TIME WARNER CABLE

80-Y-2138

May 22, 2003

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 Lebanon (Madison 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 LEBANON

THIS AGREEMENT, executed in triplicate this 5th day of May, 2003 by and between the TOWN OF LEBANON, (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 Board of Trustees of the Municipality.

(c) "Cable Television Service" means

(1) The one way transmission to Subscribers of Video Programming, or other programming service, and

(2) Subscriber interaction, if any, which is required for the selection or use of such Video Programming, or other programming service.

(d) "Cable Television System" means a facility, consisting of a set of closed transmission paths, including (without limitation) fiber optic wires or lines, and associated signal generation, reception and control equipment that provides Cable Television Service to multiple subscribers within a community.

(e) "Time Warner Cable" means Time Warner Cable Entertainment-Advance/Newhouse Partnership.

(f) "Effective Date" of this agreement shall be that date subsequent to confirmation of the Franchise, by the New York State Public Service Commission ("NYSPSC") agreed to by the parties, which date is (calendar date).

(g) "Franchise" means the grant or authority given hereunder to Time Warner Cable to construct and operate a Cable Television System in the Municipality in accordance with the terms hereof.

(h) "FCC" means the Federal Communications Commission, its designees and any successor thereto.

(i) "Gross Revenues" means all revenues 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. In the event, during the life of this franchise high speed internet service is defined as a cable service under federal law.

(j) "May" is permissive.

(k) "Municipality " means the Town of Lebanon. Wherever the context shall permit, Board, Council and Municipality shall be used interchangeably and shall have the same meaning under this Franchise.

(l) "NYSPSC" means New York State Public Service Commission.

(m) "Person" means an individual, partnership, association, corporation, joint stock company trust, corporation, or organization of any kind.

(n) "Service Tier" means a category of Cable Television Service provided by Time Warner Cable over the Cable Television System for which a separate rate is charged for such category by Time Warner Cable.

(o) "Shall" or "will" are mandatory.

(p) "Streets" means the surface of, as well as the space above and below, any and all streets, avenues, highways, boulevards, concourses, driveways, bridges, tunnels, parks, parkways, waterways, docks and public grounds and waters within or belonging to the Municipality.

(q) "Subscriber" means any person lawfully receiving any Cable Television Service in the Municipality provided over the Cable Television System.

(r) "Video Programming" means any and all programming services provided by, or generally considered comparable to programming provided by a television broadcast station.

SECTION 2 - CONSENT TO FRANCHISE AND CONDITION PRECEDENT

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

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

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

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

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

SECTION 3 - APPROVAL OF COMPANY BY MUNICIPALITY

(a) This Franchise is subject to and complies with all applicable Federal and State laws and regulations, including, without limitation, the rules of the NYSPSC concerning franchise standards. The Municipality hereby acknowledges and agrees that this Franchise has been entered into by it in accordance with and pursuant to the Communications Act of 1934, as amended, 47 U.S.C. Sec. 521 et seq. (hereinafter referred to as the "Communications Act"). The Municipality hereby represents and warrants that this Franchise has been duly entered into in accordance with all applicable local laws. The Municipality hereby acknowledges that it, by duly authorized members thereof, has met with Time Warner Cable for the purposes of evaluating Time Warner Cable and negotiating and consummating this Franchise. The terms of this franchise are subject to the approval the NYSPSC.

(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 5 of May 2003 or on the date the NYSPSC approves said franchise agreement and terminating

on the 5 of May, 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) 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.

(c) 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.

SECTION 6 - REVOCATION

(a) The Municipality may revoke this Franchise and all rights afforded Time Warner Cable hereunder in any of the following events or for any of the following reasons:

(i) Time Warner Cable fails after sixty (60) days written notice from the Municipality to substantially comply or to take reasonable steps to comply with a material provision of this Franchise. Notwithstanding the above, should Time Warner Cable comply or take said reasonable steps to comply within said sixty days notice, the Municipality's right to revoke this Franchise shall immediately be extinguished; or

(ii) Time Warner Cable is adjudged a bankrupt; or

(iii) Time Warner Cable knowingly and willfully attempts or does practice a material fraud or deceit in its securing of this Franchise.

(b) Notwithstanding the above, no revocation shall be effective unless and until the Municipality shall have adopted a 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.

SECTION 7 - INDEMNIFICATION & INSURANCE

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

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

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

(a) Time Warner Cable hereby agrees that when and wherever it deems it economical and reasonably feasible, it shall enter into agreements with telephone or electric or other utilities (collectively "utilities") for the use of said utilities' poles or conduit space whereby said utilities shall provide use of and access to said poles or conduit space by Time Warner Cable for Time Warner Cable's lines and other equipment. Notwithstanding the above, where necessary to service Subscribers and where attachment to the pole(s) or conduit space of utilities is not economically reasonable or otherwise feasible, Time Warner Cable may erect or authorize or permit others to erect any poles or conduit space or any other facilities within the Streets of the Municipality pursuant to the issuance by the Municipality of any necessary authorizations which shall not be unreasonably withheld or delayed.

(b) Subject to the provisions of sub-paragraph (c) below, in such areas of the Municipality where it or any sub-division thereof shall hereafter duly require that all utility lines be installed underground, Time Warner Cable shall install its lines underground in accordance with such requirement.

(c) Notwithstanding the foregoing, if Time Warner Cable shall in any instance be unable to install or locate its wires underground, then the Municipality, on being apprised of the facts thereof, shall permit such wires to be installed above the ground even though other facilities in the area may be placed, or required to be placed, underground. However, any such permission shall be on such conditions as the Municipality may reasonably require.

SECTION 9 - RELOCATION OF PROPERTY

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

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

SECTION 10 - USE & INSTALLATION

(a) Time Warner Cable or any person authorized by Time Warner Cable to erect, construct or maintain any of the property of Time Warner Cable used in the transmission or reception of Cable Television Service shall at all times employ due care under the facts and circumstances and shall maintain and install said property of Time Warner Cable in accordance with commonly accepted methods and principles in the cable television industry so as to prevent failures and accidents likely to cause damage or injury to members of the public. All Cable Television System equipment shall conform to those standards of the National Electrical Code and the National Board of Fire Underwriters which exist at the time said equipment is installed and replaced.

(b) Time Warner Cable agrees to install all Cable Television System equipment in a manner to reasonably minimize interference to be expected with the usual use of the Streets and in no event shall any such Cable Television System equipment be located so as to substantially and regularly interfere with the usual public travel on any Street of the Municipality. Time Warner Cable shall construct and maintain its cable system using materials of good and durable quality and shall perform all work involved in the construction, installation, maintenance and repair of the cable system in a safe, thorough and reliable manner. Time Warner Cable shall promptly repair or replace any municipal property damaged or destroyed by Time Warner Cable so as to restore it to serviceable condition.

(c) Whenever Time Warner Cable or any person on its behalf shall cause any injury or damage to public property or Street, by or because of the installation, maintenance or operation of the Cable Television System equipment, such injury or damage shall be remedied as soon as reasonably possible after the earlier of notice to Time Warner Cable from the Municipality or after Time Warner Cable becomes aware of the same, in such fashion so as to restore the property or Street to serviceable condition. Time Warner Cable is hereby granted the authority to trim trees upon and overhanging the Streets of, and abutting private property, (i.e., in the public way) in the Municipality to the extent it reasonably deems necessary so as to prevent the branches or growths from coming in contact with the wires, cable and other equipment of Franchisee's Cable Television System.

SECTION 11 - CONTINUOUS SERVICE

Time Warner Cable shall continue to provide cable service to all subscribers who meet their obligations to Time Warner Cable with respect to such service. Time Warner Cable shall not, without the written consent of the Municipality abandon its cable television system or any portion thereof in such a way as would 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. For purposes of the calculation under Section 595.5, the number of homes per linear mile shall be twenty-five (25) and located within 200 feet of ariel feeder cable extension,

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.

SECTION 14 - RATES

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.
The rates and charges imposed by the franchisee fir 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 and that the rates for any cable television service for which approval is required shall be deemed part of the franchise whether or not the same is specifically set forth therein.

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 and basic service to any school, police station, firehouse and municipally owned building which is occupied for governmental purposes, provided the connection point is no further than two hundred feet (200') from the closest feeder line of the Cable Television System. All such connections shall be above ground except where all utility lines and cables in the area are underground. The Municipality shall not extend such service to additional outlets, without the express written consent of Time Warner Cable.

(b) Municipality, upon reasonable notice and during normal business hours, shall have the right to inspect all books, records, maps, plans, financial statements and other like materials of Time Warner Cable which are pertinent to Time Warner Cable's compliance with the terms and conditions of this Franchise.

(c) Municipality and Time Warner Cable agree that Time Warner Cable's obligations hereunder are subject to any applicable law, including laws regarding the privacy of information regarding subscribers.

(d) Municipality will maintain the confidentiality of any information obtained pursuant to this provision to the extent permitted by law, provided Time Warner Cable has advised Municipality of the confidential nature of the information. In the event that the Municipality receives request for the disclosure of such information with which it, in good faith, believes it must under law comply, then the Municipality will give Time Warner Cable notice of such request as soon as possible prior to disclosure in order to allow Time Warner Cable to take such steps as it may deem appropriate to seek judicial or other remedies to protect the confidentiality of such information.

SECTION 16 - PUBLIC, EDUCATIONAL AND GOVERNMENTAL

ACCESS CHANNELS

Time Warner Cable shall comply with the 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 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.

(b) 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.

(c) 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.

(d) 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.

(e) 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.

(f) 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.

(g) 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.

(h) At least once each year, Time Warner Cable shall provide notice to each subscriber of its procedures for reporting and resolving subscriber complaints.

SECTION 18 - FRANCHISE FEES

(a) Time Warner Cable shall pay the Municipality an amount equal to 5 % of Time Warner Cable's Gross Revenues received by Time Warner Cable directly from subscribers for cable

services purchased by subscribers on a regular, recurring monthly basis.

(b) There shall be applied as a credit against the Franchise Fee the aggregate of: (I) any taxes, fees or assessments of general applicability imposed on Time Warner Cable or any subscribers, or both, which are discriminatory against Time Warner Cable or any subscribers, (ii) any non-capital expenses incurred by Time Warner Cable in support of the PEG access requirements of this Franchise and (iii) any fees or assessments payable to the NYSPSC which when combined with all other fees and credits would exceed 5% of gross revenues. Time Warner Cable shall have the right to apply franchise fees paid as a credit against special franchise assessments pursuant to Section 626 of the New York State Real Property Tax Law.

(c) Payment of the franchise fee shall be due annually within one hundred twenty (120) days of the end of the company's fiscal year. Time Warner Cable shall submit to the Municipality, along with the payment of said fees, a report showing reasonable detail the basis for the computation thereof.

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

(a) Should any provision of this Franchise be held invalid by a court or regulatory agency of competent jurisdiction, the remaining provisions of this franchise shall remain in full force and effect.

(b) To the extent not inconsistent with or contrary to applicable federal law, the terms of this Franchise shall be governed and construed in accordance with the laws of the State of New York. The parties hereby acknowledge and 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 or sex.

SECTION 20 - NOTICE

All notices required herein shall be in writing and shall be deemed delivered when received by United States certified mail, return receipt requested, or on the date of delivery to addressee when sent by express mail, or overnight, or hand delivered to the parties and locations as specified below. Both Time Warner Cable and Municipality may change where notice is to be given by giving notice to the other.

When notices sent to Time Warner Cable:

Time Warner Cable of Syracuse
Attention: General Manager
1117 Erie Blvd. West
Rome, New York 13440
Telephone: (315) 337-3112
Facsimile: (315) 337-0587

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 Lebanon
Attention: Supervisor
P.O. Box 49E, RD #2
Earlville, New York 13332

SECTION 21 - 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 22 - 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 23 - 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 24 - 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 25 - 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 5 day of May, 2007

TIME WARNER ENTERTAINMENT-ADVANCE/NEWHOUSE PARTNERSHIP

MUNICIPALITY: TOWN OF LEBANON

By: Mary L Coulter

Title: President

By: James Schmidt

Title: Town 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) 463-2288 Time Warner Cable
6005 Fair Lakes Road
East Syracuse, NY 13221

(315) 895-7001 Time Warner Cable
56 Otsego Street
Ilion., NY 13357

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

Town of Lebanon - Madison 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
- Secondary residential connections	See Question #5
- Residential pay-cable subscriptions	See Question #5
- Commercial connections	See Question #5
- Other	See Question #5

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 orginated 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)
- Commerical 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)? 0 miles

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 Company is currently 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 Hamilton Certificate of Confirmation and Franchise Agreement.

Mary L Cotter

Mary L.Cotter
President
Time Warner Cable - Syracuse Division

Dated: May 19, 2003

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

STATE OF NEW YORK)
) ss.:
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

19th day of May, 2003

Notary Public

Gary J. Corbett
Notary Public, State of New York
No. 01C04700481
Qualified in Onondaga County
My Commission Expires March 31, 2006

EXHIBIT A

TIME WARNER CABLE

We're also pleased to announce our new Digital Video Recorder (DVR) service, letting you watch TV on your schedule. Now, you can find and automatically record your favorite shows, right in your cable box. Our new DVR-capable Home Terminals let you record two different programs simultaneously, or watch one program and record another at the same time. The service also features "picture-in-picture" and the ability to pause, rewind and fast-forward recorded programs—you can even pause live TV for up to an hour, then resume watching exactly where you left off! Our DVR service lets you record up to 40 hours of programming, and the easy-to-use on-screen menus and our Interactive Program Guide make it easy to learn, with no expensive equipment to buy. Call our office if you'd like more information or to order our DVR service.

Time Warner Cable is pleased to be the first in your community to offer a variety of television services in high-definition (HDTV) format: HBO and Showtime provide full-time HD feeds, and both WCNY and WSTM recently launched Digital broadcast services, including some primetime programming in HD. A special Digital Home Terminal is required to receive high-definition signals—and, of course, you'll need a HDTV-set. Contact your local office for more information.

The costs to provide these services and the greater variety of new and exciting programming have risen over the past year. To offset these rising business costs, we will introduce new prices for some components of our service effective January 1, 2003. Our new monthly rate for Basic Service will be $8.44, and Standard Service will be $42.89. Detailed rate information for services and equipment can be found on the panel to the right.

We recognize that you have a variety of entertainment options, and we appreciate the opportunity to serve you. We are committed to providing you with the highest quality choices and value. For more information on Time Warner Cable and our available services, visit our website at *www.twcny.com*.

Time Warner Cable

Hamilton Rates & Se[illegible]es

HM

	Effective 1/1/03
A. *Cable Service:*	
Basic Service (18 channels)	$8.44
Standard Service (73 channels): (Consists of Basic Service @ $8.44/mo. + all Standard channels @ $34.45/mo.)	$42.89
Vacation Basic	$5.00
Channel Guide Monthly Publication	$2.75
Customers who take more than one of our Premium movie services receive substantial discounts on our a la carte rates. Please see your statement for further details, or call our office for more information on our great premium packages.	
B. *Premium Services:**	
Home Box Office	$10.25
Cinemax	$8.95
Showtime	$8.95
The Movie Channel (Digital Only)	$8.95
STARZ!	$7.75
* *Additional equipment required to receive these premium services (except for HBO).*	
C. *Digital Cable Services**	
Full Digital Cable Service *(includes channels 100-209, plus Digital Navigator Package)*	$10.00
Digital Plus *(channels 100-199, plus (Digital Navigator Package)*	$8.95
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
Digital Video Recorder (DVR) Service	$ 9.95
* *Digital Terminal required for all Digital Cable services.*	
D. *Equipment:*	
Home Terminal (analog)/Digital Terminal	$6.60
Remote/ Digital Remote	$ .35
E. *Installation Charges:*	
Standard Install/Reconnect (pre-wired home)	$31.81
Standard Installation (unwired home)	$45.86
Hourly Service Charge	$37.62
Additional Outlet(s) at time of initial installation	$19.89
Additional Outlet(s), separate trip	$31.74
(Sales tax will be applied to installation charges)	

Digital Terminal is required in order to receive some channels and/or 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

38 Milford Street • Hamilton, NY 13346
(315) 824-0815 or 800-451-4525 • www.twcny.com

Hamilton

1/03

BASIC CABLE

2 WKTV-2 (Utica, NBC)
3 WSTM-3 (Syracuse, NBC)
4 WCNY-24 (Syracuse, PBS)
5 WTVH-5 (Syracuse, CBS)
7 WNYS-43 (Syracuse, WB)
8 WSYT-68 (Syracuse, FOX)
9 WIXT-9 (Syracuse, ABC)
10 Local WeatherNOW
11 WSKG-46 (Binghamton, PBS)
12 WFXV-33 (Utica, FOX)
13 WSBK (Boston, UPN)
14 CKWS-11 (Kingston, CBC)
15 TBS
16 WGN-9 (Chicago, IND)
17 C-SPAN
18 WSPX-56 (Syracuse, PAX)
19 QVC
99 Public Access

STANDARD CHANNELS

20 HSN: Home Shopping Network
21 USA Network
22 ABC Family
23 TV Guide Channel
24 ESPN: 24 Hour Sports
25 ESPN 2
26 CNN
27 TNT
28 TNN: The National Network
29 VH-1
30 The Weather Channel
31 Animal Planet
32 A&E
33 Nickelodeon
34 E!
35 The Discovery Channel
36 YES: Yankees Sports
37 CMT: Country Music TV
38 TLC: The Learning Channel
39 The Food Network
40 Court TV
41 EWTN
42 MSNBC
43 Headline News
44 fX Network
45 FOX Sports New York
46 HGTV: Home and Garden TV
47 Sci-Fi Channel
48 Lifetime
49 Comedy Central
50 Empire Sports Network
51 Bravo
52 Hallmark Channel
53 Travel Channel
54 TV Land
55 National Geographic
56 FOX News Channel
57 The History Channel
58 BET
59 Cartoon Network
60 AMC: American Movie Classics
61 MTV
62 CNBC
63 C-SPAN 2
64 ESPN Classic
65 MSG: Madison Square Garden
66 TCM: Turner Classic Movies
67 The Golf Channel
68 WE: Women's Entertainment
69 The Disney Channel
70 Lifetime Movie Network
72 Shop NBC
73 Oxygen
78 SoapNet
96 Leased Access

PREMIUM CHANNELS

6 HBO
75 Showtime
76 HBO2
77 Cinemax
79 STARZ!

TIME WARNER HOME THEATER: IN DEMAND

71 iN DEMAND 1 (1-800-934-4481)
74 iN DEMAND 3 (6 am-10 pm) (1-800-934-4484)
74 Spice (10 pm-6 am) (1-800-723-4486)

EXHIBIT B

Digital Cable Lineup

100 MSG – Madison Square Garden
101 ESPN Classic
102 The Golf Channel
103 Speed Channel
105 Outdoor Channel
106 FOX Sports World
107 ESPNews
109 Information
110 TCM: Turner Classic Movies
111 AMC: American Movie Classics
112 Lifetime Real Women
120 Discovery Kids
121 Discovery Science
122 Discovery Wings
123 Discovery Health
124 Discovery Civilization
125 Discovery Leisure
126 The History Channel
127 History International
128 National Geographic
129 BBC America
130 The Biography Channel
131 Court TV
132 CNNfn
133 C-SPAN3
134 Newsworld International
135 Bloomberg
136 CNBC World
137 Tech TV
138 Do It Yourself
139 International Channel
140 CMT: Country Music TV
141 Great American Country
142 MTV2
143 MuchMusic
144 VH1 Classic
145 BET on Jazz
150 Ovation
151 Bravo
152 TRIO
159 Fine Living
160 Style
161 Health Network
162 Game Show Network
163 America's Store
170 Disney
171 Disney West
172 Toon Disney
173 Noggin
174 Nick Too
175 Nick Gas
176 Boomerang
190 TBN-Trinity Broadcasting Network
200 Encore
201 Encore West
202 Encore Action
203 Encore Love Stories
204 Encore Mystery
205 Encore Westerns
206 Encore True Stories
207 WAM!
208 FOX Movie Channel
209 IFC: Independent Film Channel

Premium Channels
additional fees apply.

300 HBO
301 HBO West
302 HBO2
303 HBO2 West
304 HBO Signature
305 HBO Signature West
306 HBO Family
307 HBO Family West
308 HBO Comedy
309 HBO Comedy West
310 HBO Zone
311 HBO Zone West
312 HBO Latino
313 HBO Latino West
320 Cinemax
321 Cinemax West
322 MoreMax
323 MoreMax West
324 ThrillerMax
325 ThrillerMax West
326 ActionMax
327 ActionMax West
328 wmax
329 @max
330 5starmax
331 outermax
340 Showtime
341 Showtime Too
342 Showtime Showcase
343 Showtime Extreme
344 Showtime Beyond
345 Showtime Next
346 Showtime Women
347 Showtime Family Zone
350 The Movie Channel
351 The Movie Channel Xtra
360 STARZ!
361 STARZ! West
362 STARZ! Theater
363 STARZ! Theater West
364 STARZ! Family
365 STARZ! Family West
366 STARZ! Cinema
367 STARZ! Cinema West
368 Black STARZ!
369 Black STARZ! West

High Definition and Digital Broadcast Channels

800 HBO HDTV
801 Showtime HDTV
850 WCNY (Syracuse, PBS)
851 WCNY "PBS Kids"
852 WCNY "PBS You"
863 WSTM (Syracuse, NBC)

** HD-compatible converter and TV set required to receive HD signals.*

Hamilton

Dear Time Warner Cable Customer:

We're pleased to bring you up-to-date with your Time Warner Cable service, provide you with a new channel lineup card (attached) that features all of our available channels, describe some exciting new features and detail changes to our rates for some services effective January 1.

This past year, we've strived to enhance our programming by adding several new networks to our Standard service. We increased your lineup with four new channels including YES: Yankees Entertainment and Sports, The National Geographic Channel, Lifetime Movie Network and Local WeatherNOW, found exclusively on Time Warner Cable channel 10.*

If you don't have Digital Cable, see what you're missing by reviewing our Digital lineup. Then, call us to add this service which also features: an easy-to-use Interactive Program Guide; 45 commercial-free, Digital music channels; access to 39 Pay-Per-View channels with Time Warner Home Theatre; sports packages like the NBA League Pass, NHL Center Ice and ESPN Full Court (college basketball); and, more than 55 screens of commercial-free premium movie channels. There has never been a better time to join the Digital Cable revolution, and with our introduction of our video-on-demand service you'll even be able to browse a library of movies and your favorite programs and order, play, pause, rewind and fast-forward those with the touch of a button.

TIME WARNER CABLE

HM

CURRENT ANNUAL PERFORMANCE TEST

Table of Contents

TIME WARNER CABLE
SYRACUSE DIVISION

CATV

Proof - of - Performance Tests

System Name: ILION

Plant Mileage: 297.11 **As of** JULY 2, 2002

Basic Subscribers: 14,362 **As of** JULY 2, 2002

System Bandwidth: 550 Mhz **As of** JULY 2, 2002

Number of Channels Tested: 9

Number of Test Points: 7

Test Start Date: JULY 2, 2002

Test Completion Date: AUGUST 30, 2002

TIME WARNER CABLE--SYRACUSE DIVISION

SYSTEM NAME: ILION **DATE:** JULY 2, 2002

FCC TESTING SUMMARY

Changes Since Last Proof of Performance:

NO CHANGES TO FCC TEST OR LOCATIONS

Test Results:

HEADEND AND ALL TEST POINTS MET OR EXCEEDED FCC PROOF OF PERFORMANCE STANDARDS

Miscellaneous:

TIME WARNER CABLE--SYRACUSE DIVISION

SYSTEM NAME: ILION **DATE:** JULY 2, 2002

ACTUAL CHAN	CARRIER FREQ	CONV CHAN	TYPE	SCRAM "Y"	VITS "Y"	CALL LTR	PROG SOURCE
2	55.2500	2	TV			WKTV-2	OFF-AIR
3	61.2500	3	TV			WFXV-33	OFF-AIR
4	67.2500	4	TV			WCNY-24	OFF-AIR
5	77.2500	5	TV			WTVH-5	OFF-AIR
6	83.2500	6	TV			HBO	SATELLITE
A-5	91.2500	79	TV	Y		STARZI	SATELLITE
A-4	97.2500	96	TV			TVSS/JOBSHOW	SAT/TAPEDECK
A-3	103.2500						
A-2	109.2750						
A-1	115.2750	99	TV			SHOPATHOME	SATELLITE
A	121.2625	14	TV			USA	SATELLITE
B	127.2625	15	TV			FAMILY CH.	SATELLITE
C	133.2625	16	TV			MSG	SATELLITE
D	139.2500	17	TV			TNT	SATELLITE
E	145.2500	18	TV			VALUE VISION	SATELLITE
F	151.3210	19	TV			AMC	SATELLITE
G	157.2500	20	TV			VH-1	SATELLITE
H	163.2500	21	TV			ODYSSEY	SATELLITE
I	169.2500	22	TV			COMEDY	SATELLITE
7	175.2500	7	TV			WUTR-20	OFF-AIR
8	181.2500	8	TV			WUPN(PNY)	OFF-AIR
9	187.2500	9	TV			QVC	SATELLITE
10	193.2500	10	TV			PUBLIC ACCESS	HCCC MICROWAVE
11	199.2500	11	TV			CKWS-11	FIBER FEED
12	205.2500	12	TV			WPIX-11	SATELLITE
13	211.2500	13	TV			WTBS	SATELLITE
J	217.2500	23	TV			C-SPAN	SATELLITE
K	223.2500	24	TV			LIFETIME	SATELLITE
L	229.2625	25	TV			CNN HEADLINE	SATELLITE
M	235.2625	26	TV			TNN	SATELLITE
N	241.2625	27	TV			TDC	SATELLITE
O	247.2625	28	TV			FSNY	SATELLITE
P	253.2625	29	TV			TLC	SATELLITE
Q	259.2625	30	TV			MTV	SATELLITE
R	265.2625	31	TV			CNBC	SATELLITE
S	271.2625	32	TV			NICKELODEON	SATELLITE
T	277.2625	33	TV			TWC	SATELLITE
U	283.2625	34	TV			CNN	SATELLITE
V	289.2625	35	TV			A&E	SATELLITE
W	295.2625	36	TV			WBU-TV	SATELLITE
AA	301.2625	37	TV			COURT TV	SATELLITE
BB	307.2625	38	TV			EMP/SP	SATELLITE
CC	313.2625	39	TV			EWTN	SATELLITE
DD	319.2625	40	TV			C-SPAN 2	SATELLITE
EE	325.2625	41	TV			E!	SATELLITE
FF	331.2750	42	TV			TV FOOD	SATELLITE
GG	337.2625	43	TV			ESPN	SATELLITE
HH	343.2625	44	TV			MSNBC	SATELLITE
II	349.2625	45	TV			CARTOON	SATELLITE
JJ	355.2625	46	TV			CMTV	SATELLITE
KK	361.2625	47	TV			TV LAND	SATELLITE
LL	367.2625	48	TV			PREVIEW	SATELLITE
MM	373.2625	49	TV			CNN/SI	SATELLITE
NN	379.2625	50	TV			FOX NEWS	SATELLITE
OO	385.2625	51	TV			ANIMAL PLANET	SATELLITE
PP	391.2625	52	TV			BET	SATELLITE
QQ	397.2625	53	TV			SCIFI	SATELLITE
RR	403.2500	54	TV			HGTV	SATELLITE
SS	409.2500	55	TV			PAX-TV	SATELLITE
TT	415.2500	56	TV			PPV PREVIEW	SATELLITE/LASER DISK
UU	421.2500	57	TV			TRAVEL	SATELLITE
VV	427.2500	58	TV			BRAVO	SATELLITE
WW	433.2500	59	TV			FX	SATELLITE
XX	439.2500	60	TV			HSN	SATELLITE
YY	445.2500	61	TV			ESPN2	SATELLITE
ZZ	451.2500	62	TV			WE	SATELLITE
63	457.2500	63	TV			GOLF	SATELLITE
64	463.2500	64	TV			ESPN C	SATELLITE
65	469.2500	65	TV			HISTORY	SATELLITE
66	475.2500	66	TV			TCM	SATELLITE
67	481.2500	67	TV			OXYGEN	SATELLITE
68	487.2500	68	TV			SOAPNET	SATELLITE
69	493.2500	69	TV			DISNEY	SATELLITE
70	499.2500	70	TV	Y		PLAYBOY	SATELLITE
71	505.2500	71	TV	Y		VC-1	SATELLITE
72	511.2500	72	TV	Y		HOT CHOICE	SATELLITE
73	517.2500	73	TV	Y		VC-5	SATELLITE
74	523.2500	74	TV	Y		VC-3/ SPICE	SATELLITE
75	529.2500	75	TV	Y		SHOWTIME	SATELLITE
76	535.2500	76	TV	Y		HBO PLUS	SATELLITE
77	541.2500	77	TV	Y		CINEMAX	SATELLITE
78	547.2500	78	TV	Y		HBO SIGNATURE	SATELLITE

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
	Tune 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	WAM!	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	2823	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 / 619 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 8 Hits Feed (KU)	472
					1472	3	3	51	ESPN sports pkg 2	G7 (G11) Tr 8 Hits Feed (KU)	473
					1473	4	4	52	ESPN sports pkg 3	G7 (G11) Tr 8 Hits Feed (KU)	474
					1474	5	5	53	ESPN sports pkg 4	G7 (G11) Tr 8 Hits Feed (KU)	475
					1475	6	6	54	ESPN sports pkg 5	G7 (G11) Tr 8 Hits Feed (KU)	476
					1476	7	7	47	ESPN sports pkg 6	G7 (G11) Tr 8 Hits Feed (KU)	477
					1477	8	8	48	ESPN sports pkg 7	G7 (G11) Tr 8 Hits Feed (KU)	478
					1478	10	10	50	ESPN sports pkg 8	G7 (G11) Tr 8 Hits Feed (KU)	479
5B	QAM14	717 / 579 MHz	111 / 83	256	9001	1	1	61	NHL / MLB 1	GE 1 Tr 13	480
GBIG 4	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	QAM15	735 / 489 MHz	114 / 68	256	1359	6	6	4	Starz!2 West	Satcom C4 Tr 5	363
GBIG 5	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	QAM16	741 / 489 MHz	115 / 68	256	1353	1	1	1	Showtime Next	Satcom C3 Tr 16	345
GBIG 5	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	QAM17	633 / 501 MHz	92 / 70	256	1208	4	1	41	VH1 Classic	Satcom C3 Tr 15	144
GBIG 5	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: ILION **DATE:** JULY 2, 2002

NON-VIDEO SERVICES

CARRIER FREQ	DESCRIPTION	BANDWIDTH	PROG SOURCE
53.0000	DATA	1MHz	SST
105.0000	SWEEP	1MHz	HP3010H
106.2000	DATA	1MHz	ATX
108.2000	DATA	1MHz	ATX
111.0000	DIGITAL CARRIER	1MHz	SA/MOD
573.0000	DATA	6MHz	DOCSIS
579.0000	DATA	6MHz	MOTOROLA

TIME WARNER CABLE
SYRACUSE DIVISION

Proof - of - Performance Test

System Name: ILION

Statement of Qualifications

Employee Name:	MARK A. D'AOUST	Title:	FIELD ENGINEER
System:	TIME WARNER EAST REGION		
Qualifications:	NCTI SERVICE TECH		
	18 YEARS CATV EXPERIENCE		
	TIME WARNER /SYRACUSE DIVISION		
	FCC SCHOOL 1996/1998		

Employee Name:	JOEL P. MARMON	Title:	HEADEND TECH.
System:	TIME WARNER EAST REGION		
Qualifications:	NCTI FIBER OPTICS		
	NCTI TESTS AND MEASUREMENTS		
	NCTI ADVANCED TECH.		
	15YEARS CATV EXPERIENCE		

Employee Name:	GREG COBB	Title:	MAINTENANCE TECH
System:	TIME WARNER EAST REGION		
Qualifications:	NCTI TECH, FIBER OPTICS		
	TIME WARNER FIBER OPTIC LEVEL 1		
	TIME WARNER DIGITAL 1,2&3		
	20 YEARS CATV EXPERIENCE		

TIME WARNER CABLE
SYRACUSE DIVISION

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

System Name: ILION

Date: JULY 2, 2002

Test Equipment				
Equipment Description	Model #	Manufacturer	Serial #	Last Calib
SPECTRUM ANALYZER	8591C	H-P	3829A02865	11/01
NTSC TV GENERATOR	TSG-120	TEKTRONIX	B031159	N/A
TUNABLE BANDPASS FILT.	55/880	TRILITHIC	9909070	N/A
20 DB AMPLIFIER	AM1000	TRILITHIC	9910147	N/A
SIGNAL LEVEL METER	3010	CALAN/HP	US37241488	1/00
SIGNAL LEVEL METER	3010R	CALAN/HP	US40306138	1/01

TIME WARNER CABLE
SYRACUSE DIVISION

Terminal Isolation Test

System Name: ILION

Date: JULY 2, 2002

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.

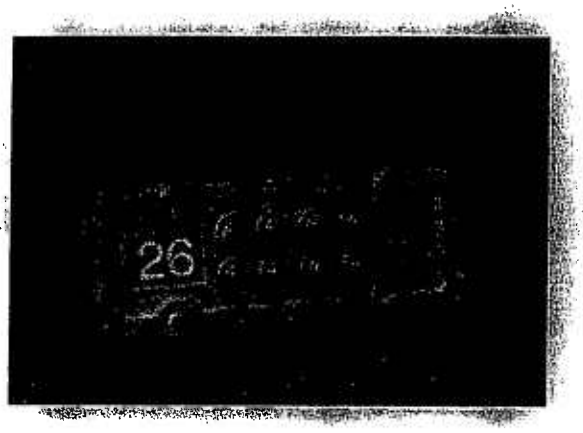
Taps and Passives

Scientific Atlanta

Multimedia Stretch™ Taps

Description

Scientific-Atlanta's Multimedia Stretch™ Tap is designed to support the delivery of advanced applications and services in a cost-effective platform. In addition to providing high quality RF performance specifications that are essential to the reliable transmission of data and digital video services, the Multimedia Stretch Tap includes the capability to house other performance-enhancing options. As an example, we have developed and field-tested a version of the plug-in directional coupler that cost-effectively balances reverse path signals resulting in a marked performance improvement in this challenging portion of your networks. Recently completed is an addressable version of the Multimedia Stretch Tap faceplate that introduces significant operating cost savings and new revenue-generating opportunities.



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

Features

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

Multimedia Stretch Tap

The Multimedia Stretch Tap also provides an important level of network flexibility by enabling reversibility. As operators expand the fiber optic portion of their broadband networks, the result is often a reversal of the feeder signal flow. By simply changing the orientation of the plug-in directional coupler module, technicians can avoid time consuming and expensive resplicing of the cable.

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.

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.

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 m W x 88.9 mm D

Mechanical

- AL360T housing with powder paint coating and aluminum end plugs for environmental protection
- Sealed and swaged extended F-ports for enhanced resistance to moisture ingress
- Nickel-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 100 dB
- Pressure tested at 10 psi for 60 seconds under water.

Electrical Specifications

- Thru Continuous current 12 amps – 60/90 V AC
- Current limiting 250 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's Multimedia Stretch Taps meet or exceed the following industry standards:

Mechanical

- SCTE IPS-SP-400 – F-port interface specification
- SCTE IPS-SP-420 - entry port interface specification

Emissions

- FCC – Part 76, Subpart K
- EN 50083-2

Environmental

- ASTM G 53 - weathering specification
- ASTM B 117 - salt spray specification
- ASTM D 3170 - chip resistance specification
- ASTM G 21 - fungus growth rate of zero
- EN 50083-1

Specifications and product availability are subject to change.

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 Mean	0.4 Max 0.3 Mean	0.5 Max 0.4 Mean	0.7 Max 0.6 Mean
Short Circuited Return Loss (dB)	40 Max 53 Mean	16 Max 18 Mean	16 Max 17 Mean	14 Max 15 Mean

Multimedia Stretch Tap

2-Way

	Freq.	Tap Value															
		4 dB		8 dB		11 dB		14 dB		17 dB		20 dB		23 dB		26 dB		29 dB	
	MHz	Mean	Max	Mean	Max	Mean	Max	Mean	Max	Mean	Max	Mean	Max	Mean	Max	Mean	Max	Mean	Max
Insertion Loss	5	-		3.45		1.91		1.16		0.85		0.76		0.76		0.76		0.76	
(dB)	40	-		3.18		1.47		0.87		0.60		0.49		0.50		0.50		0.50	
	50	-		3.20		1.47		0.87		0.61		0.49		0.49		0.49		0.49	
	450	-		4.13		2.29		1.64		1.39		1.19		1.22		1.22		1.22	
	550	-		4.00		2.36		1.73		1.49		1.26		1.30		1.30		1.30	
	750	-		3.69		2.40		1.82		1.60		1.34		1.38		1.38		1.38	
	870	-		3.97		2.55		1.97		1.78		1.43		1.46		1.46		1.46	
	1000	-		4.67		2.86		1.99		1.78		1.36		1.35		1.35		1.35	
Tap Loss	5	4.98		7.76		11.39		13.79		16.68		19.87		22.71		25.87		29.27	
(dB)	40	4.31		7.40		11.45		13.84		16.48		19.89		22.60		25.65		28.92	
(Max tolerance	50	4.10		7.40		11.44		13.82		16.43		19.86		22.58		25.64		28.90	
±1 dB)	450	4.79		7.95		11.31		13.66		16.74		19.51		22.16		25.27		28.29	
	550	4.44		8.10		11.24		13.63		16.84		19.31		22.06		25.29		28.20	
	750	4.55		8.40		11.50		13.66		16.94		19.51		22.50		26.01		28.74	
	870	4.87		8.48		11.69		13.92		17.21		19.87		22.90		26.55		29.23	
	1000	4.97		8.56		11.17		13.67		16.39		19.56		22.65		26.37		28.96	
Return Loss	5	15		14		12		13		14		14		14		14		14	
(dB, min)	10	14		15		15		15		15		15		15		15		15	
	50	15		15		15		15		15		15		15		15		15	
	750	15		15		15		15		15		15		15		15		15	
	870	15		15		15		15		15		15		15		15		15	
	1000	15		14		14		14		15		15		15		15		15	
Tap-to-Tap	5	18		18		18		18		18		18		18		18		18	
Isolation	750	18		18		18		18		18		18		18		18		18	
(dB,min)	1000	18		18		18		18		18		18		18		18		18	
Out-to-Tap	5	-		18		20		20		22		25		25		35		35	
Isolation	750	-		18		20		22		22		25		25		35		35	
	1000	-		18		20		22		22		25		25		35		35	

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	563542	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
	SAT STM2-25	562115	Multimedia Stretch Tap Module 25 dB

Multimedia Stretch Tap
4-Way

	Freq.	Tap Value							
		8 dB	11 dB	14 dB	17 dB	20 dB	23 dB	26 dB	29 dB
	MHz	Mean Max	Mean Max	Mean Max	Mean Max	Mean Max	Mean Max	Mean Max	Mean Max
Insertion Loss	5	-	3.45	1.91	1.16	0.85	0.76	0.76	0.76
(dB)	40	-	3.18	1.47	0.87	0.60	0.49	0.50	0.50
	50	-	3.20	1.47	0.87	0.61	0.49	0.49	0.49
	450	-	4.13	2.29	1.64	1.39	1.19	1.22	1.22
	550	-	4.00	2.36	1.73	1.49	1.26	1.30	1.30
	750	-	3.69	2.40	1.82	1.60	1.34	1.38	1.38
	870	-	3.97	2.55	1.97	1.78	1.43	1.46	1.46
	1000	-	4.67	2.86	1.99	1.78	1.36	1.35	1.35
Tap Loss	5	8.15	10.86	14.18	16.67	19.95	22.89	25.70	28.70
(dB)	40	7.58	10.58	14.57	17.03	19.67	23.05	25.82	28.81
(Max tolerance	50	7.38	10.58	14.55	17.02	19.63	23.03	25.80	28.80
±1 dB)	450	7.86	11.11	14.51	16.75	20.00	22.77	25.57	28.62
	550	7.56	11.38	14.43	16.72	20.27	22.59	25.52	28.61
	750	7.74	11.72	14.80	16.76	20.24	22.85	25.67	29.12
	870	8.12	12.27	15.04	17.15	20.69	23.37	26.21	29.66
	1000	8.73	12.44	15.18	17.11	20.50	23.60	26.31	30.04
Return Loss	5	14	14	12	14	14	14	14	14
(dB, min)	10	14	15	14	15	15	15	15	15
	50	15	15	15	15	15	15	15	15
	750	14	15	15	15	15	15	15	15
	870	15	15	15	15	15	15	15	15
	1000	15	14	15	14	14	14	15	14
Tap-to-Tap	5	18	18	18	18	18	18	18	18
Isolation	750	18	18	18	18	18	18	18	18
(dB,min)	1000	18	18	18	18	18	18	18	18
Out-to-Tap Isolation	5	-	18	20	22	25	25	35	35
	750	-	18	20	22	25	25	35	35
	1000	-	18	20	22	25	25	35	35

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	563543	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
8-Way

	Freq.	Tap Value											
		11 dB		14 dB		17 dB		20 dB		23 dB		26 dB		29dB	
	MHz	Mean	Max	Mean	Max	Mean	Max	Mean	Max	Mean	Max	Mean	Max	Mean	Max
Insertion Loss	5	-		3.45		1.91		1.16		0.85		0.76		0.76	
(dB)	40	-		3.18		1.47		0.87		0.60		0.49		0.50	
	50	-		3.20		1.47		0.87		0.61		0.49		0.49	
	450	-		4.13		2.29		1.64		1.39		1.19		1.22	
	550	-		4.00		2.36		1.73		1.49		1.26		1.30	
	750	-		3.69		2.40		1.82		1.60		1.34		1.38	
	870	-		3.97		2.55		1.97		1.78		1.43		1.46	
	1000	-		4.67		2.86		1.99		1.78		1.36		1.35	
Tap Loss	5	11.34		14.50		17.71		20.21		23.43		26.13		28.93	
(dB)	40	10.84		13.91		17.82		20.34		22.79		26.16		29.07	
(Max tolerance	50	10.62		13.90		17.79		20.31		22.80		26.20		29.06	
±1 dB)	450	11.07		14.56		17.77		20.16		23.28		25.95		28.87	
	550	11.17		14.85		17.95		20.24		23.53		25.96		28.84	
	750	11.33		15.55		18.52		20.44		23.94		26.28		29.25	
	870	11.87		16.18		18.96		20.92		24.53		26.78		30.08	
	1000	12.35		16.34		19.05		21.08		24.48		27.06		30.48	
Return Loss	5	14		14		12		14		14		14		14	
(dB, min)	10	14		15		15		15		15		15		15	
	50	15		15		15		15		15		15		15	
	750	14		15		15		15		15		15		15	
	870	15		15		14		15		15		15		15	
	1000	15		14		14		14		14		14		14	
Tap-to-Tap	5	18		18		18		18		18		18		18	
Isolation	750	18		18		18		18		18		18		18	
(dB,min)	1000	18		18		18		18		18		18		18	
Out-to-Tap Isolation	5	-		20		22		25		25		35		35	
	750	-		20		22		25		25		35		35	
	1000	-		20		22		25		25		35		35	

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	563544	Multimedia Stretch Tap 8-Way Faceplate Assembly
Directional coupler Module	SAT STM-0	543487	Multimedia Stretch Tap Module 0 dB
	SAT STM-4	562108	Multimedia Stretch Tap Module 4 dB
	SAT STM-7	562109	Multimedia Stretch Tap Module 7 dB
	SAT STM-10	562110	Multimedia Stretch Tap Module 10 dB
	SAT STM-13	562111	Multimedia Stretch Tap Module 13 dB
	SAT STM-16	562112	Multimedia Stretch Tap Module 16 dB
	SAT STM-19	562113	Multimedia Stretch Tap Module 19 dB
	SAT STM-22	562114	Multimedia Stretch Tap Module 22 dB
	SAT STM-25	562115	Multimedia Stretch Tap Module 25 dB

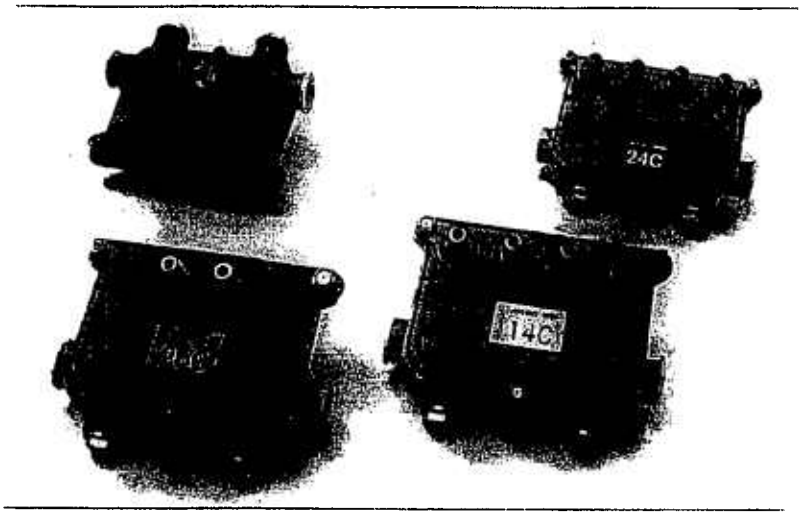
Other Stretch Tap Accessories

- DC/EQ Plug-in modules
- Addressable Multimedia Stretch Taps
- Multimedia Stretch Taps with Technician Access

Scientific-Atlanta, Inc.
1-800-722-2009 or 770-903-6900
www.sciatl.com

Part Number 571710 Rev D
December 1999

Conventional Multi-Taps



9000-C Series

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

- Optional continuous AC and RF power passing circuits eliminate downstream service interruptions when 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-C 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-C series multi-taps all share these standard features:

- 1 GHz bandwidth capacity,
- brass SCTE F-ports with drip lips and rubber boots,
- RFI and weather gaskets,
- network power capacity of 90 VAC, 0 to 60 Hz,
- strip gauges and heat-shrink ridges for easy installation,
- numbered ports for easier subscriber audits,
- 2.5 KV surge resistance meets ANSI/IEEE C62.41-1991 Class B, 2500 V surge and 12-amp current handling capability,
- interchangeable 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 is coated with a protective finish, which provides excellent corrosion resistance. Rubber boots inside the brass SCTE F-ports help keep the 9000-C 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.

Order the 9000T-PWR-FI power bypass assembly option to prevent interruptions in power and RF service when face plates are removed. Also, order the 9000-USB-PBT for easy aerial to underground interconnections.

Nominal Performance*

9200-C 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 (In/Out)											
10 MHz	—	2.8	1.3	1.0	0.9	0.7	0.3	0.3	0.3	0.3	dB
30 MHz	—	2.8	1.3	0.8	0.7	0.6	0.3	0.3	0.3	0.3	dB
54 MHz	—	2.8	1.3	0.7	0.7	0.6	0.3	0.3	0.3	0.3	dB
112 MHz	—	3.2	1.7	0.9	0.8	0.7	0.5	0.5	0.4	0.4	dB
150 MHz	—	3.2	1.7	0.9	0.8	0.7	0.5	0.5	0.4	0.4	dB
186 MHz	—	3.2	1.7	0.9	0.8	0.7	0.5	0.5	0.4	0.4	dB
222 MHz	—	3.3	1.7	0.9	0.9	0.8	0.5	0.5	0.5	0.5	dB
330 MHz	—	3.4	1.8	0.9	0.9	0.8	0.5	0.5	0.5	0.5	dB
400 MHz	—	3.4	1.9	1.0	0.9	0.8	0.6	0.6	0.5	0.5	dB
450 MHz	—	3.4	1.9	1.0	0.9	0.8	0.6	0.6	0.5	0.5	dB
550 MHz	—	3.5	1.9	1.0	0.9	0.8	0.6	0.6	0.5	0.6	dB
600 MHz	—	3.8	2.1	1.1	1.0	0.9	0.6	0.6	0.6	0.6	dB
750 MHz	—	4.3	2.5	1.2	1.2	1.0	0.8	0.8	0.7	0.8	dB
862 MHz	—	4.5	2.8	1.4	1.3	1.1	0.9	0.9	0.9	1.0	dB
1000 MHz	—	4.8	3.5	1.6	1.3	1.1	1.0	1.0	1.0	1.1	dB
Tap Loss											
10-19 MHz	3.4	7.7	10.8	13.7	15.7	18.4	21.2	24.4	27.3	30.3	dB
20-899 MHz	3.7	8.0	11.1	14.9	17.4	20.0	22.6	25.5	28.1	31.2	dB
900-1000 MHz	5.2	9.6	11.0	15.2	17.0	20.0	23.2	26.5	29.1	32.3	dB

*All specifications are subject to change without notice.

Conventional Multi-Taps

Worst Case Specifications* — 9200-C 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	12	12	12	12	12	12	12	12	12	amps
Voltage Passing Capacity (min.)											
0-60 MHz	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

Nominal Performance*

9400-C 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 (In/Out)											
10 MHz	—	3.5	1.3	1.0	0.9	0.6	0.3	0.3	0.3	0.3	dB
30 MHz	—	3.4	1.3	0.7	0.7	0.6	0.3	0.3	0.3	0.3	dB
54 MHz	—	3.4	1.3	0.7	0.7	0.6	0.3	0.3	0.3	0.3	dB
112 MHz	—	3.8	1.7	0.9	0.8	0.7	0.5	0.5	0.5	0.5	dB
150 MHz	—	3.8	1.7	0.9	0.8	0.7	0.5	0.5	0.5	0.5	dB
186 MHz	—	3.9	1.8	0.9	0.9	0.7	0.5	0.5	0.5	0.5	dB
222 MHz	—	3.9	1.8	0.9	0.9	0.7	0.5	0.5	0.5	0.5	dB
330 MHz	—	4.0	1.8	0.9	0.9	0.7	0.5	0.5	0.5	0.5	dB
400 MHz	—	4.1	1.8	1.0	0.9	0.8	0.5	0.6	0.6	0.5	dB
450 MHz	—	4.1	1.8	1.0	0.9	0.8	0.5	0.6	0.6	0.5	dB
550 MHz	—	4.2	1.9	1.0	0.9	0.8	0.6	0.6	0.6	0.6	dB
600 MHz	—	4.4	2.1	1.1	0.9	0.8	0.6	0.6	0.7	0.6	dB
750 MHz	—	4.7	2.6	1.3	1.1	1.0	0.9	0.8	0.8	0.8	dB
862 MHz	—	4.8	3.0	1.6	1.3	1.1	1.1	1.0	1.0	1.0	dB
1000 MHz	—	4.9	3.6	1.8	1.3	1.1	1.1	1.0	1.0	1.0	dB
Tap Loss											
10-19 MHz	6.9	10.3	14.5	15.8	19.4	22.1	24.9	27.9	31.0	34.2	dB
20-899 MHz	7.2	10.7	14.7	17.6	21.0	23.6	26.3	29.2	32.2	35.3	dB
900-1000 MHz	8.2	12.8	15.0	18.2	20.7	23.2	26.0	29.1	32.0	35.2	dB

*All specifications are subject to change without notice.

