



September 18, 2009

Margaret Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Ex Parte Presentation; ET Docket Nos. 02-380 and 04-186;
WT Docket Nos. 08-166 and 08-167

Dear Ms. Dortch:

On Thursday, September 17, 2009, David Donovan, Victor Tawil and Bruce Franca of the Association for Maximum Service Television, Inc. (MSTV) met with the following members of the Media Bureau: Mr. William Lake, Chief of the Media Bureau, Ms. Eloise Gore, Ms. Barbara Kreisman, and Mr. Jon Wong.

We discussed a number of issues relating to DTV reception especially in the VHF band. In this regard, we noted significant problems with interfering noise in the VHF band. The following slides were presented.

We discussed MSTV's concerns about proposals to eliminate all wireless microphones, both licensed and unlicensed, from the 700 MHz band in February 2010. We referenced the MSTV's phase out plan, which would require stations to stop using licensed wireless microphones in this band: 1) upon proper notification from the new user of 700 MHz spectrum, we would stop using licensed microphones 60 days prior to the commencement of that service, or 2) February 10, 2012, (whichever occurs first.)

We noted that licensed wireless microphones were essential to the coverage of live local news events. In addition, replacing these microphones between now and February would be a significant expense. Moreover, a hard deadline for all wireless microphones operating in the 700 MHz band may create a significant equipment shortage. Finally, many of the microphones now operating in this band were purchased prior to the FCC's NOI suggesting that microphone use would be eliminated in this band. In similar contexts, existing licensed users have been allowed to remain operating on a secondary basis, or be allowed to operate until the new user commences service.

Sincerely



David L. Donovan

Attachment

Recent Field Measurements

TV Reception Group

VHF RECEPTION

INVESTIGATION/ISSUES

Investigation of VHF Reception Issues

- MSTV investigation looked at three different sets of data (FCC, Chicago and Baltimore) to attempt to identify the various mechanisms that are likely to affect high VHF TV reception. MSTV also conducted a number of independent experiments in Washington to further investigate these mechanisms

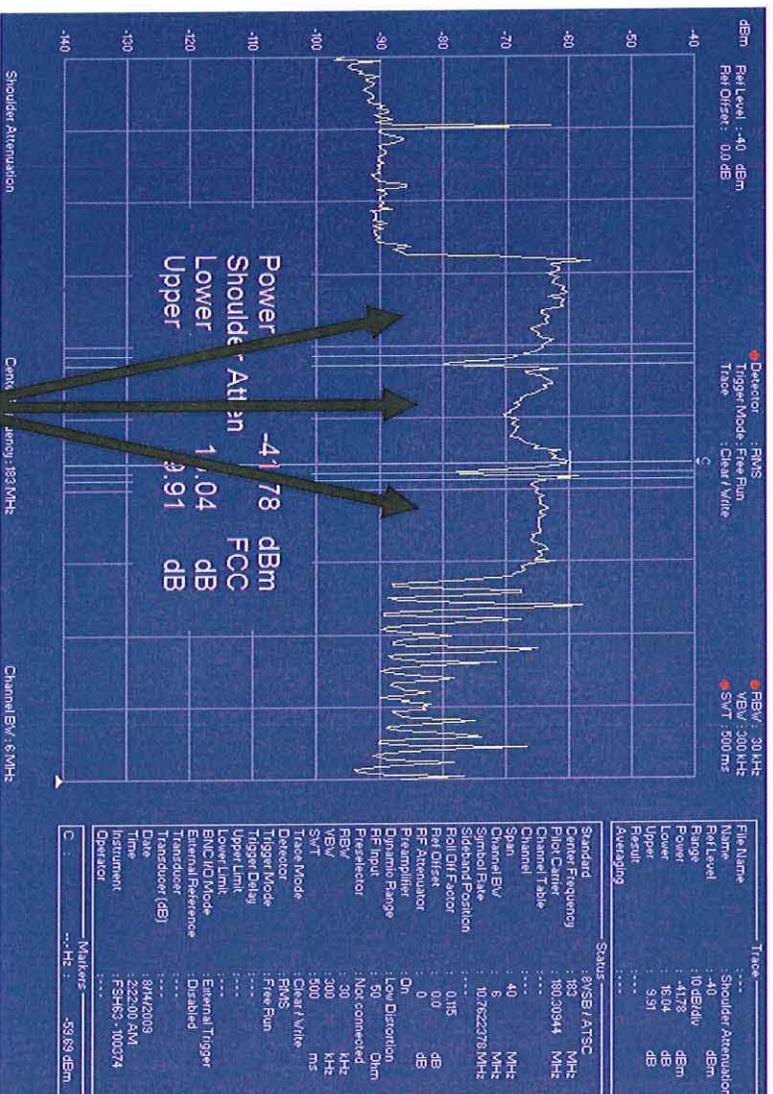
MSTV Investigation of VHF Reception Bottom line

