



TIME WARNER
CABLE

98-V-1164

November 13, 1998

Secretary John C. Crary
NYS Department of Public Service
Three Empire State Plaza - 19th Floor
Albany, New York 12223

Dear Mr. Crary:

Enclosed are an original and four (4) copies of the Franchise Renewal Agreement for the Village of Hannibal (Oswego County).

If you have any questions, please do not hesitate to contact me at (315) 463-2288 (ext. 249).

Sincerely,

Petra A. Redchuk
Government Reporting Coordinator
enclosures

cc: John Owen, V.P./General Manager-Time Warner Cable Syracuse Division
Mayor Eugene Gauger-Village of Hannibal

APPLICATION FOR RENEWAL OF FRANCHISE
OR CERTIFICATE OF CONFIRMATION
(Form R-2):

1. The exact legal name of applicant is :

Time-Warner Entertainment-Advance/Newhouse Partnership

2. Applicant does business under the following name or names:

Time Warner Cable - Syracuse Division

3. Applicant's mailing address is:

5015 Campuswood Drive

P.O. Box 4733

East Syracuse, NY 13221

4. Applicant's telephone number(s) is (are):

<u>(315) 463-2288 Time Warner Cable</u>	<u>(315) 363-4832 Time Warner Cable</u>
<u>5015 Campuswood Drive</u>	<u>417 S. Second Street</u>
<u>East Syracuse, NY 13221</u>	<u>Fulton, NY 13069</u>

5. (a) This application is for the renewal of operating rights in the

Village of Hannibal - Oswego County
(Municipality & County)

- (b) Applicant serves the following additional municipalities from the same headend or from a different headend but in the same or adjacent county:

See Attached List (Exhibit 1)

6. The number of subscribers in each of the municipalities noted above is:

- Primary residential connections	<u>See Question #5(b)</u>
- Secondary residential connections	<u>N/A</u>
- Residential pay-cable subscriptions	<u>N/A</u>
- Commercial connections	<u>N/A</u>
- Other	<u>N/A</u>

7. The following signals are regularly carried by the applicant's cable system (where signals are received other than by direct off-air pickup, please so indicate):

See Attached Channel Line-Up Card (Exhibit A)

8. Applicant does X does not _____ provide channel capacity and/or production facilities for local origination. If answer is affirmative, specify below the number of hours of locally originated programming carried by the system during the past twelve months and briefly describe the nature of the programming:

Applicant has carried over 100 hours of locally originated programming of various types, including PEG Access.

9. The current monthly rates for service in the municipality specified in Question 5(a) are:

- Primary residential connections	<u>See Attached Rate Card (Exhibit A)</u>
- Secondary residential connections	<u>See Attached Rate Card (Exhibit A)</u>
- Pay-cable subscriptions	<u>See Attached Rate Card (Exhibit A)</u>
- Commercial connections	<u>See Attached Rate Card (Exhibit A)</u>
- Other	<u>See Attached Rate Card (Exhibit A)</u>

10. How many miles of new cable television plant were placed in operation by applicant during the past twelve months in the municipality specified in Question 5(a)? 0.50 miles
In the municipalities specified in Question 5(b)? See Attached List (Exhibit 2)

11. State and describe below any significant achievements and/or improvements that took place with respect to system operation during the past twelve months:

N/A

12. Indicate whether applicant has previously filed with the NYS Department of Public Service its:

(a) Current Statement of Assessment pursuant to Section 217 Chapter 83?

 X Yes No

(b) Current Annual Financial Report? X Yes No

If answer to any of the above is negative, please explain:

N/A

13. Has any event or change occurred during the past twelve months which has had, or could have, a significant impact upon applicant's ability to provide cable television service? If so describe below:

No event or change has occurred during the past twelve months which has had, or
could have, a significant impact upon applicant's ability to provide cable television
services.

WHEREFORE, the applicant, Time Warner Cable, requests that the New York State Public Service Commission grant this application and approve the Village of Hannibal Certificate of Confirmation and Franchise Agreement.



Mary L. Cotter
President
Time Warner Cable - Syracuse Division

Dated: N OVEMBER 10, 1998

Please attach a copy of applicant's current annual performance test.

STATE OF NEW YORK)
) S.S.:
COUNTY OF ONONDAGA)

MARY L. COTTER, being sworn, says:

1. I am President of the Syracuse Division of Time Warner Cable and
 I am familiar with the business operations of the Company
2. This application was prepared by me or under my direct supervision.
3. All of the statements and information contained herein are true and
 accurate to the best of my knowledge and belief.



Mary L. Cotter

Sworn to before me this

10th day of NOVEMBER, 19 98



Notary Public

Petra A. Redchuk
Notary Public - State of New York
No. 02RE6002758
Qualified in Onondaga County
My Commission Expires 2/17/2000

Exhibit 1

Question 5(b): Applicant serves the following additional Municipalities from the same headend or from a different headend but in the same or adjacent county:

<u>Municipality</u>	<u>Subscribers</u>	<u>Municipality</u>	<u>Subscribers</u>
City of Fulton	4,201	Town of Granby	1,731
Town of Hannibal	780	Town of New Haven	723
Town of Palermo	796	Town of Sterling	308
Town of Volney	1,463	Village of Fair Haven	434
Village of Hannibal	183	Town of Minetto	540
Town of New Haven	9	Town of Oswego	1,405
Town of Scriba	2,132	Town of Sterling	9
City of Oswego	6,746		

Exhibit 2

Question 10: The number of miles of new cable television plant placed in operation by applicant during the past twelve (12) months in the municipalities specified in Question 5(b) are:

<u>Municipality</u>	<u>Miles of Plant</u>	<u>Municipality</u>	<u>Miles of Plant</u>
City of Fulton	0.10 Miles	Town of Granby	0.50 Miles
Town of Hannibal	0.20 Miles	Town of Volney	0.60 Miles
Village of Hannibal	0.50 Miles	City of Oswego	0.50 Miles
Town of Minetto	0.10 Miles	Town of Oswego	0.20 Miles
Town of Scriba	0.30 Miles		

EXHIBIT A



Monthly Service Fees

Rates & Services

	Total Channels	Per Month
A. Cable Service:		
Basic Cable Package:	12	\$ 4.10
Basic/SuperStation Package:	16	\$ 5.85
Standard Cable Package: (Includes Basic/Superstation)	55	\$ 29.75
Cable ValuePak: ***	9	\$ 3.65
Additional Outlet:		No Charge
B. Premium (Pay) Channels:		
Home Box Office		\$ 9.75
Cinemax		\$8.00/\$6.00†
The Disney Channel		\$8.00/\$6.00†
Showtime		\$8.00/\$6.00†
Starz!		\$12.95††
†\$6.00 if taken as a second Premium Channel		
††Multiple discounts apply when purchased in combination with other premium services.		
C. Equipment Charges (plus tax as applicable):		
Nonaddressable Converter		\$.80
Addressable Converter *		\$ 2.79
Remote Control (Requires Converter)		\$.38
D. Other Packages:		
"Gold" Package: Standard, Cable ValuePak with HBO, Cinemax, HBO2, HBO3, Cinemax2		\$52.32
"Silver" Package: Standard, Cable ValuePak with HBO		\$46.32
"Bronze" Package: Standard, Cable ValuePak		\$36.57
Note: Gold, Silver and Bronze packages include a free installation of one additional outlet.		
E. Installation Charges** (plus tax as applicable):		
New Installation, Unwired		\$34.63
New Installation, Wire-in		\$23.90
Installation of Additional Sets		\$21.59
Installation of Additional Sets at time of primary install		\$13.82
Upgrades, downgrades, reconnects, relocates, maintenance/ service calls or any other service requiring a truck roll		\$18.83
Electronic Charge/Switches		\$ 1.99
Hourly Service Charge (for non-standard installations and non-system related service calls)		\$31.72

**Note: Charges apply to standard residential installations. Downgrade charges are generally assessed when a customer changes from Standard to Basic Cable service. Other Downgrade Service charges and Maintenance/Service Call charges may be assessed when a trip to the subscriber's premises is requested or required due to damages caused by customer neglect or for non-cable related problems or service.

The foregoing rates do not include franchise fees which can range from 3 to 5% depending on the community in which you live, nor FCC regulatory fees of several cents per month, or state sales tax (where applicable). Rates apply to Standard Residential Accounts only.

*An addressable converter is required for Cable ValuePak, certain Premium channels, and Pay-Per-View channels.

Basic Cable Package required for all service levels.

*** Standard Cable required for this service.

Time Warner Cable
417 South Second Street
Fulton, New York 13069
(315) 592-2253
or email us at

fulton.cable@twcable.com

Time Warner Cable Fulton Channel Guide

BASIC CABLE \$4.10

- 2 Prevue Guide
- 3 WSTM-3 (Syracuse, NBC) ◊
- 5 WTVH-5 (Syracuse, CBS)
- 7 WNY5-43 (Syracuse, IND)
- 8 WSYT-68 (Syracuse, FOX) ◊
- 9 WIXT-9 (Syracuse, ABC)
- 10 WCNV-24 (Syracuse, PBS) ◊
- 11 WCNV II (Syracuse, PBS)
- 12 Public Access
- 13 Cable 13/Travel Channel
- 14 Syracuse Video Classifieds
- 15 Time Warner Highlights

SUPERSTATION CHANNELS \$1.75

- 16 WTBS (Atlanta, IND)
- 17 WPIX (New York, IND) ◊
- 18 WGN (Chicago, IND) ◊
- 19 Animal Planet

STANDARD CHANNELS \$23.90/mo.

- 4 QVC: Home Shopping
- 20 The Family Channel
- 21 FX Network
- 22 CNN: 24 Hour News
- 23 CNN: Headline News
- 24 ESPN: 24 Hour Sports
- 25 ESPN 2
- 26 TNN: The Nashville Network
- 27 CMTV: Country Music TV ◊
- 28 MTV: Music Television ◊
- 29 VH-1: Video Hits One
- 30 Lifetime Network
- 31 USA Network
- 32 The Discovery Channel
- 33 A&E: Arts & Entertainment
- 34 Nickelodeon
- 35 C-SPAN: Government Channel
- 36 C-SPAN 2
- 37 CNBC: Financial News
- 38 MSNBC
- 39 E! Entertainment TV
- 40 The Weather Channel
- 41 Q2 Home Shopping
- 42 HSN: Home Shopping Network
- 43 Odyssey
- 44 EWTN: Eternal Word TV
- 45 TNT: Turner Network Television
- 46 TV Food Net
- 47 FIT-TV

STANDARD CHANNELS continued

- 48 BET: Black Entertainment Television
- 49 TLC: The Learning Channel
- 50 Comedy Central
- 51 Cartoon Network
- 52 Court TV
- 53 Sci-Fi Network
- 54 SportsChannel
- 55 AMC: American Movie Classics
- 58 Pay Per View Previews
- 61 TV Land

CABLE VALUEPAK ... \$3.65/per outlet

- 56 MSG: Madison Square Garden
- 57 Golf Channel
- 59 FXM: Movies from FOX
- 60 HGTV: Home & Garden
- 62 History Channel
- 63 Turner Classic Movies
- 64 Encore
- 65 Empire Sports Network
- 78 Bravo (NEW!)

PREMIUM CHANNELS

- 6 Home Box Office ◊ \$9.75/mo.
- 66 HBO2 ◊ FREE*
- 67 HBO3 ◊ FREE*
- 68 Cinemax ◊ \$8.00**
- 69 Cinemax 2 ◊ FREE*
- 70 Starz (NEW!) \$12.95***
- 71 The Disney Channel \$8.00**
- 72 Showtime ◊ \$8.00**

*Offered at no charge with certain multi-pay combinations.

**\$6.00 as a second Premium Channel.

***Multiple discounts apply when purchased in combination with other premium services.

PAY PER VIEW CHANNELS

- 73 Home Theatre - movies & events (1-800-723-HIT3)
- 74 Home Theatre - movies (1-800-723-HIT4)
- 75 Home Theatre - movies & events (1-800-723-HIT5)
- 76 Home Theatre - Adult (Spice) (10pm-6am) (1-800-723-HIT6)

Rates shown do not include equipment charges, local franchise fees and taxes where applicable.

An addressable converter is required to order PPV movies & events and to subscribe to our Cable ValuePak or Premium Channels (except HBO).

◊ = Stereo

EXHIBIT B



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CURRENT ANNUAL PERFORMANCE TEST

TIME WARNER CABLE SYRACUSE DIVISION

CATV

Proof - of - Performance Tests

System Name: Time Warner - Syracuse System

Plant Mileage: 2,592.8 Miles As of February 1998

Basic Subscribers: 117,199 As of February 1998

System Bandwidth: 550 Mhz As of February 1998

Number of Channels Tested: 9

Number of Test Points: 16

Test Start Date: February 10, 1998

Test Completion Date: February 25, 1998

TIME WARNER CABLE--SYRACUSE DIVISION

SYSTEM NAME: Syracuse DATE: February 1998

FCC TESTING SUMMARY

Changes Since Last Proof of Performance:

Channels A-1, A-2, and are currently not being utilized.

Rinaldo Blvd. test pt. #13 changed tap value to a 20/4.

Test Results:

All test results were favorable.

Miscellaneous:

Time Warner Syracuse system includes, Syracuse, Fulton, Seneca, Oswego.

The Movie Channel is not carried in Fulton.

Ch.78 is converter mapped to Ch.76, Ch.76 is converter mapped to Ch.78 in Syracuse and Seneca systems.

Ch.16,17,19,65 in the Oswego system are scrambled.

Ch. 77.in the Oswego system is in the clear.

Ch. 61 and 77 in the Fulton system are in the clear.

TIME WARNER CABLE-SYRACUSE DIVISION

SYSTEM NAME:

Syracuse

DATE:

February 1998

ACTUAL CHAN	CARRIER FREQ	CONV CHAN	TYPE	SCRAM "Y"	VITS "Y"	CALL LTR	PROG SOURCE
2	55.2500	2	TV		Y	PREV	PREVUE GDE
3	61.2500	3	TV		Y	WSTM	OFF-AIR
4	67.2500	4	TV		Y	QVC	SATELLITE
5	77.2500	5	TV		Y	WTVH	OFF-AIR
6	83.2500	6	TV			MKTG	IN-HOUSE
A-5	91.2500						
A-4	97.2500						
A-3	103.2500						
A-2	109.2750		TV			OPEN	OPEN
A-1	115.2750		TV			OPEN	OPEN
A	121.2625	14	TV			CACS	IN-HOUSE
B	127.2625	15	TV		Y	HBO	SATELLITE
C	133.2625	16	TV			WTBS	SATELLITE
D	139.2500	17	TV		Y	WPIX	SATELLITE
E	145.2500	18	TV			WGN	SATELLITE
F	151.3210	19	TV		Y	ANIMAL PLANET	SATELLITE
G	157.2500	20	TV		Y	FAMILY	SATELLITE
H	163.2500	21	TV		Y	FX	SATELLITE
I	169.2500	22	TV		Y	CNN	SATELLITE
7	175.2500	7	TV			WNYS	OFF-AIR
8	181.2500	8	TV		Y	WSYT	OFF-AIR
9	187.2500	9	TV		Y	WIXT	OFF-AIR
10	193.2500	10	TV			WCNY	OFF-AIR
11	199.2500	11	TV			WCNY2	FROM WCNY
12	205.2500	12	TV			ACCESS	IN-HOUSE
13	211.2500	13	TV			WNLO	LOCAL ORIG
J	217.2500	23	TV		Y	HNN	SATELLITE
K	223.2500	24	TV		Y	ESPN	SATELLITE
L	229.2625	25	TV		Y	ESPN 2	SATELLITE
M	235.2625	26	TV		Y	TNN	SATELLITE
N	241.2625	27	TV		Y	CMTV	SATELLITE
O	247.2625	28	TV		Y	MTV	SATELLITE
P	253.2625	29	TV		Y	VH-1	SATELLITE
Q	259.2625	30	TV		Y	LIFE	SATELLITE
R	265.2625	31	TV		Y	USA	SATELLITE
S	271.2625	32	TV		Y	DISC	SATELLITE
T	277.2625	33	TV		Y	A&E	SATELLITE
U	283.2625	34	TV		Y	NICK	SATELLITE
V	289.2625	35	TV			CSPAN	SATELLITE
W	295.2625	36	TV			CSPAN 2	SATELLITE
AA	301.2625	37	TV		Y	CNBC	SATELLITE
BB	307.2625	38	TV		Y	MSNBC	SATELLITE
CC	313.2625	39	TV			EI TV	SATELLITE
DD	319.2625	40	TV		Y	TWC	SATELLITE
EE	325.2625	41	TV		Y	QVC 2	SATELLITE
FF	331.2750	42	TV		Y	HSN	SATELLITE
GG	337.2625	43	TV		Y	ODYSSEY	SATELLITE
HH	343.2625	44	TV			EWTN	SATELLITE
II	349.2625	45	TV			TNT	SATELLITE
JJ	355.2625	46	TV			TV FOOD	SATELLITE
KK	361.2625	47	TV			TV LAND	SATELLITE
LL	367.2625	48	TV		Y	BET	SATELLITE
MM	373.2625	49	TV		Y	TLC	SATELLITE
NN	379.2625	50	TV		Y	COMEDY	SATELLITE
OO	385.2625	51	TV		Y	CARTOON	SATELLITE
PP	391.2625	52	TV			COURT	SATELLITE
QQ	397.2625	53	TV		Y	SCI-FI	SATELLITE
RR	403.2500	54	TV		Y	SPORTS CH	SATELLITE
SS	409.2500	55	TV			AMC	SATELLITE
TT	415.2500	56	TV	Y		MSG	SATELLITE
UU	421.2500	57	TV	Y	Y	GOLF	SATELLITE
VV	427.2500	58	TV		Y	SNEAK	SATELLITE
WW	433.2500	59	TV	Y	Y	FXM	SATELLITE
XX	439.2500	60	TV	Y		HGTV	SATELLITE
YY	445.2500	61	TV	Y		EMPIRE SPORTS	SATELLITE
ZZ	451.2500	62	TV	Y		HIST	SATELLITE
83	457.2500	63	TV	Y	Y	TCM	SATELLITE
84	463.2500	64	TV	Y		ENCORE	SATELLITE
85	469.2500	65	TV			ACCESS	IN-HOUSE
86	475.2500	66	TV	Y		HBO 2	SATELLITE
87	481.2500	67	TV	Y		HBO 3	SATELLITE
88	487.2500	68	TV	Y		CMX	SATELLITE
89	493.2500	69	TV	Y		CMX 2	SATELLITE
90	499.2500	70	TV	Y		TMC	SATELLITE
71	505.2500	71	TV	Y		DISNEY	SATELLITE
72	511.2500	72	TV	Y	Y	SHOW	SATELLITE
73	517.2500	73	TV	Y		V-CHOICE	SAT PPV
74	523.2500	74	TV	Y		HITS 1	SAT PPV
75	529.2500	75	TV	Y		HOT CH	SAT PPV
76	535.2500	76	TV	Y		BRAVO	SATELLITE
77	541.2500	77	TV	Y		STARZ	SATELLITE
78	547.2500	78	TV	Y		SPICE	SAT PPV

TIME WARNER CABLE-SYRACUSE DIVISION

SYSTEM NAME:

Fulton

DATE:

February 1998

ACTUAL CHAN	CARRIER FREQ	CONV CHAN	TYPE	SCRAM "Y"	VITS "Y"	CALL LTR	PROG SOURCE
2	55.2500	2	TV		Y	PREV	PREVUE GDE
3	61.2500	3	TV		Y	WSTM	OFF-AIR
4	67.2500	4	TV		Y	QVC	SATELLITE
5	77.2500	5	TV		Y	WTVH	OFF-AIR
6	83.2500	6	TV		Y	HBO	SATELLITE
A-5	91.2500						
A-4	97.2500						
A-3	103.2500						
A-2	109.2750		TV			OPEN	OPEN
A-1	115.2750		TV			OPEN	OPEN
A	121.2625	14	TV			CACS	IN-HOUSE
B	127.2625	15	TV			MKTG	IN-HOUSE
C	133.2625	16	TV			WTBS	SATELLITE
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9	187.2500	9	TV		Y	WIXT	OFF-AIR
10	193.2500	10	TV			WCNY	OFF-AIR
11	199.2500	11	TV			WCNY2	FROM WCNY
12	205.2500	12	TV			ACCESS	IN-HOUSE
13	211.2500	13	TV			WNLO	LOCAL ORIG
J	217.2500	23	TV		Y	HNN	SATELLITE
K	223.2500	24	TV		Y	ESPN	SATELLITE
L	229.2625	25	TV		Y	ESPN 2	SATELLITE
M	235.2625	26	TV		Y	TNN	SATELLITE
N	241.2625	27	TV		Y	CMTV	SATELLITE
O	247.2625	28	TV		Y	MTV	SATELLITE
P	253.2625	29	TV		Y	VH-1	SATELLITE
Q	259.2625	30	TV		Y	LIFE	SATELLITE
R	265.2625	31	TV		Y	USA	SATELLITE
S	271.2625	32	TV		Y	DISC	SATELLITE
T	277.2625	33	TV		Y	A&E	SATELLITE
U	283.2625	34	TV		Y	NICK	SATELLITE
V	289.2625	35	TV			CSPAN	SATELLITE
W	295.2625	36	TV			CSPAN 2	SATELLITE
AA	301.2625	37	TV		Y	CNBC	SATELLITE
BB	307.2625	38	TV		Y	MSNBC	SATELLITE
CC	313.2625	39	TV			EI TV	SATELLITE
DD	319.2625	40	TV		Y	TWC	SATELLITE
EE	325.2625	41	TV		Y	QVC 2	SATELLITE
FF	331.2750	42	TV		Y	HSN	SATELLITE
GG	337.2625	43	TV		Y	ODYSSEY	SATELLITE
HH	343.2625	44	TV			EWTV	SATELLITE
II	349.2625	45	TV			TNT	SATELLITE
JJ	355.2625	46	TV			TV FOOD	SATELLITE
KK	361.2625	47	TV			FIT-TV	SATELLITE
LL	367.2625	48	TV		Y	BET	SATELLITE
MM	373.2625	49	TV		Y	TLC	SATELLITE
NN	379.2625	50	TV		Y	COMEDY	SATELLITE
OO	385.2625	51	TV		Y	CARTOON	SATELLITE
PP	391.2625	52	TV			COURT	SATELLITE
QQ	397.2625	53	TV		Y	SCI-FI	SATELLITE
RR	403.2500	54	TV		Y	SPORTS CH	SATELLITE
SS	409.2500	55	TV			AMC	SATELLITE
TT	415.2500	56	TV	Y		MSG	SATELLITE
UU	421.2500	57	TV	Y	Y	GOLF	SATELLITE
VV	427.2500	58	TV	Y	Y	SNEAK	SATELLITE
WW	433.2500	59	TV	Y	Y	FXM	SATELLITE
XX	439.2500	60	TV	Y		HGTV	SATELLITE
YY	445.2500	61	TV			TVLAND	SATELLITE
ZZ	451.2500	62	TV	Y		HIST	SATELLITE
63	457.2500	63	TV	Y	Y	TCM	SATELLITE
64	463.2500	64	TV	Y		ENCORE	SATELLITE
65	469.2500	65	TV	Y		EMPIRE SPORTS	SATELLITE
66	475.2500	66	TV	Y		HBO 2	SATELLITE
67	481.2500	67	TV	Y		HBO 3	SATELLITE
68	487.2500	68	TV	Y		CMX	SATELLITE
69	493.2500	69	TV	Y		CMX 2	SATELLITE
70	499.2500	70	TV	Y		STARZ	SATELLITE
71	505.2500	71	TV	Y		DISNEY	SATELLITE
72	511.2500	72	TV	Y	Y	SHOW	SATELLITE
73	517.2500	73	TV	Y		V-CHOICE	SAT PPV
74	523.2500	74	TV	Y		HITS 1	SAT PPV
75	529.2500	75	TV	Y		HOT CH	SAT PPV
76	535.2500	76	TV	Y		SPICE	SAT PPV
77	541.2500	77	TV			LEASED ACCESS	IN-HOUSE
78	547.2500	78	TV	Y		BRAVO	SATELLITE

TIME WARNER CABLE-SYRACUSE DIVISION

SYSTEM NAME:

Oswego

DATE:

February 1998

ACTUAL CHAN	CARRIER FREQ	CONV CHAN	TYPE	SCRAM "Y"	VITS "Y"	CALL LTR	PROG SOURCE
2	55.2500	2	TV		Y	PREV	PREVUE GDE
3	61.2500	3	TV		Y	WSTM	OFF-AIR
4	67.2500	4	TV		Y	GOVERNEDUC	IN-HOUSE
5	77.2500	5	TV		Y	WTVH	OFF-AIR
6	83.2500	6	TV		Y	PUBLIC ACCESS	IN-HOUSE
A-5	91.2500						
A-4	97.2500						
A-3	103.2500						
A-2	109.2750		TV			OPEN	OPEN
A-1	115.2750		TV			OPEN	OPEN
A	121.2625	14	TV			QVC	SATELLITE
B	127.2625	15	TV		Y	HBO	SATELLITE
C	133.2625	16	TV	S		WTBS	SATELLITE
D	139.2500	17	TV	S	Y	WPIX	SATELLITE
E	145.2500	18	TV			VALUEVISION	SATELLITE
F	151.3210	19	TV	S	Y	ANIMAL PLANET	SATELLITE
G	157.2500	20	TV		Y	FAMILY	SATELLITE
H	163.2500	21	TV		Y	FX	SATELLITE
I	169.2500	22	TV		Y	CNN	SATELLITE
7	175.2500	7	TV			WNYS	OFF-AIR
8	181.2500	8	TV		Y	WSYT	OFF-AIR
9	187.2500	9	TV		Y	WIXT	OFF-AIR
10	193.2500	10	TV			WCNY	OFF-AIR
11	199.2500	11	TV			WCNY2	FROM WCNY
12	205.2500	12	TV			WNPE-PBS	OFF-AIR
13	211.2500	13	TV			WNLO	LOCAL ORIG
J	217.2500	23	TV		Y	HNN	SATELLITE
K	223.2500	24	TV		Y	ESPN	SATELLITE
L	229.2625	25	TV		Y	ESPN 2	SATELLITE
M	235.2625	26	TV		Y	TNN	SATELLITE
N	241.2625	27	TV		Y	CMTV	SATELLITE
O	247.2625	28	TV		Y	MTV	SATELLITE
P	253.2625	29	TV		Y	VH-1	SATELLITE
Q	259.2625	30	TV		Y	LIFE	SATELLITE
R	265.2625	31	TV		Y	USA	SATELLITE
S	271.2625	32	TV		Y	DISC	SATELLITE
T	277.2625	33	TV		Y	A&E	SATELLITE
U	283.2625	34	TV		Y	NICK	SATELLITE
V	289.2625	35	TV			CSPAN	SATELLITE
W	295.2625	36	TV			CSPAN 2	SATELLITE
AA	301.2625	37	TV		Y	CNBC	SATELLITE
BB	307.2625	38	TV		Y	MSNBC	SATELLITE
CC	313.2625	39	TV			E! TV	SATELLITE
DD	319.2625	40	TV		Y	TWC	SATELLITE
EE	325.2625	41	TV		Y	TV LAND	SATELLITE
FF	331.2750	42	TV		Y	HSN	SATELLITE
GG	337.2625	43	TV		Y	ODYSSEY	SATELLITE
HH	343.2625	44	TV			EWTN	SATELLITE
II	349.2625	45	TV			TNT	SATELLITE
JJ	355.2625	46	TV			TV FOOD	SATELLITE
KK	361.2625	47	TV			FIT-TV	SATELLITE
LL	367.2625	48	TV		Y	BET	SATELLITE
MM	373.2625	49	TV		Y	TLC	SATELLITE
NN	379.2625	50	TV		Y	COMEDY	SATELLITE
OO	385.2625	51	TV		Y	CARTOON	SATELLITE
PP	391.2625	52	TV			COURT	SATELLITE
QQ	397.2625	53	TV		Y	SCI-FI	SATELLITE
RR	403.2500	54	TV		Y	SPORTS CH	SATELLITE
SS	409.2500	55	TV			AMC	SATELLITE
TT	415.2500	56	TV	Y		MSG	SATELLITE
UU	421.2500	57	TV	Y		EMPIRE SPORTS	SATELLITE
VV	427.2500	58	TV		Y	SNEAK	SATELLITE
WW	433.2500	59	TV	Y	Y	FXM	SATELLITE
XX	439.2500	60	TV	Y		HGTV	SATELLITE
YY	445.2500	61	TV	Y		GOLF CH	SATELLITE
ZZ	451.2500	62	TV	Y		HIST	SATELLITE
63	457.2500	63	TV	Y	Y	TCM	SATELLITE
64	463.2500	64	TV	Y		ENCORE	SATELLITE
65	469.2500	65	TV	Y		BRAVO	SATELLITE
66	475.2500	66	TV	Y		HBO 2	SATELLITE
67	481.2500	67	TV	Y		HBO 3	SATELLITE
68	487.2500	68	TV	Y		CMX	SATELLITE
69	493.2500	69	TV	Y		CMX 2	SATELLITE
70	499.2500	70	TV	Y		PLAYBOY	SATELLITE
71	505.2500	71	TV	Y		DISNEY	SATELLITE
72	511.2500	72	TV	Y	Y	SHOW	SATELLITE
73	517.2500	73	TV	Y		V-CHOICE	SAT PPV
74	523.2500	74	TV	Y		HITS 1	SAT PPV
75	529.2500	75	TV	Y		HOT CH	SAT PPV
76	535.2500	76	TV	Y		SPICE	SAT PPV
77	541.2500	77	TV			LEASED ACCESS	IN-HOUSE
78	547.2500	78	TV	Y		STARZ	SATELLITE

TIME WARNER CABLE--SYRACUSE DIVISION

SYSTEM NAME: SYRACUSE

DATE: February 1998

NON-VIDEO SERVICES

[illegible]

TIME WARNER CABLE
SYRACUSE DIVISION

Proof - of - Performance Test

System Name: TIME WARNER - SYRACUSE SYSTEM

Statement of Qualifications

Employee Name:	<u>Patrick Thrall</u>	Title:	<u>Field Engineer</u>
System:	<u>Syracuse</u>		
Qualifications:	<u>21 yrs CATV including 5 years as a headend tech and</u>		
	<u>7 years as a trunk tech.</u>		
	<u>Coursework in electronics at Canton ATC and various</u>		
	<u>cable technical seminars.</u>		

Employee Name:	<u>Bruce Diriwachter</u>	Title:	<u>Maintenance Technician</u>
System:	<u>Syracuse</u>		
Qualifications:	<u>15 yrs. of CATV experience</u>		

Employee Name:	<u>Scott Williams</u>	Title:	<u>Maintenance Technician</u>
System:	<u>Syracuse</u>		
Qualifications:	<u>17 yrs. of CATV experience</u>		

Proof - of - Performance Test

System Name: TIME WARNER - SYRACUSE SYSTEM

Statement of Qualifications

Employee Name:	<u>Paul Bellucci</u>	Title: <u>Maintenance Technician</u>
System:	<u>Syracuse</u>	
Qualifications:	<u>18 yrs CATV experience</u>	

Employee Name:	<u>Bob Wentworth</u>	Title: <u>Maintenance Technician</u>
System:	<u>Syracuse</u>	
Qualifications:	<u>17 yrs. of CATV experience</u>	

Employee Name:	<u>Ricky Lapage</u>	Title: <u>Installer Tech</u>
System:	<u>Oswego</u>	
Qualifications:	<u>16 yrs. of CATV experience</u>	

TIME WARNER CABLE SYRACUSE DIVISION

CATV

Proof - of - Performance Tests

Test Equipment Listings

System Name:

Time Warner - Syracuse

Date: February 1998

Test Equipment				
Equipment Description	Model #	Manufacturer	Serial #	Last Calib
Calan Star SLM	2010	Calan/HP	9210392	Dec 96
Spectrum Analyzer	8591c	H/p	3649A01838	Feb 97
Precision Preselector	n/a	Trilithic	F005120	n/a
NTSC generator	TSG-95	Tektronix	B023398	Mar 96
Calan Star SLM	2010	Calan/HP	9210390	Dec 96
Calan Star SLM	2010	Calan/HP	9401158	Feb 95

TIME WARNER CABLE SYRACUSE DIVISION

Terminal Isolation Test

System Name: Time Warner - Syracuse

Date: February 1998

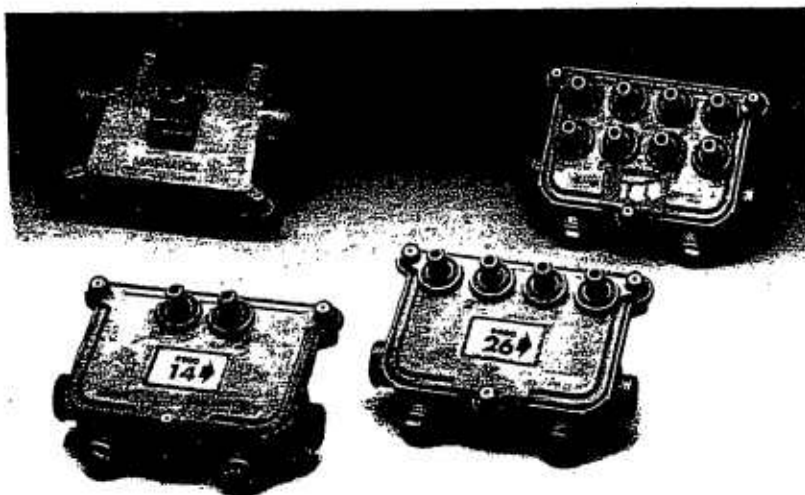
The terminal isolation provided to each subscriber terminal shall not be less than 18 decibels. In lieu of periodic testing, the cable operator may use specifications provided by the manufacturer for the terminal isolation equipment to meet this standard.

Instructions:

Attach a copy of the manufacturer's specifications covering all directional taps used in the system. The specification sheet must show the minimum tap-to-tap isolation. In lieu of a specification sheet, attach a letter from the manufacturer(s) certifying that the directional taps used in the system do exhibit a minimum tap-to-tap isolation of 18dB.

Multi-Taps

9000 Series



The 9000 series 1 GHz multi-tap taps off part of its input RF signal but allows the rest of that signal to pass through. It divides the tapped-off signal into multiple outputs.

- Optional continuous AC and RF power passing circuits eliminate downstream service interruptions when baseplates are removed.
- 90° rotating seizure mechanism makes installation easy.
- F-Port capacitors eliminate hum modulation that can originate at the subscriber home.
- Environmental coating provides excellent corrosion resistance.
- Dual gaskets keep RF signals pure and protect the circuitry from extreme environments.

A multi-tap is a combination of a directional coupler and splitters arranged to produce a specific value or signal loss, from the multi-tap's input to its tap ports.

Philips 9000 series 1 GHz multi-taps are available in two-way, four-way and eight-way models, offering two, four, and eight tap ports respectively. We've created a compact tap which fits easily into a 6" pedestal.

Our 9000 series multi-taps all share the following standard features:

- 1 GHz bandwidth capacity
- brass SCTE F-ports with drip lips and rubber boots,
- weather gasket,

- RFI gasket,
- strip gauges and heat-shrink ridges for easy installation,
- numbered ports for easier subscriber audits,
- high surge resistance and 10-amp current handling capability,
- interchangeable baseplates,
- baseplates fit in 8000 series covers for easy upgrade to 1 GHz,

The aluminum die-cast housing is pressure tested to 10 psi and is coated with a protective finish, which provides excellent corrosion resistance. Rubber boots inside the brass SCTE F-ports help keep the 9000 series multi-taps

water-tight. A single alloy at contact points eliminates the galvanic couple and corrosion that accompanies aluminum-to-brass connections. So, by connecting the brass SCTE F-port to a brass F-connector, you can eliminate a weak link in your network.

All F-ports have a capacitor that blocks hum modulation that can originate in the subscriber home. This capacitor also provides additional protection from transients traveling on subscriber drop cables.

Order the **9000T-PWR** power passing assembly option to prevent interruptions in power and RF service when baseplates are removed. Also, order the **9000-USB** for easy aerial to underground interconnections.



PHILIPS

9800 Series Eight-Way Multi-Taps

Worst Case Specifications*

	9812	9815	9818	9821	9824	9827	9830	9833	9836	Units
Tap Value	12.0	15.5	18.0	21.0	24.0	27.0	30.0	33.0	36.0	dB
Bandwidth	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	MHz
Color Code	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown	
Tolerance										
10-19 MHz	1.7	2.0	1.5	2.5	2.5	2.5	2.5	2.5	2.5	± dB
20-899 MHz	1.8	2.0	1.5	1.5	1.5	1.5	1.5	2.1	1.8	± dB
900-1000 MHz	2.3	2.5	1.9	2.4	2.1	2.1	1.9	1.8	2.3	± dB
Insertion Loss (max.)										
10 MHz	—	3.8	1.9	1.2	1.0	0.8	0.5	0.5	0.5	dB
30 MHz	—	3.5	1.5	1.0	0.9	0.7	0.4	0.4	0.4	dB
54 MHz	—	3.5	1.6	1.0	0.8	0.7	0.4	0.4	0.4	dB
112 MHz	—	4.0	1.9	1.2	0.9	0.8	0.6	0.6	0.6	dB
150 MHz	—	4.0	1.9	1.2	0.9	0.8	0.6	0.6	0.6	dB
186 MHz	—	4.1	2.0	1.3	1.0	0.8	0.6	0.6	0.6	dB
222 MHz	—	4.1	2.0	1.3	1.0	0.8	0.6	0.6	0.6	dB
330 MHz	—	4.2	2.1	1.4	1.0	0.8	0.6	0.6	0.6	dB
400 MHz	—	4.3	2.2	1.4	1.0	0.8	0.7	0.7	0.7	dB
450 MHz	—	4.4	2.2	1.4	1.0	0.8	0.7	0.7	0.7	dB
550 MHz	—	4.5	2.3	1.3	1.1	0.9	0.8	0.8	0.8	dB
600 MHz	—	4.7	2.4	1.4	1.1	1.0	0.9	0.9	0.9	dB
750 MHz	—	5.1	2.8	1.6	1.3	1.2	1.2	1.2	1.2	dB
862 MHz	—	5.3	3.2	1.8	1.6	1.3	1.4	1.4	1.4	dB
1000 MHz	—	5.4	3.9	2.3	1.8	1.4	1.4	1.4	1.4	dB
Flatness (max.)										
10-1000 MHz	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	± dB
Tap-to-Out Isolation (min.)										
10-29 MHz	—	21	24	27	30	34	34	36	38	dB
30-749 MHz	—	27	30	32	34	38	40	42	44	dB
750-899 MHz	—	25	28	30	33	36	38	40	41	dB
900-1000 MHz	—	25	28	28	33	34	36	38	39	dB
Tap-to-Tap Isolation (min.)										
10-29 MHz	20	20	20	20	20	20	20	20	20	dB
30-449 MHz	25	25	25	25	25	25	25	25	25	dB
450-749 MHz	23	23	23	23	23	23	23	23	23	dB
750-1000 MHz	20	20	20	20	20	20	20	20	20	dB
Return Loss In (min.)										
10-29 MHz	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	16	16	16	16	16	16	16	16	16	dB
Return Loss Out (min.)										
10-29 MHz	—	17	17	17	17	17	17	17	17	dB
30-599 MHz	—	18	18	18	18	18	18	18	18	dB
600-899 MHz	—	17	17	17	17	17	17	17	17	dB
900-1000 MHz	—	16	16	16	16	16	16	16	16	dB
Return Loss Tap (min.)										
10-29 MHz	16	16	16	16	16	16	16	16	16	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	dB
600-1000 MHz	16	16	16	16	16	16	16	16	16	dB
Hum Modulation @ 8 amps (max.)										
10-49 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	dB
50-599 MHz	—	-70	-70	-70	-70	-70	-70	-70	-70	dB
600-749 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	dB
750-1000 MHz	—	-60	-60	-60	-60	-60	-60	-60	-60	dB
RFI Isolation	Exceeds FCC requirements									
Current	0	10	10	10	10	10	10	10	10	amps
Surge Rating	ANSI/IEEE C62.41-1991, Class B, 2500 Volts									

All specifications are subject to change without notice.

9800 Series Eight-Way Multi-Tap

Nominal Performance Specifications*

Notes	9812	9815	9818	9821	9824	9827	9830	9833	9836
Tap Value	12.0	15.5	18.0	21.0	24.0	27.0	30.0	33.0	36.0
Bandwidth	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000
Color Code	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown
Insertion Loss (Input/Output)									
10 MHz	—	3.5	1.4	1.1	0.9	0.7	0.3	0.3	0.3
30 MHz	—	3.4	1.3	0.9	0.7	0.6	0.3	0.3	0.3
54 MHz	—	3.4	1.3	0.9	0.7	0.5	0.3	0.3	0.3
112 MHz	—	3.8	1.7	1.0	0.8	0.7	0.4	0.5	0.4
150 MHz	—	3.8	1.7	1.0	0.8	0.7	0.4	0.5	0.4
186 MHz	—	3.9	1.8	1.0	0.8	0.7	0.4	0.5	0.4
222 MHz	—	3.9	1.8	1.1	0.8	0.7	0.4	0.5	0.4
330 MHz	—	4.0	1.9	1.1	0.8	0.7	0.5	0.5	0.5
400 MHz	—	4.1	2.0	1.1	0.8	0.7	0.5	0.5	0.5
450 MHz	—	4.1	2.0	1.1	0.9	0.7	0.6	0.6	0.5
550 MHz	—	4.2	2.0	1.1	0.9	0.7	0.6	0.6	0.6
600 MHz	—	4.5	2.2	1.2	0.9	0.8	0.7	0.7	0.6
750 MHz	—	4.9	2.6	1.3	1.0	0.9	0.8	0.8	0.8
862 MHz	—	5.0	2.9	1.5	1.2	1.1	1.0	1.0	1.0
1000 MHz	—	5.2	3.5	1.7	1.2	1.1	1.1	1.1	1.1
Tap Loss									
10-19 MHz	10.7	13.8	17.8	19.4	22.3	25.5	28.8	32.2	34.5
20-899 MHz	11.3	14.7	18.4	20.6	24.3	26.7	30.4	32.8	35.6
900-1000 MHz	13.0	16.7	18.8	20.7	25.1	27.8	30.4	33.2	36.3
Mechanical									
Dimensions	a	4.9 (12.6) W x 3.8 (9.6) H x 2.4 (6.1) D							
Weight		0.8 (0.37)							
Connector Type	b	Standard CATV KS entry connectors for cable up to 0.625" diameter							
Pin Length		1.44 (3.7)							

*All specifications are subject to change without notice.

Notes:

- Height dimension includes plug; depth dimension includes 1/2" F-ports and strand clamp/bolt in closed position.
- Pin connector (.067 inch diameter) recommended for best RF performance.



PHILIPS

2-1-96

RF Pa

9400 Series Four-Way Multi-Taps

Worst Case Specifications*

	9408	9411	9414	9417	9420	9423	9426	9429	9432	9435	Units
Tap Value	8.0	11.5	14.5	17.0	20.0	23.0	26.0	29.0	32.0	35.0	dB
Bandwidth	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	MHz
Color Code	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown	
Tolerance											
10-19 MHz	1.5	1.5	1.5	2.1	1.9	2.2	2.5	2.5	2.3	1.9	± dB
20-899 MHz	1.5	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	± dB
900-1000 MHz	1.5	2.5	2.3	2.2	2.0	1.9	1.7	1.6	1.8	2.0	± dB
Insertion Loss (max.)											
10 MHz	—	3.6	1.9	1.2	1.0	0.8	0.5	0.4	0.4	0.4	dB
30 MHz	—	3.5	1.5	0.9	0.8	0.7	0.4	0.3	0.3	0.3	dB
54 MHz	—	3.5	1.5	0.9	0.8	0.7	0.4	0.3	0.3	0.3	dB
112 MHz	—	4.0	1.8	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
150 MHz	—	4.1	1.8	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
186 MHz	—	4.1	1.8	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
222 MHz	—	4.2	1.8	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
330 MHz	—	4.3	1.9	1.0	1.0	0.9	0.6	0.6	0.6	0.6	dB
400 MHz	—	4.3	2.0	1.1	1.1	0.9	0.7	0.7	0.7	0.7	dB
450 MHz	—	4.3	2.0	1.1	1.1	0.9	0.7	0.7	0.7	0.7	dB
550 MHz	—	4.4	2.1	1.2	1.1	0.9	0.7	0.7	0.7	0.7	dB
600 MHz	—	4.7	2.4	1.4	1.1	1.0	0.8	0.8	0.8	0.8	dB
750 MHz	—	5.1	2.9	1.6	1.4	1.3	1.1	1.1	1.1	1.1	dB
862 MHz	—	5.2	3.3	1.8	1.6	1.5	1.2	1.2	1.2	1.2	dB
1000 MHz	—	5.4	4.0	2.2	1.8	1.6	1.4	1.3	1.3	1.3	dB
Flatness (max.)											
10-1000 MHz	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	± dB
Tap-to-Out Isolation (min.)											
10-29 MHz	—	20	21	22	27	30	34	34	36	38	dB
30-749 MHz	—	24	27	30	33	36	38	40	42	44	dB
750-899 MHz	—	22	25	28	31	34	36	38	40	42	dB
900-1000 MHz	—	22	25	28	31	34	36	38	40	42	dB
Tap-to-Tap Isolation (min.)											
10-29 MHz	20	20	20	20	20	20	20	20	20	20	dB
30-449 MHz	25	25	25	25	25	25	25	25	25	25	dB
450-749 MHz	23	23	23	23	23	23	23	23	23	23	dB
750-1000 MHz	20	20	20	20	20	20	20	20	20	20	dB
Return Loss In (min.)											
10-29 MHz	17	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	17	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	16	16	16	16	16	16	16	16	16	16	dB
Return Loss Out (min.)											
10-29 MHz	—	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	—	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	—	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	—	16	16	16	16	16	16	16	16	16	dB
Return Loss Tap (min.)											
10-29 MHz	16	16	16	16	16	16	16	16	16	16	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	18	dB
600-1000 MHz	16	16	16	16	16	16	16	16	16	16	dB
Hum Modulation @ 8 amps (max.)											
10-49 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
50-599 MHz	—	-70	-70	-70	-70	-70	-70	-70	-70	-70	dB
600-749 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
750-1000 MHz	—	-60	-60	-60	-60	-60	-60	-60	-60	-60	dB
RFI Isolation	Exceeds FCC requirements										
Current	0	10	10	10	10	10	10	10	10	10	amps
Surge Rating	ANSI/IEEE C62.41-1991, Class B, 2500 Volts										

*All specifications are subject to change without notice.



9400 Series Four-Way Multi-T

Nominal Performance Specifications*

	Notes	9408	9411	9414	9417	9420	9423	9426	9429	9432	9435
Tap Value		8.0	11.5	14.5	17.0	20.0	23.0	26.0	29.0	32.0	35
Bandwidth		10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000
Color Code		Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown
Insertion Loss (In/Out)											
10 MHz		—	3.5	1.3	1.0	0.9	0.6	0.3	0.3	0.3	0
30 MHz		—	3.4	1.3	0.7	0.7	0.6	0.3	0.3	0.3	0
54 MHz		—	3.4	1.3	0.7	0.7	0.6	0.3	0.3	0.3	0
112 MHz		—	3.8	1.7	0.9	0.8	0.7	0.5	0.5	0.5	0
150 MHz		—	3.8	1.7	0.9	0.8	0.7	0.5	0.5	0.5	0
186 MHz		—	3.9	1.8	0.9	0.9	0.7	0.5	0.5	0.5	0
222 MHz		—	3.9	1.8	0.9	0.9	0.7	0.5	0.5	0.5	0
330 MHz		—	4.0	1.8	0.9	0.9	0.7	0.5	0.5	0.5	0
400 MHz		—	4.1	1.8	1.0	0.9	0.8	0.5	0.6	0.6	0
450 MHz		—	4.1	1.8	1.0	0.9	0.8	0.5	0.6	0.6	0
550 MHz		—	4.2	1.9	1.0	0.9	0.8	0.6	0.6	0.6	0
600 MHz		—	4.4	2.1	1.1	0.9	0.8	0.6	0.6	0.7	0
750 MHz		—	4.7	2.6	1.3	1.1	1.0	0.9	0.8	0.8	0
862 MHz		—	4.8	3.0	1.6	1.3	1.1	1.1	1.0	1.0	1
1000 MHz		—	4.9	3.6	1.8	1.3	1.1	1.1	1.0	1.0	1
Tap Loss											
10-19 MHz		6.9	10.3	14.5	15.8	19.4	22.1	24.9	27.9	31.0	34
20-899 MHz		7.2	10.7	14.7	17.6	21.0	23.6	26.3	29.2	32.2	35
900-1000 MHz		8.2	12.8	15.0	18.2	20.7	23.2	26.0	29.1	32.0	35
Mechanical											
Dimensions	a	4.9 (12.6) W x 3.8 (9.7) H x 2.4 (6.1) D									
Weight		0.7 (0.33)									
Connector Type	b	Standard CATV KS entry connectors for cable up to 0.625" diameter									
Pin Length		1.44 (3.7)									

*All specifications are subject to change without notice.

Notes:

- Height dimension includes plug; depth dimension includes 1/2" F-ports and strand clamp/bolt in closed position.
- Pin connector (.067 inch diameter) recommended for best RF performance.



PHILIPS

9200 Series Two-Way Multi-Taps

Worst Case Specifications*

	9204	9208	9211	9214	9217	9220	9223	9226	9229	9232	Units
Tap Value	4.0	8.5	11.0	14.0	17.0	20.0	23.0	26.0	29.0	32.0	dB
Bandwidth	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	MHz
Color Code	Black	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	
Tolerance											
10-19 MHz	1.5	1.5	1.5	1.5	2.5	2.5	2.5	2.5	2.5	2.5	± dB
20-899 MHz	1.5	2.0	1.5	1.5	1.5	1.6	1.5	1.5	2.0	1.8	± dB
900-1000 MHz	2.0	2.0	1.5	2.0	1.6	1.7	1.7	2.0	2.0	2.0	± dB
Insertion Loss (max.)											
10 MHz	—	3.6	1.9	1.0	1.0	0.8	0.5	0.5	0.4	0.4	dB
30 MHz	—	3.1	1.5	0.8	0.8	0.7	0.5	0.4	0.3	0.3	dB
54 MHz	—	3.3	1.5	0.8	0.8	0.7	0.4	0.4	0.3	0.3	dB
112 MHz	—	3.3	1.8	1.0	0.9	0.8	0.5	0.5	0.5	0.5	dB
150 MHz	—	3.3	1.8	1.0	0.9	0.8	0.5	0.5	0.5	0.5	dB
186 MHz	—	3.4	1.9	1.0	0.9	0.8	0.5	0.5	0.5	0.5	dB
222 MHz	—	3.5	1.9	1.0	1.0	0.8	0.5	0.5	0.5	0.5	dB
330 MHz	—	3.6	2.0	1.0	1.0	0.8	0.6	0.6	0.6	0.6	dB
400 MHz	—	3.7	2.1	1.1	1.0	0.9	0.7	0.7	0.6	0.6	dB
450 MHz	—	3.8	2.1	1.1	1.0	0.9	0.7	0.7	0.6	0.6	dB
550 MHz	—	3.9	2.1	1.2	1.1	0.9	0.7	0.7	0.7	0.7	dB
600 MHz	—	4.1	2.4	1.4	1.2	1.0	0.8	0.8	0.8	0.8	dB
750 MHz	—	4.7	3.0	1.6	1.4	1.2	1.0	1.0	0.9	0.9	dB
862 MHz	—	5.0	3.5	1.8	1.6	1.4	1.2	1.2	1.1	1.1	dB
1000 MHz	—	5.5	4.1	2.0	1.8	1.6	1.4	1.3	1.3	1.3	dB
Flatness (max.)											
10-1000 MHz	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	± dB
Tap-to-Out Isolation (min.)											
10-29 MHz	—	20	20	20	24	29	30	34	34	36	dB
30-749 MHz	—	22	24	26	30	33	36	38	40	42	dB
750-899 MHz	—	20	22	25	28	31	34	36	38	40	dB
900-1000 MHz	—	20	22	24	28	31	34	36	38	40	dB
Tap-to-Tap Isolation (min.)											
10-29 MHz	20	20	20	20	20	20	20	20	20	20	dB
30-449 MHz	25	25	25	25	25	25	25	25	25	25	dB
450-749 MHz	23	23	23	23	23	23	23	23	23	23	dB
750-1000 MHz	20	20	20	20	20	20	20	20	20	20	dB
Return Loss In (min.)											
10-29 MHz	17	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	17	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	16	16	16	16	16	16	16	16	16	16	dB
Return Loss Out (min.)											
10-29 MHz	—	17	17	17	17	17	17	17	17	17	dB
30-599 MHz	—	18	18	18	18	18	18	18	18	18	dB
600-899 MHz	—	17	17	17	17	17	17	17	17	17	dB
900-1000 MHz	—	16	16	16	16	16	16	16	16	16	dB
Return Loss Tap (min.)											
10-29 MHz	16	16	16	16	16	16	16	16	16	16	dB
30-599 MHz	18	18	18	18	18	18	18	18	18	18	dB
600-1000 MHz	16	16	16	16	16	16	16	16	16	16	dB
Hum Modulation @ 8 amps (max.)											
10-49 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
50-599 MHz	—	-70	-70	-70	-70	-70	-70	-70	-70	-70	dB
600-749 MHz	—	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
750-1000 MHz	—	-60	-60	-60	-60	-60	-60	-60	-60	-60	dB
RFI Isolation	Exceeds FCC requirements										
Current (continuous)	0	10	10	10	10	10	10	10	10	10	amps
Surge Rating	ANSI/IEEE C62.41-1991, Class B, 2500 Volts										

*All specifications are subject to change without notice.



9200 Series Two-Way Multi-Tap

Nominal Performance Specifications*

Notes	9204	9208	9211	9214	9217	9220	9223	9226	9229	9232
Tap Value	4.0	8.5	11.0	14.0	17.0	20.0	23.0	26.0	29.0	32.0
Bandwidth	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000	10-1000
Color Code	Black	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver
Insertion Loss (In/Out)										
10 MHz	—	2.8	1.3	1.0	0.9	0.7	0.3	0.3	0.3	0.3
30 MHz	—	2.8	1.3	0.8	0.7	0.6	0.3	0.3	0.3	0.3
54 MHz	—	2.8	1.3	0.7	0.7	0.6	0.3	0.3	0.3	0.3
112 MHz	—	3.2	1.7	0.9	0.8	0.7	0.5	0.5	0.4	0.4
150 MHz	—	3.2	1.7	0.9	0.8	0.7	0.5	0.5	0.4	0.4
186 MHz	—	3.2	1.7	0.9	0.8	0.7	0.5	0.5	0.5	0.5
222 MHz	—	3.3	1.7	0.9	0.9	0.8	0.5	0.5	0.5	0.5
330 MHz	—	3.4	1.8	0.9	0.9	0.8	0.5	0.5	0.5	0.5
400 MHz	—	3.4	1.9	1.0	0.9	0.8	0.6	0.6	0.5	0.5
450 MHz	—	3.4	1.9	1.0	0.9	0.8	0.6	0.6	0.5	0.5
550 MHz	—	3.5	1.9	1.0	0.9	0.8	0.6	0.6	0.6	0.6
600 MHz	—	3.8	2.1	1.1	1.0	0.9	0.6	0.6	0.6	0.6
750 MHz	—	4.3	2.5	1.2	1.2	1.0	0.8	0.8	0.7	0.8
862 MHz	—	4.5	2.8	1.4	1.3	1.1	0.9	0.9	0.9	1.0
1000 MHz	—	4.8	3.5	1.6	1.3	1.1	1.0	1.0	1.0	1.1
Tap Loss										
10-19 MHz	3.4	7.7	10.8	13.7	15.7	18.4	21.2	24.4	27.2	30.5
20-899 MHz	3.7	8.0	11.1	14.9	17.4	20.0	22.6	25.5	28.1	31.2
900-1000 MHz	5.2	9.6	11.0	15.2	17.0	20.0	23.2	26.5	29.1	32.8
Mechanical										
Dimensions	a	4.9 (12.6) W x 3.8 (9.6) H x 2.4 (6.1) D								ir
Weight		0.7 (0.33)								lt
Connector Type	b	Standard CATV KS entry connectors for cable up to 0.625" diameter								ir
Pin Length		1.44 (3.7)								

*All specifications are subject to change without notice.

Notes:

- Height dimension includes plug; depth dimension includes 1/2" F-ports and strand clamp/bolt in closed position.
- Pin connector (.067 inch diameter) recommended for best RF performance.



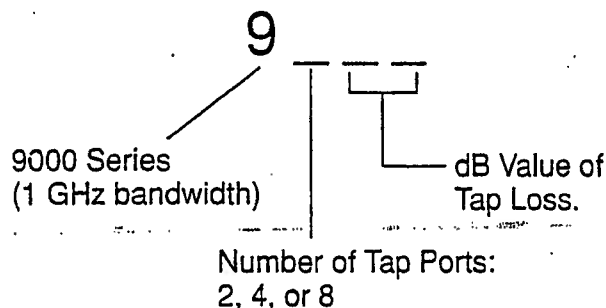
PHILIPS

Multi-Taps

Ordering Information

☎ To order, call your sales representative at 1-800-448-5171 (in NY State 1-800-522-7464).

9000 series multi-taps are available in several models, as indicated below.



Model	Description
9800 series	Eight-way multi-tap models. Available in these dB values: 12, 15, 18, 21, 24, 27, 30, 33, and 36.
9400 series	Four-way multi-tap models. Available in these dB values: 8, 11, 14, 17, 20, 23, 26, 29, 32, and 35.
9200 series	Two-way multi-tap models. Available in these dB values: 4, 8, 11, 14, 17, 20, 23, 26, 29, and 32.
9000-USB	1 GHz universal splice block. A jumper wire/pc board assembly mounted inside a multi-tap housing. When used as a strand-mounted device, it provides a convenient place to interconnect aerial cable to underground cable. Also replaces a multi-tap baseplate that you've removed from service. The 9000-USB has the following specifications:

	9000-USB	Units
Insertion Loss (max.)		
5-599 MHz	0.3	dB
600-749 MHz	0.4	dB
750-1000 MHz	0.6	dB
Return Loss (min.)		
5-899 MHz	18	dB
900-1000 MHz	16	dB

*All specifications are subject to change without notice.

Accessory

9000T-PWR	Power passing assembly. Can be field-installed in 8200/8400 or 9200/9400/9800 series covers so that power and RF service will be uninterrupted when baseplates are removed. Not used in terminating taps (8204, 8408, 9204, 9408, 9812, 9204T, and 9408T models).
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FFT-K Series

Tap Design Specifications

Specifications: 5 - 1000MHz

INSERTION LOSS (dB)																	
REL	NOM. TAP VALUE	5MHz		50 MHz		300 MHz		450 MHz		600 MHz		750 MHz		900 MHz		1000 MHz	
		NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX
1-4TK	4.3																
1-7K	7.5	3.5	3.5	3.3	3.5	3.8	4.1	4.1	4.4	4.7	5.0	4.9	5.1	4.9	5.2	5.0	5.3
1-10K	10.5	2.0	2.2	1.5	1.6	1.7	1.9	2.0	2.2	2.3	2.5	2.8	3.0	3.1	3.3	3.4	3.6
1-12K	12.0	1.4	1.6	1.0	1.2	1.3	1.5	1.5	1.7	1.6	1.8	1.9	2.1	2.4	2.6	2.7	2.9
1-14K	14.0	1.3	1.5	1.0	1.1	1.3	1.4	1.3	1.5	1.4	1.6	1.8	2.0	2.2	2.4	2.7	2.9
1-17K	17.0	1.0	1.2	0.8	1.0	1.0	1.2	1.2	1.3	1.2	1.4	1.5	1.7	1.7	1.9	2.0	2.2
2-20K	20.0	0.7	1.0	0.5	0.8	0.9	1.1	0.9	1.1	1.1	1.3	1.3	1.5	1.7	1.9	1.9	2.1
2-23K	23.0	0.4	0.6	0.3	0.5	0.6	0.8	0.8	1.0	1.0	1.2	1.3	1.4	1.6	1.7	1.8	2.0
2-26K	26.0	0.5	0.6	0.4	0.5	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.8	2.0
2-29K	29.0	0.4	0.6	0.4	0.5	0.6	0.8	0.8	1.0	1.0	1.2	1.3	1.4	1.6	1.7	1.8	2.0
2-32K	32.0	0.5	0.6	0.4	0.5	0.7	0.8	0.8	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.8	2.0
2-35K	35.0	0.4	0.6	0.3	0.5	0.6	0.8	0.8	1.0	1.0	1.2	1.3	1.4	1.6	1.7	1.8	2.0

INSERTION LOSS (dB)																	
MODEL	NOM. TAP VALUE	5MHz		50 MHz		300 MHz		450 MHz		600 MHz		750 MHz		900 MHz		1000 MHz	
		NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX
T4-7TK	6.8																
T4-10K	10.3	3.4	3.7	3.3	3.5	3.9	4.1	4.2	4.4	4.7	5.0	4.9	5.1	4.9	5.2	5.0	5.3
T4-14K	14.4	2.1	2.3	1.8	1.9	2.0	2.2	2.3	2.5	2.7	2.9	3.1	3.3	3.5	3.7	3.7	3.9
T4-15.5K	15.5	1.5	1.6	1.2	1.4	1.4	1.6	1.6	1.8	1.8	2.0	1.9	2.1	2.4	2.6	2.9	3.1
T4-17K	17.0	1.4	1.5	1.2	1.3	1.3	1.5	1.6	1.7	1.6	1.8	1.9	2.0	2.2	2.4	2.6	2.8
T4-20K	20.0	1.3	1.4	1.1	1.2	1.3	1.4	1.3	1.5	1.6	1.7	1.7	1.8	1.9	2.1	2.2	2.4
T4-23K	23.0	0.9	1.0	0.7	0.8	1.2	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2.1	2.2
T4-26K	26.0	0.5	0.7	0.4	0.6	0.8	0.9	0.8	1.0	1.0	1.2	1.3	1.4	1.6	1.7	1.9	2.1
T4-29K	29.0	0.5	0.7	0.4	0.6	0.7	0.9	0.9	1.0	1.0	1.2	1.3	1.4	1.6	1.7	1.9	2.1
T4-32K	32.0	0.5	0.7	0.5	0.6	0.7	0.9	0.8	1.0	1.0	1.2	1.2	1.4	1.6	1.7	1.9	2.1
T4-35K	35.0	0.6	0.7	0.5	0.6	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.9	2.1

		INSERTION LOSS (dB)															
MODEL	NOM. TAP VALUE	5MHz		50 MHz		300 MHz		450 MHz		600 MHz		750 MHz		900 MHz		1000 MHz	
		NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX	NOM	MAX
FTB-10TK	10.4																
FTB-14K	14.2	3.9	4.2	3.5	3.7	3.8	4.0	4.1	4.3	4.8	4.7	4.9	5.0	5.0	5.3	5.3	5.6
FTB-17K	17.8	2.3	2.4	1.6	1.8	1.8	2.0	2.1	2.3	2.5	2.7	2.9	3.1	3.2	3.5	3.7	3.9
FTB-20K	20.0	1.2	1.3	0.8	1.0	1.0	1.2	1.3	1.5	1.6	1.8	2.0	2.2	2.5	2.7	3.0	3.2
FTB-23K	22.5	1.2	1.4	1.0	1.2	1.1	1.3	1.3	1.5	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6
FTB-26K	26.1	1.0	1.2	0.4	0.6	0.6	0.8	0.8	0.9	1.0	1.1	1.2	1.4	1.5	1.8	2.0	2.2
FTB-29K	29.2	0.8	1.0	0.5	0.6	0.6	0.8	0.7	0.9	1.0	1.1	1.2	1.4	1.5	1.8	2.0	2.2
FTB-32K	32.2	0.3	1.0	0.5	0.6	0.6	0.8	0.7	0.9	1.0	1.1	1.2	1.4	1.5	1.8	2.0	2.2
FTB-35K	35.0	0.8	1.0	0.5	0.6	0.5	0.8	0.7	0.9	1.0	1.1	1.2	1.4	1.6	1.8	2.0	2.2

Specifications subject to change without notice.

FFT-K Series Tap To Output Isolation, Nominal

MODEL NO. FFT-2K	5-10 MHz	10-50 MHz	50-450 MHz	450-600 MHz	600-750 MHz	750-1000 MHz
FFT2-4TK	—	—	—	—	—	20
FFT2-7K	15	20	25	25	20	22
FFT2-10K	18	25	25	25	22	23
FFT2-12K	20	25	23	23	21	25
FFT2-14K	24	25	30	30	21	25
FFT2-17K	27	35	35	33	30	30
FFT2-20K	30	35	40	40	40	35
FFT2-23K	30	37	40	40	40	35
FFT2-26K	36	45	45	45	40	35
FFT2-29K	39	45	45	45	40	36
FFT2-32K	42	45	45	45	40	38
FFT2-35K	45	45	45	45	45	40

Tap Value: 2-ways = ± 1.50 dB
4-ways = ± 1.50 dB
8-ways = ± 2.0 dB

Tap to Tap Isolation: 5-30 MHz - 20 dB
30-750 MHz - 25 dB
750-1000 MHz - 20 dB

Return Loss: Tap 10-30 MHz - 16 dB
30-600 MHz - 18 dB
600-1000 MHz - 16 dB

MODEL NO. FFT-4K	5-10 MHz	10-50 MHz	50-450 MHz	450-600 MHz	600-750 MHz	750-1000 MHz
FFT4-7TK	—	—	—	—	—	25
FFT4-10K	20	20	25	25	25	25
FFT4-14K	25	20	30	25	25	25
FFT4-15.5K	25	25	30	25	25	25
FFT4-17K	27	27	30	30	30	25
FFT4-20K	30	30	35	35	35	30
FFT4-23K	33	35	40	40	40	35
FFT4-26K	36	40	40	40	40	35
FFT4-29K	39	40	45	45	45	40
FFT4-32K	42	45	45	45	45	40
FFT4-35K	45	45	45	45	45	40

HUM MODULATIONS

High Frequency Transients:

Hum modulation -73 dB for input voltage slew rates below 0.3V/ μ s

Low Frequency Hum:

Hum modulation -70 dB measured at 7 amps with a 60V-AC power supply

MODEL NO. FFT-8K	5-10 MHz	10-50 MHz	50-450 MHz	450-600 MHz	600-750 MHz	750-1000 MHz
FFT8-10TK	—	—	—	—	—	25
FFT8-14K	20	25	25	25	25	25
FFT8-17K	23	30	30	30	30	25
FFT8-20K	30	30	35	35	35	30
FFT8-23K	30	35	35	35	35	30
FFT8-26K	38	40	40	40	40	35
FFT8-29K	40	45	45	40	40	35
FFT8-32K	40	45	45	40	40	35
FFT8-35K	40	45	45	40	40	35

Return Loss: In/Out 5-30 MHz - 16 dB
30-600 MHz - 18 dB
600-1000 MHz - 16 dB

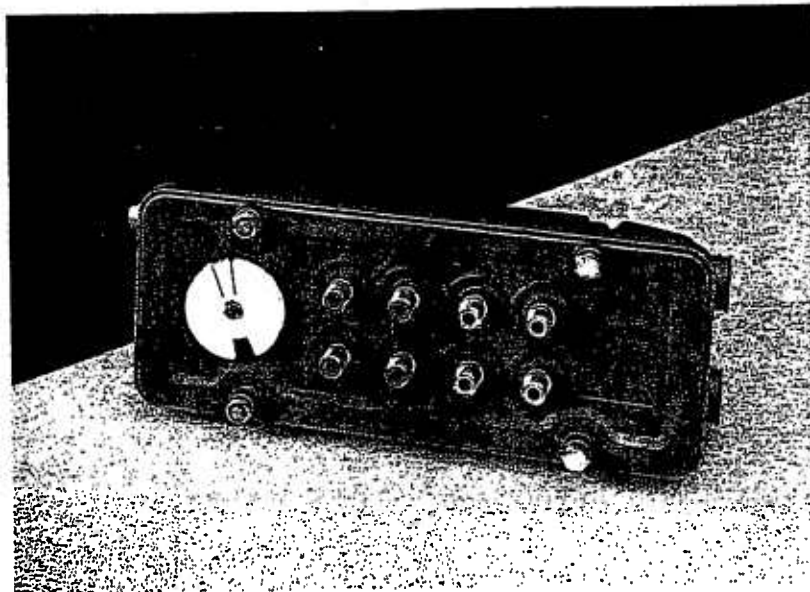
Current Passing Capacity: 7 Amps Continuous

Transmission Systems

Multimedia Stretch Taps



**Scientific
Atlanta**



22324

Networks delivering advanced applications and services have unique, dynamic demands. That's why Scientific-Atlanta developed its new 1 GHz Multimedia Stretch Tap, which incorporates the subscriber drop powering capability and other advanced features of our highly successful Multimedia Taps in an upgrade-friendly, nine-inch housing. Several flexibility-enhancing features have also been added, maximizing the cost-effectiveness of the tap solution.

During system upgrades, operators are challenged to quickly install new equipment while minimizing the impact on customers. Splicing taps is a time-consuming process complicated by a widened gap in the feeder cabling. Scientific-Atlanta's new Multimedia Stretch Tap features a nine-inch housing that flexibly fills this gap — without using costly or performance-reducing extension connectors — providing operators with the

fastest way to restore customer service and complete upgrade efforts.

The Multimedia Stretch Tap also provides an important level of network flexibility by enabling reversibility. As operators expand the fiber optic por-

tion of their broadband networks, the result is often a reversal of the feeder signal flow. By simply changing the orientation of the plug-in Directional Coupler Module, technicians can avoid time consuming and expensive resplicing of the cable.

FEATURES

- Patent-pending Connection-Beam AC/RF bypass switch, providing interruption-free service to downstream customers during faceplate removal
- Per-port power activation and protection, maximizing cost and customer service effectiveness
- Nine-inch housing, simplifying system upgrades
- Faceplate reversibility, eliminating costly resplicing
- Plug-in directional coupler, enabling field modification without costly resplicing
- Available in 2-, 4-, and 8-way versions
- Compatible with aerial or pedestal mounting
- Faceplate-confined circuitry simplifies maintenance efforts
- Available space for future enhancements

Multimedia Stretch Taps

The plug-in Directional Coupler Module further adds to the flexibility of the tap, and helps to control inventory expense. By removing and replacing the on-board device, operators are able to modify tap values — again without costly resplicing. A dial indicator on the Multimedia Stretch Tap faceplate is used to record the configured tap loss value.

Most importantly, Scientific-Atlanta's Multimedia Stretch Tap is designed for the future. Our engineers have maximized available space in the device to allow for adding future advanced features with operation-enhancing functionality.

SPECIFICATIONS

Dimensions

2-, 4-, 8-way 3.5 in. H x 9 in. W x 3.5 in. D
88.9 mm H x 228.6 mm W x 88.9 mm D

Mechanical

- AL360T housing with coating for superior environmental protection.
- Sealed and swaged extended F-ports for maximum resistance to moisture ingress.
- Tin-plated brass F-ports to ensure a corrosion-resistant drop interface.
- Versatile housing design permits aerial, pedestal, or MDU mounting schemes.
- Operating temperature from -40° C to +60° C.
- EMI shielding minimum 105 dB.
- Pressure tested at 10 psi for 60 seconds under water.

Electrical Specifications

Thru Continuous Current: 12 amps - 60/90 V AC
Current Limiting: 300 mA @ 60° C, per drop
Surge Resistance: 1 kV
Impedance: 75 ohm
Thru Hum Modulation: 70 dB average @ 10 Amps
65 dB average @ 12 Amps
Tap Port Hum Modulation: 65 dB average

Standards Compliance

Scientific-Atlanta Multimedia Stretch Taps meet or exceed the following industry standards:

Belcore

- TR - NWT- 1089 Level 1
- TA - NWT - 001503 Section 4.3

SCTE

- F-port interface specification IPS-SP-400
- Entry-port interface specification IPS-SP-402

Underwriters Laboratories

- Standard 1459

NEC

- Class 3 circuits

IEEE

- Category B1 C62.41-1991

IEC

- Standard 1000-4-5 (formerly 801-5/D)
- Standard 65

CENELEC

- Standards EN60065, EN50083-1

AC/RF Bypass Switch Performance

System Open Circuit Time	0 mS
Contact Resistance	10 mOhms max
Current and Voltage Carrying	12 A, 60/ 90 V AC
RF Frequency Range	5 to 1000 MHz
Operating Temperature	-40° C to +60° C

	5 MHz	550 MHz	750 MHz	1 GHz
Short Circuited Insertion Loss (dB)	0.1 max 0.05 typ	0.4 max 0.3 typ	0.5 max 0.4 typ	0.7 max 0.6 typ
Short Circuited Return Loss (dB)	40 max 53 typ	16 max 18 typ	16 max 17 typ	14 max 15 typ

Multimedia Stretch Tap

Two-way – Revision A

	Frequency	Tap Value								
		4	8	11	14	17	20	23	26	29
Insertion Loss (dB, max)	5	—	3.6	2.2	1.5	1.1	1.1	1.1	1.1	1.1
	10	—	3.6	2.2	1.5	1.1	1.1	1.1	1.1	1.1
	50	—	3.5	1.7	1.2	0.9	0.8	0.8	0.8	0.8
	300	—	4.1	2.2	1.8	1.5	1.2	1.2	1.2	1.2
	450	—	4.3	2.7	1.9	1.6	1.4	1.4	1.4	1.4
	550	—	4.1	2.8	2.0	1.8	1.4	1.4	1.4	1.4
	750	—	4.4	3.0	2.1	1.8	1.6	1.4	1.4	1.4
	860	—	4.6	3.2	2.1	1.9	1.6	1.4	1.4	1.4
	1000	—	4.8	3.4	2.2	2.0	1.6	1.5	1.5	1.5
Tap Loss (±1 dB, max)	5	4.0	8.0	11.0	13.5	17.0	19.0	22.5	25.5	29.0
	10	4.0	8.0	11.0	13.5	17.0	19.0	22.5	25.0	29.0
	50	4.0	8.0	11.0	13.5	17.0	19.0	22.5	25.0	29.0
	300	4.0	8.0	11.0	13.5	17.0	19.0	22.5	25.0	29.0
	450	4.0	8.0	11.0	13.5	17.0	19.0	22.5	25.0	29.0
	550	4.0	8.0	11.0	13.5	17.0	19.0	22.5	25.0	29.0
	750	4.0	8.0	11.0	13.5	17.0	19.0	22.5	25.0	29.0
	860	4.0	8.0	11.0	13.5	17.0	19.0	22.5	25.0	29.0
	1000	4.5	8.0	11.0	13.5	17.0	19.0	22.5	25.0	29.0
Tap-to Tap Isolation (dB, min)	5	18	18	18	18	18	18	18	18	18
	750	18	18	18	18	18	18	18	18	18
	1000	18	18	18	18	18	18	18	18	18
Out-to-Tap Isolation (dB, min)	5	—	20	20	20	25	25	35	35	35
	750	—	20	20	25	25	25	35	35	35
	1000	—	20	20	25	25	25	35	35	35
Return Loss (dB, min)	5	16	15	13	13	15	15	15	15	15
	10	16	16	16	16	16	16	16	16	16
	50	16	16	16	16	16	16	16	16	16
	750	14	16	16	16	16	16	16	16	16
	860	16	16	16	16	16	16	16	16	16
	1000	16	16	16	16	16	16	16	16	16

The Multimedia Stretch Tap consists of a housing and faceplate assemblies and a plug-in directional coupler module. Part numbers are listed below for complete taps as well as for the major components.

Product	Model Number	Part Number	Description
Complete Tap Assembly	SAT ST2-4	562732	Multimedia Stretch Tap 2-Way @ 4 dB
	SAT ST2-8	562733	Multimedia Stretch Tap 2-Way @ 8 dB
	SAT ST2-11	562734	Multimedia Stretch Tap 2-Way @ 11 dB
	SAT ST2-14	562735	Multimedia Stretch Tap 2-Way @ 14 dB
	SAT ST2-17	562736	Multimedia Stretch Tap 2-Way @ 17 dB
	SAT ST2-20	562737	Multimedia Stretch Tap 2-Way @ 20 dB
	SAT ST2-23	562738	Multimedia Stretch Tap 2-Way @ 23 dB
	SAT ST2-26	562739	Multimedia Stretch Tap 2-Way @ 26 dB
	SAT ST2-29	562740	Multimedia Stretch Tap 2-Way @ 29 dB
	SAT STF-2	543484	Multimedia Stretch Tap 2-Way Faceplate Assembly
Faceplate Assembly	SAT STM2-0	543487	Multimedia Stretch Tap Module @ 0 dB
	SAT STM2-4	562108	Multimedia Stretch Tap Module @ 4 dB
	SAT STM2-7	562109	Multimedia Stretch Tap Module @ 7 dB
	SAT STM2-10	562110	Multimedia Stretch Tap Module @ 10 dB
	SAT STM2-13	562111	Multimedia Stretch Tap Module @ 13 dB
	SAT STM2-16	562112	Multimedia Stretch Tap Module @ 16 dB
	SAT STM2-19	562113	Multimedia Stretch Tap Module @ 19 dB
	SAT STM2-22	562114	Multimedia Stretch Tap Module @ 22 dB
	SAT STM2-25	562115	Multimedia Stretch Tap Module @ 25 dB

Multimedia Stretch Tap

Four-way – Revision A

	Frequency	Tap Value							
		8	11	14	17	20	23	26	29
Insertion Loss (dB, max)	5	—	3.7	2.2	1.5	1.2	1.1	1.1	1.1
	10	—	3.7	2.2	1.5	1.2	1.1	1.1	1.1
	50	—	3.5	1.7	1.2	0.9	0.8	0.8	0.8
	300	—	4.1	2.5	1.8	1.5	1.4	1.2	1.2
	450	—	4.2	2.7	1.8	1.6	1.5	1.3	1.3
	550	—	4.3	2.8	1.9	1.8	1.5	1.3	1.3
	750	—	4.5	3.2	2.0	1.7	1.5	1.4	1.4
	860	—	4.6	3.3	2.1	1.7	1.5	1.4	1.4
	1000	—	4.7	3.4	2.2	1.8	1.6	1.5	1.5
Tap Loss (±1 dB, max)	5	8.0	11.0	15.0	17.0	20.0	22.5	25.5	28.5
	10	8.0	11.0	15.0	17.0	20.0	22.5	25.5	28.5
	50	8.0	11.0	15.0	17.0	20.0	22.5	25.5	28.5
	300	8.0	11.0	15.0	17.0	20.0	22.5	25.5	28.5
	450	8.0	11.0	15.0	17.0	20.0	22.5	25.5	28.5
	550	8.0	11.5	15.0	17.0	20.0	22.5	25.5	28.5
	750	8.0	11.5	15.0	17.0	20.0	22.5	25.5	28.5
	860	8.0	11.5	15.0	17.0	20.0	22.5	25.5	28.5
	1000	8.0	12.0	15.0	17.0	20.0	22.5	25.5	28.5
Tap-to Tap Isolation (dB, min)	5	18	18	18	18	18	18	18	18
	750	18	18	18	18	18	18	18	18
	1000	18	18	18	18	18	18	18	18
Out-to-Tap Isolation (dB, min)	5	—	25	25	25	25	35	35	35
	750	—	25	25	25	25	35	35	35
	1000	—	25	25	25	25	35	35	35
Return Loss (dB, min)	5	16	14	13	15	15	15	15	15
	10	14	16	15	16	16	16	16	16
	50	16	16	16	16	16	16	16	16
	750	15	16	16	16	16	16	16	16
	860	16	16	16	16	16	16	16	16
	1000	16	16	16	16	15	15	16	15

The Multimedia Stretch Tap consists of a housing and faceplate assemblies and a plug-in directional coupler module. Part numbers are listed below for complete taps as well as for the major components.

Product	Model Number	Part Number	Description
Complete Tap Assembly	SAT ST4-8	562742	Multimedia Stretch Tap 4-Way @ 8 dB
	SAT ST4-11	562743	Multimedia Stretch Tap 4-Way @ 11 dB
	SAT ST4-14	562744	Multimedia Stretch Tap 4-Way @ 14 dB
	SAT ST4-17	562745	Multimedia Stretch Tap 4-Way @ 17 dB
	SAT ST4-20	562746	Multimedia Stretch Tap 4-Way @ 20 dB
	SAT ST4-23	562747	Multimedia Stretch Tap 4-Way @ 23 dB
	SAT ST4-26	562748	Multimedia Stretch Tap 4-Way @ 26 dB
	SAT ST4-29	562749	Multimedia Stretch Tap 4-Way @ 29 dB
Faceplate Assembly	SAT STF-4	543485	Multimedia Stretch Tap 4-Way Faceplate Assembly
Directional Coupler Module	SAT STM-0	543487	Multimedia Stretch Tap Module @ 0 dB
	SAT STM-4	562108	Multimedia Stretch Tap Module @ 4 dB
	SAT STM-7	562109	Multimedia Stretch Tap Module @ 7 dB
	SAT STM-10	562110	Multimedia Stretch Tap Module @ 10 dB
	SAT STM-13	562111	Multimedia Stretch Tap Module @ 13 dB
	SAT STM-16	562112	Multimedia Stretch Tap Module @ 16 dB
	SAT STM-19	562113	Multimedia Stretch Tap Module @ 19 dB
	SAT STM-22	562114	Multimedia Stretch Tap Module @ 22 dB
	SAT STM-25	562115	Multimedia Stretch Tap Module @ 25 dB

Multimedia Stretch Tap Eight-way – Revision A

	Frequency	Tap Value						
		11	14	17	20	23	26	29
Insertion Loss (dB, max)	5	—	3.7	2.2	1.5	1.2	1.1	1.1
	10	—	3.7	2.2	1.5	1.2	1.1	1.1
	50	—	3.5	1.7	1.2	0.9	0.8	0.8
	300	—	4.1	2.9	1.8	1.5	1.4	1.3
	450	—	4.2	3.0	1.8	1.6	1.4	1.3
	550	—	4.3	3.0	1.9	1.6	1.5	1.3
	750	—	4.4	3.0	2.0	1.7	1.5	1.4
	860	—	4.5	3.0	2.1	1.8	1.5	1.5
	1000	—	4.7	3.0	2.2	1.9	1.6	1.6
Tap Loss (±1 dB, max)	5	11.0	14.0	18.0	20.0	23.0	26.0	29.0
	10	11.0	14.5	18.0	20.0	23.0	26.0	29.0
	50	11.0	14.5	18.0	20.0	23.0	26.0	29.0
	300	11.0	14.5	18.0	20.0	23.0	26.0	29.0
	450	11.0	14.5	18.0	20.0	23.0	26.0	29.0
	550	11.0	15.0	18.0	20.0	23.0	26.0	29.0
	750	11.0	15.5	18.0	20.0	23.0	26.0	29.0
	860	11.5	15.5	18.0	20.0	23.0	26.0	29.0
	1000	12.0	16.0	18.0	20.0	23.0	26.0	29.0
Tap-to Tap Isolation (dB, min)	5	18	18	18	18	18	18	18
	750	18	18	18	18	18	18	18
	1000	18	18	18	18	18	18	18
Out-to-Tap Isolation (dB, min)	5	—	25	25	25	30	35	35
	750	—	25	25	25	30	35	35
	1000	—	25	25	25	30	35	35
Return Loss (dB, min)	5	15	15	13	14	15	14	14
	10	14	16	16	16	16	16	16
	50	16	16	16	16	16	16	16
	750	16	16	16	16	16	16	16
	860	16	16	16	16	16	16	16
	1000	16	16	16	16	16	16	16

The Multimedia Stretch Tap consists of a housing and faceplate assemblies and a plug-in directional coupler module. Part numbers are listed below for complete taps as well as for the major components.

Product	Model Number	Part Number	Description
Complete Tap Assembly	SAT ST8-11	562751	Multimedia Stretch Tap 8-Way @ 11 dB
	SAT ST8-14	562752	Multimedia Stretch Tap 8-Way @ 14 dB
	SAT ST8-17	562753	Multimedia Stretch Tap 8-Way @ 17 dB
	SAT ST8-20	562754	Multimedia Stretch Tap 8-Way @ 20 dB
	SAT ST8-23	562755	Multimedia Stretch Tap 8-Way @ 23 dB
	SAT ST8-26	562756	Multimedia Stretch Tap 8-Way @ 26 dB
	SAT ST8-29	562757	Multimedia Stretch Tap 8-Way @ 29 dB
Faceplate Assembly	SAT STF-8	543486	Multimedia Stretch Tap 8-Way Faceplate Assembly
Directional Coupler Module	SAT STM-0	543487	Multimedia Stretch Tap Module @ 0 dB
	SAT STM-4	562108	Multimedia Stretch Tap Module @ 4 dB
	SAT STM-7	562109	Multimedia Stretch Tap Module @ 7 dB
	SAT STM-10	562110	Multimedia Stretch Tap Module @ 10 dB
	SAT STM-13	562111	Multimedia Stretch Tap Module @ 13 dB
	SAT STM-16	562112	Multimedia Stretch Tap Module @ 16 dB
	SAT STM-19	562113	Multimedia Stretch Tap Module @ 19 dB
	SAT STM-22	562114	Multimedia Stretch Tap Module @ 22 dB
	SAT STM-25	562115	Multimedia Stretch Tap Module @ 25 dB

TIME WARNER CABLE SYRACUSE DIVISION

Converter and Trap Specifications

System Name: _____ Time Warner - Syracuse

Date: _____ February 1998

All testing done at the end of a 100ft drop cable (RG-6) without a converter. Converter specification sheets are attached for "After Converter" numbers, if so desired.

Instructions:

Attach a copy of the manufacturer's specifications covering all converters used in the system. The specification sheet must show the converters carrier- to- noise (C/N) and distortion figures.

Attach a copy of the manufacturer's specifications covering all traps that are in use in the cable plant. This should include B-basic traps, individual channel traps, high pass filters, etc.

