TIME WARNER CABLE

December 29, 2002

VIA CERTIFIED MAIL/
RETURN RECEIPT REQUESTED

Secretary Janet Diexler
N.Y.S. Department of Public Service
Three Empire State Plaza - 19th Floor
Albany, New York 12223

Dear Ms. Diexler:

Enclosed are an original and four (4) copies of the Town of Caroline (Tompkins County) franchise application, which is served by the Time Warner Cable Syracuse Division.

If you have any questions, please do not hesitate to contact me at (315) 634-6107.

Sincerely,

Richard T. Strong
Manager of Government Affairs
enclosures

cc: Henry Pearl, Vice President/General Manager Manager-Time Warner Cable Syracuse

6005 Fair Lakes Road East Syracuse, NY 13057 · P.O. Box 4733 Syracuse, NY 13221 Tel 315.634.6200 Fax 315.463.6584

CABLE TELEVISION
FRANCHISE RENEWAL AGREEMENT

TOWN OF CAROLINE

THIS AGREEMENT, executed in triplicate this 15 day of October, 2002, by and between the TOWN OF CAROLINE, (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 6005 Fair Lakes Road, 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 Town Board 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 Town of Caroline. 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. Nothing in this Franchise Agreement shall be deemed to waive the requirement of the various generally applicable codes and ordinances of the Municipality regarding permits, fees to be paid, or manner of construction. 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. The Municipality makes no warranty,

express or implied, that it has any rights to grant the use of any existing easements to Time Warner Cable. The intention of this provision is that the Municipality grants only such rights as may actually exist and it is understood and agreed that no claim shall be made against the Municipality because of the lack of existence of any such right in any easement.

(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 pass a resolution, 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/Newhouse Partnership, as defined in this Franchise, and its successors, assigns and transferees.

(e) Non-exclusive. This Franchises Agreement shall not be construed as any limitation upon the right of the Municipality to grant to other persons rights, privileges, or authorities similar to the rights, privileges, and authorities herein set forth, in the public rights-of-way. The Municipality specifically reserves the right to grant at any time such additional franchises for this purpose, as it

deemed appropriate.

(f) This Franchise herein granted shall be non-exclusive and the Municipality reserves the right to grant to any other person or entity, at any time, the right to use or occupy the right to use or occupy the streets or roads of the Municipality for the construction and operation of any other cable television system or open video system within the Municipality or for whatever purpose deemed appropriate by the Municipality, provided any authorization granted by the Municipality shall, unless expressly prohibited by law, contain no more favorable or less burdensome terms and conditions than those contained herein including, but not limited to, term, Franchise Area, non-discriminatory build out obligations, line extension policies, channel and capital requirements, customer service obligations, definition of Gross Revenues and franchise fee payment requirements.

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 later of the 11th of October, 2002 or on the date the NYSPSC approves said franchise agreement and terminating on the 11th of October, 2012.

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 (60) 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) No revocation shall be effective unless and until the Municipality shall have adopted an resolution setting forth the cause and reason for the revocation and the effective date thereof, which resolution 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 resolution. 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.

(c) Failure to comply with material provisions of this agreement shall result in liquidated

damages in the amount of $50.00 per day. Before seeking collection of liquidated damages, other damages, or revocation of the Franchise, the Municipality shall provide the Time Warner Cable with a detailed written Notice of the alleged violation. Time Warner Cable shall have thirty (30) days from receipt of the Notice to come into compliance or, if the violation is not capable of being cured within thirty (30) days after notification, to submit a plan and schedule to promptly cure the violation and thereafter comply with the plan and schedule until Time Warner Cable is in compliance. If Time Warner Cable fails to come into compliance as described in this paragraph, then the Town Attorney or his or her designee may commence an action or special proceeding against Time Warner Cable in a court of competent jurisdiction to collect civil penalties and/or damages, together with costs, disbursements and recoverable attorneys' fees, and/or compel compliance with or restrain by injunction any violation. In lieu of an action to collect civil penalties and/or damages, the Municipality may make a demand for the payment of liquidated damages or other damages as specified in the Franchise, and Time Warner Cable shall pay or permit to be paid from the performance or construction bonds, as applicable, the full amount demanded within ten (10) days of receipt of the demand. The Municipality may, in addition or in the alternative to other remedies, seek to revoke the Franchise as set forth in paragraph 6(a) above. The imposition of liquidated or other damages shall not preclude the Municipality from exercising the other enforcement provisions of this Chapter. Violations shall be excused if caused by a Force Majeure event. Franchisee reserves the right to appeal any decision of Municipality to a court of competent jurisdiction.

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 the following minimum limits:

(i) Commercial General Liability (bodily injury and property damage) - $2,000,000 per occurrence and $6,000,000 general aggregate limit;

(ii) Commercial Auto Liability with a combined single limit (bodily injury and property

damage) - $2,000,000 with uninsured and underinsured motorist coverage of $1,000,000 respectively.

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. Time Warner Cable shall not erect any poles, conduits or other cable appurtenances within the confines of any street without first obtaining a Highway Work Permit in accordance with Municipalities generally applicable permitting procedures.

(b) In 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.

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 at least its condition prior to such damage.

(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 at least its condition prior to such damage. 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. Time Warner Cable shall obtain the prior permission of any affected private landowner before trimming any privately owned trees.

(d) The parties acknowledge that the Municipality has no jurisdiction over state or county owned roadways.

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 except as set forth below:

Time Warner Cable shall offer cable service to all residences receiving cable service on the effective date of this Franchise. In addition, Time Warner Cable shall extend service to all residences within the corporate limits of the Municipality in which the density of residences is at least twenty (20) residences per cable mile from the closest usable point on the cable system. In other areas with less than twenty (20) residences per mile, Time Warner Cable shall offer a cost-sharing arrangement with residents. Upon receipt of all necessary approvals, Franchise shall extend service within sixty (60) days of receipt of payment in full from the affected resident as set forth below. The cost-sharing arrangement shall consist of the following.

1. Upon the request of a subscriber desiring service, Time Warner Cable shall prepare, at its cost, an engineering survey and cost analysis to determine the cost of the plant extension required to provide service to the subscriber from the closest point on the cable system.

2. The cost of construction shall be allocated based on the following formula: If a request for extension of service into a residential area requires the construction of cable plant which does not pass at least twenty (20) potential subscribers per mile, Time Warner Cable and subscribers will each bear their proportionate share of construction costs. For example, if there are ten (10) dwelling units per mile, Time Warner Cable's share will equal one-half (½) of the cost of construction or where there are five (5) dwelling units per mile, Time Warner Cable's share shall equal one-quarter (1/4) of the cost of construction. The remaining cost will be shared equally by each subscriber. This line extension formula shall also be applied to any portion of a mile meeting proportionate density requirements. For example, if there are ten (10) dwelling units per one half mile, the Time Warner Cable shall construct the plant. The cost sharing plan described above would be utilized if there were less than the proportionate share of dwelling units per the portion of a mile needed to reach the dwelling units.

3. Should additional subscribers request cable television service, subscribers utilizing the cost-sharing plan for extensions shall be reimbursed pro-rata for their contribution or a proportional share thereof. In such case, the pro-rata shares shall be recalculated and each new subscriber shall pay the new pro-rata share, and all prior subscribers shall receive pro-rata refunds. At such time as there are said twenty (20) potential subscribers per mile, the subscribers shall receive their pro-rata share of construction costs. In any event, at the end of three (3) years from the completion of a project, the subscribers are no longer eligible for refunds, and the amounts paid in construction costs will be credited to the plant account of Time Warner Cable.

4. The plant extension shall be measured from the nearest usable point on the then-existing system. The total cable length shall exclude the drop cable necessary to serve individual subscriber premises.

5. The average cost of line extension shall be recalculated annually and based upon then-current costs for labor and materials.

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.

(c) Notice Requirements. The Franchisee shall comply with all requirements contained in the Federal and State law and regulations retaining to rates and charges for cable television service.

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) All books, records, correspondence, applications and other documentation of ongoing business relative to the operation of Time Warner Cable within the Municipality shall be maintained for a period as specified by the New York State Department of Public Service.

(e) Maps. Time Warner Cable shall maintain maps of suitable scale showing the location of headend, all trunk and distribution lines. Service drops need not be shown. Upon written request, within ten (10) days, Time Warner Cable shall allow the Municipality to inspect all such

maps for the purpose of insuring compliance with this Franchise/

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 595.4 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 device and Time Warner Cable shall offer 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.

(k) Abandonment. Time Warner Cable shall continue to provide Cable Service to all subscribes who meet their obligations to the Time Warner Cable with respect to such Cable Service. Time Warner Cable shall not without consent of the Municipality abandon its Cable System. Such approval shall not be unreasonably withheld.

(l) Review of Time Warner Cable's Performance. At any time during the Franchise term, but not more than bi-annually, at the request of the Municipality or Time Warner Cable, the Municipality and Time Warner Cable shall participate in a review of Time Warner Cable's operations hereunder. Any changes in operational procedures suggested as a result of this review shall only be effective by mutual consent.

SECTION 18 - FRANCHISE FEES

(a) Time Warner Cable shall pay to the Municipality a franchise fee of ~~three~~ five OB 5 percent (~~3~~%) of gross annual revenues from the provision of Cable Services in the Town 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. The report accompanying the payment should have sufficient detail so that the Town may independently verify the accuracy of the payment. The report should also be verified from an officer of the company. Additionally, a late fee of (one and one-half) 1½ percent should be included if the payment is received after the scheduled date.

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 agree 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, sex or sexual orientation.

SECTION 20 - GUARANTEE OF PERFORMANCE

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.
Time Warner Cable shall furnish a construction bond during the construction of any rebuild of the

Cable Television System in the amount of $10,000.00.

SECTION 21 - NOTICE

All notices required herein shall be in writing and shall be deemed delivered when deposited in United States mail by 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: General Manager
519 West State Street
Ithaca, New York 14850
Telephone: (607) 272-7875
Facsimile: (607) 272-5404

or

Time Warner Cable
Attention: Division President
6005 Fair Lakes Road
East Syracuse, New York 13057
Telephone: (315) 634-6200
Facsimile: (315) 463-2088

When notices sent to
Municipality:

Town of Caroline
Attention: Town Supervisor
P.O. Box 136
Slaterville Springs, New York 14881

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 15 day of October, 2002.

TIME WARNER ENTERTAINMENT-ADVANCE/NEWHOUSE PARTNERSHIP

By: Mary Lou Tiller
Officer Name

Title: President

MUNICIPALITY: TOWN OF CAROLINE

By: Dan Barber
Name

Title: Supervisor

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:

6005 Fair Lakes Road

P.O. Box 4733

East Syracuse, NY 13221

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

(315) 634-6200 Time Warner Cable
6005 Fair Lakes Road
East Syracuse, NY 13221

(607) 272-7875 Time Warner Cable
519 West State Street
Ithaca, NY 14850

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

Town of Caroline - Tompkins 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	See Question #5(b)
- Secondary residential connections	N/A
- Residential pay-cable subscriptions	N/A
- Commercial connections	N/A
- Other	N/A

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	See Attached Rate Card (Exhibit B)
- Secondary residential connections	See Attached Rate Card (Exhibit B)
- Pay-cable subscriptions	See Attached Rate Card (Exhibit B)
- Commercial connections	See Attached Rate Card (Exhibit B)
- Other	See Attached Rate Card (Exhibit B)

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 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:

The System is rebuilt to a minimum of 750 MHZ.

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 Town of Caroline Certificate of Confirmation and Franchise Agreement.

Mary L. Cotter
President
Time Warner Cable - Syracuse Division

Dated: October 16, 2002

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
17th day of October, 2002

Notary Public

Gary J. Corbett
Notary Public, State of New York
No. 01C04700481
Qualified in Onondaga County
My Commission Expires March 31, 2003

EXHIBIT A

		Effective 1/1/0
A.	***Cable Service:***	
	Basic Service:	$16.91
	P.E.G. Access Fee (City of Ithaca only)	$1.26
	Standard Service:	
	(Consists of Basic Service @ $16.91/mo. + all Standard channels @ $25.14/mo.)	$42.05
	(Services above Standard require an addressable Home Terminal)	
	Channel Guide Monthly Publication	$2.75
B.	***Premium Services:***	
	Home Box Office	$10.95
	Cinemax	$10.95
	Showtime	$10.95
	The Movie Channel (Digital Only)	$10.95
	STARZ!	$7.75
	(2 or more Premium Services are discounted)	
C.	***Special Packages***	
	TV Marquee: *Includes Basic Cable, Standard Service, Home Terminal and Remote Control*	$48.00
	Movie Marquee: *TV Marquee plus any 3 Premium Services*	$64.05
	Digital Marquee: *Includes TV Marquee plus Full Digital Cable service*	$57.00
	Digital Movie Marquee: *Digital Marquee plus any 3 Premium services*	$73.05
D.	***Digital Cable Packages****	
	Full Digital Cable Service *(includes channels 100-209, plus Digital Navigator Package)*	$9.00
	Digital Plus *(channels 100-199, plus Digital Navigator Package)*	$7.95
	Digital Movie Pak *(includes channels 200-209, plus Digital Navigator Package)*	$7.95
	Digital Navigator Package *(includes Interactive Program Guide, 40 Music Choice channels, plus access to iNDemand and premium services)*	$3.95
	Digital Programming on Additional Outlet (each)	$ .95
	**TV Marquee required for Digital Cable service.*	
E.	***Equipment:***	
	Home Terminal (analog)/Digital Terminal	$5.60
	Remote/ Digital Remote	.35
E.	***Installation Charges:***	
	Standard Install/Reconnect (pre-wired home)	$30.57
	Standard Installation (unwired home)	$43.09
	Hourly Service Charge	$35.83
	Service Charge	$22.55
	Additional Outlet(s) at time of initial installation	$19.25
	Additional Outlet(s), separate trip	$30.53
	(Sales tax will be applied to installation charges)	

Basic service required by federal law as prerequisite to other services. Rates and charges apply to standard residential installations and service. The above rates for cable service packages and equipment do not include franchise fees or State and Federal regulatory fees.

TIME WARNER CABLE

519 West State Street • Ithaca, NY 14850
(607) 272-3456 • www.twcny.com

EXHIBIT B

TIME WARNER CABLE

Effective 12/26/01

Tompkins County Channel Lineup Card

BASIC SERVICE

1 TV Guide Channel *(98 on cable-ready sets)*
2 E!
3 WSTM-3 (Syracuse, NBC)
4 WCNY-24 (Syracuse, PBS)
5 WTVH-5 (Syracuse, CBS)
6 WSKG-46 (Binghamton, PBS)
7 NewsCenter 7/Marketplace
8 WSYT-68 (Syracuse, FOX)
9 WIXT-9 (Syracuse, ABC)
10 WPIX-11 (New York, WB)
11 WNYS-43 (Syracuse, WB)
12 WBNG-12 (Binghamton, CBS)
13 Public Access
14 C-SPAN
15 Government Access
16 Educational Access
17 TBS
18 QVC
19 WENY-36 (Elmira, ABC)
20 Shop NBC
21 C-SPAN 2 *(99 on cable-ready sets)*
22 Shop at Home/Leased Access
76 Educational Access/SCOLA
77 Local Origination/Leased Access
78 Public Access 2

STANDARD SERVICE

23 Court TV
24 FoxSports New York
25 Nickelodeon
26 A&E
27 CNBC
28 MSG: Madison Square Garden
29 BRAVO!
30 The Discovery Channel
31 AMC: American Movie Classics
32 Headline News
33 ABC Family (formerly FOX Family)
34 TNN: The National Network
35 BET
36 VH-1
37 Lifetime
38 CNN
39 ESPN
40 TLC: The Learning Channel
41 Comedy Central
42 The History Channel
43 TCM: Turner Classic Movies
44 Food Network
45 FOX News Channel
46 USA
47 Weather Channel
48 TNT

(TC)

STANDARD SERVICE continued

49 TV Land
50 MSNBC
51 CMT: Country Music Television
52 Travel Channel
53 The Cartoon Network
54 HGTV: Home & Garden
55 MTV
56 Animal Planet
57 EWTN/INSP
58 ESPN2
59 ESPN Classic
60 WE: Women's Entertainment
61 Oxygen
62 The Golf Channel
63 Sci-Fi Channel
64 fX Network
70 SoapNet
71 The Disney Channel

PREMIUM CHANNELS

65 HBO
66 HBO Plus
67 HBO Signature
68 Cinemax
69 Showtime
99 Starz!

TIME WARNER HOME THEATER: IN DEMAND

72 In Demand 1
73 Playboy
74 Hot Choice
75 In Demand 5

Digital Cable, from Time Warner Cable

The next page features our Digital Cable lineup including exclusive, Digital-only channels like Speedvision, Game Show Network and Toon Disney; our Digital Movie Pak featuring 8 channels of Encore; and many more Premium movie channels. A Digital Home Terminal is required to receive these channels; call your local system office for more information on available packages and rates.

Digital Home Theater: iN DEMAND Movies & Even

Tune to channel 400 for previews to see what's on our 39 iN DEMAND channels (channels 401 to 434), plus our Adult-only Pay-Per-View services on channels 490-494. One-button ordering is easy with our Interactive Program Guide and on-screen ordering instructions.

Digital Music Choice

We offer 45 differently themed channels of commercial-free music offering CD-quality sound (see lineup on back). These channels can be found from 500-544.

CURRENT ANNUAL PERFORMANCE TEST

FCC
PROOFS

ITHACA

JANUARY
2002

Table of Contents

1 — **Ithaca**
FEBRUARY 2002

System Information
Test Summary

2 — Channel Line Up
Non Video Service

3 — Statement of Qualifications
Test Equipment Listing

4 — Terminal Isolation Test

5 — Converter and Trap Specifications

6 — Headend Test

7 — Test Points

1. Hopkins Road
2. Valley View Road
3. Stowell Road
4. Old Peruville Road
5. Lake Road
6. Woodland Road
7. Curry Road
8. Reach Run

8 — Test Procedures

TIME WARNER CABLE
SYRACUSE DIVISION

CATV

Proof - of - Performance Tests

System Name: _____

Plant Mileage: 569.7 **As of** 01/03/02

Basic Subscribers: 26200 **As of** 01/03/02

System Bandwidth: 552MHZ **As of** 01/03/02

Number of Channels Tested: 9

Number of Test Points: 8

Test Start Date: 01/03/02

Test Completion Date: 01/29/02

TIME WARNER CABLE--SYRACUSE DIVISION

SYSTEM NAME: Time Warner-Ithaca **DATE:** Jan 23,2002

FCC TESTING SUMMARY

Changes Since Last Proof of Performance:

1)All fcc/system test points changed.
2) "DMX" music service dropped from system.
3)"Starz" service moved from channel 70 to channel 99 (A-1).
4) "C-SPAN-2" service moved from channel 99 (A-1) to channel 21.
5)Channel 59,"ESPN-classic" service unscrambled.
6)Channel 60,Encore service,replaced with "Womens Entertainment-WE" service and unscrambled.
7)Channel 61,"IFC" service replaced with "Oxygen" service and unscrambled.
8)Channel 62,"Golf channel" service unscrambled.
9) Channel 70,"Starz" service replaced with "Soapnet" service and unscrambled.
10)Channel 71,"Disney" service unscrambled.

Test Results:

All have passed.

Miscellaneous:

Digital services frequency bandwidth from 563 - 750 mhz.

TIME WARNER CABLE--SYRACUSE DIVISION

SYSTEM NAME: Time Warner Cable - Ithaca **DATE:** 01/23/02

ACTUAL CHAN	CARRIER FREQ	CONV CHAN	TYPE	SCRAM "Y"	VITS "Y"	CALL LTR	PROG SOURCE
2	55.2500	2	TV	N	N	EI	SATELLITE
3	61.2500	3	TV	N	Y	WSTM	OFF-AIR
4	67.2500	4	TV	N	Y	WCNY	OFF-AIR
5	77.2500	5	TV	N	Y	WTVH	OFF-AIR
6	83.2500	6	TV	N	Y	WSKG	OFF-AIR
A-5	91.2500						
A-4	97.2500						
A-3	103.2500						
A-2	109.2750	1	TV	N	Y	TV GUIDE	SATELLITE
A-1	115.2750	99	TV	Y	Y	STARZ	SATELLITE
A	121.2625	14	TV	N	N	CSPAN-1	SATELLITE
B	127.2625	15	TV	N	N	GOVT ACCS	LOCAL ORIG
C	133.2625	16	TV	N	N	EDUC ACCS	LOCAL ORIG
D	139.2500	17	TV	N	N	TBS	SATELLITE
E	145.2500	18	TV	N	Y	QVC	SATELLITE
F	151.321	19	TV	N	Y	WENY	OFF-AIR
G	157.2500	20	TV	N	Y	VALUE VISION	SATELLITE
H	163.2500	21	TV	N	N	C-SPAN 2	SATELLLITE
I	169.2500	22	TV	N	N	SHOP AT HOME	SATELLITE
7	175.2500	7	TV	N	N	NEWSCENTER	LOCAL ORIG
8	181.2500	8	TV	N	Y	WSYT	OFF-AIR
9	187.2500	9	TV	N	Y	WIXT	OFF-AIR
10	193.2500	10	TV	N	Y	WPIX-11 IND	SATELLITE
11	199.2500	11	TV	N	N	WNYS	OFF-AIR
12	205.2500	12	TV	N	Y	WBNG	OFF-AIR
13	211.2500	13	TV	N	N	PUB. ACCESS	LOCAL ORIG
J	217.2500	23	TV	N	N	COURT	SATELLITE
K	223.2500	24	TV	N	N	FOX SPORTS	SATELLITE
L	229.2625	25	TV	N	Y	NICKELODEON	SATELLITE
M	235.2625	26	TV	N	Y	A&E	SATELLITE
N	241.2625	27	TV	N	Y	CNBC	SATELLITE
O	247.2625	28	TV	N	N	MSG	SATELLITE
P	253.2625	29	TV	N	N	BRAVO	SATELLITE
Q	259.2625	30	TV	N	N	DISCOVERY	SATELLITE
R	265.2625	31	TV	N	N	AMC	SATELLITE
S	271.2625	32	TV	N	Y	HEADLN NEWS	SATELLITE
T	277.2625	33	TV	N	N	FOX FAMILY	SATELLITE
U	283.2625	34	TV	N	Y	TNN	SATELLITE
V	289.2625	35	TV	N	Y	BET	SATELLITE
W	295.2625	36	TV	N	Y	VH-1	SATELLITE
AA	301.2625	37	TV	N	Y	LIFETIME	SATELLITE
BB	307.2625	38	TV	N	Y	CNN	SATELLITE
CC	313.2625	39	TV	N	Y	ESPN	SATELLITE
DD	319.2625	40	TV	N	N	TLC	SATELLITE
EE	325.2625	41	TV	N	N	COMEDY	SATELLITE
FF	331.2750	42	TV	N	Y	HISTORY	SATELLITE
GG	337.2625	43	TV	N	N	TCM	SATELLITE
HH	343.2625	44	TV	N	N	TV FOOD NET.	SATELLITE
II	349.2625	45	TV	N	Y	FOX NEWS	SATELLITE
JJ	355.2625	46	TV	N	Y	USA	SATELLITE
KK	361.2625	47	TV	N	N	WEATHER CH	SATELLITE
LL	367.2625	48	TV	N	Y	TNT	SATELLITE
MM	373.2625	49	TV	N	Y	TV LAND	SATELLITE
NN	379.2625	50	TV	N	Y	MSNBC	SATELLITE
OO	385.2625	51	TV	N	Y	CMT	SATELLITE
PP	391.2625	52	TV	N	N	TRAVEL	SATELLITE
QQ	397.2625	53	TV	N	Y	CARTOON	SATELLITE
RR	403.2500	54	TV	N	N	HGTV	SATELLITE
SS	409.2500	55	TV	N	Y	MTV	SATELLITE
TT	415.2500	56	TV	N	Y	ANIMAL PLANE	SATELLITE
UU	421.2500	57	TV	N	N	EWTN/INSP	SATELLITE
VV	427.2500	58	TV	N	Y	ESPN 2	SATELLITE
WW	433.2500	59	TV	N	N	ESPN CLASSIC	SATELLITE
XX	439.2500	60	TV	N	N	WE	SATELLITE
YY	445.2500	61	TV	N	Y	OXYGEN	SATELLITE
ZZ	451.2500	62	TV	N	Y	GOLF	SATELLITE
63	457.2500	63	TV	N	Y	SCI-FI	SATELLITE
64	463.2500	64	TV	N	N	FX	SATELLITE
65	469.2500	65	TV	Y	N	HBO	SATELLITE
66	475.2500	66	TV	Y	N	HBO PLUS	SATELLITE
67	481.2500	67	TV	Y	N	HBO SIGNATUR	SATELLITE
68	487.2500	68	TV	Y	N	CINEMAX	SATELLITE
69	493.2500	69	TV	Y	N	SHOWTIME	SATELLITE
70	499.2500	70	TV	N	N	SOAPNET	SATELLITE
71	505.2500	71	TV	N	N	DISNEY	SATELLITE
72	511.2500	72	TV	Y	N	IN DEMAND 1	SATELLITE
73	517.2500	73	TV	Y	N	PLAYBOY	SATELLITE
74	523.2500	74	TV	Y	N	HOT CHOICE	SATELLITE
75	529.2500	75	TV	Y	N	IN DEMAND 5	SATELLITE
76	535.2500	76	TV	N	N	SCOLA	LOCAL ORIG.
77	541.2500	77	TV	N	N	LOCAL ORG	LOCAL ORIG.
78	547.2500	78	TV	N	N	PUB ACCS 2	LOCAL ORIG.

TIME WARNER CABLE--SYRACUSE DIVISION

SYSTEM NAME: Time Warner Cable - Candor **DATE:** 01/23/02

ACTUAL CHAN	CARRIER FREQ	CONV CHAN	TYPE	SCRAM "Y"	VITS "Y"	CALL LTR	PROG SOURCE
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5	77.2500	5	TV	N	Y	WICZ	OFF-AIR
6	83.2500	6	TV	N	Y	WSKG	OFF-AIR
A-5	91.2500						
A-4	97.2500						
A-3	103.2500						
A-2	109.2750	1	TV	N	Y	TV GUIDE	SATELLITE
A-1	115.2750	99	TV	Y	Y	STARZ	SATELLITE
A	121.2625	14	TV	N	N	CSPAN-1	SATELLITE
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9	187.2500	9	TV	N	Y	WIVT	OFF-AIR
10	193.2500	10	TV	N	Y	WPIX-11 IND	SATELLITE
11	199.2500	11	TV	N	N	WNYS	OFF-AIR
12	205.2500	12	TV	N	Y	WBNG	OFF-AIR
13	211.2500	13	TV	N	N	TV GUIDE	SATELLITE
J	217.2500	23	TV	N	N	COURT	SATELLITE
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V	289.2625	35	TV	N	Y	BET	SATELLITE
W	295.2625	36	TV	N	Y	VH-1	SATELLITE
AA	301.2625	37	TV	N	Y	LIFETIME	SATELLITE
BB	307.2625	38	TV	N	Y	CNN	SATELLITE
CC	313.2625	39	TV	N	Y	ESPN	SATELLITE
DD	319.2625	40	TV	N	N	TLC	SATELLITE
EE	325.2625	41	TV	N	N	COMEDY	SATELLITE
FF	331.2750	42	TV	N	Y	HISTORY	SATELLITE
GG	337.2625	43	TV	N	N	TCM	SATELLITE
HH	343.2625	44	TV	N	N	TV FOOD NET.	SATELLITE
II	349.2625	45	TV	N	Y	FOX NEWS	SATELLITE
JJ	355.2625	46	TV	N	Y	USA	SATELLITE
KK	361.2625	47	TV	N	N	WEATHER CH	SATELLITE
LL	367.2625	48	TV	N	Y	TNT	SATELLITE
MM	373.2625	49	TV	N	Y	TV LAND	SATELLITE
NN	379.2625	50	TV	N	Y	MSNBC	SATELLITE
OO	385.2625	51	TV	N	Y	CMT	SATELLITE
PP	391.2625	52	TV	N	N	TRAVEL	SATELLITE
QQ	397.2625	53	TV	N	Y	CARTOON	SATELLITE
RR	403.2500	54	TV	N	N	HGTV	SATELLITE
SS	409.2500	55	TV	N	Y	MTV	SATELLITE
TT	415.2500	56	TV	N	Y	ANIMAL PLANET	SATELLITE
UU	421.2500	57	TV	N	N	EWTN/INSP	SATELLITE
VV	427.2500	58	TV	N	Y	ESPN 2	SATELLITE
WW	433.2500	59	TV	N	N	ESPN CLASSIC	SATELLITE
XX	439.2500	60	TV	N	N	WE	SATELLITE
YY	445.2500	61	TV	N	Y	OXYGEN	SATELLITE
ZZ	451.2500	62	TV	N	Y	GOLF	SATELLITE
63	457.2500	63	TV	N	Y	SCI-FI	SATELLITE
64	463.2500	64	TV	N	N	FX	SATELLITE
65	469.2500	65	TV	Y	N	HBO	SATELLITE
66	475.2500	66	TV	Y	N	HBO PLUS	SATELLITE
67	481.2500	67	TV	Y	N	HBO SIGNATUR	SATELLITE
68	487.2500	68	TV	Y	N	CINEMAX	SATELLITE
69	493.2500	69	TV	Y	N	SHOWTIME	SATELLITE
70	499.2500	70	TV	N	N	SOAPNET	SATELLITE
71	505.2500	71	TV	N	N	DISNEY	SATELLITE
72	511.2500	72	TV	Y	N	IN DEMAND 1	SATELLITE
73	517.2500	73	TV	Y	N	PLAYBOY	SATELLITE
74	523.2500	74	TV	Y	N	HOT CHOICE	SATELLITE
75	529.2500	75	TV	Y	N	IN DEMAND 5	SATELLITE
76	535.2500	76					
77	541.2500	77	TV	N	N	LOCAL ORG	LOCAL ORIG.

RATE MUX NUMBER	QAM NAME	QAM FREQUENCY	ANALOG CHANNEL	MOD. TYPE	SESSION NUMBER	MPEG IN	MPEG OUT	G-BIG MPEG	SERVICE		QAM SOURCE	DIGITAL CHANNEL
N/A SWIF *	QAM1	567MHz	81	64	Below 20			128-138	BFS,IPG,etc.		DNCS	N/A
GBIG 4		BIG QAM										
2B	QAM2	591 / **525** MHz	85 / **74**	256	1911	12	12	8	iNDemand 1		Satcom C3 Tr 3	401
GBIG 2	11				1916	6	6	6	iNDemand 2		Satcom C3 Tr 3	402
					1913	3	3	3	iNDemand 3		Satcom C3 Tr 3	403
					1914	4	4	4	iNDemand 4		Satcom C3 Tr 3	404
					1915	5	5	5	iNDemand 5		Satcom C3 Tr 3	405
					1917	7	7	7	iNDemand 6		Satcom C3 Tr 3	406
					1912	2	2	2	HC		Satcom C3 Tr 3	490
					1106	1	1	1	Outdoor Channel		Athena 1	105
	Tur.e to analog in the North Country				1130	2	22	9	History		Athena 1	130
					1182	102	102	10	MTV2		Athena 1	142
					1184	101	101	11	Noggin		Athena 1	173
1A	QAM3	597 / **507** MHz	86 / **71**	256	1300	1	1	1	HBO East		Galaxy 1 Tr 23(I)	300
GBIG 1	12				1301	2	2	2	HBO Plus East		Galaxy 1 Tr 23(I)	302
					1302	3	3	3	HBO Signature East		Galaxy 1 Tr 23(I)	304
					1303	4	4	4	HBO Family East		Galaxy 1 Tr 23(I)	306
					1307	8	8	5	HBO Latino East		Galaxy 1 Tr 23(I)	312
					1310	21	21	6	Max East		Galaxy 1 Tr 23(I)	320
					1311	22	22	7	More Max East		Galaxy 1 Tr 23(I)	322
					1313	23	23	8	Action Max East		Galaxy 1 Tr 23(I)	326
					1370	7	7	9	WMAX East		Galaxy 1 Tr 18(I)	328
					1371	27	27	10	@MAX East		Galaxy 1 Tr 18(I)	329
					1372	44	44	12	5 StarMAX East		Galaxy 1 Tr 18(I)	330
					1373	30	30	11	OuterMAX East		Galaxy 1 Tr 18(I)	331
1B	QAM4	603 / **513** MHz	87 / **72**	256	1312	24	24	33	Thriller Max East		Galaxy 1 Tr 18(I)	324
GBIG 1	13				1305	26	26	32	HBO Zone East		Galaxy 1 Tr 18(I)	310
					1304	6	11	31	HBO Comedy East		Galaxy 1 Tr 18(I)	308
					1113	7	7	27	Encore		Galaxy 1 Tr 13	200
					1201	8	8	28	Encore West		Galaxy 1 Tr 13	201
					1206	9	9	29	WAMI		Galaxy 1 Tr 13	207
					1330	1	1	21	Starz!		Galaxy 1 Tr 13	370
					1357	2	2	22	Starz! West		Galaxy 1 Tr 13	371
					1331	3	3	23	Starz!2		Galaxy 1 Tr 13	372
					1332	4	4	24	Starz!4 Family		Galaxy 1 Tr 13	374
					1333	6	6	26	Starz!5 Cinema		Galaxy 1 Tr 13	376
					1358	10	10	30	Starz!5 Cinema West		Galaxy 1 Tr 13	377
					1334	5	5	25	Bet Movies		Galaxy 1 Tr 13	378
3A	QAM5	621 / **531** MHz	90 / **75**	256	1918	8	8	22	iNDemand 7		Satcom C4 Tr 18	407
GBIG 2	9				1919	9	9	23	iNDemand 8		Satcom C4 Tr 18	408
					1920	10	10	24	iNDemand 9		Satcom C4 Tr 18	409
					1921	11	11	25	iNDemand 10		Satcom C4 Tr 18	410
					1922	1	1	21	iNDemand 11		Satcom C4 Tr 18	411
					1923	12	12	26	iNDemand 12		Satcom C4 Tr 18	412
					2913	13	13	27	iNDemand 13		Satcom C4 Tr 18	413
					2914	14	14	28	iNDemand 14		Satcom C4 Tr 18	414
					1219	1	3	30	National Geographic		Satcom C3 Tr 1	128
					1100	2	2	29	MSG		Local MPEG Encoders	100
3B	QAM6	627 / **537** MHz	91 / **76**	256	2915	1	1	41	iNDemand 15		Telstar 7 Tr 2	415
GBIG 2	13				2916	2	2	42	iNDemand 16		Telstar 7 Tr 2	416
					2917	3	3	43	iNDemand 17		Telstar 7 Tr 2	417
					2918	4	4	44	iNDemand 18		Telstar 7 Tr 2	418
					2919	5	5	45	iNDemand 19		Telstar 7 Tr 2	419
					2920	6	6	46	iNDemand 20		Telstar 7 Tr 2	420
					2921	7	7	47	iNDemand 21		Telstar 7 Tr 2	421
					2922	8	8	48	iNDemand 22		Telstar 7 Tr 2	422
					1102	38	38	50	ESPN Classic		Athena 1	101
					1103	37	37	49	Golf Ch.		Athena 1	102
					1161	39	39	51	Health		Athena 1	161
					1140	40	40	52	CMT		Athena 1	140
					1163	4	14	53	America's Store		Athena 1	163

6B	**QAM7**	639 / **495** MHz	93 / **69**	256	1362	11	11	21	HBO East West		Galaxy 1 Tr 23(Q)	301
GBIG 5	11				1363	12	12	22	HBO Plus West		Galaxy 1 Tr 23(Q)	303
					1364	13	13	23	HBO Signature West		Galaxy 1 Tr 23(Q)	305
					1365	14	14	24	HBO Family West		Galaxy 1 Tr 23(Q)	307
					1366	18	18	26	HBO Latino West		Galaxy 1 Tr 23(Q)	313
					1367	31	31	27	Max East West		Galaxy 1 Tr 23(Q)	321
					1368	32	32	28	More Max West		Galaxy 1 Tr 23(Q)	323
					1369	33	33	29	Action Max West		Galaxy 1 Tr 23(Q)	327
					1374	15	15	25	HBO Comedy West		Galaxy 1 Tr 18(Q)	309
					1375	16	16	31	HBO Zone West		Galaxy 1 Tr 18(Q)	311
					1376	34	34	30	Thriller Max West		Galaxy 1 Tr 18(Q)	325
4B	**QAM8**	645 / **543** MHz	94 / **77**	256	1202	1	1	9	Encore Action		Galaxy 1 Tr 3	202
GBIG 3	13				1203	3	3	10	Encore Love		Galaxy 1 Tr 3	203
					1204	5	5	11	Encore Mystery		Galaxy 1 Tr 3	204
					1205	9	9	12	Encore Westerns		Galaxy 1 Tr 3	205
					1207	7	7	13	Encore True		Galaxy 1 Tr 3	206
					1947	13	13	8	iNDemand Barker		Telstar 7 Tr 4	400
					2931	1	10	1	iNDemand 31		Telstar 7 Tr 4	431
					2932	2	2	2	iNDemand 32		Telstar 7 Tr 4	432
					2933	3	11	3	iNDemand 33		Telstar 7 Tr 4	433
					2934	4	4	4	iNDemand 34		Telstar 7 Tr 4	434
					1999	6	12	6	Spice		Telstar 7 Tr 4	492
					1998	7	6	5	Spice 2		Telstar 7 Tr 4	493
					2494	8	8	7	Pleasure		Telstar 7 Tr 4	494
5A	**QAM9**	657 / **561** MHz	101 / **80**	256	2923	1	1	21	iNDemand 23		Telstar 7 Tr 3	423
GBIG 3	12				2924	2	2	22	iNDemand 24		Telstar 7 Tr 3	424
					2925	3	3	23	iNDemand 25		Telstar 7 Tr 3	425
					2926	4	4	24	iNDemand 26		Telstar 7 Tr 3	426
					2927	5	5	25	iNDemand 27		Telstar 7 Tr 3	427
					2928	6	6	26	iNDemand 28		Telstar 7 Tr 3	428
					2929	7	7	27	iNDemand 29		Telstar 7 Tr 3	429
					2930	8	8	28	iNDemand 30		Telstar 7 Tr 3	430
					1104	48	48	31	Speed Channel		Athena 2	103
					1131	46	46	30	Court TV		Athena 2	131
					5061	43	43	29	IFC		Athena 2	209
					1997	49	49	32	Playboy		Athena 2	491
ASI N/A	**QAM10**	663 / **555** MHz	102 / **79**	256	1117	114	114	50	ESPN News		Athena 3	107
GBIG 3	11				1183	59	59	47	TRIO		Athena 3	152
					1185	60	60	48	Newsworld Int		Athena 3	134
					2106	54	54	43	FOX Sports World		Athena 3	106
					1180	115	115	51	CSPAN-3		Athena 3	133
					1141	56	56	44	Bet on Jazz		Athena 3	145
					1150	57	57	45	Ovation		Athena 3	150
					1162	58	58	46	Game Show Network		Athena 3	162
					1350	52	52	41	Disney E		Athena 3	170
					1351	53	53	42	Disney W		Athena 3	171
					1116	113	113	49	Toon Disney		Athena 3	172

7B	**QAM11**	669 / **549** MHz	103 / **78**	256	1120	2	2	24	Discovery Kids	***	Satcom C3 Tr 22	120
GBIG 4	10-Video				1121	3	3	25	Discovery Science	***	Satcom C3 Tr 22	121
	45-Audio				2132	1	1	53	Discovery Health	***	Satcom C3 Tr 22	123
					1122	7	4	51	Discovery Wings	***	Satcom C3 Tr 22	122
					1213	5	55	55	Discovery Civilizations	***	Satcom C3 Tr 22	124
					1212	4	54	54	Discovery Home & L.	***	Satcom C3 Tr 22	125
					1124	6	50	52	BBC America	***	Satcom C3 Tr 22	129
					1110	4	52	2	TCM	***	Galaxy 1R Tr 15	110
					1105	2	51	1	CNN-SI	***	Galaxy 1R Tr 15	104
					1133	1	53	3	CNN-FN	***	Galaxy 1R Tr 15	132
					1500	5		43	Showcase		Satcom C3 Tr 9	500
					1501	6		42	Showcase 2		Satcom C3 Tr 9	501
					1502	7		49	Origens		Satcom C3 Tr 9	502
					1503	8		41	New Releases		Satcom C3 Tr 9	503
					1504	9		40	American Originals		Satcom C3 Tr 9	504
					1505	10		39	Sounds of Seasons		Satcom C3 Tr 9	505
					1506	11		38	For Kids Only		Satcom C3 Tr 9	506
					1507	12		50	World Beat		Satcom C3 Tr 9	507
					1508	13		33	Body & Soul		Satcom C3 Tr 9	508
					1509	14		32	Classic R&B		Satcom C3 Tr 9	509
					1510	15		29	R&B Hits		Satcom C3 Tr 9	510
					1511	16		26	Dance		Satcom C3 Tr 9	511
					1512	17		23	Rap		Satcom C3 Tr 9	512
					1513	18		17	Metal		Satcom C3 Tr 9	513
					1514	19		15	Alternative Rock		Satcom C3 Tr 9	514
					1515	20		14	Progressive		Satcom C3 Tr 9	515
					1516	21		36	Classic Rock		Satcom C3 Tr 9	516
					1517	22		35	Rock Hits		Satcom C3 Tr 9	517
					1518	23		34	Soft Rock		Satcom C3 Tr 9	518
					1519	24		30	Hit List		Satcom C3 Tr 9	519
					1520	25		18	80's		Satcom C3 Tr 9	520
					1521	26		9	70's		Satcom C3 Tr 9	521
					1522	27		10	Solid Gold Oldies		Satcom C3 Tr 9	522
					1523	28		11	Today's Country		Satcom C3 Tr 9	523
					1524	29		12	Classic Country		Satcom C3 Tr 9	524
					1525	30		13	Big Band		Satcom C3 Tr 9	525
					1526	31		47	Singers & Standards		Satcom C3 Tr 9	526
					1527	32		48	Easy Listening		Satcom C3 Tr 9	527
					1528	33		16	Classical Masterpiece		Satcom C3 Tr 9	528
					1529	34		22	Light Classical		Satcom C3 Tr 9	529
					1530	35		45	Atmospheres		Satcom C3 Tr 9	530
					1531	36		46	Light Jazz		Satcom C3 Tr 9	531
					1532	37		28	Jazz		Satcom C3 Tr 9	532
					1533	38		27	Blues		Satcom C3 Tr 9	533
					1534	39		31	Gospel		Satcom C3 Tr 9	534
					1535	40		19	Contemp. Christian		Satcom C3 Tr 9	535
					1536	41		20	Music Latina		Satcom C3 Tr 9	536
					1537	42		21	Tropical		Satcom C3 Tr 9	537
					1538	43		37	Mexicana		Satcom C3 Tr 9	538
					1539	44		44	Tejano		Satcom C3 Tr 9	539
					1540	45		4	Folklorica		Satcom C3 Tr 9	540
					1541	46		5	Boleros		Satcom C3 Tr 9	541
					1542	47		6	Int. Love Songs		Satcom C3 Tr 9	542
					1543	48		7	Brazilian Pop		Satcom C3 Tr 9	543
					1544	49		8	Brazilian Beat		Satcom C3 Tr 9	544
2A	**QAM12**	675 / **519** MHz	104 / **73**	256	1341	7	7	51	TMC 2		Satcom C3 Tr 19	351
GBIG 1	13				1340	4	4	49	TMC		Satcom C3 Tr 19	350
					1352	8	8	52	Showtime Beyond		Satcom C3 Tr 19	344
					1323	9	9	53	Showtime Extreme		Satcom C3 Tr 19	343
					1322	3	3	48	Showtime 3		Satcom C3 Tr 19	342
					1321	2	2	47	Showtime Too		Satcom C3 Tr 19	341
					1320	1	1	46	Showtime East		Satcom C3 Tr 19	340
					1324	5	5	50	FLIX		Satcom C3 Tr 19	18 W'twn
					1114	108	108	43	Lifetime Movie Ntwk		Athena 2	112
					1160	107	107	42	Style		Athena 2	160
					1190	50	50	45	MuchMusic		Athena 2	143
					1181	109	109	44	Bloomberg		Athena 2	135
					1112	45	45	41	FXM		Athena 2	208

4A	QAM13	711 / n/a MHz	110	256	1600	1	1	41	NBA / WNBA CH.		GE 1 Tr 8	460
	14				1601	2	12	42	NBA / WNBA PPV 1		GE 1 Tr 8	461
					1602	3	13	43	NBA / WNBA PPV 2		GE 1 Tr 8	462
					1603	4	14	44	NBA / WNBA PPV 3		GE 1 Tr 8	463
					1604	5	15	45	NBA / WNBA PPV 4		GE 1 Tr 8	464
					1605	6	16	46	NBA / WNBA PPV 5		GE 1 Tr 8	465
					1471	2	2	49	ESPN sports pkg 1		G7 (G11) Tr 6 Hits Feed (KU)	472
					1472	3	3	51	ESPN sports pkg 2		G7 (G11) Tr 6 Hits Feed (KU)	473
					1473	4	4	52	ESPN sports pkg 3		G7 (G11) Tr 6 Hits Feed (KU)	474
					1474	5	5	53	ESPN sports pkg 4		G7 (G11) Tr 6 Hits Feed (KU)	475
					1475	6	6	54	ESPN sports pkg 5		G7 (G11) Tr 6 Hits Feed (KU)	476
					1476	7	7	47	ESPN sports pkg 6		G7 (G11) Tr 6 Hits Feed (KU)	477
					1477	8	8	48	ESPN sports pkg 7		G7 (G11) Tr 6 Hits Feed (KU)	478
					1478	10	10	50	ESPN sports pkg 8		G7 (G11) Tr 6 Hits Feed (KU)	479
5B GBIG 4	QAM14	717 / **579** MHz	111 / **83**	256	9001	1	1	61	NHL / MLB 1		GE 1 Tr 13	480
	14				9002	2	2	62	NHL / MLB 2		GE 1 Tr 13	481
					9003	3	3	63	NHL / MLB 3		GE 1 Tr 13	482
					9004	4	4	64	NHL / MLB 4		GE 1 Tr 13	483
					9005	5	5	65	NHL / MLB 5		GE 1 Tr 13	484
					9006	6	6	66	NHL / MLB 6		GE 1 Tr 13	485
					9007	7	7	67	NHL / MLB 7		GE 1 Tr 13	486
					9008	8	8	68	NHL / MLB 8		GE 1 Tr 13	487
	Not available in the North Country				1606	1	9	69	NBA / WNBA PPV 6		GE 1 Tr 14	466
	Not available in the North Country				1607	2	10	70	NBA / WNBA PPV 7		GE 1 Tr 14	467
	Not available in the North Country				1608	3	11	71	NBA / WNBA PPV 8		GE 1 Tr 14	468
	Not available in the North Country				1609	4	12	72	NBA / WNBA PPV 9		GE 1 Tr 14	469
	Not available in the North Country				1610	5	13	73	NBA / WNBA PPV 10		GE 1 Tr 14	470
	Not available in the North Country				1611	6	14	74	NBA / WNBA PPV 11		GE 1 Tr 14	471
6A GBIG 5	QAM15	735 / **489** MHz	114 / **68**	256	1359	6	6	4	Starz!2 West		Satcom C4 Tr 5	363
	1-HDTV, 3 std				1361	7	7	6	Starz!4 Family West		Satcom C4 Tr 5	365
					1360	8	8	5	Bet Movies West		Satcom C4 Tr 5	369
	HD not in North Country				1306	51	51	N/A	HBO East HDTV		Telstar 7 Tr 17	391
6A GBIG 5	QAM16	741 / **489** MHz	115 / **68**	256	1353	1	1	1	Showtime Next		Satcom C3 Tr 16	345
	1-HDTV, 3 std		reserve 6 sessions		1355	3	3	3	Showtime Women		Satcom C3 Tr 16	346
					1354	2	2	2	Showtime Family		Satcom C3 Tr 16	347
	HD not in North Country				1356	8	8	N/A	Showtime HDTV		Satcom C3 Tr 16	392
7A GBIG 5	QAM17	633 / **501** MHz	92 / **70**	256	1208	4	1	41	VH1 Classic		Satcom C3 Tr 15	144
	9				1209	8	2	42	Nick GAS		Satcom C3 Tr 15	175
					1210	10	3	43	Nick Too		Satcom C3 Tr 15	174
					1211	1	4	44	International Channel		Galaxy 11 Tr 24	139
					1214	5	8	47	Boomerang		Galaxy 1R Tr 15	176
					1215	70	10	49	Do-It-Yourself		Telstar 7 Tr 14	138
					1216	60	9	48	Tech TV		Telstar 7 Tr 14	137
					1218	8	5	45	Great Amer. Country		Satcom C3 Tr 20	141
					1217	1	7	46	Trinity Broadcasting		Galaxy 5 Tr 3 -- RTE	190
	QAM18	747 / **NA** MHz	116	256	3103	1	4	N/A	MC Concerts -- RTE		Satcom C4 Tr 5	254
	1											

* 33 foot limitation for SWIF connections

** Rate Mux feed not required if DHEI splitter used. Rate Mux channel could be used for expansion such as Showtime/TMC west coast feeds.

TIME WARNER CABLE--SYRACUSE DIVISION

SYSTEM NAME: Ithaca **DATE:** 01/23/02

NON-VIDEO SERVICES

CARRIER FREQ	DESCRIPTION	BANDWIDTH	PROG SOURCE
52.0000	DATA	200khz	Trilithic fsk
53.2950	DATA	200khz	Electroline tap fsk
53.7500	DATA	200khz	Electroline tap fsk
89.5000	FM	150khz	WFMT RADIO
93.7000	FM	150khz	WMHR RADIO
94.1000	FM	150khz	WCNY RADIO
95.7000	FM	150khz	WHWK RADIO
96.1000	FM	150khz	WICB RADIO
96.5000	FM	150khz	WAER RADIO
96.9000	FM	150khz	WYXL RADIO
98.5000	FM	150khz	WIII RADIO
98.9000	FM	150khz	WEOS RADIO
99.1000	FM	150khz	WVBR RADIO
99.5000	FM	150khz	WSKG RADIO
103.1000	FM	150khz	WQNY RADIO
104.2500	DATA	200khz	SA QPSK
105.9000	FM	150khz	VIC RADIO
106.5000	DATA	200khz	Jerrold fsk
561.0000	DATA	25khz	Sweep telemetry
571.2500	DATA	6.0mhz	Roadrunner QAM
577.2500	DATA	6.0mhz	Roadrunner QAM

TIME WARNER CABLE
SYRACUSE DIVISION

Proof - of - Performance Test

System Name: *Time Warner Ithaca*

Statement of Qualifications

Employee Name: *Robert Eaton* Title: *Maintenance Supervisor*

System: *Ithaca*

Qualifications: *Associates in Electronics, 28 years experience as video engineer and 4 years headend tech experience.TWC Fiber Optic Certification graduate.*

Employee Name: *Paul Cullings* Title: *Head end Technician*

System: *Ithaca*

Qualifications: *19 years experience as electronic technician.4 years in cable as mainline and head end technician.FCC general radio-telephone operators license #PG-20-9108.*

Employee Name: *Rob Vrzal* Title: *Maint Tech II*

System: *Ithaca*

Qualifications: *20 years of CATV mainline experience,including FCC testing.*

TIME WARNER CABLE
SYRACUSE DIVISION

Proof - of - Performance Test

System Name: *Time Warner Ithaca*

Statement of Qualifications

Employee Name: *Torrance Countryman* Title: *Maint. Tech II*

System: *Ithaca*

Qualifications: *18 Years plant experience in CATV, NCTI tech courses, Installer tech class, NCTI fiber-oiptics course. Fcc testing and TWC fiber certification graduate.*

Employee Name: *Cary Besemer* Title: *Maint. Tech II*

System: *Ithaca*

Qualifications: *12 Years field experience in CATV.*

Employee Name: Title:

System: *Ithaca*

Qualifications:

TIME WARNER CABLE
SYRACUSE DIVISION

CATV **Proof - of - Performance Tests** **Test Equipment Listings**

System Name: *TIME WARNER - ITHACA*

Date: *01/17/02*

Test Equipment				
Equipment Description	Model #	Manufacturer	Serial #	Last Calib
Spectrum Analyzer	*8591C*	*HP*	*3624a01618*	*05/25/99*
Stealth Trak Meter	*3SRV*	*Wavetek*	*9233994*	*03/01/99*
Stealth Trak Meter	*3SRV*	*Wavetek*	*9243885*	*03/01/99*
Stealth Trak Meter	*3SRV*	*Wavetek*	*9243906*	*03/01/99*
Tunable Bandpass Filter	*VF-4*	*Trilithic*	*9940472*	*n/a*
20 db Pre-amp	*AM-1000*	*Trilithic*	*108028*	*n/a*
Test signal generator	*TSG-120*	*Tektronics*	*B010707*	*n/a*

TIME WARNER CABLE
SYRACUSE DIVISION

Terminal Isolation Test

System Name: Ithaca

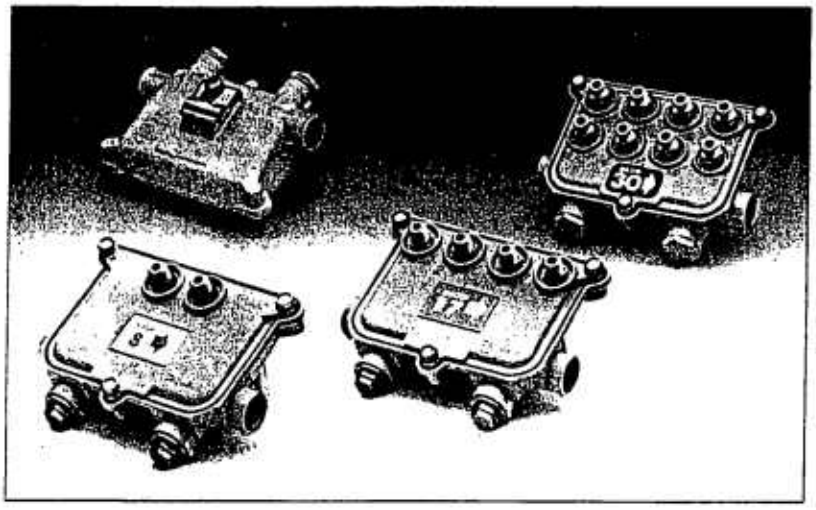
Date: 01/23/02

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



8000 Series

The 8000 Series 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.

- **90° rotating seizure mechanism makes installation easy.**
- **Dual gaskets keep RF signals pure and protect the housing from extreme environments.**
- **Environmental coating provides excellent corrosion resistance.**
- **Brass F ports offer galvanic compatability.**

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.

Magnavox's 8000 Series multi-taps are available in 2-way, 4-way, and 8-way models, offering 2, 4, and 8 tap ports, respectively. We've created a compact tap which fits easily into a 6" pedestal.

Our multi-taps all share the following standard features:

- brass F-ports with drip lips and rubber boots,
- protective finish,
- weather gasket,
- RFI gasket,
- color-coded value labels,
- strip gauges and heat-shrink ridges for easy installation,
- numbered ports for convenient subscriber audits,
- high surge resistance, and
- 6 Amps current handling capability.

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 F-ports help keep the 8000 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 F-port to a brass F-connector, you can eliminate a weak link in your network.

8200 Series Two-Way Multi-Tap Specifications*

(Worst case performance.)