Conventional Multi-Taps

Worst Case Specifications* — 9400-C 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	12	12	12	12	12	12	12	12	12	amps
Voltage Passing Capacity (min.)											
0-60 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

Nominal Performance*

9800-C 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	—	3.5	1.4	1.1	0.9	0.7	0.3	0.3	0.3	dB
30 MHz	—	3.4	1.3	0.9	0.7	0.6	0.3	0.3	0.3	dB
54 MHz	—	3.4	1.3	0.9	0.7	0.5	0.3	0.3	0.3	dB
112 MHz	—	3.8	1.7	1.0	0.8	0.7	0.4	0.5	0.4	dB
150 MHz	—	3.8	1.7	1.0	0.8	0.7	0.4	0.5	0.4	dB
186 MHz	—	3.9	1.8	1.0	0.8	0.7	0.4	0.5	0.4	dB
222 MHz	—	3.9	1.8	1.1	0.8	0.7	0.4	0.5	0.4	dB
330 MHz	—	4.0	1.9	1.1	0.8	0.7	0.5	0.5	0.5	dB
400 MHz	—	4.1	2.0	1.1	0.8	0.7	0.5	0.5	0.5	dB
450 MHz	—	4.1	2.0	1.1	0.9	0.7	0.6	0.6	0.5	dB
550 MHz	—	4.2	2.0	1.1	0.9	0.7	0.6	0.6	0.6	dB
600 MHz	—	4.5	2.2	1.2	0.9	0.8	0.7	0.7	0.6	dB
750 MHz	—	4.9	2.6	1.3	1.0	0.9	0.8	0.8	0.8	dB
862 MHz	—	5.0	2.9	1.5	1.2	1.1	1.0	1.0	1.0	dB
1000 MHz	—	5.2	3.5	1.7	1.2	1.1	1.1	1.1	1.1	dB
Tap Loss										
10-19 MHz	10.7	13.3	17.8	19.4	22.3	25.5	28.8	32.2	34.5	dB
20-899 MHz	11.3	14.7	18.4	20.6	24.3	26.7	30.4	32.3	35.6	dB
900-1000 MHz	13.0	16.7	18.8	20.7	25.1	27.8	30.4	33.2	36.3	dB

*All specifications are subject to change without notice.

Conventional Multi-Taps

Worst Case Specifications* — 9800-C 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	12	12	12	12	12	12	12	12	amps
Voltage Passing Capacity (min.)										
0 to 60 MHz	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

Conventional Multi-Taps

Specifications (continued)

9000-C 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.

PHILIPS

TIME WARNER CABLE
SYRACUSE DIVISION

Converter & Trap Specifications

System Name: ILION

Date: JULY 2, 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.

Time Warner Cable
Syracuse Division

CONVERTER
IN - CHANNEL FREQUENCY RESPONSE TEST

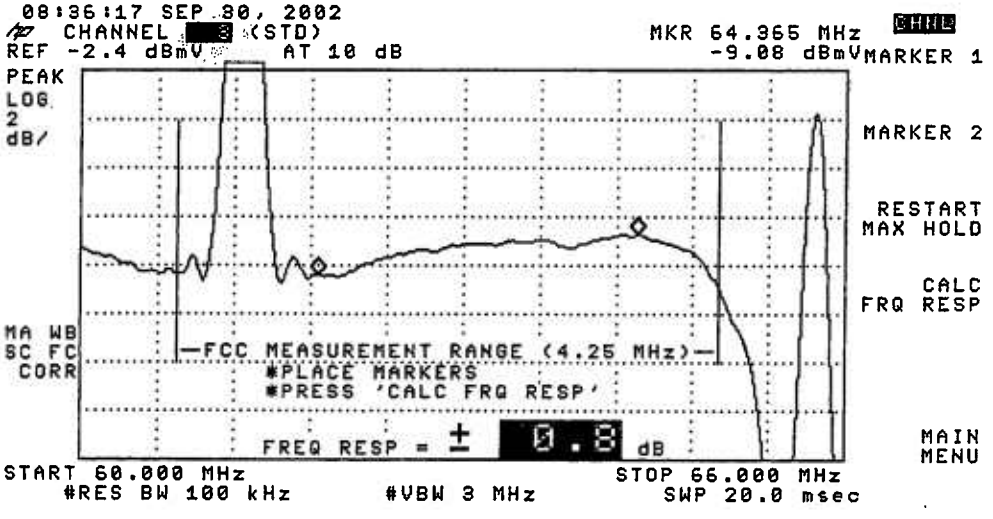
(76.605 (a) 6)

System Name: ILION Date: AUGUST 6, 2002

Test Performed By MARK D'AOUST Location: HEADEND

MODEL: G/I CFT2014/V5 SERIAL# T3K2401588CI

(SEE THE ATTATCHED SWEEP TRACES)



Time Warner Cable
Syracuse Division

CONVERTER
IN - CHANNEL FREQUENCY RESPONSE TEST

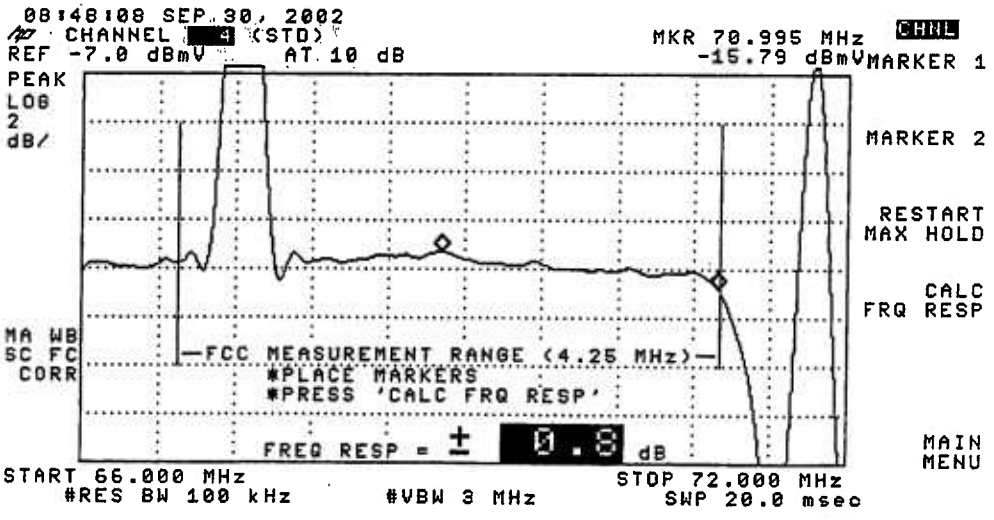
(76.605 (a) 6)

System Name: ILION Date: AUGUST 6, 2002

Test Performed By MARK D'AOUST Location: HEADEND

MODEL: S/A-2100DHCT SERIAL# SABCTTCPR

(SEE THE ATTATCHED SWEEP TRACES)



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

Eagle Graphics/Video Processing Specifications

Item	Specification
Video resolution	Up to 720 x 480 VGA
Graphics resolution	Up to 640 x 480 VGA non-interlaced
Color graphics display mode	256 or 65,000
Graphics features	• Video scaling and capturing • Alpha blending • 8 or 16 bit color • Square and round pixel display • Anti-flutter filter • Anti-aliasing fonts • Supports transparent, translucent, and opaque graphics and overlays

Environmental Specifications

Item	Specification
Operational temperature range	0°C to 40°C (32°F to 104°F)
Humidity	5% to 95%, non-condensing

Regulatory Specifications

The EXPLORER 2000 Digital Home Communications Terminal (DHCT) meets FCC Part 15, subpart B, class B, applicable parts of Part 76, and UL rule #1409 under the required category of Cable Terminal Devices.

Remote Control Specifications

Introduction

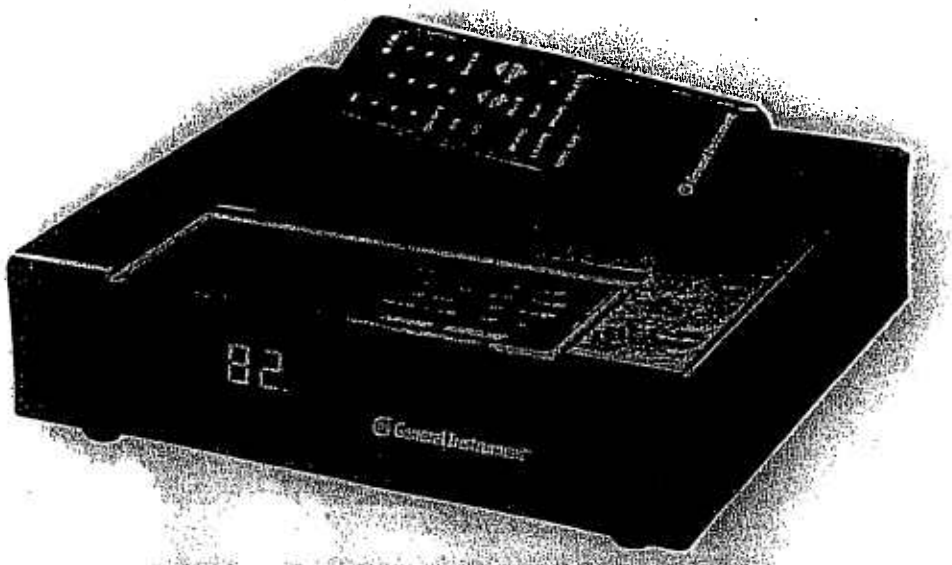
This section contains specifications for the Model 2050-ER1 remote control.

Remote Control Specifications

Item	Specification
IR wavelength	940 nm
Transmitting Range to EXPLORER 2000 DHCT at 2.8 V minimum voltage	• Straight to STT - 8 meters • Remote 30 degrees off center (all directions) • Remote 80 degrees up
Power	• Operational at a minimum battery voltage of 2.4 V • Meets specifications at 2.8 V • The microprocessor remains in stop mode to conserve power until the user presses a button.
Batteries	Uses 2 AA alkaline batteries
Operating temperature	0°C to 40°C (32°F to 104°F)

IMPULSE® 7000 Series
DPBB7300P

Impulse-Capable
Baseband Addressable Terminal



Impulse With Enhanced Baseband Security

FEATURES

- UNMATCHED BASEBAND SCRAMBLING
- LOW NOISE TUNER
- FULLY DOWNLOADABLE
- TWO-WAY UPGRADABLE WITH INTERNAL MODULES

The General Instrument IMPULSE 7000 (Model DPBB7300P) is a 550 MHz (82-channel) baseband addressable terminal that offers the reliability, flexibility and control of the IMPULSE 7000 series.

The hi-tech styling of this attractive terminal allows it to seamlessly blend into today's modern home entertainment centers. The DPBB7300P is backward-compatible with all GI's addressable products and systems using Hamlin scrambling.

BASEBAND SCRAMBLING

The DPBB7300P represents GI's fourth generation of baseband addressable terminals and offers a level of video security unparalleled in the industry today. The DPBB7300P descrambles GI's state-of-the-art, proprietary baseband scrambling schemes, including dynamic video inversion, dynamic sync suppression and subcarrier jamming audio privacy.

Baseband processing also provides volume control capability, allowing the subscriber to adjust the volume level through the remote control unit. The DPBB7300P passes BTSC stereo signals to subscribers with stereo TVs and VCRs.

LOW-NOISE FILTER

The DPBB7300P incorporates an AGC pre-amplified tuner with custom video and audio SAW filters for improved audio/video performance.

ONE- AND TWO-WAY IMPULSE MODULES

GI's field-upgradable STARFONE® impulse modules allow one-way addressable systems to offer push-button subscriber ordering by using the cable system for downstream communications to subscriber homes and a telephone return path for upstream return messaging.

GI's store-and-forward technology permits instant authorization of terminals while a programmable credit limit allows operators to restrict the maximum purchases for each subscriber.

The STARVUE® module, similarly field-upgradable, uses the same store-and-forward impulse technology. STARVUE, however, employs a cable return path for upstream communications. Both modules can handle event purchases with a 63-event limit. STARVUE is also capable of handling subscriber opinion polling.

DOWNLOADABILITY

Advanced downloading capability gives addressable computer control over each addressable terminal's parameters, key features and service authorizations. The built-in diagnostic capability provides valuable subscriber feedback on terminal functions, reducing truck rolls and offering excellent customer service via telephone diagnosis. The addressable terminal's downloadable channel assignment gives the cable operator maximum flexibility in channel allocation and downloadable channel output (2/3 or 3/4), reducing inventory requirements by encouraging exchange of terminals between systems. Up to six barker channels can be operator-programmed for such uses as marketing assistance, subscriber education, accounts receivable and parental control messaging.

SUBSCRIBER FEATURES

Subscriber-pleasing features include remote volume control via the MRC550 or optional TVRC, BUDDY or URC units. Subscribers can program their favorite channels, avail themselves of last-channel recall and lock-out channels using electronic parental control. The terminals also feature a convenience outlet.

The standalone time-controlled programming (TCP) feature allows a subscriber to videotape eight different events in one month's time or a series of single/everyday events. When used with the STARFONE or STARVUE internal modules, the terminal can even be programmed to purchase and record IPPV events while the subscriber is absent.

ADDRESSABLE SUPPORT

The ACC-2000/AH-4/4E/ACC-4000 addressable controllers can easily support all capabilities of this terminal.

GROWTH CAPABILITIES

The unit can be easily upgraded with any of the optional A/B or RF Bypass switches that GI offers.

The RF Bypass switch allows the subscriber to bypass the terminal and tune non-scrambled programs directly with a cable-ready TV or VCR.

General Instrument

ıtrolled channels. The lock and key nbols and parental control barker es remove any doubt whether the control feature is in use.

ıscriber Control Over Display Features. earch has shown that subscribers have erent preferences for either a clear or id menu background. The ICFT 2000 ws the subscriber to change the menu kground to a clear, partial or solid ıen, depending on personal preference. / can also adjust the centering of menus heir televisions.

ote Controls. The ICFT 2000 comes with ıoice of three special remote controls—TVRC-IOSD, MRC-OSD and the IN-VIEW. TVRC-IOSD and MRC-OSD are feature-. Special keys have been added to rol the on-screen display. The TVRC-OSD ıad uses colours to facilitate use. The -OSD remote control allows subscribers ım the television on and off and control V's volume in addition to controlling the inal. The IN-VIEW is a limited function ote control that uses only 10 keys to rol the terminal's volume, power, nels and most of the on-screen display s. The IN-VIEW's yellow colour and ist strap make the remote control ı ω keep track of.

RATOR FEATURES

CFT 2000 provides multiple screens of age space that operators can use to / customers of important information. screens can be used to verify customer ntments, remind customers of service ges or disconnect dates, and explain e outages. Notifying subscribers of her hazards in the area is another ple of how the operator can use this e.

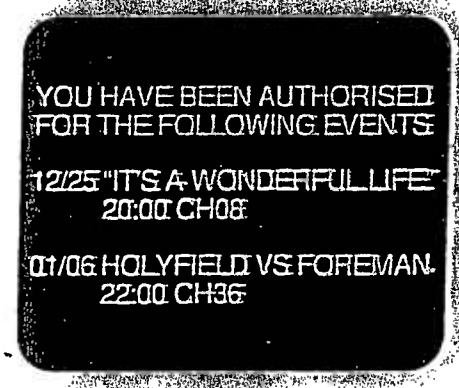
lition, the message screens can serve as ıtional tools, advertising upcoming pay-ew events and services and limited free / viewing, as well as important commu-ents. They offer the potential for other ve revenue generating ideas, such as ed advertising. Using the ICFT 2000, tors can send messages to specific ribers, to a group of selected sub-rs or to the entire subscriber base. ges can be customer-designed with GI's ssage editor, allowing operators to ir messages to suit specific needs.

BARKERS

The ICFT 2000 comes with two types of barkers—terminal-activated and operator-activated—allowing flexibility for operators who wish to guide subscriber viewing. All barker messages can be edited by the operator.

Terminal-Activated Barkers. Besides providing video off-tuning, the operator can choose a character-generated message explaining why a channel is off limits and what steps are necessary to change this (unlock the terminal, order the PPV service, etc.).

The ICFT 2000 offers six terminal-activated barkers, four standard barkers (parental control, impulse pay-per-view, unauthorised pay and disconnect) and two optional barkers (turn-on that appears each time the subscriber turns on the terminal and out-of-credit). These barkers are found in the channel map.



Operator-Activated Barkers. These appear only on scrambled channels that subscribers are authorised to view. The operator can use these to verify purchase of PPV events and services or to provide movie/event-specific information (moving running time or movie description). Operator-activated barkers can be programmed and sent on a specific scrambled channel to an individual subscriber, a group of subscribers or the entire subscriber base.

DOWNLOADABLE SYSTEM PARAMETERS

Downloadability gives the cable operator greater control and ease of operation. Using the ACC-4000 or the AH-4/4E controller, the operator can download such features as subscriber address, system site code, geographic code, output channel, barker channel, timeout period, custom channel assignment and input channel frequencies.

This downloading capability provides operator benefits such as centralised control over system functions, simplification of the installation process and reduction of inventory requirements. The software-selectable output channel capability enables the operator to easily switch between different terminal output channels. The 3/4 output channel allows for compatibility with subscriber VCRs so subscribers need not tune to one channel to watch TV and another to use the VCR. The output channel range 46-60 (UHF) is also available for PAL-I. This helps reduce inventory requirements by allowing interchange of terminals between systems.

IMPROVED SIGNAL SECURITY

Model ICFT 2000 descrambles GI's modes of dynamic video inversion coupled with dynamic sync suppression. It also offers audio privacy. GI's baseband scrambling scheme offers the most secure signal in the cable industry today, protecting operator investments in expensive pay and special event programming.

ELECTRONIC PROGRAMMING GUIDE (EPG)

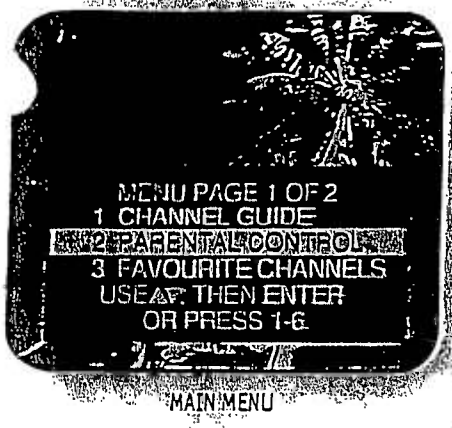
The operator can use the ICFT 2000's in-band and out-of-band message capability to provide programme guide information to subscribers. The ways of presenting this type of information, and the type of information presented, are many. Examples of EPG information include movie and/or programme-specific descriptions of current and/or future programmes or movies. Schedule information is another possibility. Events/programmes in a specific period could be organized by subject matter.

TWO-WAY UPGRADABILITY

The ICFT 2000 is upgradable to two-way operation using GI's STARVUE® internal module. The ICFT 2000 lets operators offer push-button impulse pay-per-view programming to subscribers without expensive rework.

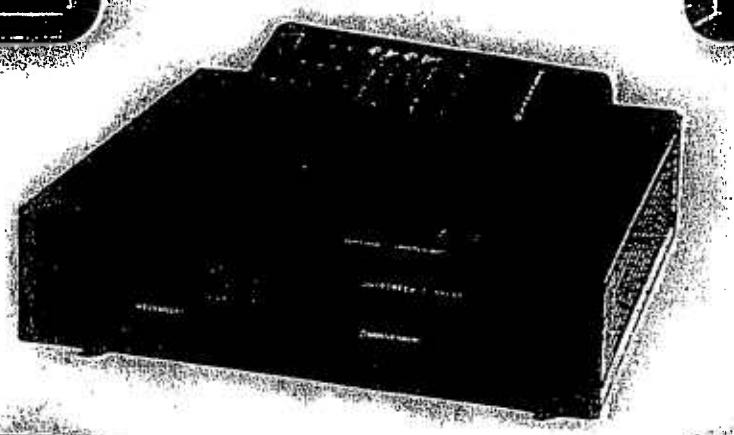
INTERCON 7000 Series
ICFT 2000

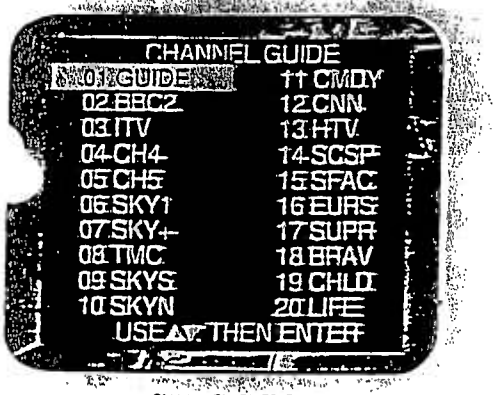
Baseband Addressable Terminal With On-Screen Display



MAIN MENU

MAIN MENU





CHANNEL GUIDE

MESSAGE DISPLAY

Impulse, Enhanced Baseband Scrambling and On-Screen Display

FEATURES

- ON-SCREEN DISPLAY
- UNMATCHED BASEBAND SCRAMBLING
- DIN STEREO COMPATIBILITY
- ELECTRONIC PROGRAMME GUIDE CAPABILITY
- NICAM AND TELETEXT COMPATIBLE
- TWO-WAY UPGRADABLE

The General Instrument ICFT 2000 is a 550 MHz impulse-capable international baseband terminal with consumer-friendly on-screen display programming capability and the unmatched scrambling security of baseband technology.

SUBSCRIBER FEATURES

)on-screen display feature is sophisti-.ted, yet easy to use. Multi-coloured, simple-format menus and help message-screens walk subscribers through even the nore complicated terminal functions, such as VCR timer programming and parental codes. It also makes purchasing PPV events and services even more convenient.

Channel I.D. When a subscriber changes channels, the on-screen display shows the channel number and name. It also indicates whether or not the terminal is locked, parentally controlled or 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 shows whether the volume has increased or decreased. Subscribers with stereo televisions or VCRs receive and enjoy stereo programming because the ICFT 2000 passes NICAM and DIN stereo signals.

VCR Timers. Subscribers can programme up to eight events over a 365-day period. The ICFT 2000 makes it possible to programme events on a once, daily, weekly, weekday and weekend basis. It is also easy to review and correct already-programmed events.

Parental Control. The on-screen menus make it easier to activate and deactivate parentally

General Instrument

MPULSE® 7000 Series
DPBB7300P

80-Channel Addressable Baseband Terminal

Specifications

MODEL	DPBB73★# (★ = 1 way/2 way, # = output channel 2/3)
Input Frequency	54-550 MHz (excluding data carrier frequency)
HRC/IRC Frequency Assignments	Downloaded
Number of Channels	80 channels per cable, one or two cables (less 2 channels: one for data frequency and one for OSC)
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	13 to 17 dBc
Data Carrier	FSK Modulated FM Carrier
Frequency	106.5 or 108.5 MHz
Bandwidth	±200 KHz standard TM
Level	−15 dBmV
Video S/N	48 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	5 dB min.
Output	8 dB min.
Spurious:	
Input	−57 dBc max., in band
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)
Output Level	10 to 15 dBmV
Isolation (Input/Output)	70 dB min.
Differential Gain	10% (max.)
Differential Phase	10 degrees (max.)
Scrambling Method	Gated Sync Suppression or Dynamic Gated Sync Suppression, Video Inversion, Audio Privacy, Hamlin Compatibility (Unauthorized viewing is switched to barker channel) Option: Oak Compatibility (A)
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 Terminal Configuration Authorization Information Barker Channel(s) Consumer Feature Enable/Disable Channel Cross Reference Map
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

DPBB7300 Handheld Remote Controls

HRC	
Transmission Range	Up to 25 feet in a direct line from the receiver/terminal or up to 22 feet at an angle of ±20 degrees from receiver centerline
Power Requirements	Two 1.5 Volt AAA batteries
Weight	3 ounces (with battery)
Batteries	Included as standard
IRC	
Transmission Range	Up to 25 feet in a direct line from the receiver/terminal or up to 22 feet at an angle of ±20 degrees from receiver centerline
Power Requirements	Four 1.5 Volt AAA batteries
Weight	10 ounces (with battery)
Batteries	Included as standard
Buddy	
Transmission Range	Up to 25 feet in a direct line from the receiver/terminal at 0 degrees and 22 feet at any angle or up to ±20 degrees axial
Power Requirements	9 Volts
Weight	4 Ounces (with battery)
Batteries	Included as standard
[illegible]	
[illegible]ission Range	Up to 25 feet in a direct line from the receiver/terminal at 0 degrees and 22 feet at any angle or up to ±20 degrees axial
Power Requirements	6 Volts
Weight	6.5 Ounces (with battery)
Batteries	Included as standard: Four 1.5 Volt AAA

Specifications subject to change without notice.

INTERCON® 7000 Series
ICFT 2000

Baseband Addressable Terminal With On-Screen Display

Specifications

MODEL	ICFT 20★#
	★ = 1 = 1-way, 2 = 2-way
	# = Output channel
	3 = VHF Ch. 3/4
	6 = UHF Ch. 46-60
Input Frequency	46.75-552 MHz
	(excluding data carrier frequency)
HRC/IRC Frequency Assignments	Downloaded
Number of Channels	62 PAL I—8 MHz
	72 PAL B—7 MHz
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	10 to 15 dBc
Data Carrier	FSK Modulated FM Carrier
Frequency	122.7 MHz
Bandwidth	±200 KHz standard FM
Level	−15 dBmV
Video S/N	48 dB @ 0 dBmV input level
Output Frequency Accuracy	±100 KHz
Stability	±20 KHz
Return Loss:	
Input	6 dB min.
Output	8 dB min.
Spurious:	
Output	−57 dB max., in-band
Cross Modulation Distortion	−56 dB (PAL I-62 channels; PAL B-72 channels each @ +15 dBmV)
Composite Second Order Distortion	−56 dB (PAL I-62 channels; PAL B-72 channels each @ +15 dBmV)
Second Order Distortion	−60 dB (@ +15 dBmV input level)
Composite Triple Beat Distortion	−56 dB (PAL I-62 channels; PAL B-72 channels each @ +15 dBmV)
Converted Input Beats (With all Input Signals)	−25 dBc (PAL I-62 channels; PAL B-72 channels each @ +15 dBmV)
Output Level	10-15 dBmV

Isolation (Input/Output)	70 dB min.
Differential Gain	10% (max.)
Differential Phase	10 degrees (max.)
Scrambling Method	Gated Sync Suppression or Dynamic Gated Sync Suppression, Video Inversion, Audio Privacy.
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 Terminal Configuration Authorisation Information Barker Channel(s) Consumer Feature Enable/Disable Subscriber Messaging Channel Descriptors Channel Cross Reference Map
Two-way System Compatibility	Upgrade in field by addition of STARVUE®
Operating Temperature Range	15°C to 40°C
Operating Humidity Range	5% to 95% (non-condensing)
AC Voltage	216 VAC to 264 VAC, 50 Hz
Power Dissipation	20 Watts at 264 VAC
Surge Protection	Surge protection provided on power supply and RF ports
Size	260.4 mm x 209.6 mm x 68.6 mm (LxWxH)
Weight	2.7 kg

ICFT2000 Handheld Remote Controls

MRC-OSD	Transmission Range	Up to 7.6 meters in a direct line from the receiver/terminal or up to 6.7 meters at an angle of ±20 degrees from receiver centerline	Power Requirements: 3 Volts Weight: 85 grams (with battery) Batteries: Two 1.5 V, IEC type R03 Batteries included as standard
IVR-OSD	Transmission Range	Up to 7.6 meters in a direct line from the receiver/terminal or up to 6.7 meters at an angle of ±20 degrees from receiver centerline	Power Requirements: 6 Volts Weight: 140 Grams Batteries: Four 1.5 V, IEC type R03 Batteries included as standard
ImView	Transmission Range	Up to 7.6 meters in a direct line from the receiver/terminal or up to 6.7 meters at an angle of ±20 degrees from receiver centerline	Power Requirements: 3 Volts Weight: 100 Grams Batteries: Two 1.5 V, IEC type R03 Batteries included as standard

NOTE: Specifications subject to change without notice.

General Instrument

Subscriber Products

Set-Top Terminal, Model 8505 and 8510

Economical Performers

The new Models 8505 and 8510 set-top terminals deliver Scientific-Atlanta quality at an economical price. They are the basic parts of Scientific-Atlanta's MASTERWORKS strategy to make the most revenue from every type of subscriber.

The 8505 has two large keys on the front that allow subscribers to tune upward or downward and turn the unit on or off. A two-speed channel increment/decrement is featured; holding either the up or down key for more than two second increases channel changing speed. A manual fine tuning wheel is placed at the side of the unit to achieve maximum picture quality. The 8505 is designed to operate in 330 MHz systems.

The 8510 is an enhanced unit that contains all the features of the 8505, adding infrared remote control for direct channel entry capability and favorite channel recall. Now even basic subscriber revenues can be enhanced through remote control rentals. SAW resonator technology is incorporated in the 8510 for improved tuning stability and frequency accuracy.

Small in Size, Big on Reliability

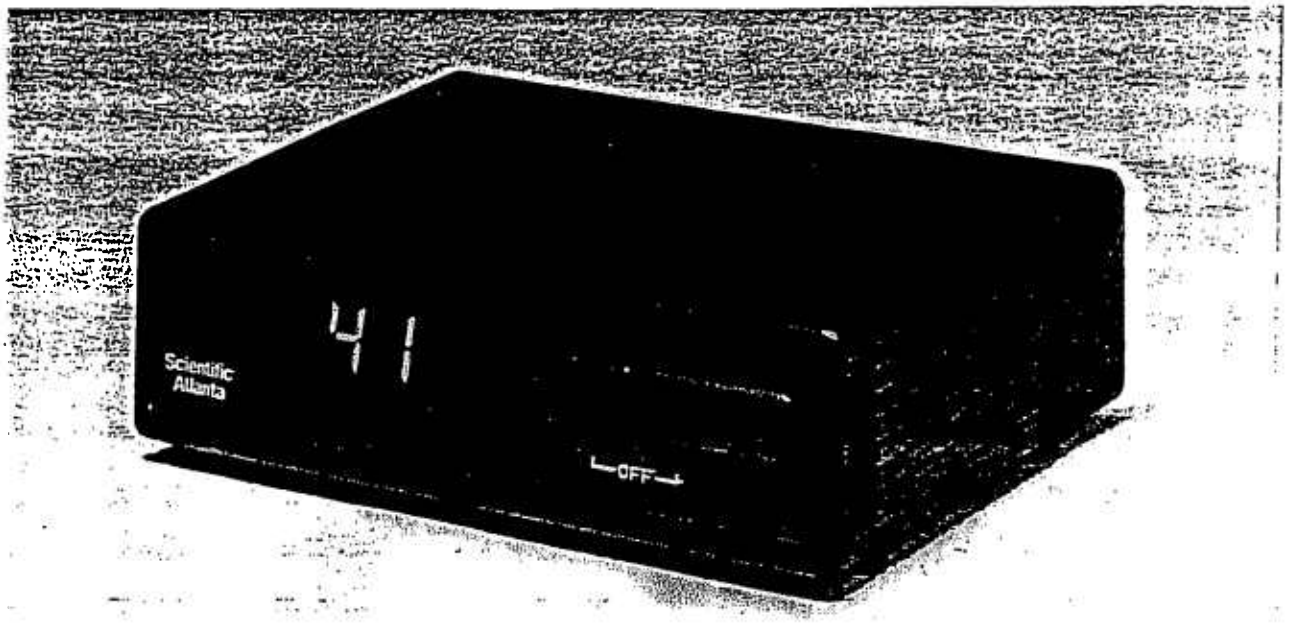
Scientific-Atlanta has reduced both the size and the number of components in the 8505 and 8510, which has increased reliability to the highest levels ever. Both products are covered by our three-year limited warranty and 99% reliability guarantee.

Features

- Easy to use, two buttons control channel changes and on/off
- Small in size, takes less room on TV set
- 8505 provides 330 MHz, has manual fine tuning
- 8510 provides 450 MHz, has SAW resonator for tuning stability
- 8510 offers infrared remote control capability with last channel recall and favorite channel memory (remote optional)
- 8505 has convenience AC outlet; 8510 has switched AC outlet
- Channel line-ups available:
  8505 EIA (with variable fine tune)
  8510 EIA (switch selectable between Standard and HRC)

Subscriber Products

Set-Top Terminal, Model 8505 and 8510



Specifications

Environmental

Temperature
0 to 45°C
Relative Humidity
5 to 95%

Electrical

Input Bandwidth
54 to 330 MHz – 8505
54 to 450 MHz – 8510Number of Channels
45 – 8505
66 – 8510
Output Channel
3 or 4
Channel Frequency Response
±2 dB
Gain
0 to +9 dB
Noise Figure
13 dB – 8505
13.5 dB (typical) – 8510
Return Loss
Input: 7 dB on tuned channel
Output: 11 dB
Isolation Input/Output
60 dB
Spurious Resonse
Input: −37 dBmV
Output: −57 dBmV in channel
Frequency Stability
±1.5 MHz (manual fine tune) – 8505
±250 kHz – 8510 (SAW Resonator)
AC Input Range
115V ac ±10%
Power Consumption
11 watts maximum
Surge Protection
AC Line and RF Input
Distortion at 15 dBmV flat input:
Second Order: −57 dB
Cross Modulation: −57 dB
Composite Triple Beat — −57dB
Input Level
−7 to +20 dBmV

Mechanical

Dimensions
7" × 4.75" × 2"
Weight
2 pounds
Keyboard Type
Two Keys (increment and decrement)
Display Type
LED, 0.5" × 0.26"

Specifications subject to change without notice.

ESN - Single Channel Negative Traps

Typical Response

Model	Channel		Notch Depth	L.A.S.	Upper Video	High Frequency Loss
ESN-A-2*	A-2	98	-75 dB	-3.2 dB	-1.0 dB	-1.5 dB @ 550 MHz
ESN-A-1	A-1	99	-75 dB	-3.5 dB	-1.0 dB	-1.5 dB @ 550 MHz
ESN-A	A	14	-75 dB	-3.7 dB	-1.0 dB	-1.5 dB @ 550 MHz
ESN-B	B	15	-75 dB	-4.0 dB	-1.0 dB	-1.5 dB @ 550 MHz
ESN-C	C	16	-75 dB	-4.3 dB	-1.0 dB	-1.5 dB @ 550 MHz
ESN-D	D	17	-75 dB	-4.6 dB	-1.0 dB	-1.5 dB @ 550 MHz
ESN-E	E	18	-75 dB	-4.8 dB	-1.0 dB	-1.5 dB @ 550 MHz
ESN-F	F	19	-75 dB	-5.1 dB	-1.0 dB	-1.5 dB @ 550 MHz
ESN-G	G	20	-75 dB	-5.4 dB	-1.0 dB	-1.5 dB @ 550 MHz
ESN-H	H	21	-75 dB	-5.6 dB	-1.2 dB	-1.5 dB @ 550 MHz
ESN-I	I	22	-75 dB	-5.9 dB	-1.2 dB	-1.5 dB @ 550 MHz
ESN-7	7	7	-75 dB	-6.1 dB	-1.2 dB	-1.5 dB @ 550 MHz
ESN-8	8	8	-75 dB	-6.3 dB	-1.2 dB	-1.5 dB @ 550 MHz
ESN-9	9	9	-75 dB	-6.5 dB	-1.2 dB	-1.5 dB @ 550 MHz
ESN-10	10	10	-75 dB	-6.6 dB	-1.2 dB	-1.5 dB @ 550 MHz
ESN-11	11	11	-75 dB	-6.8 dB	-1.2 dB	-1.5 dB @ 550 MHz
ESN-12	12	12	-75 dB	-7.0 dB	-1.2 dB	-1.5 dB @ 550 MHz
ESN-13	13	13	-75 dB	-7.2 dB	-1.2 dB	-1.5 dB @ 550 MHz
ESN-J	J	23	-70 dB	-7.4 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-K	K	24	-70 dB	-7.5 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-L	L	25	-70 dB	-7.8 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-M	M	26	-70 dB	-8.1 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-N	N	27	-70 dB	-8.2 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-O	O	28	-70 dB	-8.4 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-P	P	29	-70 dB	-8.7 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-Q	Q	30	-70 dB	-9.0 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-R	R	31	-70 dB	-9.3 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-S	S	32	-70 dB	-9.6 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-T	T	33	-70 dB	-9.9 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-U	U	34	-70 dB	-10.1 dB	-1.4 dB	-2.0 dB @ 1 GHz
ESN-V	V	35	-70 dB	-10.3 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-W	W	36	-70 dB	-10.5 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-AA	AA	37	-70 dB	-10.6 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-BB	BB	38	-70 dB	-10.8 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-CC	CC	39	-70 dB	-11.0 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-DD	DD	40	-70 dB	-11.2 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-EE	EE	41	-70 dB	-11.3 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-FF	FF	42	-70 dB	-11.4 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-GG	GG	43	-70 dB	-11.5 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-HH	HH	44	-70 dB	-11.7 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-II	II	45	-70 dB	-12.0 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-JJ	JJ	46	-70 dB	-12.3 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-KK	KK	47	-70 dB	-12.6 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-LL	LL	48	-70 dB	-12.9 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-MM	MM	49	-70 dB	-13.2 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-NN	NN	50	-70 dB	-13.5 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-OO	OO	51	-70 dB	-13.8 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-PP	PP	52	-70 dB	-14.1 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-QQ	QQ	53	-70 dB	-14.3 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-RR	RR	54	-70 dB	-14.6 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-SS	SS	55	-70 dB	-14.8 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-TT	TT	56	-70 dB	-14.9 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-UU	UU	57	-70 dB	-15.1 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-VV	VV	58	-70 dB	-15.3 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-WW	WW	59	-70 dB	-15.5 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-XX	XX	60	-70 dB	-15.7 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-YY	YY	61	-70 dB	-15.9 dB	-1.8 dB	-2.0 dB @ 1 GHz
ESN-ZZ	ZZ	62	-70 dB	-16.1 dB	-1.8 dB	-2.0 dB @ 1 GHz

*Patents #5148133, 5168251 Trap: Length is 3.65" / Diameter .835 / Specifications subject to change without notice

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Canada: Antec Corp., *Telephone:* 1-800-665-1432 *Fax:* (905) 507-6486 Telonix, *Telephone:* 1-888-835-6649 *Fax:* 905-727-2991
Distribution: Argentina, Belgium, Brazil, Canada, Chile, Denmark, Israel, France, Germany, Israel, Italy, Korea, Mexico, Nigeria

ETN* MICRO-SERIES Single Channel Negative Traps

Typical Response

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

* Patents #4491803, 5303399 **Higher channels available upon request.

EAGLE COMTRONICS INC.

Corporate Headquarters: 4562 Waterhouse Road, Clay, NY 13041
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TIME WARNER CABLE
SYRACUSE DIVISION

Proof - of - Performance Tests

Headend Tests

System Name: ILION

HE Location: SILVER ST. LITCHFIELD NEW YORK

Visual Carrier and Aural Carrier Difference Frequency Tests

(at Headend)

System Name: **TIME WARNER CABLE**

HE Location: **ILION**

Date: **JULY 6,2002** Performed by: **JOEL P. MARMON**

Chan	Freq	Visual Freq (MHz)	Aural Freq Diff (MHz)	Chan	Freq	Visual Freq (MHz)	Aural Freq Diff (MHz)
2	55.2500	55.26251	4.49984	AA	301.2625	301.26235	4.50005
3	61.2500	61.26255	4.49953	BB	307.2625	307.26248	4.50001
4	67.2500	67.26290	4.49990	CC	313.2625	313.26237	4.49998
5	77.2500	77.25100	4.50007	DD	319.2625	319.26234	4.49989
6	83.2500	83.25018	4.50004	EE	325.2625	325.26201	4.50007
				FF	331.2750	331.27488	4.50009
				GG	337.2625	337.26227	4.50018
A-5	91.2500	91.24992	4.50020	HH	343.2625	343.26128	4.49977
A-4	97.2500	97.26250	4.50000	II	349.2625	349.26326	4.50013
A-3	103.2500			JJ	355.2625	355.26281	4.49998
A-2	109.2750			KK	361.2625	361.26224	4.49985
A-1	115.2750	115.27330	4.49992	LL	367.2625	367.26266	4.50004
A	121.2625	121.26251	4.50002	MM	373.2625	373.26282	4.49994
B	127.2625	127.26271	4.50001	NN	379.2625	379.26275	4.50002
C	133.2625	133.26125	4.50010	OO	385.2625	385.26226	4.50009
D	139.2500	139.24990	4.49999	PP	391.2625	391.26210	4.50032
E	145.2500	145.24905	4.49999	QQ	397.2625	397.26241	4.50022
F	151.3210	151.32180	4.49998	RR	403.2500	403.26231	4.49960
G	157.2500	157.25075	4.50001	SS	409.2500	409.25068	4.50003
H	163.2500	163.24851	4.49997	TT	415.2500	415.24998	4.49995
I	169.2500	169.24738	4.50018	UU	421.2500	421.23614	4.50006
7	175.2500	175.26075	4.49976	VV	427.2500	427.24893	4.50012
8	181.2500	181.24800	4.50013	WW	433.2500	433.25212	4.49996
9	187.2500	187.24942	4.50007	XX	439.2500	439.26350	4.49924
10	193.2500	193.25050	4.50003	YY	445.2500	445.25064	4.50026
11	199.2500	199.25059	4.50007	ZZ	451.2500	451.25126	4.50023
12	205.2500	205.26235	4.49993	63	457.2500	457.25021	4.50020
13	211.2500	211.25197	4.50007	64	463.2500	463.26287	4.49958
J	217.2500	217.24999	4.50003	65	469.2500	469.24948	4.49985
K	223.2500	223.24849	4.50007	66	475.2500	475.25146	4.50004
L	229.2625	229.26195	4.50004	67	481.2500	481.25069	4.49993
M	235.2625	235.26055	4.49992	68	487.2500	487.25116	4.49991
N	241.2625	241.26241	4.50004	69	493.2500	493.26282	4.50000
O	247.2625	247.26255	4.49977	70	499.2500	499.24975	4.49920
P	253.2625	253.26134	4.50021	71	505.2500	505.25122	4.49977
Q	259.2625	259.26377	4.49994	72	511.2500	511.25024	4.49986
R	265.2625	265.26006	4.50015	73	517.2500	517.25071	4.50004
S	271.2625	271.26091	4.50002	74	523.2500	523.24909	4.49978
T	277.2625	277.26098	4.50005	75	529.2500	529.25034	4.50017
U	283.2625	283.26226	4.49995	76	535.2500	535.25111	4.50000
V	289.2625	289.26163	4.49984	77	541.2500	541.26242	4.50010
W	295.2625	295.26123	4.50005	78	547.2500	547.25896	4.50000

Visual / Aural Level Difference Test

(at Headend)

System Name: **ILION**

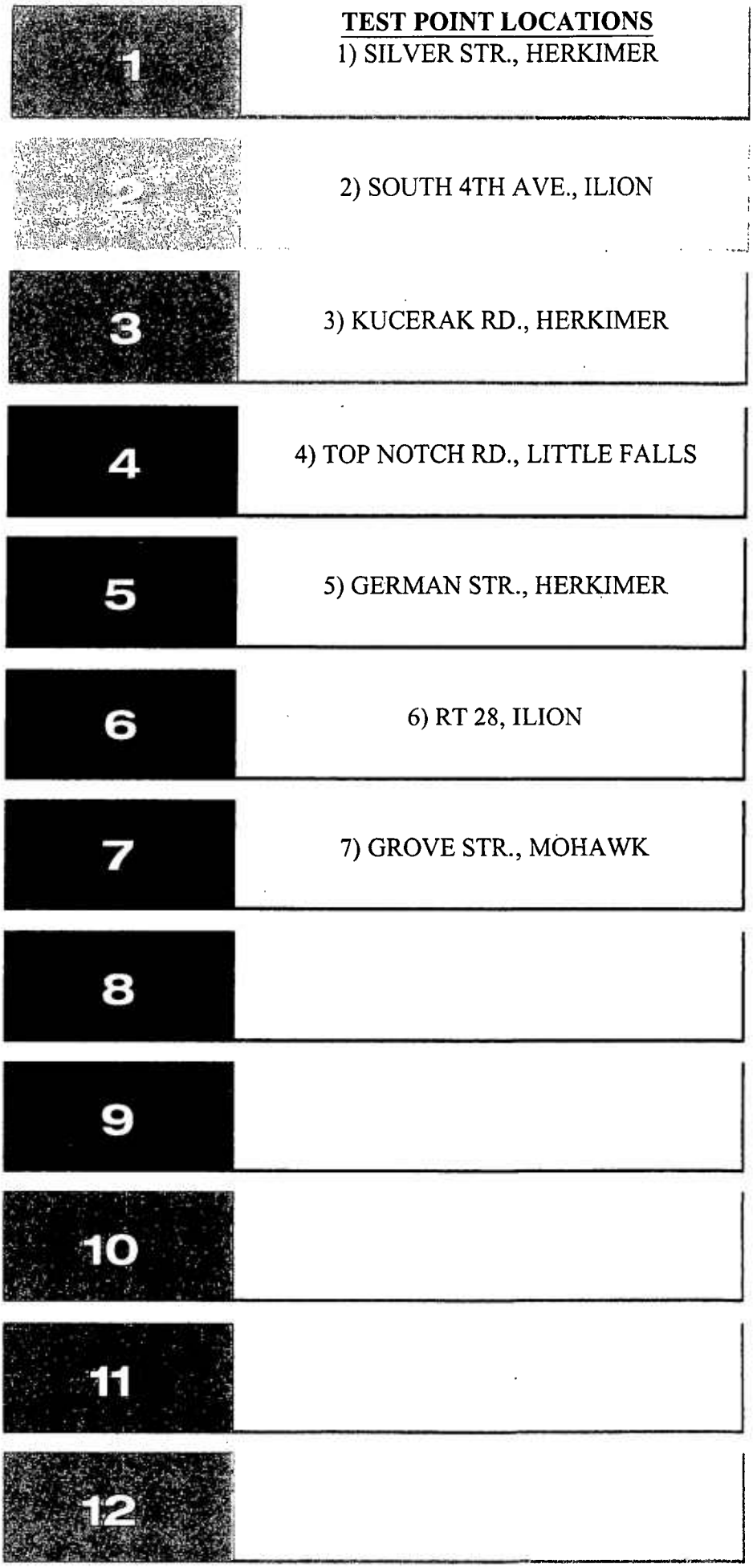
HE Location: **SILVER STREET**

Date: 02-Jul-02 Performed by: **MARK A. D'AOUST**

Time: 12:23 PM Meter /Serial Number: **CALAN 3010#US37241488**

Chan	Freq (MHz)	Visual Level (dbmV)	Aural Level (dbmV)	Scram 'S'	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmV)	Aural Level (dbmV)	Scram 'S'	Diff (Dbmv)
2	55.2500	13.9	0.0		13.9	AA	289.2625	14.0	0.3		13.7
3	61.2500	13.8	0.2		13.6	BB	307.2625	14.1	0.1		14.0
4	67.2500	14.1	0.3		13.8	CC	313.2625	14.2	0.0		14.2
5	77.2500	13.8	0.1		13.7	DD	319.2625	14.2	0.2		14.0
6	83.2500	13.8	0.0		13.8	EE	325.2625	13.8	0.3		13.5
						FF	331.2750	14.0	0.1		13.9
						GG	337.2625	14.2	0.6		13.6
A-5	91.2500	14.0	0.2	S	13.8	HH	343.2625	14.3	0.0		14.3
A-4	97.2500	13.9	0.3		13.6	II	349.2625	14.1	0.2		13.9
A-3	103.2500					JJ	355.2625	13.8	0.3		13.5
A-2	109.2750					KK	361.2625	14.0	0.1		13.9
A-1	115.2750	13.9	0.1		13.8	LL	367.2625	14.3	0.0		14.3
A	121.2625	14.1	0.6		13.5	MM	373.2625	13.8	0.2		13.6
B	127.2625	13.8	0.1		13.7	NN	379.2625	14.1	0.3		13.8
C	133.2625	14.0	0.0		14.0	OO	385.2625	14.1	0.1		14.0
D	139.2500	13.9	0.2		13.7	PP	391.2625	14.0	0.6		13.4
E	145.2500	14.0	0.3		13.7	QQ	397.2625	13.9	0.0		13.9
F	151.2500	14.1	0.1		14.0	RR	403.2500	13.8	0.2		13.6
G	157.2500	14.2	0.0		14.2	SS	409.2500	14.3	0.3		14.0
H	163.2500	13.8	0.2		13.6	TT	415.2500	14.1	0.1		14.0
I	169.2500	13.8	0.3		13.5	UU	421.2500	14.1	0.0		14.1
7	175.2500	14.0	0.1		13.9	VV	427.2500	14.3	0.2		14.1
8	181.2500	14.0	0.0		14.0	WW	433.2500	14.0	0.3		13.7
9	187.2500	13.9	0.2		13.7	XX	439.2500	14.3	0.1		14.2
10	193.2500	14.1	0.3		13.8	YY	445.2500	14.3	0.6		13.7
11	199.2500	13.8	0.1		13.7	ZZ	451.2500	13.9	-1.0		14.9
12	205.2500	13.8	0.0		13.8	63	457.2500	13.8	0.8		13.0
13	211.2500	13.8	0.2		13.6	64	463.2500	14.1	0.2		13.9
J	217.2500	13.9	0.3		13.6	65	469.2500	14.1	0.0		14.1
K	223.2500	14.3	0.1		14.2	66	475.2500	14.1	0.2		13.9
L	229.2625	14.1	0.6		13.5	67	481.2500	13.9	0.3		13.6
M	235.2625	14.1	0.0		14.1	68	487.2500	14.0	0.1		13.9
N	241.2625	14.0	0.2		13.8	69	493.2500	14.0	0.0		14.0
O	247.2625	14.0	0.3		13.7	70	499.2500	14.1	0.2	S	13.9
P	253.2625	13.9	0.1		13.8	71	505.2500	14.3	0.3	S	14.0
Q	259.2625	13.8	0.0		13.8	72	511.2500	14.3	0.1	S	14.2
R	265.2625	14.1	0.2		13.9	73	517.2500	14.2	0.6	S	13.6
S	271.2625	14.3	0.3		14.0	74	523.2500	13.8	1.0	S	12.8
T	277.2625	14.0	0.1		13.9	75	529.2500	14.1	0.0	S	14.1
U	283.2625	13.9	0.6		13.3	76	535.2500	14.0	0.2	S	13.8
V	289.2625	14.1	0.0		14.1	77	541.2500	13.8	0.3	S	13.5
W	283.2625	13.9	0.2		13.7	78	547.2500	13.9	0.1	S	13.8

PEAK TO VALLEY: 0.5


TEST POINT LOCATIONS
1) SILVER STR., HERKIMER
1
2) SOUTH 4TH AVE., ILION
3) KUCERAK RD., HERKIMER
3
4) TOP NOTCH RD., LITTLE FALLS
4
5) GERMAN STR., HERKIMER
5
6) RT 28, ILION
6
7) GROVE STR., MOHAWK
7
8
9
10
11
12

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ILION

System Test Point # 1

Location: SILVER ST.

