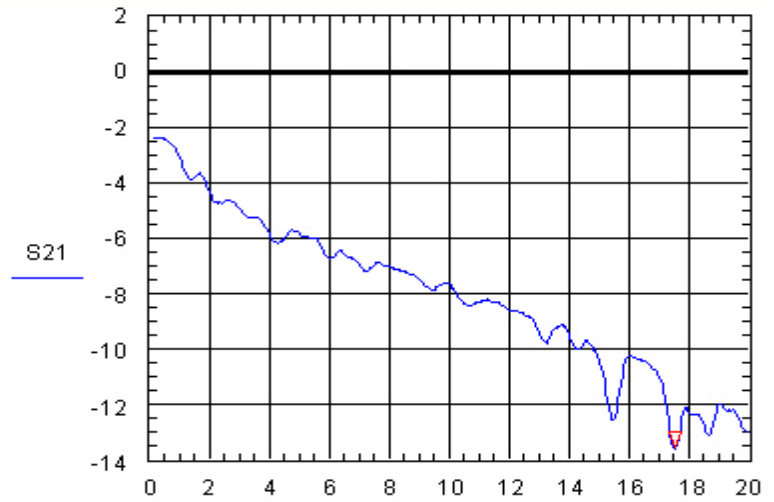
OUTPUT VSWR

J33-J30 ON

INPUT VSWR



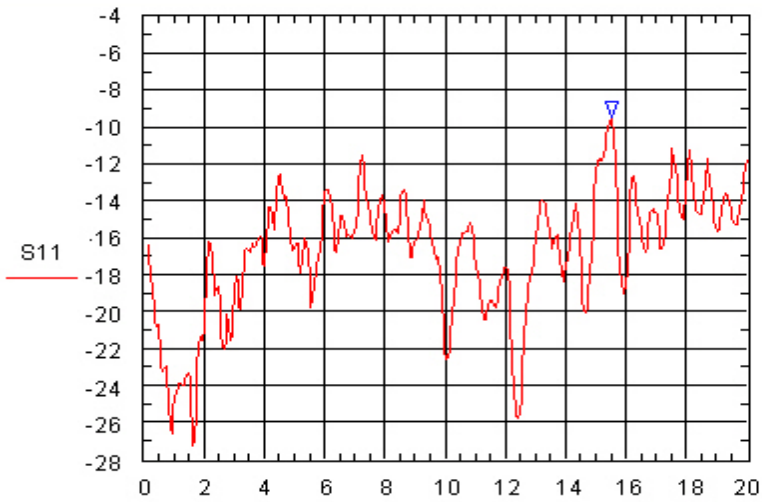
INSERTION LOSS



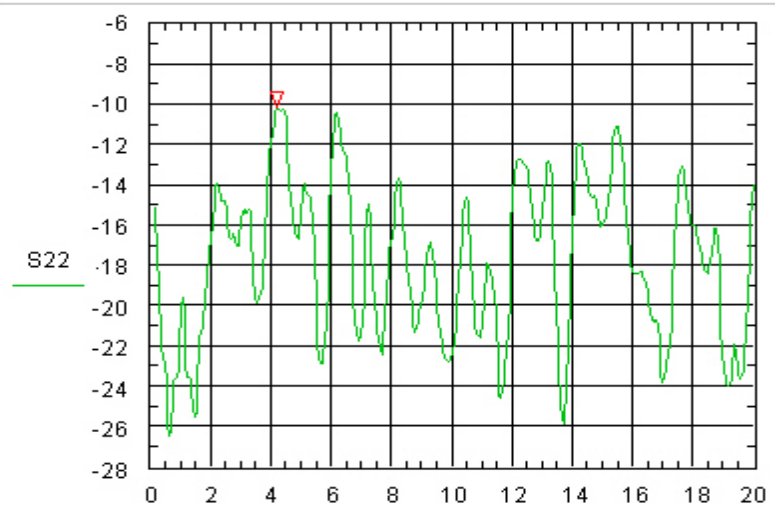
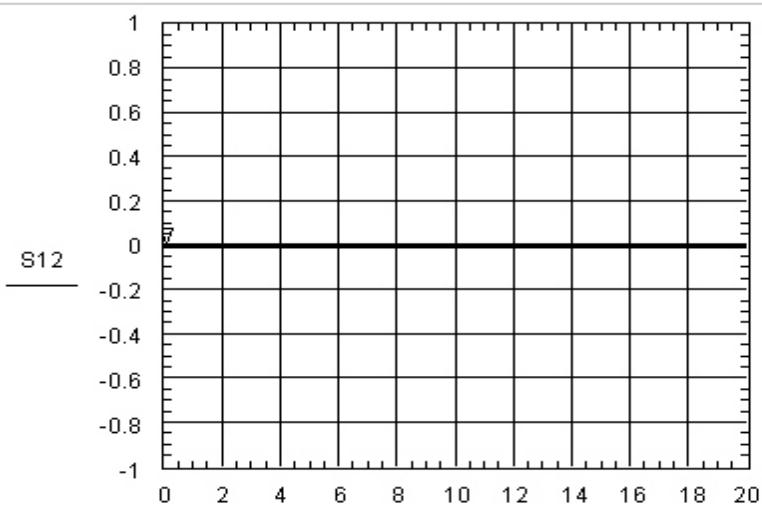
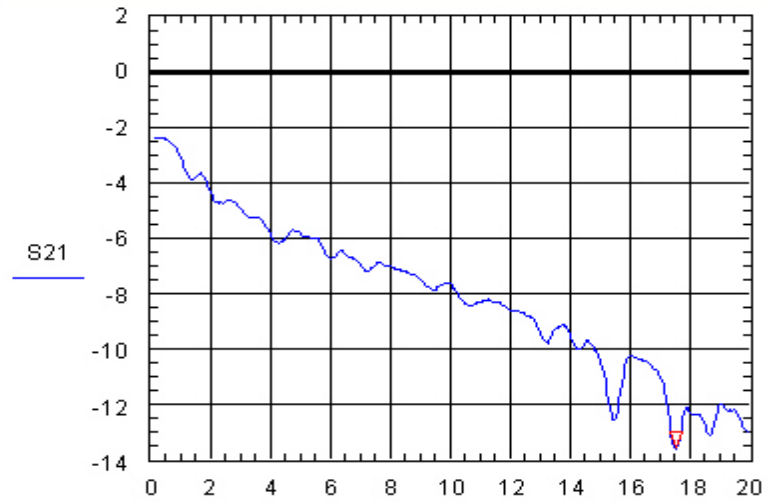
OUTPUT VSWR

J33-J31 ON

INPUT VSWR



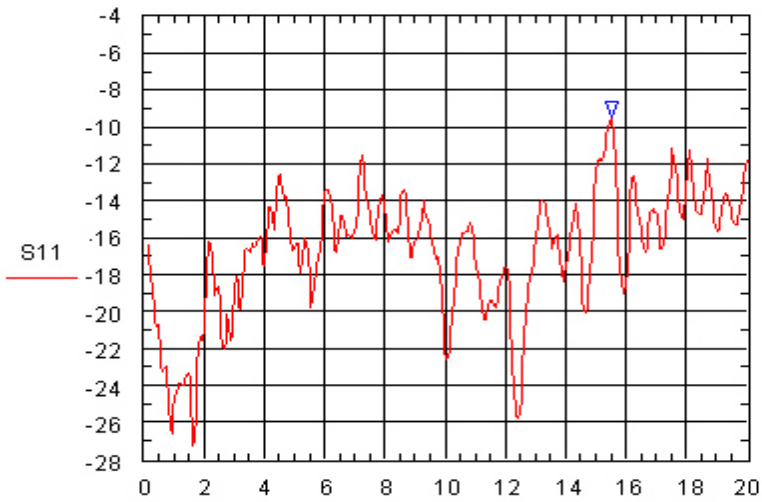
INSERTION LOSS



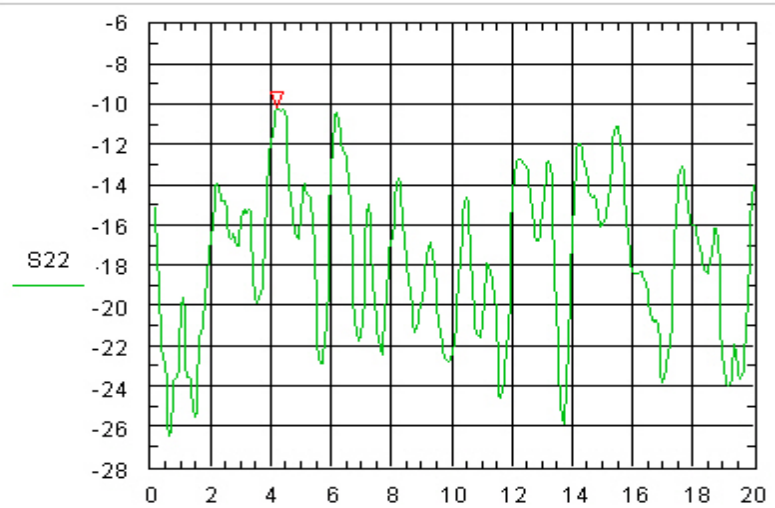
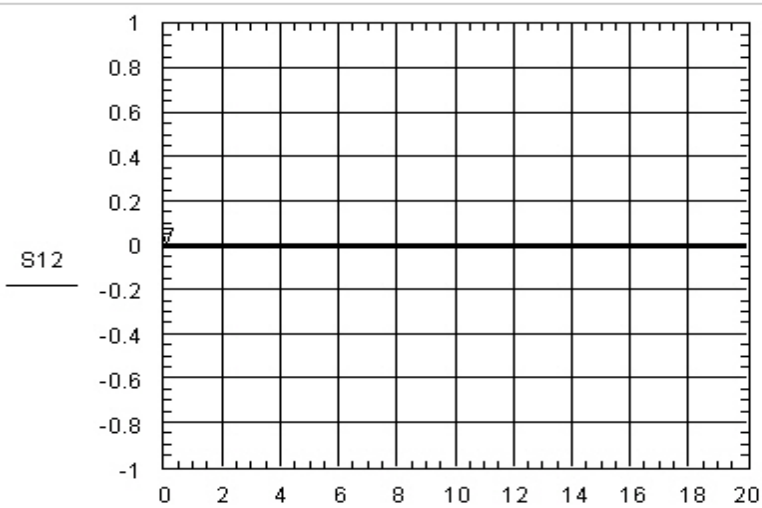
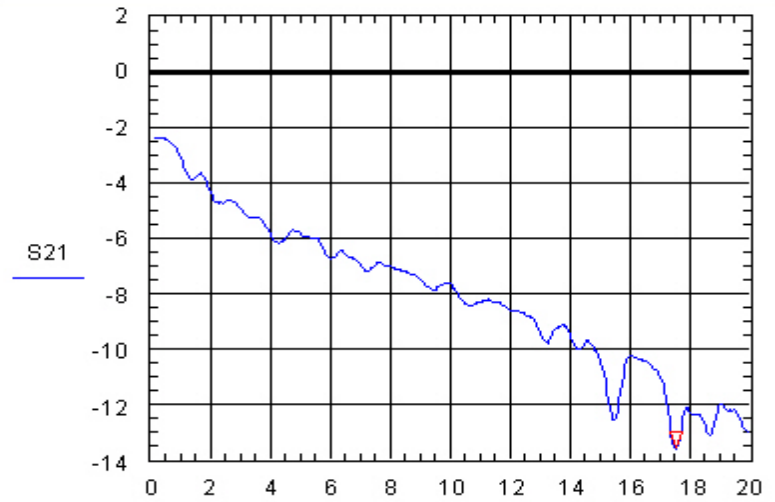
OUTPUT VSWR

