

EXHIBIT E  
REPORT OF MEASUREMENTS

**A. TEST REPORT**

The Model SelectAmp 1900-FC PCS Channelized Bi-Directional Amplifier was tested and found to comply with the limits imposed by the FCC "Code of Federal Regulations", Title 47, Part 24 for Personal Communication Services (PCS).

The attached test report describes the results of the test in detail.

EXHIBIT E  
REPORT OF MEASUREMENTS

**A. TEST REPORT**

The Model SelectAmp 1900-FC PCS Channelized Bi-Directional Amplifier was tested and found to comply with the limits imposed by the FCC "Code of Federal Regulations", Title 47, Part 24 for Personal Communication Services (PCS).

The attached test report describes the results of the test in detail.

ELITE ELECTRONIC ENGINEERING COMPANY  
1516 CENTRE CIRCLE  
DOWNERS GROVE, ILLINOIS 60515-1082

ELITE PROJECT: 27233

DATES TESTED: January 5 through  
January 14, 1999

TEST PERSONNEL: Daniel E. Crowder

TEST SPECIFICATION: Federal Communication Commission (FCC) Part 24;  
Industry Canada (IC) RSS-131 Issue 1

ENGINEERING TEST REPORT NO. 21337  
MEASUREMENT OF RF INTERFERENCE FROM A  
PCS CHANNELIZED BIDIRECTIONAL AMPLIFIER  
MODEL SELECTAMP1900-FC

FOR: Andrew Corporation  
Richardson, TX

PURCHASE ORDER NO: 86312

Report By:

*Carol Buysa for*  
Daniel E. Crowder

Approved By:

*Raymond J. Klouda*  
Raymond J. Klouda  
Registered Professional  
Engineer of Illinois - 44894

ENGINEERING TEST REPORT NO. 21337

ADMINISTRATIVE DATA AND SUMMARY OF TESTS

**DESCRIPTION OF TEST ITEM:** PCS Channelized Bidirectional Amplifier

**MODEL NO:** SELECTAMP1900-FC

**SERIAL NO:** 050

**FCC ID NO:** KUWSA1900-FC

**MANUFACTURER:** Andrew Corporation

**APPLICABLE SPECIFICATIONS:** FCC Parts 2 and 24;  
IC RSS-131, Issue 1

**QUANTITY OF ITEMS TESTED:** One (1)

**TEST PERFORMED BY:** ELITE ELECTRONIC ENGINEERING COMPANY  
Downers Grove, Illinois 60515

**DATES TESTED:** January 5 through January 14, 1999

**PERSONNEL (OPERATORS, OBSERVERS, AND CO-ORDINATORS):**  
**CUSTOMER:** No Andrew Corporation personnel were present.  
**ELITE ELECTRONIC:** Daniel E. Crowder

**ELITE JOB NO.:** 27233

**ABSTRACT:** The PCS Channelized Bidirectional Amplifier complies with the RF Power Output and Gain, the Occupied Bandwidth, the Spurious Emissions and Intermodulation Products at Antenna Terminal, the Field Strength of Spurious Emissions requirements and the Frequency Stability requirements of the FCC "Code of Federal Regulations" Title 47, Part 24, Subpart E for Broadband PCS and the IC RSS-131, Issue 1. See test results and data pages for more details.

## ENGINEERING TEST REPORT NO. 21337

## TABLE OF CONTENTS

| PARAGRAPH                | DESCRIPTION OF CONTENTS   | PAGE NO. |
|--------------------------|---|----------|
| 1.0                      | INTRODUCTION  | 1        |
| 1.1                      | DESCRIPTION OF TEST ITEM  | 1        |
| 1.2                      | PURPOSE   | 2        |
| 1.3                      | APPLICABLE DOCUMENTS  | 2        |
| 1.4                      | SUBCONTRACTOR IDENTIFICATION  | 2        |
| 2.0                      | TEST ITEM SETUP AND OPERATION                                       | 2        |
| 2.1                      | SETUP   | 2        |
| 2.2                      | MODULATION  | 2        |
| 2.3                      | FREQUENCY SELECTION   | 3        |
| 3.0                      | TEST EQUIPMENT  | 4        |
| 4.0                      | REQUIREMENTS, PROCEDURES AND RESULTS                                | 4        |
| 4.1                      | RF POWER OUTPUT AND GAIN MEASUREMENTS                               | 4        |
| 4.1.1                    | REQUIREMENTS  | 4        |
| 4.1.2                    | PROCEDURES  | 5        |
| 4.1.3                    | RESULTS   | 6        |
| 4.2                      | OCCUPIED BANDWIDTH MEASUREMENTS                                     | 6        |
| 4.2.1                    | REQUIREMENTS  | 6        |
| 4.2.2                    | PROCEDURES  | 7        |
| 4.2.3                    | RESULTS   | 8        |
| 4.3                      | SPURIOUS EMISSIONS AND INTERMODULATION PRODUCTS AT ANTENNA TERMINAL | 8        |
| 4.3.1                    | REQUIREMENTS  | 8        |
| 4.3.2                    | PROCEDURES  | 9        |
| 4.3.3                    | RESULTS   | 10       |
| 4.4                      | FIELD STRENGTH OF SPURIOUS EMISSIONS                                | 10       |
| 4.4.1                    | REQUIREMENTS  | 10       |
| 4.4.2                    | PROCEDURES  | 10       |
| 4.4.3                    | RESULTS   | 12       |
| 4.5                      | FREQUENCY STABILITY   | 12       |
| 4.5.1                    | REQUIREMENTS  | 12       |
| 4.5.2                    | PROCEDURES  | 12       |
| 4.5.3                    | RESULTS OF TESTS  | 13       |
| 5.0                      | CONCLUSION  | 14       |
| 6.0                      | CERTIFICATION   | 14       |
| TABLE I - EQUIPMENT LIST |   | 17       |

ENGINEERING TEST REPORT NO. 21337  
 MEASUREMENT OF RF INTERFERENCE FROM A  
 PCS CHANNELIZED BIDIRECTIONAL AMPLIFIER  
 MODEL SELECTAMP1900-FC

**1.0 INTRODUCTION:**

**1.1 DESCRIPTION OF TEST ITEM:** This report present the results of the radio interference measurements performed on the PCS Channelized Bidirectional Amplifier, Model No. SELECTAMP1900-FC, serial no. 050, (hereinafter referred to as the test item). The tests were performed for Andrew Corporation of Richardson, TX.

The test item is a channelized bidirectional amplifier that provides signal level enhancement to the PCS spectrum. The channelized feature of the amplifier provides rejection to alternate service providers and reduces the possibility of system interference from unwanted signals. The test item provides selective frequency amplification of user specified frequencies in the 1890 - 1910MHz uplink and 1970 - 1990MHz downlink PCS bands. The test item will selectively filter for one channel in the uplink and downlink band as determined by the operator.

The test item is designed to operate in the following frequency ranges:

| <u>Block</u> | <u>Downlink<br/>Frequency<br/>MHz</u> | <u>Uplink<br/>Frequency<br/>MHz</u> |
|--------------|---------------------------------------|-------------------------------------|
| F            | 1970-1975                             | 1890-1895                           |
| C            | 1975-1990                             | 1895-1910                           |

The amplification has an RF gain from 65 to 95dB, adjustable in 2 dB steps. The maximum output power is rated at 2 Watts.

## ENGINEERING TEST REPORT NO. 21337

**1.2 PURPOSE:** The test series was performed to determine if the test item meets the technical requirements of the FCC Part 24, Subpart E for Broadband PCS, and IC RSS-131, Issue 1.

**1.3 APPLICABLE DOCUMENTS:** The following documents of the exact issue designated form part of this document to the extent specified herein:

- "Code of Federal Regulations - Telecommunications", Title 47, Part 2 and 24
- IC RSS-131, Issue 1, "Radio Signal Enhancers for the Mobile Telephone Service"

**1.4 SUBCONTRACTOR IDENTIFICATION:** This series of tests was performed by the Elite Electronic Engineering Company, Downers Grove, Illinois.

**2.0 TEST ITEM SETUP AND OPERATION:**

**2.1 SETUP:** The test item was powered with 115VAC, 60Hz power. The test item was grounded only through the third wire of its input power cord.

The diplexer provided to cover the frequency ranges (Blocks F and C) was installed. The diplexer isolates the downlink from the uplink path and contain bandpass filters that provide out-of-band rejection.

The gain was adjusted for its maximum. An input signal was fed into the test item. The level of the input signal was set so that the power output reached its maximum rated level.

**2.2 MODULATION:** The test signal was modulated with three different representative types of digital I/Q modulations: NADC (30kHz); PCS1900 (200kHz); CDMA (1.23 MHz). The input signals were supplied from a Rohde & Schwarz M/N SMHU Signal Generator equipped with IQ modulation in combination with a LeCroy M/N LW420A Arbitrary

## ENGINEERING TEST REPORT NO. 21337

Waveform Generator. The various digital broadband modulations were generated with the aid of Rohde & Schwarz IQSIM ver 4.04 software package installed on a PC. The software generates the digital modulation protocols per the industry standards. The NADC modulation file used was "NADC\_UF1" - Uplink signal, Full rate with sync word S1. The PCS1900 modulation file used was "PCS\_0" - Signal simulating one time slot with synchronization word TSC0. The CDMA modulation file used was "CDMA9CH" - Example signal simulating 9 channels.