	8204	8208	8211	8214	8217	8220	8223	8226	8229	8232	Units
Tap Value (± 1.5)	4	8	11	14	17	20	23	26	29	32	dB
Bandwidth	5-600	5-600	5-600	5-600	5-600	5-600	5-600	5-600	5-600	5-600	MHz
Color Code	Black	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	
Insertion Loss (max.)											
5 MHz	–	3.2	1.8	0.9	0.7	0.6	0.5	0.4	0.4	0.4	dB
30 MHz	–	2.8	1.5	0.8	0.6	0.4	0.4	0.3	0.3	0.3	dB
54 MHz	–	2.7	1.4	0.7	0.5	0.4	0.4	0.3	0.3	0.3	dB
330 MHz	–	2.9	1.5	0.8	0.7	0.6	0.5	0.4	0.4	0.4	dB
400 MHz	–	3.1	1.7	1.2	0.8	0.7	0.6	0.5	0.5	0.5	dB
450 MHz	–	3.3	1.9	1.3	1.0	0.9	0.7	0.7	0.7	0.7	dB
500 MHz	–	3.6	2.2	1.5	1.2	1.0	0.8	0.8	0.8	0.8	dB
600 MHz	–	3.7	2.3	1.6	1.3	1.1	1.0	1.0	0.9	0.9	dB
Flatness (max.)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	± dB
Tap-to-Out Isolation (min.)											
5-600 MHz	–	22	24	27	30	33	36	38	40	42	dB
Tap-to-Tap Isolation (typical)	28	28	28	28	28	28	28	28	28	28	dB
5-500 MHz (min.)	26	26	26	26	26	26	26	26	26	26	dB
500-600 MHz (min.)	24	24	24	24	24	24	24	24	24	24	dB
Return Loss (min.)											
In	18	18	18	18	18	18	18	18	18	18	dB
Out	–	18	18	18	18	18	18	18	18	18	dB
Tap	16	16	16	16	16	16	16	16	16	16	dB
Hum Modulation @ 6 Amps											
5-450 MHz	-70	-70	-70	-70	-70	-70	-70	-70	-70	-70	dB
450-600 MHz	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
RFI Isolation	Exceeds FCC requirements										
Surge Rating	IEEE 587, Class B, 2500 Volts										

* All specifications are subject to change without notice.

8400 Series Four-Way Multi-Tap Specifications*

(Worst case performance.)

	8408	8411	8414	8417	8420	8423	8426	8429	8432	8435	Units
Tap Value (± 1.5)	8	11	14	17	20	23	26	29	32	35	dB
Bandwidth	5-600	5-600	5-600	5-600	5-600	5-600	5-600	5-600	5-600	5-600	MHz
Color Code	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown	
Insertion Loss (max.)											
5 MHz	–	3.2	1.8	0.9	0.7	0.6	0.5	0.5	0.5	0.5	dB
30 MHz	–	2.8	1.5	0.8	0.6	0.4	0.4	0.4	0.4	0.4	dB
54 MHz	–	2.7	1.4	0.7	0.5	0.4	0.3	0.3	0.3	0.3	dB
330 MHz	–	2.9	1.5	0.8	0.7	0.6	0.5	0.4	0.4	0.4	dB
400 MHz	–	3.1	1.7	1.0	0.8	0.7	0.6	0.5	0.5	0.5	dB
450 MHz	–	3.3	1.9	1.3	1.0	0.7	0.7	0.7	0.7	0.7	dB
500 MHz	–	3.6	2.2	1.5	1.2	0.8	0.8	0.8	0.8	0.8	dB
600 MHz	–	3.7	2.3	1.6	1.3	1.1	1.0	0.9	0.9	0.9	dB
Flatness (max.)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	± dB
Tap-to-Out Isolation (min.)											
5-600 MHz	–	24	27	30	33	36	38	40	42	44	dB
Tap-to-Tap Isolation (typical)	28	28	28	28	28	28	28	28	28	28	dB
5-500 MHz (min.)	26	26	26	26	26	26	26	26	26	26	dB
500-600 MHz (min.)	24	24	24	24	24	24	24	24	24	24	dB
Return Loss (min.)											
In	18	18	18	18	18	18	18	18	18	18	dB
Out	–	18	18	18	18	18	18	18	18	18	dB
Tap	16	16	16	16	16	16	16	16	16	16	dB
Hum Modulation @ 6 Amps											
5-450 MHz	-70	-70	-70	-70	-70	-70	-70	-70	-70	-70	dB
450-600 MHz	-64	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
RFI Isolation	Exceeds FCC requirements										
Surge Rating	IEEE 587, Class B, 2500 Volts										

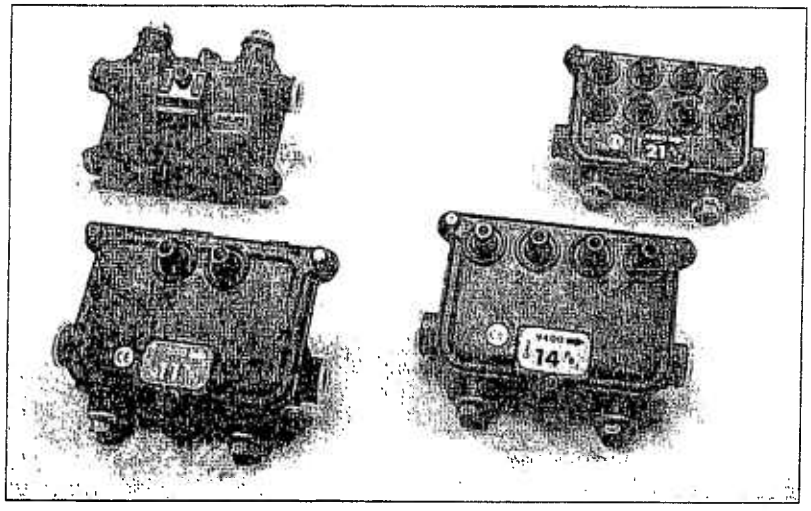
* All specifications are subject to change without notice.

8800 Series Eight-Way Multi-Tap Specifications*
(Worst case performance.)

	8812	8815	8818	8821	8824	8827	8830	8833	8836	Units
Tap Value (± 1.5)	12	15	18	21	24	27	30	33	36	dB
Bandwidth	5-600	5-600	5-600	5-600	5-600	5-600	5-600	5-600	5-600	MHz
Color Code	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown	
Insertion Loss (max.)										
5 MHz	–	3.2	1.6	1.0	0.6	0.6	0.4	0.4	0.4	dB
30 MHz	–	3.0	1.5	1.0	0.6	0.6	0.4	0.5	0.5	dB
50 MHz	–	2.9	1.6	1.0	0.6	0.6	0.5	0.5	0.5	dB
330 MHz	–	3.2	1.8	1.1	0.8	0.8	0.6	0.6	0.6	dB
400 MHz	–	3.4	2.0	1.1	1.0	0.8	0.6	0.6	0.6	dB
450 MHz	–	3.4	2.0	1.3	1.0	1.0	0.7	0.7	0.7	dB
500 MHz	–	3.6	2.2	1.4	1.1	1.1	0.9	0.9	0.9	dB
600 MHz	–	3.7	2.3	1.6	1.3	1.1	0.9	0.9	0.9	dB
Flatness (max.)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	± dB
Tap-to-Out Isolation (min.)										
5-600 MHz	–	27	30	34	36	38	40	42	44	dB
Tap-to-Tap Isolation (typical)	28	28	28	28	28	28	28	28	28	dB
5-500 MHz (min.)	25	25	25	25	25	25	25	25	25	dB
500-600 MHz (min.)	22	22	22	22	22	22	22	22	22	dB
Return Loss (min.)										
In	18	18	18	18	18	18	18	18	18	dB
Out	–	18	18	18	18	18	18	18	18	dB
Tap	16	16	16	16	16	16	16	16	16	dB
Hum Modulation @ 6 Amps										
5-450 MHz	-70	-70	-70	-70	-70	-70	-70	-70	-70	dB
450-600 MHz	-64	-64	-64	-64	-64	-64	-64	-64	-64	dB
RFI Isolation	Exceeds FCC requirements									
Surge Rating	IEEE 587, Class B, 2500 Volts									

*All specifications are subject to change without notice.

Power Bypass Multi-Taps



9000-PBT Series

The 9000-PBT 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.

- Continuous RF signal and AC power bypass circuit eliminates downstream service interruptions when face plates 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-PBT 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-inch pedestal.

Our 9000-PBT series multi-taps all share these standard features:

- 1 GHz bandwidth capacity,
- brass SCTE F-ports with drip lips and rubber boots,
- interchangeable face plates,
- strip gauges and heat-shrink ridges for easy installation,
- 2.5 KV surge resistance meets ANSI/IEEE C62.41-1991 Class B, 2500 V surge and 10-amp current-handling capability,
- network power capacity of 90 VAC, 0 to 60 Hz,
- easily upgraded to telephony with F-port powered 9000T-FP or twisted pair 9000T-TP face plates, and
- face plates fit in 8000 series housings for easy upgrade to 1 GHz.

The aluminum die-cast housing is pressure tested to 10 psi and 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 resistant. 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.

The power bypass assembly, located in the housing, prevents interruptions in power and RF service when face plates are removed. The 10-amp current rating (for assembly) meets future system requirements.

Power Bypasss Multi-Taps

Worst Case Specifications* 9800-PBT Eight-Way Series

	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					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	1.8	1.8	± dB
900-1000 MHz	2.3	2.5	1.9	2.4	2.1	2.1	1.9	2.1	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 (max.)	0	10	10	10	10	10	10	10	10	amps
Voltage Passing Capacity (min) 0 to 60 Hz.	90	90	90	90	90	90	90	90	90	VAC
Surge Rating	ANSI/IEEE C62.41-1991, Class B, 2500 Volts									

*All specifications are subject to change without notice.

PHILIPS

Power Bypass Multi-Taps

Worst Case Specifications* 9400-PBT Four-Way Series

	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						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 (max.)	0	10	10	10	10	10	10	10	10	10	amps
Voltage Passing Capacity (min) 0 to 60 Hz.	90	90	90	90	90	90	90	90	90	90	VAC
Surge Rating	ANSI/IEEE C62.41-1991, Class B, 2500 Volts										

*All specifications are subject to change without notice.

PHILIPS

Power Bypass Multi-Taps

Worst Case Specifications* 9200-PBT Two-Way Series

	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						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 (max.)	0	10	10	10	10	10	10	10	10	10	amps
Voltage Passing Capacity (min) 0 to 60 Hz.	90	90	90	90	90	90	90	90	90	90	VAC
Surge Rating	ANSI/IEEE C62.41-1991, Class B, 2500 Volts										

*All specifications are subject to change without notice.

PHILIPS

Specifications (continued)

9000-PBT Series

	Notes		Units
Mechanical			
Dimensions (height x width x depth)	a	3.8 x 4.9 x 2.4 (9.6 x 12.6 x 6.1)	in. (cm)
Weight		0.8 (0.37)	lbs. (kg)
Connector Type	b	Standard CATV KS entry connectors for cable up to 0.625" diameter	
Pin Length		1.44 (3.7)	in. (cm)

*All specifications are subject to change without notice.

Notes:

a. Height dimension includes plug; depth dimension includes 1/2" F-ports and strand clamp/bolt in closed position.

b. Pin connector (.067 inch diameter) is recommended for best RF performance.

Nominal Performance*

9200-PBT Two-Way Series

	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						MHz
Color Code	Black	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	
Insertion Loss (input/output)											
10 MHz	—	2.7	1.3	0.6	0.5	0.4	0.3	0.3	0.3	0.3	dB
30 MHz	—	2.7	1.2	0.6	0.4	0.4	0.3	0.3	0.3	0.3	dB
55 MHz	—	2.6	1.2	0.6	0.4	0.3	0.3	0.3	0.3	0.3	dB
70 MHz	—	2.9	1.4	0.7	0.6	0.4	0.3	0.3	0.3	0.3	dB
112 MHz	—	3.1	1.6	0.9	0.8	0.5	0.4	0.4	0.4	0.4	dB
150 MHz	—	3.3	1.6	0.9	0.8	0.5	0.4	0.4	0.4	0.4	dB
186 MHz	—	3.3	1.6	0.9	0.8	0.5	0.4	0.4	0.4	0.4	dB
222 MHz	—	3.3	1.6	0.9	0.8	0.5	0.4	0.4	0.4	0.4	dB
330 MHz	—	3.3	1.6	1.0	0.8	0.5	0.5	0.4	0.4	0.5	dB
400 MHz	—	3.4	1.7	1.0	0.8	0.6	0.5	0.5	0.5	0.5	dB
450 MHz	—	3.4	1.7	1.0	0.8	0.6	0.5	0.5	0.5	0.5	dB
550 MHz	—	3.5	1.8	1.0	0.8	0.6	0.5	0.5	0.5	0.5	dB
600 MHz	—	3.6	1.9	1.1	0.9	0.7	0.6	0.6	0.6	0.6	dB
750 MHz	—	3.9	2.2	1.3	1.1	0.9	0.8	0.7	0.8	0.8	dB
862 MHz	—	4.1	2.4	1.4	1.3	1.0	0.8	0.8	0.8	0.9	dB
1000 MHz	—	4.0	2.9	1.8	1.7	1.1	1.0	0.9	0.9	1.0	dB
Tap Loss											
10-19 MHz	3.4	7.6	11.3	14.8	17.1	19.6	22.3	25.2	28.3	31.3	dB
20-899 MHz	3.6	7.5	11.2	14.7	16.6	20.3	23.0	25.9	28.8	31.7	dB
900-1000	4.5	9.2	12.1	15.0	17.0	21.0	23.7	27.2	29.7	32.9	dB

*All specifications are subject to change without notice.

Nominal Performance*

9400-PBT Four-Way Series

	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						MHz
Color Code	Orange	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown	
Insertion Loss (input/output)											
10 MHz	—	3.2	1.4	0.7	0.5	0.4	0.4	0.3	0.3	0.3	dB
30 MHz	—	3.2	1.3	0.6	0.4	0.4	0.3	0.3	0.3	0.3	dB
55 MHz	—	3.2	1.2	0.6	0.4	0.4	0.3	0.3	0.3	0.3	dB
70 MHz	—	3.5	1.4	0.8	0.6	0.6	0.3	0.3	0.3	0.3	dB
112 MHz	—	3.7	1.6	0.9	0.8	0.7	0.4	0.4	0.4	0.4	dB
150 MHz	—	3.7	1.6	0.9	0.8	0.7	0.4	0.4	0.4	0.4	dB
186 MHz	—	3.8	1.6	0.9	0.8	0.7	0.4	0.4	0.4	0.4	dB
222 MHz	—	3.8	1.6	0.9	0.8	0.7	0.4	0.4	0.4	0.4	dB
330 MHz	—	3.9	1.7	1.0	0.8	0.7	0.5	0.5	0.5	0.5	dB
400 MHz	—	4.0	1.8	1.0	0.8	0.7	0.5	0.5	0.5	0.5	dB
450 MHz	—	4.0	1.8	1.0	0.8	0.7	0.5	0.5	0.5	0.5	dB
550 MHz	—	4.1	1.9	1.1	0.9	0.8	0.6	0.5	0.5	0.6	dB
600 MHz	—	4.4	2.0	1.2	0.9	0.8	0.6	0.6	0.6	0.6	dB
750 MHz	—	4.6	2.4	1.4	1.1	1.0	0.8	0.8	0.7	0.8	dB
862 MHz	—	4.5	2.8	1.5	1.3	1.1	0.9	0.9	0.8	0.9	dB
1000 MHz	—	4.4	3.4	2.0	1.7	1.6	1.1	1.0	0.9	1.1	dB
Tap Loss											
10-19 MHz	6.8	10.7	14.9	17.5	20.2	23.3	25.4	28.3	31.4	34.4	dB
20-899 MHz	7.2	10.5	14.9	17.2	19.8	22.8	26.1	29.1	32.0	35.0	dB
900-1000 MHz	8.6	13.3	15.7	17.7	20.7	23.8	25.9	29.5	32.2	34.9	dB

*All specifications are subject to change without notice.

Nominal Specifications*

9800-PBT Eight-Way Series

	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					MHz
Color Code	Gold	White	Blue	Green	Purple	Yellow	Red	Silver	Brown	
Insertion Loss (input/output)										
10 MHz	—	2.6	1.4	0.8	0.5	0.5	0.4	0.3	0.4	dB
30 MHz	—	2.5	1.3	0.7	0.4	0.4	0.3	0.3	0.3	dB
54 MHz	—	2.4	1.2	0.6	0.4	0.3	0.3	0.3	0.3	dB
70 MHz	—	2.6	1.4	0.8	0.6	0.4	0.3	0.3	0.3	dB
112 MHz	—	2.9	1.7	1.0	0.8	0.5	0.4	0.4	0.4	dB
150 MHz	—	2.9	1.7	1.0	0.8	0.5	0.4	0.4	0.4	dB
186 MHz	—	2.9	1.8	1.0	0.8	0.5	0.4	0.4	0.4	dB
222 MHz	—	3.0	1.8	1.1	0.8	0.5	0.4	0.4	0.4	dB
330 MHz	—	3.0	1.9	1.1	0.8	0.5	0.4	0.4	0.4	dB
400 MHz	—	3.1	1.9	1.2	0.8	0.6	0.5	0.5	0.5	dB
450 MHz	—	3.1	1.9	1.2	0.8	0.6	0.5	0.5	0.5	dB
550 MHz	—	3.3	2.0	1.2	0.9	0.6	0.5	0.5	0.5	dB
600 MHz	—	3.5	2.1	1.3	0.9	0.7	0.7	0.7	0.7	dB
750 MHz	—	3.9	2.4	1.5	1.1	0.8	0.7	0.8	0.7	dB
862 MHz	—	4.1	2.7	1.7	1.3	0.9	0.8	0.8	0.8	dB
1000 MHz	—	4.3	3.0	2.2	1.7	1.1	1.0	1.0	1.0	dB
Tap Loss										
10-29 MHz	11.0	15.3	17.9	21.4	24.1	25.9	28.8	31.7	34.7	dB
20-899 MHz	11.3	15.1	17.6	21.1	23.7	26.9	30.1	32.5	35.6	dB
900-1000 MHz	12.5	16.2	18.7	21.9	24.2	27.4	30.3	33.0	36.3	dB

*All specifications are subject to change without notice.

Distribution Slope Equalizers

Worst Case Specifications*

9-DSE Series 42/54 Split

	Notes	-7508	-7511	-1008	-1011	Units
Return Bandwidth		5-42	5-42	5-42	5-42	MHz
Forward Bandwidth		54-750	54-750	54-1000	54-1000	MHz
Insertion Loss (maximum)						
Return		1.8	1.8	1.8	1.8	dB
Forward	a					
@ 54 MHz		7.8	10.5	8.5	11.0	dB
@ 550 MHz		3.5	3.8	4.7	5.0	dB
@ 750 MHz		2.2	2.5	3.7	4.1	dB
@ 1000 MHz		N/A	N/A	3.0	3.2	dB
Return Loss (minimum) (input/output)		16	16	16	16	dB
Flatness (maximum)						
Return		± 0.6	± 0.6	± 0.6	± 0.6	dB
Forward		± 0.65	± 0.65	± 0.65	± 0.65	dB
Forward Equalizer (typical @ highest forward frequency)		8.0	11.0	8.0	11.0	dB
Relative Chroma Delay (maximum)						
Return						
7.00-10.58 MHz		-11	-11	-11	-11	n'sec
13.00-16.58 MHz		-3	-3	-3	-3	n'sec
19.00-22.58 MHz		-4	-4	-4	-4	n'sec
25.00-28.58 MHz		-4	-4	-4	-4	n'sec
31.00-34.58 MHz		-9	-9	-9	-9	n'sec
37.00-40.58 MHz		-23	-23	-23	-23	n'sec
Forward						
55.25-58.83 MHz		-30	-30	-30	-30	n'sec
61.25-64.83 MHz		-10	-10	-10	-10	n'sec
67.25-70.83 MHz		-4	-4	-4	-4	n'sec
73.25-76.83 MHz		-3	-3	-3	-3	n'sec
Unstated Channels		<2	<2	<2	<2	n'sec
Hum Modulation @ 6 amps (minimum)						
5-750 MHz		-60	-60	-60	-60	dB
751-1000 MHz		—	—	-55	-55	dB
Isolation Overall (minimum)		35	35	35	35	dB
RFI Isolation		Exceeds FCC requirements				
Current Handling Capability (maximum)		8	8	8	8	amps
Voltage Passing Capacity (min.) 0 to 60 Hz		90	90	90	90	VAC
Surge Rating		ANSI/IEEE C62.41-1991, Class B, 2500 Volts				
Thermal Change (maximum, -40 to +60 C)		± 0.5	± 0.5	± 0.5	± 0.5	dB
Mechanical						
Dimensions (height x width x depth)	b	4.7 x 5.5 x 3.0 (11.9 x 1.4 x 7.6)				in. (cm)
Weight		1.0 (0.45)				lbs. (kg)
Connector Type	c	Standard CATV KS entry connectors for cable up to 0.625" diameter				
Pin Length		1.44 (3.7)				in. (cm)

*All specifications are subject to change without notice.

Notes:

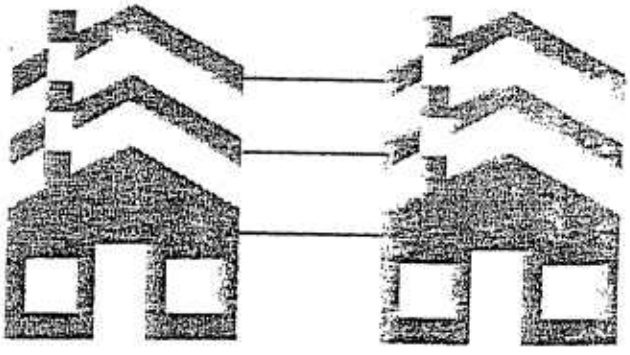
a. For 7508 and 7511, includes 1.0 dB for equalizer loss. For 1008 and 1011, includes 1.5 dB for equalizer loss.

b. Height dimension includes port plug; depth dimension includes strand clamp and bolt in closed position.

c. Pin connector (.067 inch diameter) recommended for best RF performance.

Appendices

- Appendix A - Technical Information
- Appendix B - Customer Information



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:

Bellcore
- 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 B- 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

		Tap Value								
	Frequency	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
Faceplate Assembly	SAT STF-2	543484	Multimedia Stretch Tap 2-Way Faceplate Assembly
Directional Coupler Module	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

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 Assemb
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: Ithaca

Date: Jan 04,2002

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.

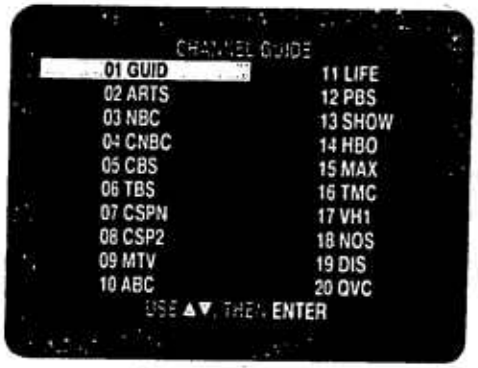
Instructions:

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.

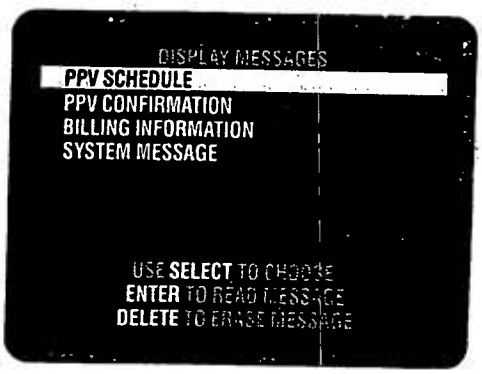
Attach a copy of the manufacturer's specifications covering all traps that are in use in the cable plant. This should include B-basic traps, individual channel traps, high pass filters, etc.

MAIN MENU

MAIN MENU



CHANNEL GUIDE



MESSAGE DISPLAY

IMPULSE, ENHANCED BASEBAND SECURITY AND ON-SCREEN DISPLAY

FEATURES

- ON-SCREEN DISPLAY
- UNMATCHED BASEBAND SCRAMBLING
- FULLY DOWNLOADABLE
- ELECTRONIC PROGRAM GUIDE CAPABILITY
- SUBSCRIBER MESSAGING

The Jerrold CFT-2000 is a 550 MHz impulse-capable baseband converter with consumer-friendly on-screen display programming capability and the unmatched scrambling security of baseband technology.

• SUBSCRIBER FEATURES

The on-screen display feature is sophisticated, yet easy to use. Multi-colored, simple-format menus and help message screens walk subscribers through the steps required for even the more complicated converter functions, such as VCR timer programming, sleep timers and parental codes, and it makes purchasing PPV events and services even more convenient.

Channel I.D. When a subscriber changes channels, the on-screen display identifies the channel number and channel name, as well as whether the converter is locked, parentally controlled, and if it is tuned to a favorite channel.

Volume Control Bar. When a subscriber presses the volume up/down key, the volume control bar appears on the screen. The bar's movement visually indicates whether the volume has increased or decreased. The CFT 2000 passes BTSC stereo signals, allowing subscribers with stereo televisions or VCRs to receive and enjoy stereo programming. The volume control bar also indicates the best stereo point for optimal stereo sound.

VCR Timers. Subscribers can quickly program up to eight events over a 365-day period. The CFT 2000 makes it possible to program events on a one-time, daily, weekly, weekday and weekend basis. It is also easier to review and correct already-programmed events.

Parental Control. The on-screen menus make it easier to activate and deactivate parentally controlled channels. The lock and key symbols,

Jerrold IMPULSE 7000 Series Model CFT 2000

Baseband Converter With On-Screen Display

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	FSK Modulated FM Carrier 106.5 or 108.5 MHz
Bandwidth	±200 KHz standard FM
Level	−15 dBmV
Video 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	6 dB min.
Output	8 dB min.
Spurious:	
Output	−57 dBc max., in band
Cross Modulation Distortion	−56 dB (82 channels, each @ +15 dBmV)
Composite Second Order Distortion	−56 dB (82 channels each @ + 15 dBmV)
Second Order Distortion	−60 dB (@ +15 dBmV input level)
Composite Triple Beat Distortion	−56 dB (82 channels each @ +15 dBmV)
Converted Input Beats (With all Input Signals)	−25 dB (82 channels, each @ +15 dBmV)
Hum Modulation Distortion	3 IRE
Output Level	7-14 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.
On-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
Two-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.

NOTE: Specifications subject to change without notice.

JERROLD COMMUNICATIONS

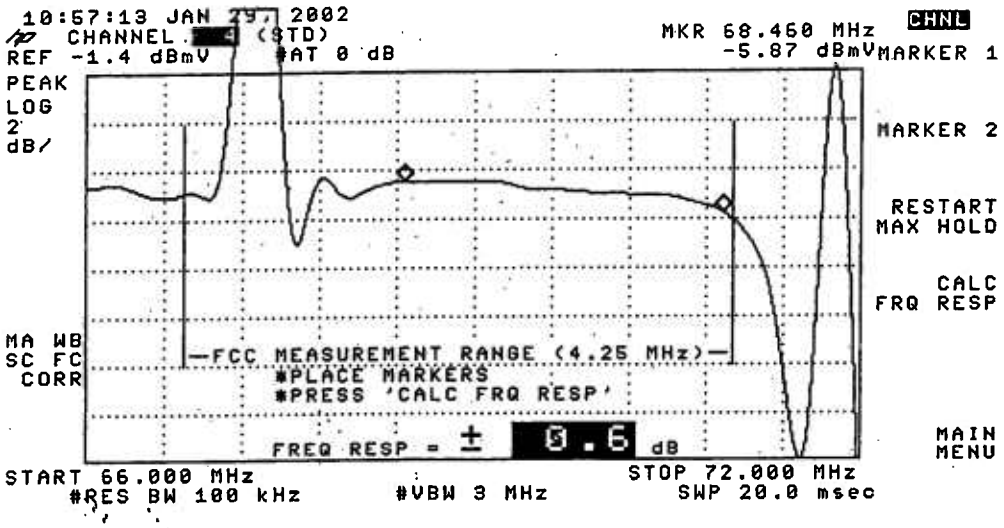
General Instrument
CFT 2200

Specifications

Input Frequency	54-860MHz (excluding data carrier frequency)
HRC/IRC Frequency Assignments	Download
Number of Channels	136 channels per cable; one or two cables
Dual A/B Cable Switching	Optional A/B (field upgradable)
A/B Cable Switching	LED in front display
Input Video Level	0 dBmV to +15 dBmV
Input Sound Level	-17dBmV to +2 dBmV
Data Carrier	FSK Modulated FM Carrier
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 min.
Output	8 dB min.
Spurious:	
Output	-57 dBc max., in band
Cross Modulation Distortion	- 56 dB (136 channels, each @ +15 dBmV)
Composite Second Order Distortion	-60 dB (136 channels, each @ +15 dBmV)
Second Order Distortion	-60 dB (136 channels, each @ +15 dBmV input level)
Composite Triple Beat Distortion	-65dB (136 channels, each @ + 15 dBmV)
Converted Input Beats (With all Input Signals)	-25dB 136 channels, each @ +15 dBmV)
Hum Modulation Distortion	3 IRE

Output Level	10 to 15 dBmV
Isolation (Input/Output)	70 dB min.
Differential Phase	10 degrees (max.)
Scrambling Method	Gated Sync Suppression or Dynamic Gated Sync Suppression, Video Inversion, Audio Privacy, Hamlin Compatibility
On Screen Display	Character Size: 18x12 (in 12x24) and 12x8 (in 16x32) pixels Screen Size: 12 rows x 24 columns 16 rows x 32 columns Message/Barker Capacity: 40 Pages Channel Descriptors: 4 characters, maximum
Mechanical Security	Std.: security screws; security pin; uni-chassis construction
Two-way Systems Compatibility	Upgrade in field by addition of STARVUE®, STARFONE® or Network 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	24 Watts at 115 VAC
Surge Protection	Surge protection provided on power supply and RF ports
Size	13.0" x 8.53" x 2.875" (LxWxH)
Weight	7.0 lbs

IN-CHANNEL FREQUENCY RESPONSE SAMPLE
THROUGH A JERROLD CFT-2000 CONVERTER.
INPUT ON CHANNEL 13, OUTPUT CHANNEL 4.
SAMPLE TAKEN AT ITHACA HEADEND.



Scientific Atlanta

Broadband Communications Group

Set-Top Terminal *Model 8511*

19961

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

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

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.

Set-Top Terminal
Model 8511

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.

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.

Scientific-Atlanta, Inc.

United States: 4386 Park Drive, Box 105027, Atlanta, GA 30348; Telephone 404-441-4100; TWX 810-766-4912; Telex 0542898
Europe: Home Park Estate, Kings Langley, Herts WD4 8LZ, England; Telephone 092-776-6133; Telex 912044
Japan: ABS Building, 2-4-16, Kudan Minami Chiyoda-Ku, Tokyo 102 Japan; Telephone: 03-221-9768; Fax: 03-239-2817; Telex: J32384

EXPLORER® 2000
Digital Home Communications Terminal

EXPLORER 2000 DHCT Specifications

Introduction

This section contains operating and other specifications for the EXPLORER 2000 Digital Home Communications Terminal (DHCT).

Electrical Overstress Protection

The EXPLORER 2000 DHCT withstands the following electrical currents without damage:

- hits at 3.5 kV to the RF and AC input ports
- 10 hits of 15 kV from a 150 pF capacitor through a 150 ohm series resistor on all external ports

RF and Baseband Output Performance

The following table provides output measurements based on a **+15 dBmV** Input signal.

Item	Output
Cross modulation distortion (XMOD)	-54 dBc
Composite second order distortion (CSO)	-54 dBc
Composite triple beat distortion (CTB)	-55 dBc

Frequency Resolution

Frequency assignments comply with *STD*, *HRC*, and *IRC* frequency lineups.

Channel	Steps
QAM (digital)	250 kHz
NTSC (analog)	62.5 kHz

Continued on next page

Power

Item	Power
Consumption	35 Watts maximum
AC Input	Standard residential AC line voltage of 103.5 V AC to 126.5 V AC at 60 Hz
AC Outlet	Supplies 400 Watts maximum at the AC input line voltage. User controls on/off function through EXPLORER 2000 DHCT interface.

Analog Channel RF Input

Item	Specification
Connector	Threaded female F-connector
Frequency range	54 MHz to 860 MHz
RF input level	0 dBmV to +15 dBmV (meets NTSC specs)
Functional operation without damage	-7 dBmV to +20 dBmV (minimum)
Input return loss	7 dB minimum
Noise figure	<12 dB at maximum gain
C/N (at input)	57 dB minimum (meets all specs) 40 dB minimum (minimum)

Continued on next page

Digital Channel Input

Item	Specification
Frequency range	54 MHz to 869 MHz
Input return loss	7 dB minimum
Noise figure	<12 dB at maximum gain
Modulation technique	ITUJ.83 Annex A 64 QAM and 256 QAM
Transmission rate	• Approximately 30 Mbps at 64 QAM • Approximately 40 Mbps at 256 QAM
Transport	DAVIC structure - convolutional de-interleaving and Reed Solomon FEC with T=8
Average private data rate	3 Mbps (from QAM demodulated input to DRAM)
Private data format	per MPEG-2 (ISO/IEC 13818)

RF Input Levels

Item	Modulation Rate	Level
Typical for BER after FEC $<10^{-9}$	64 QAM	-20 dBmV to +14 dBmV
	256 QAM	-14 dBmV to +14 dBmV
Meets specifications of BER after FEC $<10^{-9}$	64 QAM	-15 dBmV to +14 dBmV
	256 QAM	-9 dBmV to +14 dBmV
C/N (at input) - to meet BER at input levels above	64 QAM	>32 dB in 6 MHz BW
	256 QAM	>38 dB in 6 MHz BW

Continued on next page

Digital Audio

Item	Specification
Data rate	384 Kbps maximum
Formats	• MPEG-1 • Layer 2 • 2 channel Musicam • AC-3
Supported sampling rates	• 32 kHz • 48 kHz • 44.1 kHz

Computer Generated Audio

The EXPLORER 2000 DHCT supports the following computer audio sampling rates:

- 8 kHz
- 11.025 kHz
- 22.05 kHz
- 24 kHz
- 32 kHz
- 44.1 kHz
- 48 kHz

Continued on next page

Baseband Audio Output

Category	Item	Specification
General	Connector	2 female RCA-type phono jacks: • Right channel - red insulation • Left channel - white insulation
	Output level	1.3 V p-p ± 10% with 10 kΩ load
	Output impedance	600 Ω nominal
	Mute	-50 dB
ResApp Controlled	Volume control	30 steps from 0 dB (maximum volume) to -63 dB nominal
Analog service (BTSC selected)	Frequency response	50 Hz to 10 kHz ± 2 dB
	Stereo channel separation	• 25 dB at 3 kHz • 15 dB at 10 kHz
	Total harmonic distortion	1 kHz <3.5%
	Signal-to-noise ratio	• > 45 dB A-weighted • 25 kHz L+R deviation at 1 kHz
Analog service (SAP selected)	Frequency response	100 Hz to 8 kHz ± 2 dB
	Total harmonic distortion	1 kHz < 3.0%
Digital service	Frequency response	20 Hz to 20 kHz ± 1.0 dB
	Signal to noise ratio	• >80 dB A-weighted • >80 dB at 1 kHz (dynamic range)
	Total harmonic distortion - 20 Hz to 20 kHz bandwidth	< 0.2% at 1 kHz
	Stereo channel separation	> 80 dB at 1 kHz

Continued on next page

Baseband Video Output

Item	Specification
Connector	Female RCA type with yellow insulation
Output	1.0 V p-p ± 10% at 75 Ω nominal
Frequency response - 220 kHz to 3.75 MHz (can change based on FCC part 76)	± 3 dB p-p
S/N with input +5 dBmV, input C/N 57 dB min. (55-550 MHz)	42 dB minimum unweighted
S/N with input +5 dBmV, input C/N 57 dB min. (55-860 MHz)	41 dB minimum unweighted

RF Output

Item	Specification
Connector	F type
Frequency	• Channel 3 - 61.25 MHz • Channel 4 - 67.25 MHz (channels are switchable)
RF output level	• +9 ± 4.5 dBmV Video • ± 13.5 ± 3.5 dBc Audio
Frequency response - 220 kHz to 3.75 MHz (can change based on FCC part 76)	± 3 dB p-p
Return loss	10 dB minimum
S/N with input +5 dBmV, input C/N 57 dB min. (55-550 MHz)	42 dB minimum unweighted equivalent to a 49 dB C/N, assuming 7 dB correction factor
S/N with input +5 dBmV, input C/N 57 dB min. (550-850 MHz)	41 dB minimum unweighted equivalent to a 48 dB C/N, assuming 7 dB correction factor

Continued on next page

S-Video Output

Part	Function
Connector	4-position mini-DIN
S/N with input +5 dBmV, input C/N 57 dB min. (55-550 MHz)	42 dB minimum unweighted
S/N with input +5 dBmV, input C/N 57 dB min. (550-860 MHz)	41 dB minimum unweighted
Output levels	• Y: 1 V p-p ± 10% • C: 0.29 V p-p ± 10%

Forward Control Channel RF Input

Item	Specification
Modulation technique	Differential QPSK
Frequency	70 MHz to 130 MHz agile in 250 kHz steps
Transmission rate	1.544 Mbps
Channel bandwidth	1 MHz
Channel spacing	1 MHz
Adjacent channel performance (data)	Meets BER performance at +6 dBc 1.00 MHz from center
Mode	Continuous
Transmission format	DS1 extended Superframe - 53 byte ATM cells with AAL5 layer T=1 Reed Solomon
RF input level	-16 dBm VRMS to +15 dBm VRMS (6 dB to 16 dB below NTSC video)
BER performance at C/N=18 dB (in 772 kHz BW) at RF level above	< 10^{-9} after Reed Solomon

Continued on next page

Reverse Control and Interactive Channel RF Output

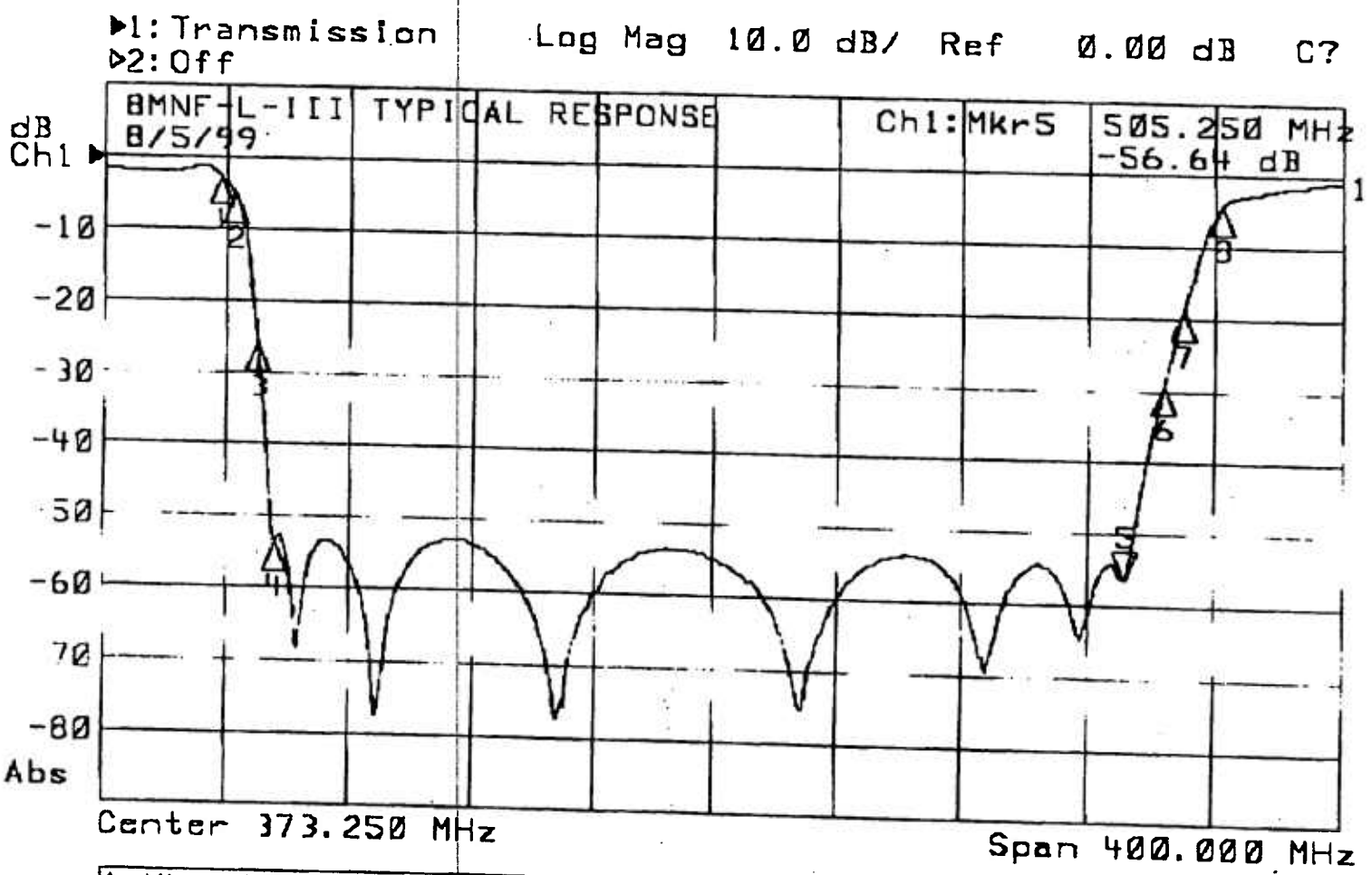
Item	Specification
Modulation technique	Differential QPSK
Frequency	8 MHz to 26.5 MHz
Channel bandwidth	1 MHz
Channel step size	50 kHz
Forward error correction	Shortened Reed Solomon (59,53), T=3
Mode	Burst mode
Transmission rate	256 Kbps or 1.544 Mbps (maximum burst rate)
Transmission format	53 byte ATM cells
Channel sharing protocol	Slotted ALOHA, TDMA and Reservation
Maximum RF output level	Variable +55 dBm VRMS minimum
C/N0, 2 MHz from carrier (Output level >40 dbm VRMS)	120 dB/Hz
Spurious output (5-42 MHz)	-45 dBC
Channel tuning time	< 5 mS

Memory Configuration

Memory Type	Capacity
CPU DRAM	4 MB standard, MB expandable to 16 MB at factory
CPU Flash	2 MB
CPU ROM	2 MB
Decompression/Graphics SDRAM	2 MB (shared by CPU for application processing)
CPU EEPROM	16 kb

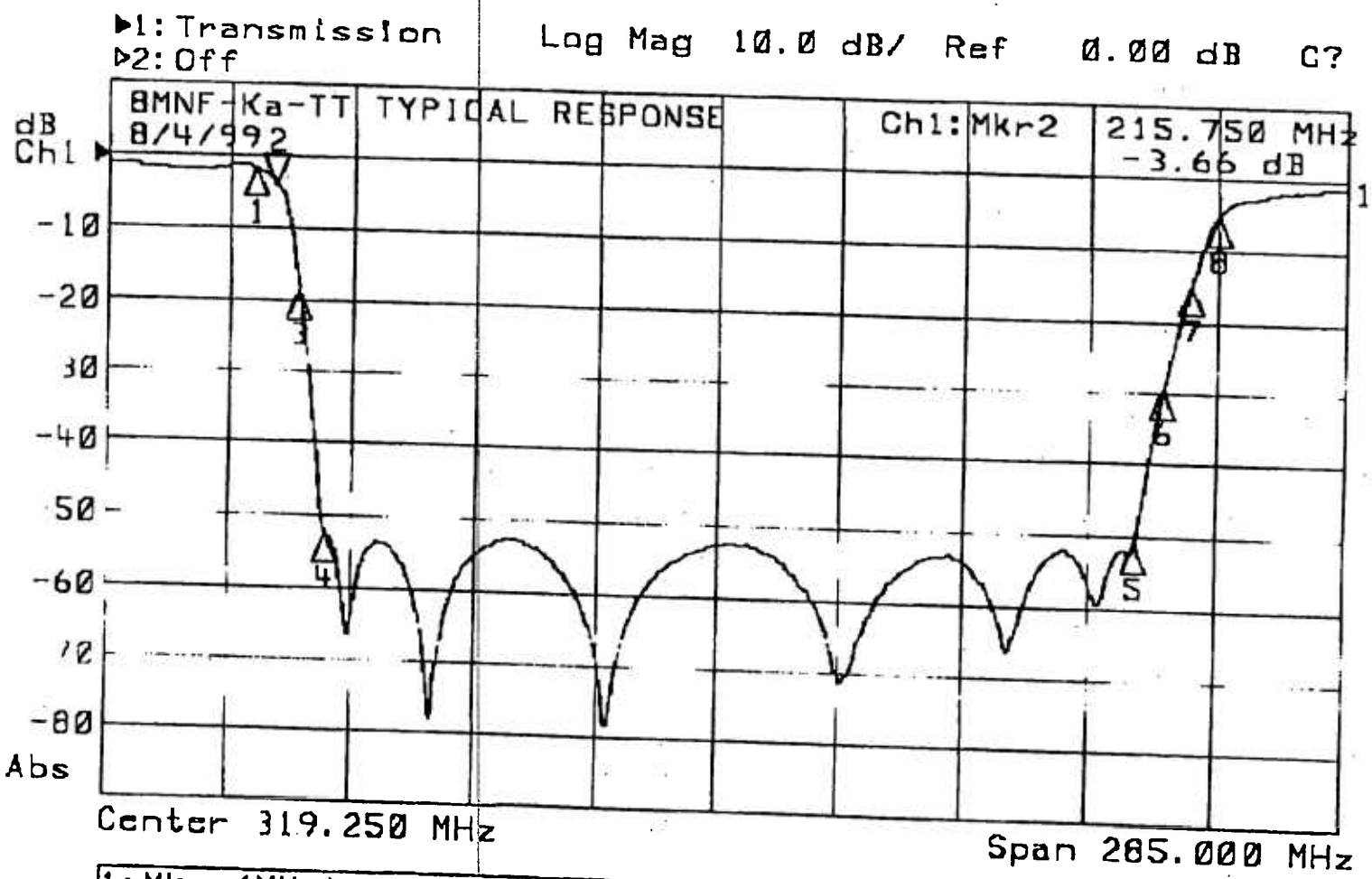
Continued on next page

8MNF-L-III



1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1: 211.25	-2.61		
2: 215.75	-4.93		
3: 223.25	-25.66		
4: 229.25	-53.65		
5> 505.25	-56.64		
6: 517.25	-28.91		
7: 523.25	-18.76		
8: 535.25	-4.16		

8MNF-Ka-TT



1: Mkr (MHz)	dB
1: 211.25	-1.69
2> 215.75	-3.66
3: 221.25	-18.43
4: 227.75	-52.37
5: 415.25	-51.03
6: 421.25	-29.42
7: 427.25	-14.60
8: 433.25	-4.85

2: Mkr (MHz)	dB

TIME WARNER CABLE
SYRACUSE DIVISION

Proof - of - Performance Tests

Headend Tests

System Name: Ithaca

Location: 519 W. State Street

Visual Carrier and Aural Carrier Difference Frequency Tests

(at Headend)

System Name: **Time-Warner Ithaca**

HE Location: **517 West State Street**

Date: **Jan 23,2002** Performed by: **Paul Cullings**

Chan	Freq	Visual Freq (MHz)	Aural Freq Diff. (MHz)	Chan	Freq	Visual Freq (MHz)	Aural Freq Diff. (MHz)
2	55.2500	55.25000	4.49990	AA	301.2625	301.26280	4.49980
3	61.2500	61.25000	4.50010	BB	307.2625	307.26260	4.50010
4	67.2500	67.26250	4.49990	CC	313.2625	313.26260	4.49990
5	77.2500	77.24990	4.49980	DD	319.2625	319.26240	4.50000
6	83.2500	83.25010	4.50010	EE	325.2625	325.26260	4.50000
				FF	331.2750	331.27530	4.49980
				GG	337.2625	337.26130	4.49970
A-5	91.2500			HH	343.2625	343.26220	4.50000
A-4	97.2500			II	349.2625	349.26250	4.49990
A-3	103.2500			JJ	355.2625	355.26240	4.50010
A-2	109.2750	109.27490	4.50000	KK	361.2625	361.26240	4.50030
A-1	115.2750	115.27310	4.50010	LL	367.2625	367.26210	4.50010
A	121.2625	121.26250	4.49980	MM	373.2625	373.26260	4.50010
B	127.2625	127.26260	4.49990	NN	379.2625	379.26230	4.50000
C	133.2625	133.26230	4.50010	OO	385.2625	385.26110	4.50000
D	139.2500	139.24780	4.50010	PP	391.2625	391.26290	4.50010
E	145.2500	145.25000	4.50000	QQ	397.2625	397.26170	4.50000
F	151.3210	151.32050	4.50010	RR	403.2500	403.26220	4.50010
G	157.2500	157.26260	4.50020	SS	409.2500	409.26000	4.50010
H	163.2500	163.26260	4.49960	TT	415.2500	415.25000	4.50010
I	169.2500	169.26250	4.49980	UU	421.2500	421.25000	4.50000
7	175.2500	175.24990	4.49990	VV	427.2500	427.25020	4.49980
8	181.2500	181.25000	4.50000	WW	433.2500	433.25050	4.50000
9	187.2500	187.24980	4.50010	XX	439.2500	439.24560	4.50020
10	193.2500	193.25000	4.50010	YY	445.2500	445.24980	4.50010
11	199.2500	199.25000	4.50000	ZZ	451.2500	451.26270	4.50010
12	205.2500	205.25000	4.50000	63	457.2500	457.25070	4.50020
13	211.2500	211.25130	4.50010	64	463.2500	463.25030	4.50000
J	217.2500	217.24980	4.50000	65	469.2500	469.26250	4.50000
K	223.2500	223.26260	4.49980	66	475.2500	475.24810	4.50020
L	229.2625	229.26250	4.49990	67	481.2500	481.24730	4.50040
M	235.2625	235.26170	4.50010	68	487.2500	487.24740	4.50030
N	241.2625	241.26250	4.50000	69	493.2500	493.26250	4.50030
O	247.2625	247.26270	4.50010	70	499.2500	499.24850	4.50000
P	253.2625	253.26260	4.49990	71	505.2500	505.24700	4.50010
Q	259.2625	259.26130	4.50000	72	511.2500	511.24750	4.50000
R	265.2625	265.26200	4.50000	73	517.2500	517.25040	4.50010
S	271.2625	271.26280	4.49970	74	523.2500	523.25030	4.50000
T	277.2625	277.26220	4.49990	75	529.2500	529.26100	4.50020
U	283.2625	283.26220	4.50010	76	535.2500	535.24900	4.50000
V	289.2625	289.26100	4.50010	77	541.2500	541.24590	4.50000
W	295.2625	295.26170	4.50010	78	547.2500	547.24470	4.50000

Visual Carrier and Aural Carrier Difference Frequency Tests

(at Headend)

System Name: **Time-Warner Ithaca,Candor feed**

HE Location: **517 West State Street**

Date: **Jan 23,2002** Performed by: **Paul Cullings**

Chan	Freq	Visual Freq (MHz)	Aural Freq Diff (MHz)	Chan	Freq	Visual Freq (MHz)	Aural Freq Diff (MHz)
2	55.2500			AA	301.2625		
3	61.2500			BB	307.2625		
4	67.2500			CC	313.2625		
5	77.2500	77.26240	4.49990	DD	319.2625		
6	83.2500			EE	325.2625		
				FF	331.2750		
				GG	337.2625		
A-5	91.2500			HH	343.2625		
A-4	97.2500			II	349.2625		
A-3	103.2500			JJ	355.2625		
A-2	109.2750			KK	361.2625		
A-1	115.2750			LL	367.2625		
A	121.2625			MM	373.2625		
B	127.2625	127.26250	4.50000	NN	379.2625		
C	133.2625	133.26249	4.49990	OO	385.2625		
D	139.2500			PP	391.2625		
E	145.2500			QQ	397.2625		
F	151.3210			RR	403.2500		
G	157.2500			SS	409.2500		
H	163.2500			TT	415.2500		
I	169.2500			UU	421.2500		
7	175.2500			VV	427.2500		
8	181.2500			WW	433.2500		
9	187.2500	187.24980	4.50010	XX	439.2500		
10	193.2500			YY	445.2500		
11	199.2500			ZZ	451.2500		
12	205.2500			63	457.2500		
13	211.2500	211.25130	4.50010	64	463.2500		
J	217.2500			65	469.2500		
K	223.2500			66	475.2500		
L	229.2625			67	481.2500		
M	235.2625			68	487.2500		
N	241.2625			69	493.2500		
O	247.2625			70	499.2500		
P	253.2625			71	505.2500		
Q	259.2625			72	511.2500		
R	265.2625			73	517.2500		
S	271.2625			74	523.2500		
T	277.2625			75	529.2500		
U	283.2625			76	535.2500		
V	289.2625			77	541.2500		
W	295.2625			78	547.2500		

Visual / Aural Level Difference Test

(at Headend)

System Name: **Time Warner - Ithaca**

HE Location: **517 West State Street**

Date: Jan 23-02 Performed by: Paul Cullings

Time 12:10 PM Meter/Serial Number: 9243862

Chan	Freq. (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scram "S"	Diff. (Dbmv)	Chan	Freq. (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	cra "S"	Diff. (Dbmv)
2	55.2500	15.4	0.7		14.7	AA	289.2625	15.4	0.8		14.6
3	61.2500	15.5	0.4		15.1	BB	307.2625	15.5	0.7		14.8
4	67.2500	15.7	0.6		15.1	CC	313.2625	15.7	0.5		15.2
5	77.2500	15.5	1.1		14.4	DD	319.2625	15.8	1.5		14.3
6	83.2500	15.3	0.8		14.5	EE	325.2625	15.7	1.5		14.2
						FF	331.2750	15.6	0.9		14.7
						GG	337.2625	15.6	0.8		14.8
A-5	91.2500					HH	343.2625	15.5	1.2		14.3
A-4	97.2500					II	349.2625	15.8	1.0		14.8
A-3	103.2500					JJ	355.2625	15.9	0.5		15.4
A-2	109.2750	15.4	1.0		14.4	KK	361.2625	15.6	0.9		14.7
A-1	115.2750	15.6	0.0	S	15.6	LL	367.2625	15.8	1.0		14.8
A	121.2625	15.5	0.9		14.6	MM	373.2625	15.7	1.2		14.5
B	127.2625	15.5	0.4		15.1	NN	379.2625	15.4	1.2		14.2
C	133.2625	15.6	1.2		14.4	OO	385.2625	15.5	0.9		14.6
D	139.2500	15.4	0.9		14.5	PP	391.2625	15.7	1.0		14.7
E	145.2500	15.4	0.3		15.1	QQ	397.2625	15.8	0.9		14.9
F	151.2500	15.6	1.0		14.6	RR	403.2500	15.8	1.6		14.2
G	157.2500	15.7	1.0		14.7	SS	409.2500	15.9	1.2		14.7
H	163.2500	15.8	1.3		14.5	TT	415.2500	15.6	1.5		14.1
I	169.2500	15.6	1.6		14.0	UU	421.2500	15.9	1.0		14.9
7	175.2500	15.3	0.4		14.9	VV	427.2500	15.6	1.1		14.5
8	181.2500	15.6	0.9		14.7	WW	433.2500	15.4	0.5		14.9
9	187.2500	15.4	0.6		14.8	XX	439.2500	15.6	0.4		15.2
10	193.2500	15.5	1.0		14.5	YY	445.2500	15.6	1.3		14.3
11	199.2500	15.3	0.6		14.7	ZZ	451.2500	15.9	0.9		15.0
12	205.2500	15.6	1.0		14.6	63	457.2500	15.8	1.3		14.5
13	211.2500	15.2	0.4		14.8	64	463.2500	15.7	2.0		13.7
J	217.2500	15.6	0.6		15.0	65	469.2500	15.8	1.4	S	14.4
K	223.2500	15.4	1.0		14.4	66	475.2500	15.5	-0.1	S	15.6
L	229.2625	15.5	0.4		15.1	67	481.2500	15.7	1.0	S	14.7
M	235.2625	15.4	0.1		15.3	68	487.2500	15.9	0.5	S	15.4
N	241.2625	15.5	0.6		14.9	69	493.2500	15.7	0.9	S	14.8
O	247.2625	15.6	0.2		15.4	70	499.2500	15.6	0.7		14.9
P	253.2625	15.6	0.6		15.0	71	505.2500	15.8	1.2		14.6
Q	259.2625	15.4	0.5		14.9	72	511.2500	15.6	-0.4	S	16.0
R	265.2625	15.3	0.7		14.6	73	517.2500	15.4	0.4	S	15.0
S	271.2625	15.6	1.0		14.6	74	523.2500	15.8	0.3	S	15.5
T	277.2625	15.4	1.1		14.3	75	529.2500	15.6	0.6	S	15.0
U	283.2625	15.3	0.7		14.6	76	535.2500	15.4	1.4		14.0
V	289.2625	15.2	0.5		14.7	77	541.2500	15.5	1.2		14.3
W	283.2625	15.5	0.5		15.0	78	547.2500	15.8	1.3		14.5