- Large number of VHF DTV reception failures despite adequate signal strength present
- Two main causes observed:
 - Very poor performance of indoor VHF receiving antennas
 - Noise/interference sources in the home difficult to trace or determine

MSTV Washington Experiment

- Washington DC Tests focused on Noise contribution
 - Looked at Channels 7 and 9
 - LPTV Operation on Channel 8
- Appears to be More Reception Problems with Channel 9 than Channel 7

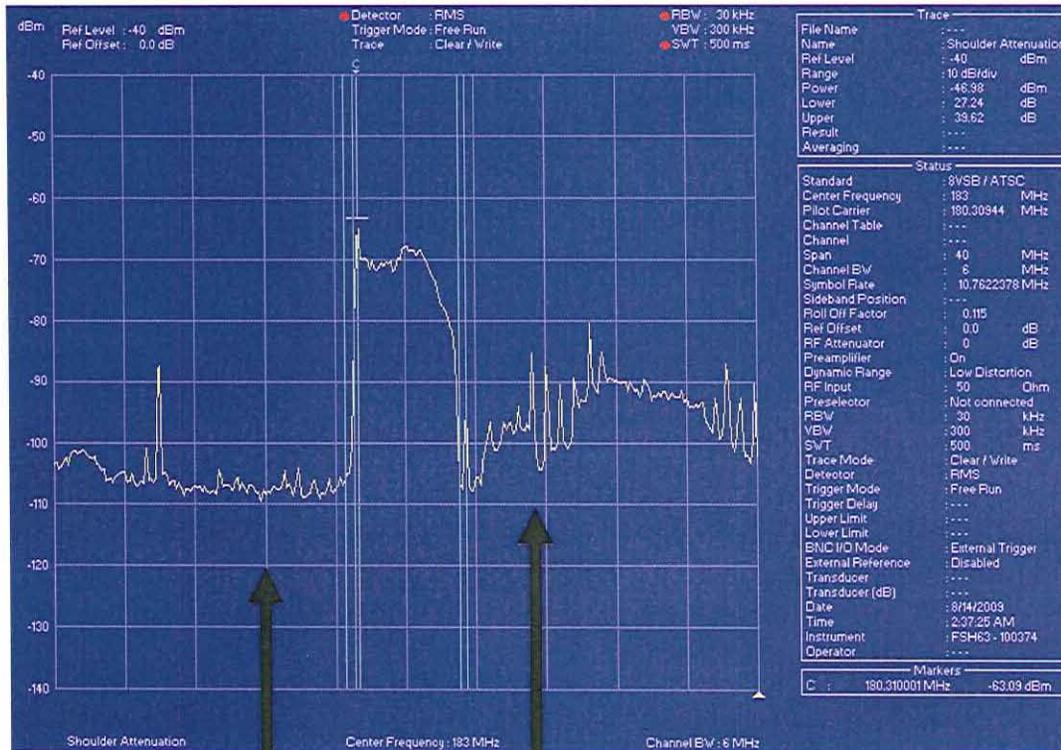
MSTV Washington VHF Tests



DTV Ch 7, 8, 9

- Spectrum showing Chs. 7, 8, and 9
- Test location about three blocks from WUSA
- TV Dipole