The RF Power Output and Amplifier Gain Measurements was performed with CDMA modulation and/or CW. The Occupied Bandwidth tests were performed with NADC, PCS1900 and CDMA modulated input signal. The Spurious Emissions and Intermodulation Products at Antenna Terminal and the Field Strength of Spurious Emissions tests were performed with a CDMA modulated and CW input signal. Frequency Stability tests was performed with a CW input signal.

**2.3 FREQUENCY SELECTION:** Two test frequencies, one at the low edge and one at the high edge, were selected for each frequency block (four per diplexer) for both the uplink and downlink. The frequencies were one channel spacing from the low or high edge of the frequency range edge. The specified channel spacings used for each modulation type are shown below:

| <u>Modulation</u> | <u>Channel Spacing</u> |
|-------------------|------------------------|
| NADC              | 30kHz                  |
| PCS1900           | 200kHz                 |
| CDMA              | 1.23MHz                |



## ENGINEERING TEST REPORT NO. 21337

The specific test frequencies are designated as follows:

## Uplink:

| Block | Modulation Type | Low Edge Frequency (MHz) | High Edge Frequency (MHz) |
|-------|-----------------|--------------------------|---------------------------|
| C     | NADC            | C1=1895.03               | C2=1909.97                |
| F     | NADC            | F1=1890.03               | F2=1894.97                |
| C     | PCS1900         | C3=1895.20               | C4=1909.80                |
| F     | PCS1900         | F3=1890.20               | F4=1894.80                |
| C     | CDMA            | C5=1896.23               | C6=1908.77                |
| F     | CDMA            | F5=1891.23               | F6=1893.77                |

## Downlink:

| Block | Modulation Type | Low Edge Frequency (MHz) | High Edge Frequency (MHz) |
|-------|-----------------|--------------------------|---------------------------|
| C     | NADC            | C7=1975.03               | C8=1989.97                |
| F     | NADC            | F7=1970.03               | F8=1974.97                |
| C     | PCS1900         | C9=1975.20               | C10=1989.80               |
| F     | PCS1900         | F9=1970.20               | F10=1974.80               |
| C     | CDMA            | C11=1976.23              | C12=1988.77               |
| F     | CDMA            | F11=1971.23              | F12=1973.77               |

**3.0 TEST EQUIPMENT:**

A list of the test equipment used can be found on Table I. All equipment was calibrated per the instruction manuals supplied by the manufacturer.

**4.0 REQUIREMENTS, PROCEDURES AND RESULTS:****4.1 RF POWER OUTPUT AND GAIN MEASUREMENTS:****4.1.1 REQUIREMENTS:**

FCC Part 24: In accordance with paragraph 24.232, the output power of the test item shall not exceed an equivalent isotropically radiated power (EIRP) level of 1640 watts peak. In no case may the peak output power of the test item exceed 100 watts.

IC RSS-131: In accordance with paragraph 6.1, the passband gain

## ENGINEERING TEST REPORT NO. 21337

shall not exceed the nominal gain by more than 1 dB. The 20 dB bandwidth shall not exceed the nominal bandwidth that is stated by the manufacturer. Outside of the 20 dB bandwidth, the gain shall not exceed that at the 20 dB point.

**4.1.2 PROCEDURES:**

(a) The input signal was set to the center frequency of Block C.

(b) The input signal was CDMA modulated.

(c) A spectrum analyzer was connected to the output of the test item. The output of the test item was monitored using a 3MHz bandwidth.

(d) The amplitude of the input signal was adjusted until the output power reached the rated level. The output power level was measured and recorded.

(e) The input signal from the signal generator was measured with the spectrum analyzer and recorded.

(f) The gain was calculated by subtracting the input level from the output level and recorded.

(g) Steps (a) through (f) were repeated with the input signal set to the center frequency of Block F

(h) The input signal was switched to the tracking generator. The frequency versus gain was plotted with 1dB/div resolution for the passband response curve. The spectrum analyzer bandwidth was reduced to increase resolution. Since the amplifier is channelized, a family of gain curves was created for each diplexer. The channel frequency was incremented in 2.5 MHz steps starting with first frequency in the band.

## ENGINEERING TEST REPORT NO. 21337

The frequency versus gain curve was plotted with 10dB/div resolution to measure the 20 dB bandwidth of the amplifier.

(j) The frequency versus gain curve was expanded to show the out-of-band gain response. The gain was plotted for the midband frequency to at least +/- 250% of the 20 dB bandwidth of the amplifier.

**4.1.3 RESULTS:** The output power and calculated gain are presented on data page 101. The response curve plots are included as data pages 102 through 107. The test data shows that the amplifier is capable of operating at its rated output power of 2 Watts. All other tests were performed at this power level.

Power output complies with the FCC requirements. The maximum power output per channel is rated at 2 watts (33dBm) which is below the 100 watt maximum limit. The EIRP limit does not apply to the power output alone, but the combination of the power output and the antenna. Compliance to the power output will be based on the system configuration. Therefore, the EIRP requirement cannot be applied to an amplifier.

Since the amplifier is channelized, a family of gain curves were plotted for the diplexer. The center frequency of the channel was adjusted in 2.5 MHz increments starting at the first channel for each diplexer. The maximum gain varies from 90.5dB to 94.8dB. The gain complies with the IC RSS-131 requirements.

**4.2 OCCUPIED BANDWIDTH MEASUREMENTS:**

**4.2.1 REQUIREMENTS:** In accordance with Paragraph 24.238, on any frequency outside the authorized frequency block, the power of any emission shall be attenuated below the transmitter power (P) by

## ENGINEERING TEST REPORT NO. 21337

at least  $43 + 10 \log(P)$  dB. For a rated power level of 2W, the emissions outside of the emission bandwidth shall be attenuated at least 46dB below the transmitter power.

In the 1MHz bands immediately outside and adjacent to the frequency range a resolution of at least one percent of the emission bandwidth shall be used. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency where the emissions are 26dB down.

**4.2.2 PROCEDURES:** The test was performed using each of the modulations types listed in paragraph 2.2 (NADC, PCS1900, CDMA).

(a) The input signal was set to frequency C1. The input signal level was adjusted to provide the rated level at the test item output. The reference level was recorded.

(b) The input signal was modulated with NADC.

(c) A spectrum analyzer was connected to the output of the test item. With a bandwidth of the spectrum analyzer set to 1% of the emission bandwidth or greater, the output of the test item was measured and recorded.

(d) The input signal from the signal generator was measured with the spectrum analyzer and recorded over the same frequency range.

(e) Steps (c) through (d) were repeated with the input signal set to frequency C2, C7, C8, F1, F2, F7, and F8.

(g) The modulation was changed to PCS1900 and steps (c) and (d) were repeated for frequencies C3, C4, C9, C10, F3, F4, F9 and F10.

(h) The modulation was changed to CDMA and steps (c) and (d) were repeated for frequencies C5, C6, C11, C12, F5, F6, F11 and F12.

## ENGINEERING TEST REPORT NO. 21337

**4.2.3 RESULTS:**

The plots of the occupied bandwidth measured with the Block C and F diplexer with NADC modulation of the carrier are presented on data pages 108 through 125. The plots of the occupied bandwidth measured with the Block C and F diplexer with PCS1900 modulation of the carrier are presented on data pages 126 through 143. The plots of the occupied bandwidth measured with the Block C and F diplexer with CDMA modulation of the carrier are presented on data pages 144 through 161.

The limits, shown on the plots, are referenced to the power measured from the unmodulated carrier. The plots show that the amplifier maintains the occupied bandwidth requirements at the band edges when the center frequency is at least one channel (BW) from the band edge with the NADC, PCS1900 and CDMA modulations of the carrier.

**4.3 SPURIOUS EMISSIONS AND INTERMODULATION PRODUCTS AT ANTENNA TERMINAL:**

**4.3.1 REQUIREMENTS:** This test determines whether the test item produces excessive spurious emissions or intermodulation products.

In accordance with Paragraph FCC 24.238 and IC 6.3, 6.4 and 6.5, the spurious emissions and intermodulation products shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log(P)$  dB. FCC requirements apply only to frequencies outside the authorized frequency block. For 2W, the spurious emissions shall be attenuated by a minimum of 46 dB. This requirement translates to a limit of -13dBm. The peak power of the emissions shall be measured at the antenna terminal from 30MHz up to the 10th harmonic of the

## ENGINEERING TEST REPORT NO. 21337

fundamental frequency.

**4.3.2 PROCEDURES:** In general, this test will measure in band and out of band spurious and intermodulation products when other signals are introduced at the input which already has the signal ( $f_0$ ) which is either CW or modulated with CDMA modulated. The interfering signal ( $f_1$ ) was unmodulated. The two-tone configuration was setup with ( $f_1$ ) applied at the adjacent channel frequency.

(a) The input signal ( $f_0$ ) was set to 1982MHz. The input signal level was adjusted to provide the rated level at the test item output. The reference level was recorded.