Service Manual

CATV Converter

With Detachable Infrared Remote Control

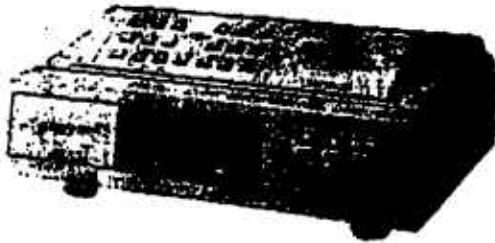
TZ-PC140 series

TZ-PC145 series

Without Detachable Infrared Remote Control

TZ-PC141 series

TZ-PC146 series



The Service Technician is required to read and follow the "Safety Precautions" and "Important Safety Notice" in this Service Manual.

SPECIFICATIONS

Input Bandwidth	: 54MHz - 450MHz or 550MHz
Input Channel	: 68 or 85 Channels (Standard & IRC) 66 or 83 Channels (HRC)
Channel Assignment	: Standard, IRC and HRC
Input Level	: -6 dBmV to +15dBmV
Input/Output Impedance	: 75 Ohms (F receptacle)
Input Return Loss	: TZ-PC140/PC141 : 5dB (Min.), 7dB (Typ.) TZ-PC145/PC146 : 4dB (Min.), 7dB (Typ.)
Output Return Loss	: 18 dB
Output Channel	: Ch 2, Ch 3 and Ch 4
Noise Figure	: TZ-PC140/PC141 : Less than 15 dB (Min.), Less than 13 dB (Typ.) TZ-PC145/PC146 : Less than 16 dB (Min.), Less than 14 dB (Typ.)
Cross Modulation	: -53dB (Min.), -57dB (Typ.) at +15 dBmV : 65 or 82 Channel load
Inter Modulation	: -53dB (Min.), -55dB (Typ.) at +15 dBmV : 65 or 82 Channel load
Auxiliary AC Outlet Capability	: 400W (Max.)
Channel Memory Capacity	: 68 or 85 (Max.)
Surge Protection	: 5 KV (between power line and cable ground)
Static Discharge Protection	: 25 KV
Power Source	: 105V - 130V/60 Hz
Dimensions (W x H x D)	: 8-5/64 x 2-41/64 x 5-5/16 Inch (205 x 67 x 135 mm)
Net Weight	: 1.0 kg (2.25 lbs)

Specifications are subject to change without notice.

Panasonic.

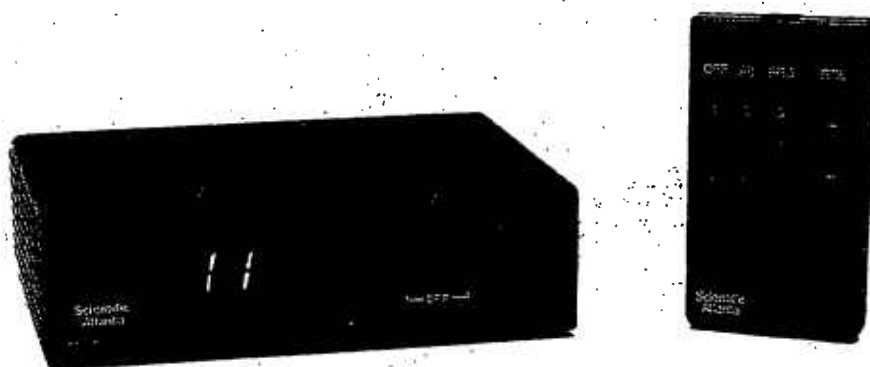
Panasonic Industrial Company
One Panasonic Way
Secaucus, New Jersey 07094

Panasonic Model, Inc.
91 238 South St. 2nd Floor
P. O. Box 774
Hawthorne, New Jersey 07042

Panasonic Sales Company,
Division of Matsushita Electric
of America, Inc.
400 85 3rd Avenue, Rm 407
Victoria Industrial Park
Parsippany, New Jersey 07054

Subscriber Systems

Model 8511 Set-Top Terminal



19961

Compact and simple to operate, the Model 8511 Set-Top Terminal offers Scientific-Atlanta quality and reliability at an economical price.

DESCRIPTION

Popular for its compact size, the Model 8511 Set-Top Terminal has two large keys on the front that allow subscribers to quickly and easily change channels and turn the unit on or off. With the two-speed channel increment/decrement feature, subscribers can alter channel changing speed by pressing either key for more than two seconds.

Reliable, High-Quality Technology

Subscribers will benefit from the set-top terminal's ultra-reliable, high-quality design. The infrared remote control provides convenient direct channel entry and favorite channel recall. Quality Automatic Frequency

Control (AFC) ensures improved tuning stability and frequency accuracy. The product is covered by Scientific-Atlanta's three-year limited warranty and 99% reliability guarantee.

FEATURES

- 550 MHz bandwidth
- AFC technology for tuning stability
- Infrared remote control capability with favorite channel memory (remote optional)
- Compact size takes up less room on TV set
- Two keys control channel changes and on/off settings
- Two-speed channel increment/decrement
- Switched AC outlet
- EIA channel lineup available (switch selectable between Standard and HRC)
- Meets FCC Part 15H Requirements

Model 8511 Set-Top Terminal

SPECIFICATIONS

Environmental

Temperature

0°C to 45°C

Relative humidity

5% to 95%

Electrical

Input bandwidth

54 MHz to 550 MHz

Number of channels

82

Output channel

3 or 4, set at factory

Channel frequency response

+2 dB

Gain

0 dB, min

5 dB, typical

Output level

15.5 dBmV, max

Noise figure

12 dB, typical

Return loss

Input

7 dB, min on tuned channel (54 MHz to 440 MHz)

5 dB, min on tuned channel (440 MHz to 550 MHz)

Output

11 dB, min

Isolation input/output

60 dB

Spurious response

Input

-37 dBmV (up to 550 MHz)

Output

-57 dBc (in channel)

Frequency accuracy

+100 kHz

AC input range

115 V AC +10%

Power consumption

7 W, typical

Surge protection

AC: Spark gaps and transformer isolation

RF: Inductor shunt to ground

Distortion at 15 dBmV; 80 channel load

Flat input

Second order: -57 dB

Cross Modulator: -57 dB

Composite triple beat: -57 dB

Input level

-7 dBmV to +20 dBmV

Mechanical

Dimensions

7 in. L x 4.75 in. W x 2 in. H

Weight

1.75 lbs

Keyboard type

Two keys (Increment and decrement, front access)

Display type

2-Digit LED, 0.57 in. H x 0.40 in. W (per digit)

ORDER INFORMATION

- Model 8511-300 Set-Top Terminal with channel 3 output
- Model 8511-400 Set-Top Terminal with channel 4 output
- Model 8550-175 Remote Control

Specifications and product availability subject to change without notice.



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Settop Converters

Specifications

	DQN7P-*
	(* = Output channel 2/3)
Input Frequency	54-550 MHz
IRC/IRC Frequency Assignments	Programmable 82 channels
Input Video Level	0dBmV to +15dBmV
Input Sound Level	-17dBmV to +5dBmV
Noise Figure	10dB maximum (Carrier-to-Noise Ratio: 52dB at 3dBmV input level)
Fine Tuning	Automatic
AFT Capture Range	±300 KHz @ input level of 0dBmV ±1.3 KHz @ specified temperature
Output Frequency Stability	±100 KHz @ specified temperature and AC voltage range
Return Loss:	
Input	6 dB min.
Output	10 dB min.
Spurious:	
Input	-10dBmV max.
Output	-57dBmV max., in-band
Cross Modulation Distortion	-56dB (82 channels, each @ 15dBmV input level)
Second Order Distortion	-62dB (@ +15 dBmV input level)
Composite Triple Beat Distortion	-65dB (82 channels, each @ +15dBmV)
Converter Input Beats	
(with All Input Signals)	-25dBc (82 channels, each @ +15dBmV)
Output Level	+5dBmV to +15 max.
Gain	0dB min.: 8 dB max.
Upper Adjacent Video Trap	-12dB nominal: -8dB min.
Adjacent Video Trap	-12dB nominal: -8dB min.
Frequency Response	1.5dB Peak-to-Peak for 4.5MHz video-to-audio carrier
Isolation (Input/Output)	70dB min.
Parental Control by Channel	100% user-controlled offering channel-by-channel selection with user-supplied/implemented "lock-out" feature
Mechanical Security	Std.: Security Screws; uni-chassis construction
Operating Temperature Range	59°F to 104°F (15°C to 40°C)
Operating Humidity Range	5% to 95% (non-condensing)
AC Voltage	105 VAC to 125 VAC, 60Hz
Power Dissipation	14 watts at 125 VAC
Size	8.0" x 7.0" x 2.5" (LxWxH) (203.3mm x 177.3mm x 63.5mm)
Weight	3.9lbs.

MRC-Remote Control

Transmission Range	
Up to 25 feet in direct line from the receiver/converter or up to	
22 feet at an angle of up to ±20 degrees from receiver center line	
Power Requirements	Two 1.5V AAA batteries
	3 ounces (with battery)
Batteries	Included as standard

BUDDY-Remote Control

Transmission Range

Up to 30 feet in a direct line from the receiver/converter at
0 degrees and 22 feet at an angle of up to ± 20 degrees axial.

Power Requirements 3 Volts

Weight 4 ounces (with battery)

Batteries Included as standard, two 1.5 volts AAA

Specifications

4L	DPV72*#P (* = 1-way/2-way; # = output channel 2/3 or 3/4)
Input Frequency	54-550 MHz (excluding data carrier frequency)
HRC/IRC Frequency Assignments	Downloaded
Number of Channels	82 channels per cable; one or two cables
Dual A/B Cable Switching	Optional A/B Switch (field upgradable)
A/B Cable Indicator	LED in front display
Input Video Level	0 dBmV to +15 dBmV
Input Sound Level	-17 dBmV to +2 dBmV
Data Carrier Frequency Bandwidth Level	FSK Modulated FM Carrier 106.5 MHz ±200 KHz standard FM -15 dBmV min.
Video S/N	49 dB @ 0 dBmV input
Tuning	Automatic
AFT Capture Range	±300 KHz @ input level of 0 dBmV
Output Frequency Stability	±150 KHz across input dynamic range
Return Loss: Input Output	6 dB min. 8 dB min.
Spurious: Output	-57 dBc max., in-band
Cross Modulation Distortion	-56 dB (82 channels, each @ 15 dBmV input level)
Composite Second Order Distortion	-60 dB (82 channels, each @ +15 dBmV)
Second Order Distortion	-60 dB (@ +15 dBmV input level)
Converted input beats (with all input signals)	-25 dB (82 channels, each @ 15 dBmV)
Composite Triple Beat Distortion	-65 dB (82 channels, each @ 15 dBmV)
Output Level	10 dBmV - 15 dBmV
Isolation (Input/Output)	70 dB min.
Differential Phase	10 degrees

Differential Gain	10%
Scrambling Method	Gated Sync Suppression or Dynamic Gated Sync Suppression; Hamlin Compatibility. (Unauthorized viewing is switched to barker channel) Option: Oak Compatibility (A, B)
Electronic Parental Control by Channel	100% user-controlled offering channel-by-channel selection
Mechanical Security	Std.: security screws; security pin; uni-chassis construction
Downloadable Parameters	Output Channel Initialization Command Channel Map System Site Code Time Out Period Terminal Configuration Authorization Information Barker Channel(s) Consumer Feature Enable/Disable
Toy System Compatibility	Upgrade in field by addition of STARFONE® or STARVUE® internal module
Operating Temperature Range	59°F to 104°F (15°C to 40°C)
Operating Humidity Range	5% to 95% (non-condensing)
AC Voltage	105 VAC to 125 VAC, 60 Hz
Power Dissipation	16 Watts at 120 VAC
Surge Protection	Surge protection provided on power supply and RF ports
Size	10.25" x 8.25" x 2.7" (LxWxH) (260.4 mm x 209.6 mm x 68.6 mm)
Weight	5.5 lbs

DFV7200P Handheld Remote Control

Transmission Range	Up to 25 feet in a direct line from the receiver/converter or up to 22 feet at an angle of ±20 degrees receiver centerline
Power Requirements	Two 1.5 Volt AAA Batteries
Weight	3 Ounces (with Battery)
Batteries	Included as standard

NOTE: Specifications subject to change without notice.

Specifications

MODEL	CFT 20*# (* = 1 way/2 way; # = output channel 3/4)
Input Frequency	54-550 MHz (excluding data carrier frequency)
HRC/IRC Frequency Assignments	Downloaded
Number of Channels	82 channels per cable; one or two cables
Dual A/B Cable Switching	Optional A/B switch (field upgradable)
A/B Cable Indicator	LED in front display
Input Video Level	0 dBmV to +15 dBmV
Input Sound Level	-17 dBmV to +2 dBmV
Data Carrier Frequency Bandwidth Level	FSK Modulated FM Carrier 106.5 or 108.5 MHz ±200 KHz standard FM -15 dBmV
S/N	49 dB @ 0 dBmV input level
Fine Tuning	Automatic
AFT Capture Range	±300 KHz @ input level of 0 dBmV
Output Frequency Accuracy	±150 KHz
Return Loss: Input Output	6 dB min. 8 dB min.
Spurious: Output	-57 dBc max., in band
Cross Modulation Distortion	-56 dB (82 channels, each @ +15 dBmV)
Composite Second Order Distortion	-60 dB (82 channels, each @ +15 dBmV)
Second Order Distortion	-60 dB (@ +15 dBmV input level)
Composite Triple Beat Distortion	-65 dB (82 channels, each @ +15 dBmV)
Converted Input Beats (With all Input Signals)	-25 dB (82 channels, each @ +15 dBmV)
Form Modulation Distortion	3 IRE
Output Level	10 to 15 dBmV
Isolation (Input/Output)	70 dB min.
Differential Gain	10% (max.)

Differential Phase	10 degrees (max.).
Scrambling Method	Gated Sync Suppression or Dynamic Gated Sync Suppression, Video Inversion, Audio Privacy, Hamlin Compatibility
Screen Display	Character Size: 12 x 18 pixels Screen Size: 12 rows x 24 columns Message/Barker Capacity: 14 pages Channel Descriptors: 4 characters, maximum
Parental Control by Channel	100% user-controlled offering channel-by-channel selections
Mechanical Security	Std.: security screws; security pin; uni-chassis construction.
Downloadable Parameters	Output Channel Initialization Command Terminal Logical Address System Site Code Time Out Period Terminal Configuration Authorization Information Barker Channel(s) Consumer Feature Enable/Disable Subscriber Messaging Channel Descriptors Channel Cross Reference Map Decryption Key
Way System Compatibility	Upgrade in field by addition of STARVUE® OR STARFONE® internal module
Operating Temperature Range	59°F to 104°F (15°C to 40°C)
Operating Humidity Range	5% to 95% (non-condensing)
AC Voltage	105 VAC to 125 VAC, 60 Hz
Power Dissipation	16 Watts at 120 VAC
Surge Protection	Surge protection provided on power supply and RF ports
Size	10.25" x 8.25" x 2.7" (LxWxH) (260.4 mm x 209.6 mm x 68.6 mm)
Weight	5.5 lbs

Jerrold Impulse Model CFT-2000
Handheld Remote Controls

TC-OSD
Mission Range Up to 25 feet in a direct line from the
receiver/converter or up to 22 feet at an
angle of ±20 degrees from receiver centerline

TVRC-OSD
Transmission Range Up to 25 feet in a direct line from the
receiver/converter or up to 22 feet at an angle

of ± 20 degrees from receiver centerline

IN VIEW

Transmission Range

Up to 30 feet in a direct line from the receiver/converter at 0 degrees and 22 feet at any angle of up to ± 20 degrees axial

Power Requirements

Two 1.5 Volt AAA batteries

Weight

3 ounces (with battery)

Batteries

Included as standard

Power Requirements

Four 1.5 Volt AAA batteries

Weight

10 ounces (with battery)

Batteries

Included as standard

Power Requirements

3 Volts

Weight

4 Ounces (with battery)

Batteries

Included as standard, Two 1.5 Volt AAA

NOTE: Specifications subject to change without notice.

Appendix A

Technical Specifications

CFT2200 Set-Top Specifications

Input Frequency	54-860 MHz (excluding data carrier frequency)
HRC/IRC Frequency Assignments	Downloadable
Number of Channels	136 channels per cable; one or two cables
Dual A/B Cable Switching	Optional A/B (field upgradeable)
A/B Cable Switching	LED in front display
Input Video Level	0 dBmV to +15 dBmV
Input Sound Level	-17 dBmV to +2 dBmV
Data Carrier	FSK modulated FM carrier (see the product catalog for additional data carriers)
Frequency	106.5, 108.5 or 97.5 MHz
Bandwidth	± 200 kHz standard FM
Level	-15 dBmV
Video S/N	49 dB @ 0 dBmV input level
Output Frequency Accuracy	± 150 kHz
Return Loss	
Input	6 dB minimum
Output	8 dB minimum
Spurious Output	-57 dBc maximum, in band
Cross Modulation Distortion	-56 dB (136 channels, each @ +15 dBmV)
Composite Second Order Distortion	-57 dB (136 channels, each @ +15 dBmV)
Second Order Distortion	-60 dB (136 channels, each @ +15 dBmV)
Composite Triple Beat Distortion	-57 dB (136 channels, each @ +15 dBmV)
Converter Input Beats (with all input signals)	-25 dB (136 channels, each @ +15 dBmV)
Hum Modulation Distortion	3 IRE
Output Level	-10 to 15 dBmV
Isolation (Input/output)	70 dB minimum
Differential Phase	10 degrees (maximum)
Scrambling Method	Gated sync suppression or dynamic gated sync suppression, video inversion, audio privacy, Hamlin compatibility

On Screen Display**Character Size**

12 x 8 (in 16 x 32) pixels

Screen Size

16 rows x 32 columns

Message/Barker Capacity

Up to 40 pages (configuration dependent)

Channel Descriptors

5 character, maximum

Mechanical Security

Standard: security screws; security pin; uni-chassis construction

Two-way Systems Compatibility

Upgrade in the field by addition of STARVUE or STARFONE

Operating Environment Range**Temperature**

15 to + 40 degrees C (59 to + 104 degrees F)

Humidity

5 to 95% (non-condensing)

AC Voltage

105 Vac to 125 Vac, 60 Hz

Power Dissipation

19 watts at 115 VAC

Surge Protection

Provided on power supply and RF ports

Size

13.0 x 8.53 x 2.875 inches

Weight

7.0 pounds

ESN* Single Channel Negative Traps

Typical Response

Model	Channel		Notch Depth	L.A.S.	Upper Video	High Frequency Loss
ESN-A-2*	A-2	98	-75 dB	-3.2 dB	-1.0 dB	-1.5 dB @ 860 MHz
ESN-A-1	A-1	99	-75 dB	-3.5 dB	-1.0 dB	-1.5 dB @ 860 MHz
ESN-A	A	14	-75 dB	-3.7 dB	-1.0 dB	-1.5 dB @ 860 MHz
ESN-B	B	15	-75 dB	-4.0 dB	-1.0 dB	-1.5 dB @ 860 MHz
ESN-C	C	16	-75 dB	-4.3 dB	-1.0 dB	-1.5 dB @ 860 MHz
ESN-D	D	17	-75 dB	-4.6 dB	-1.0 dB	-1.5 dB @ 860 MHz
ESN-E	E	18	-75 dB	-4.8 dB	-1.0 dB	-1.5 dB @ 860 MHz
ESN-F	F	19	-75 dB	-5.1 dB	-1.0 dB	-1.5 dB @ 860 MHz
ESN-G	G	20	-75 dB	-5.4 dB	-1.0 dB	-1.5 dB @ 860 MHz
ESN-H	H	21	-75 dB	-5.6 dB	-1.2 dB	-1.5 dB @ 860 MHz
ESN-I	I	22	-75 dB	-5.9 dB	-1.2 dB	-1.5 dB @ 860 MHz
ESN-7	7	7	-75 dB	-6.1 dB	-1.2 dB	-1.5 dB @ 860 MHz
ESN-8	8	8	-75 dB	-6.3 dB	-1.2 dB	-1.5 dB @ 860 MHz
ESN-9	9	9	-75 dB	-6.5 dB	-1.2 dB	-1.5 dB @ 860 MHz
ESN-10	10	10	-75 dB	-6.6 dB	-1.2 dB	-1.5 dB @ 860 MHz
ESN-11	11	11	-75 dB	-6.8 dB	-1.2 dB	-1.5 dB @ 860 MHz
ESN-12	12	12	-75 dB	-7.0 dB	-1.2 dB	-1.5 dB @ 860 MHz
ESN-13	13	13	-75 dB	-7.2 dB	-1.2 dB	-1.5 dB @ 860 MHz
ESN-J	J	23	-70 dB	-7.4 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-K	K	24	-70 dB	-7.6 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-L	L	25	-70 dB	-7.8 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-M	M	26	-70 dB	-8.1 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-N	N	27	-70 dB	-8.2 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-O	O	28	-70 dB	-8.4 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-P	P	29	-70 dB	-8.7 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-Q	Q	30	-70 dB	-9.0 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-R	R	31	-70 dB	-9.3 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-S	S	32	-70 dB	-9.6 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-T	T	33	-70 dB	-9.9 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-U	U	34	-70 dB	-10.1 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-V	V	35	-70 dB	-10.3 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-W	W	36	-70 dB	-10.5 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-AA	AA	37	-70 dB	-10.6 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-BB	BB	38	-70 dB	-10.8 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-CC	CC	39	-70 dB	-11.0 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-DD	DD	40	-70 dB	-11.2 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-EE	EE	41	-70 dB	-11.3 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-FF	FF	42	-70 dB	-11.4 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-GG	GG	43	-70 dB	-11.5 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-HH	HH	44	-70 dB	-11.7 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-II	II	45	-70 dB	-12.0 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-JJ	JJ	46	-70 dB	-12.3 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-KK	KK	47	-70 dB	-12.6 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-LL	LL	48	-70 dB	-12.9 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-MM	MM	49	-70 dB	-13.2 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-NN	NN	50	-70 dB	-13.5 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-OO	OO	51	-70 dB	-13.8 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-PP	PP	52	-70 dB	-14.1 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-QQ	QQ	53	-70 dB	-14.3 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-RR	RR	54	-70 dB	-14.5 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-SS	SS	55	-70 dB	-14.8 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-TT	TT	56	-70 dB	-14.9 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-UU	UU	57	-70 dB	-15.1 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-VV	VV	58	-70 dB	-15.3 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-WW	WW	59	-70 dB	-15.5 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-XX	XX	60	-70 dB	-15.7 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-YY	YY	61	-70 dB	-15.9 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-ZZ	ZZ	62	-70 dB	-16.1 dB	-1.8 dB	-2.0 dB @ 1 GHz

*Patents #5148133, 5168251

Trap: Length is 3.56" / Diameter .825 / Specifications subject to change without notice



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ETN* MICRO-SERIES Single Channel Negative Traps

Typical Response

MODEL	CHANNEL		NOTCH-DEPTH	L.A.S.	UPPER VIDEO	HIGH FREQUENCY LOSS
ETN-2*	2	2	-75 dB	-2.0 dB	-0.5 dB	-2.5dB @ 800 MHz
ETN-3	3	3	-75 dB	-2.5 dB	-0.5 dB	-2.5dB @ 860 MHz
ETN-4	4	4	-75 dB	-2.5 dB	-0.5 dB	-2.5dB @ 860 MHz
ETN-5	5	5	-75 dB	-0.5 dB	-1.0 dB	-2.5dB @ 860 MHz
ETN-6	6	6	-75 dB	-3.5 dB	-1.0 dB	-2.5dB @ 860 MHz
ETN-A-2	A-2	98	-75 dB		-1.0 dB	-2.5dB @ 860 MHz
ETN-A-1	A-1	99	-75 dB	-5.5 dB	-1.0 dB	-2.5dB @ 860 MHz
ETN-A	A	14	-75 dB	-5.8 dB	-1.0 dB	-2.5dB @ 860 MHz
ETN-B	B	15	-75 dB	-5.8 dB	-1.0 dB	-2.5dB @ 860 MHz
ETN-C	C	16	-75 dB	-5.8 dB	-1.0 dB	-2.5dB @ 860 MHz
ETN-D	D	17	-75 dB	-6.0 dB	-1.0 dB	-2.5dB @ 860 MHz
ETN-E	E	18	-75 dB	-6.2 dB	-1.2 dB	-2.5dB @ 860 MHz
ETN-F	F	19	-75 dB	-6.5 dB	-1.2 dB	-2.5dB @ 860 MHz
ETN-G	G	20	-75 dB	-6.8 dB	-1.2 dB	-2.5dB @ 860 MHz
ETN-H	H	21	-75 dB	-7.0 dB	-1.2 dB	-2.5dB @ 860 MHz
ETN-I	I	22	-75 dB	-7.2 dB	-1.2 dB	-2.5dB @ 860 MHz
ETN-7	7	7	-75 dB	-7.5 dB	-1.2 dB	-2.5dB @ 860 MHz
ETN-8	8	8	-75 dB	-8.0 dB	-1.2 dB	-2.5dB @ 860 MHz
ETN-9	9	9	-75 dB	-8.2 dB	-1.5 dB	-2.5dB @ 860 MHz
ETN-10	10	10	-75 dB	-9.0 dB	-1.5 dB	-2.5dB @ 860 MHz
ETN-11	11	11	-75 dB	-9.5 dB	-1.5 dB	-2.5dB @ 860 MHz
ETN-12	12	12	-75 dB	-10.0 dB	-1.5 dB	-2.5dB @ 860 MHz
ETN-13	13	13	-75 dB	-10.5 dB	-1.5 dB	-2.5dB @ 860 MHz
ETN-J	J	23	-70 dB	-11.5 dB	-1.5 dB	-2.5dB @ 860 MHz
ETN-K	K	24	-70 dB	-12.5 dB	-1.5 dB	-2.5dB @ 860 MHz
ETN-L	L	25	-70 dB	-13.5 dB	-1.5 dB	-2.5dB @ 860 MHz
ETN-M	M	26	-70 dB	-14.5 dB	-1.5 dB	-2.5dB @ 860 MHz
ETN-N	N	27	-70 dB	-15.0 dB	-1.5 dB	-2.5dB @ 860 MHz
ETN-O	O	28	-70 dB	-15.5 dB	-2.0 dB	-2.5dB @ 860 MHz
ETN-P	P	29	-70 dB	-16.0 dB	-2.0 dB	-2.5dB @ 860 MHz
ETN-Q	Q	30	-70 dB	-16.5 dB	-2.0 dB	-2.5dB @ 860 MHz
ETN-R	R	31	-70 dB	-17.0 dB	-2.0 dB	-2.5dB @ 860 MHz
ETN-S	S	32	-70 dB	-17.5 dB	-2.0 dB	-2.5dB @ 860 MHz
ETN-T	T	33	-70 dB	-18.5 dB	-2.5 dB	-2.5dB @ 860 MHz
ETN-U	U	34	-70 dB	-20.0 dB	-2.5 dB	-2.5dB @ 860 MHz
ETN-V	V	35	-70 dB	-21.5 dB	-2.5 dB	-2.5dB @ 860 MHz
ETN-W**	W	36	-70 dB	-23.0 dB	-2.5 dB	-2.5dB @ 860 MHz

* Patents #4451803, 5202656

**Higher channels available upon request.

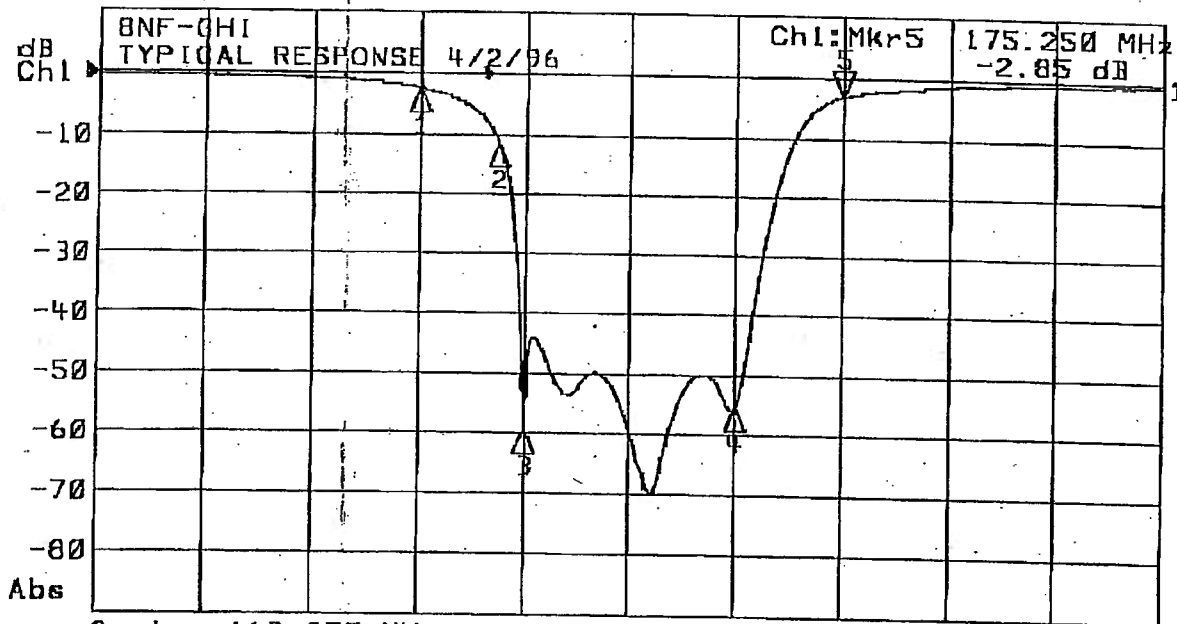


Corporate Headquarters: 4562 Waterhouse Road, Clay, NY 13041
 Telephone: (315) 622-3402 Toll Free 1 800-448-7474 Fax: (315) 622-3800
 Eagle Web Site: <http://www.eaglefilters.com>
 U.S.: Antec Corp. Telephone: 1-800-252-2288 Fax: (708) 439-8531

Canada: Antec Corp., Telephone: 1-800-665-1482 Fax: (905) 507-6496 Telonix, Telephone: 1-888-835-6649 Fax: 905-727-2991
 Distribution: Argentina, Belgium, Brazil, Canada, Chile, Denmark, Egypt, France, Germany, Israel, Italy, Korea, Mexico, Norway, Poland, Portugal, Romania, South Africa, Spain, Sweden, Taiwan, Turkey, UK, and Venezuela. Call for any additional information.



►1: Transmission /M Log Mag 10.0 dB/ Ref 0.00 dB C
 ►2: Off



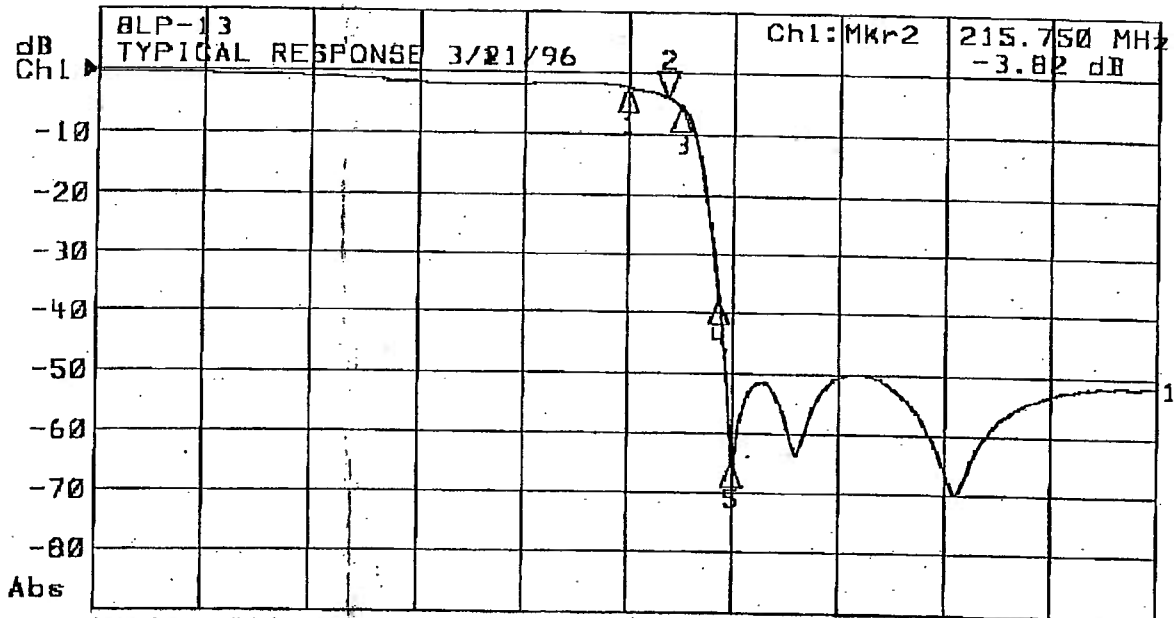
Center 163.250 MHz

Span 60.000 MHz

1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1: 151.25	-2.10		
2: 155.75	-11.11		
3: 157.25	-59.37		
4: 169.25	-55.32		
5: 175.25	-2.85		



►1: Transmission Log Mag 10.0 dB/ Ref 0.00 dB C
 ►2: Off



Center 211.300 MHz

Span 120.000 MHz

1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1: 211.25	-2.28		
2: 215.75	-3.82		
3: 217.25	-5.32		
4: 221.75	-37.81		
5: 223.25	-65.01		

PPC TRAP SPECIFICATION SHEET

Product Code: _____ Prep By: 718
 Model: MBR6-15B/22 Date: 4-15-77
 No. Poles: 6 Rev: _____
 Response: Actual ☒ Estimated ☐

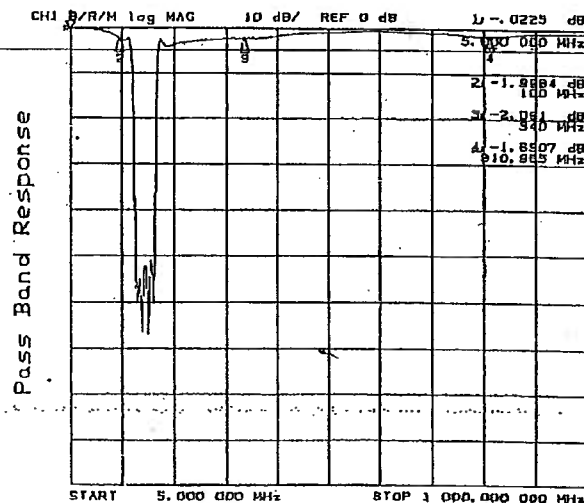
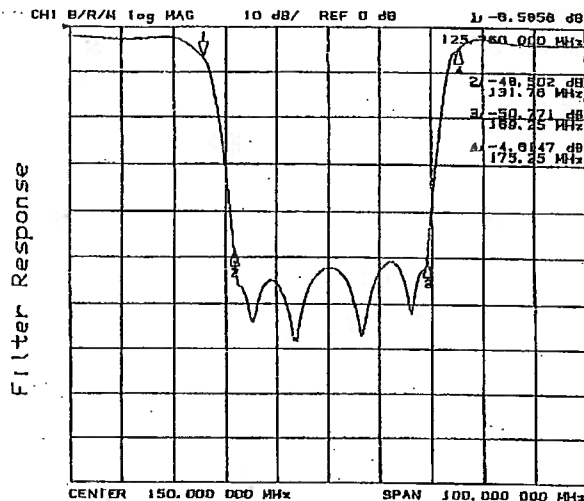
Parameter

Passband Loss: 1 2.5 dB Max
 Frequency Range: 5 MHz To 100 MHz
 Passband Loss: 2 3 dB Max
 Frequency Range: 340 MHz To 1 MHz/GHz
 Rejection: 45 dB Min
 Frequency Range: 183.26 MHz To 167.75 MHz/GHz

	Freq Desc.	Freq (MHz)	Loss (dB)
1.	<u>14 AUD</u>	<u>125.76</u>	<u>7.5 MAX</u>
2.	<u>15 AUD</u>	<u>131.76</u>	<u>40 min</u>
3.	<u>22 VID</u>	<u>169.25</u>	<u>40 min</u>
4.	<u>7 VID</u>	<u>175.25</u>	<u>5.5 MAX</u>
5.	_____	_____	_____
6.	_____	_____	_____

Other Specifications

Revisions



PPC TRAP SPECIFICATION SHEET

Product Code: MLP6-13 Prep By: ROJ
 Model: MLP6-13 Date: 3/5/97
 No. Poles: 6 Rev: _____
 Response: Actual ☒ Estimated ☐

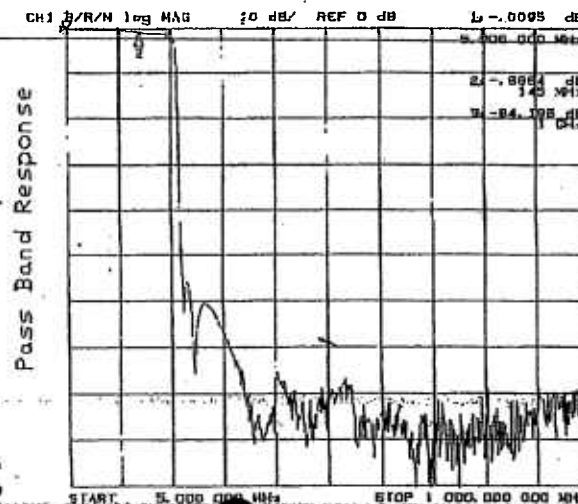
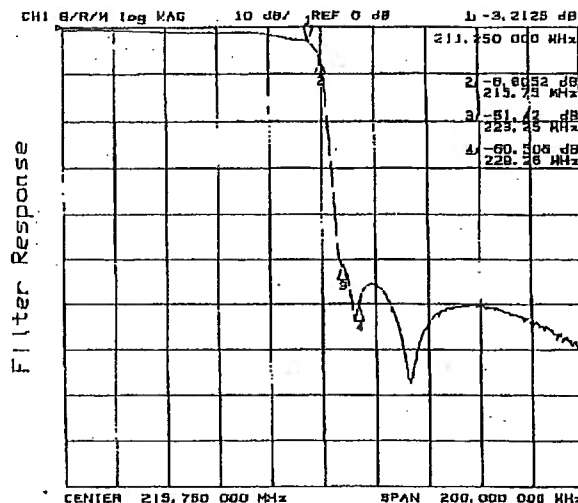
Parameter

Passband Loss: 1.5 dB Max
 Frequency Range: 5 MHz To 145 MHz
 Passband Loss: 2 dB Max
 Frequency Range: _____ MHz To _____ MHz/GHz
 Rejection: 50 dB Min
 Frequency Range: 229.26 MHz To 1 MHz/GHz

	Freq Desc.	Freq (MHz)	Loss (dB)
1.	<u>13VID</u>	<u>211.25</u>	<u>4.5 MAX.</u>
2.	<u>13AUD</u>	<u>215.75</u>	<u>9.0 MAX.</u>
3.	<u>24VID</u>	<u>223.25</u>	<u>45 MIN.</u>
4.	<u>25VID</u>	<u>229.26</u>	<u>50 MIN.</u>
5.	_____	_____	_____
6.	_____	_____	_____

Other Specifications

Revisions



Production Products Co.
 JOHN MEZZALINGUA C., INC.

TIME WARNER CABLE SYRACUSE DIVISION

Proof - of - Performance Tests

Headend Tests

System Name: **Time Warner - Syracuse**

HE Location: **Fayetteville Headend
N. Burdick St., Fayetteville**

Visual Carrier and Aural Carrier Difference Frequency Tests

(at Headend)

System Name: Time Warner-Syracuse

HE Location: Burdick

Date: 2-18-98 Performed by: P. Thrall

Chan	Freq	Visual Freq (MHz)	Aural Freq Diff (MHz)	Chan	Freq	Visual Freq (MHz)	Aural Freq Diff (MHz)
2	55.2500	55.24990	4.49999	AA	301.2625	301.26139	4.50005
3	61.2500	61.23995	4.50012	BB	307.2625	307.26256	4.49998
4	67.2500	67.24966	4.50001	CC	313.2625	313.26170	4.50002
5	77.2500	77.23994	4.49999	DD	319.2625	319.26282	4.49998
6	83.2500	83.25361	4.49993	EE	325.2625	325.26247	4.49999
				FF	331.2750	331.27573	4.50002
				GG	337.2625	337.26279	4.50001
				HH	343.2625	343.26261	4.49998
A-5	91.2500			II	349.2625	349.26260	4.50000
A-4	97.2500			JJ	355.2625	355.26263	4.50003
A-3	103.2500			KK	361.2625	361.26258	4.50003
A-2	109.2750			LL	367.2625	367.26282	4.50002
A-1	115.2750			MM	373.2625	373.26252	4.50002
A	121.2625	121.26243	4.49992	NN	379.2625	379.26263	4.49996
B	127.2625	127.26272	4.50009	OO	385.2625	385.26262	4.50002
C	133.2625	133.26249	4.50003	PP	391.2625	391.26114	4.49997
D	139.2500	139.24906	4.49999	QQ	397.2625	397.26277	4.49999
E	145.2500	145.24567	4.50007	RR	403.2500	403.26249	4.50004
F	151.3210	151.32321	4.50000	SS	409.2500	409.26251	4.50001
G	157.2500	157.24969	4.50001	TT	415.2500	415.26259	4.50002
H	163.2500	163.24751	4.49999	UU	421.2500	421.26279	4.50003
I	169.2500	169.24865	4.49999	VV	427.2500	427.26245	4.50000
7	175.2500	175.24532	4.50005	WW	433.2500	433.26243	4.50000
8	181.2500	181.25127	4.50006	XX	439.2500	439.26224	4.50000
9	187.2500	187.24236	4.49983	YY	445.2500	445.26268	4.50002
10	193.2500	193.24933	4.50002	ZZ	451.2500	451.26250	4.50011
11	199.2500	199.25076	4.49999	63	457.2500	457.26242	4.49999
12	205.2500	205.24947	4.49998	64	463.2500	463.26245	4.50006
13	211.2500	211.25017	4.50000	65	469.2500	469.26249	4.49984
J	217.2500	217.25100	4.49998	66	475.2500	475.26224	4.50010
K	223.2500	223.24983	4.49998	67	481.2500	481.26246	4.50008
L	229.2625	229.26293	4.49998	68	487.2500	487.26251	4.50012
M	235.2625	235.26239	4.50000	69	493.2500	493.26268	4.50011
N	241.2625	241.26081	4.49998	70	499.2500	499.26228	4.50006
O	247.2625	247.26200	4.50012	71	505.2500	505.26241	4.49999
P	253.2625	253.26101	4.50011	72	511.2500	511.26247	4.50009
Q	259.2625	259.26272	4.50000	73	517.2500	517.26240	4.50014
R	265.2625	265.26130	4.49996	74	523.2500	523.26242	4.50015
S	271.2625	271.26120	4.49999	75	529.2500	529.26265	4.50012
T	277.2625	277.26200	4.50000	76	535.2500	535.26198	4.50008
U	283.2625	283.26034	4.49998	77	541.2500	541.26289	4.50008
V	289.2625	289.26265	4.50001	78	547.2500	547.26269	4.49999
W	295.2625	295.26157	4.49998				

Visual / Aural Level Difference Test

(at Headend)

System Name: Time Warner - Syracuse

HE Location: Burdick St.

Date: 2-10-98 Performed by: P. Thrall

Time: 10:02 AM. Meter /Serial Number: Calan star 2010 / 9210392

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scram S	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scram S	Diff (Dbmv)
2	55.2500	16.0	1.9		14.1	AA	289.2625	16.0	1.7		14.3
3	61.2500	15.9	1.9		14.0	BB	307.2625	15.9	2.2		13.7
4	67.2500	15.7	1.9		13.8	CC	313.2625	15.5	1.3		14.2
5	77.2500	15.7	1.7		14.0	DD	319.2625	15.8	2.0		13.8
6	83.2500	15.8	1.9		13.9	EE	325.2625	15.8	1.6		14.2
						FF	331.2750	15.8	1.4		14.4
						GG	337.2625	15.9	1.7		14.2
A-5	91.2500					HH	343.2625	15.8	2.1		13.7
A-4	97.2500					II	349.2625	16.0	2.3		13.7
A-3	103.2500					JJ	355.2625	15.7	2.4		13.3
A-2	109.2750					KK	361.2625	15.9	2.0		13.9
A-1	115.2750					LL	367.2625	15.5	1.8		13.7
A	121.2625	15.6	2.0		13.6	MM	373.2625	16.0	1.8		14.2
B	127.2625	15.5	1.6		13.9	NN	379.2625	16.0	2.2		13.8
C	133.2625	15.7	1.7		14.0	OO	385.2625	16.0	2.4		13.6
D	139.2500	15.7	2.1		13.6	PP	391.2625	16.0	2.2		13.8
E	145.2500	15.9	1.7		14.2	QQ	397.2625	15.8	2.1		13.7
F	151.2500	15.9	1.5		14.4	RR	403.2500	16.0	2.1		13.9
G	157.2500	15.7	1.8		13.9	SS	409.2500	16.0	2.3		13.7
H	163.2500	15.5	1.3		14.2	TT	415.2500	15.7	1.1	S	14.6
I	169.2500	15.5	1.8		13.7	UU	421.2500	15.5	1.4	S	14.1
7	175.2500	15.6	1.7		13.9	VV	427.2500	15.8	2.3		13.5
8	181.2500	15.9	1.7		14.2	WW	433.2500	15.5	0.7	S	14.8
9	187.2500	15.8	1.8		14.0	XX	439.2500	15.5	1.8	S	13.7
10	193.2500	15.6	2.0		13.6	YY	445.2500	16.0	2.4	S	13.6
11	199.2500	15.5	1.5		14.0	ZZ	451.2500	15.6	1.2	S	14.4
12	205.2500	15.9	1.7		14.2	63	457.2500	15.9	1.0	S	14.9
13	211.2500	15.8	1.8		14.0	64	463.2500	15.5	1.2	S	14.3
J	217.2500	15.7	1.9		13.8	65	469.2500	15.7	2.5		13.2
K	223.2500	15.7	1.8		13.9	66	475.2500	15.5	1.5	S	14.0
L	229.2625	15.5	1.7		13.8	67	481.2500	16.0	1.7	S	14.3
M	235.2625	15.7	1.9		13.8	68	487.2500	15.5	0.8	S	14.7
N	241.2625	16.0	2.0		14.0	69	493.2500	15.5	0.5	S	15.0
O	247.2625	15.8	1.5		14.3	70	499.2500	15.7	0.7	S	15.0
P	253.2625	16.0	1.4		14.6	71	505.2500	15.5	1.6	S	13.9
Q	259.2625	15.9	1.8		14.1	72	511.2500	15.5	0.4	S	15.1
R	265.2625	15.9	1.7		14.2	73	517.2500	15.6	0.7	S	14.9
S	271.2625	15.6	1.7		13.9	74	523.2500	15.6	1.4	S	14.2
T	277.2625	15.9	2.0		13.9	75	529.2500	15.8	1.1	S	14.7
U	283.2625	15.5	1.7		13.8	76	535.2500	15.5	0.4	S	15.1
V	289.2625	15.8	1.9		13.9	77	541.2500	15.6	1.2	S	14.4
W	283.2625	16.0	1.8		14.2	78	547.2500	16.0	0.8	S	15.2

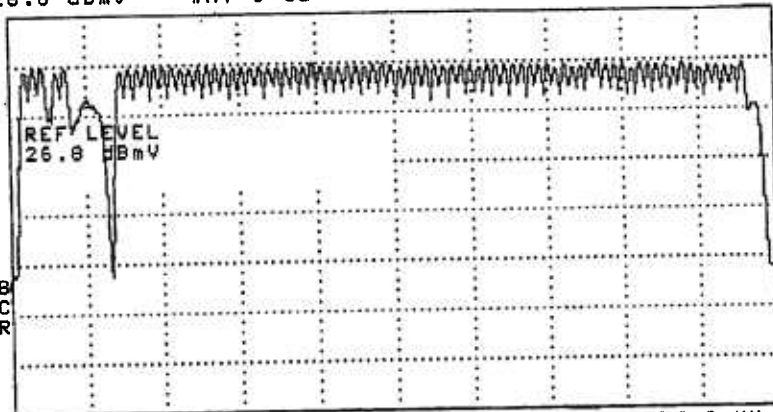
PEAK TO VALLEY: 0.5

11:11:10 FEB 10, 1990

REF 26.8 dBmV #AT 0 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR



START 45.0 MHz RES BW 3.0 MHz VBW 1 MHz STOP 575.0 MHz SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

More
1 of 3

11:13:01 FEB 10, 1990

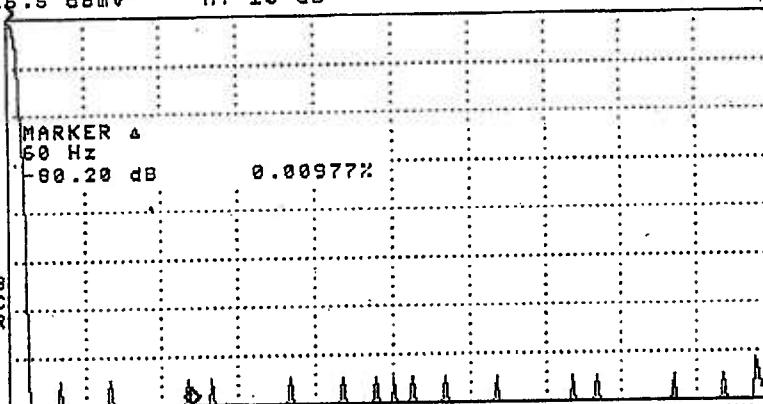
CHANNEL 2 (STD)
REF 16.5 dBmV AT 10 dB

MKR Δ 60 Hz
-80.20 dB

CHNL

PEAK
LOG
10
dB/

VA SB
SC FC
CORR



START 55.238 MHz #RES BW 1.0 MHz #VBW 1 kHz STOP 55.238 MHz #SWP 800 msec

MAIN
MENU

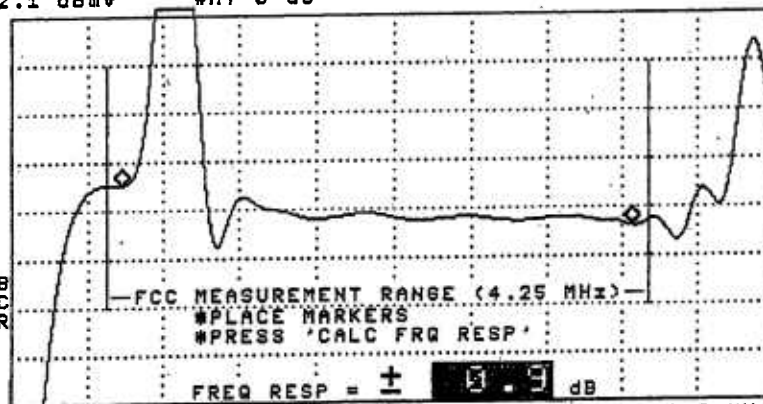
11:22:00 FEB 10, 1990

CHANNEL 2 (STD)
REF 2.1 dBmV #AT 0 dB

MKR 58.875 MHz CHNL
-6.65 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



START 54.000 MHz #RES BW 100 kHz #VBW 3 MHz STOP 60.000 MHz SWP 20.0 msec

MARKER 2

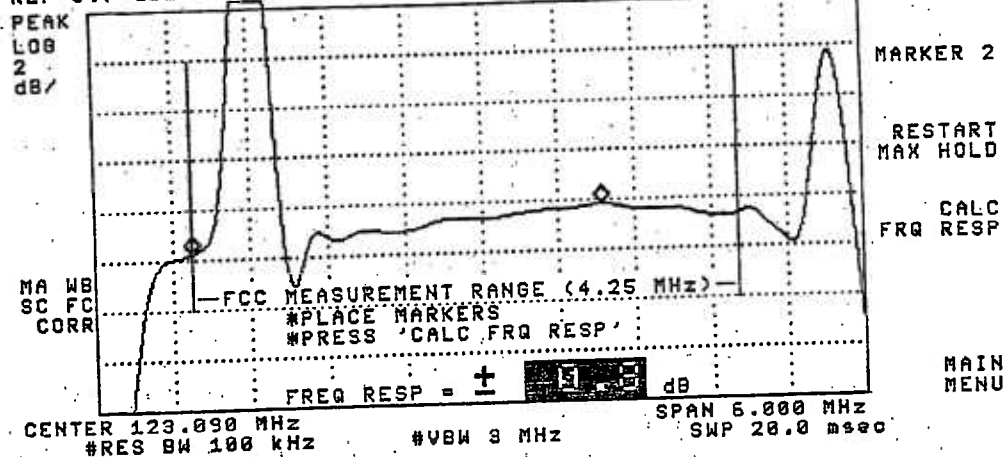
RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

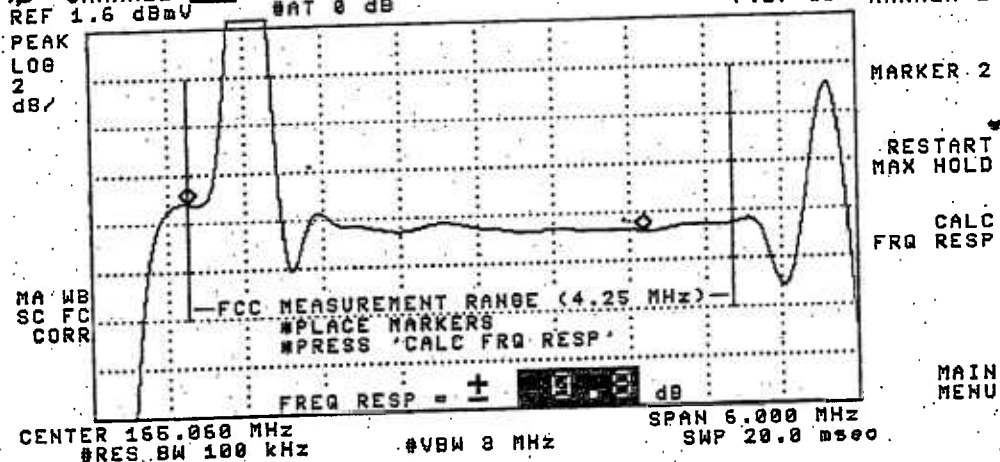
11:37:18 FEB 10, 1998
CHANNEL (STD)
REF 3.7 dBmV #AT 0 dB

MKR 120.840 MHz
-6.08 dBmV MARKER 1



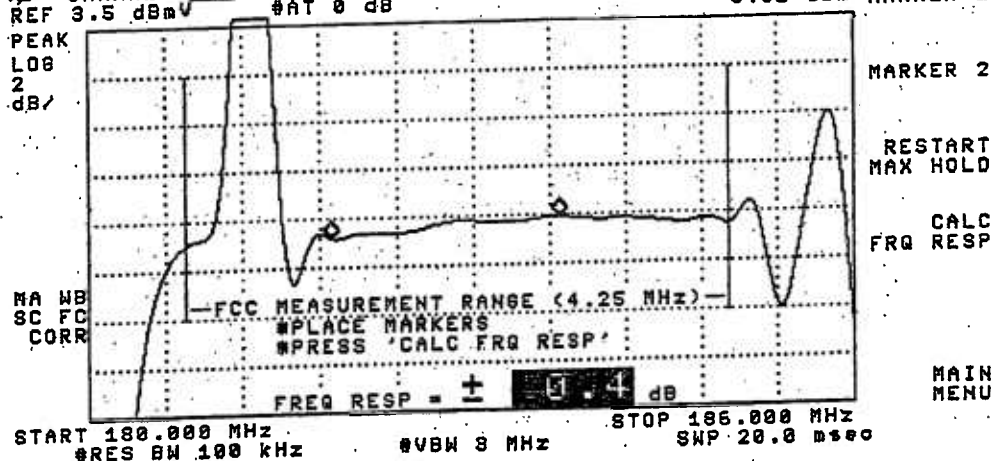
11:39:07 FEB 10, 1998
CHANNEL (STD)
REF 1.6 dBmV #AT 0 dB

MKR 166.365 MHz
-7.17 dBmV MARKER 1



11:40:20 FEB 10, 1998
CHANNEL (STD)
REF 3.5 dBmV #AT 0 dB

MKR 181.890 MHz
-5.92 dBmV MARKER 1



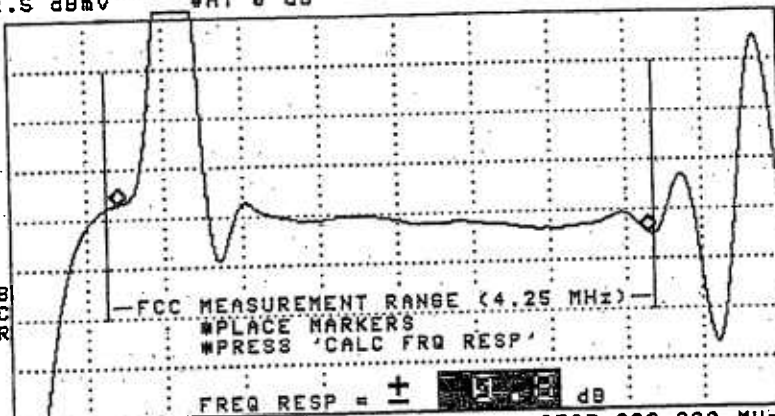
11:41:46 FEB 10, 1998

CHANNEL (STD)
REF 2.5 dBmV #AT 0 dB

MKR 280.965 MHz
-6.49 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 276.000 MHz STOP 282.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

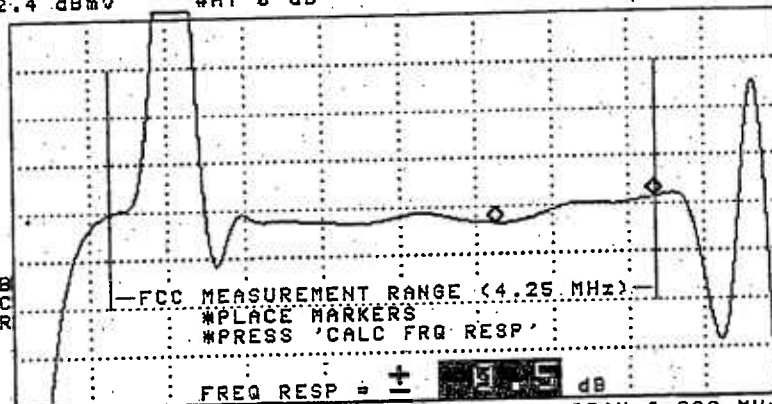
11:42:59 FEB 10, 1998

CHANNEL (STD)
REF 2.4 dBmV #AT 0 dB

MKR 315.780 MHz
-6.29 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

CENTER 315.030 MHz SPAN 6.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

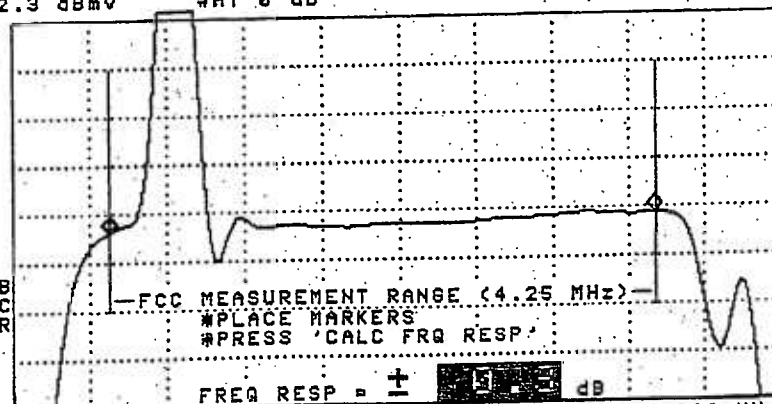
11:44:28 FEB 10, 1998

CHANNEL (STD)
REF 2.3 dBmV #AT 0 dB

MKR 366.780 MHz
-6.45 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

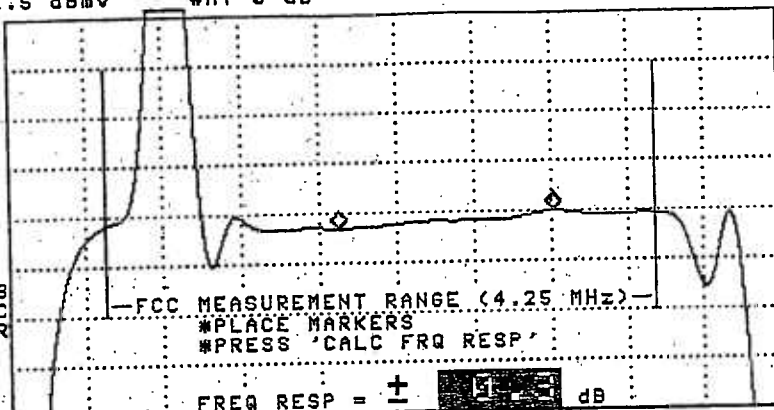
CENTER 369.030 MHz SPAN 6.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

11:45:55 FEB 10, 1998
CHANNEL 54 (STD)
REF 1.5 dBmV #AT 0 dB

MKR 404.610 MHz
-7.16 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

CENTER 405.060 MHz
#RES BW 100 kHz

#VBW 3 MHz

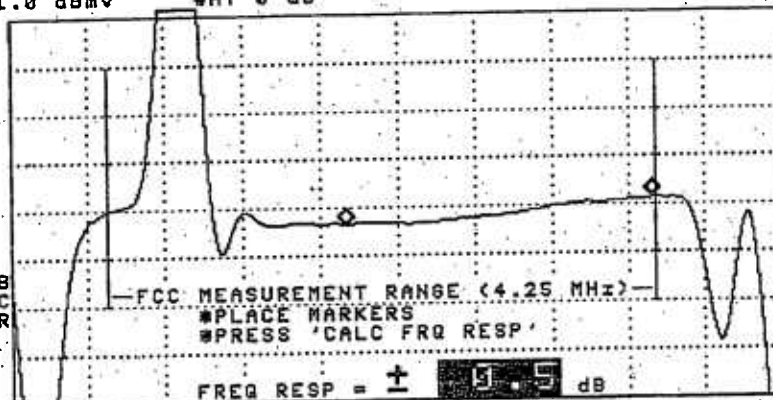
SPAN 6.000 MHz
SWP 20.0 msec

11:48:09 FEB 10, 1998
CHANNEL 54 (STD)
REF 1.0 dBmV #AT 0 dB

MKR 470.595 MHz
-7.68 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz
#RES BW 100 kHz

#VBW 3 MHz

STOP 474.000 MHz
SWP 20.0 msec

TIME WARNER CABLE SYRACUSE DIVISION

Proof - of - Performance Tests

Headend Tests

System Name: **Time Warner - Syracuse**

HE Location: **Geddes Headend
Southview Dr., Geddes**

Visual Carrier and Aural Carrier Difference Frequency Tests

(at Headend)

System Name: Time Warner-Syracuse
 HE Location: Geddes
 Date: 2-18-98 Performed by: Patrick Thrall

Chan	Freq	Visual Freq (MHz)	Aural Freq Diff (MHz)	Chan	Freq	Visual Freq (MHz)	Aural Freq Diff (MHz)
2	55.2500	55.25105	4.49998	AA	301.2625	301.26259	4.49999
3	61.2500	61.23995	4.50013	BB	307.2625	307.26268	4.50000
4	67.2500	67.24721	4.49996	CC	313.2625	313.26345	4.49998
5	77.2500	77.23993	4.49999	DD	319.2625	319.26283	4.49998
6	83.2500	83.24965	4.49994	EE	325.2625	325.26240	4.49997
				FF	331.2750	331.27511	4.50004
				GG	337.2625	337.26384	4.50000
A-5	91.2500			HH	343.2625	343.26289	4.50000
A-4	97.2500			II	349.2625	349.26273	4.49998
A-3	103.2500			JJ	355.2625	355.26267	4.50004
A-2	109.2750			KK	361.2625	361.26283	4.50003
A-1	115.2750			LL	367.2625	367.26252	4.50000
A	121.2625	121.26306	4.49992	MM	373.2625	373.26278	4.50002
B	127.2625	127.26388	4.50009	NN	379.2625	379.26294	4.49999
C	133.2625	133.26362	4.50002	OO	385.2625	385.26252	4.50002
D	139.2500	139.24973	4.50010	PP	391.2625	391.26294	4.49999
E	145.2500	145.24258	4.50007	QQ	397.2625	397.26267	4.50000
F	151.3210	151.32231	4.49999	RR	403.2500	403.26229	4.50003
G	157.2500	157.26252	4.49999	SS	409.2500	409.26209	4.50003
H	163.2500	163.26178	4.50001	TT	415.2500	415.26265	4.50003
I	169.2500	169.26205	4.50002	UU	421.2500	421.26242	4.50002
7	175.2500	175.24957	4.50002	VV	427.2500	427.26265	4.50000
8	181.2500	181.24951	4.50005	WW	433.2500	433.26233	4.50004
9	187.2500	187.23995	4.50006	XX	439.2500	439.26269	4.49998
10	193.2500	193.25035	4.50002	YY	445.2500	445.26242	4.50002
11	199.2500	199.24884	4.50000	ZZ	451.2500	451.26209	4.50011
12	205.2500	205.25194	4.49997	63	457.2500	457.26240	4.50001
13	211.2500	211.24973	4.49997	64	463.2500	463.26260	4.50005
J	217.2500	217.24967	4.49997	65	469.2500	469.26223	4.49983
K	223.2500	223.24293	4.49998	66	475.2500	475.26240	4.50010
L	229.2625	229.26123	4.49998	67	481.2500	481.26237	4.50011
M	235.2625	235.26264	4.50003	68	487.2500	487.26245	4.50011
N	241.2625	241.26242	4.50004	69	493.2500	493.26240	4.50010
O	247.2625	247.26447	4.50010	70	499.2500	499.26228	4.50008
P	253.2625	253.26269	4.50014	71	505.2500	505.25083	4.50006
Q	259.2625	259.26274	4.49998	72	511.2500	511.26242	4.50008
R	265.2625	265.26147	4.50006	73	517.2500	517.26269	4.50011
S	271.2625	271.26407	4.49997	74	523.2500	523.26236	4.50016
T	277.2625	277.26088	4.50009	75	529.2500	529.26239	4.50011
U	283.2625	283.26240	4.49996	76	535.2500	535.26262	4.50010
V	289.2625	289.26130	4.50002	77	541.2500	541.26296	4.50009
W	295.2625	295.26039	4.49999	78	547.2500	547.26227	4.50001

Visual / Aural Level Difference Test

(at Headend)

System Name: Time Warner - Syracuse

HE Location: Geddes Head-End

Date: 2-11-98 Performed by: P. Thrall

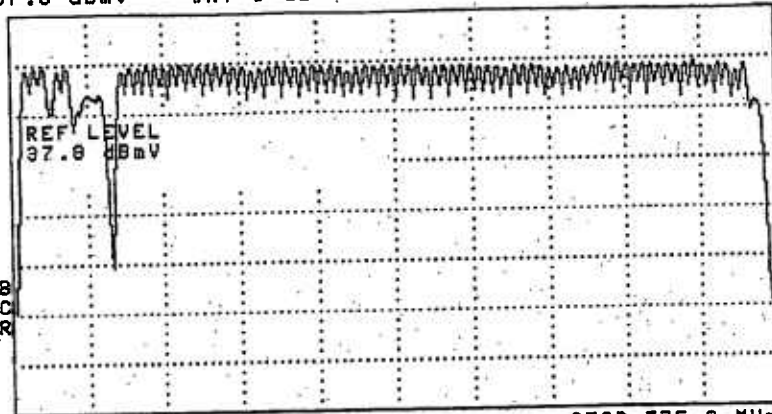
Time: 09:37 AM Meter /Serial Number: Calan star 2010 / 9210392

Chan	Freq (kHz)	Visual Level (dbmV)	Aural Level (dbmV)	Scram "S"	Diff (dbmV)	Chan	Freq (kHz)	Visual Level (dbmV)	Aural Level (dbmV)	Scram "S"	Diff (dbmV)
2	55.2500	25.5	11.5		14.0	AA	289.2625	25.5	11.8		13.7
3	61.2500	25.6	11.4		14.2	BB	307.2625	25.6	11.3		14.3
4	67.2500	25.6	11.3		14.3	CC	313.2625	25.7	11.7		14.0
5	77.2500	25.3	11.5		13.8	DD	319.2625	25.5	11.6		13.9
6	83.2500	25.5	11.1		14.4	EE	325.2625	25.6	11.1		14.5
						FF	331.2750	25.3	11.6		13.7
						GG	337.2625	25.4	11.2		14.2
A-5	91.2500					HH	343.2625	25.6	11.3		14.3
A-4	97.2500					II	349.2625	25.4	11.3		14.1
A-3	103.2500					JJ	355.2625	25.7	12.3		13.4
A-2	109.2750					KK	361.2625	25.6	11.6		14.0
A-1	115.2750					LL	367.2625	25.4	11.5		13.9
A	121.2625	25.5	11.8		13.9	MM	373.2625	25.3	11.4		13.9
B	127.2625	25.5	11.5		14.0	NN	379.2625	25.4	11.2		14.2
C	133.2625	25.3	11.0		14.3	OO	385.2625	25.3	11.2		14.1
D	139.2500	25.8	11.5		14.3	PP	391.2625	25.3	11.4		13.9
E	145.2500	25.5	11.9		13.6	QQ	397.2625	25.5	11.1		14.4
F	151.2500	25.6	11.1		14.5	RR	403.2500	25.4	11.4		14.0
G	157.2500	25.6	11.5		14.1	SS	409.2500	25.6	11.8		13.8
H	163.2500	25.8	11.5		14.3	TT	415.2500	25.4	10.8	S	14.6
I	169.2500	25.5	11.8		13.9	UU	421.2500	25.3	10.7	S	14.6
7	175.2500	25.6	11.8		13.8	VV	427.2500	25.6	11.3		14.3
8	181.2500	25.5	11.5		14.0	WW	433.2500	25.4	11.2	S	14.2
9	187.2500	25.7	11.1		14.6	XX	439.2500	25.3	10.8	S	14.5
10	193.2500	25.6	11.8		13.8	YY	445.2500	25.7	11.4	S	14.3
11	199.2500	25.8	11.7		14.1	ZZ	451.2500	25.3	10.2	S	15.1
12	205.2500	25.5	11.7		13.8	63	457.2500	25.3	10.9	S	14.4
13	211.2500	25.3	10.5		14.8	64	463.2500	25.4	10.4	S	15.0
J	217.2500	25.3	11.3		14.0	65	469.2500	25.4	11.2		14.2
K	223.2500	25.6	11.4		14.2	66	475.2500	25.3	10.5	S	14.8
L	229.2625	25.7	11.8		14.1	67	481.2500	25.4	11.4	S	14.0
M	235.2625	25.7	11.3		14.4	68	487.2500	25.8	11.5	S	14.3
N	241.2625	25.3	11.4		13.9	69	493.2500	25.3	10.4	S	14.9
O	247.2625	25.5	11.8		13.7	70	499.2500	25.3	10.9	S	14.4
P	253.2625	25.7	11.6		14.1	71	505.2500	25.4	9.7	S	15.7
Q	259.2625	25.4	11.4		14.0	72	511.2500	25.3	11.3	S	14.0
R	265.2625	25.5	11.5		14.0	73	517.2500	25.6	10.3	S	15.3
S	271.2625	25.3	11.4		13.9	74	523.2500	25.3	10.1	S	15.2
T	277.2625	25.4	10.1		15.3	75	529.2500	25.3	10.2	S	15.1
U	283.2625	25.3	11.2		14.1	76	535.2500	25.7	11.1	S	14.6
V	289.2625	25.6	11.8		14.0	77	541.2500	25.4	10.5	S	14.9
W	289.2625	25.4	11.4		14.0	78	547.2500	25.8	10.1	S	15.7

PEAK TO VALLEY: 0.5

11:06:40 FEB 11, 1998
 CHANNEL (STD)
 REF 37.8 dBmV #AT 0 dB

PEAK
 LOG
 10
 dB/



START 45.0 MHz
 RES BW 3.0 MHz

VBW 1 MHz

STOP 575.0 MHz
 SWP 20.0 msec

MA SB
 SC FC
 CORR

CLEAR
 WRITE A

MAX
 HOLD A

VIEW A

BLANK A

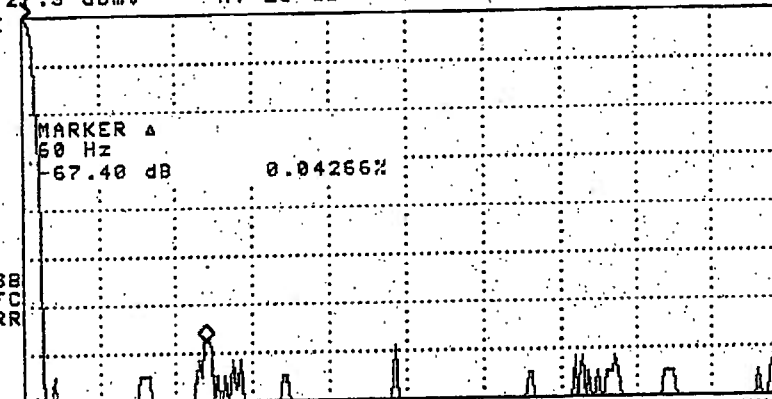
Trace
 A B C

More
 1 of 3

11:09:21 FEB 11, 1998
 CHANNEL (STD)
 REF 27.3 dBmV AT 10 dB

MKR Δ 60 Hz
 -67.40 dB

PEAK
 LOG
 10
 dB/



START 55.293 MHz
 #RES BW 1.0 MHz

#VBW 1 kHz

STOP 55.293 MHz
 #SWP 800 msec

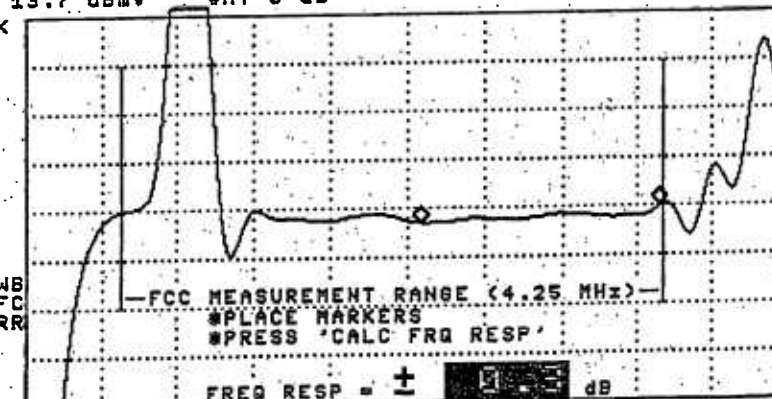
VA SB
 SC FC
 CORR

MAIN
 MENU

11:25:40 FEB 11, 1998
 CHANNEL (STD)
 REF 13.7 dBmV #AT 0 dB

MKR 57.105 MHz
 5.04 dBmV MARKER 1

PEAK
 LOG
 2
 dB/



MA WB
 SC FC
 CORR

START 54.000 MHz
 #RES BW 100 kHz

#VBW 3 MHz

STOP 50.000 MHz
 SWP 20.0 msec

MARKER 2

RESTART
 MAX HOLD

CALC
 FRQ RESP

MAIN
 MENU

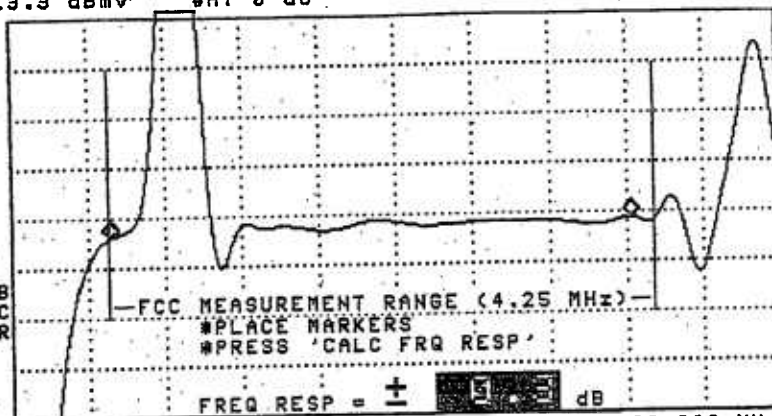
FCC MEASUREMENT RANGE (4.25 MHz)
 #PLACE MARKERS
 #PRESS 'CALC FRQ RESP'
 FREQ RESP = ± 0.3 dB

11:29:17 FEB 11, 1998
 CHANNEL (STD)
 REF 13.3 dBmV #AT 0 dB

MKR 120.765 MHz
 4.47 dBmV MARKER 1

PEAK
 LOG
 2
 dB/

MA WB
 SC FC
 CORR



MARKER 2

RESTART
 MAX HOLD

CALC
 FRQ RESP

MAIN
 MENU

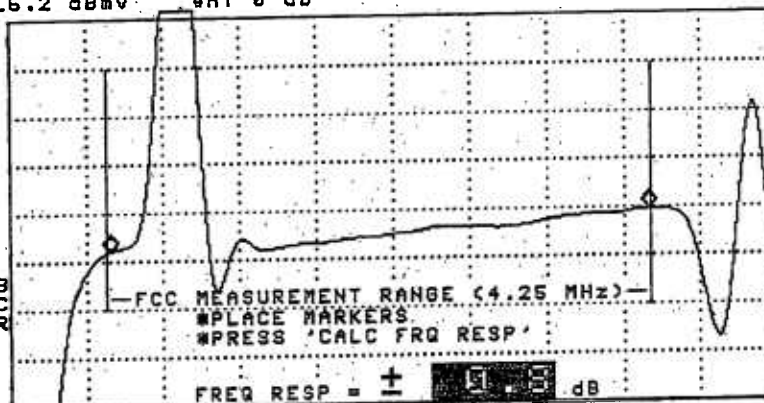
START 120.000 MHz STOP 125.000 MHz
 #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

11:31:58 FEB 11, 1998
 CHANNEL (STD)
 REF 16.2 dBmV #AT 0 dB

MKR 166.995 MHz
 8.13 dBmV MARKER 1

PEAK
 LOG
 2
 dB/

MA WB
 SC FC
 CORR



MARKER 2

RESTART
 MAX HOLD

CALC
 FRQ RESP

MAIN
 MENU

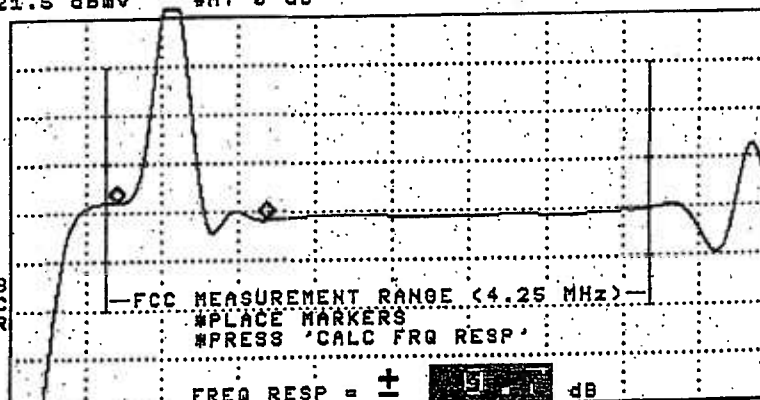
START 162.000 MHz STOP 168.000 MHz
 #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

11:35:33 FEB 11, 1998
 CHANNEL (STD)
 REF 21.5 dBmV #AT 0 dB

MKR 182.025 MHz
 4.75 dBmV MARKER 1

PEAK
 LOG
 4
 dB/

MA WB
 SC FC
 CORR



MARKER 2

RESTART
 MAX HOLD

CALC
 FRQ RESP

MAIN
 MENU

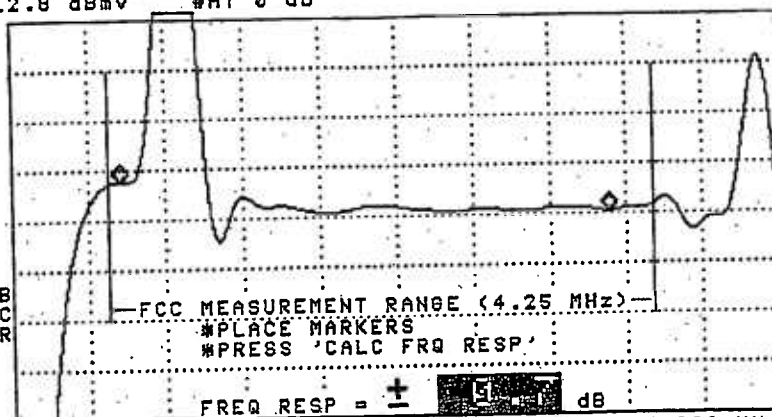
START 180.000 MHz STOP 186.000 MHz
 #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

11:46:06 FEB 11, 1998
CHANNEL 100 (STD)
REF 12.8 dBmV #AT 0 dB

MKR 280.665 MHz
4.86 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 276.000 MHz
#RES BW 100 kHz

#VBW 9 MHz

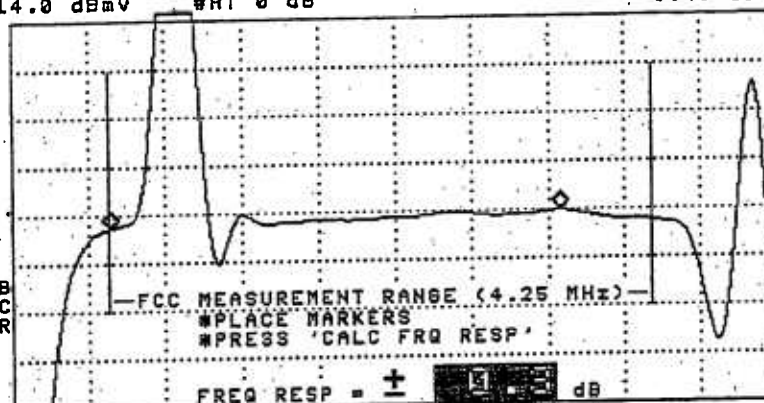
STOP 282.000 MHz
SWP 20.0 msec

11:50:32 FEB 11, 1998
CHANNEL 100 (STD)
REF 14.0 dBmV #AT 0 dB

MKR 312.765 MHz
5.45 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 312.000 MHz
#RES BW 100 kHz

#VBW 9 MHz

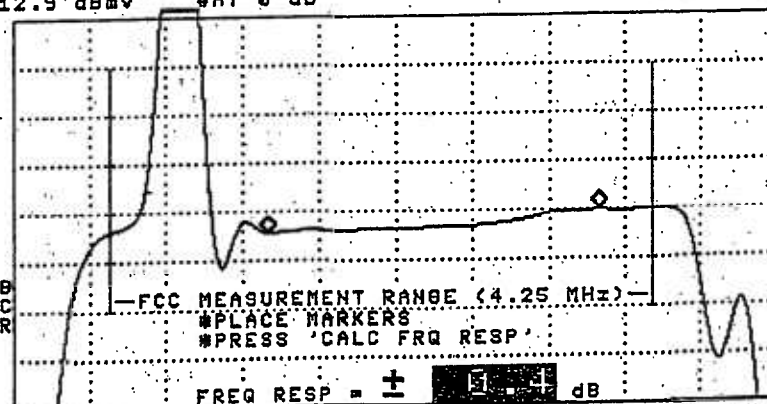
STOP 318.000 MHz
SWP 20.0 msec

11:52:30 FEB 11, 1998
CHANNEL 100 (STD)
REF 12.9 dBmV #AT 0 dB

MKR 367.995 MHz
4.03 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 366.000 MHz
#RES BW 100 kHz

#VBW 9 MHz

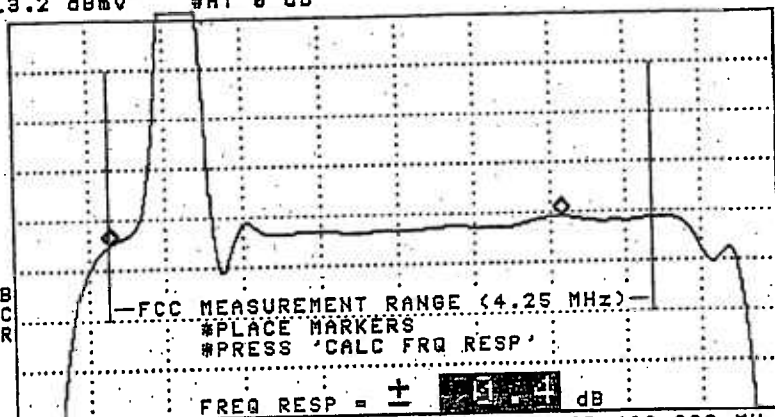
STOP 372.000 MHz
SWP 20.0 msec

11:54:19 FEB 11, 1998
CHANNEL **STD** (STD)
REF 13.2 dBmV #AT 0 dB

MKR 402.765 MHz **CH1**
4.15 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

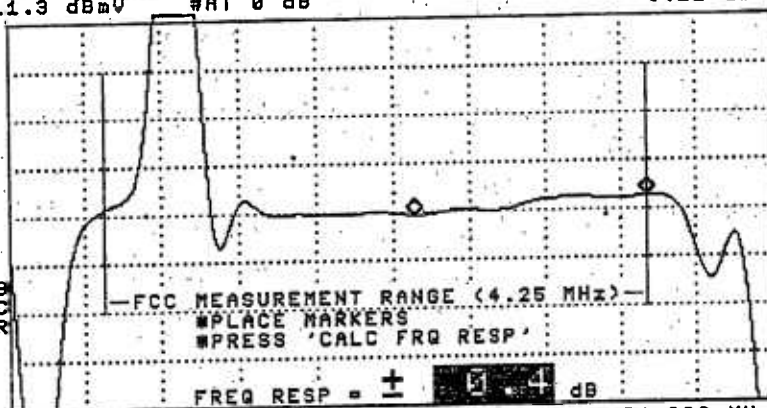
START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

11:56:24 FEB 11, 1998
CHANNEL **STD** (STD)
REF 11.3 dBmV #AT 0 dB

MKR 471.165 MHz **CH1**
9.12 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

TIME WARNER CABLE SYRACUSE DIVISION

Proof - of - Performance Tests

Headend Tests

System Name: **Time Warner - Syracuse**

HE Location: **Fulton Headend, Tower Dr., Fulton**

Visual Carrier and Aural Carrier Difference Frequency Tests (at Headend)