Washington VHF Tests

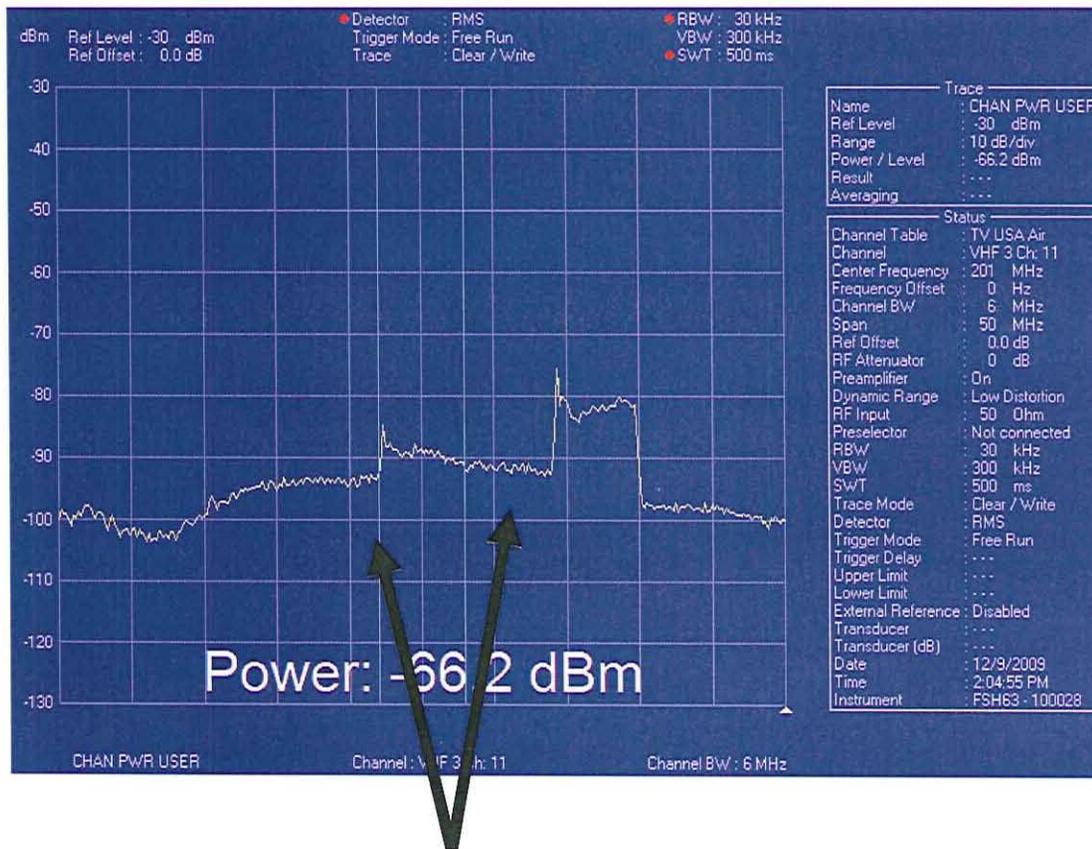


Low Noise
On Ch 7

High Noise
Level on Ch 9

- Channels 7 and 9 “shut-off”
- Test location about three blocks from WUSA
- Whip Antenna

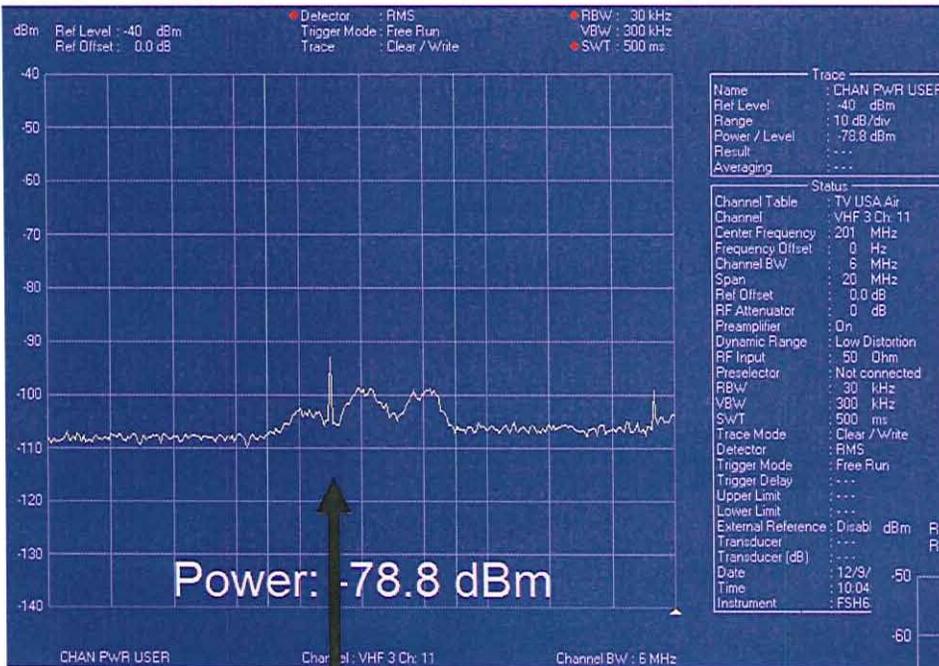
Impact of Increase in Noise Floor (Cordless Phone)