(b) A second signal ( $f_1$ ) was introduced to the input at a power level equal to the ( $f_0$ ). The CW signal ( $f_1$ ) was applied at the adjacent CDMA channel (1.23 MHz) to ( $f_0$ ).

(c) A spectrum analyzer with its BW set at 30 kHz was connected to the output of the test item. The inband signal levels were measured and plotted. Any spurious emissions or intermodulation products detected were compared to the limit.

(d) With the analyzer BW switched to 100 kHz, the out of band signal levels were measured and plotted over the frequency range from 30MHz to 1 GHz. With the BW set to 1 MHz, the emission levels for 1 GHz to 20GHz (10th Harmonic) were measured. These emission levels were compared to limit.

(e) Steps (c) through (d) were repeated with CDMA modulation applied to ( $f_0$ ).

(f) Step (c) through (f) were repeated with the input signal ( $f_0$ ) was set to 1972 MHz. output. The reference level was recorded.

## ENGINEERING TEST REPORT NO. 21337

(g) Steps (c) through (e) were repeated for the uplink with (f0) set to 1902MHz and 1892MHz.

**4.3.3 RESULTS:** The plots of the antenna conducted/intermodulation products measurements are presented on data pages 162 through 225. The limit lines have been adjusted to include the cable loss factors. As can be seen from the data, the test item did not produce spurious emissions or intermodulation products in excess of the -13 dBm (attenuated 46dB below unmodulated carrier level) limit.

**4.4 FIELD STRENGTH OF SPURIOUS EMISSIONS:**

**4.4.1 REQUIREMENTS:** In accordance with Paragraph 24.238, on any frequency outside the frequency range, the emissions shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log(P)$  dB. This requirement translates to a field strength limit of -13dBm (ERP). The emissions shall be measured from 30MHz up to the 10th harmonic of the fundamental frequency.

**4.4.2 PROCEDURES:** The radiated tests were performed in a 32ft. x 20ft. x 18ft. hybrid ferrite-tile/anechoic absorber lined test chamber. With the exception of the floor, the reflective surfaces of the shielded chamber are lined with ferrite tiles. Anechoic absorber material is installed over the ferrite tile. The floor of the chamber is used as the ground plane. The chamber complies with ANSI 63.4 and CISPR 16 requirements for site attenuation.

Preliminary radiated measurements are performed to determine the frequencies where the significant emissions might be found. With the test item at one set position and the measurement antenna at a set height (i.e. without maximizing), the radiated emissions were measured

## ENGINEERING TEST REPORT NO. 21337

using peak detection. This data was then automatically plotted. The frequencies where significant emission levels found were remeasured taking the extra pains to maximize the emission levels.

Measurements were performed with the input signal CW and modulated with CDMA. This modulation scheme was selected to represent worst case scenarios.

(a) The test item was placed on a 0.8 meter high non-conductive stand at a 3 meter test distance from the receive antenna.

(b) The output was terminated in 50 Ohm load.

(c) The input frequency was set to 1972.5 MHz with (CW) no modulation. The level was adjusted for 2 Watts output.

(d) Preliminary emission levels were measured over the frequency range from 30MHz to 18GHz. These preliminary levels were then plotted. The readings were taken with a peak detector function. The measurement BW was 100 kHz up to 1GHz and 1 MHz up to 18 GHz.

(e) Significant emissions were maximized at each frequency by rotating the test item and adjusting the receive antenna height and polarization. The maximum meter reading was recorded. Measurement BW was 1 MHz for frequencies above 1 GHz and 100 kHz for frequencies 1GHz or less. Peak reading were recorded. No averaging methods or corrections were applied. As a minimum measurements were made at each harmonic of the transmit frequency up through the tenth harmonic. If no signal was detected above the noise floor, the noise level was recorded and noted as ambient.

(f) Steps (d) and (e) was repeated with CMDA modulation.

(g) Step (c) through (f) were repeated with the input signal at frequencies 1892.5MHz, 1982.5MHz; 1902.5MHz



## ENGINEERING TEST REPORT NO. 21337

**4.4.3 RESULTS:** The preliminary plots are presented on data pages 226 through 241. This data is only presented for a reference, and is not used as to determine compliance. All significant radiated emissions were subsequently remeasured manually maximizing the level.

The final radiated levels are presented on data pages 242 through 249. The radiated emissions were measured through the 10th harmonic. Field strength levels are presented as equivalent radiated power from a standard tuned dipole.

The radiated emission levels for the harmonics were below the specification limit.

**4.5 FREQUENCY STABILITY:****4.5.1 REQUIREMENTS:**

FCC Part 24: In accordance with Paragraph 24.235, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency range.

IC RSS-131: In accordance with Paragraph 6.8, the frequency stability shall be within +/- 1.5 parts per million (0.00015%).

**4.5.2 PROCEDURES:** Two separate procedures were performed for each of the two tests which are as follows:

**(a) Frequency Stability vs. Temperature**

(1) The test item was placed in a Thermotron temperature chamber. The test item was powered up.

(2) The measurement equipment was connected to the test item's antenna port.

(3) The ambient room temperature was recorded and a reference frequency was recorded.

## ENGINEERING TEST REPORT NO. 21337

(4) The temperature was varied from -30 to +50 degrees centigrade in 10 degree increments. The test item was allowed to soak from 30 to 45 minutes at each temperature. After this time period the unit was set to transmit and the frequency recorded.

(b) Frequency Stability vs. Voltage:

(1) The measurement equipment was connected to the test item's antenna port.

(2) The nominal voltage to the test item is 115 Volts 60Hz. The test item was set to transmit and a reference frequency was recorded.

(3) The input voltage was adjusted to 85 percent of the nominal voltage or 97.75 Volts 60Hz and the test item set to transmit. This frequency was recorded.

(4) The input voltage was adjusted to 115 percent of the nominal voltage or 132.25 Volts 60Hz and the test item set to transmit. This frequency was recorded.

**4.5.3 RESULTS OF TESTS:** The results of the frequency stability vs. temperature tests can be found on data pages 250 and 251. As can be seen from the data, the frequency stability of the test item is within +/- 1.5 ppm which is sufficient to ensure that the fundamental emission stays within the authorized range.

The results of the frequency stability vs. voltage variation tests can be seen on data page 252. As can be seen from the data, the frequency stability of the test item is within +/- 1.5 ppm which is sufficient to ensure that the fundamental emission stays within the authorized block.

## ENGINEERING TEST REPORT NO. 21337

**5.0 CONCLUSION:**

The PCS Channelized Bidirectional Amplifier, Model No. SELECTAMP1900-FC, complies with the RF Power Output, the Occupied Bandwidth, the Spurious Emissions at Antenna Terminal, the Field Strength of Spurious Emissions and the Intermodulation Products at Antenna Terminal, and Frequency Stability requirements of the FCC Part 24, Subpart E for Broadband PCS and IC RSS-131, Issue 1.

**6.0 CERTIFICATION:**

Elite Electronic Engineering Company certifies that the information contained in this report was obtained under conditions which meet or exceed those specified in the test specification.

The data presented in this test report pertains to the test item at the test date.

## ENGINEERING TEST REPORT NO. 21254

TABLE I: TEST EQUIPMENT LIST

ELITE ELECTRONIC ENG. INC.