J33-J32 ON

INPUT VSWR



INSERTION LOSS



OUTPUT VSWR

PHASE PLOTS J1-J32

FOR

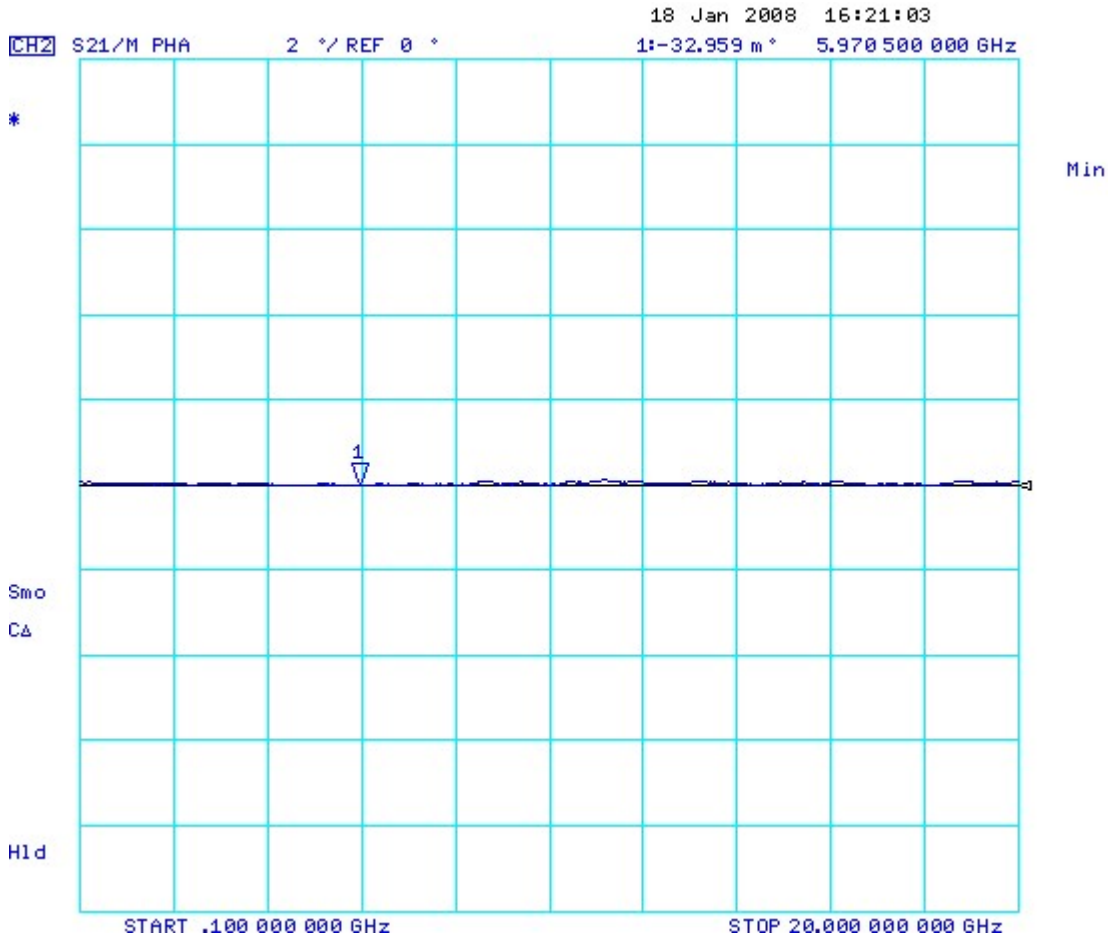
AMC MODEL NUMBER

**MSN-32DT-05-DEC-MP
OPTION 100M20, PM10**

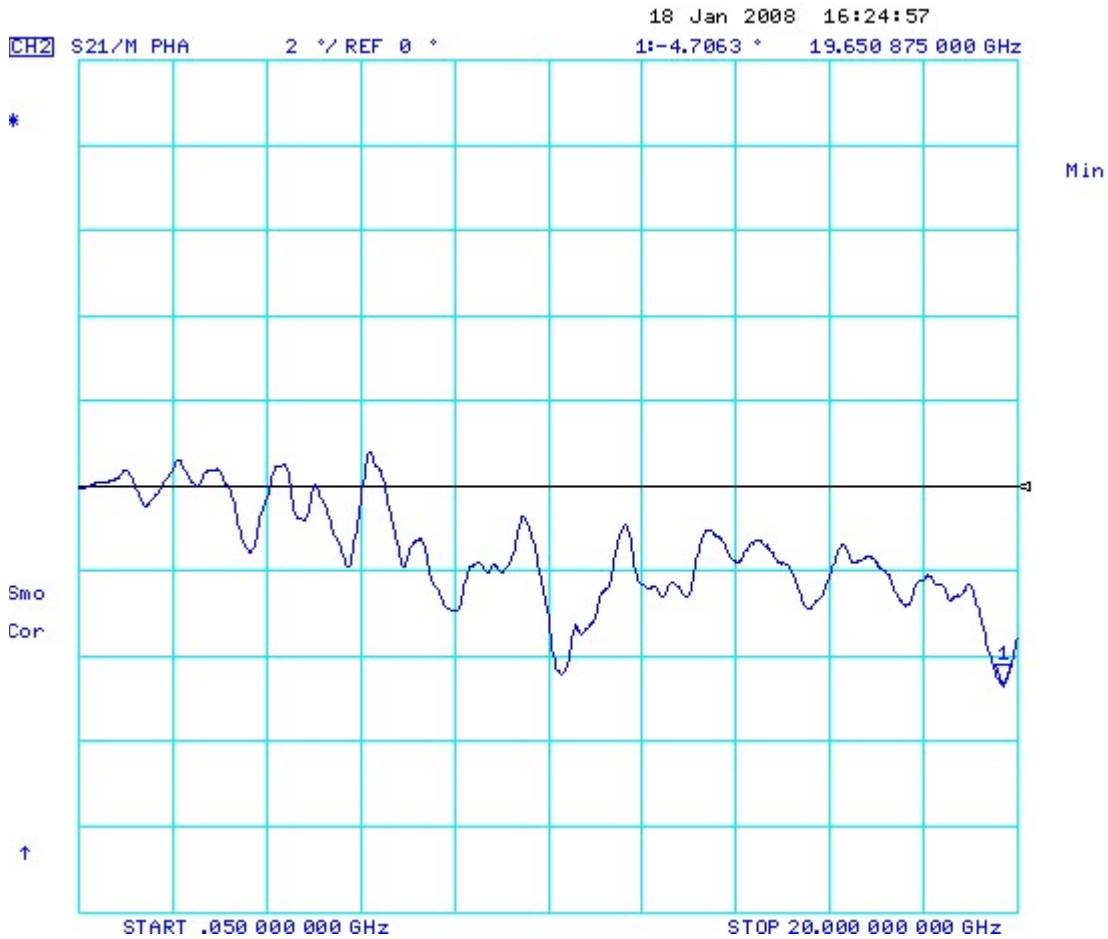
Serial Number:

32MS801001

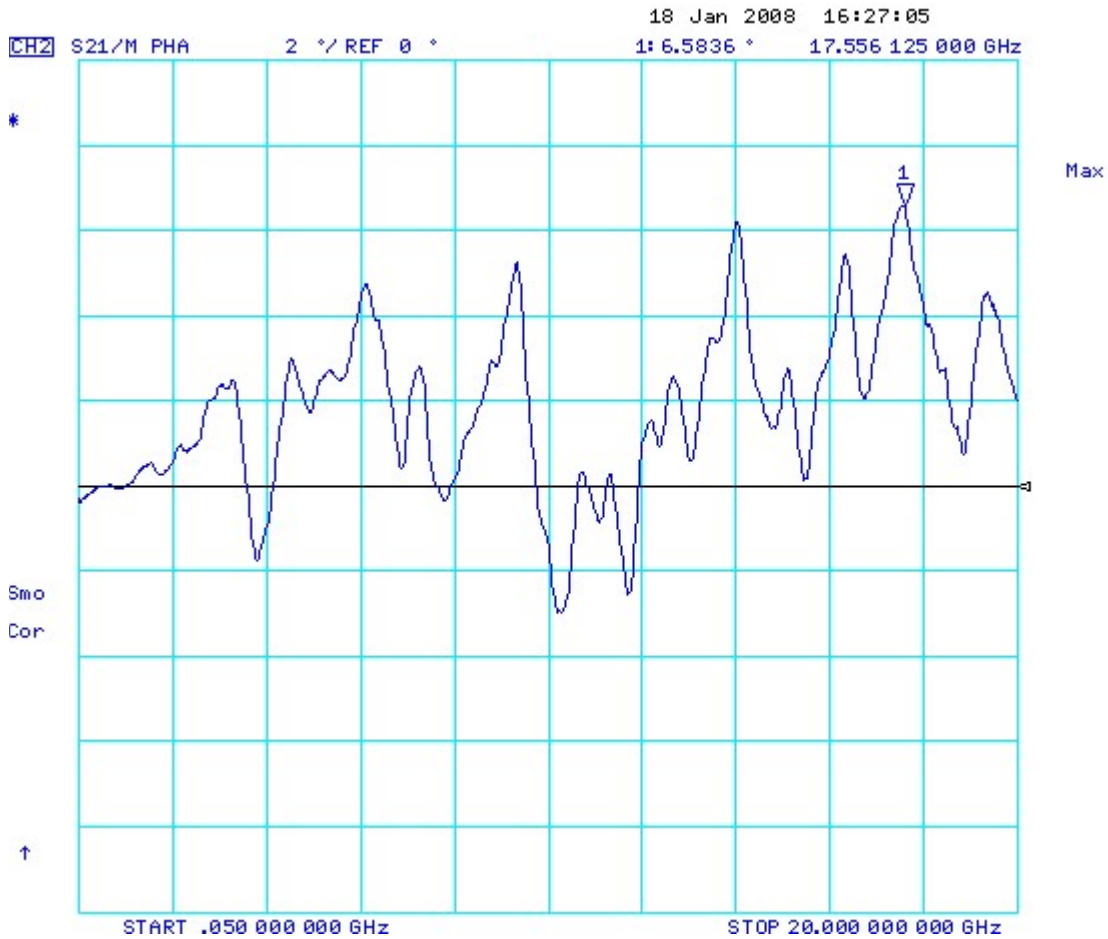
J01



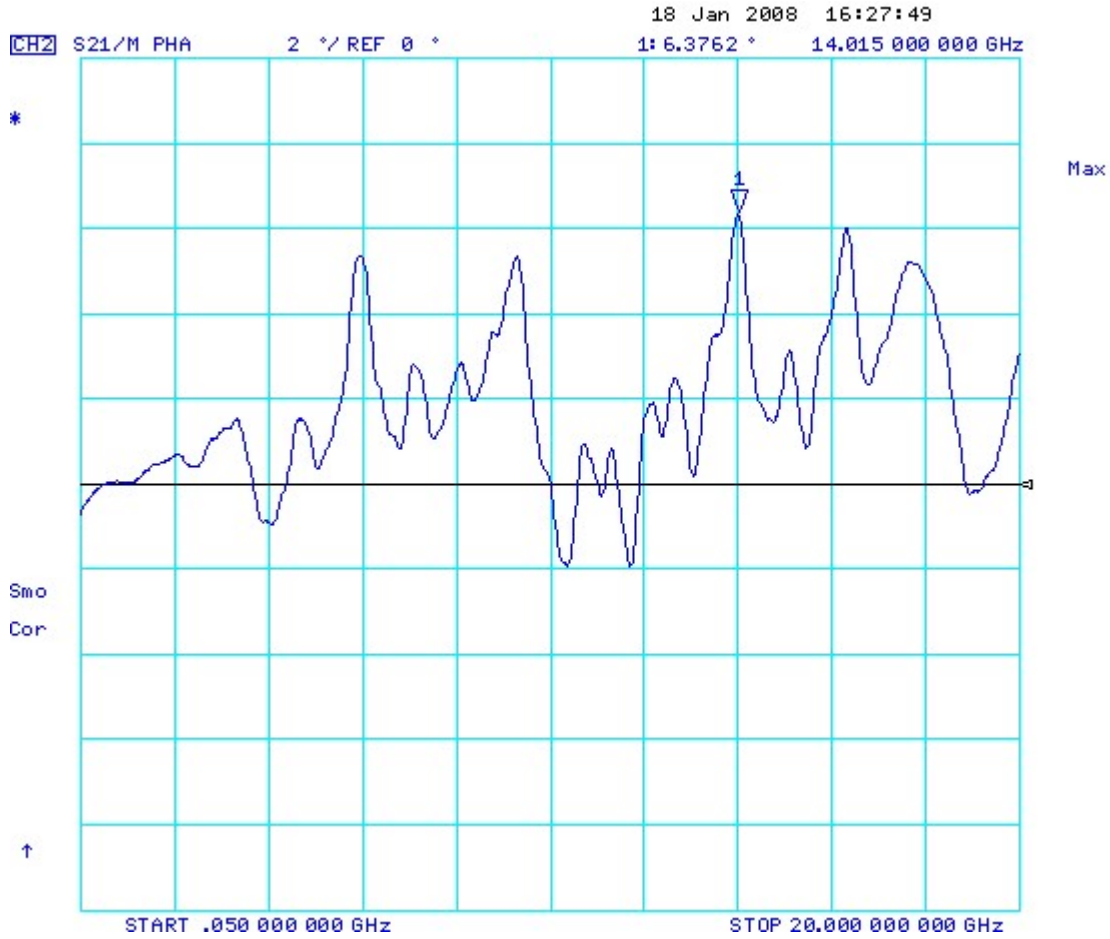
J02



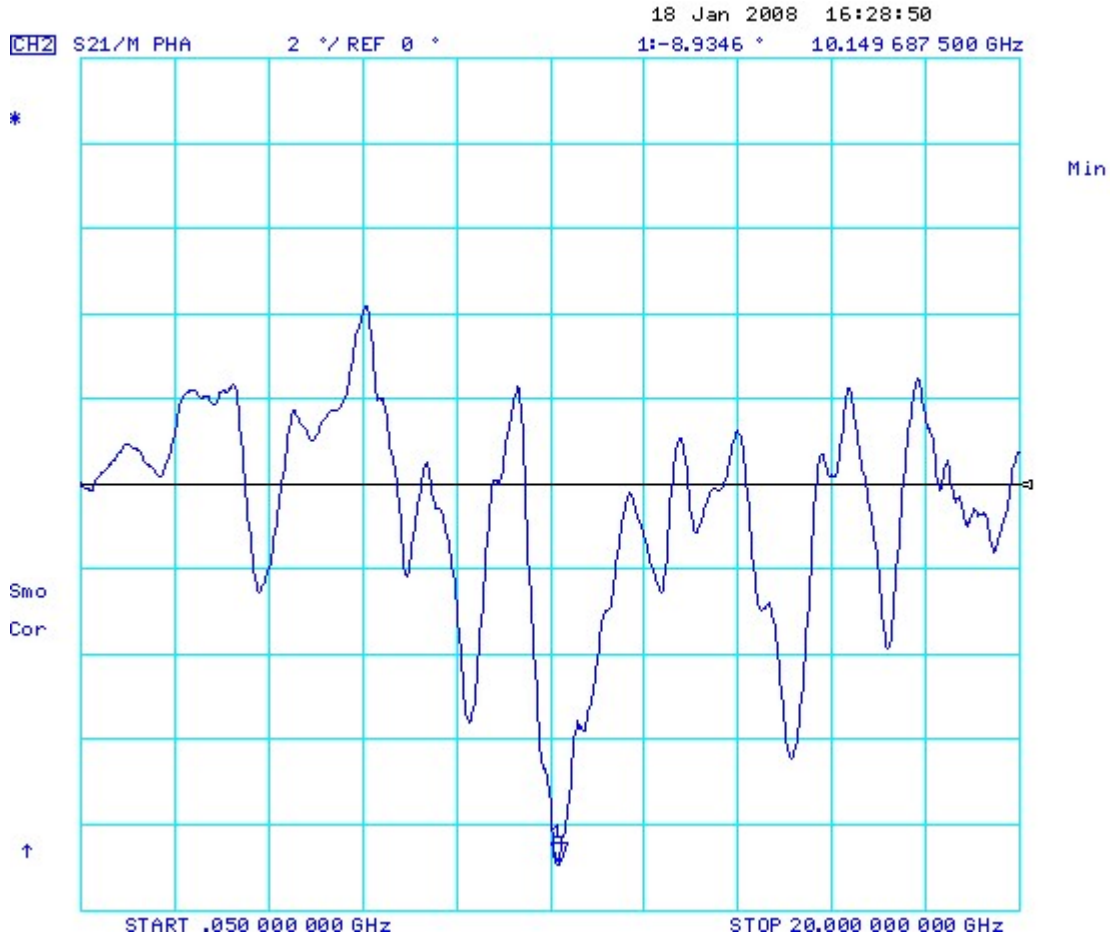
J03



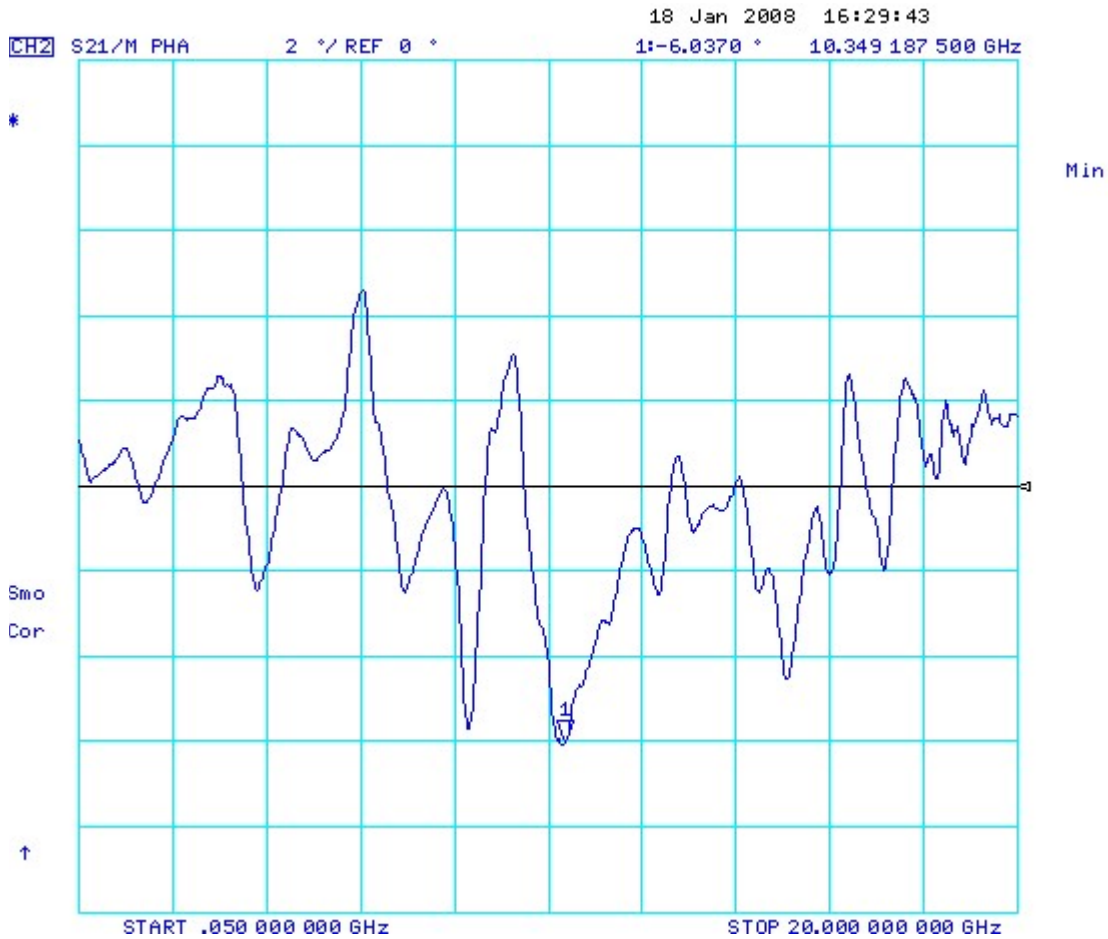
J04



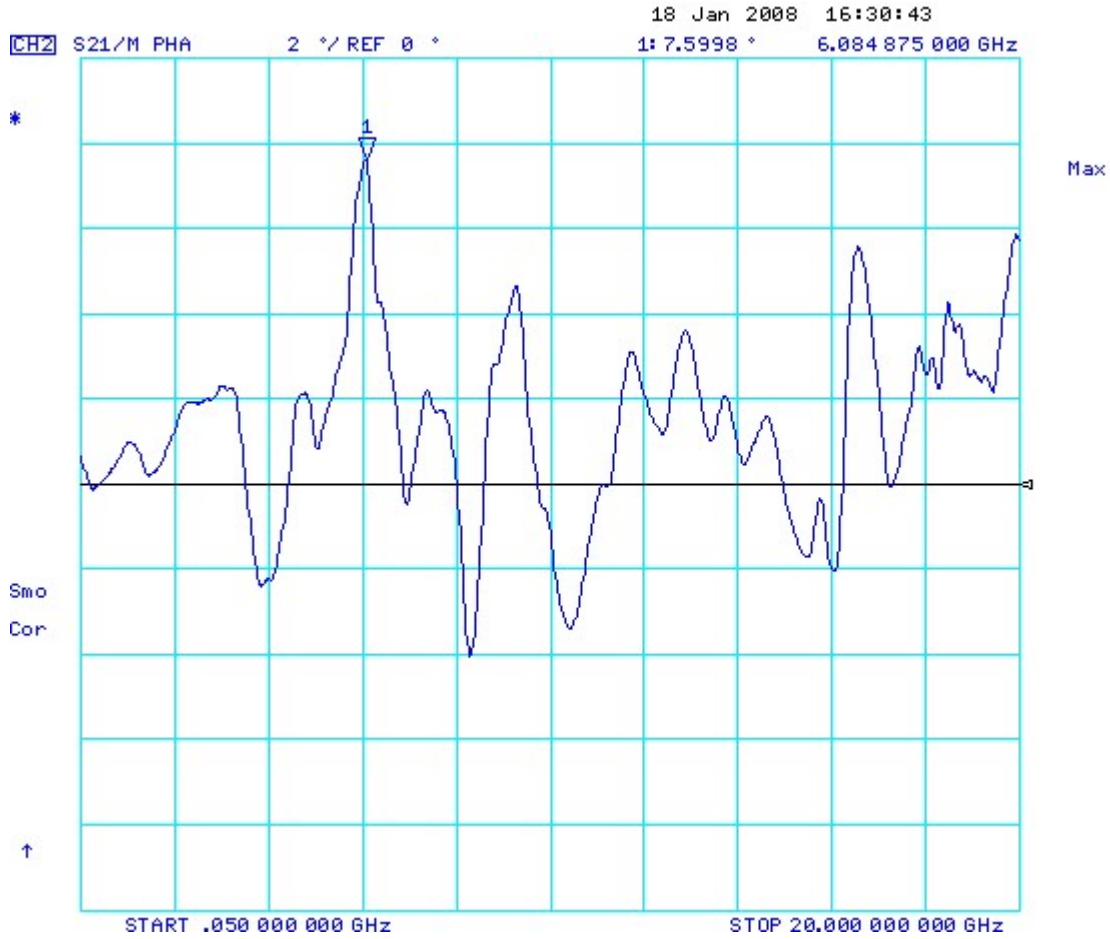
J05



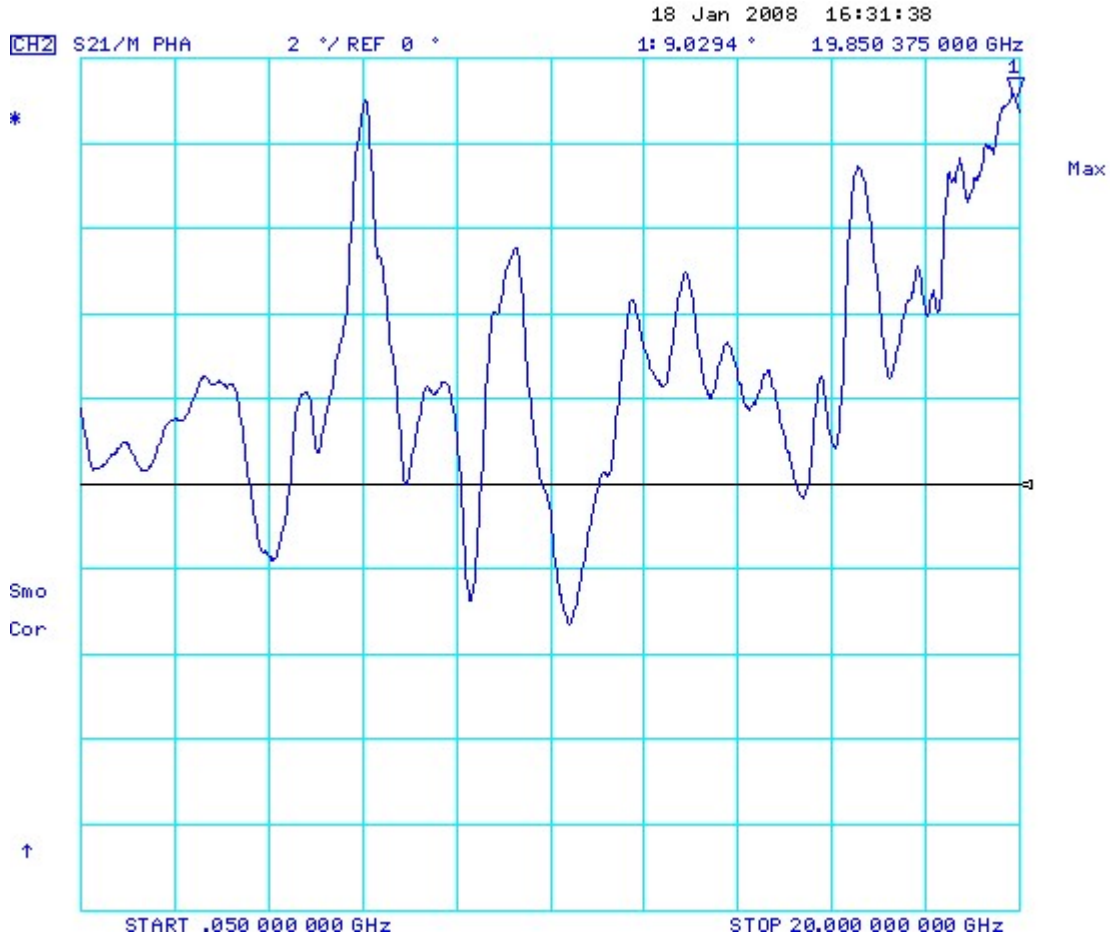
J06



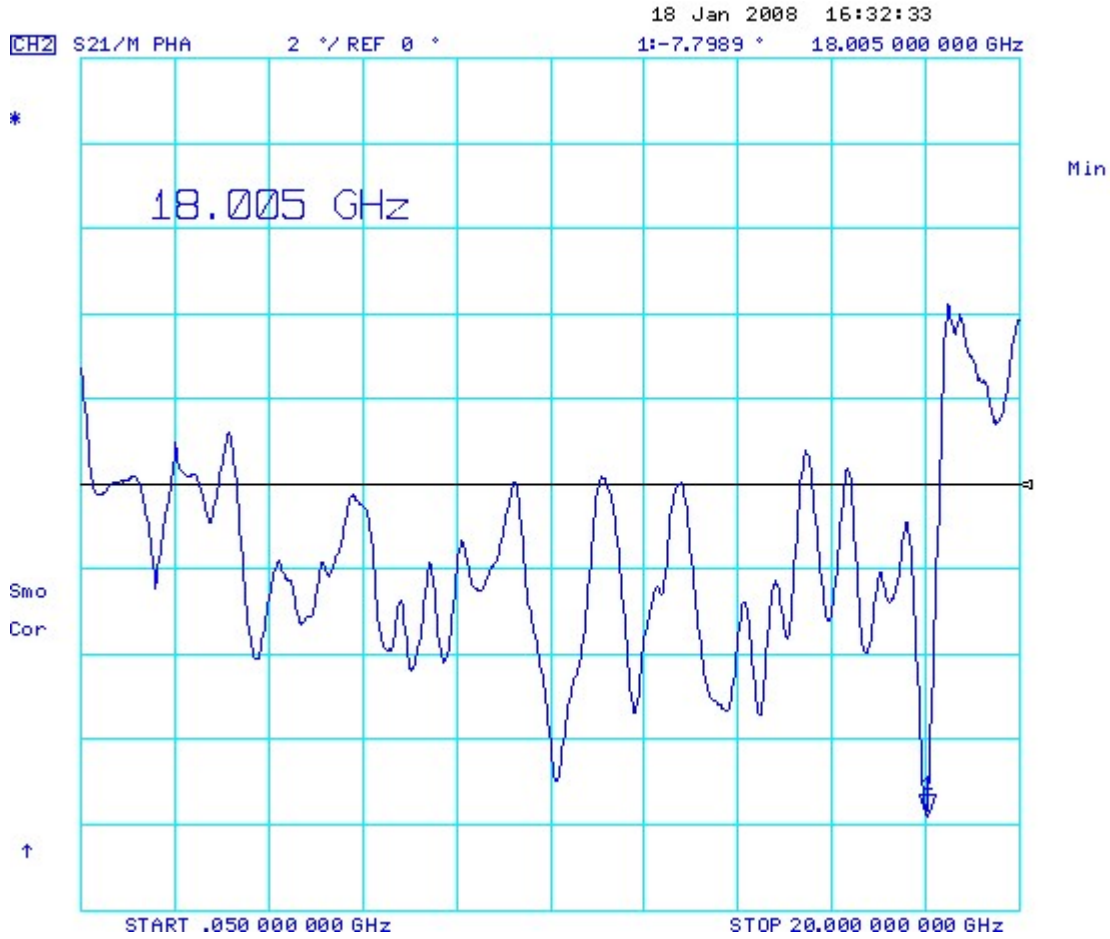
J07



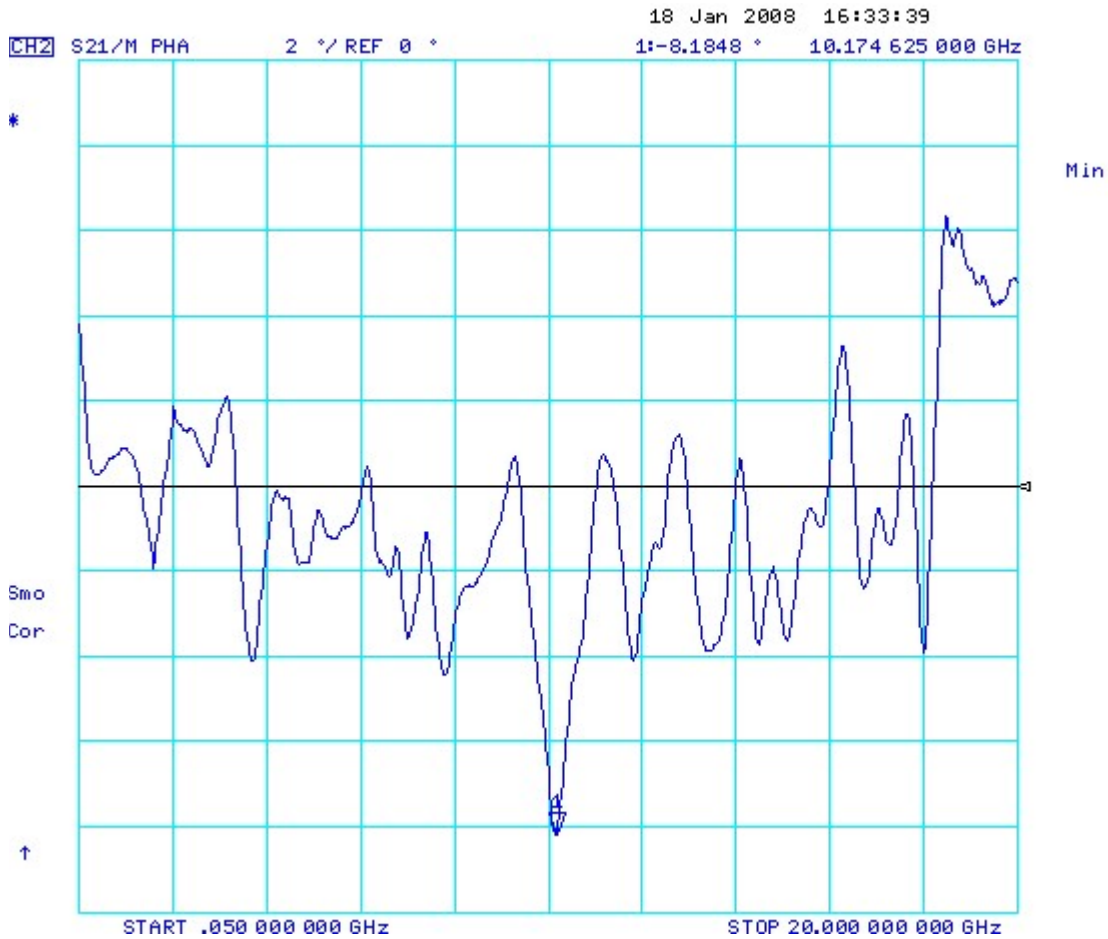
J08



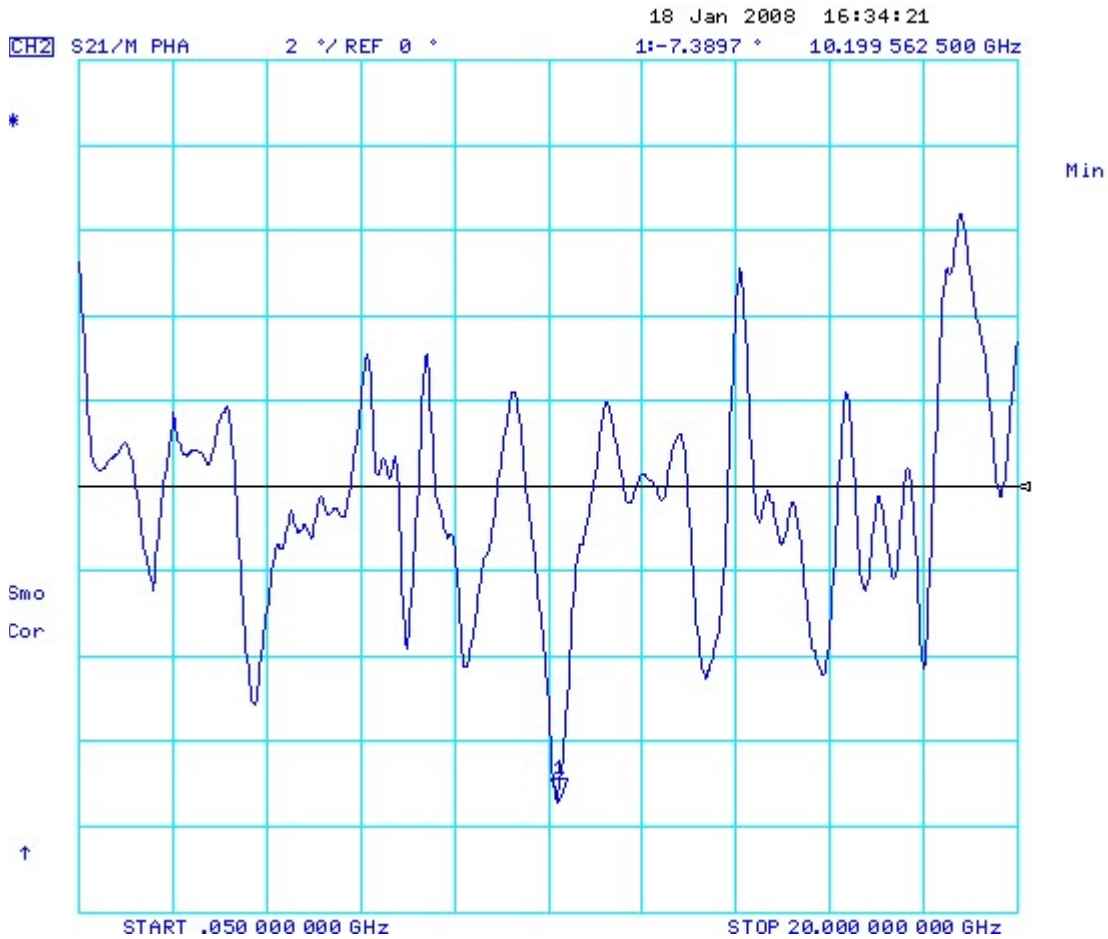
J09



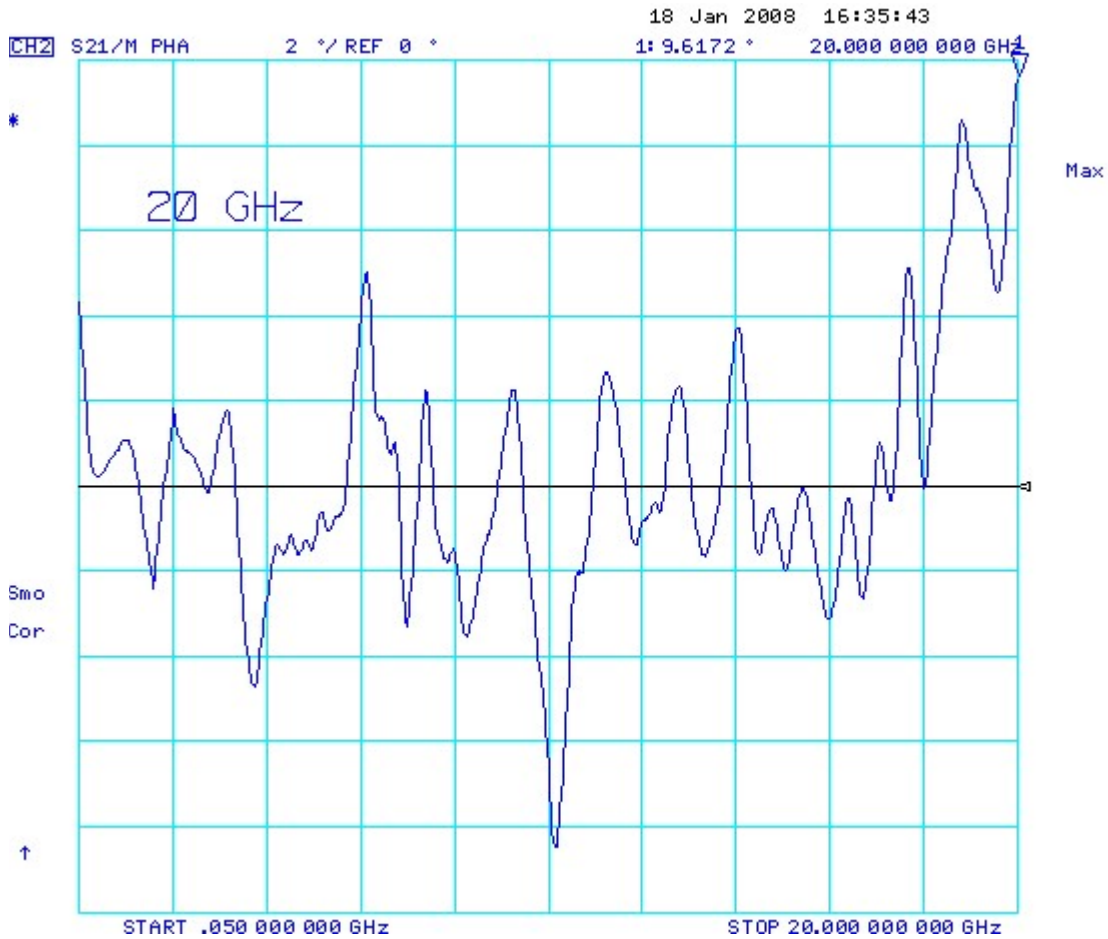
J10



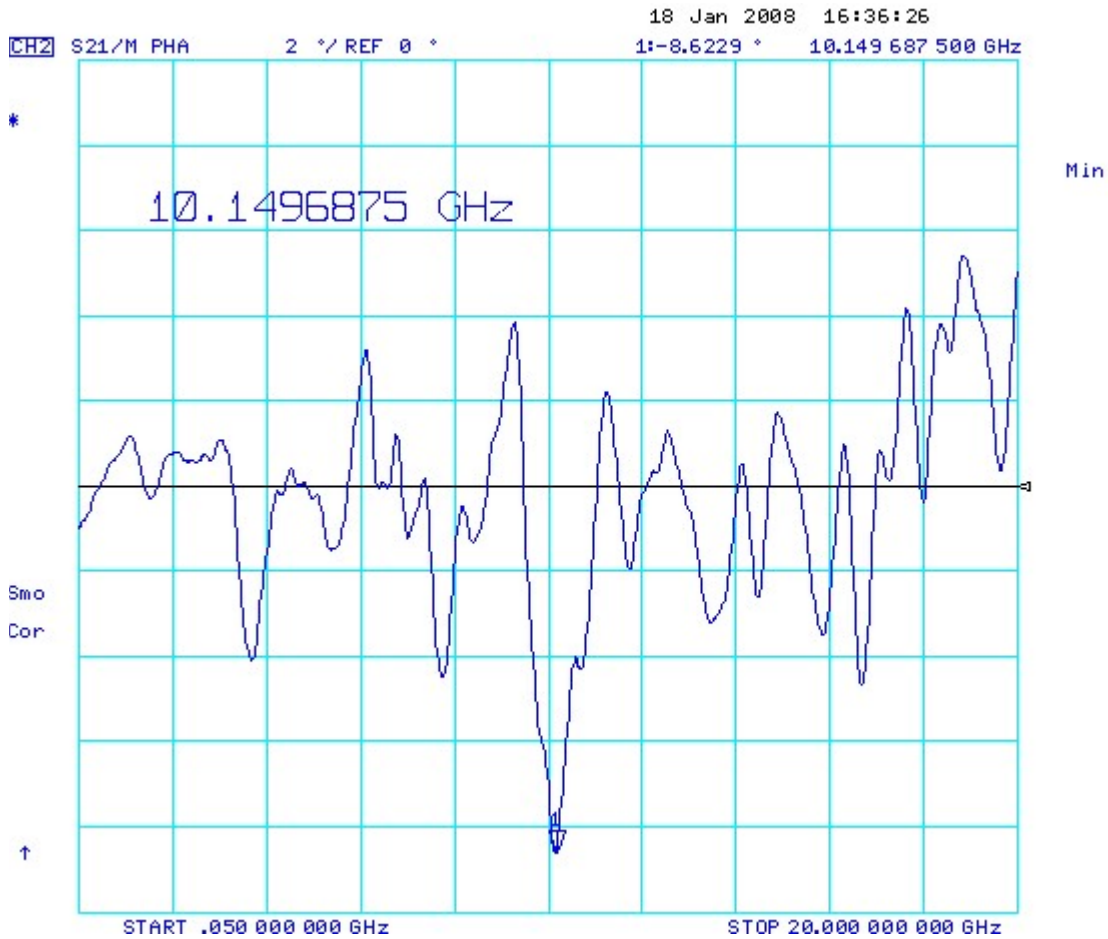
J11