- Increase in Noise Floor Degrades DTV Receiver and Prevents Reception
- Interference from Cordless Phone Depicted
- No DTV Reception Despite Relatively Strong Signal (-66.2 dBm)

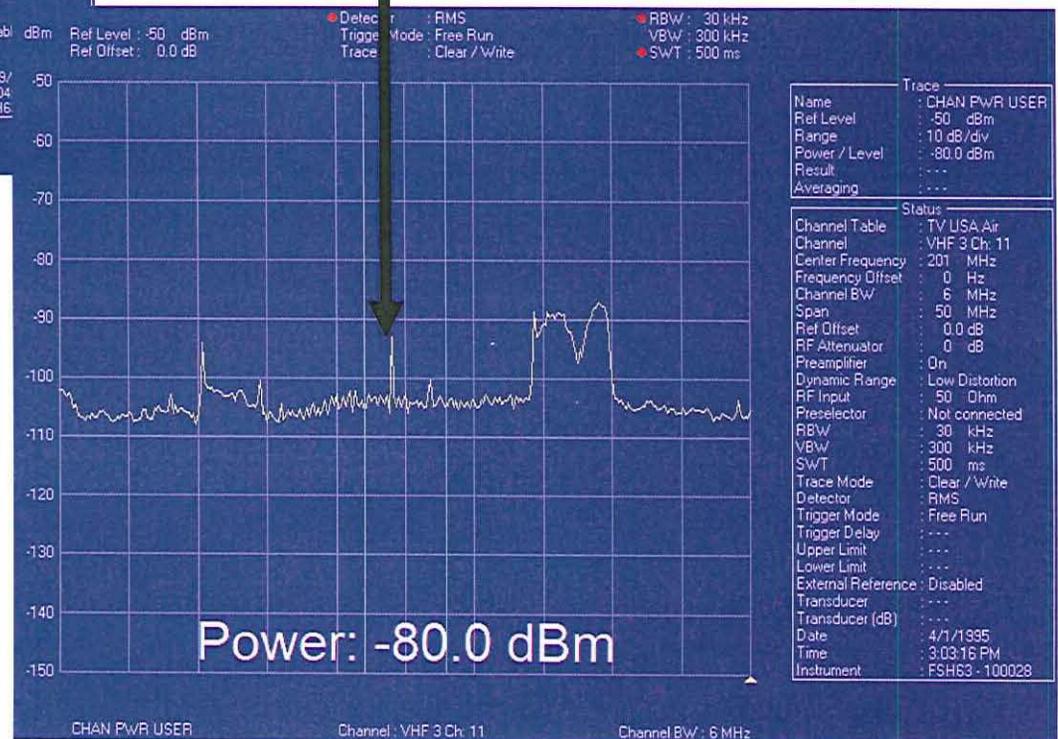
Broadband Noise from Cordless Telephone Power Supply Causing Interference to Channel 11 Reception