Page: 1

| Eq ID                                      | Equipment Description      | Manufacturer    | Model No. | Serial No.   | Frequency Range | Cal Date | Cal Inv | Due Date |
|--|----------------------------|-----------------|-----------|--------------|-----------------|----------|---------|----------|
| Equipment Type: ACCESSORIES, MISCELLANEOUS |                            |                 |           |              |                 |          |         |          |
| XYF2                                       | POWER SPLITTER             | HEWLETT PACKARD | 11667A    | 11047        | DC-18GHZ        |          | N/A     |          |
| XYF3                                       | POWER SPLITTER             | HEWLETT PACKARD | 11667A    | 11052        | DC-18GHZ        |          | N/A     |          |
| Equipment Type: ATTENUATORS                |                            |                 |           |              |                 |          |         |          |
| T1E4                                       | 100B, 25W ATTENUATOR       | WEINSCHEL       | 46-10-43  | AV5805       | DC-18GHZ        | 02/20/98 | 12      | 02/20/99 |
| T2D2                                       | 200B, 25W ATTENUATOR       | WEINSCHEL       | 46-20-43  | AV5815       | DC-18GHZ        | 02/20/98 | 12      | 02/20/99 |
| T2D6                                       | 200B, 25W ATTENUATOR       | WEINSCHEL       | 46-20-43  | AY9245       | DC-18GHZ        | 06/02/98 | 12      | 06/02/99 |
| Equipment Type: CONTROLLERS                |                            |                 |           |              |                 |          |         |          |
| CDFO                                       | COMPUTER                   | BRIO            | HPD5555A  | US75140557   |                 |          |         |          |
| CTGO                                       | TEMP. RECORDER/CONTR.      | HONEYWELL       | DR4502    | 882572787600 | -87 TO 190C     | 12/04/98 | 6       | 06/04/99 |
| Equipment Type: METERS                     |                            |                 |           |              |                 |          |         |          |
| MFCO                                       | MICROWAVE FREQ. COUNTER    | HEWLETT PACKARD | 5343A     | 2133A00591   | 10HZ-26GHZ      | 06/01/98 | 12      | 06/01/99 |
| MPAO                                       | POWER METER                | HEWLETT PACKARD | 432A      | 1141A08696   | 0.01-40GHZ      | 12/31/98 | 6       | 06/30/99 |
| MCAA                                       | THERMISTOR MOUNT           | HEWLETT PACKARD | 8478B     | 1144A08340   | 0.01-18GHZ      | 07/21/98 | 6       | 01/21/99 |
| Equipment Type: PRINTERS AND PLOTTERS      |                            |                 |           |              |                 |          |         |          |
| HRE8                                       | LASER JET 6P               | HEWLETT PACKARD | C3980A    | USCD109528   |                 |          |         |          |
| Equipment Type: SIGNAL GENERATORS          |                            |                 |           |              |                 |          |         |          |
| GBB1                                       | SYNTHESIZED GENERATOR      | HEWLETT PACKARD | 8660C     | 2406A04972   | 10KHZ-2.6GHZ    | 12/07/98 | 6       | 06/07/99 |
| GBC2                                       | MODULATION HEAD            | HEWLETT PACKARD | 86632B    | 2505A02682   | AM & FM         | 11/25/98 | 6       | 05/25/99 |
| GBG0                                       | TUNING HEAD                | HEWLETT PACKARD | 86603A    | 2325A03357   | 1-2600MHZ       | 12/07/98 | 6       | 06/07/99 |
| GBQ0                                       | SIGNAL GENERATOR WITH I/Q  | ROHDE & SCHWARZ | SMHU-58   | 843558/039   | 1KHZ-4320MHZ    | 06/08/98 | 12      | 06/08/99 |
| GWG0                                       | ARBITRARY WAVEFORM GENERAT | LECROY          | LW420A    | U3093        | ---             |          |         | NOTE 1   |

Cal. Interval: Listed in Months I/O: Initial Only N/A: Not Applicable

Note 1: For the purpose of this test, the equipment was calibrated over the specified frequency range, pulse rate, or modulation prior to the test or monitored by a calibrated instrument.

## ENGINEERING TEST REPORT NO. 21337

## DATA SHEET

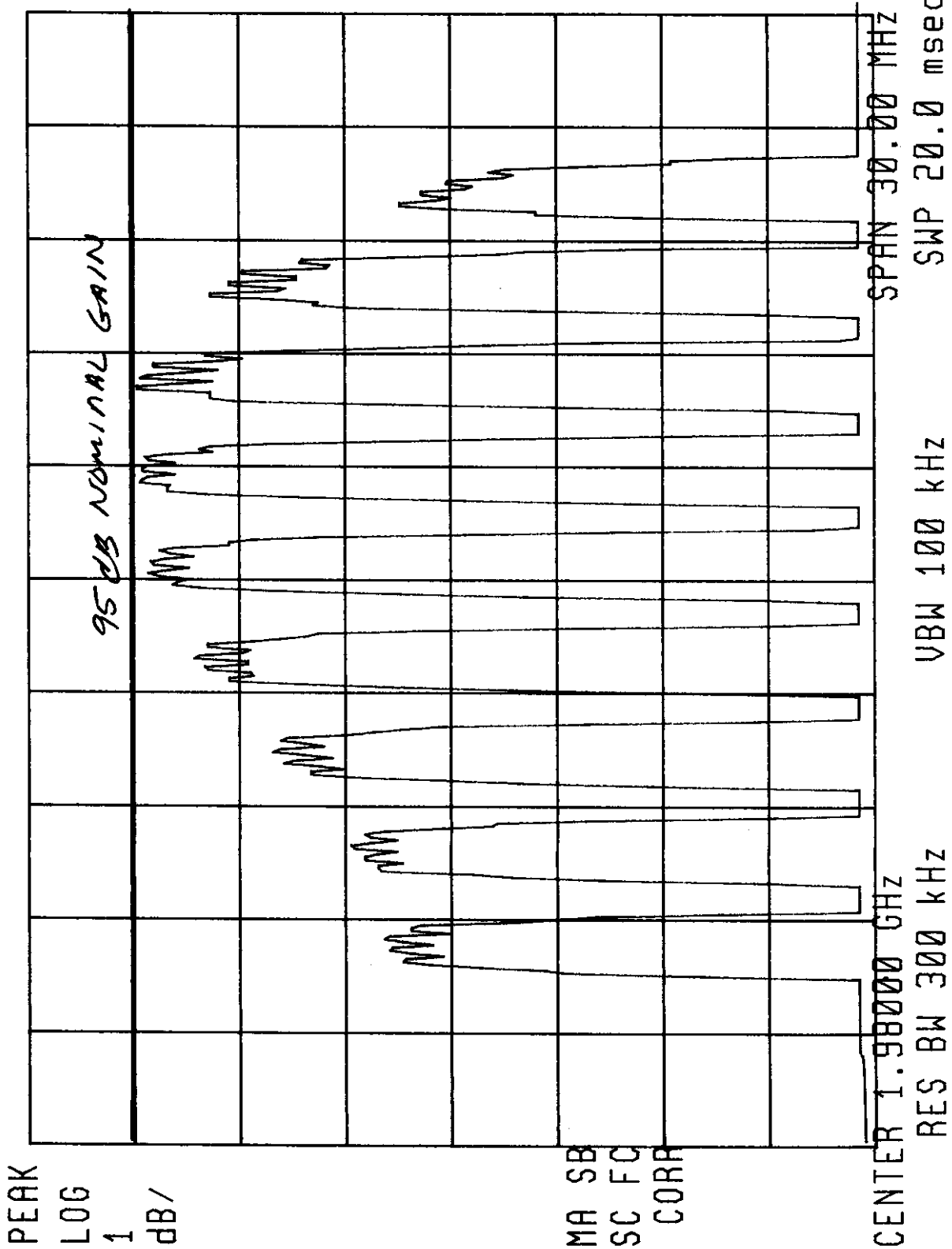
MANUFACTURER : ANDREW CORP.  
 TEST ITEM : PCS CHANNELIZED BIDIRECTIONAL AMPLIFIER  
 MODEL NO. : SELECTAMP 1900-FC  
 SERIAL NUMBER : 050  
 SPECIFICATION : FCC-24 PARA. 24.232; IC RSS-131 PARA. 6.2  
 TEST DESC : RF POWER OUTPUT AND GAIN MEASUREMENTS  
 TEST EQUIPMENT : See Table I  
 DATE TESTED : January 8, 1999  
 NOTES : CDMA MODULATION

| DIPLEXER | FREQUENCY<br>(MHz) | INPUT<br>POWER<br>(dBm) | OUTPUT<br>POWER<br>(dBm) | CALCULATED<br>GAIN<br>(dB) |
|----------|--------------------|-------------------------|--------------------------|----------------------------|
| UPLINK   |                    |                         |                          |                            |
| C        | 1902.5             | -59.6                   | 33.0                     | 92.6                       |
| F        | 1892.5             | -59.1                   | 33.0                     | 92.1                       |
| DOWNLINK |                    |                         |                          |                            |
| C        | 1982.5             | -60.0                   | 33.0                     | 93.0                       |
| F        | 1972.5             | -59.5                   | 33.0                     | 92.5                       |