Community: LITCHFIELD

Pole Number: NM4

D.T. Value: 11

Map Number: 560-5554

OR Number: 969

Trunk Cascade: 4 LE Cascade 3

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

System Name: **ILION**

Test Location: **SILVER STREEET**

Date: 28-Aug-02

Time: 09:01 AM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (Dbmv)
2	55.2500	13.8	0.5		13.3	AA	301.2625	14.2	2.2		12.0
3	61.2500	14.0	1.3		12.7	BB	307.2625	13.9	0.7		13.2
4	67.2500	13.7	2.0		11.7	CC	313.2625	14.4	1.4		13.0
5	77.2500	13.9	2.2		11.7	DD	319.2625	14.0	1.9		12.1
6	83.2500	14.0	2.3		11.7	EE	325.2625	14.0	3.4		10.6
						FF	331.2750	14.6	3.2		11.4
						GG	337.2625	14.0	1.4		12.6
A-5	91.2500	13.9	0.5	S	13.4	HH	343.2625	13.5	2.1		11.4
A-4	97.2500	12.4	0.0		12.4	II	349.2625	13.7	1.9		11.8
A-3	103.2500					JJ	355.2625	14.1	1.5		12.6
A-2	109.2750					KK	361.2625	13.8	0.9		12.9
A-1	115.2750	12.9	0.8		12.1	LL	367.2625	13.1	1.5		11.6
A	121.2625	12.0	0.6		11.4	MM	373.2625	13.3	1.3		12.0
B	127.2625	12.3	0.9		11.4	NN	379.2625	13.8	1.6		12.2
C	133.2625	12.5	0.0		12.5	OO	385.2625	13.6	0.8		12.8
D	139.2500	12.3	0.4		11.9	PP	391.2625	12.8	0.3		12.5
E	145.2500	12.0	0.4		11.6	QQ	397.2625	13.6	2.1		11.5
F	151.2500	11.0	-0.5		11.5	RR	403.2500	14.0	1.6		12.4
G	157.2500	12.9	1.1		11.8	SS	409.2500	13.0	0.3		12.7
H	163.2500	12.6	1.1		11.5	TT	415.2500	12.1	-0.1		12.2
I	169.2500	12.3	0.3		12.0	UU	421.2500	11.9	0.8		11.1
7	175.2500	11.8	0.9		10.9	VV	427.2500	12.4	0.4		12.0
8	181.2500	12.4	0.5		11.9	WW	433.2500	12.3	0.7		11.6
9	187.2500	12.0	0.1		11.9	XX	439.2500	12.4	0.0		12.4
10	193.2500	12.2	0.8		11.4	YY	445.2500	12.3	1.1		11.2
11	199.2500	12.4	0.5		11.9	ZZ	451.2500	13.8	3.3		10.5
12	205.2500	12.5	0.8		11.7	63	457.2500	12.9	1.3		11.6
13	211.2500	11.8	0.0		11.8	64	463.2500	14.1	1.4		12.7
J	217.2500	12.4	0.8		11.6	65	469.2500	14.1	2.4		11.7
K	223.2500	11.9	-0.1		12.0	66	475.2500	15.4	3.2		12.2
L	229.2625	12.1	-4.3		16.4	67	481.2500	15.0	2.1		12.9
M	235.2625	11.8	-0.1		11.9	68	487.2500	15.0	2.3		12.7
N	241.2625	12.5	0.6		11.9	69	493.2500	15.0	3.1		11.9
O	247.2625	12.0	1.5		10.5	70	499.2500	13.1	2.2	S	10.9
P	253.2625	12.8	1.1		11.7	71	505.2500	15.0	3.4	S	11.6
Q	259.2625	13.0	0.8		12.2	72	511.2500	16.1	6.1	S	10.0
R	265.2625	13.4	1.3		12.1	73	517.2500	15.3	2.9	S	12.4
S	271.2625	12.8	0.9		11.9	74	523.2500	14.3	1.8	S	12.5
T	277.2625	13.2	1.0		12.2	75	529.2500	14.8	3.0	S	11.8
U	283.2625	13.4	1.7		11.7	76	535.2500	15.3	3.3	S	12.0
V	289.2625	13.5	1.5		12.0	77	541.2500	15.3	2.6	S	12.7
W	295.2625	13.6	1.6		12.0	78	547.2500	14.9	2.5	S	12.4

PEAK TO VALLEY: 5.1

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

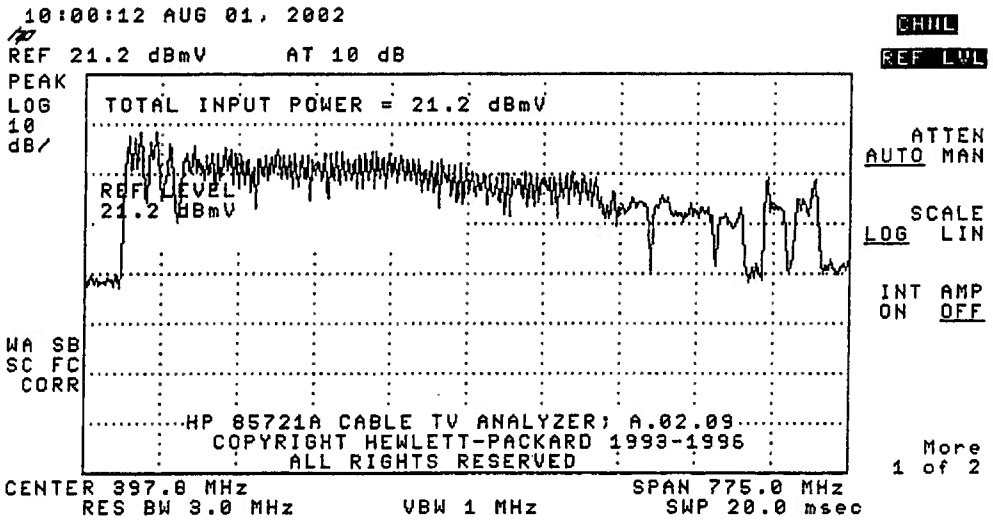
System Name: ILION **Date:** AUGUST 1,2002

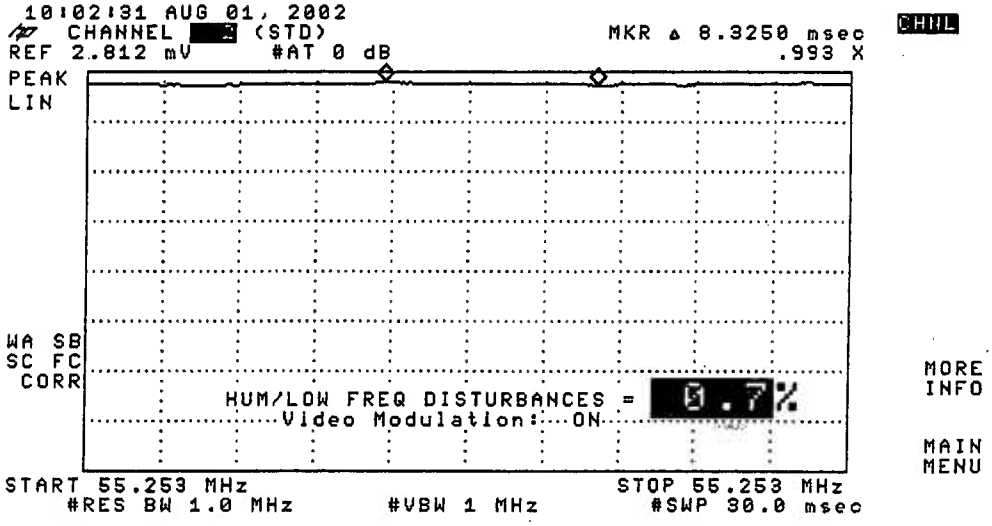
Test Performed By: JOEL MARMON/MARK D'AOUST

Location: SILVER ST. LITCHFIELD

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

Channel						
2	0.30	46.3	59.1	73.8		
9	0.30	46.5	67.8	73.4		
14	0.30	46.2	64.1	69.0		
20	0.30	46.5	67.3	76.4		
24	0.20	46.5	67.6	71.4		
29	0.20	46.4	64.1	71.0		
36	0.30	46.4	65.3	73.5		
49	0.20	46.5	67.1	75.0		
57	0.40	46.1	65.6	72.3		0.7


10:00:12 AUG 01, 2002
CHNL
REF 21.2 dBmV
AT 10 dB
REF LVL
PEAK
LOG
10
dB/
TOTAL INPUT POWER = 21.2 dBmV
REF LEVEL
21.2 dBmV
ATTEN
AUTO MAN
SCALE
LOG LIN
INT AMP
ON OFF
WA SB
SC FC
CORR
HP 85721A CABLE TV ANALYZER; A.02.09
COPYRIGHT HEWLETT-PACKARD 1993-1996
ALL RIGHTS RESERVED
More
1 of 2
CENTER 397.8 MHz
SPAN 775.0 MHz
RES BW 3.0 MHz
VBW 1 MHz
SWP 20.0 msec


10:02:31 AUG 01, 2002
CHANNEL 3 (STD)
MKR Δ 8.3250 msec
.993 X
REF 2.812 mV
#AT 0 dB
CHNL
PEAK
LIN
WA SB
SC FC
CORR
HUM/LOW FREQ DISTURBANCES = 0.7%
Video Modulation: ON
MORE INFO
MAIN MENU
START 55.253 MHz
STOP 55.253 MHz
#RES BW 1.0 MHz
#VBW 1 MHz
#SWP 30.0 msec

Time Warner Cable
Syracuse Division

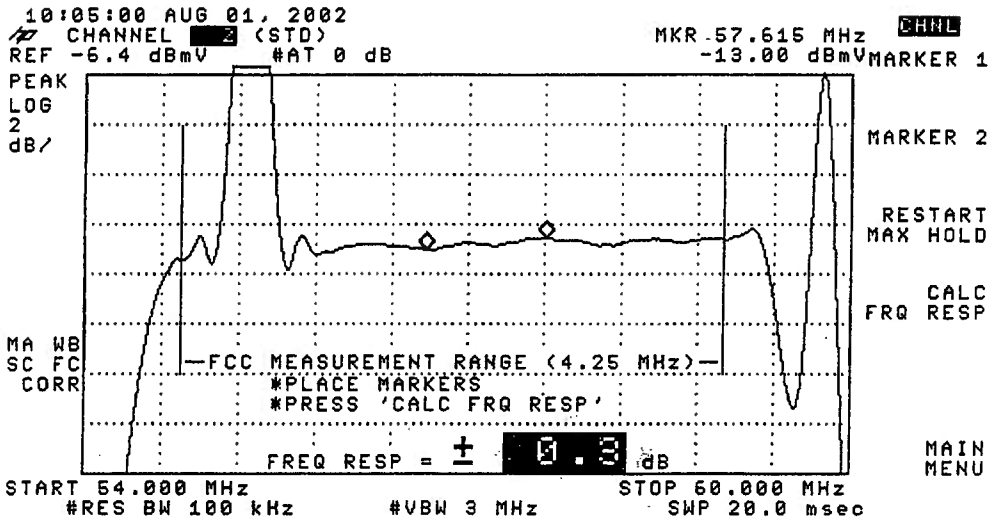
IN - CHANNEL FREQUENCY RESPONSE TEST

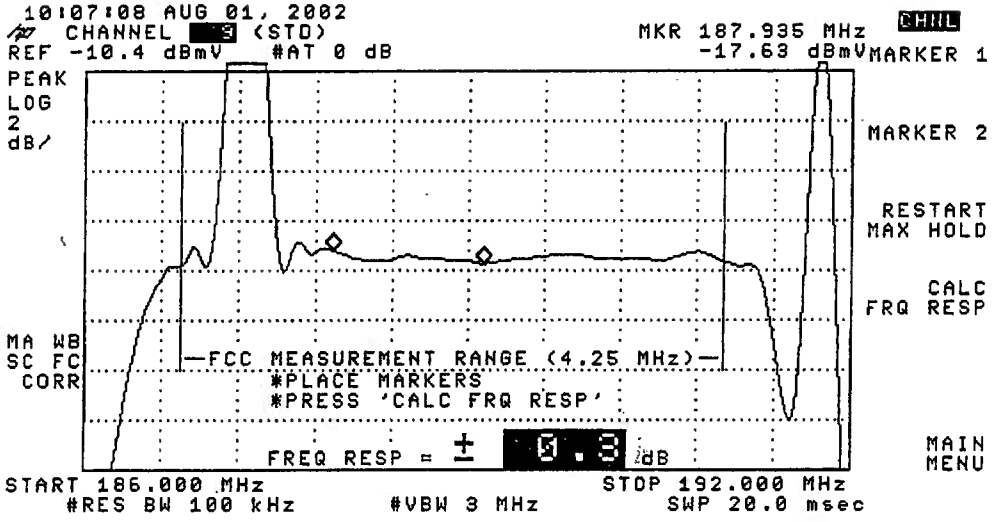
(76.605 (a) 6)

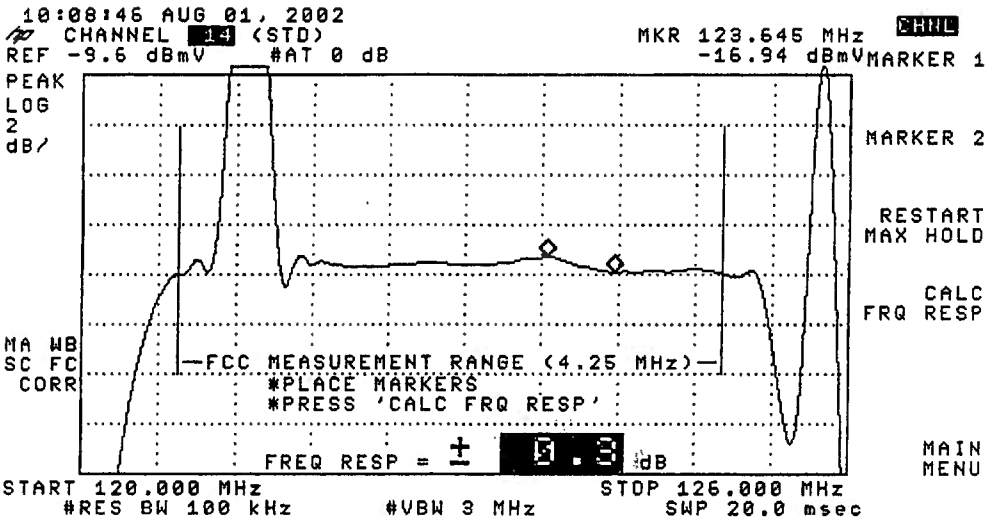
System Name: ILION Date: AUG. 1, 2002

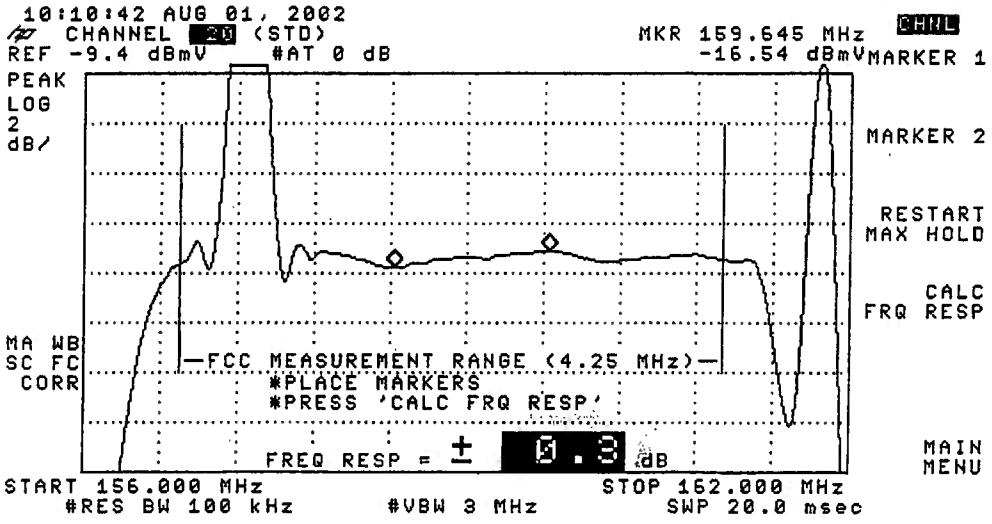
Test Performed By: MARK D'AOUST/JOEL MARMON Location: SILVER ST.

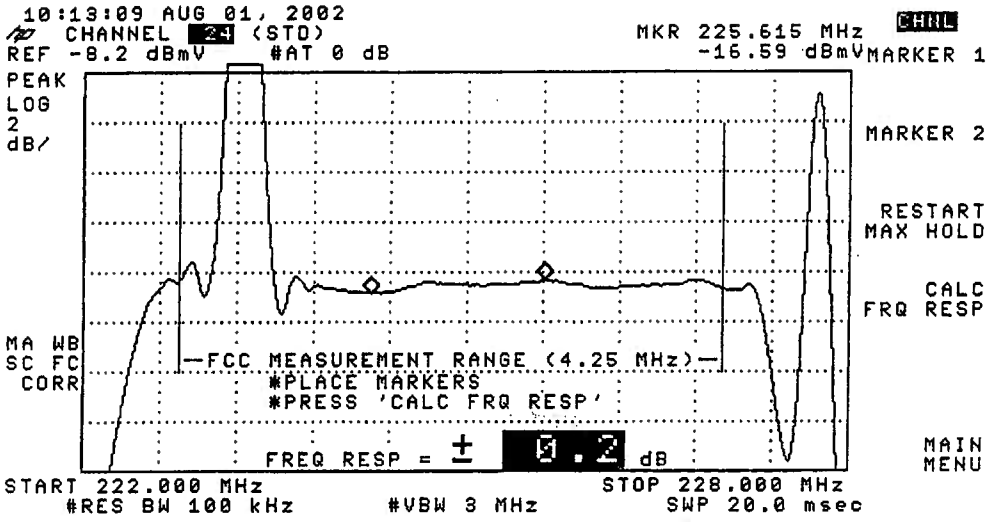
(SEE THE ATTATCHED SWEEP TRACES)

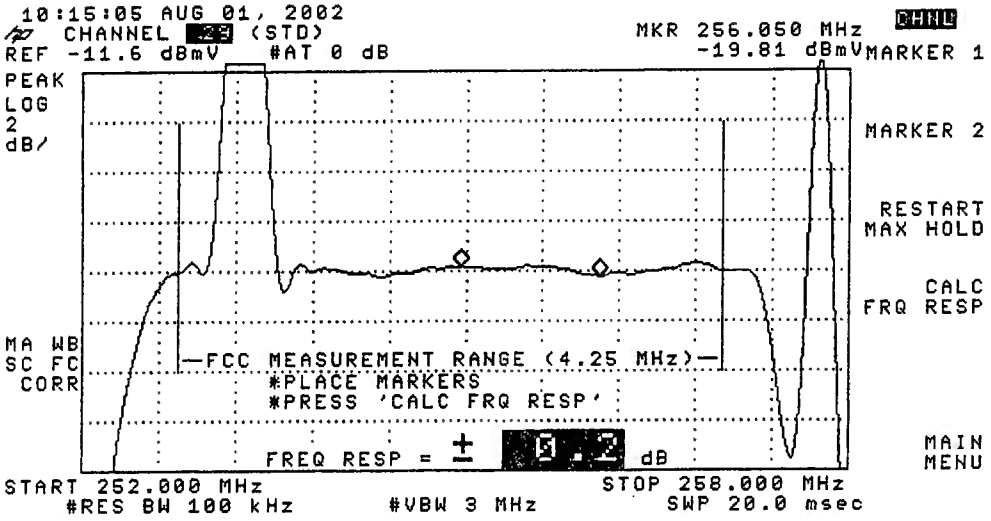

10:05:00 AUG 01, 2002
CHANNEL 2 (STD)
REF -6.4 dBmV
#AT 0 dB
MKR 57.615 MHz
-13.00 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 54.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 60.000 MHz
SWP 20.0 msec

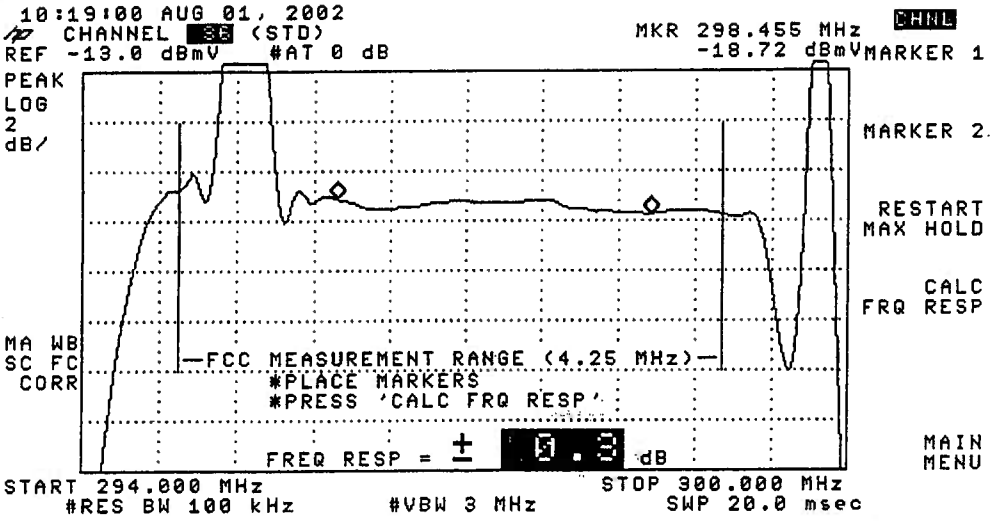

10:07:08 AUG 01, 2002
CHANNEL 3 (STD)
REF -10.4 dBmV
#AT 0 dB
MKR 187.935 MHz
-17.63 dBmV
CH1L
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 186.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 192.000 MHz
SWP 20.0 msec

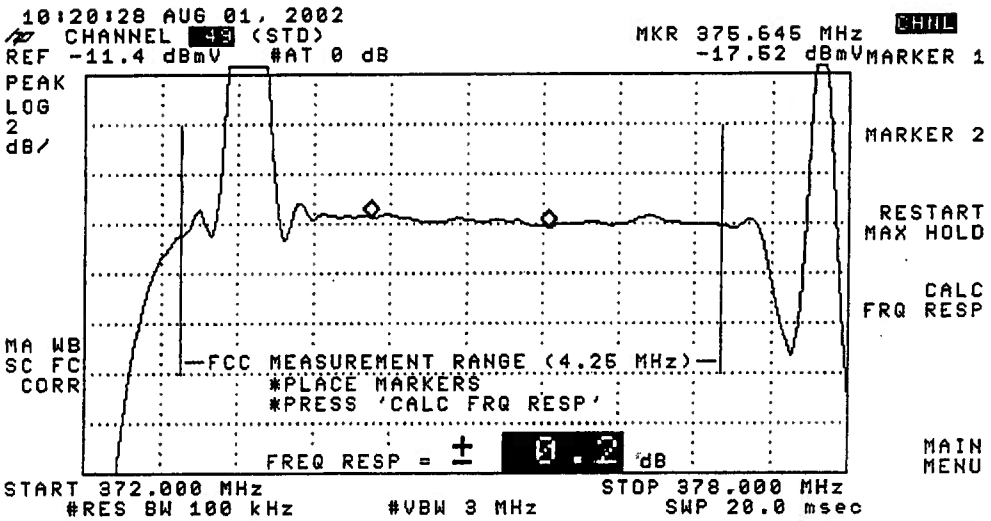

10:08:46 AUG 01, 2002
CHANNEL 14 (STD)
REF -9.6 dBmV
#AT 0 dB
MKR 123.645 MHz
-16.94 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 5.3 dB
MAIN
MENU
START 120.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 126.000 MHz
SWP 20.0 msec

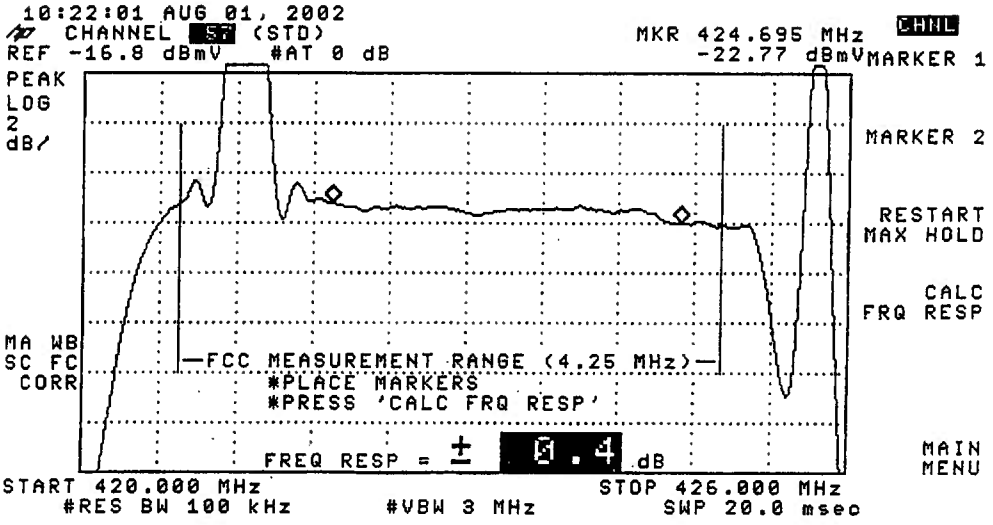

10:10:42 AUG 01, 2002
CHANNEL 20 (STD)
REF -9.4 dBmV
#AT 0 dB
MKR 159.645 MHz
-16.54 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 156.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 162.000 MHz
SWP 20.0 msec

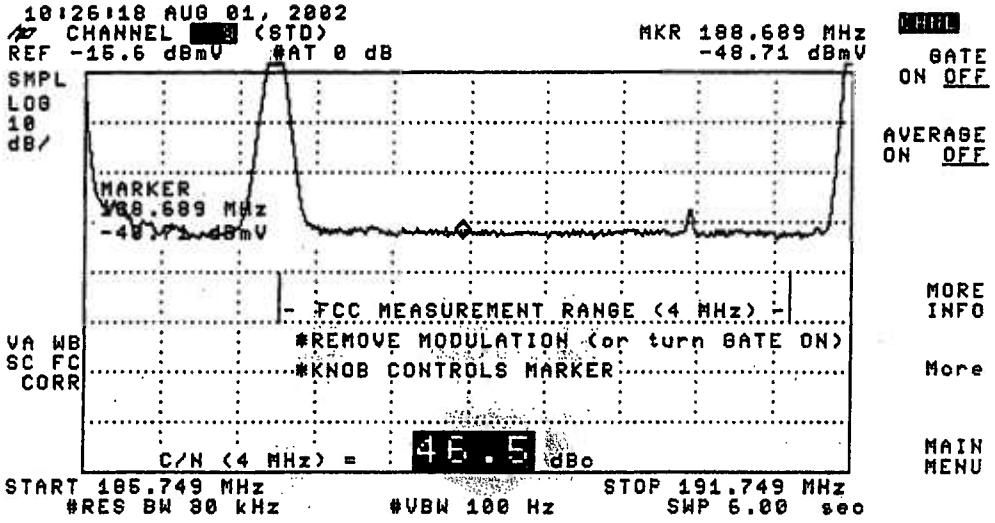

10:13:09 AUG 01, 2002
CHANNEL 24 (STD)
REF -8.2 dBmV
#AT 0 dB
MKR 225.615 MHz
-16.59 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.2 dB
MAIN
MENU
START 222.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 228.000 MHz
SWP 20.0 msec

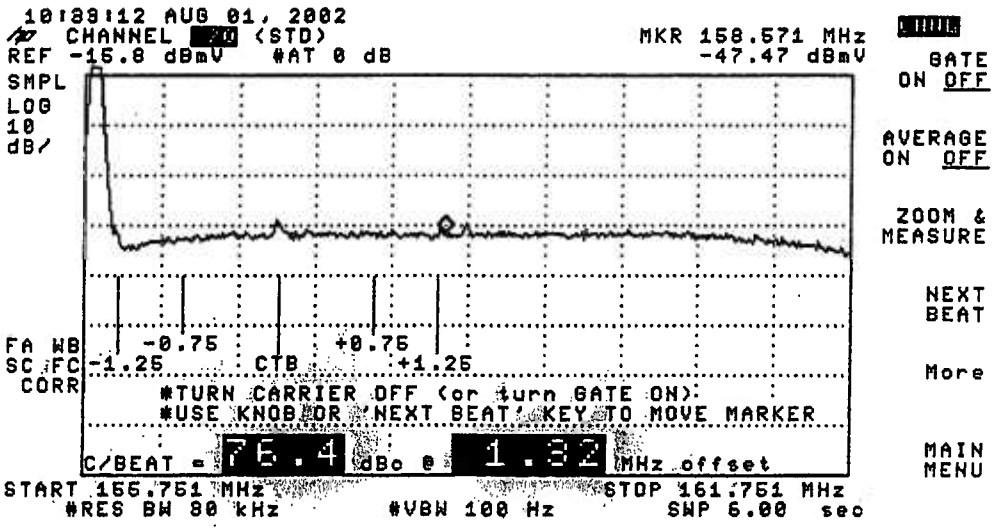

10:15:05 AUG 01, 2002
CHANNEL 29 (STD)
REF -11.6 dBmV
#AT 0 dB
MKR 256.050 MHz
-19.81 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.2 dB
MAIN
MENU
START 252.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 258.000 MHz
SWP 20.0 msec

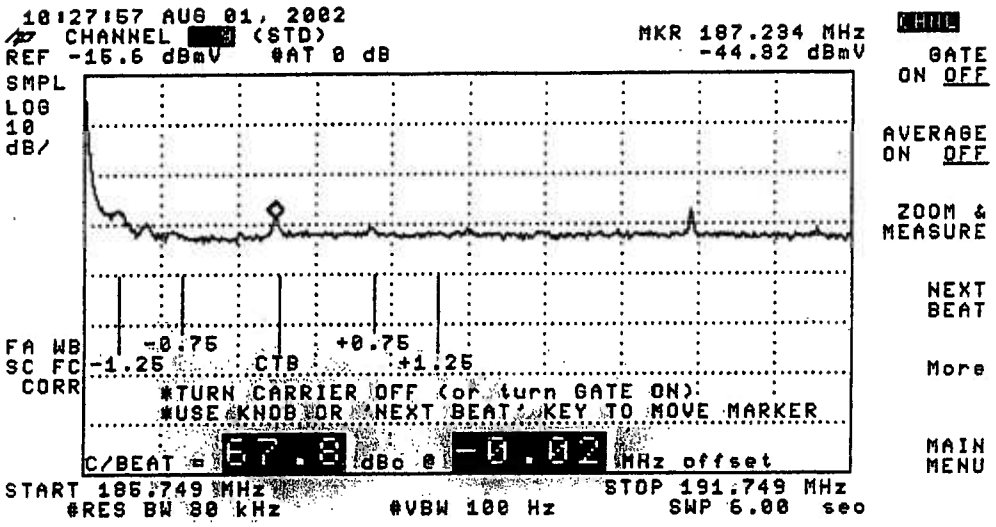

10:19:00 AUG 01, 2002
CHANNEL 36 (STD)
REF -13.0 dBmV
#AT 0 dB
MKR 298.455 MHz
-18.72 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 294.000 MHz
STOP 300.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec


10:20:28 AUG 01, 2002
CHANNEL 49 (STD)
REF -11.4 dBmV
#AT 0 dB
MKR 375.645 MHz
-17.52 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 372.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 378.000 MHz
SWP 20.0 msec


10:22:01 AUG 01, 2002
CHANNEL ST (STD)
REF -16.8 dBmV
#AT 0 dB
MKR 424.695 MHz
-22.77 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 420.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 426.000 MHz
SWP 20.0 msec


10:26:18 AUG 01, 2002
CHANNEL [redacted] (STD)
REF -15.6 dBmV
#AT 0 dB
MKR 188.689 MHz
-48.71 dBmV
SMPL
LOG
10
dB/
MARKER
188.689 MHz
-48.71 dBmV
- FCC MEASUREMENT RANGE (4 MHz) -
#REMOVE MODULATION (or turn GATE ON)
#KNOB CONTROLS MARKER
C/N (4 MHz) = 46.5 dBc
START 185.749 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 191.749 MHz
SWP 6.00 sec
GATE
ON OFF
AVERAGE
ON OFF
MORE
INFO
More
MAIN
MENU
VA WB
SC FC
CORR


10:33:12 AUG 01, 2002
CHANNEL [redacted] (STD)
REF -15.8 dBmV #AT 0 dB
MKR 158.571 MHz
-47.47 dBmV
SMPL
LOG
10
dB/
GATE
ON OFF
AVERAGE
ON OFF
ZOOM &
MEASURE
NEXT
BEAT
More
MAIN
MENU
FA WB
SC FC
CORR
-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
C/BEAT = 76.4 dBc @ 1.82 MHz offset
START 155.751 MHz
STOP 161.751 MHz
#RES BW 80 kHz
#VBW 100 Hz
SWP 6.00 sec


10:27:57 AUG 01, 2002
CHANNEL [redacted] (STD)
REF -15.6 dBmV
#AT 0 dB
MKR 187.234 MHz
-44.82 dBmV
CHNL
GATE
ON OFF
SMPL
LOG
10
dB/
AVERAGE
ON OFF
ZOOM &
MEASURE
NEXT
BEAT
FA WB
SC FC
CORR
-0.75
+0.75
-1.25
CTB
+1.25
More
#TURN CARRIER OFF (or turn GATE ON)
#USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
C/BEAT = 67.8 dBc @ -0.02 MHz offset
MAIN
MENU
START 185.749 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 191.749 MHz
SWP 6.00 sec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: ILION

Test Point Location SILVER STREET

Date: AUG. 8, 2002 Performed by GREGG COBB

Meter Serial Number: CALAN 2010#US36160897

Chan	Freq (MHz)	Temp °F 68	72	69	65	Max Variation	Chan	Freq (MHz)	Temp °F 68	72	69	65	Max Variation
		Time 09:01	15:00	21:00	03:15				Time 09:01	15:00	21:00	03:15	
		Visual Level (dbmV)							Visual Level (dbmV)				
2	55.2500	13.8	14.6	14.8	14.8	1.0	AA	301.2625	14.2	15.3	15.3	14.9	1.1
3	61.2500	14.0	14.9	14.9	15.0	1.0	BB	307.2625	13.9	15.3	15.1	15.5	1.6
4	67.2500	13.7	14.2	14.2	14.3	0.6	CC	313.2625	14.4	15.4	15.7	15.4	1.3
5	77.2500	13.9	14.7	14.8	14.5	0.9	DD	319.2625	14.0	15.5	15.7	15.3	1.7
6	83.2500	14.0	14.8	14.9	15.0	1.0	EE	325.2625	14.0	15.9	15.7	15.7	1.9
							FF	331.2750	14.6	15.8	15.9	15.8	1.3
							GG	337.2625	14.0	15.4	15.6	15.5	1.6
A-5	91.2500	13.9	14.4	14.8	13.8	1.0	HH	343.2625	13.5	15.1	15.1	15.8	2.3
A-4	97.2500	12.4	13.4	13.9	13.8	1.5	II	349.2625	13.7	15.2	15.3	15.6	1.9
A-3	103.2500						JJ	355.2625	14.1	15.7	15.5	15.3	1.6
A-2	109.2750						KK	361.2625	13.8	15.4	15.5	15.5	1.7
A-1	115.2750	12.9	13.7	13.9	13.9	1.0	LL	367.2625	13.1	14.6	14.8	15.5	2.4
A	121.2625	12.0	13.0	13.0	13.0	1.0	MM	373.2625	13.3	14.7	14.9	15.4	2.1
B	127.2625	12.3	13.4	13.5	13.5	1.2	NN	379.2625	13.8	15.2	15.4	14.9	1.6
C	133.2625	12.5	13.2	13.2	13.4	0.9	OO	385.2625	13.6	15.2	15.4	15.0	1.8
D	139.2500	12.3	13.3	13.4	13.6	1.3	PP	391.2625	12.8	14.2	14.5	15.3	2.5
E	145.2500	12.0	13.2	13.2	13.2	1.2	QQ	397.2625	13.6	15.4	15.3	15.3	1.8
F	151.2500	11.0	12.0	12.1	12.1	1.1	RR	403.2500	14.0	15.3	15.4	14.3	1.4
G	157.2500	12.9	13.8	13.9	14.3	1.4	SS	409.2500	13.0	14.3	14.6	15.3	2.3
H	163.2500	12.6	13.6	13.7	13.7	1.1	TT	415.2500	12.1	13.6	14.0	15.5	3.4
I	169.2500	12.3	13.2	13.0	12.8	0.9	UU	421.2500	11.9	13.6	14.0	14.6	2.7
7	175.2500	11.8	13.1	13.1	13.1	1.3	VV	427.2500	12.4	13.8	14.2	14.1	1.8
8	181.2500	12.4	13.4	13.5	13.5	1.1	WW	433.2500	12.3	13.7	13.9	13.7	1.6
9	187.2500	12.0	13.0	13.2	13.2	1.2	XX	439.2500	12.4	14.2	14.5	14.2	2.1
10	193.2500	12.2	13.3	13.4	13.4	1.2	YY	445.2500	12.3	13.8	14.0	14.0	1.7
11	199.2500	12.4	13.4	13.4	13.5	1.1	ZZ	451.2500	13.8	15.0	15.7	14.5	1.9
12	205.2500	12.5	13.8	13.8	13.8	1.3	63	457.2500	12.9	15.4	13.8	13.9	2.5
13	211.2500	11.8	12.9	13.0	13.0	1.2	64	463.2500	14.1	15.6	16.0	15.8	1.9
J	217.2500	12.4	13.5	13.5	13.9	1.5	65	469.2500	14.1	15.7	15.6	14.6	1.6
K	223.2500	11.9	13.2	12.6	13.1	1.3	66	475.2500	15.4	16.8	17.0	15.7	1.6
L	229.2625	12.1	13.2	13.4	13.2	1.3	67	481.2500	15.0	17.4	16.4	15.2	2.4
M	235.2625	11.8	13.1	13.4	13.2	1.6	68	487.2500	15.0	14.7	15.0	17.0	2.3
N	241.2625	12.5	13.7	13.9	13.8	1.4	69	493.2500	15.0	16.4	16.7	15.7	1.7
O	247.2625	12.0	13.4	13.5	13.4	1.5	70	499.2500	13.1	16.4	16.7	14.6	3.6
P	253.2625	12.8	14.1	14.2	14.2	1.4	71	505.2500	15.0	17.1	17.1	16.6	2.1
Q	259.2625	13.0	14.2	14.2	14.3	1.3	72	511.2500	16.1	17.4	17.5	16.4	1.4
R	265.2625	13.4	14.9	14.8	14.8	1.5	73	517.2500	15.3	16.8	17.0	17.1	1.8
S	271.2625	12.8	14.2	14.2	14.3	1.5	74	523.2500	14.3	16.8	17.0	17.5	3.2
T	277.2625	13.2	14.5	14.4	14.6	1.4	75	529.2500	14.8	16.7	16.5	17.1	2.3
U	283.2625	13.4	14.9	15.0	15.0	1.6	76	535.2500	15.3	16.9	17.0	17.0	1.7
V	289.2625	13.5	14.6	14.8	14.9	1.4	77	541.2500	14.4	16.3	16.5	16.5	2.1
W	295.2625	13.6	15.0	15.3	15.5	1.9	78	547.2500	14.1	15.9	16.0	17.0	2.9

Max NonAdjacent Channel Level Diff.	5.4
Max Adjacent Channel Level Diff.	2.7

Max Variance from last proof-of-performance test	7.2
Date of last proof-of-performance test	FEB. 7,2002

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

TestPoint 1 Page 5 of 5

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ILION

System Test Point # 2

Location: SOUTH FOURTH AVE.

Community: ILION
Pole Number: 21/22

D.T. Value: 14
Map Number: 626-5622
OR Number: 942
Trunk Cascade: 1 LE Cascade 2

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

System Name: **ILION**

Test Location: **S. 4TH AVE.**

Date: 28-Aug-02

Time: 09:15 AM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (Dbmv)
2	55.2500	13.4	-0.4		13.8	AA	301.2625	8.6	-5.7		14.3
3	61.2500	13.8	-0.2		14.0	BB	307.2625	8.4	-3.9		12.3
4	67.2500	13.3	0.3		13.0	CC	313.2625	8.2	-5.7		13.9
5	77.2500	12.5	-2.0		14.5	DD	319.2625	8.2	-6.3		14.5
6	83.2500	12.9	-1.6		14.5	EE	325.2625	8.2	-5.6		13.8
						FF	331.2750	8.3	-4.7		13.0
						GG	337.2625	7.7	-6.2		13.9
A-5	91.2500	11.8	-0.6	S	12.4	HH	343.2625	7.6	-5.0		12.6
A-4	97.2500	12.1	-1.2		13.3	II	349.2625	7.7	-7.3		15.0
A-3	103.2500					JJ	355.2625	7.1	-7.1		14.2
A-2	109.2750					KK	361.2625	7.2	-7.2		14.4
A-1	115.2750	11.4	-2.3		13.7	LL	367.2625	6.7	-7.2		13.9
A	121.2625	10.9	-3.4		14.3	MM	373.2625	6.9	-6.1		13.0
B	127.2625	11.1	-2.7		13.8	NN	379.2625	6.2	-6.6		12.8
C	133.2625	11.2	-1.9		13.1	OO	385.2625	6.1	-8.8		14.9
D	139.2500	10.9	-1.8		12.7	PP	391.2625	5.9	-7.8		13.7
E	145.2500	11.2	-2.1		13.3	QQ	397.2625	5.1	-9.2		14.3
F	151.2500	9.6	-4.3		13.9	RR	403.2500	4.5	-9.1		13.6
G	157.2500	11.0	-3.1		14.1	SS	409.2500	4.7	-9.4		14.1
H	163.2500	9.7	-3.3		13.0	TT	415.2500	3.7	-9.1		12.8
I	169.2500	10.9	-2.4		13.3	UU	421.2500	4.0	-9.3		13.3
7	175.2500	10.1	-3.6		13.7	VV	427.2500	5.0	-9.1		14.1
8	181.2500	10.3	-3.4		13.7	WW	433.2500	4.5	-9.5		14.0
9	187.2500	10.5	-3.3		13.8	XX	439.2500	4.7	-8.4		13.1
10	193.2500	10.0	-4.1		14.1	YY	445.2500	4.5	-9.6		14.1
11	199.2500	9.9	-4.1		14.0	ZZ	451.2500	4.7	-8.5		13.2
12	205.2500	9.7	-1.2		10.9	63	457.2500	4.7	-8.6		13.3
13	211.2500	9.5	-2.3		11.8	64	463.2500	5.1	-7.5		12.6
J	217.2500	8.2	-5.3		13.5	65	469.2500	5.8	-7.6		13.4
K	223.2500	9.3	-4.7		14.0	66	475.2500	5.8	-7.9		13.7
L	229.2625	9.0	-4.4		13.4	67	481.2500	5.6	-7.3		12.9
M	235.2625	8.2	-6.0		14.2	68	487.2500	5.7	-6.6		12.3
N	241.2625	7.8	-5.6		13.4	69	493.2500	5.8	-7.7		13.5
O	247.2625	9.0	-4.9		13.9	70	499.2500	4.4	-8.5	S	12.9
P	253.2625	8.5	-4.7		13.2	71	505.2500	6.1	-7.2	S	13.3
Q	259.2625	9.0	-4.4		13.4	72	511.2500	5.5	-7.4	S	12.9
R	265.2625	8.8	-3.7		12.5	73	517.2500	6.6	-6.8	S	13.4
S	271.2625	9.1	-4.4		13.5	74	523.2500	4.4	-9.0	S	13.4
T	277.2625	8.9	-5.0		13.9	75	529.2500	6.3	-7.8	S	14.1
U	283.2625	9.3	-4.3		13.6	76	535.2500	5.7	-8.5	S	14.2
V	289.2625	8.9	-4.5		13.4	77	541.2500	4.5	-12.3	S	16.8
W	295.2625	8.9	-4.0		12.9	78	547.2500	4.4	-6.4	S	10.8

PEAK TO VALLEY: 10.1

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

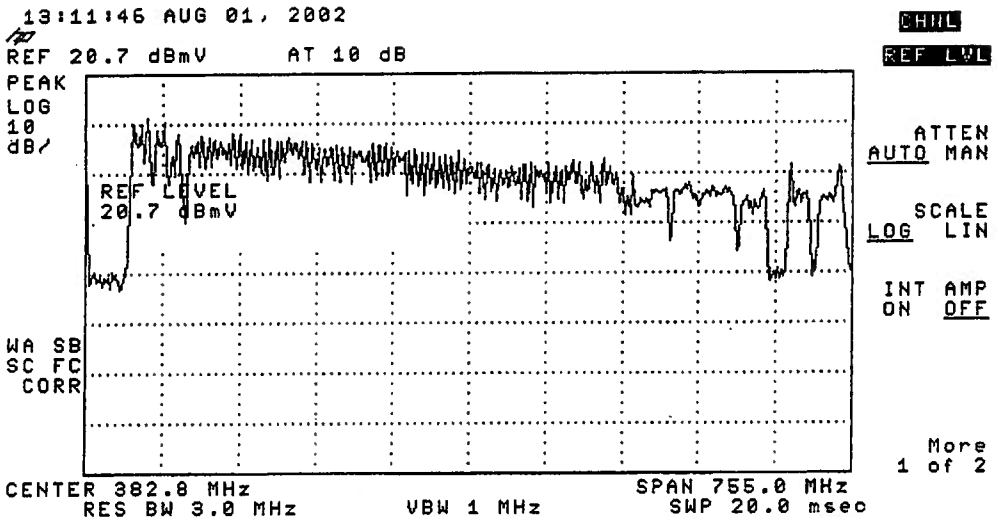
System Name: ILION **Date:** AUGUST 1,2002

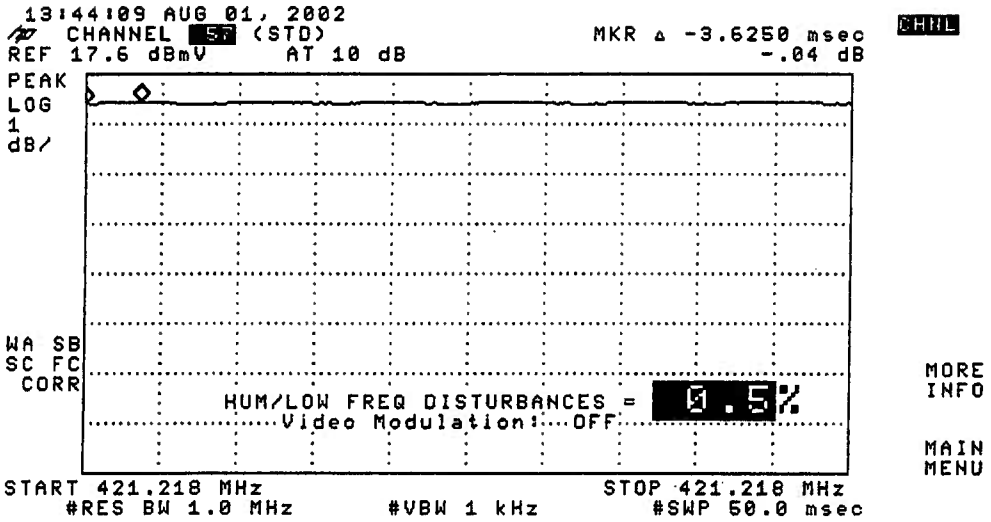
Test Performed By: JOEL MARMON/MARK D'AOUST

Location: S.FOURTH AVE. ILION

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

2	0.30	48.1	67.6	73.1		
9	0.30	48.3	72.1	72.9		
14	0.20	48.0	74.2	74.6		
20	0.40	48.3	70.1	71.3		
24	0.40	47.8	70.5	74.0		
29	0.50	47.5	71.0	72.0		
36	0.30	47.6	70.0	72.3		
49	0.20	48.1	70.1	71.0		
57	0.60	46.9	67.2	69.4		0.5


13:11:46 AUG 01, 2002
CHNL
REF 20.7 dBmV
AT 10 dB
REF LVL
PEAK
LOG
10
dB/
REF LEVEL
20.7 dBmV
ATTEN
AUTO MAN
SCALE
LOG LIN
INT AMP
ON OFF
WA SB
SC FC
CORR
More
1 of 2
CENTER 382.8 MHz
SPAN 755.0 MHz
RES BW 3.0 MHz
VBW 1 MHz
SWP 20.0 msec


13:44:09 AUG 01, 2002
CHANNEL 57 (STD)
MKR Δ -3.6250 msec
CHNL
REF 17.6 dBmV
AT 10 dB
-.04 dB
PEAK
LOG
1
dB/
WA SB
SC FC
CORR
HUM/LOW FREQ DISTURBANCES = 0.5%
Video Modulation: OFF
MORE
INFO
MAIN
MENU
START 421.218 MHz
STOP 421.218 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
#SWP 50.0 msec

Time Warner Cable
Syracuse Division

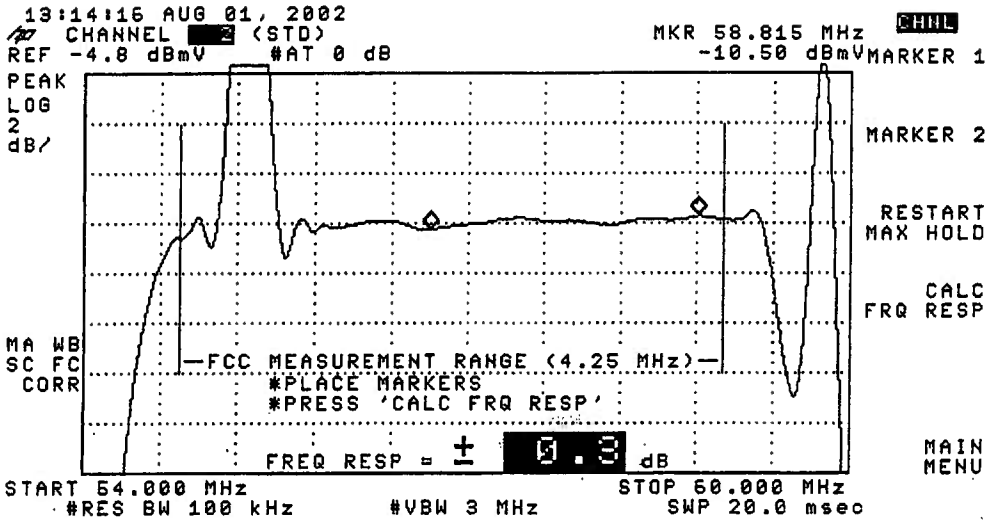
IN - CHANNEL FREQUENCY RESPONSE TEST

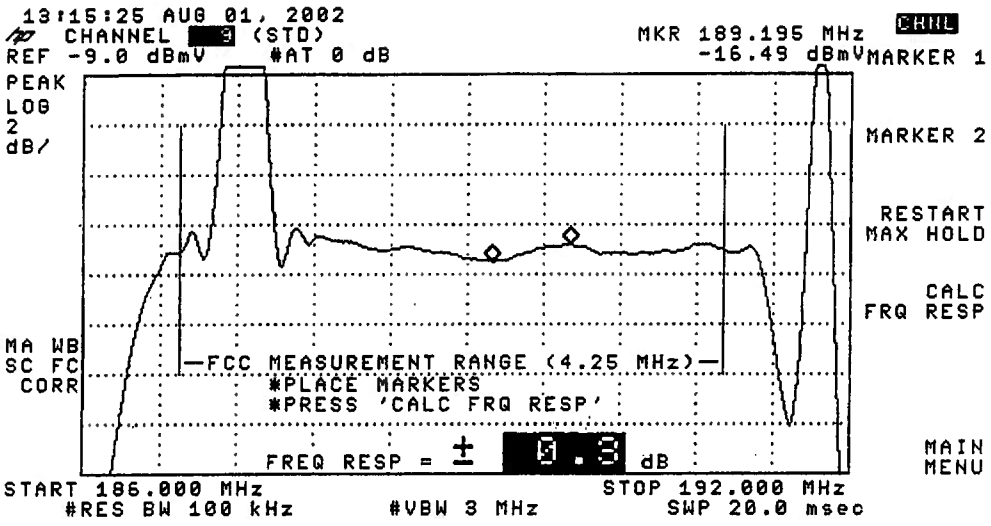
(76.605 (a) 6)

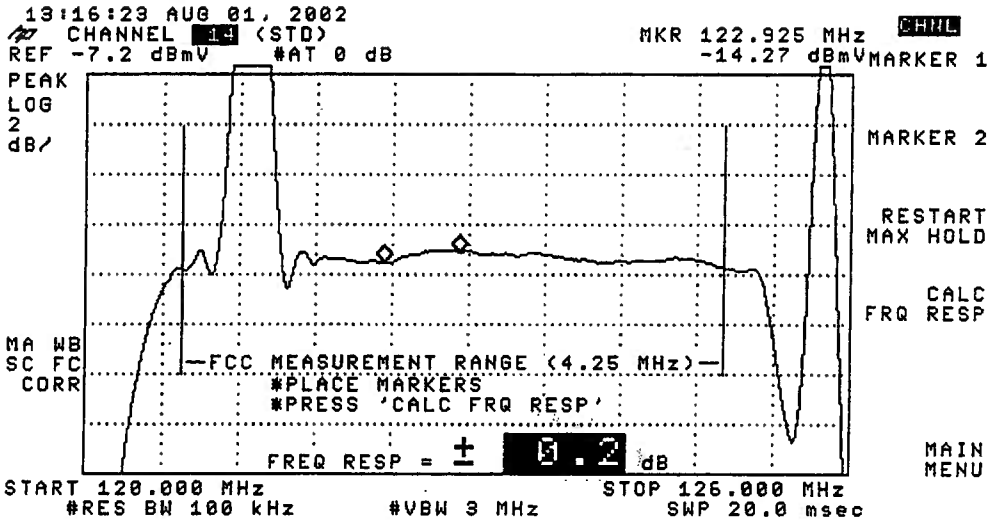
System Name: ILION Date: AUG. 1, 2002

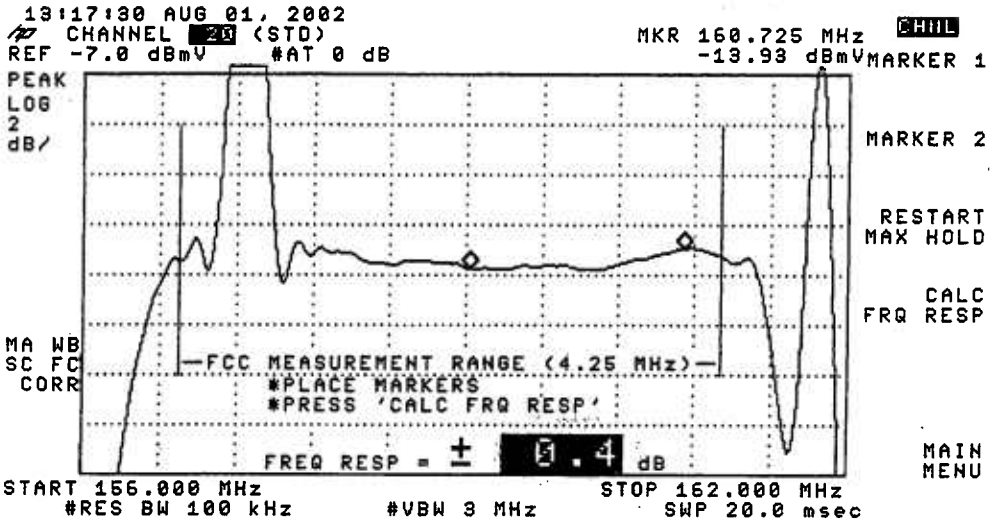
Test Performed By: MARK D'AOUST/JOEL MARMON Location: SOUTH 4TH AVE.