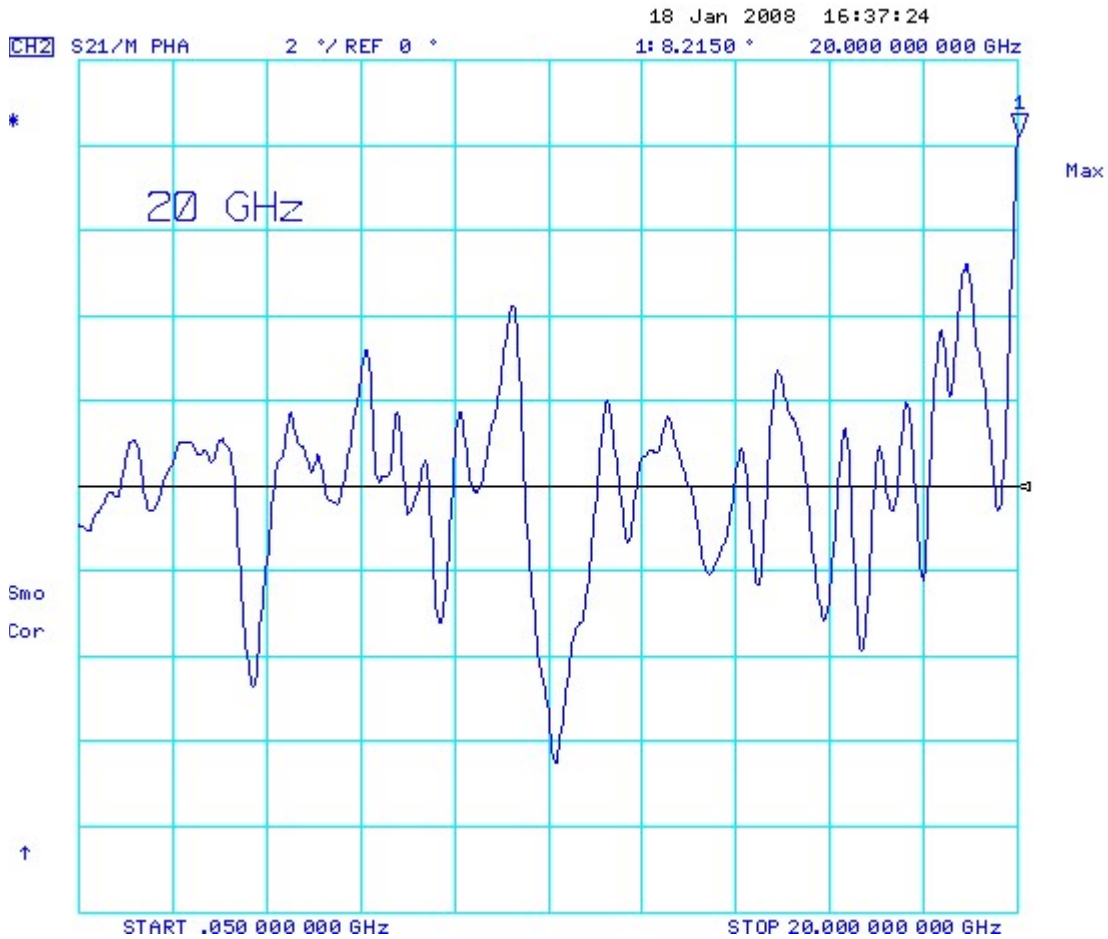
J12



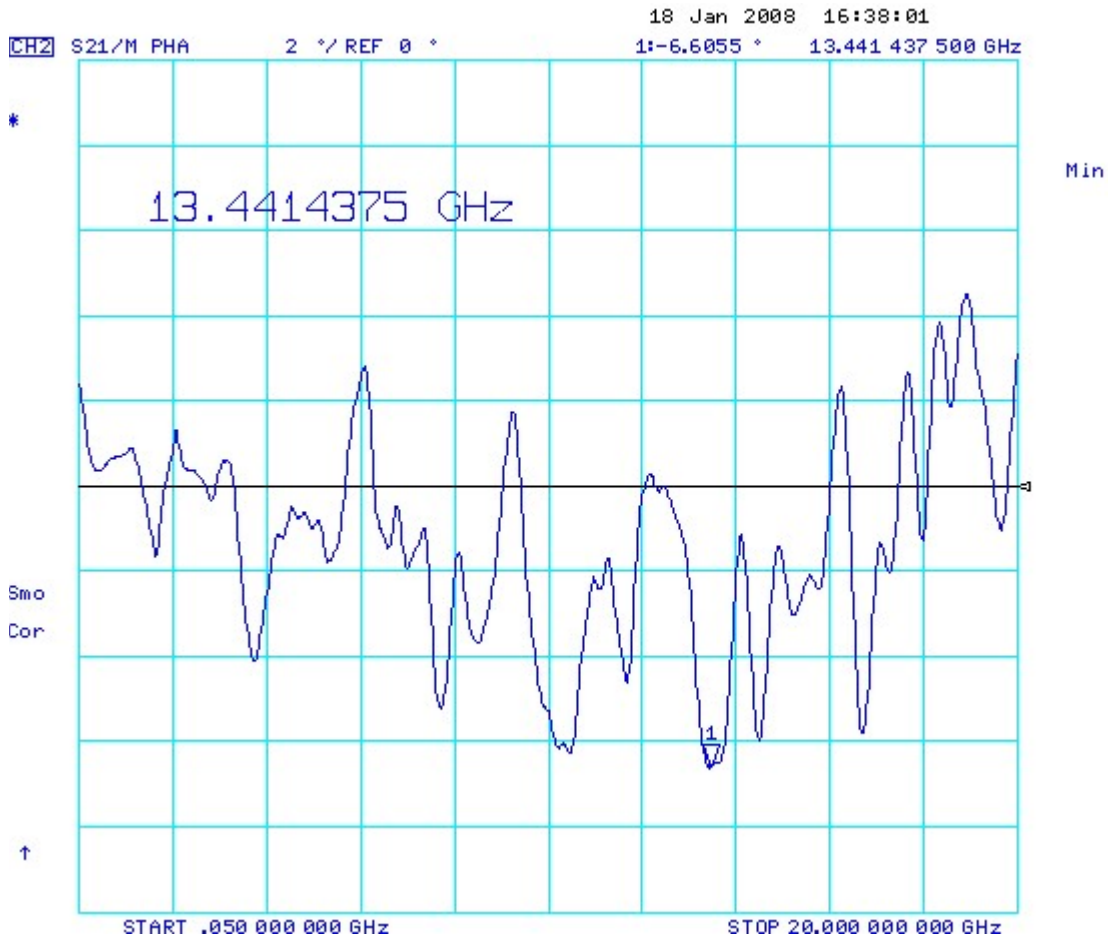
J13



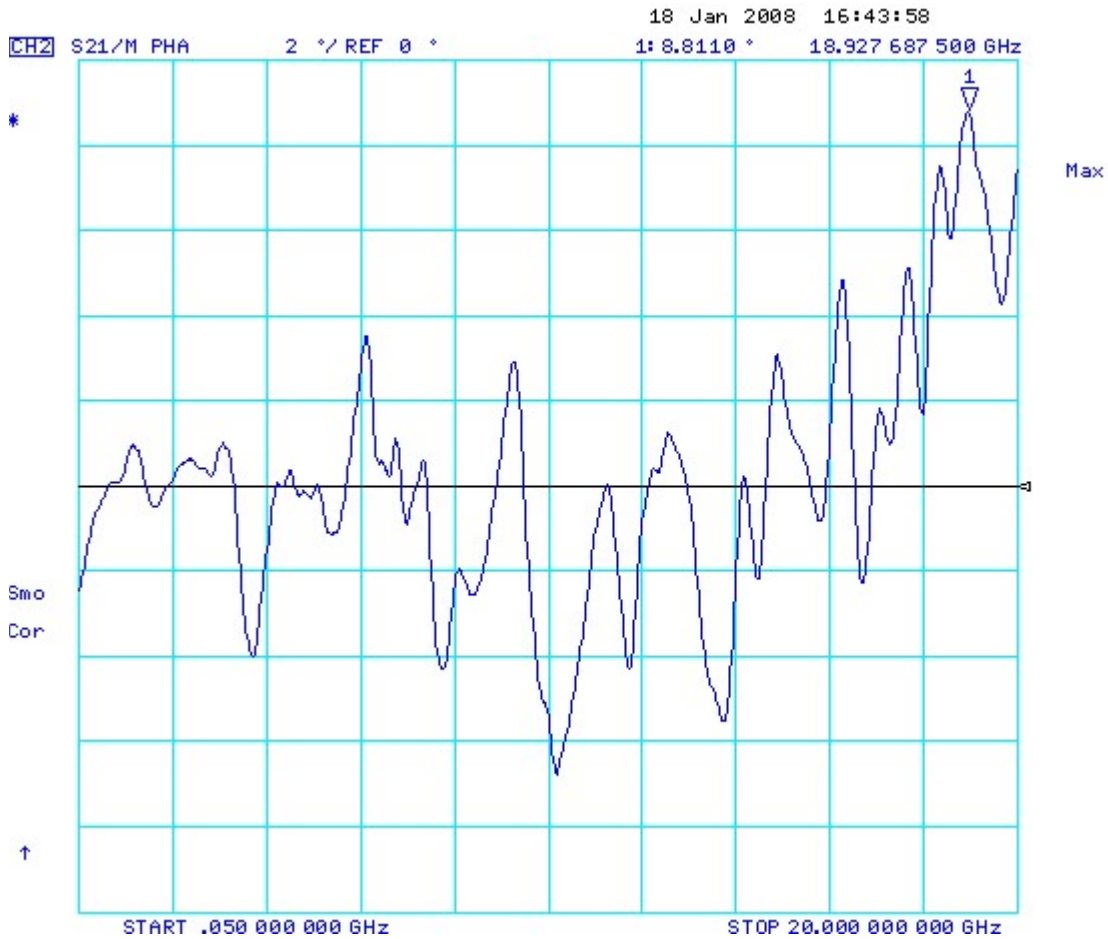
J14



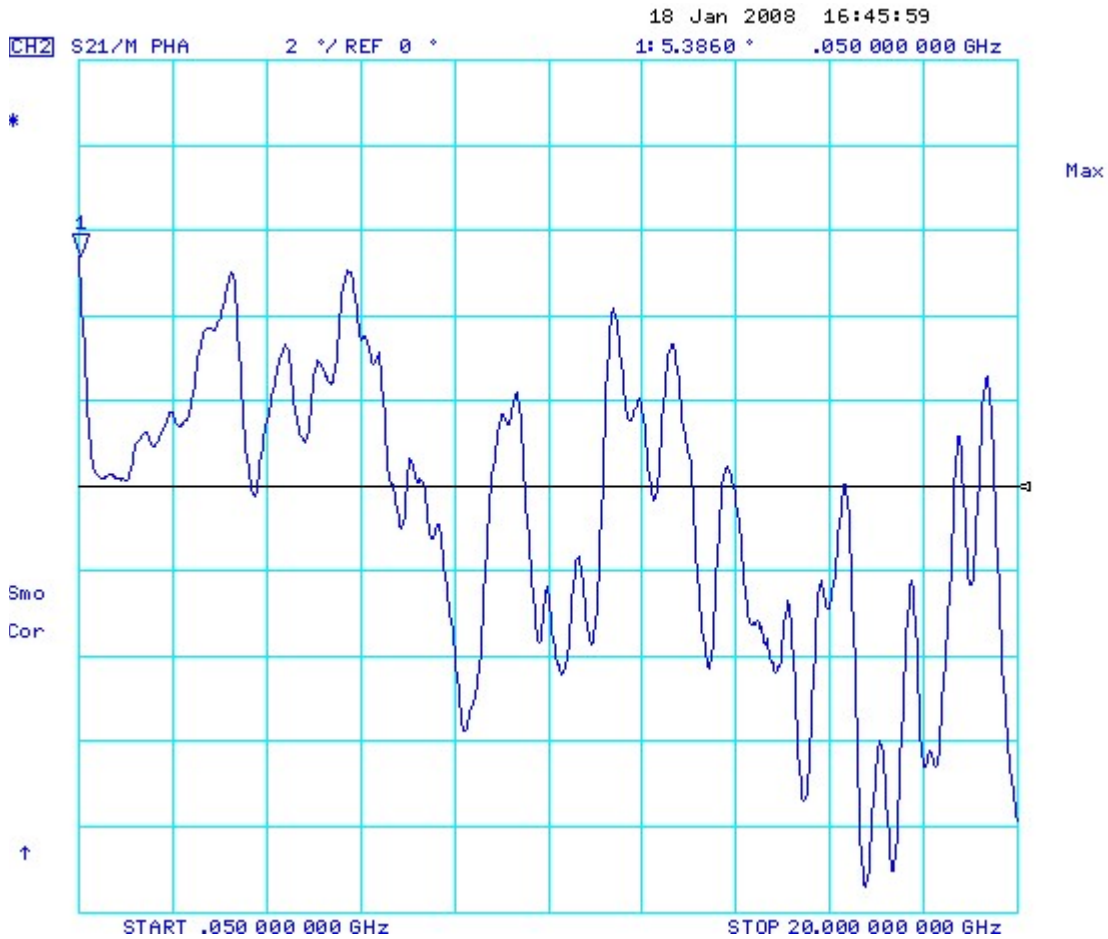
J15



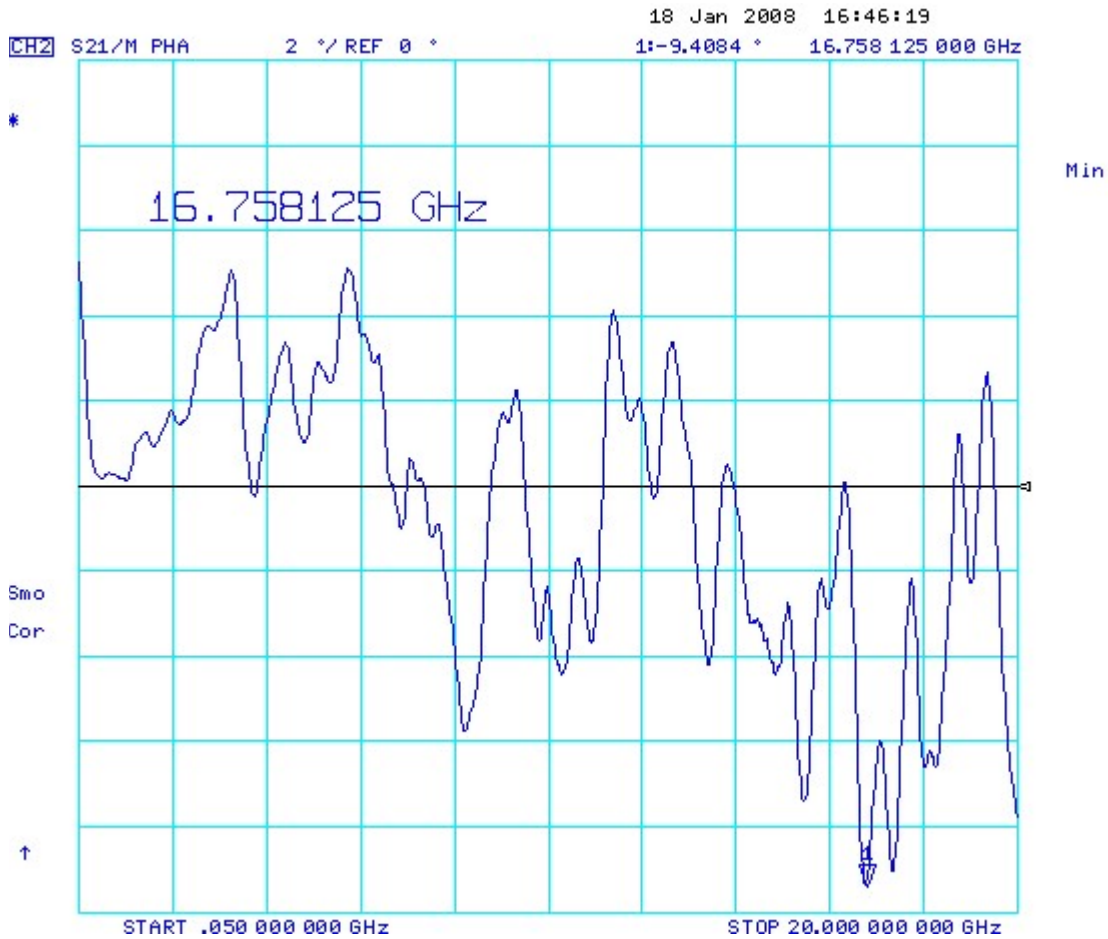
J16



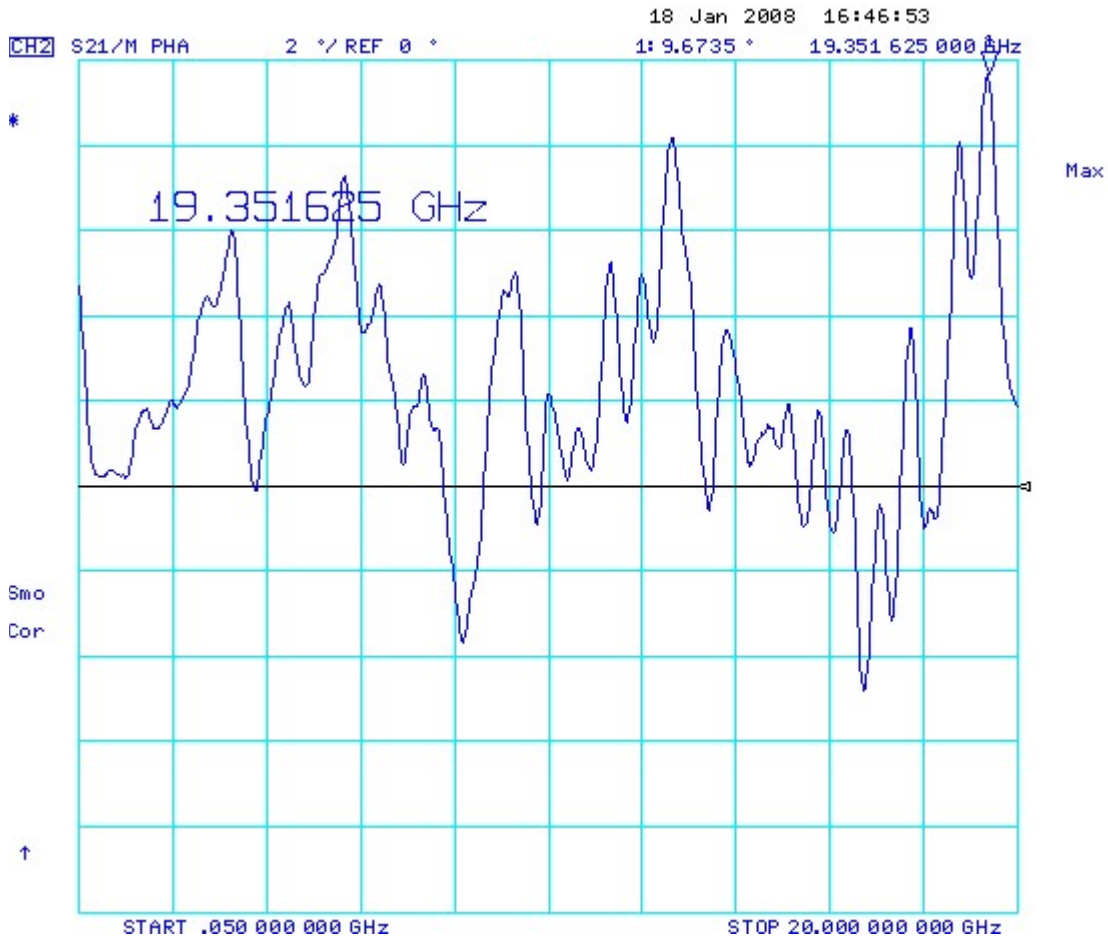
J17



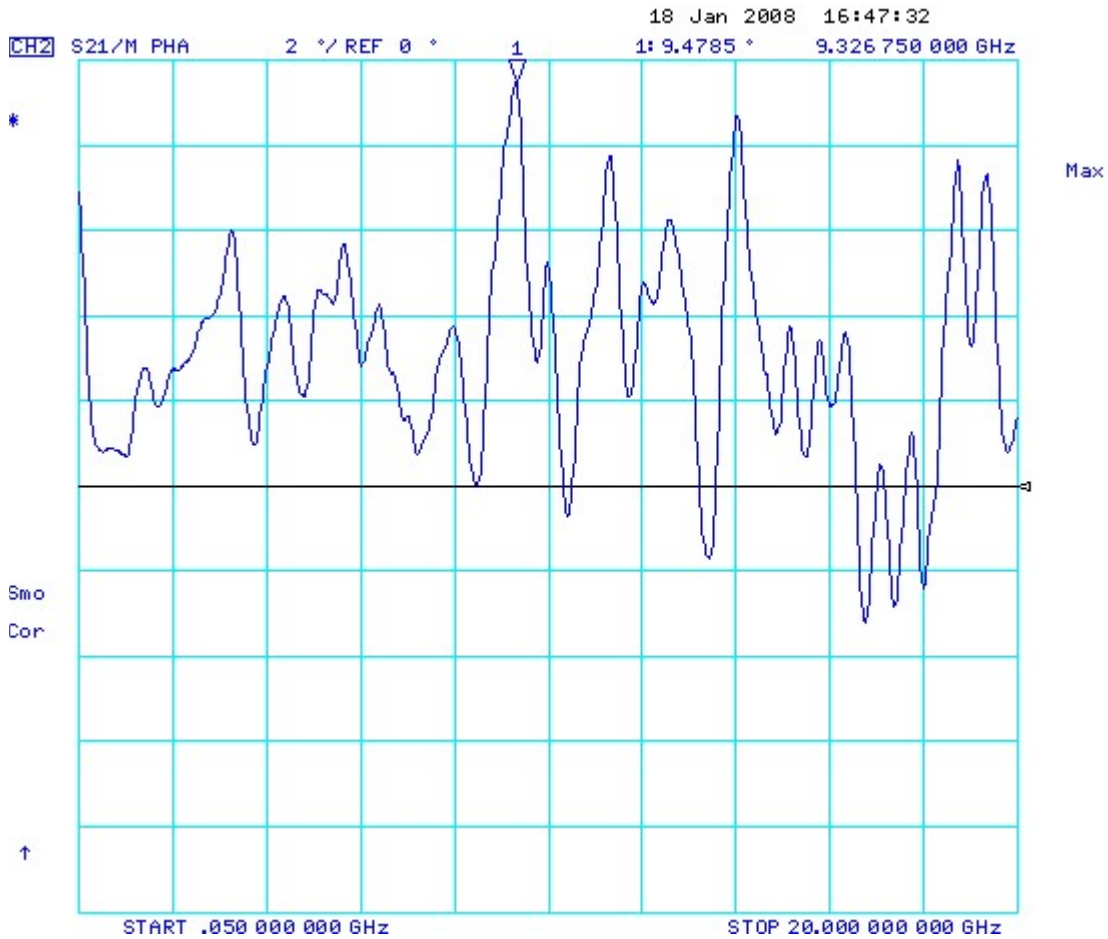
J18



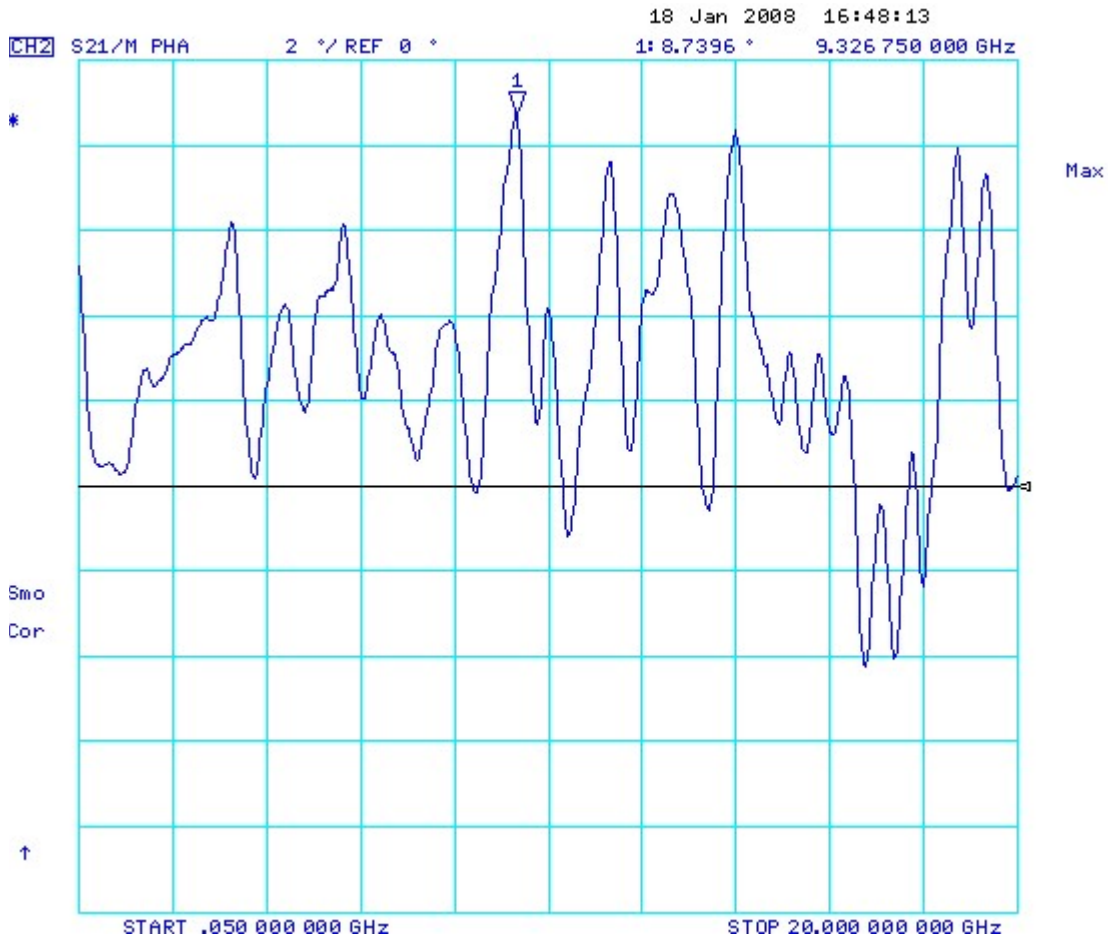
J19



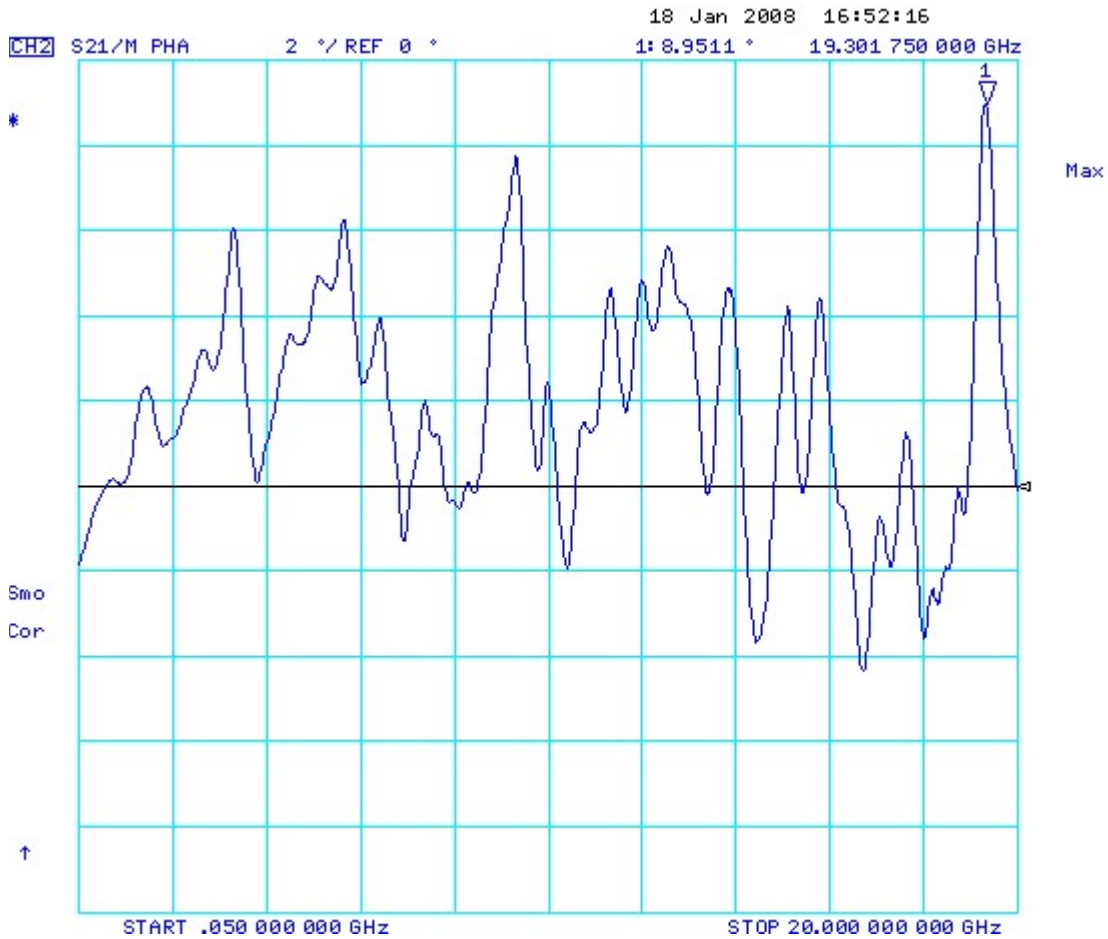
J20



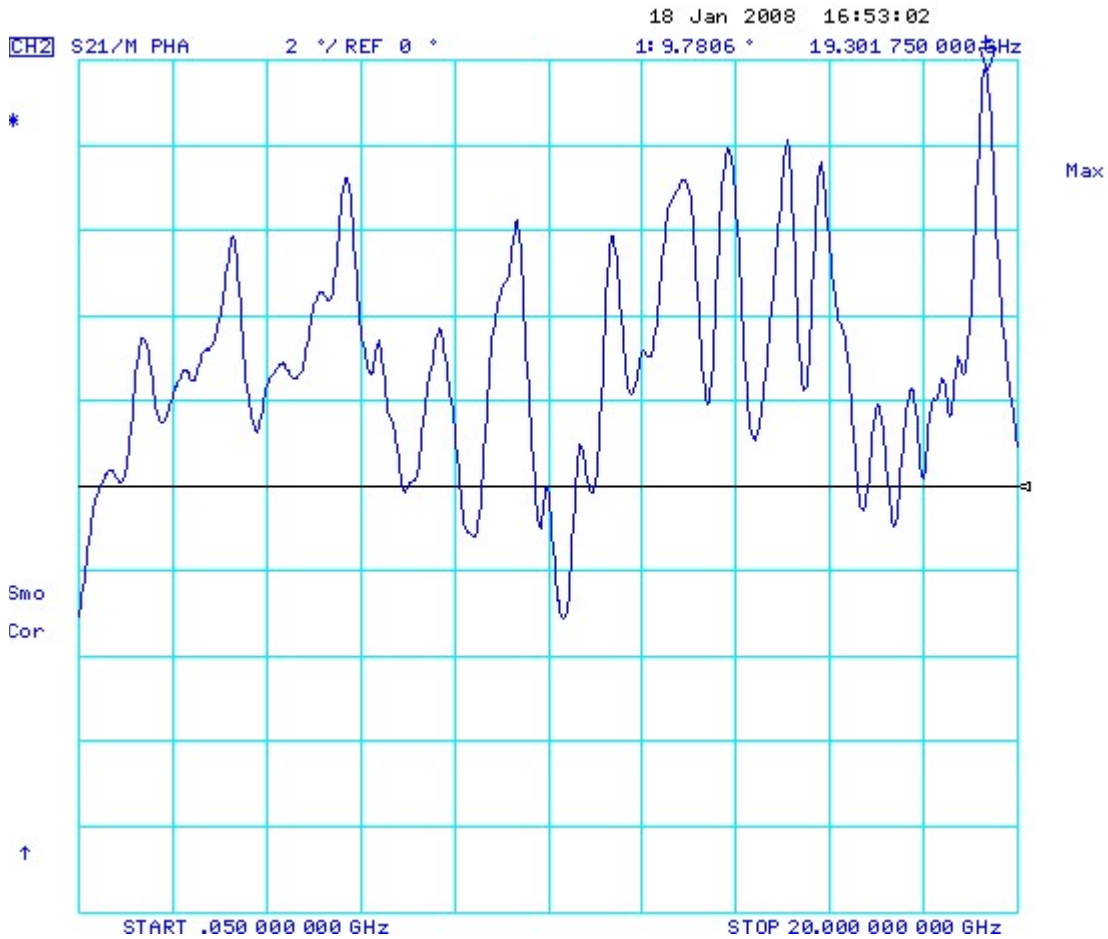
J21



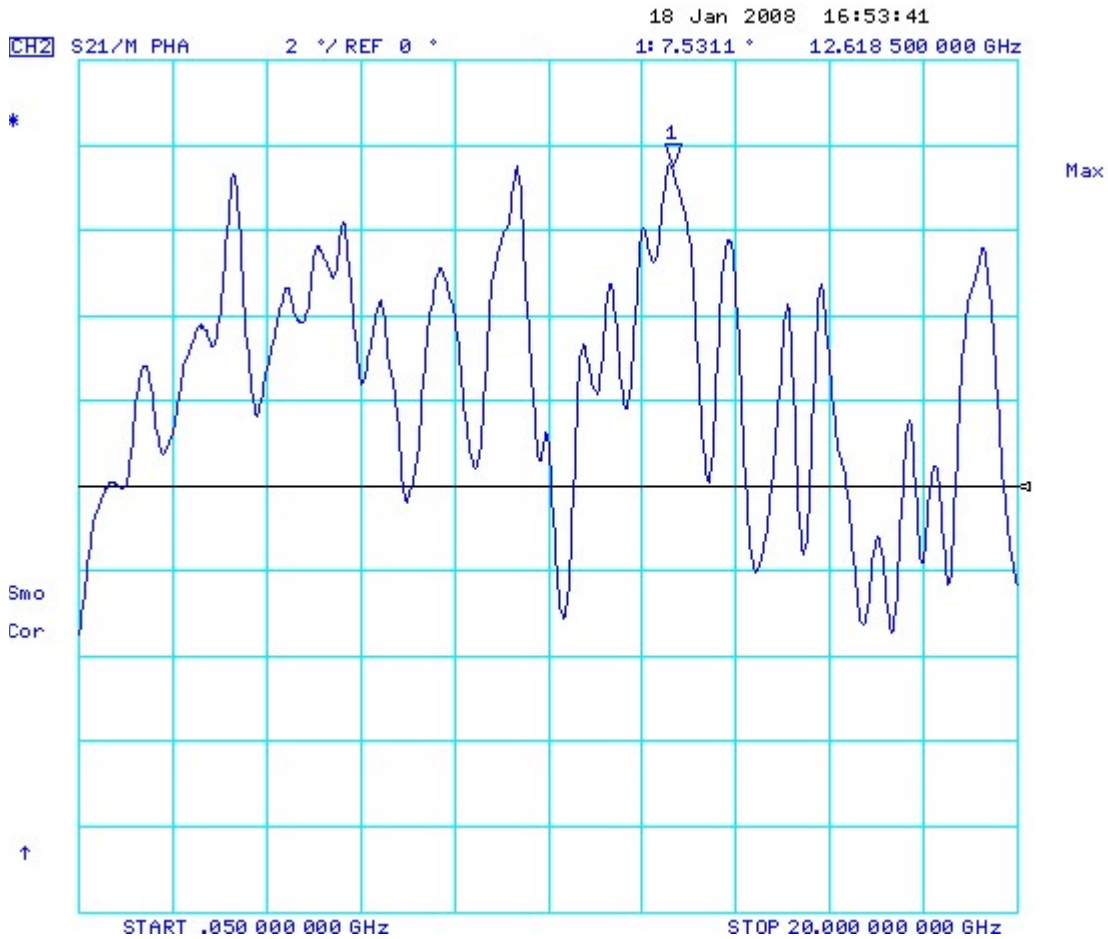
J22



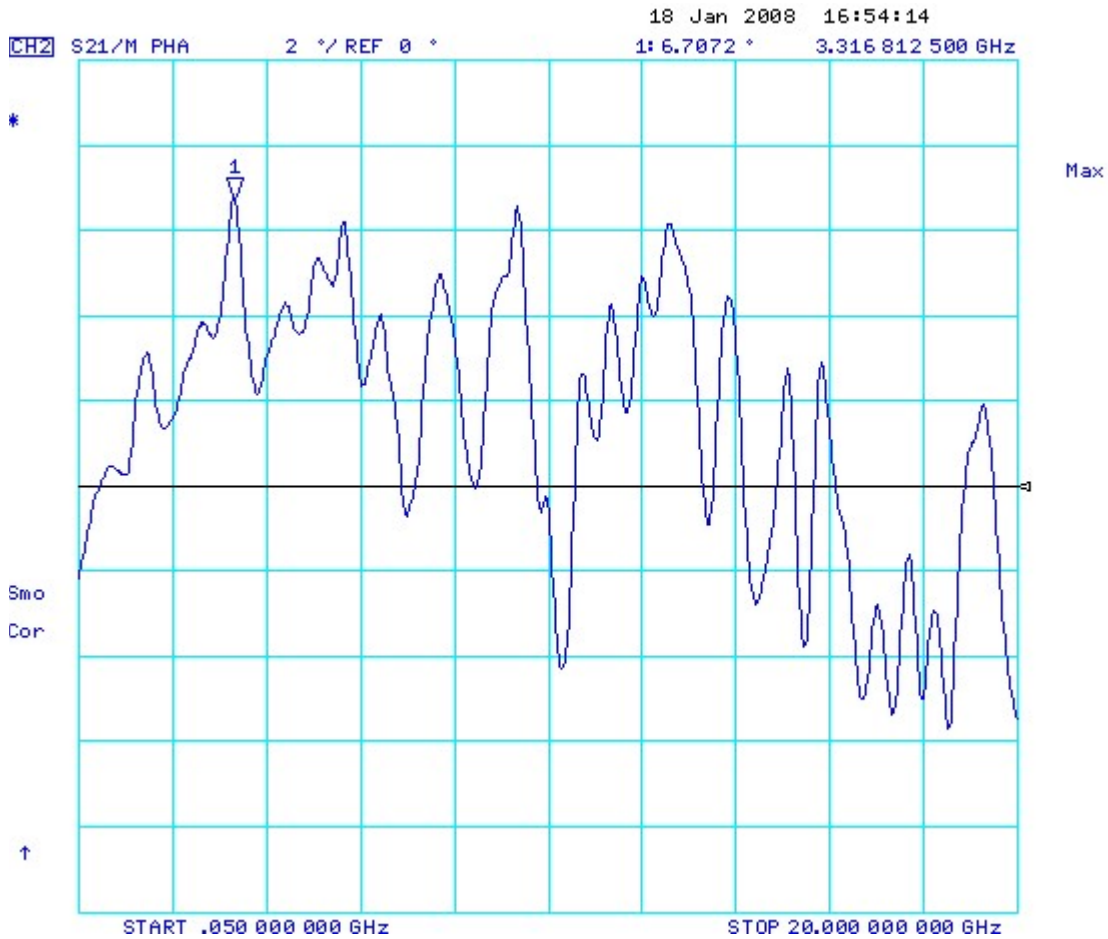