CHECKED BY: RJK

FREQ VS. GAIN RESPONSE  
 FOR PASSBAND OF  
 BLOCKS F+C

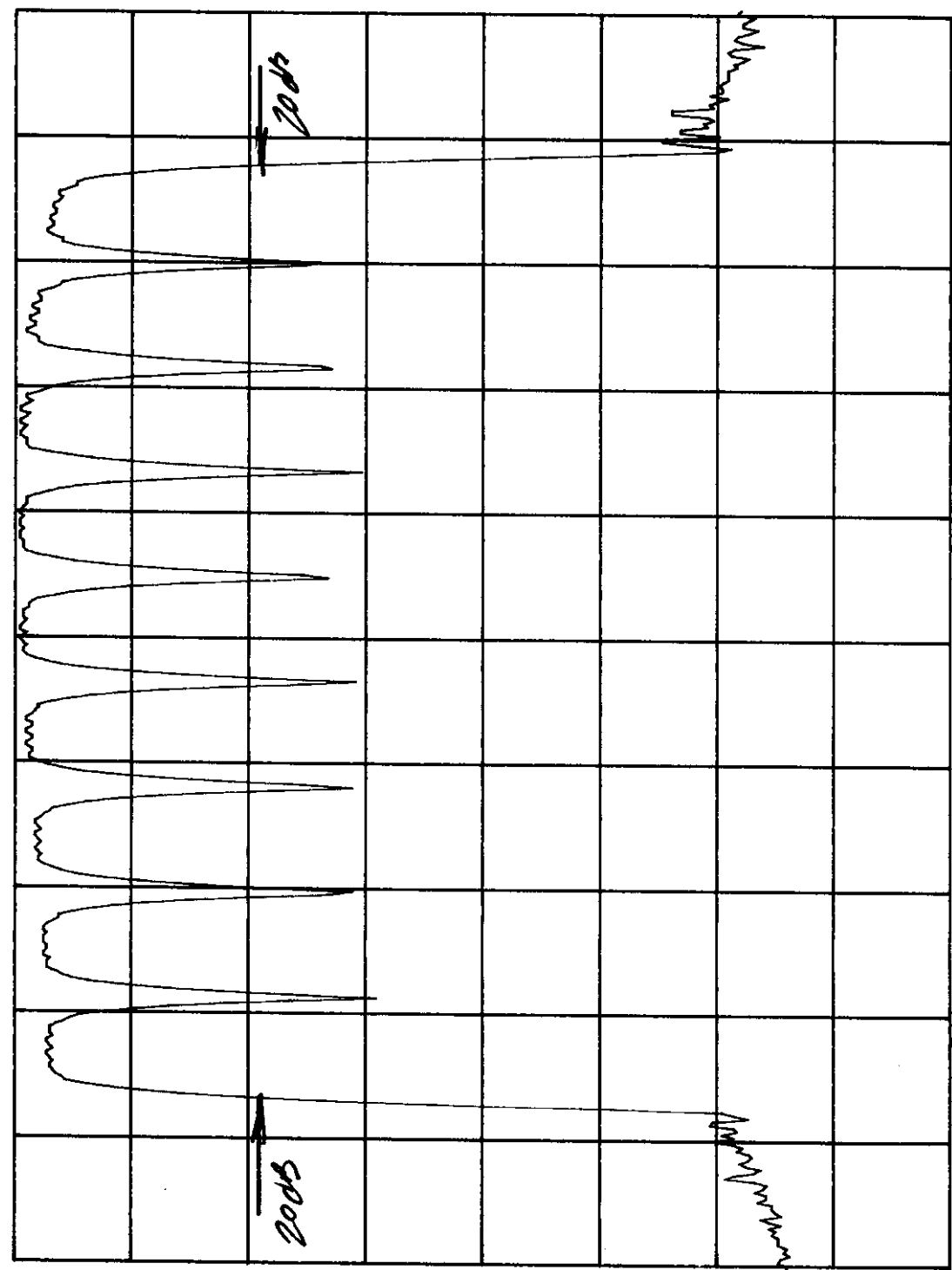
16:24:56 JAN 14, 1999  
 ANDREW SELECTAMP 7800/1900-FC  
 REF -6.0 dBm AT 10 dB + 40 dB EXT



PEAK  
 LOG  
 1  
 dB/

MA SB  
 SC FC  
 CORR

16:27:41 JAN 14, 1999  
 ANDREWS SELECTAMP 1800/1900FC  
 REF -6.0 dBm AT 10 dB +40 dB EXT  
 GAIN VS FREQ RESPONSE  
 AMPLIFIER 20dB BW



CENTER 1.98000 GHz  
 RES BW 300 kHz  
 VBW 100 kHz  
 SPAN 30.00 MHz  
 SWP 20.0 msec