PEAK TO VALLEY: 0.7

Visual / Aural Level Difference

(at Headend)

System Name: **Time Warner - Candor**

Test Location: **Head end-517 West State Street, Ithaca**

Date: Jan 23,02 Performed by: Paul Cullings

Time 12:12 PM Meter/Serial Number: 9243862

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scram "S"	Diff. (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	cra "S"	Diff (Dbmv)
2	55.2500					AA	289.2625				
3	61.2500					BB	307.2625				
4	67.2500					CC	313.2625				
5	77.2500	15.0	0.0		15.0	DD	319.2625				
6	83.2500					EE	325.2625				
						FF	331.2750				
						GG	337.2625				
A-5	91.2500					HH	343.2625				
A-4	97.2500					II	349.2625				
A-3	103.2500					JJ	355.2625				
A-2	109.2750					KK	361.2625				
A-1	115.2750					LL	367.2625				
A	121.2625					MM	373.2625				
B	127.2625	14.8	0.3		14.5	NN	379.2625				
C	133.2625	14.9	0.9		14.0	OO	385.2625				
D	139.2500					PP	391.2625				
E	145.2500					QQ	397.2625				
F	151.2500					RR	403.2500				
G	157.2500					SS	409.2500				
H	163.2500					TT	415.2500				
I	169.2500					UU	421.2500				
7	175.2500					VV	427.2500				
8	181.2500					WW	433.2500				
9	187.2500	15.1	1.2		13.9	XX	439.2500				
10	193.2500					YY	445.2500				
11	199.2500					ZZ	451.2500				
12	205.2500					63	457.2500				
13	211.2500	14.8	-0.2		15.0	64	463.2500				
J	217.2500					65	469.2500				
K	223.2500					66	475.2500				
L	229.2625					67	481.2500				
M	235.2625					68	487.2500				
N	241.2625					69	493.2500				
O	247.2625					70	499.2500				
P	253.2625					71	505.2500				
Q	259.2625					72	511.2500				
R	265.2625					73	517.2500				
S	271.2625					74	523.2500				
T	277.2625					75	529.2500				
U	283.2625					76	535.2500				
V	289.2625					77	541.2500				
W	283.2625					78	547.2500				

PEAK TO VALLEY: 0.3

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ITHACA

System Test Point # 1

Location: HOPKINS RD

Community: ITHACA

Pole Number: 1

D.T. Value: 17

Map Number: 2275424

OR Number: 1015

Trunk Cascade: 3 LE Cascade 1

Visual Carrier Level
Visual / Aural Level Difference
(at Test Point, at The End of a 100' Drop)

System Name: **Time Warner-Ithaca**

Test Location: **Hopkins Road Ithaca**

Date: 17-Jan-02

Time 11:58 AM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff (Dbmv)	Chan	Freq. (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	cra "S"	Diff. (Dbmv)
2	55.2500	11.5	-3.0		14.5	AA	289.2625	10.2	-4.6		14.8
3	61.2500	11.1	-3.7		14.8	BB	307.2625	10.4	-4.5		14.9
4	67.2500	11.4	-3.8		15.2	CC	313.2625	10.9	-4.3		15.2
5	77.2500	11.3	-3.6		14.9	DD	319.2625	11.5	-3.6		15.1
6	83.2500	10.8	-4.2		15.0	EE	325.2625	11.0	-3.6		14.6
						FF	331.2750	10.9	-3.8		14.7
						GG	337.2625	10.5	-4.4		14.9
A-5	91.2500					HH	343.2625	10.4	-4.4		14.8
A-4	97.2500					II	349.2625	10.7	-4.0		14.7
A-3	103.2500					JJ	355.2625	10.5	-4.3		14.8
A-2	109.2750	9.9	-4.3		14.2	KK	361.2625	10.5	-3.5		14.0
A-1	115.2750	8.6	-5.5	S	14.1	LL	367.2625	11.0	-3.8		14.8
A	121.2625	9.3	-5.2		14.5	MM	373.2625	10.9	-4.1		15.0
B	127.2625	9.1	-5.7		14.8	NN	379.2625	10.9	-4.2		15.1
C	133.2625	8.5	-5.8		14.3	OO	385.2625	10.6	-4.3		14.9
D	139.2500	8.9	-5.2		14.1	PP	391.2625	10.6	-4.6		15.2
E	145.2500	8.7	-6.0		14.7	QQ	397.2625	11.2	-4.1		15.3
F	151.2500	8.8	-5.5		14.3	RR	403.2500	11.0	-4.3		15.3
G	157.2500	9.0	-6.1		15.1	SS	409.2500	11.0	-3.4		14.4
H	163.2500	8.9	-5.7		14.6	TT	415.2500	10.8	-4.5		15.3
I	169.2500	9.3	-5.2		14.5	UU	421.2500	11.4	-4.2		15.6
7	175.2500	9.1	-5.8		14.9	VV	427.2500	11.1	-4.1		15.2
8	181.2500	9.0	-5.7		14.7	WW	433.2500	10.9	-4.2		15.1
9	187.2500	9.4	-6.1		15.5	XX	439.2500	10.9	-4.0		14.9
10	193.2500	9.3	-5.3		14.6	YY	445.2500	10.6	-3.9		14.5
11	199.2500	9.1	-5.6		14.7	ZZ	451.2500	11.5	-3.5		15.0
12	205.2500	9.8	-5.5		15.3	63	457.2500	11.5	-3.4		14.9
13	211.2500	9.4	-5.8		15.2	64	463.2500	11.1	-3.2		14.3
J	217.2500	9.2	-5.9		15.1	65	469.2500	11.9	-2.4	S	14.3
K	223.2500	9.5	-5.6		15.1	66	475.2500	11.9	-2.2	S	14.1
L	229.2625	9.3	-5.8		15.1	67	481.2500	11.6	-1.9	S	13.5
M	235.2625	9.4	-5.7		15.1	68	487.2500	11.5	-2.3	S	13.8
N	241.2625	10.1	-6.1		16.2	69	493.2500	11.7	-1.8	S	13.5
O	247.2625	9.5	-5.5		15.0	70	499.2500	11.8	-3.0		14.8
P	253.2625	9.9	-5.3		15.2	71	505.2500	12.2	-2.4		14.6
Q	259.2625	10.0	-4.7		14.7	72	511.2500	12.2	-2.4	S	14.6
R	265.2625	9.6	-4.8		14.4	73	517.2500	12.8	-1.8	S	14.6
S	271.2625	10.1	-4.5		14.6	74	523.2500	12.9	-2.0	S	14.9
T	277.2625	10.3	-4.6		14.9	75	529.2500	13.8	-2.0	S	15.8
U	283.2625	10.4	-5.0		15.4	76	535.2500	12.7	-2.5		15.2
V	289.2625	10.0	-4.5		14.5	77	541.2500	12.7	-2.4		15.1
W	283.2625	10.0	-4.9		14.9	78	547.2500	13.1	-1.5		14.6

PEAK TO VALLEY: 5.3

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: TIME WARNER CABLE- ITHACA **Date:** 01/29/2002

Test Performed By: Paul Cullings

Location: Hopkins Street

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

Channel Number	In Channel Response	Carrier To Noise Ratio	Distortions (-dBc)			Hum
	(+/- dB)	(dB)	CTB	CSO	XMOD	(%)
2	0.5	49	68.9	71	70	0.4
13	0.7	48.4	69	71		
14	0.1	47.3	68	66		
20	0.4	47.5	68.8	69		
25	0.5	49.4	69	71		
35	0.4	48.8	68.8	68		
44	0.5	49.7	69.7	69		
57	0.2	50.1	67.7	71.2		
78	0.4	50	69.6	70		

Time Warner Cable
Syracuse Division

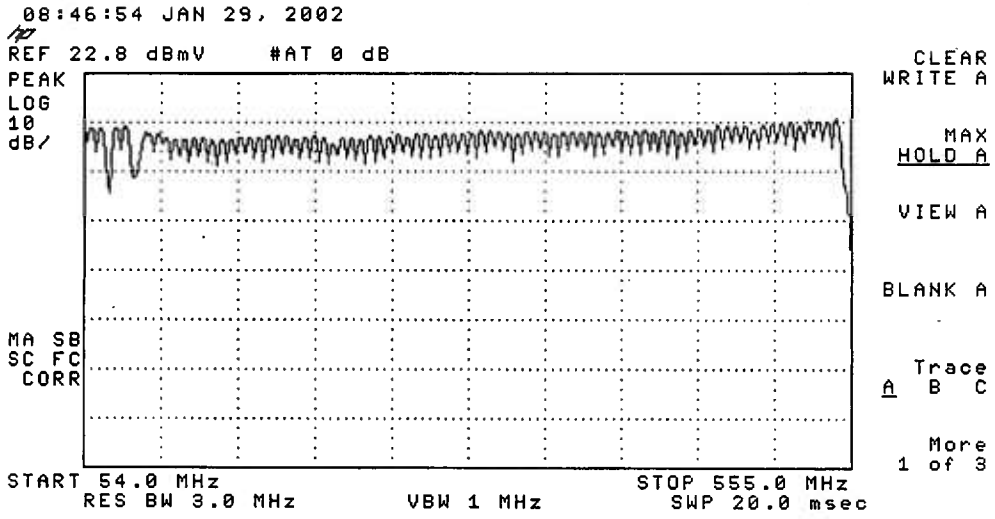
IN - CHANNEL FREQUENCY RESPONSE TEST

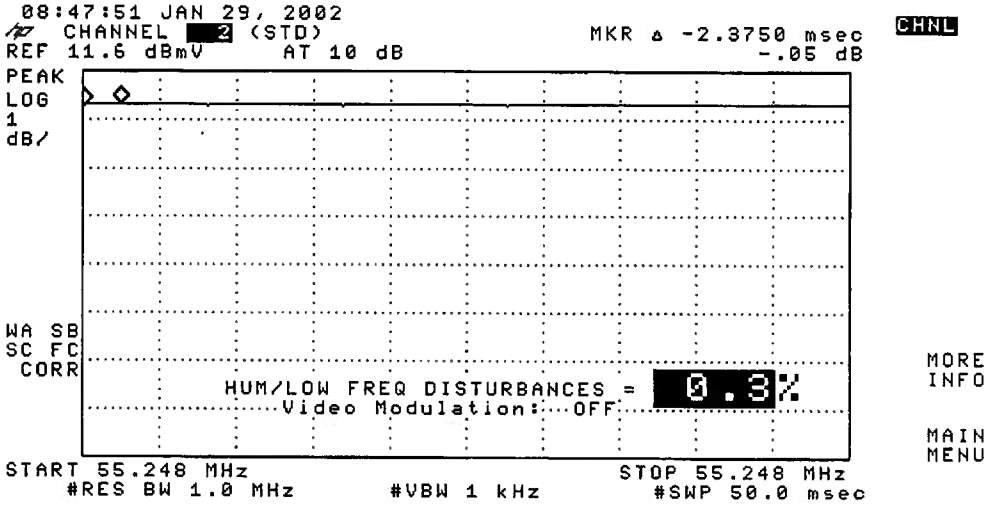
(76.605 (a) 6)

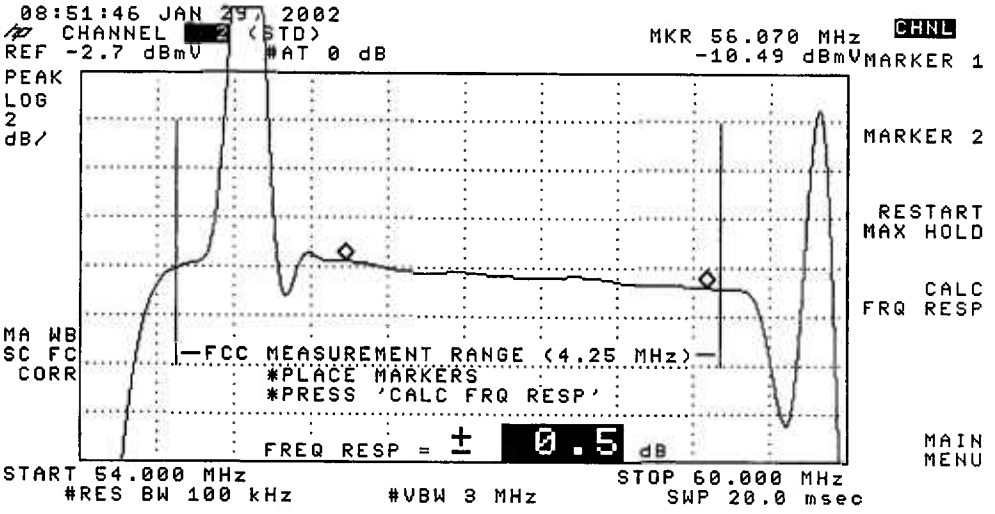
System Name: **TIME WARNER-ITHACA** Date: **01/29/02**

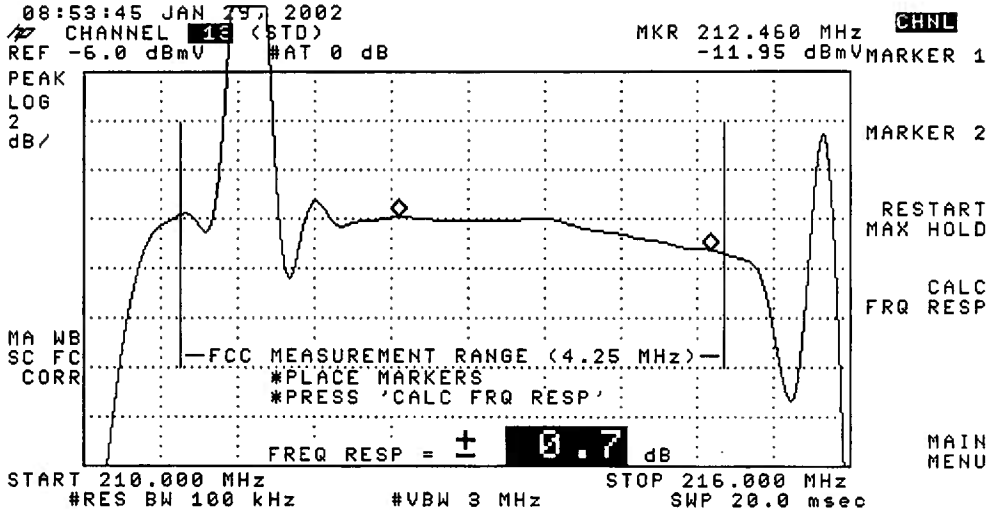
Test Performed By: **Paul Cullings** Location: **Hopkins Rd. Ithaca**

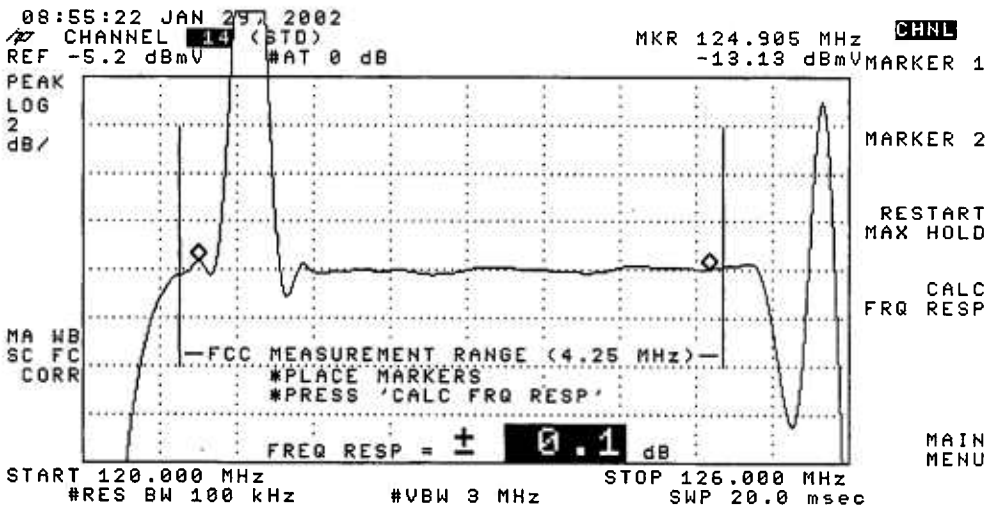
(SEE THE ATTATCHED SWEEP TRACES)

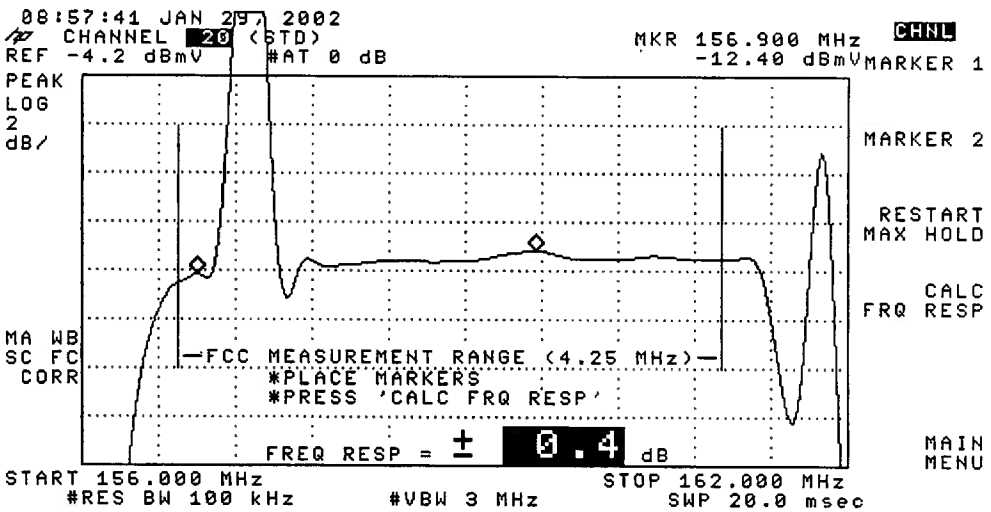

08:46:54 JAN 29, 2002
REF 22.8 dBmV
#AT 0 dB
PEAK
LOG
10
dB/
MA SB
SC FC
CORR
START 54.0 MHz
RES BW 3.0 MHz
VBW 1 MHz
STOP 555.0 MHz
SWP 20.0 msec
CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

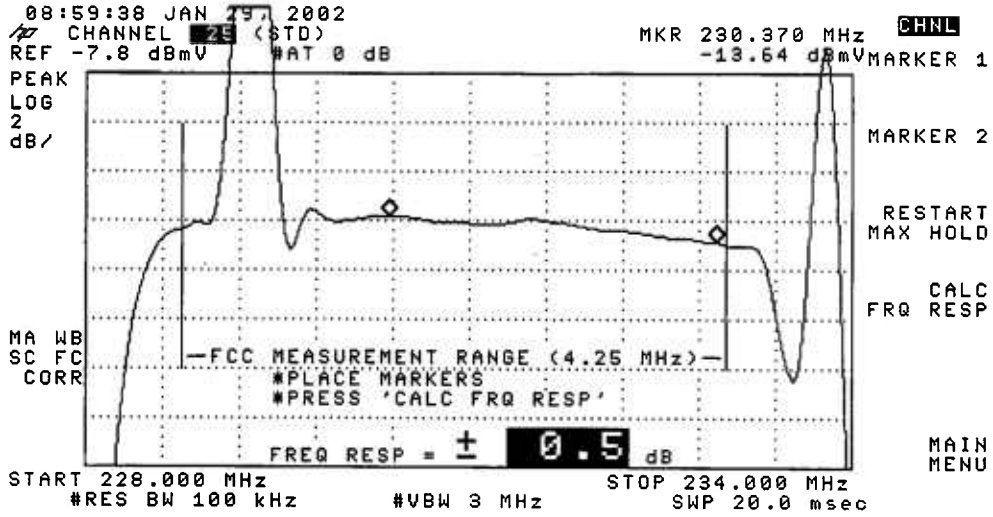

08:47:51 JAN 29, 2002
CHANNEL 2 (STD)
REF 11.6 dBmV
AT 10 dB
MKR Δ -2.3750 msec
-.05 dB
CHNL
PEAK
LOG
1
dB/
WA SB
SC FC
CORR
HUM/LOW FREQ DISTURBANCES = 0.3%
Video Modulation: OFF
START 55.248 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
STOP 55.248 MHz
#SWP 50.0 msec
MORE
INFO
MAIN
MENU

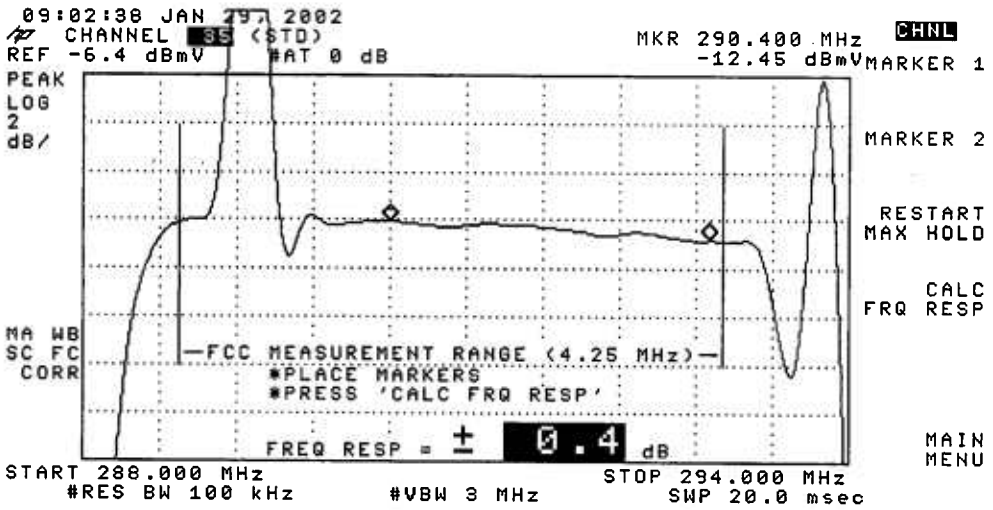

08:51:46 JAN 29, 2002
CHANNEL 2 (STD)
REF -2.7 dBmV
#AT 0 dB
MKR 56.070 MHz
-10.49 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.5 dB
MAIN
MENU
START 54.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 60.000 MHz
SWP 20.0 msec

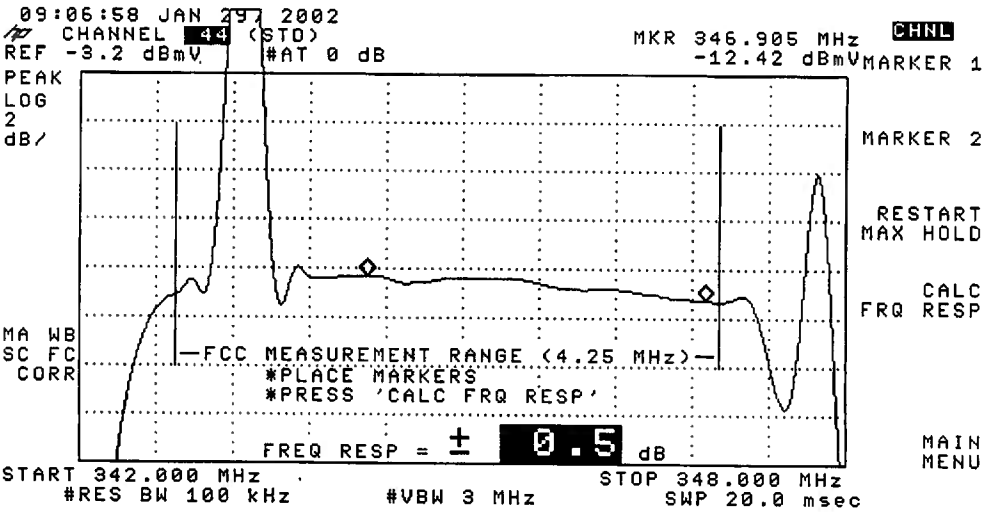

08:53:45 JAN 29, 2002
CHANNEL 13 (STD)
REF -6.0 dBmV
#AT 0 dB
MKR 212.460 MHz
-11.95 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.7 dB
MAIN
MENU
START 210.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 216.000 MHz
SWP 20.0 msec

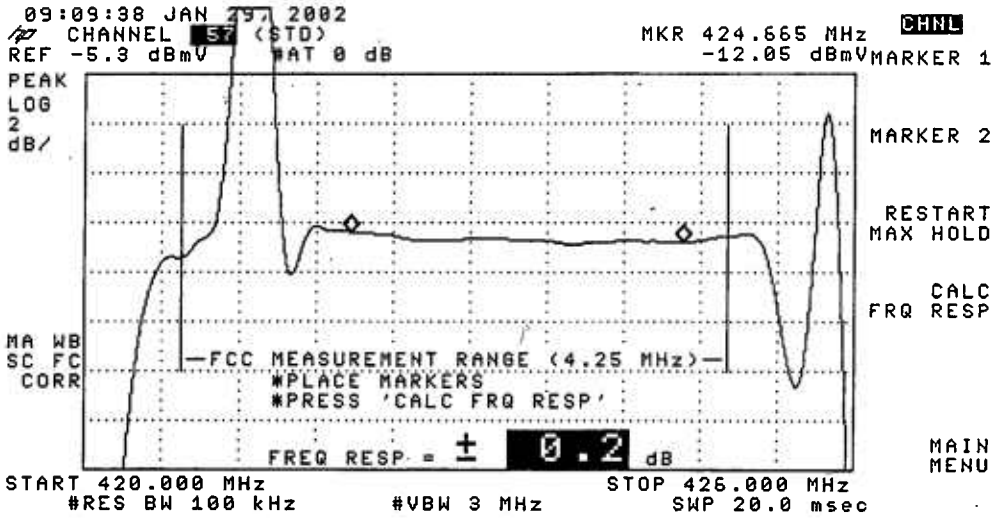

08:55:22 JAN 29, 2002
CHANNEL 14 (STD)
REF -5.2 dBmV
#AT 0 dB
MKR 124.905 MHz
-13.13 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.1 dB
MAIN
MENU
START 120.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 126.000 MHz
SWP 20.0 msec

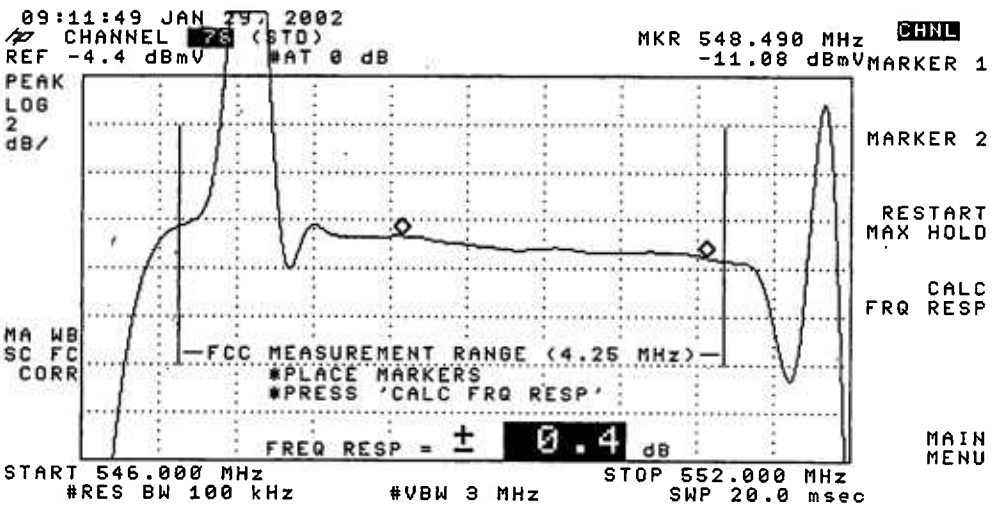

08:57:41 JAN 29, 2002
CHANNEL 20 (STD)
REF -4.2 dBmV
#AT 0 dB
MKR 156.900 MHz
-12.40 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 156.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 162.000 MHz
SWP 20.0 msec

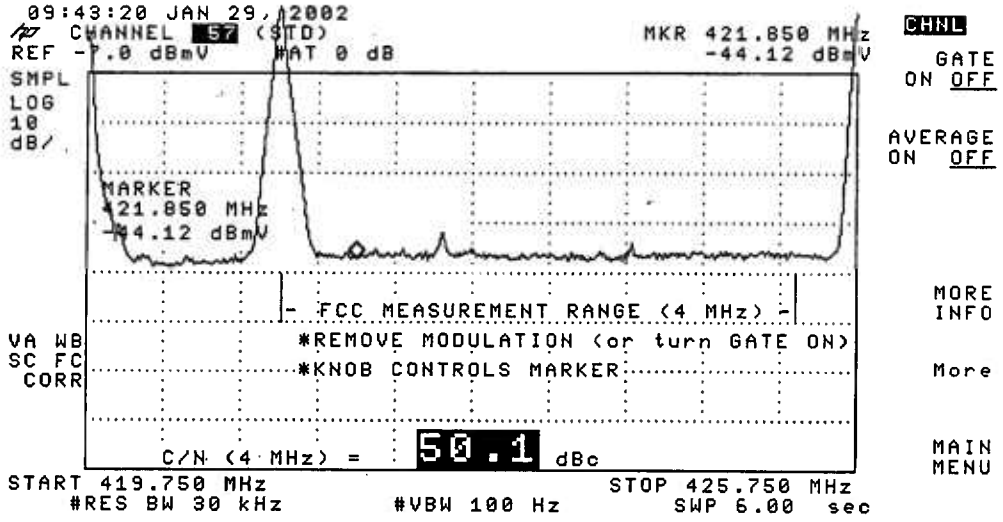

08:59:38 JAN 29, 2002
CHANNEL 25 (STD)
REF -7.8 dBmV
#AT 0 dB
MKR 230.370 MHz
-13.64 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.5 dB
MAIN
MENU
START 228.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 234.000 MHz
SWP 20.0 msec

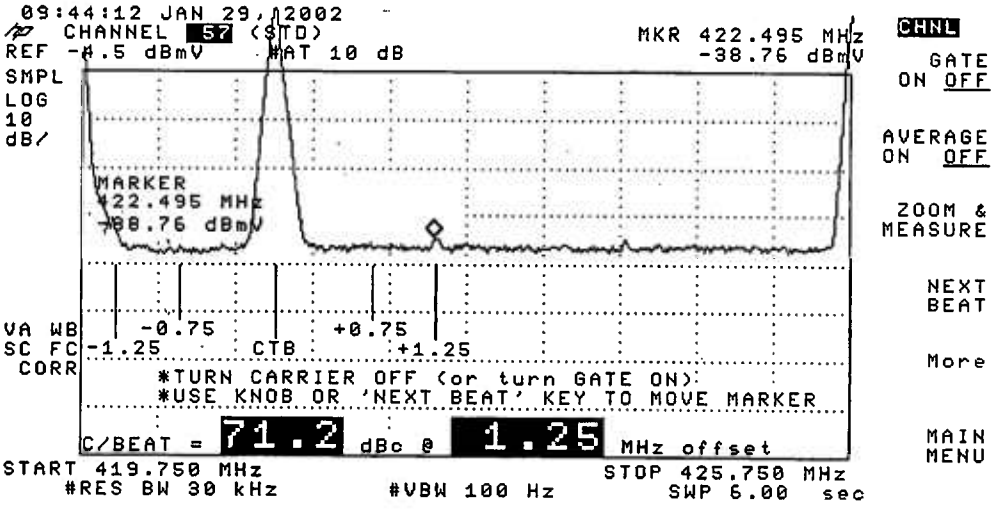

09:02:38 JAN 29, 2002
CHANNEL 35 (STD)
REF -6.4 dBmV
#AT 0 dB
MKR 290.400 MHz
-12.45 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 288.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 294.000 MHz
SWP 20.0 msec

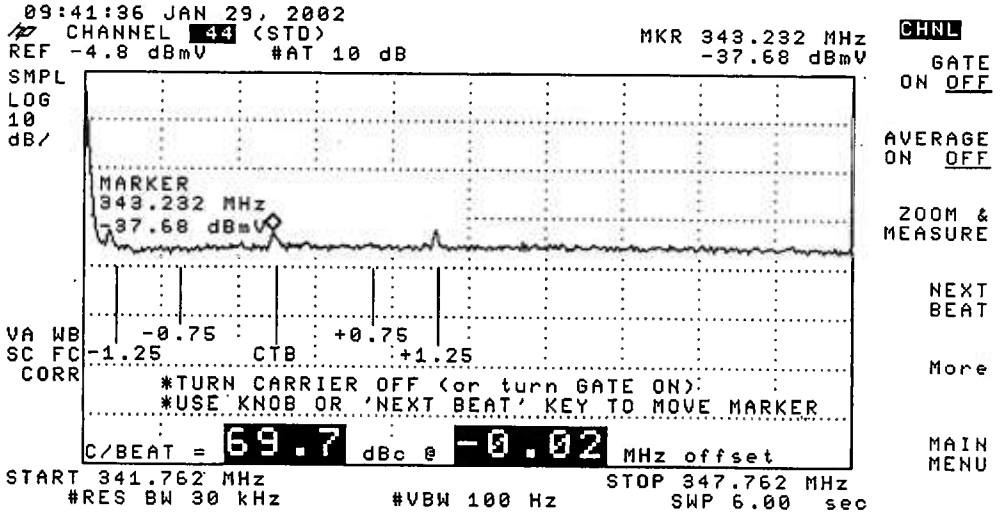

09:06:58 JAN 29, 2002
CHANNEL 44 (STD)
REF -3.2 dBmV
#AT 0 dB
MKR 346.905 MHz
-12.42 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.5 dB
MAIN
MENU
START 342.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 348.000 MHz
SWP 20.0 msec


09:09:38 JAN 29, 2002
CHANNEL 57 (STD)
REF -5.3 dBmV
#AT 0 dB
MKR 424.665 MHz
-12.05 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.2 dB
MAIN
MENU
START 420.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 426.000 MHz
SWP 20.0 msec


09:11:49 JAN 29, 2002
CHANNEL 75 (STD)
REF -4.4 dBmV
#AT 0 dB
MKR 548.490 MHz
-11.08 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 546.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 552.000 MHz
SWP 20.0 msec


09:43:20 JAN 29, 2002
CHANNEL 57 (STD)
REF -7.0 dBmV
#AT 0 dB
MKR 421.850 MHz
-44.12 dBmV
CHNL
GATE ON OFF
AVERAGE ON OFF
SMPL
LOG
10
dB/
MARKER
421.850 MHz
-44.12 dBmV
- FCC MEASUREMENT RANGE (4 MHz) -
MORE INFO
VA WB
SC FC
CORR
*REMOVE MODULATION (or turn GATE ON)
*KNOB CONTROLS MARKER
More
C/N (4 MHz) = 50.1 dBc
MAIN MENU
START 419.750 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 425.750 MHz
SWP 6.00 sec


09:44:12 JAN 29, 2002
CHANNEL 57 (STD)
REF -4.5 dBmV
#AT 10 dB
MKR 422.495 MHz
-38.76 dBmV
CHNL
GATE ON OFF
AVERAGE ON OFF
SMPL
LOG
10
dB/
MARKER
422.495 MHz
-38.76 dBmV
ZOOM & MEASURE
NEXT BEAT
VA WB
SC FC
CORR
-0.75
-1.25
CTB
+0.75
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
More
C/BEAT = 71.2 dBc @ 1.25 MHz offset
MAIN MENU
START 419.750 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 425.750 MHz
SWP 6.00 sec


09:41:36 JAN 29, 2002
CHANNEL 44 (STD)
REF -4.8 dBmV
#AT 10 dB
MKR 343.232 MHz
-37.68 dBmV
CHNL
GATE ON OFF
AVERAGE ON OFF
SMPL
LOG
10
dB/
MARKER
343.232 MHz
-37.68 dBmV
ZOOM & MEASURE
NEXT BEAT
VA WB
SC FC
CORR
-0.75
-1.25
CTB
+0.75
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
More
C/BEAT = 69.7 dBc @ -0.02 MHz offset
MAIN MENU
START 341.762 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 347.762 MHz
SWP 6.00 sec

Visual Carrier Level Variation Test

System Name: Time Warner-Ithaca

Test Point Location Hopkins Road

Date: 01/17/02 Performed by: Torrance Countryman

Meter Serial Number: 9233994

Chan	Freq (MHz)	Temp °F				Max Variation	Chan	Freq (MHz)	Temp °F				Max Variation
		35	30	25	20				35	30	25	20	
		Time							Time				
		11:58	18:12	00:11	06:11				11:58	18:12	00:11	06:11	
		Visual Level (dbmv)							Visual Level (dbmv)				
2	55.2500	11.5	11.2	11.4	11.6	0.4	AA	301.2625	10.2	10.2	10.5	10.2	0.3
3	61.2500	11.1	11.1	11.4	11.4	0.3	BB	307.2625	10.4	10.3	10.6	10.1	0.5
4	67.2500	11.4	11.2	11.4	11.2	0.2	CC	313.2625	10.9	10.5	10.8	10.6	0.4
5	77.2500	11.3	11.1	11.2	11.2	0.2	DD	319.2625	11.5	11.3	11.4	11.2	0.3
6	83.2500	10.8	10.4	10.4	10.2	0.6	EE	325.2625	11.0	10.6	10.9	10.7	0.4
							FF	331.2750	10.9	10.9	11.0	11.1	0.2
							GG	337.2625	10.5	10.2	10.6	10.2	0.4
A-5	91.2500						HH	343.2625	10.4	10.2	10.4	10.4	0.2
A-4	97.2500						II	349.2625	10.7	10.3	10.7	10.5	0.4
A-3	103.2500						JJ	355.2625	10.5	10.3	10.5	10.3	0.2
A-2	109.2750	9.9	9.6	9.7	9.4	0.5	KK	361.2625	10.5	10.2	10.6	10.3	0.4
A-1	115.2750	8.6	8.6	9.3	8.9	0.7	LL	367.2625	11.0	10.6	10.9	10.6	0.4
A	121.2625	9.3	9.1	9.4	9.1	0.3	MM	373.2625	10.9	10.6	10.9	10.6	0.3
B	127.2625	9.1	8.8	9.1	8.9	0.3	NN	379.2625	10.9	10.5	10.9	10.7	0.4
C	133.2625	8.5	8.5	8.7	8.4	0.3	OO	385.2625	10.6	10.9	10.8	10.6	0.3
D	139.2500	8.9	8.3	9.0	8.7	0.7	PP	391.2625	10.6	10.4	10.8	10.5	0.4
E	145.2500	8.7	8.5	8.6	8.6	0.2	QQ	397.2625	11.2	10.7	10.7	10.7	0.5
F	151.2500	8.8	8.5	9.2	8.6	0.7	RR	403.2500	11.0	11.1	11.2	11.2	0.2
G	157.2500	9.0	9.0	9.5	8.8	0.7	SS	409.2500	11.0	10.9	10.8	10.8	0.2
H	163.2500	8.9	8.5	9.0	8.5	0.5	TT	415.2500	10.8	10.7	11.2	10.9	0.5
I	169.2500	9.3	8.9	9.1	8.9	0.4	UU	421.2500	11.4	11.3	11.3	11.1	0.3
7	175.2500	9.1	8.4	8.7	8.4	0.7	VV	427.2500	11.1	10.8	10.9	10.8	0.3
8	181.2500	9.0	8.5	9.0	8.7	0.5	WW	433.2500	10.9	10.6	11.3	10.8	0.7
9	187.2500	9.4	9.0	9.1	8.9	0.5	XX	439.2500	10.9	10.8	11.2	10.9	0.4
10	193.2500	9.3	8.3	8.6	8.5	1.0	YY	445.2500	10.6	10.4	10.9	10.8	0.5
11	199.2500	9.1	8.4	8.3	8.4	0.8	ZZ	451.2500	11.5	11.1	11.6	11.4	0.5
12	205.2500	9.8	8.8	9.0	8.8	1.0	63	457.2500	11.5	11.0	11.5	11.2	0.5
13	211.2500	9.4	9.0	9.3	9.1	0.4	64	463.2500	11.1	10.8	11.0	11.0	0.3
J	217.2500	9.2	9.1	9.2	9.1	0.1	65	469.2500	11.9	11.2	11.8	11.8	0.7
K	223.2500	9.5	9.4	9.8	9.4	0.4	66	475.2500	11.9	10.5	12.2	11.4	1.7
L	229.2625	9.3	9.1	9.2	9.0	0.3	67	481.2500	11.6	11.1	11.5	11.2	0.5
M	235.2625	9.4	8.8	9.1	8.8	0.6	68	487.2500	11.5	10.9	11.9	10.7	1.2
N	241.2625	10.1	9.4	9.6	9.4	0.7	69	493.2500	11.7	11.3	11.8	11.6	0.5
O	247.2625	9.5	9.3	9.3	9.6	0.3	70	499.2500	11.8	11.4	11.7	11.4	0.4
P	253.2625	9.9	9.6	9.6	9.5	0.4	71	505.2500	12.2	11.9	12.3	11.9	0.4
Q	259.2625	10.0	9.6	9.7	9.5	0.5	72	511.2500	12.2	12.3	12.6	12.2	0.4
R	265.2625	9.6	9.1	9.6	9.3	0.5	73	517.2500	12.8	12.5	12.8	12.6	0.3
S	271.2625	10.1	9.9	9.9	10.0	0.2	74	523.2500	12.9	12.2	12.0	12.9	0.9
T	277.2625	10.3	9.9	9.8	9.9	0.5	75	529.2500	13.8	13.3	13.4	13.2	0.6
U	283.2625	10.4	9.6	10.1	9.7	0.8	76	535.2500	12.7	12.7	12.9	12.7	0.2
V	289.2625	10.0	10.1	10.0	9.9	0.2	77	541.2500	12.7	12.9	13.6	13.2	0.9
W	295.2625	10.0	9.5	10.1	9.8	0.6	78	547.2500	13.1	13.1	13.1	12.9	0.2

Max NonAdjacent Channel Level Diff.	5.3
Max Adjacent Channel Level Diff.	1.4

Max Variance from last proof-of-performance test	N/a
Date of last proof-of-performance test	test point changed

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

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ITHACA

System Test Point # 2

Location: MAPLE & VALLEYVIEW RD.

Community: WEST DANBY

Pole Number: 203/70

D.T. Value: 17

Map Number: 2275374

OR Number: 1051

Trunk Cascade: 5 LE Cascade 0

Visual Carrier Level
Visual / Aural Level Difference
(at Test Point, at The End of a 100' Drop)

System Name: **Time Warner-Ithaca**

Test Location: **West Danby Road Newfield**

Date: 17-Jan-02

Time 12:05 PM

Chan	Freq. (MHz.)	Visual Level (dbmv.)	Aural Level (dbmv.)	Scra "S"	Diff. (Dbmv.)	Chan	Freq. (MHz.)	Visual Level (dbmv.)	Aural Level (dbmv.)	cra "S"	Diff. (Dbmv.)
2	55.2500	10.5	-4.0		14.5	AA	289.2625	12.7	-2.2		14.9
3	61.2500	10.1	-4.3		14.4	BB	307.2625	12.8	-1.9		14.7
4	67.2500	10.9	-3.8		14.7	CC	313.2625	13.5	-2.0		15.5
5	77.2500	10.1	-4.3		14.4	DD	319.2625	13.3	-1.4		14.7
6	83.2500	10.2	-4.2		14.4	EE	325.2625	13.4	-1.0		14.4
						FF	331.2750	12.9	-1.8		14.7
						GG	337.2625	12.6	-1.8		14.4
A-5	91.2500					HH	343.2625	12.9	-1.7		14.6
A-4	97.2500					II	349.2625	13.2	-1.6		14.8
A-3	103.2500					JJ	355.2625	13.3	-1.9		15.2
A-2	109.2750	10.4	-3.6		14.0	KK	361.2625	13.6	-0.8		14.4
A-1	115.2750	9.9	-3.9	S	13.8	LL	367.2625	13.5	-0.9		14.4
A	121.2625	9.8	-4.3		14.1	MM	373.2625	13.8	-1.0		14.8
B	127.2625	10.0	-4.8		14.8	NN	379.2625	14.0	-1.6		15.6
C	133.2625	9.9	-4.2		14.1	OO	385.2625	13.9	-1.2		15.1
D	139.2500	10.2	-3.5		13.7	PP	391.2625	13.4	-1.5		14.9
E	145.2500	10.6	-4.2		14.8	QQ	397.2625	14.0	-1.1		15.1
F	151.2500	10.1	-4.2		14.3	RR	403.2500	14.1	-0.9		15.0
G	157.2500	10.9	-4.0		14.9	SS	409.2500	13.9	-0.2		14.1
H	163.2500	10.9	-3.6		14.5	TT	415.2500	14.1	-0.7		14.8
I	169.2500	10.8	-3.0		13.8	UU	421.2500	13.9	-0.8		14.7
7	175.2500	11.1	-3.9		15.0	VV	427.2500	14.0	-0.7		14.7
8	181.2500	11.0	-3.0		14.0	WW	433.2500	13.9	-0.8		14.7
9	187.2500	11.3	-3.4		14.7	XX	439.2500	13.9	-0.9		14.8
10	193.2500	11.2	-3.3		14.5	YY	445.2500	14.0	-1.1		15.1
11	199.2500	11.0	-3.3		14.3	ZZ	451.2500	14.3	-0.2		14.5
12	205.2500	11.3	-3.4		14.7	63	457.2500	14.3	-0.7		15.0
13	211.2500	11.0	-3.5		14.5	64	463.2500	13.3	0.2		13.1
J	217.2500	11.5	-3.4		14.9	65	469.2500	14.6	0.1	S	14.5
K	223.2500	11.4	-2.9		14.3	66	475.2500	14.4	-0.9	S	15.3
L	229.2625	11.7	-3.2		14.9	67	481.2500	14.6	-0.9	S	15.5
M	235.2625	11.7	-2.9		14.6	68	487.2500	14.3	-0.7	S	15.0
N	241.2625	11.8	-3.7		15.5	69	493.2500	14.8	-0.3	S	15.1
O	247.2625	12.2	-3.0		15.2	70	499.2500	14.7	-0.1		14.8
P	253.2625	11.7	-2.5		14.2	71	505.2500	14.8	0.3		14.5
Q	259.2625	11.8	-2.5		14.3	72	511.2500	14.2	-0.9	S	15.1
R	265.2625	11.9	-2.5		14.4	73	517.2500	15.7	0.2	S	15.5
S	271.2625	12.1	-2.1		14.2	74	523.2500	15.5	-0.2	S	15.7
T	277.2625	12.4	-2.2		14.6	75	529.2500	15.7	0.1	S	15.6
U	283.2625	12.6	-2.0		14.6	76	535.2500	15.4	0.7		14.7
V	289.2625	12.8	-1.9		14.7	77	541.2500	15.4	0.5		14.9
W	283.2625	12.2	-2.1		14.3	78	547.2500	15.7	0.8		14.9

PEAK TO VALLEY: 5.9

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: TIME WARNER-ITHACA **Date:** 01/24/02

Test Performed By: Paul Cullings

Location: Maple&Valleyview Road West Danby

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

Channel Number	In Channel Response	Carrier To Noise Ratio	Distortions (-dBc)			Hum
	(+/- dB)	(dB)	CTB	CSO	XMOD	(%)
2	0.6	48.7	71	70	74	0.6
13	0.7	48.5	70	70.5		
14	0.2	47.8	70.5	68		
20	0.1	47.3	71.5	70.6		
25	0.4	48	71	70.6		
35	0.3	48.3	70	68.1		
44	0.3	49.2	71.1	70		
57	0.1	49.4	71.8	70.2		
78	0.5	49.1	71	70.8		

Time Warner Cable
Syracuse Division

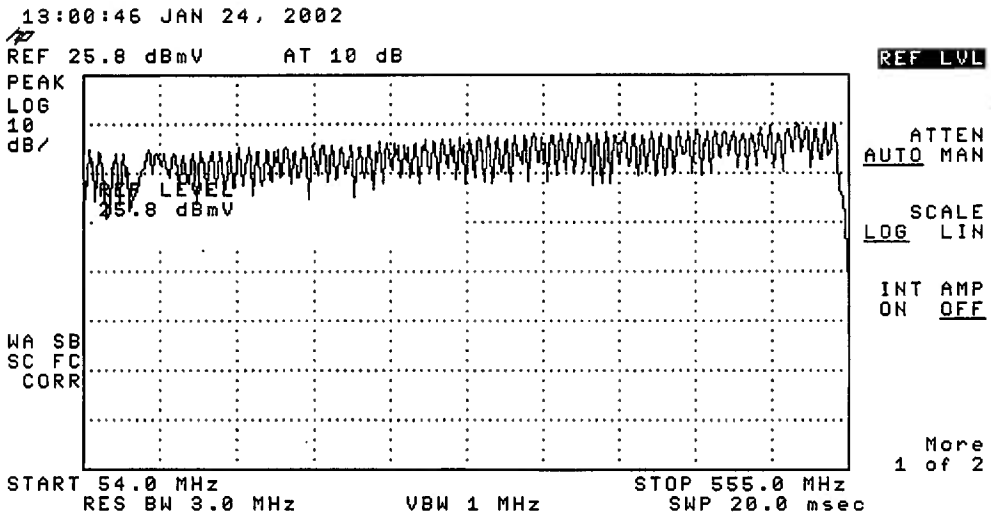
IN - CHANNEL FREQUENCY RESPONSE TEST

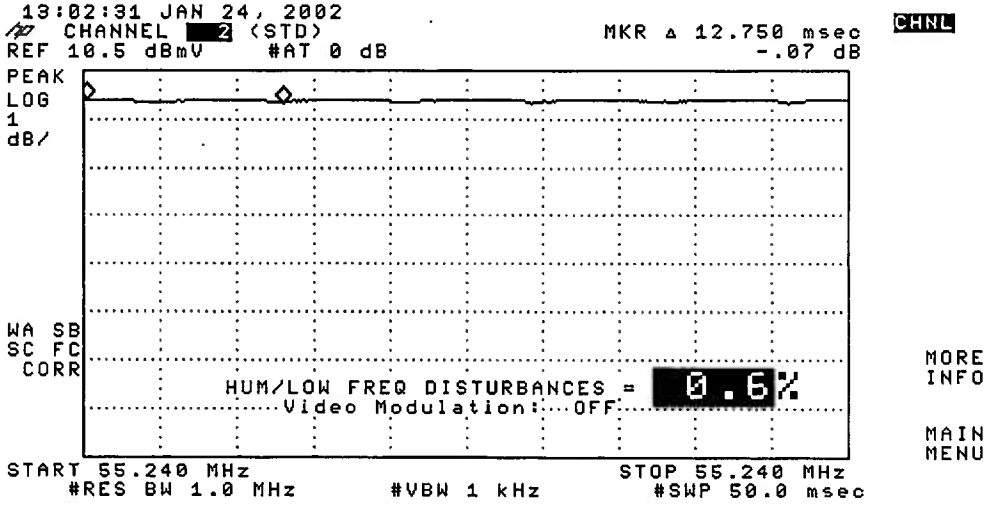
(76.605 (a) 6)

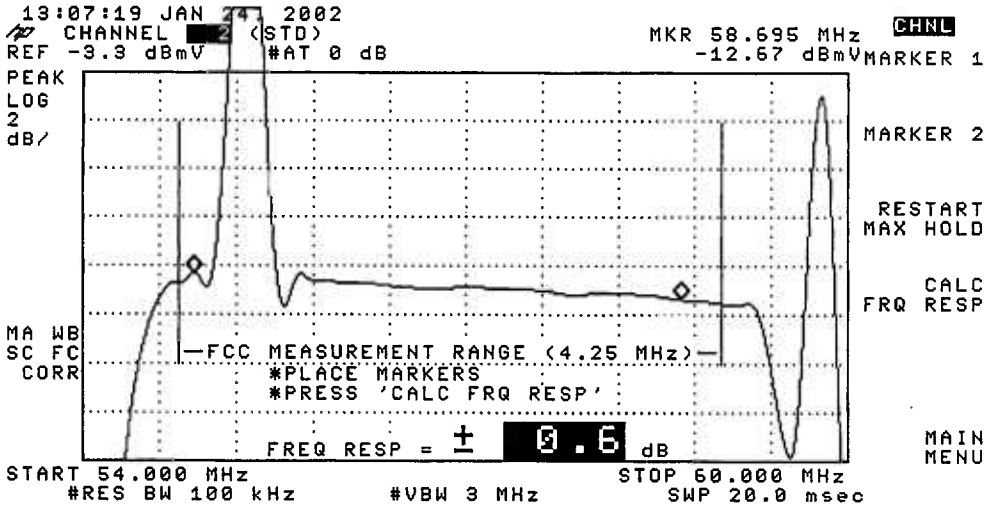
System Name: TIME WARNER-ITHACA Date: 01/24/02

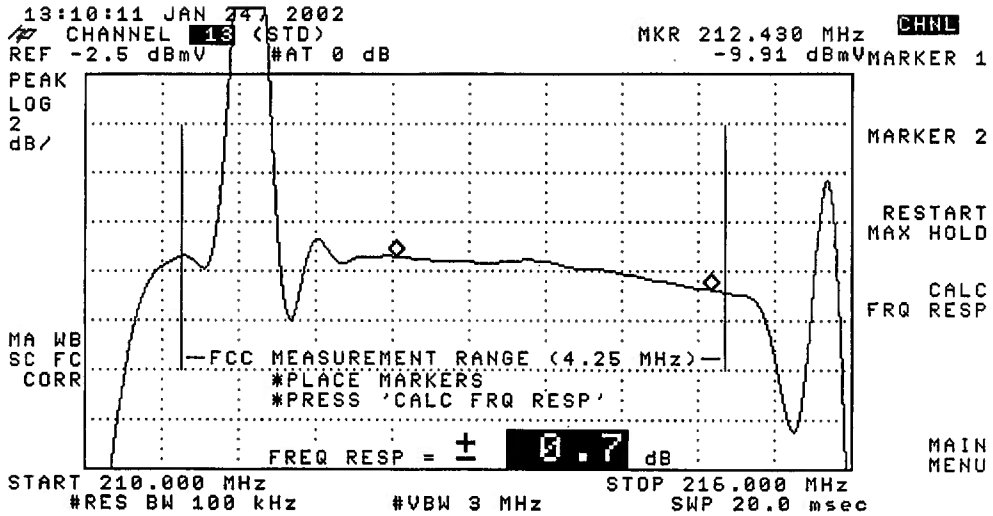
Test Performed By: Paul Cullings Location: Maple&Valleyview Rd.