System Name: Time Warner-Syracuse
 HE Location: Fulton
 Date: 2-18-98 Performed by: Pat Thrall

Chan	Freq	Visual Freq (MHz)	Aural Freq Diff (MHz)	Chan	Freq	Visual Freq (MHz)	Aural Freq Diff (MHz)
2	55.2500	55.25051	4.49973	AA	301.2625	301.26217	4.49998
3	61.2500	61.24365	4.50010	BB	307.2625	307.26230	4.49999
4	67.2500	67.25291	4.49993	CC	313.2625	313.26085	4.50000
5	77.2500	77.24952	4.49999	DD	319.2625	319.26241	4.49991
6	83.2500	83.24988	4.50009	EE	325.2625	325.26266	4.49998
				FF	331.2750	331.27520	4.50000
				GG	337.2625	337.26281	4.50000
A-5	91.2500			HH	343.2625	343.26354	4.49998
A-4	97.2500			II	349.2625	349.26315	4.50002
A-3	103.2500			JJ	355.2625	355.26150	4.50002
A-2	109.2750			KK	361.2625	361.26294	4.49999
A-1	115.2750			LL	367.2625	367.26240	4.50003
A	121.2625	121.26264	4.49999	MM	373.2625	373.26272	4.50002
B	127.2625	127.26153	4.50003	NN	379.2625	379.26242	4.50000
C	133.2625	133.26181	4.50001	OO	385.2625	385.26232	4.50002
D	139.2500	139.24742	4.49999	PP	391.2625	391.26248	4.50000
E	145.2500	145.25050	4.50007	QQ	397.2625	397.26247	4.49999
F	151.3210	151.32088	4.50000	RR	403.2500	403.26254	4.50002
G	157.2500	157.26202	4.50003	SS	409.2500	409.26249	4.50001
H	163.2500	163.25067	4.49994	TT	415.2500	415.26257	4.50003
I	169.2500	169.25144	4.50002	UU	421.2500	421.26241	4.50002
7	175.2500	175.25077	4.50002	VV	427.2500	427.26245	4.49998
8	181.2500	181.24794	4.50004	VVV	433.2500	433.26245	4.50002
9	187.2500	187.23995	4.50002	XX	439.2500	439.26262	4.49998
10	193.2500	193.26262	4.50000	YY	445.2500	445.25088	4.50002
11	199.2500	199.24665	4.50000	ZZ	451.2500	451.26231	4.50011
12	205.2500	205.25136	4.49998	63	457.2500	457.26278	4.49999
13	211.2500	211.25039	4.49997	64	463.2500	463.26295	4.50005
J	217.2500	217.24842	4.49997	65	469.2500	469.26295	4.50004
K	223.2500	223.26245	4.50001	66	475.2500	475.26257	4.50010
L	229.2625	229.26108	4.49999	67	481.2500	481.26232	4.50009
M	235.2625	235.26236	4.50000	68	487.2500	487.26272	4.50011
N	241.2625	241.26245	4.50003	69	493.2500	493.26291	4.50009
O	247.2625	247.26240	4.50010	70	499.2500	499.26210	4.50007
P	253.2625	253.26451	4.50015	71	505.2500	505.26277	4.50006
Q	259.2625	259.26215	4.49998	72	511.2500	511.26293	4.50009
R	265.2625	265.26269	4.50001	73	517.2500	517.26248	4.50010
S	271.2625	271.26294	4.49997	74	523.2500	523.26265	4.50015
T	277.2625	277.26024	4.50009	75	529.2500	529.26209	4.50012
U	283.2625	283.26109	4.49997	76	535.2500	535.26259	4.49999
V	289.2625	289.26322	4.50002	77	541.2500	541.25002	4.49981
W	295.2625	295.26543	4.49998	78	547.2500	547.26204	4.50010

Visual / Aural Level Difference Test

(at Headend)

System Name: Time Warner - Syracuse

HE Location: Fulton Head-End

Date: 2-13-98 Performed by: P. Thrall

Time: 01:16 PM Meter /Serial Number: Calan star 2010 / 9210392

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scram (S)	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scram (S)	Diff (Dbmv)
2	55.2500	27.3	13.5		13.8	AA	289.2625	27.3	14.0		13.3
3	61.2500	27.3	13.2		14.1	BB	307.2625	27.2	14.5		12.7
4	67.2500	27.1	13.2		13.9	CC	313.2625	27.3	14.1		13.2
5	77.2500	27.1	13.6		13.5	DD	319.2625	27.3	14.1		13.2
6	83.2500	27.3	13.4		13.9	EE	325.2625	27.2	14.2		13.0
						FF	331.2750	27.2	14.1		13.1
						GG	337.2625	27.3	14.0		13.3
A-5	91.2500					HH	343.2625	26.8	12.7		14.1
A-4	97.2500					II	349.2625	26.9	12.5		14.4
A-3	103.2500					JJ	355.2625	27.3	14.2		13.1
A-2	109.2750					KK	361.2625	27.3	13.6		13.7
A-1	115.2750					LL	367.2625	27.2	14.0		13.2
A	121.2625	27.3	13.5		13.8	MM	373.2625	27.3	13.7		13.6
B	127.2625	27.2	13.9		13.3	NN	379.2625	27.2	14.1		13.1
C	133.2625	27.3	13.9		13.4	OO	385.2625	27.3	13.9		13.4
D	139.2500	27.1	13.3		13.8	PP	391.2625	27.3	13.7		13.6
E	145.2500	27.1	13.7		13.4	QQ	397.2625	27.3	13.9		13.4
F	151.2500	27.1	13.5		13.6	RR	403.2500	27.2	14.3		12.9
G	157.2500	27.2	13.7		13.5	SS	409.2500	26.9	13.2		13.7
H	163.2500	27.2	13.3		13.9	TT	415.2500	27.3	13.5	S	13.8
I	169.2500	27.1	13.3		13.8	UU	421.2500	26.8	13.4	S	13.4
7	175.2500	27.2	14.0		13.2	VV	427.2500	27.2	14.0		13.2
8	181.2500	27.2	13.7		13.5	WW	433.2500	27.3	13.5	S	13.8
9	187.2500	27.2	13.4		13.8	XX	439.2500	26.8	13.6	S	13.2
10	193.2500	27.1	13.2		13.9	YY	445.2500	27.3	14.2		13.1
11	199.2500	27.2	13.4		13.8	ZZ	451.2500	27.3	14.3	S	13.0
12	205.2500	27.3	13.5		13.8	63	457.2500	27.2	12.5	S	14.7
13	211.2500	27.3	14.1		13.2	64	463.2500	27.2	13.3	S	13.9
J	217.2500	27.3	13.4		13.9	65	469.2500	27.3	14.0	S	13.3
K	223.2500	27.2	14.5		12.7	66	475.2500	27.3	13.9	S	13.4
L	229.2625	27.3	13.5		13.8	67	481.2500	27.2	13.7	S	13.5
M	235.2625	27.2	14.0		13.2	68	487.2500	27.1	14.0	S	13.1
N	241.2625	27.3	14.1		13.2	69	493.2500	27.3	13.8	S	13.5
O	247.2625	27.3	14.0		13.3	70	499.2500	27.3	14.1	S	13.2
P	253.2625	27.2	14.2		13.0	71	505.2500	27.2	13.9	S	13.3
Q	259.2625	27.2	14.2		13.0	72	511.2500	27.2	14.0	S	13.2
R	265.2625	27.3	13.4		13.9	73	517.2500	27.1	14.0	S	13.1
S	271.2625	26.8	12.5		14.3	74	523.2500	27.3	13.8	S	13.5
T	277.2625	27.3	13.9		13.4	75	529.2500	27.1	13.6	S	13.5
U	283.2625	27.2	13.8		13.4	76	535.2500	27.2	13.3	S	13.9
V	289.2625	27.3	14.1		13.2	77	541.2500	27.2	14.3		12.9
W	283.2625	26.8	12.8		14.0	78	547.2500	27.1	12.6	S	14.5

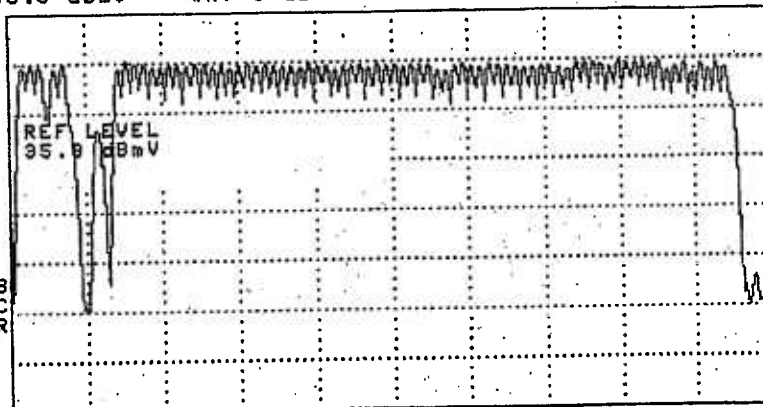
PEAK TO VALLEY: 0.5

13:26:28 FEB 13, 1998

REF 35.8 dBmV #AT 0 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR



START 45.0 MHz
RES BW 3.0 MHz

VBW 1 MHz

STOP 575.0 MHz
SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

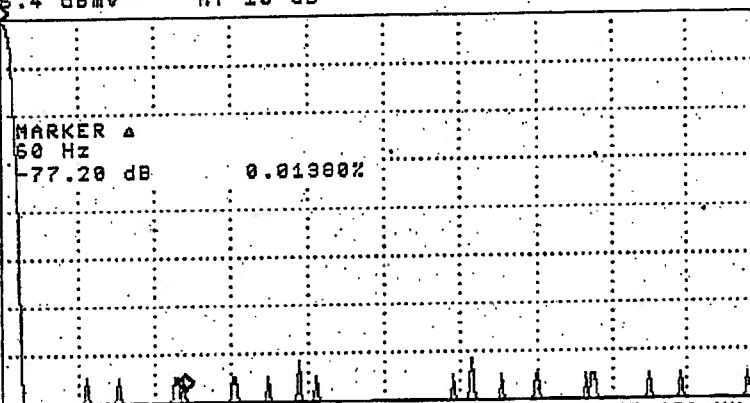
More
1 of 3

13:29:09 FEB 13, 1998

CHANNEL (STD)
REF 26.4 dBmV AT 10 dB

PEAK
LOG
10
dB/

VA SB
SC FC
CORR



START 55.250 MHz
RES BW 1.0 MHz

VBW 1 kHz

STOP 55.250 MHz
SWP 800 msec

MKR A 50 Hz
-77.20 dB

CHIME

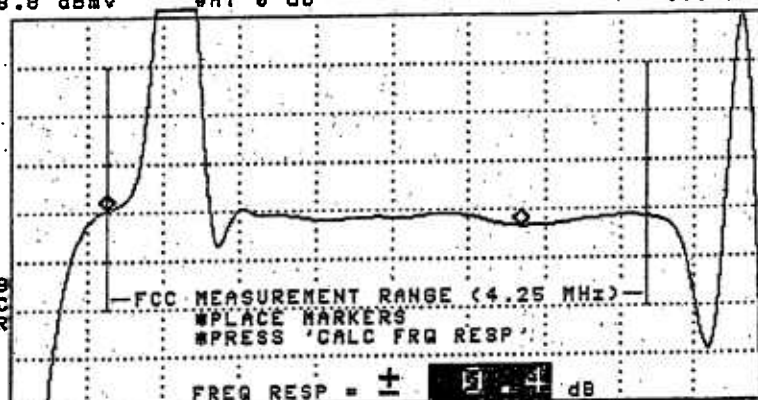
MAIN
MENU

13:30:39 FEB 13, 1998

CHANNEL (STD)
REF 8.8 dBmV AT 0 dB

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



CENTER 57.000 MHz
RES BW 100 kHz

VBW 3 MHz

SPAN 6.000 MHz
SWP 20.0 msec

MKR 59.005 MHz
.08 dBmV

CHIME

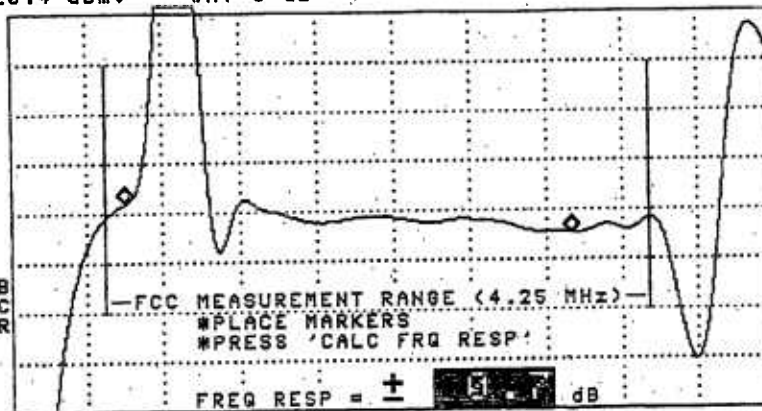
MAIN
MENU

13:32:10 FEB 13, 1998
CHANNEL 24 (STD)
REF 10.4 dBmV #AT 0 dB

MKR 124.395 MHz CH11
1.50 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

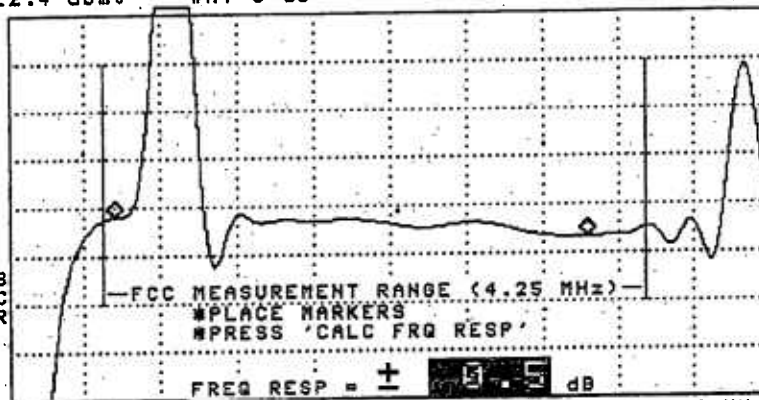
START 120.000 MHz STOP 126.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:33:24 FEB 13, 1998
CHANNEL 24 (STD)
REF 12.4 dBmV #AT 0 dB

MKR 156.645 MHz CH11
3.01 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

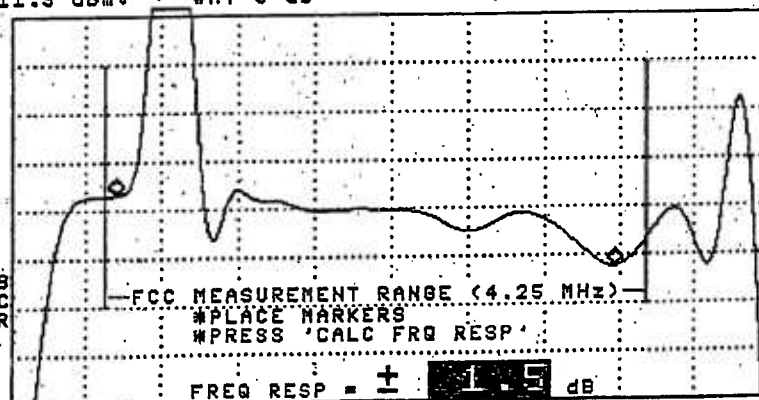
START 152.000 MHz STOP 158.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:38:02 FEB 13, 1998
CHANNEL 24 (STD)
REF 11.3 dBmV #AT 0 dB

MKR 184.755 MHz CH11
.79 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

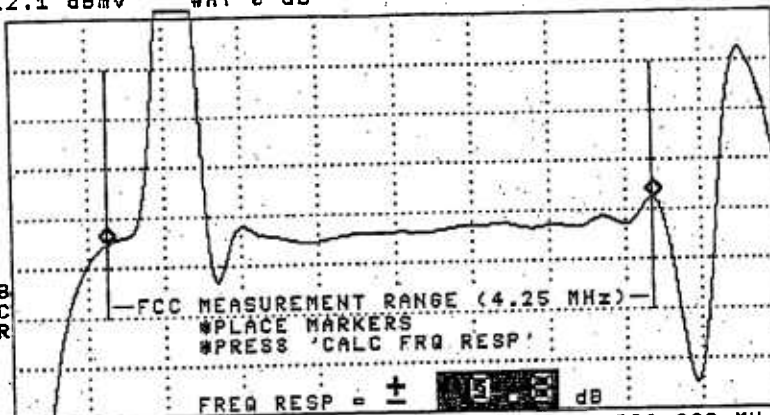
MAIN
MENU

START 180.000 MHz STOP 186.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:39:17 FEB 13, 1998
 CHANNEL 2 (STD)
 REF 12.1 dBmV #AT 0 dB
 PEAK
 LOG
 2
 dB/

MKR 276.750 MHz
 3.02 dBmV MARKER 1

MA WB
 SC FC
 CORR



MARKER 2

RESTART
 MAX HOLD

CALC
 FRQ RESP

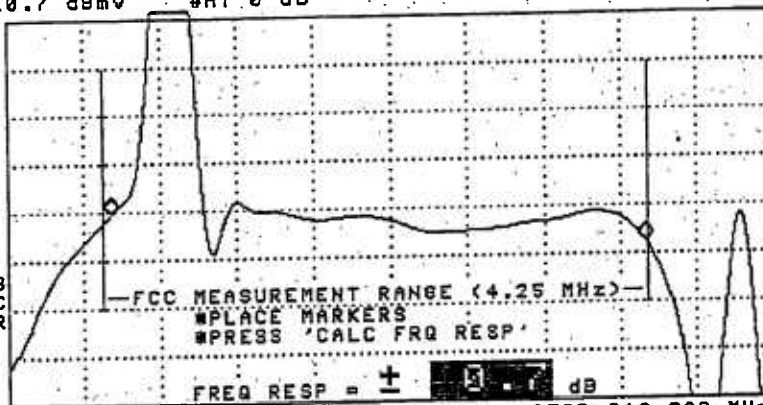
MAIN
 MENU

START 276.000 MHz STOP 282.000 MHz
 #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:40:49 FEB 13, 1998
 CHANNEL 2 (STD)
 REF 10.7 dBmV #AT 0 dB
 PEAK
 LOG
 2
 dB/

MKR 316.995 MHz
 1.23 dBmV MARKER 1

MA WB
 SC FC
 CORR



MARKER 2

RESTART
 MAX HOLD

CALC
 FRQ RESP

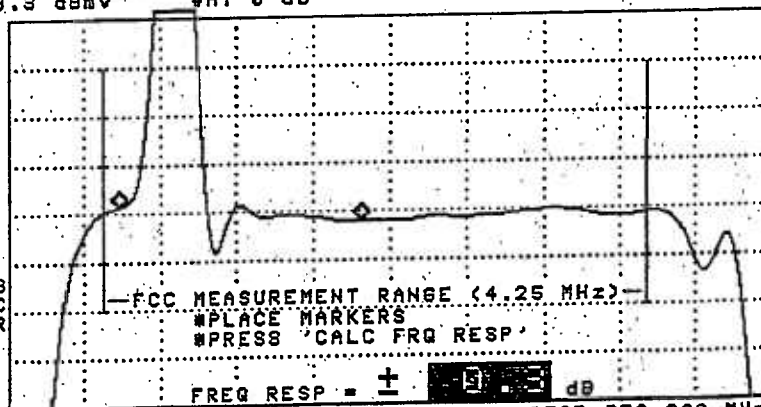
MAIN
 MENU

START 312.000 MHz STOP 318.000 MHz
 #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:41:48 FEB 13, 1998
 CHANNEL 2 (STD)
 REF 9.3 dBmV #AT 0 dB
 PEAK
 LOG
 2
 dB/

MKR 368.775 MHz
 .89 dBmV MARKER 1

MA WB
 SC FC
 CORR



MARKER 2

RESTART
 MAX HOLD

CALC
 FRQ RESP

MAIN
 MENU

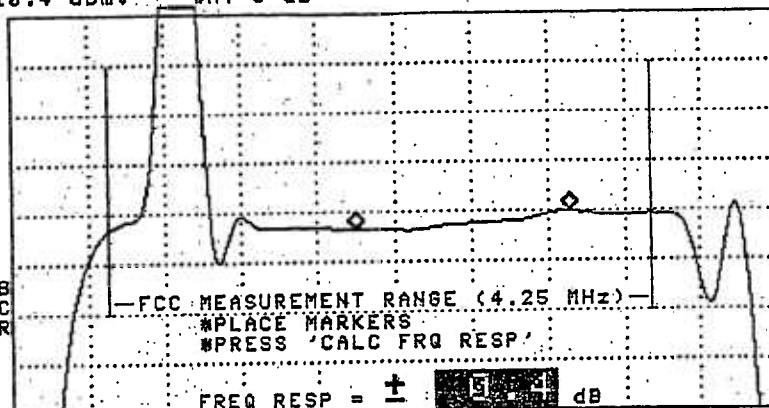
START 366.000 MHz STOP 372.000 MHz
 #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:42:53 FEB 13, 1990
CHANNEL 55 (STD)
REF 10.4 dBmV #AT 0 dB

MKR 404.700 MHz 1.60 dBmV
MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

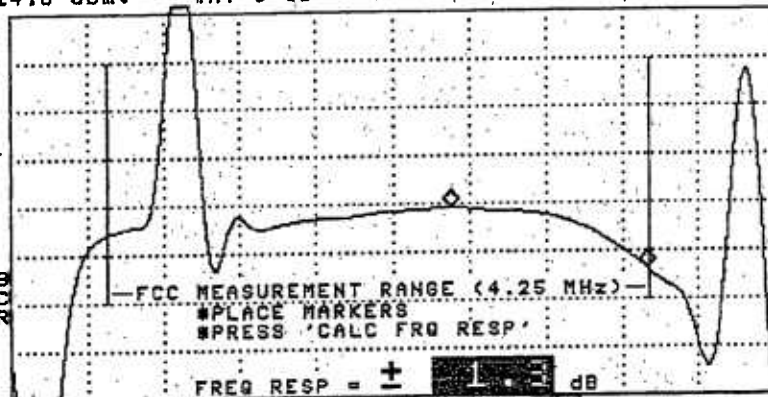
START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:45:02 FEB 13, 1990
CHANNEL 55 (STD)
REF 14.0 dBmV #AT 0 dB

MKR 471.450 MHz 6.60 dBmV
MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

TIME WARNER CABLE SYRACUSE DIVISION

Proof - of - Performance Tests

Headend Tests

System Name: **Time Warner - Syracuse**

HE Location: **Fulton Headend
(Oswego Feed) Tower Dr., Fulton**

Visual Carrier and Aural Carrier Difference Frequency Tests

(at Headend)

System Name: Time Warner-Syracuse

HE Location: Oswego

Date: 2-18-98 Performed by: P. Thrall

Chan	Freq	Visual Freq (MHz)	Aural Freq Diff (MHz)	Chan	Freq	Visual Freq (MHz)	Aural Freq Diff (MHz)
2	55.2500	55.25000	4.50005	AA	301.2625	301.26220	4.49997
3	61.2500	61.24334	4.50014	BB	307.2625	307.26228	4.49998
4	67.2500	67.24914	4.50005	CC	313.2625	313.26118	4.50001
5	77.2500	77.24946	4.49998	DD	319.2625	319.26242	4.49999
6	83.2500	83.24989	4.50014	EE	325.2625	325.26270	4.50002
				FF	331.2750	331.27520	4.50001
				GG	337.2625	337.26258	4.50002
A-5	91.2500			HH	343.2625	343.26337	4.49999
A-4	97.2500			II	349.2625	349.26326	4.50003
A-3	103.2500			JJ	355.2625	355.26148	4.50004
A-2	109.2750			KK	361.2625	361.26292	4.49999
A-1	115.2750			LL	367.2625	367.26240	4.50000
A	121.2625	121.26270	4.50002	MM	373.2625	373.26272	4.50002
B	127.2625	127.27477	4.50009	NN	379.2625	379.26240	4.49999
C	133.2625	133.26272	4.50003	OO	385.2625	385.26230	4.50003
D	139.2500	139.25004	4.49998	PP	391.2625	391.26247	4.49999
E	145.2500	145.26229	4.49999	QQ	397.2625	397.26245	4.49999
F	151.3210	151.32311	4.49999	RR	403.2500	403.26252	4.50003
G	157.2500	157.26202	4.50003	SS	409.2500	409.26249	4.50001
H	163.2500	163.25087	4.50001	TT	415.2500	415.26284	4.50002
I	169.2500	169.25143	4.50003	UU	421.2500	421.24911	4.50002
7	175.2500	175.25074	4.50003	VV	427.2500	427.26287	4.50001
8	181.2500	181.24796	4.50005	WW	433.2500	433.26249	4.50004
9	187.2500	187.23994	4.50003	XX	439.2500	439.25007	4.49997
10	193.2500	193.26263	4.50001	YY	445.2500	445.25013	4.50001
11	199.2500	199.24867	4.49999	ZZ	451.2500	451.26232	4.50010
12	205.2500	205.26195	4.50004	63	457.2500	457.26251	4.49999
13	211.2500	211.25041	4.49998	64	463.2500	463.26281	4.50005
J	217.2500	217.24842	4.49998	65	469.2500	469.26253	4.50010
K	223.2500	223.26245	4.50002	66	475.2500	475.26297	4.50012
L	229.2625	229.26109	4.49999	67	481.2500	481.26100	4.50009
M	235.2625	235.26238	4.49998	68	487.2500	487.26248	4.50011
N	241.2625	241.26255	4.50006	69	493.2500	493.26284	4.50009
O	247.2625	247.26239	4.50011	70	499.2500	499.26242	4.49997
P	253.2625	253.26453	4.50010	71	505.2500	505.26247	4.50006
Q	259.2625	259.26214	4.50000	72	511.2500	511.26249	4.50009
R	265.2625	265.26269	4.50004	73	517.2500	517.25041	4.50011
S	271.2625	271.26293	4.50004	74	523.2500	523.26254	4.50014
T	277.2625	277.26023	4.50007	75	529.2500	529.26331	4.50017
U	283.2625	283.26110	4.49997	76	535.2500	535.26369	4.49994
V	289.2625	289.26324	4.50002	77	541.2500	541.24995	4.49983
W	295.2625	295.26564	4.49999	78	547.2500	547.26239	4.50007

Visual / Aural Level Difference Test

(at Headend)

System Name: Time Warner - Syracuse

HE Location: Fulton Head-End (Oswego Feed)

Date: 2-17-98 Performed by: P. Thrall

Time: 12:12 PM Meter /Serial Number: Calan star 2010 / 9210392

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scram S	Dir (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scram S	Dir (Dbmv)
2	55.2500	30.5	17.3		13.2	AA	289.2625	30.5	16.8		13.7
3	61.2500	30.5	17.0		13.5	BB	307.2625	30.2	17.3		12.9
4	67.2500	30.4	17.2		13.2	CC	313.2625	30.5	16.6		13.9
5	77.2500	30.5	17.6		12.9	DD	319.2625	30.3	17.1		13.2
6	83.2500	30.4	17.1		13.3	EE	325.2625	30.5	16.7		13.8
						FF	331.2750	30.4	16.2		14.2
						GG	337.2625	30.2	16.7		13.5
A-5	91.2500					HH	343.2625	30.3	17.0		13.3
A-4	97.2500					II	349.2625	30.0	16.5		13.5
A-3	103.2500					JJ	355.2625	30.0	16.6		13.4
A-2	109.2750					KK	361.2625	30.2	15.8		14.4
A-1	115.2750					LL	367.2625	30.0	16.5		13.5
A	121.2625	30.4	16.9		13.5	MM	373.2625	30.1	16.4		13.7
B	127.2625	30.0	16.9		13.1	NN	379.2625	30.2	16.3		13.9
C	133.2625	30.0	17.3		12.7	OO	385.2625	30.0	16.7		13.3
D	139.2500	30.5	17.4		13.1	PP	391.2625	30.3	16.3		14.0
E	145.2500	30.5	16.9		13.6	QQ	397.2625	30.0	16.1		13.9
F	151.2500	30.1	17.4		12.7	RR	403.2500	30.0	17.2		12.8
G	157.2500	30.5	17.4		13.1	SS	409.2500	30.3	16.1		14.2
H	163.2500	30.5	16.8		13.7	TT	415.2500	30.1	15.6	S	14.5
I	169.2500	30.4	16.7		13.7	UU	421.2500	30.5	16.0	S	14.5
7	175.2500	30.4	16.5		13.9	VV	427.2500	30.1	16.0		14.1
8	181.2500	30.5	17.1		13.4	WW	433.2500	30.0	15.6	S	14.4
9	187.2500	30.5	17.3		13.2	XX	439.2500	30.3	15.9	S	14.4
10	193.2500	30.5	16.6		13.9	YY	445.2500	30.0	16.1	S	13.9
11	199.2500	30.5	17.3		13.2	ZZ	451.2500	30.1	16.0	S	14.1
12	205.2500	30.4	17.5		12.9	63	457.2500	30.0	16.0	S	14.0
13	211.2500	30.4	16.9		13.5	64	463.2500	30.0	15.9	S	14.1
J	217.2500	30.5	16.7		13.8	65	469.2500	30.0	16.1	S	13.9
K	223.2500	30.4	17.7		12.7	66	475.2500	30.1	15.6	S	14.5
L	229.2625	30.5	16.6		13.9	67	481.2500	30.4	16.1	S	14.3
M	235.2625	30.5	16.8		13.7	68	487.2500	30.0	15.8	S	14.2
N	241.2625	30.0	16.2		13.8	69	493.2500	30.1	15.7	S	14.4
O	247.2625	30.5	17.0		13.5	70	499.2500	30.2	15.9	S	14.3
P	253.2625	30.4	17.5		12.9	71	505.2500	30.0	15.9	S	14.1
Q	259.2625	30.5	17.4		13.1	72	511.2500	30.0	15.6	S	14.4
R	265.2625	30.4	16.7		13.7	73	517.2500	30.4	16.1	S	14.3
S	271.2625	30.1	16.4		13.7	74	523.2500	30.2	15.9	S	14.3
T	277.2625	30.4	16.7		13.7	75	529.2500	30.2	15.7	S	14.5
U	283.2625	30.4	17.3		13.1	76	535.2500	30.1	15.8	S	14.3
V	289.2625	30.4	16.6		13.8	77	541.2500	30.4	16.8		13.6
W	283.2625	30.0	16.9		13.1	78	547.2500	30.0	15.7	S	14.3

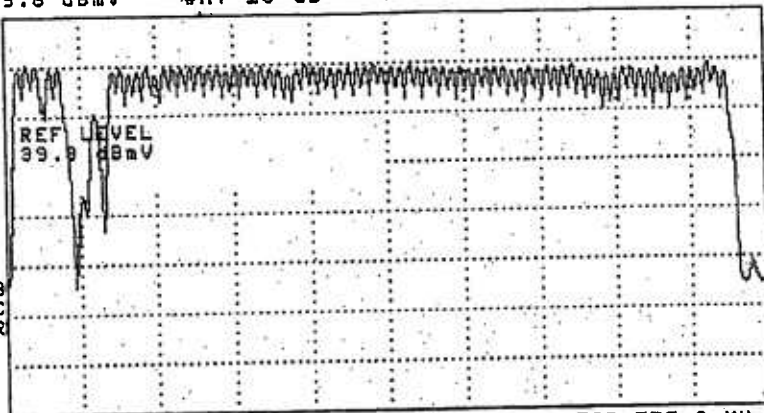
PEAK TO VALLEY: 0.5

12:15:52 FEB 17, 1998

REF 39.9 dBmV #AT 10 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR



START 46.0 MHz RES BW 3.0 MHz VBW 1 MHz STOP 575.0 MHz SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

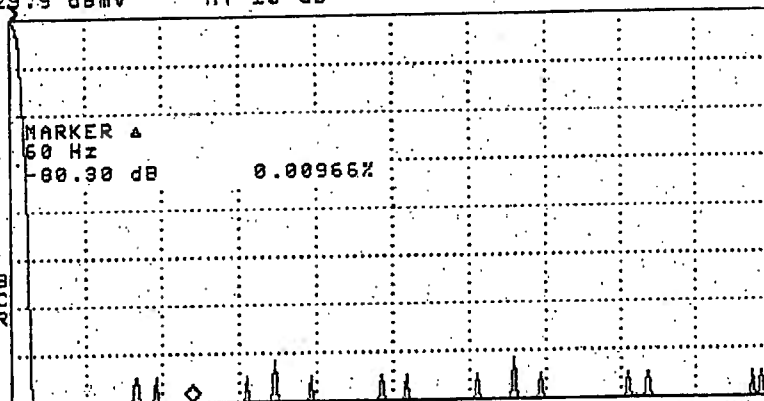
More
1 of 3

12:17:40 FEB 17, 1998

CHANNEL 2 (STD)
REF 29.9 dBmV AT 10 dB

PEAK
LOG
10
dB/

VA SB
SC FC
CORR



START 55.240 MHz #RES BW 1.0 MHz #VBW 1 kHz STOP 55.240 MHz #SWP 800 msec

MKR Δ 50 Hz
-80.30 dB

CHNL

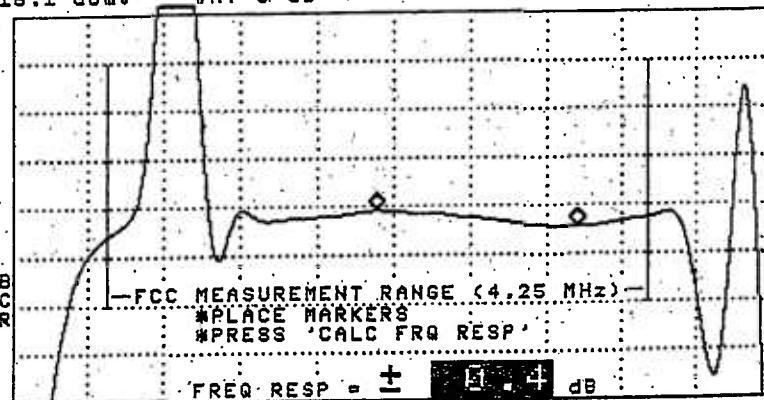
MAIN
MENU

12:23:29 FEB 17, 1998

CHANNEL 2 (STD)
REF 16.1 dBmV #AT 0 dB

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



START 54.000 MHz #RES BW 100 kHz #VBW 3 MHz STOP 60.000 MHz SWP 20.0 msec

MKR 55.865 MHz
7.87 dBmV

CHNL

MARKER 2

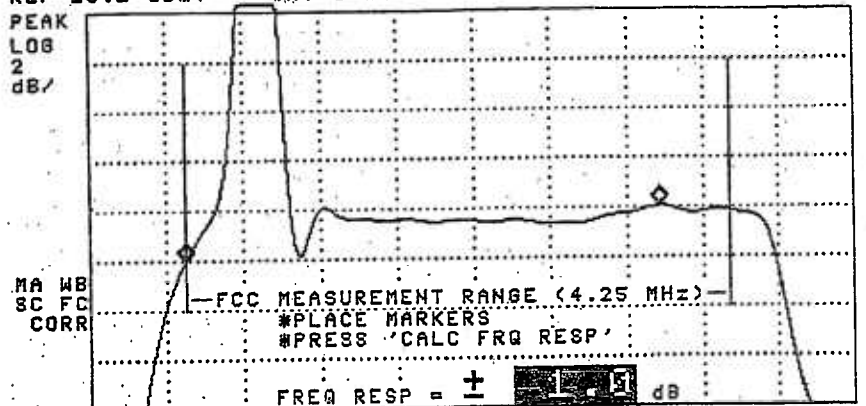
RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

12:25:40 FEB 17, 1998
 CHANNEL 24 (STD)
 REF 15.1 dBmV #AT 0 dB

MKR 120.750 MHz 5.14 dBmV MARKER 1



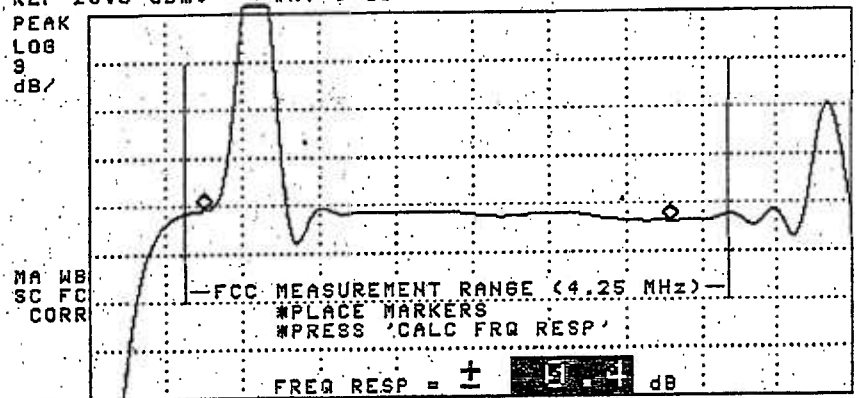
MARKER 2
 RESTART
 MAX HOLD
 CALC
 FRQ RESP

MAIN MENU

START 120.000 MHz STOP 125.000 MHz
 #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

12:26:43 FEB 17, 1998
 CHANNEL 24 (STD)
 REF 20.3 dBmV #AT 0 dB

MKR 166.545 MHz 7.12 dBmV MARKER 1



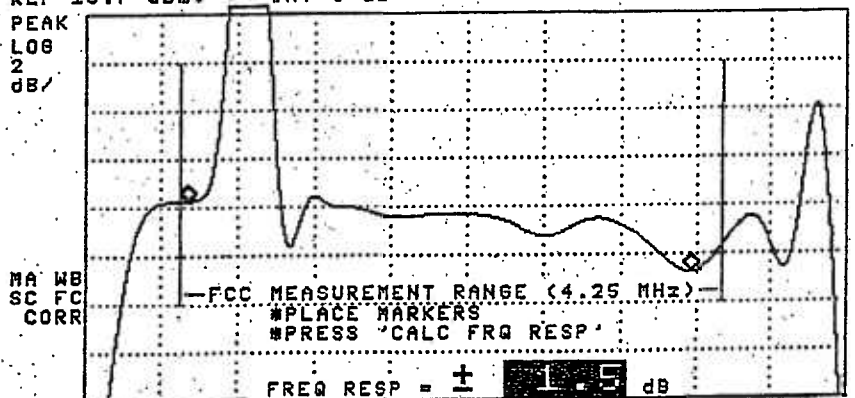
MARKER 2
 RESTART
 MAX HOLD
 CALC
 FRQ RESP

MAIN MENU

START 162.000 MHz STOP 168.000 MHz
 #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

12:27:52 FEB 17, 1998
 CHANNEL 24 (STD)
 REF 15.7 dBmV #AT 0 dB

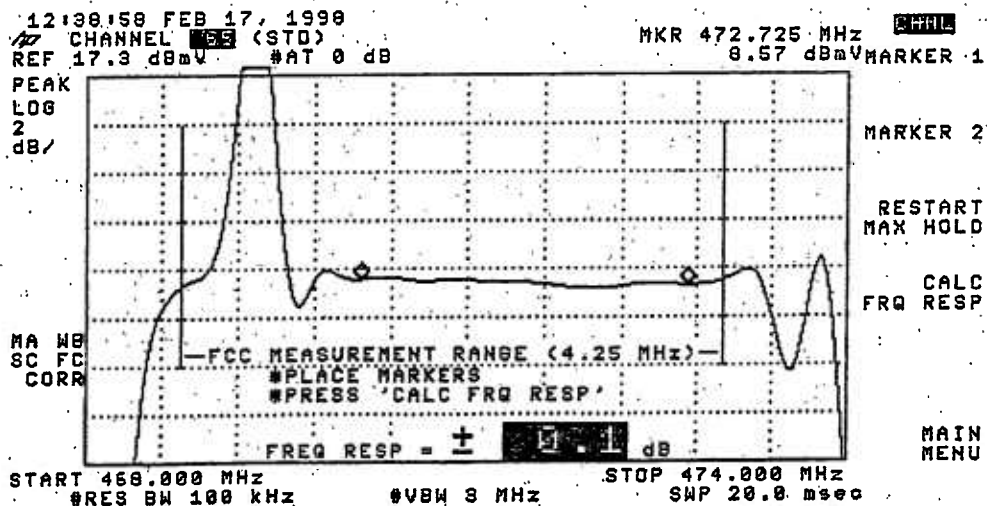
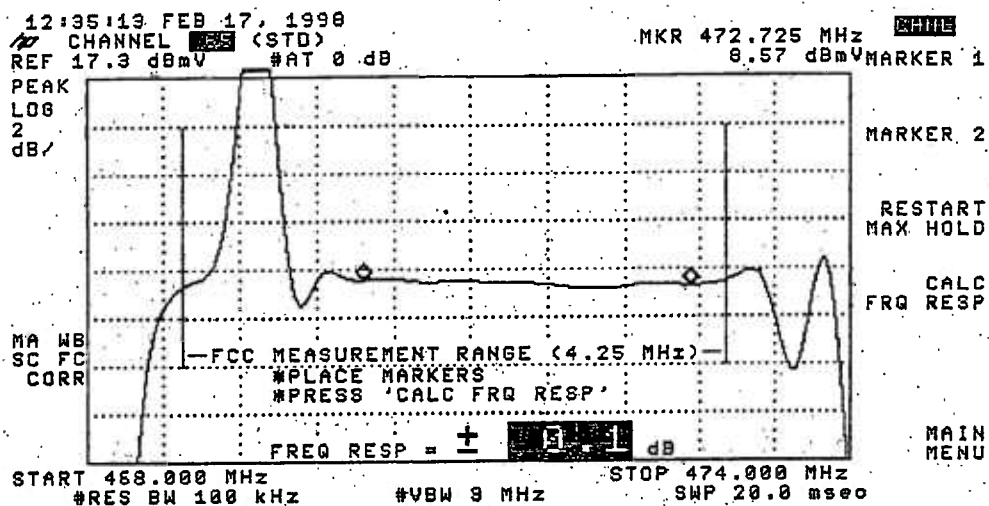
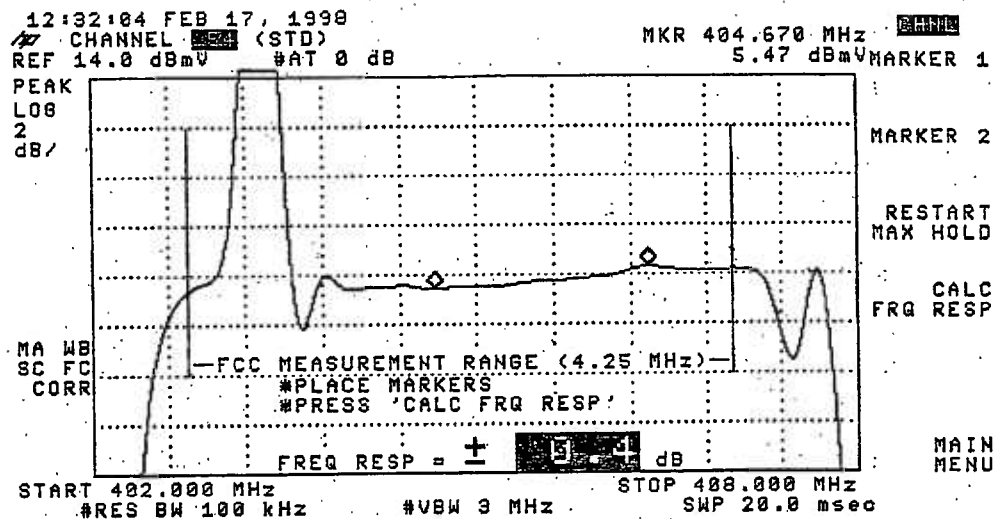
MKR 184.755 MHz 4.94 dBmV MARKER 1



MARKER 2
 RESTART
 MAX HOLD
 CALC
 FRQ RESP

MAIN MENU

START 180.000 MHz STOP 186.000 MHz
 #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

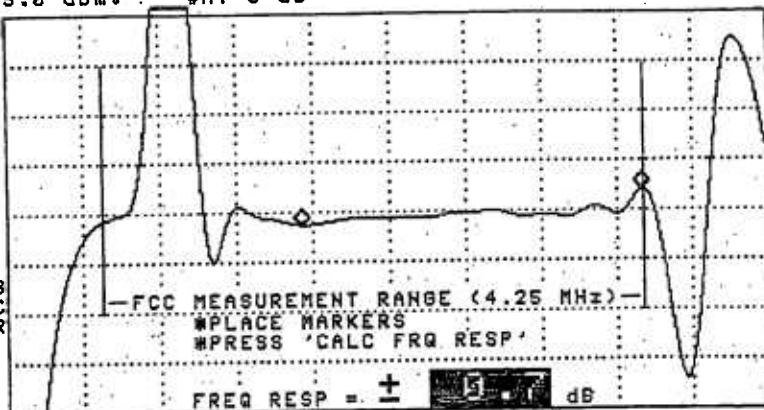


12:28:55 FEB 17, 1998
CHANNEL 23 (STD)
REF 15.0 dBmV #AT 0 dB

MKR 278.310 MHz
6.42 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

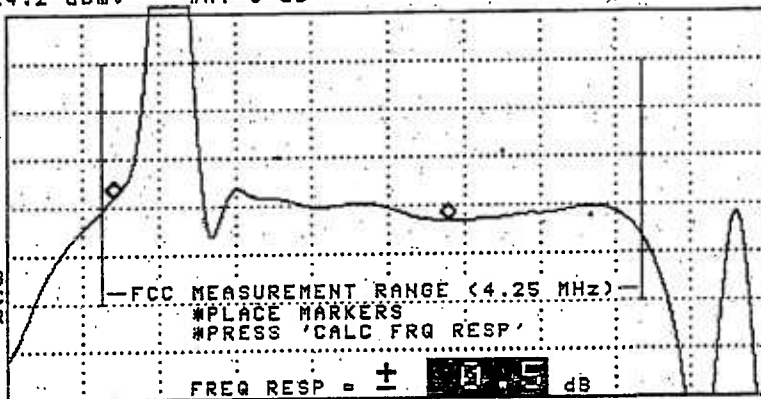
START 276.000 MHz STOP 282.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

12:30:00 FEB 17, 1998
CHANNEL 23 (STD)
REF 14.2 dBmV #AT 0 dB

MKR 315.465 MHz
5.58 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

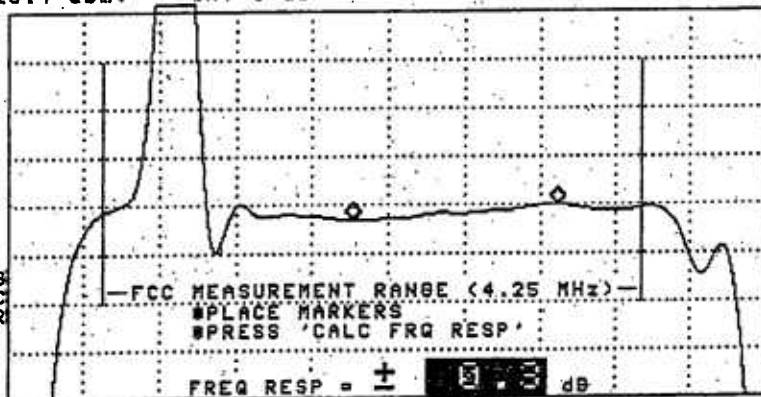
START 312.000 MHz STOP 318.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

12:31:03 FEB 17, 1998
CHANNEL 48 (STD)
REF 13.4 dBmV #AT 0 dB

MKR 368.730 MHz
4.76 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 366.000 MHz STOP 372.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 1

Location: Irving Ave.

Community: Liverpool

Pole Number: NYT#6

D.T. Value: 20-4

Map Number: 18-25a

OR Number: 108

Trunk Cascade: 3 LE Cascade: 1

Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: Irving Ave.

Date: 12-Feb-98

Time: 02:41 PM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Dif (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Dif (Dbmv)
2	55.2500	10.2	-3.9		14.1	AA	301.2625	9.5	-4.4		13.9
3	61.2500	9.7	-2.7		12.4	BB	307.2625	9.3	-4.4		13.7
4	67.2500	10.7	-3.0		13.7	CC	313.2625	8.9	-4.4		13.3
5	77.2500	10.5	-3.1		13.6	DD	319.2625	9.2	-4.1		13.3
6	83.2500	11.3	-2.4		13.7	EE	325.2625	9.7	-4.8		14.5
						FF	331.2750	9.4	-4.1		13.5
						GG	337.2625	9.1	-3.6		12.7
A-5	91.2500					HH	343.2625	10.3	-3.4		13.7
A-4	97.2500					II	349.2625	9.5	-4.0		13.5
A-3	103.2500					JJ	355.2625	10.3	-3.0		13.3
A-2	109.2750					KK	361.2625	9.6	-4.7		14.3
A-1	115.2750					LL	367.2625	8.7	-3.9		12.6
A	121.2625	11.2	-3.7		14.9	MM	373.2625	9.1	-4.0		13.1
B	127.2625	10.6	-3.5		14.1	NN	379.2625	9.7	-4.2		13.9
C	133.2625	9.8	-3.5		13.3	OO	385.2625	8.8	-5.2		14.0
D	139.2500	11.3	-2.8		14.1	PP	391.2625	9.2	-5.1		14.3
E	145.2500	10.1	-3.9		14.0	QQ	397.2625	8.6	-4.9		13.5
F	151.2500	10.4	-2.9		13.3	RR	403.2500	8.7	-4.6		13.3
G	157.2500	10.9	-3.0		13.9	SS	409.2500	9.8	-4.0		13.8
H	163.2500	10.1	-2.8		12.9	TT	415.2500	9.2	-5.0	S	14.2
I	169.2500	11.8	-2.2		14.0	UU	421.2500	9.4	-5.7	S	15.1
7	175.2500	11.5	-2.3		13.8	VV	427.2500	8.2	-5.3		13.5
8	181.2500	11.1	-2.5		13.6	WW	433.2500	8.5	-4.3	S	12.8
9	187.2500	11.3	-3.0		14.3	XX	439.2500	9.1	-5.0	S	14.1
10	193.2500	10.6	-2.3		12.9	YY	445.2500	10.2	-4.2	S	14.4
11	199.2500	11.2	-2.1		13.3	ZZ	451.2500	9.3	-5.8	S	15.1
12	205.2500	11.2	-2.8		14.0	63	457.2500	8.5	-5.3	S	13.8
13	211.2500	9.0	-3.6		12.6	64	463.2500	8.5	-4.9	S	13.4
J	217.2500	10.2	-3.6		13.8	65	469.2500	9.6	-4.5		14.1
K	223.2500	9.9	-3.7		13.6	66	475.2500	9.8	-5.0	S	14.8
L	229.2625	9.7	-3.4		13.1	67	481.2500	10.0	-4.2	S	14.2
M	235.2625	10.0	-4.4		14.4	68	487.2500	9.3	-4.4	S	13.7
N	241.2625	9.9	-3.9		13.8	69	493.2500	8.5	-4.6	S	13.1
O	247.2625	10.5	-3.2		13.7	70	499.2500	10.8	-3.9	S	14.7
P	253.2625	10.5	-3.0		13.5	71	505.2500	8.5	-6.2	S	14.7
Q	259.2625	10.0	-3.4		13.4	72	511.2500	9.9	-4.5	S	14.4
R	265.2625	10.3	-4.0		14.3	73	517.2500	9.2	-6.3	S	15.5
S	271.2625	9.0	-3.8		12.8	74	523.2500	8.2	-6.4	S	14.6
T	277.2625	8.5	-4.5		13.0	75	529.2500	9.1	-5.4	S	14.5
U	283.2625	9.3	-4.5		13.8	76	535.2500	9.0	-5.7	S	14.7
V	289.2625	9.7	-3.8		13.5	77	541.2500	8.2	-7.3	S	15.5
W	295.2625	10.1	-4.7		14.8	78	547.2500	7.9	-8.8	S	16.7

PEAK TO VALLEY: 3.9

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98

Test Performed By: Patrick Thrall

Location: Irving Ave.

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response (dBm)	Carrier To Noise Ratio (dB)	Disturbance (dBm)			Hum (%)
			TOB	CSO	MOD	
2	0.4	51	67.2	70.1	72.7	0.1
A	0.4	51.6	67	70	73.1	
H	0.9	50.4	65.6	70.2	72.2	
8	1	51.7	65.5	71.1	73	
T	1	50.2	63.1	70	72.6	
CC	0.7	51.8	62.4	68.7	73	
LL	0.8	50	60.8	68.8	73.9	
RR	1.1	50.3	60	68.7	74	
CCC	0.6	49.6	60.6	62.9	73	

Time Warner Cable Syracuse Division

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

System Name: Time Warner-Syracuse

Date: February 1998

Test Performed By Patrick Thrall

Location: Irving Ave.

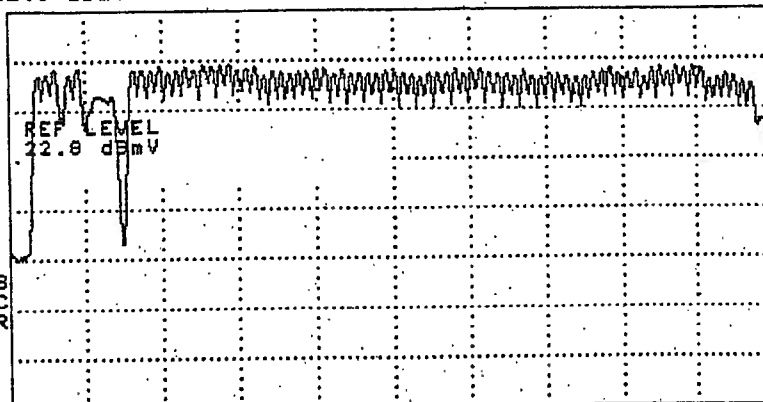
(SEE THE ATTACHED SWEEP TRACES)

14:43:03 FEB 12, 1998

REF 22.8 dBmV #AT 0 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR



CENTER 299.4 MHz
RES BW 3.0 MHz

VBW 1 MHz

SPAN 530.0 MHz
SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

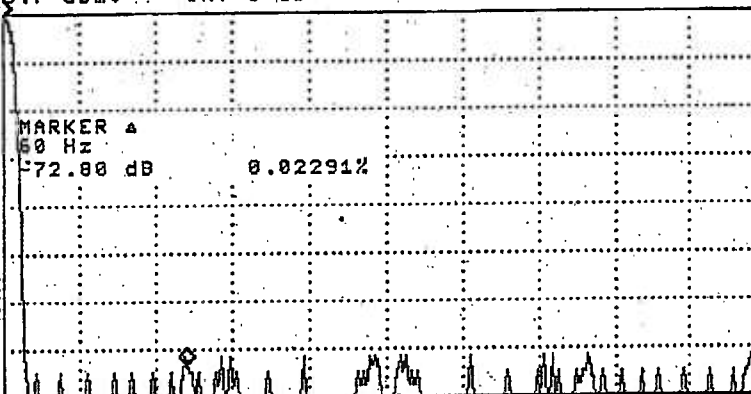
More
1 of 3

14:47:50 FEB 12, 1998

CHANNEL (STD)
REF 10.7 dBmV #AT 0 dB

PEAK
LOG
10
dB/

VA SB
SC FC
CORR



START 55.240 MHz
#RES BW 1.0 MHz

#VBW 1 kHz

STOP 55.240 MHz
#SWP 800 msec

MKR A 50 Hz
-72.80 dB

CHNL

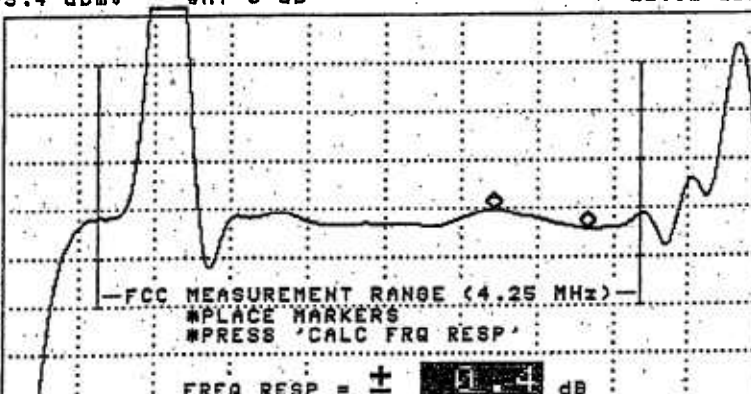
MAIN
MENU

14:51:35 FEB 12, 1998

CHANNEL (STD)
REF -3.4 dBmV #AT 0 dB

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



START 54.000 MHz
#RES BW 100 kHz

#VBW 3 MHz

STOP 60.000 MHz
SWP 20.0 msec

MKR 58.590 MHz
-12.92 dBmV

CHNL

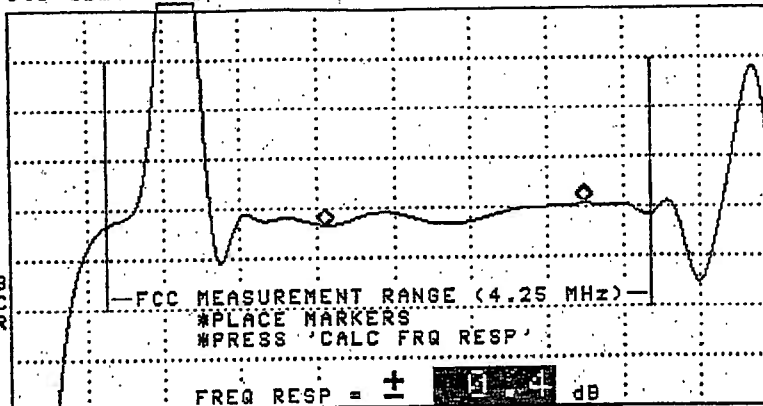
MAIN
MENU

14:53:19 FEB 12, 1998
CHANNEL (STD)
REF -3.0 dBmV #AT 0 dB

MKR 122.460 MHz
-11.74 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

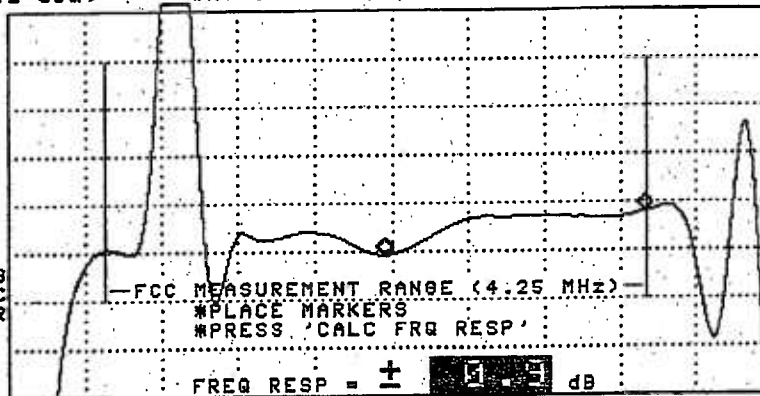
START 120.000 MHz STOP 126.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

14:55:24 FEB 12, 1998
CHANNEL (STD)
REF .2 dBmV #AT 0 dB

MKR 164.940 MHz
-10.00 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

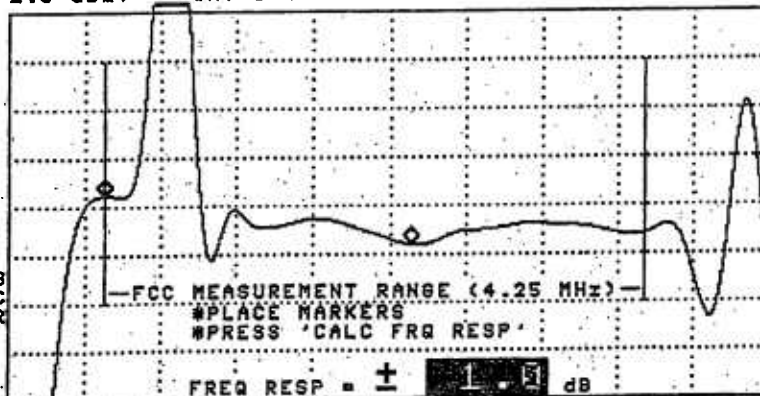
START 162.000 MHz STOP 168.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

14:57:52 FEB 12, 1998
CHANNEL (STD)
REF -1.8 dBmV #AT 0 dB

MKR 189.165 MHz
-11.46 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

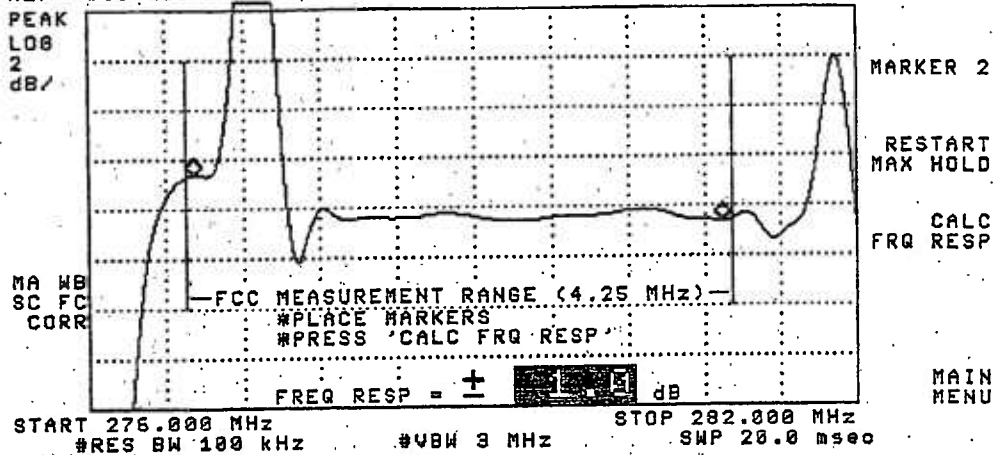
CALC
FRQ RESP

MAIN
MENU

START 180.000 MHz STOP 186.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

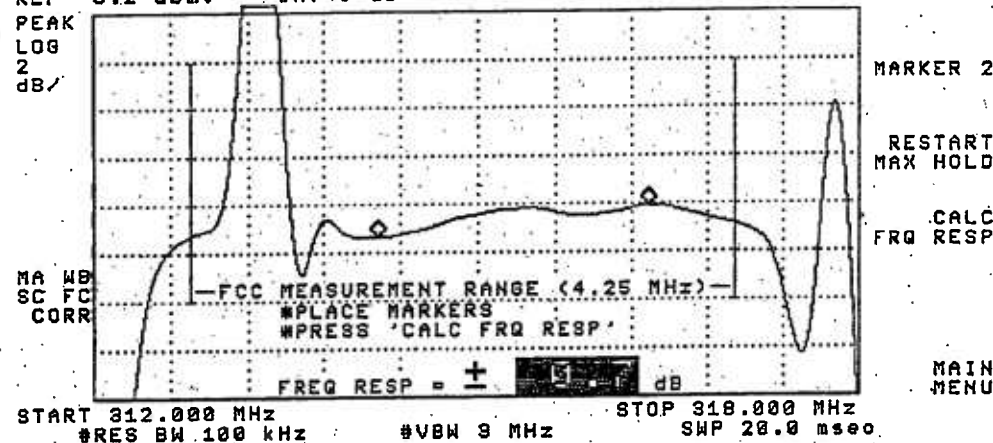
14:59:19 FEB 12, 1998
 CHANNEL 2 (STD)
 REF -9.8 dBmV #AT 0 dB

MKR 280.935 MHz
 -12.43 dBmV MARKER 1



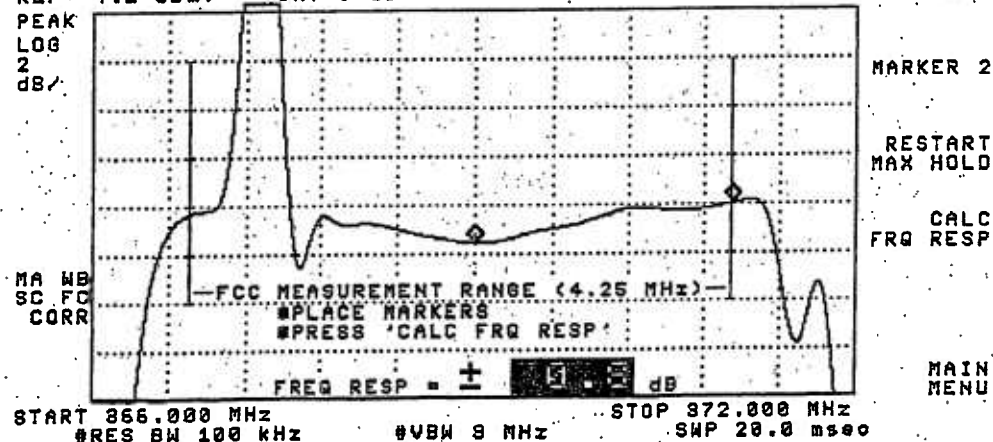
15:00:41 FEB 12, 1998
 CHANNEL 2 (STD)
 REF -9.2 dBmV #AT 0 dB

MKR 314.220 MHz
 -12.59 dBmV MARKER 1



15:01:40 FEB 12, 1998
 CHANNEL 2 (STD)
 REF -4.2 dBmV #AT 0 dB

MKR 369.000 MHz
 -13.70 dBmV MARKER 1

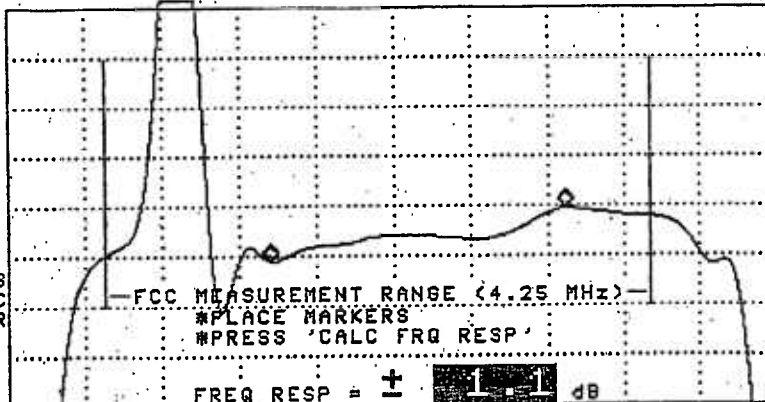


15:03:16 FEB 12, 1998
CHANNEL **55.1** (STD)
REF -4.2 dBmV #AT 0 dB

MRK 404.040 MHz **14.43**
-14.43 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

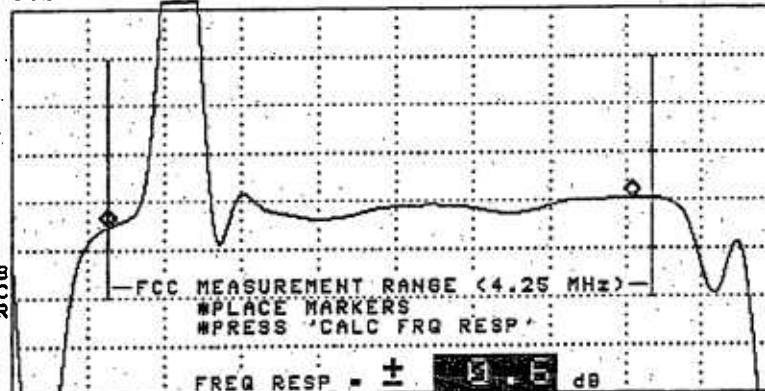
START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:04:30 FEB 12, 1998
CHANNEL **55.1** (STD)
REF -5.1 dBmV #AT 0 dB

MRK 468.750 MHz **14.16**
-14.16 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: Time Warner - Syracuse

Test Point Location Irving Ave

Date: February 1998

Performed by: B. Diriwachter & B. Wentworth

Meter Serial Number: 9210392

Chan	Freq (MHz)	Temp. F					Max Variation	Chan	Freq (MHz)	Temp. F					Max Variation
		28	29	31	34	28				29	31	34			
		Time				Time									
		23:15	05:15	11:10	17:10	23:15				05:15	11:10	17:10			
		Visual Level (dbmV)						Visual Level (dbmV)							
2	55.2500	11.5	11.6	10.7	4.8	6.8	AA	301.2625	9.9	9.6	8.9	9.7	1.0		
3	61.2500	12.0	11.9	11.2	5.2	6.8	BB	307.2625	12.3	12.1	11.2	11.7	1.1		
4	67.2500	12.7	12.6	12.1	5.6	7.1	CC	313.2625	12.8	12.5	11.8	12.4	1.0		
5	77.2500	12.2	12.5	11.7	5.4	7.1	DD	319.2625	11.9	11.8	11.3	11.8	0.6		
6	83.2500	13.2	12.9	12.5	5.9	7.3	EE	325.2625	12.6	12.6	11.9	12.5	0.7		
							FF	331.2750	12.5	12.7	11.6	11.9	1.1		
							GG	337.2625	12.6	12.6	11.7	12.5	0.9		
A-5	91.2500						HH	343.2625	13.6	13.4	12.5	13.6	1.1		
A-4	97.2500						II	349.2625	12.5	12.6	12.0	12.5	0.6		
A-3	103.2500						JJ	355.2625	13.2	13.2	12.5	13.2	0.7		
A-2	109.2750						KK	361.2625	12.8	13.1	12.4	13.2	0.8		
A-1	115.2750						LL	367.2625	12.5	12.6	11.5	12.5	1.1		
A	121.2625	13.5	13.3	12.5	13.1	1.0	MM	373.2625	12.8	12.8	12.1	12.6	0.7		
B	127.2625	12.5	12.4	11.9	12.3	0.6	NN	379.2625	12.7	12.3	11.9	12.8	0.9		
C	133.2625	11.9	12.5	11.3	11.7	1.2	OO	385.2625	12.2	12.6	11.6	12.6	1.0		
D	139.2500	13.7	13.1	12.7	13.6	1.0	PP	391.2625	13.2	13.2	12.2	13.1	1.0		
E	145.2500	12.4	12.4	11.5	12.1	0.9	QQ	397.2625	12.7	12.4	11.7	12.8	1.1		
F	151.2500	13.0	13.0	12.4	13.0	0.6	RR	403.2500	12.7	12.8	11.8	12.7	1.0		
G	157.2500	13.6	13.4	12.7	13.1	0.9	SS	409.2500	12.6	12.8	12.1	12.8	0.7		
H	163.2500	12.9	12.4	11.8	12.4	1.1	TT	415.2500	12.3	11.7	11.8	11.0	1.3		
I	169.2500	13.5	13.5	12.9	13.8	0.9	UU	421.2500	12.9	12.9	10.0	12.9	2.9		
7	175.2500	14.1	14.2	13.4	13.9	0.8	VV	427.2500	12.2	12.3	11.1	12.2	1.2		
8	181.2500	13.5	13.5	12.6	13.1	0.9	WW	433.2500	12.7	11.7	11.7	12.1	1.0		
9	187.2500	13.9	13.8	12.5	13.7	1.4	XX	439.2500	12.3	12.0	11.4	11.5	0.9		
10	193.2500	13.2	13.1	12.3	12.9	0.9	YY	445.2500	13.3	13.4	12.5	13.2	0.9		
11	199.2500	13.5	13.4	12.7	13.4	0.8	ZZ	451.2500	12.7	12.3	12.1	12.9	0.8		
12	205.2500	13.0	12.7	11.9	12.5	1.1	63	457.2500	11.3	12.0	11.7	11.6	0.7		
13	211.2500	12.1	11.0	9.2	12.0	2.9	64	463.2500	12.6	12.5	11.7	12.0	0.9		
J	217.2500	12.2	12.1	11.4	11.7	0.8	65	469.2500	13.1	13.2	12.0	12.9	1.2		
K	223.2500	12.2	12.2	11.5	12.1	0.7	66	475.2500	13.0	13.1	11.3	13.1	1.8		
L	229.2625	12.4	12.3	11.5	12.2	0.9	67	481.2500	13.1	13.9	12.8	13.3	1.1		
M	235.2625	12.7	12.6	11.9	12.7	0.8	68	487.2500	13.8	14.1	12.9	13.4	1.2		
N	241.2625	12.7	12.7	11.8	12.5	0.9	69	493.2500	12.7	12.8	12.0	12.8	0.8		
O	247.2625	13.3	13.2	12.4	13.1	0.9	70	499.2500	13.8	13.7	13.0	13.8	0.8		
P	253.2625	12.6	13.0	12.3	12.6	0.7	71	505.2500	13.0	12.7	11.7	12.3	1.3		
Q	259.2625	12.6	12.3	11.9	12.3	0.7	72	511.2500	14.0	13.4	12.5	13.1	1.5		
R	265.2625	12.9	13.2	12.4	13.1	0.8	73	517.2500	12.6	13.5	12.4	13.1	1.1		
S	271.2625	12.1	11.7	11.4	11.9	0.7	74	523.2500	12.7	12.7	11.5	11.8	1.2		
T	277.2625	12.4	12.1	11.4	12.1	1.0	75	529.2500	13.5	12.5	12.1	12.9	1.4		
U	283.2625	12.7	12.5	11.8	12.5	0.9	76	535.2500	12.7	10.9	10.3	11.9	2.4		
V	289.2625	12.5	12.5	11.5	12.5	1.0	77	541.2500	11.9	12.2	10.8	10.9	1.4		
W	295.2625	12.2	12.3	11.7	12.3	0.6	78	547.2500	12.3	12.3	11.5	12.2	0.8		

Max NonAdjacent Channel Level Diff.	9.1
Max Adjacent Channel Level Diff.	2.8

Max Variance from last proof-of-performance test	7.3
Date of last proof-of-performance test	8/97

Note: Make measurements through a 100 ft. test drop cable without a converter.

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 2

Location: Kinderhook Rd

Community: Kirkville

Pole Number: NM#23

D.T. Value: 17-4

Map Number: 20-35

OR Number: 98

Trunk Cascade: 4 LE Cascade: 2

Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: Kinderhook Rd.

Date: 10-Feb-98

Time: 01:05 PM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra (S)	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra (S)	Diff (Dbmv)
2	55.2500	14.1	0.6		13.5	AA	301.2625	14.9	0.7		14.2
3	61.2500	14.4	0.9		13.5	BB	307.2625	14.6	0.6		14.0
4	67.2500	14.5	0.5		14.0	CC	313.2625	13.7	0.1		13.6
5	77.2500	14.1	0.1		14.0	DD	319.2625	15.0	1.1		13.9
6	83.2500	14.1	0.5		13.6	EE	325.2625	14.6	-0.2		14.8
						FF	331.2750	14.1	0.0		14.1
						GG	337.2625	14.0	-0.1		14.1
A-5	91.2500					HH	343.2625	13.3	0.4		12.9
A-4	97.2500					II	349.2625	14.4	0.3		14.1
A-3	103.2500					JJ	355.2625	13.4	-0.6		14.0
A-2	109.2750					KK	361.2625	12.7	-0.5		13.2
A-1	115.2750					LL	367.2625	11.9	-2.3		14.2
A	121.2625	15.4	2.1		13.3	MM	373.2625	12.7	-0.5		13.2
B	127.2625	15.4	2.0		13.4	NN	379.2625	13.1	-0.5		13.6
C	133.2625	16.2	2.2		14.0	OO	385.2625	12.7	-1.4		14.1
D	139.2500	16.2	2.2		14.0	PP	391.2625	12.2	-1.9		14.1
E	145.2500	15.7	1.5		14.2	QQ	397.2625	11.5	-2.2		13.7
F	151.2500	15.8	1.4		14.4	RR	403.2500	10.6	-1.8		12.4
G	157.2500	15.8	1.8		14.0	SS	409.2500	12.4	-1.2		13.6
H	163.2500	15.0	1.0		14.0	TT	415.2500	12.4	-3.1	S	15.5
I	169.2500	15.3	1.6		13.7	UU	421.2500	10.5	-3.2	S	13.7
7	175.2500	15.0	1.3		13.7	VV	427.2500	11.1	-2.7		13.8
8	181.2500	15.2	0.8		14.4	WW	433.2500	10.5	-3.3	S	13.8
9	187.2500	14.6	0.8		13.8	XX	439.2500	10.9	-2.3	S	13.2
10	193.2500	14.4	0.7		13.7	YY	445.2500	11.9	-1.6	S	13.5
11	199.2500	14.1	0.2		13.9	ZZ	451.2500	11.3	-3.1	S	14.4
12	205.2500	14.4	0.3		14.1	63	457.2500	10.4	-3.4	S	13.8
13	211.2500	14.0	0.0		14.0	64	463.2500	10.3	-2.7	S	13.0
J	217.2500	13.6	-0.1		13.7	65	469.2500	11.9	-1.1		13.0
K	223.2500	13.5	0.3		13.2	66	475.2500	12.1	-2.3	S	14.4
L	229.2625	13.9	0.2		13.7	67	481.2500	12.2	-2.4	S	14.6
M	235.2625	13.8	-0.1		13.9	68	487.2500	11.2	-3.4	S	14.6
N	241.2625	13.7	0.1		13.6	69	493.2500	10.5	-2.1	S	12.6
O	247.2625	13.9	0.0		13.9	70	499.2500	12.3	-2.0	S	14.3
P	253.2625	15.1	0.3		14.8	71	505.2500	11.1	-1.3	S	12.4
Q	259.2625	14.8	1.0		13.8	72	511.2500	12.5	-3.3	S	15.8
R	265.2625	14.7	0.1		14.6	73	517.2500	11.4	-3.2	S	14.6
S	271.2625	13.7	0.3		13.4	74	523.2500	11.9	-1.9	S	13.8
T	277.2625	14.4	0.3		14.1	75	529.2500	12.7	-1.3	S	14.0
U	283.2625	14.0	1.2		12.8	76	535.2500	12.7	-1.9	S	14.6
V	289.2625	15.3	1.4		13.9	77	541.2500	12.1	-2.4	S	14.5
W	295.2625	15.1	0.4		14.7	78	547.2500	12.7	-2.7	S	15.4

PEAK TO VALLEY: 5.9

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98

Test Performed By: Patrick Thrall

Location: Kinderhook Rd.