PEAK  
 LOG  
 10  
 dB/

MA SB  
 SC FC  
 CORR

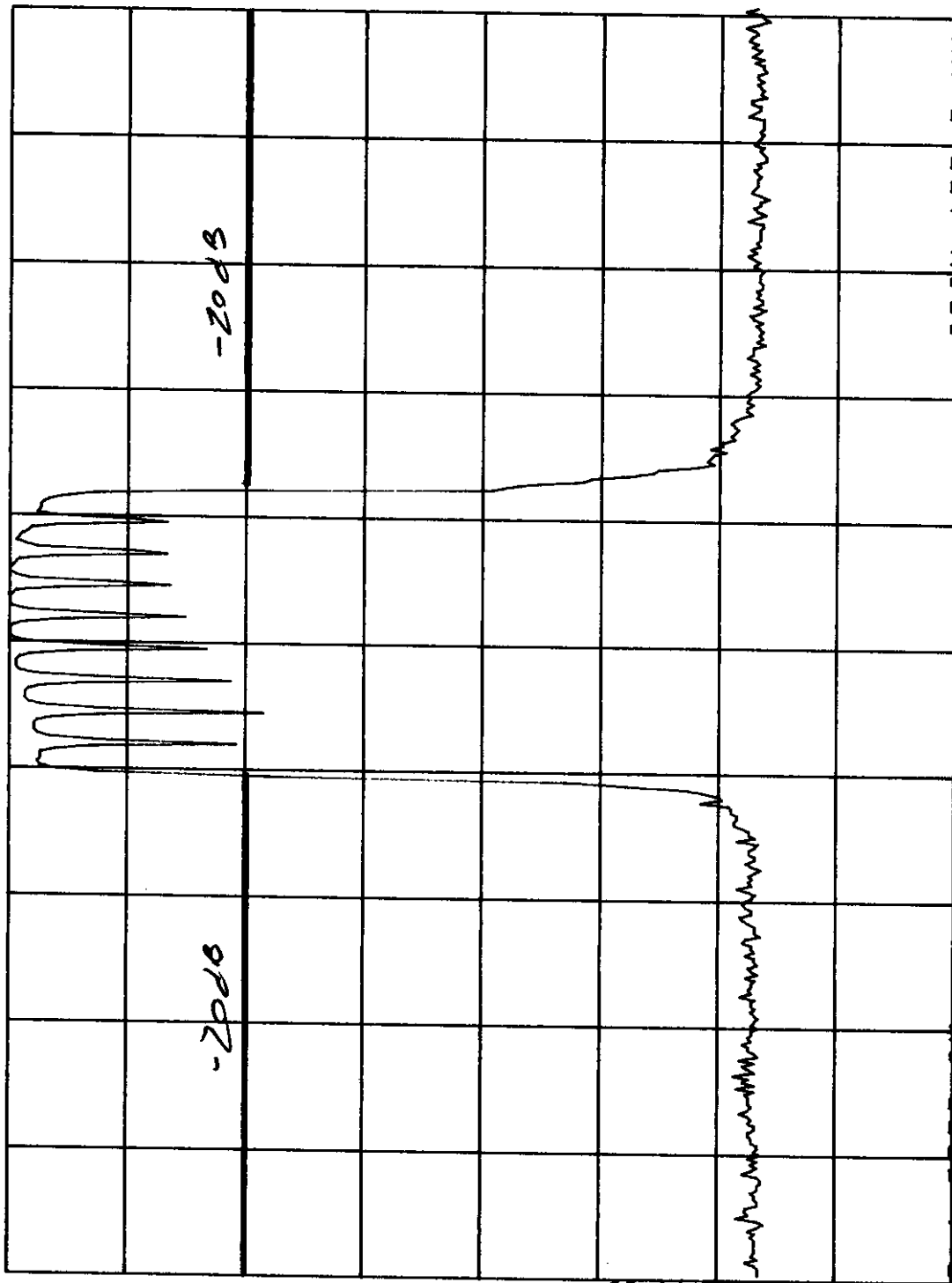
16:20:27 JAN 14, 1999

ANDREWS SELECTAMP 1800 1900 F-L

REF -6.0 dBm AT 10 dB + 40dB EN

GAIN VS. FREQ. RESPONSE  
fo 1/2500 of 20dB BW

PEAK  
LOG  
10  
dB/

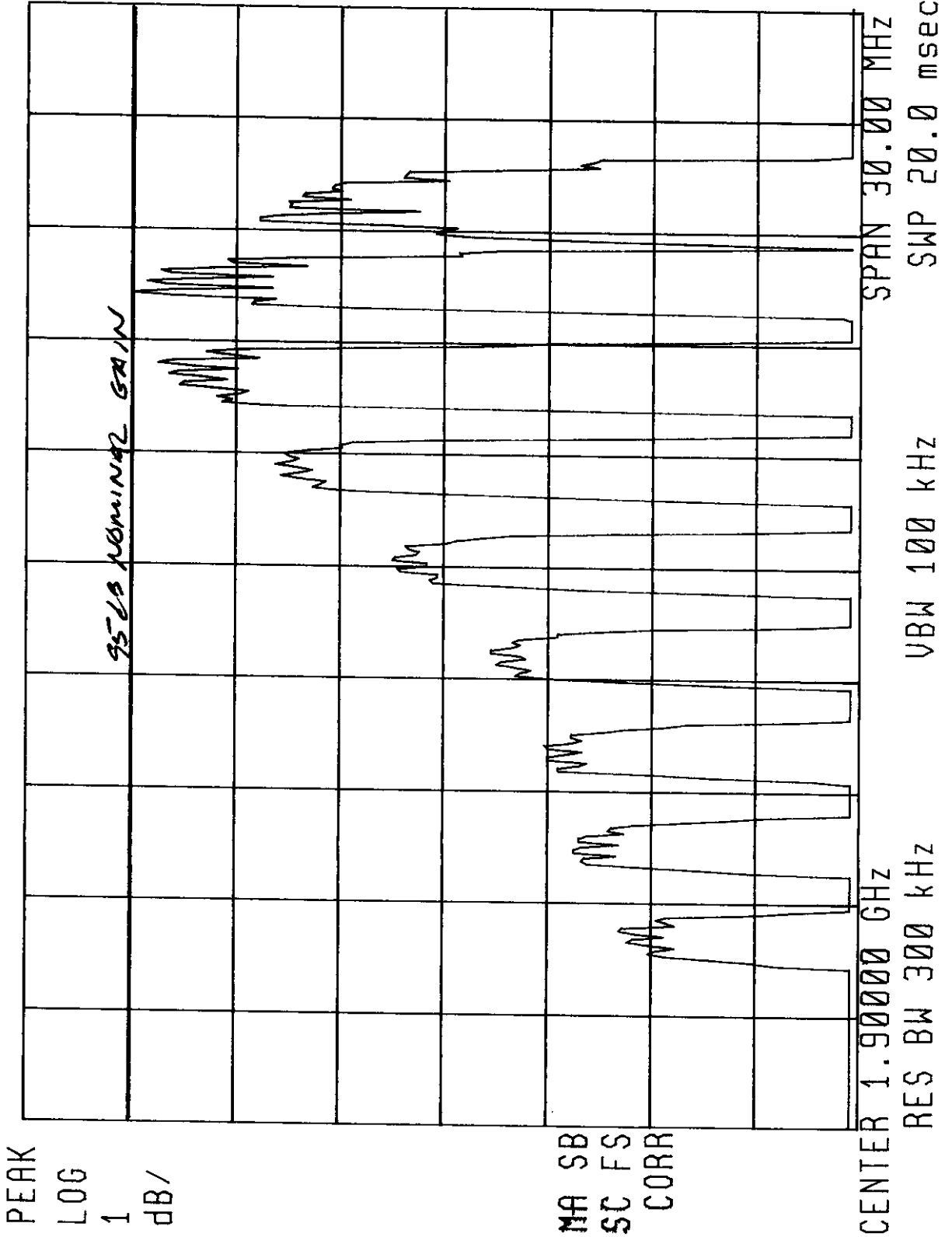


MA SB  
SC FC  
CORR

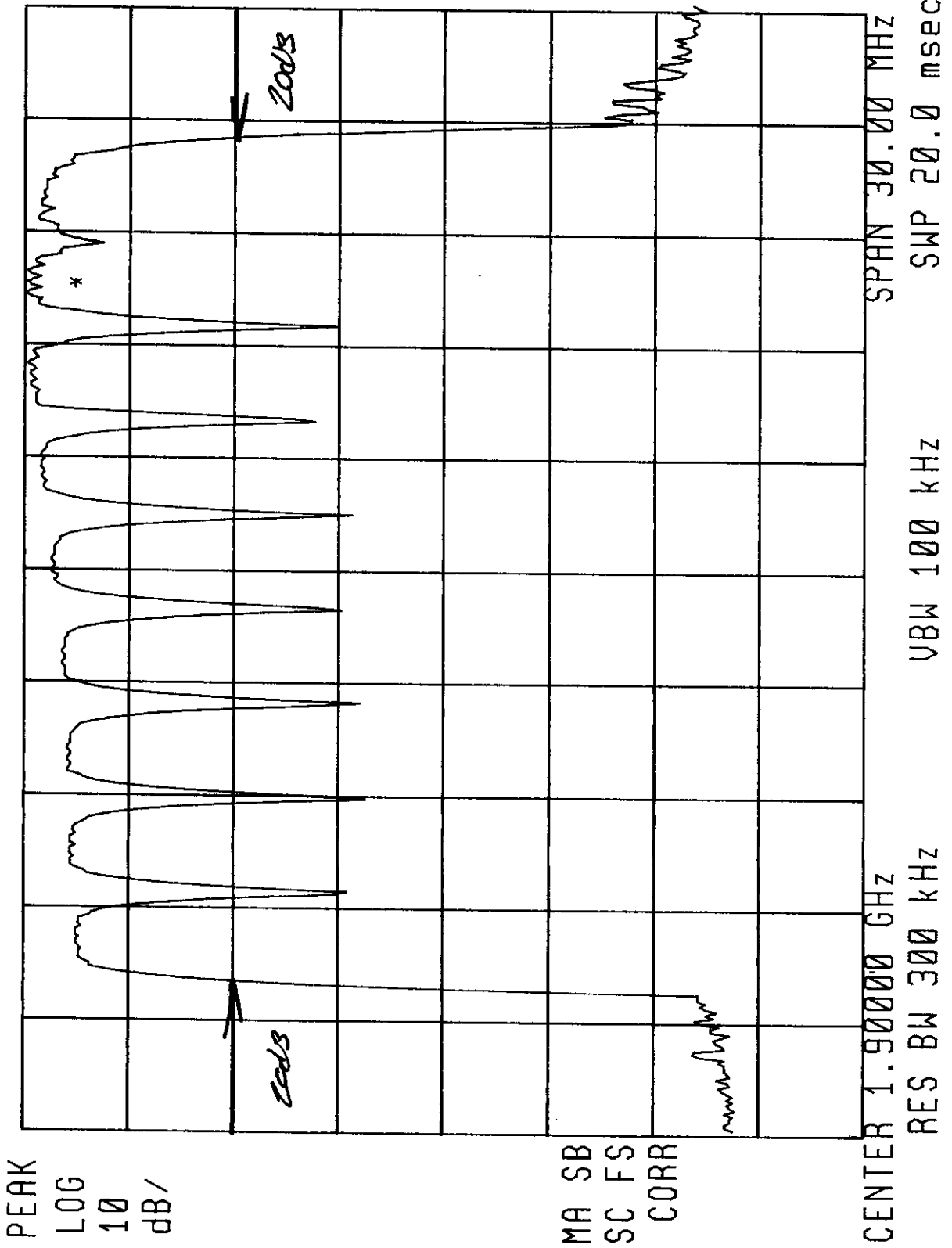
CENTER 1.9800 GHZ  
RES BW 1.0 MHz  
SPAN 100.0 MHz  
VBW 300 kHz  
SWP 20.0 msec



16:09:54 JAN 14, 1999  
 ADDRESS SELECTAMP 1800 1900-FC  
 REF -6.0 dBm AT 10 dB +40 dB EXT.  
 FREQ VS. GAIN RESPONSE  
 FOR PASSBAND OF BLOCK F+L



16:12:48 JAN 14, 1999  
 ANDREWS SELECTAMP 1800 1900FC  
 REF -6.0 dBm AT 10 dB +40dB EXT  
 GAIN VS. FREQ RESPONSE  
 AMPLIFIER 20dB BW