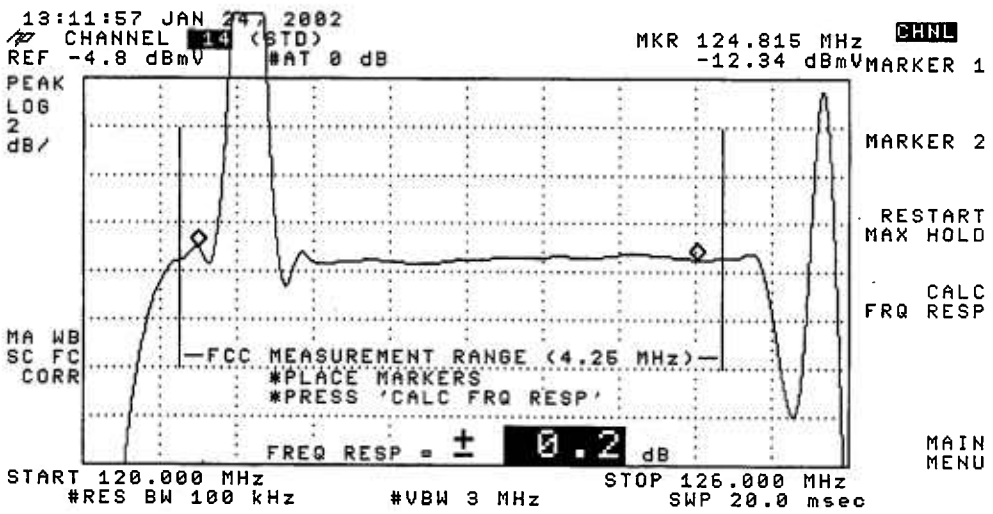
(SEE THE ATTATCHED SWEEP TRACES)

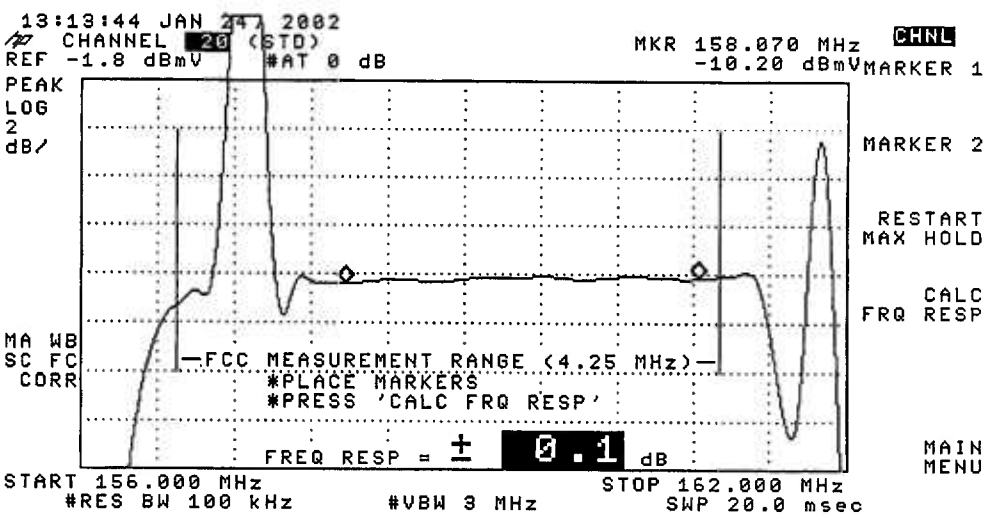

13:00:46 JAN 24, 2002
REF 25.8 dBmV
AT 10 dB
REF LVL
PEAK
LOG
10
dB/
REF LEVEL
25.8 dBmV
ATTEN
AUTO MAN
SCALE
LOG LIN
INT AMP
ON OFF
WA SB
SC FC
CORR
More
1 of 2
START 54.0 MHz
RES BW 3.0 MHz
VBW 1 MHz
STOP 555.0 MHz
SWP 20.0 msec

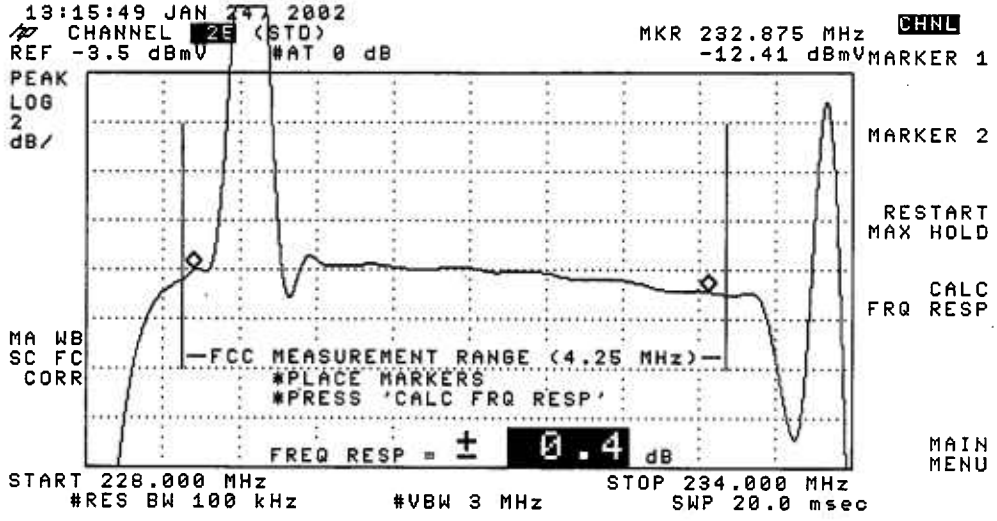

13:02:31 JAN 24, 2002
CHANNEL 2 (STD)
REF 10.5 dBmV
#AT 0 dB
MKR Δ 12.750 msec
-.07 dB
CHNL
PEAK
LOG
1
dB/
WA SB
SC FC
CORR
HUM/LOW FREQ DISTURBANCES = 0.6%
Video Modulation: OFF
MORE
INFO
MAIN
MENU
START 55.240 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
STOP 55.240 MHz
#SWP 50.0 msec

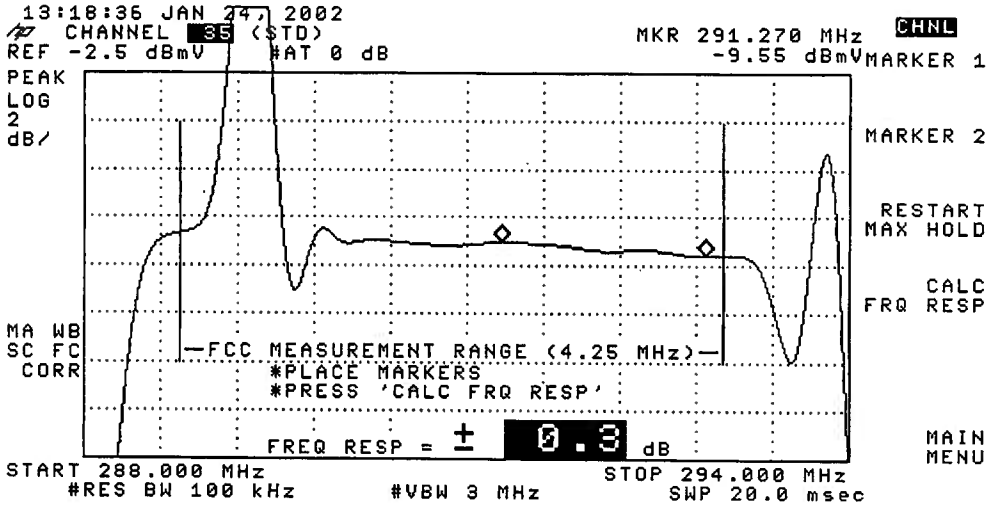

13:07:19 JAN 24, 2002
CHANNEL 2 (STD)
REF -3.3 dBmV
#AT 0 dB
MKR 58.695 MHz
-12.67 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.6 dB
MAIN
MENU
START 54.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 60.000 MHz
SWP 20.0 msec

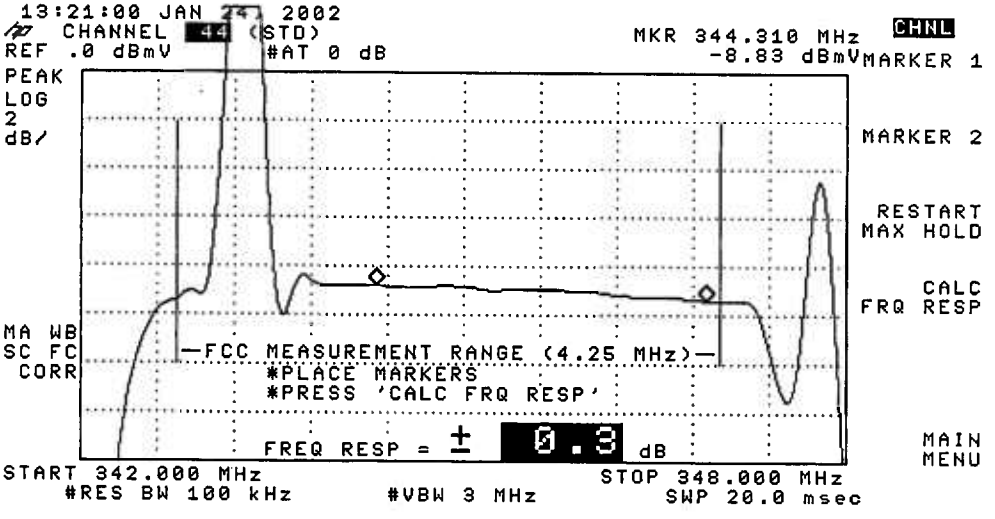

13:10:11 JAN 24, 2002
CHANNEL 13 (STD)
REF -2.5 dBmV
#AT 0 dB
MKR 212.430 MHz
-9.91 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.7 dB
MAIN
MENU
START 210.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 216.000 MHz
SWP 20.0 msec

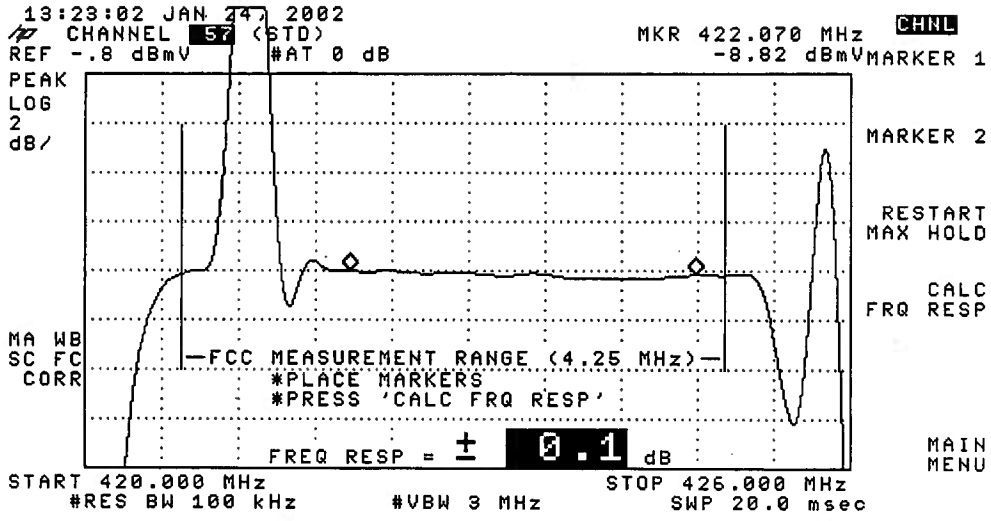

13:11:57 JAN 24, 2002
CHANNEL 14 (STD)
REF -4.8 dBmV
#AT 0 dB
MKR 124.815 MHz
-12.34 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.2 dB
MAIN
MENU
START 120.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 126.000 MHz
SWP 20.0 msec

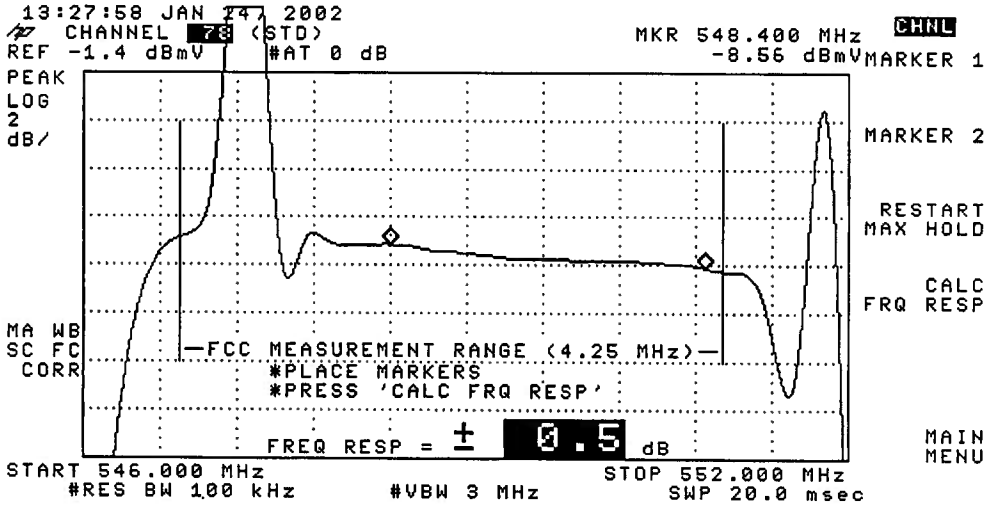

13:13:44 JAN 24, 2002
CHANNEL 20 (STD)
REF -1.8 dBmV
#AT 0 dB
MKR 158.070 MHz
-10.20 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.1 dB
MAIN
MENU
START 156.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 162.000 MHz
SWP 20.0 msec

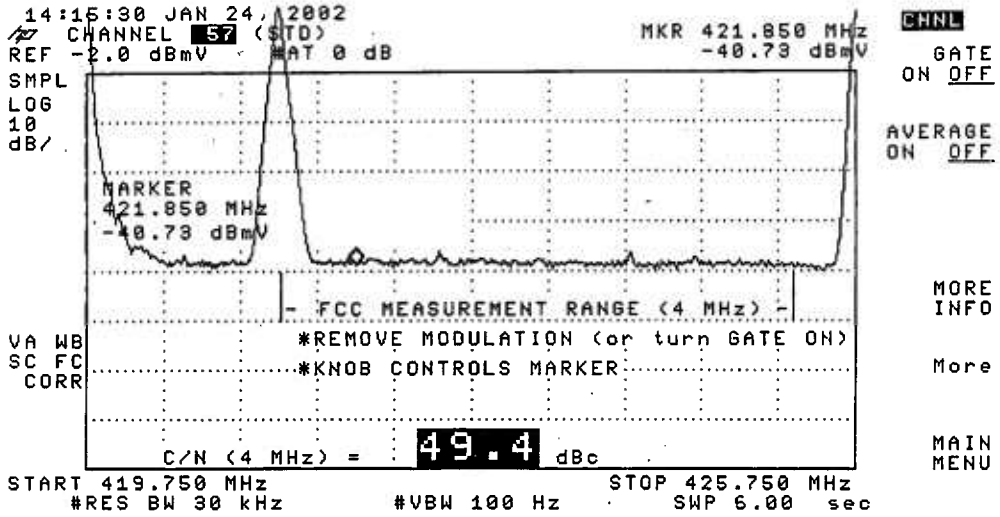

13:15:49 JAN 24, 2002
CHANNEL 25 (STD)
REF -3.5 dBmV
#AT 0 dB
MKR 232.875 MHz
-12.41 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 228.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 234.000 MHz
SWP 20.0 msec

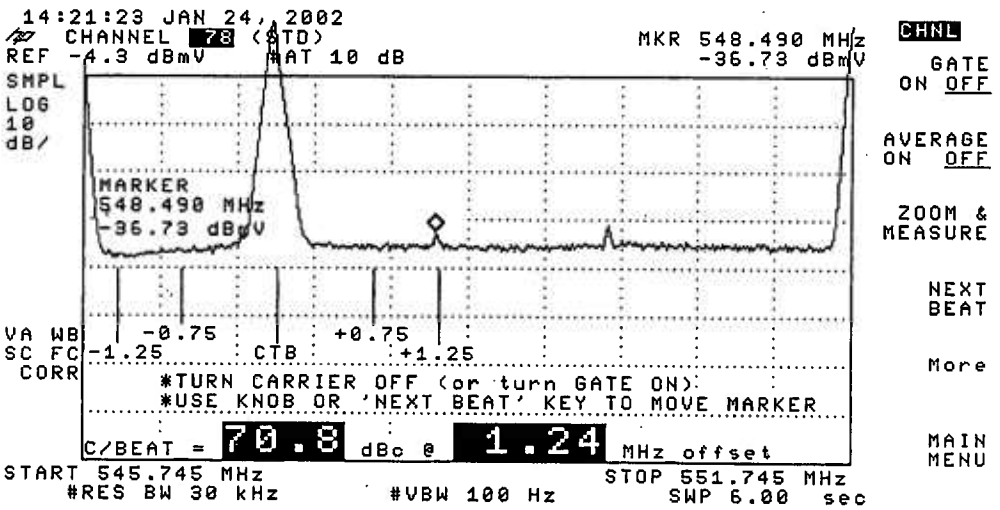

13:18:36 JAN 24, 2002
CHANNEL 35 (STD)
REF -2.5 dBmV
#AT 0 dB
MKR 291.270 MHz
-9.55 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 288.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 294.000 MHz
SWP 20.0 msec

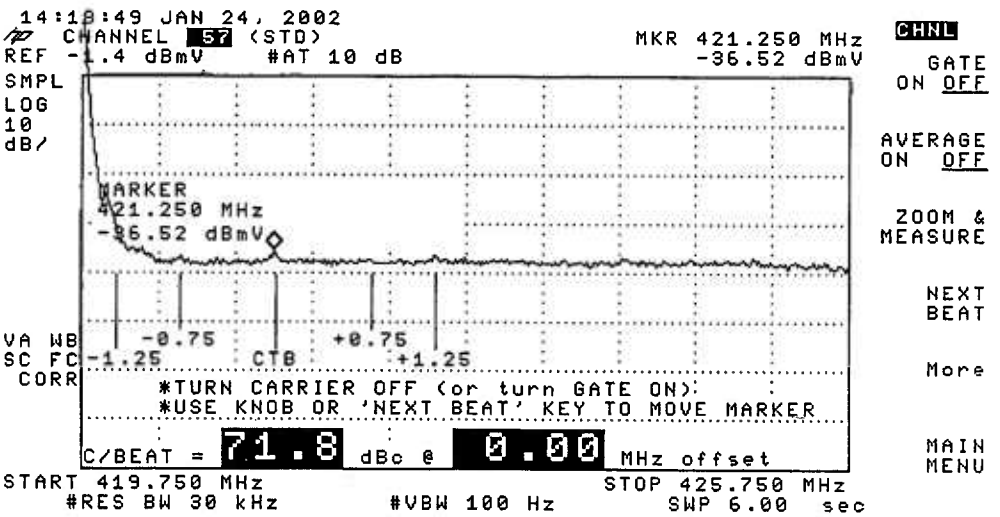

13:21:00 JAN 24, 2002
CHANNEL 44 (STD)
REF .0 dBmV
#AT 0 dB
MKR 344.310 MHz
-8.83 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 342.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 348.000 MHz
SWP 20.0 msec


13:23:02 JAN 24, 2002
CHANNEL 57 (STD)
REF -.8 dBmV
#AT 0 dB
MKR 422.070 MHz
-8.82 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.1 dB
MAIN
MENU
START 420.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 426.000 MHz
SWP 20.0 msec


13:27:58 JAN 24, 2002
CHANNEL 78 (STD)
REF -1.4 dBmV
#AT 0 dB
MKR 548.400 MHz
-8.56 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.5 dB
MAIN
MENU
START 546.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 552.000 MHz
SWP 20.0 msec


14:15:30 JAN 24, 2002
CHANNEL 57 (STD)
REF -2.0 dBmV
#AT 0 dB
MKR 421.850 MHz
-40.73 dBmV
SMPL
LOG
10
dB/
MARKER
421.850 MHz
-40.73 dBmV
- FCC MEASUREMENT RANGE (4 MHz) -
*REMOVE MODULATION (or turn GATE ON)
*KNOB CONTROLS MARKER
VA WB
SC FC
CORR
C/N (4 MHz) = 49.4 dBc
START 419.750 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 425.750 MHz
SWP 6.00 sec
CHNL
GATE
ON OFF
AVERAGE
ON OFF
MORE
INFO
More
MAIN
MENU


14:21:23 JAN 24, 2002
CHANNEL 78 (STD)
REF -4.3 dBmV
#AT 10 dB
MKR 548.490 MHz
-36.73 dBmV
SMPL
LOG
10
dB/
MARKER
548.490 MHz
-36.73 dBmV
-0.75
+0.75
-1.25
CTB
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
VA WB
SC FC
CORR
C/BEAT = 70.8 dBc @ 1.24 MHz offset
START 545.745 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 551.745 MHz
SWP 6.00 sec
CHNL
GATE
ON OFF
AVERAGE
ON OFF
ZOOM &
MEASURE
NEXT
BEAT
More
MAIN
MENU


14:18:49 JAN 24, 2002
CHANNEL 57 (STD)
REF -1.4 dBmV
#AT 10 dB
MKR 421.250 MHz
-36.52 dBmV
SMPL
LOG
10
dB/
MARKER
421.250 MHz
-36.52 dBmV
-0.75
+0.75
-1.25
CTB
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
VA WB
SC FC
CORR
C/BEAT = 71.8 dBc @ 0.00 MHz offset
START 419.750 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 425.750 MHz
SWP 6.00 sec
CHNL
GATE
ON OFF
AVERAGE
ON OFF
ZOOM &
MEASURE
NEXT
BEAT
More
MAIN
MENU

Visual Carrier Level Variation Test

System Name: Time Warner-Ithaca

Test Point Location West Danby Road Newfield

Date: 01/17/02 Performed by: Rob Vrzal

Meter Serial Number: 9243906

Chan	Freq. (MHz)	Temp °F 37 Time 12:05 Visual Level (dbmv)	35 17:53	27 23:48	20 06:00	Max Variation
2	55.2500	10.5	9.9	10.4	10.6	0.7
3	61.2500	10.1	10.0	10.2	10.4	0.4
4	67.2500	10.9	10.4	10.9	10.9	0.5
5	77.2500	10.1	9.8	9.8	10.3	0.5
6	83.2500	10.2	9.5	9.8	9.5	0.7
A-5	91.2500					
A-4	97.2500					
A-3	103.2500					
A-2	109.2750	10.4	9.7	10.1	10.4	0.7
A-1	115.2750	9.9	9.8	9.1	10.2	1.1
A	121.2625	9.8	9.7	9.9	9.9	0.2
B	127.2625	10.0	9.8	9.9	10.0	0.2
C	133.2625	9.9	9.4	9.7	10.0	0.6
D	139.2500	10.2	9.7	9.9	10.0	0.5
E	145.2500	10.6	10.3	10.4	10.7	0.4
F	151.2500	10.1	9.6	9.6	9.6	0.5
G	157.2500	10.9	10.5	10.7	10.9	0.4
H	163.2500	10.9	10.5	10.8	10.9	0.4
I	169.2500	10.8	10.6	10.7	10.9	0.3
7	175.2500	11.1	10.5	10.4	10.5	0.7
8	181.2500	11.0	10.2	10.5	10.8	0.8
9	187.2500	11.3	10.8	10.7	10.7	0.6
10	193.2500	11.2	10.2	10.4	10.6	1.0
11	199.2500	11.0	10.1	10.3	10.2	0.9
12	205.2500	11.3	10.4	10.5	10.6	0.9
13	211.2500	11.0	10.7	10.6	10.9	0.4
J	217.2500	11.5	11.3	11.3	11.4	0.2
K	223.2500	11.4	11.2	11.6	11.3	0.4
L	229.2625	11.7	11.2	11.1	11.0	0.7
M	235.2625	11.7	11.1	11.3	11.3	0.6
N	241.2625	11.8	11.5	11.4	11.2	0.6
O	247.2625	12.2	11.7	11.9	11.7	0.5
P	253.2625	11.7	11.3	11.1	11.3	0.6
Q	259.2625	11.8	11.2	11.6	11.6	0.6
R	265.2625	11.9	11.4	11.5	11.7	0.5
S	271.2625	12.1	11.6	11.8	11.8	0.5
T	277.2625	12.4	11.9	12.1	12.1	0.5
U	283.2625	12.6	12.1	12.3	12.3	0.5
V	289.2625	12.8	12.2	12.3	12.3	0.6
W	295.2625	12.2	11.9	12.0	12.0	0.3

Chan	Freq (MHz)	Temp °F 37 Time 12:05 Visual Level (dbmv)	35 17:53	27 23:48	20 06:00	Max Variation
AA	301.2625	12.7	12.7	12.6	12.9	0.3
BB	307.2625	12.8	13.0	12.8	12.9	0.2
CC	313.2625	13.5	12.8	12.9	13.0	0.7
DD	319.2625	13.3	13.0	13.1	13.2	0.3
EE	325.2625	13.4	12.5	12.9	12.9	0.9
FF	331.2750	12.9	13.1	13.4	13.8	0.9
GG	337.2625	12.6	12.0	12.3	12.6	0.6
HH	343.2625	12.9	12.4	12.6	12.6	0.5
II	349.2625	13.2	12.9	12.9	13.3	0.4
JJ	355.2625	13.3	13.0	12.9	13.1	0.4
KK	361.2625	13.6	13.1	13.4	13.2	0.5
LL	367.2625	13.5	12.6	13.2	13.1	0.9
MM	373.2625	13.8	13.6	13.6	13.5	0.3
NN	379.2625	14.0	13.5	13.8	13.8	0.5
OO	385.2625	13.9	13.6	13.7	13.6	0.3
PP	391.2625	13.4	12.6	12.9	12.9	0.8
QQ	397.2625	14.0	13.7	13.9	13.6	0.4
RR	403.2500	14.1	14.0	14.1	14.0	0.1
SS	409.2500	13.9	13.7	13.8	13.6	0.3
TT	415.2500	14.1	13.8	14.0	13.7	0.4
UU	421.2500	13.9	13.8	13.7	13.9	0.2
VV	427.2500	14.0	14.2	14.1	14.0	0.2
WW	433.2500	13.9	13.9	14.0	14.0	0.1
XX	439.2500	13.9	13.5	13.7	13.6	0.4
YY	445.2500	14.0	13.7	13.6	13.6	0.4
ZZ	451.2500	14.3	13.8	14.0	14.2	0.5
63	457.2500	14.3	13.7	13.8	13.9	0.6
64	463.2500	13.3	12.9	13.5	13.4	0.6
65	469.2500	14.6	13.6	13.7	14.4	1.0
66	475.2500	14.4	14.5	14.4	14.5	0.1
67	481.2500	14.6	13.8	13.9	14.3	0.8
68	487.2500	14.3	13.6	13.8	14.4	0.8
69	493.2500	14.8	14.3	14.4	14.6	0.5
70	499.2500	14.7	14.0	14.2	14.3	0.7
71	505.2500	14.8	14.0	14.1	14.2	0.8
72	511.2500	14.2	14.1	14.2	14.4	0.3
73	517.2500	15.7	15.0	15.1	15.0	0.7
74	523.2500	15.5	14.6	14.5	15.4	1.0
75	529.2500	15.7	15.2	15.0	15.5	0.7
76	535.2500	15.4	15.1	15.1	15.3	0.3
77	541.2500	15.4	15.8	15.7	15.8	0.4
78	547.2500	15.7	15.2	15.1	15.3	0.6

Max NonAdjacent Channel Level Diff.	6.6
Max Adjacent Channel Level Diff.	1.5

Max Variance from last proof-of-performance test	N/a
Date of last proof-of-performance test	test point changed

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

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ITHACA

System Test Point # 3

Location: STOWELL AVE.

Community: CANDOR

Pole Number: 191A/1

D.T. Value: 20

Map Number: 2755340

OR Number: 1062

Trunk Cascade: 2 LE Cascade 3

Visual Carrier Level
Visual / Aural Level Difference
(at Test Point, at The End of a 100' Drop)

System Name: **Time Warner-Candor**

Test Location: **Stowell Road Candor**

Date: 17-Jan-02

Time 11:36 AM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff. (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	cra "S"	Diff. (Dbmv)
2	55.2500	9.5	-4.5		14.0	AA	289.2625	7.4	-7.0		14.4
3	61.2500	9.9	-4.6		14.5	BB	307.2625	7.9	-7.2		15.1
4	67.2500	9.9	-5.3		15.2	CC	313.2625	7.8	-6.9		14.7
5	77.2500	8.9	-4.2		13.1	DD	319.2625	8.1	-6.9		15.0
6	83.2500	8.8	-4.8		13.6	EE	325.2625	7.0	-6.7		13.7
						FF	331.2750	6.8	-8.0		14.8
						GG	337.2625	6.3	-8.8		15.1
A-5	91.2500					HH	343.2625	6.4	-7.7		14.1
A-4	97.2500					II	349.2625	7.1	-8.3		15.4
A-3	103.2500					JJ	355.2625	6.8	-7.2		14.0
A-2	109.2750	9.6	-4.7		14.3	KK	361.2625	6.5	-7.4		13.9
A-1	115.2750	8.7	-6.5	S	15.2	LL	367.2625	7.0	-7.8		14.8
A	121.2625	8.2	-5.8		14.0	MM	373.2625	6.7	-7.8		14.5
B	127.2625	8.1	-6.2		14.3	NN	379.2625	6.4	-8.6		15.0
C	133.2625	8.1	-7.3		15.4	OO	385.2625	6.2	-8.6		14.8
D	139.2500	7.9	-6.0		13.9	PP	391.2625	5.7	-9.4		15.1
E	145.2500	8.1	-7.5		15.6	QQ	397.2625	6.1	-8.7		14.8
F	151.2500	7.1	-8.0		15.1	RR	403.2500	6.4	-8.5		14.9
G	157.2500	8.0	-6.9		14.9	SS	409.2500	6.1	-8.9		15.0
H	163.2500	7.8	-5.6		13.4	TT	415.2500	6.4	-8.4		14.8
I	169.2500	8.0	-5.7		13.7	UU	421.2500	6.3	-9.0		15.3
7	175.2500	7.6	-7.7		15.3	VV	427.2500	6.1	-7.8		13.9
8	181.2500	7.3	-7.1		14.4	WW	433.2500	6.3	-8.0		14.3
9	187.2500	7.6	-8.1		15.7	XX	439.2500	6.4	-8.8		15.2
10	193.2500	7.2	-8.4		15.6	YY	445.2500	6.8	-8.4		15.2
11	199.2500	7.1	-7.3		14.4	ZZ	451.2500	7.3	-7.4		14.7
12	205.2500	7.0	-7.7		14.7	63	457.2500	7.7	-7.7		15.4
13	211.2500	7.2	-8.8		16.0	64	463.2500	6.9	-7.1		14.0
J	217.2500	6.9	-8.3		15.2	65	469.2500	7.7	-6.2	S	13.9
K	223.2500	7.1	-7.2		14.3	66	475.2500	7.5	-8.4	S	15.9
L	229.2625	6.6	-8.0		14.6	67	481.2500	7.7	-7.8	S	15.5
M	235.2625	6.9	-7.0		13.9	68	487.2500	7.2	-7.8	S	15.0
N	241.2625	7.4	-8.2		15.6	69	493.2500	7.9	-7.0	S	14.9
O	247.2625	7.5	-8.4		15.9	70	499.2500	8.1	-6.7		14.8
P	253.2625	7.9	-6.9		14.8	71	505.2500	8.8	-6.3		15.1
Q	259.2625	8.0	-6.9		14.9	72	511.2500	8.8	-6.6	S	15.4
R	265.2625	7.7	-6.7		14.4	73	517.2500	9.4	-5.8	S	15.2
S	271.2625	7.5	-6.7		14.2	74	523.2500	8.8	-6.9	S	15.7
T	277.2625	7.6	-7.7		15.3	75	529.2500	9.6	-6.3	S	15.9
U	283.2625	7.5	-6.8		14.3	76	535.2500				
V	289.2625	7.2	-6.7		13.9	77	541.2500	9.3	-5.9		15.2
W	283.2625	7.9	-7.3		15.2	78	547.2500				

PEAK TO VALLEY: 4.2

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: Time Warner Ithaca **Date:** 01/28/02

Test Performed By: Paul Cullings

Location: Stowell Rd. Town of Candor

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

Channel Number	In Channel Response	Carrier To Noise Ratio	Distortions (-dBc)			Hum
	(+/- dB)	(dB)	CTB	CSO	XMOD	(%)
2	0.3	48.6	70.1	69.9	72	0.5
13	0.3	47.2	67.1	66.6		
14	0.6	47.4	69.4	67.2		
20	0.3	48.7	69.2	70.3		
25	0.4	48.5	69.4	71.1		
35	0.4	48.3	65.8	69.3		
44	0.7	48.6	69.9	69.4		
57	0.2	48.7	68.9	69.1		
77	0.8	47.9	71.5	70.2		

Time Warner Cable
Syracuse Division

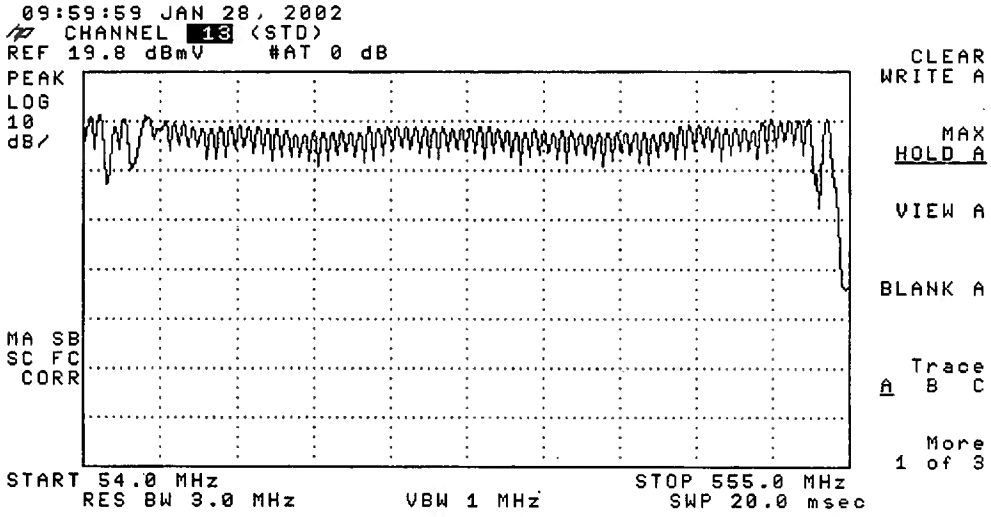
IN - CHANNEL FREQUENCY RESPONSE TEST

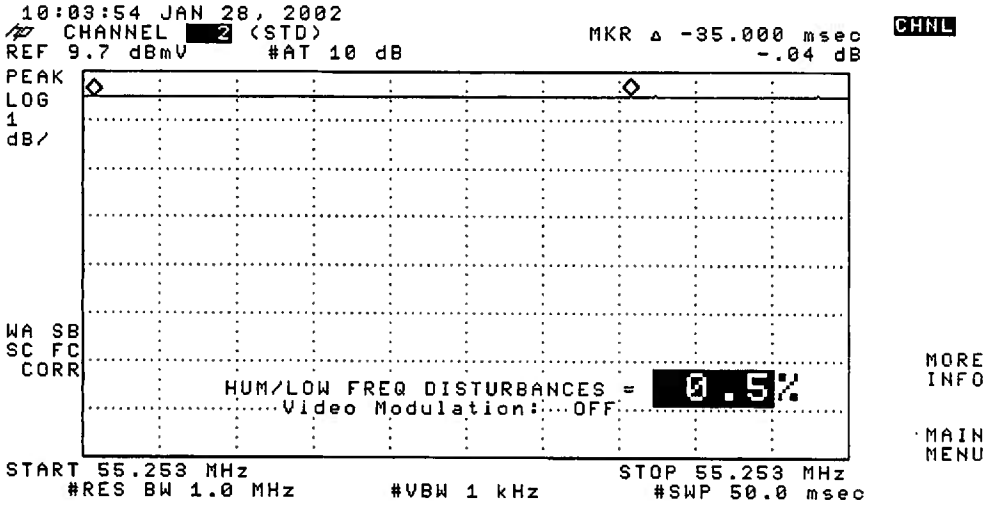
(76.605 (a) 6)

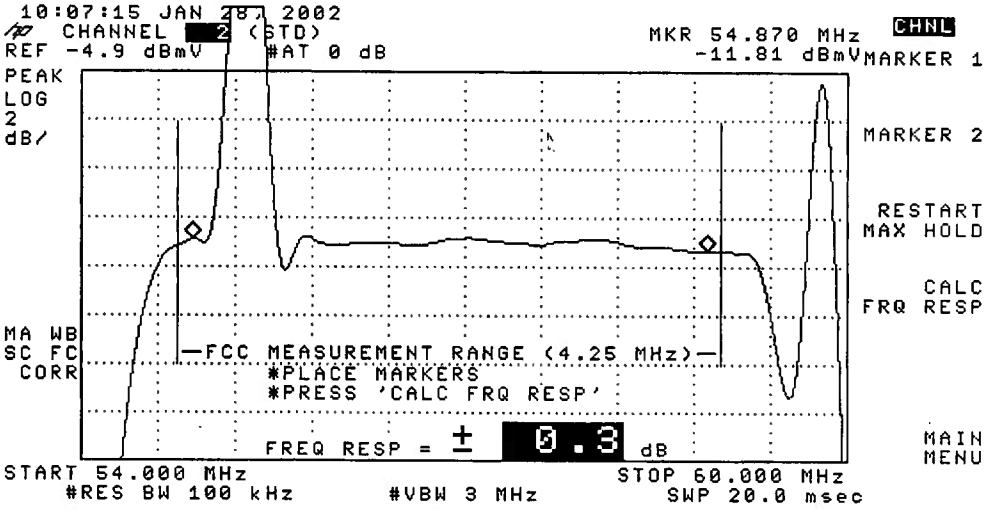
System Name: TIME WARNER ITHACA Date: 01/28/02

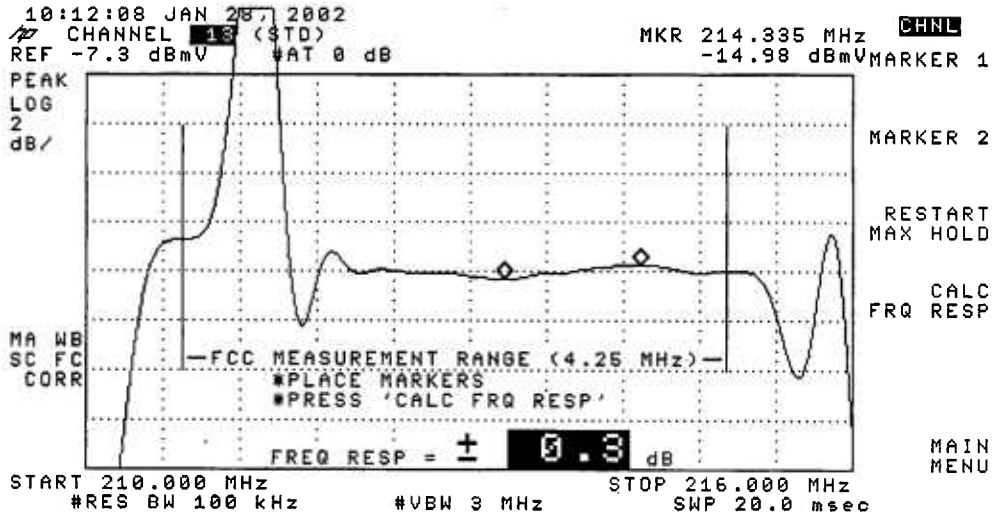
Test Performed By: Paul Cullings Location: Stowell Rd. Candor

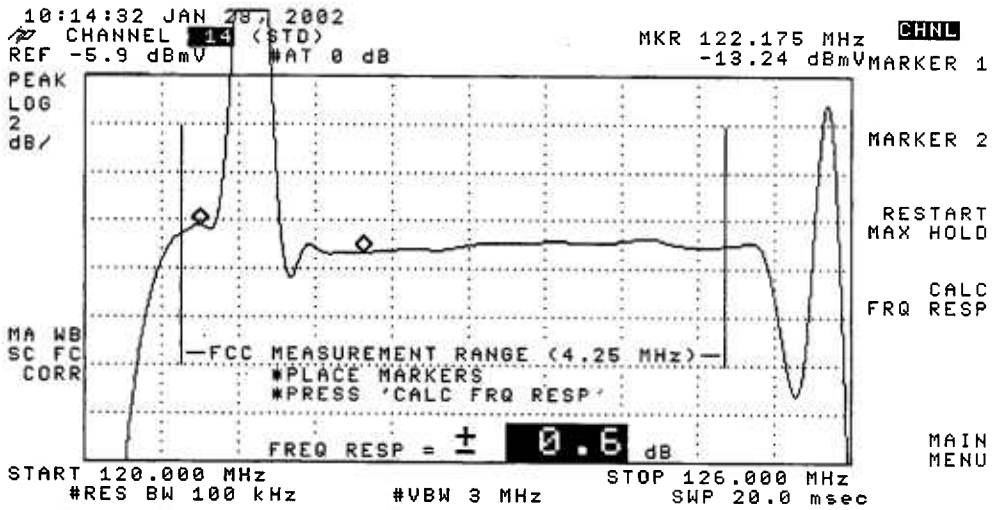
(SEE THE ATTATCHED SWEEP TRACES)

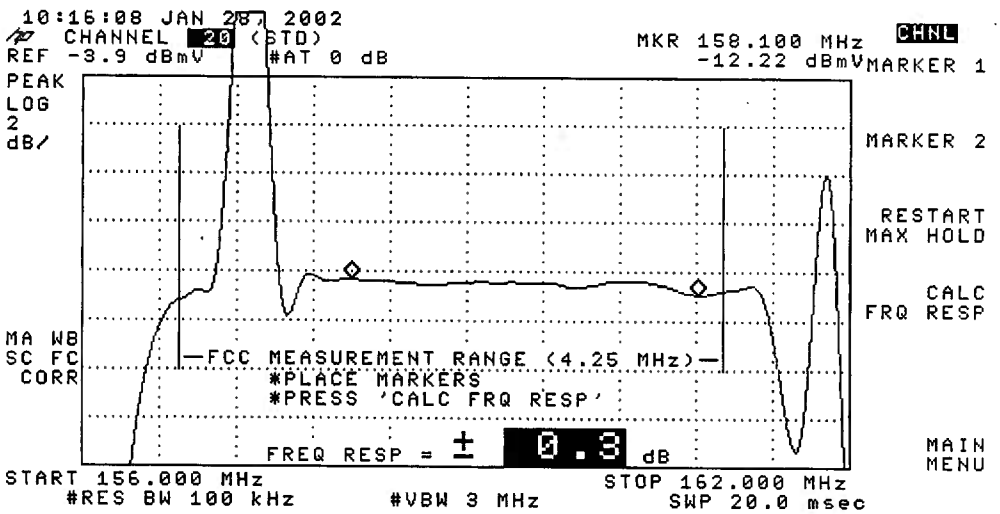

09:59:59 JAN 28, 2002
CHANNEL 13 (STD)
REF 19.8 dBmV
#AT 0 dB
PEAK
LOG
10
dB/
MA SB
SC FC
CORR
START 54.0 MHz
RES BW 3.0 MHz
VBW 1 MHz
STOP 555.0 MHz
SWP 20.0 msec
CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

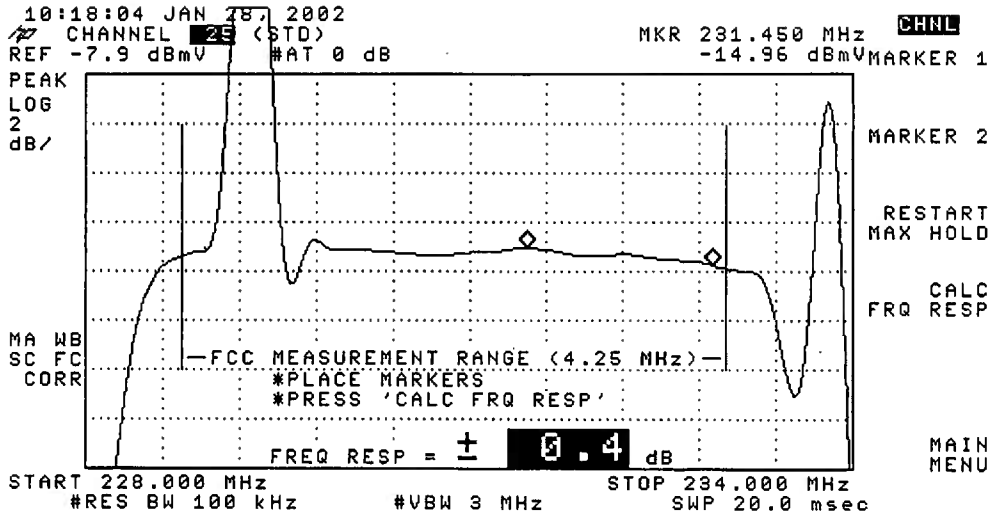

10:03:54 JAN 28, 2002
CHANNEL 2 (STD)
REF 9.7 dBmV
#AT 10 dB
MKR Δ -35.000 msec
-.04 dB
CHNL
PEAK
LOG
1
dB/
WA SB
SC FC
CORR
HUM/LOW FREQ DISTURBANCES = 0.5%
Video Modulation: OFF
START 55.253 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
STOP 55.253 MHz
#SWP 50.0 msec
MORE
INFO
MAIN
MENU

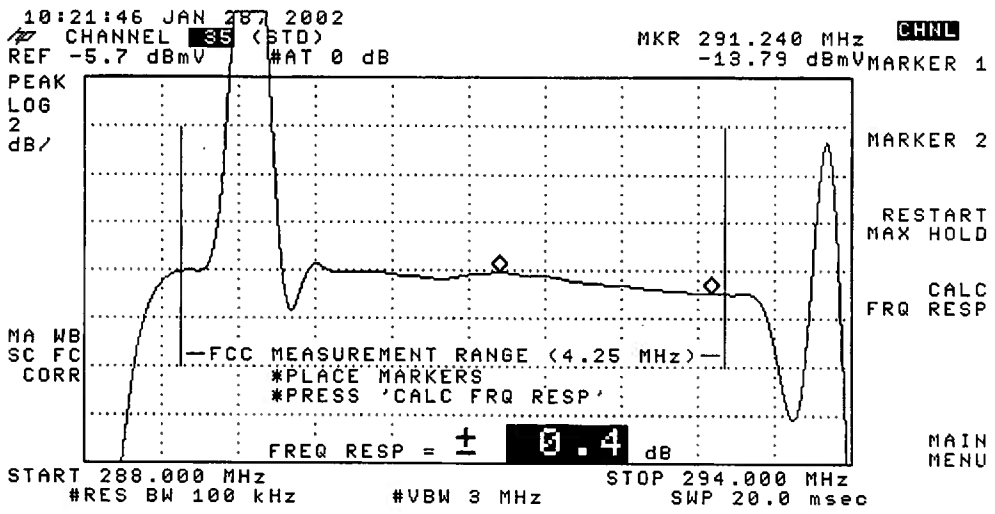

10:07:15 JAN 28, 2002
CHANNEL 2 (STD)
REF -4.9 dBmV
#AT 0 dB
MKR 54.870 MHz
-11.81 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 54.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 60.000 MHz
SWP 20.0 msec

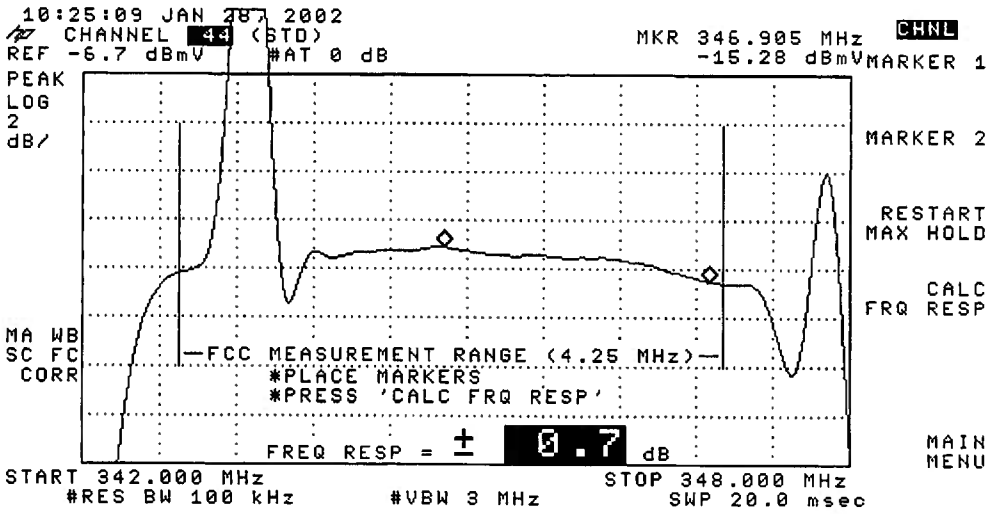

10:12:08 JAN 28, 2002
CHANNEL 13 (STD)
REF -7.3 dBmV
#AT 0 dB
MKR 214.335 MHz
-14.98 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 210.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 216.000 MHz
SWP 20.0 msec

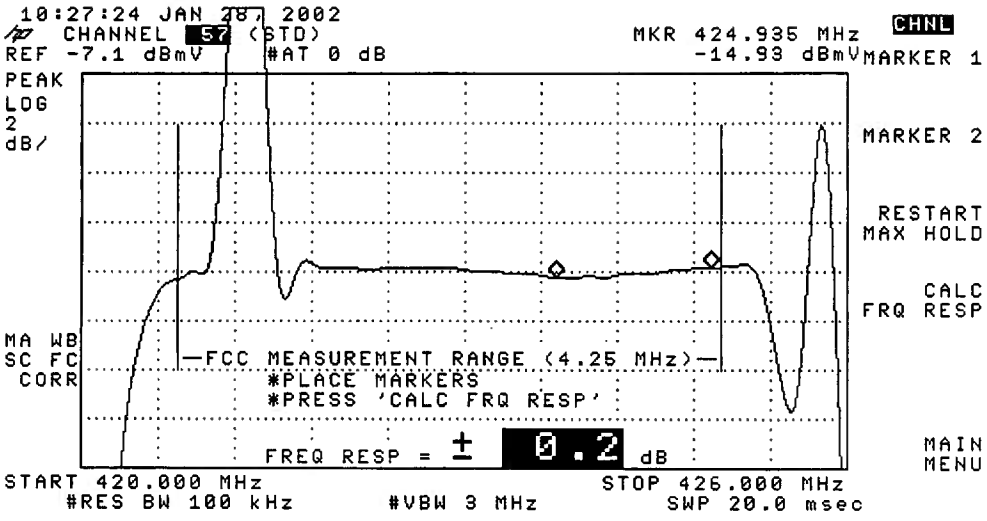

10:14:32 JAN 28, 2002
CHANNEL 14 (STD)
REF -5.9 dBmV
#AT 0 dB
MKR 122.175 MHz
-13.24 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.6 dB
MAIN
MENU
START 120.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 126.000 MHz
SWP 20.0 msec

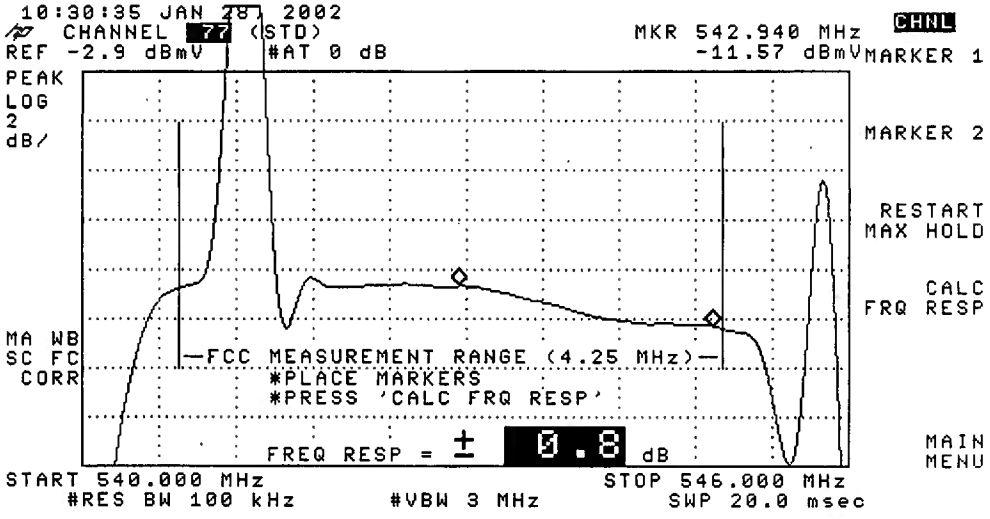

10:16:08 JAN 28, 2002
CHANNEL 20 (STD)
REF -3.9 dBmV
#AT 0 dB
MKR 158.100 MHz
-12.22 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 156.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 162.000 MHz
SWP 20.0 msec

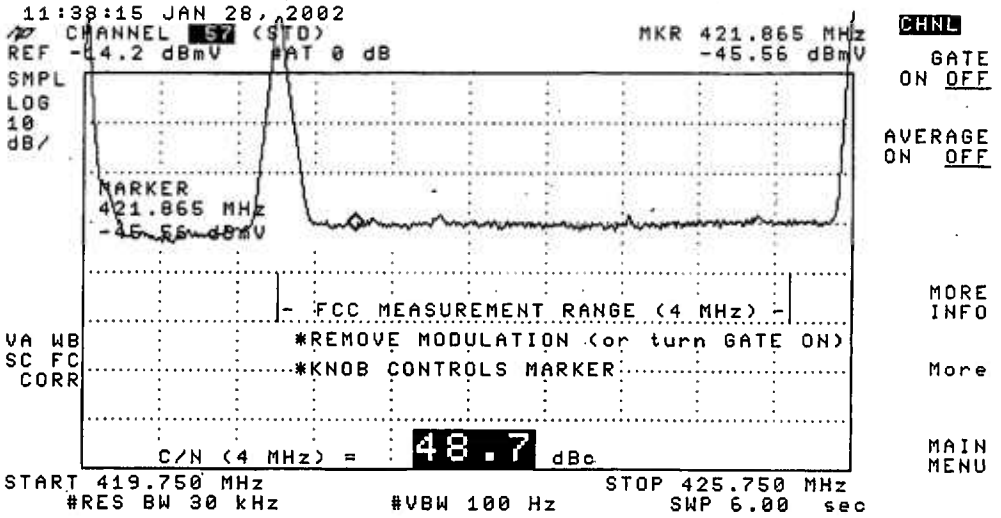

10:18:04 JAN 28, 2002
CHANNEL 25 (STD)
REF -7.9 dBmV
#AT 0 dB
MKR 231.450 MHz
-14.96 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 228.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 234.000 MHz
SWP 20.0 msec