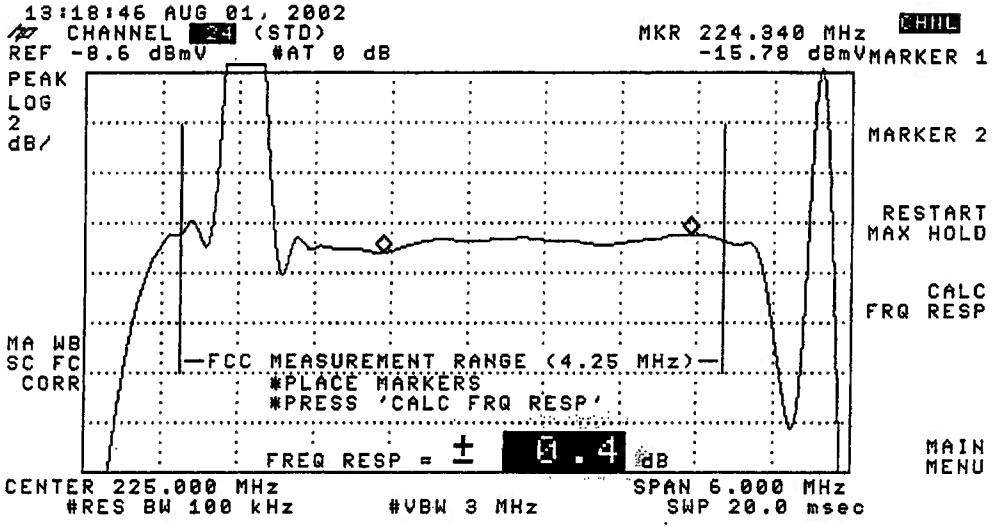
(SEE THE ATTATCHED SWEEP TRACES)

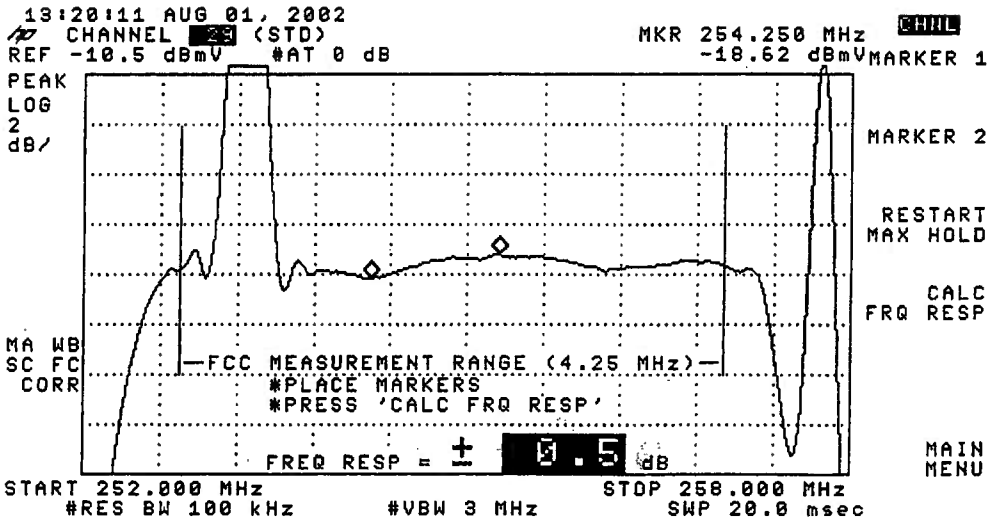

13:14:16 AUG 01, 2002
CHANNEL 2 (STD)
REF -4.8 dBmV
#AT 0 dB
MKR 58.815 MHz
-10.50 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 54.000 MHz
STOP 60.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

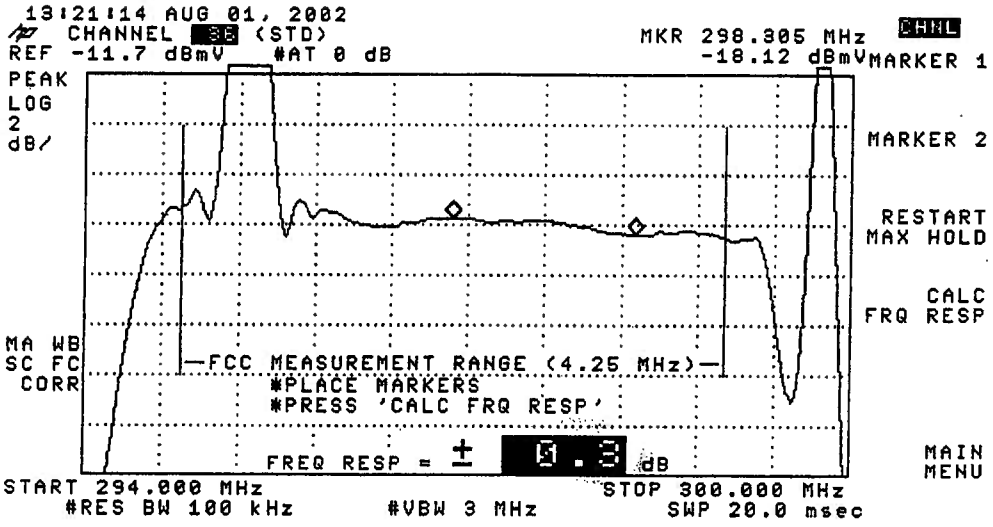

13:15:25 AUG 01, 2002
CHANNEL 3 (STD)
REF -9.0 dBmV
#AT 0 dB
MKR 189.195 MHz
-16.49 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 186.000 MHz
STOP 192.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

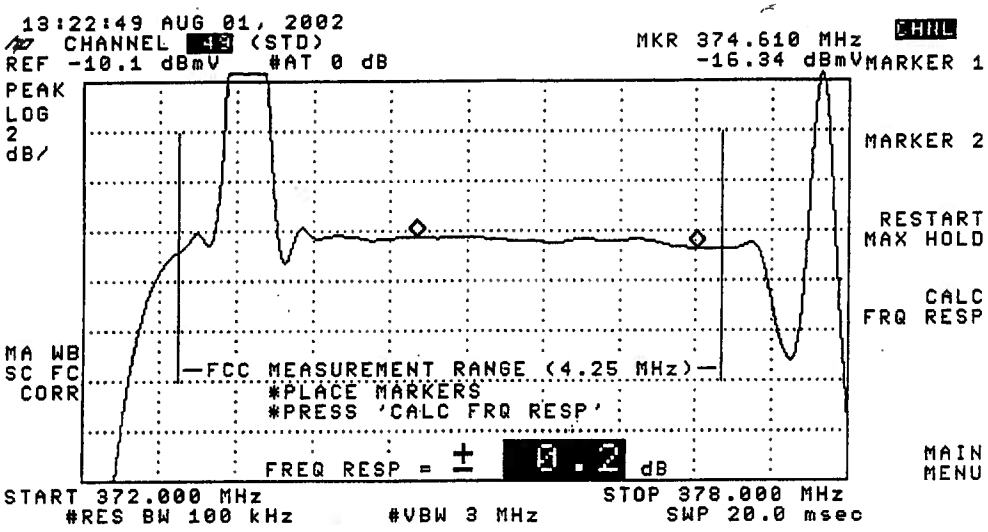

13:16:23 AUG 01, 2002
CHANNEL 14 (STD)
REF -7.2 dBmV
#AT 0 dB
MKR 122.925 MHz
-14.27 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.2 dB
MAIN
MENU
START 120.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 126.000 MHz
SWP 20.0 msec

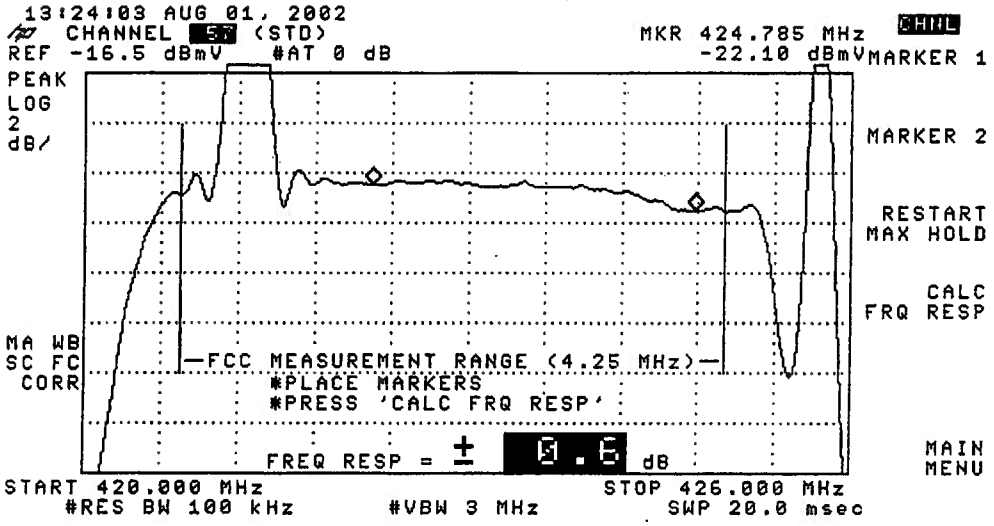

13:17:30 AUG 01, 2002
CHANNEL 20 (STD)
REF -7.0 dBmV
#AT 0 dB
MKR 160.725 MHz
-13.93 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 156.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 162.000 MHz
SWP 20.0 msec

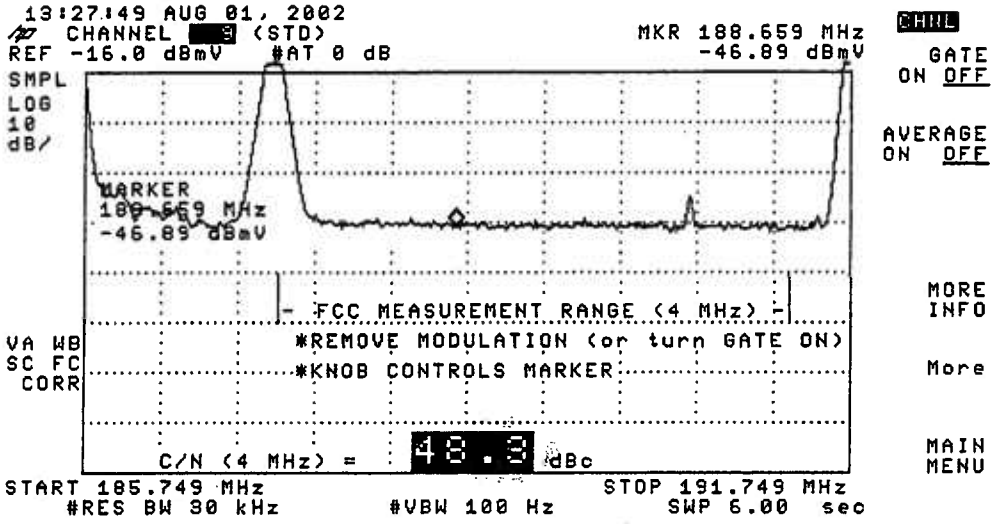

13:18:46 AUG 01, 2002
CHANNEL 24 (STD)
REF -8.6 dBmV
#AT 0 dB
MKR 224.340 MHz
-15.78 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 6.4 dB
MAIN
MENU
CENTER 225.000 MHz
SPAN 6.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

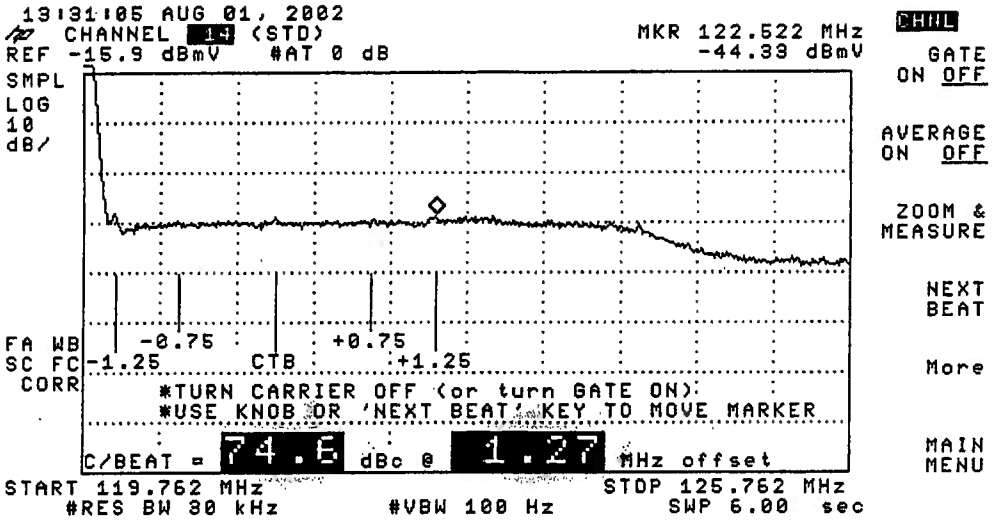

13:20:11 AUG 01, 2002
CHANNEL 29 (STD)
REF -10.5 dBmV
#AT 0 dB
MKR 254.250 MHz
-18.62 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.5 dB
MAIN
MENU
START 252.000 MHz
STOP 258.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

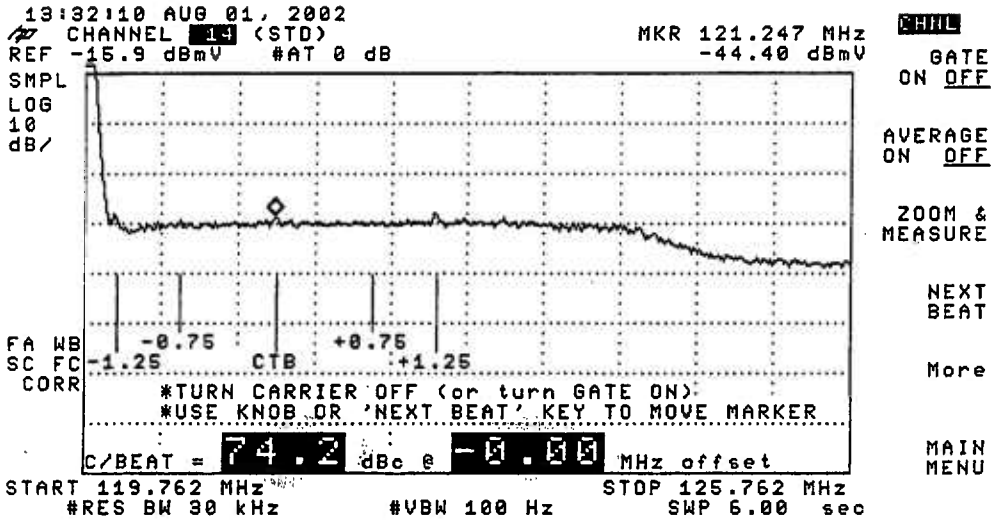

13:21:14 AUG 01, 2002
CHANNEL 38 (STD)
REF -11.7 dBmV
#AT 0 dB
MKR 298.305 MHz
-18.12 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 294.000 MHz
STOP 300.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec


13:22:49 AUG 01, 2002
CHANNEL 43 (STD)
REF -10.1 dBmV
#AT 0 dB
MKR 374.610 MHz
-16.34 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 372.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 378.000 MHz
SWP 20.0 msec


13:24:03 AUG 01, 2002
CHANNEL 57 (STD)
REF -16.5 dBmV
#AT 0 dB
MKR 424.785 MHz
-22.10 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 = ± 0.6 dB
MAIN
MENU
START 420.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 426.000 MHz
SWP 20.0 msec


13:27:49 AUG 01, 2002
CHANNEL 3 (STD)
REF -16.0 dBmV
#AT 0 dB
MKR 188.659 MHz
-46.89 dBmV
CHRL
GATE
ON OFF
AVERAGE
ON OFF
SMPL
LOG
10
dB/
MARKER
188.659 MHz
-46.89 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) = 48.3 dBc
MAIN
MENU
START 185.749 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 191.749 MHz
SWP 6.00 sec


13:31:05 AUG 01, 2002
CHANNEL 14 (STD)
REF -15.9 dBmV #AT 0 dB
MKR 122.522 MHz
-44.33 dBmV
CHNL
GATE ON OFF
AVERAGE ON OFF
ZOOM & MEASURE
NEXT BEAT
More
MAIN MENU
SMPL
LOG
10
dB/
FA WB
SC FC
CORR
-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
C/BEAT = 74.6 dBc @ 1.27 MHz offset
START 119.762 MHz
STOP 125.762 MHz
#RES BW 30 kHz
#VBW 100 Hz
SWP 6.00 sec


13:32:10 AUG 01, 2002
CHANNEL 14 (STD)
REF -15.9 dBmV
#AT 0 dB
MKR 121.247 MHz
-44.40 dBmV
SMPL
LOG
10
dB/
-0.75
+0.75
FA WB
SC FC
CORR
-1.25
CTB
+1.25
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
C/BEAT = 74.2 dBc @ -0.00 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 76.605 (a) 4

System Name: ILION

Test Point Location S.4TH AVE.

Date: AUG. 8, 2002 Performed by MARK D'AOUST

Meter Serial Number: CALAN 3010#US37241488

Chan	Freq (MHz)	Temp:F 68 09:15	72 15:10	70 21:10	65 03:23	Max Variation	Chan	Freq (MHz)	Temp:F 68 09:15	72 15:10	70 21:10	65 03:23	Max Variation
		Visual Level (dbmV)							Visual Level (dbmV)				
2	55.2500	13.4	13.0	13.5	13.7	0.7	AA	301.2625	8.6	8.8	9.4	9.7	1.1
3	61.2500	13.8	13.7	14.2	14.3	0.6	BB	307.2625	8.4	8.2	8.4	9.2	1.0
4	67.2500	13.3	13.3	13.7	13.8	0.5	CC	313.2625	8.2	8.2	9.1	9.6	1.4
5	77.2500	12.5	12.2	12.6	13.1	0.9	DD	319.2625	8.2	7.7	8.8	9.2	1.5
6	83.2500	12.9	12.8	13.1	13.3	0.5	EE	325.2625	8.2	8.0	8.7	9.5	1.5
							FF	331.2750	8.3	7.9	8.7	9.1	1.2
							GG	337.2625	7.7	7.4	8.1	9.0	1.6
A-5	91.2500	11.8	12.0	12.0	11.2	0.8	HH	343.2625	7.6	7.2	8.3	8.9	1.7
A-4	97.2500	12.1	12.0	12.1	12.4	0.4	II	349.2625	7.7	7.4	8.3	8.4	1.0
A-3	103.2500						JJ	355.2625	7.1	6.9	7.7	8.4	1.5
A-2	109.2750						KK	361.2625	7.2	6.9	7.7	8.5	1.6
A-1	115.2750	11.4	11.2	11.8	12.1	0.9	LL	367.2625	6.7	6.8	7.1	8.1	1.4
A	121.2625	10.9	10.6	11.1	11.2	0.6	MM	373.2625	6.9	6.4	7.0	7.9	1.5
B	127.2625	11.1	10.7	11.3	11.5	0.8	NN	379.2625	6.2	5.9	6.6	7.3	1.4
C	133.2625	11.2	10.7	11.4	11.6	0.9	OO	385.2625	6.1	5.6	6.2	7.6	2.0
D	139.2500	10.9	10.5	11.1	11.5	1.0	PP	391.2625	5.9	5.2	6.3	6.9	1.7
E	145.2500	11.2	10.9	11.4	11.9	1.0	QQ	397.2625	5.1	4.5	5.4	6.8	2.3
F	151.2500	9.6	9.2	9.7	10.2	1.0	RR	403.2500	4.5	4.0	5.0	6.5	2.5
G	157.2500	11.0	10.5	11.0	11.7	1.2	SS	409.2500	4.7	4.4	5.2	5.8	1.4
H	163.2500	9.7	9.5	10.3	10.4	0.9	TT	415.2500	3.7	3.4	4.2	5.3	1.9
I	169.2500	10.9	10.6	11.1	11.5	0.9	UU	421.2500	4.0	3.8	4.4	5.8	2.0
7	175.2500	10.1	10.1	10.4	11.1	1.0	VV	427.2500	5.0	4.7	5.1	4.5	0.6
8	181.2500	10.3	10.0	10.6	10.8	0.8	WW	433.2500	4.5	4.1	4.8	4.7	0.7
9	187.2500	10.5	10.1	10.6	10.7	0.6	XX	439.2500	4.7	4.0	5.1	5.5	1.5
10	193.2500	10.0	9.6	10.2	10.6	1.0	YY	445.2500	4.5	4.2	4.8	5.3	1.1
11	199.2500	9.9	9.5	9.9	10.4	0.9	ZZ	451.2500	4.7	4.2	5.3	5.6	1.4
12	205.2500	9.7	9.5	10.2	10.3	0.8	63	457.2500	4.7	4.2	5.1	5.2	1.0
13	211.2500	9.5	9.2	9.9	10.1	0.9	64	463.2500	5.1	4.5	5.6	5.7	1.2
J	217.2500	8.2	7.9	8.4	8.7	0.8	65	469.2500	5.8	5.4	6.1	5.6	0.7
K	223.2500	9.3	9.0	9.5	9.9	0.9	66	475.2500	5.8	5.5	6.5	6.1	1.0
L	229.2625	9.0	8.9	9.4	9.9	1.0	67	481.2500	5.6	5.3	6.1	6.4	1.1
M	235.2625	8.2	7.9	8.6	8.9	1.0	68	487.2500	5.7	5.3	6.2	6.9	1.6
N	241.2625	7.8	8.0	8.6	8.7	0.9	69	493.2500	5.8	5.4	6.5	6.6	1.2
O	247.2625	9.0	8.5	9.3	9.5	1.0	70	499.2500	4.4	3.8	3.9	6.6	2.8
P	253.2625	8.5	8.3	9.1	9.2	0.9	71	505.2500	6.1	5.5	6.5	6.8	1.3
Q	259.2625	9.0	8.7	9.1	9.6	0.9	72	511.2500	5.5	5.1	6.0	5.3	0.9
R	265.2625	8.8	8.4	9.4	9.6	1.2	73	517.2500	6.6	6.2	6.0	7.2	1.2
S	271.2625	9.1	8.8	9.4	9.8	1.0	74	523.2500	4.4	3.9	4.9	6.5	2.6
T	277.2625	8.9	8.7	9.2	9.3	0.6	75	529.2500	6.3	3.8	3.5	7.7	4.2
U	283.2625	9.3	9.0	9.8	9.9	0.9	76	535.2500	5.7	3.5	3.4	5.4	2.3
V	289.2625	8.9	9.0	9.5	9.7	0.8	77	541.2500	5.0	3.6	3.8	6.7	3.1
W	295.2625	8.9	8.3	9.3	9.2	1.0	78	547.2500	4.4	3.5	4.1	5.2	1.7

Max NonAdjacent Channel Level Diff.	10.8
Max Adjacent Channel Level Diff.	2.6

Max Variance from last proof-of-performance test	5.4
Date of last proof-of-performance test	FEB. 7,2002

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

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ILION

System Test Point # 3

Location: KUCERAK RD.

Community: HERKIMER
Pole Number: 9

D.T. Value: 8
Map Number: 653-5638
OR Number: 956
Trunk Cascade: 4 LE Cascade 2

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

System Name: **ILION**

Test Location: **KUCERAK RD.**

Date: 28-Aug-02

Time: 10:04 AM

Ch	Freq (MHz)	Visual Level (dBmV)	Aural Level (dBmV)	Scr	Diff (dB)	Ch	Freq (MHz)	Visual Level (dBmV)	Aural Level (dBmV)	Scr	Diff (dB)
2	55.2500	17.4	3.7		13.7	AA	301.2625	13.8	-0.5		14.3
3	61.2500	18.0	4.4		13.6	BB	307.2625	13.8	0.9		12.9
4	67.2500	17.9	5.3		12.6	CC	313.2625	13.5	-0.7		14.2
5	77.2500	16.9	2.5		14.4	DD	319.2625	13.4	-0.9		14.3
6	83.2500	17.0	2.7		14.3	EE	325.2625	13.7	0.0		13.7
						FF	331.2750	13.8	1.4		12.4
						GG	337.2625	13.9	-0.3		14.2
A-5	91.2500	14.5	3.7	S	10.8	HH	343.2625	13.6	0.5		13.1
A-4	97.2500	16.2	3.1		13.1	II	349.2625	13.6	-1.4		15.0
A-3	103.2500					JJ	355.2625	12.8	-1.0		13.8
A-2	109.2750					KK	361.2625	13.0	-1.9		14.9
A-1	115.2750	15.6	1.5		14.1	LL	367.2625	12.4	-1.7		14.1
A	121.2625	14.7	0.2		14.5	MM	373.2625	12.3	-0.7		13.0
B	127.2625	14.5	0.8		13.7	NN	379.2625	11.8	-0.8		12.6
C	133.2625	14.6	2.0		12.6	OO	385.2625	12.1	-2.6		14.7
D	139.2500	15.0	2.4		12.6	PP	391.2625	11.7	-1.9		13.6
E	145.2500	15.5	2.2		13.3	QQ	397.2625	11.5	-3.1		14.6
F	151.2500	14.4	0.6		13.8	RR	403.2500	10.9	-2.8		13.7
G	157.2500	15.6	1.6		14.0	SS	409.2500	10.9	-3.0		13.9
H	163.2500	15.1	1.3		13.8	TT	415.2500	9.8	-4.1		13.9
I	169.2500	15.3	2.5		12.8	UU	421.2500	9.8	-3.1		12.9
7	175.2500	15.4	1.2		14.2	VV	427.2500	11.1	-2.8		13.9
8	181.2500	15.0	0.9		14.1	WW	433.2500	10.7	-2.9		13.6
9	187.2500	15.2	1.5		13.7	XX	439.2500	10.8	-2.3		13.1
10	193.2500	15.2	0.8		14.4	YY	445.2500	10.9	-3.0		13.9
11	199.2500	14.7	0.8		13.9	ZZ	451.2500	10.9	-2.3		13.2
12	205.2500	14.7	3.3		11.4	63	457.2500	11.0	-2.0		13.0
13	211.2500	14.1	2.5		11.6	64	463.2500	11.3	-1.2		12.5
J	217.2500	13.5	-0.1		13.6	65	469.2500	11.7	-1.7		13.4
K	223.2500	14.2	0.7		13.5	66	475.2500	12.0	-2.3		14.3
L	229.2625	14.3	0.8		13.5	67	481.2500	11.3	-1.5		12.8
M	235.2625	14.2	-0.2		14.4	68	487.2500	11.2	-0.7		11.9
N	241.2625	13.9	0.0		13.9	69	493.2500	11.4	-2.1		13.5
O	247.2625	14.5	0.1		14.4	70	499.2500	11.0	-3.0	S	14.0
P	253.2625	14.1	0.7		13.4	71	505.2500	12.6	-0.8	S	13.4
Q	259.2625	14.5	1.0		13.5	72	511.2500	12.0	-0.6	S	12.6
R	265.2625	14.6	1.6		13.0	73	517.2500	13.7	0.1	S	13.6
S	271.2625	14.6	0.7		13.9	74	523.2500	12.1	-2.0	S	14.1
T	277.2625	14.4	0.2		14.2	75	529.2500	12.0	0.0	S	12.0
U	283.2625	14.6	0.1		14.5	76	535.2500	13.6	-0.3	S	13.9
V	289.2625	14.3	0.1		14.2	77	541.2500	12.0	-2.0	S	14.0
W	295.2625	13.7	0.5		13.2	78	547.2500	12.7	-0.6	S	13.3

PEAK TO VALLEY: 8.2

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

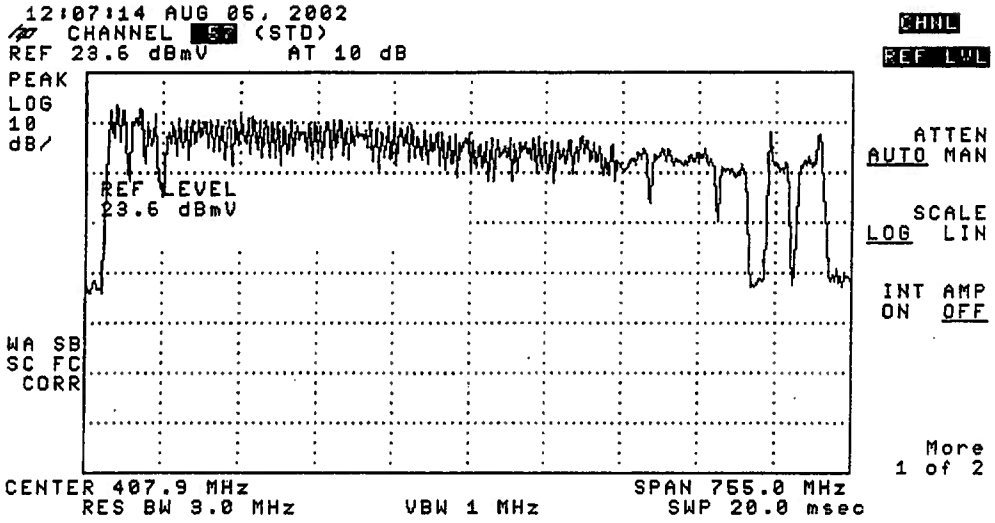
System Name: ILION **Date:** AUGUST 5,2002

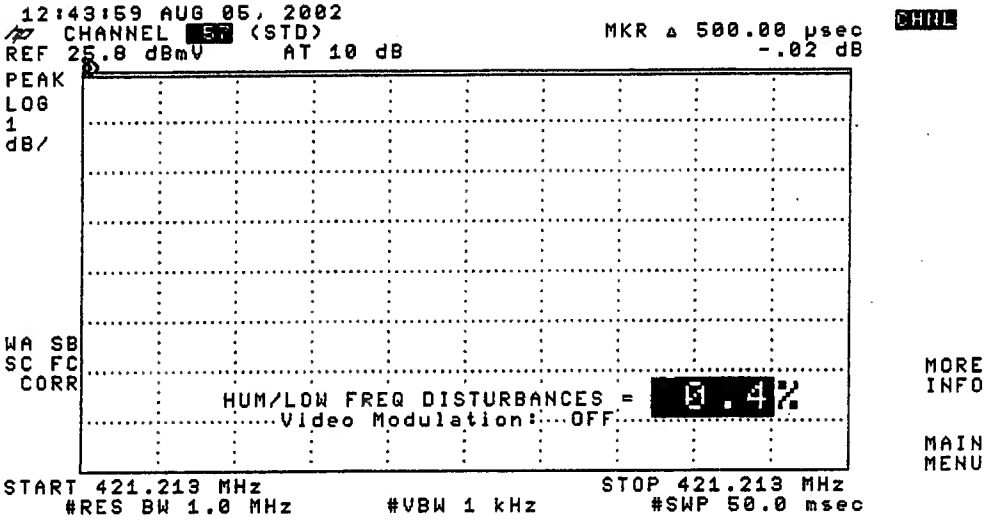
Test Performed By: JOEL MARMON/MARK D'AOUST

Location: KURCERAK RD.

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

2	0.40	46.7	60.0	75.1		
9	0.30	47.7	63.7	76.5		
14	0.30	47.5	65..1	73.7		
20	0.40	48.4	64.3	72.7		
24	0.30	47.5	62.5	71.7		
29	0.30	46.5	60.3	66.1		
36	0.60	47.6	61.8	64.7		
49	0.30	47.8	62.6	63.6		
57	0.40	47.4	60.6	63.8		0.4


12:07:14 AUG 05, 2002
CHANNEL 57 (STD)
REF 23.6 dBmV
AT 10 dB
CHNL
REF LVL
PEAK
LOG
10
dB/
REF LEVEL
23.6 dBmV
ATTEN
AUTO MAN
SCALE
LOG LIN
INT AMP
ON OFF
WA SB
SC FC
CORR
More
1 of 2
CENTER 407.9 MHz
SPAN 755.0 MHz
RES BW 3.0 MHz
VBW 1 MHz
SWP 20.0 msec


12:43:59 AUG 05, 2002
CHANNEL 57 (STD)
MKR Δ 500.00 µsec
CHRL
REF 25.8 dBmV
AT 10 dB
-.02 dB
PEAK
LOG
1
dB/
WA SB
SC FC
CORR
HUM/LOW FREQ DISTURBANCES = 0.4%
Video Modulation: OFF
MORE
INFO
MAIN
MENU
START 421.213 MHz
STOP 421.213 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
#SWP 50.0 msec

Time Warner Cable
Syracuse Division

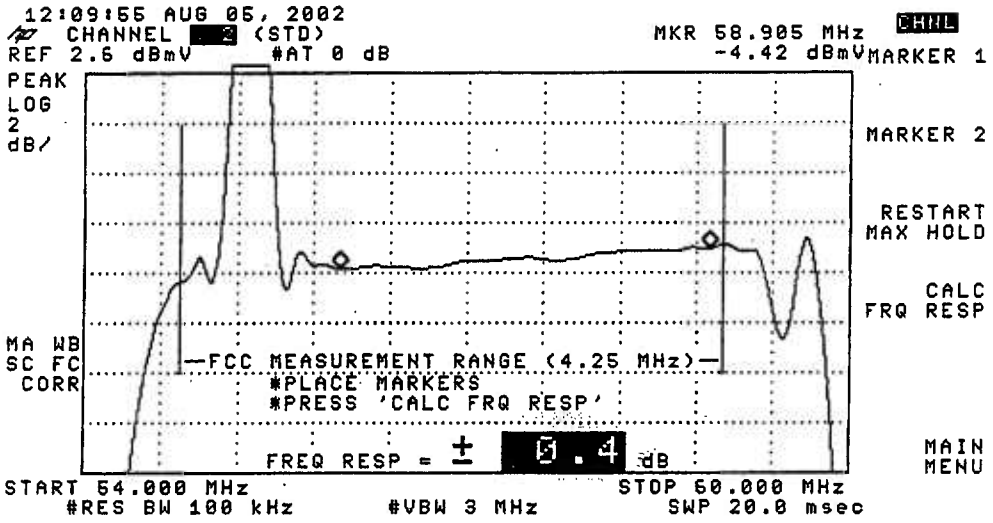
IN - CHANNEL FREQUENCY RESPONSE TEST

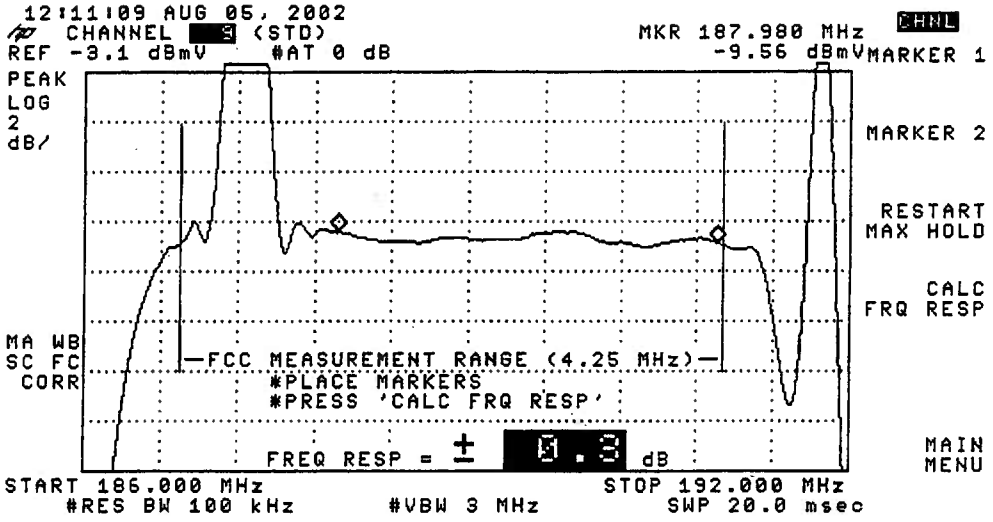
(76.605 (a) 6)

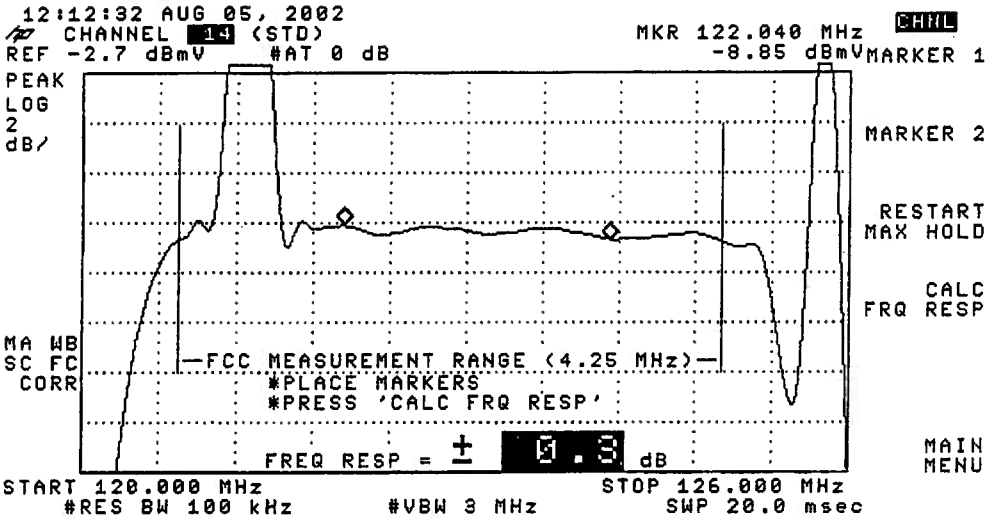
System Name: ILION Date: AUG. 1, 2002

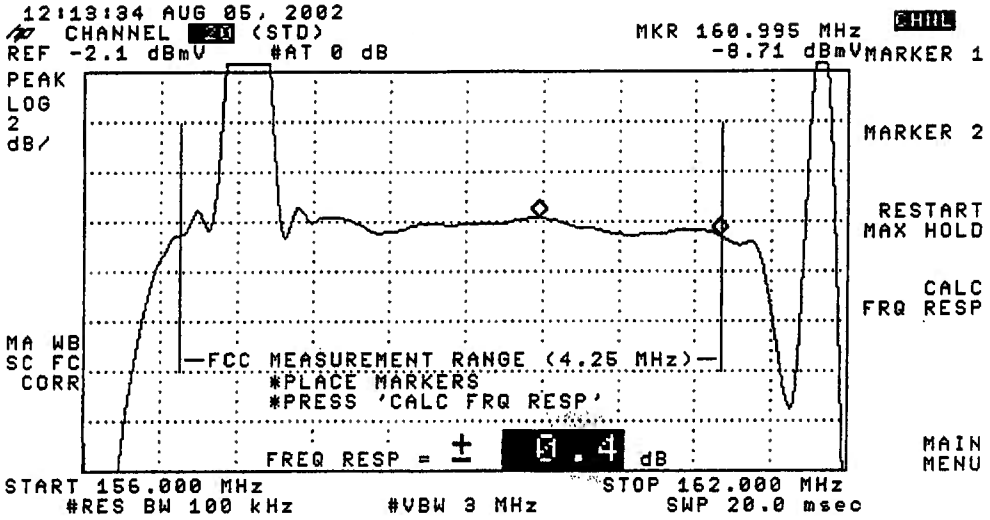
Test Performed By: MARK D'AOUST/JOEL MARMON Location: KUCERAK RD.

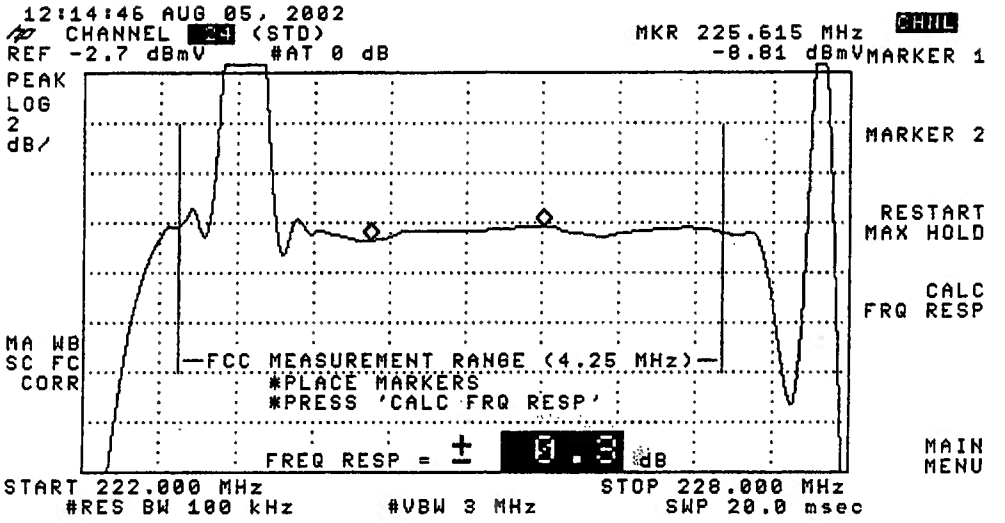
(SEE THE ATTATCHED SWEEP TRACES)

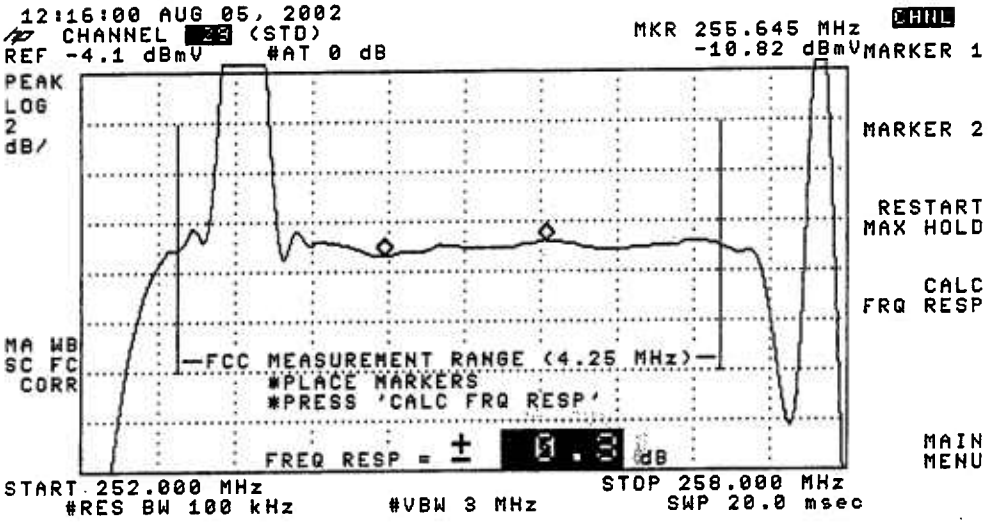

12:09:55 AUG 05, 2002
CHANNEL 3 (STD)
REF 2.6 dBmV
#AT 0 dB
MKR 58.905 MHz
-4.42 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 54.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 60.000 MHz
SWP 20.0 msec

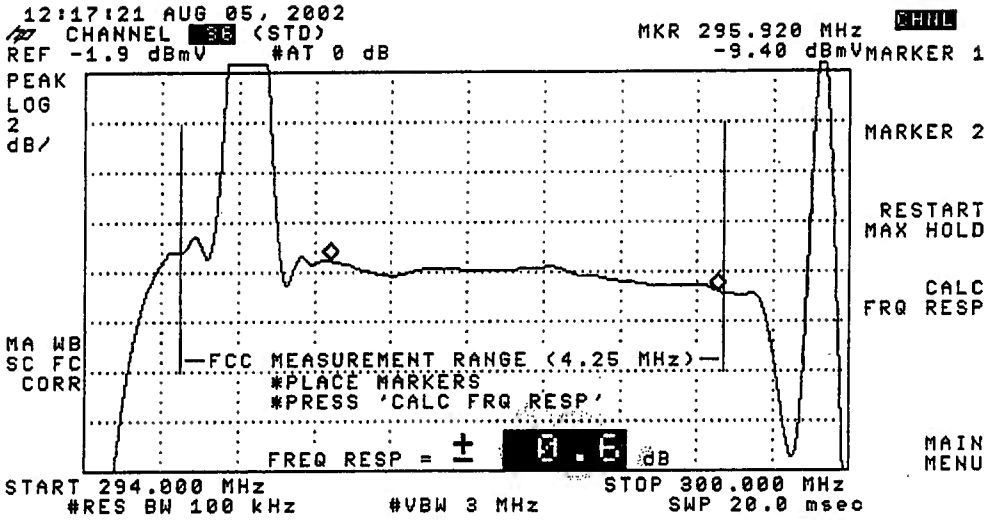

12:11:09 AUG 05, 2002
CHANNEL 3 (STD)
REF -3.1 dBmV
#AT 0 dB
MKR 187.980 MHz
-9.56 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 186.000 MHz
STOP 192.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

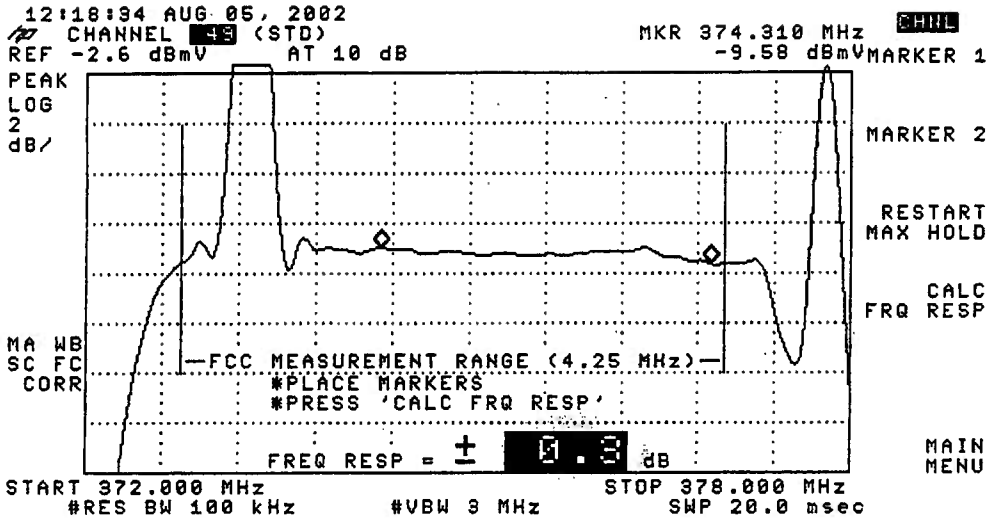

12:12:32 AUG 05, 2002
CHANNEL 14 (STD)
REF -2.7 dBmV
#AT 0 dB
MKR 122.040 MHz
-8.85 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 120.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 126.000 MHz
SWP 20.0 msec

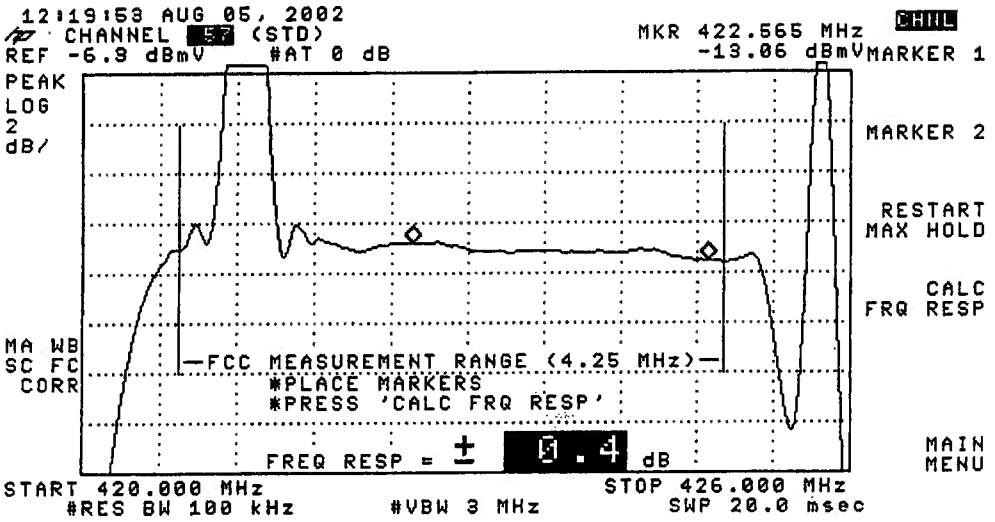

12:13:34 AUG 05, 2002
CHANNEL 20 (STD)
REF -2.1 dBmV
#AT 0 dB
MKR 160.995 MHz
-8.71 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 5.4 dB
MAIN
MENU
START 156.000 MHz
STOP 162.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

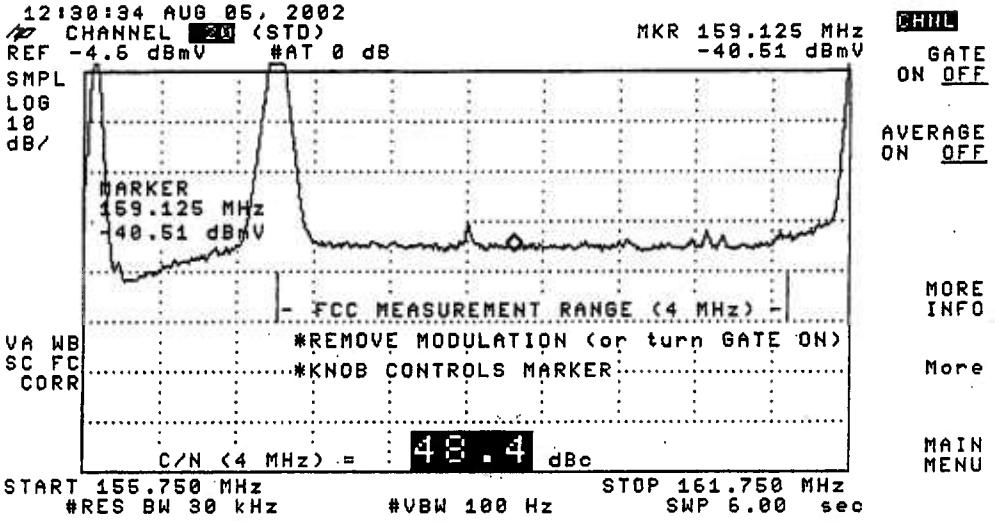

12:14:46 AUG 05, 2002
CHANNEL 24 (STD)
REF -2.7 dBmV
#AT 0 dB
MKR 225.615 MHz
-8.81 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 222.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 228.000 MHz
SWP 20.0 msec