16:16:46 JAN 14, 1999

ANDREWS SELECTAMP 1800 1900-FC

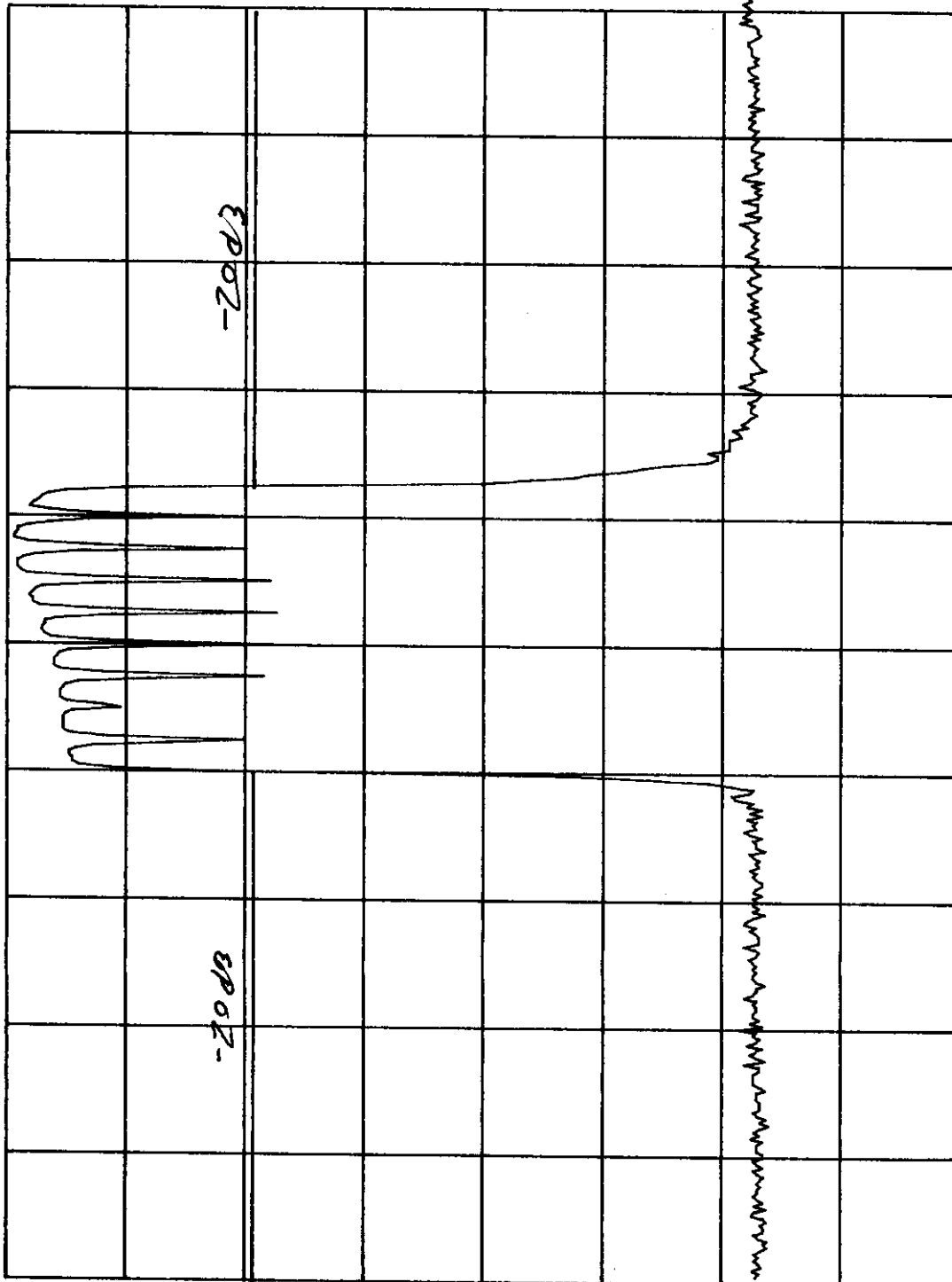
REF -6.0 dBm

AT 10 dB + 40 dB EXT

GAIN VS. FREQ RESPONSE

to +/- 250% of 20dB BW

PEAK  
LOG  
10  
dB/



MA SB  
SC FC  
CORR

CENTER 1.9000 GHz  
RES BW 1.0 MHz

SPAN 100.0 MHz  
VBW 300 kHz  
SWP 20.0 msec

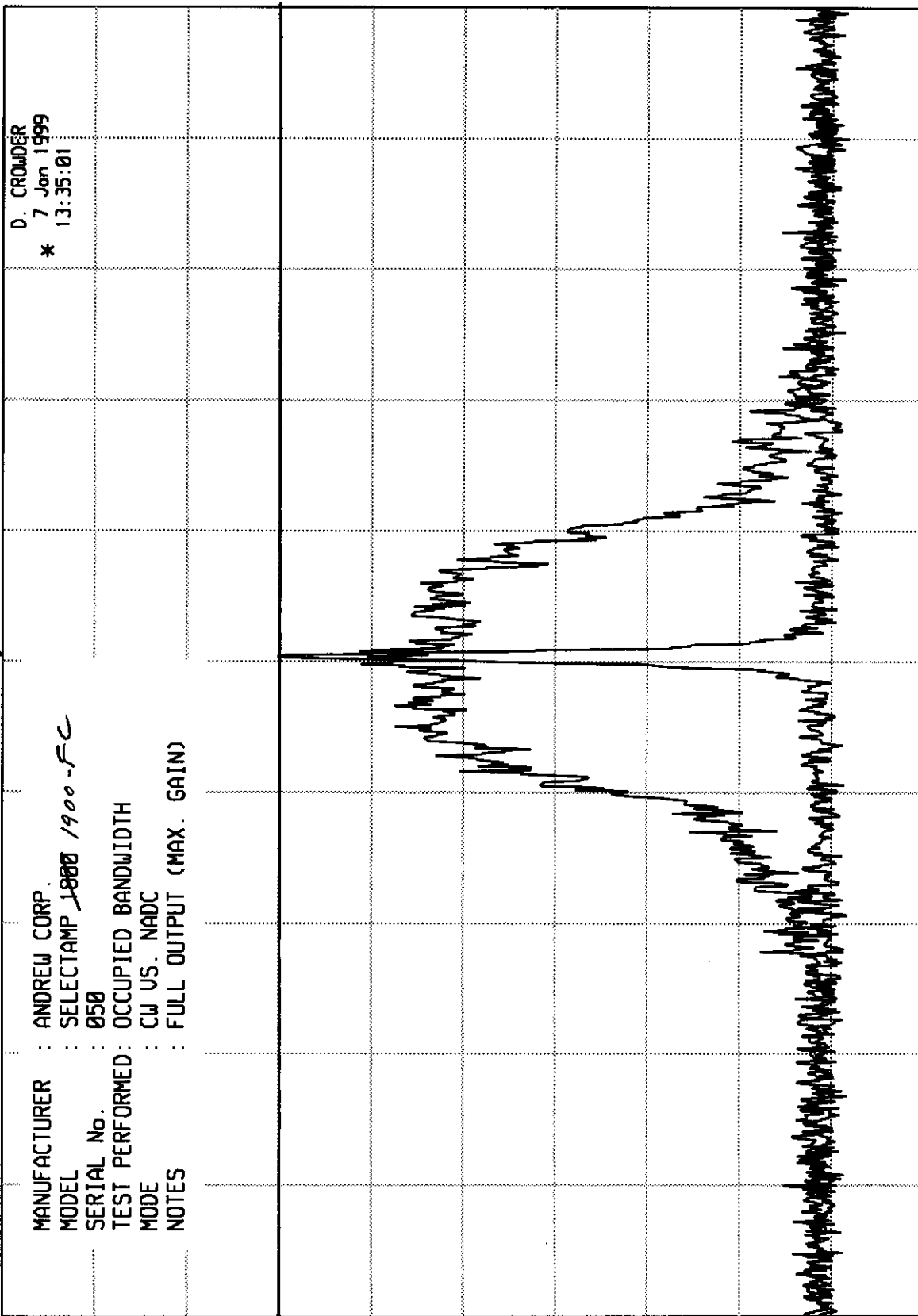
ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

REF 23.0 dBm  
 ATTN 40 dB + 40 dB EXT

hp

10 dB/



SPAN 150 kHz  
 SWP 11.3 sec

VBW 1 kHz

Hz (i)

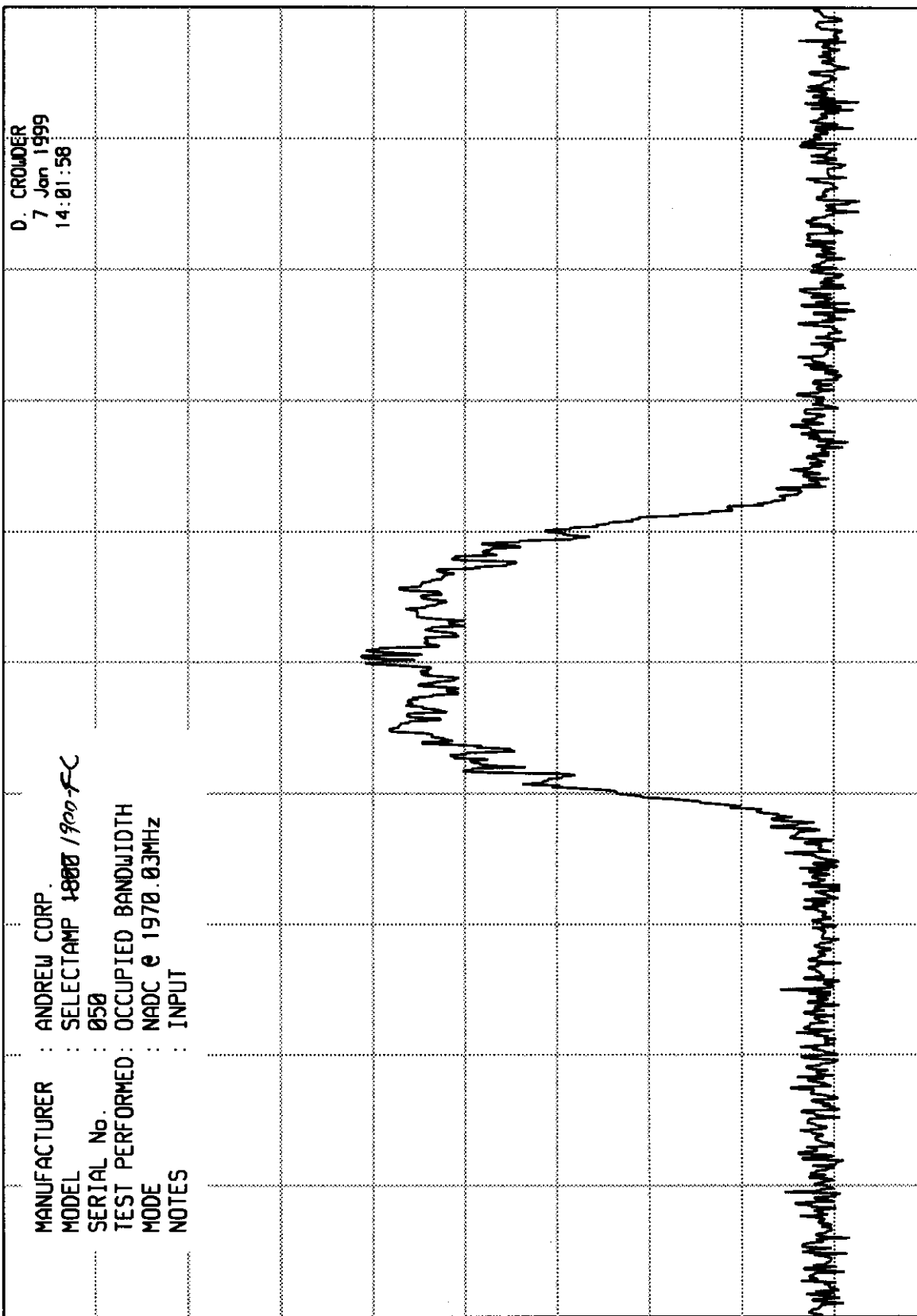
CENTER 1.970 030 GHz  
 RES BW 300

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp

REF -30.0 dBm      ATTN 0 dB



D. CROWDER  
 7 Jan 1999  
 14:01:58

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : NADC e 1970.03MHz  
 NOTES : INPUT