Example: Narrowband CW-like Interference

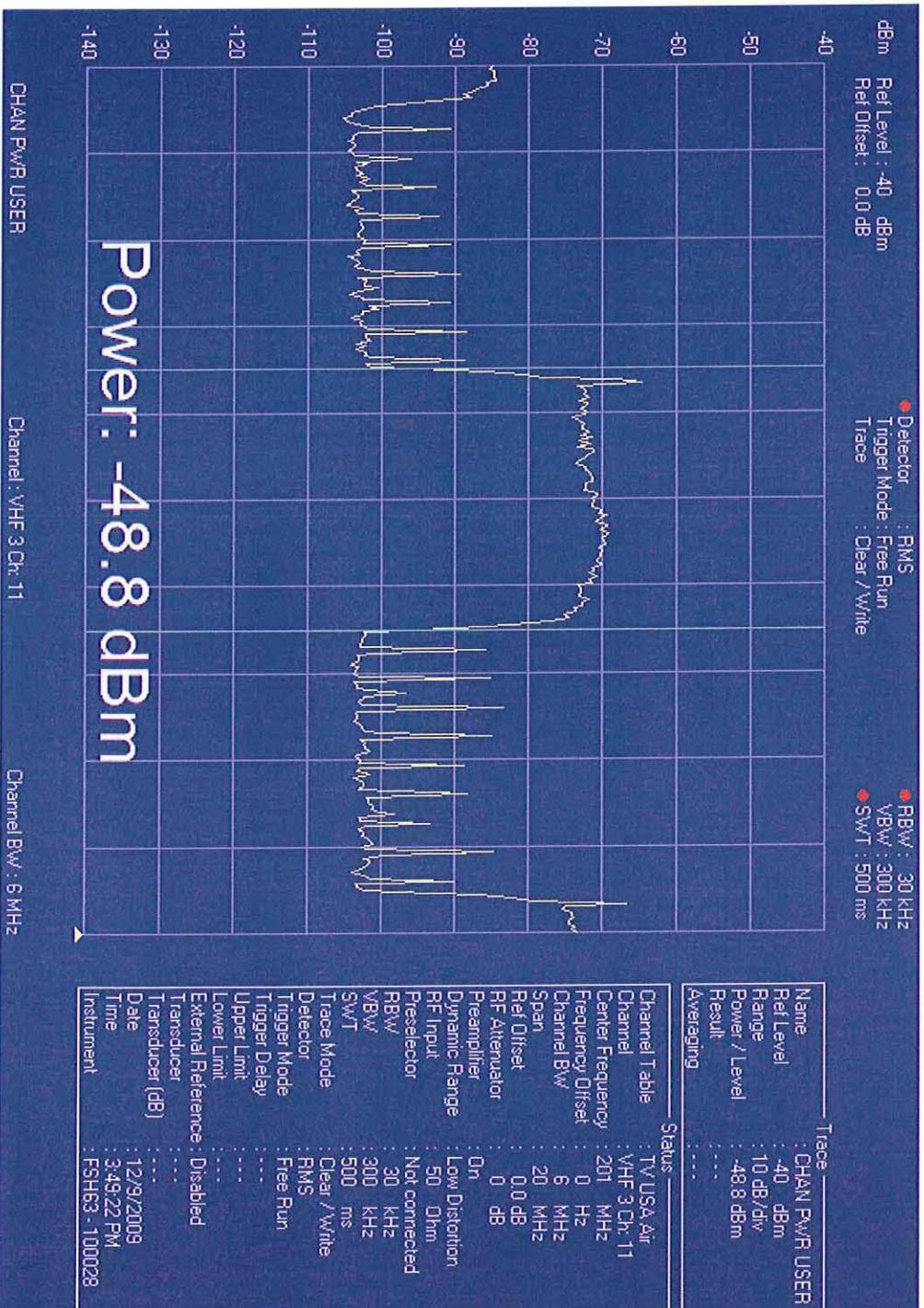


Narrowband CW-like interference.