J23



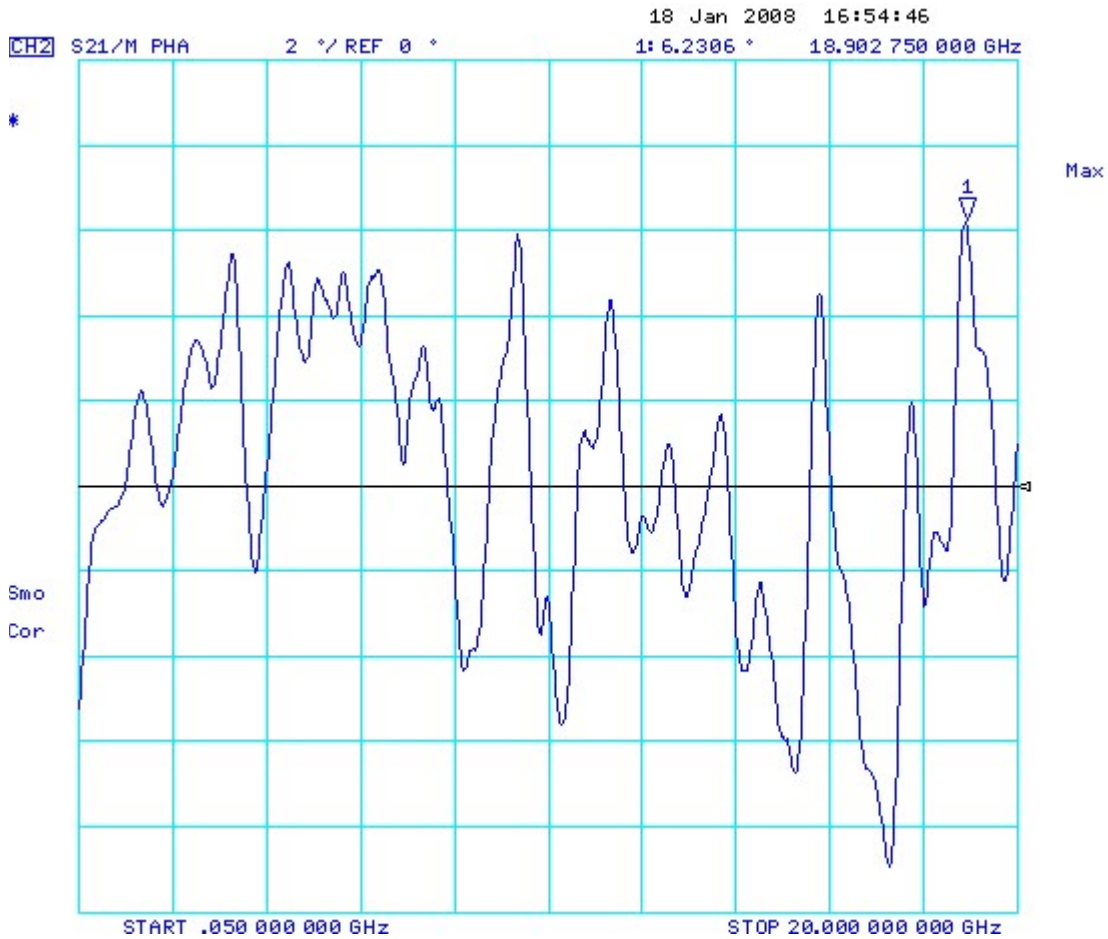
J24



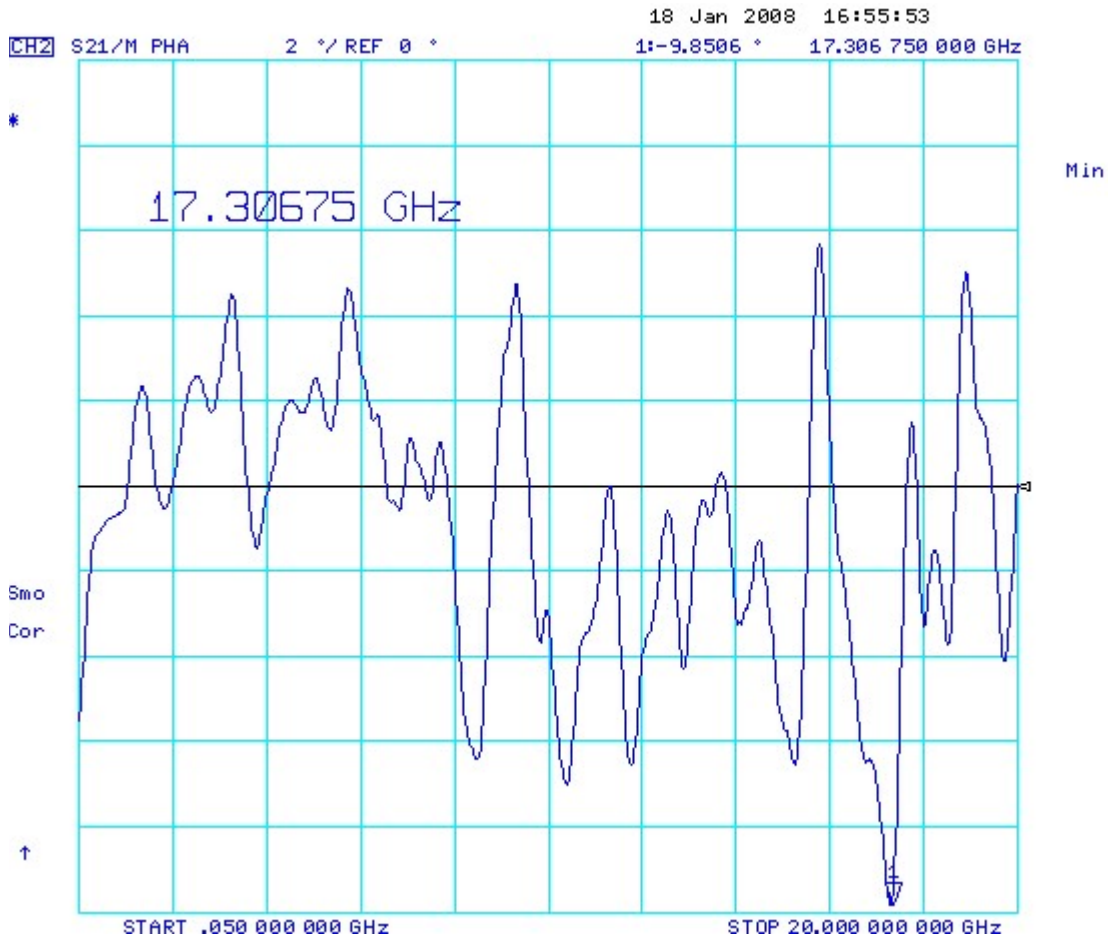
J25



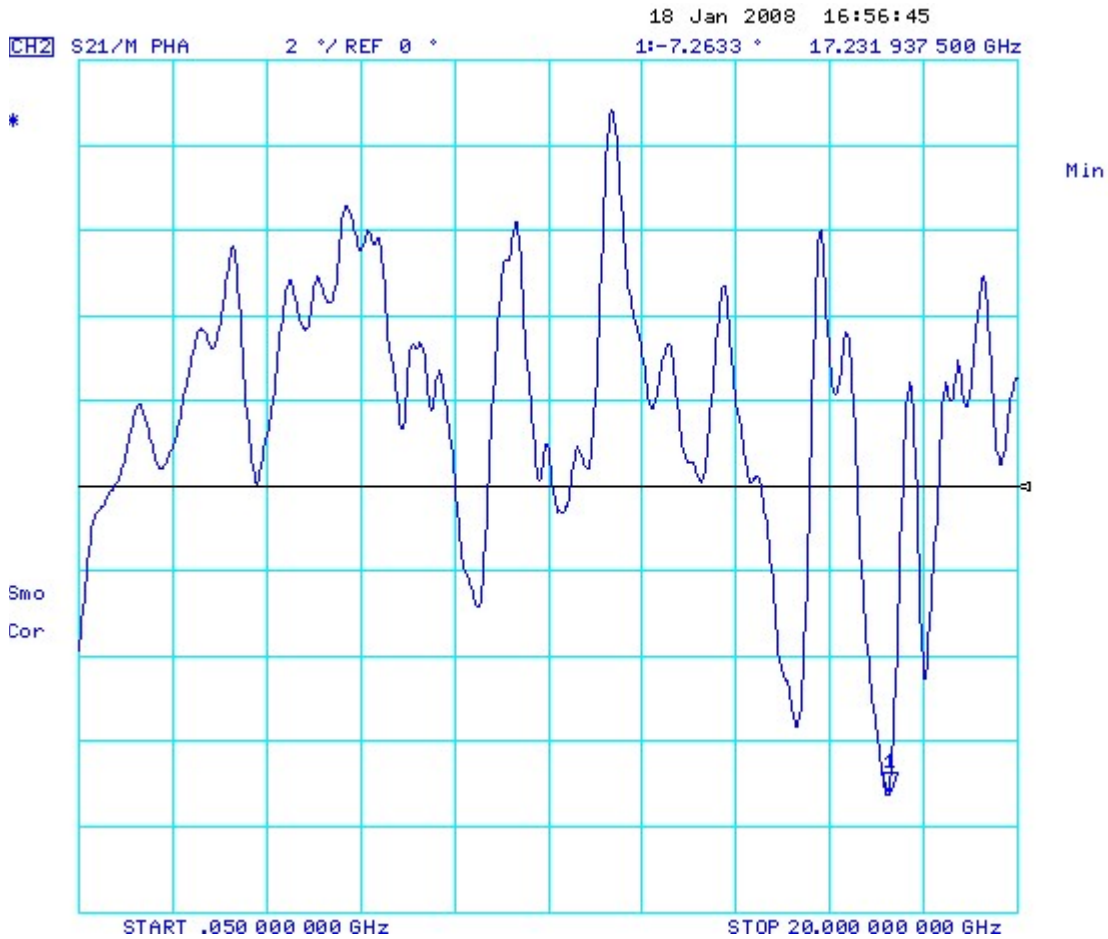
J26



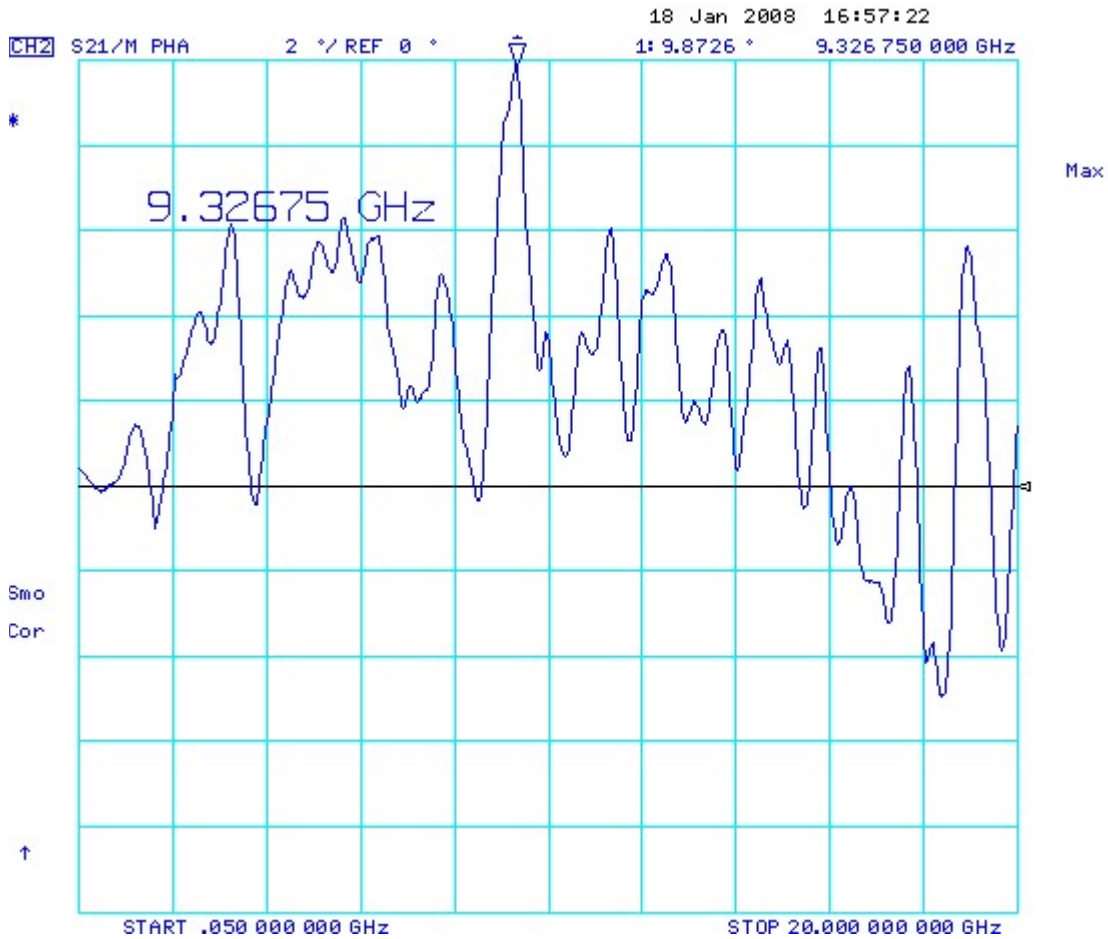
J27



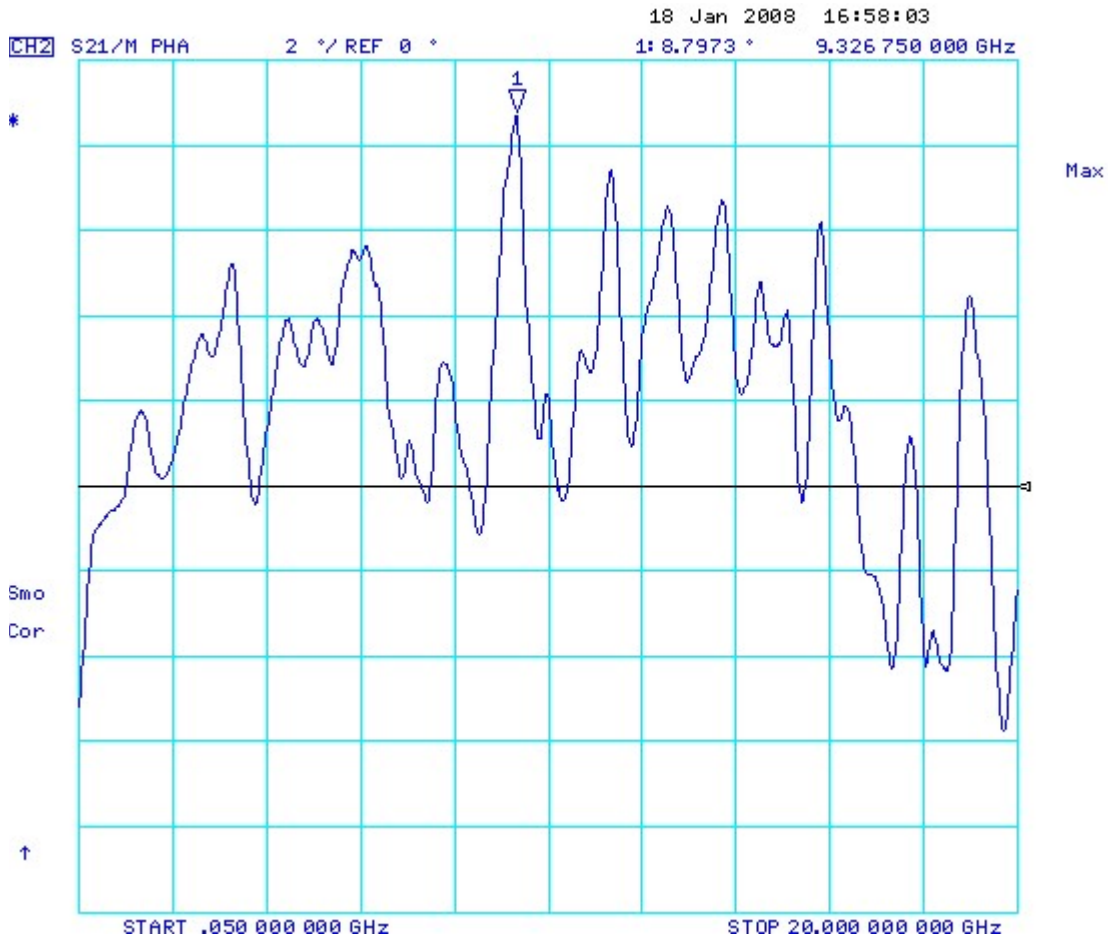
J28



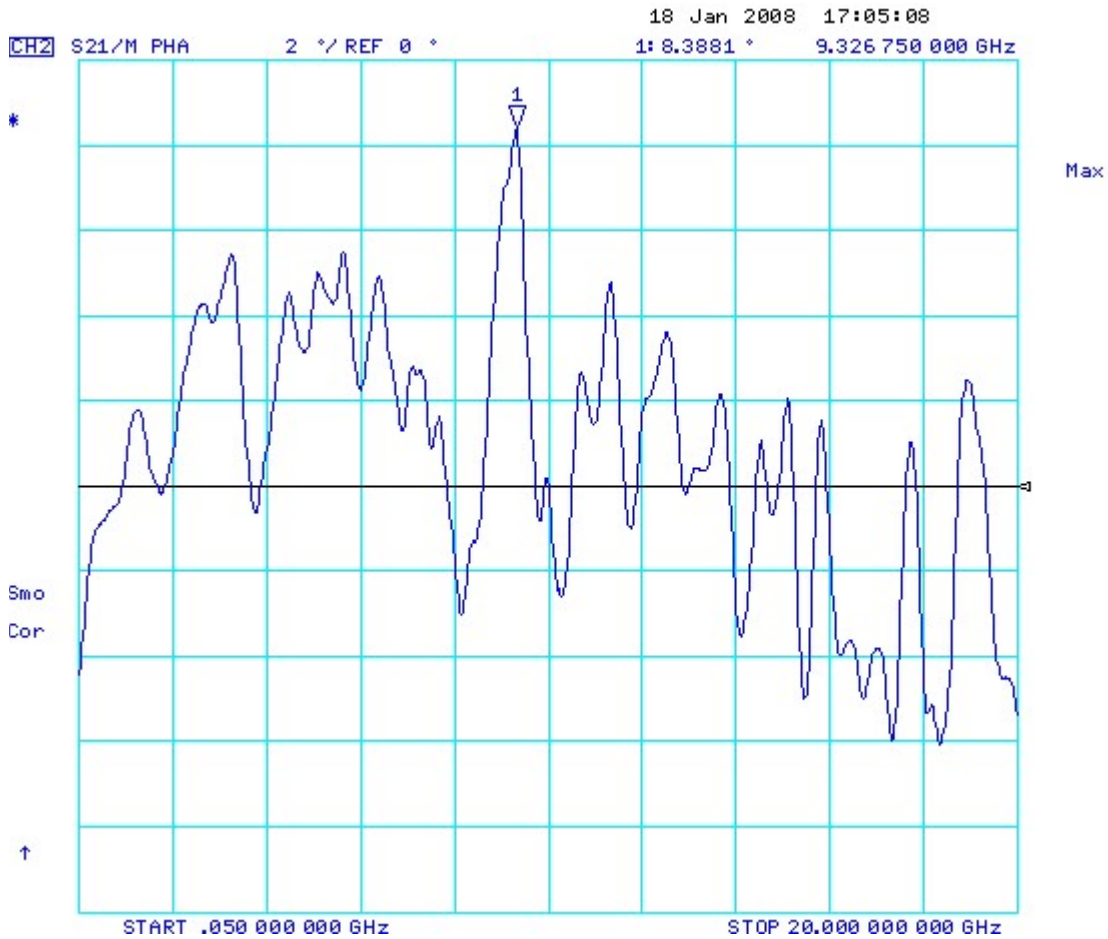
J29



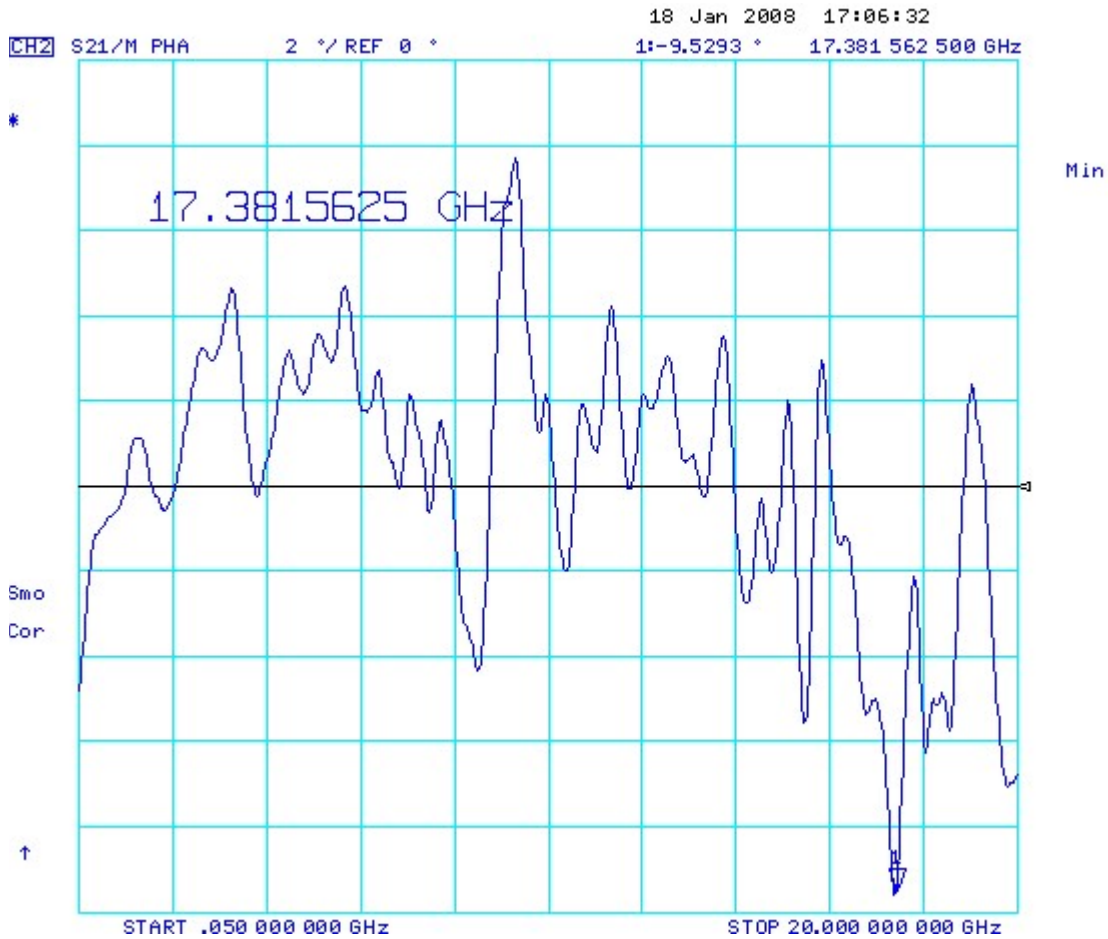
J30



J31



J32



TEST DATA

PORT TO PORT ISOLATION

FOR

AMC MODEL NUMBER

MSN-32DTT-05-DEC-MP
OPTION 100M20, PM10

Serial Number:

32MS801001



CUSTOMER: MI TECH
 JOB NO: 705103PE