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response (dB)	Carrier To Noise Ratio (dB)	Distortions (dB)			Hum (%)
			CTB	CSO	CSOD	
2	0.7	51.8	69.1	71.5	75	0.1
A	0.7	51.7	68.1	69.8	75	
H	0.9	51.4	65.2	69.9	73.9	
8	0.4	52	66.3	69.2	76.1	
T	0.7	51.9	62.4	68.8	74.2	
CC	0.6	50.5	62.5	67.7	74.6	
LL	0.5	50.6	60.5	63.9	75.2	
RR	0.6	51.1	60.1	63.6	74.3	
CCC	0.8	50.1	60	63.9	75	

Time Warner Cable Syracuse Division

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

System Name: Time Warner-Syracuse Date: February 1998
Test Performed By Patrick Thrall Location: Kinderhook Rd

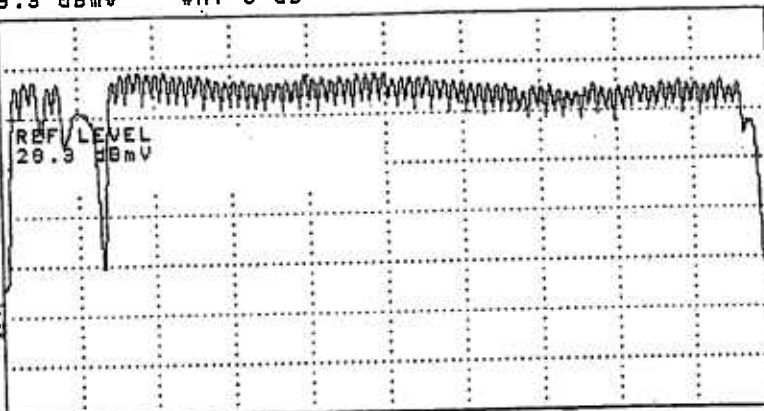
(SEE THE ATTACHED SWEEP TRACES)

14:11:07 FEB 10, 1998
 CHANNEL 1 (STD)
 REF 28.3 dBmV #AT 0 dB

PEAK
 LOG
 10
 dB/

MA SB
 SC FC
 CORR

START 45.0 MHz RES BW 3.0 MHz VBW 1 MHz STOP 575.0 MHz SWP 20.0 msec



CHNL
 CLEAR
 WRITE A

MAX
 HOLD A

VIEW A

BLANK A

Trace
 A B C

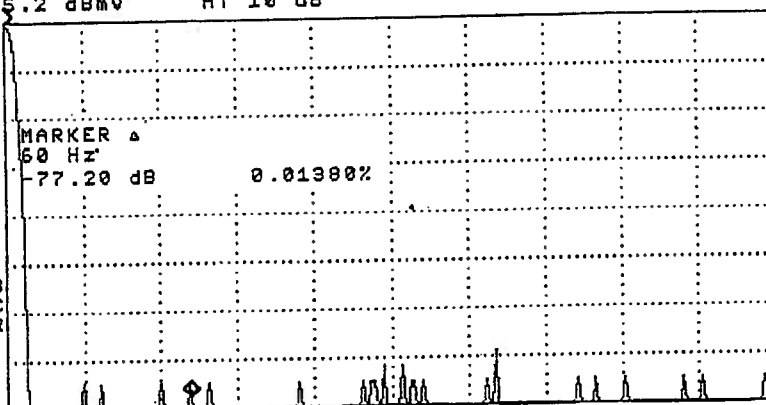
More
 1 of 3

14:24:03 FEB 10, 1998
 CHANNEL 1 (STD)
 REF 15.2 dBmV AT 10 dB

PEAK
 LOG
 10
 dB/

VA SB
 SC FC
 CORR

START 55.243 MHz #RES BW 1.0 MHz #VBW 1 kHz STOP 55.243 MHz #SWP 800 msec



MKR Δ 50 Hz
 -77.20 dB

CHNL

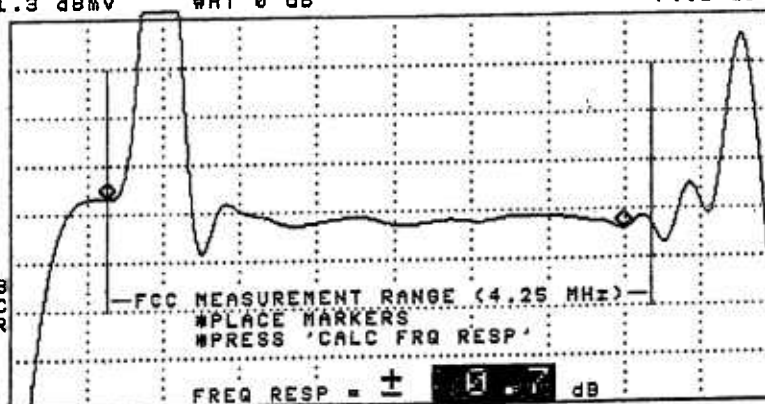
MAIN
 MENU

14:25:34 FEB 10, 1998
 CHANNEL 1 (STD)
 REF 1.3 dBmV #AT 0 dB

PEAK
 LOG
 2
 dB/

MA WB
 SC FC
 CORR

CENTER 57.120 MHz #RES BW 100 kHz #VBW 3 MHz SPAN 6.000 MHz SWP 20.0 msec



MKR 58.905 MHz
 -7.51 dBmV

CHNL

MARKER 2

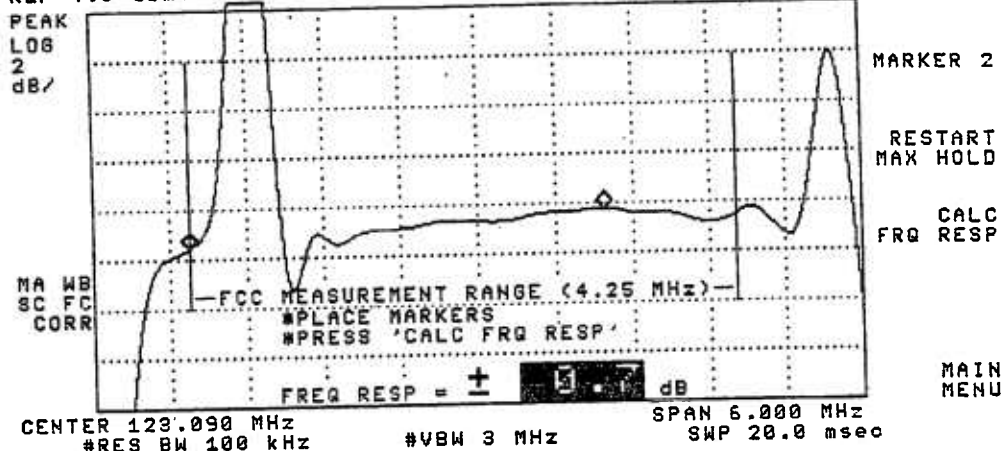
RESTART
 MAX HOLD

CALC
 FRQ RESP

MAIN
 MENU

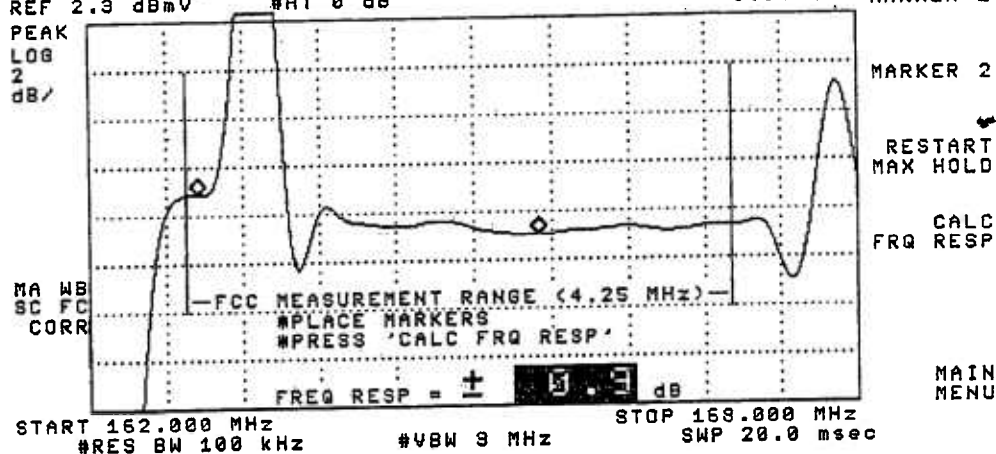
14:27:23 FEB 10, 1998
CHANNEL 14 (STD)
REF 4.3 dBmV #AT 0 dB

MKR 120.840 MHz CHANNEL
-5.30 dBmV MARKER 1



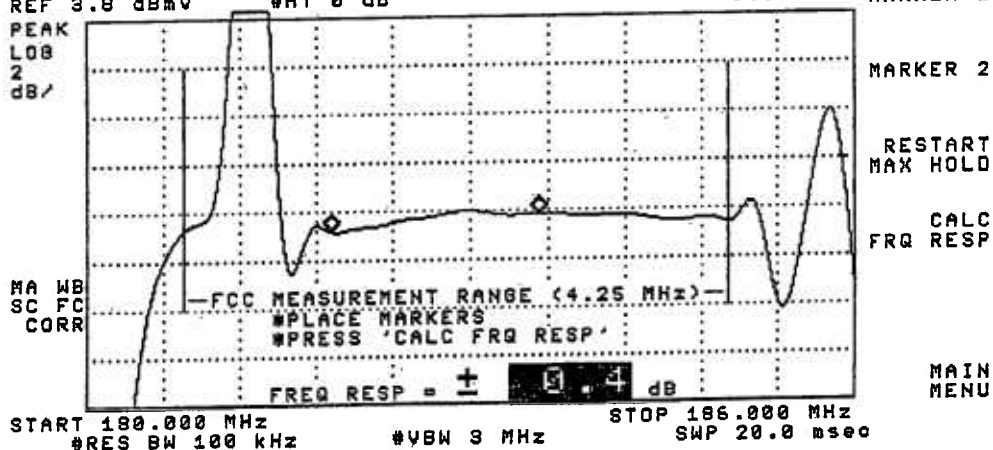
14:29:01 FEB 10, 1998
CHANNEL 14 (STD)
REF 2.3 dBmV #AT 0 dB

MKR 165.495 MHz CHANNEL
-6.68 dBmV MARKER 1



14:30:10 FEB 10, 1998
CHANNEL 14 (STD)
REF 3.8 dBmV #AT 0 dB

MKR 181.920 MHz CHANNEL
-5.05 dBmV MARKER 1

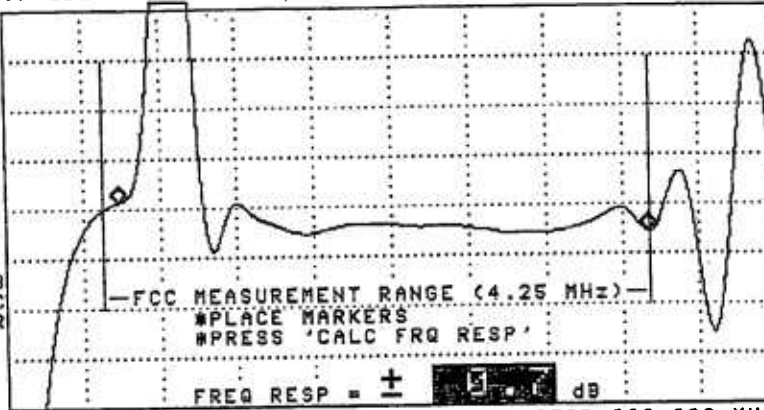


14:31:28 FEB 10, 1998
CHANNEL 1 (STD)
REF 2.7 dBmV #AT 0 dB

MKR 280.995 MHz CHNL
-6.41 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

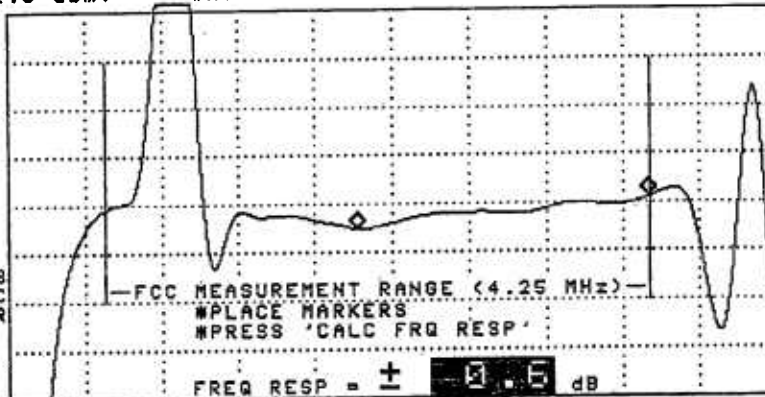
START 276.000 MHz STOP 282.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

14:33:00 FEB 10, 1998
CHANNEL 1 (STD)
REF 2.6 dBmV #AT 0 dB

MKR 314.730 MHz CHNL
-6.43 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

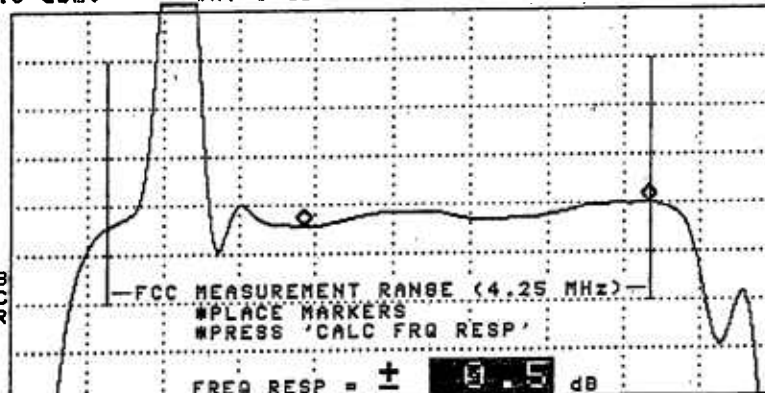
START 312.000 MHz STOP 318.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

14:35:10 FEB 10, 1998
CHANNEL 1 (STD)
REF .8 dBmV #AT 0 dB

MKR 368.310 MHz CHNL
-8.00 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

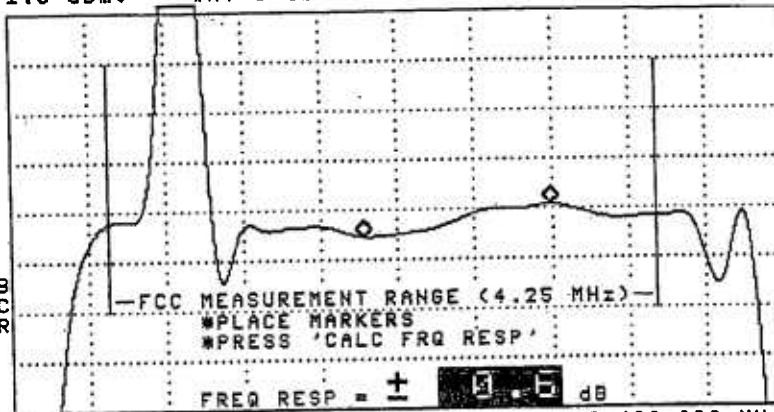
START 366.000 MHz STOP 372.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

14:36:27 FEB 10, 1998
CHANNEL 53 (STD)
REF -1.0 dBmV #AT 0 dB

MKR 404.730 MHz CHNL
-10.00 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

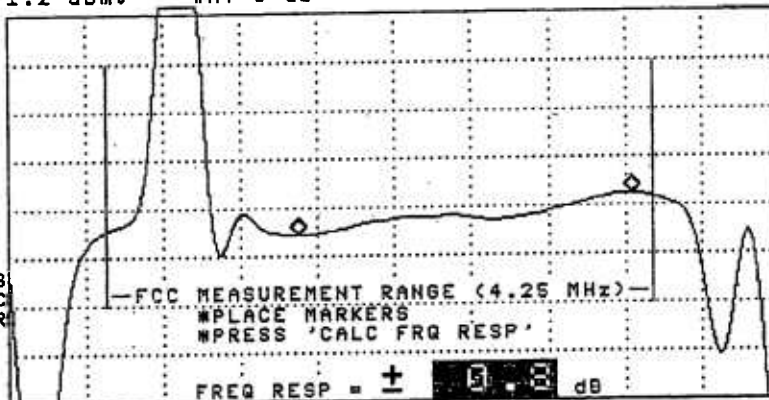
START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

14:37:33 FEB 10, 1998
CHANNEL 53 (STD)
REF -1.2 dBmV #AT 0 dB

MKR 470.250 MHz CHNL
-10.30 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: Time Warner - Syracuse

Test Point Location Kinderhook Rd.

Date: February 1998

Performed by: S. Williams & P. Bellucci

Meter Serial Number: 9210390

Chan	Freq (MHz)	Temp °F					Max Variation	Chan	Freq (MHz)	Temp °F					Max Variation
		27	26	29	32	27				26	29	32			
		Time				Time									
		22:29	04:35	10:34	16:27	22:29				04:35	10:34	16:27			
		Visual Level (dbmv)							Visual Level (dbmv)						
2	55.2500	16.4	14.1	16.5	16.0	2.4	AA	301.2625	19.5	14.9	18.6	18.2	4.6		
3	61.2500	16.9	14.4	16.6	16.6	2.5	BB	307.2625	19.2	14.6	18.6	18.3	4.6		
4	67.2500	17.0	14.5	16.8	16.3	2.5	CC	313.2625	18.8	13.7	18.3	18.0	5.1		
5	77.2500	16.6	14.1	16.5	16.2	2.5	DD	319.2625	19.8	15.0	18.9	18.8	4.8		
6	83.2500	16.5	14.1	16.2	15.6	2.4	EE	325.2625	19.5	14.6	18.2	17.9	4.9		
							FF	331.2750	19.5	14.1	18.9	18.2	5.4		
							GG	337.2625	19.6	14.0	19.0	18.7	5.6		
A-5	91.2500						HH	343.2625	19.1	13.3	17.7	17.5	5.8		
A-4	97.2500						II	349.2625	19.5	14.4	18.9	18.6	5.1		
A-3	103.2500						JJ	355.2625	19.1	13.4	18.2	17.7	5.7		
A-2	109.2750						KK	361.2625	18.9	12.7	17.5	17.2	6.2		
A-1	115.2750						LL	367.2625	18.5	11.9	17.7	17.5	6.6		
A	121.2625	18.5	15.4	17.9	17.6	3.1	MM	373.2625	19.0	12.7	17.9	17.5	6.3		
B	127.2625	18.3	15.4	18.3	17.8	2.9	NN	379.2625	18.8	13.1	17.7	16.8	5.7		
C	133.2625	19.0	16.2	18.2	18.0	2.8	OO	385.2625	18.8	12.7	17.5	17.1	6.1		
D	139.2500	18.8	16.2	18.6	18.0	2.6	PP	391.2625	19.2	12.2	18.2	17.3	7.0		
E	145.2500	19.4	15.7	18.8	18.5	3.7	QQ	397.2625	18.9	11.5	17.5	17.3	7.4		
F	151.2500	18.8	15.8	18.8	18.5	3.0	RR	403.2500	18.0	10.6	17.1	16.5	7.4		
G	157.2500	18.9	15.8	18.4	18.2	3.1	SS	409.2500	18.4	12.4	17.7	17.2	6.0		
H	163.2500	18.0	15.0	17.6	17.5	3.0	TT	415.2500	17.3	12.4	16.4	15.3	4.9		
I	169.2500	18.3	15.3	18.0	17.7	3.0	UU	421.2500	16.0	10.5	16.1	16.0	5.6		
7	175.2500	18.1	15.0	17.5	17.4	3.1	VV	427.2500	17.8	11.1	17.2	16.6	6.7		
8	181.2500	18.2	15.2	18.0	17.3	3.0	WW	433.2500	17.4	10.5	16.2	15.6	6.9		
9	187.2500	17.9	14.6	17.9	17.1	3.3	XX	439.2500	17.3	10.9	16.2	16.2	6.4		
10	193.2500	17.7	14.4	17.4	16.8	3.3	YY	445.2500	17.5	11.9	17.1	16.8	5.6		
11	199.2500	17.4	14.1	17.0	16.4	3.3	ZZ	451.2500	17.3	11.3	17.4	16.5	6.1		
12	205.2500	18.2	14.4	18.3	17.8	3.9	63	457.2500	16.9	10.4	16.5	15.8	6.5		
13	211.2500	17.5	14.0	16.5	16.4	3.5	64	463.2500	17.3	10.3	16.8	16.8	7.0		
J	217.2500	17.4	13.6	15.9	16.1	3.8	65	469.2500	18.1	11.9	17.1	16.6	6.2		
K	223.2500	17.4	13.5	16.7	16.5	3.9	66	475.2500	17.8	12.1	16.9	16.7	5.7		
L	229.2625	17.6	13.9	16.7	16.5	3.7	67	481.2500	18.2	12.2	17.0	16.8	6.0		
M	235.2625	17.8	13.8	16.8	16.6	4.0	68	487.2500	17.3	11.2	16.3	16.1	6.1		
N	241.2625	18.0	13.7	17.4	17.4	4.3	69	493.2500	17.7	10.5	16.8	17.0	7.2		
O	247.2625	17.9	13.9	17.5	17.1	4.0	70	499.2500	18.1	12.3	17.6	17.4	5.8		
P	253.2625	19.5	15.1	17.5	17.5	4.4	71	505.2500	16.9	11.1	15.7	16.0	5.8		
Q	259.2625	18.4	14.8	18.1	17.6	3.6	72	511.2500	18.2	12.5	17.5	17.2	5.7		
R	265.2625	18.7	14.7	18.2	17.8	4.0	73	517.2500	16.8	11.4	17.5	17.0	6.1		
S	271.2625	18.3	13.7	17.5	16.9	4.6	74	523.2500	18.3	11.9	18.0	17.6	6.4		
T	277.2625	19.2	14.4	19.0	18.4	4.8	75	529.2500	18.4	12.7	17.7	17.2	5.7		
U	283.2625	18.5	14.0	17.7	17.2	4.5	76	535.2500	18.1	12.7	18.1	16.3	5.4		
V	289.2625	19.1	15.3	18.3	18.0	3.8	77	541.2500	17.9	12.1	17.6	17.1	5.8		
W	295.2625	18.9	15.1	18.6	18.3	3.8	78	547.2500	18.2	12.7	18.1	17.7	5.5		

Max NonAdjacent Channel Level Diff.	5.9
Max Adjacent Channel Level Diff.	1.9

Max Variance from last proof-of-performance test	6.7
Date of last proof-of-performance test	8/97

Note: Make measurements through a 100 ft. test drop cable without a converter.

TestPoint 2 Page 5 of 5

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 3

Location: Cornwell Rd.

Community: Van Buren

Pole Number: 9

D.T. Value: 20-4

Map Number: 12-15

OR Number: 646

Trunk Cascade: 5 LE Cascade: 1

Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: Cornwell Rd.

Date: 11-Feb-98

Time: 03:26 PM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Sora 'S'	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Sora 'S'	Diff (Dbmv)
2	55.2500	10.6	-2.3		12.9	AA	301.2625	9.2	-3.9		13.1
3	61.2500	11.8	-1.6		13.4	BB	307.2625	9.7	-4.0		13.7
4	67.2500	11.6	-2.5		14.1	CC	313.2625	9.6	-3.4		13.0
5	77.2500	11.0	-2.9		13.9	DD	319.2625	10.3	-2.7		13.0
6	83.2500	10.5	-3.5		14.0	EE	325.2625	10.7	-3.1		13.8
						FF	331.2750	10.6	-2.7		13.3
						GG	337.2625	10.8	-3.0		13.8
A-5	91.2500					HH	343.2625	10.9	-2.6		13.5
A-4	97.2500					II	349.2625	11.0	-2.5		13.5
A-3	103.2500					JJ	355.2625	11.6	-2.0		13.6
A-2	109.2750					KK	361.2625	11.1	-3.2		14.3
A-1	115.2750					LL	367.2625	10.3	-3.2		13.5
A	121.2625	9.5	-4.3		13.8	MM	373.2625	9.5	-3.7		13.2
B	127.2625	10.1	-3.4		13.5	NN	379.2625	10.3	-3.5		13.8
C	133.2625	10.1	-3.9		14.0	OO	385.2625	9.1	-4.8		13.9
D	139.2500	10.5	-3.4		13.9	PP	391.2625	9.9	-4.8		14.7
E	145.2500	10.0	-4.6		14.6	QQ	397.2625	8.9	-4.9		13.8
F	151.2500	9.6	-4.3		13.9	RR	403.2500	8.3	-4.7		13.0
G	157.2500	9.4	-4.2		13.6	SS	409.2500	10.2	-3.0		13.2
H	163.2500	9.7	-4.4		14.1	TT	415.2500	9.1	-5.6	S	14.7
I	169.2500	9.5	-4.1		13.6	UU	421.2500	7.3	-6.8	S	14.1
7	175.2500	9.3	-4.3		13.6	VV	427.2500	7.5	-7.0		14.5
8	181.2500	9.3	-4.6		13.9	WW	433.2500	5.9	-6.5	S	12.4
9	187.2500	9.0	-4.8		13.8	XX	439.2500	6.5	-7.3	S	13.8
10	193.2500	9.2	-4.9		14.1	YY	445.2500	7.8	-6.9	S	14.7
11	199.2500	7.5	-6.6		14.1	ZZ	451.2500	6.0	-8.5	S	14.5
12	205.2500	8.0	-5.7		13.7	63	457.2500	6.3	-7.4	S	13.7
13	211.2500	6.5	-6.1		12.6	64	463.2500	6.2	-6.8	S	13.0
J	217.2500	8.8	-5.1		13.9	65	469.2500	8.1	-5.5		13.6
K	223.2500	8.8	-5.4		14.2	66	475.2500	9.1	-6.7	S	15.8
L	229.2625	8.8	-5.2		14.0	67	481.2500	8.4	-6.4	S	14.8
M	235.2625	8.2	-6.1		14.3	68	487.2500	7.5	-7.1	S	14.6
N	241.2625	7.5	-6.0		13.5	69	493.2500	6.2	-7.1	S	13.3
O	247.2625	7.6	-5.5		13.1	70	499.2500	7.8	-5.6	S	13.4
P	253.2625	8.0	-5.4		13.4	71	505.2500	8.6	-7.8	S	16.4
Q	259.2625	7.8	-5.9		13.7	72	511.2500	8.3	-6.2	S	14.5
R	265.2625	7.9	-6.0		13.9	73	517.2500	7.0	-8.2	S	15.2
S	271.2625	7.4	-5.7		13.1	74	523.2500	6.6	-7.5	S	14.1
T	277.2625	7.3	-6.0		13.3	75	529.2500	7.8	-7.0	S	14.8
U	283.2625	7.5	-5.7		13.2	76	535.2500	8.1	-6.5	S	14.6
V	289.2625	8.3	-4.5		12.8	77	541.2500	7.4	-8.5	S	15.9
W	295.2625	8.9	-4.7		13.6	78	547.2500	6.4	-9.8	S	16.2

PEAK TO VALLEY: 5.9

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98
Test Performed By: Patrick Thrall
Location: Cornwell Rd.

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In-Channel Response (μ dB)	Carrier To Noise Ratio (dB)	Distortions (dB)			Hum (%)
			C/N	C/N ₀	C/N ₀ Mod	
2	0.8	49	68.3	68.5	72.8	0.12
A	0.4	48	67	66.6	73.1	
H	0.8	50.6	64.1	66.5	73.9	
8	0.7	50	64	65.6	74	
T	0.7	50.2	60	63.3	73.3	
CC	0.5	50	60.5	64.9	72.8	
LL	0.3	50.2	59.6	63.4	73	
RR	0.8	49.6	59.6	61.8	73.6	
CCC	0.6	48.1	58.7	58.2	72.9	

Time Warner Cable Syracuse Division

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

System Name: Time Warner-Syracuse Date: February 1998

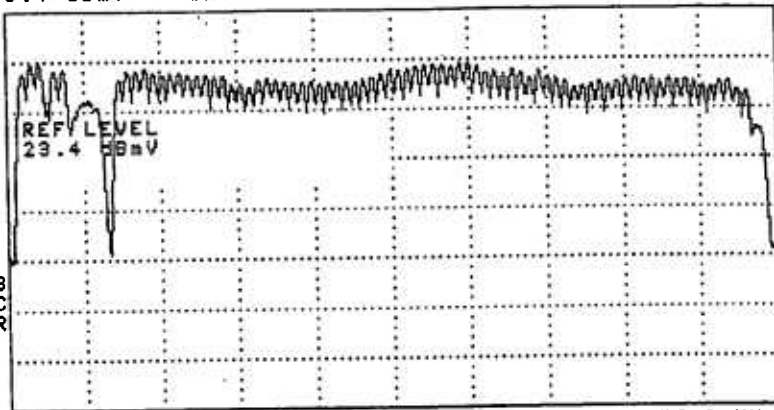
Test Performed By Patrick Thrall Location: Cornwell Rd.

(SEE THE ATTACHED SWEEP TRACES)

16:32:12 FEB 11, 1998
 CHANNEL 2 (STD)
 REF 23.4 dBmV #AT 0 dB

PEAK
 LOG
 10
 dB/

MA SB
 SC FC
 CORR



START 45.0 MHz RES BW 3.0 MHz VBW 1 MHz STOP 575.0 MHz SWP 20.0 msec

CHNL
 CLEAR
 WRITE A

MAX
 HOLD A

VIEW A

BLANK A

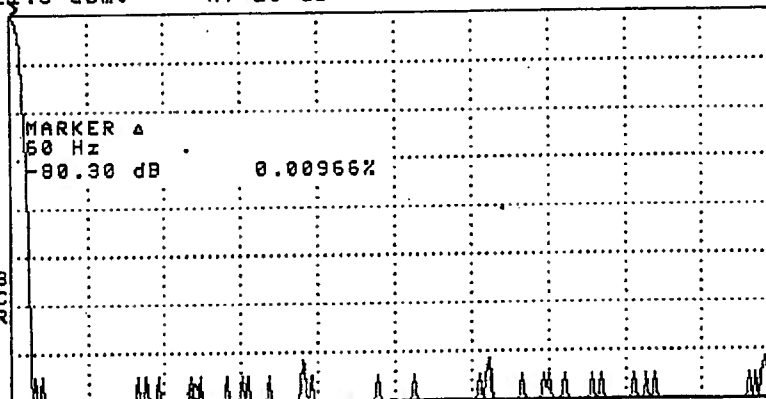
Trace
 A B C

More
 1 of 3

16:34:00 FEB 11, 1998
 CHANNEL 2 (STD)
 REF 11.5 dBmV AT 10 dB

PEAK
 LOG
 10
 dB/

VA SB
 SC FC
 CORR



START 55.238 MHz #RES BW 1.0 MHz #VBW 1 kHz STOP 55.238 MHz #SWP 800 msec

MKR Δ 60 Hz
 -80.30 dB

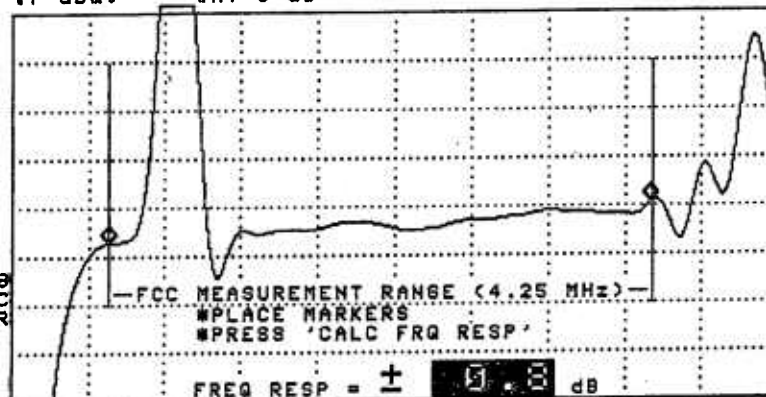
CHNL

MAIN
 MENU

16:37:12 FEB 11, 1998
 CHANNEL 3 (STD)
 REF -0.7 dBmV #AT 0 dB

PEAK
 LOG
 2
 dB/

MA WB
 SC FC
 CORR



START 54.000 MHz #RES BW 100 kHz #VBW 3 MHz STOP 60.000 MHz SWP 20.0 msec

MKR 54.750 MHz
 -10.14 dBmV

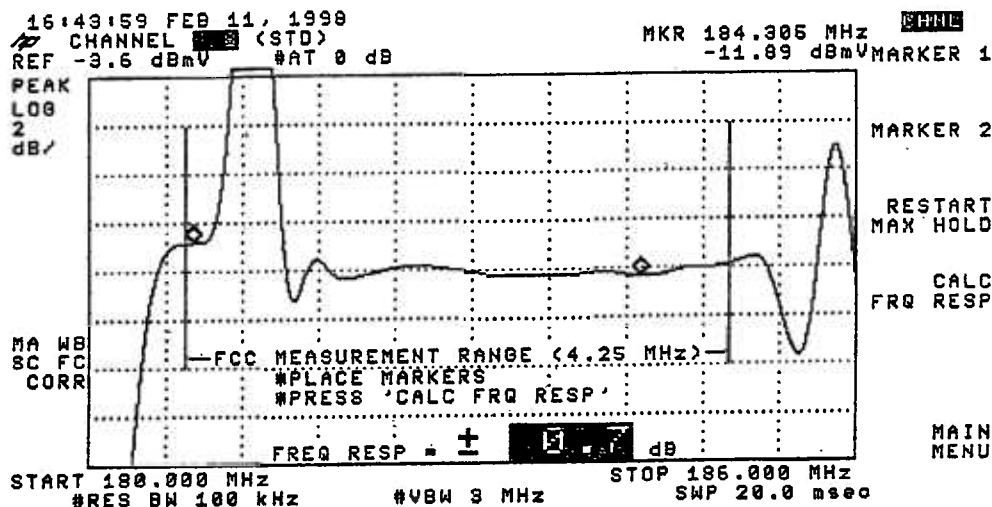
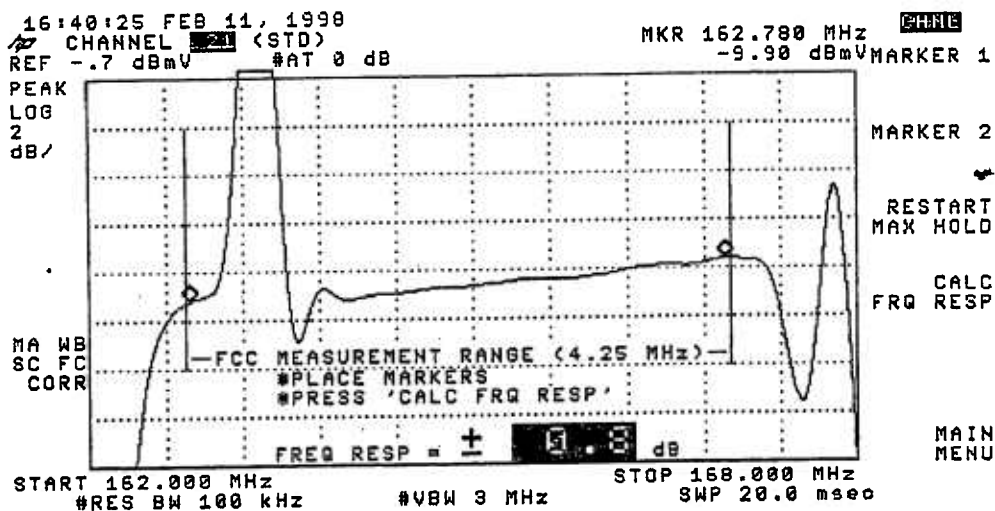
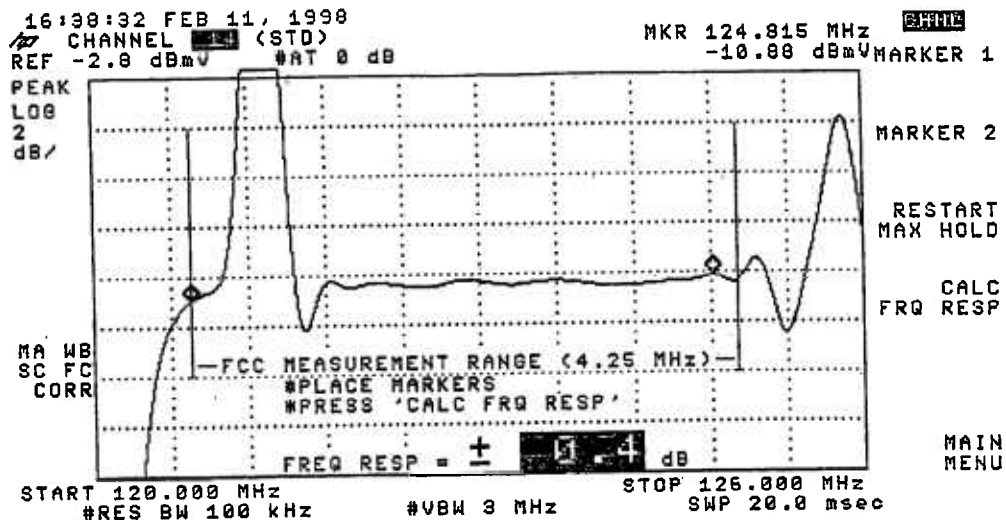
CHNL

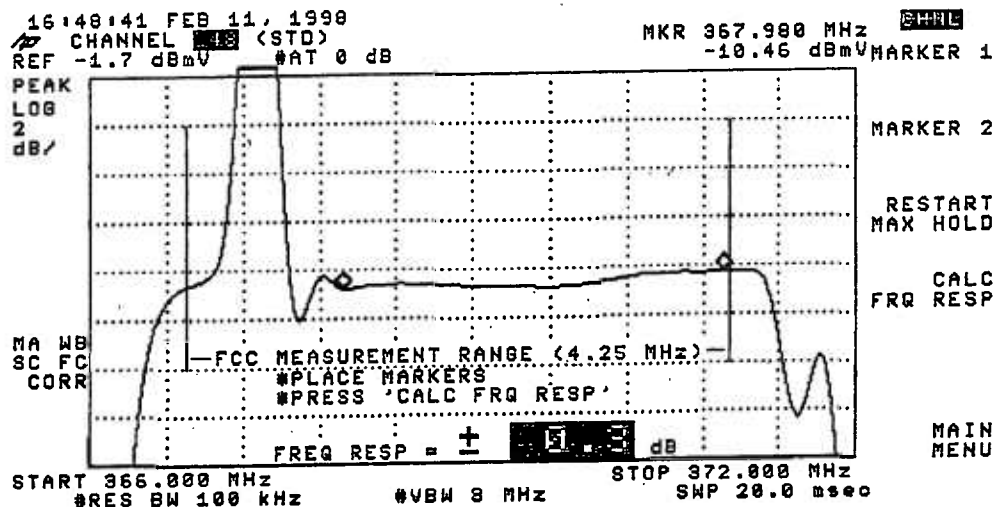
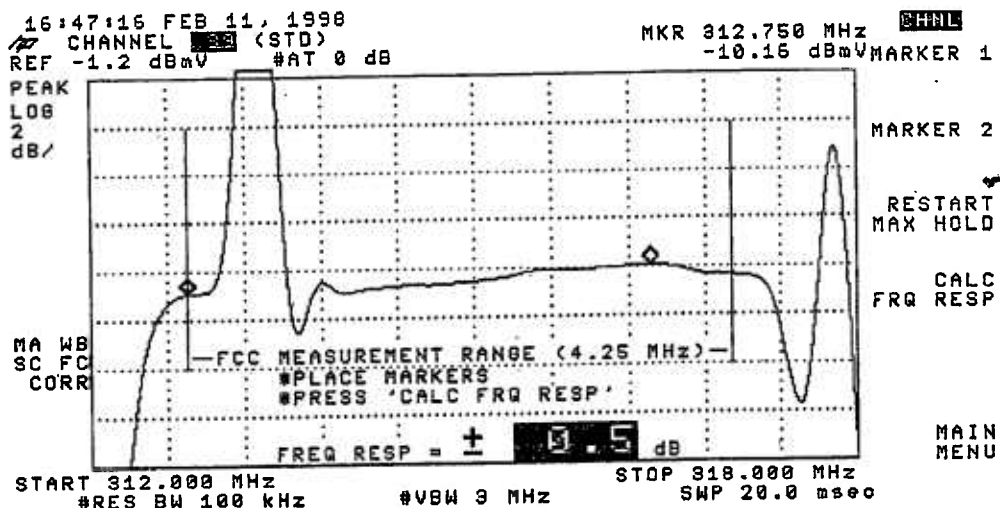
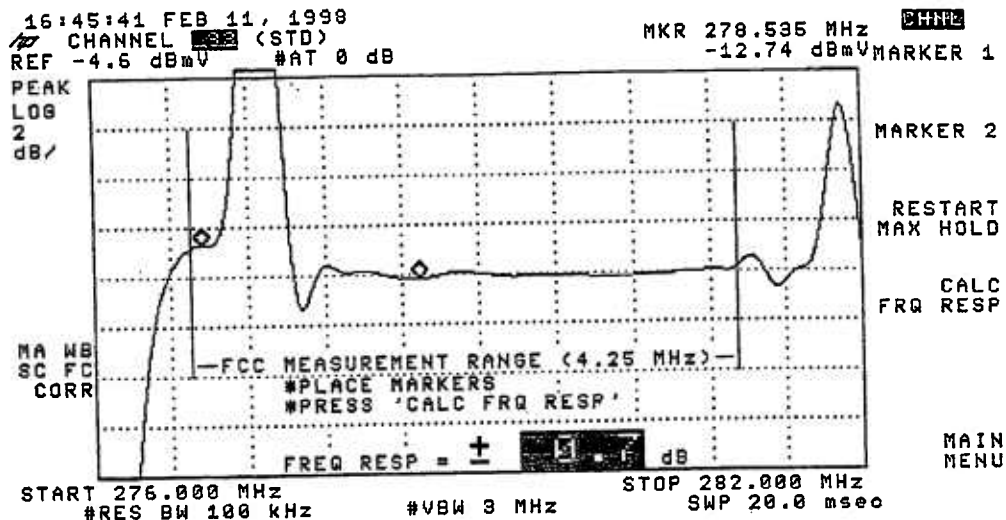
MARKER 2

RESTART
 MAX HOLD

CALC
 FRQ RESP

MAIN
 MENU



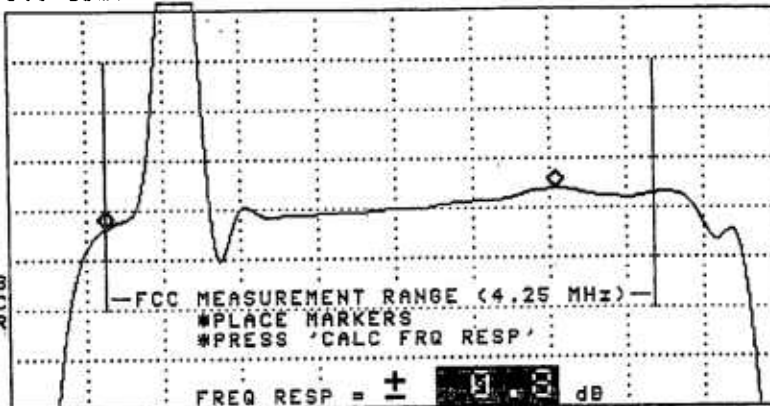


16:49:43 FEB 11, 1998
CHANNEL 54 (STD)
REF -3.6 dBmV #AT 0 dB

MKR 402.750 MHz
-12.34 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

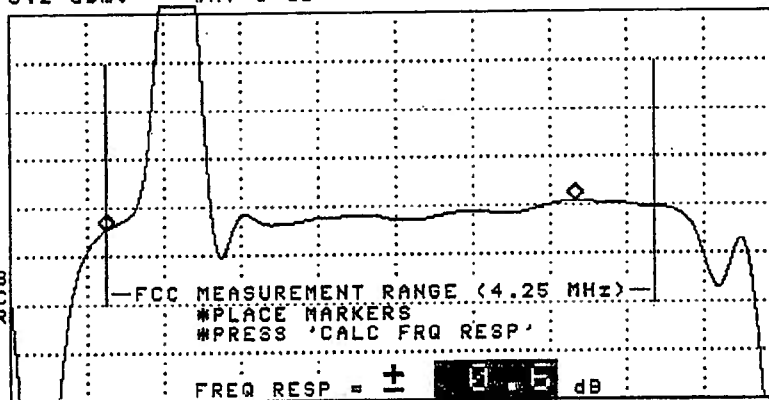
START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

16:51:04 FEB 11, 1998
CHANNEL 55 (STD)
REF -5.2 dBmV #AT 0 dB

MKR 468.750 MHz
-14.15 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: Time Warner - Syracuse

Test Point Location Cornwell Rd.

Date: February 1998

Performed by: S.Williams & P.Bellucci

Meter Serial Number: 9210390

Chan	Freq (MHz)	Temp F				Max Variation	Chan	Freq (MHz)	Temp F				Max Variation
		27	28	30	33				27	28	30	33	
		Time							Time				
		02:52	07:58	14:02	20:00				02:52	07:58	14:02	20:00	
		Visual Level (dbmV)							Visual Level (dbmV)				
2	55.2500	12.1	12.2	11.2	11.5	1.0	AA	301.2625	12.2	11.0	12.0	12.3	1.3
3	61.2500	13.8	13.8	13.4	13.6	0.4	BB	307.2625	13.3	13.0	12.4	13.1	0.9
4	67.2500	13.6	13.7	13.2	13.7	0.5	CC	313.2625	13.8	13.2	12.7	13.5	1.1
5	77.2500	13.2	13.3	12.6	13.0	0.7	DD	319.2625	13.6	13.3	13.2	13.5	0.4
6	83.2500	12.8	12.6	12.4	12.5	0.4	EE	325.2625	14.7	14.1	13.7	14.2	1.0
							FF	331.2750	14.4	13.8	13.5	14.0	0.9
							GG	337.2625	14.8	14.3	13.6	14.5	1.2
A-5	91.2500						HH	343.2625	15.1	14.7	14.1	14.6	1.0
A-4	97.2500						II	349.2625	15.0	14.7	14.0	14.6	1.0
A-3	103.2500						JJ	355.2625	15.2	14.5	14.4	14.8	0.8
A-2	109.2750						KK	361.2625	14.9	14.6	14.1	14.4	0.8
A-1	115.2750						LL	367.2625	14.6	14.4	13.8	14.1	0.8
A	121.2625	12.6	12.4	11.9	11.9	0.7	MM	373.2625	14.0	13.6	13.0	13.3	1.0
B	127.2625	12.7	12.4	11.8	12.0	0.9	NN	379.2625	13.9	13.6	13.0	13.5	0.9
C	133.2625	12.6	12.6	11.5	12.2	1.1	OO	385.2625	13.7	13.2	12.6	13.3	1.1
D	139.2500	13.4	13.0	12.4	12.8	1.0	PP	391.2625	13.9	13.8	13.2	13.6	0.7
E	145.2500	12.6	12.7	11.8	11.9	0.9	QQ	397.2625	13.8	13.0	12.7	13.3	1.1
F	151.2500	12.6	12.6	11.8	12.2	0.8	RR	403.2500	13.4	13.0	12.5	12.9	0.9
G	157.2500	12.5	12.3	11.5	12.1	1.0	SS	409.2500	14.1	13.2	13.2	13.8	0.9
H	163.2500	12.5	12.1	11.6	12.2	0.9	TT	415.2500	12.3	12.0	11.8	12.7	0.9
I	169.2500	11.9	12.1	11.1	11.9	1.0	UU	421.2500	12.2	12.1	10.4	11.4	1.8
7	175.2500	12.6	12.1	11.4	12.2	1.2	VV	427.2500	12.0	11.3	11.3	11.9	0.7
8	181.2500	11.9	11.8	11.0	11.5	0.9	WW	433.2500	10.5	10.8	10.0	10.7	0.8
9	187.2500	12.1	12.1	11.1	11.6	1.0	XX	439.2500	9.4	9.7	9.7	10.1	0.7
10	193.2500	12.2	12.1	11.2	11.6	1.0	YY	445.2500	11.6	10.8	10.7	11.2	0.9
11	199.2500	10.5	10.5	9.7	10.3	0.8	ZZ	451.2500	11.2	9.1	11.0	10.2	2.1
12	205.2500	11.0	11.3	10.1	10.6	1.2	63	457.2500	11.5	10.0	10.4	10.9	1.5
13	211.2500	11.1	10.9	10.6	10.7	0.5	64	463.2500	11.8	11.2	11.3	11.4	0.6
J	217.2500	11.0	10.7	10.1	10.5	0.9	65	469.2500	12.3	11.5	11.6	12.1	0.8
K	223.2500	11.5	11.3	10.6	11.3	0.9	66	475.2500	11.8	12.1	11.7	12.3	0.6
L	229.2625	11.5	11.5	10.8	11.3	0.7	67	481.2500	12.7	12.3	12.1	12.8	0.7
M	235.2625	11.3	10.7	10.5	10.9	0.8	68	487.2500	12.1	11.7	11.7	12.3	0.6
N	241.2625	11.3	11.1	10.3	10.8	1.0	69	493.2500	11.7	10.7	11.0	11.1	1.0
O	247.2625	10.9	10.8	10.2	10.6	0.7	70	499.2500	12.4	11.5	11.8	11.3	1.1
P	253.2625	11.0	10.5	9.9	10.6	1.1	71	505.2500	12.1	10.8	11.0	11.4	1.3
Q	259.2625	11.0	10.9	10.4	10.8	0.6	72	511.2500	12.9	11.9	12.4	13.3	1.4
R	265.2625	11.0	10.6	10.2	10.5	0.8	73	517.2500	12.9	11.8	12.2	12.1	1.1
S	271.2625	11.0	10.4	9.9	10.5	1.1	74	523.2500	12.2	11.6	11.9	12.3	0.7
T	277.2625	11.0	10.6	10.1	10.4	0.9	75	529.2500	10.9	11.0	11.1	11.2	0.3
U	283.2625	10.9	10.6	10.3	10.8	0.6	76	535.2500	10.9	11.7	11.2	11.1	0.8
V	289.2625	11.8	11.2	11.0	11.4	0.8	77	541.2500	11.7	9.9	11.3	12.0	2.1
W	295.2625	11.7	11.6	11.0	11.5	0.7	78	547.2500	11.8	11.4	11.4	11.8	0.4

Max NonAdjacent Channel Level Diff.	5.8
Max Adjacent Channel Level Diff.	2.2

Max Variance from last proof-of-performance test	6.6
Date of last proof-of-performance test	0 8/97

Note: Make measurements through a 100 ft. test drop cable without a converter.

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 4

Location: Delphi-Falls Rd

Community: Pompey

Pole Number: 2\73

D.T. Value: 17-4

Map Number: 37-35

OR Number: 71

Trunk Cascade: 5 LE Cascade: 1

Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: Delphi-Falls Rd.

Date: 10-Feb-98

Time: 02:57 PM

ci

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (dbmv)
2	55.2500	12.5	-0.7		13.2	AA	301.2625	11.4	-2.5		13.9
3	61.2500	12.1	-1.3		13.4	BB	307.2625	10.8	-2.2		13.0
4	67.2500	12.2	-1.5		13.7	CC	313.2625	10.6	-3.4		14.0
5	77.2500	11.4	-2.6		14.0	DD	319.2625	10.7	-2.1		12.8
6	83.2500	10.9	-2.7		13.6	EE	325.2625	10.9	-3.3		14.2
						FF	331.2750	10.8	-3.3		14.1
						GG	337.2625	10.7	-2.8		13.5
						HH	343.2625	10.7	-2.4		13.1
A-5	91.2500					II	349.2625	10.9	-2.3		13.2
A-4	97.2500					JJ	355.2625	10.9	-3.0		13.9
A-3	103.2500					KK	361.2625	10.4	-3.3		13.7
A-2	109.2750					LL	367.2625	9.7	-4.3		14.0
A-1	115.2750					MM	373.2625	10.6	-3.0		13.6
A	121.2625	12.0	-1.4		13.4	NN	379.2625	10.7	-2.5		13.2
B	127.2625	12.2	-1.2		13.4	OO	385.2625	10.9	-3.0		13.9
C	133.2625	12.6	-0.9		13.5	PP	391.2625	10.1	-3.4		13.5
D	139.2500	12.6	-0.9		13.5	QQ	397.2625	9.6	-3.5		13.1
E	145.2500	12.1	-1.4		13.5	RR	403.2500	10.2	-2.9		13.1
F	151.2500	12.3	-1.5		13.8	SS	409.2500	10.5	-2.4		12.9
G	157.2500	12.6	-1.1		13.7	TT	415.2500	10.6	-4.0	S	14.6
H	163.2500	11.8	-1.6		13.4	UU	421.2500	9.6	-4.8	S	14.4
I	169.2500	12.3	-1.3		13.6	VV	427.2500	9.9	-3.6		13.5
7	175.2500	11.8	-1.7		13.5	WW	433.2500	9.3	-4.4	S	13.7
8	181.2500	11.7	-2.2		13.9	XX	439.2500	9.7	-3.6	S	13.3
9	187.2500	11.6	-1.8		13.4	YY	445.2500	11.5	-2.6	S	14.1
10	193.2500	11.6	-2.2		13.8	ZZ	451.2500	9.9	-4.3	S	14.2
11	199.2500	10.8	-2.9		13.7	63	457.2500	10.0	-4.1	S	14.1
12	205.2500	10.8	-3.1		13.9	64	463.2500	9.5	-3.1	S	12.6
13	211.2500	10.7	-3.4		14.1	65	469.2500	10.9	-1.5		12.4
J	217.2500	10.5	-3.2		13.7	66	475.2500	11.4	-2.9	S	14.3
K	223.2500	9.9	-3.4		13.3	67	481.2500	11.0	-3.5	S	14.5
L	229.2625	10.2	-3.6		13.8	68	487.2500	9.8	-4.6	S	14.4
M	235.2625	9.3	-4.2		13.5	69	493.2500	10.0	-3.7	S	13.7
N	241.2625	9.7	-3.7		13.4	70	499.2500	11.0	-4.0	S	15.0
O	247.2625	9.8	-4.0		13.8	71	505.2500	11.0	-3.5	S	14.5
P	253.2625	10.8	-3.5		14.3	72	511.2500	9.9	-5.8	S	15.7
Q	259.2625	10.4	-2.8		13.2	73	517.2500	8.8	-6.1	S	14.9
R	265.2625	10.7	-3.7		14.4	74	523.2500	7.9	-5.2	S	13.1
S	271.2625	10.2	-3.3		13.5	75	529.2500	8.8	-5.0	S	13.8
T	277.2625	10.8	-2.6		13.4	76	535.2500	9.7	-6.4	S	16.1
U	283.2625	10.1	-2.5		12.6	77	541.2500	7.7	-7.1	S	14.8
V	289.2625	11.3	-2.2		13.5	78	547.2500	7.6	-8.6	S	16.2
W	295.2625	11.1	-2.9		14.0						

PEAK TO VALLEY: 5

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98

Test Performed By: Patrick Thrall

Location: Delphi - Falls Rd.

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response (dF-dB)	Carrier To Noise Ratio (dB)	Distortions (dBe)			Hum (%)
			Cb	Cso	12 Min	
2	0.8	50.4	69.5	70.5	74.3	0.1
A	0.9	50.6	68	70.8	74.2	
H	0.8	50	65.5	68	73.2	
8	0.8	51	64.7	70	72.9	
T	0.6	51.2	63.5	68.9	73.5	
CC	0.3	51.5	64.2	70	75.1	
LL	0.6	50	60.8	67.6	74.1	
RR	0.6	51	64.5	68.1	73	
CCC	0.4	50.1	61	65.9	72.9	

Time Warner Cable Syracuse Division

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

System Name: Time Warner-Syracuse

Date: February 1998

Test Performed By Patrick Thrall

Location: Delphi - Falls Rd.

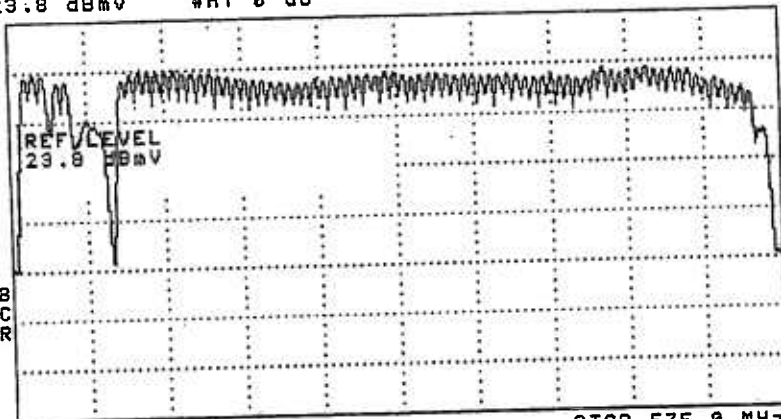
(SEE THE ATTACHED SWEEP TRACES)

16:01:15 FEB 10, 1998

REF 23.8 dBmV #AT 0 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR



START 45.0 MHz
RES BW 3.0 MHz

VBW 1 MHz

STOP 575.0 MHz
SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

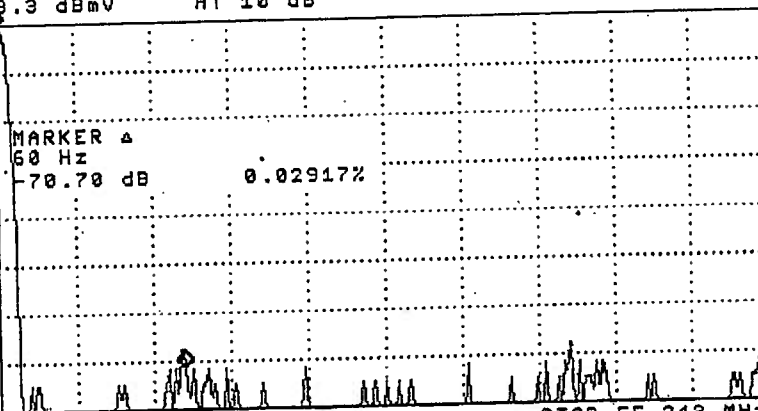
More
1 of 3

16:02:45 FEB 10, 1998

CHANNEL 2 (STD)
REF 13.3 dBmV AT 10 dB

PEAK
LOG
10
dB/

VA SB
SC FC
CORR



START 55.243 MHz
#RES BW 1.0 MHz

#VBW 1 kHz

STOP 55.243 MHz
#SWP 800 msec

MKR Δ 60 Hz
-70.70 dB

CHNL

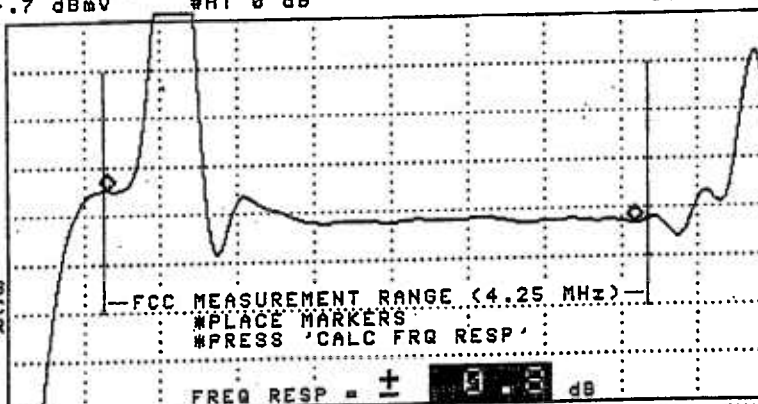
MAIN
MENU

16:04:15 FEB 10, 1998

CHANNEL 2 (STD)
REF -7.7 dBmV #AT 0 dB

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



START 54.000 MHz
#RES BW 100 kHz

#VBW 3 MHz

STOP 60.000 MHz
SWP 20.0 msec

MKR 58.905 MHz
-9.33 dBmV

CHNL

MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

FREQ RESP = ± 0.3 dB

16:17:59 FEB 10, 1998
CHANNEL 55 (STD)
REF -2.3 dBmV #AT 0 dB

MKR 469.980 MHz CHNL
-11.50 dBmV MARKER 1

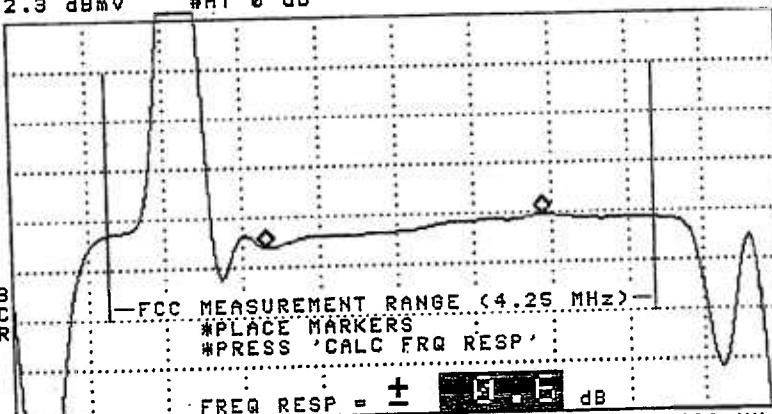
PEAK
LOG
2
dB/

MA WB
SC FC
CORR

START 468.000 MHz
#RES BW 100 kHz

#VBW 3 MHz

STOP 474.000 MHz
SWP 20.0 msec



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

16:20:20 FEB 10, 1998
CHANNEL 55 (STD)
REF .5 dBmV #AT 0 dB

MKR 181.920 MHz CHNL
-8.51 dBmV MARKER 1

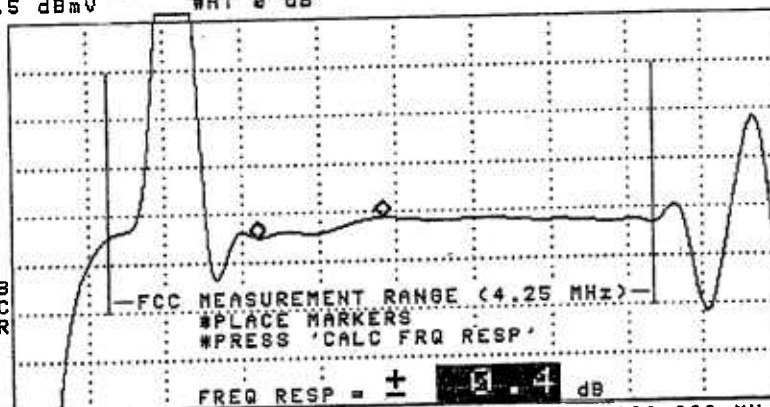
PEAK
LOG
2
dB/

MA WB
SC FC
CORR

START 180.000 MHz
#RES BW 100 kHz

#VBW 3 MHz

STOP 186.000 MHz
SWP 20.0 msec

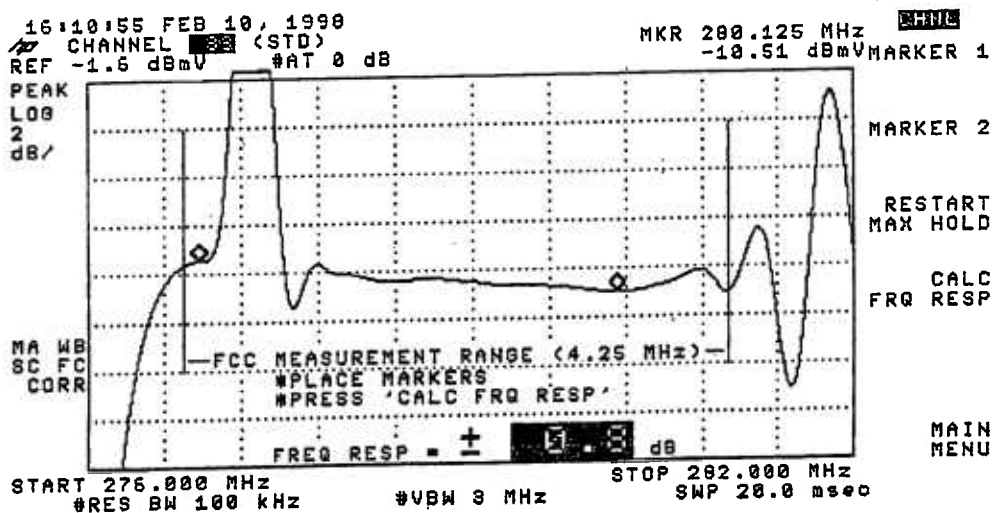
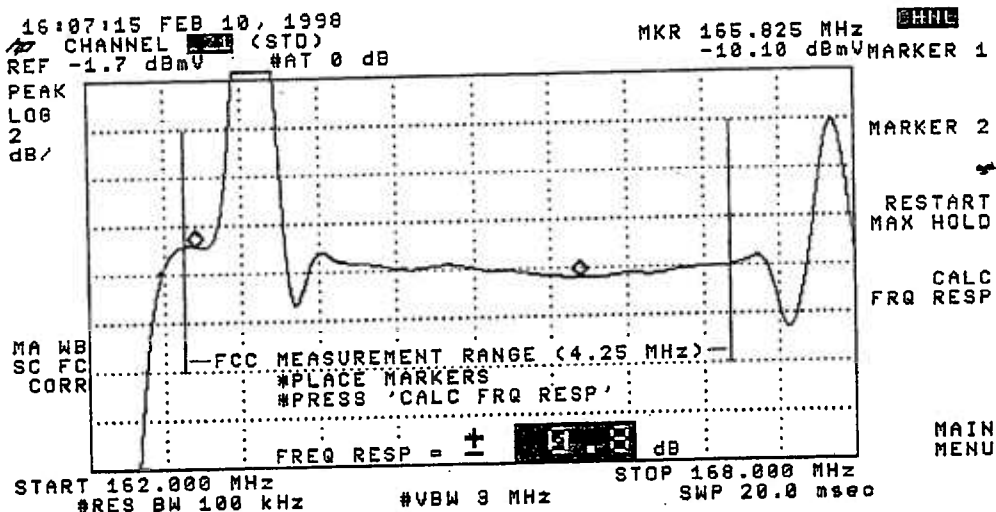
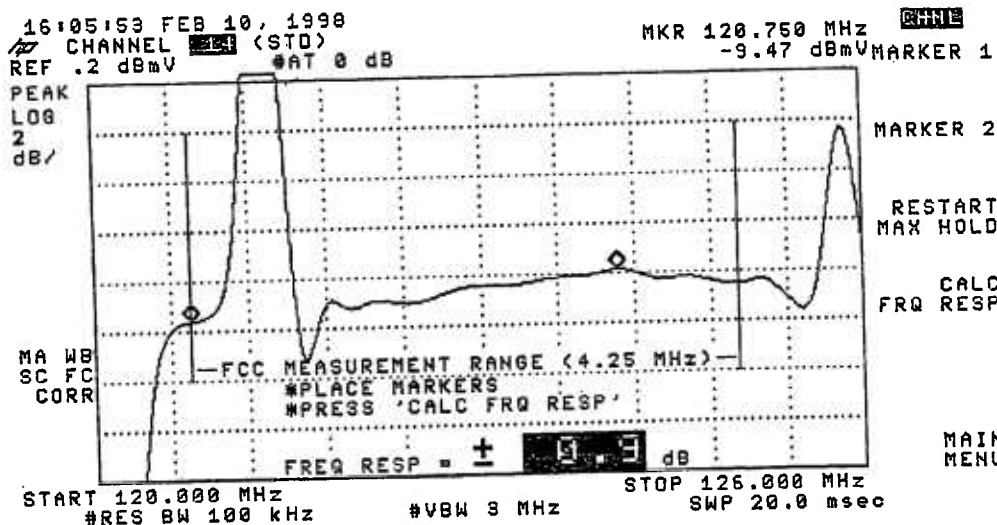


MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

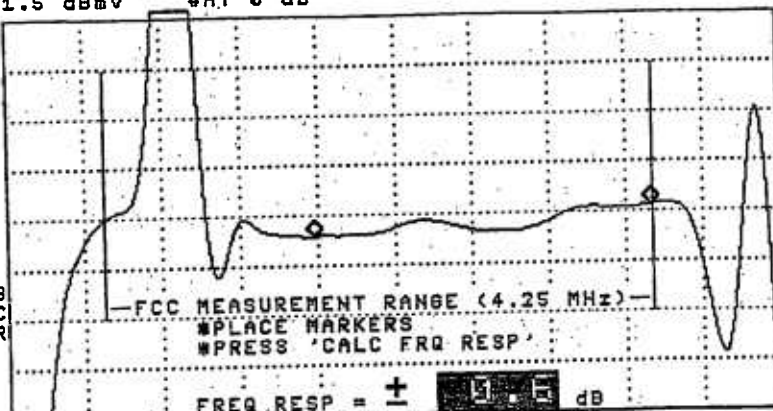


16:13:06 FEB 10, 1998
 CHANNEL 1 (STD)
 REF -1.5 dBmV #AT 0 dB

MKR 314.370 MHz
 -10.39 dBmV MARKER 1

PEAK
 LOG
 2
 dB/

MA WB
 SC FC
 CORR



MARKER 2

RESTART
 MAX HOLD

CALC
 FRQ RESP

MAIN
 MENU

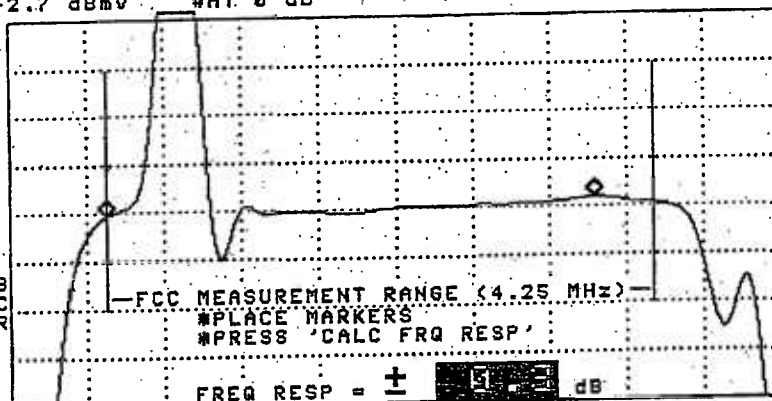
START 312.000 MHz STOP 318.000 MHz
 #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

16:14:37 FEB 10, 1998
 CHANNEL 1 (STD)
 REF -2.7 dBmV #AT 0 dB

MKR 366.750 MHz
 -10.06 dBmV MARKER 1

PEAK
 LOG
 2
 dB/

MA WB
 SC FC
 CORR



MARKER 2

RESTART
 MAX HOLD

CALC
 FRQ RESP

MAIN
 MENU

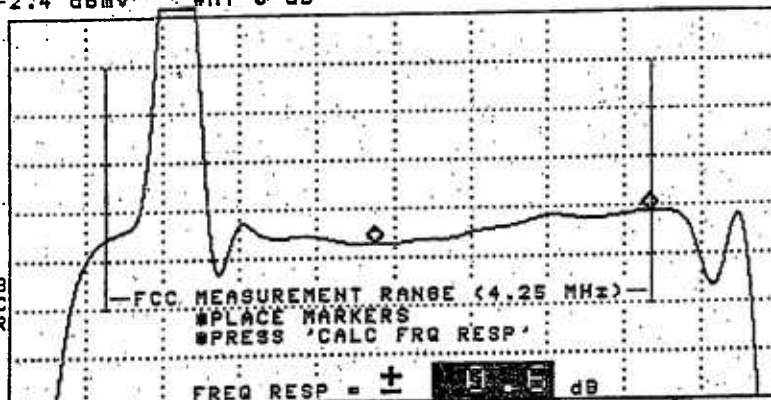
START 366.000 MHz STOP 372.000 MHz
 #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

16:16:47 FEB 10, 1998
 CHANNEL 1 (STD)
 REF -2.4 dBmV #AT 0 dB

MKR 404.850 MHz
 -11.83 dBmV MARKER 1

PEAK
 LOG
 2
 dB/

MA WB
 SC FC
 CORR



MARKER 2

RESTART
 MAX HOLD

CALC
 FRQ RESP

MAIN
 MENU

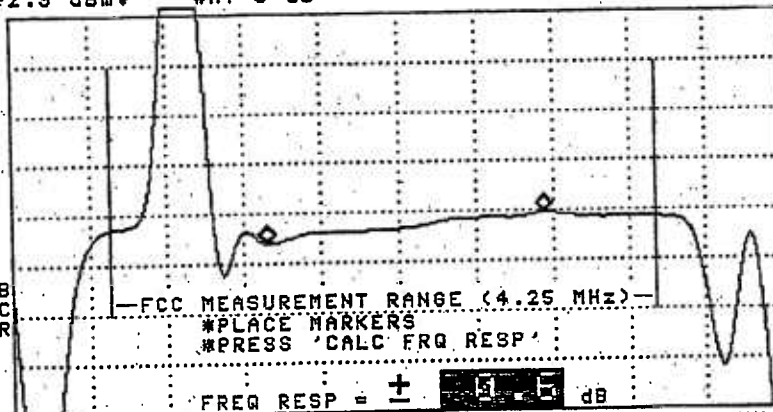
CENTER 405.000 MHz SPAN 5.000 MHz
 #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

16:17:59 FEB 10, 1998
 CHANNEL 55 (STD)
 REF -2.3 dBmV #AT 0 dB

MKR 469.980 MHz **CH10**
 -11.50 dBmV MARKER 1

PEAK
 LOG
 2
 dB/

MA WB
 SC FC
 CORR



MARKER 2

RESTART
 MAX HOLD

CALC
 FRQ RESP

MAIN
 MENU

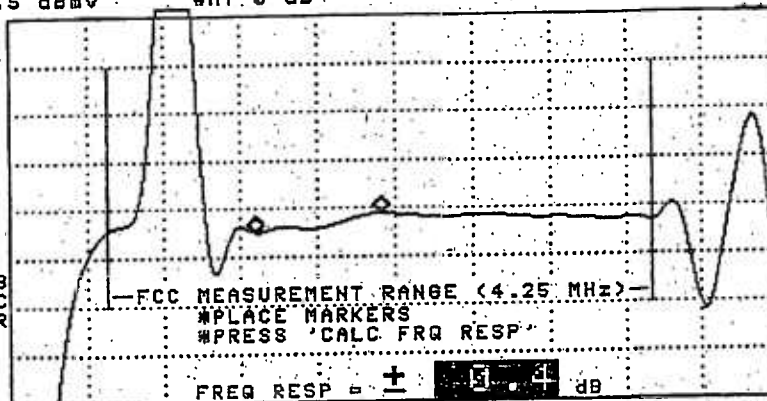
START 453.000 MHz STOP 474.000 MHz
 #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

16:20:20 FEB 10, 1998
 CHANNEL 55 (STD)
 REF .5 dBmV #AT 0 dB

MKR 181.920 MHz **CH10**
 -8.51 dBmV MARKER 1

PEAK
 LOG
 2
 dB/

MA WB
 SC FC
 CORR



MARKER 2

RESTART
 MAX HOLD

CALC
 FRQ RESP

MAIN
 MENU

START 180.000 MHz STOP 186.000 MHz
 #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: Time Warner - Syracuse

Test Point Location Delphi Falls Rd.

Date: February 1998

Performed by: S. Williams & P. Bellucci

Meter Serial Number: 9210390

Chan	Freq (MHz)	Temp °F					Max	Chan	Freq (MHz)	Temp °F					Max
		25	25	29	33	25				25	29	33			
		Time				Time									
		23:17	05:10	11:15	17:03	23:17				05:10	11:15	17:03			
		Visual Level (dbmV)							Visual Level (dbmV)						
		Variation							Variation						
2	55.2500	14.8	15.2	14.7	14.5	0.7	AA	301.2625	15.3	15.7	14.5	15.1	1.2		
3	61.2500	14.6	14.9	14.5	14.5	0.4	BB	307.2625	15.2	15.4	14.5	14.9	0.9		
4	67.2500	14.4	14.6	14.0	14.4	0.6	CC	313.2625	14.3	14.6	13.5	14.4	1.1		
5	77.2500	13.8	13.8	13.4	13.8	0.4	DD	319.2625	15.0	15.4	14.4	14.7	1.0		
6	83.2500	13.2	13.5	12.8	13.1	0.7	EE	325.2625	15.4	15.7	14.6	14.8	1.1		
							FF	331.2750	15.2	15.7	14.5	15.1	1.2		
							GG	337.2625	15.2	15.5	14.7	15.2	0.8		
A-5	91.2500						HH	343.2625	15.0	15.3	13.8	14.4	1.5		
A-4	97.2500						II	349.2625	14.9	15.7	14.9	15.2	0.8		
A-3	103.2500						JJ	355.2625	14.9	15.2	14.3	14.9	0.9		
A-2	109.2750						KK	361.2625	14.9	14.9	13.7	14.3	1.2		
A-1	115.2750						LL	367.2625	14.4	14.8	13.9	14.6	0.9		
A	121.2625	14.7	15.1	14.0	14.4	1.1	MM	373.2625	15.1	15.3	14.3	14.7	1.0		
B	127.2625	14.8	15.3	14.7	14.9	0.6	NN	379.2625	14.8	15.0	13.8	14.1	1.2		
C	133.2625	15.0	15.6	14.8	15.1	0.8	OO	385.2625	14.9	15.3	14.2	14.5	1.1		
D	139.2500	15.1	15.7	15.0	15.2	0.7	PP	391.2625	15.0	15.3	14.3	14.7	1.0		
E	145.2500	15.3	15.8	15.0	15.2	0.8	QQ	397.2625	15.1	15.6	14.3	14.8	1.3		
F	151.2500	15.1	15.6	15.2	15.3	0.5	RR	403.2500	14.9	15.2	14.3	14.9	0.9		
G	157.2500	15.0	15.4	14.9	14.8	0.6	SS	409.2500	14.7	15.1	14.2	14.5	0.9		
H	163.2500	13.5	13.8	14.4	13.1	1.3	TT	415.2500	14.9	15.9	13.9	13.9	2.0		
I	169.2500	14.0	14.6	14.7	14.4	0.7	UU	421.2500	13.8	15.2	12.6	13.5	2.6		
7	175.2500	14.9	15.2	14.3	14.7	0.9	VV	427.2500	14.6	15.1	14.4	14.8	0.7		
8	181.2500	15.1	15.5	14.6	15.0	0.9	WW	433.2500	14.8	14.2	13.7	14.2	1.1		
9	187.2500	14.9	14.9	14.7	14.9	0.2	XX	439.2500	13.8	14.8	14.0	13.9	1.0		
10	193.2500	14.7	15.2	14.4	14.4	0.8	YY	445.2500	15.4	15.9	15.2	15.5	0.7		
11	199.2500	13.9	14.3	13.5	13.6	0.8	ZZ	451.2500	14.3	15.7	14.2	13.4	2.3		
12	205.2500	14.6	15.1	14.5	14.9	0.6	63	457.2500	14.7	14.8	14.4	14.2	0.6		
13	211.2500	14.1	14.4	13.1	13.7	1.3	64	463.2500	14.9	15.1	14.5	14.9	0.6		
J	217.2500	13.8	14.4	13.3	13.5	1.1	65	469.2500	15.4	15.6	14.7	14.8	0.9		
K	223.2500	13.6	14.0	13.1	13.4	0.9	66	475.2500	15.2	15.6	14.9	15.2	0.7		
L	229.2625	13.7	14.1	12.8	13.6	1.3	67	481.2500	15.4	15.8	14.3	14.9	1.5		
M	235.2625	13.5	13.9	12.6	13.1	1.3	68	487.2500	14.8	15.4	14.2	13.3	2.1		
N	241.2625	13.8	14.3	13.3	13.8	1.0	69	493.2500	14.6	15.4	14.6	14.4	1.0		
O	247.2625	13.7	14.0	13.1	13.5	0.9	70	499.2500	15.1	15.5	15.1	14.8	0.7		
P	253.2625	15.0	15.4	13.5	14.0	1.9	71	505.2500	13.6	15.1	13.5	14.4	1.6		
Q	259.2625	14.1	14.5	13.8	14.2	0.7	72	511.2500	15.0	14.6	14.3	13.6	1.4		
R	265.2625	14.4	14.8	13.9	14.3	0.9	73	517.2500	14.1	14.6	14.2	13.5	1.1		
S	271.2825	14.5	15.0	13.6	14.0	1.4	74	523.2500	13.8	14.1	13.6	12.6	1.5		
T	277.2625	15.3	15.7	15.1	15.3	0.6	75	529.2500	15.1	14.2	14.2	13.7	1.4		
U	283.2625	14.8	15.3	14.2	14.5	1.1	76	535.2500	14.1	12.3	12.9	12.9	1.8		
V	289.2625	15.0	15.5	14.2	14.7	1.3	77	541.2500	12.5	13.0	12.4	11.8	1.2		
W	295.2625	14.7	15.2	14.6	14.9	0.6	78	547.2500	12.8	12.9	12.6	12.2	0.7		

Max NonAdjacent Channel Level Diff.	3.7
Max Adjacent Channel Level Diff.	2.1

Max Variance from last proof-of-performance test	6
Date of last proof-of-performance test	8/97

Note: Make measurements through a 100 ft. test drop cable without a converter.

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 5

Location: Holmes Rd

Community: S. Onondaga

Pole Number: 4\07

D.T. Value: 4-2

Map Number: 30-22

OR Number: 50

Trunk Cascade: 5 LE Cascade: 1

Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: Holmes Rd.

Date: 11-Feb-98

Time: 12:12 PM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff (Dbmv)
2	55.2500	15.7	2.7		13.0	AA	301.2625	15.0	1.6		13.4
3	61.2500	16.8	2.8		14.0	BB	307.2625	15.3	1.0		14.3
4	67.2500	16.8	2.1		14.7	CC	313.2625	15.1	1.1		14.0
5	77.2500	15.7	1.7		14.0	DD	319.2625	14.8	1.1		13.7
6	83.2500	15.4	1.1		14.3	EE	325.2625	14.9	0.1		14.8
						FF	331.2750	14.2	0.6		13.6
						GG	337.2625	13.7	0.3		13.4
A-5	91.2500					HH	343.2625	13.8	0.2		13.6
A-4	97.2500					II	349.2625	14.0	0.1		13.9
A-3	103.2500					JJ	355.2625	14.5	0.9		13.6
A-2	109.2750					KK	361.2625	13.5	-0.3		13.8
A-1	115.2750					LL	367.2625	13.5	0.0		13.5
A	121.2625	15.4	1.6		13.8	MM	373.2625	12.9	0.3		12.6
B	127.2625	15.4	2.4		13.0	NN	379.2625	14.3	0.4		13.9
C	133.2625	15.8	1.5		14.3	OO	385.2625	13.5	-0.6		14.1
D	139.2500	16.5	2.2		14.3	PP	391.2625	13.6	-0.4		14.0
E	145.2500	15.5	1.2		14.3	QQ	397.2625	12.6	-0.9		13.5
F	151.2500	15.6	1.1		14.5	RR	403.2500	12.7	-0.7		13.4
G	157.2500	15.3	0.4		14.9	SS	409.2500	13.7	0.4		13.3
H	163.2500	14.2	1.1		13.1	TT	415.2500	13.9	-0.7	S	14.6
I	169.2500	14.9	1.6		13.3	UU	421.2500	13.7	-1.3	S	15.0
7	175.2500	15.2	1.5		13.7	VV	427.2500	13.3	-0.5		13.8
8	181.2500	15.0	1.1		13.9	VW	433.2500	12.0	-0.3	S	12.3
9	187.2500	15.0	0.8		14.2	XX	439.2500	13.0	-0.7	S	13.7
10	193.2500	14.4	1.1		13.3	YY	445.2500	14.3	-0.2	S	14.5
11	199.2500	14.6	0.7		13.9	ZZ	451.2500	13.4	-1.4	S	14.8
12	205.2500	14.1	0.4		13.7	63	457.2500	12.7	-0.1	S	12.8
13	211.2500	12.7	-0.7		13.4	64	463.2500	13.1	-0.6	S	13.7
J	217.2500	13.8	0.0		13.8	65	469.2500	14.6	0.7		13.9
K	223.2500	14.2	0.3		13.9	66	475.2500	15.0	-0.5	S	15.5
L	229.2625	14.3	0.1		14.2	67	481.2500	14.3	0.4	S	13.9
M	235.2625	13.9	-0.2		14.1	68	487.2500	13.9	0.1	S	13.8
N	241.2625	14.0	0.0		14.0	69	493.2500	13.3	-0.1	S	13.4
O	247.2625	14.0	0.9		13.1	70	499.2500	15.1	0.9	S	14.2
P	253.2625	14.5	1.3		13.2	71	505.2500	14.6	-1.3	S	15.9
Q	259.2625	14.9	1.1		13.8	72	511.2500	14.6	-0.2	S	14.8
R	265.2625	15.2	0.8		14.4	73	517.2500	13.6	-1.5	S	15.1
S	271.2625	14.7	1.0		13.7	74	523.2500	12.6	-1.7	S	14.3
T	277.2625	14.3	0.6		13.7	75	529.2500	13.9	-0.2	S	14.1
U	283.2625	14.6	0.6		14.0	76	535.2500	14.5	0.1	S	14.4
V	289.2625	15.1	1.4		13.7	77	541.2500	12.9	-1.5	S	14.4
W	295.2625	14.9	1.0		13.9	78	547.2500	13.5	0.1	S	13.4

PEAK TO VALLEY: 4.8

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98

Test Performed By: Patrick Thrall

Location: Holmes Rd.

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response (-1/-0dB)	Carrier To Noise Ratio (dB)	Distortions (-dBc)			Hum (%)
2	0.4	51.2	69.3	71	74.3	0.1
A	0.3	51.6	68.7	70.1	73.9	
H	1.1	51	65.1	70.2	74	
8	0.8	52	65.5	72	72.9	
T	0.9	51.4	63.8	69.1	74.1	
CC	0.3	51	63.1	67.6	72.1	
LL	0.5	51.3	63	67.1	73.4	
RR	0.6	51	63.2	65.7	72.8	
CCC	0.5	49.9	59.9	59.8	73.8	

Time Warner Cable Syracuse Division

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

System Name: Time Warner-Syracuse

Date: February 1998

Test Performed By Patrick Thrall

Location: Holmes Rd.

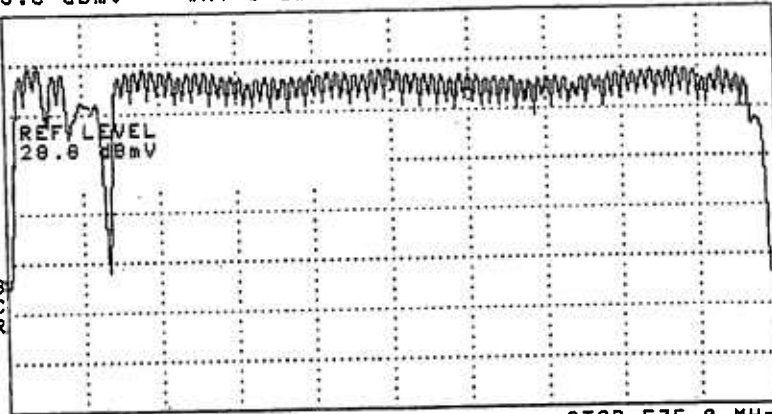
(SEE THE ATTACHED SWEEP TRACES)

13:10:04 FEB 11, 1998

REF 28.8 dBmV #AT 0 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR



START 45.0 MHz RES BW 3.0 MHz VBW 1 MHz STOP 575.0 MHz SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

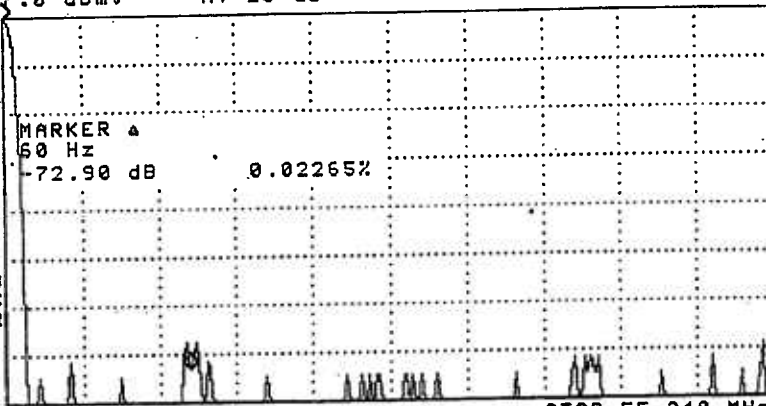
More
1 of 3

13:11:15 FEB 11, 1998

CHANNEL 2 (STD)
REF 17.0 dBmV AT 10 dB

PEAK
LOG
10
dB/

VA SB
SC FC
CORR



START 55.240 MHz #RES BW 1.0 MHz #VBW 1 kHz STOP 55.240 MHz #SWP 800 msec

MKR Δ 60 Hz
-72.90 dB

CHNL

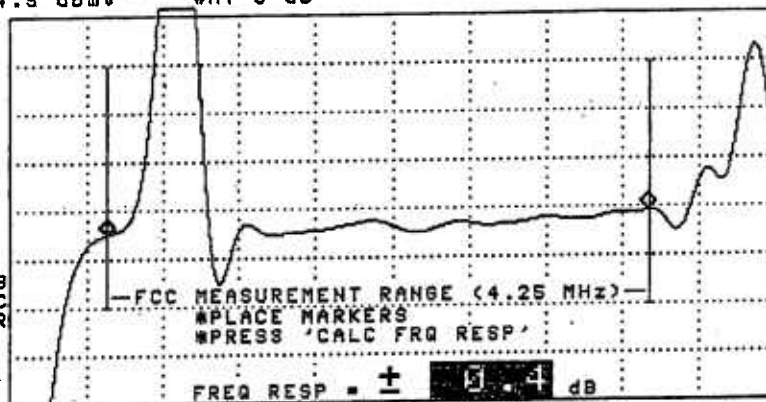
MAIN
MENU

13:14:21 FEB 11, 1998

CHANNEL 2 (STD)
REF 4.5 dBmV #AT 0 dB

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



START 54.000 MHz #RES BW 100 kHz #VBW 3 MHz STOP 60.000 MHz SWP 20.0 msec

MKR 54.750 MHz
-4.55 dBmV

CHNL

MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

-FCC MEASUREMENT RANGE (4.25 MHz)-
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'

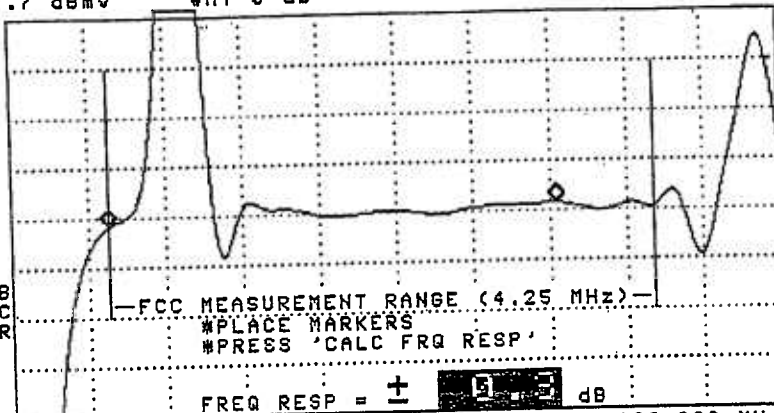
FREQ RESP = ± 0.4 dB

13:18:09 FEB 11, 1998
CHANNEL 1 (STD)
REF 2.7 dBmV #AT 0 dB

MKR 120.750 MHz CH11
-5.66 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

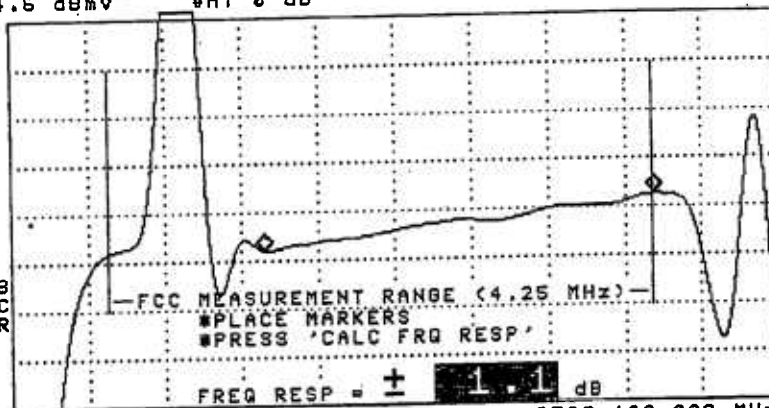
START 120.000 MHz STOP 126.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:24:51 FEB 11, 1998
CHANNEL 2 (STD)
REF 4.6 dBmV #AT 0 dB

MKR 163.900 MHz CH11
-5.04 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

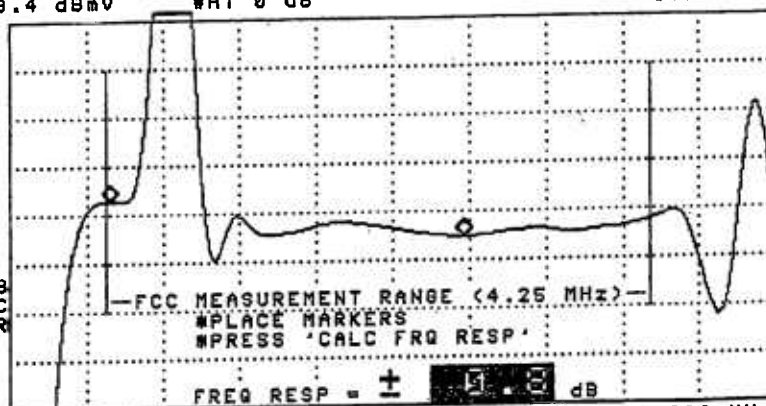
START 162.000 MHz STOP 168.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:26:12 FEB 11, 1998
CHANNEL 3 (STD)
REF 3.4 dBmV #AT 0 dB

MKR 183.555 MHz CH11
-5.67 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

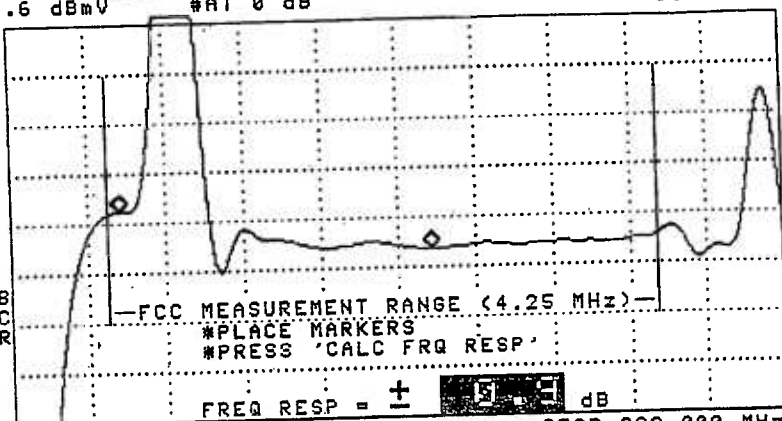
START 180.000 MHz STOP 186.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:27:28 FEB 11, 1998
CHANNEL 23 (STD)
REF 3.6 dBmV #AT 0 dB

MKR 279.255 MHz
-5.68 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

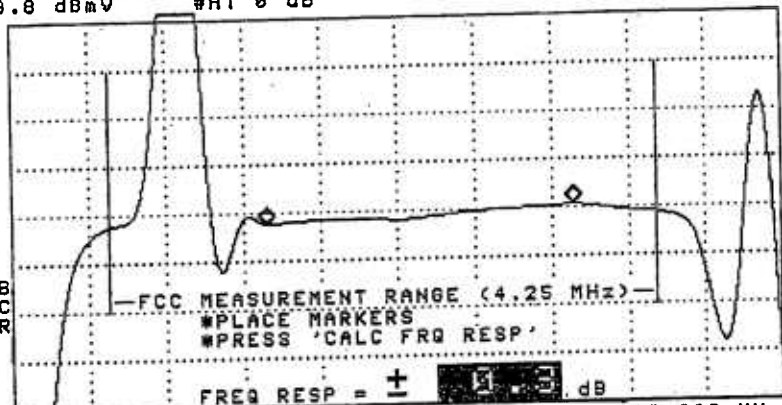
START 276.000 MHz STOP 282.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:28:56 FEB 11, 1998
CHANNEL 23 (STD)
REF 3.8 dBmV #AT 0 dB

MKR 313.980 MHz
-4.74 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

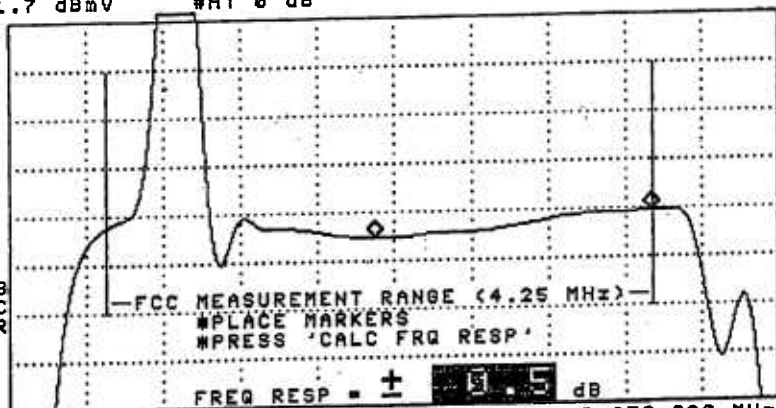
START 312.000 MHz STOP 318.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:30:10 FEB 11, 1998
CHANNEL 23 (STD)
REF 1.7 dBmV #AT 0 dB

MKR 368.850 MHz
-7.32 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

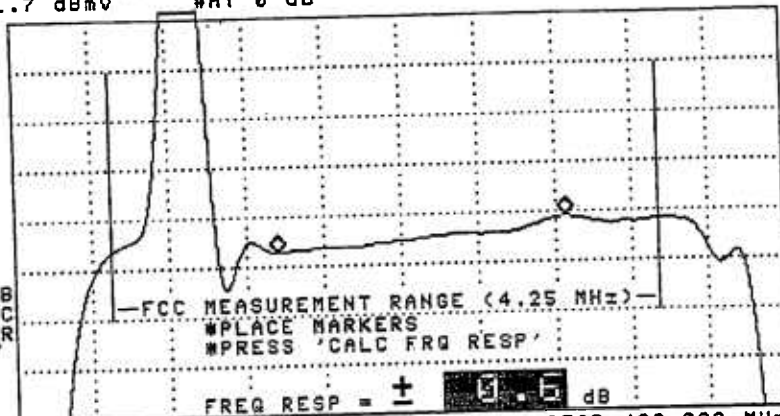
START 366.000 MHz STOP 372.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:31:57 FEB 11, 1998
CHANNEL 54 (STD)
REF 1.7 dBmV #AT 0 dB

MKR 404.040 MHz
-7.72 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 402.000 MHz
#RES BW 100 kHz

#VBW 3 MHz

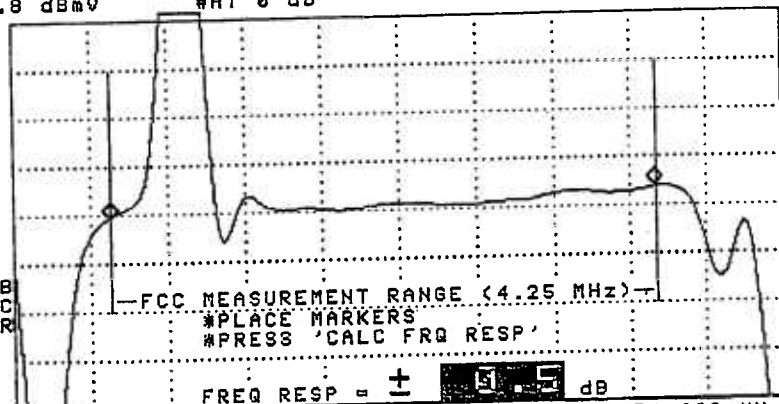
STOP 408.000 MHz
SWP 20.0 msec

13:33:01 FEB 11, 1998
CHANNEL 55 (STD)
REF .8 dBmV #AT 0 dB

MKR 468.750 MHz
-7.30 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz
#RES BW 100 kHz

#VBW 3 MHz

STOP 474.000 MHz
SWP 20.0 msec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: Time Warner - Syracuse

Test Point Location Holmes Rd.