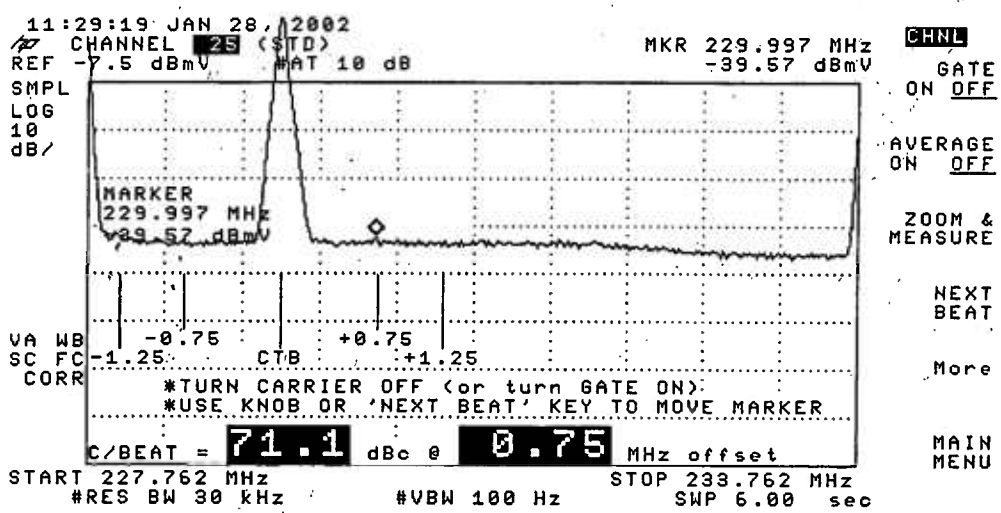

10:21:46 JAN 28, 2002
CHANNEL 35 (STD)
REF -5.7 dBmV
#AT 0 dB
MKR 291.240 MHz
-13.79 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 288.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 294.000 MHz
SWP 20.0 msec

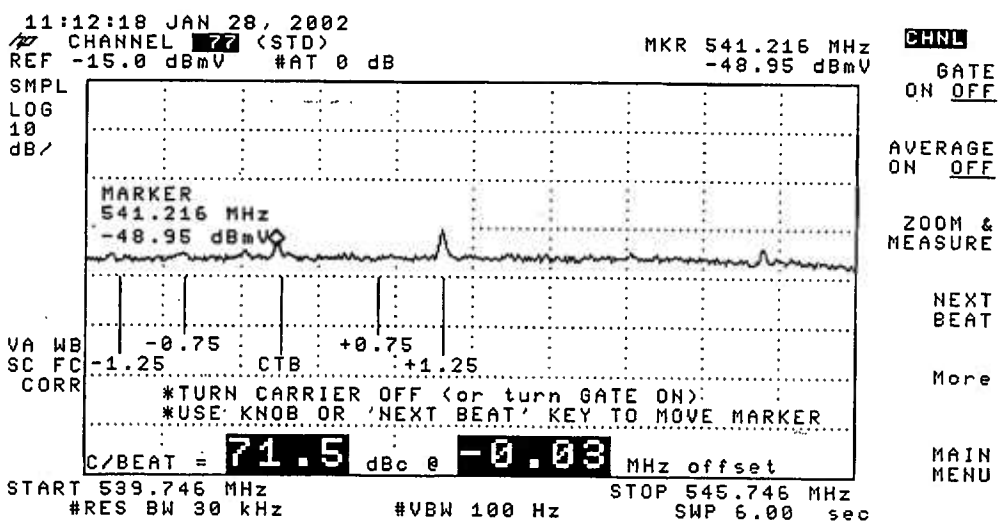

10:25:09 JAN 28, 2002
CHANNEL 44 (STD)
REF -6.7 dBmV
#AT 0 dB
MKR 346.905 MHz
-15.28 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.7 dB
MAIN
MENU
START 342.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 348.000 MHz
SWP 20.0 msec


10:27:24 JAN 28, 2002
CHANNEL 57 (STD)
REF -7.1 dBmV
#AT 0 dB
MKR 424.935 MHz
-14.93 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.2 dB
MAIN
MENU
START 420.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 426.000 MHz
SWP 20.0 msec


10:30:35 JAN 28 2002
CHANNEL 77 (STD)
REF -2.9 dBmV
#AT 0 dB
MKR 542.940 MHz
-11.57 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.8 dB
MAIN
MENU
START 540.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 546.000 MHz
SWP 20.0 msec


11:38:15 JAN 28, 2002
CHANNEL 57 (STD)
REF -14.2 dBmV
#AT 0 dB
MKR 421.865 MHz
-45.56 dBmV
SMPL
LOG
10
dB/
MARKER
421.865 MHz
-45.56 dBmV
- FCC MEASUREMENT RANGE (4 MHz) -
*REMOVE MODULATION (or turn GATE ON)
*KNOB CONTROLS MARKER
VA WB
SC FC
CORR
C/N (4 MHz) = 48.7 dBc
START 419.750 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 425.750 MHz
SWP 6.00 sec
CHNL
GATE ON OFF
AVERAGE ON OFF
MORE INFO
More
MAIN MENU


11:29:19 JAN 28, 2002
CHANNEL 25 (STD)
REF -7.5 dBmV
#AT 10 dB
MKR 229.997 MHz
-39.57 dBmV
SMPL
LOG
10
dB/
MARKER
229.997 MHz
-39.57 dBmV
-0.75
+0.75
-1.25
CTB
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
VA WB
SC FC
CORR
C/BEAT = 71.1 dBc @ 0.75 MHz offset
START 227.762 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 233.762 MHz
SWP 6.00 sec
CHNL
GATE ON OFF
AVERAGE ON OFF
ZOOM & MEASURE
NEXT BEAT
More
MAIN MENU


11:12:18 JAN 28, 2002
CHANNEL 77 (STD)
REF -15.0 dBmV
#AT 0 dB
MKR 541.216 MHz
-48.95 dBmV
SMPL
LOG
10
dB/
MARKER
541.216 MHz
-48.95 dBmV
-0.75
+0.75
-1.25
CTB
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
VA WB
SC FC
CORR
C/BEAT = 71.5 dBc @ -0.03 MHz offset
START 539.746 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 545.746 MHz
SWP 6.00 sec
CHNL
GATE ON OFF
AVERAGE ON OFF
ZOOM & MEASURE
NEXT BEAT
More
MAIN MENU

Visual Carrier Level Variation Test

System Name: Time Warner-Candor

Test Point Location Stowell Road

Date: 01/17/02 Performed by Rob Vrzal

Meter Serial Number: 9243906

Chan	Freq (MHz)	Temp °F				Max Variation	Chan	Freq (MHz)	Temp °F				Max Variation
		37	20	25	30				37	20	25	30	
		Time							Time				
		11:36	17:27	23:19	05:34				11:36	17:27	23:19	05:34	
		Visual Level (dbmv)							Visual Level (dbmv)				
2	55.2500	9.5	9.4	9.2	9.6	0.4	AA	301.2625	7.4	7.2	7.6	7.4	0.4
3	61.2500	9.9	9.7	9.8	9.8	0.2	BB	307.2625	7.9	7.9	7.9	7.9	0.0
4	67.2500	9.9	10.3	10.2	10.5	0.6	CC	313.2625	7.8	7.7	7.8	7.7	0.1
5	77.2500	8.9	8.6	8.8	8.7	0.3	DD	319.2625	8.1	7.7	7.9	7.9	0.4
6	83.2500	8.8	8.5	8.8	8.6	0.3	EE	325.2625	7.0	6.9	6.9	7.3	0.4
							FF	331.2750	6.8	7.3	6.6	6.9	0.7
							GG	337.2625	6.3	5.8	6.1	5.9	0.5
A-5	91.2500						HH	343.2625	6.4	6.0	6.0	5.9	0.5
A-4	97.2500						II	349.2625	7.1	6.8	6.9	7.1	0.3
A-3	103.2500						JJ	355.2625	6.8	6.5	6.6	6.6	0.3
A-2	109.2750	9.6	9.0	8.9	9.5	0.7	KK	361.2625	6.5	6.4	6.6	6.5	0.2
A-1	115.2750	8.7	8.6	9.1	9.5	0.9	LL	367.2625	7.0	6.9	7.1	7.0	0.2
A	121.2625	8.2	8.7	8.8	9.2	1.0	MM	373.2625	6.7	6.8	6.6	6.6	0.2
B	127.2625	8.1	8.1	8.0	8.6	0.6	NN	379.2625	6.4	6.6	6.6	6.5	0.2
C	133.2625	8.1	8.4	8.5	8.7	0.6	OO	385.2625	6.2	6.2	6.2	6.2	0.0
D	139.2500	7.9	7.7	7.9	7.9	0.2	PP	391.2625	5.7	5.6	5.7	5.4	0.3
E	145.2500	8.1	7.9	7.9	8.4	0.5	QQ	397.2625	6.1	6.3	6.4	6.3	0.3
F	151.2500	7.1	6.8	7.2	7.3	0.5	RR	403.2500	6.4	6.7	6.7	6.8	0.4
G	157.2500	8.0	7.8	8.2	8.3	0.5	SS	409.2500	6.1	5.9	6.3	6.1	0.4
H	163.2500	7.8	7.6	7.8	8.1	0.5	TT	415.2500	6.4	6.1	6.2	6.3	0.3
I	169.2500	8.0	7.5	7.7	8.0	0.5	UU	421.2500	6.3	6.2	6.0	6.3	0.3
7	175.2500	7.6	7.0	7.2	7.4	0.6	VV	427.2500	6.1	6.1	6.1	6.1	0.0
8	181.2500	7.3	6.9	6.9	7.3	0.4	WW	433.2500	6.3	6.2	6.4	6.3	0.2
9	187.2500	7.6	7.4	7.3	7.7	0.4	XX	439.2500	6.4	6.1	6.5	6.6	0.5
10	193.2500	7.2	6.7	6.6	6.5	0.7	YY	445.2500	6.8	7.0	6.6	7.0	0.4
11	199.2500	7.1	6.2	6.1	6.2	1.0	ZZ	451.2500	7.3	7.2	7.5	7.2	0.3
12	205.2500	7.0	6.3	6.3	6.3	0.7	63	457.2500	7.7	7.5	7.8	7.7	0.3
13	211.2500	7.2	7.0	7.2	7.1	0.2	64	463.2500	6.9	6.5	7.0	7.1	0.6
J	217.2500	6.9	7.2	7.3	7.1	0.4	65	469.2500	7.7	6.9	7.7	7.9	1.0
K	223.2500	7.1	7.5	7.3	7.5	0.4	66	475.2500	7.5	7.1	7.6	7.1	0.5
L	229.2625	6.6	6.5	6.5	6.6	0.1	67	481.2500	7.7	6.4	7.4	7.1	1.3
M	235.2625	6.9	6.8	6.7	6.9	0.2	68	487.2500	7.2	6.4	6.1	6.6	1.1
N	241.2625	7.4	7.2	7.1	7.2	0.3	69	493.2500	7.9	7.4	7.6	7.3	0.6
O	247.2625	7.5	7.4	7.2	7.3	0.3	70	499.2500	8.1	7.5	7.6	7.5	0.6
P	253.2625	7.9	7.4	7.3	7.5	0.6	71	505.2500	8.8	8.1	8.1	7.8	1.0
Q	259.2625	8.0	7.5	7.9	7.6	0.5	72	511.2500	8.8	7.8	8.3	7.6	1.2
R	265.2625	7.7	7.3	7.3	7.4	0.4	73	517.2500	9.4	8.5	8.6	8.6	0.9
S	271.2625	7.5	7.2	7.3	7.4	0.3	74	523.2500	8.8	8.0	6.9	8.3	1.9
T	277.2625	7.6	7.2	7.3	7.3	0.4	75	529.2500	9.6	8.8	8.8	8.6	1.0
U	283.2625	7.5	7.4	7.5	7.5	0.1	76	535.2500					
V	289.2625	7.2	7.3	7.3	7.1	0.2	77	541.2500	9.3	9.5	9.6	9.2	0.4
W	295.2625	7.9	7.6	7.5	7.5	0.4	78	547.2500					

Max NonAdjacent Channel Level Diff.	5.1
Max Adjacent Channel Level Diff.	1.9

Max Variance from last proof-of-performance test	N/A
Date of last proof-of-performance test	Changed Test Point

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

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ITHACA

System Test Point # 4

Location: OLD PERUVILLE ROAD

Community: GROTON

Pole Number: 117

D.T. Value: 17

Map Number: 2725456

OR Number: 1004

Trunk Cascade: 4 LE Cascad 0

Visual Carrier Level
Visual / Aural Level Difference
(at Test Point, at The End of a 100' Drop)

System Name: **Time Warner-Ithaca**

Test Location: **Old Peruville Road Groton**

Date: 17-Jan-02

Time 12:03 PM

Chan.	Freq. (MHz.)	Visual Level (dbmv.)	Aural Level (dbmv.)	Scra "S"	Diff. (Dbmv.)	Chan.	Freq. (MHz.)	Visual Level (dbmv.)	Aural Level (dbmv.)	cra "S"	Diff. (Dbmv.)
2	55.2500	11.2	-3.8		15.0	AA	289.2625	7.7	-7.5		15.2
3	61.2500	10.4	-4.3		14.7	BB	307.2625	7.4	-7.4		14.8
4	67.2500	11.2	-4.3		15.5	CC	313.2625	8.2	-7.0		15.2
5	77.2500	10.5	-4.3		14.8	DD	319.2625	8.2	-6.9		15.1
6	83.2500	10.6	-4.9		15.5	EE	325.2625	8.1	-6.4		14.5
						FF	331.2750	8.1	-7.0		15.1
						GG	337.2625	7.8	-7.2		15.0
A-5	91.2500					HH	343.2625	8.0	-7.2		15.2
A-4	97.2500					II	349.2625	7.9	-7.0		14.9
A-3	103.2500					JJ	355.2625	7.5	-6.9		14.4
A-2	109.2750	8.9	-5.7		14.6	KK	361.2625	7.6	-6.4		14.0
A-1	115.2750	7.9	-7.1	S	15.0	LL	367.2625	7.9	-7.0		14.9
A	121.2625	7.8	-6.3		14.1	MM	373.2625	7.6	-7.2		14.8
B	127.2625	8.2	-7.0		15.2	NN	379.2625	7.8	-7.7		15.5
C	133.2625	7.7	-6.7		14.4	OO	385.2625	8.1	-7.5		15.6
D	139.2500	8.2	-5.9		14.1	PP	391.2625	7.6	-7.7		15.3
E	145.2500	8.1	-6.7		14.8	QQ	397.2625	7.9	-7.4		15.3
F	151.2500	8.1	-6.4		14.5	RR	403.2500	7.0	-7.6		14.6
G	157.2500	8.2	-6.9		15.1	SS	409.2500	7.7	-7.0		14.7
H	163.2500	8.0	-6.6		14.6	TT	415.2500	7.4	-7.5		14.9
I	169.2500	7.9	-6.1		14.0	UU	421.2500	7.5	-7.4		14.9
7	175.2500	8.2	-6.9		15.1	VV	427.2500	7.2	-7.4		14.6
8	181.2500	8.5	-6.3		14.8	WW	433.2500	7.1	-7.7		14.8
9	187.2500	8.5	-6.8		15.3	XX	439.2500	7.2	-7.4		14.6
10	193.2500	8.0	-6.8		14.8	YY	445.2500	7.5	-7.5		15.0
11	199.2500	7.6	-7.0		14.6	ZZ	451.2500	7.5	-7.8		15.3
12	205.2500	8.3	-6.9		15.2	63	457.2500	7.6	-7.2		14.8
13	211.2500	7.7	-7.6		15.3	64	463.2500	7.3	-7.0		14.3
J	217.2500	7.1	-7.7		14.8	65	469.2500	7.9	-7.1	S	15.0
K	223.2500	7.5	-7.3		14.8	66	475.2500	8.0	-7.4	S	15.4
L	229.2625	7.5	-7.7		15.2	67	481.2500	7.7	-8.0	S	15.7
M	235.2625	7.4	-7.5		14.9	68	487.2500	7.5	-8.0	S	15.5
N	241.2625	7.6	-7.8		15.4	69	493.2500	7.3	-8.3	S	15.6
O	247.2625	7.2	-7.8		15.0	70	499.2500	7.5	-7.5		15.0
P	253.2625	7.7	-7.2		14.9	71	505.2500	7.6	-7.0		14.6
Q	259.2625	7.5	-7.5		15.0	72	511.2500	7.1	-7.8	S	14.9
R	265.2625	7.4	-7.2		14.6	73	517.2500	8.3	-7.2	S	15.5
S	271.2625	7.7	-6.9		14.6	74	523.2500	7.4	-8.7	S	16.1
T	277.2625	7.7	-7.3		15.0	75	529.2500	8.5	-6.5	S	15.0
U	283.2625	7.9	-6.8		14.7	76	535.2500	7.4	-7.4		14.8
V	289.2625	8.0	-6.7		14.7	77	541.2500	7.9	-7.2		15.1
W	283.2625	7.8	-7.3		15.1	78	547.2500	7.7	-7.5		15.2

PEAK TO VALLEY: 4.2

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: TIME WARNER CABLE- ITHACA **Date:** 01/25/02

Test Performed By: Paul Cullings

Location: Old Peruville Road Groton

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

Channel Number	In Channel Response	Carrier To Noise Ratio	Distortions (-dBc)			Hum
	(+/- dB)	(dB)	CTB	CSO	XMOD	(%)
2	0.6	47.6	68	69.3	70	0.4
13	0.7	47.5	69.3	69.4		
14	0.3	47.3	68	67		
20	0.1	47.5	68.2	69.4		
25	0.5	47.8	67.2	69.5		
35	0.5	47.3	68.3	67.3		
44	0.4	48.4	68.4	69		
57	0.2	48.6	68.5	69.6		
78	0.4	48.9	68	69		

Time Warner Cable
Syracuse Division

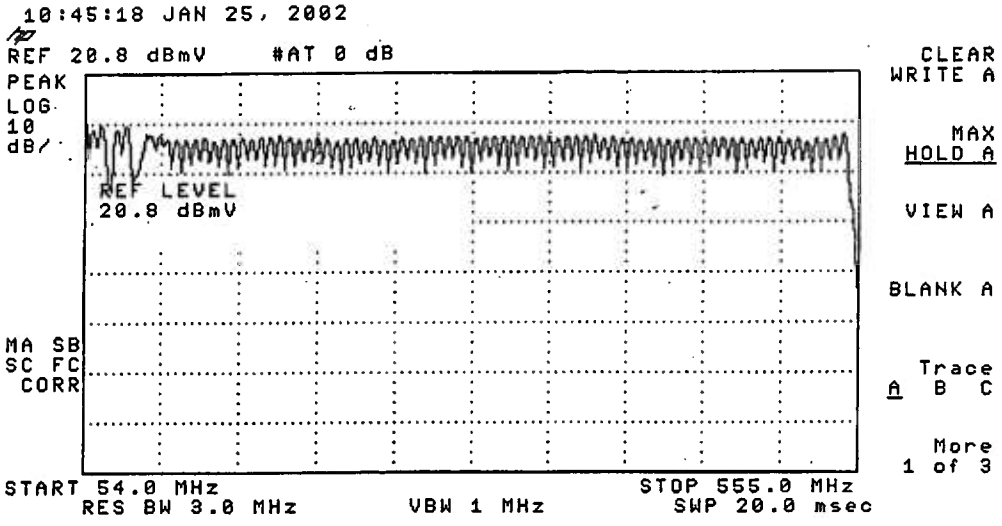
IN - CHANNEL FREQUENCY RESPONSE TEST

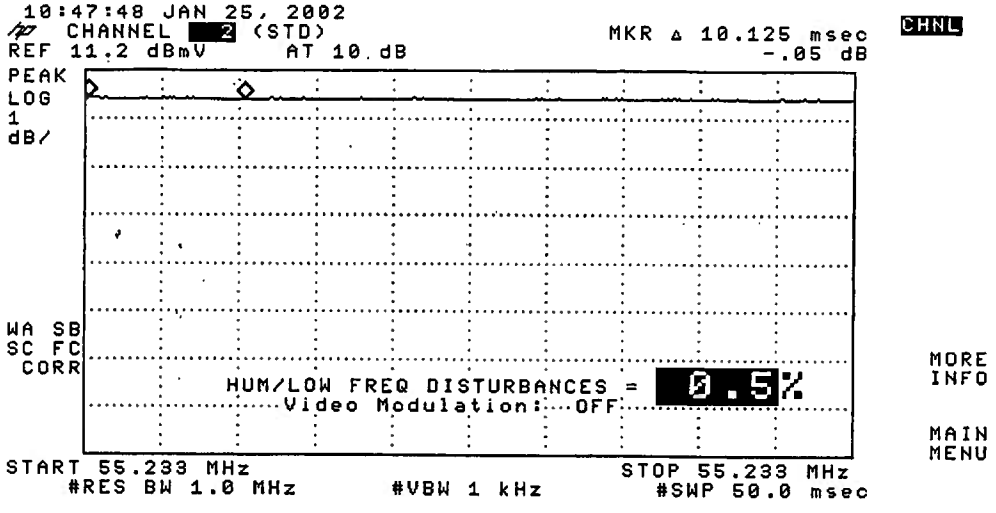
(76.605 (a) 6)

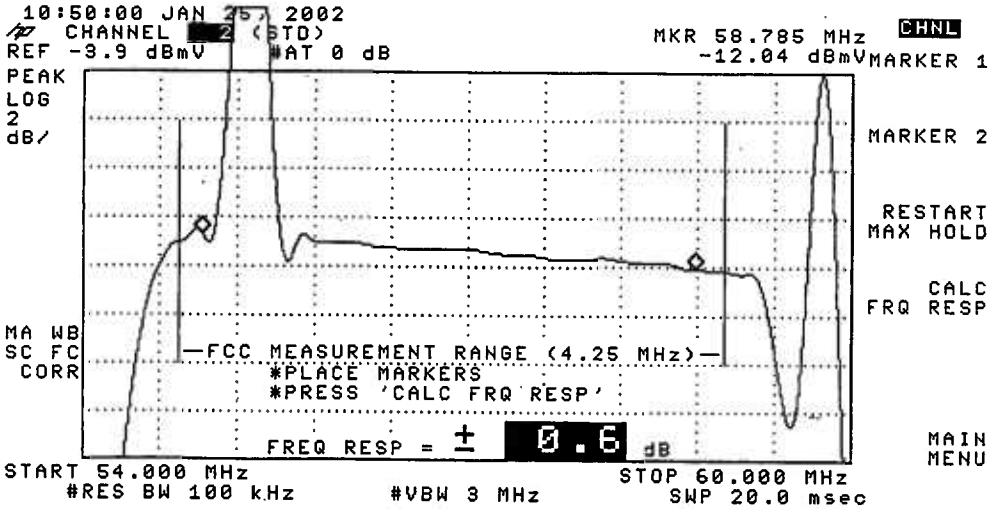
System Name: TIME WARNER-ITHACA Date: 01/25/02

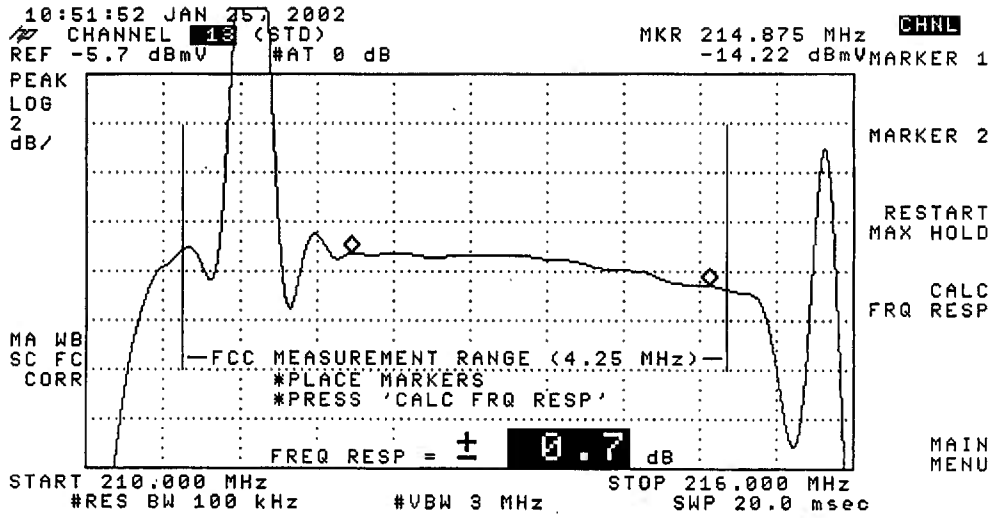
Test Performed By: Paul Cullings Location: Old Peruville Rd. Groton

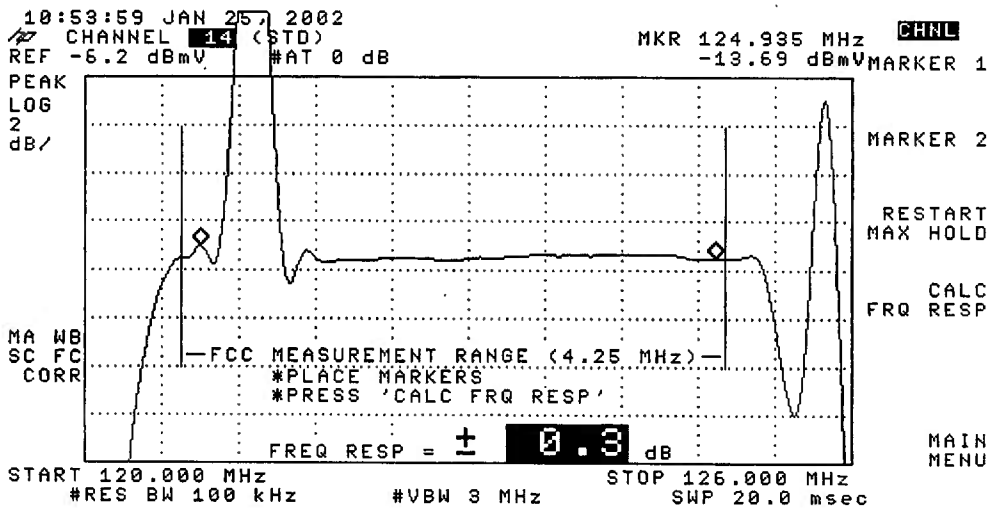
(SEE THE ATTATCHED SWEEP TRACES)

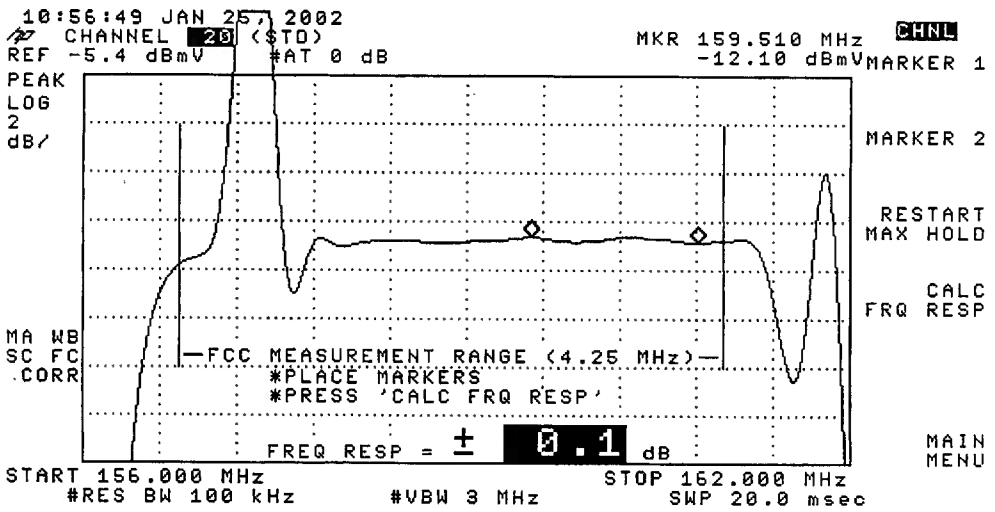

10:45:18 JAN 25, 2002
REF 20.8 dBmV
#AT 0 dB
PEAK
LOG
10
dB/
REF LEVEL
20.8 dBmV
MA SB
SC FC
CORR
START 54.0 MHz
RES BW 3.0 MHz
VBW 1 MHz
STOP 555.0 MHz
SWP 20.0 msec
CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

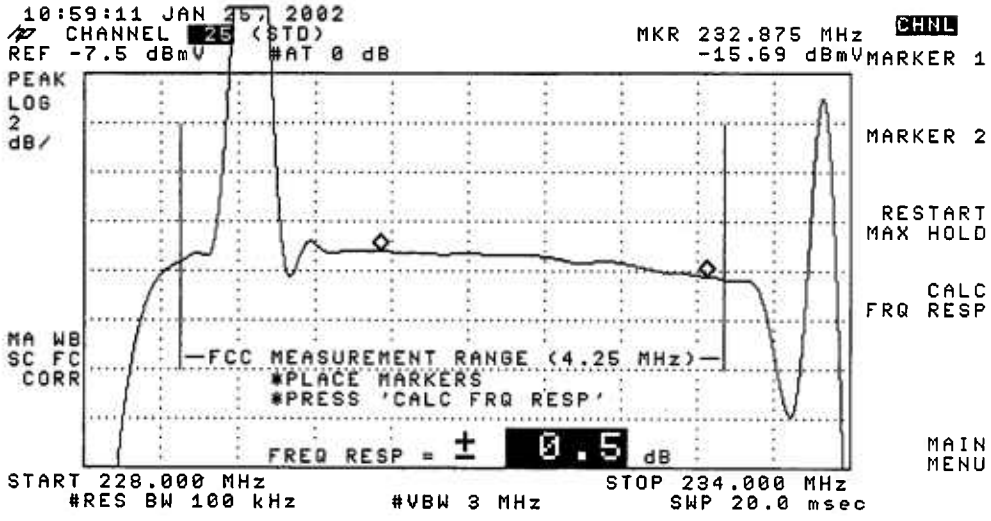

10:47:48 JAN 25, 2002
CHANNEL 2 (STD)
REF 11.2 dBmV
AT 10 dB
MKR Δ 10.125 msec
-.05 dB
CHNL
PEAK
LOG
1
dB/
WA SB
SC FC
CORR
HUM/LOW FREQ DISTURBANCES = 0.5%
Video Modulation: OFF
START 55.233 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
STOP 55.233 MHz
#SWP 50.0 msec
MORE
INFO
MAIN
MENU

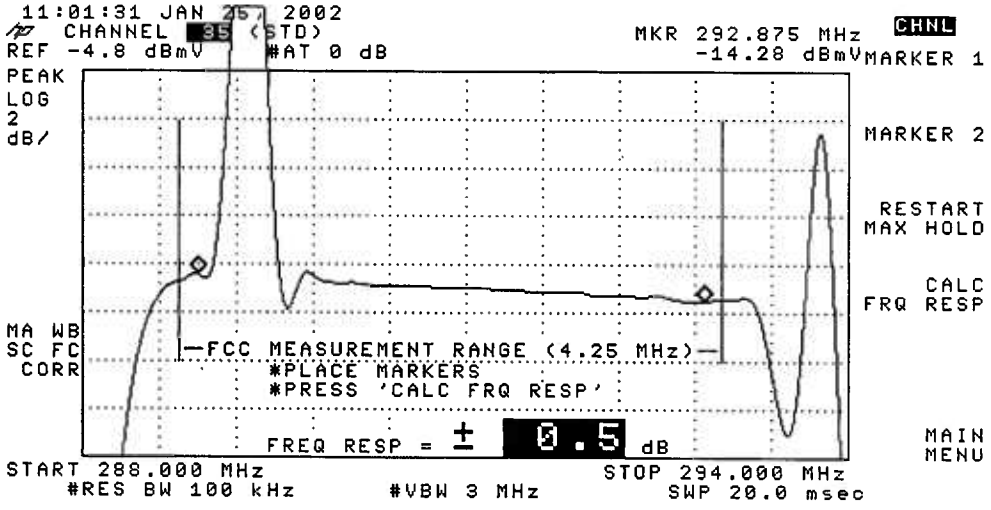

10:50:00 JAN 25, 2002
CHANNEL 2 (STD)
REF -3.9 dBmV
#AT 0 dB
MKR 58.785 MHz
-12.04 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.6 dB
MAIN
MENU
START 54.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 60.000 MHz
SWP 20.0 msec

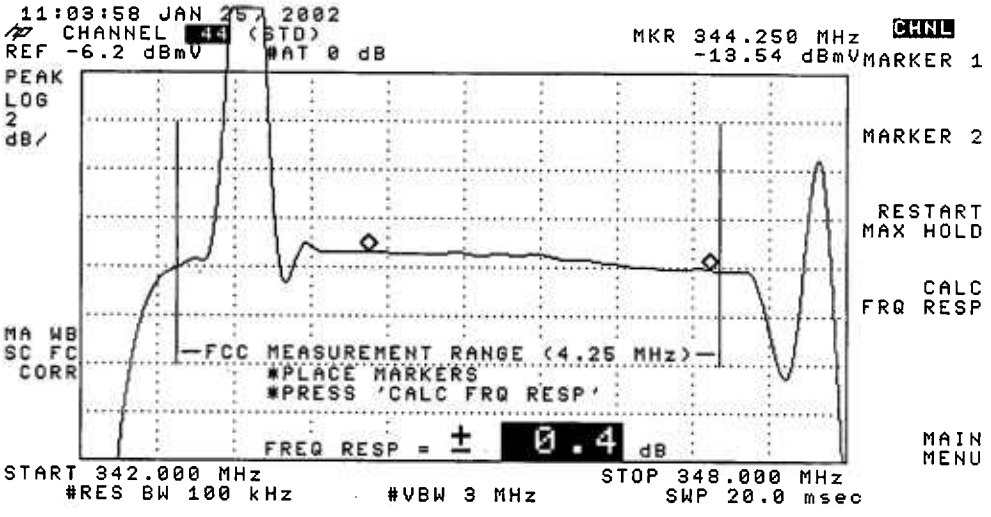

10:51:52 JAN 25, 2002
CHANNEL 13 (STD)
REF -5.7 dBmV
#AT 0 dB
MKR 214.875 MHz
-14.22 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.7 dB
MAIN
MENU
START 210.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 216.000 MHz
SWP 20.0 msec

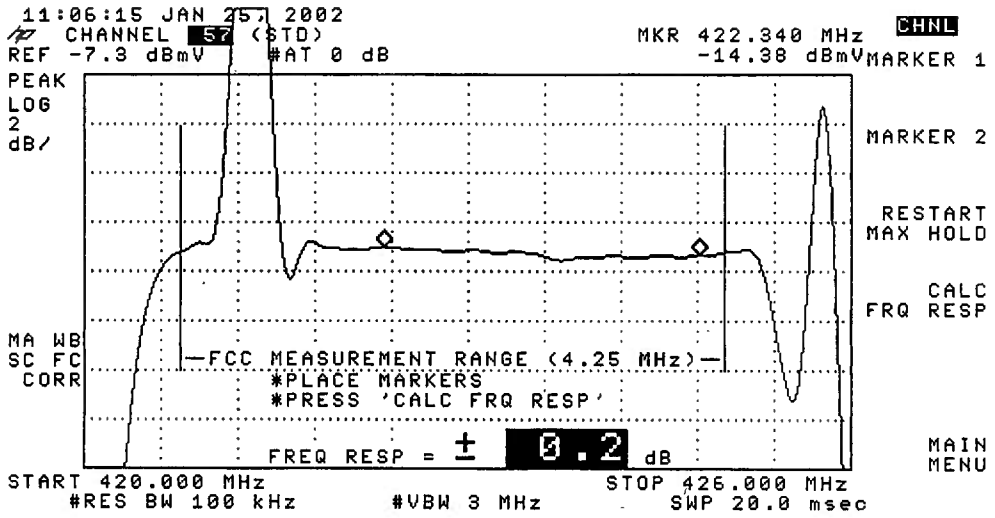

10:53:59 JAN 25, 2002
CHANNEL 14 (STD)
REF -6.2 dBmV
#AT 0 dB
MKR 124.935 MHz
-13.69 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 120.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 126.000 MHz
SWP 20.0 msec

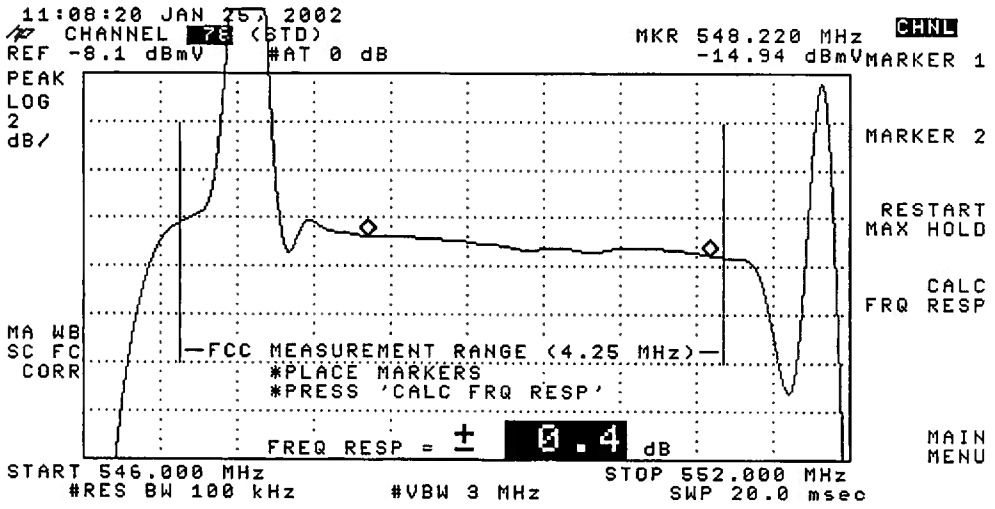

10:56:49 JAN 25, 2002
CHANNEL 20 (STD)
REF -5.4 dBmV
#AT 0 dB
MKR 159.510 MHz
-12.10 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.1 dB
MAIN
MENU
START 156.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 162.000 MHz
SWP 20.0 msec

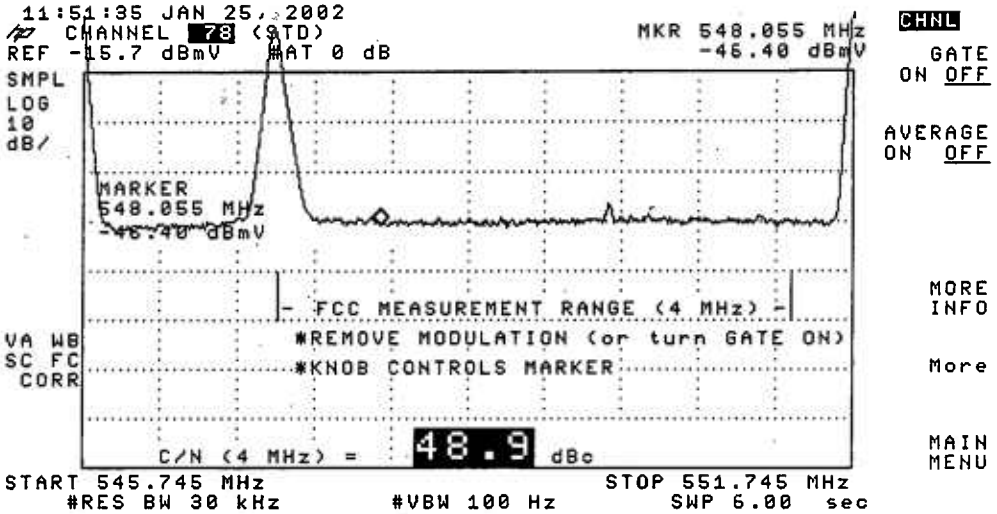

10:59:11 JAN 25, 2002
CHANNEL 25 (STD)
REF -7.5 dBmV
#AT 0 dB
MKR 232.875 MHz
-15.69 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.5 dB
MAIN
MENU
START 228.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 234.000 MHz
SWP 20.0 msec

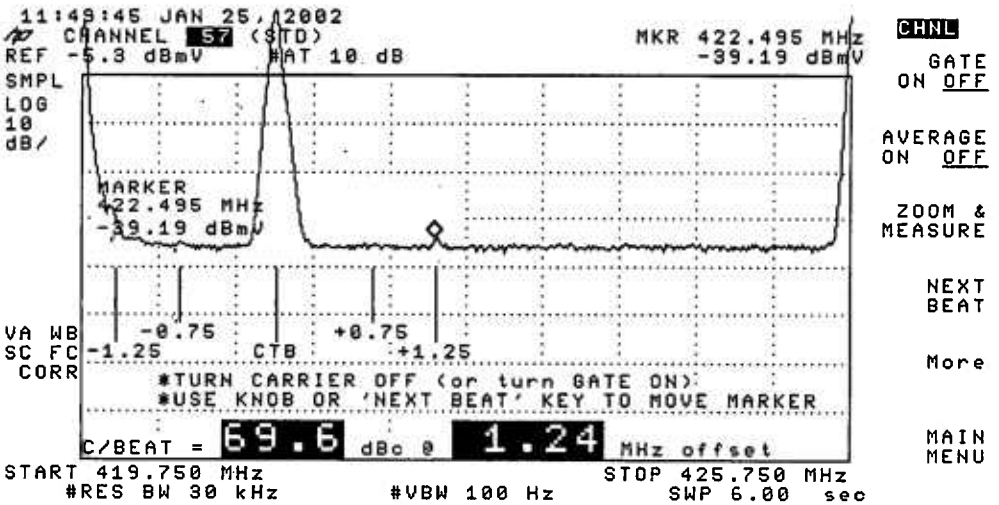

11:01:31 JAN 25, 2002
CHANNEL 35 (STD)
REF -4.8 dBmV
#AT 0 dB
MKR 292.875 MHz
-14.28 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.5 dB
MAIN
MENU
START 288.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 294.000 MHz
SWP 20.0 msec

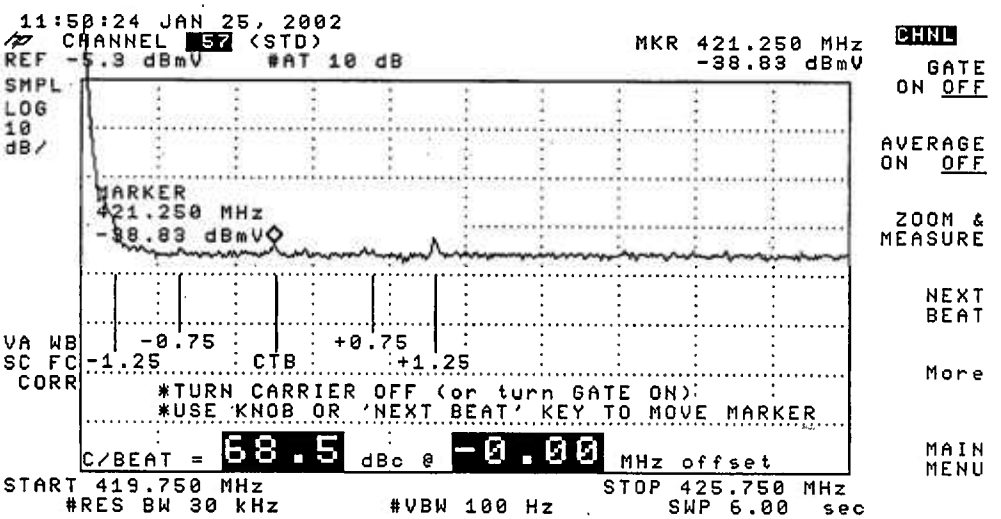

11:03:58 JAN 25, 2002
CHANNEL 44 (STD)
REF -6.2 dBmV
#AT 0 dB
MKR 344.250 MHz
-13.54 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 342.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 348.000 MHz
SWP 20.0 msec


11:06:15 JAN 25, 2002
CHANNEL 57 (STD)
REF -7.3 dBmV
#AT 0 dB
MKR 422.340 MHz
-14.38 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.2 dB
MAIN
MENU
START 420.000 MHz
STOP 426.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec


11:08:20 JAN 25, 2002
CHANNEL 78 (STD)
REF -8.1 dBmV
#AT 0 dB
MKR 548.220 MHz
-14.94 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 546.000 MHz
STOP 552.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec


11:51:35 JAN 25, 2002
CHANNEL 78 (STD)
REF -15.7 dBmV
#AT 0 dB
MKR 548.055 MHz
-46.40 dBmV
SMPL
LOG
10
dB/
MARKER
548.055 MHz
-46.40 dBmV
- FCC MEASUREMENT RANGE (4 MHz) -
*REMOVE MODULATION (or turn GATE ON)
*KNOB CONTROLS MARKER
VA WB
SC FC
CORR
C/N (4 MHz) = 48.9 dBc
START 545.745 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 551.745 MHz
SWP 6.00 sec
CHNL
GATE
ON OFF
AVERAGE
ON OFF
MORE
INFO
More
MAIN
MENU


11:49:45 JAN 25, 2002
CHANNEL 57 (STD)
REF -5.3 dBmV
#AT 10 dB
MKR 422.495 MHz
-39.19 dBmV
SMPL
LOG
10
dB/
MARKER
422.495 MHz
-39.19 dBmV
-0.75
-1.25
CTB
+0.75
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
VA WB
SC FC
CORR
C/BEAT = 69.6 dBc @ 1.24 MHz offset
START 419.750 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 425.750 MHz
SWP 6.00 sec
CHNL
GATE
ON OFF
AVERAGE
ON OFF
ZOOM &
MEASURE
NEXT
BEAT
More
MAIN
MENU


11:50:24 JAN 25, 2002
CHANNEL 57 (STD)
REF -5.3 dBmV
#AT 10 dB
MKR 421.250 MHz
-38.83 dBmV
SMPL
LOG
10
dB/
MARKER
421.250 MHz
-38.83 dBmV
-0.75
-1.25
CTB
+0.75
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
VA WB
SC FC
CORR
C/BEAT = 68.5 dBc @ -0.00 MHz offset
START 419.750 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 425.750 MHz
SWP 6.00 sec
CHNL
GATE
ON OFF
AVERAGE
ON OFF
ZOOM &
MEASURE
NEXT
BEAT
More
MAIN
MENU

Visual Carrier Level Variation Test

System Name: Time Warner-Ithaca

Test Point Location: Old Peruville Road Groton

Date: 01/17/02 Performed by: Cary Besemer

Meter Serial Number: 9243885

Chan	Freq. (MHz)	Temp °F				Max Variation	Chan	Freq. (MHz)	Temp °F				Max Variation
		39	37	35	33				39	37	35	33	
		Time							Time				
		12:03	18:03	00:15	05:43				12:03	18:03	00:15	05:43	
		Visual Level (dbmv)							Visual Level (dbmv)				
2	55.2500	11.2	11.7	11.6	11.6	0.5	AA	301.2625	7.7	8.0	8.1	6.6	1.5
3	61.2500	10.4	10.9	11.2	11.2	0.8	BB	307.2625	7.4	7.9	8.1	7.2	0.9
4	67.2500	11.2	11.4	11.6	11.0	0.6	CC	313.2625	8.2	8.3	8.4	7.6	0.8
5	77.2500	10.5	11.1	11.3	10.0	1.3	DD	319.2625	8.2	8.3	8.6	7.9	0.7
6	83.2500	10.6	10.8	10.1	9.9	0.9	EE	325.2625	8.1	8.1	8.1	6.9	1.2
							FF	331.2750	8.1	8.7	8.4	8.2	0.6
							GG	337.2625	7.8	7.9	8.3	7.2	1.1
A-5	91.2500						HH	343.2625	8.0	8.0	8.4	7.3	1.1
A-4	97.2500						II	349.2625	7.9	8.4	8.4	7.6	0.8
A-3	103.2500						JJ	355.2625	7.5	7.8	8.1	7.2	0.9
A-2	109.2750	8.9	9.1	9.7	9.0	0.8	KK	361.2625	7.6	7.6	7.7	7.2	0.5
A-1	115.2750	7.9	7.6	8.5	7.0	1.5	LL	367.2625	7.9	8.4	8.6	7.6	1.0
A	121.2625	7.8	8.9	8.9	7.4	1.5	MM	373.2625	7.6	8.1	8.4	7.3	1.1
B	127.2625	8.2	8.8	8.9	7.5	1.4	NN	379.2625	7.8	7.9	8.3	7.5	0.8
C	133.2625	7.7	8.4	8.5	7.1	1.4	OO	385.2625	8.1	8.1	8.3	7.5	0.8
D	139.2500	8.2	8.5	9.0	7.7	1.3	PP	391.2625	7.6	7.7	7.9	7.1	0.8
E	145.2500	8.1	8.9	9.1	7.8	1.3	QQ	397.2625	7.9	8.0	8.4	7.4	1.0
F	151.2500	8.1	9.4	9.6	8.0	1.6	RR	403.2500	7.0	7.3	7.8	6.7	1.1
G	157.2500	8.2	9.1	9.2	7.9	1.3	SS	409.2500	7.7	8.2	8.4	7.7	0.7
H	163.2500	8.0	8.8	9.1	7.8	1.3	TT	415.2500	7.4	8.1	8.0	7.2	0.9
I	169.2500	7.9	9.1	9.1	7.5	1.6	UU	421.2500	7.5	8.2	8.2	7.5	0.7
7	175.2500	8.2	8.9	9.1	7.5	1.6	VV	427.2500	7.2	8.1	8.5	8.0	1.3
8	181.2500	8.5	8.8	8.9	7.8	1.1	WW	433.2500	7.1	7.8	8.0	7.5	0.9
9	187.2500	8.5	9.0	9.1	7.9	1.2	XX	439.2500	7.2	8.0	8.2	7.3	1.0
10	193.2500	8.0	8.4	8.3	7.5	0.9	YY	445.2500	7.5	7.7	8.3	7.2	1.1
11	199.2500	7.6	8.1	7.9	7.0	1.1	ZZ	451.2500	7.5	8.1	8.3	7.0	1.3
12	205.2500	8.3	7.8	8.1	6.7	1.6	63	457.2500	7.6	7.7	7.8	7.1	0.7
13	211.2500	7.7	8.1	8.1	6.8	1.3	64	463.2500	7.3	7.5	7.5	7.1	0.4
J	217.2500	7.1	7.8	7.8	6.4	1.4	65	469.2500	7.9	8.2	7.7	7.8	0.5
K	223.2500	7.5	8.1	8.1	6.8	1.3	66	475.2500	8.0	7.2	9.1	7.6	1.9
L	229.2625	7.5	7.4	7.1	6.3	1.2	67	481.2500	7.7	7.5	8.6	7.6	1.1
M	235.2625	7.4	7.3	7.1	6.5	0.9	68	487.2500	7.5	7.8	7.6	6.4	1.4
N	241.2625	7.6	7.4	7.3	6.5	1.1	69	493.2500	7.3	8.1	7.8	6.7	1.4
O	247.2625	7.2	7.2	7.0	6.7	0.5	70	499.2500	7.5	7.5	7.7	6.9	0.8
P	253.2625	7.7	7.3	7.8	6.8	1.0	71	505.2500	7.6	8.0	7.9	7.1	0.9
Q	259.2625	7.5	7.3	6.9	6.3	1.2	72	511.2500	7.1	7.9	7.8	7.0	0.9
R	265.2625	7.4	7.6	7.3	6.2	1.4	73	517.2500	8.3	8.6	8.3	8.0	0.6
S	271.2625	7.7	7.5	7.7	6.8	0.9	74	523.2500	7.4	7.6	8.7	8.0	1.3
T	277.2625	7.7	7.7	7.8	7.0	0.8	75	529.2500	8.5	8.7	8.9	7.9	1.0
U	283.2625	7.9	7.7	8.3	6.9	1.4	76	535.2500	7.4	8.0	7.9	7.5	0.6
V	289.2625	8.0	7.9	7.8	7.6	0.4	77	541.2500	7.9	8.5	8.6	8.0	0.7
W	295.2625	7.8	7.6	8.0	6.8	1.2	78	547.2500	7.7	7.7	7.9	6.8	1.1

Max NonAdjacent Channel Level Diff.	5.4
Max Adjacent Channel Level Diff.	2

Max Variance from last proof-of-performance test	N/a
Date of last proof-of-performance test	test point changed

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

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ITHACA

System Test Point # 5

Location: LAKE RD

Community: DRYDEN

Pole Number: 35

D.T. Value: 11

Map Number: 12965426

OR Number: 1006

Trunk Cascade: 2 LE Cascade 2

Visual Carrier Level
Visual / Aural Level Difference
(at Test Point, at The End of a 100' Drop)

System Name: **Time Warner-Ithaca**

Test Location: **Lake Road Dryden**

Date: 20-Jan-02

Time 12:13 PM

Chan	Freq. (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff. (Dbmv)	Chan	Freq. (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	cra "S"	Diff. (Dbmv)
2	55.2500	15.4	1.3		14.1	AA	289.2625	12.6	-1.7		14.3
3	61.2500	15.3	0.9		14.4	BB	307.2625	11.9	-3.0		14.9
4	67.2500	15.8	0.9		14.9	CC	313.2625	12.4	-2.5		14.9
5	77.2500	14.3	0.3		14.0	DD	319.2625	12.4	-2.7		15.1
6	83.2500	14.1	0.6		13.5	EE	325.2625	11.6	-2.5		14.1
						FF	331.2750	12.1	-2.2		14.3
						GG	337.2625	11.4	-3.3		14.7
A-5	91.2500					HH	343.2625	10.5	-4.4		14.9
A-4	97.2500					II	349.2625	10.8	-4.1		14.9
A-3	103.2500					JJ	355.2625	10.4	-2.2		12.6
A-2	109.2750	13.6	0.2		13.4	KK	361.2625	9.8	-4.0		13.8
A-1	115.2750	14.4	-1.0	S	15.4	LL	367.2625	9.9	-5.0		14.9
A	121.2625	13.5	-0.8		14.3	MM	373.2625	10.0	-4.5		14.5
B	127.2625	13.0	-1.7		14.7	NN	379.2625	10.1	-5.7		15.8
C	133.2625	12.6	-1.5		14.1	OO	385.2625	9.6	-5.6		15.2
D	139.2500	12.7	-1.2		13.9	PP	391.2625	9.0	-5.9		14.9
E	145.2500	12.8	-2.1		14.9	QQ	397.2625	9.7	-5.7		15.4
F	151.2500	12.0	-2.3		14.3	RR	403.2500	9.6	-5.4		15.0
G	157.2500	12.9	-1.9		14.8	SS	409.2500	8.8	-5.1		13.9
H	163.2500	12.8	-1.4		14.2	TT	415.2500	9.1	-5.7		14.8
I	169.2500	12.6	-1.2		13.8	UU	421.2500	8.9	-6.3		15.2
7	175.2500	11.3	-3.2		14.5	VV	427.2500	9.3	-4.9		14.2
8	181.2500	11.6	-2.6		14.2	WW	433.2500	8.9	-5.4		14.3
9	187.2500	11.9	-3.0		14.9	XX	439.2500	9.1	-5.9		15.0
10	193.2500	11.2	-3.0		14.2	YY	445.2500	7.0	-7.3		14.3
11	199.2500	10.8	-3.3		14.1	ZZ	451.2500	9.5	-4.7		14.2
12	205.2500	11.0	-3.4		14.4	63	457.2500	9.2	-6.0		15.2
13	211.2500	11.2	-3.5		14.7	64	463.2500	8.5	-5.2		13.7
J	217.2500	11.7	-3.0		14.7	65	469.2500	9.4	-5.7	S	15.1
K	223.2500	10.8	-4.3		15.1	66	475.2500	9.7	-6.1	S	15.8
L	229.2625	11.0	-3.6		14.6	67	481.2500	8.6	-6.7	S	15.3
M	235.2625	11.4	-2.4		13.8	68	487.2500	8.0	-7.1	S	15.1
N	241.2625	11.8	-3.8		15.6	69	493.2500	8.5	-7.3	S	15.8
O	247.2625	11.6	-2.9		14.5	70	499.2500	7.2	-8.0		15.2
P	253.2625	11.5	-2.8		14.3	71	505.2500	7.4	-7.5		14.9
Q	259.2625	12.0	-2.9		14.9	72	511.2500	7.6	-7.1	S	14.7
R	265.2625	11.7	-2.7		14.4	73	517.2500	8.9	-6.2	S	15.1
S	271.2625	11.0	-3.1		14.1	74	523.2500	9.5	-4.0	S	13.5
T	277.2625	12.0	-2.3		14.3	75	529.2500	9.8	-5.8	S	15.6
U	283.2625	12.3	-2.2		14.5	76	535.2500	10.0	-4.5		14.5
V	289.2625	12.3	-1.9		14.2	77	541.2500	9.9	-4.8		14.7
W	283.2625	11.9	-2.6		14.5	78	547.2500	9.7	-5.2		14.9