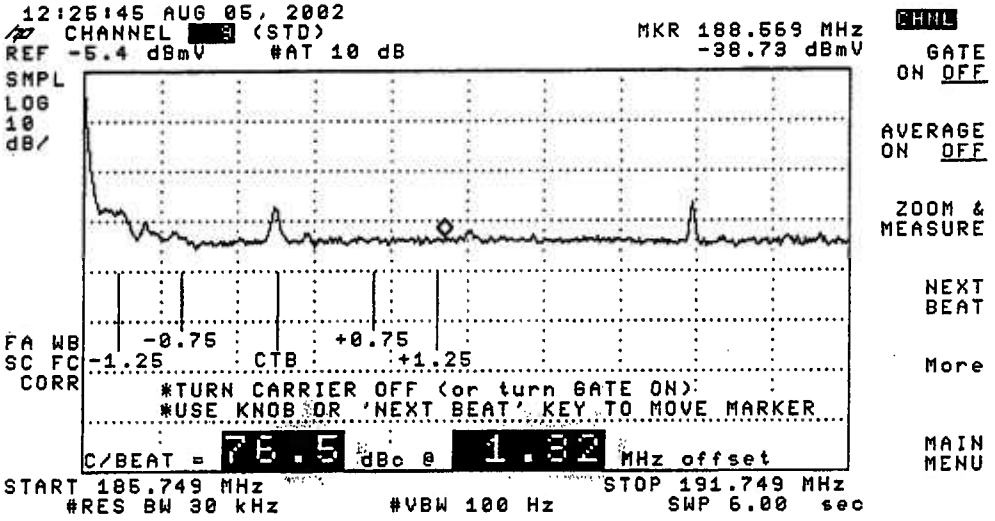

12:16:00 AUG 05, 2002
CHANNEL 23 (STD)
REF -4.1 dBmV
#AT 0 dB
MKR 255.645 MHz
-10.82 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 252.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 258.000 MHz
SWP 20.0 msec

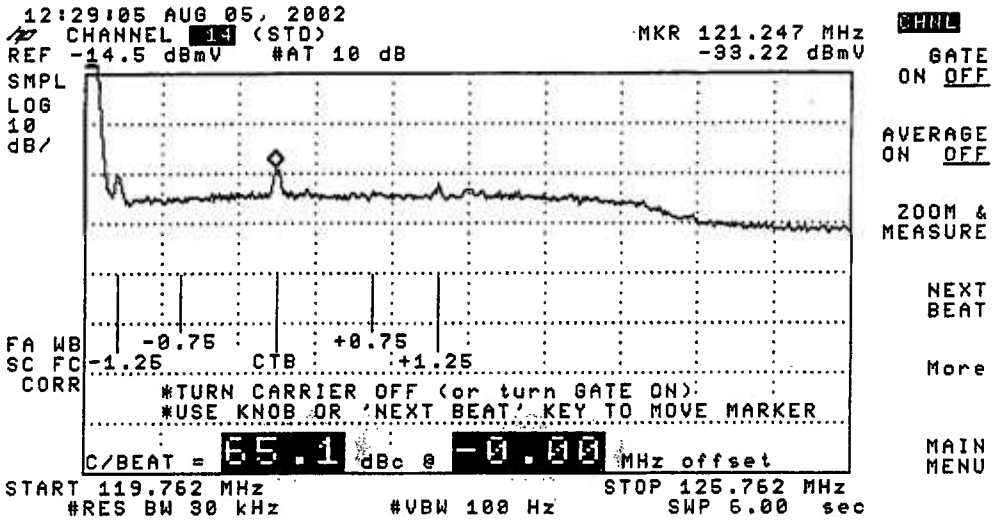

12:17:21 AUG 05, 2002
CHANNEL 36 (STD)
REF -1.9 dBmV
#AT 0 dB
MKR 295.920 MHz
-9.40 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.6 dB
MAIN
MENU
START 294.000 MHz
STOP 300.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec


12:18:34 AUG 05, 2002
CHANNEL 49 (STD)
REF -2.6 dBmV
AT 10 dB
MKR 374.310 MHz
-9.58 dBmV
CHIL
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 372.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 378.000 MHz
SWP 20.0 msec


12:19:53 AUG 05, 2002
CHANNEL 57 (STD)
REF -6.9 dBmV
#AT 0 dB
MKR 422.565 MHz
-13.06 dBmV
CHIL
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 420.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 426.000 MHz
SWP 20.0 msec


12:30:34 AUG 05, 2002
CHANNEL 20 (STD)
REF -4.6 dBmV
#AT 0 dB
MKR 159.125 MHz
-40.51 dBmV
CHNL
GATE
ON OFF
AVERAGE
ON OFF
SMPL
LOG
10
dB/
MARKER
159.125 MHz
-40.51 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) = 48.4 dBc
MAIN
MENU
START 155.750 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 161.750 MHz
SWP 6.00 sec


12:25:45 AUG 05, 2002
CHANNEL 3 (STD)
REF -5.4 dBmV
#AT 10 dB
MKR 188.569 MHz
-38.73 dBmV
SMPL
LOG
10
dB/
-0.75
+0.75
-1.25
CTB
+1.25
FA WB
SC FC
CORR
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
C/BEAT = 76.5 dBc @ 1.32 MHz offset
START 185.749 MHz
STOP 191.749 MHz
#RES BW 30 kHz
#VBW 100 Hz
SWP 6.00 sec
CHNL
GATE
ON OFF
AVERAGE
ON OFF
ZOOM &
MEASURE
NEXT
BEAT
More
MAIN
MENU


12:29:05 AUG 05, 2002
CHANNEL 14 (STD)
REF -14.5 dBmV
#AT 10 dB
MKR 121.247 MHz
-33.22 dBmV
SMPL
LOG
10
dB/
-0.75
+0.75
-1.25
CTB
+1.25
FA WB
SC FC
CORR
#TURN CARRIER OFF (or turn GATE ON)
#USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
C/BEAT = 65.1 dBc @ -0.00 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 76.605 (a) 4

System Name: ILION

Test Point Location KUCERAK

Date: AUG. 28, 2002 Performed by MARK D'AOUST

Meter Serial Number: CALAN 3010#US37241488

Chan.	Freq. (MHz)	Temp °F	69	73	68	65	Max Variation	Chan.	Freq. (MHz)	Temp °F	69	73	68	65	Max Variation
		Time	10:04	16:06	22:05	04:10				Time	10:04	16:06	22:05	04:10	
		Visual Level (dbmv)								Visual Level (dbmv)					
2	55.2500		17.4	16.9	17.0	17.5	0.6	AA	301.2625		13.8	13.6	14.2	14.9	1.3
3	61.2500		18.0	17.1	18.1	18.3	1.2	BB	307.2625		13.8	13.6	14.0	14.4	0.8
4	67.2500		17.9	17.4	17.9	18.0	0.6	CC	313.2625		13.5	13.5	13.6	14.5	1.0
5	77.2500		16.9	16.7	17.3	17.6	0.9	DD	319.2625		13.4	13.3	13.7	14.7	1.4
6	83.2500		17.0	16.8	17.2	17.4	0.6	EE	325.2625		13.7	13.9	14.2	14.3	0.6
								FF	331.2750		13.8	13.6	14.0	14.3	0.7
								GG	337.2625		13.9	13.6	14.0	15.0	1.4
A-5	91.2500		14.5	16.0	14.7	14.3	1.7	HH	343.2625		13.6	13.5	13.8	14.7	1.2
A-4	97.2500		16.2	16.1	16.5	16.7	0.6	II	349.2625		13.6	13.1	13.8	14.5	1.4
A-3	103.2500							JJ	355.2625		12.8	12.8	13.3	14.0	1.2
A-2	109.2750							KK	361.2625		13.0	12.5	13.2	14.0	1.5
A-1	115.2750		15.6	15.2	15.7	16.1	0.9	LL	367.2625		12.4	11.9	12.8	13.6	1.7
A	121.2625		14.7	14.3	14.7	14.7	0.4	MM	373.2625		12.3	11.9	12.5	13.6	1.7
B	127.2625		14.5	14.4	14.7	15.1	0.7	NN	379.2625		11.8	11.7	12.3	12.9	1.2
C	133.2625		14.6	14.6	14.9	15.0	0.4	OO	385.2625		12.1	11.7	12.3	12.9	1.2
D	139.2500		15.0	14.8	15.1	15.3	0.5	PP	391.2625		11.7	11.3	12.2	12.2	0.9
E	145.2500		15.5	15.3	15.7	15.8	0.5	QQ	397.2625		11.5	11.0	11.5	12.5	1.5
F	151.2500		14.4	14.0	14.4	14.5	0.5	RR	403.2500		10.9	10.6	11.0	12.1	1.5
G	157.2500		15.6	15.4	15.6	15.9	0.5	SS	409.2500		10.9	10.8	10.8	11.8	1.0
H	163.2500		15.1	14.5	15.3	15.6	1.1	TT	415.2500		9.8	10.3	9.5	11.2	1.7
I	169.2500		15.3	15.4	15.4	15.4	0.1	UU	421.2500		9.8	10.2	10.8	11.5	1.7
7	175.2500		15.4	15.2	15.6	15.9	0.7	VV	427.2500		11.1	10.6	11.1	9.9	1.2
8	181.2500		15.0	15.0	14.9	15.7	0.8	WW	433.2500		10.7	10.3	10.9	10.6	0.6
9	187.2500		15.2	15.2	15.4	15.8	0.6	XX	439.2500		10.8	10.2	11.0	11.3	1.1
10	193.2500		15.2	15.0	15.3	15.5	0.5	YY	445.2500		10.9	10.6	11.1	11.4	0.8
11	199.2500		14.7	14.6	14.8	15.1	0.5	ZZ	451.2500		10.9	10.9	11.3	11.4	0.5
12	205.2500		14.7	14.6	15.0	15.4	0.8	63	457.2500		11.0	11.0	11.5	11.3	0.5
13	211.2500		14.1	13.8	14.2	14.4	0.6	64	463.2500		11.3	11.2	11.7	11.6	0.5
J	217.2500		13.5	13.2	13.5	13.6	0.4	65	469.2500		11.7	11.4	12.1	11.8	0.7
K	223.2500		14.2	13.9	14.1	14.6	0.7	66	475.2500		12.0	11.6	12.2	12.2	0.6
L	229.2625		14.3	13.9	14.3	14.6	0.7	67	481.2500		11.3	11.0	11.7	12.5	1.5
M	235.2625		14.2	13.9	14.3	14.7	0.8	68	487.2500		11.2	10.9	11.6	12.6	1.7
N	241.2625		13.9	13.8	14.2	14.3	0.5	69	493.2500		11.4	10.9	11.9	12.0	1.1
O	247.2625		14.5	14.3	14.7	15.1	0.8	70	499.2500		12.0	10.4	12.0	11.7	1.6
P	253.2625		14.1	14.1	14.6	14.7	0.6	71	505.2500		12.6	11.9	12.9	11.8	1.1
Q	259.2625		14.5	14.2	14.4	14.9	0.7	72	511.2500		12.0	11.6	12.3	10.2	2.1
R	265.2625		14.6	14.4	15.2	15.5	1.1	73	517.2500		13.7	13.1	14.0	12.3	1.7
S	271.2625		14.6	14.3	15.0	15.4	1.1	74	523.2500		12.1	11.4	12.4	12.9	1.5
T	277.2625		14.4	14.3	14.9	15.1	0.8	75	529.2500		12.0	9.9	13.9	14.6	4.7
U	283.2625		14.6	14.4	14.9	15.4	1.0	76	535.2500		13.6	10.8	14.2	13.2	3.4
V	289.2625		14.3	13.6	14.3	14.9	1.3	77	541.2500		12.3	11.0	13.2	12.3	2.2
W	295.2625		13.7	13.6	13.9	14.4	0.8	78	547.2500		12.7	12.5	12.8	12.3	0.5

Max NonAdjacent Channel Level Diff.	8.6
Max Adjacent Channel Level Diff.	2.4

Max Variance from last proof-of-performance test	5.1
Date of last proof-of-performance test	FEB. 7,2002

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

TestPoint 3 Page 5 of 5

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ILION

System Test Point # 4

Location: TOP NOTCH RD

Community: LITTLE FALLS
Pole Number: 17 1/2

D.T. Value: 14
Map Number: 674-5640
OR Number: 963
Trunk Cascade: 4 LE Cascade 3

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

System Name: **ILION**

Test Location: **TOP NOTCH RD.**

Date: 28-Aug-02

Time: 04:18 PM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff. (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff. (Dbmv)
2	55.2500	14.2	1.2		13.0	AA	301.2625	13.6	-0.7		14.3
3	61.2500	15.9	2.6		13.3	BB	307.2625	13.7	1.0		12.7
4	67.2500	16.1	3.5		12.6	CC	313.2625	13.4	-0.5		13.9
5	77.2500	15.1	0.5		14.6	DD	319.2625	13.4	-0.9		14.3
6	83.2500	15.1	1.0		14.1	EE	325.2625	13.6	-0.1		13.7
						FF	331.2750	13.5	0.7		12.8
						GG	337.2625	12.9	-1.3		14.2
A-5	91.2500	14.0	2.1	S	11.9	HH	343.2625	12.8	-0.6		13.4
A-4	97.2500	15.1	1.3		13.8	II	349.2625	12.2	-2.9		15.1
A-3	103.2500					JJ	355.2625	11.7	-2.5		14.2
A-2	109.2750					KK	361.2625	11.6	-3.4		15.0
A-1	115.2750	13.8	0.0		13.8	LL	367.2625	11.2	-3.3		14.5
A	121.2625	13.3	-0.7		14.0	MM	373.2625	10.7	-2.3		13.0
B	127.2625	13.1	-0.3		13.4	NN	379.2625	10.7	-2.8		13.5
C	133.2625	13.2	0.5		12.7	OO	385.2625	10.3	-4.4		14.7
D	139.2500	13.4	0.8		12.6	PP	391.2625	9.9	-3.4		13.3
E	145.2500	13.7	0.2		13.5	QQ	397.2625	9.4	-4.8		14.2
F	151.2500	12.3	-0.9		13.2	RR	403.2500	9.1	-4.2		13.3
G	157.2500	14.2	0.4		13.8	SS	409.2500	9.2	-3.9		13.1
H	163.2500	14.0	0.3		13.7	TT	415.2500	8.8	-4.5		13.3
I	169.2500	14.4	1.1		13.3	UU	421.2500	8.8	-4.5		13.3
7	175.2500	14.0	1.1		12.9	VV	427.2500	9.7	-4.3		14.0
8	181.2500	14.5	-0.3		14.8	WW	433.2500	9.4	-4.3		13.7
9	187.2500	14.1	0.0		14.1	XX	439.2500	9.4	-3.9		13.3
10	193.2500	13.7	-0.4		14.1	YY	445.2500	9.3	-4.3		13.6
11	199.2500	13.4	-0.8		14.2	ZZ	451.2500	9.7	-3.4		13.1
12	205.2500	13.4	1.7		11.7	63	457.2500	9.4	-3.5		12.9
13	211.2500	12.4	0.3		12.1	64	463.2500	9.8	-2.6		12.4
J	217.2500	10.8	-2.6		13.4	65	469.2500	10.0	-3.1		13.1
K	223.2500	12.1	-0.7		12.8	66	475.2500	10.4	-3.5		13.9
L	229.2625	12.6	-0.6		13.2	67	481.2500	10.3	-2.6		12.9
M	235.2625	12.6	-1.2		13.8	68	487.2500	10.5	-1.5		12.0
N	241.2625	13.1	-0.7		13.8	69	493.2500	10.6	-2.8		13.4
O	247.2625	13.6	-0.3		13.9	70	499.2500	9.2	-2.5	S	11.7
P	253.2625	13.6	0.1		13.5	71	505.2500	11.7	-1.4	S	13.1
Q	259.2625	13.5	0.2		13.3	72	511.2500	11.4	-1.0	S	12.4
R	265.2625	14.0	1.0		13.0	73	517.2500	13.2	-0.1	S	13.3
S	271.2625	13.9	0.0		13.9	74	523.2500	11.7	-3.0	S	14.7
T	277.2625	13.8	-0.4		14.2	75	529.2500	11.2	-0.4	S	11.6
U	283.2625	14.0	-0.1		14.1	76	535.2500	10.4	-1.3	S	11.7
V	289.2625	14.0	-0.2		14.2	77	541.2500	11.0	-4.2	S	15.2
W	295.2625	13.4	0.3		13.1	78	547.2500	10.9	-0.2	S	11.1

PEAK TO VALLEY: 7.3

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

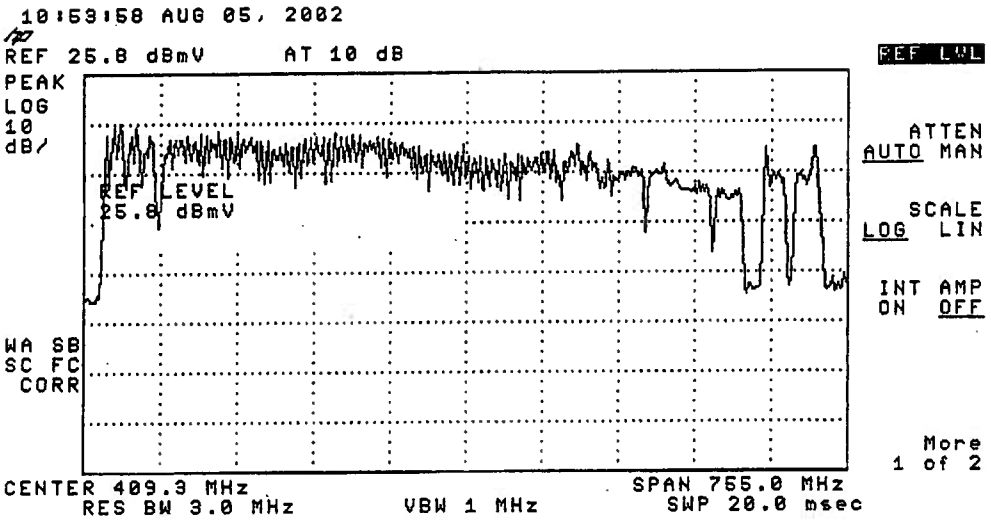
System Name: ILION **Date:** AUGUST 5,2002

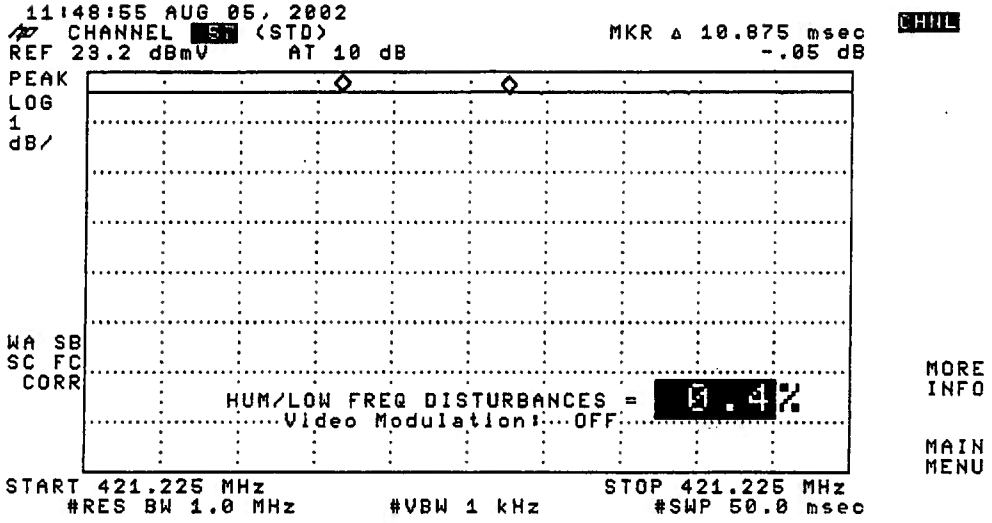
Test Performed By: JOEL MARMON/MARK D'AOUST

Location: TOP NOTCH.LITTLE FALLS

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

2	0.50	46.9	63.1	75.8		
9	0.30	47.7	62.1	73.5		
14	0.30	46.2	61.5	68.8		
20	0.40	46.9	61.9	74.0		
24	0.40	46.1	60.1	70.9		
29	0.30	46.0	60.2	68.8		
36	0.30	48.0	62.6	73.0		
49	0.20	47.5	60.8	66.5		
57	0.40	46.7	60.1	64.5		0.4


10:53:58 AUG 05, 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
CENTER 409.3 MHz
SPAN 755.0 MHz
RES BW 3.0 MHz
VBW 1 MHz
SWP 20.0 msec


11:48:55 AUG 05, 2002
CHANNEL ST (STD)
MKR Δ 10.875 msec
-.05 dB
CHNL
REF 23.2 dBmV
AT 10 dB
PEAK
LOG
1
dB/
WA SB
SC FC
CORR
HUM/LOW FREQ DISTURBANCES = 5.4%
Video Modulation: OFF
MORE
INFO
MAIN
MENU
START 421.225 MHz
STOP 421.225 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
#SWP 50.0 msec

Time Warner Cable
Syracuse Division

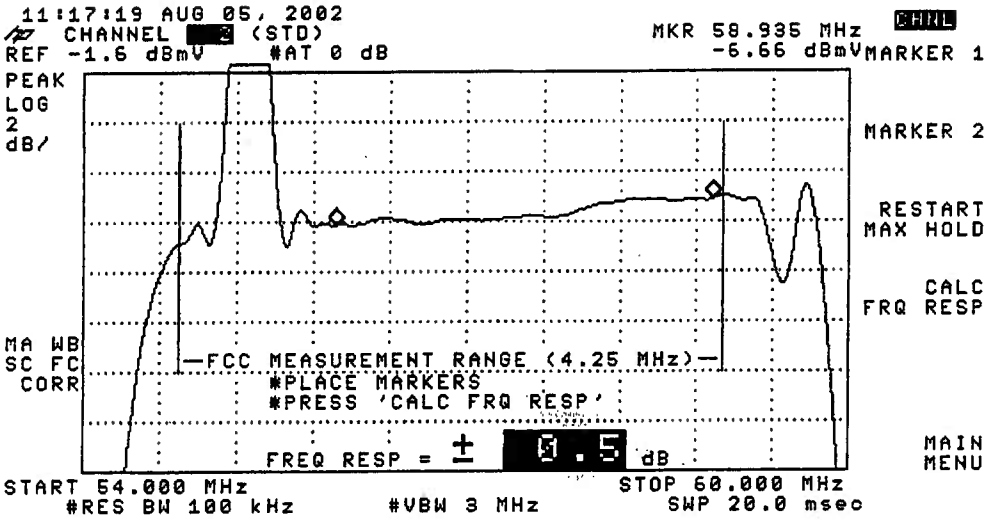
IN - CHANNEL FREQUENCY RESPONSE TEST

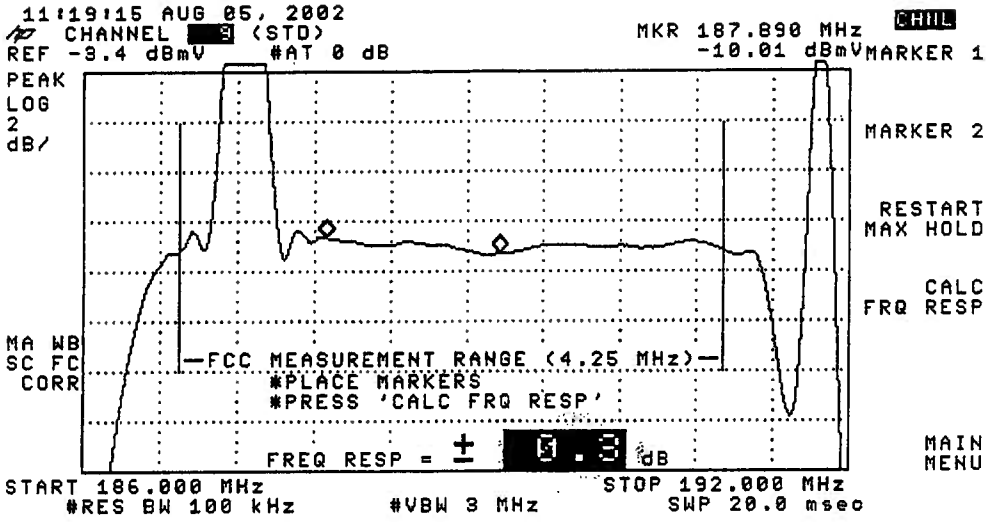
(76.605 (a) 6)

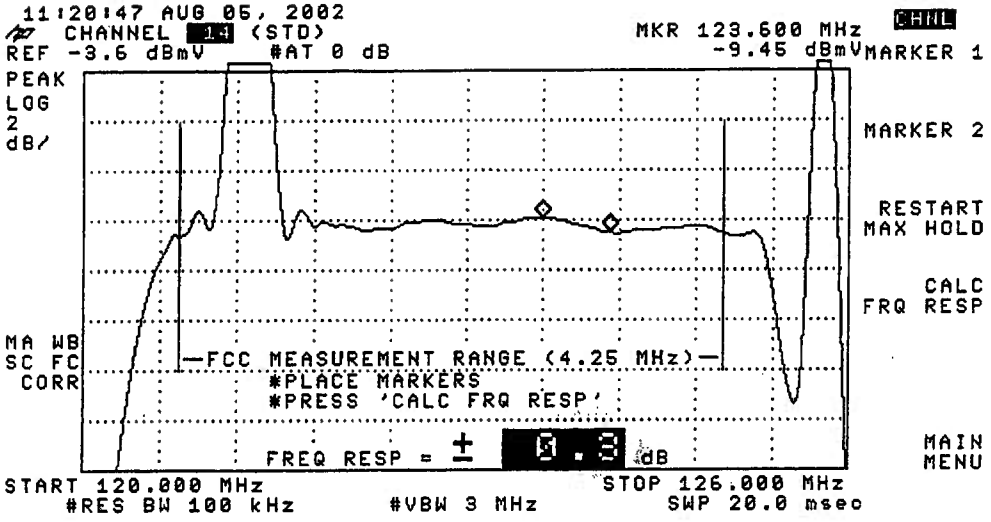
System Name: ILION Date: AUG. 1, 2002

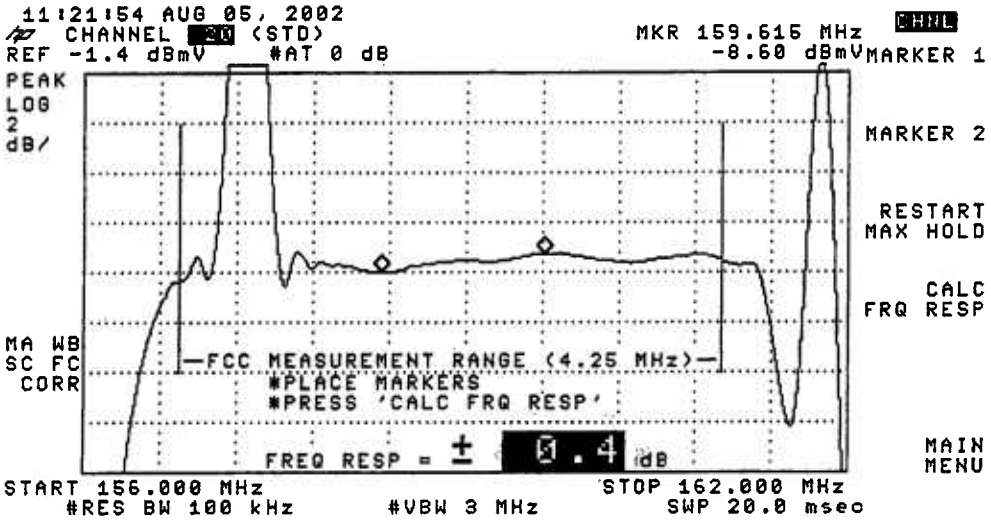
Test Performed By: MARK D'AOUST/JOEL MARMON Location: TOP NOTCH RD.

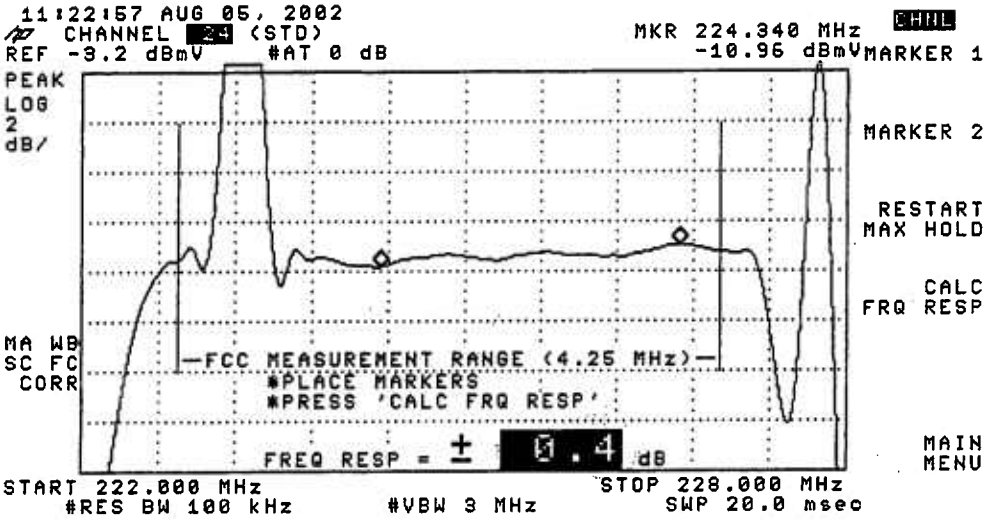
(SEE THE ATTATCHED SWEEP TRACES)

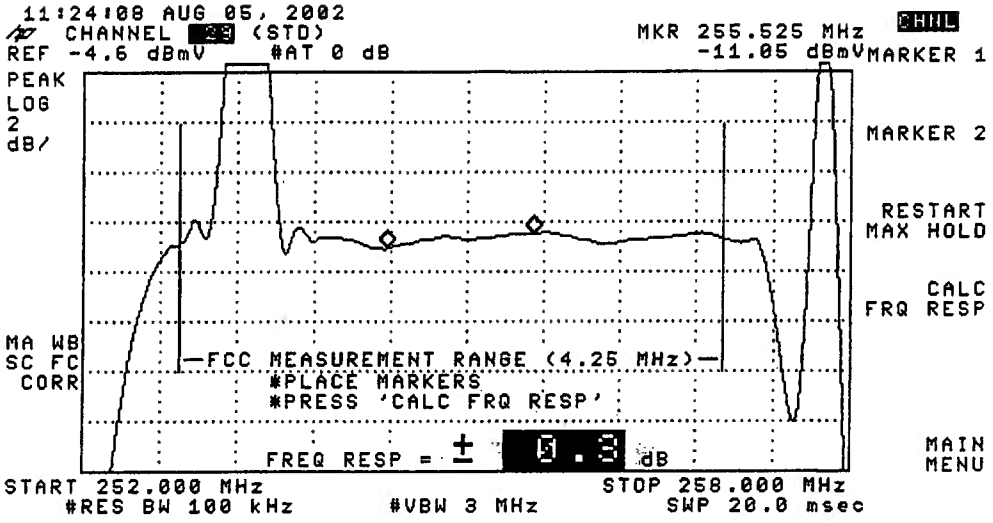

11:17:19 AUG 05, 2002
CHANNEL 3 (STD)
REF -1.6 dBmV
#AT 0 dB
MKR 58.935 MHz
-6.66 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.5 dB
MAIN
MENU
START 54.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 60.000 MHz
SWP 20.0 msec

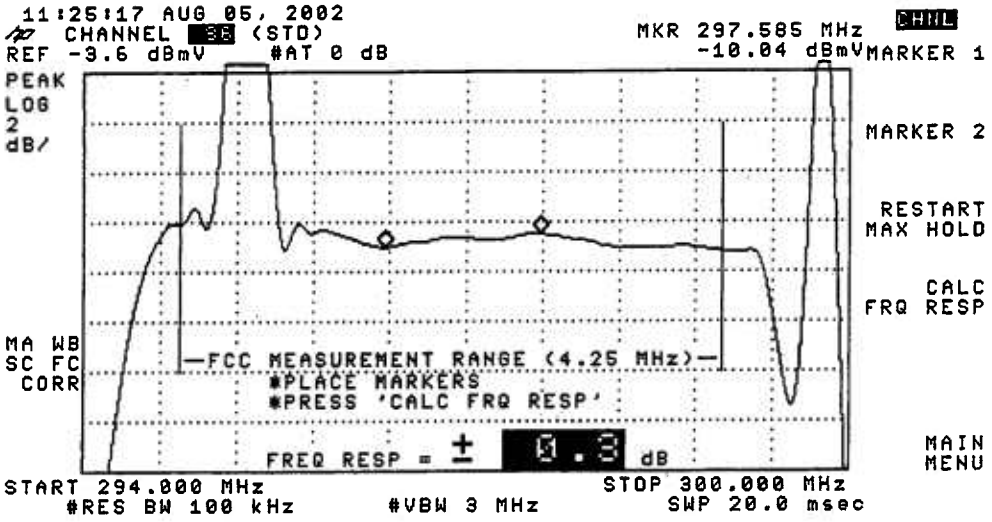

11:19:15 AUG 05, 2002
CHANNEL 9 (STD)
REF -3.4 dBmV
#AT 0 dB
MKR 187.890 MHz
-10.01 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 186.000 MHz
STOP 192.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

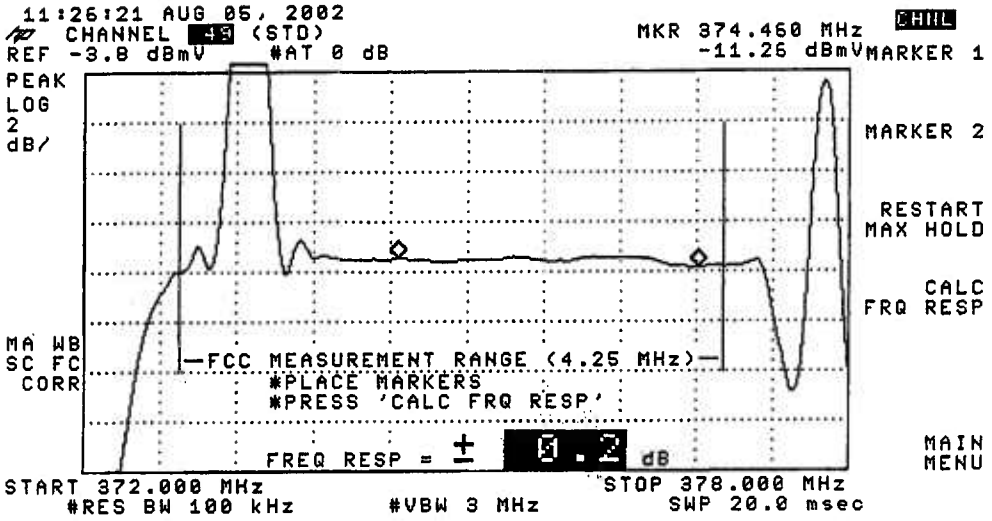

11:20:47 AUG 05, 2002
CHANNEL 14 (STD)
REF -3.6 dBmV
#AT 0 dB
MKR 123.600 MHz
-9.45 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 120.000 MHz
STOP 126.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

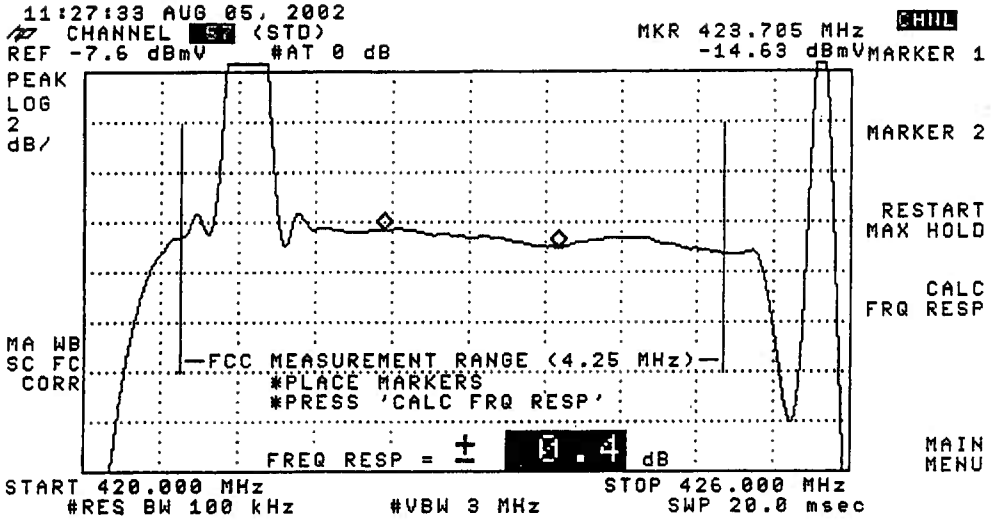

11:21:54 AUG 05, 2002
CHANNEL 30 (STD)
REF -1.4 dBmV
#AT 0 dB
MKR 159.615 MHz
-8.60 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 156.000 MHz
STOP 162.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 mseo

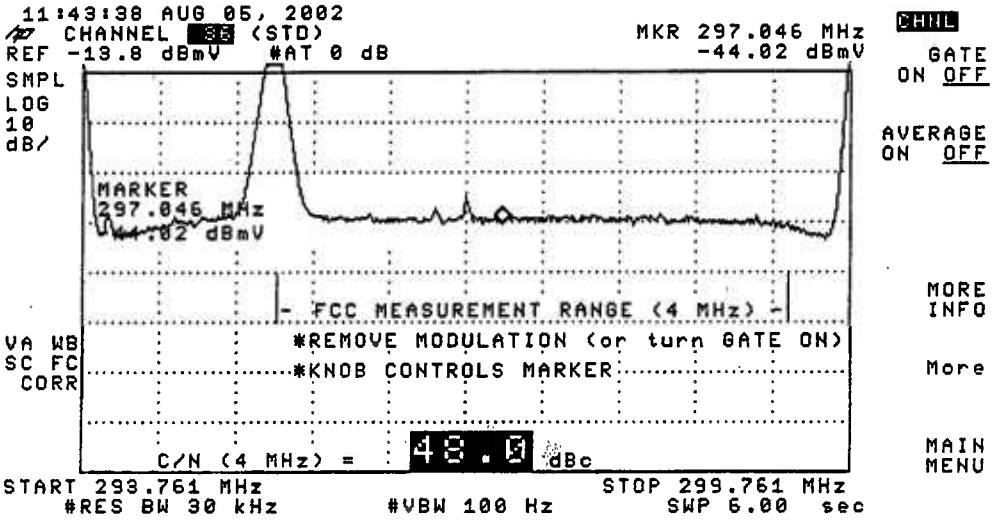

11:22:57 AUG 05, 2002
CHANNEL 24 (STD)
REF -3.2 dBmV
#AT 0 dB
MKR 224.340 MHz
-10.96 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 222.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 228.000 MHz
SWP 20.0 msec

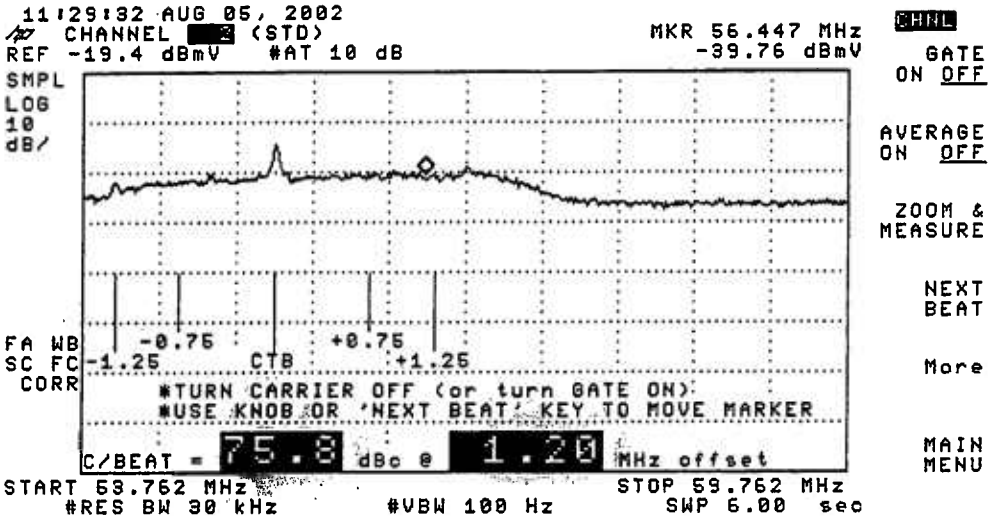

11:24:08 AUG 05, 2002
CHANNEL 29 (STD)
REF -4.6 dBmV
#AT 0 dB
MKR 255.525 MHz
-11.05 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 252.000 MHz
STOP 258.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

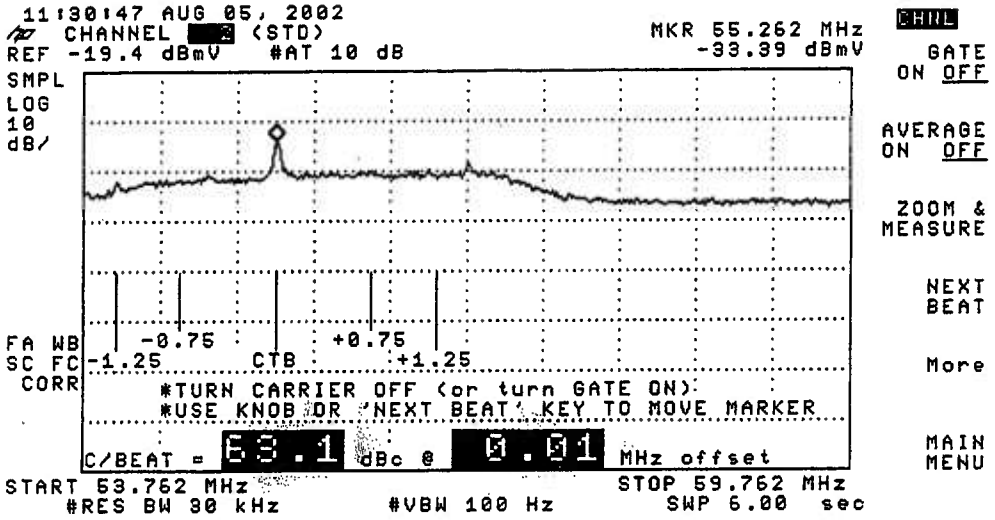

11:25:17 AUG 05, 2002
CHANNEL 38 (STD)
REF -3.6 dBmV
#AT 0 dB
MKR 297.585 MHz
-10.04 dBmV
CHHL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 294.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 300.000 MHz
SWP 20.0 msec


11:26:21 AUG 05, 2002
CHANNEL 45 (STD)
REF -3.8 dBmV
#AT 0 dB
MKR 374.460 MHz
-11.25 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 372.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 378.000 MHz
SWP 20.0 msec


11:27:33 AUG 05, 2002
CHANNEL 57 (STD)
REF -7.6 dBmV
#AT 0 dB
MKR 423.705 MHz
-14.63 dBmV
CHIL
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 = ± 3.4 dB
MAIN
MENU
START 420.000 MHz
STOP 426.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec


11:43:38 AUG 05, 2002
CHANNEL 36 (STD)
REF -13.8 dBmV
#AT 0 dB
MKR 297.046 MHz
-44.02 dBmV
CHNL
GATE
ON OFF
SMPL
LOG
10
dB/
AVERAGE
ON OFF
MARKER
297.046 MHz
-44.02 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) = 48.0 dBc
MAIN
MENU
START 293.761 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 299.761 MHz
SWP 6.00 sec


11:29:32 AUG 05, 2002
CHANNEL [redacted] (STD)
REF -19.4 dBmV #AT 10 dB
MKR 56.447 MHz
-39.76 dBmV
CHNL
GATE
ON OFF
AVERAGE
ON OFF
ZOOM &
MEASURE
NEXT
BEAT
More
MAIN
MENU
SMPL
LOG
10
dB/
FA WB
SC FC
CORR
-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
C/BEAT = 75.8 dBc @ 1.20 MHz offset
START 53.762 MHz
STOP 59.762 MHz
#RES BW 30 kHz
#VBW 100 Hz
SWP 6.00 sec


11:30:47 AUG 05, 2002
CHANNEL [redacted] (STD)
REF -19.4 dBmV
#AT 10 dB
MKR 55.262 MHz
-33.39 dBmV
CHRL
GATE ON OFF
AVERAGE ON OFF
ZOOM & MEASURE
NEXT BEAT
More
MAIN MENU
SMPL
LOG
10
dB/
FA WB
SC FC
CORR
-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
C/BEAT = 63.1 dBc @ 0.01 MHz offset
START 53.762 MHz
STOP 59.762 MHz
#RES BW 30 kHz
#VBW 100 Hz
SWP 6.00 sec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: ILION

Test Point Location TOP NOTCH

Date: AUG. 28, 2002 Performed by MARK D'AOUST

Meter Serial Number: CALAN 3010#US37241488

Chan	Freq (MHz)	Temp 68 / Time 10:17	Temp 75 / Time 16:18	Temp 67 / Time 22:17	Temp 65 / Time 04:22	Max Variation	Chan	Freq (MHz)	Temp 68 / Time 10:17	Temp 75 / Time 16:18	Temp 67 / Time 22:17	Temp 65 / Time 04:22	Max Variation
		Visual Level (dbmv)							Visual Level (dbmv)				
2	55.2500	14.3	14.2	14.7	15.1	0.9	AA	301.2625	13.7	13.6	14.1	14.3	0.7
3	61.2500	16.2	15.9	16.4	16.3	0.5	BB	307.2625	13.8	13.7	14.0	13.8	0.3
4	67.2500	16.3	16.1	16.4	16.7	0.6	CC	313.2625	13.8	13.4	13.8	14.2	0.8
5	77.2500	15.4	15.1	15.6	15.8	0.7	DD	319.2625	13.7	13.4	13.9	14.1	0.7
6	83.2500	15.1	15.1	15.5	16.0	0.9	EE	325.2625	14.1	13.6	14.0	14.2	0.6
							FF	331.2750	13.7	13.5	13.8	14.2	0.7
							GG	337.2625	13.1	12.9	13.3	14.5	1.6
A-5	91.2500	12.9	14.0	13.9	15.9	3.0	HH	343.2625	13.1	12.8	13.2	14.3	1.5
A-4	97.2500	15.4	15.1	15.4	16.0	0.9	II	349.2625	12.4	12.2	12.6	13.6	1.4
A-3	103.2500						JJ	355.2625	11.9	11.7	12.2	13.4	1.7
A-2	109.2750						KK	361.2625	11.9	11.6	12.2	13.0	1.4
A-1	115.2750	14.0	13.8	14.2	14.6	0.8	LL	367.2625	11.2	11.2	11.4	12.6	1.4
A	121.2625	13.8	13.3	13.8	13.9	0.6	MM	373.2625	10.9	10.7	11.5	12.5	1.8
B	127.2625	13.8	13.1	13.8	14.2	1.1	NN	379.2625	10.8	10.7	11.2	12.0	1.3
C	133.2625	13.7	13.2	13.6	14.1	0.9	OO	385.2625	10.5	10.3	10.8	11.7	1.4
D	139.2500	13.8	13.4	14.0	14.4	1.0	PP	391.2625	10.5	9.9	10.6	11.6	1.7
E	145.2500	14.1	13.7	14.2	14.7	1.0	QQ	397.2625	9.7	9.4	10.1	11.0	1.6
F	151.2500	12.7	12.3	12.7	13.3	1.0	RR	403.2500	9.4	9.1	9.7	10.8	1.7
G	157.2500	14.4	14.2	14.0	14.4	0.4	SS	409.2500	9.6	9.2	9.8	10.5	1.3
H	163.2500	14.4	14.0	14.5	14.7	0.7	TT	415.2500	9.2	8.8	9.3	10.1	1.3
I	169.2500	14.5	14.4	14.9	15.2	0.8	UU	421.2500	9.2	8.8	9.4	10.6	1.8
7	175.2500	14.4	14.0	14.4	14.8	0.8	VV	427.2500	10.0	9.7	9.9	9.9	0.3
8	181.2500	14.5	14.5	14.8	15.3	0.8	WW	433.2500	10.0	9.4	10.0	9.8	0.6
9	187.2500	14.5	14.1	14.7	14.9	0.8	XX	439.2500	10.1	9.4	10.2	10.7	1.3
10	193.2500	14.0	13.7	14.1	14.6	0.9	YY	445.2500	9.8	9.3	10.0	10.5	1.2
11	199.2500	13.6	13.4	13.6	14.1	0.7	ZZ	451.2500	10.2	9.7	10.2	10.8	1.1
12	205.2500	13.5	13.4	13.7	13.9	0.5	63	457.2500	9.9	9.4	10.1	10.4	1.0
13	211.2500	12.5	12.4	12.6	12.7	0.3	64	463.2500	10.3	9.8	9.9	10.7	0.9
J	217.2500	11.0	10.8	10.9	11.2	0.4	65	469.2500	10.6	10.0	10.1	10.6	0.6
K	223.2500	12.3	12.1	12.2	12.6	0.5	66	475.2500	10.9	10.4	10.2	10.8	0.7
L	229.2625	12.8	12.6	12.8	13.0	0.4	67	481.2500	10.8	10.3	10.2	10.9	0.7
M	235.2625	13.0	12.6	12.8	13.4	0.8	68	487.2500	10.8	10.5	10.4	11.1	0.7
N	241.2625	13.3	13.1	13.5	13.8	0.7	69	493.2500	10.8	10.6	10.7	10.8	0.2
O	247.2625	13.9	13.6	14.1	14.3	0.7	70	499.2500	11.0	9.2	11.0	10.7	1.8
P	253.2625	13.8	13.6	13.9	14.0	0.4	71	505.2500	11.6	11.7	12.3	11.0	1.3
Q	259.2625	13.8	13.5	13.7	14.3	0.8	72	511.2500	11.1	11.4	12.1	9.9	2.2
R	265.2625	14.2	14.0	14.2	14.8	0.8	73	517.2500	12.5	13.2	13.9	12.5	1.4
S	271.2625	14.2	13.9	14.2	14.5	0.6	74	523.2500	10.8	11.7	12.1	12.4	1.6
T	277.2625	14.1	13.8	14.0	14.4	0.6	75	529.2500	10.0	11.2	12.1	14.1	4.1
U	283.2625	14.0	14.0	14.4	14.6	0.6	76	535.2500	12.8	10.4	12.7	12.6	2.4
V	289.2625	13.5	14.0	14.0	14.3	0.8	77	541.2500	11.0	11.0	12.0	13.0	2.0
W	295.2625	13.4	13.4	13.5	13.8	0.4	78	547.2500	10.8	10.9	13.3	11.1	2.5

Max NonAdjacent Channel Level Diff.	7.3
Max Adjacent Channel Level Diff.	2.8

Max Variance from last proof-of-performance test	5
Date of last proof-of-performance test	FEB. 7,2002

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

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ILION

System Test Point # 5

Location: E. GERMAN ST.