Date: February 1998

Performed by S. Williams & P. Bellucci

Meter Serial Number: 9210390

		Temp F						Temp F								
		25	27	28	31					25	27	28	31			
		Time								Time						
		01:04	07:27	12:45	18:27	Max			Freq			01:04	07:27	12:45	18:27	Max
Chan	Freq (MHz)	Visual Level (dbmv)				Variation	Chan		(MHz)	Visual Level (dbmv)				Variation		
2	55.2500	20.0	18.3	17.8	17.7	2.3	AA		301.2625	18.1	18.0	18.5	17.9	0.6		
3	61.2500	22.1	19.6	19.1	19.2	3.0	BB		307.2625	18.7	19.5	19.1	18.9	0.8		
4	67.2500	22.0	19.4	19.0	19.2	3.0	CC		313.2625	19.1	19.7	18.9	18.9	0.8		
5	77.2500	20.8	18.6	18.0	18.3	2.8	DD		319.2625	18.5	19.1	18.3	18.4	0.8		
6	83.2500	20.3	18.3	17.7	17.7	2.6	EE		325.2625	18.8	19.1	18.7	18.6	0.5		
							FF		331.2750	18.4	18.6	17.9	17.8	0.8		
							GG		337.2625	18.3	18.6	18.0	17.7	0.9		
							HH		343.2625	18.3	18.6	18.2	17.7	0.9		
A-5	91.2500						II		349.2625	18.0	18.6	17.7	17.5	1.1		
A-4	97.2500						JJ		355.2625	18.6	18.8	18.2	17.9	0.9		
A-3	103.2500						KK		361.2625	18.1	18.5	18.0	17.8	0.7		
A-2	109.2750						LL		367.2625	17.7	18.3	17.7	17.2	1.1		
A-1	115.2750						MM		373.2625	17.7	18.0	17.5	17.3	0.7		
A	121.2625	20.4	19.1	18.7	18.5	1.9	NN		379.2625	17.8	18.5	17.9	18.0	0.7		
B	127.2625	19.6	18.4	18.0	18.1	1.6	OO		385.2625	17.4	18.0	17.6	17.1	0.9		
C	133.2625	19.5	18.7	17.8	18.0	1.7	PP		391.2625	18.2	18.2	17.6	17.4	0.8		
D	139.2500	20.3	19.5	18.6	19.1	1.7	QQ		397.2625	17.8	18.3	17.3	17.5	1.0		
E	145.2500	19.7	18.8	18.2	18.3	1.5	RR		403.2500	18.1	18.4	17.5	17.3	1.1		
F	151.2500	19.7	18.9	18.2	18.6	1.5	SS		409.2500	19.2	19.1	18.5	17.9	1.3		
G	157.2500	19.4	18.8	17.9	17.9	1.5	TT		415.2500	18.1	17.6	17.1	18.0	1.0		
H	163.2500	19.4	18.5	17.8	18.1	1.6	UU		421.2500	18.1	18.5	17.7	17.5	1.0		
I	169.2500	18.6	17.9	17.7	17.9	0.9	VV		427.2500	18.5	18.6	18.1	17.5	1.1		
7	175.2500	19.0	18.8	18.1	18.3	0.9	WW		433.2500	17.1	17.1	16.7	16.7	0.4		
8	181.2500	18.5	17.9	17.7	17.6	0.9	XX		439.2500	16.5	17.4	17.2	17.1	0.9		
9	187.2500	18.5	18.0	17.8	17.8	0.7	YY		445.2500	18.3	18.9	18.3	17.9	1.0		
10	193.2500	18.2	17.9	17.7	17.4	0.8	ZZ		451.2500	18.5	16.9	16.1	17.4	2.4		
11	199.2500	17.9	18.1	17.5	17.4	0.7	63		457.2500	18.2	19.0	18.3	18.3	0.8		
12	205.2500	16.5	16.8	16.1	16.3	0.7	64		463.2500	18.6	18.5	18.9	18.1	0.8		
13	211.2500	14.5	14.6	14.4	13.9	0.7	65		469.2500	18.9	19.2	18.7	18.3	0.9		
J	217.2500	16.4	16.6	16.1	16.0	0.6	66		475.2500	18.4	19.4	19.4	18.9	1.0		
K	223.2500	17.0	17.4	17.0	17.2	0.4	67		481.2500	18.0	18.8	19.5	18.5	1.5		
L	229.2625	17.6	17.8	17.4	17.5	0.4	68		487.2500	18.7	19.6	19.0	18.3	1.3		
M	235.2625	17.1	17.6	16.8	16.9	0.8	69		493.2500	18.5	18.9	18.9	17.5	1.4		
N	241.2625	17.6	17.9	17.4	17.4	0.5	70		499.2500	19.4	20.1	20.0	18.8	1.3		
O	247.2625	17.5	17.9	17.4	17.5	0.5	71		505.2500	17.6	19.1	19.2	18.9	1.6		
P	253.2625	17.4	18.2	17.7	17.6	0.8	72		511.2500	18.8	19.7	19.4	18.1	1.6		
Q	259.2625	18.2	18.8	18.2	18.0	0.8	73		517.2500	18.7	19.6	19.1	18.8	0.9		
R	265.2625	18.1	19.0	18.4	18.5	0.9	74		523.2500	18.1	19.5	18.9	17.6	1.9		
S	271.2625	18.3	18.8	18.0	18.1	0.8	75		529.2500	17.7	19.1	18.9	18.4	1.4		
T	277.2625	18.1	18.8	18.2	18.2	0.7	76		535.2500	18.2	19.3	18.8	18.7	1.1		
U	283.2625	18.1	18.5	18.2	18.1	0.4	77		541.2500	17.7	19.1	18.6	18.1	1.4		
V	289.2625	18.3	18.5	18.5	18.4	0.2	78		547.2500	18.1	19.4	19.1	18.2	1.3		
W	295.2625	18.0	18.7	18.0	18.1	0.7										

Max NonAdjacent Channel Level Diff.	7.8
Max Adjacent Channel Level Diff.	2.4

Max Variance from last proof-of-performance test	5.8
Date of last proof-of-performance test	8/97

Note: Make measurements through a 100 ft. test drop cable without a converter.
TestPoint 5 Page 5 of 5

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 10

Location: Pendergast Rd.

Community: Lysander

Pole Number: 20/25

D.T. Value: 26-4

Map Number: 5-19

OR Number: 313

Trunk Cascade: 6 LE Cascade:

Visual Carrier Level Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: Penderast Rd. - Lysander

Date: 12-Feb-98

Time: 11:32 AM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra 'S'	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra 'S'	Diff (Dbmv)
2	55.2500	4.5	-8.2		12.7	AA	301.2625	6.2	-6.8		13.0
3	61.2500	5.6	-7.9		13.5	BB	307.2625	6.8	-7.0		13.8
4	67.2500	5.7	-8.6		14.3	CC	313.2625	6.9	-5.9		12.8
5	77.2500	4.9	-8.7		13.6	DD	319.2625	7.6	-5.7		13.3
6	83.2500	4.9	-9.3		14.2	EE	325.2625	7.6	-7.1		14.7
						FF	331.2750	7.4	-6.3		13.7
						GG	337.2625	7.4	-6.3		13.7
A-5	91.2500					HH	343.2625	7.5	-6.2		13.7
A-4	97.2500					II	349.2625	7.5	-6.2		13.7
A-3	103.2500					JJ	355.2625	8.0	-5.5		13.5
A-2	109.2750					KK	361.2625	7.0	-6.9		13.9
A-1	115.2750					LL	367.2625	6.7	-7.0		13.7
A	121.2625	5.2	-9.2		14.4	MM	373.2625	6.1	-7.3		13.4
B	127.2625	5.6	-7.9		13.5	NN	379.2625	6.3	-7.7		14.0
C	133.2625	5.7	-7.8		13.5	OO	385.2625	5.4	-8.1		13.5
D	139.2500	7.1	-7.0		14.1	PP	391.2625	5.6	-8.8		14.4
E	145.2500	6.1	-7.6		13.7	QQ	397.2625	4.6	-9.0		13.6
F	151.2500	6.8	-7.1		13.9	RR	403.2500	4.5	-9.1		13.6
G	157.2500	6.9	-7.0		13.9	SS	409.2500	6.6	-7.4		14.0
H	163.2500	7.6	-7.4		15.0	TT	415.2500	4.4	-9.3	S	13.7
I	169.2500	7.0	-7.2		14.2	UU	421.2500	4.0	-10.6	S	14.6
7	175.2500	6.5	-6.9		13.4	VV	427.2500	4.2	-9.7		13.9
8	181.2500	6.0	-8.4		14.4	WW	433.2500	4.2	-9.8	S	14.0
9	187.2500	5.5	-8.2		13.7	XX	439.2500	4.6	-10.2	S	14.8
10	193.2500	5.9	-8.6		14.5	YY	445.2500	5.1	-9.4	S	14.5
11	199.2500	4.6	-10.2		14.8	ZZ	451.2500	4.2	-10.7	S	14.9
12	205.2500	4.2	-10.1		14.3	63	457.2500	4.4	-9.4	S	13.8
13	211.2500	4.0	-9.9		13.9	64	463.2500	4.6	-9.9	S	14.5
J	217.2500	4.4	-9.6		14.0	65	469.2500	5.5	-8.1		13.6
K	223.2500	4.5	-9.8		14.3	66	475.2500	5.7	-8.8	S	14.5
L	229.2625	4.3	-10.1		14.4	67	481.2500	6.1	-8.7	S	14.8
M	235.2625	3.7	-10.8		14.5	68	487.2500	5.1	-9.5	S	14.6
N	241.2625	3.4	-10.1		13.5	69	493.2500	3.5	-9.4	S	12.9
O	247.2625	3.7	-9.5		13.2	70	499.2500	6.0	-7.7	S	13.7
P	253.2625	4.2	-9.1		13.3	71	505.2500	5.1	-9.9	S	15.0
Q	259.2625	4.7	-8.9		13.6	72	511.2500	5.6	-8.6	S	14.2
R	265.2625	5.1	-9.1		14.2	73	517.2500	5.5	-9.9	S	15.4
S	271.2625	4.6	-8.8		13.4	74	523.2500	4.2	-10.4	S	14.6
T	277.2625	4.7	-9.1		13.8	75	529.2500	5.2	-8.2	S	13.4
U	283.2625	4.9	-8.6		13.5	76	535.2500	6.9	-7.4	S	14.3
V	289.2625	5.6	-7.4		13.0	77	541.2500	6.4	-9.0	S	15.4
W	295.2625	6.2	-7.9		14.1	78	547.2500	6.2	-8.9	S	15.1

PEAK TO VALLEY: 4.6

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98

Test Performed By: Patrick Thrall

Location: Pendergast Rd. - Lysander

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In-Channel Response	Carrier To Noise Ratio	Distortions			Hum
	(dBm)	(dB)	C/N	C/NO	C/ACC	(%)
2	1	49	67.1	66.1	74.3	0.1
A	0.5	49.5	65.2	67.9	74.6	
H	0.7	50	62.9	67.1	73.9	
8	1	50	62.8	66.9	74.6	
T	0.8	49.6	59.5	64.2	73.3	
CC	0.5	49.9	59.3	65.1	73	
LL	0.3	49.6	59.2	62.3	74	
RR	0.8	49	59	61.3	74.6	
CCC	0.4	48.1	58.9	59.6	72.9	

Time Warner Cable Syracuse Division

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

System Name: Time Warner-Syracuse

Date: February 1998

Test Performed By Patrick Thrall

Location: Pendergast Rd. - Lysander

(SEE THE ATTACHED SWEEP TRACES)

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: Time Warner - Syracuse

Test Point Location Rinaldo Blvd.

Date: February 1998

Performed by: B. Diriwachter & B. Wentworth

Meter Serial Number: 9210392

Chan	Freq (MHz)	Temp °F				Max Variation	Chan	Freq (MHz)	Temp °F				Max Variation
		27	22	29	31				27	22	29	31	
		Time							Time				
		22:18	04:30	10:36	16:30				22:18	04:30	10:36	16:30	
		Visual Level (dbmv)						Visual Level (dbmv)					
2	55.2500	18.4	18.6	18.0	17.9	0.7	AA	301.2625	17.0	16.5	17.0	15.9	1.1
3	61.2500	21.0	21.2	20.6	20.5	0.7	BB	307.2625	19.2	19.2	18.4	18.5	0.8
4	67.2500	20.8	21.1	20.8	20.6	0.5	CC	313.2625	19.3	19.7	18.5	18.5	1.2
5	77.2500	20.3	20.3	19.6	19.9	0.7	DD	319.2625	19.8	19.2	18.5	18.5	1.3
6	83.2500	20.5	20.6	19.9	20.0	0.7	EE	325.2625	19.8	19.7	18.7	18.4	1.4
							FF	331.2750	19.5	19.6	18.5	18.5	1.1
							GG	337.2625	19.7	19.8	18.8	18.8	1.0
A-5	91.2500						HH	343.2625	19.6	19.8	18.7	18.8	1.1
A-4	97.2500						II	349.2625	19.4	19.7	18.4	18.4	1.3
A-3	103.2500						JJ	355.2625	19.9	20.0	18.9	18.9	1.1
A-2	109.2750						KK	361.2625	20.0	20.2	19.0	18.9	1.3
A-1	115.2750						LL	367.2625	19.5	19.7	18.6	18.8	1.1
A	121.2625	21.9	21.9	21.2	21.1	0.8	MM	373.2625	18.9	19.2	18.2	18.1	1.1
B	127.2625	22.2	22.3	21.6	21.5	0.8	NN	379.2625	19.2	19.0	18.1	18.2	1.1
C	133.2625	21.8	22.4	21.7	21.1	1.3	OO	385.2625	18.0	18.5	17.1	17.5	1.4
D	139.2500	22.3	22.5	21.6	21.7	0.9	PP	391.2625	18.4	18.4	17.4	17.3	1.1
E	145.2500	21.6	21.5	20.8	20.3	1.3	QQ	397.2625	17.6	17.8	16.6	16.8	1.2
F	151.2500	22.2	22.4	21.4	21.5	1.0	RR	403.2500	17.1	17.3	16.0	16.0	1.3
G	157.2500	22.6	22.6	21.7	21.6	1.0	SS	409.2500	17.8	17.8	16.3	16.7	1.5
H	163.2500	23.1	22.8	22.0	22.2	1.1	TT	415.2500	16.0	16.2	15.1	14.8	1.4
I	169.2500	22.6	22.7	22.0	22.0	0.7	UU	421.2500	15.2	15.9	13.1	14.4	2.8
7	175.2500	23.1	23.5	22.4	22.5	1.1	VV	427.2500	15.3	15.3	13.6	14.2	1.7
8	181.2500	22.6	22.6	21.9	21.8	0.8	WW	433.2500	14.1	13.8	12.5	12.6	1.6
9	187.2500	22.4	22.4	21.8	21.6	0.8	XX	439.2500	13.9	13.0	12.4	12.9	1.5
10	193.2500	21.9	22.1	21.4	21.2	0.9	YY	445.2500	15.5	15.6	14.0	14.4	1.6
11	199.2500	21.4	21.6	20.7	20.6	1.0	ZZ	451.2500	13.9	15.0	11.8	13.3	3.2
12	205.2500	20.1	19.8	19.3	19.3	0.8	63	457.2500	14.5	14.5	13.2	13.5	1.3
13	211.2500	17.7	17.9	17.2	17.4	0.7	64	463.2500	14.9	15.0	13.3	13.4	1.7
J	217.2500	18.8	18.9	18.1	18.2	0.8	65	469.2500	13.3	15.5	13.8	14.2	2.2
K	223.2500	19.1	19.1	18.3	18.5	0.8	66	475.2500	15.0	16.1	13.8	14.9	2.3
L	229.2625	19.0	18.9	18.0	18.2	1.0	67	481.2500	16.5	16.5	14.6	15.5	1.9
M	235.2625	18.0	18.3	17.3	17.6	1.0	68	487.2500	16.5	16.0	14.7	15.5	1.8
N	241.2625	18.1	18.1	17.2	17.3	0.9	69	493.2500	15.6	15.6	13.9	14.2	1.7
O	247.2625	17.5	17.8	16.7	16.9	1.1	70	499.2500	16.1	15.9	14.6	15.4	1.5
P	253.2625	18.0	17.7	17.0	16.8	1.2	71	505.2500	15.6	15.3	13.7	14.1	1.9
Q	259.2625	17.9	18.0	16.9	17.2	1.1	72	511.2500	16.3	16.6	14.0	15.3	2.6
R	265.2625	18.3	18.3	17.3	17.3	1.0	73	517.2500	16.0	16.4	14.7	15.1	1.7
S	271.2625	17.9	17.9	16.6	16.8	1.3	74	523.2500	15.3	15.6	14.1	14.4	1.5
T	277.2625	18.1	17.8	16.8	16.7	1.4	75	529.2500	15.6	14.2	13.6	14.4	2.0
U	283.2625	17.9	17.9	16.7	16.7	1.2	76	535.2500	15.1	15.4	12.1	13.1	3.3
V	289.2625	18.7	18.6	17.8	17.5	1.2	77	541.2500	14.8	14.4	13.2	13.7	1.6
W	295.2625	18.5	18.3	17.6	17.8	0.9	78	547.2500	15.0	15.1	13.5	14.3	1.6

Max NonAdjacent Channel Level Diff.	10.6
Max Adjacent Channel Level Diff.	2.7

Max Variance from last proof-of-performance test	5.2
Date of last proof-of-performance test	8/97

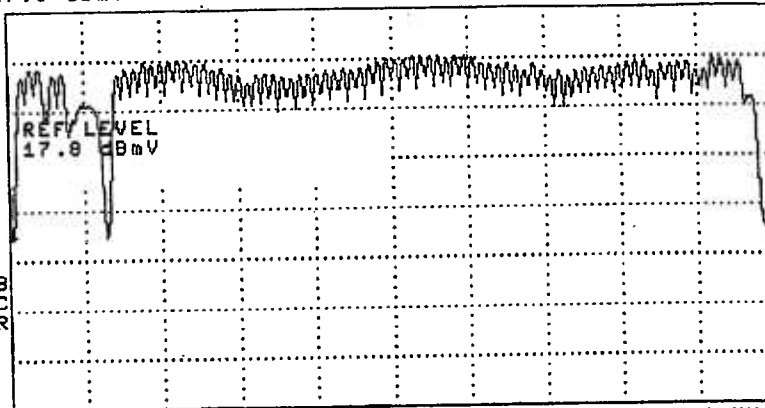
Note: Make measurements through a 100 ft. test drop cable without a converter.

11:33:20 FEB 12, 1998

REF 17.8 dBmV #AT 0 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR



START 45.0 MHz RES BW 3.0 MHz VBW 1 MHz STOP 575.0 MHz SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

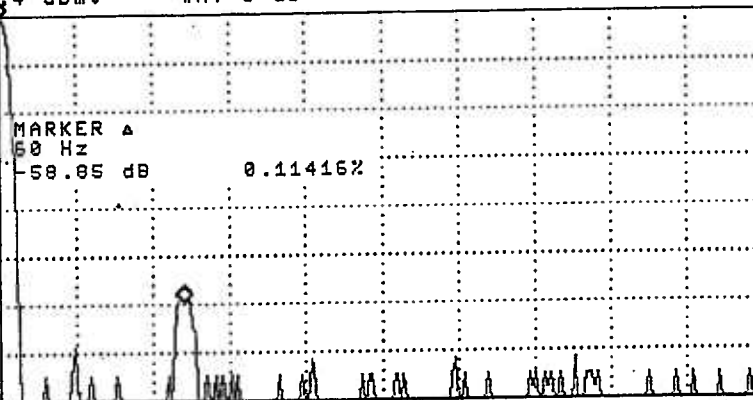
More
1 of 3

11:34:49 FEB 12, 1998

CHANNEL 2 (STD)
REF 5.4 dBmV #AT 0 dB

PEAK
LOG
10
dB/

VA SB
SC FC
CORR



START 55.248 MHz #RES BW 1.0 MHz #VBW 1 kHz #SWP 800 msec

MKR 60 Hz
-58.85 dB

CHNL

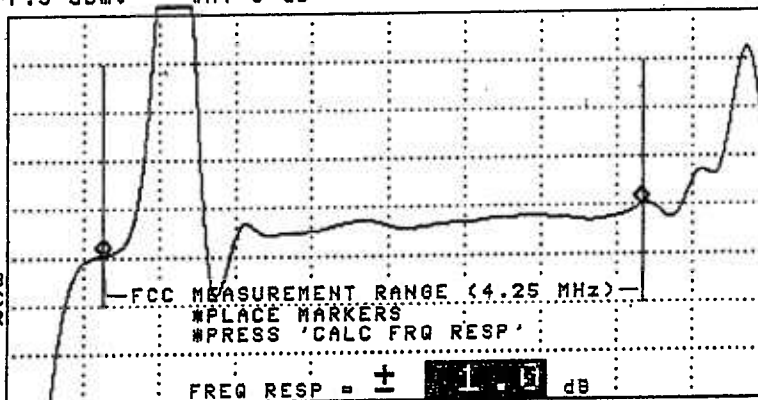
MAIN
MENU

11:37:10 FEB 12, 1998

CHANNEL 2 (STD)
REF -7.5 dBmV #AT 0 dB

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



START 54.000 MHz #RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

MKR 58.995 MHz
-15.47 dBmV

CHNL

MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

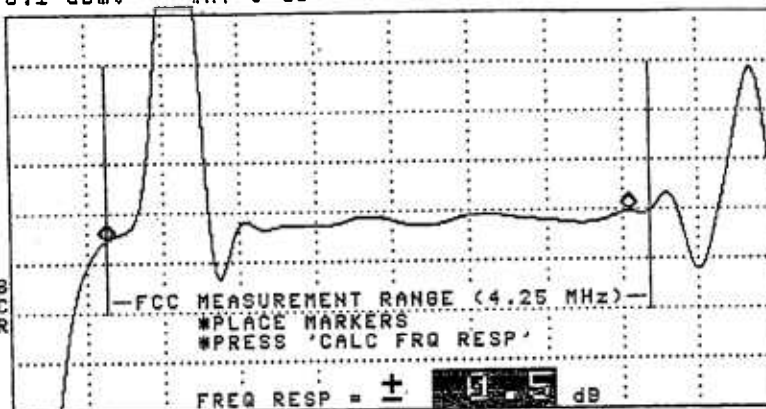
MAIN
MENU

11:38:47 FEB 12, 1998
CHANNEL 24 (STD)
REF -8.1 dBmV #AT 0 dB

MKR 124.845 MHz
-16.24 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 120.000 MHz
#RES BW 100 kHz

#VBW 3 MHz

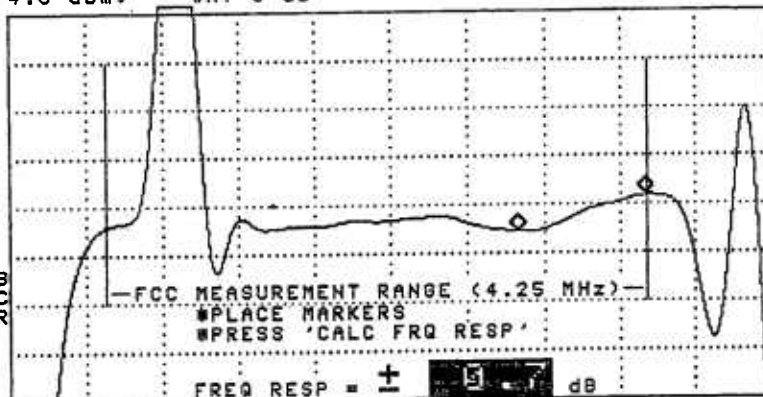
STOP 126.000 MHz
SWP 20.0 msec

11:40:02 FEB 12, 1998
CHANNEL 24 (STD)
REF -4.8 dBmV #AT 0 dB

MKR 165.990 MHz
-13.86 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 162.000 MHz
#RES BW 100 kHz

#VBW 3 MHz

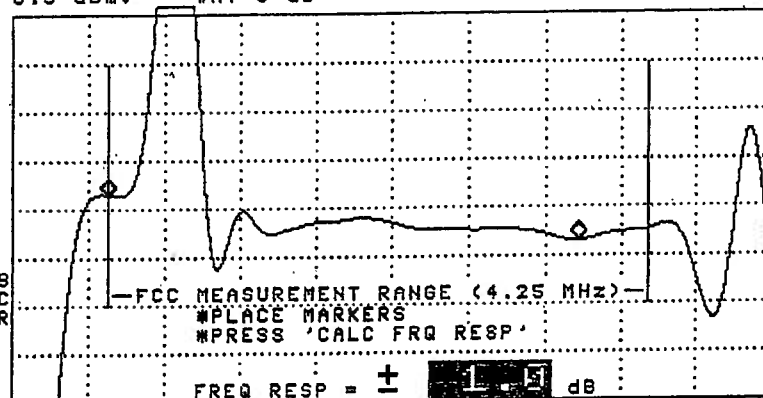
STOP 168.000 MHz
SWP 20.0 msec

11:41:22 FEB 12, 1998
CHANNEL 24 (STD)
REF -6.8 dBmV #AT 0 dB

MKR 184.455 MHz
-16.19 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

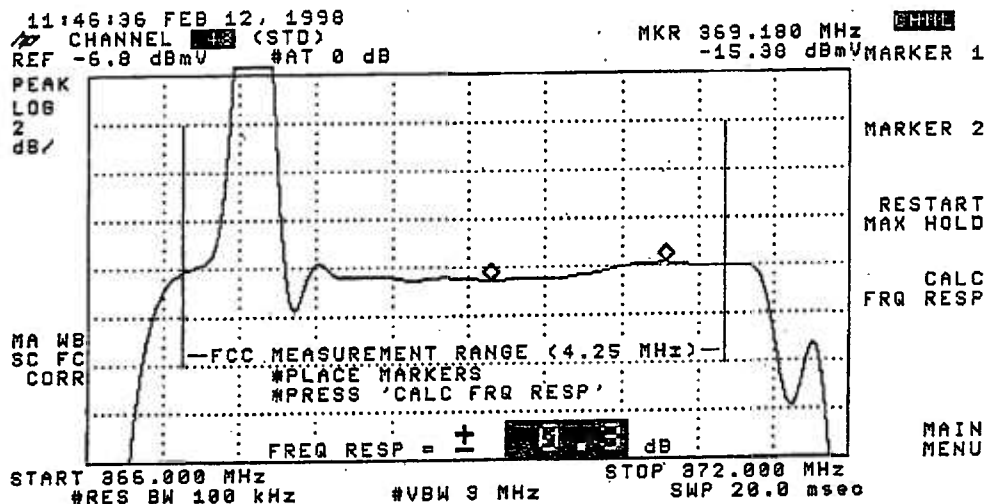
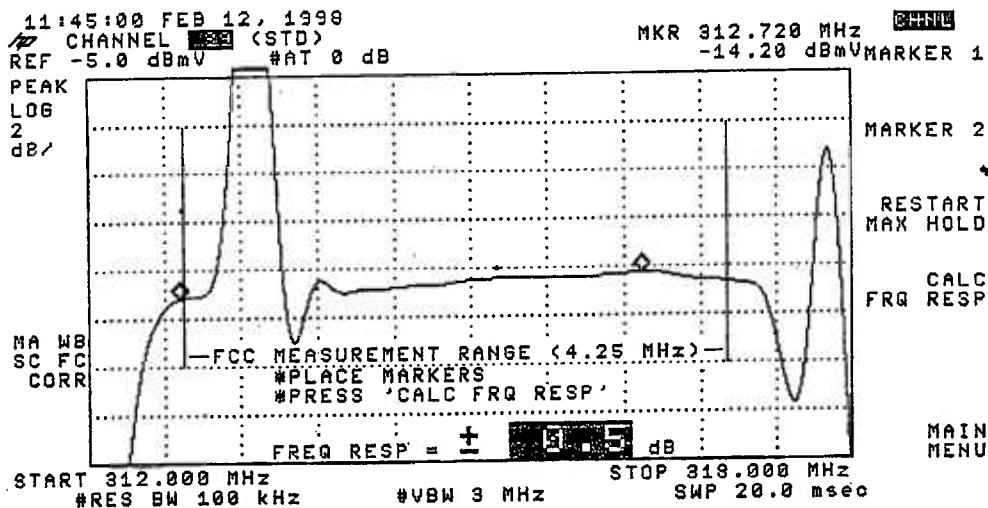
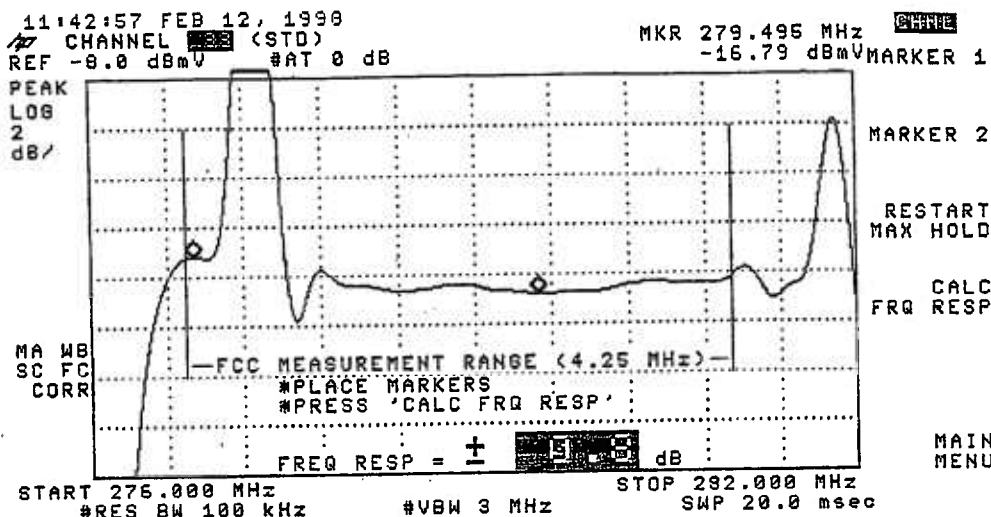
CALC
FRQ RESP

MAIN
MENU

START 180.000 MHz
#RES BW 100 kHz

#VBW 3 MHz

STOP 186.000 MHz
SWP 20.0 msec

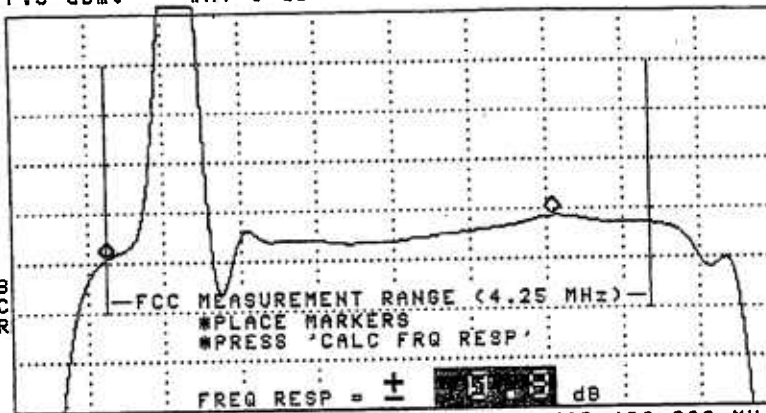


11:48:00 FEB 12, 1998
CHANNEL 524 (STD)
REF -7.5 dBmV #AT 0 dB

MKR 402.750 MHz
-17.29 dBmV MARKER 1

PEAK
LOB
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

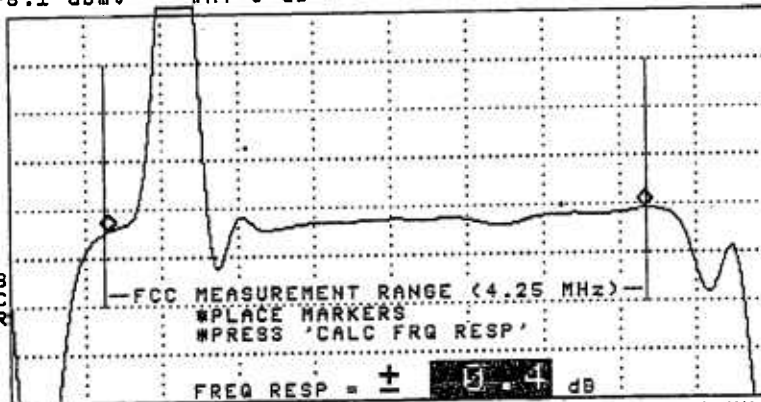
START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

11:49:27 FEB 12, 1998
CHANNEL 524 (STD)
REF -8.1 dBmV #AT 0 dB

MKR 468.780 MHz
-17.06 dBmV MARKER 1

PEAK
LOB
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: Time Warner - Syracuse

Test Point Location Pendergast Rd. - Lysander

Date: February 1998

Performed by: B. Diriwachter & B. Wentworth

Meter Serial Number: 9210392

Chan.	Freq. (MHz)	Temp. F					Chan.	Freq. (MHz)	Temp. F					Max	
		27	29	29	32	27			29	29	32				
		Time				Time									
		00:46	06:49	12:43	18:42	00:46			06:49	12:43	18:42				
		Visual Level (dbmv)							Visual Level (dbmv)						
2	55.2500	6.2	5.9	5.5	5.6	0.7	AA	301.2625	9.9	9.5	7.8	9.0	2.1		
3	61.2500	8.2	7.9	7.5	7.8	0.7	BB	307.2625	10.5	10.0	9.8	10.0	0.7		
4	67.2500	8.0	7.8	7.7	7.9	0.3	CC	313.2625	11.2	10.5	10.2	10.7	1.0		
5	77.2500	7.3	7.1	6.8	7.0	0.5	DD	319.2625	11.2	10.7	10.4	10.8	0.8		
6	83.2500	7.2	6.9	6.8	7.0	0.4	EE	325.2625	11.8	11.1	10.9	11.3	0.9		
							FF	331.2750	11.6	10.8	10.3	11.0	1.3		
							GG	337.2625	11.6	11.0	10.5	10.9	1.1		
A-5	91.2500						HH	343.2625	12.0	11.4	10.9	11.3	1.1		
A-4	97.2500						II	349.2625	11.4	10.8	10.2	11.0	1.2		
A-3	103.2500						JJ	355.2625	12.0	11.1	10.8	11.3	1.2		
A-2	109.2750						KK	361.2625	11.4	11.0	10.4	10.9	1.0		
A-1	115.2750						LL	367.2625	11.2	10.7	10.3	10.5	0.9		
A	121.2625	8.1	7.7	7.4	7.3	0.8	MM	373.2625	10.8	10.1	9.9	10.3	0.9		
B	127.2625	8.3	8.0	7.6	7.6	0.7	NN	379.2625	10.7	9.7	9.4	10.2	1.3		
C	133.2625	8.4	8.0	7.5	7.8	0.9	OO	385.2625	9.9	9.2	8.8	9.4	1.1		
D	139.2500	9.4	9.4	8.8	9.1	0.6	PP	391.2625	10.3	9.9	9.3	9.7	1.0		
E	145.2500	9.4	9.2	8.6	8.8	0.8	QQ	397.2625	9.6	9.3	8.7	9.0	0.9		
F	151.2500	9.5	9.5	9.0	9.6	0.6	RR	403.2500	9.6	9.2	8.6	9.2	1.0		
G	157.2500	9.8	9.5	9.2	9.4	0.6	SS	409.2500	10.5	10.0	9.3	9.7	1.2		
H	163.2500	9.8	9.8	9.3	9.3	0.5	TT	415.2500	9.1	8.5	7.8	8.3	1.3		
I	169.2500	9.5	8.9	9.2	9.3	0.6	UU	421.2500	9.3	8.0	7.8	8.1	1.5		
7	175.2500	9.9	9.6	9.4	9.5	0.5	VV	427.2500	8.9	8.6	8.1	8.5	0.8		
8	181.2500	8.4	8.3	7.8	8.1	0.6	WW	433.2500	7.4	6.5	6.5	7.1	0.9		
9	187.2500	9.4	9.1	8.7	8.9	0.7	XX	439.2500	8.1	7.9	6.6	6.6	1.5		
10	193.2500	9.2	9.0	8.5	8.8	0.7	YY	445.2500	9.1	8.9	8.2	8.7	0.9		
11	199.2500	7.6	7.3	7.0	7.0	0.6	ZZ	451.2500	8.1	8.3	5.8	8.0	2.5		
12	205.2500	7.7	6.7	6.8	6.9	1.0	63	457.2500	8.8	8.4	8.5	8.8	0.4		
13	211.2500	6.9	6.0	7.2	6.9	1.2	64	463.2500	8.7	9.0	7.5	9.1	1.6		
J	217.2500	8.6	6.2	6.0	6.3	0.6	65	469.2500	9.9	9.6	9.1	9.5	0.8		
K	223.2500	7.4	7.2	6.8	7.1	0.6	66	475.2500	10.7	10.3	9.6	10.2	1.1		
L	229.2625	7.5	6.9	6.7	7.0	0.8	67	481.2500	10.3	9.9	10.1	9.9	0.4		
M	235.2625	6.9	6.3	6.2	6.5	0.7	68	487.2500	10.5	9.0	9.2	9.5	1.5		
N	241.2625	7.0	6.7	6.5	6.7	0.5	69	493.2500	9.2	9.0	8.5	8.4	0.8		
O	247.2625	6.8	6.5	6.0	6.5	0.8	70	499.2500	10.4	9.9	8.3	9.6	2.1		
P	253.2625	6.9	6.4	6.1	6.6	0.8	71	505.2500	9.6	9.6	8.0	9.3	1.6		
Q	259.2625	8.2	7.3	7.2	7.5	1.0	72	511.2500	10.3	10.1	9.8	9.8	0.5		
R	265.2625	8.4	7.9	7.5	7.7	0.9	73	517.2500	11.2	10.9	10.1	10.6	1.1		
S	271.2625	8.3	7.7	7.5	7.8	0.8	74	523.2500	10.3	10.2	9.3	9.3	1.0		
T	277.2625	8.5	8.1	7.8	8.1	0.7	75	529.2500	10.2	10.3	9.1	10.2	1.2		
U	283.2625	8.8	8.1	7.4	8.1	1.4	76	535.2500	10.8	10.0	9.0	10.3	1.8		
V	289.2625	9.4	8.8	8.5	8.7	0.9	77	541.2500	10.6	10.6	10.1	9.9	0.7		
W	295.2625	9.6	9.0	8.5	8.9	1.1	78	547.2500	11.8	11.8	11.0	11.5	0.8		

Max NonAdjacent Channel Level Diff.	5.9
Max Adjacent Channel Level Diff.	2.7

Max Variance from last proof-of-performance test	5.8
Date of last proof-of-performance test	8/97

Note: Make measurements through a 100 ft. test drop cable without a converter.

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 11

Location: Apulia Rd

Community: Lafayette

Pole Number: 87

D.T. Value: 4-2

Map Number: 30-29

OR Number: 169

Trunk Cascade: 5 LE Cascade: 1

Visual Carrier Level

Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: Apulia Rd.

Date: 13-Feb-98

Time: 10:06 AM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Sera S	Diff (dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Sera S	Diff (dbmv)
2	55.2500	11.2	-1.8		13.0	AA	301.2625	9.4	-3.7		13.1
3	61.2500	12.7	-1.2		13.9	BB	307.2625	9.8	-3.7		13.5
4	67.2500	12.2	-2.3		14.5	CC	313.2625	9.8	-3.1		12.9
5	77.2500	10.4	-3.5		13.9	DD	319.2625	10.6	-2.5		13.1
6	83.2500	10.4	-3.6		14.0	EE	325.2625	11.0	-3.2		14.2
						FF	331.2750	11.1	-2.1		13.2
						GG	337.2625	11.1	-2.2		13.3
						HH	343.2625	11.8	-1.6		13.4
A-5	91.2500					II	349.2625	12.1	-1.4		13.5
A-4	97.2500					JJ	355.2625	12.5	0.0		12.5
A-3	103.2500					KK	361.2625	12.2	-1.4		13.6
A-2	109.2750					LL	367.2625	11.8	-1.5		13.3
A-1	115.2750					MM	373.2625	11.8	-1.5		13.3
A	121.2625	10.1	-4.1		14.2	NN	379.2625	12.8	-1.5		14.3
B	127.2625	9.9	-3.4		13.3	OO	385.2625	11.6	-2.2		13.8
C	133.2625	9.5	-3.8		13.3	PP	391.2625	12.3	-2.1		14.4
D	139.2500	10.6	-3.2		13.8	QQ	397.2625	11.5	-2.4		13.9
E	145.2500	10.3	-3.8		14.1	RR	403.2500	11.2	-2.0		13.2
F	151.2500	10.3	-3.6		13.9	SS	409.2500	13.5	0.0		13.5
G	157.2500	9.9	-3.6		13.5	TT	415.2500	12.3	-2.2	S	14.5
H	163.2500	10.4	-3.5		13.9	UU	421.2500	11.4	-2.9	S	14.3
I	169.2500	10.2	-3.2		13.4	VV	427.2500	11.6	-2.4		14.0
7	175.2500	10.3	-3.1		13.4	WW	433.2500	10.4	-2.0	S	12.4
8	181.2500	10.4	-3.6		14.0	XX	439.2500	11.7	-2.1	S	13.8
9	187.2500	10.3	-4.1		14.4	YY	445.2500	13.0	-1.9	S	14.9
10	193.2500	9.4	-3.8		13.2	ZZ	451.2500	11.7	-3.1	S	14.8
11	199.2500	9.5	-4.1		13.6	63	457.2500	11.6	-2.6	S	14.2
12	205.2500	8.9	-4.6		13.5	64	463.2500	10.7	-3.4	S	14.1
13	211.2500	7.3	-6.0		13.3	65	469.2500	12.4	-1.7		14.1
J	217.2500	8.3	-5.7		14.0	66	475.2500	12.8	-2.2	S	15.0
K	223.2500	8.1	-5.7		13.8	67	481.2500	12.6	-1.6	S	14.2
L	229.2625	7.8	-5.9		13.7	68	487.2500	12.3	-1.8	S	14.1
M	235.2625	7.3	-6.5		13.8	69	493.2500	11.0	-2.4	S	13.4
N	241.2625	7.3	-6.3		13.6	70	499.2500	13.1	-0.8	S	13.9
O	247.2625	7.1	-5.4		12.5	71	505.2500	12.7	-3.2	S	15.9
P	253.2625	7.7	-5.5		13.2	72	511.2500	12.7	-1.9	S	14.6
Q	259.2625	8.2	-5.5		13.7	73	517.2500	11.9	-3.4	S	15.3
R	265.2625	8.3	-5.9		14.2	74	523.2500	10.8	-3.5	S	14.3
S	271.2625	7.8	-5.1		12.9	75	529.2500	12.4	-1.8	S	14.2
T	277.2625	7.8	-5.7		13.5	76	535.2500	13.4	-1.8	S	15.2
U	283.2625	8.2	-4.9		13.1	77	541.2500	12.5	-3.4	S	15.9
V	289.2625	9.3	-4.0		13.3	78	547.2500	11.4	-3.5	S	14.9
W	295.2625	9.4	-4.3		13.7						

PEAK TO VALLEY: 6.4

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98

Test Performed By: Patrick Thrall

Location: Apulia Rd.

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response	Carrier To Noise Ratio	Distortions (dBr)			Modulation
	(dBr)	(dB)	CTB	CSO	CSF	(%)
2	0.6	49	65.6	67.3	69.8	0.1
A	0.3	49.8	65	68.3	69.4	
H	0.7	50	63.1	69.8	69	
8	0.8	50.8	62.5	68	70.1	
T	0.8	49.6	59.9	66.3	68.8	
CC	0.5	49	60	64.7	69	
LL	0.6	49.6	60.8	65.1	70.5	
RR	0.7	50	60.1	64.2	69.7	
CCC	0.3	49	58.9	60.5	70.1	

**Time Warner Cable
Syracuse Division**

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

System Name: Time Warner-Syracuse Date: February 1998
Test Performed By Patrick Thrall Location: Apulla Rd.

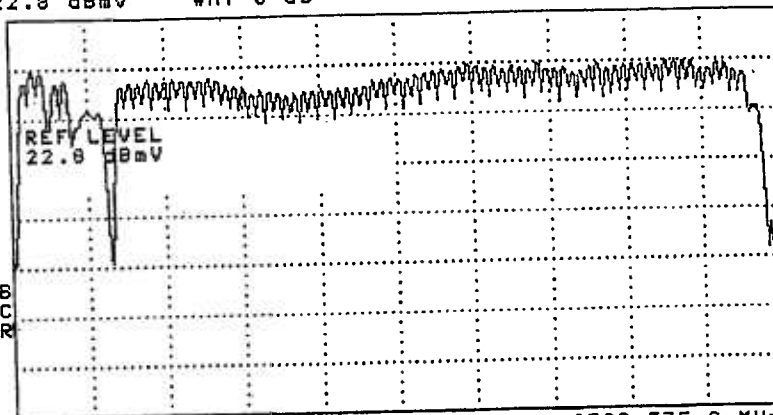
(SEE THE ATTACHED SWEEP TRACES)

10:13:29 FEB 13, 1998

REF 22.8 dBmV #AT 0 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR



START 45.0 MHz RES BW 3.0 MHz VBW 1 MHz STOP 575.0 MHz SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

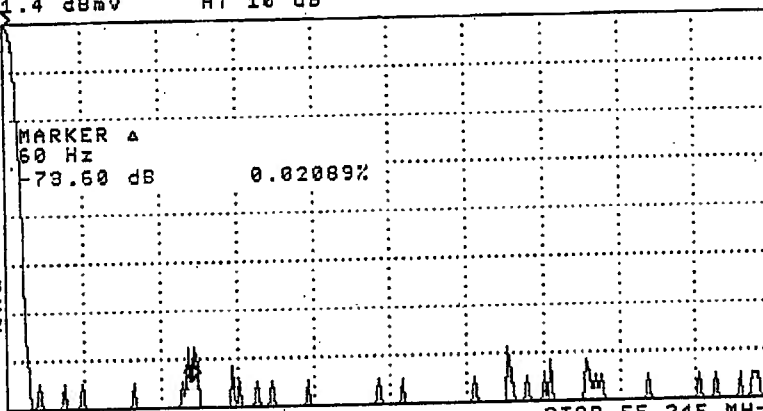
More
1 of 3

10:15:57 FEB 13, 1998

CHANNEL (STD)
REF 11.4 dBmV AT 10 dB

PEAK
LOG
10
dB/

VA SB
SC FC
CORR



START 55.245 MHz #RES BW 1.0 MHz #VBW 1 kHz STOP 55.245 MHz #SWP 800 msec

MKR A 50 Hz
-73.60 dB

CHNL

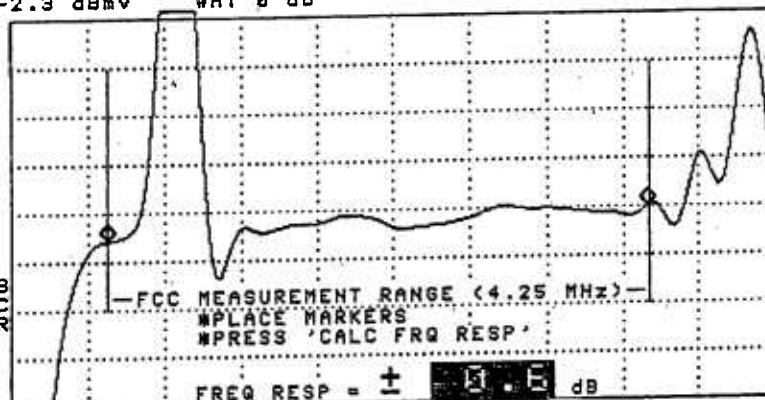
MAIN
MENU

10:17:56 FEB 13, 1998

CHANNEL (STD)
REF -2.3 dBmV #AT 0 dB

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



START 54.000 MHz #RES BW 100 kHz #VBW 3 MHz STOP 60.000 MHz SWP 20.0 msec

MKR 54.750 MHz
-11.44 dBmV

CHNL

MARKER 2

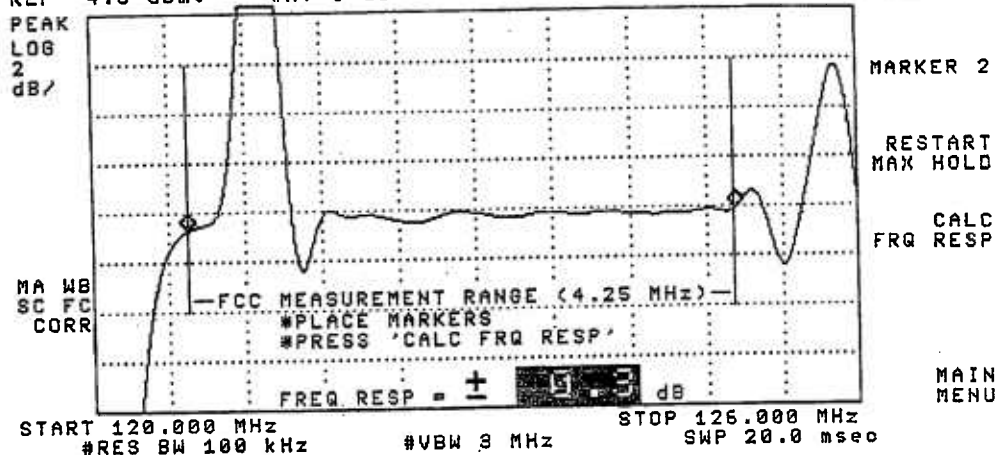
RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

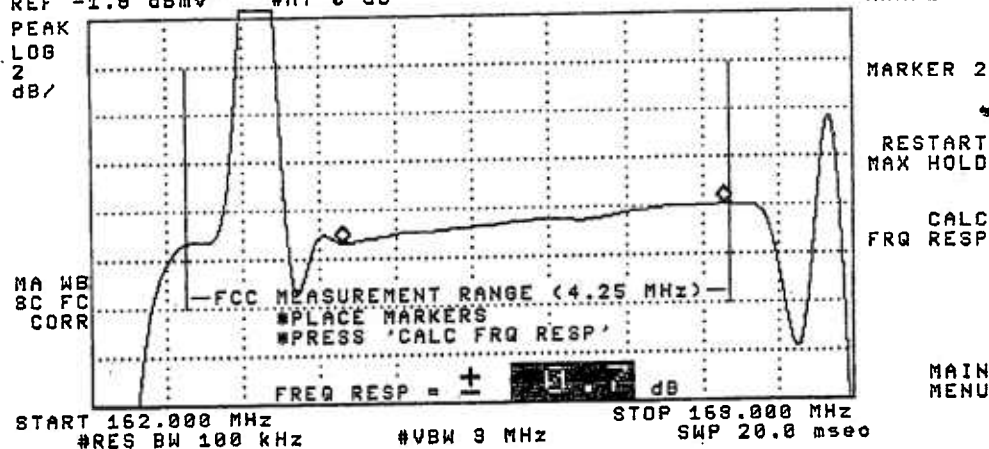
10:19:31 FEB 13, 1998
CHANNEL 2 (STD)
REF -4.3 dBmV #AT 0 dB

MKR 120.750 MHz
-12.99 dBmV MARKER 1



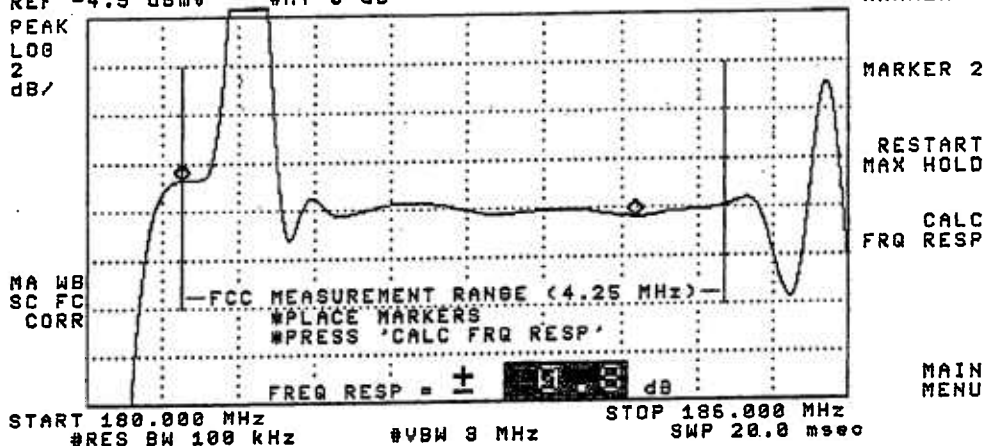
10:20:30 FEB 13, 1998
CHANNEL 2 (STD)
REF -1.0 dBmV #AT 0 dB

MKR 163.980 MHz
-11.16 dBmV MARKER 1



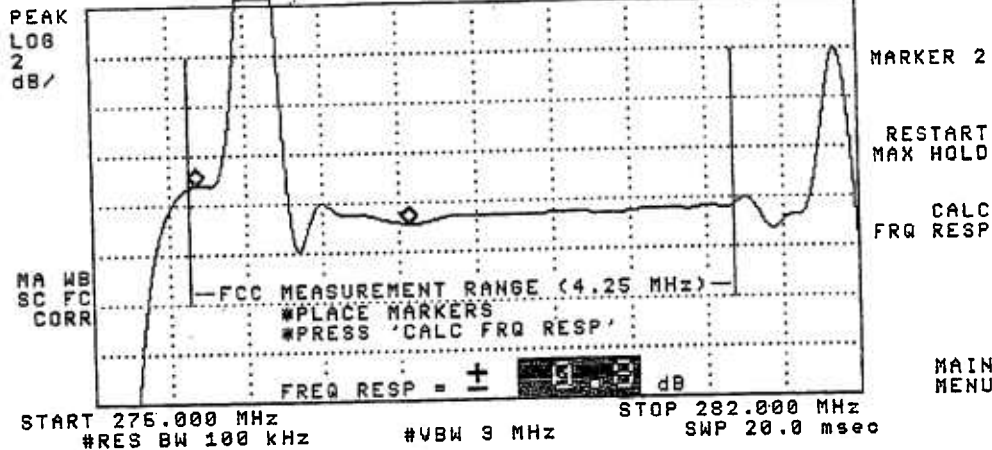
10:22:00 FEB 13, 1998
CHANNEL 2 (STD)
REF -4.5 dBmV #AT 0 dB

MKR 184.305 MHz
-12.85 dBmV MARKER 1



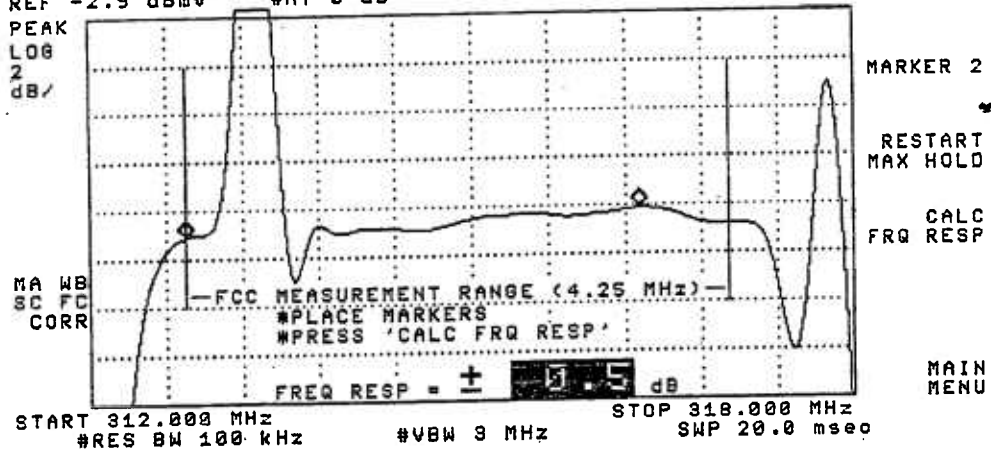
10:23:10 FEB 13, 1998
 CHANNEL 23 (STD)
 REF -5.6 dBmV #AT 0 dB

MRK 278.475 MHz CHNL
 -14.48 dBmV MARKER 1



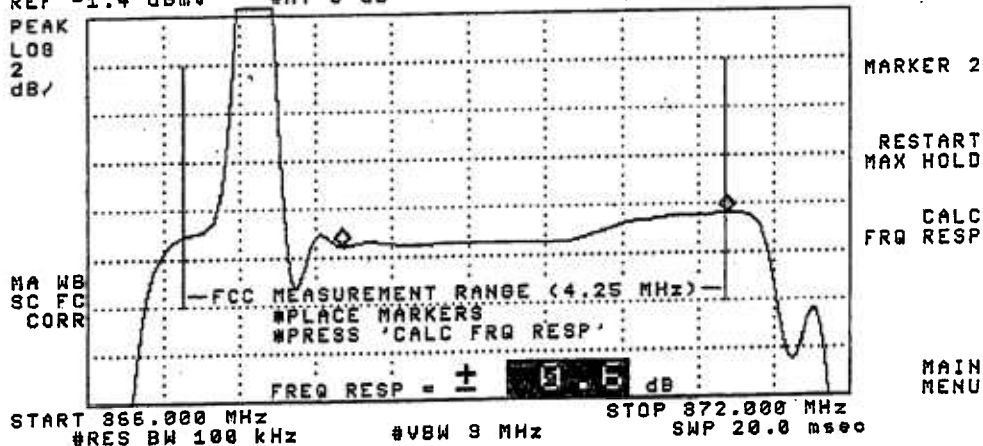
10:24:21 FEB 13, 1998
 CHANNEL 23 (STD)
 REF -2.9 dBmV #AT 0 dB

MRK 312.750 MHz CHNL
 -12.02 dBmV MARKER 1



10:25:53 FEB 13, 1998
 CHANNEL 23 (STD)
 REF -1.4 dBmV #AT 0 dB

MRK 368.010 MHz CHNL
 -10.91 dBmV MARKER 1

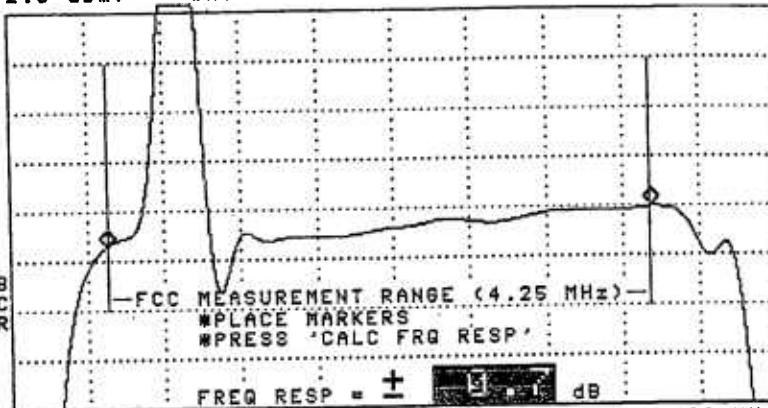


10:27:11 FEB 13, 1998
CHANNEL 54 (STD)
REF -2.0 dBmV #AT 0 dB

MKR 402.750 MHz CHNL
-11.37 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

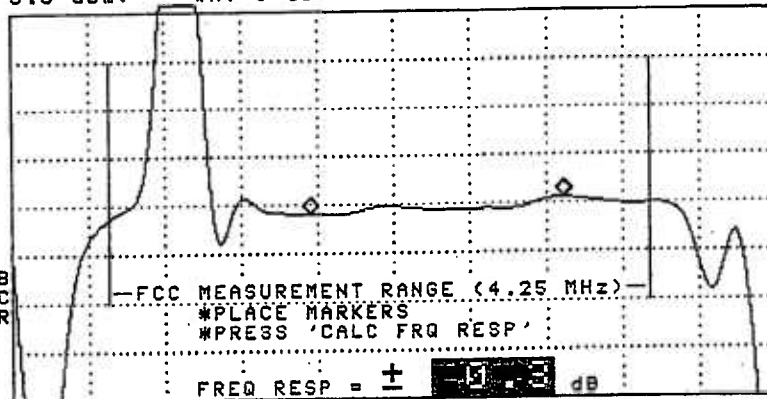
START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

10:28:27 FEB 13, 1998
CHANNEL 55 (STD)
REF -3.3 dBmV #AT 0 dB

MKR 470.340 MHz CHNL
-11.53 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: Time Warner - Syracuse

Test Point Location Apulia Rd.

Date: February 1998

Performed by: S. Williams & P. Bellucci

Meter Serial Number: 9210390

Chan	Freq (MHz)	Temp °F				Max Variation	Chan	Freq (MHz)	Temp °F				Max Variation
		27	29	30	34				27	29	30	34	
		Time											
		00:07	06:12	11:47	17:44				00:07	06:12	11:47	17:44	
Visual Level (dbmv)													
2	55.2500	12.5	12.3	12.0	12.2	0.5	AA	301.2625	9.8	9.8	9.8	9.8	0.0
3	61.2500	14.5	14.4	14.4	14.3	0.2	BB	307.2625	12.5	12.2	12.5	12.3	0.3
4	67.2500	14.0	13.8	13.9	13.8	0.2	CC	313.2625	13.2	13.1	13.2	13.0	0.2
5	77.2500	12.4	12.1	12.1	12.3	0.3	DD	319.2625	13.3	13.2	13.1	13.0	0.3
6	83.2500	12.4	12.3	12.3	12.3	0.1	EE	325.2625	14.0	14.0	13.5	13.5	0.5
							FF	331.2750	13.9	13.5	13.4	13.5	0.5
							GG	337.2625	14.4	14.0	14.0	13.8	0.6
A-5	91.2500						HH	343.2625	14.9	14.8	14.4	14.6	0.5
A-4	97.2500						II	349.2625	14.9	14.6	14.5	14.4	0.5
A-3	103.2500						JJ	355.2625	15.3	15.0	14.6	14.5	0.8
A-2	109.2750						KK	361.2625	15.7	15.4	15.2	15.1	0.6
A-1	115.2750						LL	367.2625	15.2	14.9	14.8	14.7	0.5
A	121.2625	12.1	11.8	11.7	11.6	0.5	MM	373.2625	15.3	15.3	14.9	14.8	0.5
B	127.2625	11.9	11.7	11.6	11.6	0.3	NN	379.2625	15.6	15.2	15.2	15.0	0.6
C	133.2625	11.5	11.3	11.0	11.1	0.5	OO	385.2625	15.0	14.9	14.6	14.6	0.4
D	139.2500	12.7	12.6	12.4	12.3	0.4	PP	391.2625	15.7	15.3	15.1	15.1	0.6
E	145.2500	12.3	12.1	11.7	11.9	0.6	QQ	397.2625	15.6	15.3	15.2	15.2	0.4
F	151.2500	12.4	12.2	12.0	12.2	0.4	RR	403.2500	15.5	15.3	14.8	15.0	0.7
G	157.2500	12.4	12.0	11.8	11.8	0.6	SS	409.2500	16.6	16.4	16.0	16.1	0.6
H	163.2500	12.6	12.1	12.2	11.8	0.8	TT	415.2500	15.4	15.3	15.1	14.3	1.1
I	169.2500	11.9	12.1	11.9	11.8	0.3	UU	421.2500	15.9	14.7	14.8	14.2	1.7
7	175.2500	12.8	12.6	12.4	12.4	0.4	VV	427.2500	15.6	15.5	15.3	15.2	0.4
8	181.2500	12.4	12.0	11.9	11.9	0.5	VVV	433.2500	14.5	14.0	14.3	14.6	0.6
9	187.2500	12.3	12.0	12.0	12.1	0.3	XX	439.2500	14.9	14.9	14.8	15.1	0.3
10	193.2500	12.0	11.7	11.3	11.5	0.7	YY	445.2500	16.0	15.9	15.7	15.7	0.3
11	199.2500	11.5	11.4	11.0	11.3	0.5	ZZ	451.2500	15.6	15.0	14.9	15.2	0.7
12	205.2500	10.2	10.1	9.7	9.8	0.5	63	457.2500	14.4	15.9	15.0	15.0	1.5
13	211.2500	8.1	7.7	7.7	7.6	0.5	64	463.2500	14.4	15.6	15.4	15.0	1.2
J	247.2500	9.6	9.5	9.2	9.4	0.4	65	469.2500	15.9	15.5	15.5	15.6	0.4
K	223.2500	9.8	9.8	9.5	9.9	0.4	66	475.2500	15.6	15.5	15.8	15.7	0.3
L	229.2625	10.1	10.1	9.6	9.9	0.5	67	481.2500	16.2	16.5	16.3	15.9	0.6
M	235.2625	9.7	9.4	9.1	9.2	0.6	68	487.2500	16.7	16.1	16.0	16.3	0.7
N	241.2625	10.1	10.0	9.2	9.3	0.9	69	493.2500	14.1	15.1	15.4	15.0	1.3
O	247.2625	10.0	9.9	9.6	9.8	0.4	70	499.2500	15.8	15.8	16.4	16.5	0.7
P	253.2625	10.2	10.1	9.7	10.1	0.5	71	505.2500	15.9	16.3	15.4	14.8	1.5
Q	259.2625	10.6	10.3	10.0	10.5	0.6	72	511.2500	16.5	15.1	16.1	16.0	1.4
R	265.2625	10.5	10.1	10.2	10.3	0.4	73	517.2500	16.3	16.3	16.2	16.3	0.1
S	271.2625	10.0	10.1	9.9	10.1	0.2	74	523.2500	16.3	16.1	15.6	15.7	0.7
T	277.2625	10.6	10.4	9.7	10.4	0.9	75	529.2500	16.2	15.3	15.2	15.7	1.0
U	283.2625	10.8	10.6	10.2	9.9	0.9	76	535.2500	16.9	15.2	15.5	16.0	1.7
V	289.2625	11.6	11.3	10.8	11.1	0.8	77	541.2500	15.0	15.8	15.5	14.6	1.2
W	295.2625	11.8	11.6	11.1	11.2	0.7	78	547.2500	15.9	16.5	16.0	16.0	0.6

Max NonAdjacent Channel Level Diff.	8.9
Max Adjacent Channel Level Diff.	2.7

Max Variance from last proof-of-performance test	4.9
Date of last proof-of-performance test	0 8/97

Note: Make measurements through a 100 ft. test drop cable without a converter.

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 12

Location: Gaskin Rd

Community: Clay

Pole Number: 3310/004

D.T. Value: 11-4

Map Number: 8-21

OR Number: 191

Trunk Cascade: 6 LE Cascade:

Visual Carrier Level Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: Gaskin Rd.

Date: 12-Feb-98

Time: 12:51 PM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (dbmv)
2	55.2500	17.1	4.8		12.3	AA	301.2625	20.8	7.1		13.7
3	61.2500	19.2	5.9		13.3	BB	307.2625	21.0	6.5		14.5
4	67.2500	19.8	5.1		14.7	CC	313.2625	20.3	6.6		13.7
5	77.2500	18.4	4.0		14.4	DD	319.2625	20.4	7.1		13.3
6	83.2500	18.3	4.5		13.8	EE	325.2625	20.4	5.4		15.0
						FF	331.2750	20.1	6.3		13.8
						GG	337.2625	19.9	6.2		13.7
A-5	91.2500					HH	343.2625	20.2	6.1		14.1
A-4	97.2500					II	349.2625	19.7	5.9		13.8
A-3	103.2500					JJ	355.2625	20.3	7.1		13.2
A-2	109.2750					KK	361.2625	19.7	6.0		13.7
A-1	115.2750					LL	367.2625	19.2	5.9		13.3
A	121.2625	19.0	4.3		14.7	MM	373.2625	19.8	6.5		13.3
B	127.2625	18.6	5.3		13.3	NN	379.2625	20.2	5.9		14.3
C	133.2625	19.3	4.8		14.5	OO	385.2625	19.4	5.3		14.1
D	139.2500	19.4	5.3		14.1	PP	391.2625	19.6	4.8		14.8
E	145.2500	18.5	4.6		13.9	QQ	397.2625	19.4	4.8		14.6
F	151.2500	19.1	5.1		14.0	RR	403.2500	18.9	6.0		12.9
G	157.2500	19.5	5.7		13.8	SS	409.2500	21.3	7.3		14.0
H	163.2500	19.8	5.8		14.0	TT	415.2500	20.1	5.2	S	14.9
I	169.2500	20.0	5.9		14.1	UU	421.2500	20.1	4.7	S	15.4
7	175.2500	19.8	6.1		13.7	VV	427.2500	19.7	5.6		14.1
8	181.2500	20.0	5.7		14.3	WW	433.2500	18.8	5.9	S	12.9
9	187.2500	20.1	5.4		14.7	XX	439.2500	20.0	6.0	S	14.0
10	193.2500	19.5	5.9		13.6	YY	445.2500	20.8	5.3	S	15.5
11	199.2500	19.7	5.7		14.0	ZZ	451.2500	18.9	4.4	S	14.5
12	205.2500	19.5	5.3		14.2	63	457.2500	19.4	5.3	S	14.1
13	211.2500	17.7	4.3		13.4	64	463.2500	19.4	4.8	S	14.6
J	217.2500	18.6	4.8		13.8	65	469.2500	20.0	5.4		14.6
K	223.2500	19.1	4.7		14.4	66	475.2500	20.1	4.7	S	15.4
L	229.2625	18.6	4.5		14.1	67	481.2500	18.9	5.3	S	13.6
M	235.2625	18.3	3.8		14.5	68	487.2500	19.2	5.2	S	14.0
N	241.2625	18.5	4.6		13.9	69	493.2500	18.6	5.1	S	13.5
O	247.2625	18.4	5.4		13.0	70	499.2500	20.2	5.9	S	14.3
P	253.2625	19.5	6.1		13.4	71	505.2500	19.3	3.6	S	15.7
Q	259.2625	19.6	5.8		13.8	72	511.2500	19.0	4.9	S	14.1
R	265.2625	20.2	5.9		14.3	73	517.2500	18.8	3.3	S	15.5
S	271.2625	19.4	6.1		13.3	74	523.2500	18.7	3.1	S	13.6
T	277.2625	19.9	5.9		14.0	75	529.2500	18.8	4.0	S	14.8
U	283.2625	19.6	6.4		13.2	76	535.2500	19.3	4.5	S	14.8
V	289.2625	20.9	7.1		13.8	77	541.2500	18.5	3.0	S	15.5
W	295.2625	21.1	6.7		14.4	78	547.2500	18.5	3.5	S	15.0

PEAK TO VALLEY: 4.6

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98

Test Performed By: Patrick Thrall

Location: Gaskin Rd.

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response	Carrier To Noise Ratio	Distortions			Hum
	(+/- dB)	(dB)	(-dBc)			(%)
2.	1	50	62.6	70	74.3	0.1
A	0.5	50.6	62.9	71.1	74.3	
H	0.9	51	60.1	68.8	74.6	
8	0.9	51.6	59.6	68.3	73.9	
T	1	51	58.8	66.1	74.9	
CC	0.5	50.6	58.7	65.8	72.9	
LL	0.7	50.4	57.6	67.2	73.1	
RR	0.8	50	57.9	67.5	73.6	
CCC	0.3	48.1	57.5	58.6	74	

Time Warner Cable Syracuse Division

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

System Name: Time Warner-Syracuse Date: February 1998
Test Performed By Patrick Thrall Location: Gaskin Rd.

(SEE THE ATTACHED SWEEP TRACES)

12:52:37 FEB 12, 1998

REF 31.8 dBmV #AT 0 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR

CENTER 302.1 MHz
RES BW 3.0 MHz
VBW 1 MHz
SPAN 530.0 MHz
SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

More
1 of 3

12:59:32 FEB 12, 1998

CHANNEL 2 (STD)
REF 17.6 dBmV AT 10 dB

MKR Δ 60 Hz
-72.00 dB

PEAK
LOG
10
dB/

VA SB
SC FC
CORR

START 55.238 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
STOP 55.238 MHz
#SWP 800 msec

MAIN
MENU

13:01:32 FEB 12, 1998

CHANNEL 2 (STD)
REF 5.0 dBmV #AT 0 dB

MKR 54.750 MHz
-5.03 dBmV

PEAK
LOG
2
dB/

MA WB
SC FC
CORR

START 54.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 50.000 MHz
SWP 20.0 msec

MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

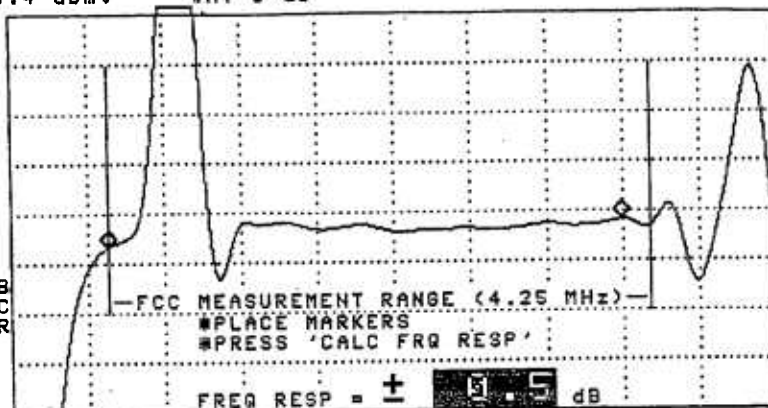
MAIN
MENU

13:20:13 FEB 12, 1998
CHANNEL 14 (STD)
REF 5.4 dBmV #AT 0 dB

MKR 124.785 MHz
-2.98 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

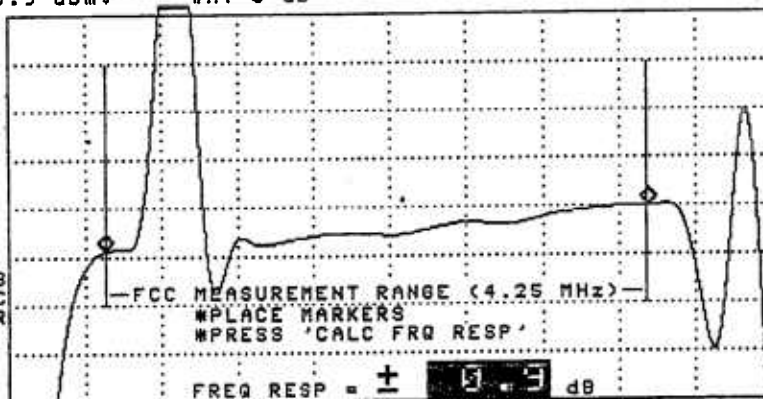
START 120.000 MHz STOP 126.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:22:02 FEB 12, 1998
CHANNEL 24 (STD)
REF 8.9 dBmV #AT 0 dB

MKR 162.750 MHz
-.97 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

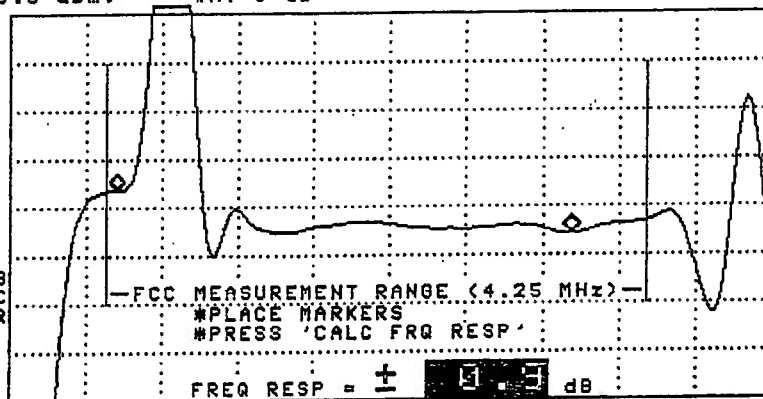
START 162.000 MHz STOP 168.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:23:21 FEB 12, 1998
CHANNEL 3 (STD)
REF 6.8 dBmV #AT 0 dB

MKR 184.425 MHz
-2.36 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

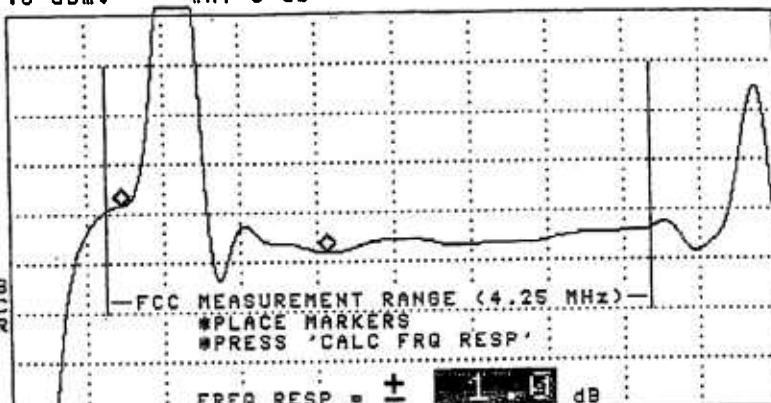
START 180.000 MHz STOP 186.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

19:25:15 FEB 12, 1998
CHANNEL 33 (STD)
REF 7.8 dBmV #AT 0 dB

MKR 278.475 MHz CHANNEL
-1.81 dBmV MARKER 1

PEAK
LOB
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

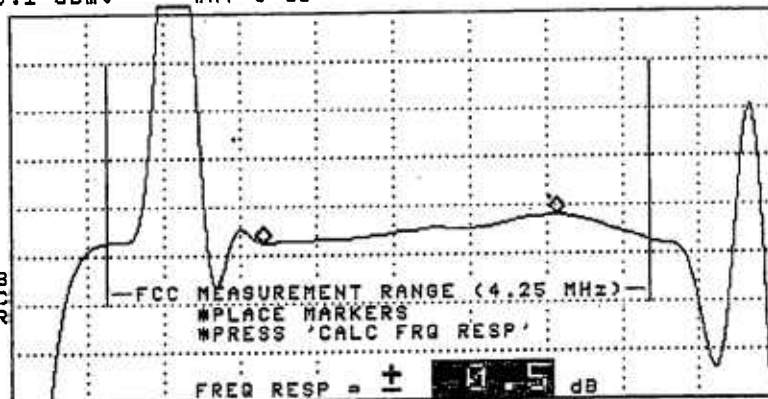
START 276.000 MHz STOP 282.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

19:26:32 FEB 12, 1998
CHANNEL 33 (STD)
REF 9.1 dBmV #AT 0 dB

MKR 313.980 MHz CHANNEL
-.37 dBmV MARKER 1

PEAK
LOB
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

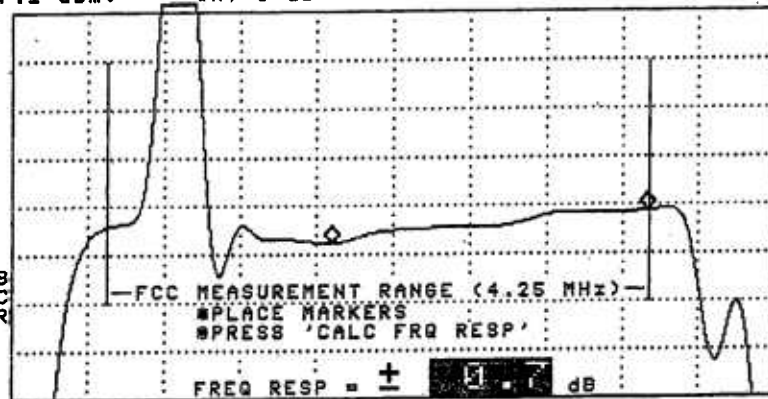
START 312.000 MHz STOP 318.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

19:27:57 FEB 12, 1998
CHANNEL 33 (STD)
REF 7.1 dBmV #AT 0 dB

MKR 368.520 MHz CHANNEL
-2.45 dBmV MARKER 1

PEAK
LOB
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 366.000 MHz STOP 372.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

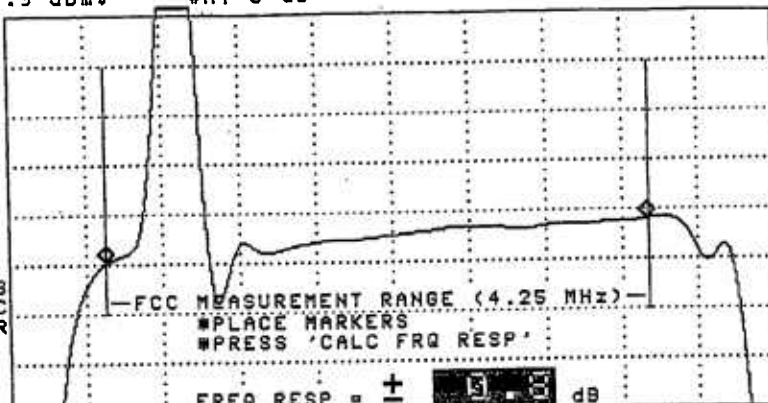
13:29:24 FEB 12, 1998
CHANNEL 54 (STD)
REF 6.9 dBmV #AT 0 dB

MKR 402.750 MHz
-3.08 dBmV

CHHPL
Demod

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Track
Gen

Aux Conn
Control

Monitor
TV

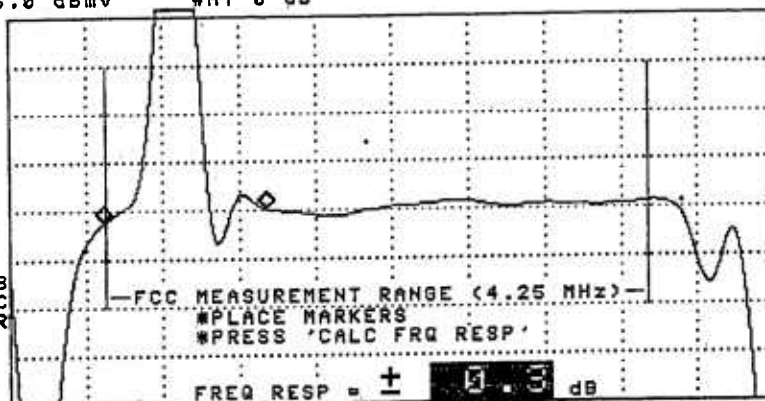
13:31:09 FEB 12, 1998
CHANNEL 55 (STD)
REF 5.0 dBmV #AT 0 dB

MKR 468.735 MHz
-3.54 dBmV

CHHPL

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: Time Warner - Syracuse

Test Point Location Gaskin Rd.