PEAK TO VALLEY: 8.8

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: TIME WARNER-ITHACA **Date:** 01/25/02

Test Performed By: Paul Cullings

Location: Lake Road Dryden

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

Channel Number	In Channel Response	Carrier To Noise Ratio	Distortions (-dBc)			Hum
	(+/- dB)	(dB)	CTB	CSO	XMOD	(%)
2	0.5	48	67.9	69	70	0.5
13	0.7	47.9	67.7	68.9		
14	0.4	47.1	67.5	68.8		
20	0.1	47.2	68	68.9		
25	0.7	47.3	66.6	67.9		
35	0.4	47.9	67.9	63.3		
44	0.6	48.8	67	66		
57	0.2	48.4	68	69.2		
78	0.7	49.9	68	69		

Time Warner Cable
Syracuse Division

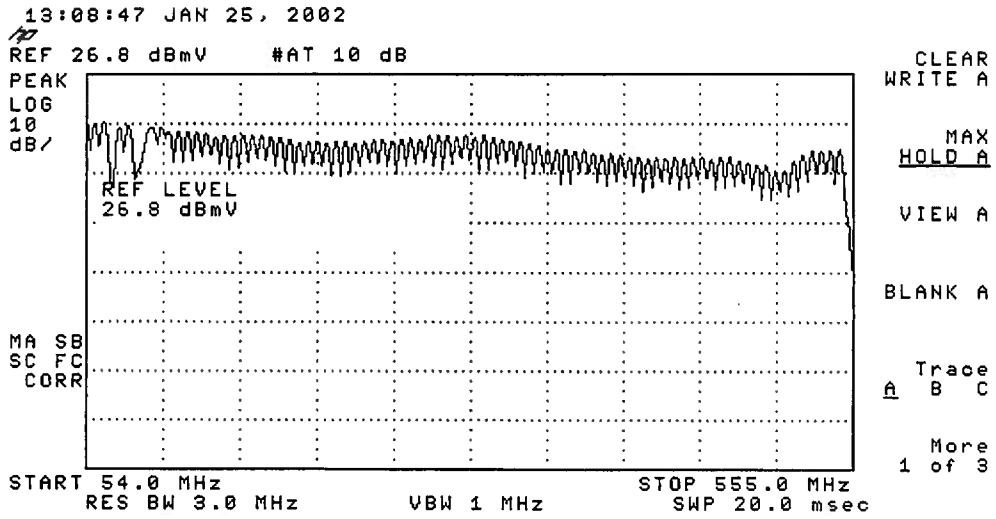
IN - CHANNEL FREQUENCY RESPONSE TEST

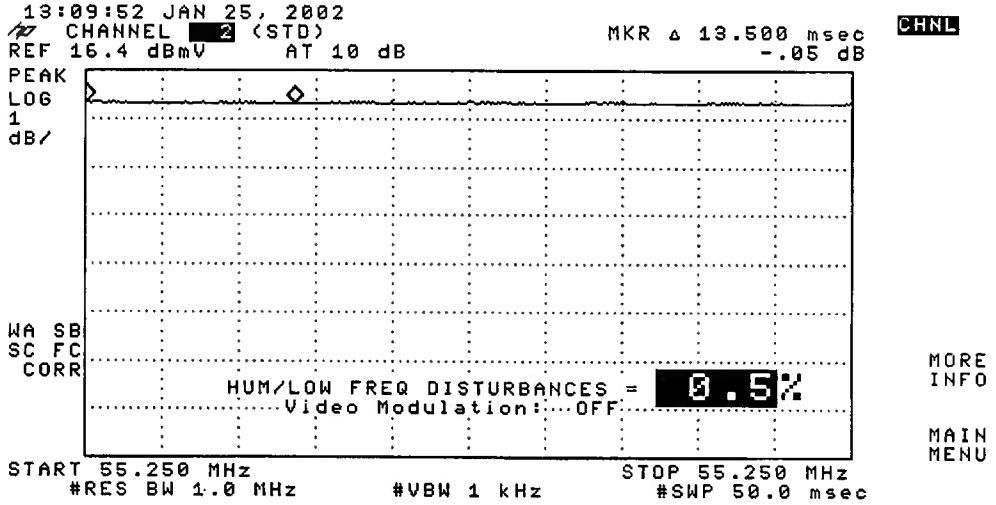
(76.605 (a) 6)

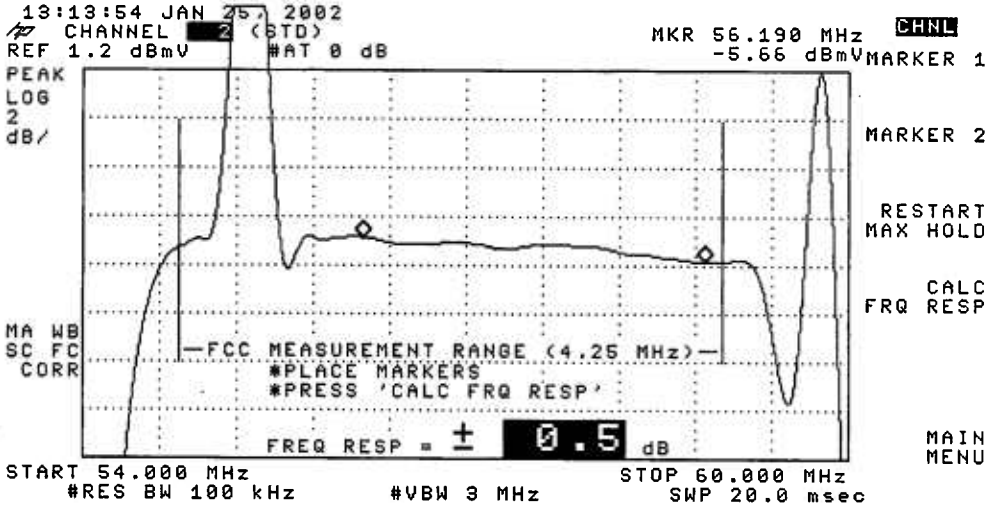
System Name: TIME WARNER-ITHACA Date: 01/25/02

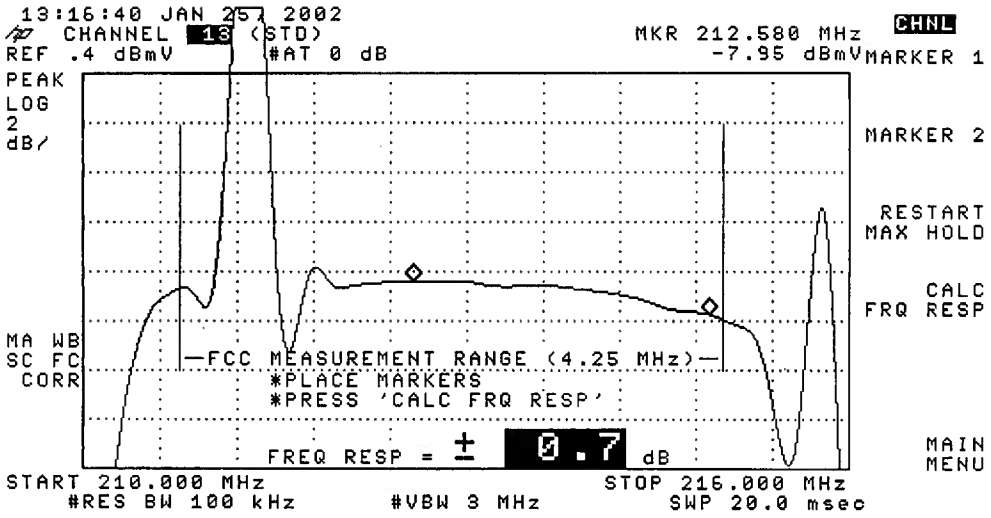
Test Performed By: Paul Cullings Location: Lake Rd. Dryden

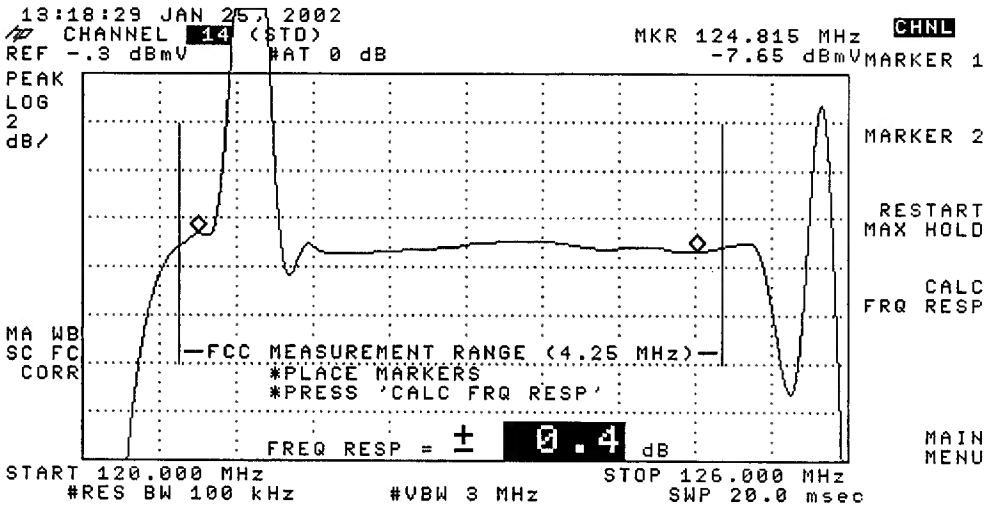
(SEE THE ATTATCHED SWEEP TRACES)

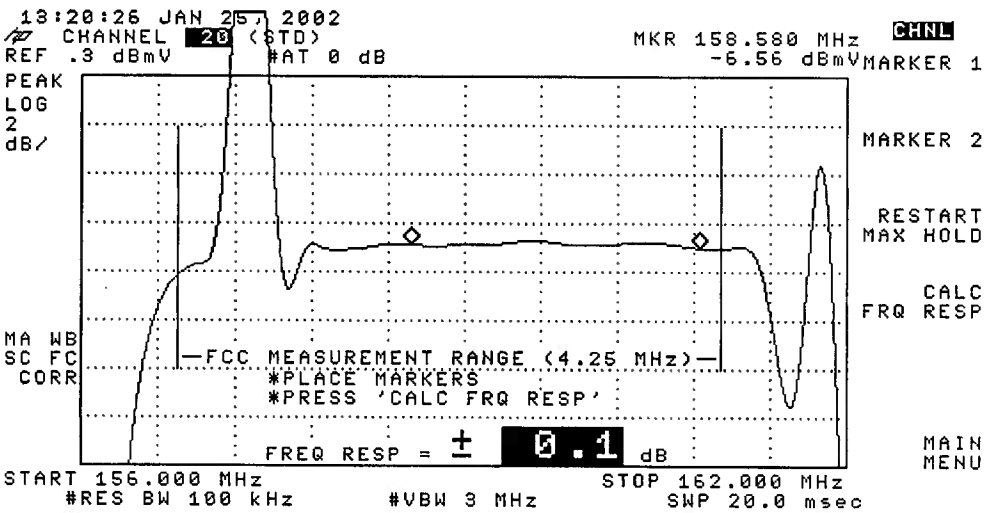

13:08:47 JAN 25, 2002
REF 26.8 dBmV
#AT 10 dB
PEAK
LOG
10
dB/
REF LEVEL
26.8 dBmV
MA SB
SC FC
CORR
START 54.0 MHz
RES BW 3.0 MHz
VBW 1 MHz
STOP 555.0 MHz
SWP 20.0 msec
CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

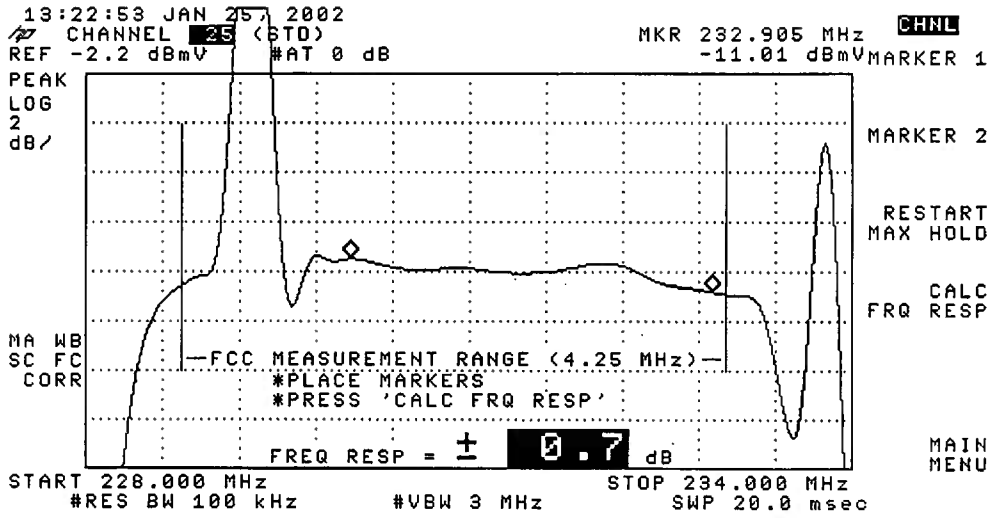

13:09:52 JAN 25, 2002
CHANNEL 2 (STD)
REF 16.4 dBmV
AT 10 dB
MKR Δ 13.500 msec
-.05 dB
CHNL
PEAK
LOG
1
dB/
WA SB
SC FC
CORR
HUM/LOW FREQ DISTURBANCES = 0.5%
Video Modulation: OFF
START 55.250 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
STOP 55.250 MHz
#SWP 50.0 msec
MORE
INFO
MAIN
MENU

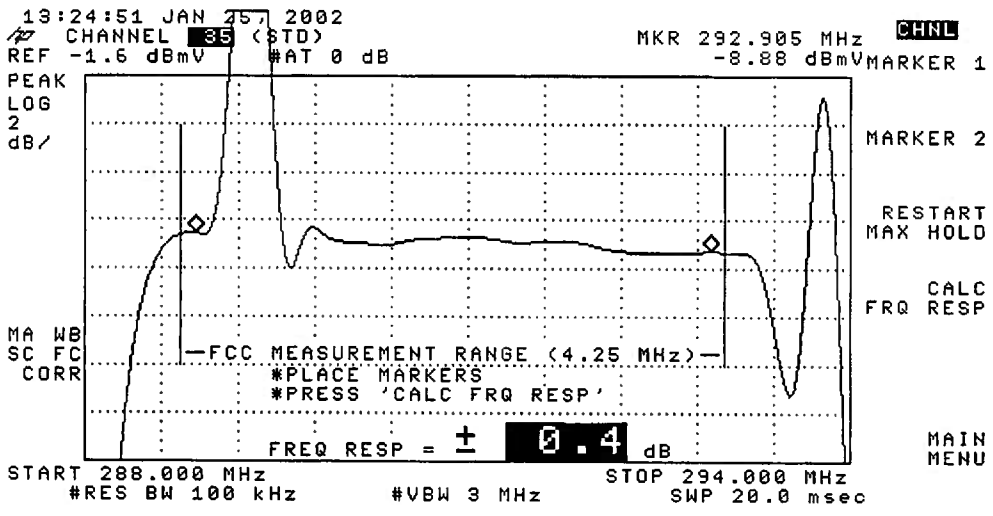

13:13:54 JAN 25, 2002
CHANNEL 2 (STD)
REF 1.2 dBmV
#AT 0 dB
MKR 56.190 MHz
-5.66 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.5 dB
START 54.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 60.000 MHz
SWP 20.0 msec
MAIN
MENU

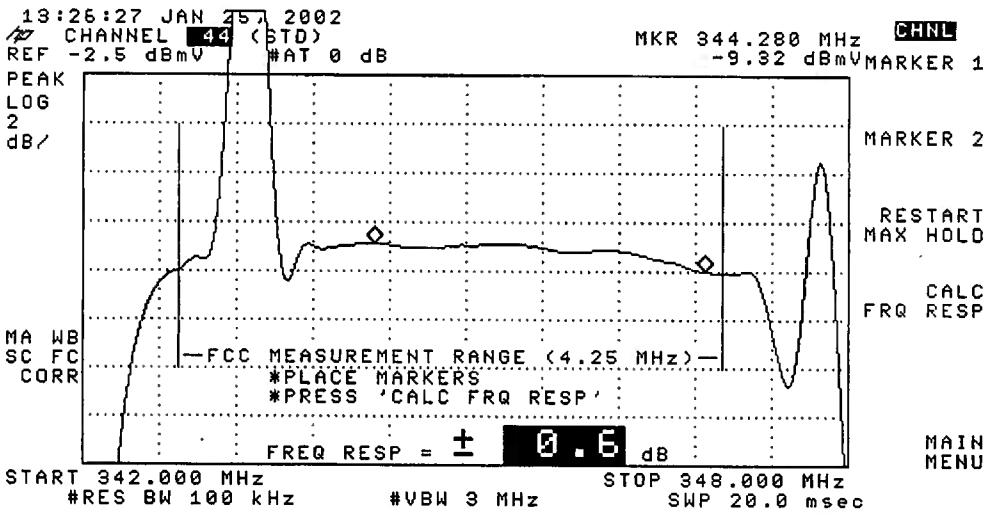

13:16:40 JAN 25, 2002
CHANNEL 13 (STD)
REF .4 dBmV
#AT 0 dB
MKR 212.580 MHz
-7.95 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.7 dB
MAIN
MENU
START 210.000 MHz
STOP 216.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

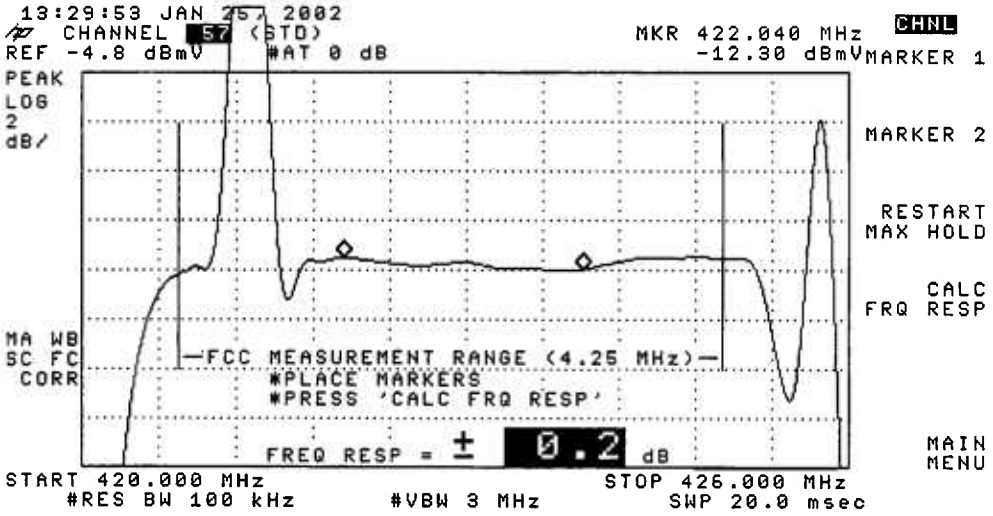

13:18:29 JAN 25, 2002
CHANNEL 14 (STD)
REF -.3 dBmV
#AT 0 dB
MKR 124.815 MHz
-7.65 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 120.000 MHz
STOP 126.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

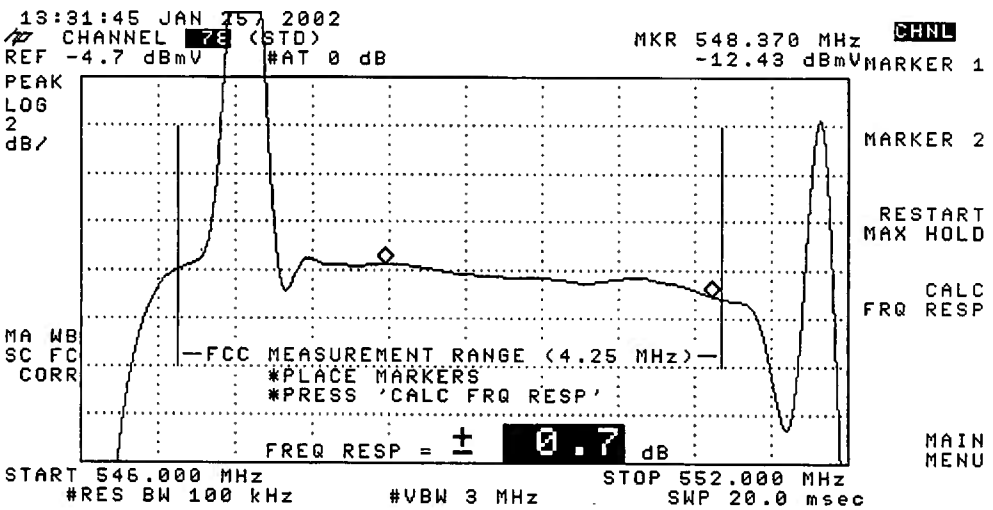

13:20:26 JAN 25, 2002
CHANNEL 20 (STD)
REF .3 dBmV
#AT 0 dB
MKR 158.580 MHz
-6.56 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.1 dB
MAIN
MENU
START 156.000 MHz
STOP 162.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

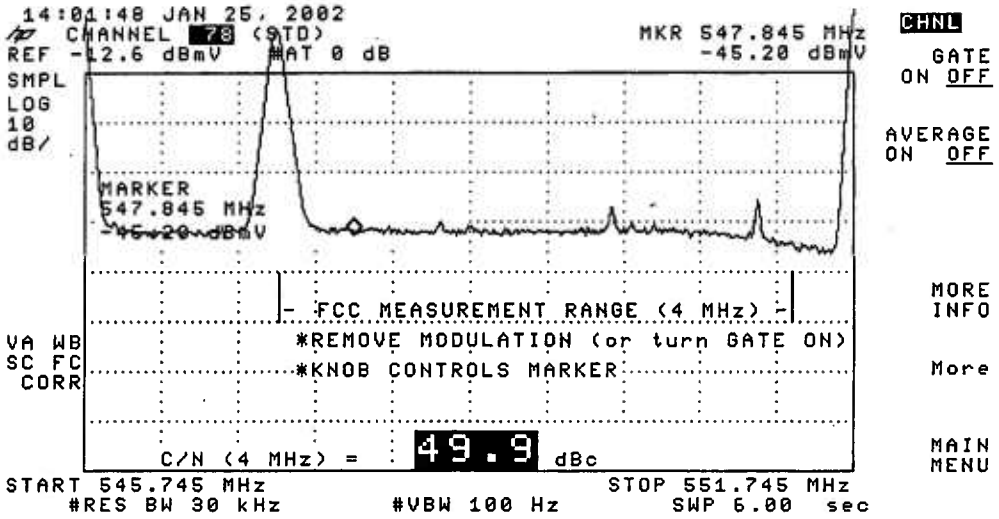

13:22:53 JAN 25, 2002
CHANNEL 25 (STD)
REF -2.2 dBmV
#AT 0 dB
MKR 232.905 MHz
-11.01 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.7 dB
MAIN
MENU
START 228.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 234.000 MHz
SWP 20.0 msec

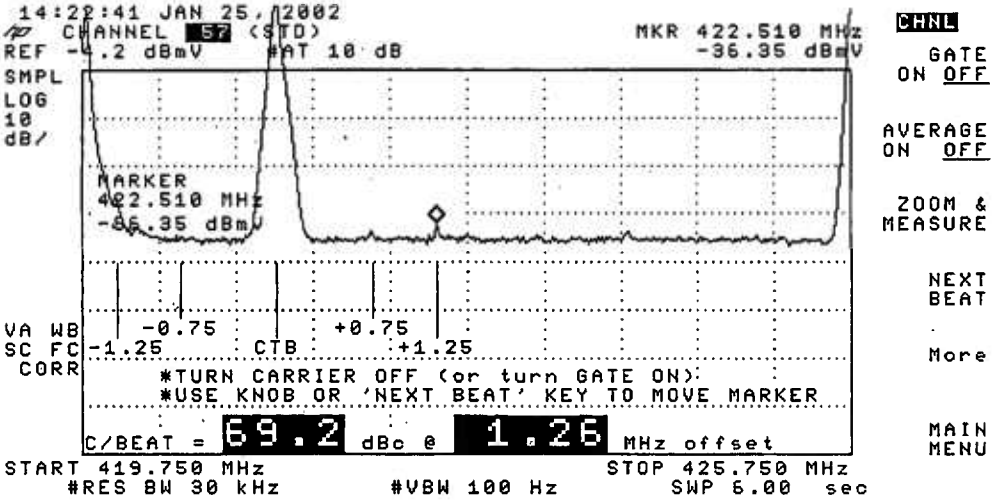

13:24:51 JAN 25, 2002
CHANNEL 35 (STD)
REF -1.6 dBmV
#AT 0 dB
MKR 292.905 MHz
-8.88 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 288.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 294.000 MHz
SWP 20.0 msec

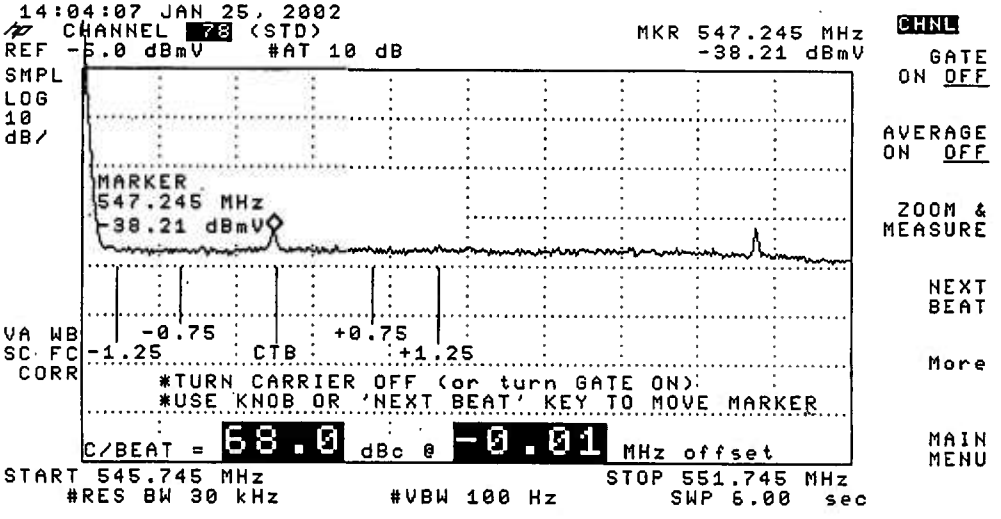

13:26:27 JAN 25, 2002
CHANNEL 44 (STD)
REF -2.5 dBmV
#AT 0 dB
MKR 344.280 MHz
-9.32 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.6 dB
MAIN
MENU
START 342.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 348.000 MHz
SWP 20.0 msec


13:29:53 JAN 25, 2002
CHANNEL 57 (STD)
REF -4.8 dBmV
#AT 0 dB
MKR 422.040 MHz
-12.30 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.2 dB
MAIN
MENU
START 420.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 426.000 MHz
SWP 20.0 msec


13:31:45 JAN 25, 2002
CHANNEL 78 (STD)
REF -4.7 dBmV
#AT 0 dB
MKR 548.370 MHz
-12.43 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.7 dB
MAIN
MENU
START 546.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 552.000 MHz
SWP 20.0 msec


14:01:48 JAN 25, 2002
CHANNEL 78 (STD)
REF -12.6 dBmV
#AT 0 dB
MKR 547.845 MHz
-45.20 dBmV
SMPL
LOG
10
dB/
MARKER
547.845 MHz
-45.20 dBmV
- FCC MEASUREMENT RANGE (4 MHz) -
*REMOVE MODULATION (or turn GATE ON)
*KNOB CONTROLS MARKER
VA WB
SC FC
CORR
C/N (4 MHz) = 49.9 dBc
START 545.745 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 551.745 MHz
SWP 6.00 sec
CHNL
GATE ON OFF
AVERAGE ON OFF
MORE INFO
More
MAIN MENU


14:22:41 JAN 25, 2002
CHANNEL 57 (STD)
REF -4.2 dBmV
#AT 10 dB
MKR 422.510 MHz
-36.35 dBmV
SMPL
LOG
10
dB/
MARKER
422.510 MHz
-36.35 dBmV
-0.75
+0.75
-1.25
CTB
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
VA WB
SC FC
CORR
C/BEAT = 69.2 dBc @ 1.26 MHz offset
START 419.750 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 425.750 MHz
SWP 6.00 sec
CHNL
GATE ON OFF
AVERAGE ON OFF
ZOOM & MEASURE
NEXT BEAT
More
MAIN MENU


14:04:07 JAN 25, 2002
CHANNEL 78 (STD)
REF -5.0 dBmV
#AT 10 dB
MKR 547.245 MHz
-38.21 dBmV
SMPL
LOG
10
dB/
MARKER
547.245 MHz
-38.21 dBmV
-0.75
+0.75
-1.25
CTB
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
VA WB
SC FC
CORR
C/BEAT = 68.0 dBc @ -0.01 MHz offset
START 545.745 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 551.745 MHz
SWP 6.00 sec
CHNL
GATE ON OFF
AVERAGE ON OFF
ZOOM & MEASURE
NEXT BEAT
More
MAIN MENU

Visual Carrier Level Variation Test

System Name: Time Warner-Ithaca

Test Point Location: Lake Road Dryden

Date: 01/20/02 Performed by: Rob Vrzal

Meter Serial Number: 9243906

Chan	Freq (MHz)	Temp °F 35 Time 12:13 Visual Level (dbmv)	30 17:54	27 23:55	22 06:07	Max Variation	Chan	Freq (MHz)	Temp °F 35 Time 12:13 Visual Level (dbmv)	30 17:54	27 23:55	22 06:07	Max Variation
2	55.2500	15.4	15.5	15.4	15.5	0.1	AA	301.2625	12.6	12.5	12.6	12.7	0.2
3	61.2500	15.3	15.6	15.3	15.1	0.5	BB	307.2625	11.9	12.0	12.3	12.4	0.5
4	67.2500	15.8	15.6	15.8	15.4	0.4	CC	313.2625	12.4	12.3	12.4	12.4	0.1
5	77.2500	14.3	14.3	14.4	13.9	0.5	DD	319.2625	12.4	12.6	12.4	12.4	0.2
6	83.2500	14.1	14.5	14.2	13.7	0.8	EE	325.2625	11.6	11.6	11.7	11.7	0.1
							FF	331.2750	12.1	12.2	11.8	12.0	0.4
							GG	337.2625	11.4	11.4	11.4	11.3	0.1
A-5	91.2500						HH	343.2625	10.5	10.1	10.5	10.6	0.5
A-4	97.2500						II	349.2625	10.8	10.9	10.9	11.0	0.2
A-3	103.2500						JJ	355.2625	10.4	10.5	10.5	10.4	0.1
A-2	109.2750	13.6	13.1	13.4	13.2	0.5	KK	361.2625	9.8	9.9	10.1	10.1	0.3
A-1	115.2750	14.4	14.4	14.4	14.4	0.0	LL	367.2625	9.9	9.7	9.8	10.0	0.3
A	121.2625	13.5	13.4	13.3	13.3	0.2	MM	373.2625	10.0	9.9	10.1	9.8	0.3
B	127.2625	13.0	13.1	13.1	13.1	0.1	NN	379.2625	10.1	10.3	10.2	10.2	0.2
C	133.2625	12.6	12.5	12.4	12.6	0.2	OO	385.2625	9.6	10.0	9.7	9.6	0.4
D	139.2500	12.7	12.3	12.4	12.3	0.4	PP	391.2625	9.0	9.0	8.8	9.0	0.2
E	145.2500	12.8	12.4	12.8	12.5	0.4	QQ	397.2625	9.7	9.7	9.8	9.5	0.3
F	151.2500	12.0	11.9	11.9	11.8	0.2	RR	403.2500	9.6	9.5	9.5	9.6	0.1
G	157.2500	12.9	12.3	12.8	12.8	0.6	SS	409.2500	8.8	8.7	8.7	8.8	0.1
H	163.2500	12.8	12.5	12.9	12.8	0.4	TT	415.2500	9.1	9.0	9.2	9.2	0.2
I	169.2500	12.6	12.4	12.6	12.7	0.3	UU	421.2500	8.9	8.9	8.9	9.2	0.3
7	175.2500	11.3	11.1	11.6	11.6	0.5	VV	427.2500	9.3	9.4	9.3	9.5	0.2
8	181.2500	11.6	11.8	11.9	11.7	0.3	WW	433.2500	8.9	8.9	8.9	9.2	0.3
9	187.2500	11.9	11.5	11.5	11.6	0.4	XX	439.2500	9.1	8.9	8.9	9.1	0.2
10	193.2500	11.2	11.1	11.1	11.2	0.1	YY	445.2500	7.0	7.7	7.5	7.4	0.7
11	199.2500	10.8	10.8	11.0	11.0	0.2	ZZ	451.2500	9.5	9.4	9.4	9.4	0.1
12	205.2500	11.0	11.0	11.3	11.1	0.3	63	457.2500	9.2	9.1	9.1	9.4	0.3
13	211.2500	11.2	11.1	11.2	11.2	0.1	64	463.2500	8.5	8.4	8.4	8.8	0.4
J	217.2500	11.7	11.8	12.0	11.7	0.3	65	469.2500	9.4	9.1	8.5	9.6	1.1
K	223.2500	10.8	10.8	10.8	10.7	0.1	66	475.2500	9.7	10.0	10.0	9.6	0.4
L	229.2625	11.0	11.0	11.2	11.0	0.2	67	481.2500	8.6	8.7	8.2	9.1	0.9
M	235.2625	11.4	11.5	11.6	11.4	0.2	68	487.2500	8.0	7.9	8.4	7.9	0.5
N	241.2625	11.8	11.9	11.9	11.7	0.2	69	493.2500	8.5	8.4	8.2	8.5	0.3
O	247.2625	11.6	11.9	12.1	11.9	0.5	70	499.2500	7.2	7.4	7.2	7.3	0.2
P	253.2625	11.5	11.5	11.6	11.5	0.1	71	505.2500	6.4	6.5	6.2	6.5	0.3
Q	259.2625	12.0	12.0	11.9	12.0	0.1	72	511.2500	7.6	7.4	7.7	7.8	0.4
R	265.2625	11.7	11.6	11.6	11.4	0.3	73	517.2500	8.9	9.2	9.3	9.5	0.6
S	271.2625	11.0	11.4	11.4	11.6	0.6	74	523.2500	9.5	8.8	8.7	9.4	0.8
T	277.2625	12.0	12.1	12.2	12.3	0.3	75	529.2500	9.8	9.8	10.0	9.9	0.2
U	283.2625	12.3	12.5	12.4	12.3	0.2	76	535.2500	10.0	10.3	10.4	9.9	0.5
V	289.2625	12.3	12.3	12.1	12.3	0.2	77	541.2500	9.9	10.1	10.1	10.7	0.8
W	295.2625	11.9	11.5	12.0	12.1	0.6	78	547.2500	9.7	9.9	9.8	10.0	0.3

Max NonAdjacent Channel Level Diff.	9.6
Max Adjacent Channel Level Diff.	2.5

Max Variance from last proof-of-performance test	N/a
Date of last proof-of-performance test	test point changed

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

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ITHACA

System Test Point # 6

Location: WOODLAND RD.

Community: BROOKTONDALE

Pole Number: 4

D.T. Value: 23

Map Number: 2575400

OR Number: 1064

Trunk Cascade: 1 LE Cascade 3

Visual Carrier Level
Visual / Aural Level Difference
(at Test Point, at The End of a 100' Drop)

System Name: **Time Warner-Ithaca**

Test Location: **Woodland Road Brooktondale**

Date: 20-Jan-02

Time 11:39 AM

Chan	Freq. (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff. (Dbmv)	Chan	Freq. (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	cra "S"	Diff (Dbmv)
2	55.2500	7.0	-6.2		13.2	AA	289.2625	7.9	-7.5		15.4
3	61.2500	7.7	-6.5		14.2	BB	307.2625	7.9	-7.1		15.0
4	67.2500	8.5	-6.1		14.6	CC	313.2625	8.1	-6.9		15.0
5	77.2500	7.0	-7.2		14.2	DD	319.2625	7.9	-6.6		14.5
6	83.2500	7.1	-6.3		13.4	EE	325.2625	7.8	-5.5		13.3
						FF	331.2750	9.0	-5.9		14.9
						GG	337.2625	7.6	-7.4		15.0
A-5	91.2500					HH	343.2625	7.2	-7.2		14.4
A-4	97.2500					II	349.2625	8.1	-7.1		15.2
A-3	103.2500					JJ	355.2625	7.0	-7.6		14.6
A-2	109.2750	7.9	-5.4		13.3	KK	361.2625	7.3	-6.7		14.0
A-1	115.2750	8.3	-7.0	S	15.3	LL	367.2625	7.6	-7.7		15.3
A	121.2625	7.5	-6.7		14.2	MM	373.2625	7.1	-6.9		14.0
B	127.2625	7.3	-7.6		14.9	NN	379.2625	7.5	-8.2		15.7
C	133.2625	6.8	-7.4		14.2	OO	385.2625	6.7	-8.2		14.9
D	139.2500	6.5	-7.3		13.8	PP	391.2625	6.1	-8.5		14.6
E	145.2500	7.1	-7.9		15.0	QQ	397.2625	6.6	-9.0		15.6
F	151.2500	6.4	-7.4		13.8	RR	403.2500	6.7	-8.1		14.8
G	157.2500	7.8	-6.7		14.5	SS	409.2500	6.5	-7.8		14.3
H	163.2500	7.7	-6.6		14.3	TT	415.2500	6.3	-7.8		14.1
I	169.2500	7.4	-6.3		13.7	UU	421.2500	5.8	-8.7		14.5
7	175.2500	6.6	-8.3		14.9	VV	427.2500	6.2	-7.9		14.1
8	181.2500	6.7	-7.7		14.4	WW	433.2500	5.6	-9.4		15.0
9	187.2500	6.8	-8.0		14.8	XX	439.2500	5.8	-9.5		15.3
10	193.2500	6.3	-7.8		14.1	YY	445.2500	4.4	-10.0		14.4
11	199.2500	5.6	-8.7		14.3	ZZ	451.2500	6.4	-7.6		14.0
12	205.2500	5.5	-9.3		14.8	63	457.2500	6.1	-8.7		14.8
13	211.2500	5.7	-9.9		15.6	64	463.2500	5.8	-8.1		13.9
J	217.2500	5.9	-8.8		14.7	65	469.2500	6.9	-8.5	S	15.4
K	223.2500	4.9	-9.3		14.2	66	475.2500	7.3	-8.5	S	15.8
L	229.2625	5.5	-8.9		14.4	67	481.2500	6.5	-8.2	S	14.7
M	235.2625	6.1	-7.9		14.0	68	487.2500	6.6	-8.7	S	15.3
N	241.2625	6.8	-8.3		15.1	69	493.2500	7.0	-7.8	S	14.8
O	247.2625	6.3	-8.5		14.8	70	499.2500	6.8	-7.6		14.4
P	253.2625	6.6	-7.5		14.1	71	505.2500	7.2	-7.9		15.1
Q	259.2625	6.9	-8.1		15.0	72	511.2500	7.6	-8.2	S	15.8
R	265.2625	6.5	-7.3		13.8	73	517.2500	8.1	-7.3	S	15.4
S	271.2625	6.8	-7.6		14.4	74	523.2500	6.9	-7.0	S	13.9
T	277.2625	6.8	-6.7		13.5	75	529.2500	7.4	-7.8	S	15.2
U	283.2625	7.7	-6.5		14.2	76	535.2500	8.2	-6.4		14.6
V	289.2625	7.8	-6.3		14.1	77	541.2500	8.1	-6.9		15.0
W	283.2625	7.2	-7.3		14.5	78	547.2500	7.9	-7.1		15.0

PEAK TO VALLEY: 4.6

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

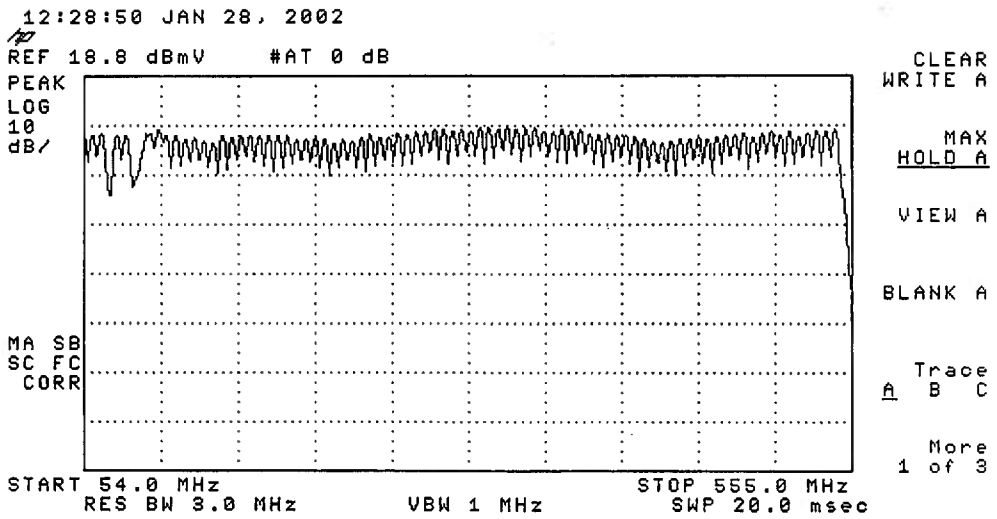
System Name: TIME WARNER-ITHACA **Date:** 01/28/02

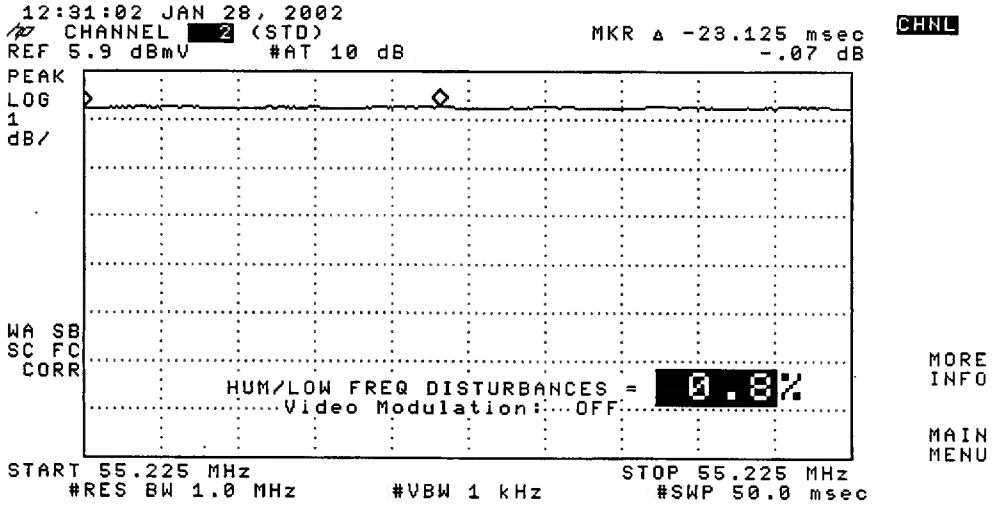
Test Performed By: Paul Cullings

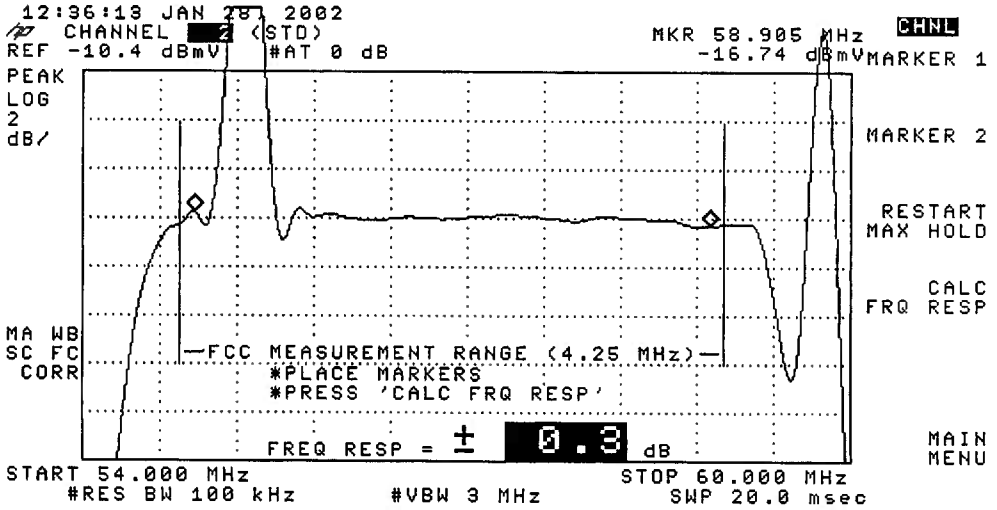
Location: Woodland Road Brooktondale

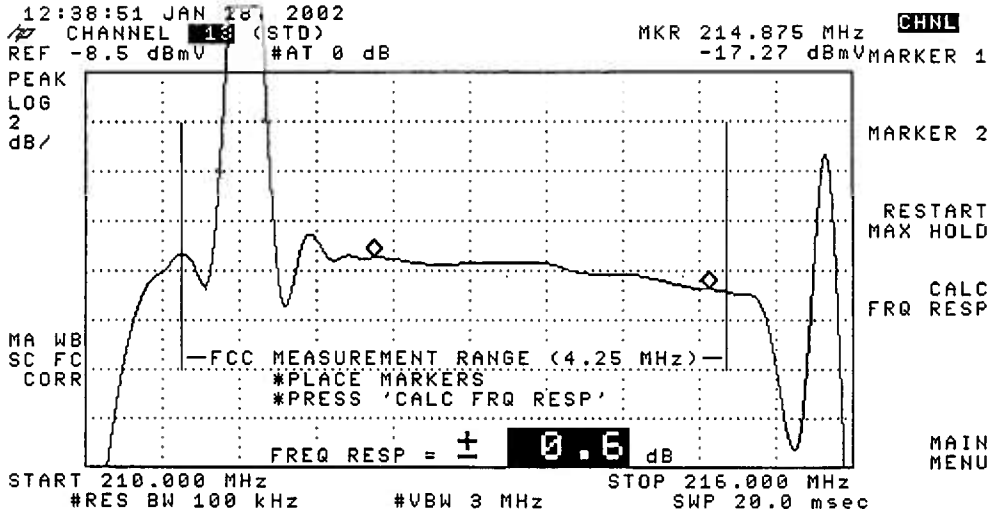
Note: Make measurements through a 100 ft. test drop cable without converter.