DTV transmitter is Off

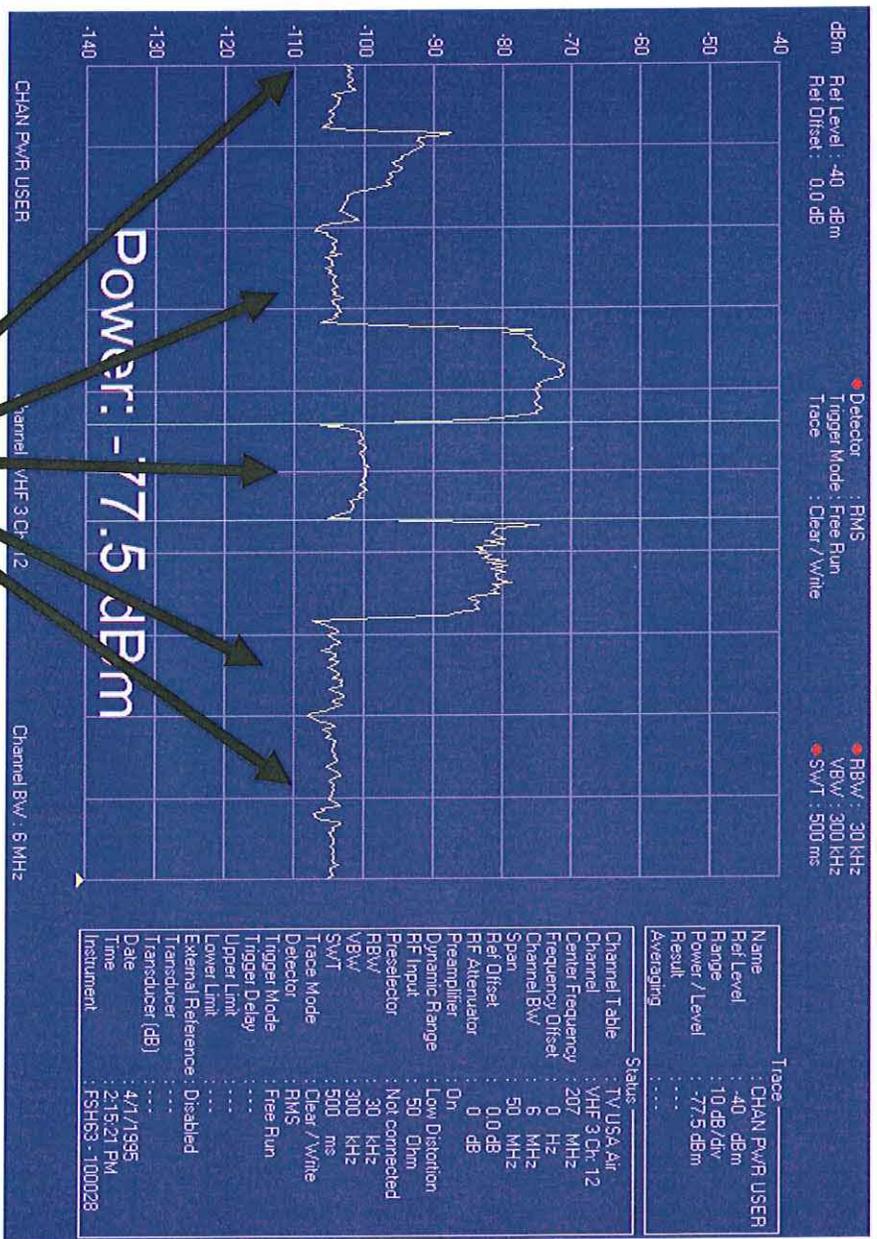
Narrowband CW-like interference.
DTV transmitter is On