Date: February 1998

Performed by: B. Diriwatner & B. Wentworth

Meter Serial Number: 9210392

Chan	Freq (MHz)	Temp °F				Max Variation	Chan	Freq (MHz)	Temp °F				Max Variation
		28	29	32	36				28	29	32	36	
		Time	Time	Time	Time				Time	Time	Time	Time	
		23:50	05:49	11:40	17:43				23:50	05:49	11:40	17:43	
		Visual Level (dbmV)							Visual Level (dbmV)				
2	55.2500	19.7	19.9	19.6	19.5	0.4	AA	301.2625	22.0	22.0	21.1	21.5	0.9
3	61.2500	21.8	21.6	21.7	21.9	0.3	BB	307.2625	24.7	24.6	23.7	23.7	1.0
4	67.2500	22.3	22.2	22.1	22.3	0.2	CC	313.2625	24.9	24.8	23.5	23.8	1.4
5	77.2500	21.1	21.0	20.5	20.9	0.6	DD	319.2625	24.4	24.2	23.5	23.4	1.0
6	83.2500	20.9	20.7	20.4	20.5	0.5	EE	325.2625	24.5	24.6	23.6	24.1	1.0
							FF	331.2750	24.1	23.9	23.0	23.4	1.1
							GG	337.2625	24.3	24.1	23.1	23.4	1.2
A-5	91.2500						HH	343.2625	24.4	24.3	23.2	23.4	1.2
A-4	97.2500						II	349.2625	23.6	23.6	22.8	23.0	0.8
A-3	103.2500						JJ	355.2625	24.5	24.2	23.2	23.6	1.3
A-2	109.2750						KK	361.2625	24.4	24.1	23.3	23.6	1.1
A-1	115.2750						LL	367.2625	23.7	23.4	22.8	23.1	0.9
A	121.2625	20.3	20.2	19.8	19.9	0.5	MM	373.2625	24.4	24.0	23.1	23.4	1.3
B	127.2625	20.7	20.7	20.2	20.4	0.5	NN	379.2625	24.3	24.3	23.1	23.8	1.2
C	133.2625	21.1	20.8	19.5	19.8	1.6	OO	385.2625	23.6	23.6	22.8	23.0	0.8
D	139.2500	21.8	21.8	21.5	21.5	0.3	PP	391.2625	24.5	24.1	23.4	23.8	1.1
E	145.2500	21.5	21.2	20.7	21.0	0.8	QQ	397.2625	24.2	23.9	23.3	23.6	0.9
F	151.2500	22.0	21.8	21.6	21.8	0.4	RR	403.2500	24.1	23.7	22.9	23.3	1.2
G	157.2500	21.0	20.8	20.6	20.9	0.4	SS	409.2500	25.1	25.0	24.0	24.4	1.1
H	163.2500	22.3	22.3	22.2	22.3	0.1	TT	415.2500	23.1	22.5	22.3	22.5	0.8
I	169.2500	22.3	22.5	21.8	22.3	0.7	UU	421.2500	23.3	23.6	22.0	23.1	1.6
7	175.2500	22.8	22.8	22.6	22.9	0.3	VV	427.2500	24.5	24.2	23.5	23.7	1.0
8	181.2500	22.0	21.8	21.3	21.7	0.7	WW	433.2500	23.3	21.9	21.5	22.0	1.8
9	187.2500	23.0	23.0	21.8	22.6	1.2	XX	439.2500	23.7	23.6	22.0	23.1	1.7
10	193.2500	22.6	22.6	21.8	22.2	0.8	YY	445.2500	24.7	24.7	23.4	24.0	1.3
11	199.2500	21.9	21.6	21.0	21.3	0.9	ZZ	451.2500	23.4	23.6	22.2	21.4	2.2
12	205.2500	22.0	21.9	20.7	21.2	1.3	63	457.2500	23.4	23.4	22.4	22.9	1.0
13	211.2500	19.6	19.2	18.7	18.8	0.9	64	463.2500	24.0	24.0	22.5	23.3	1.5
J	217.2500	21.1	20.7	20.1	20.7	1.0	65	469.2500	23.8	24.1	23.1	23.4	1.0
K	223.2500	21.7	21.8	20.8	21.1	1.0	66	475.2500	23.8	24.3	22.8	23.3	1.5
L	229.2625	21.9	21.6	20.9	21.4	1.0	67	481.2500	23.5	23.8	23.3	21.7	2.1
M	235.2625	21.7	21.6	20.8	20.9	0.9	68	487.2500	23.8	23.4	22.7	23.1	1.1
N	241.2625	22.0	21.9	21.0	21.4	1.0	69	493.2500	23.2	23.6	22.4	21.9	1.7
O	247.2625	21.7	21.6	20.7	21.0	1.0	70	499.2500	23.3	24.1	22.9	23.6	1.2
P	253.2625	22.5	22.4	21.5	21.9	1.0	71	505.2500	21.9	22.7	21.7	21.7	1.0
Q	259.2625	22.7	22.9	21.9	22.3	1.0	72	511.2500	23.3	23.2	21.9	20.5	2.8
R	265.2625	23.4	23.5	22.3	22.7	1.2	73	517.2500	23.3	23.1	22.3	22.6	1.0
S	271.2625	23.6	23.3	22.5	22.9	1.1	74	523.2500	22.7	22.6	21.8	21.7	1.0
T	277.2625	23.6	23.5	22.7	23.2	0.9	75	529.2500	23.6	22.6	21.7	22.0	1.9
U	283.2625	23.5	23.3	22.7	23.1	0.8	76	535.2500	22.8	22.6	21.0	22.0	1.8
V	289.2625	24.8	24.4	23.6	24.0	1.2	77	541.2500	22.2	22.7	21.4	21.2	1.5
W	295.2625	24.5	24.2	23.4	23.7	1.1	78	547.2500	23.1	22.9	22.2	22.7	0.9

Max NonAdjacent Channel Level Diff.	5.8
Max Adjacent Channel Level Diff.	2.7

Max Variance from last proof-of-performance test	7.9
Date of last proof-of-performance test	8/97

Note: Make measurements through a 100 ft. test drop cable without a converter.

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 13

Location: Rt 57

Community: Fulton

Pole Number: 188/174

D.T. Value: 17-2

Map Number: 22-16

OR Number: 737

Trunk Cascade: 5 LE Cascade: 1

Visual Carrier Level Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: Rt. 57

Date: 13-Feb-98

Time: 03:16 PM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra (S)	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra (S)	Diff (Dbmv)
2	55.2500	12.8	-1.6		14.4	AA	301.2625	12.3	-2.0		14.3
3	61.2500	12.2	-2.1		14.3	BB	307.2625	11.3	0.0		11.3
4	67.2500	11.8	-2.3		14.1	CC	313.2625	12.9	-0.4		13.3
5	77.2500	11.6	-1.6		13.2	DD	319.2625	12.9	-0.3		13.2
6	83.2500	11.6	-2.2		13.8	EE	325.2625	13.8	-0.9		14.7
						FF	331.2750	12.8	-1.0		13.8
						GG	337.2625	12.9	-0.7		13.6
A-5	91.2500					HH	343.2625	11.9	-2.0		13.9
A-4	97.2500					II	349.2625	12.0	-1.8		13.8
A-3	103.2500					JJ	355.2625	13.4	-0.6		14.0
A-2	109.2750					KK	361.2625	13.0	-1.1		14.1
A-1	115.2750					LL	367.2625	12.8	-0.4		13.2
A	121.2625	10.0	-3.4		13.4	MM	373.2625	12.3	-0.9		13.2
B	127.2625	10.5	-3.1		13.6	NN	379.2625	13.6	0.0		13.6
C	133.2625	10.0	-3.4		13.4	OO	385.2625	13.6	-0.8		14.4
D	139.2500	9.5	-4.1		13.6	PP	391.2625	12.9	-1.4		14.3
E	145.2500	9.6	-3.9		13.5	QQ	397.2625	12.0	-1.2		13.2
F	151.2500	9.6	-3.8		13.4	RR	403.2500	12.6	-0.2		12.8
G	157.2500	10.1	-3.4		13.5	SS	409.2500	13.0	-0.7		13.7
H	163.2500	9.9	-3.3		13.2	TT	415.2500	13.4	-1.4	S	14.8
I	169.2500	10.6	-3.1		13.7	UU	421.2500	13.0	-1.7	S	14.7
7	175.2500	11.5	-2.8		14.3	VV	427.2500	12.3	-1.2		13.5
8	181.2500	10.7	-2.6		13.3	WW	433.2500	12.5	-1.5	S	14.0
9	187.2500	10.5	-2.8		13.3	XX	439.2500	12.6	-1.9	S	14.5
10	193.2500	10.7	-2.9		13.6	YY	445.2500	12.2	-1.5		13.7
11	199.2500	10.8	-2.6		13.4	ZZ	451.2500	12.4	-0.8	S	13.2
12	205.2500	11.1	-2.7		13.8	63	457.2500	11.7	-2.8	S	14.5
13	211.2500	11.4	-2.0		13.4	64	463.2500	12.0	-1.7	S	13.7
J	217.2500	10.7	-2.8		13.5	65	469.2500	13.8	-0.5	S	14.3
K	223.2500	11.0	-1.9		12.9	66	475.2500	13.5	-1.2	S	14.7
L	229.2625	10.9	-2.9		13.8	67	481.2500	12.5	-1.3	S	13.8
M	235.2625	10.9	-2.4		13.3	68	487.2500	11.2	-1.8	S	13.0
N	241.2625	10.3	-2.6		12.9	69	493.2500	12.9	-1.0	S	13.9
O	247.2625	10.6	-2.0		12.6	70	499.2500	13.2	-0.1	S	13.3
P	253.2625	11.4	-1.2		12.6	71	505.2500	14.3	-0.3	S	14.6
Q	259.2625	11.9	-1.1		13.0	72	511.2500	13.1	-0.9	S	14.0
R	265.2625	11.6	-2.3		13.9	73	517.2500	12.6	-1.6	S	14.2
S	271.2625	10.5	-3.2		13.7	74	523.2500	12.4	-0.6	S	13.0
T	277.2625	11.8	-1.4		13.2	75	529.2500	14.4	0.5	S	13.9
U	283.2625	11.9	-1.2		13.1	76	535.2500	15.5	-0.2	S	15.7
V	289.2625	12.6	-0.4		13.0	77	541.2500	14.7	0.2		14.5
W	295.2625	12.2	-2.5		14.7	78	547.2500	13.0	-1.4	S	14.4

PEAK TO VALLEY: 6

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98

Test Performed By: Patrick Thrall

Location: Rt. 57

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response	Carrier To Noise Ratio	Distortions			Hum
			(dBc)			
	(dB)	(dB)	UT	AC	WUE	(40%)
2	0.5	47.4	47.9	68.5	69.2	0.1
A	0.7	47	47.8	68.1	70.9	
H	0.5	47.8	48	68.6	70.1	
8	1.4	47	48	68	69.8	
T	0.8	48.3	65	66.6	68.9	
CC	0.7	48.2	64.5	67.6	69.9	
LL	0.4	47.8	63.3	66.8	69.8	
RR	0.3	48	61.3	66.6	70.1	
CCC	1.3	48.1	63.5	66.3	70.2	

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 6

Location: Maple Ln

Community: N. Syracuse

Pole Number: NYT#6

D.T. Value: 23-4

Map Number: 15-26C

OR Number: 27

Trunk Cascade: 3 LE Cascade: 1

Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: Maple Rd.

Date: 12-Feb-98

Time: 03:50 PM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Sora (S)	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Sora (S)	Diff (Dbmv)
2	55.2500	6.3	-6.4		12.7	AA	301.2625	10.2	-3.2		13.4
3	61.2500	7.6	-5.9		13.5	BB	307.2625	10.2	-3.7		13.9
4	67.2500	7.5	-6.3		13.8	CC	313.2625	10.0	-3.6		13.6
5	77.2500	7.8	-5.8		13.6	DD	319.2625	10.0	-3.2		13.2
6	83.2500	8.2	-5.7		13.9	EE	325.2625	10.3	-4.2		14.5
						FF	331.2750	9.8	-3.2		13.0
						GG	337.2625	9.5	-3.7		13.2
A-5	91.2500					HH	343.2625	9.9	-3.5		13.4
A-4	97.2500					II	349.2625	9.8	-3.6		13.4
A-3	103.2500					JJ	355.2625	10.6	-2.3		12.9
A-2	109.2750					KK	361.2625	10.1	-3.4		13.5
A-1	115.2750					LL	367.2625	9.5	-3.8		13.3
A	121.2625	9.5	-4.9		14.4	MM	373.2625	9.1	-3.3		12.4
B	127.2625	9.4	-4.2		13.6	NN	379.2625	10.9	-3.1		14.0
C	133.2625	8.8	-4.7		13.5	OO	385.2625	10.4	-4.0		14.4
D	139.2500	10.0	-3.7		13.7	PP	391.2625	10.7	-3.3		14.0
E	145.2500	9.2	-4.4		13.6	QQ	397.2625	10.2	-3.6		13.8
F	151.2500	10.2	-3.4		13.6	RR	403.2500	9.5	-3.0		12.5
G	157.2500	10.2	-2.7		12.9	SS	409.2500	12.0	-1.6		13.6
H	163.2500	10.8	-2.7		13.5	TT	415.2500	10.1	-3.4	S	13.5
I	169.2500	11.1	-2.2		13.3	UU	421.2500	9.4	-3.8	S	13.2
7	175.2500	11.4	-2.1		13.5	VV	427.2500	10.2	-3.5		13.7
8	181.2500	11.3	-1.8		13.1	WW	433.2500	9.1	-4.1	S	13.2
9	187.2500	11.8	-2.2		14.0	XX	439.2500	10.3	-3.4	S	13.7
10	193.2500	11.7	-1.5		13.2	YY	445.2500	12.2	-3.2	S	15.4
11	199.2500	12.0	-1.6		13.6	ZZ	451.2500	10.2	-4.6	S	14.8
12	205.2500	12.1	-1.8		13.9	63	457.2500	9.7	-4.2	S	13.9
13	211.2500	10.7	-2.6		13.3	64	463.2500	9.7	-3.8	S	13.5
J	217.2500	11.8	-2.1		13.9	65	469.2500	11.2	-2.2		13.4
K	223.2500	11.8	-1.9		13.7	66	475.2500	12.4	-3.2	S	15.6
L	229.2625	12.0	-1.9		13.9	67	481.2500	11.9	-2.2	S	14.1
M	235.2625	11.7	-2.4		14.1	68	487.2500	10.6	-2.7	S	13.3
N	241.2625	12.1	-1.8		13.9	69	493.2500	9.6	-2.8	S	12.4
O	247.2625	12.0	-1.1		13.1	70	499.2500	12.4	-1.3	S	13.7
P	253.2625	12.1	-1.1		13.2	71	505.2500	12.2	-4.1	S	16.3
Q	259.2625	12.2	-1.6		13.8	72	511.2500	11.3	-2.8	S	14.1
R	265.2625	12.4	-2.4		14.8	73	517.2500	10.4	-5.2	S	15.6
S	271.2625	11.6	-2.2		13.8	74	523.2500	9.3	-4.9	S	14.2
T	277.2625	10.9	-3.0		13.9	75	529.2500	10.8	-3.4	S	14.2
U	283.2625	10.1	-3.1		13.2	76	535.2500	10.0	-3.7	S	13.7
V	289.2625	11.4	-2.6		14.0	77	541.2500	9.7	-5.3	S	15.0
W	295.2625	10.7	-3.5		14.2	78	547.2500	9.2	-3.7	S	12.9

PEAK TO VALLEY: 6.1

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98

Test Performed By: Patrick Thrall

Location: Maple Ln.

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response (-1/-dB)	Carrier To Noise Ratio (dB)	Distortions (dB)			Hum (%)
			CIB	CNO	CMOD	
2	0.4	49	67	69.2	72.7	0.1
A	0.4	50.4	67.1	69	72.6	
H	1	50.1	64.4	69.8	73.1	
8	0.8	51	66.7	70	73.6	
T	1	50.6	64	70	73	
/ CC	0.6	50	63	67.9	72	
LL	0.7	49.8	62.1	69.4	72.5	
RR	0.9	49.7	61.5	68.7	72.1	
CCC	0.4	49	59.2	65.6	73.6	

Time Warner Cable Syracuse Division

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

System Name: Time Warner-Syracuse Date: February 1998

Test Performed By Patrick Thrall Location: Maple Ln.

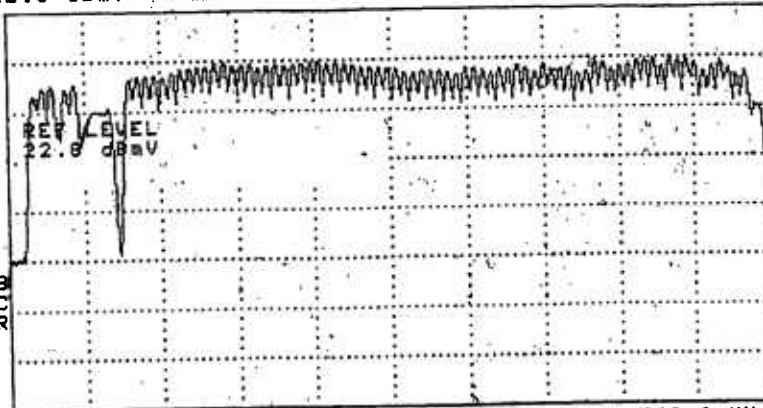
(SEE THE ATTACHED SWEEP TRACES)

15:56:10 FEB 12, 1998

REF 22.8 dBmV #AT 0 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR



CENTER 302.1 MHz
RES BW 3.0 MHz

VBW 1 MHz

SPAN 530.0 MHz
SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

More
1 of 3

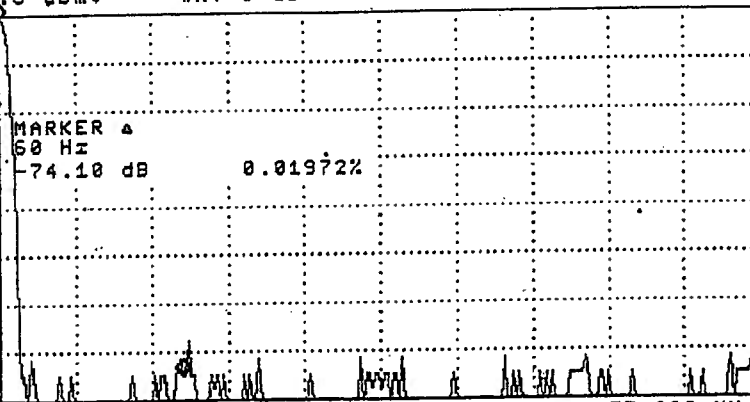
15:58:06 FEB 12, 1998

CHANNEL 2 (STD)

REF 7.3 dBmV #AT 0 dB

PEAK
LOG
10
dB/

VA SB
SC FC
CORR



START 55.238 MHz
#RES BW 1.0 MHz

#VBW 1 kHz

STOP 56.238 MHz
#SWP 800 msec

MKR A 60 Hz
-74.10 dB

WRITE

MAIN
MENU

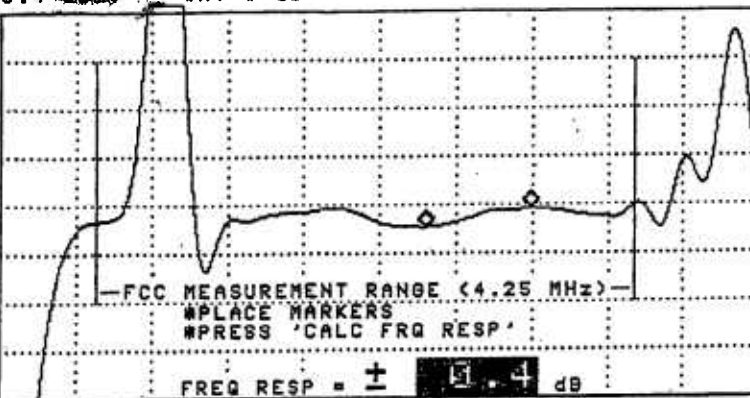
15:59:44 FEB 12, 1998

CHANNEL 3 (STD)

REF 15.4 dBmV #AT 0 dB

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



START 54.000 MHz
#RES BW 100 kHz

#VBW 3 MHz

STOP 60.000 MHz
SWP 20.0 msec

MKR 57.350 MHz
-15.35 dBmV

WRITE

MARKER 2

RESTART
MAX HOLD

CALC
FREQ RESP

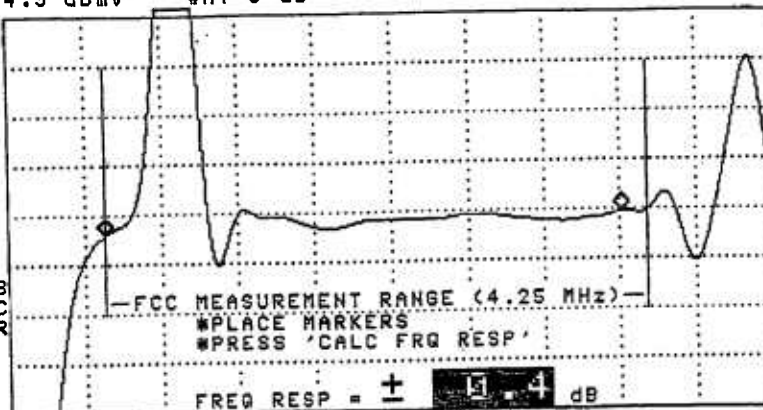
MAIN
MENU

16:01:43 FEB 12, 1998
CHANNEL 1 (STD)
REF -4.5 dBmV #AT 0 dB

CHNL
MKR 120.750 MHz
-13.28 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

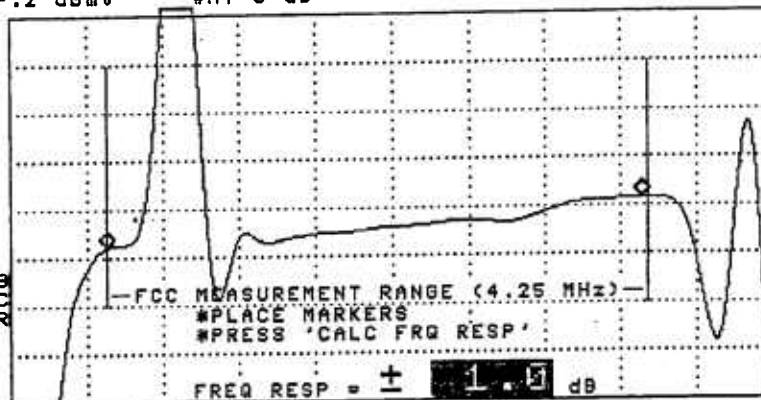
START 120.000 MHz STOP 126.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

16:03:28 FEB 12, 1998
CHANNEL 1 (STD)
REF -1.2 dBmV #AT 0 dB

CHNL
MKR 162.750 MHz
-9.85 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

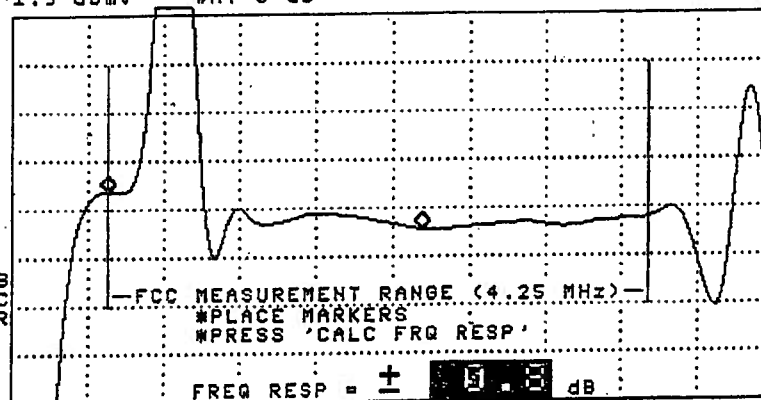
START 162.000 MHz STOP 168.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

16:04:53 FEB 12, 1998
CHANNEL 1 (STD)
REF -1.9 dBmV #AT 0 dB

CHNL
MKR 183.225 MHz
-10.74 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

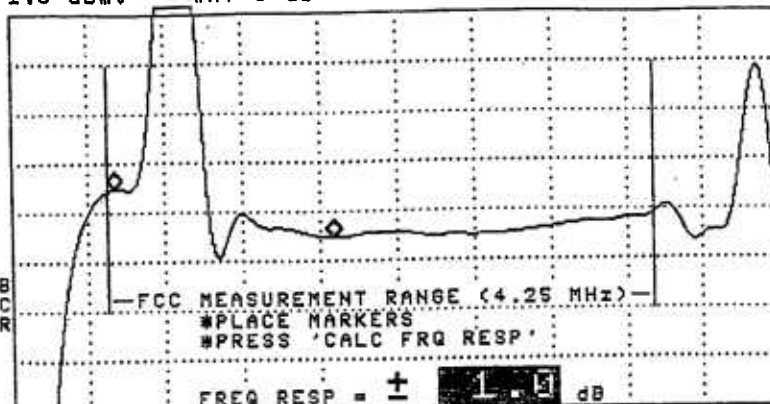
START 180.000 MHz STOP 186.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

16:06:05 FEB 12, 1998
CHANNEL 133 (STD)
REF -1.6 dBmV #AT 0 dB

MKR 278.505 MHz CHNL
-10.72 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

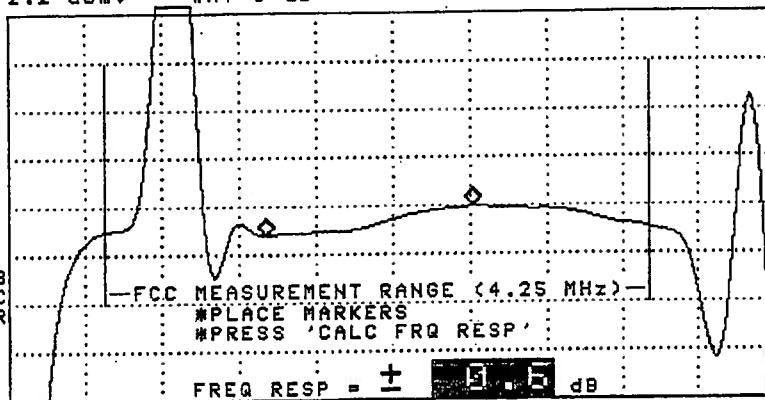
START 276.000 MHz STOP 282.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

16:07:30 FEB 12, 1998
CHANNEL 133 (STD)
REF -2.2 dBmV #AT 0 dB

MKR 314.010 MHz CHNL
-11.44 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

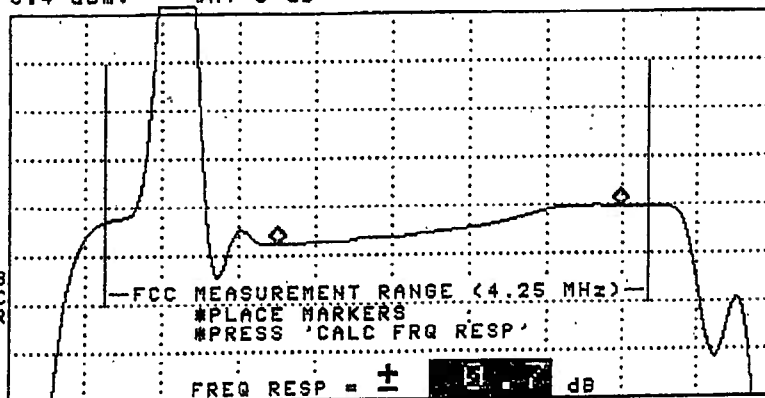
START 312.000 MHz STOP 318.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

16:08:36 FEB 12, 1998
CHANNEL 133 (STD)
REF -3.4 dBmV #AT 0 dB

MKR 368.100 MHz CHNL
-12.87 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 366.000 MHz STOP 372.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

16:09:50 FEB 12, 1998
CHANNEL **53** (STD)
REF -2.9 dBmV #AT 0 dB

MR 402.750 MHz **CHNL**
-12.77 dBmV MARKER 1

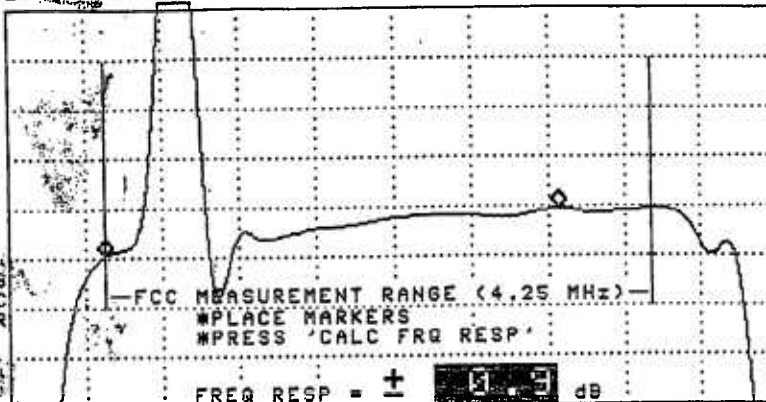
PEAK
LOG
2
dB

MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MA WB
SC FC
CORR



MAIN
MENU

START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

16:10:51 FEB 12, 1998
CHANNEL **53** (STD)
REF -3.7 dBmV #AT 0 dB

MR 468.750 MHz **CHNL**
-12.40 dBmV MARKER 1

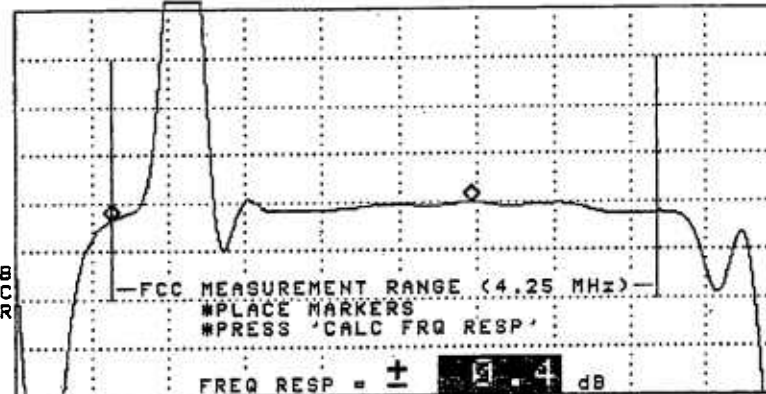
PEAK
LOG
2
dB

MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MA WB
SC FC
CORR



MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: Time Warner - Syracuse

Test Point Location Maple Ln

Date: February 1998

Performed by: B. Diriwachter & B. Wentworth

Meter Serial Number: 9210392

Chan	Freq (MHz)	Temp F				Max Variation	Chan	Freq (MHz)	Temp F				Max Variation
		26	27	30	35				26	27	30	35	
		Time	Time	Time	Time				Time	Time	Time	Time	
		22:53	05:00	10:59	16:57				22:53	05:00	10:59	16:57	
		Visual Level (dbmv)							Visual Level (dbmv)				
2	55.2500	8.3	8.2	7.6	7.7	0.7	AA	301.2625	11.0	11.1	10.6	10.7	0.5
3	61.2500	9.8	10.0	9.4	9.5	0.6	BB	307.2625	13.3	13.4	12.6	12.9	0.8
4	67.2500	9.4	9.6	9.3	9.2	0.4	CC	313.2625	13.6	13.5	13.1	12.8	0.8
5	77.2500	9.8	9.8	9.5	9.5	0.3	DD	319.2625	13.2	13.5	12.5	13.1	1.0
6	83.2500	10.0	10.3	9.8	10.0	0.5	EE	325.2625	13.3	13.6	12.9	13.1	0.7
							FF	331.2750	12.7	13.2	12.2	12.6	1.0
							GG	337.2625	12.9	13.0	12.2	12.8	0.8
A-5	91.2500						HH	343.2625	13.4	13.8	13.2	13.0	0.8
A-4	97.2500						II	349.2625	13.0	13.4	12.9	13.1	0.5
A-3	103.2500						JJ	355.2625	13.7	14.0	13.3	13.3	0.7
A-2	109.2750						KK	361.2625	13.3	13.6	12.8	12.8	0.8
A-1	115.2750						LL	367.2625	13.3	13.7	12.8	13.2	0.9
A	121.2625	11.9	11.9	11.3	11.3	0.6	MM	373.2625	13.3	13.8	13.2	13.1	0.7
B	127.2625	11.5	11.7	11.1	11.2	0.6	NN	379.2625	13.8	14.4	13.5	13.7	0.9
C	133.2625	11.2	11.6	11.1	10.8	0.8	OO	385.2625	13.2	14.1	13.3	13.4	0.9
D	139.2500	12.3	12.4	11.8	11.7	0.7	PP	391.2625	14.5	14.9	13.7	13.9	1.2
E	145.2500	11.9	12.0	11.7	11.6	0.4	QQ	397.2625	14.6	14.8	13.7	14.1	1.1
F	151.2500	12.4	12.7	12.5	12.5	0.3	RR	403.2500	14.1	14.8	13.6	13.8	1.2
G	157.2500	12.8	13.0	12.6	12.0	1.0	SS	409.2500	15.1	15.4	14.5	14.9	0.9
H	163.2500	13.2	13.5	12.9	13.1	0.6	TT	415.2500	13.5	15.2	11.7	12.6	3.5
I	169.2500	13.6	13.5	13.0	13.1	0.6	UU	421.2500	13.4	15.3	14.2	13.8	1.9
7	175.2500	14.0	13.8	13.6	13.3	0.7	VV	427.2500	14.7	15.0	14.1	14.1	0.9
8	181.2500	13.9	14.2	13.5	13.6	0.7	WW	433.2500	13.8	12.9	13.0	13.1	0.9
9	187.2500	14.1	14.7	13.8	14.1	0.9	XX	439.2500	13.9	14.6	13.6	12.4	2.2
10	193.2500	14.5	14.5	13.9	13.8	0.7	YY	445.2500	15.0	15.6	14.7	14.7	0.9
11	199.2500	14.5	14.7	14.0	14.1	0.7	ZZ	451.2500	13.6	14.8	13.9	13.8	1.2
12	205.2500	13.1	13.9	13.5	13.3	0.8	63	457.2500	13.5	14.3	13.3	13.4	1.0
13	211.2500	11.6	11.7	11.5	11.0	0.7	64	463.2500	14.3	14.8	13.5	13.9	1.3
J	217.2500	13.3	13.6	12.9	12.9	0.7	65	469.2500	12.9	15.2	14.4	14.5	2.3
K	223.2500	14.1	14.4	13.8	13.7	0.7	66	475.2500	15.1	15.6	14.6	15.0	1.0
L	229.2625	14.6	14.5	14.2	14.2	0.4	67	481.2500	15.6	15.8	15.4	15.2	0.6
M	235.2625	14.2	14.3	13.6	13.9	0.7	68	487.2500	16.0	16.8	15.6	14.9	1.9
N	241.2625	14.7	15.2	14.3	14.6	0.9	69	493.2500	14.5	15.3	14.4	14.0	1.3
O	247.2625	14.5	15.0	14.2	14.1	0.9	70	499.2500	15.5	16.0	14.7	15.6	1.3
P	253.2625	14.6	14.8	14.4	14.7	0.4	71	505.2500	15.2	15.2	14.4	14.6	0.8
Q	259.2625	15.1	15.1	14.4	14.4	0.7	72	511.2500	15.5	15.7	14.0	13.7	2.0
R	265.2625	14.6	15.2	14.2	14.7	1.0	73	517.2500	14.9	15.0	15.0	14.6	0.4
S	271.2625	14.4	14.6	14.1	13.9	0.7	74	523.2500	15.0	15.3	14.3	14.5	1.0
T	277.2625	14.4	14.6	13.6	13.9	1.0	75	529.2500	15.6	15.7	14.7	14.8	1.0
U	283.2625	13.9	14.1	13.2	13.3	0.9	76	535.2500	14.8	13.7	15.0	14.1	1.3
V	289.2625	14.0	14.6	13.9	14.1	0.7	77	541.2500	13.9	14.8	13.9	13.2	1.6
W	295.2625	13.0	13.4	13.0	13.1	0.4	78	547.2500	14.6	15.0	14.3	14.2	0.8

Max NonAdjacent Channel Level Diff.	8.6
Max Adjacent Channel Level Diff.	2.8

Max Variance from last proof-of-performance test	5.1
Date of last proof-of-performance test	8/97

Note: Make measurements through a 100 ft. test drop cable without a converter.

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 7

Location: County Line Rd

Community: Lysander

Pole Number: NM#9

D.T. Value: 20-4

Map Number: 15-8

OR Number: 380

Trunk Cascade: 5 LE Cascade: 2

Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: County Line Rd.

Date: 12-Feb-98

Time: 10:31 AM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Sora (S)	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Sora (S)	Diff (Dbmv)
2	55.2500	12.2	-1.7		13.9	AA	301.2625	9.8	-3.9		13.7
3	61.2500	12.4	-1.6		14.0	BB	307.2625	10.1	-3.8		13.9
4	67.2500	12.1	-2.3		14.4	CC	313.2625	9.6	-3.7		13.3
5	77.2500	11.3	-3.1		14.4	DD	319.2625	10.0	-3.4		13.4
6	83.2500	10.9	-3.4		14.3	EE	325.2625	10.0	-4.5		14.5
						FF	331.2750	9.8	-3.3		13.1
						GG	337.2625	9.8	-3.6		13.4
A-5	91.2500					HH	343.2625	10.7	-3.1		13.8
A-4	97.2500					II	349.2625	10.7	-3.4		14.1
A-3	103.2500					JJ	355.2625	11.0	-1.9		12.9
A-2	109.2750					KK	361.2625	10.7	-3.0		13.7
A-1	115.2750					LL	367.2625	10.5	-3.1		13.6
A	121.2625	10.6	-3.8		14.4	MM	373.2625	10.1	-3.0		13.1
B	127.2625	10.0	-3.4		13.4	NN	379.2625	11.0	-3.1		14.1
C	133.2625	10.3	-3.9		14.2	OO	385.2625	10.4	-3.9		14.3
D	139.2500	10.8	-3.3		14.1	PP	391.2625	10.6	-3.4		14.5
E	145.2500	10.3	-4.3		14.6	QQ	397.2625	9.7	-4.5		14.2
F	151.2500	9.9	-4.6		14.5	RR	403.2500	9.4	-4.0		13.4
G	157.2500	9.7	-4.5		14.2	SS	409.2500	10.8	-2.9		13.7
H	163.2500	9.5	-4.7		14.2	TT	415.2500	8.0	-5.2	S	13.2
I	169.2500	9.3	-4.4		13.7	UU	421.2500	5.0	-6.5	S	11.5
7	175.2500	9.2	-4.4		13.6	VV	427.2500	7.9	-6.5		14.4
8	181.2500	9.3	-4.7		14.0	WW	433.2500	6.4	-6.9	S	13.3
9	187.2500	9.2	-5.1		14.3	XX	439.2500	7.1	-6.6	S	13.7
10	193.2500	9.1	-4.3		13.4	YY	445.2500	8.1	-7.7	S	15.8
11	199.2500	9.3	-4.6		13.9	ZZ	451.2500	6.2	-9.5	S	15.7
12	205.2500	9.3	-4.5		13.8	63	457.2500	5.4	-8.7	S	14.1
13	211.2500	7.8	-5.6		13.4	64	463.2500	5.5	-8.9	S	14.4
J	217.2500	8.7	-5.1		13.8	65	469.2500	5.9	-8.3		14.2
K	223.2500	8.8	-4.9		13.7	66	475.2500	6.6	-8.9	S	15.5
L	229.2625	9.1	-5.2		14.3	67	481.2500	5.7	-7.9	S	13.6
M	235.2625	8.6	-5.9		14.5	68	487.2500	6.3	-7.7	S	14.0
N	241.2625	8.6	-5.5		14.1	69	493.2500	4.8	-7.5	S	12.3
O	247.2625	8.7	-4.7		13.4	70	499.2500	7.0	-5.9	S	12.9
P	253.2625	9.2	-4.2		13.4	71	505.2500	6.0	-8.7	S	14.7
Q	259.2625	9.4	-4.2		13.6	72	511.2500	7.8	-6.6	S	14.4
R	265.2625	9.9	-4.3		14.2	73	517.2500	6.8	-8.0	S	14.8
S	271.2625	9.2	-3.9		13.1	74	523.2500	7.2	-7.6	S	14.8
T	277.2625	9.2	-4.3		13.5	75	529.2500	7.7	-6.4	S	14.1
U	283.2625	9.8	-3.4		13.2	76	535.2500	8.9	-5.8	S	14.7
V	289.2625	10.7	-2.9		13.6	77	541.2500	7.9	-8.1	S	16.0
W	295.2625	10.9	-4.3		15.2	78	547.2500	7.2	-5.8	S	13.0

PEAK TO VALLEY: 7.6

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98

Test Performed By: Patrick Thrall

Location: County Line Rd.

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response (-dB)	Carrier To Noise Ratio (dB)	Distortions (-dB)			Hum (%)
			CTB	CSO	2 Mod	
2	0.3	49	65.4	69.7	74.2	0.1
A	0.3	48.3	64	68.2	73.2	
H	0.7	48.4	63.3	69.1	74	
8	0.8	48	62.4	68.2	73.1	
T	0.9	49.1	61.5	68.8	74	
CC	0.5	48.9	59.9	66.5	72.9	
LL	0.5	49.2	61	66.7	74.2	
RR	0.7	48.5	59.6	64.3	72.6	
CCC	0.3	47.6	58.2	60.1	73.3	

Time Warner Cable Syracuse Division

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

System Name: Time Warner-Syracuse

Date: February 1998

Test Performed By Patrick Thrall

Location: County Line Rd.

(SEE THE ATTACHED SWEEP TRACES)

10:33:07 FEB 12, 1998

REF 23.8 dBmV #AT 0 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR

START 45.0 MHz RES BW 3.0 MHz VBW 1 MHz STOP 575.0 MHz SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

More
1 of 3

10:34:56 FEB 12, 1998

CHANNEL 2 (STD)
REF 12.9 dBmV AT 10 dB

MKR Δ 60 Hz
-67.30 dB

CHNL

PEAK
LOG
10
dB/

VA SB
SC FC
CORR

START 55.243 MHz #RES BW 1.0 MHz #VBW 1 kHz STOP 65.243 MHz #SWP 800 msec

MARKER Δ
60 Hz
-67.30 dB 0.04315%

MAIN
MENU

10:39:41 FEB 12, 1998

CHANNEL 2 (STD)
REF -0.8 dBmV #AT 0 dB

MKR 57.300 MHz CHNL
-9.42 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR

START 54.000 MHz #RES BW 100 kHz #VBW 8 MHz STOP 60.000 MHz SWP 20.0 msec

FCC MEASUREMENT RANGE (4.25 MHz)
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'

FREQ RESP = ± 0.3 dB

MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

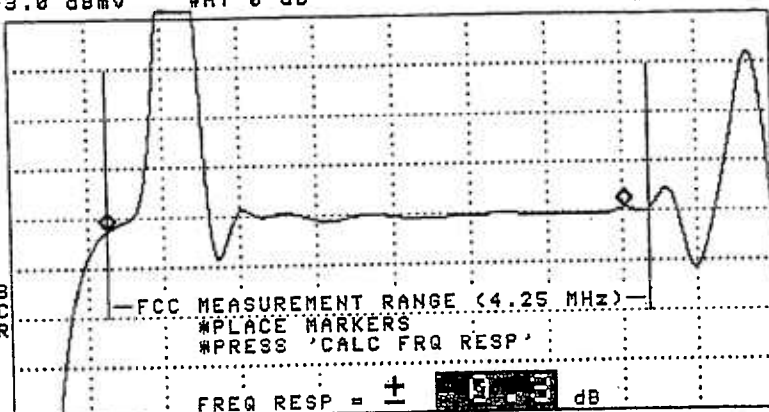
MAIN
MENU

10:41:30 FEB 12, 1998
CHANNEL 1 (STD)
REF -3.0 dBmV #AT 0 dB

MKR 120.750 MHz CHNL
-11.47 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

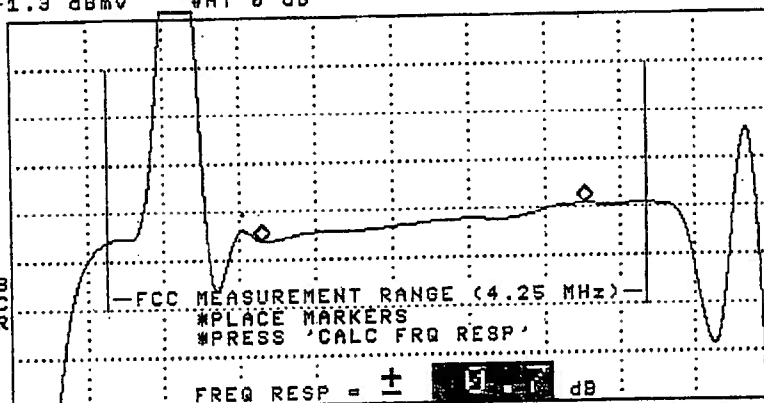
START 120.000 MHz STOP 126.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

10:42:56 FEB 12, 1998
CHANNEL 1 (STD)
REF -1.3 dBmV #AT 0 dB

MKR 163.980 MHz CHNL
-10.62 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

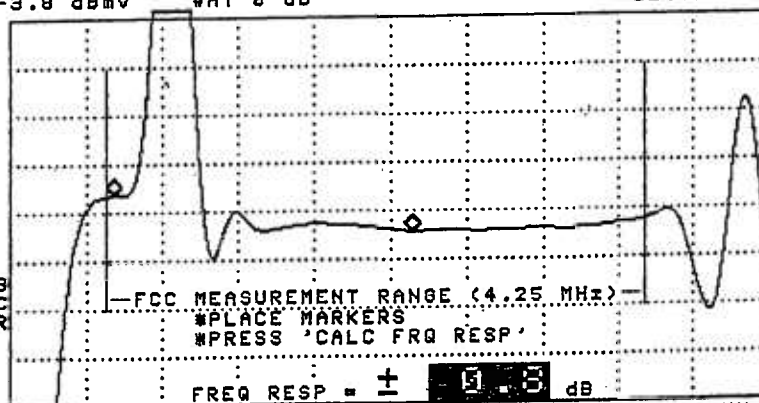
START 162.000 MHz STOP 168.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

10:44:14 FEB 12, 1998
CHANNEL 1 (STD)
REF -3.0 dBmV #AT 0 dB

MKR 183.166 MHz CHNL
-12.67 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

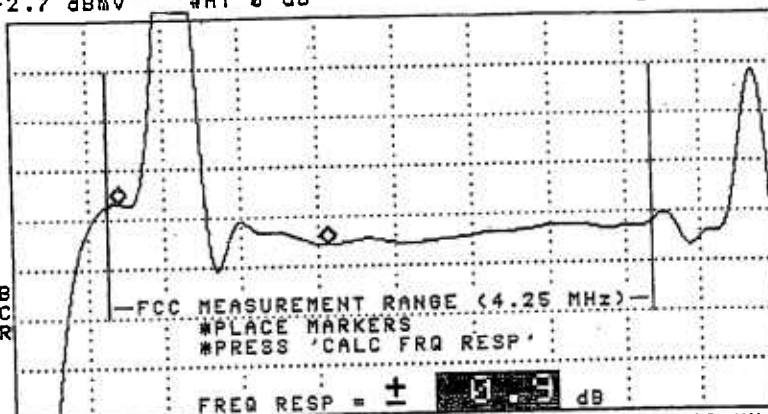
START 180.000 MHz STOP 186.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

10:45:52 FEB 12, 1998
CHANNEL 33 (STD)
REF -2.7 dBmV #AT 0 dB

MKR 278.475 MHz CHNL
-11.80 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

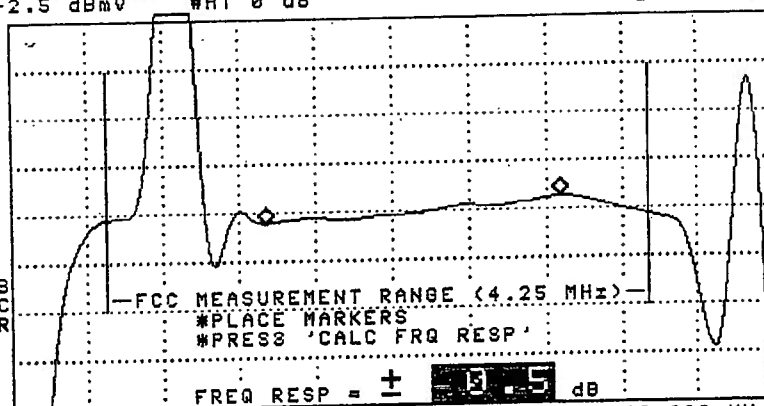
START 276.000 MHz STOP 282.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

10:49:00 FEB 12, 1998
CHANNEL 33 (STD)
REF -2.5 dBmV #AT 0 dB

MKR 314.010 MHz CHNL
-10.98 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

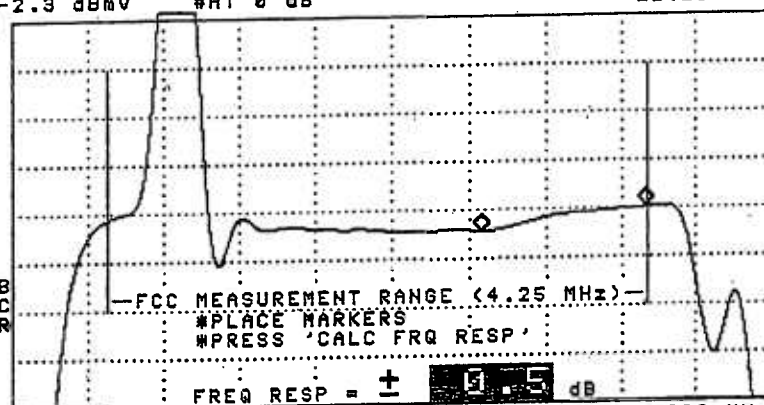
START 312.000 MHz STOP 318.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

10:50:27 FEB 12, 1998
CHANNEL 42 (STD)
REF -2.3 dBmV #AT 0 dB

MKR 369.690 MHz CHNL
-11.20 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

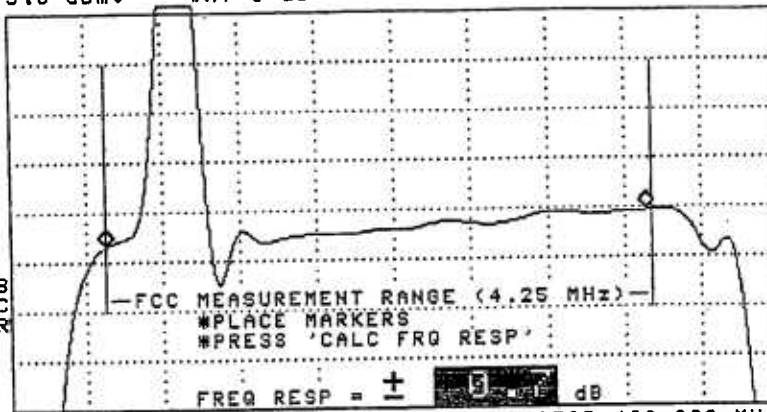
START 366.000 MHz STOP 372.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

10:51:57 FEB 12, 1998
CHANNEL 54 (STD)
REF -3.0 dBmV #AT 0 dB

MKR 402.750 MHz CHNL
-12.44 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

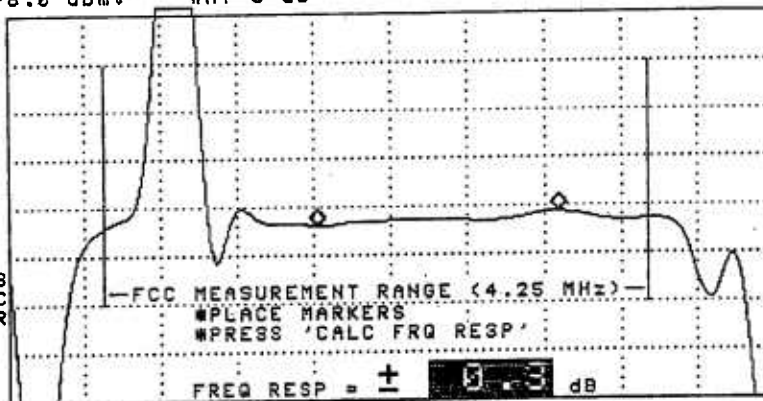
START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

10:59:36 FEB 12, 1998
CHANNEL 55 (STD)
REF -8.0 dBmV #AT 0 dB

MKR 470.430 MHz CHNL
-16.82 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: Time Warner - Syracuse

Test Point Location County Line Rd.

Date: February 1998

Performed by: B. Diriwachter & B. Wentworth

Meter Serial Number: 9210392

Chan	Freq (MHz)	Temp. F				Max Variation	Chan	Freq (MHz)	Temp. F				Max Variation
		29	30	30	32				29	30	30	32	
		Time							Time				
		01:00	07:00	12:58	18:57			01:00	07:00	12:58	18:57		
		Visual Level (dbmv)						Visual Level (dbmv)					
2	55.2500	13.6	13.6	13.8	13.8	0.2	AA	301.2625	12.7	13.7	13.0	13.8	1.1
3	61.2500	14.9	14.6	14.8	15.1	0.5	BB	307.2625	13.7	13.5	13.3	13.5	0.4
4	67.2500	14.4	14.4	14.2	14.5	0.3	CC	313.2625	14.0	13.6	13.6	14.0	0.4
5	77.2500	13.5	13.5	13.4	13.9	0.5	DD	319.2625	13.7	13.6	13.6	13.9	0.3
6	83.2500	13.1	13.1	13.2	13.4	0.3	EE	325.2625	13.9	13.8	13.7	14.0	0.3
							FF	331.2750	13.8	13.5	13.5	14.0	0.5
							GG	337.2625	14.4	14.2	13.9	14.6	0.7
							HH	343.2625	15.2	14.8	14.9	14.9	0.4
A-5	91.2500						II	349.2625	14.7	14.6	14.2	14.5	0.5
A-4	97.2500						JJ	355.2625	15.0	14.9	14.8	14.9	0.2
A-3	103.2500						KK	361.2625	15.4	15.1	15.1	15.3	0.3
A-2	109.2750						LL	367.2625	15.1	15.1	14.9	15.2	0.3
A-1	115.2750						MM	373.2625	14.6	14.3	14.4	14.7	0.4
A	121.2625	13.2	13.0	13.1	13.2	0.2	NN	379.2625	15.0	14.9	14.6	14.9	0.4
B	127.2625	12.8	12.3	12.6	12.9	0.6	OO	385.2625	14.6	14.4	14.3	14.6	0.3
C	133.2625	12.4	12.3	12.1	12.3	0.3	PP	391.2625	15.1	14.8	14.6	15.1	0.5
D	139.2500	13.2	13.3	13.3	13.5	0.3	QQ	397.2625	14.4	14.2	14.1	14.6	0.5
E	145.2500	12.9	12.4	12.8	12.9	0.5	RR	403.2500	14.3	14.2	14.0	14.4	0.4
F	151.2500	12.7	12.6	12.8	13.1	0.5	SS	409.2500	14.6	14.7	14.2	14.8	0.6
G	157.2500	12.5	12.3	11.9	12.5	0.6	TT	415.2500	13.4	12.6	12.4	13.2	1.0
H	163.2500	12.2	11.9	11.9	12.4	0.5	UU	421.2500	12.5	13.0	12.4	13.4	1.0
I	169.2500	12.0	11.7	11.8	11.7	0.3	VV	427.2500	13.0	13.0	12.3	12.8	0.7
7	175.2500	12.6	12.3	12.2	12.4	0.4	WW	433.2500	10.2	10.2	10.2	10.8	0.6
8	181.2500	12.0	12.0	11.6	12.0	0.4	XX	439.2500	11.0	10.8	10.3	10.9	0.7
9	187.2500	12.2	12.2	12.2	11.9	0.3	YY	445.2500	12.0	12.0	11.1	11.5	0.9
10	193.2500	12.3	12.0	11.8	12.0	0.5	ZZ	451.2500	11.2	10.4	9.3	9.7	1.9
11	199.2500	12.3	12.0	11.6	12.1	0.7	63	457.2500	10.3	9.8	9.2	10.2	1.1
12	205.2500	11.3	11.1	10.7	10.8	0.6	64	463.2500	10.4	10.1	7.9	9.9	2.5
13	211.2500	9.2	9.1	8.9	9.5	0.6	65	469.2500	10.0	10.0	9.2	9.8	0.8
J	217.2500	11.0	10.9	10.7	11.0	0.3	66	475.2500	10.3	9.7	8.3	10.2	2.0
K	223.2500	11.5	11.9	11.4	11.8	0.5	67	481.2500	10.7	10.2	9.9	10.7	0.8
L	229.2625	11.8	11.7	11.5	11.6	0.3	68	487.2500	11.5	11.7	10.1	10.4	1.6
M	235.2625	11.7	11.3	11.2	11.6	0.5	69	493.2500	10.9	10.8	9.6	10.3	1.3
N	241.2625	11.8	11.9	11.6	11.7	0.3	70	499.2500	12.9	12.1	11.0	11.8	1.9
O	247.2625	11.9	11.7	11.4	11.9	0.5	71	505.2500	11.6	11.1	8.5	11.4	3.1
P	253.2625	11.9	11.8	11.8	12.0	0.2	72	511.2500	12.1	11.2	11.2	11.1	1.0
Q	259.2625	12.5	12.6	12.3	12.7	0.4	73	517.2500	12.5	12.5	10.9	12.1	1.6
R	265.2625	13.0	13.1	12.7	13.0	0.4	74	523.2500	12.7	12.9	11.6	12.6	1.3
S	271.2625	13.0	12.9	12.5	13.0	0.5	75	529.2500	12.6	12.5	11.4	12.5	1.2
T	277.2625	12.5	12.7	12.5	12.8	0.3	76	535.2500	12.1	10.5	10.8	12.0	1.6
U	283.2625	13.4	13.0	13.1	13.3	0.4	77	541.2500	12.5	12.9	11.6	11.7	1.3
V	289.2625	14.2	14.2	14.0	14.5	0.5	78	547.2500	12.5	12.9	11.8	12.7	1.1
W	295.2625	14.2	14.0	13.7	14.1	0.5							

Max NonAdjacent Channel Level Diff.	7.2
Max Adjacent Channel Level Diff.	2.8

Max Variance from last proof-of-performance test	4.2
Date of last proof-of-performance test	8/97

Note: Make measurements through a 100 ft. test drop cable without a converter.

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 8

Location: Orchard St

Community: Port Byron

Pole Number: NYSEG#7

D.T. Value: 8-4

Map Number: 23-7

OR Number: 121

Trunk Cascade: 4 LE Cascade: 1

Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: Orchard St.

Date: 11-Feb-98

Time: 01:58 PM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (Dbmv)
2	55.2500	18.9	5.1		13.8	AA	301.2625	16.9	3.3		13.6
3	61.2500	19.2	5.3		13.9	BB	307.2625	17.0	2.6		14.4
4	67.2500	19.5	5.3		14.2	CC	313.2625	16.8	3.2		13.6
5	77.2500	18.6	4.1		14.5	DD	319.2625	16.9	2.9		14.0
6	83.2500	18.5	4.1		14.4	EE	325.2625	17.0	1.7		15.3
						FF	331.2750	16.2	2.1		14.1
						GG	337.2625	15.7	1.6		14.1
						HH	343.2625	15.9	2.3		13.6
A-5	91.2500					II	349.2625	15.9	2.1		13.8
A-4	97.2500					JJ	355.2625	16.2	2.3		13.9
A-3	103.2500					KK	361.2625	16.1	1.6		14.5
A-2	109.2750					LL	367.2625	15.2	1.5		13.7
A-1	115.2750					MM	373.2625	15.1	1.7		13.4
A	121.2625	18.1	4.6		13.5	NN	379.2625	16.0	1.5		14.5
B	127.2625	18.5	4.7		13.8	OO	385.2625	15.1	0.5		14.6
C	133.2625	18.8	4.3		14.5	PP	391.2625	15.1	0.6		14.5
D	139.2500	18.9	4.7		14.2	QQ	397.2625	14.2	0.4		13.8
E	145.2500	18.4	3.9		14.5	RR	403.2500	13.8	0.6		13.2
F	151.2500	18.4	4.4		14.0	SS	409.2500	15.8	2.1		13.7
G	157.2500	18.4	4.5		13.9	TT	415.2500	14.6	-0.1	S	14.7
H	163.2500	18.6	4.4		14.2	UU	421.2500	14.5	-0.2	S	14.7
I	169.2500	18.6	4.8		13.8	VV	427.2500	14.1	0.2		13.9
7	175.2500	18.7	4.8		13.9	WW	433.2500	13.8	-0.2	S	14.0
8	181.2500	18.4	4.2		14.2	XX	439.2500	14.0	0.4	S	13.6
9	187.2500	18.4	4.0		14.4	YY	445.2500	15.5	0.1	S	15.4
10	193.2500	17.5	4.0		13.5	ZZ	451.2500	14.2	-0.9	S	15.1
11	199.2500	17.6	3.8		13.8	63	457.2500	13.7	0.0	S	13.7
12	205.2500	17.4	3.3		14.1	64	463.2500	13.3	-0.4	S	13.7
13	211.2500	16.0	2.0		14.0	65	469.2500	14.6	0.7		13.9
J	217.2500	17.0	2.8		14.2	66	475.2500	15.5	-0.1	S	15.6
K	223.2500	17.0	2.6		14.4	67	481.2500	14.8	0.3	S	14.5
L	229.2625	17.0	2.7		14.3	68	487.2500	14.0	0.2	S	13.8
M	235.2625	16.0	1.8		14.2	69	493.2500	13.0	-1.1	S	14.1
N	241.2625	16.4	2.0		14.4	70	499.2500	14.3	0.4	S	13.9
O	247.2625	16.1	2.8		13.3	71	505.2500	14.6	-0.5	S	15.1
P	253.2625	16.6	2.9		13.7	72	511.2500	12.5	-1.3	S	13.8
Q	259.2625	16.6	2.9		13.7	73	517.2500	12.4	-3.1	S	15.5
R	265.2625	16.8	2.7		14.1	74	523.2500	11.3	-3.0	S	14.3
S	271.2625	16.7	3.2		13.5	75	529.2500	11.4	-2.7	S	14.1
T	277.2625	16.6	2.6		14.0	76	535.2500	12.1	-2.1	S	14.2
U	283.2625	16.6	2.8		13.8	77	541.2500	11.5	-4.4	S	15.9
V	289.2625	17.2	3.4		13.8	78	547.2500	10.9	-3.5	S	14.4
W	295.2625	17.4	3.2		14.2						

PEAK TO VALLEY: 8.6

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98

Test Performed By: Patrick Thrall

Location: Orchard St.

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response (V, dB)	Carrier To Noise Ratio (dB)	Distortions (dB)			Hum (%)
			THD	CSO	MOD	
2	0.9	51.3	67.9	70.1	74.2	0.2
A	0.4	50.8	65.2	70	74.1	
H	0.8	51	62.3	69.2	73.9	
8	0.6	51.3	63.5	69.5	74.6	
T	0.9	50.2	61.8	69	72.6	
/ CC	0.5	51	61.9	68.8	74.6	
LL	0.5	50	60.8	66.3	74.5	
RR	0.7	49.7	60.8	67	75	
CCC	0.5	49.6	59.7	60.1	74	

**Time Warner Cable
Syracuse Division**

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

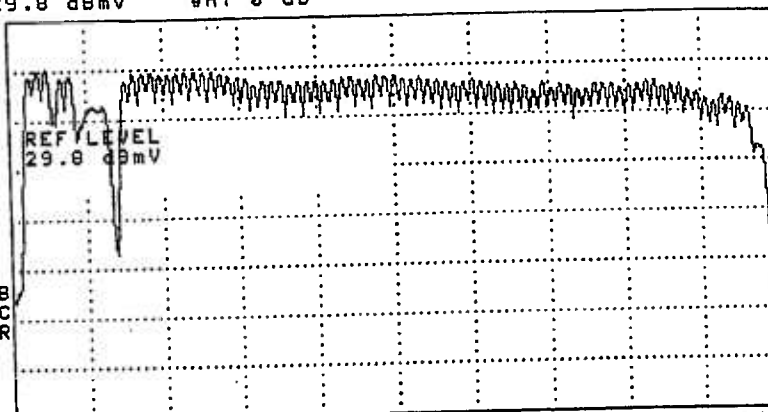
System Name: Time Warner-Syracuse Date: February 1998

Test Performed By Patrick Thrall Location: Orchard St.

(SEE THE ATTACHED SWEEP TRACES)

15:02:32 FEB 11, 1998
 CHANNEL 1 (STD)
 REF 29.8 dBmV #AT 0 dB
 PEAK
 LOG
 10
 dB/

MA SB
 SC FC
 CORR

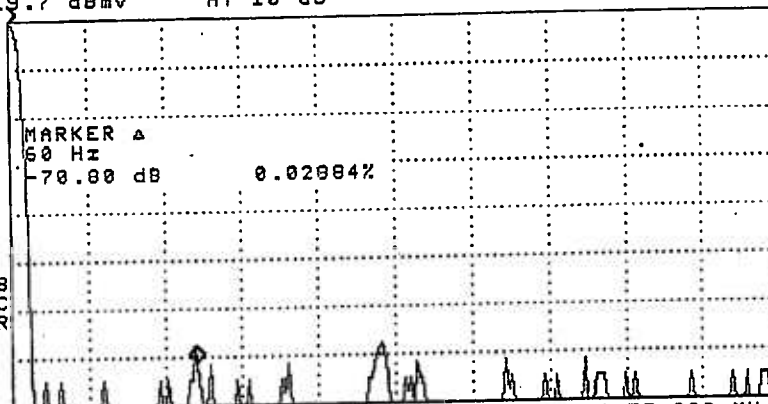


START 42.0 MHz RES BW 3.0 MHz VBW 1 MHz STOP 575.0 MHz SWP 20.0 msec

CHNL
 CLEAR
 WRITE A
 MAX
 HOLD A
 VIEW A
 BLANK A
 Trace
 A B C
 More
 1 of 3

15:04:10 FEB 11, 1998
 CHANNEL 2 (STD)
 REF 19.7 dBmV AT 10 dB
 PEAK
 LOG
 10
 dB/

VA SB
 SC FC
 CORR



START 55.233 MHz #RES BW 1.0 MHz #VBW 1 kHz STOP 55.233 MHz #SWP 800 msec

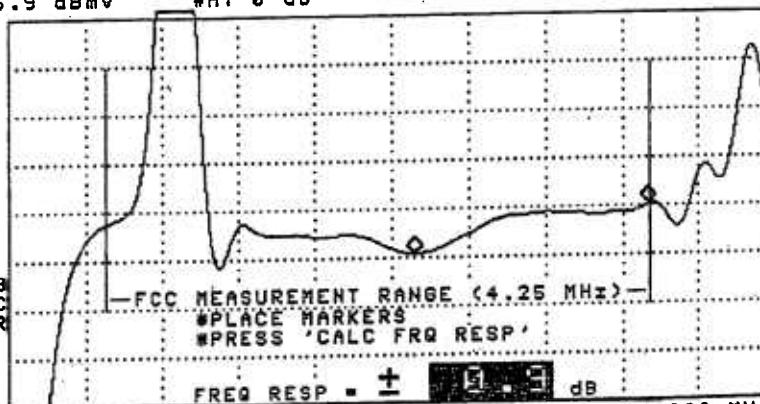
MKR Δ 60 Hz
 -70.80 dB

CHNL

MAIN
 MENU

15:05:50 FEB 11, 1998
 CHANNEL 2 (STD)
 REF 5.9 dBmV #AT 0 dB
 PEAK
 LOG
 2
 dB/

MA SB
 SC FC
 CORR



START 54.000 MHz #RES BW 100 kHz #VBW 3 MHz STOP 60.000 MHz SWP 20.0 msec

MKR 57.180 MHz
 -3.93 dBmV

CHNL

MARKER 2
 RESTART
 MAX HOLD
 CALC
 FRQ RESP

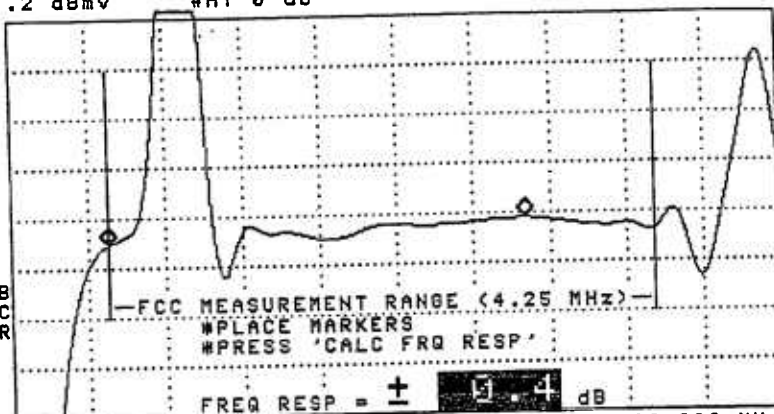
MAIN
 MENU

15:07:36 FEB 11, 1998
CHANNEL 1 (STD)
REF 5.2 dBmV #AT 0 dB

MKR 120.750 MHz CHNL
-3.84 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

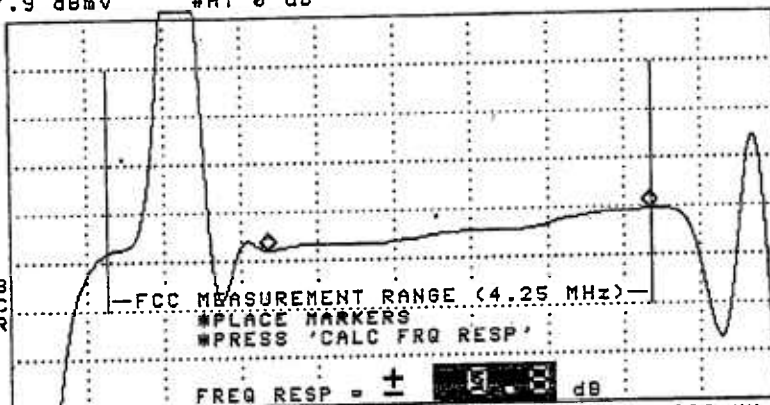
START 120.000 MHz STOP 126.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:09:47 FEB 11, 1998
CHANNEL 2 (STD)
REF 7.9 dBmV #AT 0 dB

MKR 164.010 MHz CHNL
-1.71 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

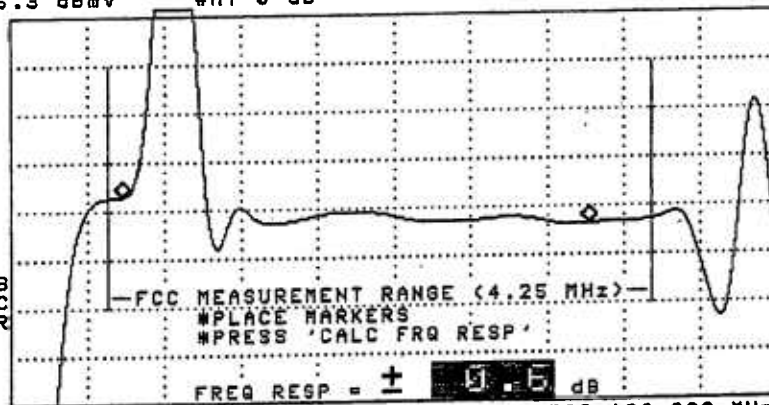
START 162.000 MHz STOP 168.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:10:54 FEB 11, 1998
CHANNEL 3 (STD)
REF 5.3 dBmV #AT 0 dB

MKR 184.515 MHz CHNL
-3.44 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

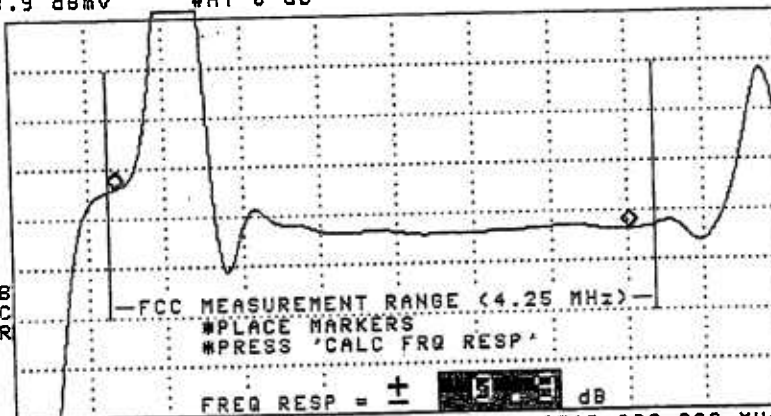
START 180.000 MHz STOP 186.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:13:42 FEB 11, 1998
CHANNEL 233 (STD)
REF 3.9 dBmV #AT 0 dB

MKR 276.810 MHz
-2.96 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

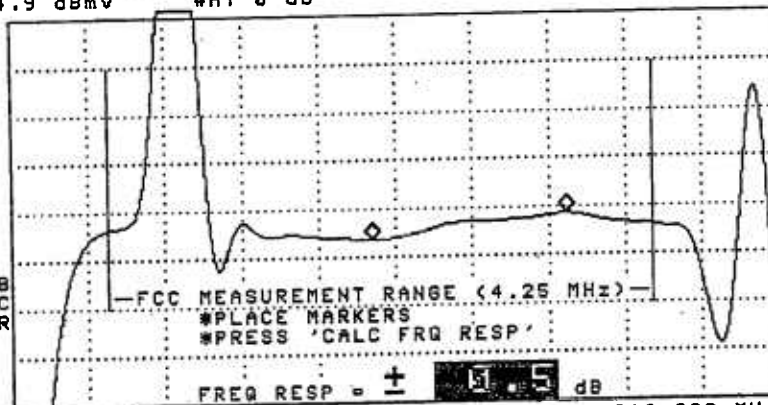
START 276.000 MHz STOP 282.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:15:13 FEB 11, 1998
CHANNEL 233 (STD)
REF 4.9 dBmV #AT 0 dB

MKR 314.820 MHz
-4.41 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

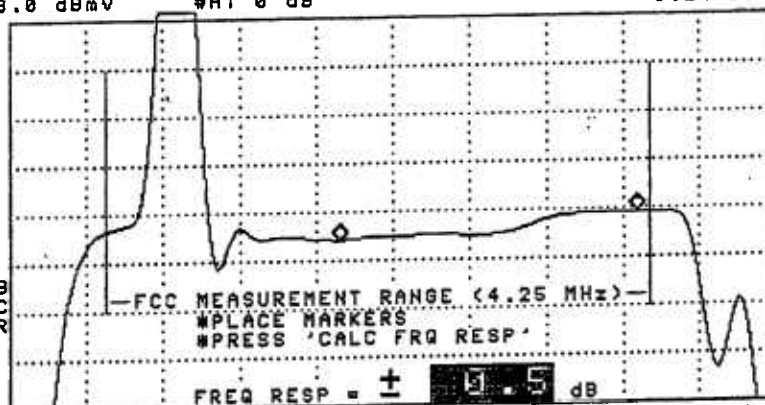
START 312.000 MHz STOP 318.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:16:50 FEB 11, 1998
CHANNEL 233 (STD)
REF 3.0 dBmV #AT 0 dB

MKR 368.590 MHz
-6.14 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

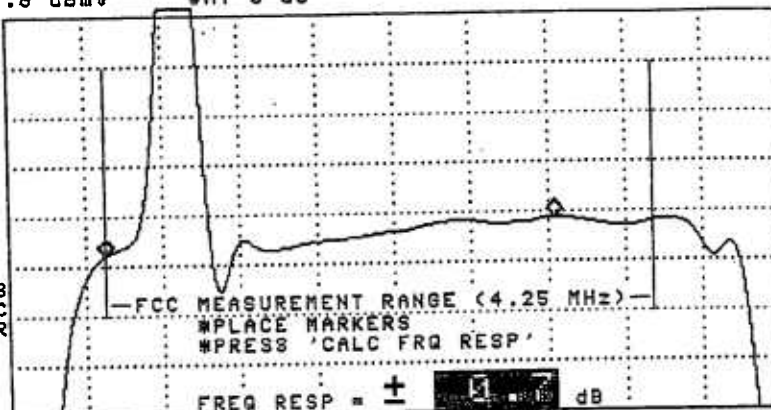
START 366.000 MHz STOP 372.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:10:07 FEB 11, 1998
CHANNEL 54 (STD)
REF 1.0 dBmV #AT 0 dB

MKR 402.750 MHz
-7.80 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FREQ RESP

MAIN
MENU

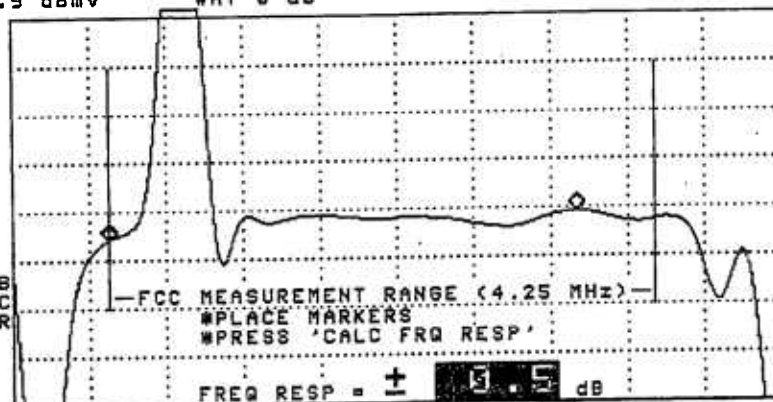
START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:20:22 FEB 11, 1998
CHANNEL 55 (STD)
REF .9 dBmV #AT 0 dB

MKR 472.395 MHz
-7.22 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FREQ RESP

MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: Time Warner - Syracuse

Test Point Location Orchard Rd.

Date: February 1998

Performed by: B. Diriwachter & B. Wentworth

Meter Serial Number: 9210390

Chan	Freq (MHz)	Temp °F				Max Variation	Chan	Freq (MHz)	Temp °F				Max Variation
		29	29	31	33				29	29	31	33	
		02:05	08:23	13:42	19:14				02:05	08:23	13:42	19:14	
		Visual Level (dbmV)							Visual Level (dbmV)				
2	55.2500	21.4	20.7	20.5	20.9	0.9	AA	301.2625	18.4	18.3	18.4	18.3	0.1
3	61.2500	22.4	21.9	21.8	22.0	0.6	BB	307.2625	20.7	20.5	20.5	20.6	0.2
4	67.2500	22.3	22.3	21.9	22.2	0.4	CC	313.2625	21.0	20.6	19.9	20.5	1.1
5	77.2500	21.3	21.2	20.8	21.2	0.5	DD	319.2625	20.7	20.4	20.2	20.0	0.7
6	83.2500	21.1	20.7	20.7	21.0	0.4	EE	325.2625	21.3	21.1	21.0	21.0	0.3
							FF	331.2750	20.4	20.1	20.1	20.1	0.3
							GG	337.2625	20.2	20.0	19.7	19.9	0.5
A-5	91.2500						HH	343.2625	20.4	20.0	19.9	20.2	0.5
A-4	97.2500						II	349.2625	20.2	20.0	19.7	19.9	0.5
A-3	103.2500						JJ	355.2625	20.4	20.1	19.7	19.7	0.7
A-2	109.2750						KK	361.2625	20.3	19.9	19.9	20.0	0.4
A-1	115.2750						LL	367.2625	19.6	19.5	19.2	19.5	0.4
A	121.2625	21.3	21.3	20.8	21.2	0.5	MM	373.2625	20.1	19.6	19.3	19.4	0.8
B	127.2625	21.3	20.9	20.7	21.0	0.6	NN	379.2625	20.1	19.6	19.3	19.6	0.8
C	133.2625	21.4	21.2	20.5	20.7	0.9	OO	385.2625	19.3	18.8	18.7	19.1	0.6
D	139.2500	21.5	21.4	21.2	21.6	0.4	PP	391.2625	19.6	19.1	18.9	19.1	0.7
E	145.2500	21.2	20.9	20.8	21.1	0.4	QQ	397.2625	19.5	19.1	18.8	18.9	0.7
F	151.2500	21.6	21.5	21.1	21.5	0.5	RR	403.2500	18.9	18.6	18.4	18.6	0.5
G	157.2500	21.6	21.1	20.9	21.0	0.7	SS	409.2500	19.9	19.9	19.7	19.8	0.2
H	163.2500	21.7	21.4	20.8	21.5	0.9	TT	415.2500	17.0	18.4	18.1	17.8	1.4
I	169.2500	21.6	21.1	21.1	21.4	0.5	UU	421.2500	18.4	19.1	18.5	19.0	0.7
7	175.2500	22.1	21.7	21.6	21.6	0.5	VV	427.2500	19.5	19.3	19.0	19.1	0.5
8	181.2500	21.3	21.3	21.0	21.3	0.3	WW	433.2500	18.0	17.0	17.1	17.4	1.0
9	187.2500	21.4	21.4	21.3	21.4	0.1	XX	439.2500	18.3	17.9	18.3	18.3	0.4
10	193.2500	21.0	20.9	20.7	20.4	0.6	YY	445.2500	19.8	19.5	19.4	19.3	0.5
11	199.2500	20.9	20.5	20.3	20.6	0.6	ZZ	451.2500	17.8	18.7	18.3	19.4	1.6
12	205.2500	19.5	19.2	19.1	19.2	0.4	63	457.2500	19.0	18.1	18.3	18.8	0.9
13	211.2500	17.4	17.2	17.3	17.3	0.2	64	463.2500	18.9	18.6	18.1	18.7	0.8
J	217.2500	19.3	19.2	19.1	19.0	0.3	65	469.2500	19.1	18.7	18.9	18.9	0.4
K	223.2500	19.8	19.4	19.5	19.6	0.4	66	475.2500	18.9	18.6	19.1	19.3	0.7
L	229.2625	19.9	19.8	19.7	19.9	0.2	67	481.2500	18.6	18.8	19.0	19.1	0.5
M	235.2625	19.5	18.9	19.3	19.3	0.6	68	487.2500	19.2	18.6	19.1	19.1	0.6
N	241.2625	19.8	19.7	19.5	19.8	0.3	69	493.2500	18.3	17.9	18.4	18.4	0.5
O	247.2625	19.9	19.5	19.8	19.7	0.4	70	499.2500	19.0	18.5	18.5	18.5	0.5
P	253.2625	20.0	19.5	19.3	19.5	0.7	71	505.2500	18.7	17.6	17.7	18.5	1.1
Q	259.2625	19.9	19.1	19.5	19.5	0.8	72	511.2500	17.5	18.2	18.1	16.3	1.9
R	265.2625	20.2	19.8	19.7	20.1	0.5	73	517.2500	18.0	17.9	17.4	16.8	1.2
S	271.2625	20.5	20.2	20.0	20.2	0.5	74	523.2500	18.1	17.4	17.4	17.5	0.7
T	277.2625	20.4	20.2	20.0	20.2	0.4	75	529.2500	17.2	16.6	16.7	16.6	0.6
U	283.2625	20.3	20.1	19.9	20.1	0.4	76	535.2500	16.3	17.2	15.5	16.3	1.7
V	289.2625	20.5	20.2	20.4	20.7	0.5	77	541.2500	15.6	16.1	16.0	15.7	0.5
W	295.2625	20.6	20.2	20.3	20.2	0.4	78	547.2500	16.3	16.5	16.5	16.4	0.2

Max NonAdjacent Channel Level Diff.	6.8
Max Adjacent Channel Level Diff.	2.9

Max Variance from last proof-of-performance test	6.1
Date of last proof-of-performance test	8/97

Note: Make measurements through a 100 ft. test drop cable without a converter.

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 9

Location: Rinaldo Blvd

Community: Bridgeport .

Pole Number: 11/11

D.T. Value: 20-4

Map Number: 12-32

OR Number: 156

Trunk Cascade: 6 LE Cascade:

Visual Carrier Level Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: Rinaldo Blvd.