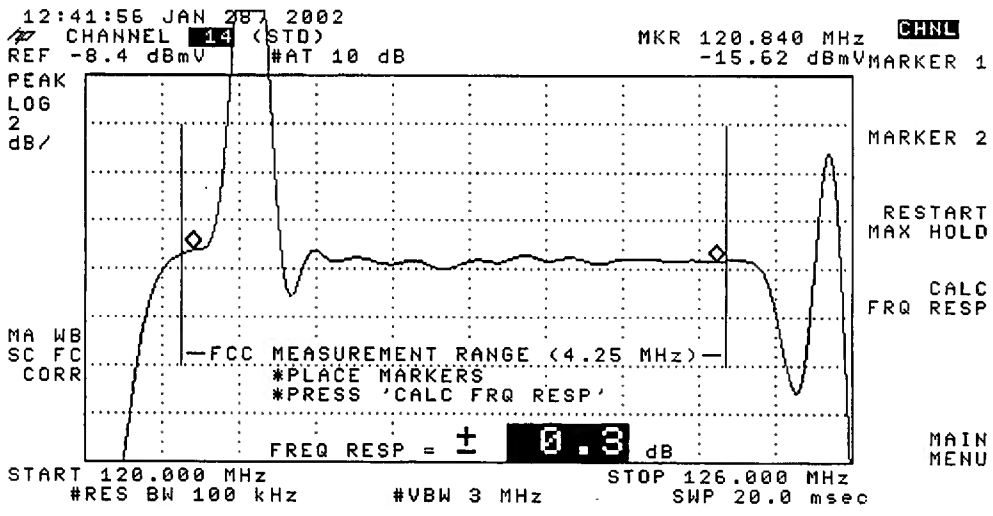
Channel Number	In Channel Response	Carrier To Noise Ratio	Distortions (-dBc)			Hum
	(+/- dB)	(dB)	CTB	CSO	XMOD	(%)
2	0.3	47.6	68.2	68.7	72	0.7
13	0.6	48.6	65.5	66.8		
14	0.3	47.5	67.8	65		
20	0.4	47.2	65.2	67		
25	0.6	47.8	66.4	68.1		
35	0.5	47.9	65.2	64		
44	0.4	48.6	64.4	67.8		
57	0.1	48	64.4	67.8		
78	0.8	49.3	65.3	69.8		

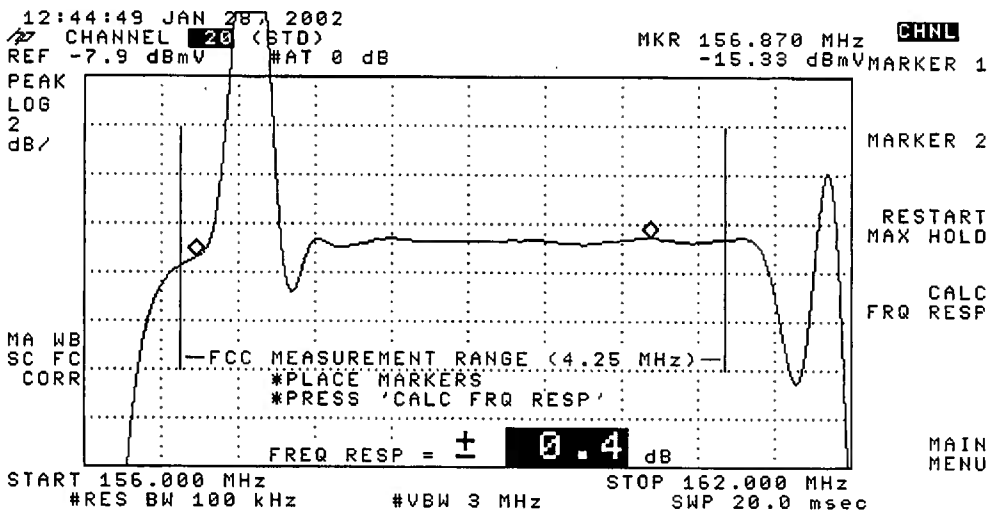

12:28:50 JAN 28, 2002
REF 18.8 dBmV
#AT 0 dB
PEAK
LOG
10
dB/
MA SB
SC FC
CORR
START 54.0 MHz
RES BW 3.0 MHz
VBW 1 MHz
STOP 555.0 MHz
SWP 20.0 msec
CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

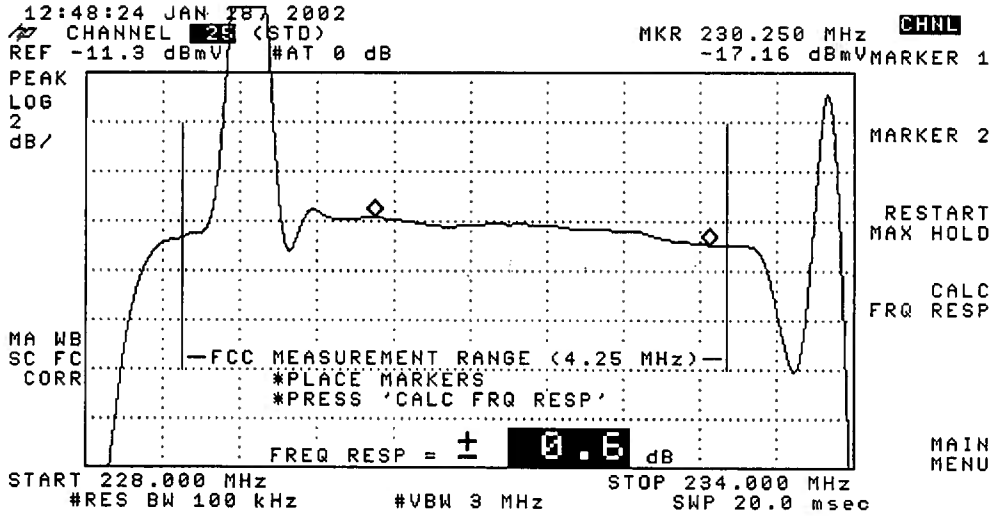

12:31:02 JAN 28, 2002
CHANNEL 2 (STD)
REF 5.9 dBmV
#AT 10 dB
MKR Δ -23.125 msec
-.07 dB
CHNL
PEAK
LOG
1
dB/
WA SB
SC FC
CORR
HUM/LOW FREQ DISTURBANCES = 0.8%
Video Modulation: OFF
START 55.225 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
STOP 55.225 MHz
#SWP 50.0 msec
MORE
INFO
MAIN
MENU

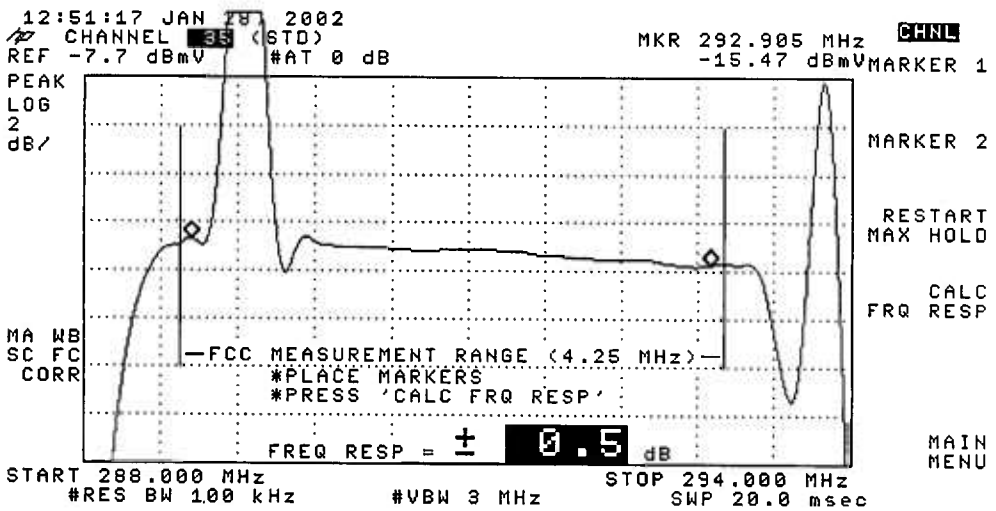

12:36:13 JAN 28, 2002
CHANNEL 2 (STD)
REF -10.4 dBmV
#AT 0 dB
MKR 58.905 MHz
-16.74 dBmV
CHNL
PEAK
LOG
2
dB/
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
START 54.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 60.000 MHz
SWP 20.0 msec
MARKER 1
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MAIN
MENU

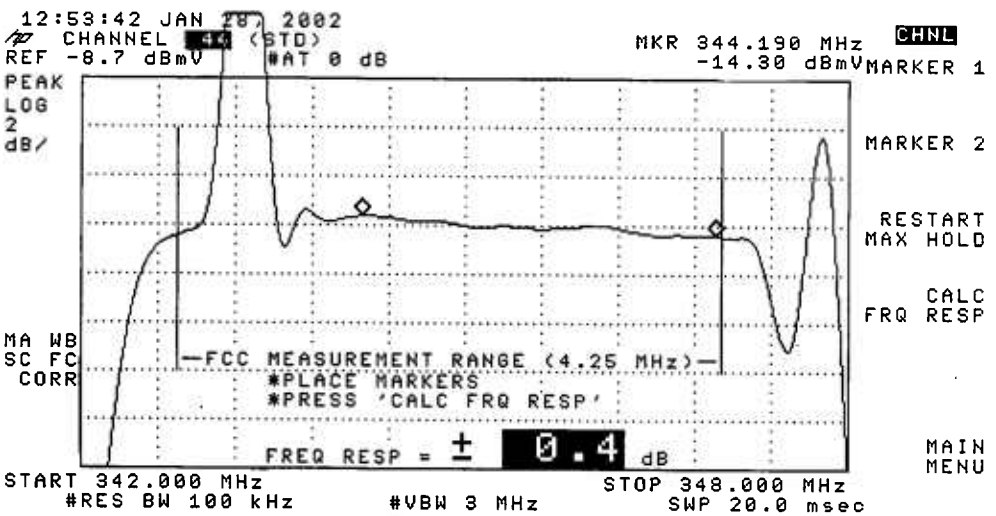

12:38:51 JAN 28, 2002
CHANNEL 13 (STD)
REF -8.5 dBmV
#AT 0 dB
MKR 214.875 MHz
-17.27 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.6 dB
MAIN
MENU
START 210.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 216.000 MHz
SWP 20.0 msec

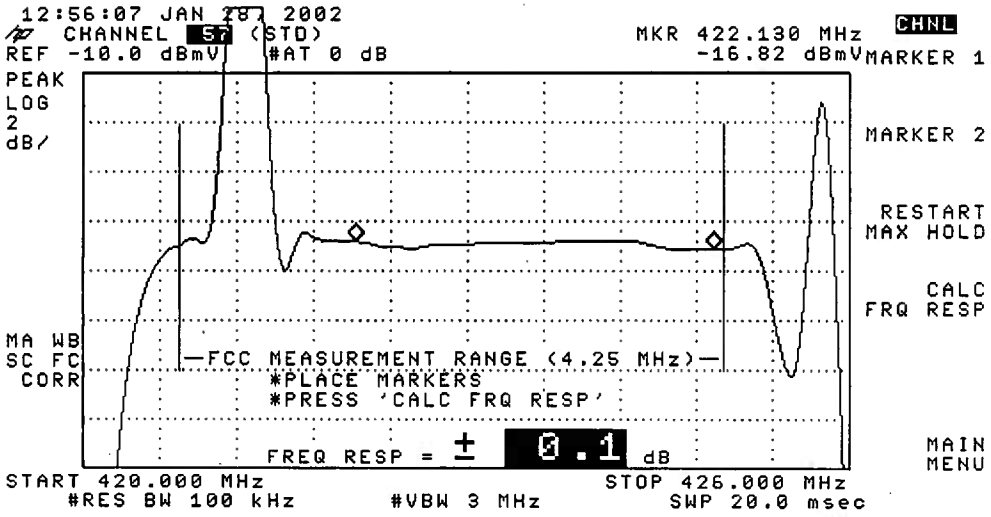

12:41:56 JAN 28, 2002
CHANNEL 14 (STD)
REF -8.4 dBmV
#AT 10 dB
MKR 120.840 MHz
-15.62 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 120.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 126.000 MHz
SWP 20.0 msec

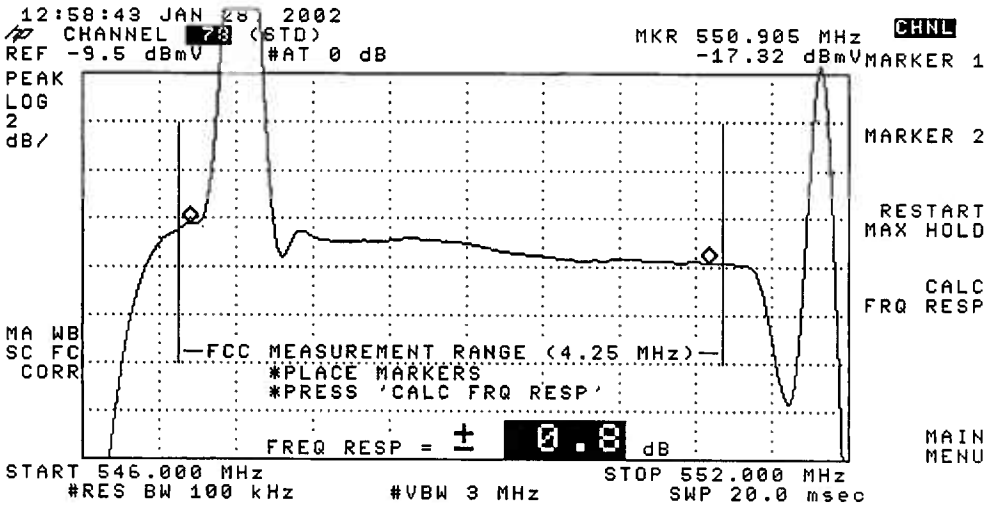

12:44:49 JAN 28, 2002
CHANNEL 20 (STD)
REF -7.9 dBmV
#AT 0 dB
MKR 156.870 MHz
-15.33 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 156.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 162.000 MHz
SWP 20.0 msec

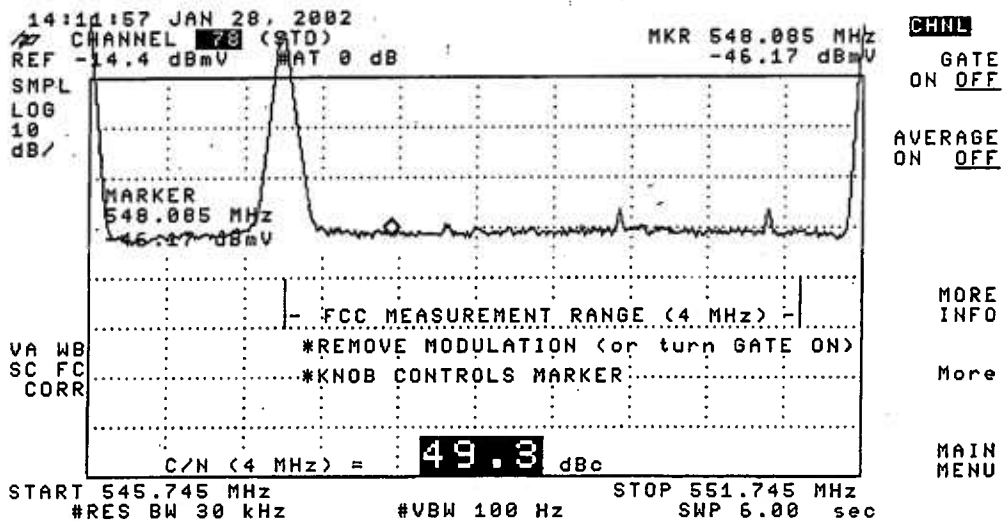

12:48:24 JAN 28, 2002
CHANNEL 25 (STD)
REF -11.3 dBmV
#AT 0 dB
MKR 230.250 MHz
-17.16 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.6 dB
MAIN
MENU
START 228.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 234.000 MHz
SWP 20.0 msec

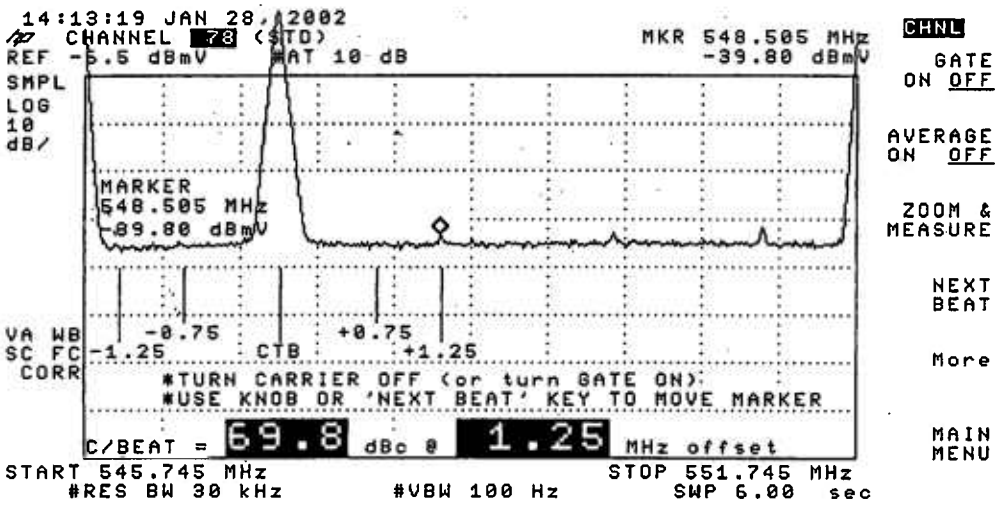

12:51:17 JAN 28, 2002
CHANNEL 35 (STD)
REF -7.7 dBmV
#AT 0 dB
MKR 292.905 MHz
-15.47 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.5 dB
MAIN
MENU
START 288.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 294.000 MHz
SWP 20.0 msec

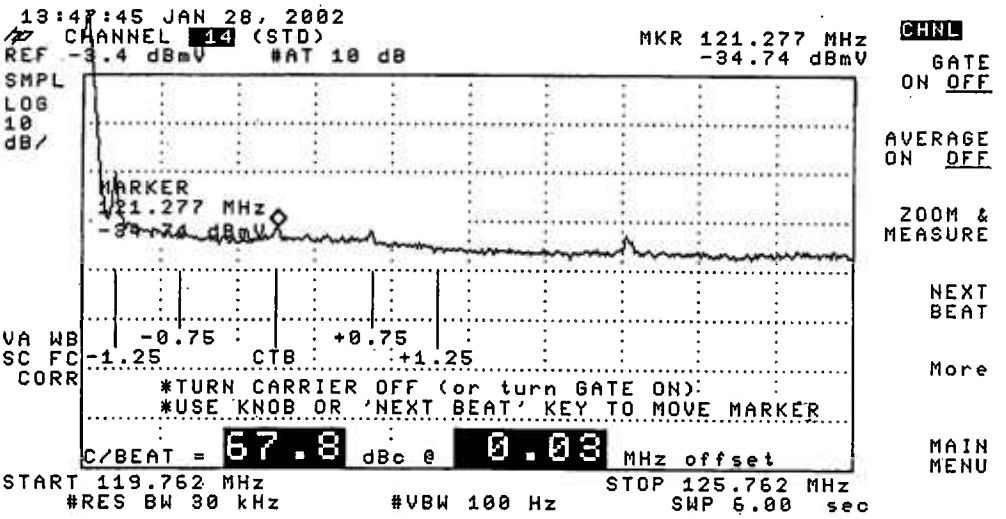

12:53:42 JAN 28, 2002
CHANNEL 44 (STD)
REF -8.7 dBmV
#AT 0 dB
MKR 344.190 MHz
-14.30 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 342.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 348.000 MHz
SWP 20.0 msec


12:56:07 JAN 28 2002
CHANNEL 57 (STD)
REF -10.0 dBmV
#AT 0 dB
MKR 422.130 MHz
-16.82 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.1 dB
MAIN
MENU
START 420.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 426.000 MHz
SWP 20.0 msec


12:58:43 JAN 28 2002
CHANNEL 78 (STD)
REF -9.5 dBmV
#AT 0 dB
MKR 550.905 MHz
-17.32 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.8 dB
MAIN
MENU
START 546.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 552.000 MHz
SWP 20.0 msec


14:11:57 JAN 28, 2002
CHANNEL 78 (STD)
REF -14.4 dBmV
#AT 0 dB
MKR 548.085 MHz
-46.17 dBmV
SMPL
LOG
10
dB/
MARKER
548.085 MHz
-46.17 dBmV
- FCC MEASUREMENT RANGE (4 MHz) -
*REMOVE MODULATION (or turn GATE ON)
*KNOB CONTROLS MARKER
VA WB
SC FC
CORR
C/N (4 MHz) = 49.3 dBc
START 545.745 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 551.745 MHz
SWP 6.00 sec
CHNL
GATE ON OFF
AVERAGE ON OFF
MORE INFO
More
MAIN MENU


14:13:19 JAN 28, 2002
CHANNEL 78 (STD)
REF -5.5 dBmV
#AT 10 dB
MKR 548.505 MHz
-39.80 dBmV
SMPL
LOG
10
dB/
MARKER
548.505 MHz
-39.80 dBmV
-0.75
+0.75
-1.25
CTB
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
VA WB
SC FC
CORR
C/BEAT = 69.8 dBc @ 1.25 MHz offset
START 545.745 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 551.745 MHz
SWP 6.00 sec
CHNL
GATE ON OFF
AVERAGE ON OFF
ZOOM & MEASURE
NEXT BEAT
More
MAIN MENU


13:47:45 JAN 28, 2002
CHANNEL 14 (STD)
REF -3.4 dBmV
#AT 10 dB
MKR 121.277 MHz
-34.74 dBmV
SMPL
LOG
10
dB/
MARKER
121.277 MHz
-34.74 dBmV
-0.75
+0.75
-1.25
CTB
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
VA WB
SC FC
CORR
C/BEAT = 67.8 dBc @ 0.03 MHz offset
START 119.762 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 125.762 MHz
SWP 6.00 sec
CHNL
GATE ON OFF
AVERAGE ON OFF
ZOOM & MEASURE
NEXT BEAT
More
MAIN MENU

Visual Carrier Level Variation Test

System Name: Time Warner-Ithaca

Test Point Location Woodland Road Brooktondale

Date: 01/20/02 Performed by: Rob Vrzal

Meter Serial Number: 9243906

Chan	Freq (MHz)	Temp °F				Max Variation	Chan	Freq (MHz)	Temp °F				Max Variation
		39	32	27	25				39	32	27	25	
		Time							Time				
		11:39	17:26	23:26	05:38				11:39	17:26	23:26	05:38	
		Visual Level (dbmv)							Visual Level (dbmv)				
2	55.2500	7.0	7.0	7.3	7.0	0.3	AA	301.2625	7.9	7.6	7.7	7.4	0.5
3	61.2500	7.7	7.5	7.7	7.7	0.2	BB	307.2625	7.9	7.8	7.9	7.7	0.2
4	67.2500	8.5	8.1	8.4	7.9	0.6	CC	313.2625	8.1	8.3	8.1	8.2	0.2
5	77.2500	7.0	6.8	6.7	6.9	0.3	DD	319.2625	7.9	8.2	8.1	8.0	0.3
6	83.2500	7.1	6.9	7.0	6.6	0.5	EE	325.2625	7.8	7.8	7.7	7.6	0.2
							FF	331.2750	9.0	8.6	8.8	8.6	0.4
							GG	337.2625	7.6	7.6	7.7	7.3	0.4
A-5	91.2500						HH	343.2625	7.2	7.1	7.2	7.1	0.1
A-4	97.2500						II	349.2625	8.1	8.0	7.9	7.8	0.3
A-3	103.2500						JJ	355.2625	7.0	6.9	6.9	6.8	0.2
A-2	109.2750	7.9	7.7	7.8	7.7	0.2	KK	361.2625	7.3	7.2	7.2	7.1	0.2
A-1	115.2750	8.3	7.9	8.1	8.5	0.6	LL	367.2625	7.6	7.4	7.4	7.1	0.5
A	121.2625	7.5	7.2	7.3	7.4	0.3	MM	373.2625	7.1	7.1	7.1	6.9	0.2
B	127.2625	7.3	6.9	7.1	7.3	0.4	NN	379.2625	7.5	7.4	7.5	7.3	0.2
C	133.2625	6.8	6.2	6.3	6.4	0.6	OO	385.2625	6.7	6.6	6.8	6.4	0.4
D	139.2500	6.5	6.0	6.2	6.3	0.5	PP	391.2625	6.1	6.0	6.2	6.0	0.2
E	145.2500	7.1	6.6	6.8	6.6	0.5	QQ	397.2625	6.6	6.5	6.8	6.4	0.4
F	151.2500	6.4	6.1	6.3	6.3	0.3	RR	403.2500	6.7	6.5	6.9	6.6	0.4
G	157.2500	7.8	7.4	7.7	7.7	0.4	SS	409.2500	6.5	6.5	6.8	6.5	0.3
H	163.2500	7.7	7.2	7.6	7.5	0.5	TT	415.2500	6.3	5.9	6.3	5.9	0.4
I	169.2500	7.4	6.8	7.3	7.3	0.6	UU	421.2500	5.8	6.0	6.1	6.0	0.3
7	175.2500	6.6	6.1	6.3	6.2	0.5	VV	427.2500	6.2	6.3	6.4	6.3	0.2
8	181.2500	6.7	6.3	6.4	6.3	0.4	WW	433.2500	5.6	5.7	5.8	5.6	0.2
9	187.2500	6.8	6.5	6.6	6.5	0.3	XX	439.2500	5.8	6.2	6.4	6.2	0.6
10	193.2500	6.3	5.9	6.0	5.9	0.4	YY	445.2500	4.4	4.9	4.6	5.0	0.6
11	199.2500	5.6	5.1	5.0	4.9	0.7	ZZ	451.2500	6.4	5.7	6.2	6.2	0.7
12	205.2500	5.5	5.5	5.6	5.3	0.3	63	457.2500	6.1	5.9	5.8	5.6	0.5
13	211.2500	5.7	5.5	5.4	5.5	0.3	64	463.2500	5.8	6.0	6.2	5.9	0.4
J	217.2500	5.9	5.7	5.7	5.6	0.3	65	469.2500	6.9	6.8	6.9	7.3	0.5
K	223.2500	4.9	4.9	4.8	4.7	0.2	66	475.2500	7.3	7.1	7.5	7.4	0.4
L	229.2625	5.5	5.3	5.3	5.1	0.4	67	481.2500	6.5	7.0	7.1	6.7	0.6
M	235.2625	6.1	6.1	6.1	6.1	0.0	68	487.2500	6.6	6.3	7.1	7.1	0.8
N	241.2625	6.8	6.7	6.6	6.4	0.4	69	493.2500	7.0	7.2	7.3	7.3	0.3
O	247.2625	6.3	6.5	6.3	6.3	0.2	70	499.2500	6.8	7.2	7.3	7.2	0.5
P	253.2625	6.6	6.6	6.5	6.5	0.1	71	505.2500	7.2	7.4	7.8	7.8	0.6
Q	259.2625	6.9	6.9	6.9	6.6	0.3	72	511.2500	7.6	8.0	7.2	8.1	0.9
R	265.2625	6.5	6.6	6.3	6.6	0.3	73	517.2500	8.1	8.6	8.6	8.4	0.5
S	271.2625	6.8	6.7	7.0	6.8	0.3	74	523.2500	6.9	7.6	7.6	7.4	0.7
T	277.2625	6.8	6.9	6.8	6.7	0.2	75	529.2500	7.4	8.1	8.1	8.1	0.7
U	283.2625	7.7	7.3	7.4	7.4	0.4	76	535.2500	8.2	8.4	8.7	8.8	0.6
V	289.2625	7.8	7.2	7.3	7.3	0.6	77	541.2500	8.1	8.8	8.8	8.6	0.7
W	295.2625	7.2	6.9	7.0	6.9	0.3	78	547.2500	7.9	8.4	8.5	8.3	0.6

Max NonAdjacent Channel Level Diff.	4.6
Max Adjacent Channel Level Diff.	2

Max Variance from last proof-of-performance test	N/a
Date of last proof-of-performance test	test point changed

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

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ITHACA

System Test Point # 7

Location: CURRY RD.

Community: TRUMANSBURG

Pole Number: 5

D.T. Value: 20

Map Number: 1855450

OR Number: 1014

Trunk Cascade: 6 LE Cascade 1

Visual Carrier Level
Visual / Aural Level Difference
(at Test Point, at The End of a 100' Drop)

System Name: **Time Warner-Ithaca**

Test Location: **Curry Road Trumansburg**

Date: 17-Jan-02

Time 11:28 AM

Chan	Freq. (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra "S"	Diff. (Dbmv)	Chan	Freq. (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	cra "S"	Diff. (Dbmv)
2	55.2500	11.1	-3.1		14.2	AA	289.2625	8.9	-6.0		14.9
3	61.2500	11.1	-3.2		14.3	BB	307.2625	8.9	-5.9		14.8
4	67.2500	11.3	-4.4		15.7	CC	313.2625	9.8	-4.6		14.4
5	77.2500	9.7	-5.6		15.3	DD	319.2625	9.5	-5.3		14.8
6	83.2500	9.0	-5.0		14.0	EE	325.2625	9.8	-4.9		14.7
						FF	331.2750	9.0	-5.3		14.3
						GG	337.2625	9.5	-6.2		15.7
A-5	91.2500					HH	343.2625	9.3	-5.4		14.7
A-4	97.2500					II	349.2625	9.4	-5.0		14.4
A-3	103.2500					JJ	355.2625	9.4	-5.5		14.9
A-2	109.2750	8.0	-6.4		14.4	KK	361.2625	8.8	-4.6		13.4
A-1	115.2750	6.7	-8.2	S	14.9	LL	367.2625	9.6	-4.9		14.5
A	121.2625	5.8	-8.6		14.4	MM	373.2625	9.7	-5.1		14.8
B	127.2625	6.4	-8.4		14.8	NN	379.2625	9.3	-5.7		15.0
C	133.2625	6.0	-8.1		14.1	OO	385.2625	9.8	-5.7		15.5
D	139.2500	6.8	-7.6		14.4	PP	391.2625	9.5	-5.8		15.3
E	145.2500	6.5	-9.0		15.5	QQ	397.2625	8.9	-5.7		14.6
F	151.2500	6.8	-8.5		15.3	RR	403.2500	9.3	-5.6		14.9
G	157.2500	7.1	-7.4		14.5	SS	409.2500	9.3	-5.8		15.1
H	163.2500	6.9	-6.6		13.5	TT	415.2500	9.4	-5.2		14.6
I	169.2500	7.6	-6.5		14.1	UU	421.2500	8.9	-6.4		15.3
7	175.2500	7.2	-7.2		14.4	VV	427.2500	8.9	-5.6		14.5
8	181.2500	7.5	-7.2		14.7	WW	433.2500	9.2	-6.2		15.4
9	187.2500	7.6	-7.3		14.9	XX	439.2500	9.2	-6.1		15.3
10	193.2500	7.9	-7.8		15.7	YY	445.2500	9.1	-5.9		15.0
11	199.2500	7.9	-6.5		14.4	ZZ	451.2500	10.2	-5.1		15.3
12	205.2500	7.8	-7.4		15.2	63	457.2500	9.5	-4.9		14.4
13	211.2500	8.1	-7.4		15.5	64	463.2500	9.6	-4.1		13.7
J	217.2500	6.8	-7.8		14.6	65	469.2500	9.9	-4.9	S	14.8
K	223.2500	8.1	-7.4		15.5	66	475.2500	9.9	-5.5	S	15.4
L	229.2625	7.3	-8.0		15.3	67	481.2500	10.8	-4.6	S	15.4
M	235.2625	7.8	-6.8		14.6	68	487.2500	10.5	-5.1	S	15.6
N	241.2625	8.4	-7.1		15.5	69	493.2500	10.5	-4.6	S	15.1
O	247.2625	8.4	-7.0		15.4	70	499.2500	11.0	-4.3		15.3
P	253.2625	8.8	-6.9		15.7	71	505.2500	11.1	-4.1		15.2
Q	259.2625	8.1	-5.7		13.8	72	511.2500	11.5	-4.4	S	15.9
R	265.2625	8.8	-6.3		15.1	73	517.2500	11.5	-2.8	S	14.3
S	271.2625	8.8	-5.9		14.7	74	523.2500	11.9	-4.0	S	15.9
T	277.2625	8.9	-6.2		15.1	75	529.2500	11.9	-3.4	S	15.3
U	283.2625	9.8	-6.1		15.9	76	535.2500	10.8	-4.0		14.8
V	289.2625	8.9	-5.1		14.0	77	541.2500	11.0	-4.3		15.3
W	283.2625	9.5	-6.1		15.6	78	547.2500	10.9	-3.8		14.7

PEAK TO VALLEY: 6.1

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: TIME WARNER-ITHACA **Date:** 01/29/02

Test Performed By: Paul Cullings

Location: Curry Road Village of Trumansburg

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

Channel Number	In Channel Response	Carrier To Noise Ratio	Distortions (-dBc)			Hum
	(+/- dB)	(dB)	CTB	CSO	XMOD	(%)
2	0.3	47.8	67.7	68.5	73	0.5
13	0.8	47.4	61.8	68.8		
14	0.1	47.3	64.7	67.1		
20	0.1	47.1	63.1	68.9		
25	0.4	47.2	62.1	67.5		
35	0.2	47.4	62.7	67.8		
44	0.6	47.9	62.2	67.7		
57	0.1	48	61	69		
78	0.7	47.5	67.5	68.8		

Time Warner Cable
Syracuse Division

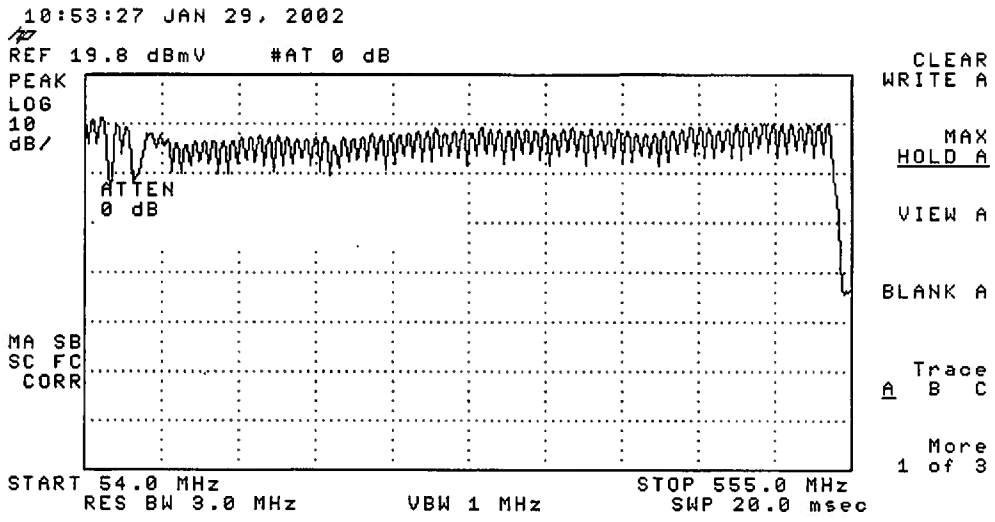
IN - CHANNEL FREQUENCY RESPONSE TEST

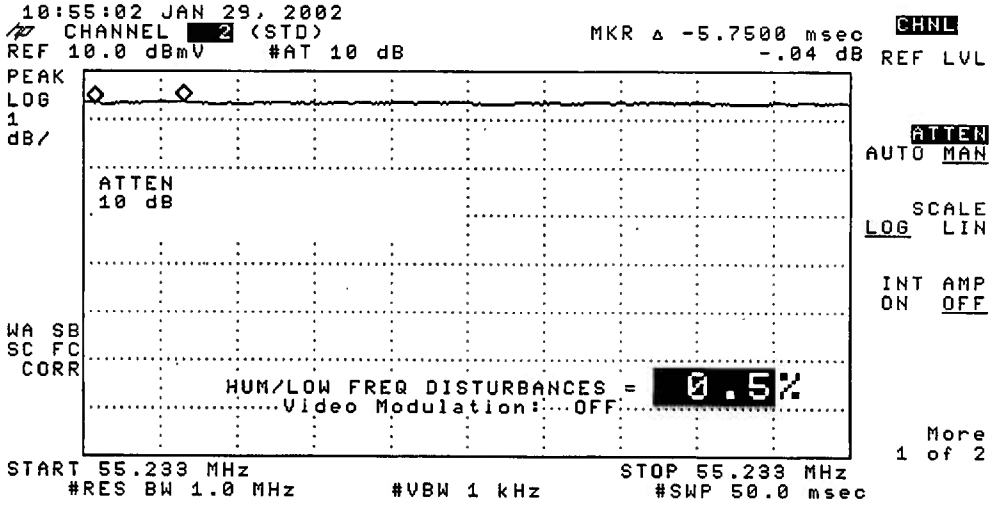
(76.605 (a) 6)

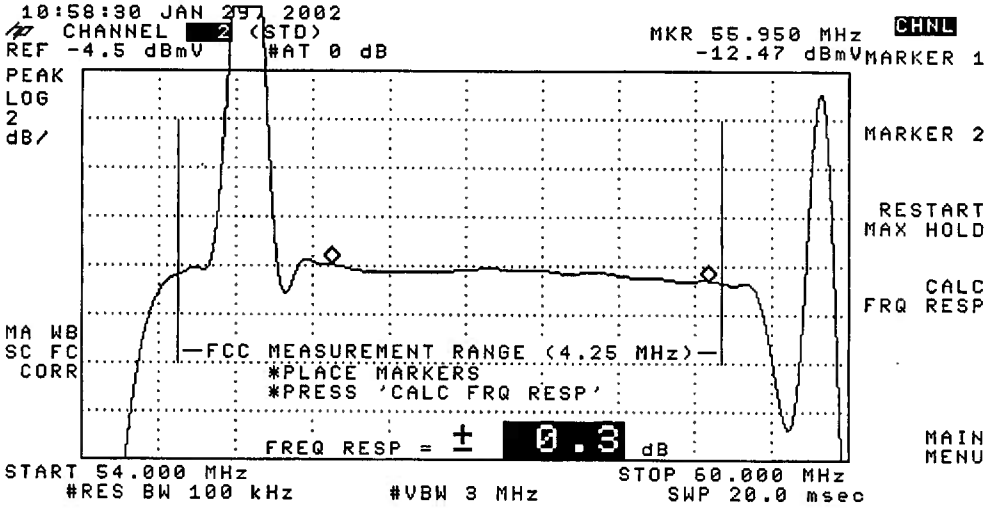
System Name: TIME WARNER-ITHACA Date: 01/29/02

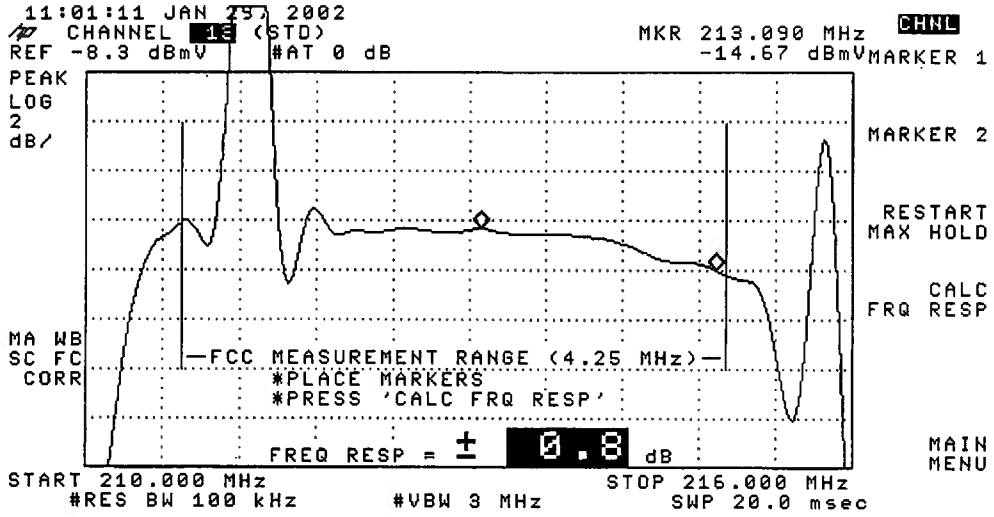
Test Performed By: Paul Cullings Location: Curry Rd. Trumansburg

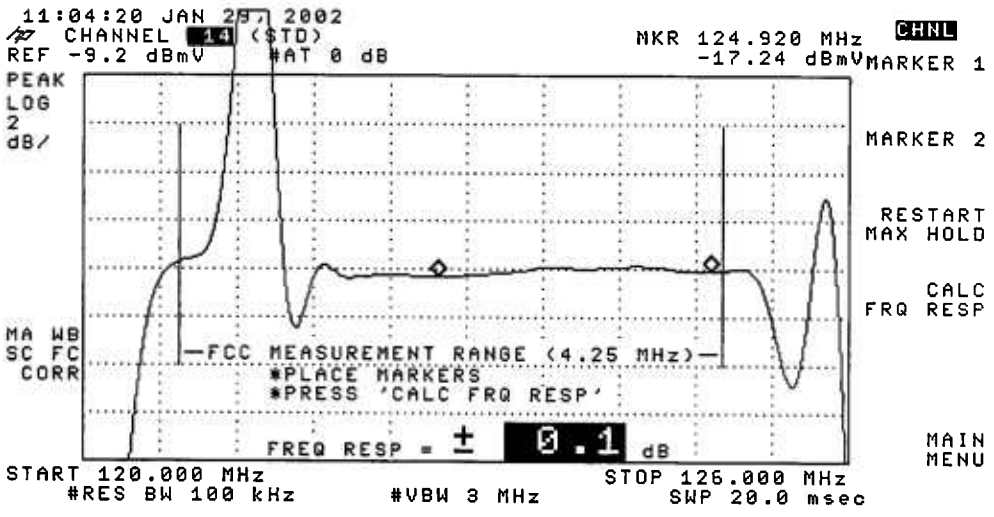
(SEE THE ATTATCHED SWEEP TRACES)

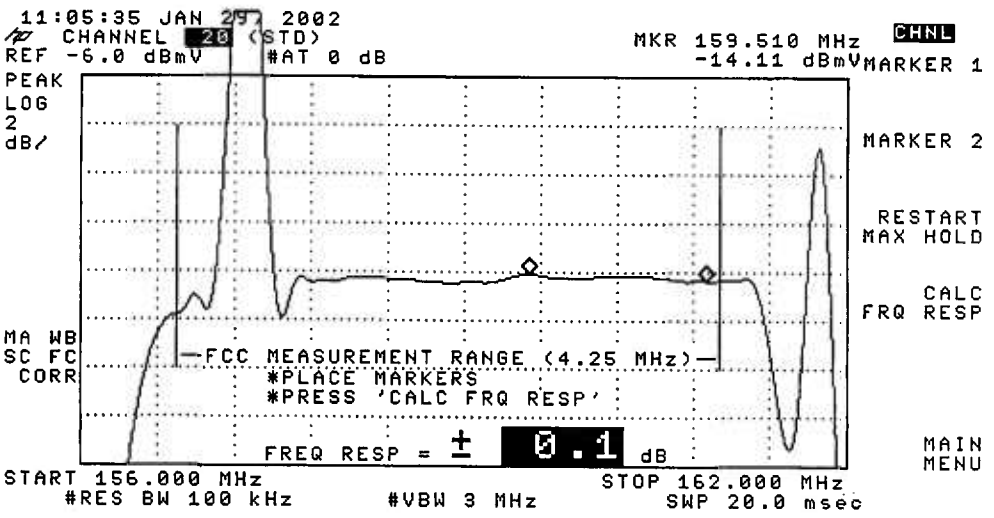

10:53:27 JAN 29, 2002
REF 19.8 dBmV
#AT 0 dB
PEAK
LOG
10
dB/
ATTEN
0 dB
MA SB
SC FC
CORR
START 54.0 MHz
RES BW 3.0 MHz
VBW 1 MHz
STOP 555.0 MHz
SWP 20.0 msec
CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

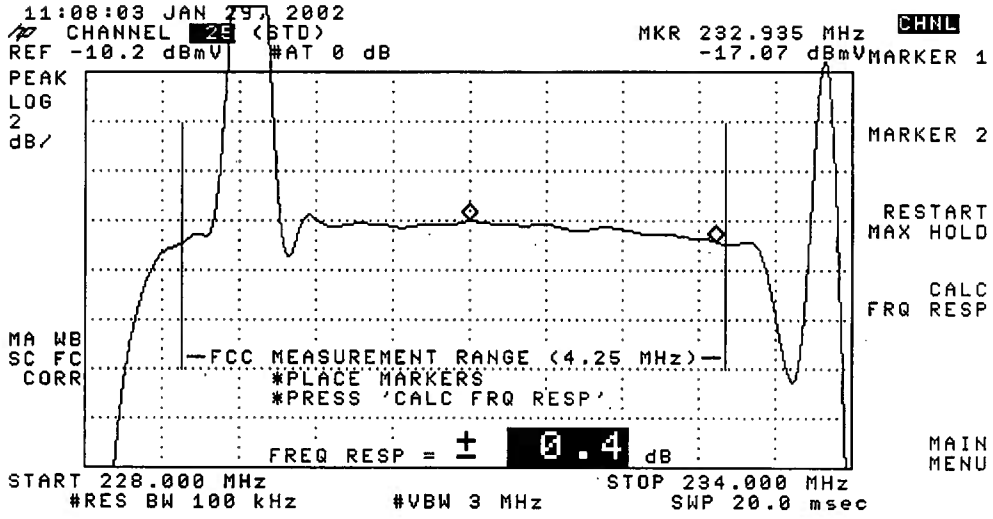

10:55:02 JAN 29, 2002
CHANNEL 2 (STD)
REF 10.0 dBmV
#AT 10 dB
MKR Δ -5.7500 msec
-.04 dB
PEAK
LOG
1
dB/
ATTEN
10 dB
WA SB
SC FC
CORR
HUM/LOW FREQ DISTURBANCES = 0.5%
Video Modulation: OFF
START 55.233 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
STOP 55.233 MHz
#SWP 50.0 msec
CHNL
REF LVL
ATTEN
AUTO MAN
SCALE
LOG LIN
INT AMP
ON OFF
More
1 of 2

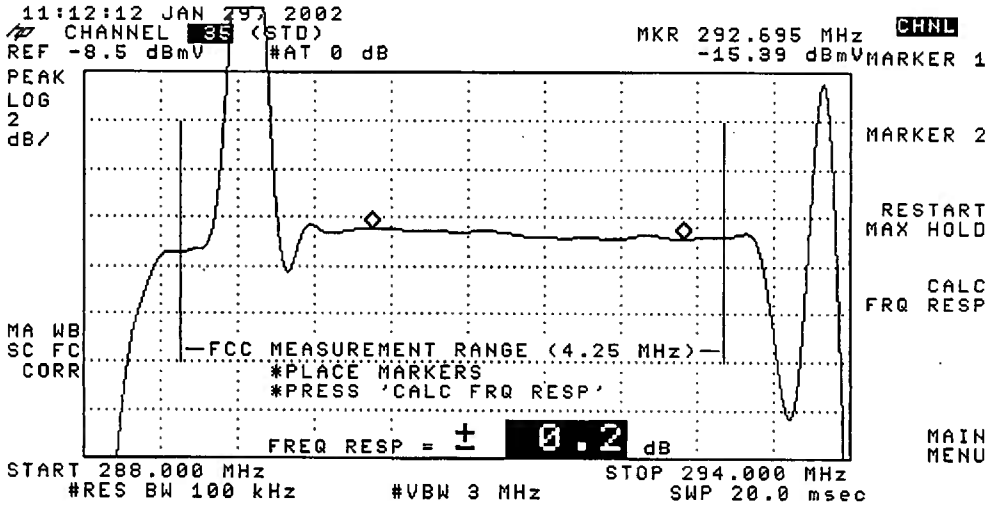

10:58:30 JAN 29, 2002
CHANNEL 2 (STD)
REF -4.5 dBmV
#AT 0 dB
MKR 55.950 MHz
-12.47 dBmV
PEAK
LOG
2
dB/
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
START 54.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 60.000 MHz
SWP 20.0 msec
CHNL
MARKER 1
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MAIN
MENU

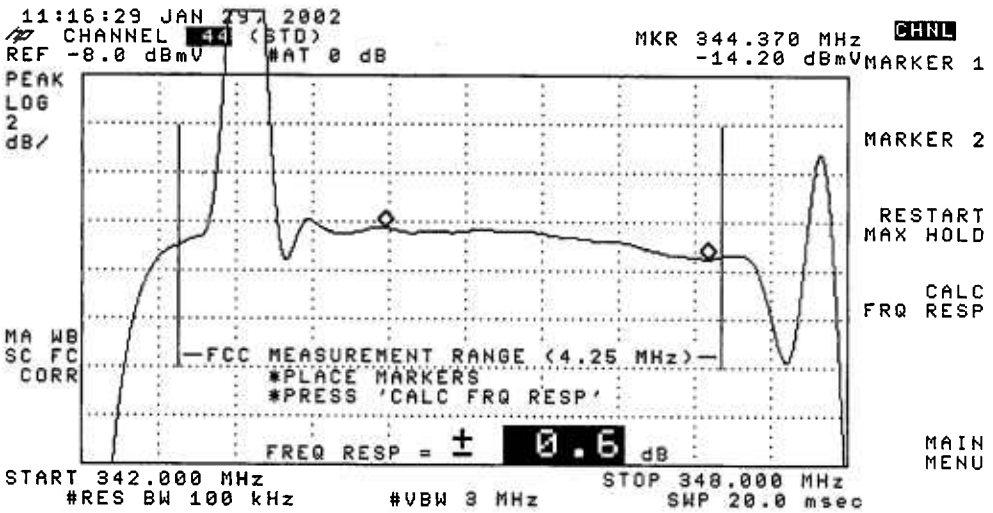

11:01:11 JAN 29, 2002
CHANNEL 13 (STD)
REF -8.3 dBmV
#AT 0 dB
MKR 213.090 MHz
-14.67 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.8 dB
MAIN
MENU
START 210.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 216.000 MHz
SWP 20.0 msec

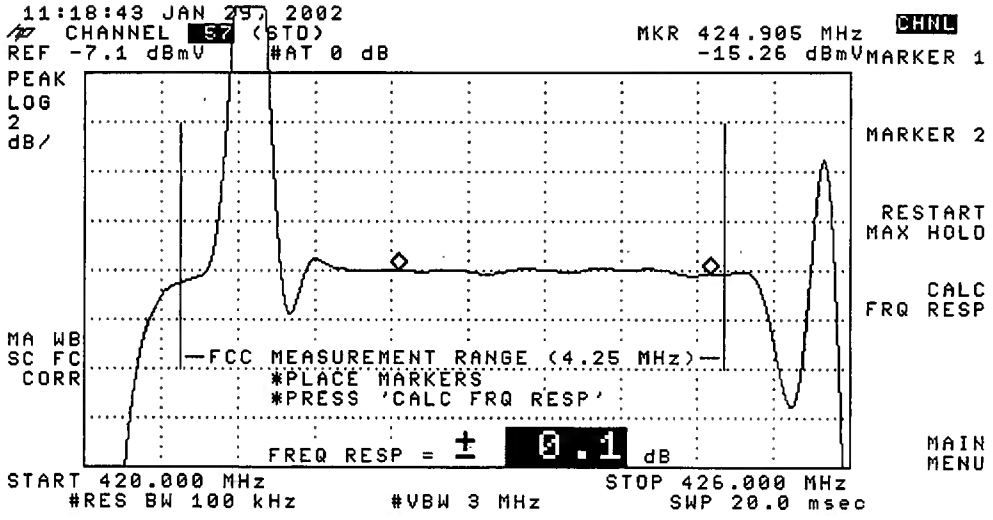

11:04:20 JAN 29, 2002
CHANNEL 14 (STD)
REF -9.2 dBmV
#AT 0 dB
MKR 124.920 MHz
-17.24 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.1 dB
MAIN
MENU
START 120.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 126.000 MHz
SWP 20.0 msec

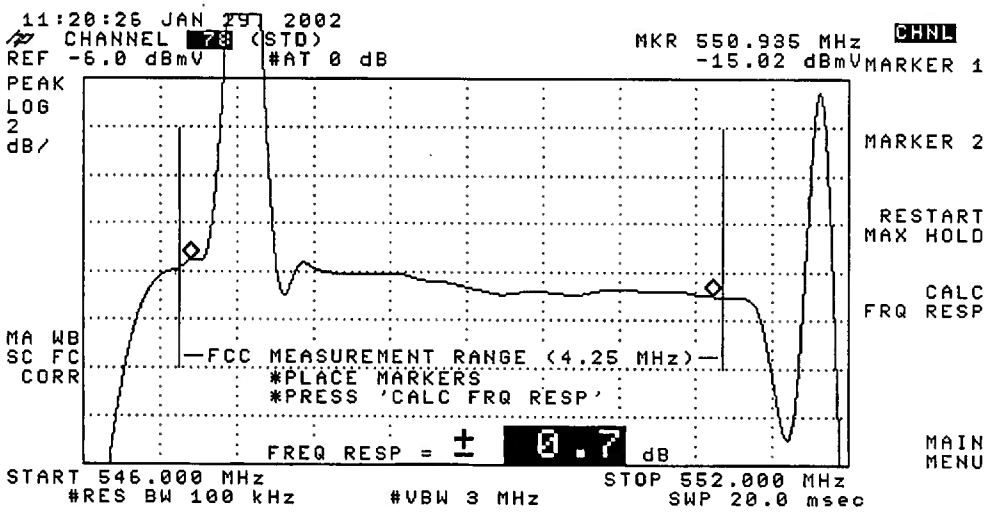

11:05:35 JAN 29, 2002
CHANNEL 20 (STD)
REF -6.0 dBmV
#AT 0 dB
MKR 159.510 MHz
-14.11 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.1 dB
MAIN
MENU
START 156.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 162.000 MHz
SWP 20.0 msec

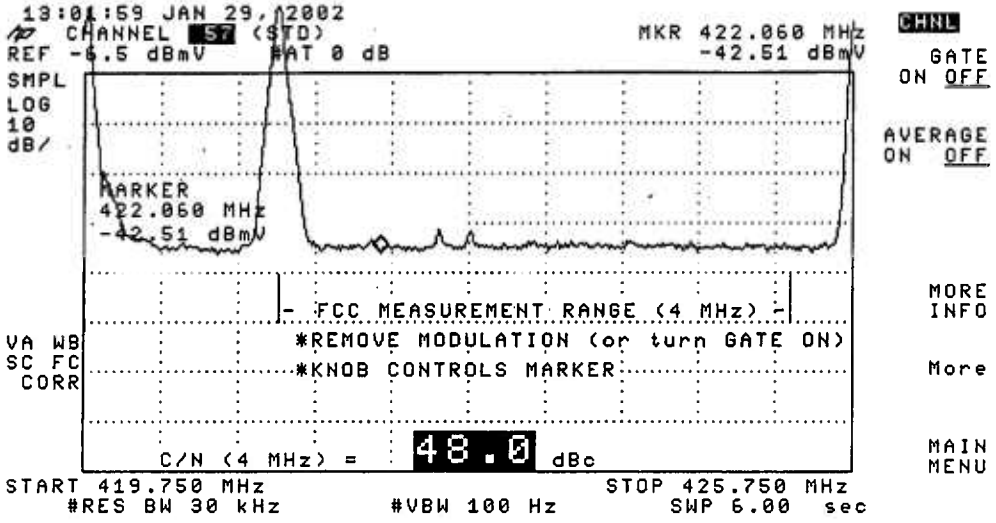

11:08:03 JAN 29, 2002
CHANNEL 25 (STD)
REF -10.2 dBmV
#AT 0 dB
MKR 232.935 MHz
-17.07 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 228.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 234.000 MHz
SWP 20.0 msec

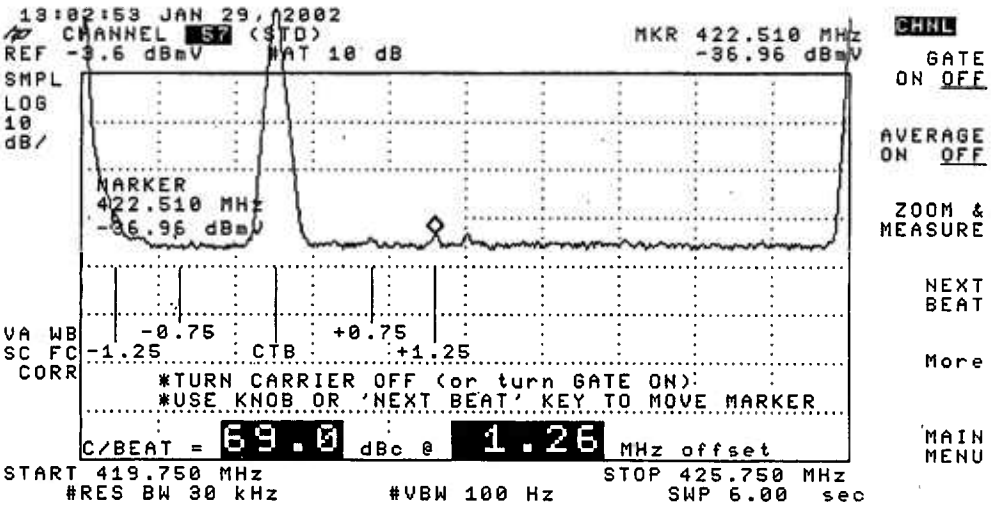

11:12:12 JAN 29, 2002
CHANNEL 35 (STD)
REF -8.5 dBmV
#AT 0 dB
MKR 292.695 MHz
-15.39 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.2 dB
MAIN
MENU
START 288.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 294.000 MHz
SWP 20.0 msec

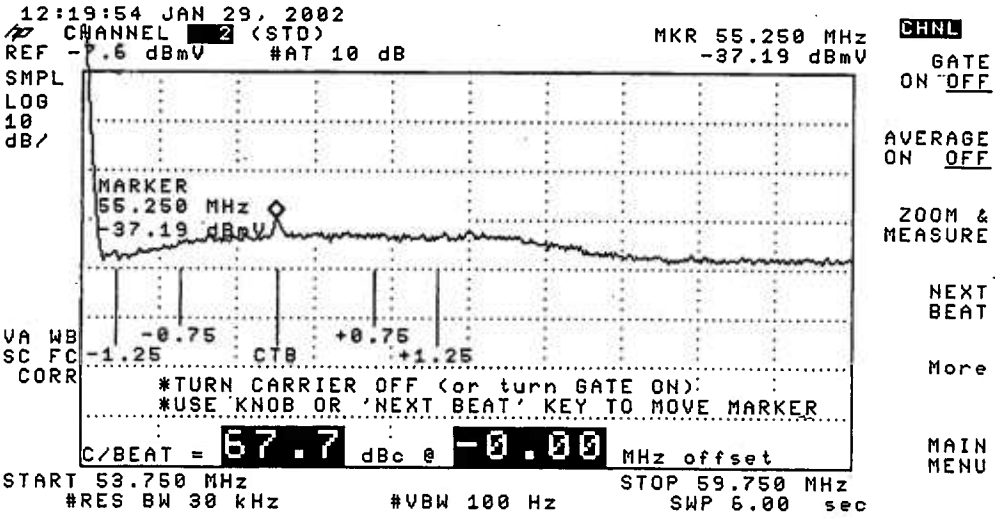

11:16:29 JAN 29, 2002
CHANNEL 44 (STD)
REF -8.0 dBmV
#AT 0 dB
MKR 344.370 MHz
-14.20 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.6 dB
MAIN
MENU
START 342.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 348.000 MHz
SWP 20.0 msec


11:18:43 JAN 29, 2002
CHANNEL 57 (STD)
REF -7.1 dBmV
#AT 0 dB
MKR 424.905 MHz
-15.26 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.1 dB
MAIN
MENU
START 420.000 MHz
STOP 426.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec


11:20:25 JAN 29, 2002
CHANNEL 78 (STD)
REF -6.0 dBmV
#AT 0 dB
MKR 550.935 MHz
-15.02 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.7 dB
MAIN
MENU
START 546.000 MHz
STOP 552.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec


13:01:59 JAN 29, 2002
CHANNEL 57 (STD)
REF -6.5 dBmV
#AT 0 dB
MKR 422.060 MHz
-42.51 dBmV
SMPL
LOG
10
dB/
MARKER
422.060 MHz
-42.51 dBmV
- FCC MEASUREMENT RANGE (4 MHz) -
*REMOVE MODULATION (or turn GATE ON)
*KNOB CONTROLS MARKER
VA WB
SC FC
CORR
C/N (4 MHz) = 48.0 dBc
START 419.750 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 425.750 MHz
SWP 6.00 sec
CHNL
GATE
ON OFF
AVERAGE
ON OFF
MORE
INFO
More
MAIN
MENU


13:02:53 JAN 29, 2002
CHANNEL 57 (STD)
REF -3.6 dBmV
#AT 10 dB
MKR 422.510 MHz
-36.96 dBmV
SMPL
LOG
10
dB/
MARKER
422.510 MHz
-36.96 dBmV
-0.75
+0.75
-1.25
CTB
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
VA WB
SC FC
CORR
C/BEAT = 69.0 dBc @ 1.26 MHz offset
START 419.750 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 425.750 MHz
SWP 6.00 sec
CHNL
GATE
ON OFF
AVERAGE
ON OFF
ZOOM &
MEASURE
NEXT
BEAT
More
MAIN
MENU


12:19:54 JAN 29, 2002
CHANNEL 2 (STD)
REF -7.6 dBmV
#AT 10 dB
MKR 55.250 MHz
-37.19 dBmV
SMPL
LOG
10
dB/
MARKER
55.250 MHz
-37.19 dBmV
-0.75
+0.75
-1.25
CTB
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
VA WB
SC FC
CORR
C/BEAT = 67.7 dBc @ -0.00 MHz offset
START 53.750 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 59.750 MHz
SWP 6.00 sec
CHNL
GATE
ON OFF
AVERAGE
ON OFF
ZOOM &
MEASURE
NEXT
BEAT
More
MAIN
MENU

Visual Carrier Level Variation Test

System Name: Time Warner-Ithaca

Test Point Location: Curry Road Trumansburg

Date: 01/17/02 Performed by: Torrance Countryman

Meter Serial Number: 9233994

Chan	Freq (MHz)	Temp °F				Max Variation	Chan	Freq (MHz)	Temp °F				Max Variation
		35	30	27	20				35	30	27	22	
		Time							Time				
		11:28	17:35	23:37	05:42				11:28	17:35	23:37	05:42	
		Visual Level (dbmv)							Visual Level (dbmv)				
2	55.2500	11.1	10.8	10.9	11.0	0.3	AA	301.2625	8.9	8.9	8.9	9.0	0.1
3	61.2500	11.1	11.1	11.2	11.0	0.2	BB	307.2625	8.9	8.7	8.6	8.1	0.8
4	67.2500	11.3	11.5	11.7	11.5	0.4	CC	313.2625	9.8	9.7	9.8	9.4	0.4
5	77.2500	9.7	10.1	10.4	10.2	0.7	DD	319.2625	9.5	9.3	9.4	9.1	0.4
6	83.2500	9.0	9.2	9.4	9.1	0.4	EE	325.2625	9.8	9.3	9.4	9.2	0.6
							FF	331.2750	9.0	8.8	9.5	9.2	0.7
							GG	337.2625	9.5	8.8	9.4	9.1	0.7
A-5	91.2500						HH	343.2625	9.3	9.0	9.1	9.1	0.3
A-4	97.2500						II	349.2625	9.4	9.2	9.1	9.2	0.3
A-3	103.2500						JJ	355.2625	9.4	9.4	9.2	9.1	0.3
A-2	109.2750	8.0	7.5	7.8	7.7	0.5	KK	361.2625	8.8	8.9	8.9	8.7	0.2
A-1	115.2750	6.7	6.4	6.6	6.7	0.3	LL	367.2625	9.6	9.5	9.3	9.2	0.4
A	121.2625	5.8	6.1	6.4	6.3	0.6	MM	373.2625	9.7	9.4	9.8	9.6	0.4
B	127.2625	6.4	6.2	6.3	6.1	0.3	NN	379.2625	9.3	9.3	9.4	9.3	0.1
C	133.2625	6.0	5.9	6.2	6.0	0.3	OO	385.2625	9.8	9.4	9.7	9.2	0.6
D	139.2500	6.8	6.5	6.8	6.5	0.3	PP	391.2625	9.5	9.1	9.5	9.0	0.5
E	145.2500	6.5	6.1	6.6	6.1	0.5	QQ	397.2625	8.9	9.3	9.5	9.2	0.6
F	151.2500	6.8	6.6	7.1	6.5	0.6	RR	403.2500	9.3	9.5	9.8	9.7	0.5
G	157.2500	7.1	7.0	7.2	7.0	0.2	SS	409.2500	9.3	9.7	9.4	9.4	0.4
H	163.2500	6.9	6.8	7.2	6.9	0.4	TT	415.2500	9.4	9.3	9.2	9.1	0.3
I	169.2500	7.6	7.4	7.6	7.4	0.2	UU	421.2500	8.9	9.2	9.4	9.1	0.5
7	175.2500	7.2	6.8	7.1	6.6	0.6	VV	427.2500	8.9	9.3	9.3	8.8	0.5
8	181.2500	7.5	7.2	7.2	7.2	0.3	WW	433.2500	9.2	9.4	9.5	8.9	0.6
9	187.2500	7.6	7.4	7.4	7.5	0.2	XX	439.2500	9.2	9.5	9.7	9.5	0.5
10	193.2500	7.9	7.0	6.9	7.2	1.0	YY	445.2500	9.1	9.6	9.8	9.5	0.7
11	199.2500	7.9	6.6	6.6	6.4	1.5	ZZ	451.2500	10.2	10.1	10.4	9.9	0.5
12	205.2500	7.8	6.8	6.8	6.8	1.0	63	457.2500	9.5	9.7	9.7	9.6	0.2
13	211.2500	8.1	7.5	7.3	7.4	0.8	64	463.2500	9.6	9.8	9.7	9.4	0.4
J	217.2500	6.8	6.6	6.6	6.5	0.3	65	469.2500	9.9	8.4	9.6	8.6	1.5
K	223.2500	8.1	7.8	8.1	7.5	0.6	66	475.2500	9.9	9.9	10.7	10.4	0.8
L	229.2625	7.3	7.3	7.2	6.9	0.4	67	481.2500	10.8	10.3	10.8	10.3	0.5
M	235.2625	7.8	7.5	7.6	7.3	0.5	68	487.2500	10.5	10.2	8.8	10.1	1.7
N	241.2625	8.4	8.2	7.9	8.1	0.5	69	493.2500	10.5	10.1	10.1	9.9	0.6
O	247.2625	8.4	7.9	7.7	7.7	0.7	70	499.2500	11.0	10.9	10.7	10.6	0.4
P	253.2625	8.8	8.1	7.4	8.3	1.4	71	505.2500	11.1	10.9	10.9	10.8	0.3
Q	259.2625	8.1	8.1	7.9	7.9	0.2	72	511.2500	11.5	10.9	11.0	10.6	0.9
R	265.2625	8.8	8.3	8.3	8.3	0.5	73	517.2500	11.5	11.1	11.1	11.1	0.4
S	271.2625	8.8	8.5	8.1	8.3	0.7	74	523.2500	11.9	10.9	11.1	11.4	1.0
T	277.2625	8.9	8.6	8.5	8.4	0.5	75	529.2500	11.9	11.7	11.9	11.7	0.2
U	283.2625	9.8	9.4	9.7	8.9	0.9	76	535.2500	10.8	10.9	10.9	10.8	0.1
V	289.2625	8.9	8.3	8.3	8.4	0.6	77	541.2500	11.0	11.6	11.7	11.5	0.7
W	295.2625	9.5	8.4	8.9	8.7	1.1	78	547.2500	10.9	11.1	10.7	11.0	0.4

Max NonAdjacent Channel Level Diff.	6.1
Max Adjacent Channel Level Diff.	2

Max Variance from last proof-of-performance test	N/a
Date of last proof-of-performance test	test point changed

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

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ITHACA

System Test Point # 8

Location: REACH RUN RD.