Community: HERKIMER

Pole Number: 20

D.T. Value: 14

Map Number: 644-5632

OR Number: 950

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: **ILION**

Test Location: **GERMAN ST.**

Date: 28-Aug-02

Time: 03:54 PM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (Dbmv)
2	55.2500	15.2	1.6		13.6	AA	301.2625	14.3	0.2		14.1
3	61.2500	15.8	2.6		13.2	BB	307.2625	14.4	1.8		12.6
4	67.2500	16.3	3.8		12.5	CC	313.2625	14.3	0.1		14.2
5	77.2500	15.1	1.1		14.0	DD	319.2625	14.1	0.1		14.0
6	83.2500	15.8	1.6		14.2	EE	325.2625	14.7	0.8		13.9
						FF	331.2750	14.6	2.1		12.5
						GG	337.2625	14.5	0.3		14.2
A-5	91.2500	14.7	1.9	S	12.8	HH	343.2625	14.4	1.3		13.1
A-4	97.2500	14.5	1.2		13.3	II	349.2625	14.2	-0.7		14.9
A-3	103.2500					JJ	355.2625	13.9	-0.1		14.0
A-2	109.2750					KK	361.2625	14.1	-0.1		14.2
A-1	115.2750	14.1	0.3		13.8	LL	367.2625	13.6	-1.0		14.6
A	121.2625	13.9	-0.7		14.6	MM	373.2625	13.1	0.5		12.6
B	127.2625	13.9	0.0		13.9	NN	379.2625	13.7	0.6		13.1
C	133.2625	13.7	0.7		13.0	OO	385.2625	13.3	-1.1		14.4
D	139.2500	13.7	0.8		12.9	PP	391.2625	12.8	-0.7		13.5
E	145.2500	14.1	1.6		12.5	QQ	397.2625	12.6	-1.9		14.5
F	151.2500	13.4	0.0		13.4	RR	403.2500	12.2	-1.2		13.4
G	157.2500	14.7	0.6		14.1	SS	409.2500	12.2	-1.3		13.5
H	163.2500	14.2	0.7		13.5	TT	415.2500	11.8	-1.2		13.0
I	169.2500	14.5	1.5		13.0	UU	421.2500	12.3	-1.6		13.9
7	175.2500	14.4	1.6		12.8	VV	427.2500	12.1	-1.1		13.2
8	181.2500	14.7	0.3		14.4	WW	433.2500	12.2	-1.0		13.2
9	187.2500	14.9	1.0		13.9	XX	439.2500	12.6	-0.4		13.0
10	193.2500	15.0	0.6		14.4	YY	445.2500	12.9	-0.8		13.7
11	199.2500	14.4	1.0		13.4	ZZ	451.2500	13.2	0.2		13.0
12	205.2500	14.9	2.9		12.0	63	457.2500	13.3	0.3		13.0
13	211.2500	13.6	1.5		12.1	64	463.2500	14.0	1.1		12.9
J	217.2500	12.1	-1.4		13.5	65	469.2500	14.0	0.3		13.7
K	223.2500	13.1	-0.2		13.3	66	475.2500	13.9	0.1		13.8
L	229.2625	13.2	-0.3		13.5	67	481.2500	13.7	0.4		13.3
M	235.2625	13.0	-0.9		13.9	68	487.2500	13.1	0.6		12.5
N	241.2625	13.4	-0.1		13.5	69	493.2500	13.1	-0.4		13.5
O	247.2625	14.1	0.1		14.0	70	499.2500	12.3	-0.5	S	12.8
P	253.2625	14.1	0.9		13.2	71	505.2500	13.4	-0.1	S	13.5
Q	259.2625	14.4	1.1		13.3	72	511.2500	12.7	0.0	S	12.7
R	265.2625	14.6	1.8		12.8	73	517.2500	14.0	0.5	S	13.5
S	271.2625	14.9	1.0		13.9	74	523.2500	12.4	-2.0	S	14.4
T	277.2625	14.9	0.8		14.1	75	529.2500	10.3	0.0	S	10.3
U	283.2625	15.1	1.0		14.1	76	535.2500	12.2	-0.8	S	13.0
V	289.2625	14.8	0.5		14.3	77	541.2500	11.0	-5.7	S	16.7
W	295.2625	14.2	1.0		13.2	78	547.2500	10.6	-1.0	S	11.6

PEAK TO VALLEY: 6

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

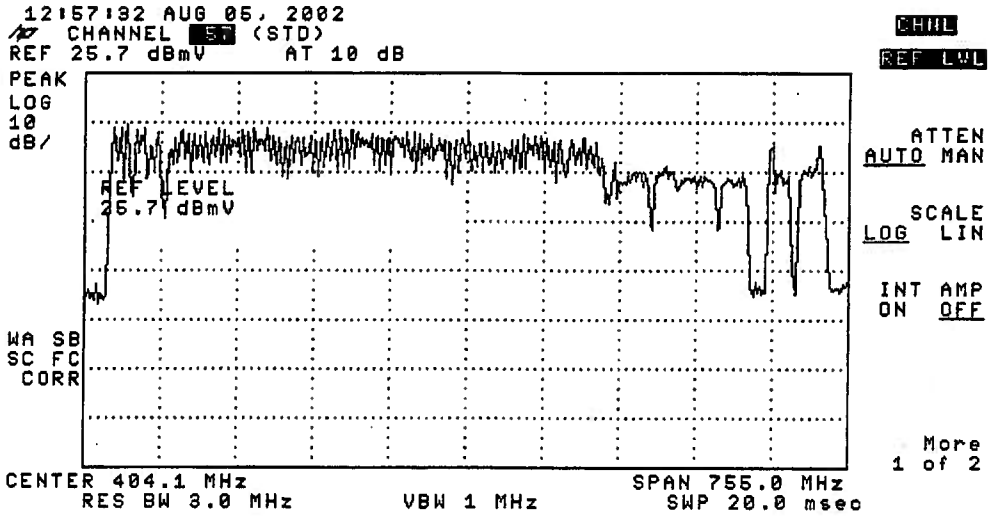
System Name: ILION **Date:** AUGUST 5,2002

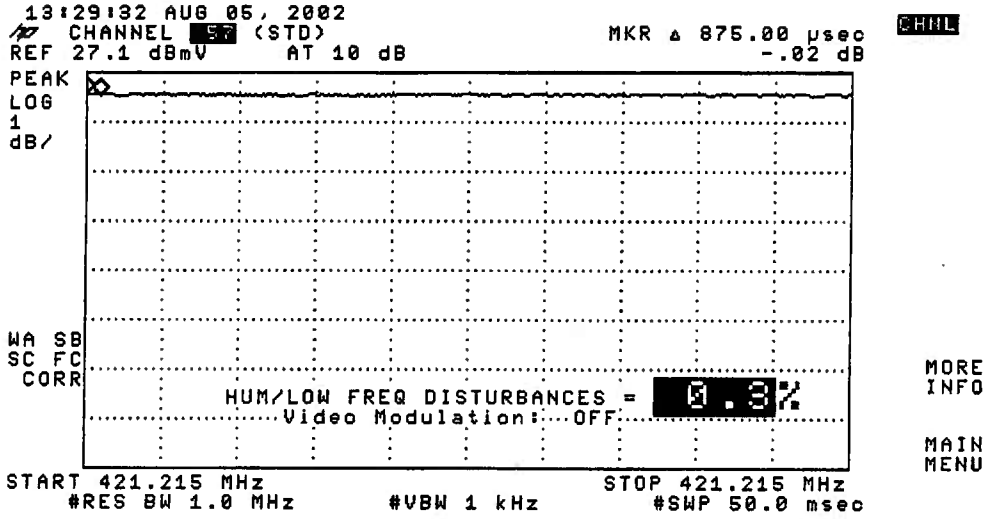
Test Performed By: JOEL MARMON/MARK D'AOUST

Location: E.GERMAN ST.

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

[redacted]						
2	0.40	47.6	61.1	75.1		
9	0.20	47.6	59.7	75.9		
14	0.30	47.5	60.1	71.7		
20	0.30	47.6	59.8	70.2		
24	0.40	46.1	59.9	74.2		
29	0.30	47.2	60.2	71.7		
36	0.30	46.4	60.0	71.3		
49	0.20	47.3	60.2	68.9		
57	0.60	47.4	60.1	69.1		0.3


12:57:32 AUG 05, 2002
CHANNEL 57 (STD)
REF 25.7 dBmV
AT 10 dB
CHNL
REF LVL
PEAK
LOG
10
dB/
REF LEVEL
25.7 dBmV
ATTEN
AUTO MAN
SCALE
LOG LIN
INT AMP
ON OFF
WA SB
SC FC
CORR
More
1 of 2
CENTER 404.1 MHz
SPAN 755.0 MHz
RES BW 3.0 MHz
VBW 1 MHz
SWP 20.0 msec


13:29:32 AUG 05, 2002
CHANNEL 57 (STD)
REF 27.1 dBmV
AT 10 dB
MKR Δ 875.00 µsec
-.02 dB
CHNL
PEAK
LOG
1
dB/
WA SB
SC FC
CORR
HUM/LOW FREQ DISTURBANCES = 0.3%
Video Modulation: OFF
MORE
INFO
MAIN
MENU
START 421.215 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
STOP 421.215 MHz
#SWP 50.0 msec

Time Warner Cable
Syracuse Division

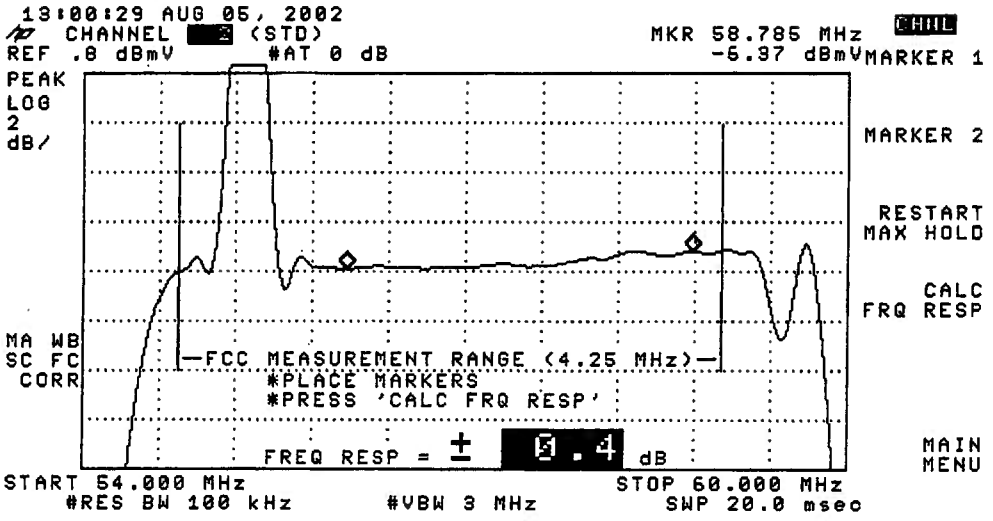
IN - CHANNEL FREQUENCY RESPONSE TEST

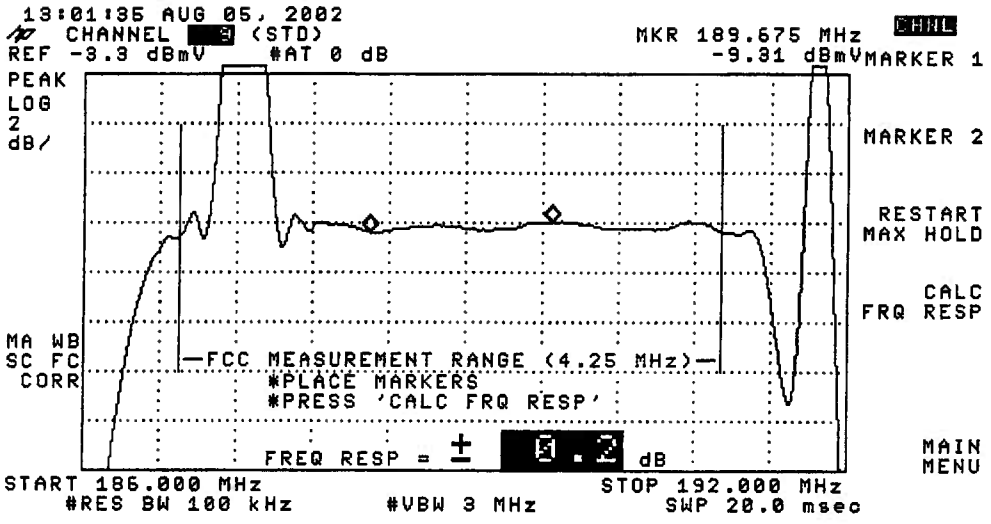
(76.605 (a) 6)

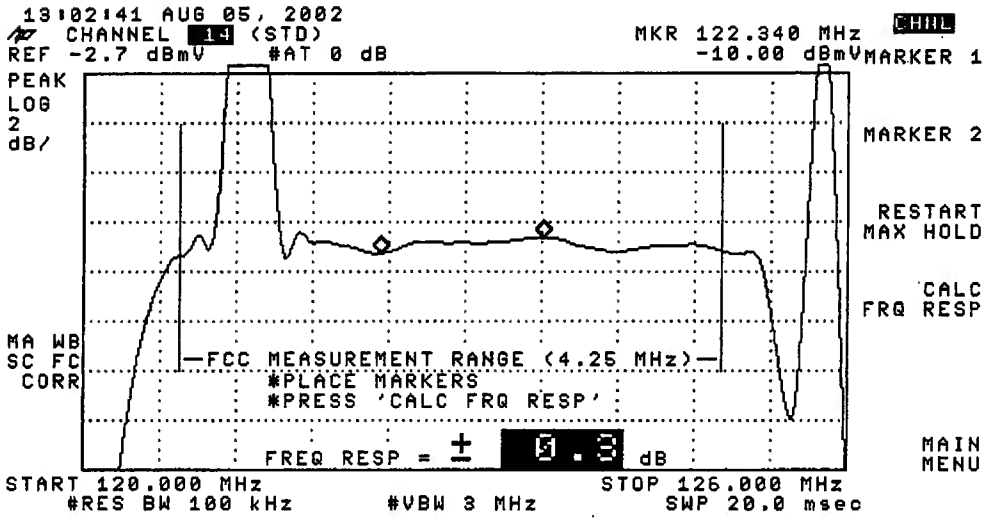
System Name: ILION Date: AUG. 1, 2002

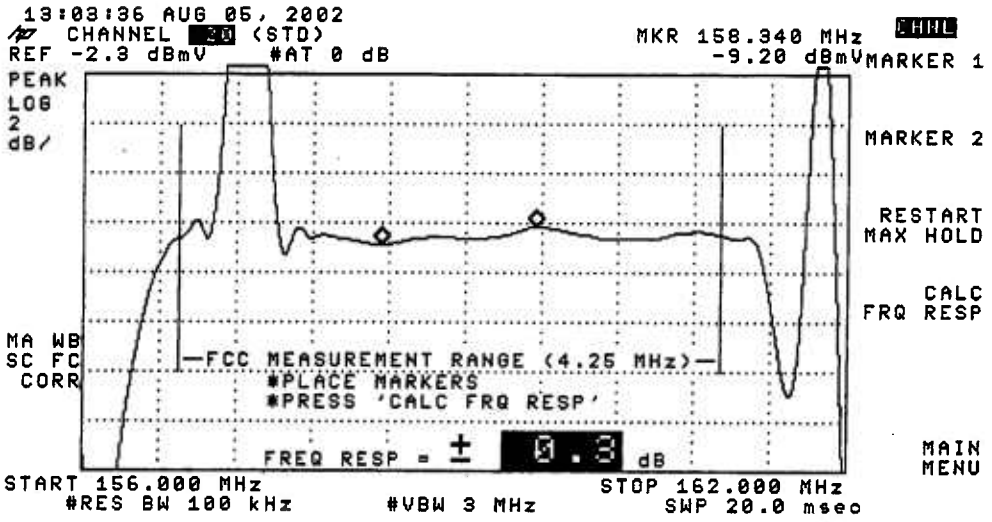
Test Performed By: MARK D'AOUST/JOEL MARMON Location: GERMAN ST.

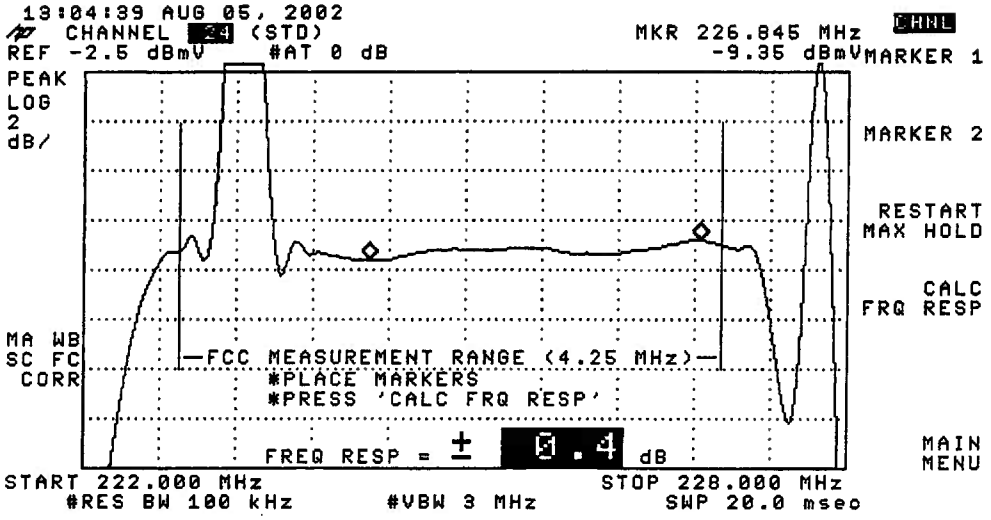
(SEE THE ATTATCHED SWEEP TRACES)

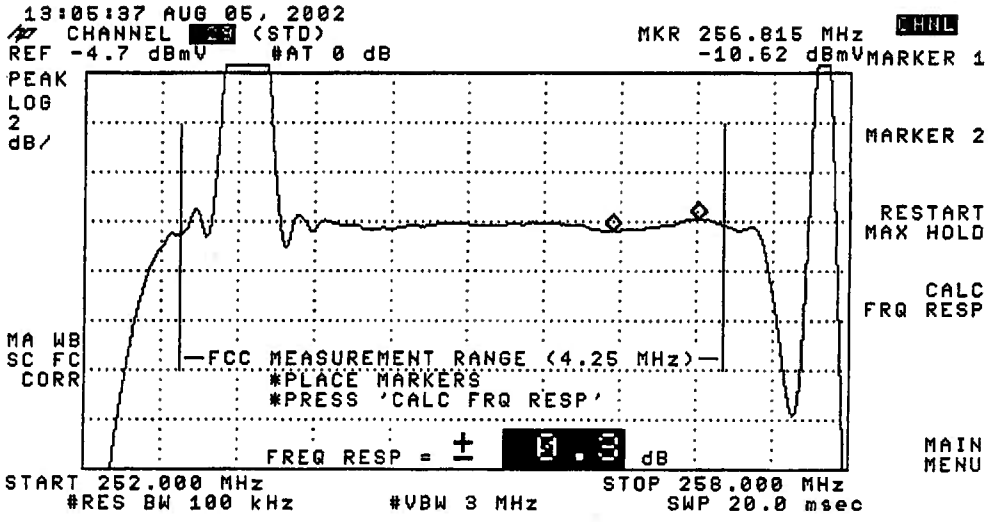

13:00:29 AUG 05, 2002
CHANNEL 3 (STD)
REF .8 dBmV
#AT 0 dB
MKR 58.785 MHz
-6.37 dBmV
CHIL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 54.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 60.000 MHz
SWP 20.0 msec

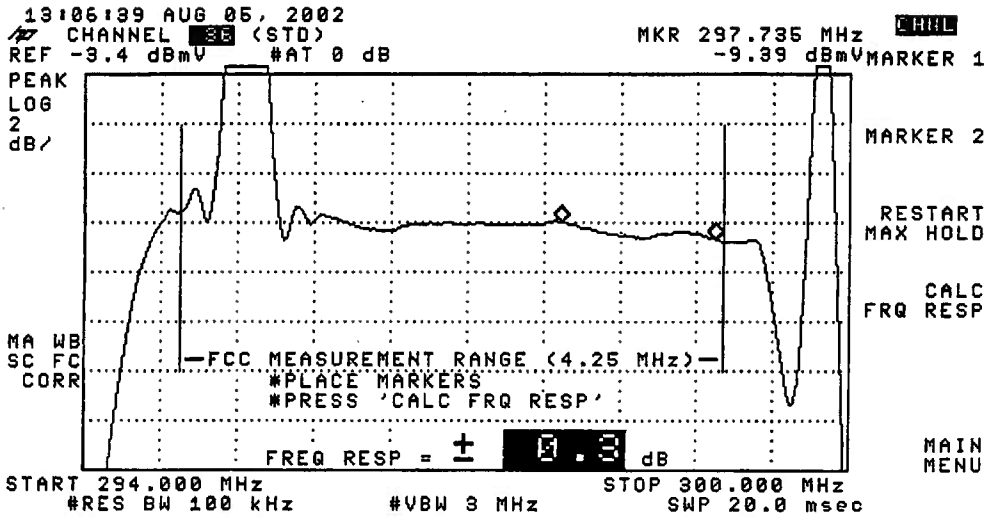

13:01:35 AUG 05, 2002
CHANNEL 9 (STD)
REF -3.3 dBmV
#AT 0 dB
MKR 189.675 MHz
-9.31 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 6.2 dB
MAIN
MENU
START 186.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 192.000 MHz
SWP 20.0 msec

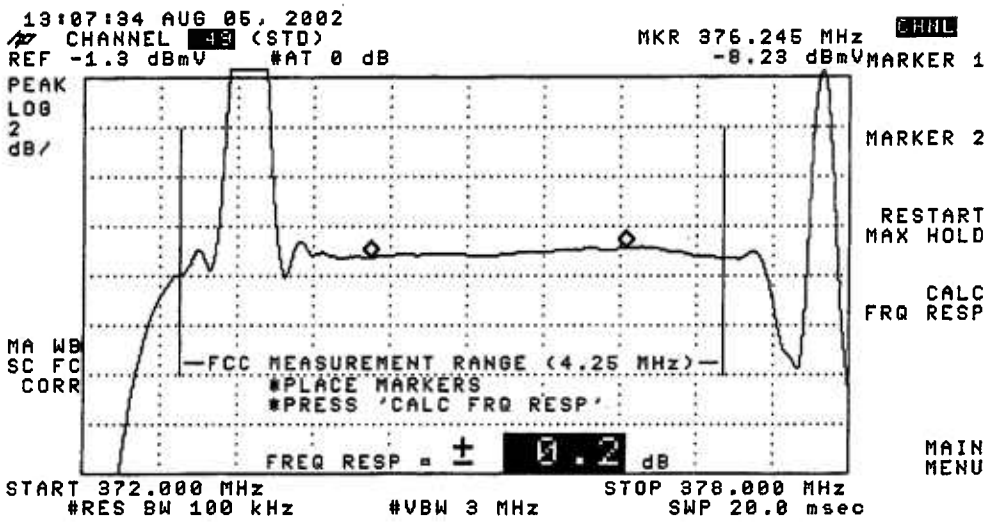

13:02:41 AUG 05, 2002
CHANNEL 14 (STD)
REF -2.7 dBmV
#AT 0 dB
MKR 122.340 MHz
-10.00 dBmV
CHAL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 120.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 126.000 MHz
SWP 20.0 msec

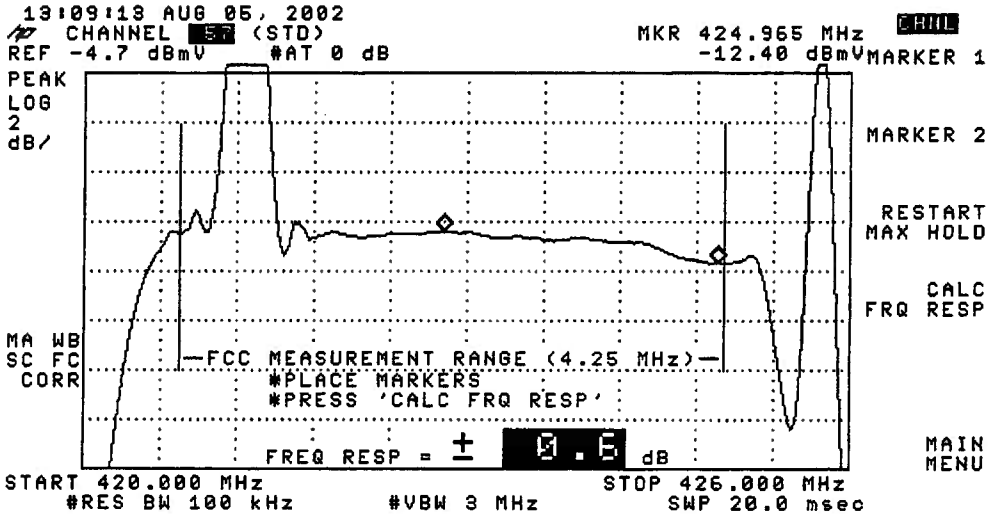

13:03:36 AUG 05, 2002
CHANNEL 20 (STD)
REF -2.3 dBmV
#AT 0 dB
MKR 158.940 MHz
-9.20 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 156.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 162.000 MHz
SWP 20.0 msec

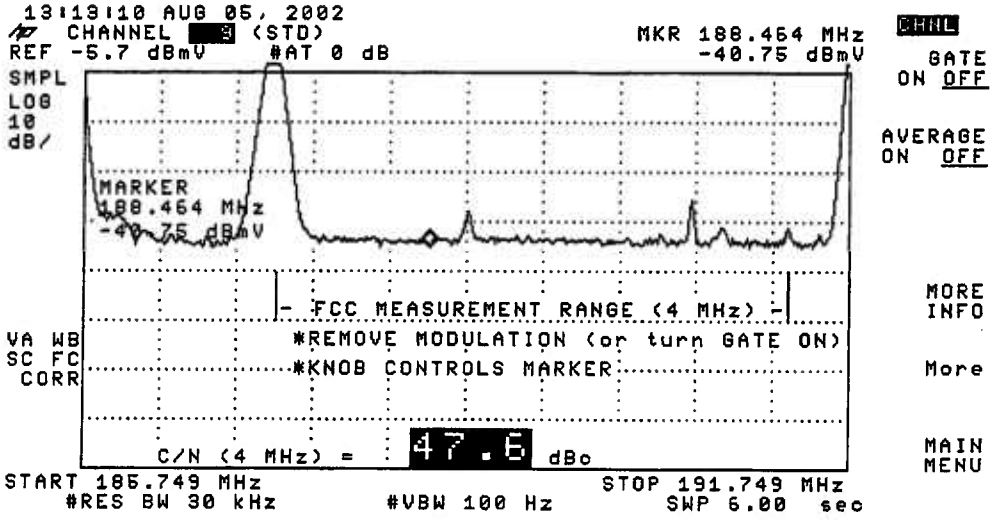

13:04:39 AUG 05, 2002
CHANNEL 24 (STD)
REF -2.5 dBmV
#AT 0 dB
MKR 226.845 MHz
-9.35 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 222.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 228.000 MHz
SWP 20.0 msec

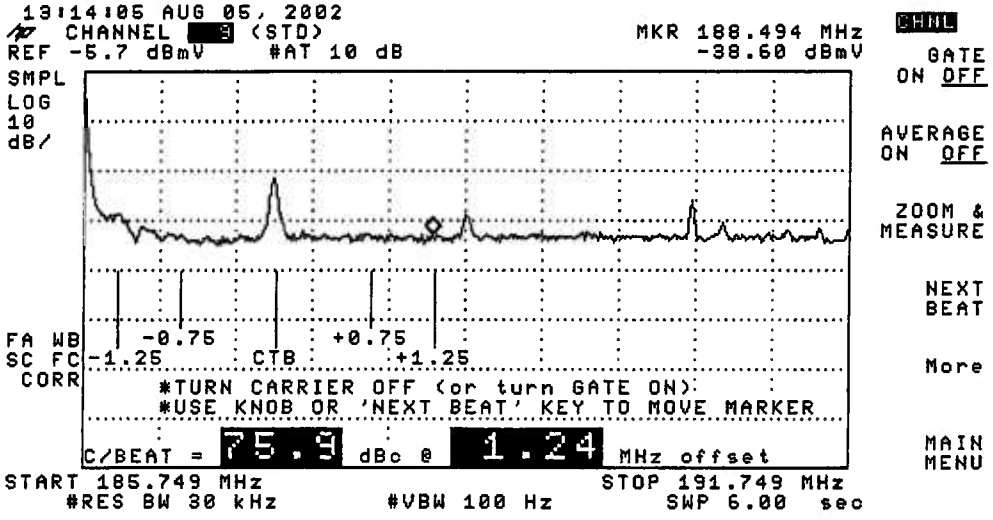

13:05:37 AUG 05, 2002
CHANNEL 29 (STD)
REF -4.7 dBmV
#AT 0 dB
MKR 256.815 MHz
-10.62 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 252.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 258.000 MHz
SWP 20.0 msec


13:06:39 AUG 05, 2002
CHANNEL 38 (STD)
REF -3.4 dBmV
#AT 0 dB
MKR 297.735 MHz
-9.39 dBmV
CHIL
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 294.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 300.000 MHz
SWP 20.0 msec


13:07:34 AUG 05, 2002
CHANNEL 49 (STD)
REF -1.3 dBmV
#AT 0 dB
MKR 376.245 MHz
-8.23 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 372.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 378.000 MHz
SWP 20.0 msec


13:09:13 AUG 05, 2002
CHANNEL 57 (STD)
REF -4.7 dBmV
#AT 0 dB
MKR 424.965 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 = ± 0.6 dB
MAIN
MENU
START 420.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 426.000 MHz
SWP 20.0 msec


13:13:10 AUG 05, 2002
CHANNEL 3 (STD)
REF -5.7 dBmV
#AT 0 dB
MKR 188.464 MHz
-40.75 dBmV
CHNL
GATE
ON OFF
AVERAGE
ON OFF
SMPL
LOG
10
dB/
MARKER
188.464 MHz
-40.75 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) = 47.6 dBc
MAIN
MENU
START 185.749 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 191.749 MHz
SWP 6.00 sec


13:14:05 AUG 05, 2002
CHANNEL 9 (STD)
REF -5.7 dBmV
#AT 10 dB
MKR 188.494 MHz
-38.60 dBmV
CHNL
GATE
ON OFF
SMPL
LOG
10
dB/
AVERAGE
ON OFF
ZOOM &
MEASURE
NEXT
BEAT
FA WB
SC FC
CORR
-0.75
+0.75
-1.25
CTB
+1.25
More
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
C/BEAT = 75.9 dBc @ 1.24 MHz offset
MAIN
MENU
START 185.749 MHz
STOP 191.749 MHz
#RES BW 30 kHz
#VBW 100 Hz
SWP 6.00 sec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: ILION

Test Point Location E.GERMAN STREET

Date: AUG. 28, 2002 Performed by MARK D'AOUST

Meter Serial Number: CALAN 3010#US37241488

Chan	Freq (MHz)	Temp °F				Max Variation	Chan	Freq (MHz)	Temp °F				Max Variation
		66	76	75	65				66	76	75	65	
		Time							Time				
		09:54	15:54	21:53	03:59				09:54	15:54	21:53	03:59	
		Visual Level (dBmV)							Visual Level (dBmV)				
2	55.2500	15.8	15.2	15.9	16.3	1.1	AA	301.2625	14.6	14.3	14.6	15.6	1.3
3	61.2500	16.3	15.8	16.6	16.9	1.1	BB	307.2625	14.6	14.4	15.0	15.0	0.6
4	67.2500	16.5	16.3	16.5	17.2	0.9	CC	313.2625	14.2	14.3	14.8	15.0	0.8
5	77.2500	15.6	15.1	16.3	16.6	1.5	DD	319.2625	14.4	14.1	15.1	15.2	1.1
6	83.2500	16.3	15.8	16.7	16.7	0.9	EE	325.2625	14.7	14.7	15.4	15.3	0.7
							FF	331.2750	14.7	14.6	15.3	15.3	0.7
							GG	337.2625	14.8	14.5	15.5	15.4	1.0
A-5	91.2500	14.0	14.7	14.6	14.7	0.7	HH	343.2625	14.5	14.4	15.4	15.5	1.1
A-4	97.2500	14.7	14.5	15.3	15.7	1.2	II	349.2625	14.5	14.2	15.1	15.5	1.3
A-3	103.2500						JJ	355.2625	14.1	13.9	14.9	15.6	1.7
A-2	109.2750						KK	361.2625	14.1	14.1	14.7	15.2	1.1
A-1	115.2750	14.4	14.1	14.8	15.1	1.0	LL	367.2625	13.5	13.6	14.1	14.8	1.3
A	121.2625	14.4	13.9	14.8	15.1	1.2	MM	373.2625	13.5	13.1	14.0	14.9	1.8
B	127.2625	14.2	13.9	14.6	15.0	1.1	NN	379.2625	13.4	13.7	14.1	14.1	0.7
C	133.2625	13.9	13.7	14.6	14.9	1.2	OO	385.2625	13.5	13.3	13.7	14.1	0.8
D	139.2500	14.0	13.7	14.5	14.9	1.2	PP	391.2625	13.1	12.8	13.8	14.0	1.2
E	145.2500	14.1	14.1	14.8	14.9	0.8	QQ	397.2625	13.1	12.6	13.2	14.2	1.6
F	151.2500	13.7	13.4	14.3	14.6	1.2	RR	403.2500	12.4	12.2	12.7	13.6	1.4
G	157.2500	15.1	14.7	15.6	15.7	1.0	SS	409.2500	12.5	12.2	12.8	13.4	1.2
H	163.2500	14.8	14.2	15.1	15.5	1.3	TT	415.2500	12.0	11.8	12.2	12.7	0.9
I	169.2500	14.8	14.5	15.4	15.8	1.3	UU	421.2500	12.5	12.3	12.6	12.8	0.5
7	175.2500	14.9	14.4	15.3	15.6	1.2	VV	427.2500	12.3	12.1	12.5	12.3	0.4
8	181.2500	15.0	14.7	15.3	15.9	1.2	WW	433.2500	12.6	12.2	12.8	12.7	0.6
9	187.2500	15.3	14.9	15.5	15.9	1.0	XX	439.2500	12.9	12.6	13.4	12.6	0.8
10	193.2500	15.1	15.0	15.7	16.0	1.0	YY	445.2500	13.2	12.9	13.6	13.0	0.7
11	199.2500	14.8	14.4	15.1	15.2	0.8	ZZ	451.2500	13.4	13.2	14.0	13.8	0.8
12	205.2500	15.1	14.9	15.6	15.8	0.9	63	457.2500	13.6	13.3	14.1	13.9	0.8
13	211.2500	13.8	13.6	14.0	14.4	0.8	64	463.2500	14.0	14.0	14.5	14.2	0.5
J	217.2500	12.5	12.1	12.7	13.1	1.0	65	469.2500	14.2	14.0	14.8	14.3	0.8
K	223.2500	13.4	13.1	13.5	13.8	0.7	66	475.2500	14.1	13.9	14.6	14.9	1.0
L	229.2625	13.3	13.2	13.8	13.9	0.7	67	481.2500	14.0	13.7	14.4	15.0	1.3
M	235.2625	13.2	13.0	13.3	14.0	1.0	68	487.2500	13.5	13.1	14.0	14.9	1.8
N	241.2625	13.3	13.4	13.8	14.1	0.8	69	493.2500	13.3	13.1	13.9	14.7	1.6
O	247.2625	14.4	14.1	14.7	15.1	1.0	70	499.2500	12.0	12.3	14.0	14.2	2.2
P	253.2625	14.2	14.1	14.6	14.7	0.6	71	505.2500	13.9	13.4	14.4	14.4	1.0
Q	259.2625	14.5	14.4	14.9	15.0	0.6	72	511.2500	13.0	12.7	13.8	13.0	1.1
R	265.2625	15.1	14.6	15.5	15.8	1.2	73	517.2500	14.4	14.0	15.3	14.7	1.3
S	271.2625	15.1	14.9	15.2	15.4	0.5	74	523.2500	12.7	12.4	13.5	14.1	1.7
T	277.2625	14.7	14.9	15.1	15.1	0.4	75	529.2500	13.0	10.3	13.5	15.7	5.4
U	283.2625	15.2	15.1	15.5	15.9	0.8	76	535.2500	13.6	12.2	13.3	14.0	1.8
V	289.2625	14.9	14.8	15.2	15.6	0.8	77	541.2500	13.0	12.0	13.0	12.9	1.0
W	295.2625	14.4	14.2	14.8	15.0	0.8	78	547.2500	14.0	10.6	12.3	11.8	3.4

Max NonAdjacent Channel Level Diff.	6
Max Adjacent Channel Level Diff.	2.1

Max Variance from last proof-of-performance test	5.4
Date of last proof-of-performance test	FEB. 7,2002

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

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ILION

System Test Point # 6

Location: RT. 28 TRL. PK.

Community: COLUMBIA
Pole Number: 48

D.T. Value: 23/4
Map Number: 635-5602
OR Number: 937
Trunk Cascade: 6 LE Cascade 0

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

System Name: **ILION**

Test Location: **RT 28**

Date: 28-Aug-02

Time: 03:29 PM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (Dbmv)
2	55.2500	5.8	-8.5		14.3	AA	301.2625	6.6	-7.7		14.3
3	61.2500	6.7	-7.6		14.3	BB	307.2625	6.5	-5.5		12.0
4	67.2500	5.7	-7.4		13.1	CC	313.2625	6.9	-7.3		14.2
5	77.2500	6.0	-8.8		14.8	DD	319.2625	6.6	-7.3		13.9
6	83.2500	5.9	-8.5		14.4	EE	325.2625	7.4	-6.5		13.9
						FF	331.2750	7.6	-4.3		11.9
						GG	337.2625	7.5	-6.3		13.8
A-5	91.2500	2.9	-7.5	S	10.4	HH	343.2625	7.7	-4.9		12.6
A-4	97.2500	5.8	-7.8		13.6	II	349.2625	7.7	-6.7		14.4
A-3	103.2500					JJ	355.2625	7.6	-6.2		13.8
A-2	109.2750					KK	361.2625	7.5	-6.3		13.8
A-1	115.2750	5.0	-8.8		13.8	LL	367.2625	7.8	-6.2		14.0
A	121.2625	5.1	-9.4		14.5	MM	373.2625	7.9	-4.9		12.8
B	127.2625	5.2	-8.4		13.6	NN	379.2625	7.6	-4.8		12.4
C	133.2625	5.5	-7.3		12.8	OO	385.2625	7.9	-6.6		14.5
D	139.2500	5.7	-7.0		12.7	PP	391.2625	8.0	-5.4		13.4
E	145.2500	6.0	-7.4		13.4	QQ	397.2625	7.8	-6.5		14.3
F	151.2500	4.8	-8.8		13.6	RR	403.2500	7.7	-5.6		13.3
G	157.2500	6.2	-7.9		14.1	SS	409.2500	8.2	-5.5		13.7
H	163.2500	5.9	-7.9		13.8	TT	415.2500	7.3	-5.8		13.1
I	169.2500	6.3	-6.8		13.1	UU	421.2500	8.0	-5.5		13.5
7	175.2500	5.9	-7.7		13.6	VV	427.2500	8.2	-5.1		13.3
8	181.2500	6.1	-8.4		14.5	WW	433.2500	8.4	-5.3		13.7
9	187.2500	6.2	-7.9		14.1	XX	439.2500	8.4	-4.6		13.0
10	193.2500	6.3	-7.9		14.2	YY	445.2500	8.6	-5.4		14.0
11	199.2500	6.2	-7.7		13.9	ZZ	451.2500	8.8	-5.2		14.0
12	205.2500	6.7	-4.7		11.4	63	457.2500	7.9	-5.1		13.0
13	211.2500	6.2	-5.1		11.3	64	463.2500	8.3	-4.0		12.3
J	217.2500	5.8	-7.9		13.7	65	469.2500	9.2	-4.4		13.6
K	223.2500	6.7	-6.9		13.6	66	475.2500	9.2	-4.6		13.8
L	229.2625	6.9	-6.7		13.6	67	481.2500	8.9	-4.1		13.0
M	235.2625	6.6	-7.6		14.2	68	487.2500	9.1	-3.2		12.3
N	241.2625	6.7	-7.4		14.1	69	493.2500	8.9	-4.6		13.5
O	247.2625	7.1	-7.0		14.1	70	499.2500	6.9	-4.6	S	11.5
P	253.2625	6.9	-6.4		13.3	71	505.2500	9.5	-4.0	S	13.5
Q	259.2625	7.2	-6.2		13.4	72	511.2500	9.0	-3.5	S	12.5
R	265.2625	7.5	-5.3		12.8	73	517.2500	10.4	-2.9	S	13.3
S	271.2625	7.7	-6.2		13.9	74	523.2500	8.6	-5.0	S	13.6
T	277.2625	7.4	-6.7		14.1	75	529.2500	8.6	-3.4	S	12.0
U	283.2625	7.4	-6.7		14.1	76	535.2500	7.0	-4.4	S	11.4
V	289.2625	6.8	-6.7		13.5	77	541.2500	9.0	-5.0	S	14.0
W	295.2625	6.2	-6.6		12.8	78	547.2500	8.2	-2.4	S	10.6

PEAK TO VALLEY: 7.5

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

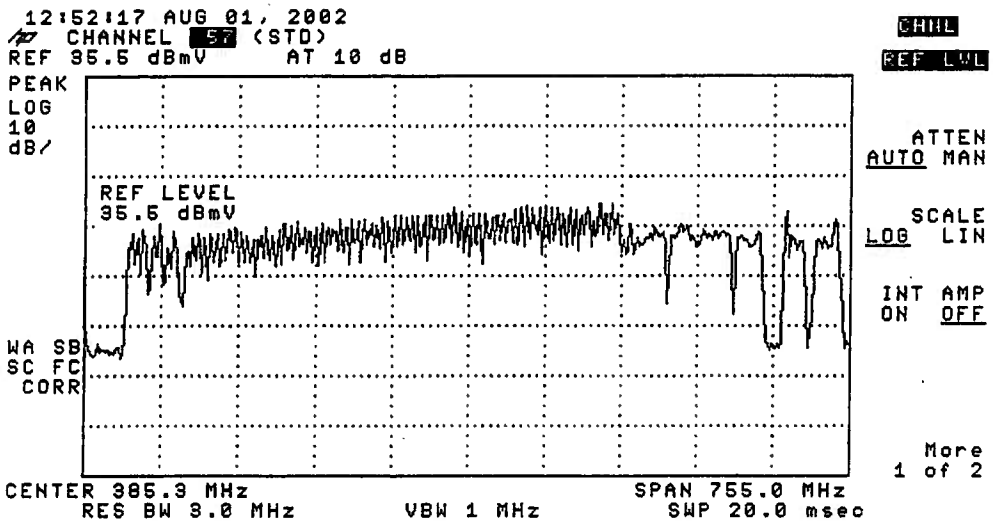
System Name: ILION **Date:** AUGUST 1,2002

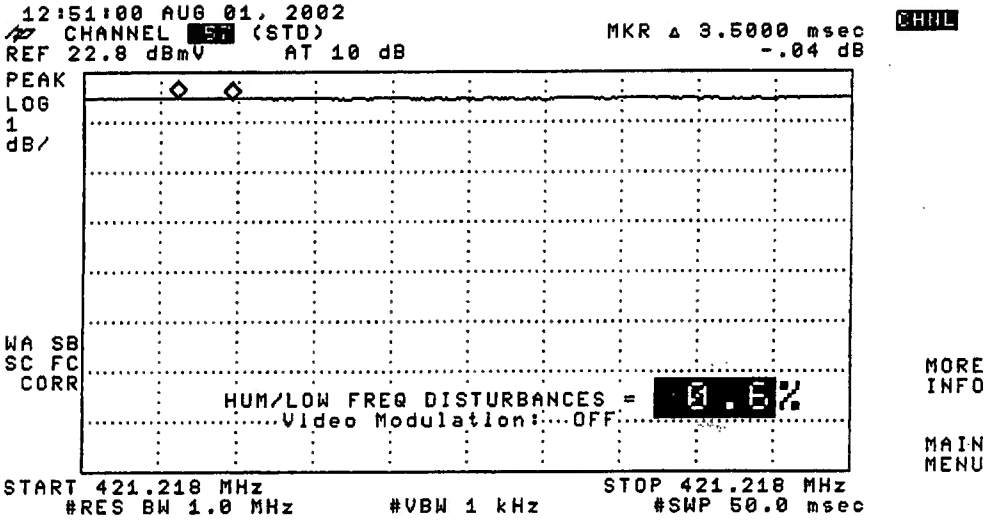
Test Performed By: JOEL MARMON/MARK D'AOUST

Location: RT. 28 TRL. PK. COLUMBIA

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

2	0.30	46.1	60.6	75.9		
9	0.30	46.2	65.4	75.1		
14	0.20	46.8	64.5	72.1		
20	0.30	46.3	67.0	74.8		
24	0.30	46.1	65.7	74.6		
29	0.30	46.7	64.4	70.1		
36	0.30	46.8	64.5	73.3		
49	0.20	47.4	64.5	71.3		
57	0.50	47.2	62.6	69.9		0.6


12:52:17 AUG 01, 2002
CHANNEL 57 (STD)
REF 35.5 dBmV
AT 10 dB
CHNL
REF LVL
PEAK
LOG
10
dB/
REF LEVEL
35.5 dBmV
ATTEN
AUTO MAN
SCALE
LOG LIN
INT AMP
ON OFF
WA SB
SC FC
CORR
More
1 of 2
CENTER 385.3 MHz
SPAN 755.0 MHz
RES BW 3.0 MHz
VBW 1 MHz
SWP 20.0 msec


12:51:00 AUG 01, 2002
CHANNEL 57 (STD)
REF 22.8 dBmV
AT 10 dB
MKR Δ 3.5000 msec
-.04 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 421.218 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
STOP 421.218 MHz
#SWP 50.0 msec

Time Warner Cable
Syracuse Division

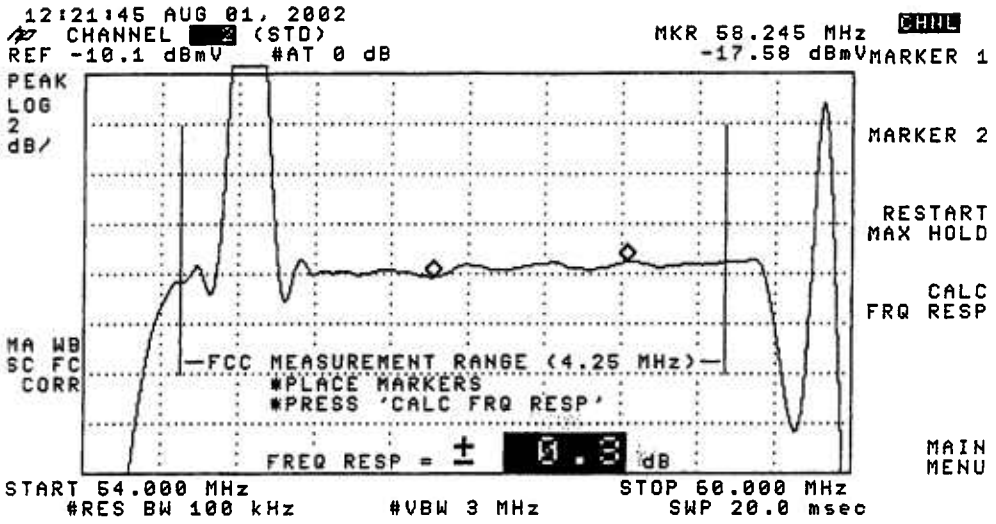
IN - CHANNEL FREQUENCY RESPONSE TEST

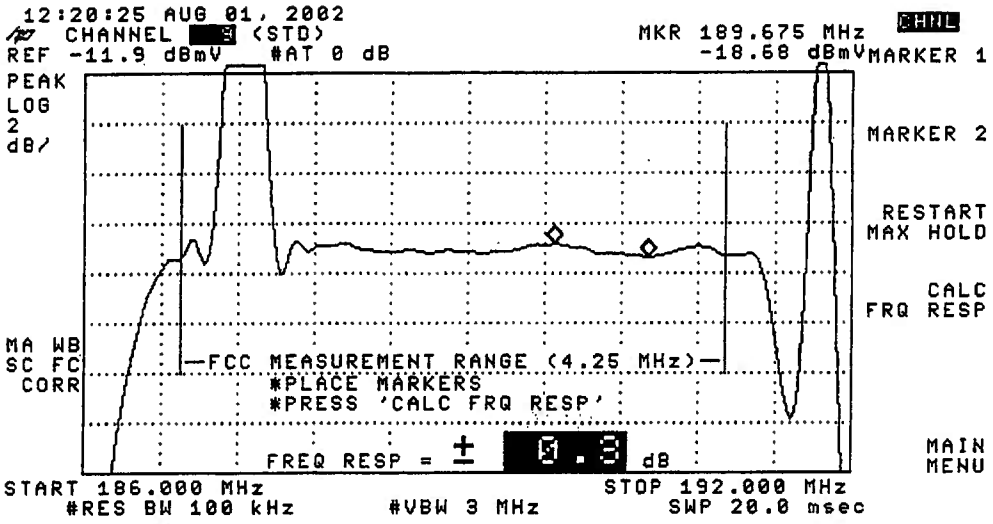
(76.605 (a) 6)

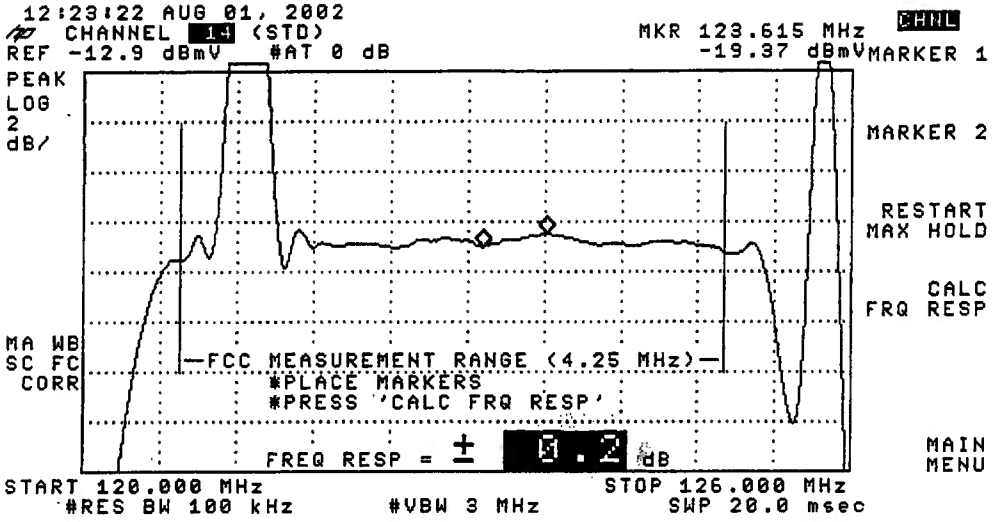
System Name: ILION Date: AUG. 1, 2002

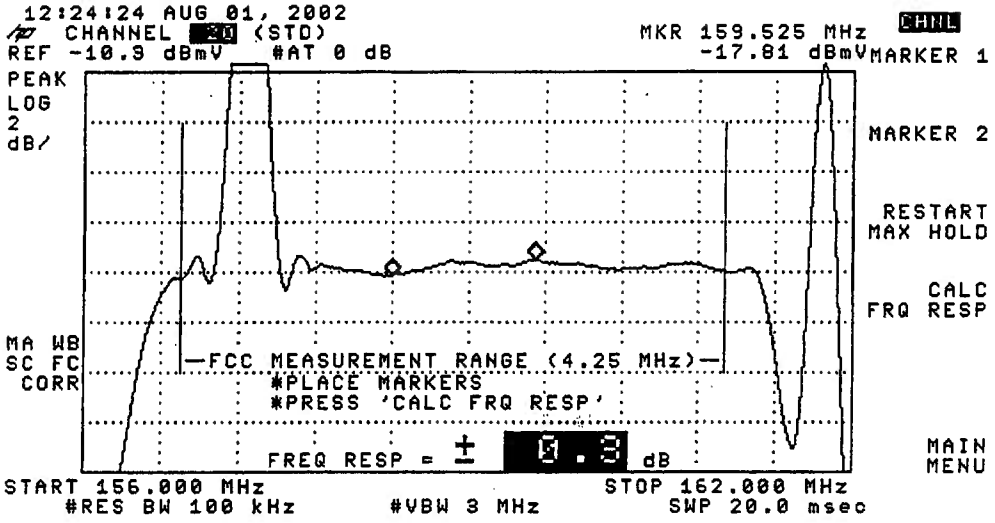
Test Performed By: MARK D'AOUST/JOEL MARMON Location: RT. 28