Date: 13-Feb-98

Time: 08:37 AM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff (Dbmv)
2	55.2500	17.2	4.6		12.6	AA	301.2625	16.4	2.7		13.7
3	61.2500	19.0	5.5		13.5	BB	307.2625	16.8	2.4		14.4
4	67.2500	19.4	4.7		14.7	CC	313.2625	16.8	3.1		13.7
5	77.2500	18.3	4.5		13.8	DD	319.2625	17.1	3.4		13.7
6	83.2500	18.7	4.6		14.1	EE	325.2625	17.5	2.7		14.8
						FF	331.2750	17.0	3.4		13.6
						GG	337.2625	17.0	3.0		14.0
A-5	91.2500					HH	343.2625	16.9	3.0		13.9
A-4	97.2500					II	349.2625	16.9	3.1		13.8
A-3	103.2500					JJ	355.2625	17.4	4.4		13.0
A-2	109.2750					KK	361.2625	17.1	3.0		14.1
A-1	115.2750					LL	367.2625	16.5	2.6		13.9
A	121.2625	20.0	5.7		14.3	MM	373.2625	15.9	1.9		14.0
B	127.2625	20.0	6.6		13.4	NN	379.2625	16.7	1.7		15.0
C	133.2625	20.0	6.0		14.0	OO	385.2625	15.4	0.8		14.6
D	139.2500	20.5	6.2		14.3	PP	391.2625	15.0	0.4		14.6
E	145.2500	19.5	5.2		14.3	QQ	397.2625	14.3	-0.2		14.5
F	151.2500	19.8	5.8		14.0	RR	403.2500	13.3	-0.2		13.5
G	157.2500	20.2	6.1		14.1	SS	409.2500	15.2	0.7		14.5
H	163.2500	20.8	6.3		14.5	TT	415.2500	13.9	-1.3	S	15.2
I	169.2500	21.1	6.7		14.4	UU	421.2500	12.8	-2.5	S	15.3
7	175.2500	20.9	7.0		13.9	VV	427.2500	11.8	-2.4		14.2
8	181.2500	20.6	6.3		14.3	VW	433.2500	10.6	-2.8	S	13.4
9	187.2500	20.2	5.5		14.7	XX	439.2500	12.2	-1.8	S	14.0
10	193.2500	19.8	5.9		13.9	YY	445.2500	13.2	-1.8	S	15.0
11	199.2500	19.5	5.0		14.5	ZZ	451.2500	10.4	-3.4	S	13.8
12	205.2500	19.1	4.8		14.3	63	457.2500	11.3	-2.2	S	13.5
13	211.2500	17.4	3.0		14.4	64	463.2500	11.3	-2.6	S	13.9
J	217.2500	17.5	3.0		14.5	65	469.2500	12.8	-1.4		14.2
K	223.2500	17.4	2.8		14.6	66	475.2500	12.4	-2.3	S	14.7
L	229.2625	16.8	2.0		14.8	67	481.2500	13.0	-1.1	S	14.1
M	235.2625	16.2	1.2		15.0	68	487.2500	12.6	-0.8	S	13.4
N	241.2625	15.6	1.0		14.6	69	493.2500	12.2	-1.5	S	13.7
O	247.2625	15.4	1.7		13.7	70	499.2500	14.2	0.0	S	14.2
P	253.2625	15.8	1.9		13.9	71	505.2500	12.9	-2.8	S	15.7
Q	259.2625	16.3	1.7		14.6	72	511.2500	13.3	-1.8	S	15.1
R	265.2625	16.4	1.4		15.0	73	517.2500	11.9	-3.8	S	15.7
S	271.2625	15.1	1.7		13.4	74	523.2500	10.5	-3.5	S	14.0
T	277.2625	15.4	1.3		14.1	75	529.2500	11.8	-2.3	S	14.1
U	283.2625	15.4	1.4		14.0	76	535.2500	12.6	-1.7	S	14.3
V	289.2625	16.3	2.6		13.7	77	541.2500	11.0	-3.4	S	14.4
W	295.2625	16.5	2.2		14.3	78	547.2500	11.2	-3.5	S	14.7

PEAK TO VALLEY: 10.7

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98

Test Performed By: Patrick Thrall

Location: Rinaldo Blvd.

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response (+/- dB)	Carrier To Noise Ratio (dB)	Distortions (+/- dB)			Harm (%)
			CIB	CSSO	XIMOD	
2	1	49.8	65	70	71.2	0.1
A	0.4	50.3	65	68.9	70.9	
H	0.8	51.4	65.4	69.1	71.3	
8	0.9	51.6	64.8	68.6	70.6	
T	0.9	50.6	62	63	71	
CC	0.5	50	60	65.1	72	
LL	0.5	50.1	61.6	67.1	71.5	
RR	0.6	50.2	59	65.6	72.7	
CCC	0.4	49.4	58.8	62.6	72	

Time Warner Cable Syracuse Division

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

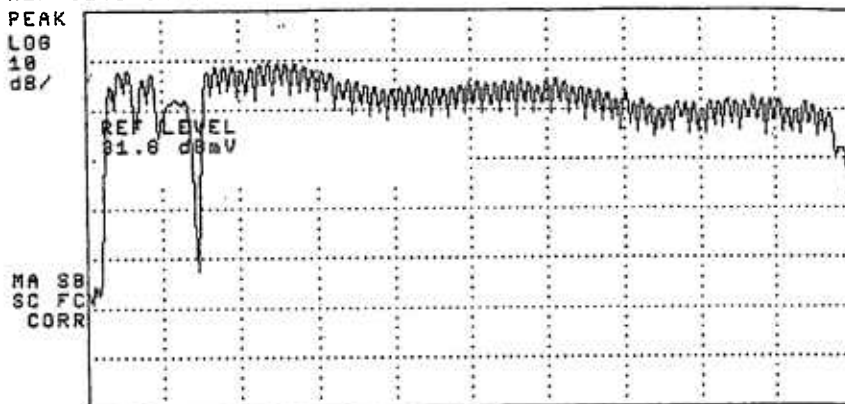
System Name: Time Warner-Syracuse Date: February 1998
Test Performed By Patrick Thrall Location: Rinaldo Blvd.

(SEE THE ATTACHED SWEEP TRACES)

08:49:53 FEB 13, 1998

REF 31.8 dBmV #AT 0 dB

PEAK
LOG
10
dB/



CENTER 302.1 MHz
RES BW 3.0 MHz

VBW 1 MHz

SPAN 530.0 MHz
SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

More
1 of 3

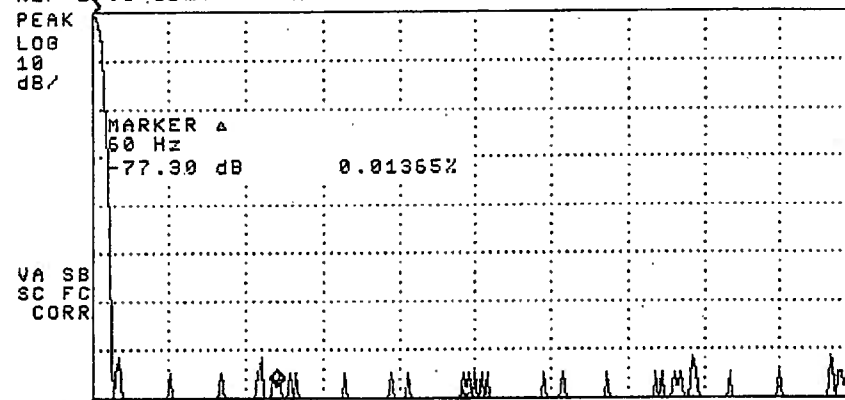
08:55:58 FEB 13, 1998

CHANNEL (STD)
REF 17.6 dBmV AT 10 dB

MKR Δ 60 Hz
-77.30 dB

CHNL

PEAK
LOG
10
dB/



START 55.245 MHz
#RES BW 1.0 MHz

#VBW 1 kHz

STOP 55.245 MHz
#SWP 800 msec

MAIN
MENU

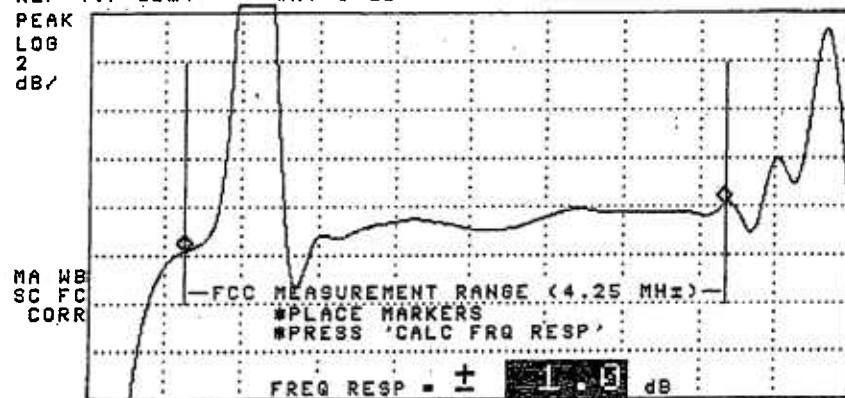
08:58:42 FEB 13, 1998

CHANNEL (STD)
REF 4.7 dBmV #AT 0 dB

MKR 54.750 MHz
-5.16 dBmV

CHNL

PEAK
LOG
2
dB/



START 54.000 MHz
#RES BW 100 kHz

#VBW 3 MHz

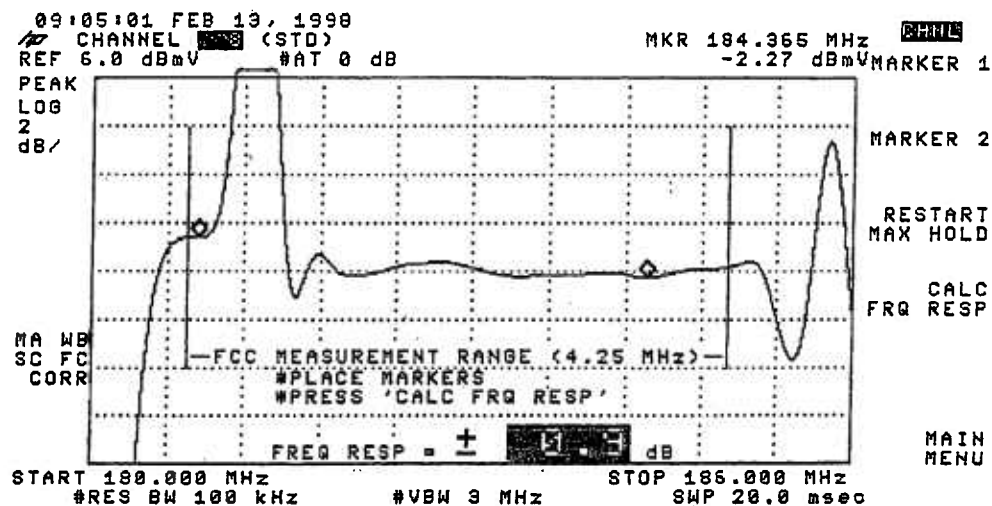
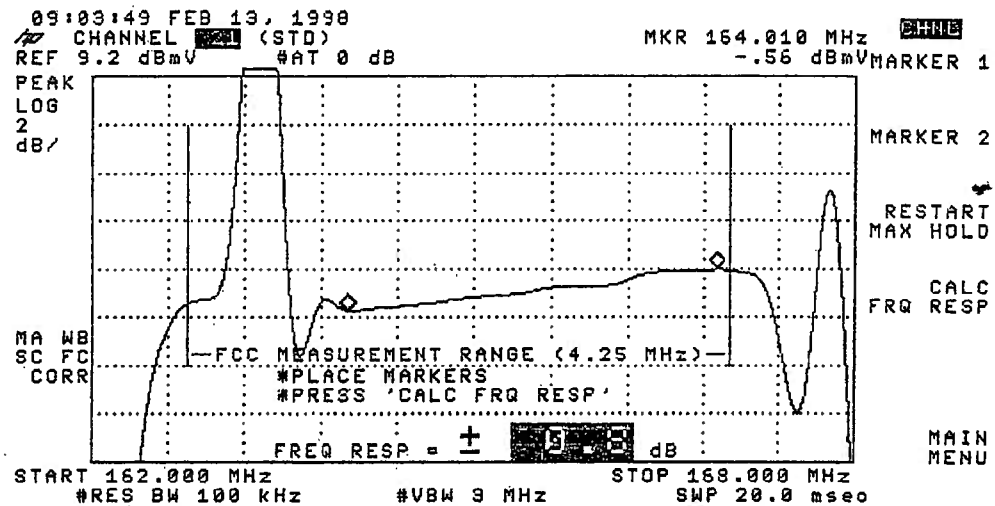
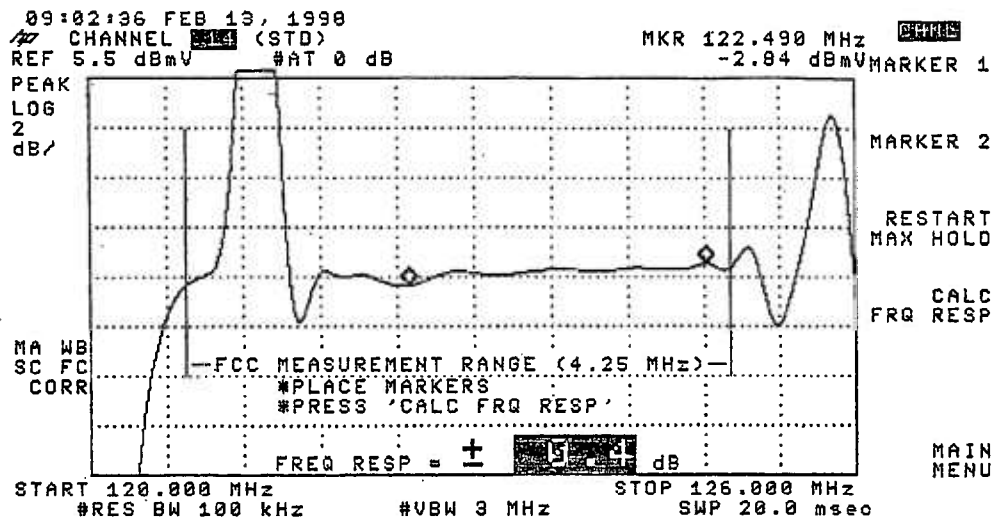
STOP 60.000 MHz
SWP 20.0 msec

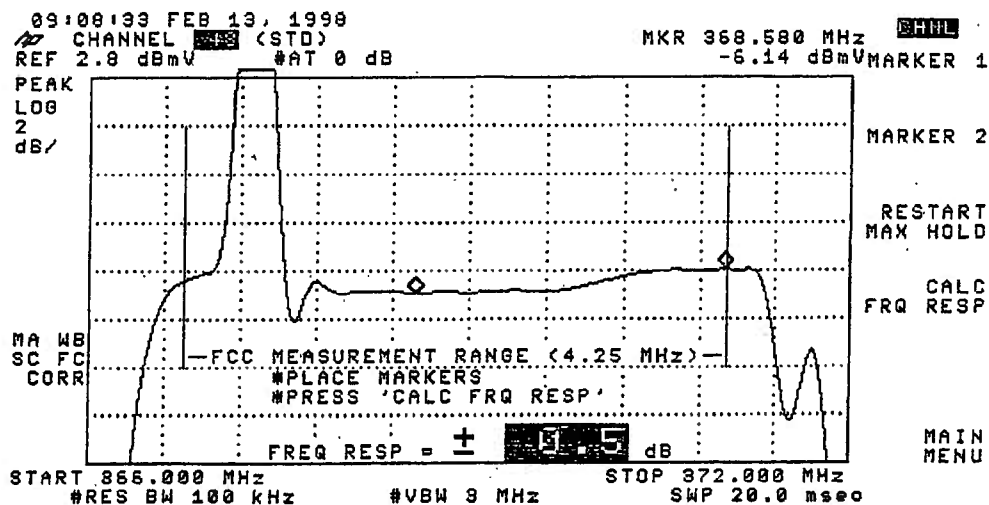
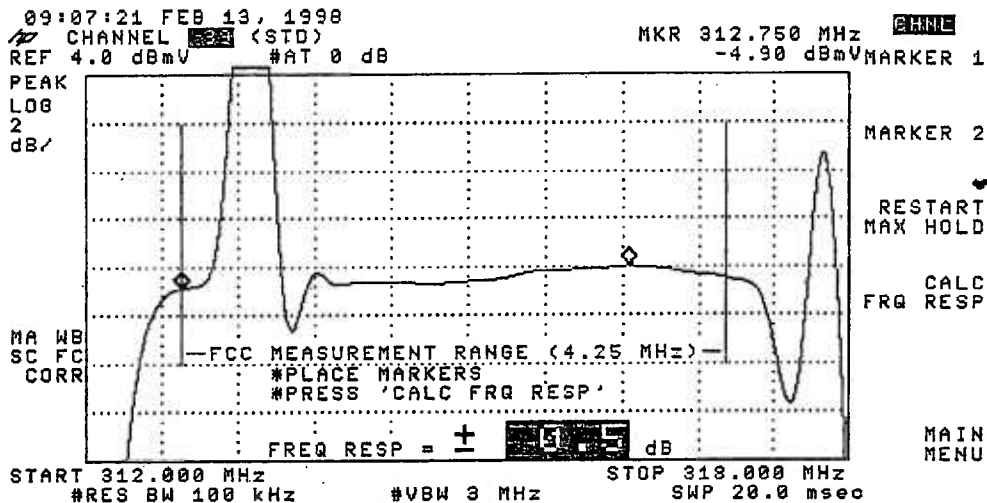
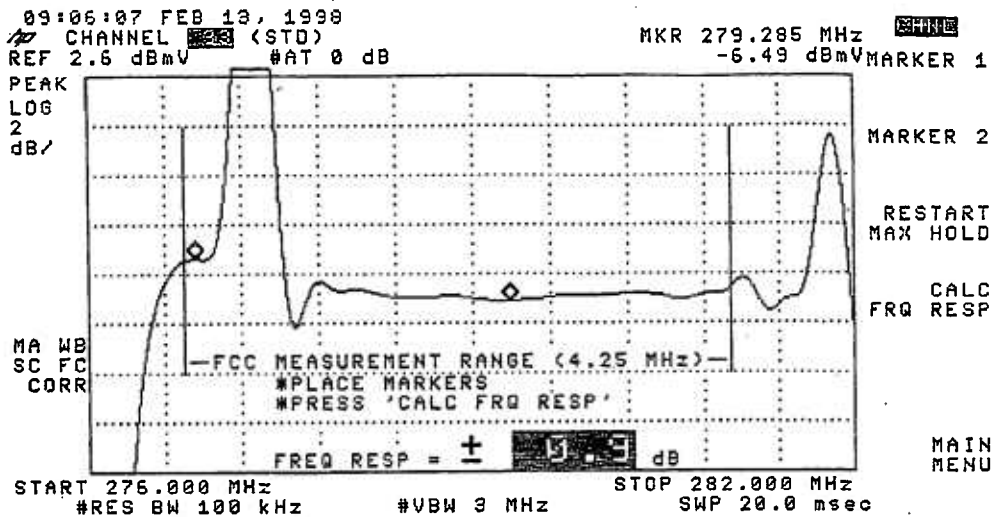
MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU



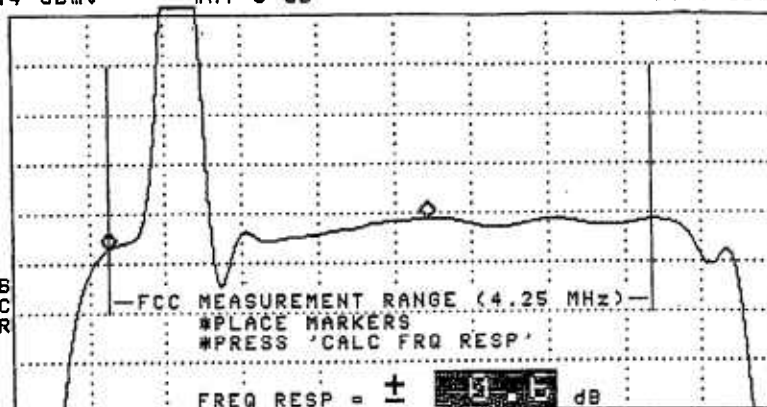


09:09:57 FEB 13, 1998
CHANNEL 55 (STD)
REF .4 dBmV #AT 0 dB

MKR 402.750 MHz **CHNL**
-9.06 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

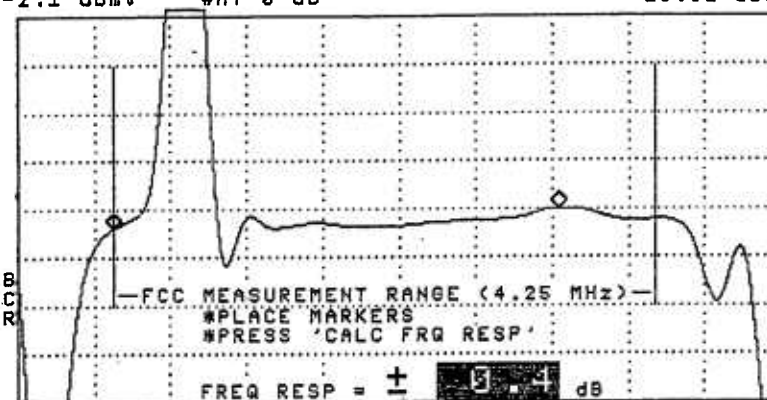
START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

09:11:34 FEB 13, 1998
CHANNEL 55 (STD)
REF -2.1 dBmV #AT 0 dB

MKR 468.750 MHz **CHNL**
-10.92 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Time Warner Cable Syracuse Division

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

System Name: Time Warner-Syracuse Date: February 1998

Test Performed By Patrick Thrall Location: Rt. 57

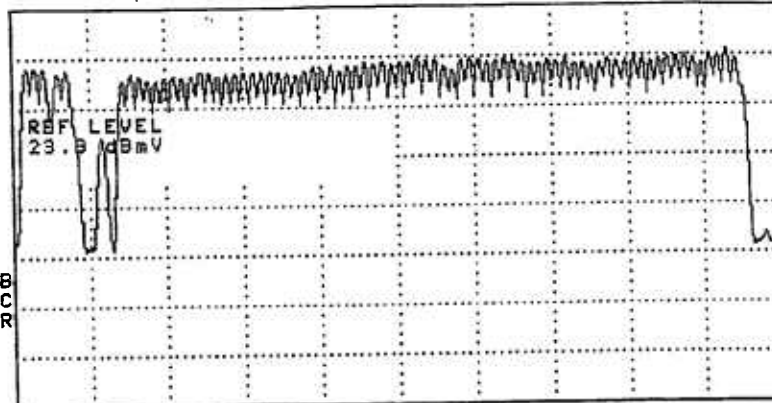
(SEE THE ATTACHED SWEEP TRACES)

15:18:12 FEB 13, 1998

REF 23.8 dBmV #AT 0 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR



START 45.0 MHz RES BW 3.0 MHz VBW 1 MHz STOP 575.0 MHz SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

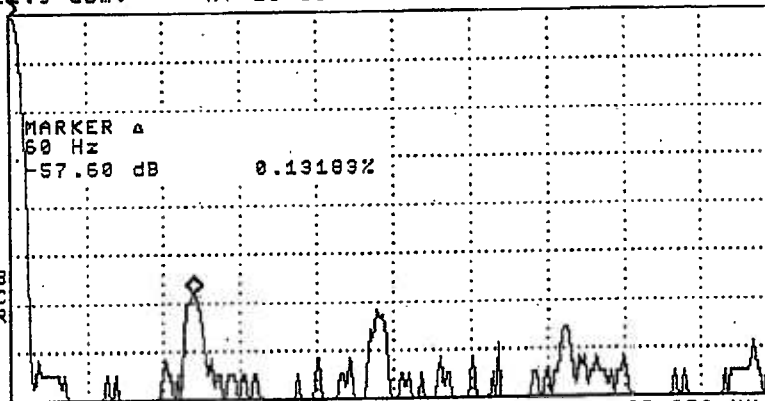
More
1 of 3

15:20:19 FEB 13, 1998

CHANNEL 2 (STD)
REF 12.9 dBmV AT 10 dB

PEAK
LOG
10
dB/

VA SB
SC FC
CORR



START 55.250 MHz #RES BW 1.0 MHz #VBW 1 kHz STOP 55.250 MHz #SWP 800 msec

MKR Δ 60 Hz
-57.60 dB

CHNL

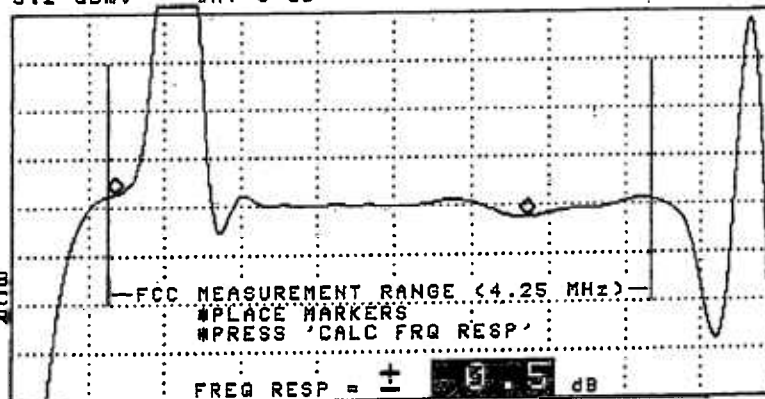
MAIN
MENU

15:22:04 FEB 13, 1998

CHANNEL 2 (STD)
REF -5.2 dBmV #AT 0 dB

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



START 54.000 MHz #RES BW 100 kHz #VBW 3 MHz STOP 60.000 MHz SWP 20.0 msec

MKR 58.035 MHz
-13.68 dBmV

MARKER 1

MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

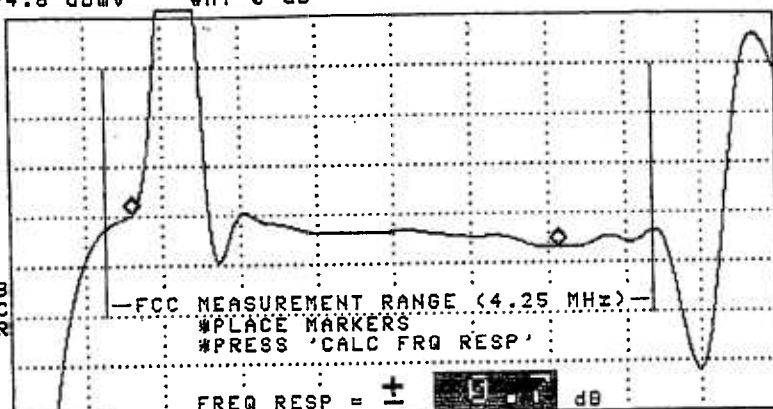
MAIN
MENU

15:23:09 FEB 13, 1998
CHANNEL 1 (STD)
REF -4.6 dBmV #AT 0 dB

MKR 124.275 MHz
-19.92 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

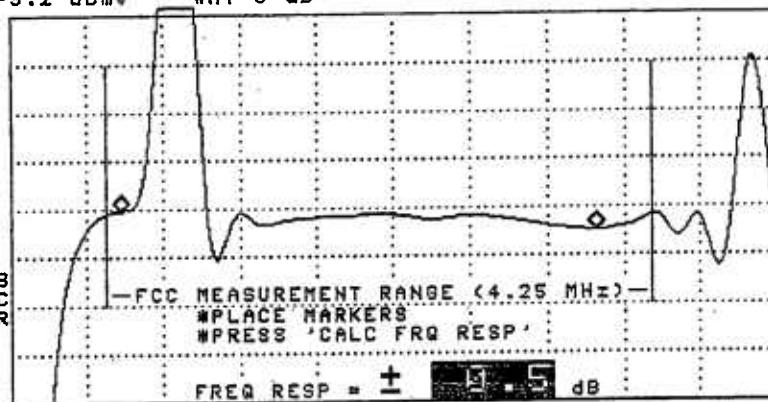
START 120.000 MHz STOP 126.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:24:16 FEB 13, 1998
CHANNEL 1 (STD)
REF -3.2 dBmV #AT 0 dB

MKR 166.575 MHz
-12.18 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

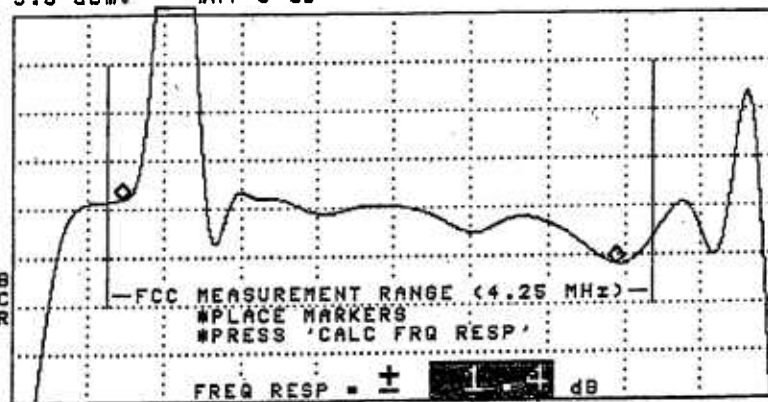
START 162.000 MHz STOP 168.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:25:22 FEB 13, 1998
CHANNEL 1 (STD)
REF -3.6 dBmV #AT 0 dB

MKR 184.725 MHz
-19.92 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

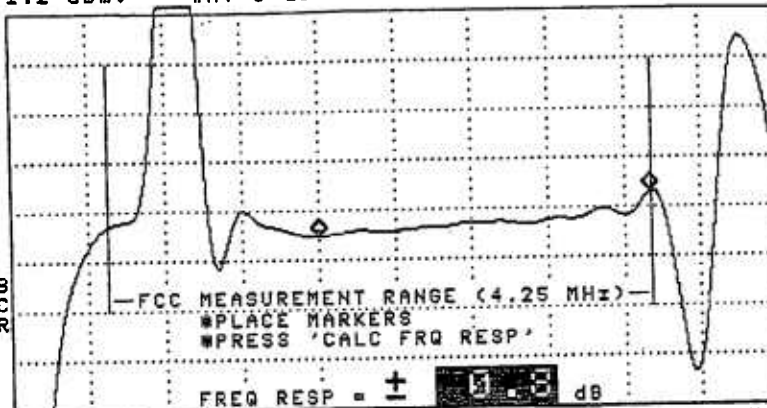
START 180.000 MHz STOP 186.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:26:20 FEB 13, 1998
CHANNEL 33 (STD)
REF -1.2 dBmV #AT 0 dB

MKR 278.400 MHz
-10.25 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

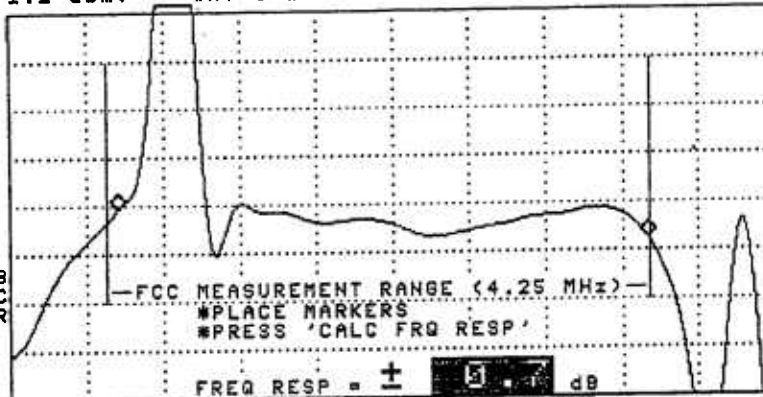
START 276.000 MHz STOP 282.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:27:22 FEB 13, 1998
CHANNEL 33 (STD)
REF -1.2 dBmV #AT 0 dB

MKR 316.995 MHz
-10.67 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

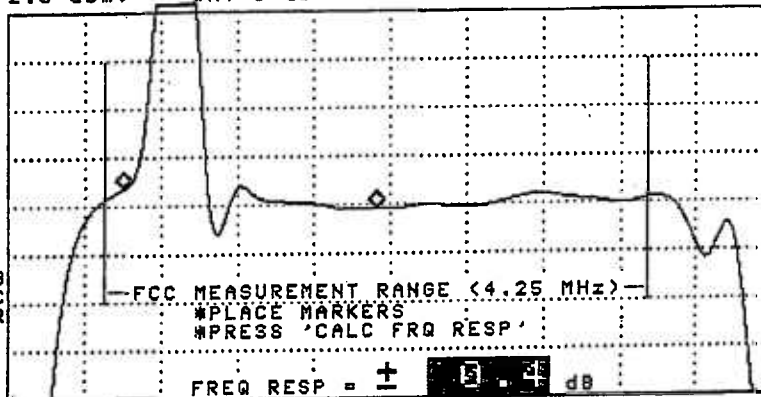
START 312.000 MHz STOP 318.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:28:29 FEB 13, 1998
CHANNEL 33 (STD)
REF -2.3 dBmV #AT 0 dB

MKR 368.895 MHz
-10.51 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

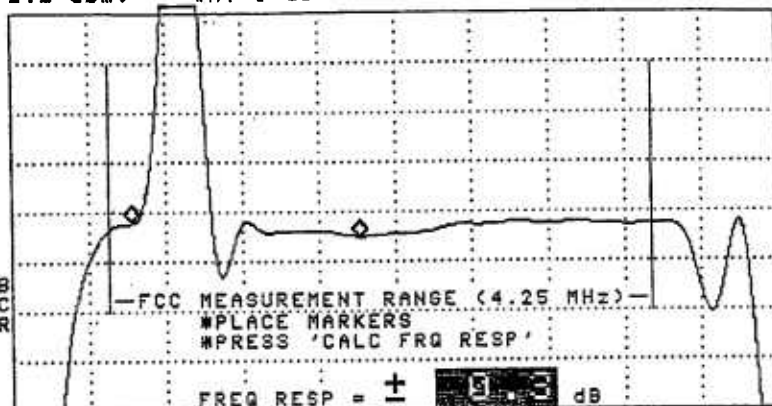
START 366.000 MHz STOP 372.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:29:32 FEB 13, 1998
CHANNEL 551 (STD)
REF -1.2 dBmV #AT 0 dB

MKR 404.715 MHz **CHNL**
-10.16 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

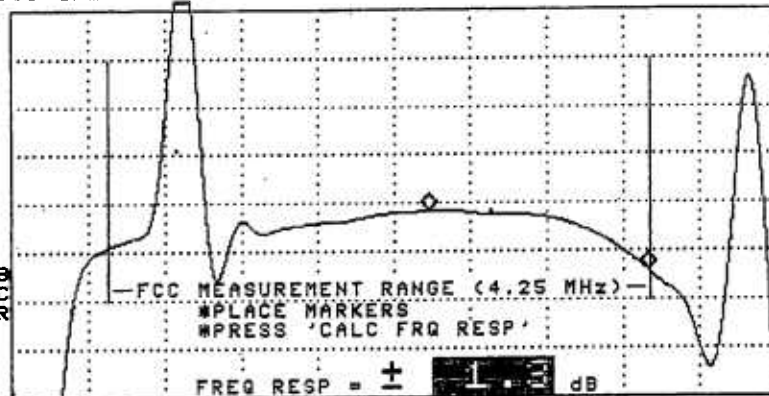
START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:30:49 FEB 13, 1998
CHANNEL 555 (STD)
REF 3.0 dBmV #AT 0 dB

MKR 471.270 MHz **CHNL**
-5.29 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: Time Warner - Syracuse

Test Point Location Rt. 57

Date: February 1998

Performed by: B. Diriwachter & B. Wentworth

Meter Serial Number: 9210392

Chan	Freq (MHz)	Temp: F				Max	Chan	Freq (MHz)	Temp: F				Max
		26	29	30	31				26	29	30	31	
		00:05	06:28	12:11	18:12				00:05	06:28	12:11	18:12	
		Visual Level (dbmv)				Variation			Visual Level (dbmv)				Variation
2	55.2500	14.1	14.1	14.4	14.5	0.4	AA	301.2625	14.0	13.7	14.1	14.3	0.6
3	61.2500	13.4	13.5	13.9	14.1	0.7	BB	307.2625	14.2	14.4	14.1	14.2	0.3
4	67.2500	13.5	13.4	13.7	13.9	0.5	CC	313.2625	14.0	14.3	14.3	14.4	0.4
5	77.2500	12.9	13.0	13.3	13.2	0.4	DD	319.2625	14.2	14.2	14.2	14.6	0.4
6	83.2500	13.5	13.2	13.6	13.8	0.6	EE	325.2625	15.2	15.1	15.3	15.5	0.4
							FF	331.2750	13.8	13.5	13.8	14.1	0.6
							GG	337.2625	13.7	13.9	14.3	14.4	0.7
A-5	91.2500						HH	343.2625	14.0	14.1	14.3	14.6	0.6
A-4	97.2500						II	349.2625	14.0	14.1	14.5	14.4	0.5
A-3	103.2500						JJ	355.2625	14.1	14.3	14.6	14.5	0.5
A-2	109.2750						KK	361.2625	13.8	13.7	14.3	14.3	0.6
A-1	115.2750						LL	367.2625	14.6	14.8	14.9	15.0	0.4
A	121.2625	11.9	12.1	11.9	12.0	0.2	MM	373.2625	14.4	14.0	14.7	14.8	0.8
B	127.2625	11.4	12.5	12.4	12.5	1.1	NN	379.2625	14.3	14.7	15.0	15.1	0.8
C	133.2625	11.6	11.6	11.8	11.8	0.2	OO	385.2625	14.7	14.6	14.9	15.2	0.6
D	139.2500	11.5	10.8	11.3	11.5	0.7	PP	391.2625	14.3	14.3	14.3	14.6	0.3
E	145.2500	11.8	11.4	11.5	11.7	0.4	QQ	397.2625	13.5	13.4	13.9	14.1	0.7
F	151.2500	11.8	11.9	12.0	11.7	0.3	RR	403.2500	13.9	13.8	14.2	14.2	0.4
G	157.2500	11.5	11.4	11.8	11.5	0.4	SS	409.2500	13.3	13.3	13.5	13.9	0.6
H	163.2500	11.2	11.5	11.5	11.5	0.3	TT	415.2500	15.8	15.4	15.2	15.3	0.6
I	169.2500	12.0	11.8	12.3	12.5	0.7	UU	421.2500	15.7	15.1	14.8	15.8	1.0
7	175.2500	12.1	12.2	12.4	12.4	0.3	VV	427.2500	15.7	15.5	15.5	16.0	0.5
8	181.2500	11.9	11.9	11.7	12.1	0.4	WW	433.2500	15.0	14.9	15.7	16.1	1.2
9	187.2500	11.9	12.0	12.0	11.9	0.1	XX	439.2500	15.2	15.1	15.4	15.7	0.6
10	193.2500	11.7	11.7	11.8	11.8	0.1	YY	445.2500	15.0	14.9	14.8	14.7	0.3
11	199.2500	12.2	12.2	12.2	12.5	0.3	ZZ	451.2500	15.0	16.1	16.0	15.9	1.1
12	205.2500	13.2	13.2	13.3	13.4	0.2	63	457.2500	15.6	17.6	15.5	16.9	2.1
13	211.2500	12.1	11.8	12.3	12.3	0.5	64	463.2500	16.1	16.5	16.1	16.6	0.5
J	217.2500	11.6	11.9	11.9	12.0	0.4	65	469.2500	15.3	16.5	13.9	14.4	2.6
K	223.2500	12.3	12.1	12.5	12.5	0.4	66	475.2500	16.8	16.0	15.9	15.8	1.0
L	229.2625	12.0	12.1	11.8	12.2	0.4	67	481.2500	16.0	14.9	14.9	15.1	1.1
M	235.2625	11.9	11.7	11.4	11.9	0.5	68	487.2500	15.5	15.2	14.8	14.7	0.8
N	241.2625	10.9	10.9	10.8	11.2	0.4	69	493.2500	14.9	15.1	14.8	14.8	0.3
O	247.2625	12.3	12.2	12.1	12.6	0.5	70	499.2500	14.2	14.6	12.9	14.2	1.7
P	253.2625	13.0	12.5	13.3	13.2	0.8	71	505.2500	14.0	13.5	14.3	14.6	1.1
Q	259.2625	12.6	12.7	13.1	13.3	0.7	72	511.2500	14.5	13.8	14.6	14.7	0.9
R	265.2625	12.8	12.8	13.4	13.4	0.6	73	517.2500	15.2	15.3	14.8	16.0	1.2
S	271.2625	12.9	12.8	13.0	13.1	0.3	74	523.2500	15.4	15.7	16.2	16.1	0.8
T	277.2625	13.6	13.6	13.8	13.7	0.2	75	529.2500	17.0	16.6	17.4	17.0	0.8
U	283.2625	13.8	13.7	13.9	13.9	0.2	76	535.2500	16.4	16.9	16.7	16.8	0.5
V	289.2625	13.8	13.7	14.1	14.2	0.5	77	541.2500	15.3	15.4	14.8	15.2	0.6
W	295.2625	14.3	14.5	14.4	14.4	0.2	78	547.2500	15.0	15.6	15.3	15.9	0.9

Max NonAdjacent Channel Level Diff.	6.8
Max Adjacent Channel Level Diff.	2.5

Max Variance from last proof-of-performance test	4.9
Date of last proof-of-performance test	8/97

Note: Make measurements through a 100 ft. test drop cable without a converter.

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 14

Location: Pendergast Rd

Community: Fulton

Pole Number: 22/29

D.T. Value: 8-4

Map Number: 25-17

OR Number: 711

Trunk Cascade: 4 LE Cascade: 2

Visual Carrier Level

Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: Pendergast Rd. - Fulton

Date: 13-Feb-98

Time: 02:23 PM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Sgra (S)	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Sgra (S)	Diff (Dbmv)
2	55.2500	11.6	-2.8		14.4	AA	301.2625	7.6	-6.0		13.6
3	61.2500	11.1	-3.4		14.5	BB	307.2625	7.9	-5.2		13.1
4	67.2500	10.4	-3.3		13.7	CC	313.2625	7.6	-5.7		13.3
5	77.2500	10.2	-3.5		13.7	DD	319.2625	7.9	-5.5		13.4
6	83.2500	10.1	-4.1		14.2	EE	325.2625	7.8	-6.0		13.8
						FF	331.2750	7.6	-5.9		13.5
						GG	337.2625	7.9	-5.6		13.5
						HH	343.2625	6.5	-7.1		13.6
A-5	91.2500					II	349.2625	6.4	-6.9		13.3
A-4	97.2500					JJ	355.2625	7.7	-5.9		13.6
A-3	103.2500					KK	361.2625	7.5	-6.7		14.2
A-2	109.2750					LL	367.2625	7.0	-6.0		13.0
A-1	115.2750					MM	373.2625	6.6	-6.1		12.7
A	121.2625	7.6	-6.2		13.8	NN	379.2625	7.8	-5.7		13.5
B	127.2625	8.0	-6.3		14.3	OO	385.2625	7.6	-6.3		13.9
C	133.2625	7.0	-6.1		13.1	PP	391.2625	7.1	-6.8		13.9
D	139.2500	6.3	-7.3		13.6	QQ	397.2625	6.6	-6.5		13.1
E	145.2500	6.6	-7.0		13.6	RR	403.2500	7.4	-5.0		12.4
F	151.2500	6.2	-6.8		13.0	SS	409.2500	7.8	-5.5		13.3
G	157.2500	6.3	-6.9		13.2	TT	415.2500	8.1	-5.6	S	13.7
H	163.2500	6.6	-7.8		14.4	UU	421.2500	8.6	-5.7	S	14.3
I	169.2500	6.0	-7.3		13.3	VV	427.2500	8.0	-5.0		13.0
7	175.2500	7.5	-6.6		14.1	WW	433.2500	8.6	-5.0	S	13.6
8	181.2500	6.0	-7.2		13.2	XX	439.2500	9.0	-4.9	S	13.9
9	187.2500	5.8	-7.2		13.0	YY	445.2500	10.0	-4.3		14.3
10	193.2500	6.2	-7.1		13.3	ZZ	451.2500	9.3	-4.7	S	14.0
11	199.2500	6.4	-6.9		13.3	63	457.2500	8.7	-6.4	S	15.1
12	205.2500	6.9	-6.9		13.8	64	463.2500	8.1	-5.4	S	13.5
13	211.2500	7.2	-6.7		13.9	65	469.2500	9.8	-4.1	S	13.9
J	217.2500	6.5	-6.9		13.4	66	475.2500	10.2	-4.4	S	14.6
K	223.2500	7.0	-5.9		12.9	67	481.2500	10.2	-4.3	S	14.5
L	229.2625	7.2	-7.2		14.4	68	487.2500	9.5	-4.7	S	14.2
M	235.2625	6.5	-6.5		13.0	69	493.2500	9.6	-3.5	S	13.1
N	241.2625	6.5	-6.1		12.6	70	499.2500	10.5	-2.5	S	13.0
O	247.2625	7.4	-5.7		13.1	71	505.2500	11.9	-3.0	S	14.9
P	253.2625	7.5	-4.8		12.3	72	511.2500	9.8	-3.5	S	13.3
Q	259.2625	7.8	-5.1		12.9	73	517.2500	9.7	-4.4	S	14.1
R	265.2625	7.6	-7.1		14.7	74	523.2500	9.3	-4.0	S	13.3
S	271.2625	7.0	-7.9		14.9	75	529.2500	10.0	-3.0	S	13.0
T	277.2625	7.1	-6.1		13.2	76	535.2500	11.6	-4.1	S	15.7
U	283.2625	7.3	-5.7		13.0	77	541.2500	10.6	-3.6		14.2
V	289.2625	7.9	-5.1		13.0	78	547.2500	8.8	-5.7	S	14.5
W	295.2625	6.9	-6.9		13.8						

PEAK TO VALLEY: 6.1

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98

Test Performed By: Patrick Thrall

Location: Pendergast Rd. - Fulton

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	Channel Response (dB)	Carrier To Noise Ratio (dB)	Distortions (dBc)			Hum (%)
			15	50	70	
2	0.4	47.7	66.6	68.1	70	0.2
A	0.8	47.8	65.4	67.7	68.4	
H	0.7	47.7	65.6	67.2	68.1	
8	1.4	47.9	64	66.1	69.9	
T	0.8	48	63.2	68.6	69.8	
CC	0.6	48	63.4	68.2	69	
LL	0.4	48.1	61.1	66.6	69.6	
RR	0.5	47.9	60	64.5	68.9	
CCC	1.2	47.7	63.4	67.6	68.9	

Time Warner Cable Syracuse Division

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

System Name: Time Warner-Syracuse Date: February 1998
Test Performed By Patrick Thrall Location: Pendergast Rd. - Fulton

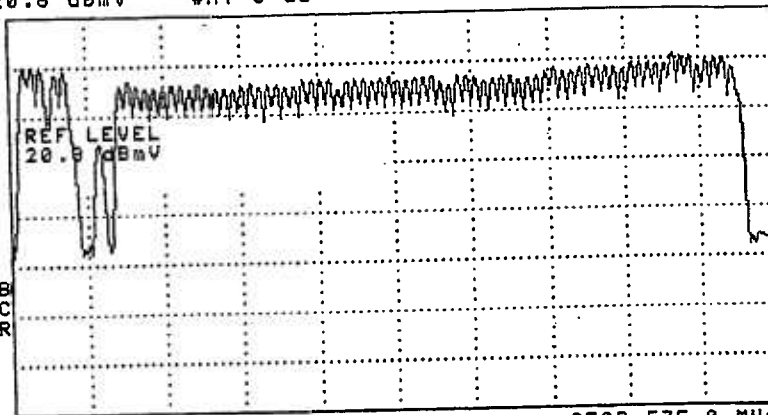
(SEE THE ATTACHED SWEEP TRACES)

14:24:57 FEB 13, 1998

REF 20.0 dBmV #AT 0 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR



START 45.0 MHz RES BW 3.0 MHz VBW 1 MHz STOP 575.0 MHz SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

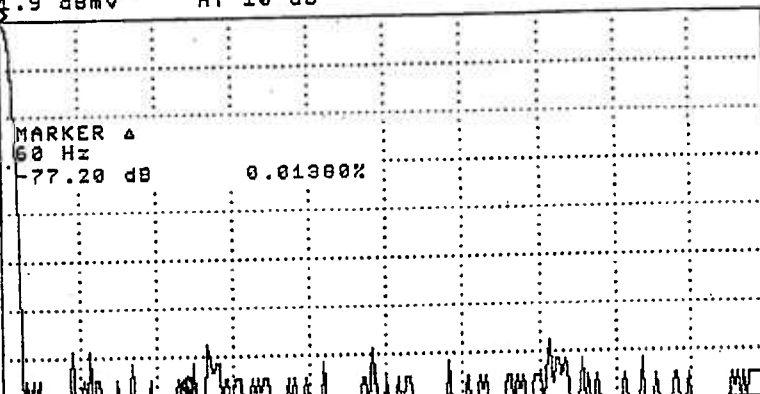
More
1 of 3

14:26:20 FEB 13, 1998

CHANNEL 2 (STD)
REF 14.9 dBmV AT 10 dB

PEAK
LOG
10
dB/

VA SB
SC FC
CORR



START 55.240 MHz #RES BW 1.0 MHz #VBW 1 kHz STOP 55.240 MHz #SWP 800 msec

MKR 60 Hz
-77.20 dB

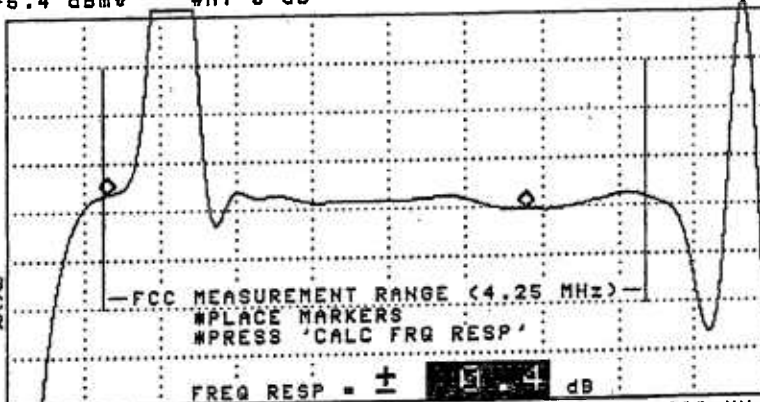
CHNL

MAIN
MENU

14:27:54 FEB 13, 1998
CHANNEL 2 (STD)
REF -6.4 dBmV #AT 0 dB

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



START 54.000 MHz #RES BW 100 kHz #VBW 8 MHz STOP 60.000 MHz SWP 20.0 msec

MKR 58.065 MHz
-14.48 dBmV

CHNL

MARKER 2

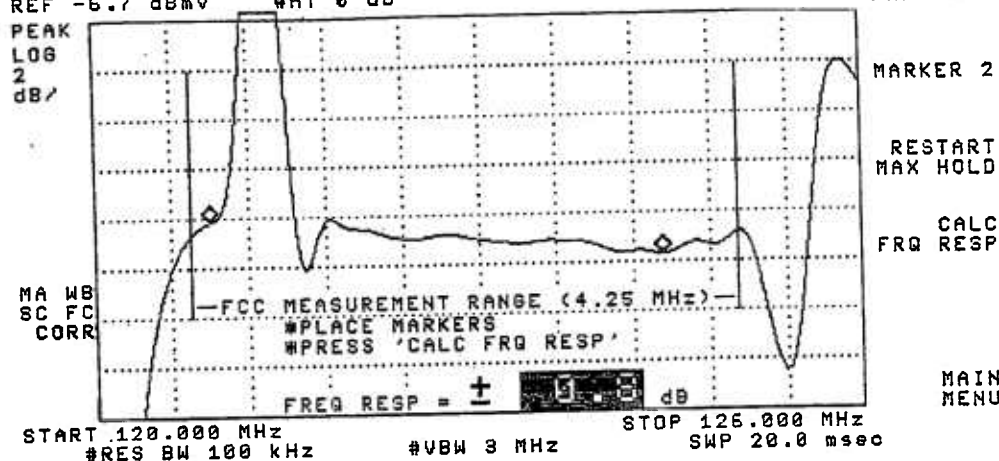
RESTART
MAX HOLD

CALC
FREQ RESP

MAIN
MENU

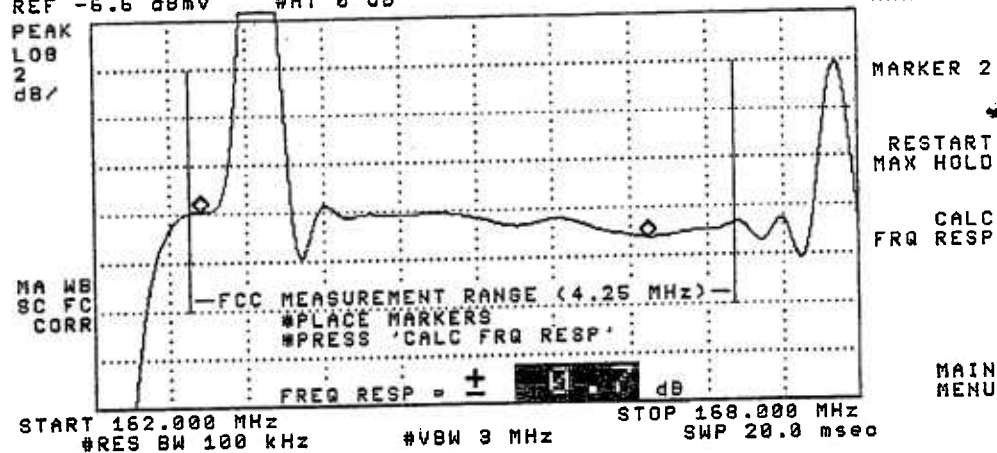
14:29:19 FEB 13, 1998
CHANNEL 21 (STD)
REF -6.7 dBmV #AT 0 dB

CHNL
MKR 124.425 MHz
-16.41 dBmV MARKER 1



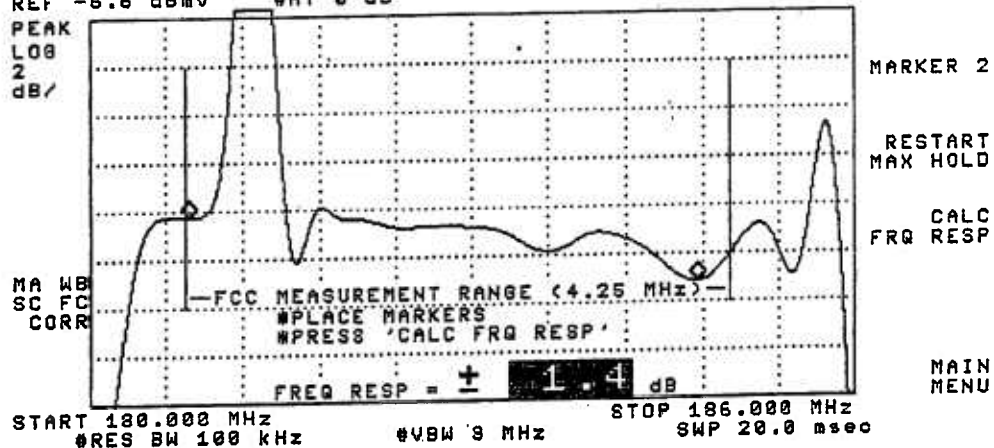
14:30:35 FEB 13, 1998
CHANNEL 21 (STD)
REF -6.6 dBmV #AT 0 dB

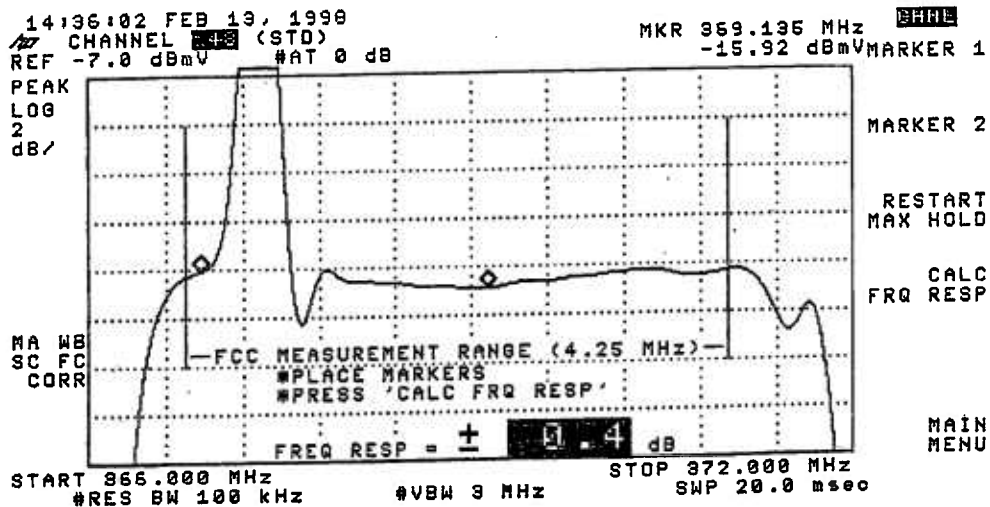
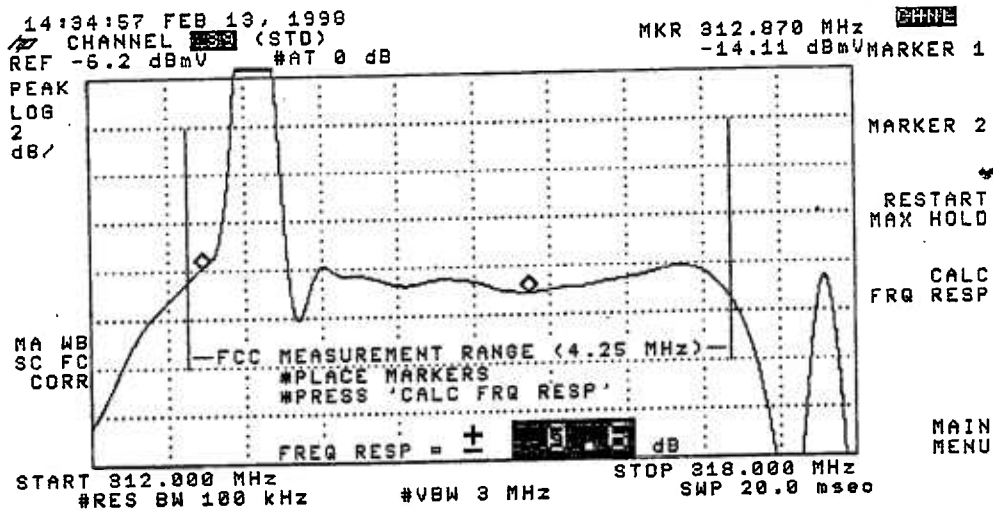
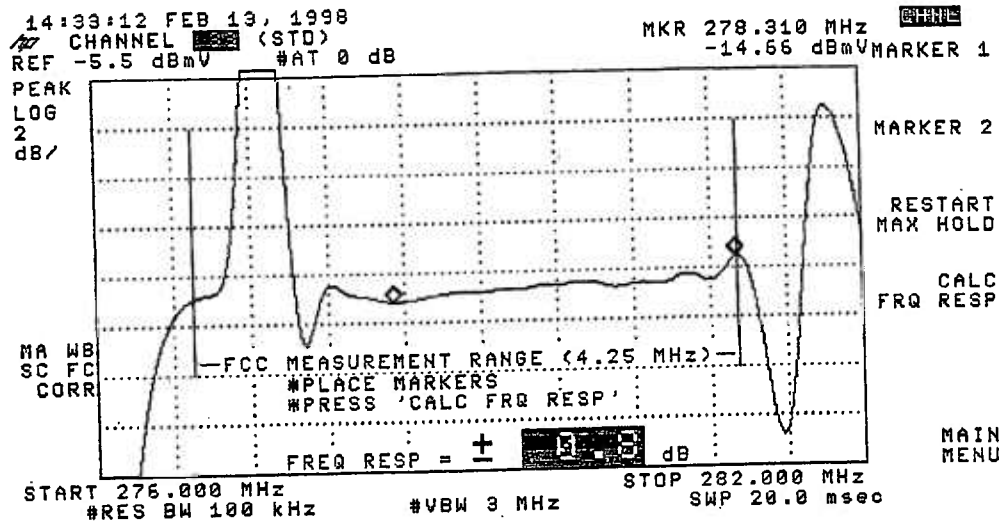
CHNL
MKR 166.335 MHz
-15.86 dBmV MARKER 1



14:31:59 FEB 13, 1998
CHANNEL 21 (STD)
REF -6.6 dBmV #AT 0 dB

CHNL
MKR 184.755 MHz
-17.76 dBmV MARKER 1



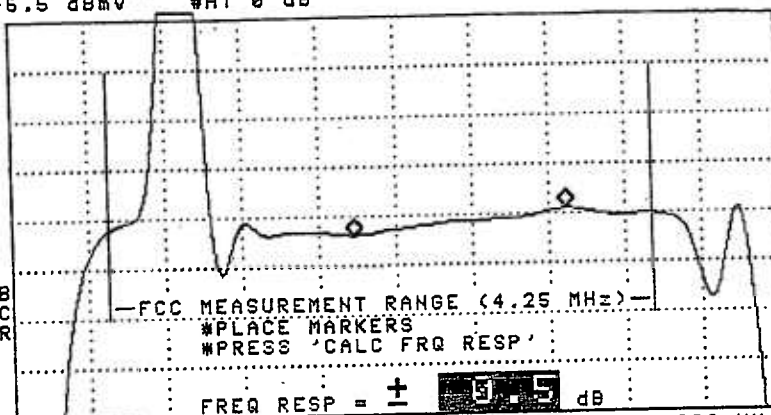


14:37:07 FEB 13, 1998
CHANNEL 55 (STD)
REF -6.5 dBmV #AT 0 dB

MKR 404.670 MHz CHNL
-15.23 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

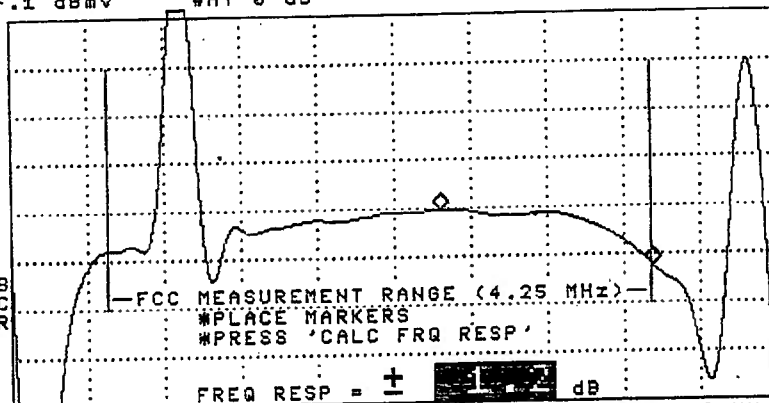
START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

14:41:04 FEB 13, 1998
CHANNEL 55 (STD)
REF -1.1 dBmV #AT 0 dB

MKR 471.360 MHz CHNL
-8.13 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: Time Warner - Syracuse

Test Point Location Pendergast Rd. - Fulton

Date: February 1998 Performed by: B. Diriwachter & B. Wentworth

Meter Serial Number: 9210392

		Temp. F								Temp. F					
		27	29	33	34					27	29	33	34		
		Time								Time					
		00:30	06:41	12:27	18:28	Max			Freq	00:30 06:41 12:27 18:28				Max	
Chan	Freq (MHz)	Visual Level (dbmV)				Variation	Chan	Freq (MHz)	Visual Level (dbmV)				Variation		
2	55.2500	13.0	13.0	13.3	13.5	0.5	AA	301.2625	8.8	8.9	8.9	9.5	0.7		
3	61.2500	12.8	12.7	13.0	13.3	0.6	BB	307.2625	9.4	9.5	9.1	9.7	0.6		
4	67.2500	12.1	12.1	12.3	12.6	0.5	CC	313.2625	8.8	9.0	8.8	9.3	0.5		
5	77.2500	12.1	11.9	11.6	12.2	0.6	DD	319.2625	9.2	9.4	9.2	9.6	0.4		
6	83.2500	12.0	12.2	12.1	12.5	0.5	EE	325.2625	9.7	9.7	9.7	10.1	0.4		
							FF	331.2750	8.5	8.8	8.4	8.8	0.4		
							GG	337.2625	9.2	9.2	8.8	9.3	0.5		
A-5	91.2500						HH	343.2625	9.2	9.2	8.8	9.3	0.5		
A-4	97.2500						II	349.2625	9.1	9.1	8.9	9.3	0.4		
A-3	103.2500						JJ	355.2625	8.8	8.8	8.8	9.2	0.4		
A-2	109.2750						KK	361.2625	8.5	8.7	8.8	9.0	0.5		
A-1	115.2750						LL	367.2625	8.8	8.8	8.8	9.3	0.5		
A	121.2625	9.7	9.6	9.5	9.7	0.2	MM	373.2625	8.4	8.5	8.8	9.0	0.6		
B	127.2625	8.9	10.2	9.7	10.0	1.3	NN	379.2625	8.5	9.0	9.3	9.3	0.8		
C	133.2625	8.8	8.6	8.1	8.6	0.7	OO	385.2625	8.3	8.8	8.9	9.2	0.9		
D	139.2500	7.0	7.2	6.6	6.8	0.6	PP	391.2625	8.4	8.7	8.7	9.0	0.6		
E	145.2500	7.6	8.1	7.9	8.5	0.9	QQ	397.2625	8.0	8.2	8.5	8.5	0.5		
F	151.2500	8.4	8.6	8.4	8.8	0.4	RR	403.2500	8.8	8.7	8.6	8.7	0.2		
G	157.2500	8.1	8.1	8.1	8.5	0.4	SS	409.2500	8.8	8.4	8.2	8.5	0.6		
H	163.2500	8.0	8.0	7.3	8.1	0.8	TT	415.2500	11.4	11.1	10.6	9.8	1.6		
I	169.2500	7.6	7.7	7.5	7.8	0.3	UU	421.2500	11.3	10.9	11.6	11.2	0.7		
7	175.2500	7.8	7.9	7.9	8.2	0.4	VV	427.2500	11.5	11.5	11.6	11.2	0.4		
8	181.2500	7.8	7.8	7.8	8.1	0.3	WW	433.2500	12.1	11.9	11.9	11.9	0.2		
9	187.2500	7.7	7.6	7.5	7.9	0.4	XX	439.2500	10.3	11.6	11.7	11.1	1.4		
10	193.2500	7.3	7.6	7.4	7.8	0.5	YY	445.2500	13.1	13.0	12.9	12.7	0.4		
11	199.2500	7.7	7.9	8.1	8.5	0.8	ZZ	451.2500	12.4	12.1	12.0	12.0	0.4		
12	205.2500	9.5	9.6	8.9	9.5	0.7	63	457.2500	11.8	11.4	12.2	12.4	1.0		
13	211.2500	7.8	7.9	7.9	8.5	0.7	64	463.2500	11.4	10.4	13.0	12.0	2.6		
J	217.2500	7.7	7.8	7.5	8.1	0.6	65	469.2500	11.0	11.6	12.5	11.0	1.5		
K	223.2500	8.0	8.4	8.2	8.6	0.6	66	475.2500	10.4	12.2	13.3	12.1	2.9		
L	229.2625	8.0	8.2	8.0	8.4	0.4	67	481.2500	11.4	10.9	12.9	12.9	2.0		
M	235.2625	7.6	7.8	7.9	8.3	0.7	68	487.2500	11.9	11.9	12.5	12.2	0.6		
N	241.2625	7.1	7.1	7.1	7.5	0.4	69	493.2500	12.2	12.4	13.0	13.0	0.8		
O	247.2625	8.8	9.1	8.8	9.0	0.3	70	499.2500	12.4	12.7	12.9	13.0	0.6		
P	253.2625	9.2	9.2	9.1	9.6	0.5	71	505.2500	12.7	13.5	12.2	13.6	1.6		
Q	259.2625	8.9	9.0	9.3	9.2	0.4	72	511.2500	14.2	13.8	14.3	13.7	0.6		
R	265.2625	9.2	9.0	9.2	9.5	0.5	73	517.2500	13.7	14.2	13.6	13.9	0.6		
S	271.2625	8.4	8.6	8.5	8.9	0.5	74	523.2500	14.3	13.9	13.0	13.7	1.3		
T	277.2625	9.0	9.6	9.4	9.3	0.6	75	529.2500	15.1	12.9	13.4	14.5	2.2		
U	283.2625	9.3	9.7	9.0	9.7	0.7	76	535.2500	13.1	12.9	12.7	13.5	0.8		
V	289.2625	9.2	9.5	9.4	9.6	0.4	77	541.2500	10.5	12.9	10.6	11.7	2.4		
W	295.2625	9.4	9.3	9.2	9.7	0.5	78	547.2500	11.9	12.9	12.1	14.2	2.3		

Max NonAdjacent Channel Level Diff.	8.1
Max Adjacent Channel Level Diff.	2.8

Max Variance from last proof-of-performance test	3.5
Date of last proof-of-performance test	8/97

Note: Make measurements through a 100 ft. test drop cable without a converter.

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 15

Location: E. Lake rd.

Community: Oswego

Pole Number: NM#145

D.T. Value: 20-4

Map Number: 272-5810

OR Number: 231

Trunk Cascade: 3 LE Cascade: 2

Visual Carrier Level

Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: E.Lake Rd. - Oswego

Date: 18-Feb-98

Time: 08:01 PM

Chan	Freq (MHz)	Visual Level (dbmV)	Aural Level (dbmV)	Sora (S)	Diff (DbmV)	Chan	Freq (MHz)	Visual Level (dbmV)	Aural Level (dbmV)	Sora (S)	Diff (DbmV)
2	55.2500	16.4	2.5		13.9	AA	301.2625	14.4	0.1		14.3
3	61.2500	16.9	2.4		14.5	BB	307.2625	14.1	0.6		13.5
4	67.2500	17.5	2.7		14.8	CC	313.2625	13.9	0.0		13.9
5	77.2500	17.1	2.1		15.0	DD	319.2625	14.1	0.6		13.5
6	83.2500	15.8	1.7		14.1	EE	325.2625	14.3	0.0		14.3
						FF	331.2750	14.0	0.0		14.0
						GG	337.2625	14.3	0.5		13.8
						HH	343.2625	14.8	0.3		14.5
A-5	91.2500					II	349.2625	14.2	0.3		13.9
A-4	97.2500					JJ	355.2625	14.1	0.4		13.7
A-3	103.2500					KK	361.2625	14.0	0.0		14.0
A-2	109.2750					LL	367.2625	14.2	0.0		14.2
A-1	115.2750					MM	373.2625	13.5	-0.5		14.0
A	121.2625	15.1	0.8		14.3	NN	379.2625	13.3	-0.3		13.6
B	127.2625	14.7	0.8		13.9	OO	385.2625	12.9	0.0		12.9
C	133.2625	14.5	-0.5	S	15.0	PP	391.2625	13.6	-0.9		14.5
D	139.2500	14.1	-1.1	S	15.2	QQ	397.2625	13.0	-0.7		13.7
E	145.2500	14.6	2.0		12.6	RR	403.2500	12.7	-0.7		13.4
F	151.2500	14.8	-0.4	S	15.2	SS	409.2500	12.4	-1.3		13.7
G	157.2500	14.8	0.7		14.1	TT	415.2500	12.4	-1.1	S	13.5
H	163.2500	14.7	0.5		14.2	UU	421.2500	12.2	-0.9	S	13.1
I	169.2500	14.8	0.5		14.3	VV	427.2500	11.9	-2.2		14.1
7	175.2500	14.5	0.1		14.4	VV	433.2500	11.6	-1.2	S	12.8
8	181.2500	14.9	1.4		13.5	XX	439.2500	11.8	-1.4	S	13.2
9	187.2500	15.1	1.4		13.7	YY	445.2500	11.6	-1.5	S	13.1
10	193.2500	14.8	0.5		14.3	ZZ	451.2500	11.7	-1.5	S	13.2
11	199.2500	14.8	0.8		14.0	63	457.2500	11.5	-0.6	S	12.1
12	205.2500	14.8	0.9		13.9	64	463.2500	11.8	-0.8	S	12.6
13	211.2500	14.3	0.0		14.3	65	469.2500	12.5	-0.9	S	13.4
J	217.2500	14.6	0.0		14.6	66	475.2500	13.4	-0.5	S	13.9
K	223.2500	14.8	0.5		14.3	67	481.2500	13.7	-1.1	S	14.8
L	229.2625	14.3	0.0		14.3	68	487.2500	13.3	-0.8	S	14.1
M	235.2625	13.8	0.2		13.6	69	493.2500	12.7	-0.9	S	13.6
N	241.2625	12.6	-0.5		13.1	70	499.2500	13.4	-1.3	S	14.7
O	247.2625	14.8	0.7		14.1	71	505.2500	13.1	-1.7	S	14.8
P	253.2625	15.1	1.5		13.6	72	511.2500	12.9	-0.8	S	13.7
Q	259.2625	14.8	1.1		13.7	73	517.2500	12.3	-1.6	S	13.9
R	265.2625	14.4	0.3		14.1	74	523.2500	12.2	-0.9	S	13.1
S	271.2625	14.0	0.4		13.6	75	529.2500	12.3	-0.8	S	13.1
T	277.2625	14.8	0.9		13.9	76	535.2500	13.3	-0.7	S	14.0
U	283.2625	15.4	1.2		14.2	77	541.2500	13.7	0.1		13.6
V	289.2625	14.8	1.1		13.7	78	547.2500	13.2	-1.5	S	14.7
W	295.2625	15.3	0.7		14.6						

PEAK TO VALLEY: 6

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98
Test Performed By: Patrick Thrall
Location: E. Lake Rd.

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response	Carrier To Noise Ratio	Distortions (-dBc)			Hum
2	0.9	49.6	66.4	67.9	74.3	0.1
A	0.8	49	65.4	65.5	74.1	
H	0.5	49.6	64	68.1	74.4	
8	1.3	49	62.6	68.7	73.9	
T	0.7	50.1	62.7	63	74.3	
CC	0.8	48.6	63	61.3	73.2	
LL	0.7	47.9	61.4	64.2	72.9	
RR	0.3	47.8	60	64.4	74.4	
CCC	0.5	49	63.7	67.6	73	

Time Warner Cable Syracuse Division

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

System Name: Time Warner-Syracuse

Date: February 1998

Test Performed By Patrick Thrall

Location: E. Lake dr.

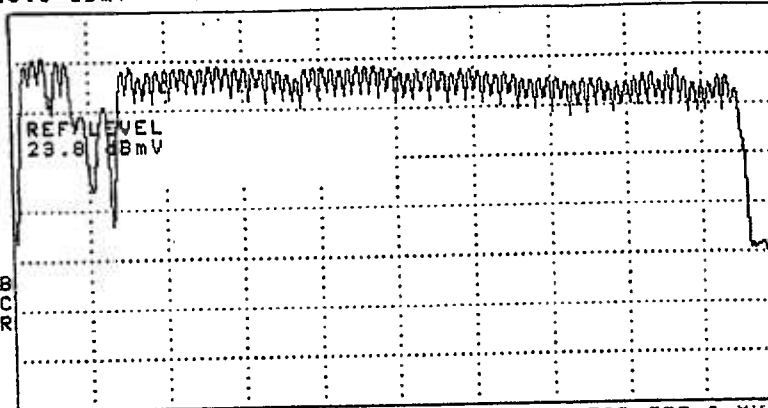
(SEE THE ATTACHED SWEEP TRACES)

13:24:13 FEB 17, 1998

REF 23.8 dBmV #AT 0 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR



START 45.0 MHz RES BW 3.0 MHz VBW 1 MHz STOP 575.0 MHz SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

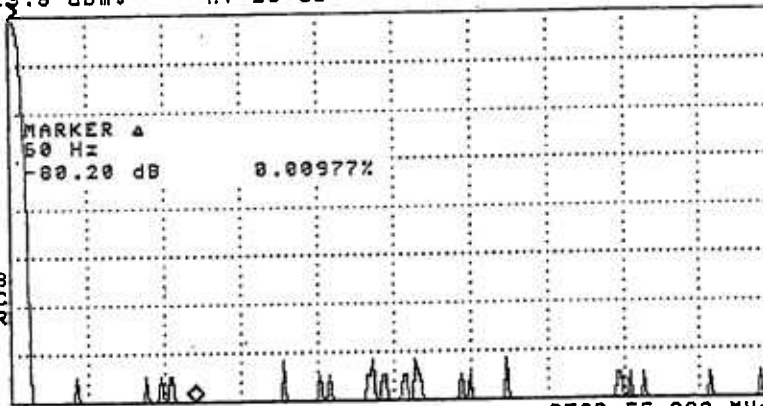
More
1 of 3

13:26:20 FEB 17, 1998

CHANNEL 1 (STD)
REF 13.8 dBmV AT 10 dB

PEAK
LOG
10
dB/

VA SB
SC FC
CORR



START 55.238 MHz #RES BW 1.0 MHz #VBW 1 kHz STOP 55.238 MHz #SWP 800 msec

MKR A 50 Hz
-80.20 dB

CHNL

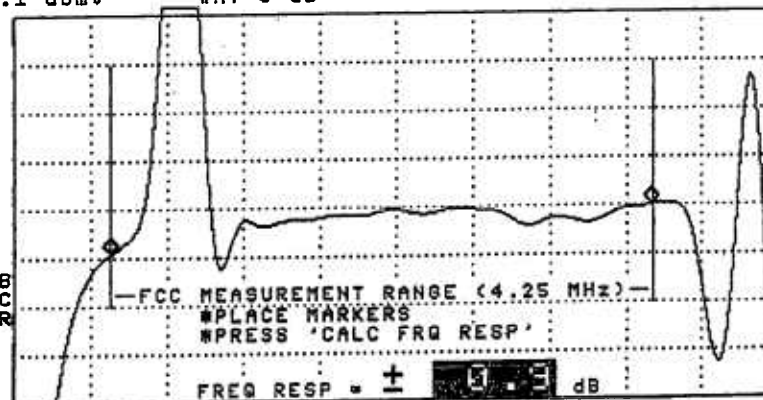
MAIN
MENU

13:29:17 FEB 17, 1998

CHANNEL 1 (STD)
REF .1 dBmV #AT 0 dB

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



START 54.000 MHz #RES BW 100 kHz #VBW 3 MHz STOP 60.000 MHz SWP 20.0 msec

MKR 58.995 MHz
-7.91 dBmV

MARKER 2

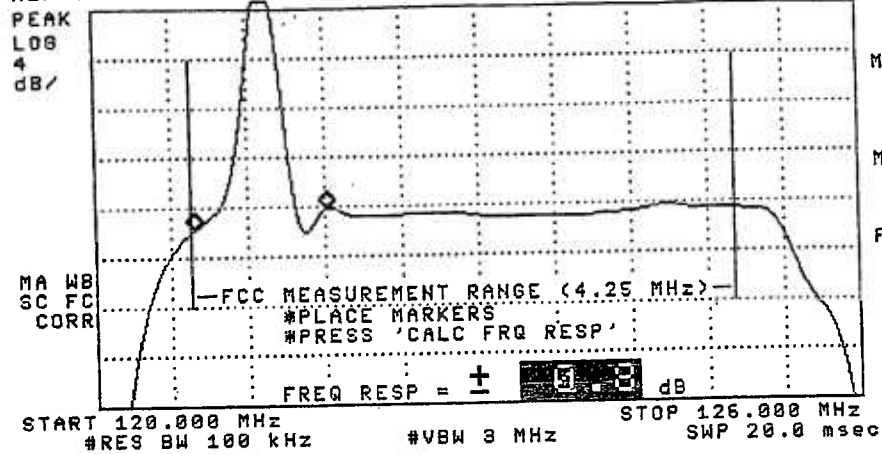
RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

13:32:43 FEB 17, 1998
 CHANNEL 0124 (STD)
 REF 6.7 dBmV #AT 0 dB

MKR 121.815 MHz
 -9.51 dBmV MARKER 1



MARKER 2

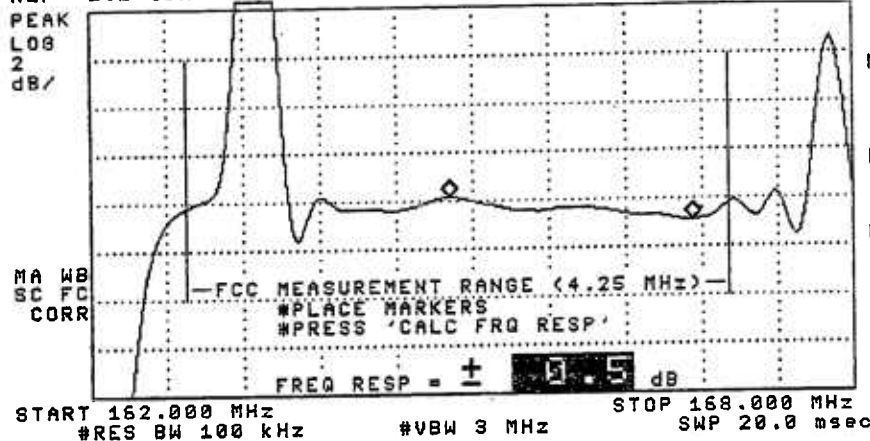
RESTART
 MAX HOLD

CALC
 FRQ RESP

MAIN
 MENU

13:35:28 FEB 17, 1998
 CHANNEL 0241 (STD)
 REF -1.2 dBmV #AT 0 dB

MKR 166.725 MHz
 -10.08 dBmV MARKER 1



MARKER 2

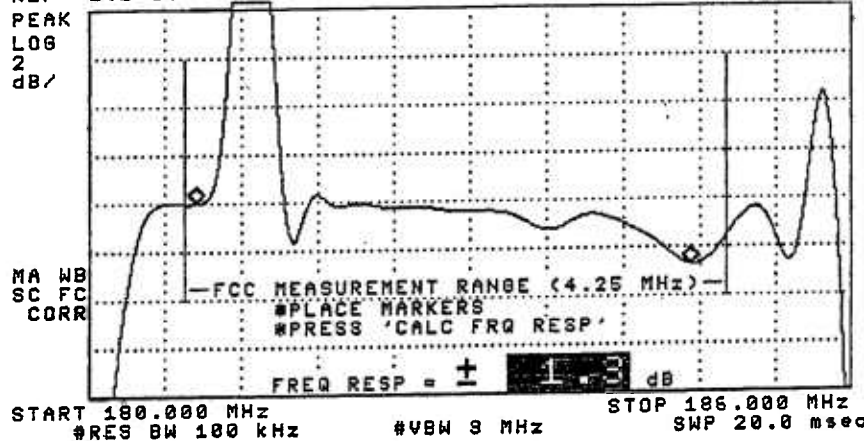
RESTART
 MAX HOLD

CALC
 FRQ RESP

MAIN
 MENU

13:37:31 FEB 17, 1998
 CHANNEL 0242 (STD)
 REF -1.1 dBmV #AT 0 dB

MKR 184.725 MHz
 -11.81 dBmV MARKER 1



MARKER 2

RESTART
 MAX HOLD

CALC
 FRQ RESP

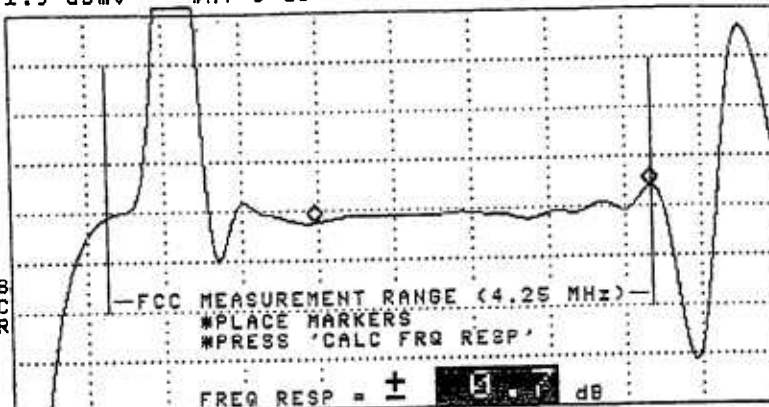
MAIN
 MENU

13:39:32 FEB 17, 1998
CHANNEL 1 (STD)
REF -1.9 dBmV #AT 0 dB

MKR 280.995 MHz
-9.02 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

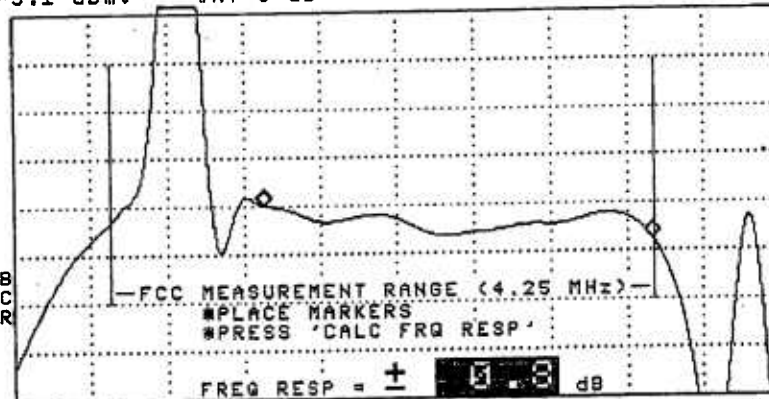
START 276.000 MHz STOP 282.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:41:47 FEB 17, 1998
CHANNEL 1 (STD)
REF -3.1 dBmV #AT 0 dB

MKR 316.995 MHz
-12.56 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

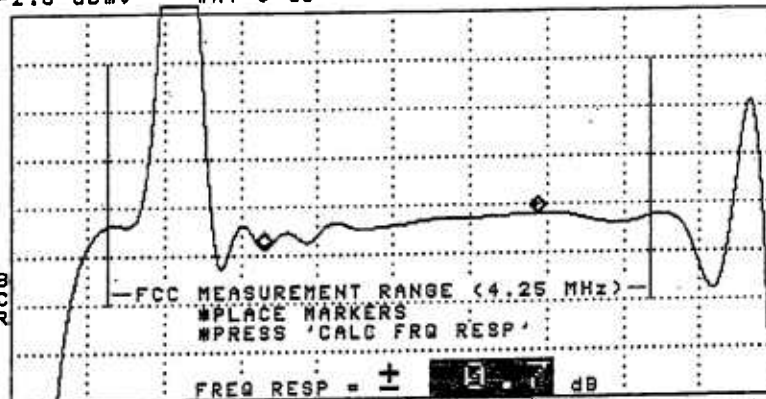
START 312.000 MHz STOP 318.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:43:52 FEB 17, 1998
CHANNEL 1 (STD)
REF -2.6 dBmV #AT 0 dB

MKR 370.125 MHz
-11.00 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

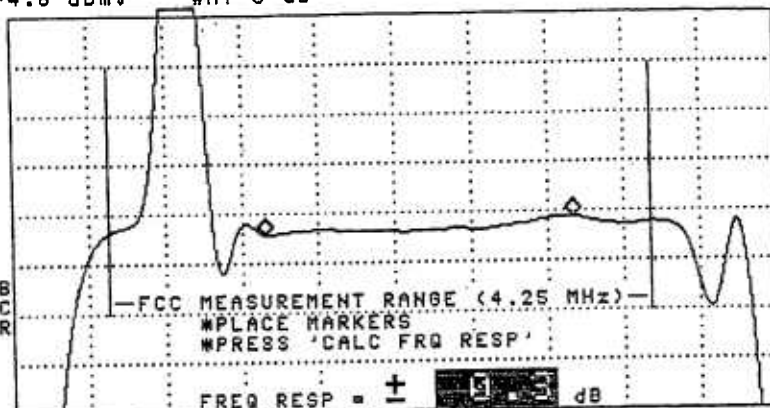
START 366.000 MHz STOP 372.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:46:47 FEB 17, 1998
CHANNEL 35 (STD)
REF -4.6 dBmV #AT 0 dB

MKR 406.395 MHz
-12.81 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

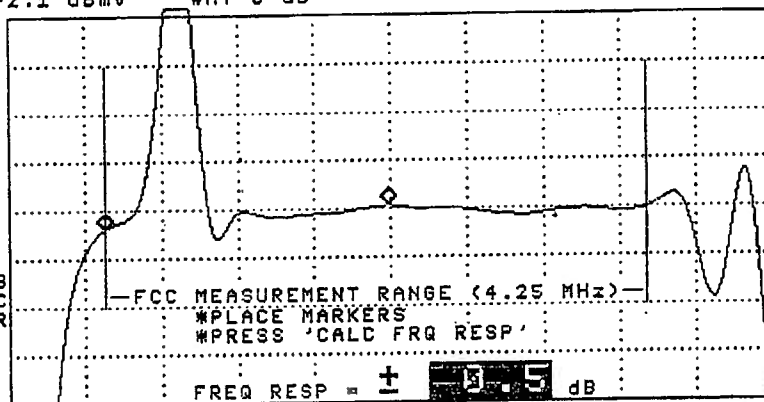
START 402.000 MHz STOP 408.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

13:48:43 FEB 17, 1998
CHANNEL 35 (STD)
REF -2.1 dBmV #AT 0 dB

MKR 470.985 MHz
-10.01 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: TIME WARNER CABLE OSWEGO (7P8)

Test Point Location: EAST LAKE ROAD

Date: FEB 18, 1998

Performed by: RICKY LAPAGE

Meter Serial Number: 9401158

Chan	Freq. (MHz)	Temp °F				Max	Chan	Freq. (MHz)	Temp °F				Max
		33	35	32	27				33	35	32	27	
		Time							Time				
		08:07	14:03	20:01	02:04				08:07	14:03	20:01	02:04	
		Visual Level (dbmV)						Visual Level (dbmV)					
2	55.2500	16.2	16.3	16.4	16.3	0.2	AA	301.2625	14.4	14.4	14.4	14.1	0.3
3	61.2500	16.8	16.9	16.9	16.8	0.1	BB	307.2625	14.4	14.3	14.1	14.3	0.3
4	67.2500	17.4	17.5	17.5	17.2	0.3	CC	313.2625	14.1	14.0	13.9	14.0	0.2
5	77.2500	17.2	17.0	17.1	16.7	0.5	DD	319.2625	13.9	14.2	14.1	13.8	0.4
6	83.2500	15.7	15.9	15.8	15.7	0.2	EE	325.2625	14.4	14.4	14.3	14.2	0.2
							FF	331.2750	14.0	14.0	14.0	14.0	0.0
							GG	337.2625	14.1	14.4	14.3	14.3	0.3
							HH	343.2625	14.7	14.9	14.8	14.7	0.2
A-5	91.2500						II	349.2625	14.0	14.2	14.2	14.0	0.2
A-4	97.2500						JJ	355.2625	14.2	14.2	14.1	14.1	0.1
A-3	103.2500						KK	361.2625	14.1	14.2	14.0	14.0	0.2
A-2	109.2750						LL	367.2625	14.3	14.1	14.2	14.1	0.2
A-1	115.2750						MM	373.2625	13.7	13.5	13.5	13.7	0.2
A	121.2625	15.2	15.1	15.1	15.1	0.1	NN	379.2625	13.3	13.2	13.3	13.2	0.1
B	127.2625	14.7	14.7	14.7	14.4	0.3	OO	385.2625	13.2	13.2	12.9	13.0	0.3
C	133.2625	14.5	14.5	14.5	14.4	0.1	PP	391.2625	13.6	13.7	13.6	13.6	0.1
D	139.2500	14.2	14.1	14.1	14.0	0.2	QQ	397.2625	13.0	12.8	13.0	13.0	0.2
E	145.2500	14.7	14.7	14.6	14.4	0.3	RR	403.2500	12.9	12.9	12.7	12.8	0.2
F	151.2500	14.9	14.9	14.8	14.8	0.1	SS	409.2500	12.1	12.4	12.4	12.4	0.3
G	157.2500	14.6	14.7	14.8	14.6	0.2	TT	415.2500	12.3	12.3	12.4	12.2	0.2
H	163.2500	14.9	15.0	14.7	14.4	0.6	UU	421.2500	12.1	12.3	12.2	12.3	0.2
I	169.2500	14.7	14.3	14.8	14.6	0.5	VV	427.2500	11.7	11.8	11.9	11.9	0.2
7	175.2500	14.5	14.5	14.5	14.2	0.3	WW	433.2500	11.7	11.8	11.8	11.7	0.2
8	181.2500	15.1	14.7	14.9	14.9	0.4	XX	439.2500	11.9	11.7	11.8	11.7	0.2
9	187.2500	15.1	15.3	15.1	15.2	0.2	YY	445.2500	11.6	11.6	11.6	11.7	0.1
10	193.2500	14.9	14.5	14.8	14.9	0.4	ZZ	451.2500	11.8	11.8	11.7	11.7	0.1
11	199.2500	15.0	14.5	14.8	14.9	0.5	63	457.2500	11.6	11.6	11.5	11.6	0.1
12	205.2500	14.8	14.8	14.8	15.0	0.2	64	463.2500	11.8	11.9	11.8	11.8	0.1
13	211.2500	14.5	14.6	14.3	14.3	0.3	65	469.2500	12.5	12.6	12.5	12.4	0.2
J	217.2500	14.7	14.6	14.6	14.4	0.3	66	475.2500	13.4	13.5	13.4	13.4	0.1
K	223.2500	14.8	14.6	14.8	14.8	0.2	67	481.2500	13.5	13.7	13.7	13.5	0.2
L	229.2625	14.3	14.3	14.3	14.3	0.0	68	487.2500	13.3	13.4	13.3	13.2	0.2
M	235.2625	13.8	13.6	13.8	13.7	0.2	69	493.2500	12.7	12.7	12.7	12.7	0.0
N	241.2625	12.9	12.9	12.6	12.9	0.3	70	499.2500	13.3	13.3	13.4	13.3	0.1
O	247.2625	14.8	14.3	14.8	14.3	0.5	71	505.2500	13.0	13.2	13.1	13.0	0.2
P	253.2625	15.1	15.0	15.1	15.0	0.1	72	511.2500	12.8	12.8	12.9	12.8	0.1
Q	259.2625	14.8	14.8	14.8	14.9	0.1	73	517.2500	12.2	12.4	12.3	12.3	0.2
R	265.2625	14.4	14.3	14.4	14.2	0.2	74	523.2500	12.1	12.1	12.2	12.0	0.2
S	271.2625	14.1	14.1	14.0	14.0	0.1	75	529.2500	12.0	12.2	12.3	12.1	0.3
T	277.2625	14.7	14.7	14.8	14.6	0.2	76	535.2500	13.1	13.2	13.3	13.2	0.2
U	283.2625	15.3	15.4	15.4	15.2	0.2	77	541.2500	13.7	13.7	13.7	13.8	0.1
V	289.2625	14.8	14.8	14.8	14.8	0.0	78	547.2500	12.8	13.1	13.2	13.1	0.4
W	295.2625	15.1	15.3	15.3	15.1	0.2							

Max NonAdjacent Channel Level Diff.	6
Max Adjacent Channel Level Diff.	2.2

Max Variance from last proof-of-performance test	5.8
Date of last proof-of-performance test	JULY 1, 1997

Note: Make measurements through a 100 ft. test drop cable without a converter.