Community: LANSING

Pole Number: UNDERGROUND

D.T. Value: 17

Map Number: 2335446

OR Number: 1027

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-Ithaca**

Test Location: **Reach Run Road Lansing**

Date: 17-Jan-02

Time 12:20 PM

Chan	Freq. (MHz.)	Visual Level (dbmv.)	Aural Level (dbmv.)	Scra "S"	Diff. (Dbmv.)	Chan	Freq. (MHz.)	Visual Level (dbmv.)	Aural Level (dbmv.)	cra "S"	Diff. (Dbmv.)
2	55.2500	15.2	1.1		14.1	AA	289.2625	11.8	-3.1		14.9
3	61.2500	15.6	0.6		15.0	BB	307.2625	12.2	-3.5		15.7
4	67.2500	15.8	0.4		15.4	CC	313.2625	11.9	-2.9		14.8
5	77.2500	15.4	0.4		15.0	DD	319.2625	12.0	-2.9		14.9
6	83.2500	15.0	0.0		15.0	EE	325.2625	11.9	-2.8		14.7
						FF	331.2750	10.6	-4.4		15.0
						GG	337.2625	10.4	-4.6		15.0
A-5	91.2500					HH	343.2625	10.6	-4.7		15.3
A-4	97.2500					II	349.2625	10.1	-5.0		15.1
A-3	103.2500					JJ	355.2625	10.0	-3.5		13.5
A-2	109.2750	13.8	-0.6		14.4	KK	361.2625	9.9	-4.4		14.3
A-1	115.2750	12.9	-2.5	S	15.4	LL	367.2625	9.6	-4.6		14.2
A	121.2625	12.6	-2.0		14.6	MM	373.2625	9.7	-5.2		14.9
B	127.2625	12.5	-2.5		15.0	NN	379.2625	10.0	-5.0		15.0
C	133.2625	12.3	-2.7		15.0	OO	385.2625	9.6	-5.4		15.0
D	139.2500	12.2	-2.0		14.2	PP	391.2625	9.8	-5.6		15.4
E	145.2500	11.9	-2.5		14.4	QQ	397.2625	10.1	-5.2		15.3
F	151.2500	12.6	-2.2		14.8	RR	403.2500	9.7	-5.3		15.0
G	157.2500	12.3	-2.8		15.1	SS	409.2500	9.9	-5.2		15.1
H	163.2500	12.3	-2.0		14.3	TT	415.2500	9.8	-5.1		14.9
I	169.2500	12.7	-1.8		14.5	UU	421.2500	9.2	-5.8		15.0
7	175.2500	12.9	-2.5		15.4	VV	427.2500	8.8	-6.5		15.3
8	181.2500	13.0	-1.9		14.9	WW	433.2500	9.2	-6.1		15.3
9	187.2500	12.7	-2.6		15.3	XX	439.2500	8.2	-7.1		15.3
10	193.2500	12.2	-2.6		14.8	YY	445.2500	7.3	-7.3		14.6
11	199.2500	12.2	-2.8		15.0	ZZ	451.2500	8.6	-7.1		15.7
12	205.2500	12.2	-2.4		14.6	63	457.2500	7.8	-7.0		14.8
13	211.2500	11.9	-3.4		15.3	64	463.2500	7.4	-6.8		14.2
J	217.2500	11.9	-2.8		14.7	65	469.2500	8.3	-6.8	S	15.1
K	223.2500	12.5	-3.1		15.6	66	475.2500	8.7	-7.0	S	15.7
L	229.2625	11.7	-3.8		15.5	67	481.2500	8.7	-6.8	S	15.5
M	235.2625	11.2	-3.3		14.5	68	487.2500	8.8	-6.3	S	15.1
N	241.2625	11.6	-3.7		15.3	69	493.2500	10.0	-5.4	S	15.4
O	247.2625	11.2	-4.1		15.3	70	499.2500	9.7	-5.1		14.8
P	253.2625	11.5	-3.5		15.0	71	505.2500	10.4	-5.3		15.7
Q	259.2625	11.1	-4.0		15.1	72	511.2500	9.8	-5.5	S	15.3
R	265.2625	11.1	-4.0		15.1	73	517.2500	10.6	-4.9	S	15.5
S	271.2625	11.6	-2.9		14.5	74	523.2500	10.7	-3.8	S	14.5
T	277.2625	11.9	-3.1		15.0	75	529.2500	11.0	-4.3	S	15.3
U	283.2625	11.9	-2.7		14.6	76	535.2500	10.5	-4.2		14.7
V	289.2625	12.2	-2.9		15.1	77	541.2500	10.5	-4.9		15.4
W	283.2625	11.8	-3.7		15.5	78	547.2500	10.0	-5.0		15.0

PEAK TO VALLEY: 8.5

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

System Name: TIME WARNER-ITHACA **Date:** 01/24/02

Test Performed By: Paul Cullings

Location: Reach Run Road Town of Lansing

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

Channel Number	In Channel Response	Carrier To Noise Ratio	Distortions (-dBc)			Hum
	(+/- dB)	(dB)	CTB	CSO	XMOD	(%)
2	0.6	49	68.6	70.1	70	0.5
13	0.6	48.5	68.7	71		
14	0.3	48.4	66.3	62.3		
20	0.2	47.8	68.2	70.5		
25	0.6	48.1	68.5	70.5		
35	0.4	47.6	67	64.5		
44	0.7	48.6	66.5	64.5		
57	0.3	48.1	65	69.9		
78	0.8	49.1	64.3	65		

Time Warner Cable
Syracuse Division

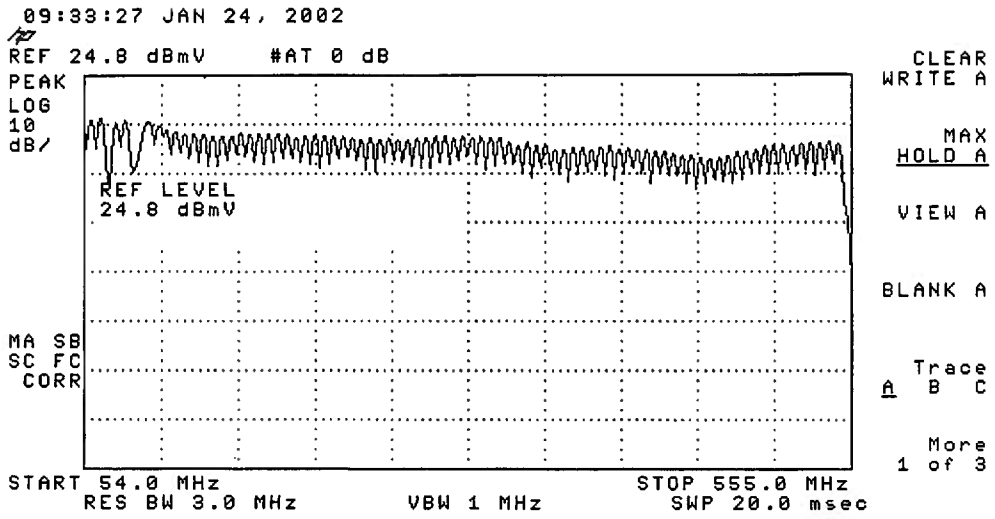
IN - CHANNEL FREQUENCY RESPONSE TEST

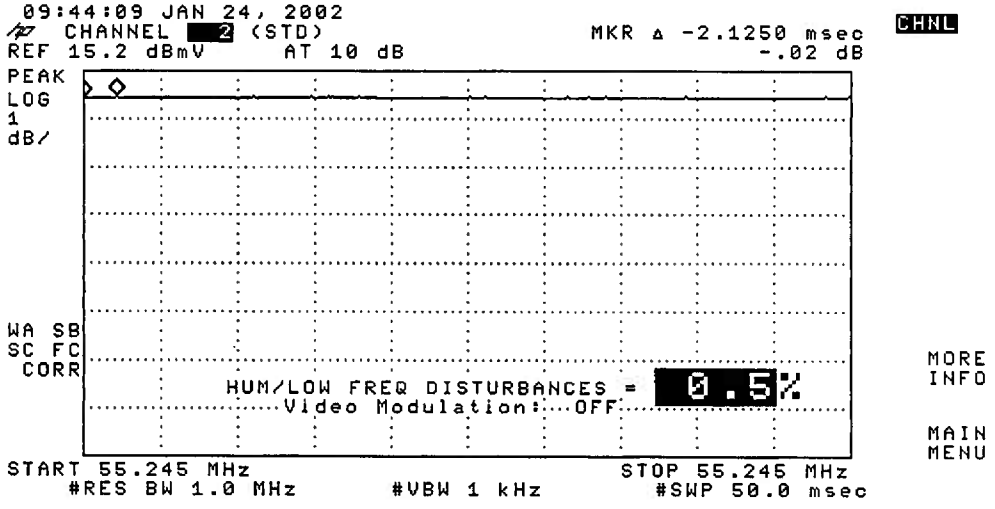
(76.605 (a) 6)

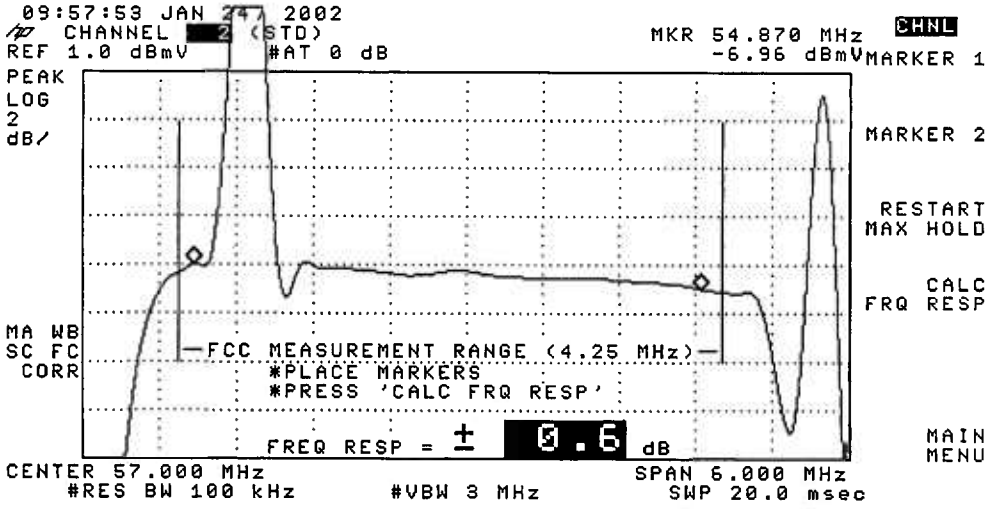
System Name: TIME WARNER-ITHACA Date: 01/24/02

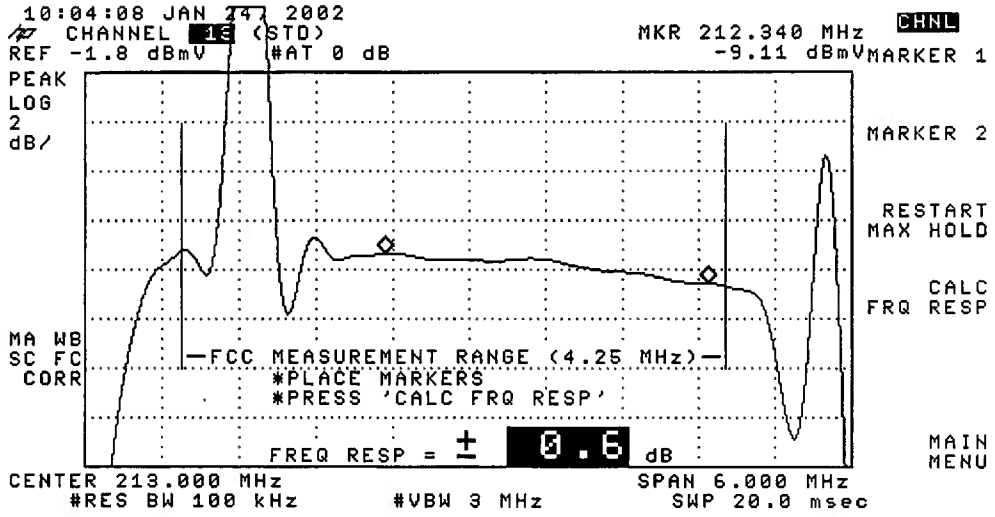
Test Performed By: Paul Cullings Location: Reach Run Rd. Lansing

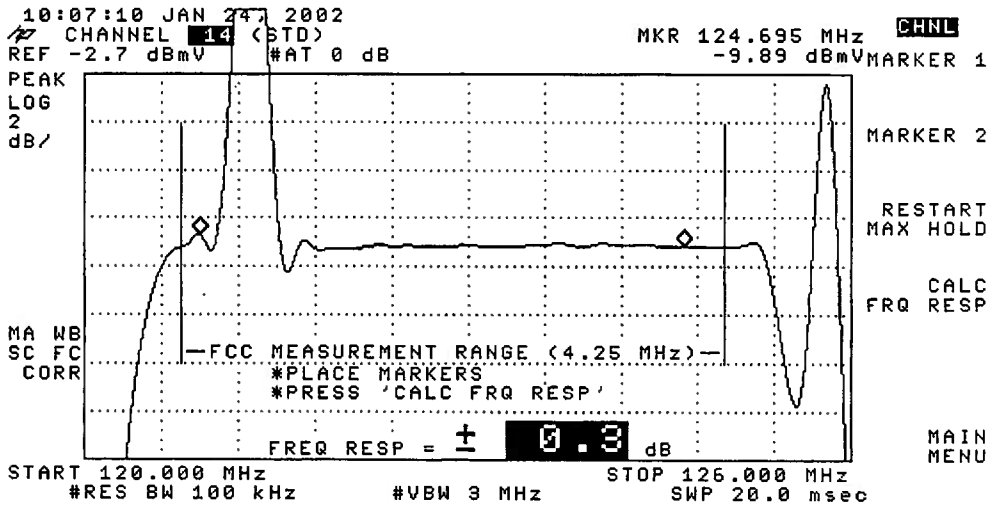
(SEE THE ATTATCHED SWEEP TRACES)

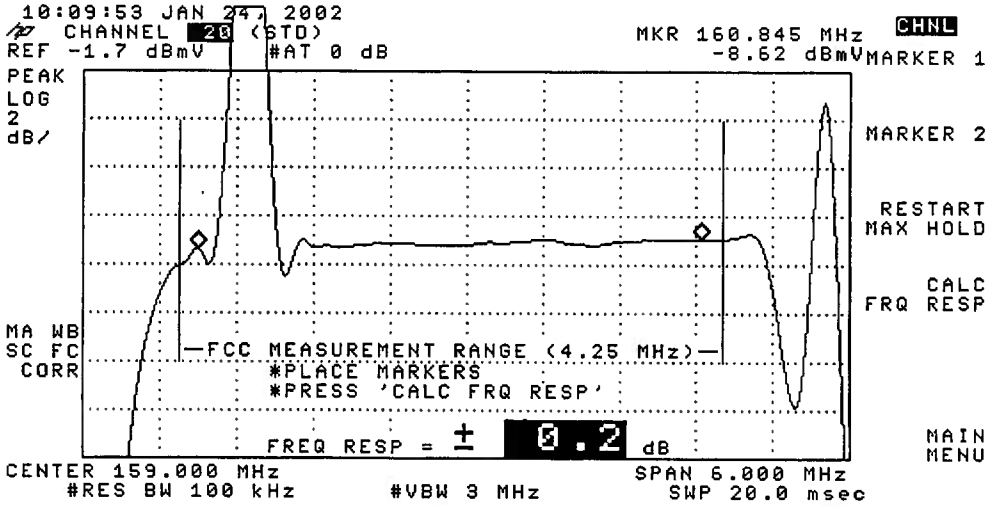

09:33:27 JAN 24, 2002
REF 24.8 dBmV
#AT 0 dB
PEAK
LOG
10
dB/
REF LEVEL
24.8 dBmV
MA SB
SC FC
CORR
START 54.0 MHz
RES BW 3.0 MHz
VBW 1 MHz
STOP 555.0 MHz
SWP 20.0 msec
CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

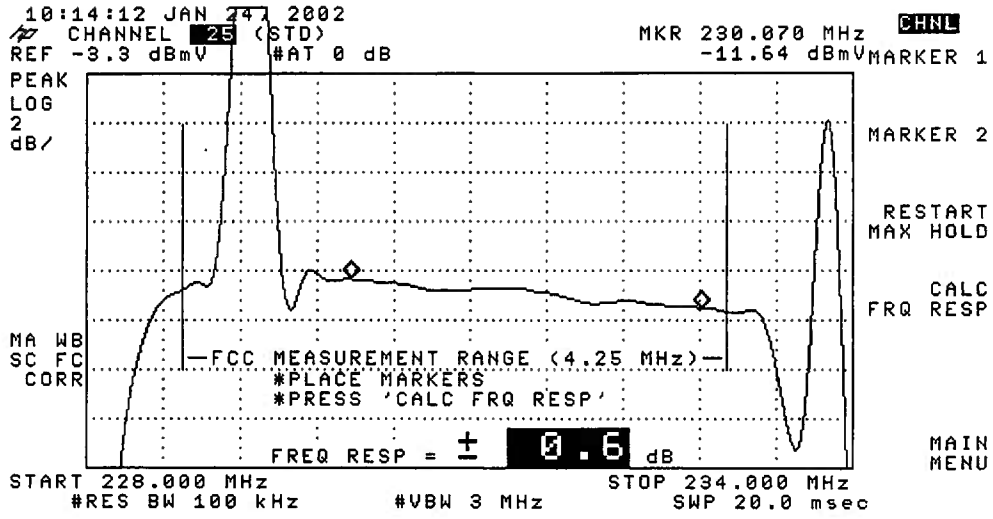

09:44:09 JAN 24, 2002
CHANNEL 2 (STD)
REF 15.2 dBmV
AT 10 dB
MKR Δ -2.1250 msec
-.02 dB
CHNL
PEAK
LOG
1
dB/
WA SB
SC FC
CORR
HUM/LOW FREQ DISTURBANCES = 0.5%
Video Modulation: OFF
START 55.245 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
STOP 55.245 MHz
#SWP 50.0 msec
MORE
INFO
MAIN
MENU

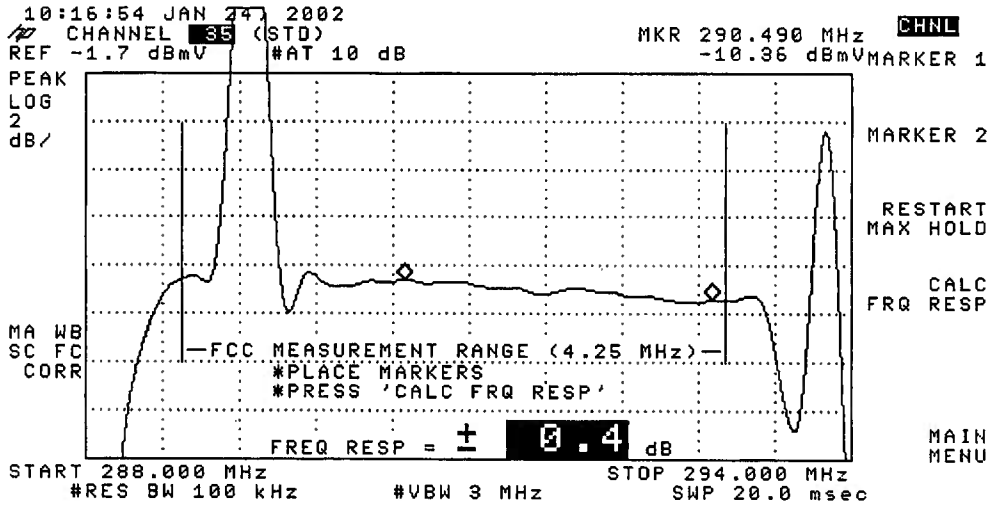

09:57:53 JAN 24, 2002
CHANNEL 2 (STD)
REF 1.0 dBmV
#AT 0 dB
MKR 54.870 MHz
-6.96 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.6 dB
MAIN
MENU
CENTER 57.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SPAN 6.000 MHz
SWP 20.0 msec

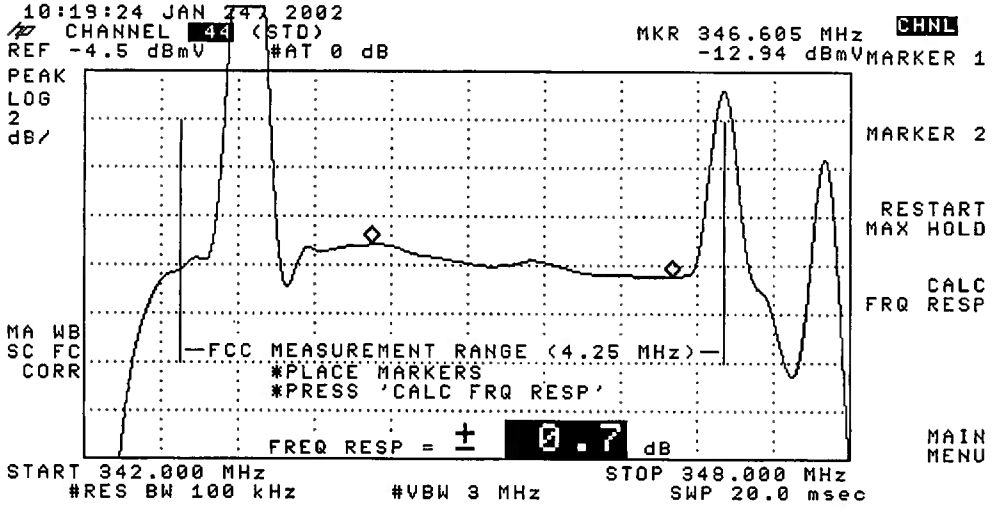

10:04:08 JAN 24, 2002
CHANNEL 13 (STD)
REF -1.8 dBmV
#AT 0 dB
MKR 212.340 MHz
-9.11 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.6 dB
MAIN
MENU
CENTER 213.000 MHz
SPAN 6.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

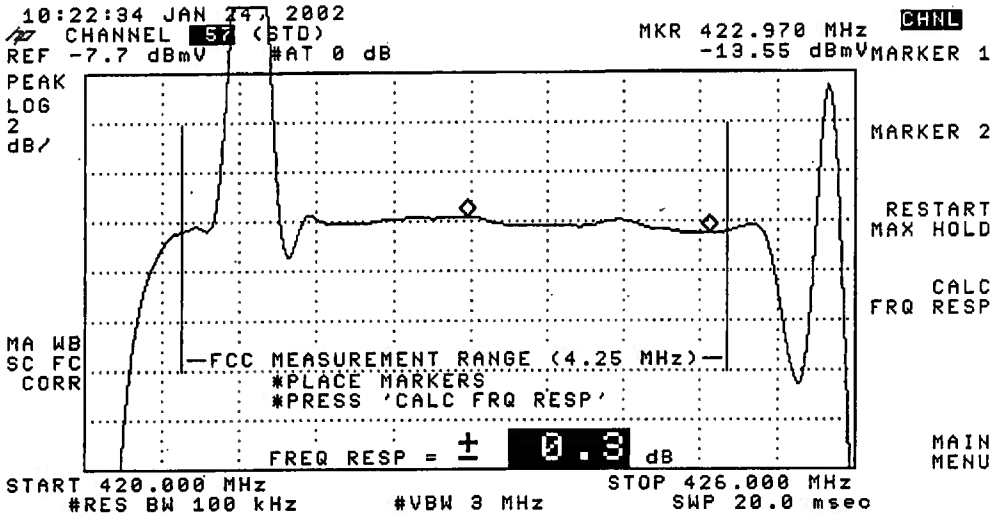

10:07:10 JAN 24, 2002
CHANNEL 14 (STD)
REF -2.7 dBmV
#AT 0 dB
MKR 124.695 MHz
-9.89 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 120.000 MHz
STOP 126.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

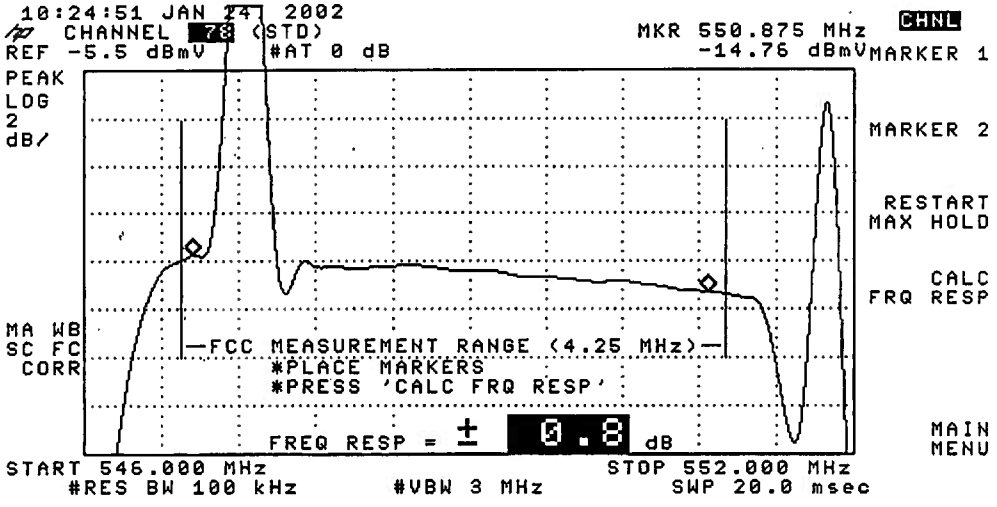

10:09:53 JAN 24, 2002
CHANNEL 20 (STD)
REF -1.7 dBmV
#AT 0 dB
MKR 160.845 MHz
-8.62 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.2 dB
MAIN
MENU
CENTER 159.000 MHz
SPAN 6.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

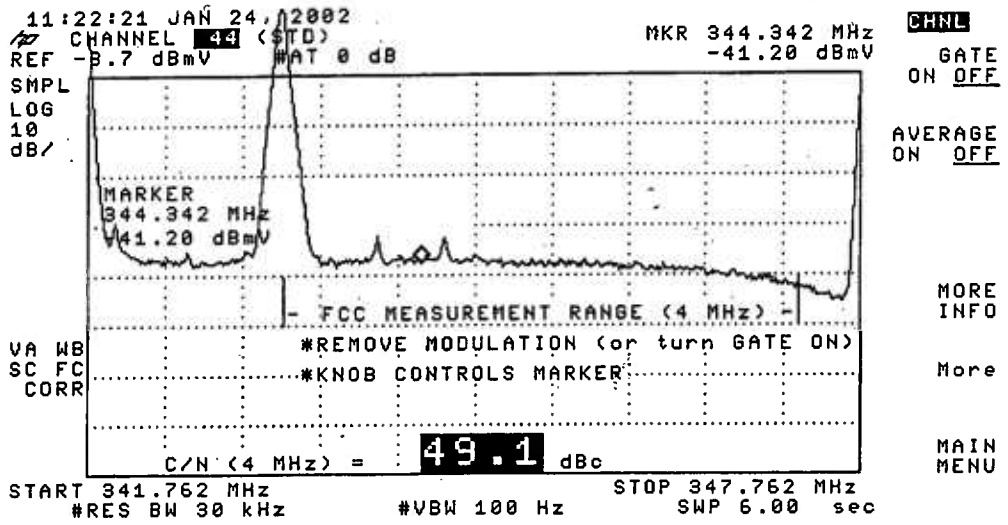

10:14:12 JAN 24, 2002
CHANNEL 25 (STD)
REF -3.3 dBmV
#AT 0 dB
MKR 230.070 MHz
-11.64 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.6 dB
MAIN
MENU
START 228.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 234.000 MHz
SWP 20.0 msec

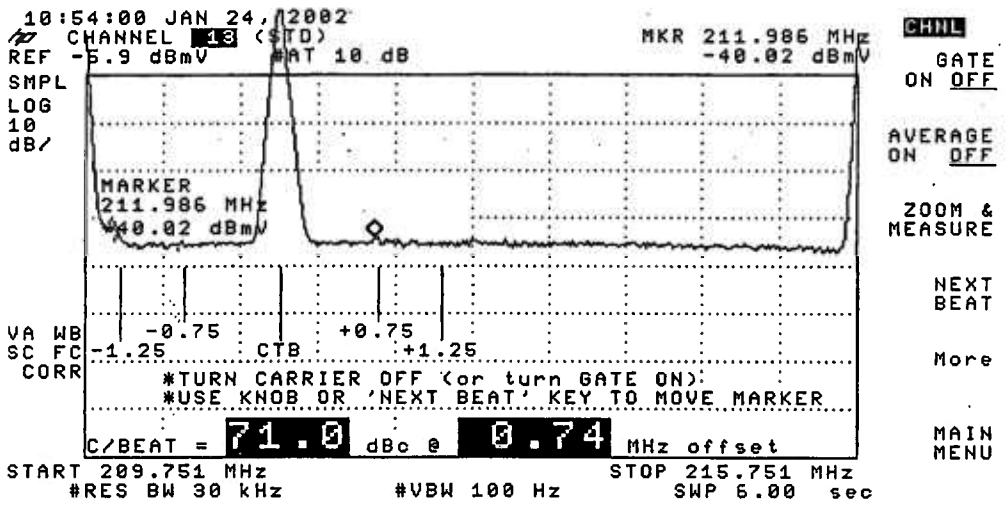

10:16:54 JAN 24, 2002
CHANNEL 35 (STD)
REF -1.7 dBmV
#AT 10 dB
MKR 290.490 MHz
-10.36 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 288.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 294.000 MHz
SWP 20.0 msec

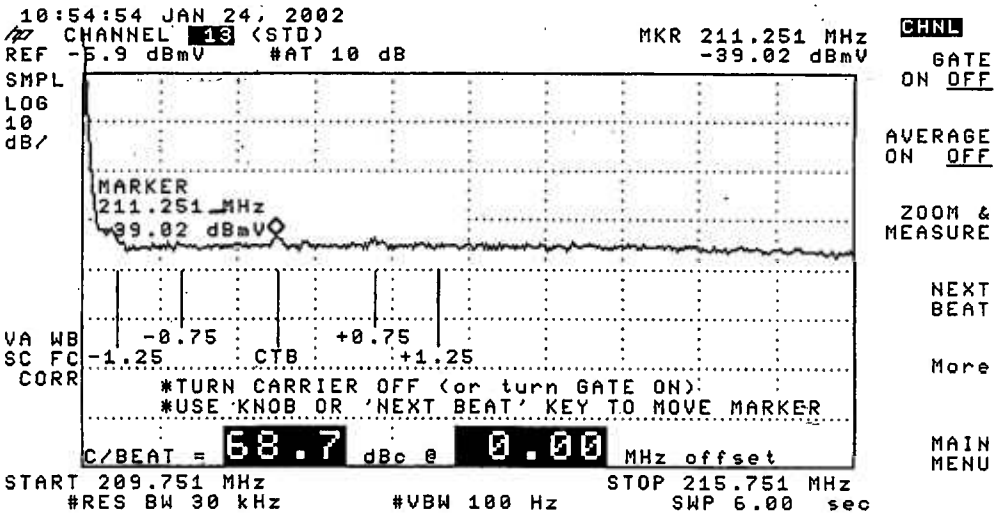

10:19:24 JAN 24, 2002
CHANNEL 44 (STD)
REF -4.5 dBmV
#AT 0 dB
MKR 346.605 MHz
-12.94 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.7 dB
MAIN
MENU
START 342.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 348.000 MHz
SWP 20.0 msec


10:22:34 JAN 24, 2002
CHANNEL 57 (STD)
REF -7.7 dBmV
#AT 0 dB
MKR 422.970 MHz
-13.55 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 420.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 426.000 MHz
SWP 20.0 msec


10:24:51 JAN 24, 2002
CHANNEL 78 (STD)
REF -5.5 dBmV
#AT 0 dB
MKR 550.875 MHz
-14.76 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.8 dB
MAIN
MENU
START 546.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 552.000 MHz
SWP 20.0 msec


11:22:21 JAN 24, 2002
CHANNEL 44 (STD)
REF -3.7 dBmV
#AT 0 dB
MKR 344.342 MHz
-41.20 dBmV
CHNL
GATE ON OFF
SMPL
LOG
10
dB/
AVERAGE ON OFF
MARKER
344.342 MHz
-41.20 dBmV
- FCC MEASUREMENT RANGE (4 MHz) -
MORE INFO
VA WB
SC FC
CORR
*REMOVE MODULATION (or turn GATE ON)
*KNOB CONTROLS MARKER
More
C/N (4 MHz) = 49.1 dBc
MAIN MENU
START 341.762 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 347.762 MHz
SWP 6.00 sec


10:54:00 JAN 24, 2002
CHANNEL 13 (STD)
REF -5.9 dBmV
#AT 10 dB
MKR 211.986 MHz
-40.02 dBmV
CHNL
GATE ON OFF
SMPL
LOG
10
dB/
AVERAGE ON OFF
MARKER
211.986 MHz
-40.02 dBmV
ZOOM & MEASURE
NEXT BEAT
-0.75
+0.75
VA WB
SC FC
CORR
-1.25
CTB
+1.25
More
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
C/BEAT = 71.0 dBc @ 0.74 MHz offset
MAIN MENU
START 209.751 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 215.751 MHz
SWP 6.00 sec


10:54:54 JAN 24, 2002
CHANNEL 13 (STD)
REF -5.9 dBmV
#AT 10 dB
MKR 211.251 MHz
-39.02 dBmV
CHNL
GATE ON OFF
SMPL
LOG
10
dB/
AVERAGE ON OFF
MARKER
211.251 MHz
-39.02 dBmV
ZOOM & MEASURE
NEXT BEAT
-0.75
+0.75
VA WB
SC FC
CORR
-1.25
CTB
+1.25
More
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
C/BEAT = 68.7 dBc @ 0.00 MHz offset
MAIN MENU
START 209.751 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 215.751 MHz
SWP 6.00 sec

Visual Carrier Level Variation Test

System Name: Time Warner-Ithaca

Test Point Location Reach Run Road Lansing

Date: 01/17/02 Performed by: Cary Besemer

Meter Serial Number: 9243885

Chan	Freq (MHz)	Temp °F 35 / Time 12:20	32 / 18:21	30 / 00:32	25 / 05:59	Max Variation	Chan	Freq (MHz)	Temp °F 35 / Time 12:20	32 / 18:21	30 / 00:32	25 / 05:59	Max Variation
		Visual Level (dbmv)							Visual Level (dbmv)				
2	55.2500	15.2	15.8	15.4	15.3	0.6	AA	301.2625	11.8	12.0	11.9	11.7	0.3
3	61.2500	15.6	15.8	15.8	15.1	0.7	BB	307.2625	12.2	11.3	11.6	11.7	0.9
4	67.2500	15.8	15.9	16.0	16.2	0.4	CC	313.2625	11.9	11.8	11.8	11.6	0.3
5	77.2500	15.4	15.6	15.7	15.6	0.3	DD	319.2625	12.0	12.4	12.4	11.8	0.6
6	83.2500	15.0	15.1	14.2	14.1	1.0	EE	325.2625	11.9	11.7	11.9	11.8	0.2
							FF	331.2750	10.6	10.9	11.8	11.5	1.2
							GG	337.2625	10.4	10.2	10.8	10.3	0.6
A-5	91.2500						HH	343.2625	10.6	10.1	10.7	10.2	0.6
A-4	97.2500						II	349.2625	10.1	10.2	10.2	10.4	0.3
A-3	103.2500						JJ	355.2625	10.0	10.1	10.5	10.1	0.5
A-2	109.2750	13.8	14.0	14.3	14.2	0.5	KK	361.2625	9.9	9.5	9.9	9.1	0.8
A-1	115.2750	12.9	13.8	14.1	13.4	1.2	LL	367.2625	9.6	9.5	9.5	9.4	0.2
A	121.2625	12.6	13.0	13.4	13.0	0.8	MM	373.2625	9.7	9.6	9.9	9.4	0.5
B	127.2625	12.5	12.8	13.0	12.9	0.5	NN	379.2625	10.0	9.9	10.2	10.0	0.3
C	133.2625	12.3	13.0	12.8	12.7	0.7	OO	385.2625	9.6	9.8	10.2	10.0	0.6
D	139.2500	12.2	12.6	12.5	12.8	0.6	PP	391.2625	9.8	9.5	9.8	9.6	0.3
E	145.2500	11.9	12.6	12.4	12.7	0.8	QQ	397.2625	10.1	10.0	10.0	10.0	0.1
F	151.2500	12.6	13.3	13.5	13.4	0.9	RR	403.2500	9.7	9.6	9.8	9.2	0.6
G	157.2500	12.3	13.2	13.1	13.1	0.9	SS	409.2500	9.9	10.2	10.2	9.9	0.3
H	163.2500	12.3	12.9	13.3	13.2	1.0	TT	415.2500	9.8	9.6	9.7	9.8	0.2
I	169.2500	12.7	13.1	13.3	13.1	0.6	UU	421.2500	9.2	9.9	9.8	9.6	0.7
7	175.2500	12.9	12.7	12.8	13.0	0.3	VV	427.2500	8.8	9.4	9.6	9.3	0.8
8	181.2500	13.0	12.8	13.0	13.1	0.3	WW	433.2500	9.2	9.2	9.4	9.0	0.4
9	187.2500	12.7	13.2	12.8	12.7	0.5	XX	439.2500	8.2	8.2	8.5	8.4	0.3
10	193.2500	12.2	12.1	12.0	12.1	0.2	YY	445.2500	7.3	7.7	7.9	7.7	0.6
11	199.2500	12.2	12.1	12.1	12.0	0.2	ZZ	451.2500	8.6	8.3	8.6	8.4	0.3
12	205.2500	12.2	11.9	12.0	12.4	0.5	63	457.2500	7.8	7.4	7.7	7.4	0.4
13	211.2500	11.9	11.9	12.1	12.1	0.2	64	463.2500	7.4	7.5	7.5	7.3	0.2
J	217.2500	11.9	12.0	12.3	12.2	0.4	65	469.2500	8.3	7.3	6.8	7.7	1.5
K	223.2500	12.5	12.6	13.0	12.5	0.5	66	475.2500	8.7	8.9	8.8	8.8	0.2
L	229.2625	11.7	11.9	12.2	12.1	0.5	67	481.2500	8.7	8.9	8.8	8.7	0.2
M	235.2625	11.2	10.8	11.2	11.0	0.4	68	487.2500	8.8	7.5	8.4	8.7	1.3
N	241.2625	11.6	10.9	11.0	10.8	0.8	69	493.2500	10.0	9.0	9.2	8.9	1.1
O	247.2625	11.2	11.0	11.3	11.0	0.3	70	499.2500	9.7	9.2	9.2	9.0	0.7
P	253.2625	11.5	10.9	10.8	11.3	0.7	71	505.2500	10.4	9.7	9.6	9.7	0.8
Q	259.2625	11.1	11.1	11.1	11.4	0.3	72	511.2500	9.8	10.3	10.1	9.6	0.7
R	265.2625	11.1	10.8	10.8	11.0	0.3	73	517.2500	10.6	10.0	10.3	10.1	0.6
S	271.2625	11.6	10.9	10.7	11.0	0.9	74	523.2500	10.7	9.8	9.8	10.4	0.9
T	277.2625	11.9	11.2	11.1	11.2	0.8	75	529.2500	11.0	10.5	10.6	10.0	1.0
U	283.2625	11.9	11.3	11.6	11.6	0.6	76	535.2500	10.5	10.2	10.3	10.2	0.3
V	289.2625	12.2	11.5	11.4	11.6	0.8	77	541.2500	10.5	11.0	10.9	10.5	0.5
W	295.2625	11.8	11.1	11.9	10.6	1.3	78	547.2500	10.0	9.8	9.9	9.7	0.3

Max NonAdjacent Channel Level Diff.	9.2
Max Adjacent Channel Level Diff.	2

Max Variance from last proof-of-performance test	N/a
Date of last proof-of-performance test	test point changed

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.

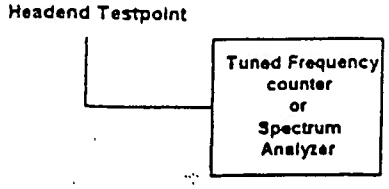
-Follow the manufacturers recommended methods for performing this measurement.

-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

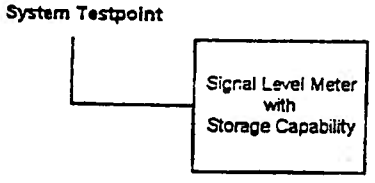
be entered into the Headend test forms at a later time.

-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 attatchment 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.

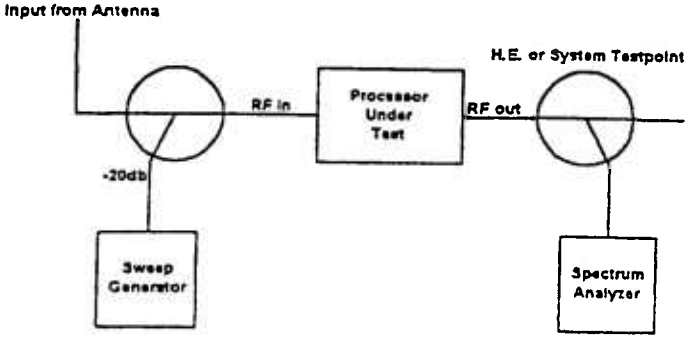
-Connect equipment as shown in the block diagrams below.

-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.

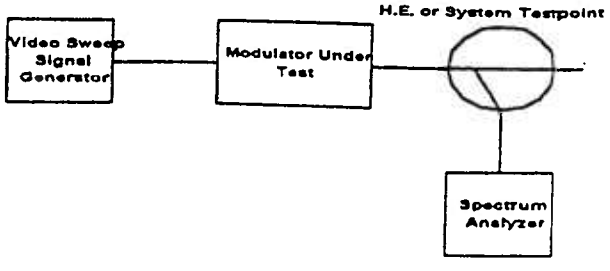
-Record the +/-db number(peak to valley/2) on page 3of 5 for each testpoint.

-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:

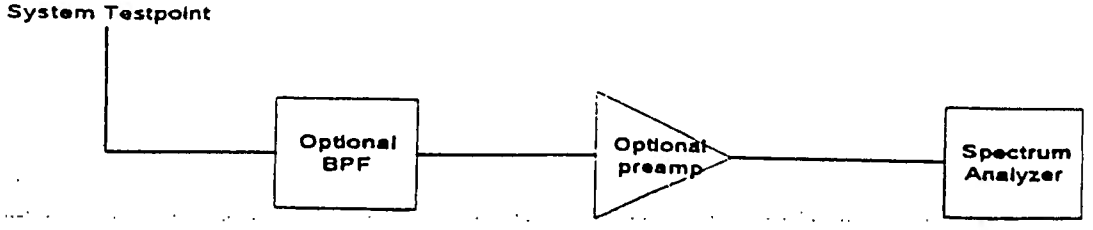
-Measurements should be made on all of the FCC designated test channels at each testpoint

-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.

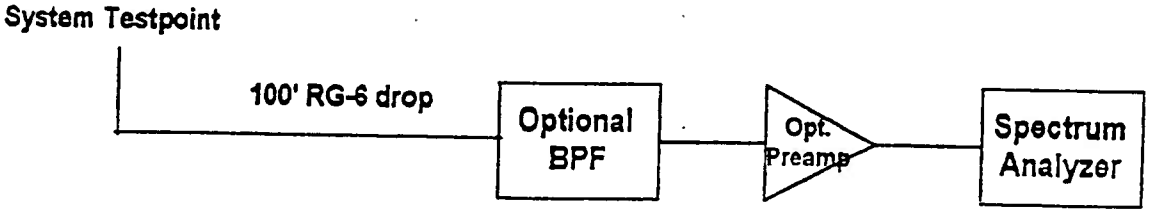
Note:

1) Intermod products can fall anywhere within a 6Mhz bandwidth.

2) CSO fall at +/- .75Mhz and +/- 1.25Mhz, 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:

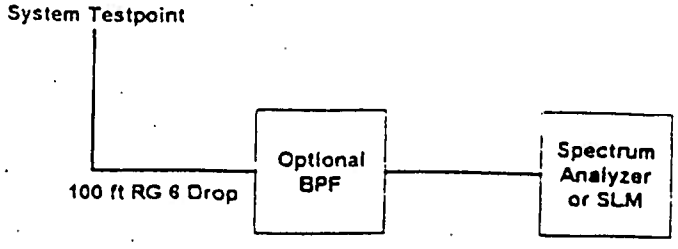


Exhibit 1

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:

Municipality	Subscribers	Municipality	Subscribers
City of Ithaca	5,373	Town of Dryden	2,633
Town of Ithaca	3,340	Town of Newfield	1,045
Town of Caroline	501	Village of Trumansburg	538
Village of Cayuga Heights	918	Village of Candor	313
Village of Lansing	1,160	Town of Lansing	1,879
Town of Danby	535	Town of Ulysses	573
Town of Groton	192	Town of Candor	326
Town of Covert	41	Village of Groton	833
Village of Dryden	640	Village of Freeville	175

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:

Municipality	Miles of Plant	Municipality	Miles of Plant
City of Ithaca	0.50 Miles	Town of Groton	0.50 Miles
Town of Ithaca	0.30 Miles	Town of Lansing	2.30 Miles
Town of Newfield	0.40 Miles	Village of Cayuga Heights	0.20 Miles
Village of Lansing	0.20 Miles	Village of Groton	0.10Miles

STATE OF NEW YORK
TOWN OF CAROLINE **COUNTY OF TOMPKINS**

In the Matter of the Renewal of the Cable Television Franchise Held by **TIME WARNER ENTERTAINMENT-ADVANCED NEWHOUSE PARTNERSHIP** in the Town of Caroline, Tompkins County, NY

RESOLUTION

An application has been duly made to the Town Board of the Town of Caroline, Tompkins County, New York, by **TIME WARNER ENTERTAINMENT-ADVANCED/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 with a local place of business located at 519 West State Street, Ithaca, New York 14850, and holder of a cable television franchise in the Town of Caroline for the approval of an agreement to renew Time Warner Entertainment-Advanced Newhouse Partnership's cable television franchise for an additional ten (10) years commencing After Approval of the NYS Public Service Commision. 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 Town Hall, Slaterville Springs, New York on October 10, 2002 at 7:00 p.m. and notice of the hearing was published in the Ithaca Journal on October 3, 2002. The Town Board for the Town of Caroline voted to approve the agreement to renew the Time Warner Entertainment-Advanced Newhouse Partnership cable television franchise on October 10, 2002.

NOW, THEREFORE, the Town Board of the Town of Caroline finds that:

1. Time Warner Entertainment-Advanced Newhouse Partnership d/b/a 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 Entertainment-Advanced Newhouse Partnership's service, including signal quality, response to customer complaints and billing practices has been reasonable in light of community needs; and

3. Time Warner Entertainment-Advanced Newhouse Partnership 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 Entertainment-Advanced Newhouse Partnership 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 Town Board of the Town of Caroline hereby renews the cable television franchise of Time Warner Entertainment-Advanced Newhouse Partnership in the Town of Caroline for ten (10) years commencing After Approval of the NYS Public Service Commision and expiring _____, _____. **BE IT FURTHER RESOLVED** that the Town Board of the Town of Caroline hereby confirms that this Franchise Renewal Agreement replaces the original franchise granted and all amendments thereto.

The foregoing having received a Aye(5) vote was thereby declared adopted.

Dated: October 10, 2002

Kim Martin Case
Town Clerk
Town of Caroline

AFFIDAVIT OF PUBLICATION

The Ithaca JOURNAL

State of New York, Tompkins County, ss.:

Linda C. Ackley being duly sworn, deposes and says that she/he resides in Ithaca, county and state aforesaid and that she/he is Clerk of The Ithaca Journal a public newspaper printed and published in Ithaca aforesaid and that a notice of which the annexed is a true copy was published in said paper

10/3 2002

and that the first publication of said notice was on the 3rd day of October 2002

Linda C. Ackley

Subscribed and sworn to before me this 3 day of October 2002

Jean Ford

Notary Public

JEAN FORD
Notary Public, State of New York
No. 4654410
Qualified in Tompkins County
Commission Expires May 31, 20 03

PLEASE TAKE NOTICE THAT the Town Board of the Town of Caroline, Tompkins County, New York has scheduled a public hearing for the 10th of October 2002 at 7 p.m. at the Town Hall, Slaterville Springs, 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 10th of October, 2002, 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 State Plaza, Albany, New York 12223.

TIME WARNER CABLE-
SYRACUSE DIVISION
October 3, 2002

AFFIDAVIT OF PUBLICATION

The Ithaca JOURNAL

State of New York, Tompkins County, ss.:

Linda C. Ackley being duly sworn, deposes and says that she/he resides in Ithaca, county and state aforesaid and that she/he is Clerk of The Ithaca Journal a public newspaper printed and published in Ithaca aforesaid and that a notice of which the annexed is a true copy was published in said paper

10/19, 10/26 2002

and that the first publication of said notice was on the 19th day of October 2002

Linda C. Ackley

Subscribed and sworn to before me this 28 day of October 2002

Jean Ford

Notary Public

JEAN FORD
Notary Public, State of New York
No. 4654410
Qualified in Tompkins County
Commission Expires May 31, 2003

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 Town of Caroline, Tompkins County, New York, with the New York State Public Service Commission.

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 Town of Caroline, PO Box 136, Slaterville Springs, New York 14881 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.

TIME WARNER CABLE-SYRACUSE DIVISION
October 19,26, 2002