 MODEL NO: MSN-32DT-05-DEC-MP
 SERIAL NO: _____
 CURRENT DRAW: + 5 VDC @ 1490 mA; - 5 VDC @ 180 mA

TECHNICIAN: P.K.
 CUSTOMER PART NO: _____
 OPTION NO: 100M20
 SPECIFICATION: MIL-STD-454
 FREQUENCY RANGE: 0.1 GHz - 20 GHz

PORT TO PORT ISOLATION (WORST CASE)		
PORT ON	PORT OFF	ISOLATION (WORST CASE)
J1	J2	85.08 dB @ 19.8Ghz
J2	J3	92.41 dB @ 0.10Ghz
J3	J4	82.78 dB @ 19.9Ghz
J4	J5	91.21 dB @ 0.10Ghz
J5	J6	91.14 dB @ 0.10Ghz
J6	J7	99.27 dB @ 0.10Ghz
J7	J8	84.48 dB @ 10.5Ghz
J8	J9	101.6 dB @ 0.10Ghz

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PORT TO PORT ISOLATION (WORST CASE)		
PORT ON	PORT OFF	ISOLATION (WORST CASE)
J9	J10	88.90 dB @ 19.7Ghz
J10	J11	96.58 dB @ 19.8Ghz
J11	J12	86.01 dB @ 19.8Ghz
J12	J13	92.68 dB @ 0.10Ghz
J13	J14	85.05 dB @ 19.6Ghz
J14	J15	99.87 dB @ 0.10Ghz
J15	J16	87.54 dB @ 19.8Ghz
J16	J17	96.69 dB @ 19.8Ghz

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* DENOTES A FAILURE

PORT TO PORT ISOLATION (WORST CASE)		
PORT ON	PORT OFF	ISOLATION (WORST CASE)
J17	J18	91.76 dB @ 0.10Ghz
J18	J19	96.65 dB @ 0.10Ghz
J19	J20	94.53 dB @ 0.10Ghz
J20	J21	89.33 dB @ 0.10Ghz
J21	J22	88.13 dB @ 19.8Ghz
J22	J23	93.52 dB @ 0.10Ghz
J23	J24	88.46 dB @ 19.7Ghz
J24	J25	93.28 dB @ 0.10Ghz
PORT TO PORT ISOLATION (WORST CASE)		
PORT ON	PORT OFF	ISOLATION (WORST CASE)
J25	J26	94.54 dB @ 0.40Ghz
J26	J27	97.63 dB @ 17.5Ghz
J27	J28	89.85 dB @ 20.0Ghz
J28	J29	96.56 dB @ 19.6Ghz
J29	J30	88.60 dB @ 19.8Ghz
J30	J31	96.22 dB @ 19.5Ghz
J31	J32	92.24 dB @ 19.2Ghz
J32	J1	102.1 dB @ 0.10Ghz

*DENOTES A FAILURE

TESTED ON: HEWLETT PACKARD 8720D

QA/QC APPROVAL: _____ DATED: _____

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