TIME WARNER CABLE SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: Time Warner-Syracuse

System Test Point # 16

Location: Hall rd.

Community: Oswego

Pole Number: NM#18

D.T. Value: 23-2

Map Number: 215-5758

OR Number: 253

Trunk Cascade: 4 LE Cascade:

Visual Carrier Level Visual / Aural Level Difference

(at Test Point, at The End of a 100' Drop)

System Name: Time Warner - Syracuse

Test Location: Hall Rd. - Oswego

Date: 18-Feb-98

Time: 08:32 PM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra 'S'	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra 'S'	Diff (Dbmv)
2	55.2500	13.4	1.2		12.2	AA	301.2625	11.2	-2.8		14.0
3	61.2500	14.7	0.3		14.4	BB	307.2625	11.2	-2.0		13.2
4	67.2500	14.4	1.1		13.3	CC	313.2625	10.8	-3.4		14.2
5	77.2500	14.5	-0.1		14.6	DD	319.2625	10.8	-2.5		13.3
6	83.2500	12.9	-0.4		13.3	EE	325.2625	11.8	-2.9		14.7
						FF	331.2750	11.1	-3.2		14.3
						GG	337.2625	11.6	-2.2		13.8
						HH	343.2625	12.0	-2.3		14.3
A-5	91.2500					II	349.2625	11.6	-2.3		13.9
A-4	97.2500					JJ	355.2625	11.6	-2.2		13.8
A-3	103.2500					KK	361.2625	12.0	-2.3		14.3
A-2	109.2750					LL	367.2625	12.1	-2.8		14.9
A-1	115.2750					MM	373.2625	11.9	-2.9		14.8
A	121.2625	11.6	-2.1		13.7	NN	379.2625	11.7	-2.8		14.5
B	127.2625	10.3	-1.6		11.9	OO	385.2625	11.4	-2.2		13.6
C	133.2625	10.5	-3.5	S	14.0	PP	391.2625	11.4	-2.7		14.1
D	139.2500	10.3	-3.4	S	13.7	QQ	397.2625	10.8	-2.7		13.5
E	145.2500	11.1	-2.6		13.7	RR	403.2500	10.8	-2.9		13.7
F	151.2500	11.6	-2.5	S	14.1	SS	409.2500	10.9	-3.0		13.9
G	157.2500	11.4	-2.2		13.6	TT	415.2500	11.2	-2.5	S	13.7
H	163.2500	10.5	-2.4		12.9	UU	421.2500	10.3	-2.3	S	12.6
I	169.2500	11.0	-1.6		12.6	VV	427.2500	10.3	-4.3		14.6
7	175.2500	10.6	-2.1		12.7	WW	433.2500	9.9	-4.4	S	14.3
8	181.2500	11.3	-1.2		12.5	XX	439.2500	10.7	-4.1	S	14.8
9	187.2500	11.7	-1.3		13.0	YY	445.2500	10.2	-3.9	S	14.1
10	193.2500	11.8	-2.3		14.1	ZZ	451.2500	10.4	-3.5	S	13.9
11	199.2500	11.7	-1.7		13.4	63	457.2500	10.1	-3.5	S	13.6
12	205.2500	12.5	-0.7		13.2	64	463.2500	10.3	-3.4	S	13.7
13	211.2500	11.8	-1.9		13.7	65	469.2500	11.1	-3.4	S	14.5
J	217.2500	11.8	-1.2		13.0	66	475.2500	11.4	-3.1	S	14.5
K	223.2500	12.3	-0.5		12.8	67	481.2500	11.5	-3.2	S	14.7
L	229.2625	11.8	-1.8		13.6	68	487.2500	11.5	-3.1	S	14.6
M	235.2625	11.9	-1.7		13.6	69	493.2500	10.8	-3.3	S	14.1
N	241.2625	10.8	-2.6		13.4	70	499.2500	11.0	-2.3	S	13.3
O	247.2625	12.0	-1.6		13.6	71	505.2500	11.1	-2.5	S	13.6
P	253.2625	12.5	-0.9		13.4	72	511.2500	10.7	-2.5	S	13.2
Q	259.2625	11.9	-1.2		13.1	73	517.2500	10.1	-3.5	S	13.6
R	265.2625	11.3	-2.2		13.5	74	523.2500	9.7	-4.0	S	13.7
S	271.2625	11.3	-2.0		13.3	75	529.2500	8.7	-4.5	S	13.2
T	277.2625	11.6	-1.8		13.4	76	535.2500	9.3	-4.2	S	13.5
U	283.2625	12.0	-2.0		14.0	77	541.2500	9.5	-3.5		13.0
V	289.2625	11.6	-2.1		13.7	78	547.2500	8.9	-4.5	S	13.4
W	295.2625	11.7	-2.8		14.5						

PEAK TO VALLEY: 6

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner-Syracuse Date: Feb. 98

Test Performed By: Patrick Thrall

Location: Hall Rd.

Note: Make measurements through a 100 ft. test drop cable without converter.

Channel Number	In Channel Response	Carrier To Noise Ratio	Distortions			Harm
	(-1% dB)	(dB)	CTB	CSO	XMOD	
						(%)
2	1.2	49.3	65.3	69.2	74.2	0.1
A	1.1	49	63.7	66.3	74.4	
H	1	49.6	61.8	69.1	74.1	
8	1.9	49	61.8	69.2	74.2	
T	0.7	50.2	62.1	68.8	74.3	
/ CC	1.1	49	62.4	65.9	73.7	
LL	0.9	48.5	59.6	67.7	73.1	
RR	0.9	48	59.9	65.4	74.1	
CCC	0.6	49	63.9	68.2	74.2	

**Time Warner Cable
Syracuse Division**

IN - CHANNEL FREQUENCY RESPONSE TEST

(76.605 (a) 6)

System Name: Time Warner-Syracuse Date: February 1998

Test Performed By Patrick Thrall Location: Hall rd.

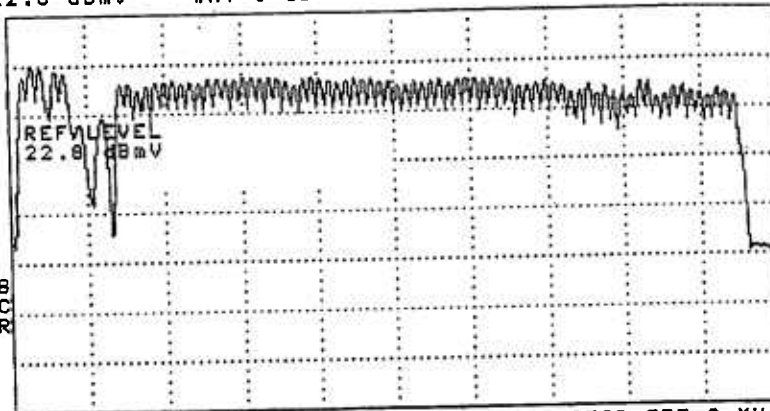
(SEE THE ATTACHED SWEEP TRACES)

15:31:33 FEB 17, 1998

REF 22.8 dBmV #AT 0 dB

PEAK
LOG
10
dB/

MA SB
SC FC
CORR



START 45.0 MHz RES BW 3.0 MHz VBW 1 MHz STOP 575.0 MHz SWP 20.0 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

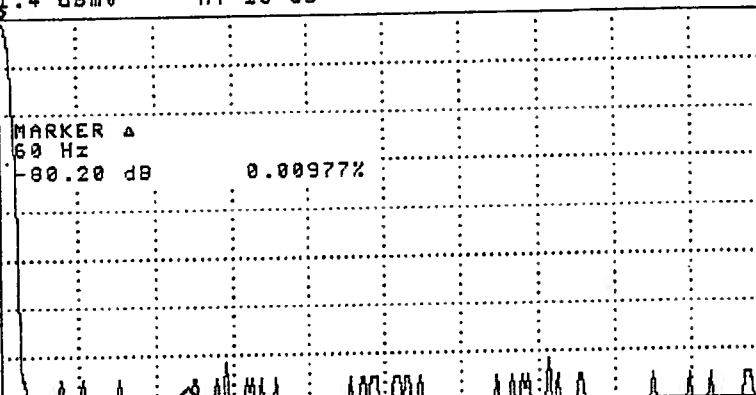
More
1 of 3

15:33:34 FEB 17, 1998

CHANNEL 2 (STD)
REF 14.4 dBmV AT 10 dB

PEAK
LOG
10
dB/

VA SB
SC FC
CORR



START 55.248 MHz #RES BW 1.0 MHz #VBW 1 kHz STOP 56.248 MHz #SWP 800 msec

MKR Δ 60 Hz
-80.20 dB

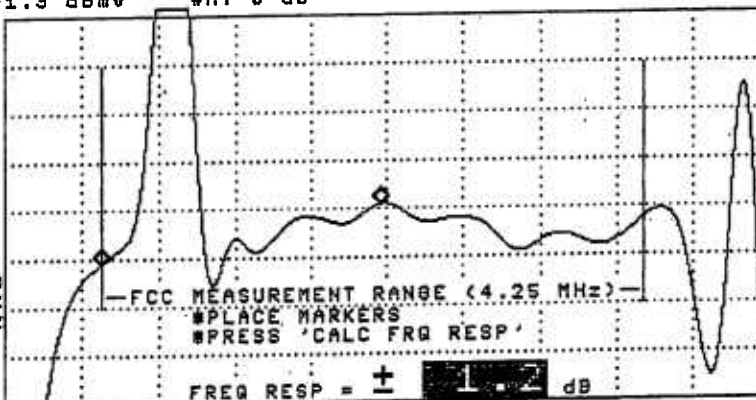
CHNL

MAIN
MENU

15:36:53 FEB 17, 1998
CHANNEL 2 (STD)
REF -1.3 dBmV #AT 0 dB

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



START 54.000 MHz #RES BW 100 kHz #VBW 3 MHz STOP 60.000 MHz SWP 20.0 msec

MKR 56.955 MHz
-9.13 dBmV

CHNL

MARKER 2

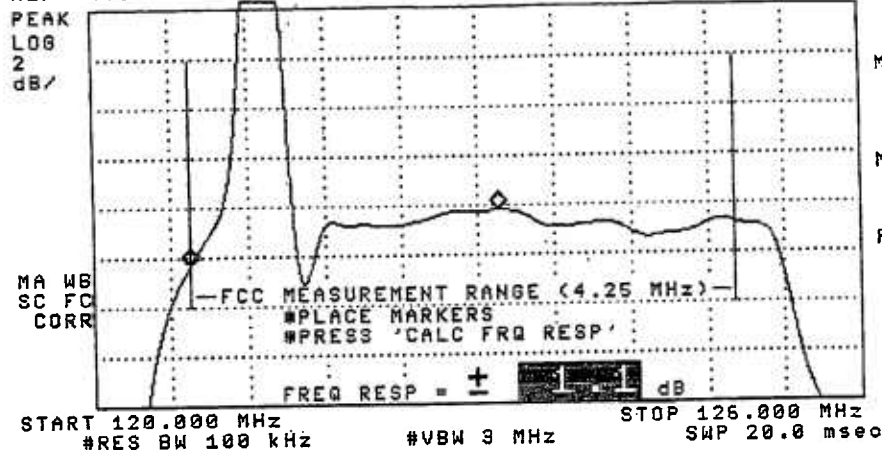
RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

15:38:33 FEB 17, 1998
 CHANNEL 24 (STD)
 REF -4.3 dBmV #AT 0 dB

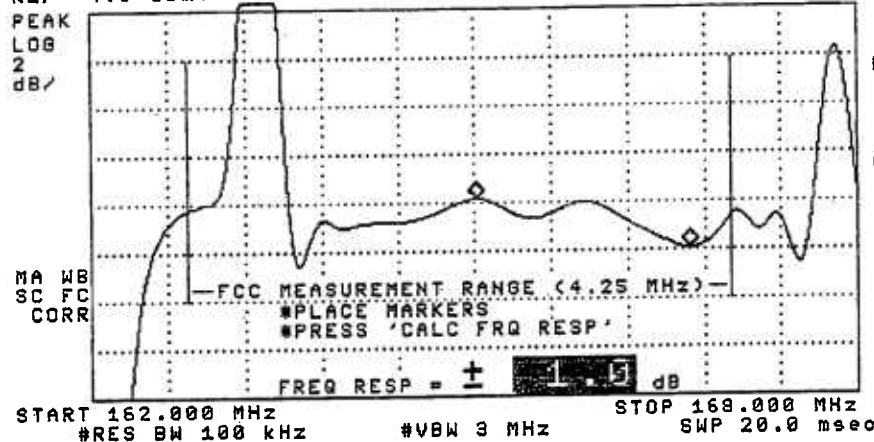
MKR 120.750 MHz
 -14.63 dBmV MARKER 1



MARKER 2
 RESTART
 MAX HOLD
 CALC
 FRQ RESP
 MAIN MENU

15:39:39 FEB 17, 1998
 CHANNEL 24 (STD)
 REF -4.0 dBmV #AT 0 dB

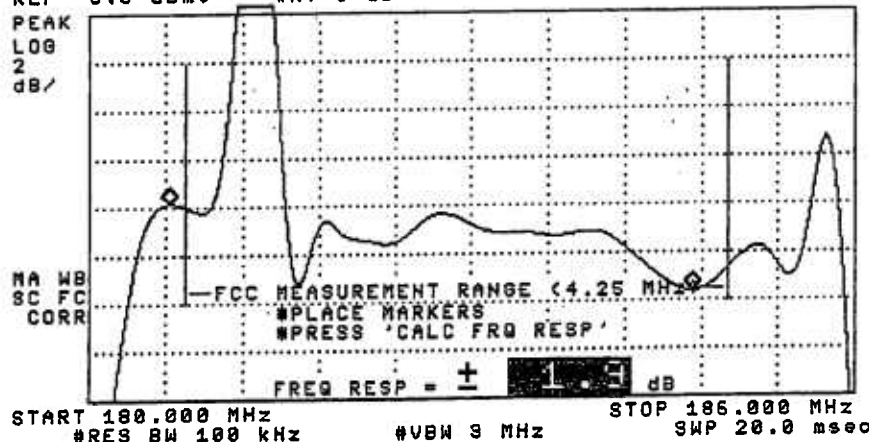
MKR 166.680 MHz
 -13.87 dBmV MARKER 1



MARKER 2
 RESTART
 MAX HOLD
 CALC
 FRQ RESP
 MAIN MENU

15:42:40 FEB 17, 1998
 CHANNEL 24 (STD)
 REF -3.3 dBmV #AT 0 dB

MKR 184.725 MHz
 -14.85 dBmV MARKER 1



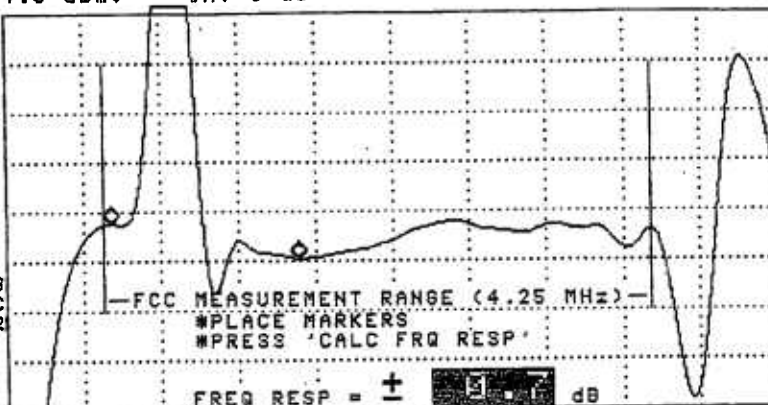
MARKER 2
 RESTART
 MAX HOLD
 CALC
 FRQ RESP
 MAIN MENU

15:43:40 FEB 17, 1998
CHANNEL 22 (STD)
REF -4.0 dBmV #AT 0 dB

MKR 278.265 MHz **CHNL**
-13.98 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 276.000 MHz STOP 282.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

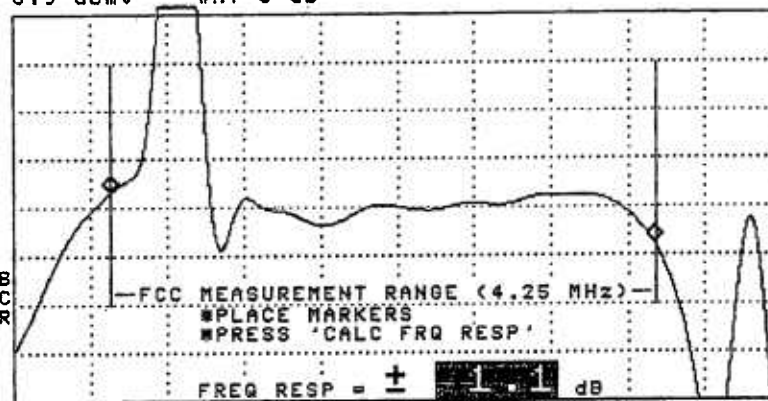
FREQ RESP = $\pm$ 5.1 dB

15:45:06 FEB 17, 1998
CHANNEL 22 (STD)
REF -6.9 dBmV #AT 0 dB

MKR 316.995 MHz **CHNL**
-16.48 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 312.000 MHz STOP 318.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

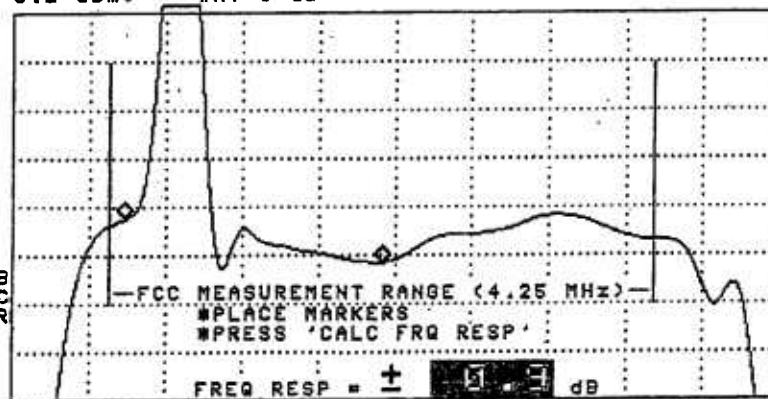
FREQ RESP = $\pm$ 1.1 dB

15:46:31 FEB 17, 1998
CHANNEL 22 (STD)
REF -5.1 dBmV #AT 0 dB

MKR 368.895 MHz **CHNL**
-15.44 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 366.000 MHz STOP 372.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

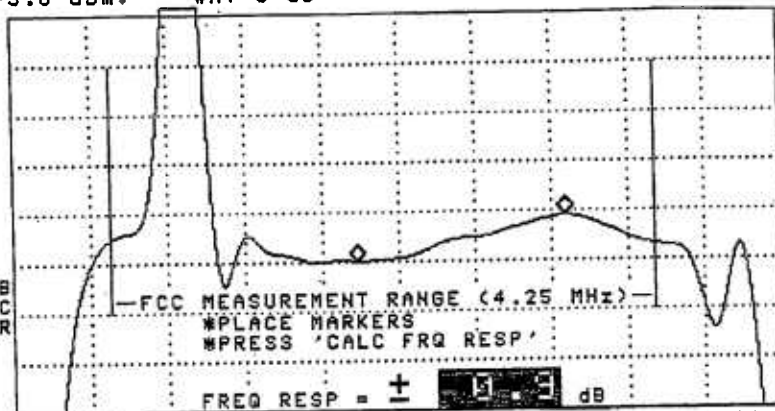
FREQ RESP = $\pm$ 0.9 dB

15:47:51 FEB 17, 1998
CHANNEL 54 (STD)
REF -5.8 dBmV #AT 0 dB

MKR 404.670 MHz
-15.77 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

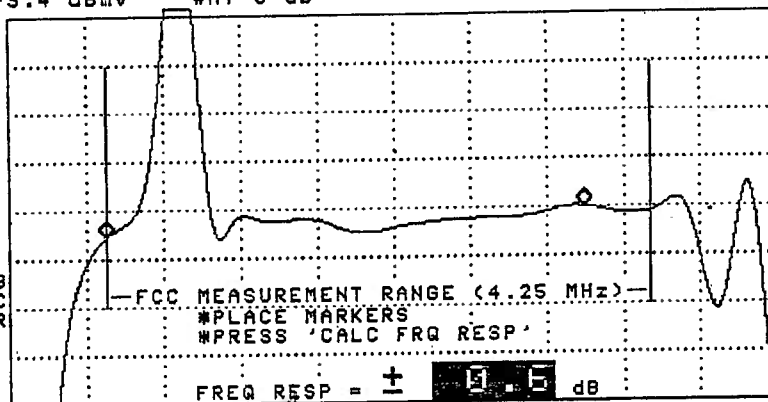
START 402.000 MHz STOP 409.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

15:49:09 FEB 17, 1998
CHANNEL 55 (STD)
REF -3.4 dBmV #AT 0 dB

MKR 468.750 MHz
-12.46 dBmV MARKER 1

PEAK
LOG
2
dB/

MA WB
SC FC
CORR



MARKER 2

RESTART
MAX HOLD

CALC
FRQ RESP

MAIN
MENU

START 468.000 MHz STOP 474.000 MHz
#RES BW 100 kHz #VBW 3 MHz SWP 20.0 msec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: TIME WARNER CABLE OSWEGO (7P8)

Test Point Location: HALL ROAD (WEST)

Date: FEB 18, 1998 Performed by: RICKY LAPAGE

Meter Serial Number: 9401158

Chan	Freq (MHz)	Temp °F				Max Variation	Chan	Freq (MHz)	Temp °F				Max Variation
		33	35	32	27				33	35	32	27	
		08:36	14:42	20:32	02:38				08:36	14:42	20:32	02:38	
		Visual Level (dbmV)							Visual Level (dbmV)				
2	55.2500	13.3	13.3	13.4	13.4	0.1	AA	301.2625	11.2	11.1	11.2	11.1	0.1
3	61.2500	15.0	14.8	14.7	14.8	0.3	BB	307.2625	11.2	11.1	11.2	11.1	0.1
4	67.2500	14.6	14.3	14.4	14.4	0.3	CC	313.2625	10.9	10.8	10.8	10.6	0.3
5	77.2500	14.7	14.5	14.5	14.5	0.2	DD	319.2625	11.1	11.0	10.8	10.9	0.3
6	83.2500	13.0	13.1	12.9	12.9	0.2	EE	325.2625	11.8	11.7	11.8	11.8	0.1
							FF	331.2750	11.2	11.1	11.1	11.1	0.1
							GG	337.2625	11.6	11.5	11.6	11.6	0.1
A-5	91.2500						HH	343.2625	12.0	11.9	12.0	11.9	0.1
A-4	97.2500						II	349.2625	11.3	11.5	11.6	11.3	0.3
A-3	103.2500						JJ	355.2625	11.5	11.3	11.6	11.5	0.3
A-2	109.2750						KK	361.2625	11.9	11.8	12.0	11.9	0.2
A-1	115.2750						LL	367.2625	12.2	12.1	12.1	11.9	0.3
A	121.2625	11.8	11.7	11.6	11.6	0.2	MM	373.2625	12.0	11.5	11.9	11.8	0.5
B	127.2625	10.5	10.3	10.3	10.1	0.4	NN	379.2625	11.9	11.3	11.7	11.4	0.6
C	133.2625	10.6	10.6	10.5	10.5	0.1	OO	385.2625	11.6	11.3	11.4	11.2	0.4
D	139.2500	10.3	10.1	10.3	10.2	0.2	PP	391.2625	11.6	11.5	11.4	11.5	0.2
E	145.2500	11.1	10.9	11.1	11.1	0.2	QQ	397.2625	11.1	11.0	10.8	10.8	0.3
F	151.2500	11.6	11.4	11.6	11.5	0.2	RR	403.2500	11.2	11.1	10.8	10.9	0.4
G	157.2500	11.4	11.1	11.4	11.5	0.4	SS	409.2500	10.9	10.8	10.9	10.7	0.2
H	163.2500	10.5	10.8	10.5	10.7	0.3	TT	415.2500	11.2	11.0	11.2	11.1	0.2
I	169.2500	11.0	10.8	11.0	11.1	0.3	UU	421.2500	10.9	10.8	10.3	10.9	0.6
7	175.2500	10.3	10.5	10.6	10.4	0.3	VV	427.2500	10.5	10.4	10.3	10.5	0.2
8	181.2500	11.0	11.4	11.3	11.0	0.4	WW	433.2500	9.9	9.8	9.9	9.9	0.1
9	187.2500	11.9	11.4	11.7	11.7	0.5	XX	439.2500	10.7	10.7	10.7	10.6	0.1
10	193.2500	11.9	11.7	11.8	11.4	0.5	YY	445.2500	9.9	10.0	10.2	9.9	0.3
11	199.2500	11.9	11.8	11.7	12.0	0.3	ZZ	451.2500	10.4	10.3	10.4	10.4	0.1
12	205.2500	12.4	12.5	12.5	12.4	0.1	63	457.2500	10.1	10.0	10.1	10.1	0.1
13	211.2500	12.1	12.0	11.8	12.1	0.3	64	463.2500	10.4	10.3	10.3	10.4	0.1
J	217.2500	12.0	11.9	11.8	11.8	0.2	65	469.2500	11.0	10.9	11.1	10.9	0.2
K	223.2500	12.4	12.3	12.3	12.2	0.2	66	475.2500	11.4	11.5	11.4	11.4	0.1
L	229.2625	11.9	11.9	11.8	11.8	0.1	67	481.2500	11.5	11.4	11.5	11.5	0.1
M	235.2625	12.0	12.0	11.9	12.0	0.1	68	487.2500	11.5	11.4	11.5	11.5	0.1
N	241.2625	10.9	10.6	10.8	10.8	0.3	69	493.2500	10.8	10.7	10.8	10.8	0.1
O	247.2625	12.0	12.0	12.0	12.0	0.0	70	499.2500	11.2	11.0	11.0	11.0	0.2
P	253.2625	12.5	12.6	12.5	12.4	0.2	71	505.2500	11.1	11.0	11.1	11.1	0.1
Q	259.2625	12.1	11.7	11.9	12.0	0.4	72	511.2500	10.8	10.7	10.7	10.8	0.1
R	265.2625	11.2	11.3	11.3	11.3	0.1	73	517.2500	10.2	10.1	10.1	10.1	0.1
S	271.2625	11.2	11.2	11.3	11.3	0.1	74	523.2500	9.7	9.6	9.7	9.7	0.1
T	277.2625	11.8	11.6	11.6	11.7	0.2	75	529.2500	8.8	8.6	8.7	8.7	0.2
U	283.2625	12.0	11.9	12.0	12.0	0.1	76	535.2500	9.2	9.1	9.3	9.2	0.2
V	289.2625	12.1	11.8	11.6	11.9	0.5	77	541.2500	9.7	9.1	9.5	9.6	0.6
W	295.2625	12.0	11.8	11.7	12.0	0.3	78	547.2500	8.9	8.7	8.9	9.0	0.3

Max NonAdjacent Channel Level Diff.	6.2
Max Adjacent Channel Level Diff.	1.7

Max Variance from last proof-of-performance test	7.8
Date of last proof-of-performance test	JUL 1, 1997

Note: Make measurements through a 100 ft. test drop cable without a converter.

TIME WARNER CABLE

SYRACUSE DIVISION

FCC TECHNICAL TESTING STANDARDS

Revised 1-6-98

VISUAL CARRIER FREQUENCY AND AURAL CARRIER CENTER FREQUENCY FCC76.612 (a) (b) and 76.605 (a) (3)

Specification:

FCC: Visual carrier frequency must meet part 76.612 (a) and (b) specifications.

The center frequency of the aural carrier must be 4.5Mhz, +/- 5Khz above the frequency of the of the visual carrier at the output of the modulating or processing equipment of the cable television system.

Syracuse Division: +/- 1Khz on aural, per FCC 76.612 air nav., +/-25Khz non air nav.

Note: New division spec of +/- 3.5Khz on visual air nav. as of 2-97

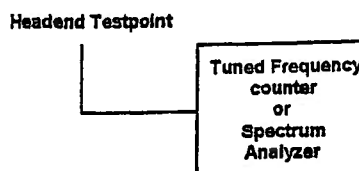
Picture Effect:

Various impairments

Recommended Procedures:

- All measurements to be made at the headend testpoint.
- Connect equipment as shown in block diagram below.
- Record the visual carrier frequency and intercarrier frequency of all system channels.
- You may use either a tuned frequency counter or as spectrum analyzer with a precision frequency option.
- Follow the manufacturers recommended methods for performing this measurement.
- Visual carrier frequencies in the frequency bands 108.0-137.0Mhz and 225.0-400.0Mhz need to be properly offset as per FCC rule 76.612.
- For non-air nav visual frequencies you should observe the +/- 25khz tolerance.
- Lastly, follow sound engineering practices as outlined in the NCTA Recommended Practices for Measurements on Cable Television Systems.

Block Diagram:



VISUAL, AURAL CARRIER LEVEL: 24 HR VARIATION

(LEVEL REQUIREMENTS)

FCC 76.605 (a) (4),(5),(6)

Specification:

FCC:

- The visual signal level of each channel must be measured and recorded, along with the date, time of measurement, and temperature, once every 6 hours(at intervals of not less than 5 hours or no more than 7 hours after the last measurement),which shall include the coldest and warmest months(January or February and in July or August) during a 24hr period.
- Visual carrier level shall be no less than 0dbmv at subscriber terminal and no less than +3dbmv at the end of a 100' drop.
- Visual signal level shall not vary by more than 8db within 24 hours or in any 6 month interval.
- Variance of adjacent (6Mhz) visual carriers shall not vary by more than 3db.
- Variance of non-adjacent channels shall not vary by more than 10db plus 1db for every 100Mhz above 300Mhz.
- The aural carrier amplitude shall be between 10db and 17db down from the visual carrier.

Recommended Procedures:

- Prior to the start of testing the Headend levels should be checked and adjusted to obtain no more than 1db max peak to valley with all non-scrambled aural carriers approximately 14db down from video.
- Store the Headend levels in the same meter that will be used for your system testpoint testing , note the time from the meter and the bin number that this was stored in. This will

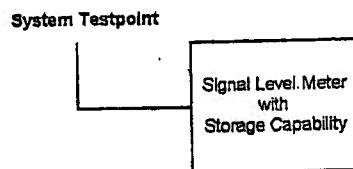
be entered into the Headend test forms at a later time.

-If you use more than one meter for your 24 hr test, then you should verify it's response against the response of the meter used for headend and testpoint testing.

-At each testpoint you should again store the recorded levels prior to the converter. The Syracuse Division has decided to test prior to the converter and insert an attachment stating the specifications of the converter.

-For the 24hr testing you should have a watch to note the time and should either use a thermometer to record the temperature or obtain this from the weather channel as the temperature reading from the meter will only indicate the temperature of the meter.

Block Diagram:



IN-CHANNEL FREQUENCY RESPONSE

FCC 76.605 (a) (7)

Specification:

FCC: +/- 2db from 750Khz to 5Mhz above the lower boundary frequency of the cable television channel.

Syracuse Division: Same as FCC

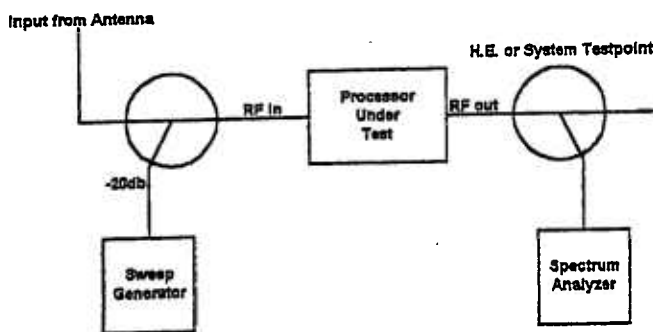
Picture Effect:

Variations can affect not only the relative amplitude of different frequency components of the visual signal, but relative visual/aural carrier level and chroma delay.

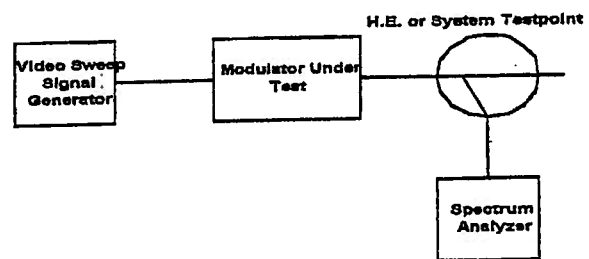
Recommended Procedures:

- Measurements should be made on all FCC designated test channels at each system testpoint. The frequency response of all channels should be verified periodically at the headend testpoint.
- Connect equipment as shown in the block diagrams below.
- This procedure varies based on the type of analyzer used and the type of channel, ie; modulator or processor. The block diagrams show the two most common setups for making this measurement.
- Record the +/-db number(peak to valley/2) on page 3 of 5 for each testpoint.
- Lastly, follow sound engineering practices as outlined in the NCTA Recommended Practices for Measurements on Cable Television Systems.

Block Diagrams:



RF Processor Sweep Setup



Video Sweep of Modulators

CARRIER TO NOISE RATIO

(C/N)

FCC 76.605 (a) (8)

Specification:

FCC: Minimum of 43db as of July 1, 1995

Syracuse Division: As per your system design specs or a minimum of 43db

Time Warner Corporate: 47db prior to converter

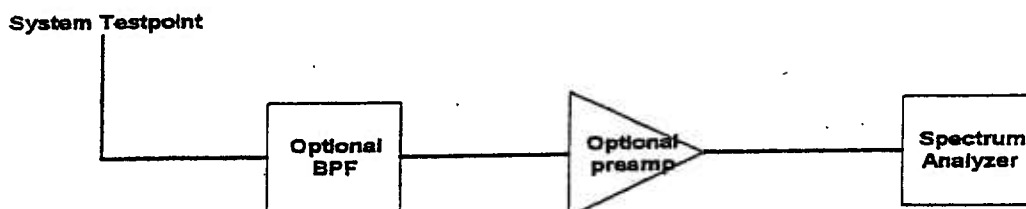
Picture Effect:

Noisy or snowy pictures. This can range from "imperceptible" at ratios above 53db to "annoying" at levels less than 40db. The ratios from 40 to 53db are subjective.

Recommended Procedures:

- Measurements should be made on all of the FCC designated test channels at each testpoint
- Connect equipment as shown in block diagram below.
- Since most systems now have analyzers or signal level meters that automate this measurement, you should follow the manufacturers recommended method for this measurement. This would include such items as the proper RF input level required for measurement, is the system noise floor higher than the analyzer noise floor?, etc.
- Lastly, follow sound engineering practices as outlined in the NCTA Recommended Practices for Measurements on Cable Television Systems.

Block Diagram:



COHERENT DISTURBANCES

(CTB,CSO,CROSS MOD,INTERMOD)

FCC 76.605 (a) (9)

Specification:

FCC: Ratio of visual signal level to coherent disturbances shall not be less than 51db

Syracuse Division: As per your system design specs with a minimum of 51db

Time Warner Corporate: CSO-55db, CTB-53db prior to converter

Picture Effect:

Interfering line patterns, horizontal line streaks, beats in the picture, etc.

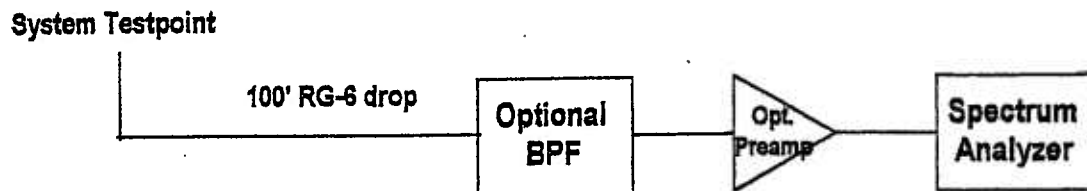
Recommended Procedures:

- Measurements should be made on all of the FCC designated test channels at each testpoint.
- Connect equipment as shown in block diagram below.
- Since most systems now have analyzers that automate these measurements, you should follow the manufacturers recommended method for performing these measurements. This would include such items as the proper RF input level that is required for the measurement, ensuring that you are not overloading the front end of the analyzer, etc.
- For best results you should look for intermod products with an analog display analyzer.
- All measurements are to be made without the converter (see page 8).
- Lastly, follow sound engineering practices as outlined in the NCTA Recommended Practices for Measurements on Cable Television Systems.

Note:

- 1) Intermod products can fall anywhere within a 6Mhz bandwidth.
- 2) CSO fall at $\pm 0.75\text{Mhz}$ and $\pm 1.25\text{Mhz}$, we only need to record the positive number as the negative numbers do not fall in the lower adjacent channel. If this measurement is automated then it will give you the worst case number. This is fine as long as it meets or exceeds spec.
- 3) CTB will fall at the visual carrier frequency. When picking test channels for the FCC proof you should pick one channel that yields worst case CTB for your specific channel loading.

Block Diagram:



LOW FREQUENCY DISTURBANCES

(HUM MODULATION)

FCC 76.605 (a) (11)

Specification:

FCC: <3%

Syracuse Division: <1%

Picture Effect:

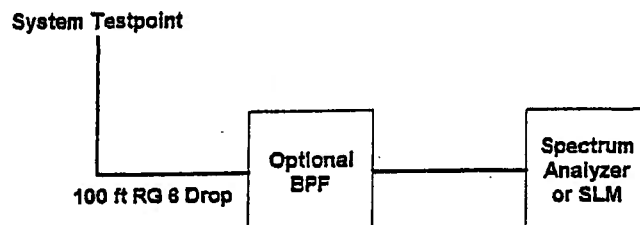
Horizontal bars or stripes slowly moving from the bottom of the screen to the top.

Recommended Procedures:

- Measurement must be made on at least one of the FCC designated test channels.
- Connect equipment as shown in block diagram below.
- Since most systems now have analyzers or signal level meters that automate this measurement, you should follow the manufacturers recommended method for this measurement. This would include such items as the proper RF input level required for measurement, should measurement be made on a cw carrier?, etc.
- Lastly, follow sound engineering practices as outlined in the NCTA

Recommended Practices for Measurements on Cable Television Systems.

Block Diagram:



**STATE OF NEW YORK
VILLAGE OF HANNIBAL**

COUNTY OF OSWEGO

In the Matter of the Renewal of the Cable Television Franchise Held by
TIME WARNER ENTERTAINMENT - ADVANCE/NEWHOUSE
PARTNERSHIP in the Village of Hannibal, Oswego County, NY

RESOLUTION

An application has been duly made to the Village Board of the Village of Hannibal, Oswego County, New York, by Time Warner Entertainment-Advance/Newhouse Partnership, a New York general partnership organized and existing under the laws of the State of New York d/b/a Time Warner Cable whose principal place of business is located at 5015 Campuswood Drive, Syracuse, New York 13221, and holder of a cable television franchise in the Village of Hannibal for the approval of an agreement to renew Time Warner Cable's cable television franchise for an additional ten (10) years commencing September 12, 1998. The Franchise Renewal Agreement would bring the franchise into conformity with certain provisions of the Federal Cable Communications Policy Act of 1984, as amended, and certain court rulings.

A public hearing was held at the Village Hall, Hannibal, New York on September 10, 1998, at 7:30 p.m. and notice of the hearing was published in the Oswego Valley News on August 21, 1998. The Village Board for the Village of Hannibal voted to approve the agreement to renew Time Warner Cable's cable television franchise on the 10th of September, 1998.

NOW, THEREFORE, the Village Board of the Village of Hannibal finds that:

1. Time Warner Cable has substantially complied with the material terms and conditions of its existing franchise and with applicable law; and
2. The quality of Time Warner Cable's service, including signal quality, response to customer complaints and billing practices has been reasonable in light of community needs; and

3. Time Warner Cable has the financial, legal and technical ability to provide the services, facilities and equipment as set forth in its proposal attached; and
4. Time Warner Cable can reasonably meet the future cable-related community needs and interests, taking into account the cost of meeting such needs and interests.

BE IT FURTHER RESOLVED that the Village Board of the Village of Hannibal hereby renews the cable television franchise of Time Warner Cable in the Village of Hannibal for ten (10) years commencing September 12, 1998 and expiring September 12, 2008.

BE IT FURTHER RESOLVED that the Village Board of the Village of Hannibal hereby confirms that this Franchise Renewal Agreement replaces the original franchise granted and all amendments thereto.

The foregoing having received a yes vote was thereby declared adopted.

Dated: October 12, 19 98

Marian Haller
Village Clerk
Village of Hannibal

AFFIDAVIT

STATE OF NEW YORK)

) ss:

COUNTY OF OSWEGO)

Jean Williamson, of the City of Fulton, County of Oswego, and State of New York, being duly sworn, deposes and says that she is the bookkeeper of The Valley News, a twice-weekly newspaper published in the City of Fulton; that notice which is hereto annexed is a true copy of a legal advertisement clipped from said newspaper; that said legal notice was regularly published in said Valley News once each week for two week(s), starting 10-13-98 and being completed 10-19-98.

Jean Williamson
Jean Williamson

Sworn and subscribed to
before me this 1st day
of Nov 19 98

Carolyn L. Eaton
Carolyn L. Eaton
Commissioner of Deeds

LEGAL NOTICE

PLEASE TAKE NOTICE THAT Time Warner Entertainment-Advance/Newhouse Partnership, a New York general partnership organized and existing under the laws of the State of New York d/b/a Time Warner Cable, has filed an application for renewal of its Certificate of Confirmation and Cable Television Franchise in the Village of Hannibal, Oswego County, New York, with the Municipality.

The application is available for public inspection at the office of the Village Clerk of the Village of Hannibal, Village Hall, Drawer B, Hannibal, NY 13074, during normal business hours.

Any interested persons may file comments on the application with the New York State Public Service Commission, Three Empire State Plaza, Albany, New York 12223.

Dated: October 6, 1998

TIME WARNER CABLE -
SYRACUSE DIVISION

AFFIDAVIT

STATE OF NEW YORK)

) ss:

COUNTY OF OSWEGO)

Jean Williamson, of the City of Fulton, County of Oswego, and State of New York, being duly sworn, deposes and says that she is the bookkeeper of The Valley News, a twice-weekly newspaper published in the City of Fulton; that notice which is hereto annexed is a true copy of a legal advertisement clipped from said newspaper; that said legal notice was regularly published in said Valley News once each week for two week(s), starting 10-13-98 and being completed 10-19-98.

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The application is available for public inspection at the offices of the New York State Public Service Commission and at the office of the Clerk of the Village of Hannibal, Village Hall, Drawer B, Hannibal, NY 13074, during normal business hours.

Any interested persons may file comments on the application with the New York State Public Service Commission, Three Empire State Plaza, Albany, New York 12223.
Dated: October 6, 1998

TIME WARNER CABLE -
SYRACUSE DIVISION

VOUCHER

TOWN OF HANNIBAL
Hannibal, New York 13074

DEPARTMENT _____

CLAIMANT'S
NAME
AND
ADDRESS

The Valley News
117 Oneida St.
Fulton, N.Y. 13069

DETAILED INVOICES MAY BE ATTACHED, AND TOTAL ENTERED ON THIS VOUCHER.
CERTIFICATION BELOW MUST BE SIGNED.

DATE	VENDOR'S INVOICE NO.	QUANTITY	DESCRIPTION OF MATERIALS OR SERVICES
8/24/98	3033	1/32	"Dog catcher"
8/24/98		1/32	"Ketcham subdivision"
8/24/98		1/32	"James Prop. Site"
8/27/98		52.56 lines @ .405	"Cable Television Franchise"
(SEE INSTRUCTIONS ON REVERSE SIDE)			

CLAIMANT'S CERTIFICATION

I, Jean Williamson, certify that the above account in the amount of \$ 66.29 is true and correct; that the items, services and disbursements charged were rendered to or for the municipality on the dates stated; that no part has been paid or satisfied; that taxes, from which the municipality is exempt, are not included; and that the amount claimed is actually due.

9/1/98
DATE

Jean Williamson
SIGNATURE

BOOKKEEPER
TITLE

(SPACE BELOW FOR MUNICIPAL USE)

DEPARTMENT APPROVAL

The above services or materials were rendered or furnished to the municipality on the dates stated and the charges are correct.

DATE

AUTHORIZED OFFICIAL

WRITE IN THIS AREA

Hannibal Village/Town Boards
Public Hearing

Cable Television Franchise

PLEASE TAKE NOTICE THAT the Town Board and Village Board of Trustees of Hannibal, Oswego County, New York, has scheduled a public hearing for the 10th day of September, 1998, 7:30 p.m. at the Town Hall, Hannibal, New York to consider renewal of the cable television franchise held by Time Warner Entertainment-Advanced/Newhouse Partnership (hereinafter referred to as Time Warner Cable). The purpose of the hearing is to consider a Franchise Renewal Agreement which would renew Time Warner Cable's cable television franchise for an additional ten years commencing on the 11th day of September 1998, and bring the franchise into conformity with certain provisions of the Federal Cable Communications Policy Act of 1984, as amended.

The Agreement, if approved by the Town and Village Boards, shall not take effect without the prior approval of the New York State Public Service Commission. A copy of the franchise renewal agreement is available for public inspection at the office of the Town Clerk during normal business hours. Interested persons may file comments or objections with the New York State Public Service Commission, 3 Empire Plaza, Albany, NY 12223. Dated: August 21, 1998

Marcia Hubbard
Town & Village Clerk
Hannibal, NY 13074

APPROVAL FOR PAYMENT

This claim is approved and ordered paid from the appropriations indicated above.

Virginia M. Weber
John Thomas

Don Mahoney
Ray McCallister

LEGAL NOTICE

PLEASE TAKE NOTICE THAT the ^{Village}~~Town~~ Board of the ^{Village}~~Town~~ of HANNIBAL
Oswego County, New York has scheduled a public hearing for the 10th of
September, 1998 at 7:30 p.m. at the Town Hall, HANNIBAL, New York
to consider renewal of the cable television franchise held by Time Warner
Entertainment-Advance/Newhouse Partnership (hereinafter referred to as "Time
Warner Cable"). The purpose of the hearing is to consider a Franchise Renewal
Agreement which would renew Time Warner Cable's cable television franchise for
an additional ten (10) years commencing on the 12th of September,
1998, and bring the franchise into conformity with certain provisions of the
Federal Cable Communications Policy Act of 1984, as amended.

The Agreement, if approved by the Town Board, shall not take effect without
the prior approval of the New York State Public Service Commission. A copy of the
Franchise Renewal Agreement is available for public inspection at the Office of the
Town Clerk during normal business hours. Interested persons may file comments or
objections with the New York State Public Service Commission, Three Empire
Plaza, Albany, New York 12223.

Dated: 8-22-98
9/1/98

Marcia Hobland
Town Clerk
Town of Hannibal

**CABLE TELEVISION
FRANCHISE RENEWAL AGREEMENT**

VILLAGE OF HANNIBAL

THIS AGREEMENT, executed in triplicate this 10th day of September, 1998, by and between the VILLAGE OF HANNIBAL, (hereinafter referred to as the Municipality) by the Supervisor acting in accordance with the authority of the duly empowered local governing body, (hereinafter referred to as the Board) and TIME WARNER ENTERTAINMENT-ADVANCE/NEWHOUSE PARTNERSHIP, a New York General Partnership, organized and existing under the laws of the State of New York, the local place of business of which is located at 5015 Campuswood Drive, P.O. Box 4733, East Syracuse, NY 13221, hereinafter referred to as "Time Warner Cable."

WITNESSETH

WHEREAS, Pursuant to the Town Law the Board has the exclusive power on behalf of the Municipality to grant franchises providing for or involving the use of the Streets (as defined in Section 1 hereof) and to give the consent of the Municipality to any franchisee for or relating to the occupation of the Streets; and

WHEREAS, Pursuant to the Communications Act of 1934, as amended, (the "Communications Act") the Board has the authority to grant cable television franchises and renewals thereof on behalf of the Municipality and whereas the Board and Time Warner Cable pursuant to said Federal Law and pursuant to applicable State laws and the regulations promulgated thereunder, have complied with the franchise procedures required of Municipalities and cable operators in the grant of cable television franchises or their renewal; and

WHEREAS, The Municipality has conducted negotiations with Time Warner Cable and has conducted one or more public hearings on Time Warner Cable's franchise renewal proposal affording all interested parties due process including notice and the opportunity to be heard; said deliberations included consideration and approval of Time Warner Cable's technical ability, financial condition and character; said public hearing also included consideration and approval of Time Warner Cable's plans for constructing and operating the cable television system; and

WHEREAS, Following such public hearings and such further opportunity for review, negotiations and other actions as the Board deemed necessary and that is required by law, the Board decided to renew Time Warner Cable's franchise as provided hereinafter; and

WHEREAS, The Board, in granting this franchise renewal, embodied in the agreement the results of its review and any negotiations with Time Warner Cable and has determined that said franchise agreement and Time Warner Cable respectively, fulfills and will fulfill the needs of the Municipality with respect to cable television service and complies with the standards and requirements of the New

York State Public Service Commission ("NYSPSC");

NOW, THEREFORE, In consideration of the foregoing clauses, which clauses are hereby made a part of this franchise agreement, and the mutual covenants and agreements herein contained, the parties hereby covenant and agree:

SECTION 1 - DEFINED TERMS

Unless the context clearly indicates that a different meaning is intended:

- (a) "Basic Service" means any service tier which includes the retransmission of local broadcast signals.
- (b) "Board" means the Board of Trustees of the Municipality.
- (c) "Cable Television Service" means
 - (1) The one way transmission to Subscribers of Video Programming, or other programming service, and
 - (2) Subscriber interaction, if any, which is required for the selection or use of such Video Programming, or other programming service.
- (d) "Cable Television System" means a facility, consisting of a set of closed transmission paths, including (without limitation) fiber optic wires or lines, and associated signal generation, reception and control equipment that provides Cable Television Service to multiple subscribers within a community.
- (e) "Time Warner Cable" means Time Warner Cable Entertainment-Advance/Newhouse Partnership.
- (f) "Effective Date" of this agreement shall be that date subsequent to confirmation of the Franchise, by the New York State Public Service Commission ("NYSPSC") agreed to by the parties, which date is (calendar date).
- (g) "Franchise" means the grant or authority given hereunder to Time Warner Cable to construct and operate a Cable Television System in the Municipality in accordance with the terms hereof.
- (h) "FCC" means the Federal Communications Commission, its designees and any successor thereto.
- (i) "Gross Revenues" means all revenues net of franchise fees actually received by and paid to Time Warner Cable by subscribers residing within the Municipality for Cable Television Service purchased by subscribers on a regular, recurring monthly basis.

- (j) "May" is permissive.
- (k) "Municipality" means the Village of Hannibal. Wherever the context shall permit, Board, Council and Municipality shall be used interchangeably and shall have the same meaning under this Franchise.
- (l) "NYSPSC" means New York State Public Service Commission.
- (m) "Person" means an individual, partnership, association, corporation, joint stock company trust, corporation, or organization of any kind.
- (n) "Service Tier" means a category of Cable Television Service provided by Time Warner Cable over the Cable Television System for which a separate rate is charged for such category by Time Warner Cable.
- (o) "Shall" or "will" are mandatory.
- (p) "Streets" means the surface of, as well as the space above and below, any and all streets, avenues, highways, boulevards, concourses, driveways, bridges, tunnels, parks, parkways, waterways, docks and public grounds and waters within or belonging to the Municipality.
- (q) "Subscriber" means any person lawfully receiving any Cable Television Service in the Municipality provided over the Cable Television System.
- (r) "Video Programming" means any and all programming services provided by, or generally considered comparable to programming provided by a television broadcast station.

SECTION 2 - CONSENT TO FRANCHISE AND CONDITION PRECEDENT

- (a) The Municipality hereby grants to Time Warner Cable the non-exclusive right to construct, erect, operate and maintain a Cable Television System and to provide Cable Television Service within the Municipality as it now exists and may hereafter be changed, and in so doing to use the Streets of the Municipality by erecting, installing, constructing, repairing, replacing, reconstructing, maintaining and retaining in, on, over, under, upon and across any and all said Streets such facilities (e.g., poles, wires, cables, conductors, ducts, conduits, vaults, pedestals, manholes, amplifiers, appliances, attachments and other property) as is deemed necessary or useful by Time Warner Cable, for the operation of its cable system. Additionally, the Municipality, insofar as it may have the authority to so grant, hereby authorizes Time Warner Cable to use any and all easements dedicated to compatible uses, such as electric, gas, telephone or other utility transmissions, for the purposes of erecting, installing, constructing, repairing, replacing,

reconstructing, maintaining and retaining in, on, over, under, upon and across such easements such facilities of the Cable Television System as is deemed necessary or useful by Time Warner Cable, for the operation of its cable system. Upon request by Time Warner Cable and at Time Warner Cable's sole expense, the Municipality hereby agrees to assist Time Warner Cable in gaining access to and using such easements.

(b) Nothing in this Franchise shall limit the right of Time Warner Cable to transmit any kind of signal, frequency, or provide any type of service now in existence or which may come into existence and which is capable of being lawfully transmitted and distributed by those facilities owned and operated by Time Warner Cable. The provision by Time Warner Cable of any service other than cable service shall be subject to all applicable laws and regulations and to any right the Municipality may have to require fair and reasonable compensation for Time Warner Cable's use of the rights-of-way to provide such service, provided that such requirement is non-discriminatory and competitively neutral.

(c) Without waiver or restriction of the rights available to the parties hereto under applicable law, this Franchise and the attachments hereto constitute the entire agreement between the parties and supersede any and all prior cable television agreements and other agreements or instruments by or between the parties hereto or their predecessors in interest as well as all rights, obligations and liabilities arising thereunder concerning or in any way relating to Cable Television Service.

(d) In the event the Municipality grants to any other Person (being referred to as "Grantee" in the below quoted paragraph) a franchise, consent or other right to occupy or use the Streets, or any part thereof, for the construction, operation or maintenance of all or part of a cable television system or any similar system or technology, the Municipality shall insert the following language into any such franchise, consent or other document and/or promptly enact legislation, conditioning the use of the Streets or any part thereof by any such Person, as follows:

"Grantee agrees that it will not move, damage, penetrate, replace or interrupt any portion of the Cable Television System of Time Warner Cable without the prior written consent of Time Warner Cable. Grantee shall indemnify Time Warner Cable against any damages or expenses incurred by Time Warner Cable as a result of any removal, damage, penetration, replacement or interruption of the services of Time Warner Cable caused by the Grantee." As used immediately above in the above quoted paragraph, the term "Time Warner Cable" shall mean Time Warner Cable Entertainment-Advance/News Partnership, as defined in this Franchise, and its successors, assigns and transferees.

(e) This Franchise is non-exclusive. Any grant of a subsequent franchise shall be on terms and conditions which are not more favorable or less burdensome than those imposed on Franchisee hereunder.

As used in this Section, the phrase, "occupancy or use of Streets," or any similar phrase, shall not be limited to the physical occupancy or use thereof but shall include any use above or below the Streets by any technology including but not limited to infrared transmissions.

SECTION 3 - APPROVAL OF COMPANY BY MUNICIPALITY

- (a) This Franchise is subject to and complies with all applicable Federal and State laws and regulations, including, without limitation, the rules of the NYSPSC concerning franchise standards. The Municipality hereby acknowledges and agrees that this Franchise has been entered into by it in accordance with and pursuant to the Communications Act of 1934, as amended, 47 U.S.C. Sec. 521 et seq. (hereinafter referred to as the "Communications Act"). The Municipality hereby represents and warrants that this Franchise has been duly entered into in accordance with all applicable local laws. The Municipality hereby acknowledges that it, by duly authorized members thereof, has met with Time Warner Cable for the purposes of evaluating Time Warner Cable and negotiating and consummating this Franchise.
- (b) In a full and public proceeding, affording due process, the Municipality has considered and approved Time Warner Cable's technical ability and character and has considered and found adequate Time Warner Cable's plans for constructing and operating the cable system.

SECTION 4 - FRANCHISE TERM

The term of this Franchise shall be ten (10) years, commencing on the 12 of September 1998 and terminating on the 12 of September 2008.

SECTION 5 - ASSIGNMENT OR TRANSFER OF FRANCHISE

- (a) Time Warner Cable shall not transfer this Franchise to any person, firm, company, corporation or any other entity without the prior written consent of the Municipality, which consent shall not be unreasonably withheld or denied.
- (b) Notwithstanding the above, this Section 5 shall not be applicable and no prior approval shall be required if Time Warner Cable shall transfer this Franchise to any of its principal partners, to any parent, subsidiary or affiliate of any of the principal partners of Time Warner Cable, or to any other firms or entities controlling, controlled, by or under the same common control as Time Warner Cable.
- (c) In the event that the Municipality refuses to grant such consent, it shall set forth specific reasons for its decision in writing by municipal resolution.

SECTION 6 - REVOCATION

- (a) The Municipality may revoke this Franchise and all rights afforded Time Warner Cable hereunder in any of the following events or for any of the following reasons:
- (i) Time Warner Cable fails after sixty (60) days written notice from the Municipality to substantially comply or to take reasonable steps to comply with a material provision of this Franchise. Notwithstanding the above, should Time Warner Cable comply or take said reasonable steps to comply within said sixty days notice, the Municipality's right to revoke this Franchise shall immediately be extinguished; or
 - (ii) Time Warner Cable is adjudged a bankrupt; or
 - (iii) Time Warner Cable knowingly and willfully attempts or does practice a material fraud or deceit in its securing of this Franchise.
- (b) Notwithstanding the above, no revocation shall be effective unless and until the Municipality shall have adopted an ordinance setting forth the cause and reason for the revocation and the effective date thereof, which ordinance shall not be adopted until the expiration of one hundred twenty (120) days from the date of delivery of written notice to Time Warner Cable specifying the reasons for revocation and an opportunity for Time Warner Cable to be fully and fairly heard on the proposed adoption of such proposed ordinance. If the revocation as proposed therein depends on a finding of fact, such finding of fact shall be made by the Municipality only after an administrative hearing providing Time Warner Cable with a full and fair opportunity to be heard, including, without limitation, the right to introduce evidence, the right to the production of evidence and the right to question witnesses. A transcript shall be made of such hearing. Time Warner Cable shall have the right to appeal any such administrative decision to a state or federal district court as Time Warner Cable may choose and the revocation shall not become effective until any such appeal has become final or the time for taking such appeal shall have expired.

SECTION 7 - INDEMNIFICATION & INSURANCE

- (a) Time Warner Cable shall indemnify and hold harmless the Municipality from all liability, damage and reasonable cost or expense arising from claims of injury to persons or damage to property occasioned by reason of any conduct of Time Warner Cable its employees or agents undertaken pursuant to this Franchise. The Municipality shall promptly notify Time Warner Cable of any claim for which it seeks indemnification; afford Time Warner Cable the opportunity to fully control the defense of such claim and any compromise, settlement, resolution or other disposition of such claim, including by making available to Time Warner Cable all relevant information under its control.

- (b) Time Warner Cable shall as of the Effective Date of this Franchise obtain liability insurance in the minimum amount set forth within and shall furnish to the Municipality evidence of such liability insurance policy or policies, in the form of a certificate of insurance naming the Municipality as an additional named insured, which policy or policies or replacements thereof shall remain in effect throughout the term of this Franchise; said policy and replacements shall be in the combined amount of Two Million Dollars (\$2,000,000.00) for bodily injury and property damage issued by a company authorized to do business in New York State. In addition, Time Warner Cable shall carry Worker's Compensation insurance for its employees in such amounts as is required by the laws of the State of New York. The insurance coverage herein referred to above may be included in one or more policies covering other risks of Time Warner Cable or any of its affiliates, subsidiaries or assigns.

SECTION 8 - USE OF EXISTING POLES AND LOCATION OF UNDERGROUND FACILITIES

- (a) Time Warner Cable hereby agrees that when and wherever it deems it economical and reasonably feasible, it shall enter into agreements with telephone or electric or other utilities (collectively "utilities") for the use of said utilities' poles or conduit space whereby said utilities shall provide use of and access to said poles or conduit space by Time Warner Cable for Time Warner Cable's lines and other equipment. Notwithstanding the above, where necessary to service Subscribers and where attachment to the pole(s) or conduit space of utilities is not economically reasonable or otherwise feasible, Time Warner Cable may erect or authorize or permit others to erect any poles or conduit space or any other facilities within the Streets of the Municipality pursuant to the issuance by the Municipality of any necessary authorizations which shall not be unreasonably withheld or delayed.
- (b) Subject to the provisions of sub-paragraph (c) below, in such areas of the Municipality where it or any sub-division thereof shall hereafter duly require that all utility lines be installed underground, Time Warner Cable shall install its lines underground in accordance with such requirement.
- (c) Notwithstanding the foregoing, if Time Warner Cable shall in any instance be unable to install or locate its wires underground, then the Municipality, on being apprised of the facts thereof, shall permit such wires to be installed above the ground even though other facilities in the area may be placed, or required to be placed, underground. However, any such permission shall be on such conditions as the Municipality may reasonably require.

SECTION 9 - RELOCATION OF PROPERTY

- (a) Whenever the Municipality shall require the relocation or reinstallation of any property of Time Warner Cable in or on any of the Streets of the Municipality as a result of the relocation or other

improvements by the Municipality of any such Streets, it shall be the obligation of Time Warner Cable on written notice of such requirement to remove and relocate or reinstall such property as may be reasonably necessary to meet the requirements of the Municipality. In the event any other person, including a public utility, is compensated for similar relocation or reinstallation then in such case Time Warner Cable shall be similarly compensated.

- (b) Time Warner Cable shall, on request of a person holding a building or moving permit issued by the Municipality, temporarily raise or lower its wires or other property or relocate the same temporarily so as to permit the moving or erection of buildings. The expenses of any such temporary removal, raising or lowering of wires or other property shall be paid in advance to Time Warner Cable by the person requesting the same. Time Warner Cable shall be given in such cases not less than five (5) working days prior written notice in order to arrange for the changes required.

SECTION 10 - USE & INSTALLATION

- (a) Time Warner Cable or any person authorized by Time Warner Cable to erect, construct or maintain any of the property of Time Warner Cable used in the transmission or reception of Cable Television Service shall at all times employ due care under the facts and circumstances and shall maintain and install said property of Time Warner Cable in accordance with commonly accepted methods and principles in the cable television industry so as to prevent failures and accidents likely to cause damage or injury to members of the public. All Cable Television System equipment shall conform to those standards of the National Electrical Code and the National Board of Fire Underwriters which exist at the time said equipment is installed and replaced.
- (b) Time Warner Cable agrees to install all Cable Television System equipment in a manner to reasonably minimize interference to be expected with the usual use of the Streets and in no event shall any such Cable Television System equipment be located so as to substantially and regularly interfere with the usual public travel on any Street of the Municipality. Time Warner Cable shall construct and maintain its cable system using materials of good and durable quality and shall perform all work involved in the construction, installation, maintenance and repair of the cable system in a safe, thorough and reliable manner. Time Warner Cable shall promptly repair or replace any municipal property damaged or destroyed by Time Warner Cable so as to restore it to serviceable condition.
- (c) Whenever Time Warner Cable or any person on its behalf shall cause any injury or damage to public property or Street, by or because of the installation, maintenance or operation of the Cable Television System equipment, such injury or damage shall be remedied as soon as reasonably possible after the earlier of notice to Time Warner Cable from the Municipality or after Time Warner Cable becomes aware of the same, in such fashion so as to restore the property or Street

to serviceable condition. Time Warner Cable is hereby granted the authority to trim trees upon and overhanging the Streets of, and abutting private property, (i.e., in the public way) in the Municipality to the extent it reasonably deems necessary so as to prevent the branches or growths from coming in contact with the wires, cable and other equipment of Franchisee's Cable Television System.

SECTION 11 - CONTINUOUS SERVICE

Time Warner Cable shall continue to provide cable service to all subscribers who meet their obligations to Time Warner Cable with respect to such service. Time Warner Cable shall not, without the written consent of the Municipality abandon its cable television system or any portion thereof in such a way as would limit its ability to continue to provide cable service to all subscribers without the written consent of the Municipality.

SECTION 12 - FRANCHISE AREA AND LINE EXTENSION

Time Warner Cable shall comply with the requirements for construction of cable television plant and provision of cable television services as set forth in Section 595.5 of the Rules of the NYSPSC.

SECTION 13 - OPERATION AND MAINTENANCE

- (a) Time Warner Cable shall contract and maintain its cable system using materials of good and durable quality and shall perform all work involved in the construction, installation, maintenance and repair of the cable system in a safe, thorough and reliable manner.
- (b) Time Warner Cable shall maintain and operate its cable television system at all times in compliance with the duly promulgated and lawful provisions of Section 596 of the Rules and Regulations of the NYSPSC and the technical requirements set forth by the FCC. Time Warner Cable shall maintain staffing levels and support equipment to assure that telephone inquiries are handled promptly in order to minimize busy signals and hold time. Time Warner Cable shall have, at all times, a person on call able to perform minor repairs or corrections to malfunctioning equipment of the cable system. Time Warner Cable shall respond to individual requests for repair service no later than the next business day. System outages, and problems associated with channel scrambling and switching equipment, shall be acted upon promptly after notification. Time Warner Cable shall maintain a means to receive repair service requests and notice of system outages at times when its business office is closed. The Municipality shall have the right and authority to request an inspection or test performed, all at the Municipality's expense. Time Warner Cable shall fully cooperate in the performance of such testing.

- (c) Throughout the term of this Franchise, Franchisee's Cable Television System shall have a minimum channel capacity of seventy-eight (78) channels. Time Warner Cable shall exercise reasonable efforts in good faith to maximize the number of energized channels available to subscribers.

SECTION 14 - RATES

- (a) The rates and charges imposed by Time Warner Cable for cable television service shall be subject to the approval of the Municipality and the NYSPSC to the extent consistent with applicable State and Federal law. The rates for any cable television service for which such approval is required shall be deemed part of the Franchise. A required approval of a change in rates in accordance with the appropriate procedures for such approval shall be deemed to amend the Franchise with respect to rates, any other requirements with respect to amendments to the Franchise to the contrary notwithstanding.
- (b) Time Warner Cable shall not illegally discriminate against individuals in the establishment and application of rates and charges for Video Programming or other communication services available to generally all subscribers.

SECTION 15 - SERVICE TO PUBLIC FACILITIES, ACCOUNTABILITY PROVISIONS AND INSPECTION OF RECORDS

- (a) At the request of the Municipality, Time Warner Cable shall provide and maintain a single service outlet to any school, police station, firehouse and municipally owned building which is occupied for governmental purposes, provided the connection point is no further than two hundred feet (200') from the closest feeder line of the Cable Television System. All such connections shall be above ground except where all utility lines and cables in the area are underground. The Municipality shall not extend such service to additional outlets, without the express written consent of Time Warner Cable.
- (b) Municipality, upon reasonable notice and during normal business hours, shall have the right to inspect all books, records, maps, plans, financial statements and other like materials of Time Warner Cable which are pertinent to Time Warner Cable's compliance with the terms and conditions of this Franchise.
- (c) Municipality and Time Warner Cable agree that Time Warner Cable's obligations hereunder are subject to any applicable law, including laws regarding the privacy of information regarding subscribers.
- (d) Municipality will maintain the confidentiality of any information obtained pursuant to this provision to the extent permitted by law, provided Time Warner Cable has advised Municipality

of the confidential nature of the information. In the event that the Municipality receives request for the disclosure of such information with which it, in good faith, believes it must under law comply, then the Municipality will give Time Warner Cable notice of such request as soon as possible prior to disclosure in order to allow Time Warner Cable to take such steps as it may deem appropriate to seek judicial or other remedies to protect the confidentiality of such information.

SECTION 16 - PUBLIC, EDUCATIONAL AND GOVERNMENTAL ACCESS CHANNELS

Time Warner Cable shall comply with the minimum standards for public, educational and governmental (PEG) access channels as set forth in Section 594.4 of the Rules of the NYSPSC.

SECTION 17 - ADDITIONAL SUBSCRIBER SERVICES

- (a) Payment for cable television service rendered to subscribers is due and payable in advance. A late charge, as determined by Time Warner Cable, may be applied to delinquent accounts.
- (b) Payment for equipment provided by Time Warner Cable to subscribers and the installation, repairs, and removal thereof shall be paid in accordance with Time Warner Cable's standard and customary practices and applicable rules and regulations of the FCC.
- (c) Time Warner Cable shall have the right to disconnect delinquent subscribers and charge such subscribers a disconnection charge as determined by Time Warner Cable, where:
 - (1) At least five (5) days have elapsed after written notice of discontinuance has been served personally upon a subscriber; or
 - (2) At least eight (8) days have elapsed after mailing to the subscriber written notice of discontinuance addressed to such person at the premises where the service is rendered.
- (d) Notice of Time Warner Cable's procedures for reporting and resolving billing disputes and Time Warner Cable's policy and the subscribers rights in regard to "personally identifiable information," as that term is defined in Section 631 of the Communications Act, will be given to each subscriber at the time of such person's initial subscription to the Cable Television System services and thereafter to all subscribers as required by Federal or State law.
- (e) Time Warner Cable shall offer to, and shall notify in writing, the subscribers of the availability of locking program control devices which enable the subscriber to limit reception of obscene or

indecent programming in the subscriber's residence. Any subscriber requesting such device shall pay Time Warner Cable in full upon receipt of the same charge to new subscribers at the time of installation and thereafter to all subscribers as required by Federal or State law.

- (f) In accordance with the applicable requirements of Federal and State laws, Time Warner Cable shall provide written notice of any increases in rates or charges for any Cable Television Service.
- (g) The Administrator, as the case may be, for the Municipality for this Franchise shall be Supervisor or Mayor of the Municipality. The Administrator is responsible for the continuing administration of the Franchise on behalf of the Municipality. All correspondence and communications between Time Warner Cable and the Municipality pursuant to this Franchise shall be addressed by Time Warner Cable to the Administrator.
- (h) It is agreed that all Cable Television Service offered to any subscribers under this Franchise shall be conditioned upon Time Warner Cable having legal access to any such subscriber's dwelling units or other units wherein such service is provided.
- (i) Time Warner Cable shall comply with the Customer Service Consumer Protection Standards set forth in Sections 590 and 596 of the Rules and Regulations of the NYSPSC.
- (j) At least once each year, Time Warner Cable shall provide notice to each subscriber of its procedures for reporting and resolving subscriber complaints.

SECTION 18 - FRANCHISE FEES

- (a) Time Warner Cable shall pay the Municipality an amount equal to 3% of Time Warner Cable's Gross Revenues received by Time Warner Cable directly from subscribers for cable services purchased by subscribers on a regular, recurring monthly basis.
- (b) There shall be applied as a credit against the Franchise Fee the aggregate of: (i) any taxes, fees or assessments of general applicability imposed on Time Warner Cable or any subscribers, or both, which are discriminatory against Time Warner Cable or any subscribers, (ii) any non-capital expenses incurred by Time Warner Cable in support of the PEG access requirements of this Franchise and (iii) any fees or assessments payable to the NYSPSC which when combined with all other fees and credits would exceed 5% of gross revenues. Time Warner Cable shall have the right to apply franchise fees paid as a credit against special franchise assessments pursuant to Section 626 of the New York State Real Property Tax Law.
- (c) Payment of the franchise fee shall be due annually within one hundred twenty (120) days of the end of the company's fiscal year. Time Warner Cable shall submit to the Municipality, along with the payment of said fees, a report showing reasonable detail the basis for the computation thereof.

SECTION 19 - SEVERABILITY, GOVERNING LAW, POLICE POWERS REQUESTS FOR AUTHORIZATION AND NON-DISCRIMINATION

- (a) Should any provision of this Franchise be held invalid by a court or regulatory agency of competent jurisdiction, the remaining provisions of this franchise shall remain in full force and effect.
- (b) To the extent not inconsistent with or contrary to applicable federal law, the terms of this Franchise shall be governed and construed in accordance with the laws of the State of New York. The parties hereby acknowledge and argue that any provisions of this Franchise or any existing or future State or local laws or rules that are inconsistent with or contrary to any applicable Federal law, including the Cable Act, as the same may be amended, are and shall be prohibited, preempted and/or superseded to the extent of any inconsistency or conflict with any applicable Federal laws.
- (c) In addition to the provisions contained in this Franchise and in existing applicable ordinances, the Municipality may adopt such additional regulations as it shall find necessary in the exercise of its police power, provided, however, that such regulations are reasonable and not materially in conflict with the privileges granted in this Franchise.
- (d) Time Warner Cable shall file requests for any necessary operating authorization with the NYSPSC and the FCC within sixty (60) days from the date the Franchise is awarded by the Municipality.
- (e) Time Warner Cable will not refuse to hire or employ, nor bar or discharge from employment, nor discriminate against any person in compensation or in terms, conditions or privileges of employment because of age, race, creed, color, national origin or sex.

SECTION 20 - GUARANTEE OF PERFORMANCE

- (a) In view of the fact that Time Warner Cable has already constructed its cable system, Time Warner Cable shall post with the Municipality a security deposit in the amount of \$1 in compliance with the rules of the NYSPSC.

SECTION 21 - NOTICE

All notices required herein shall be in writing and shall be deemed delivered when received by United States certified mail, return receipt requested, or on the date of delivery to addressee when sent by express mail, or overnight, or hand delivered to the parties and locations as specified below.

Both Time Warner Cable and Municipality may change where notice is to be given by giving notice to the other.

When notices sent to
Time Warner Cable:

Time Warner Cable of Syracuse
Attention: Vice President-General Manager
6154 Thompson Road
Syracuse, New York 13057
Telephone: (315) 437-1401
Facsimile: (315) 463-8020

or

Time Warner Cable
Attention: Division President
5015 Campuswood Drive
East Syracuse, New York 13057
Telephone: (315) 463-2288
Facsimile: (315) 463-2088

When notices sent to
Municipality:

Village of Hannibal
Attention: Mayor
Drawer B
Hannibal, NY 13074

SECTION 22 - FORCE MAJEURE

In no event, and notwithstanding any contrary provision in this Franchise, shall this Franchise be subject to revocation or termination, or Time Warner Cable be subject to penalty or prejudice or in any way liable for non-compliance with or delay in the performance of any obligations hereunder, where its failure to cure or take reasonable steps to cure is due to reason of strike, Acts of God, acts of public enemies, order of any kind of a government of the United States of America or of the State or any of their departments, agencies, political subdivisions; riots, epidemics, landslides, lightning, earthquakes, fires, hurricanes, tornadoes, volcanic activity, storms, floods, washouts, droughts, civil disturbances, explosions, partial or entire failure of utilities or any other cause or event not reasonably within the control of Time Warner Cable. Time Warner Cable shall not be deemed to be in violation or default during the continuance of such inability and Time Warner Cable shall be excused from its obligations herein during the course of any such events or conditions and the time specified for performance of Time Warner Cable's obligations hereunder shall automatically extend for a period of time equal to the period of the existence of any such events or conditions and such reasonable thereafter as shall have been necessitated by any such events or conditions.

SECTION 23 - RIGHTS OF ENFORCEMENT

Nothing contained in this Franchise is intended to or shall confer any rights or remedies on any third parties to enforce the terms of this Franchise.

SECTION 24 - FURTHER ASSURANCES

The Municipality shall, without further consideration, execute and deliver such further instruments and documents and do such other acts and things as Time Warner Cable may reasonably request in order to effect and confirm this Franchise and the rights and obligations contemplated herein.

SECTION 25 - INTEGRATION

This Franchise supersedes all prior negotiations between the parties hereto and shall be binding upon and inure to the benefit of the parties hereto and each of their respective successors and permitted assigns. This Franchise may be amended (except as otherwise expressly provided for herein) only by agreement in writing signed by duly authorized persons on behalf of both parties. To the extent required by State law, amendments hereto shall be confirmed or approved by the NYSPSC.

This Franchise may be executed in one or more counterparts, all of which taken together shall be deemed one (1) original.

The headings of the various Sections of this Franchise are for convenience only, and shall not control or affect the meaning or construction of any of the provisions of the Franchise.

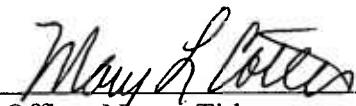
The rights and remedies of the parties pursuant to this Franchise are cumulative and shall be in addition to and not in derogation of any rights or remedies which the parties may have with respect to the subject matter of this Franchise.

SECTION 26 - NO JOINT VENTURE

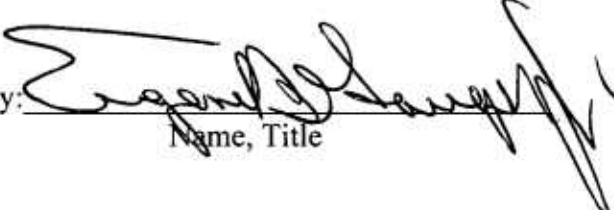
Nothing herein shall be deemed to create a joint venture or any agency or employment relationship between the parties, and neither party is authorized to nor shall either party act toward any third parties or to the public in any manner which would indicate any such relationship with the other.

IN WITNESS WHEREOF, the parties hereto have executed this agreement this 10 day of Sept, 19 98.

**TIME WARNER ENTERTAINMENT-
ADVANCE/NEWHOUSE PARTNERSHIP**

By: 
Officer Name, Title

**MUNICIPALITY:
VILLAGE OF HANNIBAL**

By: 
Name, Title