Example: Impulse Noise Interference (Leaf Blower)

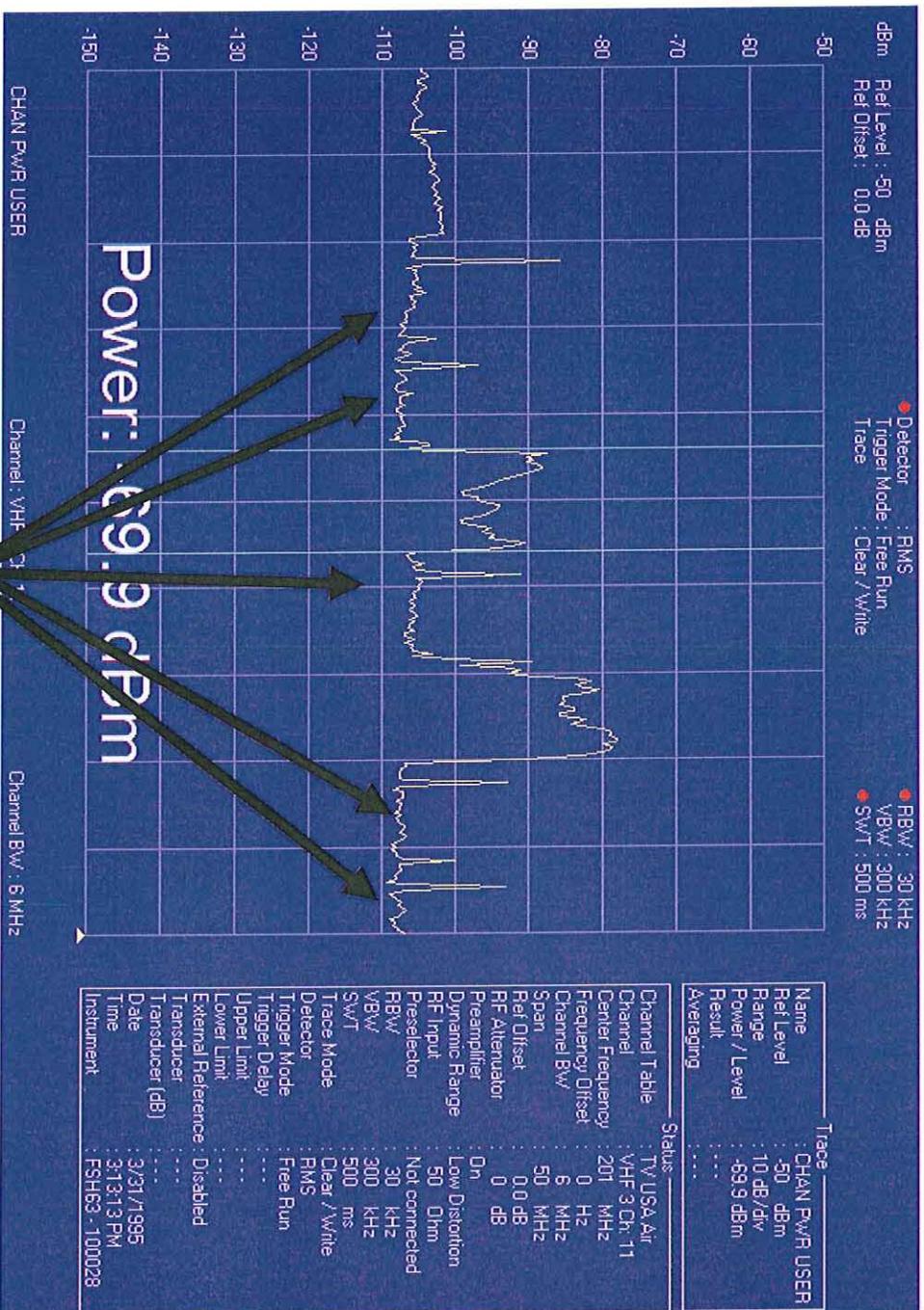


Example: Cable/FIOS Digital Leakage



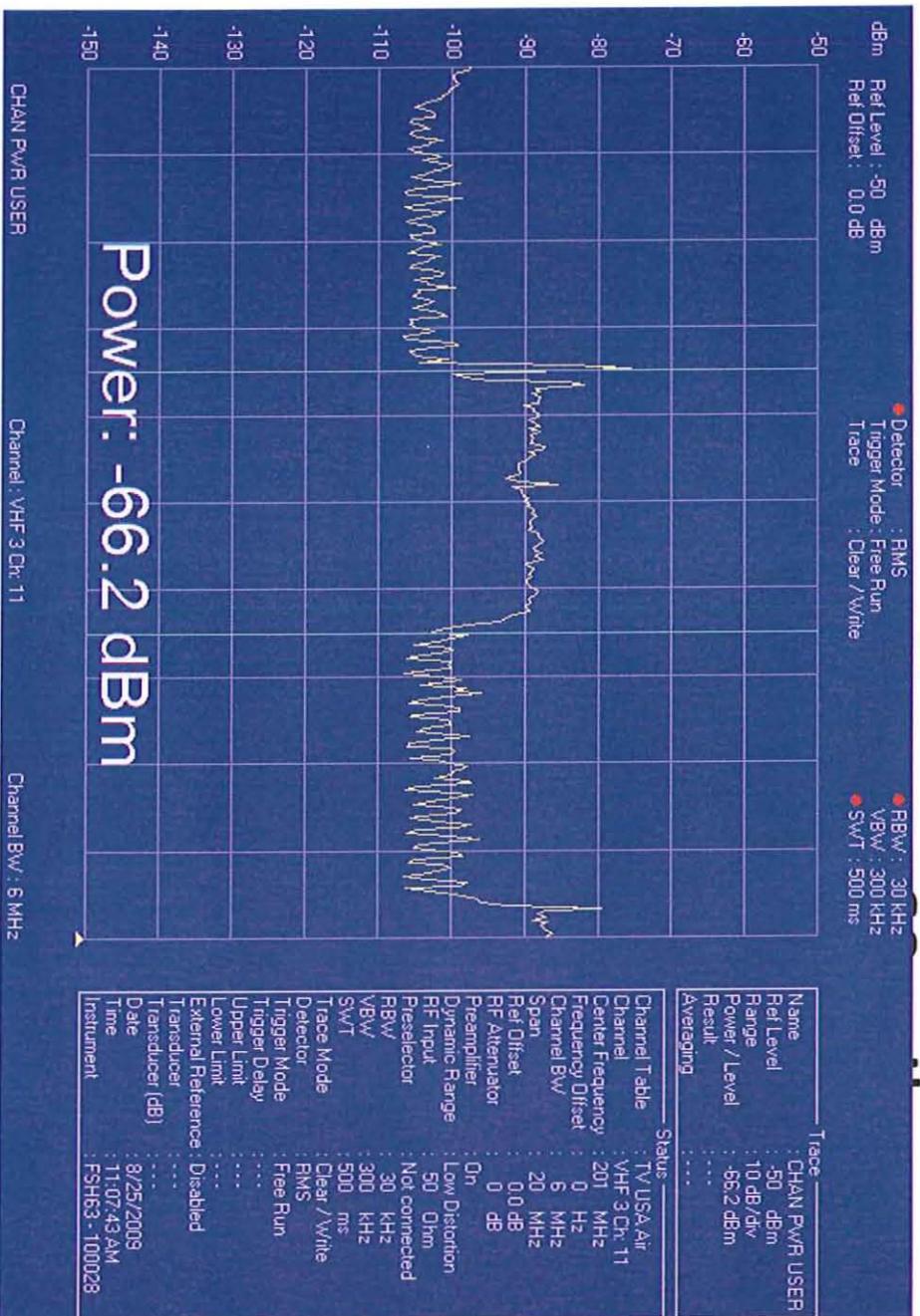
Cable/FIOS digital leakage

Example: Analog CATV Leakage



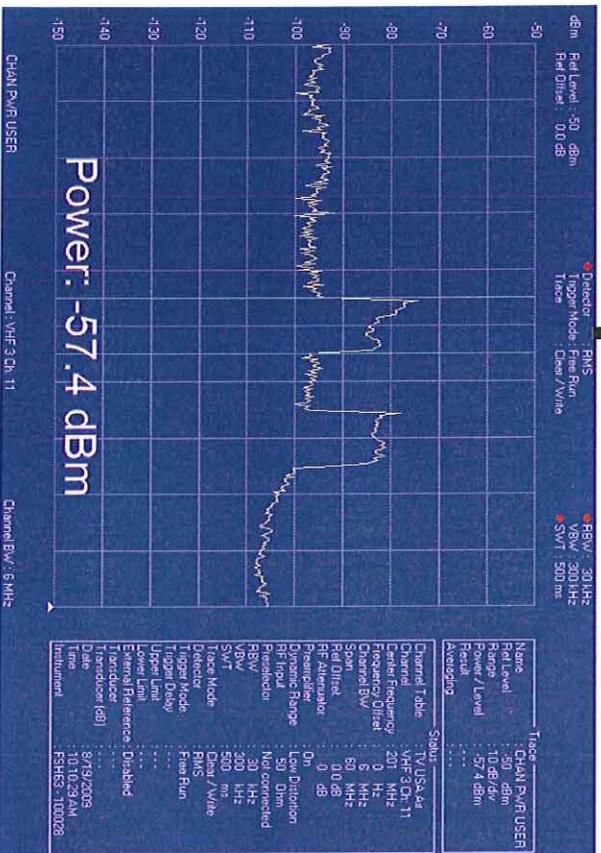