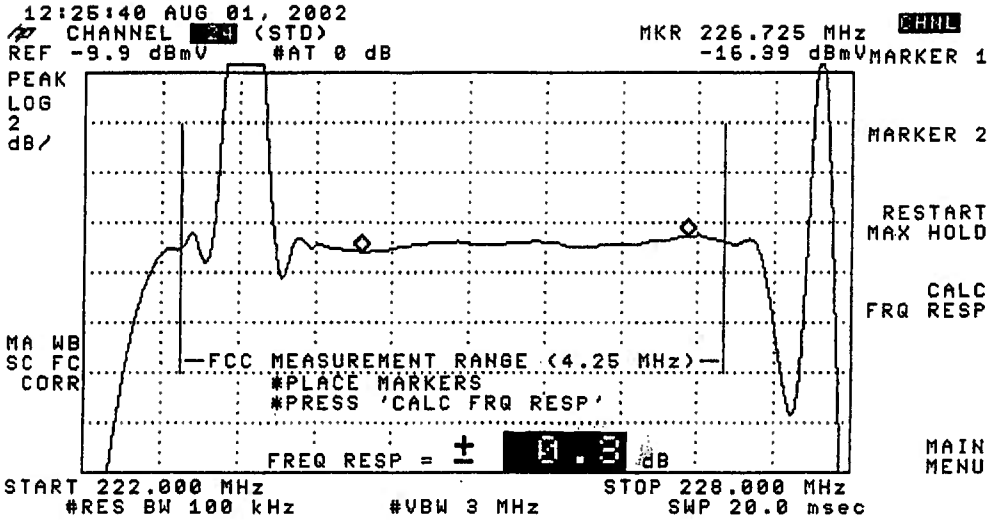
(SEE THE ATTATCHED SWEEP TRACES)

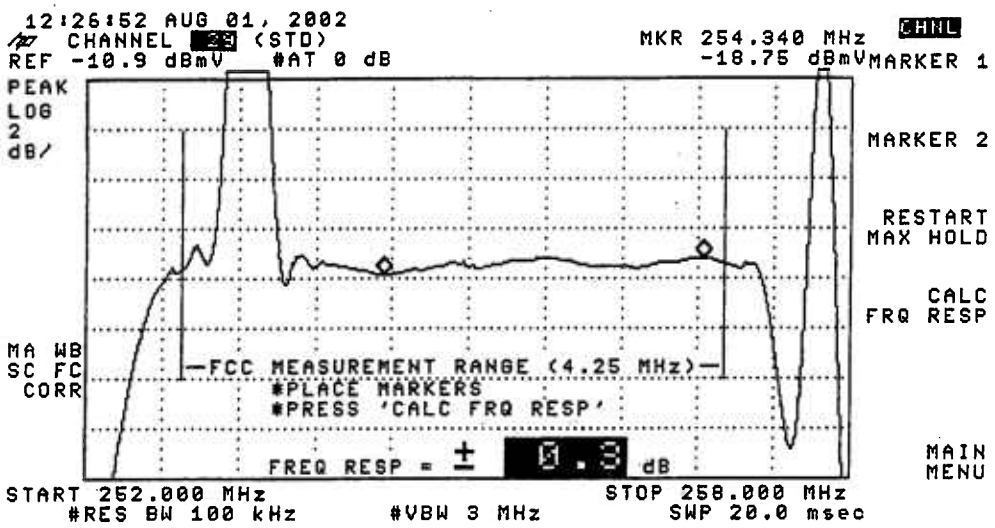

12:21:45 AUG 01, 2002
CHANNEL 2 (STD)
REF -10.1 dBmV
#AT 0 dB
MKR 58.245 MHz
-17.58 dBmV
CHIL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 54.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 60.000 MHz
SWP 20.0 msec

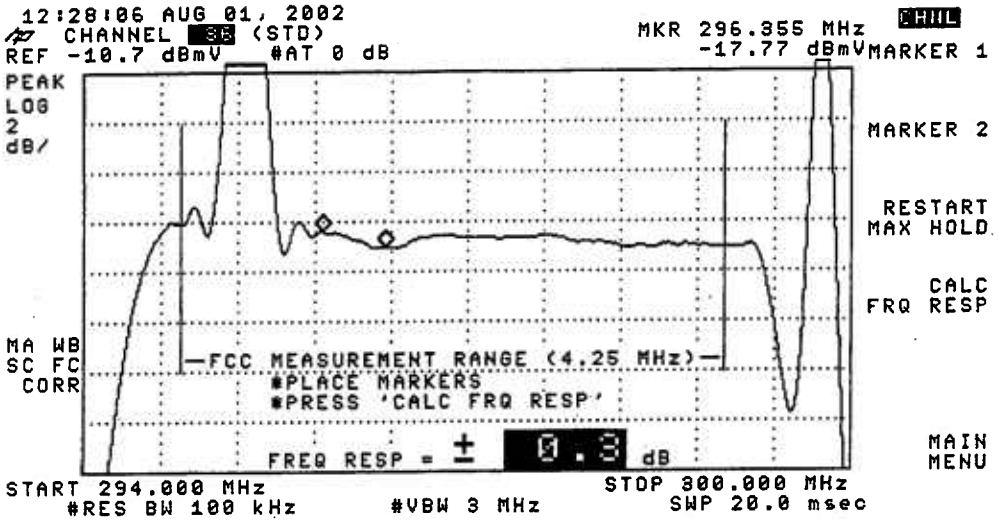

12:20:25 AUG 01, 2002
CHANNEL 3 (STD)
REF -11.9 dBmV
#AT 0 dB
MKR 189.675 MHz
-18.68 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 186.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 192.000 MHz
SWP 20.0 msec

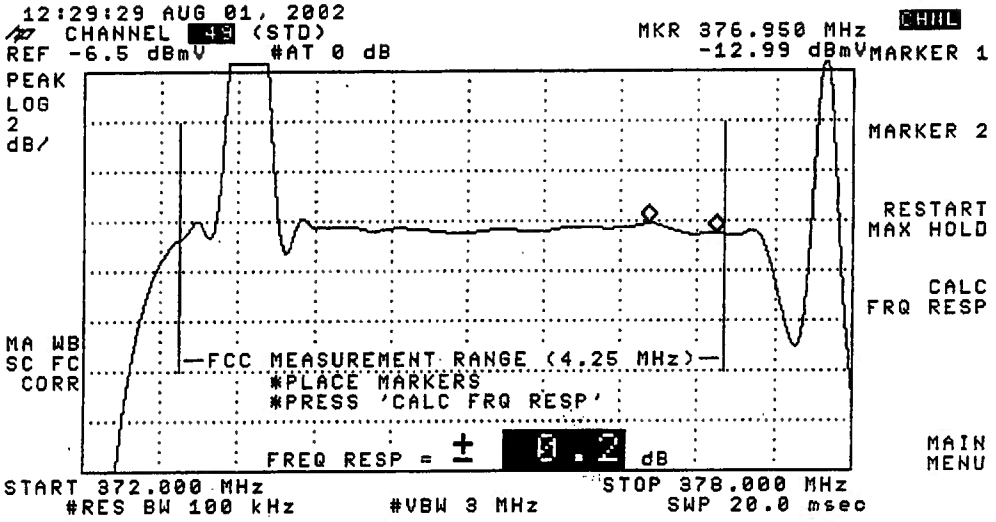

12:23:22 AUG 01, 2002
CHANNEL 14 (STD)
REF -12.9 dBmV
#AT 0 dB
MKR 123.615 MHz
-19.37 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 6.2 dB
MAIN
MENU
START 120.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 126.000 MHz
SWP 20.0 msec

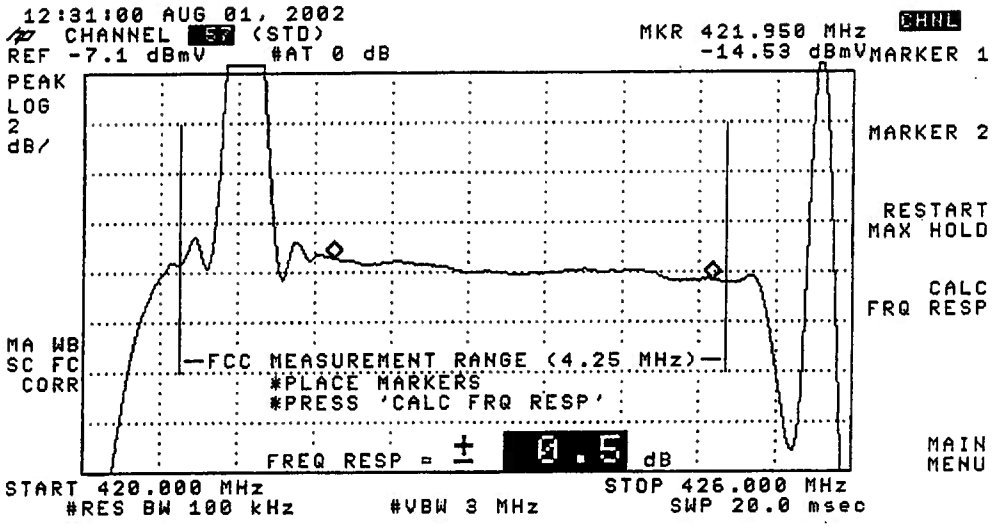

12:24:24 AUG 01, 2002
CHANNEL 20 (STD)
REF -10.9 dBmV
#AT 0 dB
MKR 159.525 MHz
-17.81 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 156.000 MHz
STOP 162.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec

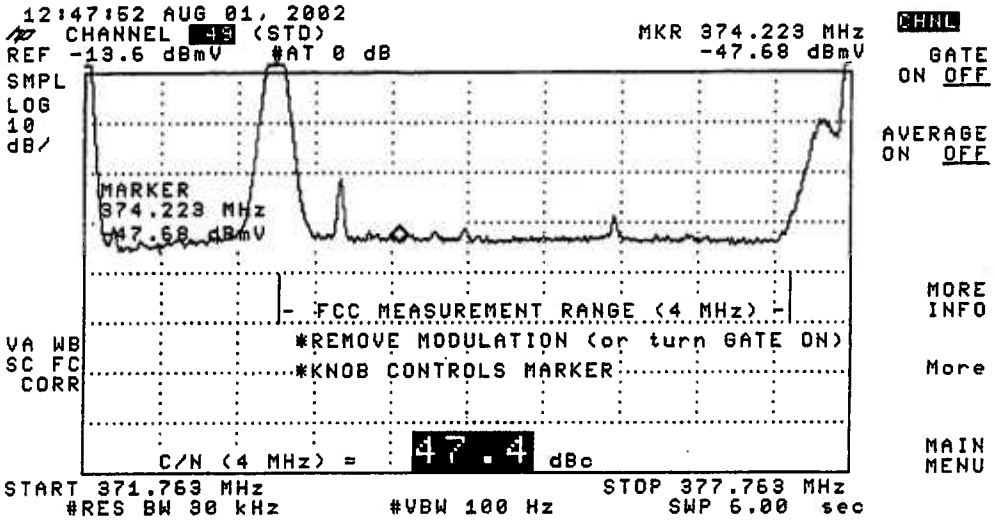

12:25:40 AUG 01, 2002
CHANNEL 24 (STD)
REF -9.9 dBmV
#AT 0 dB
MKR 226.725 MHz
-16.39 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 222.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 228.000 MHz
SWP 20.0 msec

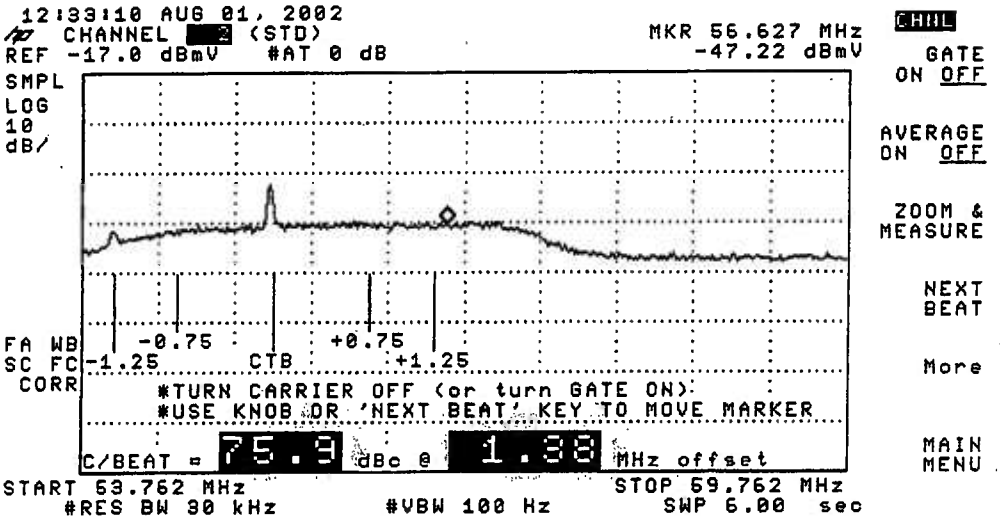

12:26:52 AUG 01, 2002
CHANNEL 23 (STD)
REF -10.9 dBmV
#AT 0 dB
MKR 254.340 MHz
-18.75 dBmV
CHNL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 252.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 258.000 MHz
SWP 20.0 msec

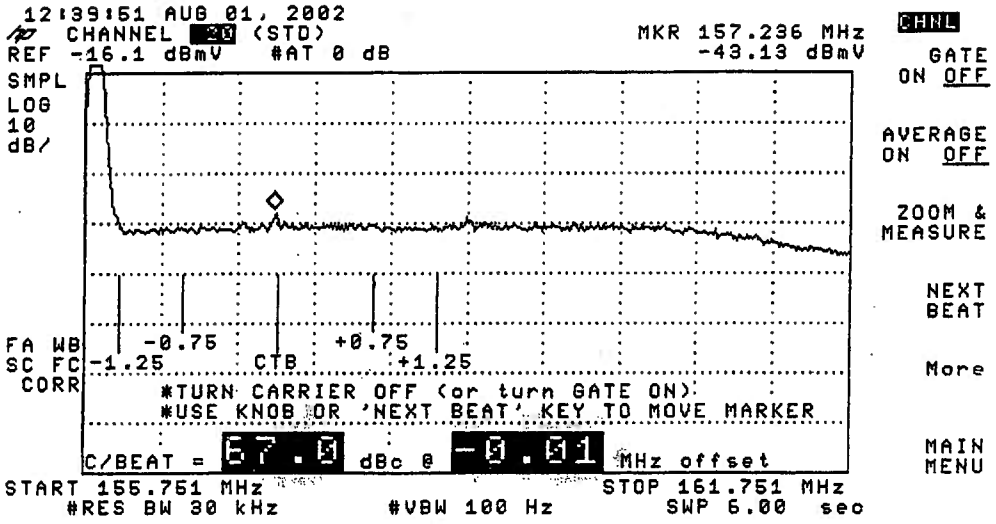

12:28:06 AUG 01, 2002
CHANNEL 38 (STD)
REF -10.7 dBmV
#AT 0 dB
MKR 296.355 MHz
-17.77 dBmV
CHNL
MARKER 1
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
PEAK
LOG
2
dB/
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
*PLACE MARKERS
*PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 294.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 300.000 MHz
SWP 20.0 msec


12:29:29 AUG 01, 2002
CHANNEL 49 (STD)
REF -6.5 dBmV
#AT 0 dB
MKR 376.950 MHz
-12.99 dBmV
CHIL
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 372.000 MHz
STOP 378.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec


12:31:00 AUG 01, 2002
CHANNEL 57 (STD)
REF -7.1 dBmV
#AT 0 dB
MKR 421.950 MHz
-14.53 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 420.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 426.000 MHz
SWP 20.0 msec


12:47:52 AUG 01, 2002
CHANNEL 49 (STD)
REF -13.6 dBmV
#AT 0 dB
MKR 374.223 MHz
-47.68 dBmV
CHNL
GATE
ON OFF
AVERAGE
ON OFF
SMPL
LOG
10
dB/
MARKER
374.223 MHz
-47.68 dBmV
- FCC MEASUREMENT RANGE (4 MHz) -
*REMOVE MODULATION (or turn GATE ON)
*KNOB CONTROLS MARKER
MORE
INFO
More
MAIN
MENU
VA WB
SC FC
CORR
C/N (4 MHz) =
47.4
dBc
START 371.763 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 377.763 MHz
SWP 6.00 sec


12:33:10 AUG 01, 2002
CHANNEL 2 (STD)
REF -17.0 dBmV
#AT 0 dB
MKR 56.627 MHz
-47.22 dBmV
SMPL
LOG
10
dB/
-0.75
+0.75
FA WB
SC FC
-1.25
CTB
+1.25
CORR
*TURN CARRIER OFF (or turn GATE ON)
*USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
C/BEAT = 75.9 dBc @ 1.88 MHz offset
START 53.762 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 59.762 MHz
SWP 6.00 sec
CHNL
GATE
ON OFF
AVERAGE
ON OFF
ZOOM &
MEASURE
NEXT
BEAT
More
MAIN
MENU


12:39:51 AUG 01, 2002
CHANNEL 20 (STD)
REF -16.1 dBmV #AT 0 dB
MKR 157.236 MHz
-43.13 dBmV
SMPL
LOG
10
dB/
FA WB
SC FC
CORR
-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
C/BEAT = 67.0 dBc @ -0.01 MHz offset
START 155.751 MHz
STOP 161.751 MHz
#RES BW 30 kHz
#VBW 100 Hz
SWP 6.00 sec
CHNL
GATE
ON OFF
AVERAGE
ON OFF
ZOOM &
MEASURE
NEXT
BEAT
More
MAIN
MENU

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: ILION

Test Point Location RT. 28

Date: AUG. 28, 2002 Performed by MARK D'AOUST

Meter Serial Number: CALAN 3010#US37241488

Chan	Freq (MHz)	Temp °F 69	77	75	66	Max Variation	Chan	Freq (MHz)	Temp °F 69	77	75	66	Max Variation
		Time 09:34	15:29	21:29	03:42				Time 09:34	15:29	21:29	03:42	
		Visual Level (dbmV)							Visual Level (dbmV)				
2	55.2500	6.1	5.8	6.6	6.8	1.0	AA	301.2625	7.1	6.6	7.4	7.8	1.2
3	61.2500	7.1	6.7	7.2	7.6	0.9	BB	307.2625	6.8	6.5	7.3	7.3	0.8
4	67.2500	6.4	5.7	6.5	7.1	1.4	CC	313.2625	6.6	6.9	7.1	7.9	1.3
5	77.2500	6.5	6.0	6.8	7.2	1.2	DD	319.2625	7.0	6.6	7.5	7.6	1.0
6	83.2500	6.2	5.9	6.5	6.8	0.9	EE	325.2625	7.5	7.4	8.0	7.3	0.7
							FF	331.2750	7.5	7.6	8.2	7.7	0.7
							GG	337.2625	7.5	7.5	7.8	8.5	1.0
A-5	91.2500	3.3	2.9	6.1	6.5	3.6	HH	343.2625	7.7	7.7	8.0	8.1	0.4
A-4	97.2500	6.1	5.8	6.6	6.8	1.0	II	349.2625	7.7	7.7	8.0	7.8	0.3
A-3	103.2500						JJ	355.2625	7.6	7.6	7.8	8.0	0.4
A-2	109.2750						KK	361.2625	7.9	7.5	8.2	8.0	0.7
A-1	115.2750	5.6	5.0	5.9	6.3	1.3	LL	367.2625	7.6	7.8	8.0	7.9	0.4
A	121.2625	5.3	5.1	5.9	5.9	0.8	MM	373.2625	8.0	7.9	8.2	8.1	0.3
B	127.2625	5.8	5.2	6.0	6.3	1.1	NN	379.2625	7.6	7.6	8.1	7.9	0.5
C	133.2625	6.0	5.5	6.2	6.5	1.0	OO	385.2625	8.0	7.9	8.5	8.3	0.6
D	139.2500	5.9	5.7	6.3	6.7	1.0	PP	391.2625	8.2	8.0	8.5	8.1	0.5
E	145.2500	6.6	6.0	7.0	7.1	1.1	QQ	397.2625	8.1	7.8	8.3	8.5	0.7
F	151.2500	5.2	4.8	5.5	5.8	1.0	RR	403.2500	8.0	7.7	8.4	8.3	0.7
G	157.2500	6.5	6.2	6.8	7.1	0.9	SS	409.2500	8.5	8.2	8.7	8.4	0.5
H	163.2500	6.3	5.9	6.6	6.9	1.0	TT	415.2500	7.5	7.3	7.9	8.4	1.1
I	169.2500	6.5	6.3	6.9	7.2	0.9	UU	421.2500	8.3	8.0	8.7	8.6	0.7
7	175.2500	6.3	5.9	6.7	7.0	1.1	VV	427.2500	8.7	8.2	9.0	7.6	1.4
8	181.2500	6.5	6.1	6.4	7.0	0.9	WW	433.2500	8.8	8.4	9.2	8.8	0.8
9	187.2500	6.5	6.2	6.7	6.8	0.6	XX	439.2500	8.9	8.4	9.3	8.9	0.9
10	193.2500	6.5	6.3	6.6	7.0	0.7	YY	445.2500	8.9	8.6	9.0	9.2	0.6
11	199.2500	6.4	6.2	6.7	6.8	0.6	ZZ	451.2500	8.9	8.8	8.5	9.7	1.2
12	205.2500	7.0	6.7	7.5	7.6	0.9	63	457.2500	8.1	7.9	9.1	9.0	1.2
13	211.2500	6.6	6.2	7.0	7.0	0.8	64	463.2500	8.8	8.3	9.4	8.8	1.1
J	217.2500	6.1	5.8	6.3	6.5	0.7	65	469.2500	9.7	9.2	10.0	9.2	0.8
K	223.2500	6.5	6.7	7.0	7.6	1.1	66	475.2500	9.4	9.2	9.9	9.5	0.7
L	229.2625	7.1	6.9	7.5	7.7	0.8	67	481.2500	9.3	8.9	9.6	9.9	1.0
M	235.2625	6.7	6.6	7.2	7.2	0.6	68	487.2500	9.4	9.1	9.6	10.2	1.1
N	241.2625	6.7	6.7	7.1	7.3	0.6	69	493.2500	9.4	8.9	9.6	9.8	0.9
O	247.2625	7.7	7.1	7.5	8.0	0.9	70	499.2500	8.1	6.9	9.0	9.9	3.0
P	253.2625	7.3	6.9	7.3	7.7	0.8	71	505.2500	9.7	9.5	10.0	9.8	0.5
Q	259.2625	7.4	7.2	7.4	7.8	0.6	72	511.2500	9.4	9.0	9.6	8.6	1.0
R	265.2625	7.8	7.5	8.0	8.2	0.7	73	517.2500	10.8	10.4	11.0	10.6	0.6
S	271.2625	7.8	7.7	7.8	8.3	0.6	74	523.2500	8.9	8.6	9.2	10.0	1.4
T	277.2625	7.6	7.4	7.8	8.2	0.8	75	529.2500	9.3	8.0	7.8	11.4	3.6
U	283.2625	7.8	7.4	8.0	8.6	1.2	76	535.2500	10.5	6.3	7.5	9.5	4.2
V	289.2625	7.4	6.8	7.5	7.8	1.0	77	541.2500	9.0	6.5	8.2	8.0	2.5
W	295.2625	7.0	6.2	7.2	7.3	1.1	78	547.2500	10.5	6.3	7.5	8.6	4.2

Max NonAdjacent Channel Level Diff.	7.5	Max Variance from last proof-of-performance test	6.4
Max Adjacent Channel Level Diff.	2.9	Date of last proof-of-performance test	FEB. 7,2002

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

TIME WARNER CABLE
SYRACUSE DIVISION

Proof-of-Performance Tests

System Name: ILION

System Test Point # 7

Location: GROVE ST.

Community: MOHAWK
Pole Number: 5/5

D.T. Value: 20
Map Number: 638-5622
OR Number: 940
Trunk Cascade: 4 LE Cascade 1

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

System Name: **ILION**

Test Location: **GROVE ST.**

Date: 28-Aug-02

Time: 09:25 AM

Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (Dbmv)	Chan	Freq (MHz)	Visual Level (dbmv)	Aural Level (dbmv)	Scra S	Diff (Dbmv)
2	55.2500	9.9	-3.5		13.4	AA	301.2625	13.8	-0.8		14.6
3	61.2500	11.2	-2.6		13.8	BB	307.2625	13.7	0.9		12.8
4	67.2500	10.8	-1.6		12.4	CC	313.2625	13.5	-0.4		13.9
5	77.2500	12.2	-2.5		14.7	DD	319.2625	13.2	-0.9		14.1
6	83.2500	12.4	-2.1		14.5	EE	325.2625	13.5	0.0		13.5
						FF	331.2750	13.7	1.2		12.5
						GG	337.2625	13.7	-0.7		14.4
A-5	91.2500	10.9	0.0	S	10.9	HH	343.2625	13.2	0.0		13.2
A-4	97.2500	12.8	-0.4		13.2	II	349.2625	13.0	-2.0		15.0
A-3	103.2500					JJ	355.2625	12.2	-2.1		14.3
A-2	109.2750					KK	361.2625	12.0	-2.7		14.7
A-1	115.2750	12.8	-1.1		13.9	LL	367.2625	12.0	-2.5		14.5
A	121.2625	12.3	-1.6		13.9	MM	373.2625	11.6	-1.3		12.9
B	127.2625	12.9	-0.5		13.4	NN	379.2625	11.3	-2.0		13.3
C	133.2625	12.8	0.3		12.5	OO	385.2625	11.0	-3.3		14.3
D	139.2500	13.3	0.7		12.6	PP	391.2625	10.6	-2.9		13.5
E	145.2500	13.8	0.3		13.5	QQ	397.2625	10.4	-3.9		14.3
F	151.2500	12.1	-1.4		13.5	RR	403.2500	10.1	-3.7		13.8
G	157.2500	13.4	-0.3		13.7	SS	409.2500	10.5	-3.4		13.9
H	163.2500	13.0	-0.2		13.2	TT	415.2500	9.1	-3.9		13.0
I	169.2500	13.2	0.3		12.9	UU	421.2500	9.3	-3.9		13.2
7	175.2500	13.3	-0.4		13.7	VV	427.2500	9.6	-4.4		14.0
8	181.2500	13.6	-0.3		13.9	WW	433.2500	9.2	-4.3		13.5
9	187.2500	13.6	0.0		13.6	XX	439.2500	9.2	-3.9		13.1
10	193.2500	13.9	-0.3		14.2	YY	445.2500	9.3	-4.6		13.9
11	199.2500	13.6	-0.1		13.7	ZZ	451.2500	9.8	-3.5		13.3
12	205.2500	14.2	2.5		11.7	63	457.2500	10.0	-3.4		13.4
13	211.2500	13.7	1.5		12.2	64	463.2500	9.8	-2.6		12.4
J	217.2500	13.0	-0.8		13.8	65	469.2500	10.2	-3.4		13.6
K	223.2500	13.6	0.1		13.5	66	475.2500	9.9	-3.8		13.7
L	229.2625	13.5	0.0		13.5	67	481.2500	9.6	-3.4		13.0
M	235.2625	13.3	-0.7		14.0	68	487.2500	9.5	-2.8		12.3
N	241.2625	13.2	-1.1		14.3	69	493.2500	9.3	-4.1		13.4
O	247.2625	13.0	-1.0		14.0	70	499.2500	8.1	-4.3	S	12.4
P	253.2625	13.2	-0.2		13.4	71	505.2500	9.6	-3.2	S	12.8
Q	259.2625	12.8	-0.3		13.1	72	511.2500	9.5	-2.8	S	12.3
R	265.2625	12.8	0.7		12.1	73	517.2500	11.4	-1.9	S	13.3
S	271.2625	13.9	0.0		13.9	74	523.2500	9.9	-3.0	S	12.9
T	277.2625	13.6	-0.1		13.7	75	529.2500	11.5	-2.5	S	14.0
U	283.2625	14.0	0.1		13.9	76	535.2500	9.9	-2.9	S	12.8
V	289.2625	13.8	-0.1		13.9	77	541.2500	9.5	-6.0	S	15.5
W	295.2625	13.5	0.8		12.7	78	547.2500	9.9	-1.8	S	11.7

PEAK TO VALLEY: 6.1

IN CHANNEL RESPONSE Test

CARRIER - TO - NOISE Test

COHERENT DISTURBANCES Test

LOW FREQUENCY DISTURBANCES Test

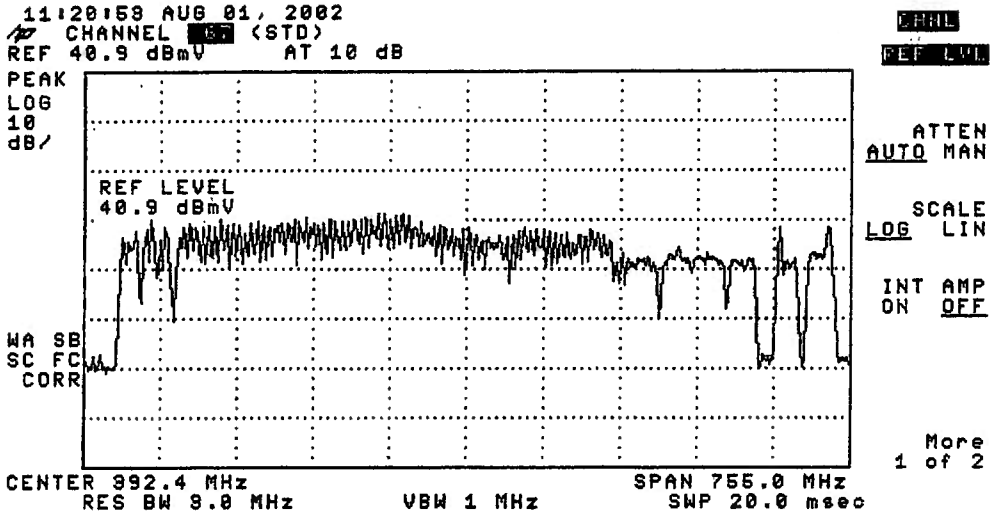
System Name: ILION **Date:** AUGUST 1,2002

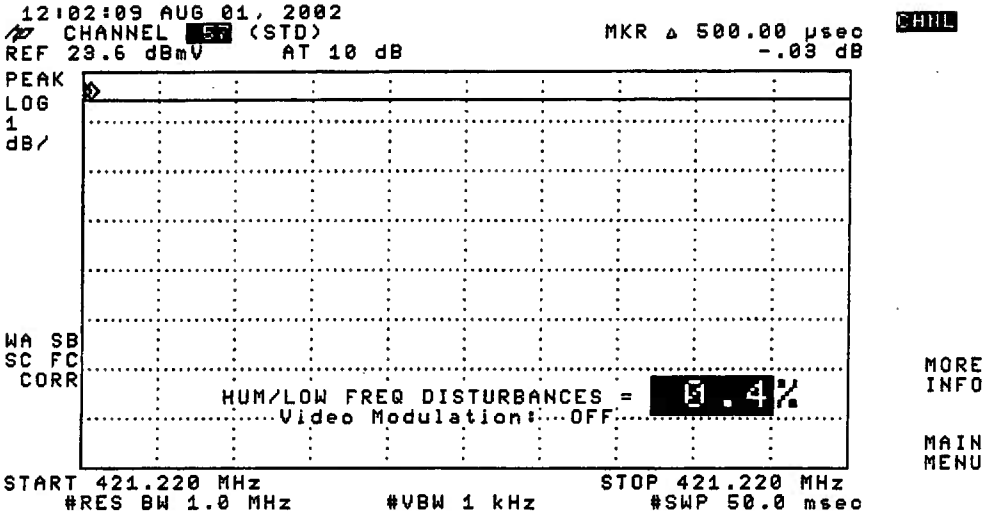
Test Performed By: JOEL MARMON/MARK D'AOUST

Location: GROVE ST. MOHAWK

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	0.40	46.7	62.6	73.0		
9	0.50	47.9	70.5	76.6		
14	0.40	47.0	67.2	72.9		
20	0.20	48.5	69.6	74.1		
24	0.30	46.6	67.0	75.0		
29	0.40	46.4	65.2	67.0		
36	0.20	46.5	64.0	67.4		
49	0.30	48.1	66.5	67.5		
57	0.90	47.1	64.2	63.9		0.4


11:20:58 AUG 01, 2002
CHANNEL 67 (STD)
REF 40.9 dBmV
AT 10 dB
CHNL
REF LVL
PEAK
LOG
10
dB/
REF LEVEL
40.9 dBmV
ATTEN
AUTO MAN
SCALE
LOG LIN
INT AMP
ON OFF
WA SB
SC FC
CORR
More
1 of 2
CENTER 992.4 MHz
SPAN 755.0 MHz
RES BW 9.0 MHz
VBW 1 MHz
SWP 20.0 msec


12:02:09 AUG 01, 2002
CHANNEL 57 (STD)
REF 23.6 dBmV
AT 10 dB
MKR Δ 500.00 µsec
-.03 dB
CHNL
PEAK
LOG
1
dB/
WA SB
SC FC
CORR
HUM/LOW FREQ DISTURBANCES = 6.4%
Video Modulation: OFF
MORE
INFO
MAIN
MENU
START 421.220 MHz
#RES BW 1.0 MHz
#VBW 1 kHz
STOP 421.220 MHz
#SWP 50.0 msec

Time Warner Cable
Syracuse Division

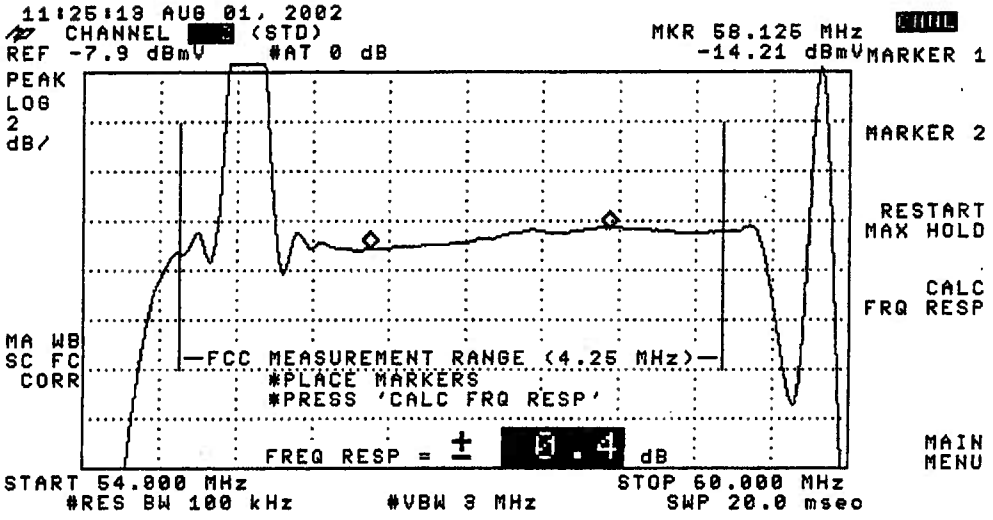
IN - CHANNEL FREQUENCY RESPONSE TEST

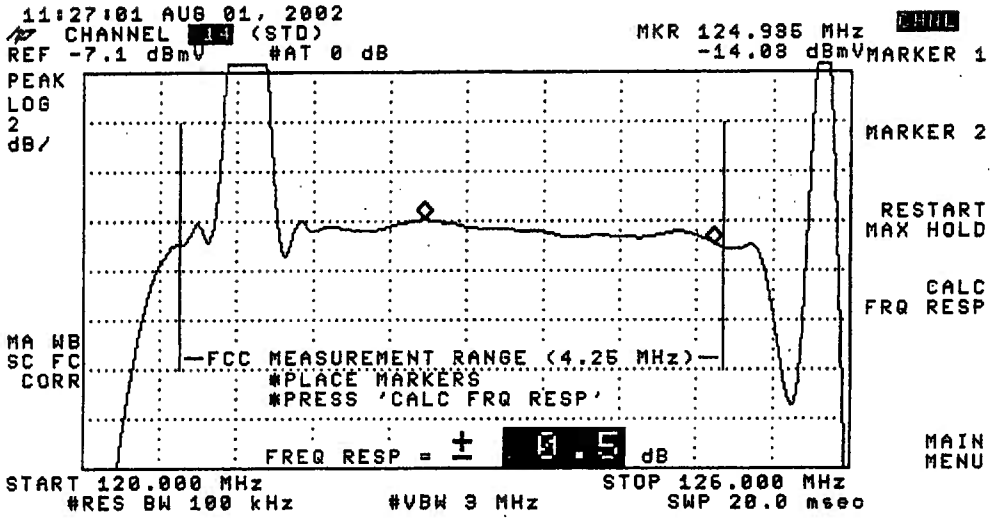
(76.605 (a) 6)

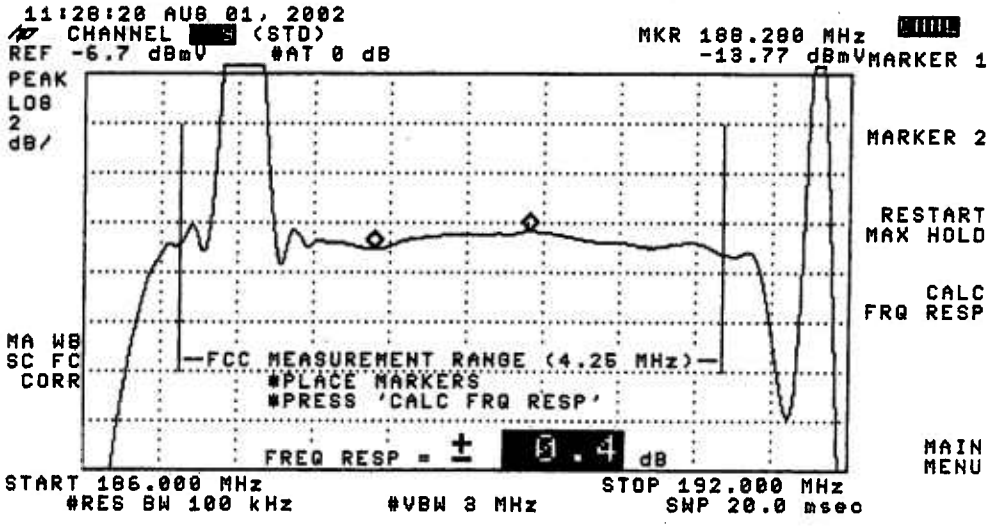
System Name: ILION Date: AUG. 1, 2002

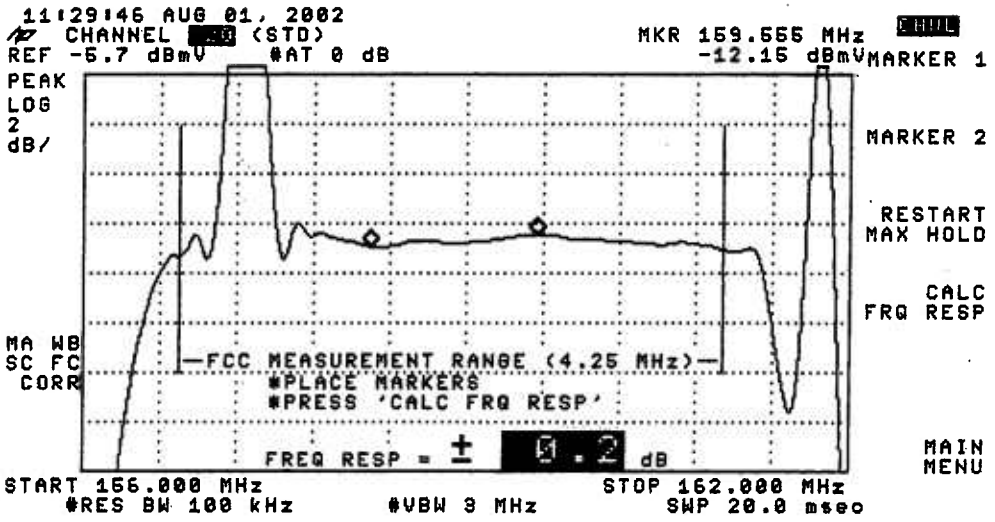
Test Performed By: MARK D'AOUST/JOEL MARMON Location: GROVE ST.

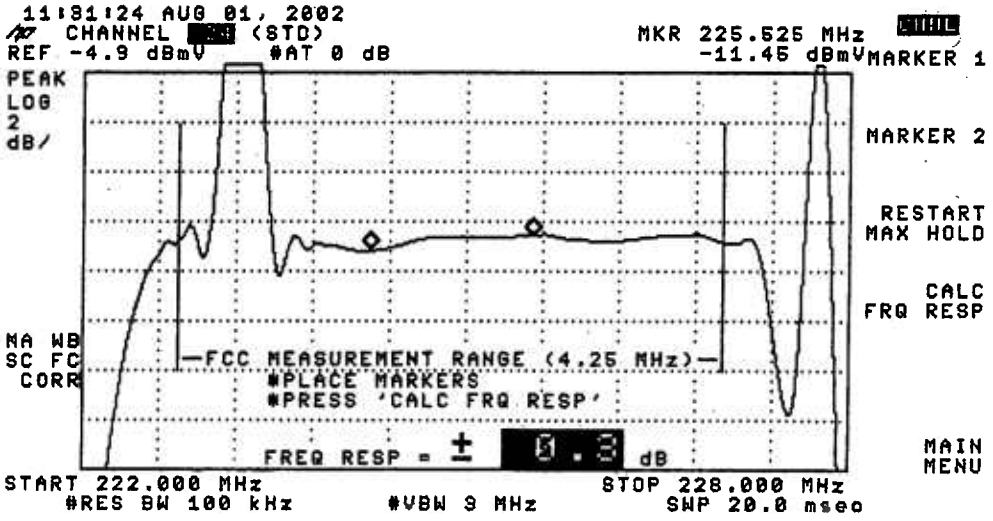
(SEE THE ATTATCHED SWEEP TRACES)

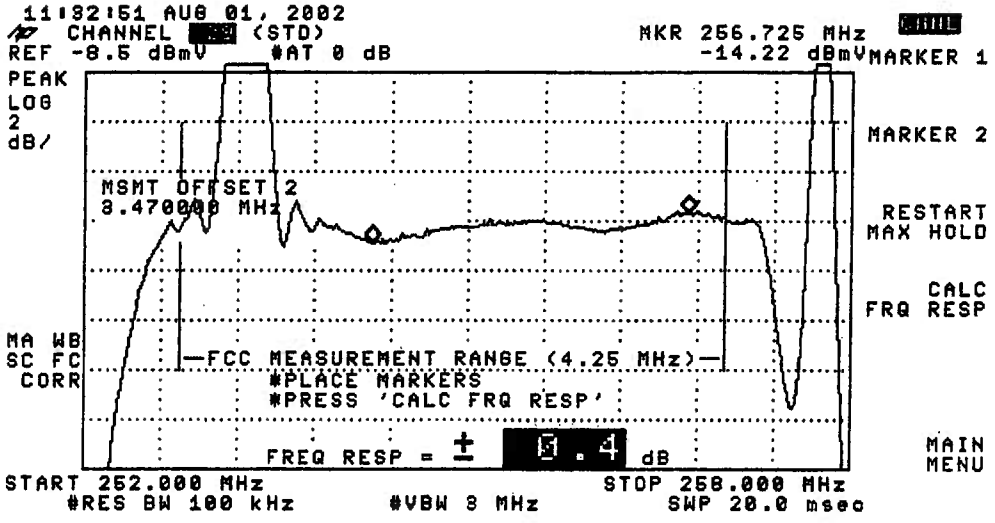

11:25:13 AUG 01, 2002
CHANNEL [redacted] (STD)
REF -7.9 dBmV
#AT 0 dB
MKR 58.125 MHz
-14.21 dBmV
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 54.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 60.000 MHz
SWP 20.0 msec

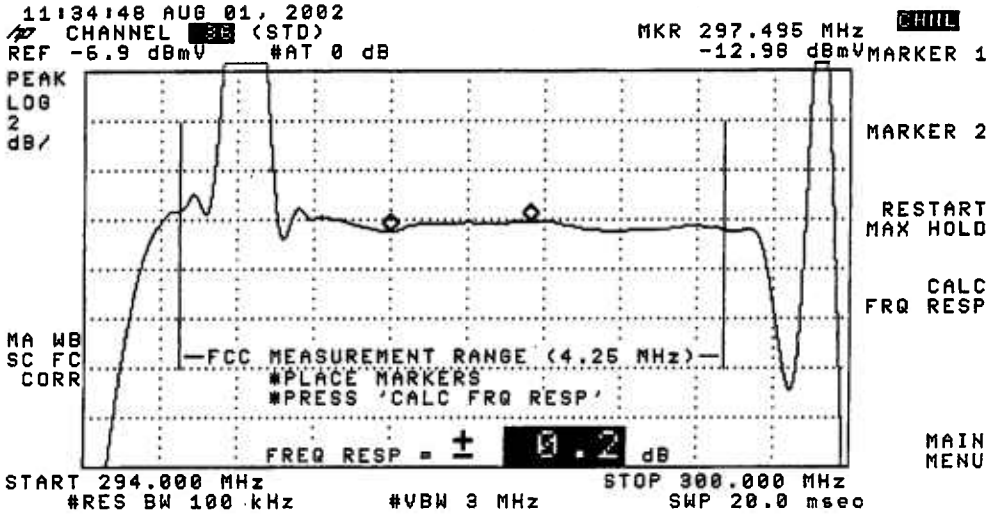

11:27:01 AUG 01, 2002
CHANNEL 14 (STD)
REF -7.1 dBmV
#AT 0 dB
MKR 124.985 MHz
-14.08 dBmV
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.5 dB
MAIN
MENU
START 120.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 126.000 MHz
SWP 20.0 msec

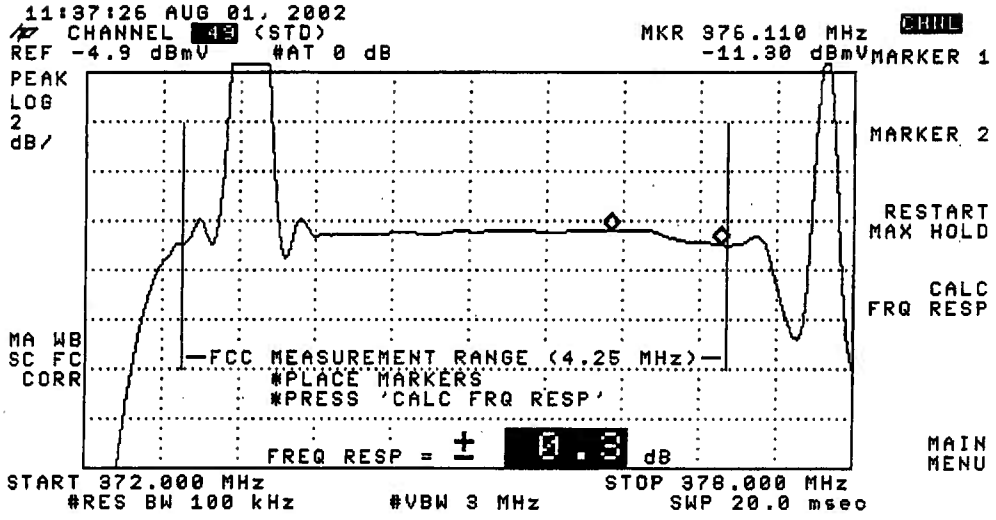

11:28:20 AUG 01, 2002
CHANNEL S (STD)
REF -6.7 dBmV
#AT 0 dB
MKR 188.280 MHz
-13.77 dBmV
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
FCC MEASUREMENT RANGE (4.25 MHz)
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.4 dB
MAIN
MENU
START 186.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 192.000 MHz
SWP 20.0 msec

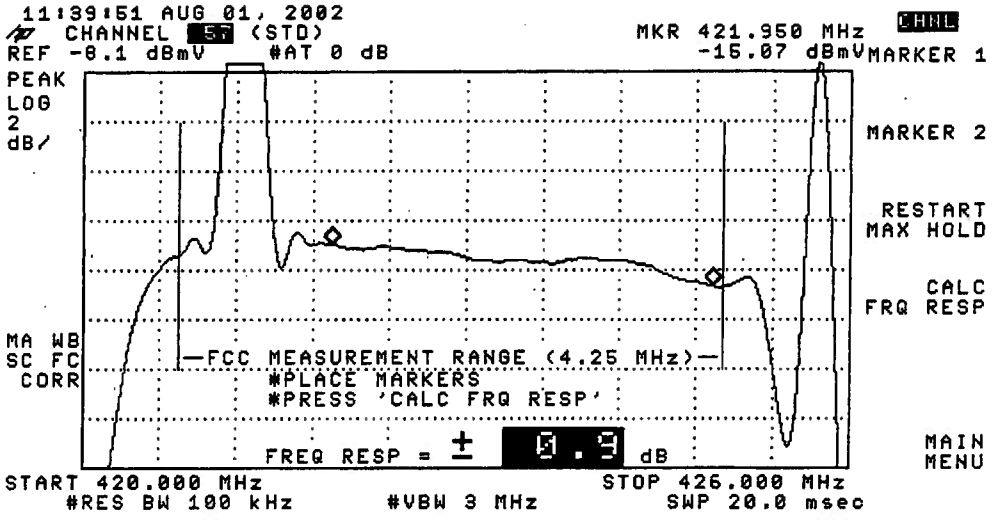

11:29:46 AUG 01, 2002
CHANNEL [redacted] (STD)
REF -5.7 dBmV
#AT 0 dB
MKR 159.555 MHz
-12.15 dBmV
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.2 dB
MAIN
MENU
START 156.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 162.000 MHz
SWP 20.0 msec

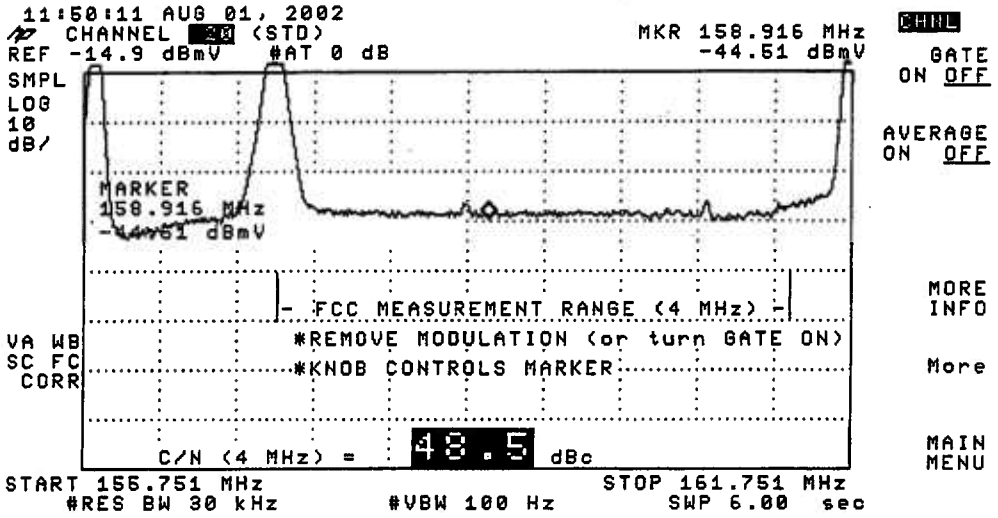

11:31:24 AUG 01, 2002
CHANNEL [redacted] (STD)
REF -4.9 dBmV
#AT 0 dB
MKR 225.525 MHz
-11.45 dBmV
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.3 dB
MAIN
MENU
START 222.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 228.000 MHz
SWP 20.0 msec