CATV analog leakage

Example: Impulse Noise (Power line 60 Hz)

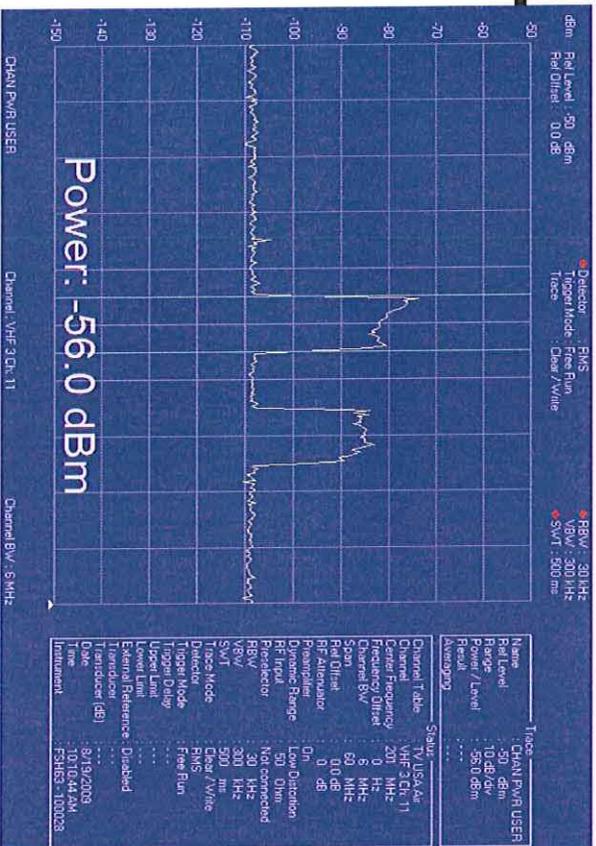


Example: Television and DVD Interference

TV and DVD
turned "off"



TV and DVD
turned "on"



TV turned "on"
and DVD turned
"off"