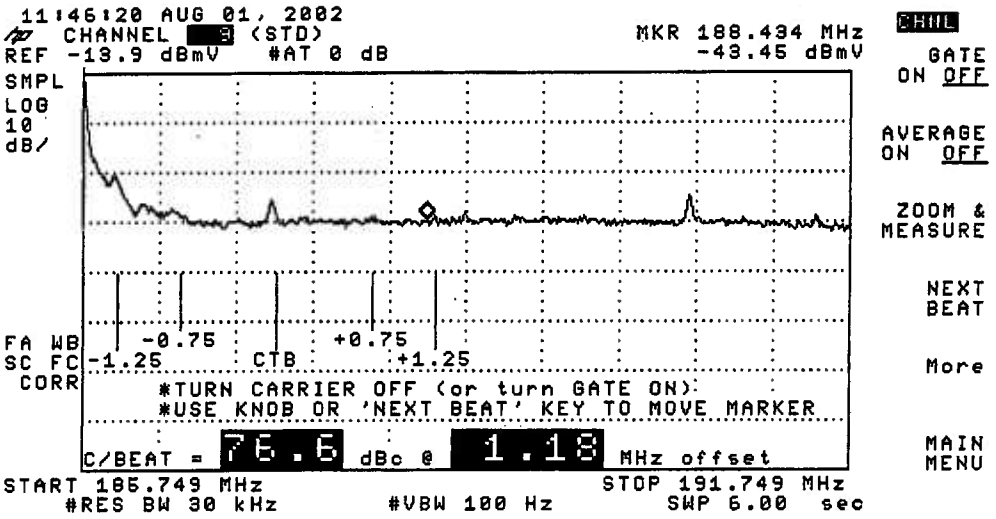

11:32:51 AUG 01, 2002
CHANNEL 134 (STD)
REF -8.5 dBmV
#AT 0 dB
MKR 256.725 MHz
-14.22 dBmV
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
MSMT OFFSET 2
3.470000 MHz
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 5.4 dB
MAIN
MENU
START 252.000 MHz
#RES BW 100 kHz
#VBW 8 MHz
STOP 258.000 MHz
SWP 20.0 msec

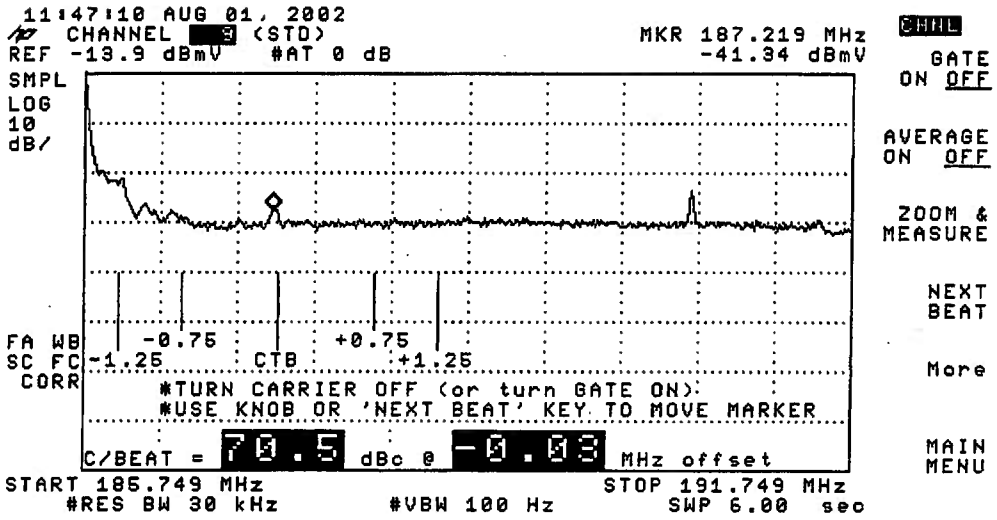

11:34:48 AUG 01, 2002
CHANNEL 36 (STD)
REF -6.9 dBmV
#AT 0 dB
MKR 297.495 MHz
-12.98 dBmV
CHILL
MARKER 1
PEAK
LOG
2
dB/
MARKER 2
RESTART
MAX HOLD
CALC
FRQ RESP
MA WB
SC FC
CORR
—FCC MEASUREMENT RANGE (4.25 MHz)—
#PLACE MARKERS
#PRESS 'CALC FRQ RESP'
FREQ RESP = ± 0.2 dB
MAIN
MENU
START 294.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 300.000 MHz
SWP 20.0 msec


11:37:26 AUG 01, 2002
CHANNEL 49 (STD)
REF -4.9 dBmV
#AT 0 dB
MKR 976.110 MHz
-11.30 dBmV
CHRL
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 372.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
STOP 378.000 MHz
SWP 20.0 msec


11:39:51 AUG 01, 2002
CHANNEL 57 (STD)
REF -8.1 dBmV
#AT 0 dB
MKR 421.950 MHz
-15.07 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 = ± 0.9 dB
MAIN
MENU
START 420.000 MHz
STOP 426.000 MHz
#RES BW 100 kHz
#VBW 3 MHz
SWP 20.0 msec


11:50:11 AUG 01, 2002
CHANNEL 38 (STD)
REF -14.9 dBmV
#AT 0 dB
MKR 158.916 MHz
-44.51 dBmV
CHNL
GATE
ON OFF
SMPL
LOG
10
dB/
AVERAGE
ON OFF
MARKER
158.916 MHz
-44.61 dBmV
MORE
INFO
- FCC MEASUREMENT RANGE (4 MHz) -
VA WB
SC FC
CORR
*REMOVE MODULATION (or turn GATE ON)
*KNOB CONTROLS MARKER
More
C/N (4 MHz) = 48.5 dBc
MAIN
MENU
START 155.751 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 161.751 MHz
SWP 6.00 sec


11:46:20 AUG 01, 2002
CHANNEL 3 (STD)
REF -13.9 dBmV
#AT 0 dB
MKR 188.434 MHz
-43.45 dBmV
CHNL
GATE
ON OFF
SMPL
LOG
10
dB/
AVERAGE
ON OFF
ZOOM &
MEASURE
NEXT
BEAT
FA WB
SC FC
CORR
-0.75
+0.75
-1.25
CTB
+1.25
More
#TURN CARRIER OFF (or turn GATE ON)
#USE KNOB OR 'NEXT BEAT' KEY TO MOVE MARKER
C/BEAT = 76.6 dBc @ 1.18 MHz offset
MAIN
MENU
START 185.749 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 191.749 MHz
SWP 6.00 sec


11:47:10 AUG 01, 2002
CHANNEL 9 (STD)
REF -13.9 dBmV
#AT 0 dB
MKR 187.219 MHz
-41.34 dBmV
CHRL
GATE ON OFF
AVERAGE ON OFF
ZOOM & MEASURE
NEXT BEAT
More
MAIN MENU
SMPL
LOG
10
dB/
FA WB
SC FC
CORR
-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
C/BEAT = 70.5 dBc @ -0.03 MHz offset
START 185.749 MHz
#RES BW 30 kHz
#VBW 100 Hz
STOP 191.749 MHz
SWP 6.00 sec

Visual Carrier Level Variation Test 76.605 (a) 4

System Name: ILION

Test Point Location GROVE STREET

Date: AUG. 28, 2002 Performed by MARK D'AOUST

Meter Serial Number: CALAN 3010#US37241488

Chan	Freq (MHZ)	Temp	68	77	75	64	Max Variation
		Time	09:25	15:20	21:19	03:32	
		Visual Level (dbmv)					
2	55.2500		9.9	8.8	9.6	9.6	1.1
3	61.2500		11.2	10.1	10.8	11.2	1.1
4	67.2500		10.8	9.9	10.7	11.1	1.2
5	77.2500		12.2	10.5	12.1	12.5	2.0
6	83.2500		12.4	11.2	12.2	12.6	1.4
A-5	91.2500		10.9	8.9	12.3	11.2	3.4
A-4	97.2500		12.8	11.7	12.5	12.8	1.1
A-3	103.2500						
A-2	109.2750						
A-1	115.2750		12.8	11.7	12.6	12.9	1.2
A	121.2625		12.3	11.6	12.3	12.8	1.2
B	127.2625		12.9	11.7	12.3	12.8	1.2
C	133.2625		12.8	11.7	12.4	12.4	1.1
D	139.2500		13.3	12.0	13.1	13.3	1.3
E	145.2500		13.8	12.2	13.6	13.8	1.6
F	151.2500		12.1	11.0	11.9	12.6	1.6
G	157.2500		13.4	12.3	13.0	13.7	1.4
H	163.2500		13.0	11.8	12.9	13.2	1.4
I	169.2500		13.2	11.9	13.0	13.2	1.3
7	175.2500		13.3	12.0	12.8	13.3	1.3
8	181.2500		13.6	12.2	13.2	13.6	1.4
9	187.2500		13.6	12.2	13.2	13.9	1.7
10	193.2500		13.9	12.5	13.5	14.1	1.6
11	199.2500		13.6	12.4	13.6	13.9	1.5
12	205.2500		14.2	12.7	14.1	14.3	1.6
13	211.2500		13.7	12.3	13.4	13.7	1.4
J	217.2500		13.0	11.7	12.8	13.1	1.4
K	223.2500		13.6	12.4	13.5	13.7	1.3
L	229.2625		13.5	12.5	13.5	13.8	1.3
M	235.2625		13.3	12.7	13.4	13.7	1.0
N	241.2625		13.2	12.5	13.3	13.0	0.8
O	247.2625		13.0	12.3	12.9	13.5	1.2
P	253.2625		13.2	12.1	12.6	13.3	1.2
Q	259.2625		12.8	12.0	12.9	13.4	1.4
R	265.2625		12.8	12.8	13.9	14.3	1.5
S	271.2625		13.9	12.8	13.6	14.4	1.6
T	277.2625		13.6	12.9	13.2	13.7	0.8
U	283.2625		14.0	13.5	14.4	14.7	1.2
V	289.2625		13.8	13.1	13.8	14.3	1.2
W	295.2625		13.5	12.8	13.5	13.7	0.9

Chan	Freq (MHZ)	Temp	68	77	75	64	Max Variation
		Time	09:25	15:20	21:19	03:32	
		Visual Level (dbmv)					
AA	301.2625		13.8	13.1	13.8	14.3	1.2
BB	307.2625		13.7	12.8	13.5	13.7	0.9
CC	313.2625		13.5	12.9	13.6	14.2	1.3
DD	319.2625		13.2	12.2	13.2	13.9	1.7
EE	325.2625		13.5	13.0	13.7	13.9	0.9
FF	331.2750		13.7	13.0	13.8	13.5	0.8
GG	337.2625		13.7	12.9	13.9	14.1	1.2
HH	343.2625		13.2	12.4	13.4	14.0	1.6
II	349.2625		13.0	12.2	13.3	14.1	1.9
JJ	355.2625		12.2	11.6	12.3	13.5	1.9
KK	361.2625		12.0	11.1	12.4	13.6	2.5
LL	367.2625		12.0	11.0	11.9	12.7	1.7
MM	373.2625		11.6	10.7	11.7	12.7	2.0
NN	379.2625		11.3	10.4	11.4	12.1	1.7
OO	385.2625		11.0	10.2	11.1	12.1	1.9
PP	391.2625		10.6	9.8	11.0	11.8	2.0
QQ	397.2625		10.4	9.6	10.7	11.6	2.0
RR	403.2500		10.1	9.5	10.4	11.1	1.6
SS	409.2500		10.5	9.7	10.9	11.1	1.4
TT	415.2500		9.1	8.4	9.5	10.8	2.4
UU	421.2500		9.3	8.8	9.9	11.4	2.6
VV	427.2500		9.6	8.9	10.0	9.9	1.1
WW	433.2500		9.2	8.7	9.8	9.9	1.2
XX	439.2500		9.2	8.5	9.8	10.5	2.0
YY	445.2500		9.3	9.1	10.0	10.3	1.2
ZZ	451.2500		9.8	9.3	10.5	10.3	1.2
63	457.2500		10.0	9.5	10.6	10.5	1.1
64	463.2500		9.8	9.5	10.6	11.1	1.6
65	469.2500		10.2	9.9	11.3	11.1	1.4
66	475.2500		9.9	9.6	10.9	11.2	1.6
67	481.2500		9.6	9.4	10.8	11.7	2.3
68	487.2500		9.5	9.4	10.7	11.5	2.1
69	493.2500		9.3	9.1	10.5	11.3	2.2
70	499.2500		8.1	7.6	9.5	11.2	3.6
71	505.2500		9.6	9.4	11.1	11.1	1.7
72	511.2500		9.5	9.1	10.7	9.7	1.6
73	517.2500		11.4	11.2	12.8	11.6	1.6
74	523.2500		9.9	9.5	11.0	11.4	1.9
75	529.2500		11.5	7.9	9.2	13.3	5.4
76	535.2500		9.9	7.5	8.1	11.7	4.2
77	541.2500		9.6	8.5	8.0	11.8	3.8
78	547.2500		9.9	9.8	10.7	12.4	2.6

Max NonAdjacent Channel Level Diff.	6.4
Max Adjacent Channel Level Diff.	2.8

Max Variance from last proof-of-performance test	6.8
Date of last proof-of-performance test	FEB. 7,2002

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.

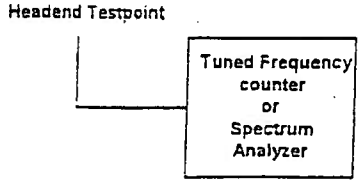
-Follow the manufacturers recommended methods for performing this measurement.

-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

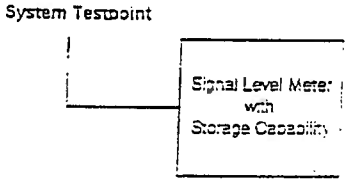
be entered into the Headend test forms at a later time.

-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:



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:

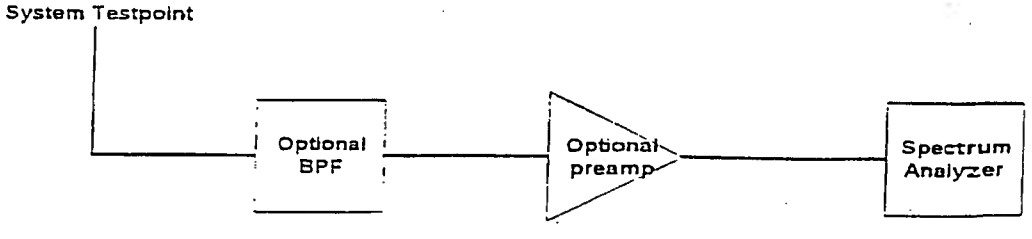
-Measurements should be made on all of the FCC designated test channels at each testpoint

-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 manufacrurers 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.

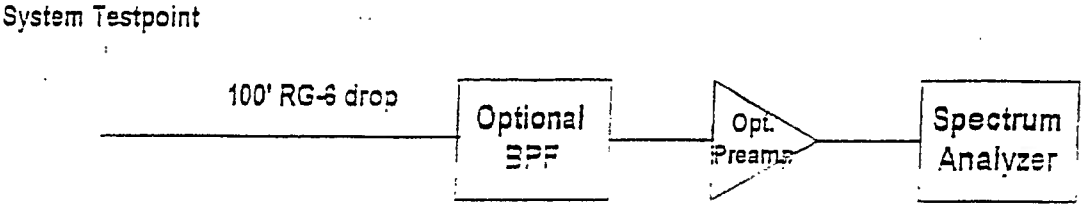
Note:

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:

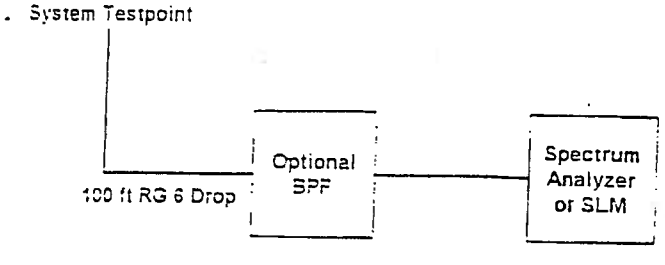
-Measurement must be made on at least one of the FCC designated test channels.

-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:



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.

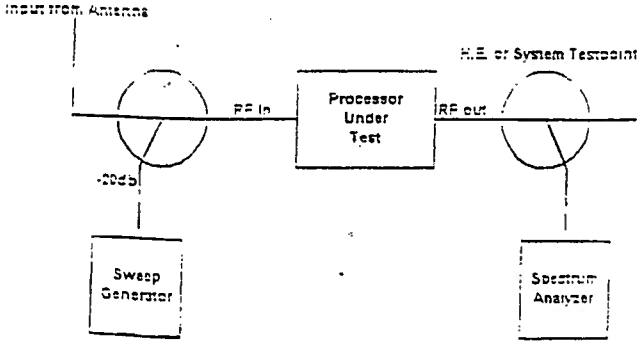
-Connect equipment as shown in the block diagrams below.

-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.

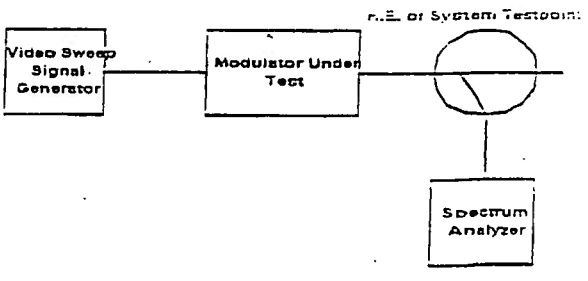
-Record the +/-db number(peak to valley/2) on page 3of 5 for each testpoint.

-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

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.

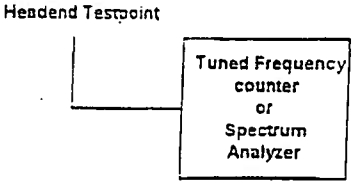
-Follow the manufacturers recommended methods for performing this measurement.

-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

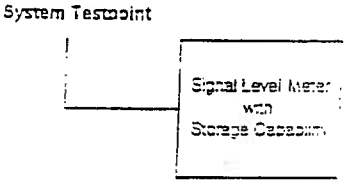
be entered into the Headend test forms at a later time.

-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:



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:

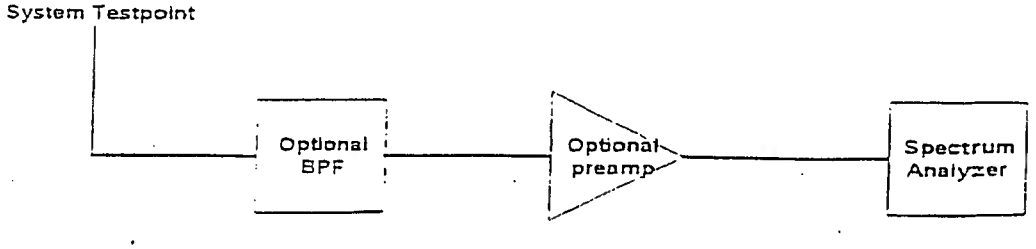
-Measurements should be made on all of the FCC designated test channels at each testpoint

-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.

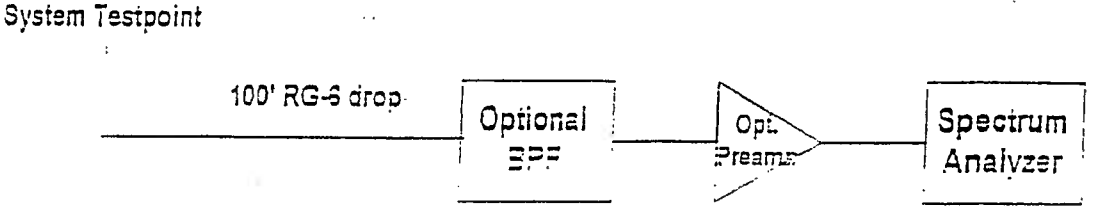
Note:

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:

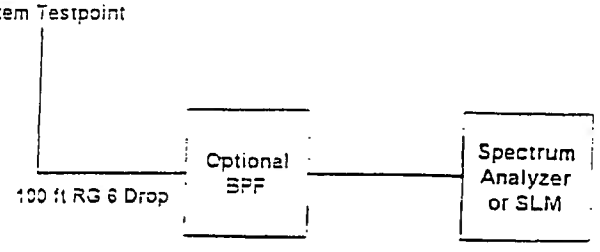
-Measurement must be made on at least one of the FCC designated test channels.

-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:



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.

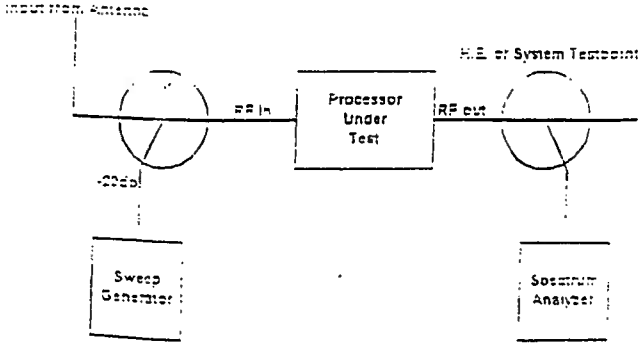
-Connect equipment as shown in the block diagrams below.

-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.

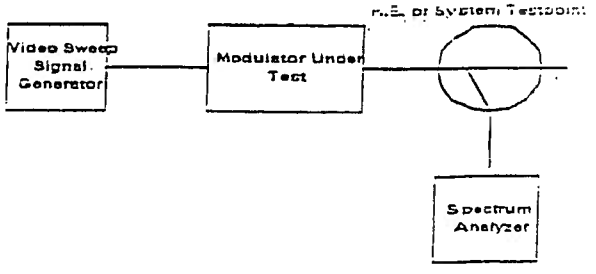
-Record the +/-db number(peak to valley/2) on page 3of 5 for each testpoint.

-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

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
Village of Smyrna	71	Town of Hamilton	189
Village of Hamilton	714	Town of Sherburne	198
Village of Sherburne	612	Village of Earlville	358
Village of Morrisville	301	Town of Madison	233
Town of Lebanon	188	Town of Eaton	295
Town of Smyrna	52		

STATE OF NEW YORK
County of Madison

Kathleen Hilgenberg, of said County, being duly sworn, says that she is and, during the whole time hereinafter mentioned, has been an agent of Tenney Media Group; Publishers of the *Mid-York Weekly* to wit: Legal Advertising Accounts Manager of the *Mid-York Weekly*, a newspaper printed and published in the County of Madison, aforesaid, and that the **Town of Lebanon Legal Notice**

Re: Notice of Public Hearing
Cable TV Franchise

of which the annexed is a printed copy, was inserted and published in said newspaper **one** week(s) successively, at least once in each week, the publication commencing on the **24th** day of **April,** 2003, and terminating on the **24th** day of **April**, 2003.

Kathleen Hilgenberg

Sworn before me this 24th

day of April, 2003

Catherine S. Hotaling
Notary Public

CATHERINE S. HOTALING
Notary Public, State of New York
Qualified in Madison County
Commission Expires May 15, 2003
01HO5043662

d-York Weekly
Hamilton, NY 13346
ALK IN:
eet, Hamilton, NY
IONE IN:
0-765-2112
ay • 7 Days A Week

grievance day to the first Monday after the fourth Tuesday in the Town of Lebanon. Copies of the proposed Local Law are available for public inspection at the Town Clerk's Office during regular business hours.

Dated: April 11, 2003

For the Town Board of Lebanon,
Dee A. Keller,
Town Clerk

PUBLIC NOTICE

Senate and Assembly yesterday (4/15/03) passed the bill (A8022/S4226) that budget votes be delayed from May 20th to June 3rd. The bill has Governor Pataki for his approval or veto. He has until April 26th to take otherwise it automatically becomes law without his signature.

e Education Law permits residents interested in running for vacant seats ducation, or individuals wishing to submit a proposition for referendum, s up to thirty days prior to the vote. Therefore, in the event that the bill is ted persons should submit petitions to the District Office by Friday, May

for any confusion that this change may generate, but we are required to of the State of New York.

estions or suggestions, please contact me at the school.

Thomas Strain
Assistant Superintendent
Sherburne-Earlville Central School

Madison Central School District
Meeting and Budget Vote

IEREBY GIVEN that a public hearing of the qualified voters of the School District, Madison County, New York will be convened at the uilding located on Route 20, Madison New York on May 13, 2003 at 7:00 ntation of the budget. The budget will be available for review during the mediately preceding the hearing between the hours of 9:00 am and 4:00 turdays and Sundays, at the Madison Central School Main Office.

KE FURTHER NOTICE that the Annual Meeting of the qualified voters Central School District of the towns of Augusta, Marshall, Vernon, Eaton, ockbridge in Oneida and Madison counties, State of New York, will be l foyer on Tuesday, May 20, 2003, between the hours of 12 noon to 8:00 ime, at which time the polls will be open to vote by ballot upon the

e annual budget of the School District for the fiscal year 2003-2004 and to ie requisite portion thereof to be raised by taxation on the taxable property ct.

oard members; 1 Board Member for 4 years commencing on July 1, 2003 g on June 30, 2007 and 1 Board Member for 1 year commencing on July l expiring on June 30, 2004.

IER NOTICE IS HEREBY GIVEN that a copy of the statement of the y which will be required to fund the School District's Budget for 2003- of public monies, may be obtained by any resident of the District during during the fourteen days immediately preceding the vote at the school ice.

HER NOTICE IS HEREBY GIVEN that petitions nominating e office of member of the Board of Education shall be filed with the Clerk istrict at her office in the Madison Central School District Main Office not 1, 2003 between the hours of 9:00 am and 4:00 pm. Each petition shall be lerk of the District and shall be signed by at least 25 qualified voters of the te the name and residence of the candidate.

IER NOTICE IS HEREBY GIVEN that the qualified voters of the shall be entitled to vote at said annual vote and election. A qualified voter) a citizen of the United States of America, (2) eighteen years of age or nt within the district for a period of third (30) days next to preceding the election. The School District may require all persons offering to vote at and election to provide one form of proof of residency pursuant to 2018-c. Such form may include a driver's license, a non-driver rd, a utility bill, or a voter registration card. Upon proof of residency, the may also require all persons offering to vote to provide their signature, d address.

HER NOTICE IS HEREBY GIVEN that applications for absentee on of Board members and adoption of the Annual Budget and propositions for at the office of the Clerk of the District. Mailed application for absentee the right to reject any or all bids.

PUBLIC NOTICE

The annual report for the calendar year ending December 31, 2002 of the Mid-York Foundation, a private foundation, is available for inspection at 160 Broad Street, Hamilton, NY 13346, upon request to any citizens within 180 days after May 15, 2003. The report is available for inspection between 9:00 am and 12 noon and 1-4:00 pm weekdays.

DATED: April 24, 2003

Jill P. Cochran
315-824-3111
President
Mid-York Foundation

TOWN OF LEBANON
NOTICE OF PUBLIC HEARING

PLEASE TAKE NOTICE that the Town Board of Lebanon shall conduct a public hearing at 8:00 p.m. on Monday, May 5, 2003 at the Lebanon Town Office, 1210 Bradley Brook Rd., Lebanon, New York to prohibit exposure of a person in the Town of Lebanon. Copies of the proposed Local Law are available for public inspection at the Town Clerk's Office during regular business hours.

Dated: April 11, 2003

For the Town Board of Lebanon,
Dee A. Keller,
Town Clerk

LEGAL NOTICE

PLEASE TAKE NOTICE that the Town Board of the Town of Lebanon, Madison County, New York, has scheduled a public hearing for the 5th day of May, 2003 at 8:30 p.m. at the Lebanon Town Office, Lebanon, 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 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, will 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.

Dated: April 11, 2003

Dee Keller, Town Clerk

LEGAL NOTICE
NOTICE OF PUBLIC HEARING
ANNUAL MEETING, BUDGET VOTE AND ELECTION
MORRISVILLE-EATON CENTRAL SCHOOL DISTRICT

NOTICE IS HEREBY GIVEN, that a public hearing of the qualified voters of the Morrisville-Eaton Central School District, Madison County, NY, will be held at the Middle/High School building on Fearon Road in said district on Tuesday, May 13, 2003 at 7:00 PM, for the presentation of the budget. The budget will be available for review on May 6, 2003 at the District Office, located in the Middle/High School, Fearon Road, Morrisville, NY.

NOTICE IS HEREBY GIVEN, that the annual meeting of the qualified voters of the Morrisville-Eaton Central School District, will be held at the Edward R. Andrews Elementary School in said District on Tuesday, May 20, 2003 at which time said vote and election will be held between the hours of 6:00 AM and 9:00 PM to vote by voting machine upon the following items:

1. To adopt the annual budget of the School District for the fiscal year 2003-2004 and to authorize the requisite portion thereof to be raised by taxation on the taxable property of the district.
2. To elect two (2) members at large of the Board of Education for three-year terms commencing July 1, 2003 and expiring on June 30, 2006; these positions are currently held by Robert Berkey and Andrew Olney, whose terms expire on June 30, 2003.
3. To consider the following proposition:

RESOLVED that the Board of Education of the Morrisville-Eaton Central School District is hereby authorized to undertake the acquisition of three (3) 65 passenger school buses at an estimated maximum aggregate cost of $191,955.00; and that such sum of so much thereof as may be necessary, shall be raised by the levy of a tax to be collected in annual installments, with such tax to be partially offset by state aid available therefor; and, in anticipation of such tax, debt obligations of the School District as may be necessary not to exceed such estimated maximum aggregate cost shall be issued.

AND NOTICE IS ALSO GIVEN that applications for absentee ballots may be applied for at the office of the School District Clerk. Any such application must be received by the District Clerk at least seven days before the date of the aforesaid annual district meeting if the ballot is to be mailed to the voter, or the day before such annual district meeting if the ballot is to be delivered personally to the voter. A list of all persons to whom absentee

limited to, the mowing of the cemetery for the 2003 season.

TOWN OF MADIS
NOTICE OF PUBLIC HE

PLEASE TAKE NOTICE that the Town Board of th public hearing at the Town Office Building, 7358 Route 20, 8th day of May, 2003, at 7:30 p.m. for the purpose of considerin establish an alternate date for the Board of Assessment Revie relation to real property tax assessments (grievance day) as the fi fourth Tuesday of May.

A copy of the proposed text is on file with the Town Clerk and review during the Clerk's regular business hours.

All persons interested therein will be given an opportunity to be he

Dated: April 11, 2003

Sall

INVITATION TO BID
ALTERATIONS TO THE EAST BAY
OF THE
EARLVILLE OPERA HOUSE
18 EAST MAIN STREET
EARLVILLE, NEW YORK

Sealed bids will be received by the Earlville Opera House, Inc. Earlville Opera House (18 East Main Street, Earlville, NY 13332) un May 22, 2003.

The work includes general construction plus hot water heating, ele under a single contract.

Bid documents will be available from the Earlville Opera House d hours. Call in advance (315/691-3550) to reserve sets. Documents wi paid non-refundable fee of $25 plus shipping and deposit.

A deposit of $30 in the name of Earlville Opera House, Inc. will b of documents. This deposit will be returned in accordance with the i Documents will be available for review at Dodge Reports/Syracus Mohawk Valley Builder's Exchange (315/624-0276), and at the Earlv

No Bid Bond is required. Performance and Payment Bonds m successful bidder. Refer to the bid documents for additional fe Affirmative Action and M/WBE participation.

A pre-bid meeting will be held at the site at 3 PM on Tuesday, bidders are strongly encouraged to attend.

The Earlville Opera House, Inc. has been and will continue to b organization. All qualified Minority and Women-Owned Business will be afforded equal opportunity without discrimination because o national origin, sex, age, disability, sexual preference or Vietnam Era

Earl

Dated: 4/24/03

NOTICE OF BUDGET HEARING OF
HAMILTON CENTRAL SCHOOL

NOTICE IS HEREBY GIVEN that the budget hearing of Hamilton Central School District, Madison County, New York, qua meetings in said school district, will be held in the school auditoriu 2003 at 7:30 P.M. (EDT) for the transaction of such business as is a Law.

NOTICE IS ALSO GIVEN THAT, pursuant to Section 2013 of the Education Law, the vote in the annual election to fill the vac Education and upon the appropriation of the necessary funds t expenditures for the school year of 2003-04 will be taken by votin May 20, 2003 at 12:00 Noon (EDT), in the main entrance foyer a School on West Kendrick Avenue, Hamilton, NY, and that the poll the hours of 12:00 Noon and 8:00 P.M. (EDT), on that date.

NOTICE IS ALSO GIVEN that petitions nominating candi member of the Board of Education must be filed in the office of t between the hours of 8:00 A.M. and 5:00 P.M. not later than April on the Board of Education will be filled at the election. The term will expire June 30, 2003. The terms of office are July 1, 2003 t petition must be directed to the Clerk of the District, shall be signed qualified voters of the district, shall state the residence of each sig name and residence of the candidate. Signature petitions may be pi the District Clerk at Hamilton Central School between the hours P.M. Monday through Friday.

RESOLUTION NO. 65-03

APPROVAL OF PROPOSED CABLE TELEVISION FRANCHISE RENEWAL AGREEMENT WITH TIME-WARNER CABLE

WHEREAS, the Lebanon Town Board has received a proposed Cable Television Franchise Renewal contractual agreement with Time-Warner Cable for operating a cable television franchise in the Town of Lebanon for its attorney, Steven Jones and,

Whereas, Attorney Jones recommends adoption of the proposed agreement after negotiating said agreement with Time-Warner Cable and,

Whereas, Town Board members have been given copies of the proposed renewal agreement to read and review and,

Whereas, the Town Board has conducted a public hearing on the proposed Cable Television Franchise Renewal Agreement and heard public comment,

THEREFORE BE IT RESOLVED, the Lebanon Town Board approves this attached proposed Cable Television Franchise Renewal Agreement with Time-Warner Cable and authorizes the Town Supervisor to sign the agreement on behalf of the Town of Lebanon.

On Motion of James Goldstein, Supervisor, Chair, Governmental Operations

Seconded by Con King

(Discussion)

Roll Call Vote: Yes 5 No ___

Vote: Hartshorn Y King Y Morgan Y Niles Y Goldstein Y

Approved 5 Defeated ___

Dated: May 5, 2003

RESOLUTION NO. 117-02

APPROVAL OF PROPOSED CABLE TELEVISION FRANCHISE RENEWAL AGREEMENT WITH TIME-WARNER CABLE

WHEREAS, the Lebanon Town Board has received a proposed Cable Television Franchise Renewal contractual agreement with Time-Warner Cable for operating a cable television franchise in the Town of Lebanon for its attorney, Steven Jones and,

Whereas, Attorney Jones recommends adoption of the proposed agreement after negotiating said agreement with Time-Warner Cable and,

Whereas, Town Board members have been given copies of the proposed renewal agreement to read and review and,

Whereas, the Town Board has conducted a public hearing on the proposed Cable Television Franchise Renewal Agreement and heard public comment,

THEREFORE BE IT RESOLVED, the Lebanon Town Board approves this attached proposed Cable Television Franchise Renewal Agreement with Time-Warner Cable and authorizes the Town Supervisor to sign the agreement on behalf of the Town of Lebanon.

On Motion of James Goldstein, Supervisor, Chair, Governmental Operations

Seconded by Carol King

(Discussion)

Roll Call Vote: Yes ✓ No ___

Vote: Hartshorn Yes King Yes Morgan Yes Niles Yes Goldstein Yes

Approved ✓ Defeated ___

Dated: Dec 9 2002

STATE OF NEW YORK
County of Madison

Kathleen Hilgenberg, of said County, being duly sworn, says
that she is and, during the whole time hereinafter mentioned,
has been an agent of Tenney Media Group; Publishers of the *Mid-York Weekly*
to wit: Legal Advertising Accounts Manager of the *Mid-York Weekly*,
a newspaper printed and published in the County of Madison,
aforesaid, and that the **Time Warner Cable Legal Notice**
Re: Notice of Application for Renewal of Certificate
of which the annexed is a printed copy, was inserted and published
in said newspaper **two** week(s) successively, at least once in each week,
the publication commencing on the **1st** day of **May,** 2003,
and terminating on the **8th** day of **May**, 2003.

Kathleen Hilgenberg

Sworn before me this 8th

day of May, 2003

Catherine S. Hotaling
Notary Public

CATHERINE S. HOTALING
Notary Public, State of New York
Qualified in Madison County
Commission Expires May 15, 2007
01HO6043662

System after 21 years of service. On August 16, 1942, Walt was united in marriage to the former Metta Merrifield in Earlville. She predeceased him on November 10, 1987.

Mr. Davies was a member of the First United Methodist Church of Earlville. He was a member of the Earlville Fire Department, and was honored for 50 years of service in 1983, and as Fireman of the Year in 1986. He was a member for over 50 years, and a Past President of the Madison County Fire Police Association, a Civil Defense volunteer and a member of the Hit or Miss Club. He was a former member and

be made to the Earlville Fire Department or the First United Methodist Church, Earlville.

Arrangements have been entrusted to the Burgess & Tedesco Funeral Home, 3 Preston St., Earlville.

Madelyn G. Osborne

ONEIDA CASTLE — Mrs. Madelyn G. Osborne, 94, of 20 W. 2nd St., died early Tuesday afternoon, April 15, 2003, at the Oneida Healthcare Center. Madelyn was born December 16, 1908 in Oneida, daughter of William and Zelma Thurston Greelisk.

Madelyn as educated in Oneida. On

Tim Valentine of Sherburne, Laurie and her husband Tony Cesari of Canastota, Erin Osborne of Oneida, one grandson Scot and his wife Diane Osborne of North Carolina, ten great grandchildren, one great-great grandson, as well as several nieces and nephews. Madelyn was predeceased by a son, Edward, and a granddaughter, Deidre.

Funeral services were held on Saturday, April 19, 2003 from the Cochran Memorial Church, Oneida Castle, with the Rev. John Hall, Pastor, officiating. Burial was in the Oneida Castle Cemetery.

Chesapeake Beach, MD; Ruth Fairchild and Dale Sorenson of Silver Spring, MD, and David and Gaylene Fairchild of Oriskany Falls. She leaves five grandchildren and spouses, Maxwell Fairchild and Peggy Sue, Amanda Fairchild, Brice Fairchild, Leslie Johnson and Jonathan Newman and Kasia; and four great grandchildren. Her youngest brother, Harry Wood, Bouckville, also survives her. Six other siblings predeceased her.

Viola graduated from Herkimer High School. Her first job was as a teacher in a one-room school in the Catskills. She studied art at Syracuse University and produced hundreds of oil paintings, some of which were recently on display at the Limestone Ridge Historical Society. She had also worked as a secretary for an insurance company. With her husband, Leslie, she managed a registered Holstein dairy farm in Augusta Center for many years. After retiring from farming they delivered mail in the Augusta area. She was an avid reader, rarely without a book until shortly before her death. A devoted sports fan, she rejoiced in the successes of her beloved New York Yankees. She served the First Presbyterian Church of Augusta as Sunday school superintendent, secretary and treasurer. For many years, she was master of the Knoxboro Grange.

For the past six years, Viola lived at the Crouse Community Center. Just as she had been a lifelong center of strength for her family, she

Brookfield. David also ow
operated a grain hauling busi
also restored many old,
homes to new condition. Ov
own sawmill, David had
log home with logs from hi
devoted family man, David
time from work to be with
and especially his children
came to his children partic
school sports, David wa
sports fan and proud fat
missing his children's gam

David is survived by
wife, Elaine, his loving m
of North Brookfield, his
Jay and his wife, Je
Whitesboro, Chad, Jared,
all of North Brookfield, a
brother and law, Annette
Tanney of North Brool
beloved grand daughter, K
cial nephew, Willie Davi
Brookfield, several aun
nieces, and nephews.

His father predeceased
2001.

Funeral services
Sunday, April 27 at the F
Church of Brookfield
Mark Thall, pastor
Interment will be
Brookfield Cemetery.
arrangements have been
the care of the Paul Fune
Brookfield.

In memory of David,
sider donations to the ca
Snow 9296 Fitch Rd. H
NY 13355.

Rosemary Cota Walli

LEGAL NOTICE

1998 Jeep Cherokee 4x4
1J4FJ68S9WL285069
Estate of Patrick Monahan
Sale: May 19, 2003 @ 12:00 Noon
Morrisville Automotive, LLC
Morrisville, New York

LEGAL NOTICE

Excess equipment sale by order of the Town Board of the Town of Marshall, will sell by sealed bid the following items: (1) 1954 Cat D-6 bulldozer, (1) 1991 Chevy Pickup, 2 wheel drive, (1) 1964 Huber Roller, (1) 1967 Brockway Dump Truck. Bids should be submitted to the Town Clerk by 5/13/03 at 3:00 PM. Bids will be opened at the Board meeting 5/13/03. The Town Board reserves the right to reject any or all bids.

PUBLIC NOTICE

The Town of Smithfield is seeking interested persons to serve on the Planning Board and Zoning Board of Appeals. You must be a resident of the Town of Smithfield and at least 18 years of age. Please forward a letter of interest to the Smithfield Town Clerk, PO Box 146, Peterboro, NY 13134 by **MAY 7, 2003.** All letters will be reviewed at the May 12, 2003 Town Board Meeting, held at 7:30 p.m. at the Smithfield Community Center. Questions call 684-9293.

Mary Benedict
Smithfield Town Clerk

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 Lebanon, Madison 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 Lebanon, P.O. Box 49E, RD#2, Earlville, New York 13332, 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

LEGAL NOTICE
NOTICE OF PUBLIC HEARING
ANNUAL MEETING, BUDGET VOTE AND ELECTION
MORRISVILLE-EATON CENTRAL SCHOOL DISTRICT

NOTICE IS HEREBY GIVEN, that a public hearing of the qualified voters of the Morrisville-Eaton Central School District, Madison County, NY, will be held at the Middle/High School building on Fearon Road in said district on Tuesday, May 27, 2003 at 7:00 PM, for the presentation of the budget. The budget will be available for review on May 20, 2003 at the District Office, located in the Middle/High School, Fearon Road, Morrisville, NY.

NOTICE IS HEREBY GIVEN, that the annual meeting of the qualified voters of the Morrisville-Eaton Central School District, will be held at the Edward R. Andrews Elementary School in said District on Tuesday, June 3, 2003 at which time said vote and election will be held between the hours of 6:00 AM and 9:00 PM to vote by voting machine upon the following items:

1. To adopt the annual budget of the School District for the fiscal year 2003-2004 and to authorize the requisite portion thereof to be raised by taxation on the taxable property of the district.
2. To elect two (2) members at large of the Board of Education for three-year terms commencing July 1, 2003 and expiring on June 30, 2006; these positions are currently held by Robert Berkey and Andrew Olney, whose terms expire on June 30, 2003.
3. To consider the following proposition:

RESOLVED that the Board of Education of the Morrisville-Eaton Central School District is hereby authorized to undertake the acquisition of three (3) 65 passenger school buses at an estimated maximum aggregate cost of $191,955.00; and that such sum or so

Town Codes Officer and claimed the property was not fit for human habitation. The Codes Officer accompanied the landlord to the property but found the tenant not at home, and could not gain access to the premises. In spite of that, he posted the structure with a vacate notice. That evening the landlord came to Court insisting the Judge issue an order to enforce the vacate notice. The Codes Officer did not appear in Court to offer testimony, no documents were produced as evidence, and most importantly, the tenant was given no opportunity to appear in Court in his own behalf. Under these circumstances, and with the advice of a Judicial Advisory Board Member in Albany, Judge Engle had no choice but to dismiss the vacate order. By not supporting the actions of the Codes Officer, Judge Engle protected the Town from a possible lawsuit, and protected the legal rights of all parties involved.

Judge Engle has served as the Madison Town Court Justice for over 13 years, duly elected to the post four times by Madison voters. He was not elected by the people to serve as a puppet for the Town Supervisor or the Town Board. If they are displeased with his performance of his duties, they are able to contact the State Judicial Review Committee with any legitimate complaints.

This resolution for a second Town Justice is an attempt to manipulate and influence the local judicial system.

Susan Bikowsky

Michigan this July 2003.

A special thank you goes to Fred Baker and the Sherburne American Legion Post 876; Pete and John Kwasnik of Service Pharmacy; Jim Fowler and the Sherburne Big M.; Robert Marvin who helped us cook; Skips Market; Parkside Restaurant; and all the parents and players.

There is still work to be done so be sure to watch for upcoming events such as a Chicken BBQ on May 31 and Pancake Breakfast on June 14.

Your support is greatly needed and appreciated. If you have any questions or would like to donate, please contact Rick Hodge at 607-674-4766.

Robin VanWagner

Ticket Amnesty for Party Weekend???

Dear Mid York Weekly:

We all hopefully survived spring party weekend without too much trauma. I would like to suggest something possibly radical: parking ticket amnesty for that weekend for on the street overnight parking.

There is much student driving that weekend . . and, of course, much student drinking. I do not want to debate the legality issue here, but we know that there are many people who are drinking and driving.

There are some who drive to parties and bars that weekend and park on the street. Later in the night, although they might be impaired, they decide to leave their cars parked. (a very wise decision....and to be lauded and rewarded) BUT, the town goes and tickets all cars parked on the street.

The students are going to realize

could donate the amount [illegible] be lost in parking ticket revenue [illegible] that the town isn't hurt financially [illegible] couldn't be that much, could it?

I would hate to say that the to[illegible] purposely targeting students, but [illegible] did my neighbor, who parked o[illegible] street Sunday night, not get ti[illegible] and yet a number of cars parked [illegible] Friday and Saturday had ticke[illegible] their windshields the next mornin[illegible]

Seems like we are sending m[illegible] signals. Let the kids park for fr[illegible]

LEGAL NOTICE

1998 Jeep Cherokee 4x4
1J4FJ68S9WL285069
Estate of Patrick Monahan
Date: May 19, 2003 @ 12:00 Noon
Morrisville Automotive, LLC
Morrisville, New York

Notice of Formation of MoAo, LLC. Arts. of Org. filed with Secy. of State of N.Y. (SSNY) on 3/25/03. Office location: Madison County. SSNY designated as agent of LLC upon whom process against it may be served. SSNY shall mail copy of process to: c/o Kiley Law Firm, 108 Lenox Ave., Oneida, NY 13421. Purpose: any lawful activity.

PLEASE TAKE NOTICE TH[illegible] Partnership, a New York general part[illegible] State of New York d/b/a Time Warn[illegible] Certificate of Confirmation and C[illegible] Madison County, New York, with the[illegible]
The application is available for p[illegible] Public Service Commission and at [illegible] Box 49E, RD#2, Earlville, New Yo[illegible]
Any interested persons may file co[illegible] Public Service Commission, Three [illegible]
TIME WARNER

NOTICE:
Entertainment-Advance/Newhouse
ized and existing under the laws of the filed an application for renewal of its Franchise in the Town of Lebanon, State Public Service Commission.
tion at the offices of the New York State the Clerk of the Town of Lebanon, P.O. ing normal business hours.
the application with the New York State Plaza, Albany, New York 12223.
SYRACUSE DIVISION

NOTICE OF BU[illegible]

A budget hearing for the inhabitants [illegible] qualified to vote at School District [illegible] Cafeteria in Sherburne, New York, [illegible] there shall be presented the proposed [illegible]

The vote upon the appropriation [illegible] expenditures or for any proposition in[illegible] of levy of taxes, as well as the election [illegible] on Tuesday, June 3, 2003, in the foyer [illegible] foyer of the Middle-High School, Sher[illegible] and 9:00 p.m.

Statement of Money

A copy of the statement of the amount [illegible] school year for school purposes shall be [illegible] and may be obtained by any resident of [illegible] period of 14 days immediately before the [illegible] of 9:00 a.m. and 5:00 p.m. except Saturd[illegible]

Vote for Board Members

Petitions nominating candidates for th[illegible] must be filed with the Clerk of the [illegible] not later than May 5, 2003. The following [illegible]
A three year term ending June 30, [illegible]
A three year term ending June 30, [illegible]
A three year term ending June 30, [illegible]
Each petition must be addressed to th[illegible] qualified voters of the District, state the re[illegible] of the candidate, vacancies upon the Bo[illegible] offices. The individuals receiving the hi[illegible] vacancies.

Propositions

Any proposition that is required to be [illegible] means of a petition signed by at least 3[illegible] signer, which proposition shall be filed wi[illegible] before the date of the election as set forth [illegible] required by statute. Any proposition shal[illegible] purpose of the proposition is not within th[illegible] of monies is required for the proposit[illegible] necessary specific appropriation.

HEARING AND VOTE
Hearing
Sherburne-Earlville Central School District [illegible] will be held in the Elementary School [illegible]ng at 6:30 p.m. on May 21, 2003, where [illegible] District budget for the following school year.
To Vote
necessary funds to meet the estimated the expenditure of money or the authorizing ers of the Board of Education shall be held Elementary School, and in the auditorium New York, between the hours of 12:00 noon
uired for Next School Year
oney which would be required for the next ted seven days before the budget hearing trict at each school building during the meeting and election, between the hours day of holiday.
Members
ice of member of the Board of Education ween the hours of 9:00 a.m. and 5:00 p.m. cies are to be filled:
presently held by John Brown
presently held by Henry Campbell
presently held by Robert White, Sr.
erk of the District, signed by at least 35 ce of each signer, and the name and address shall not be considered separate specific number of votes shall be elected to the
itions
ed for vote shall be submitted in writing by ified voters, stating the residence of each Board of Education not later than 30 days notice unless a greater number of days is rejected by the Board of Education if the wers of the voters or where the expenditure and such proposition fails to include the
Ballots

at the polling place on the date of the meeting.
AND FURTHER NOTICE IS HEREBY amount of money which will be required to fi exclusive of public monies, may be obtair business hours beginning May 13, 2003, e District Office, South Otselic, New York, Otselic Valley Junior-Senior High School and
AND FURTHER NOTICE IS HEI candidates for the office of member of the Bc of said School District at her office in the 13A, South Otselic NY, not later than Mon AM and 5:00 PM. Each petition shall be d signed by at least 25 voters of the District, candidate.
AND FURTHER NOTICE IS HERE School District shall be entitled to vote at sa is one who is (1) a citizen of the United St older, and (3) a resident within the School preceding the annual vote and election.

Georg

LEGA
NOTICE OF P
ANNUAL MEETING, BUI
MORRISVILLE-EATON C
NOTICE IS HEREBY GIVEN, that a Morrisville-Eaton Central School District, Middle/High School building on Fearon Ro 7:00 PM, for the presentation of the budge May 20, 2003 at the District Office, locat Morrisville, NY.
NOTICE IS HEREBY GIVEN, that th Morrisville-Eaton Central School District Elementary School in said District on Tues election will be held between the hours machine upon the following items:
1. To adopt the annual budget of the Sch authorize the requisite portion thereof of the district.
2. To elect two (2) members at large o commencing July 1, 2003 and exp currently held by Robert Berkey and 2003.
3. To consider the following proposition:
RESOLVED that the Board of Educa District is hereby authorized to undertake t buses at an estimated maximum aggregate much thereof as may be necessary, shall b annual installments, with such tax to be par in anticipation of such tax, debt obligations to exceed such estimated maximum aggreg
AND NOTICE IS ALSO GIVEN that for at the office of the School District Cler District Clerk at least seven days before th the ballot is to be mailed to the voter, or t ballot is to be delivered personally to the ballots shall have been issued shall be av District Clerk during regular office hours vote (excluding Saturday and Sunday). A District Clerk not later than 5:00 p.m. on t
AND FURTHER NOTICE IS HERE amount of money which will be required 2004 exclusive of public monies, may be business hours beginning May 20, 2003 a School, Fearon Road, Morrisville, NY, Elementary School, Eaton Street, Morrisv
AND FURTHER NOTICE IS H candidates for the office of member of District Clerk at the District Office, loc Morrisville, NY not later than Monday, Each petition shall be directed to the Cler