SPAN 150 kHz  
 SWP 11.3 sec

VBW 1 kHz

Hz (i)

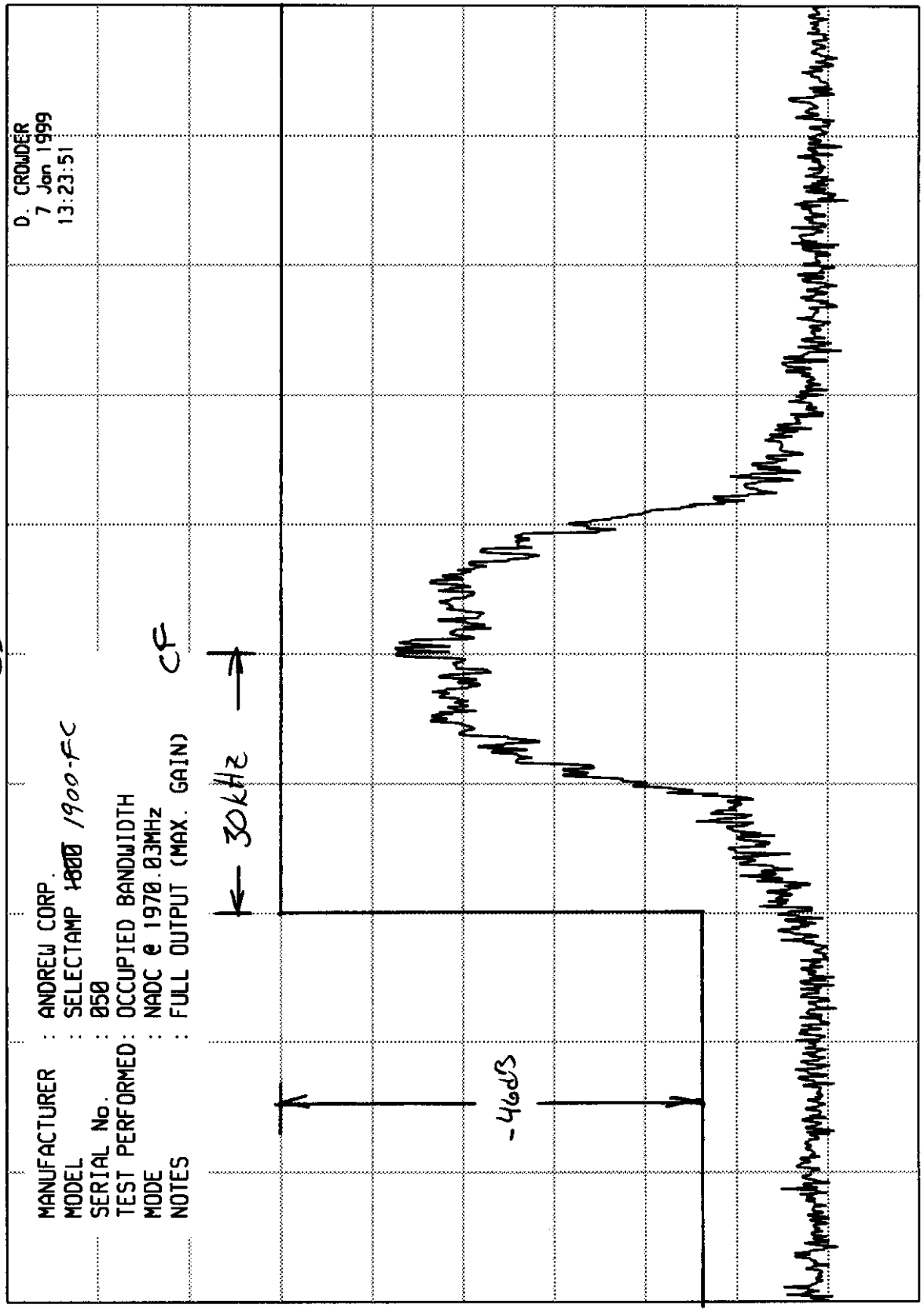
CENTER 1.970 030 GHz  
 RES BW 300

10 dB/

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

REF 23.0 dBm      ATTN 40 dB + 40 dB      Sxt



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1900 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED: OCCUPIED BANDWIDTH  
 MODE : NADC @ 1970.03MHz  
 NOTES : FULL OUTPUT (MAX. GAIN) CF

D. CROWDER  
 7 Jan 1999  
 13:23:51

hp

10 dB/

CENTER 1.970 030 GHz      RES BW 300 Hz(i)      VBW 1 kHz      SPAN 150 kHz      SWP 11.3 sec

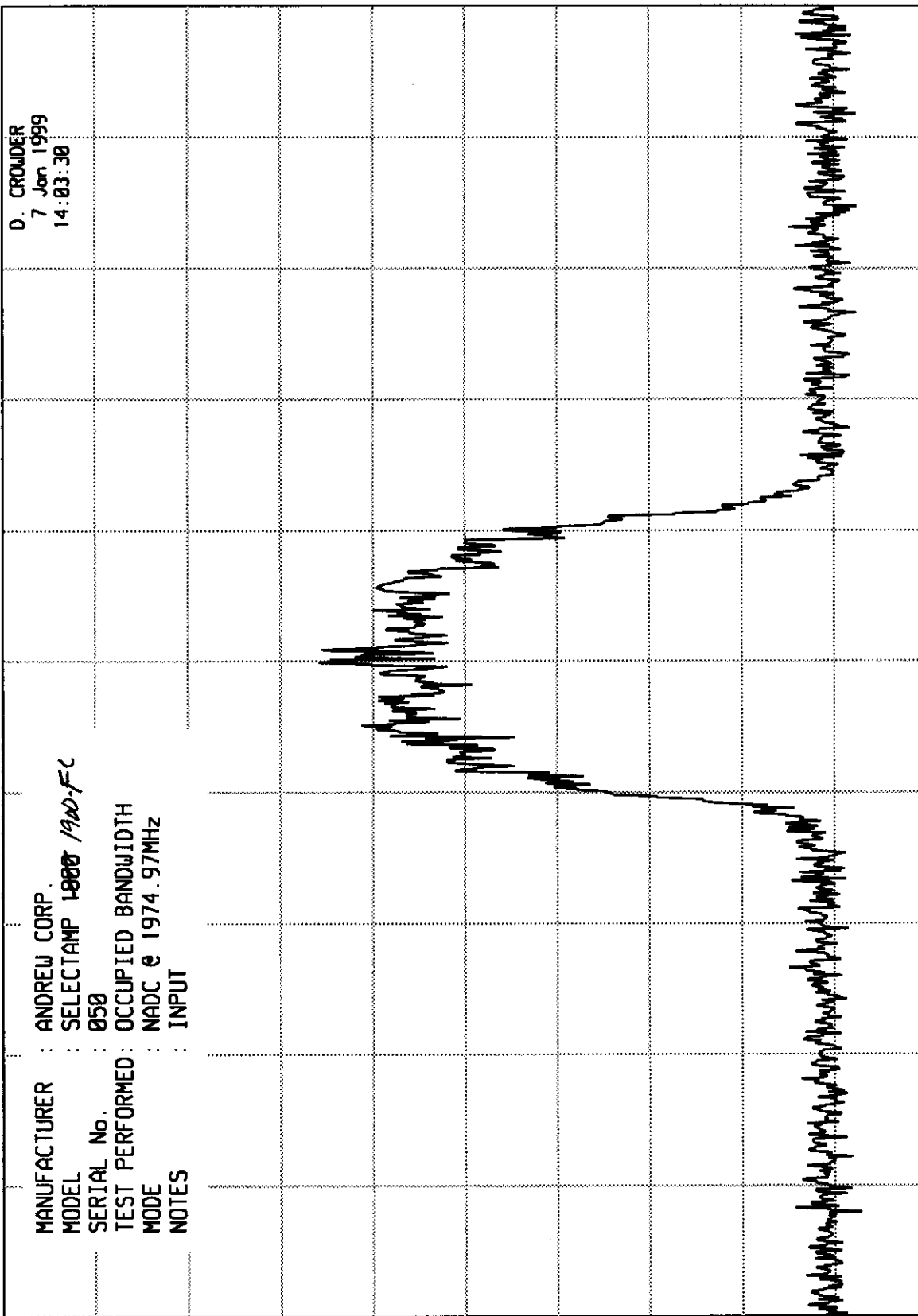
ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp

10 dB/

REF -30.0 dBm      ATTN 0 dB



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : NADC e 1974.97MHZ  
 NOTES : INPUT

D. CROWDER  
 7 Jan 1999  
 14:03:30

SPAN 150 kHz  
 SWP 11.3 sec

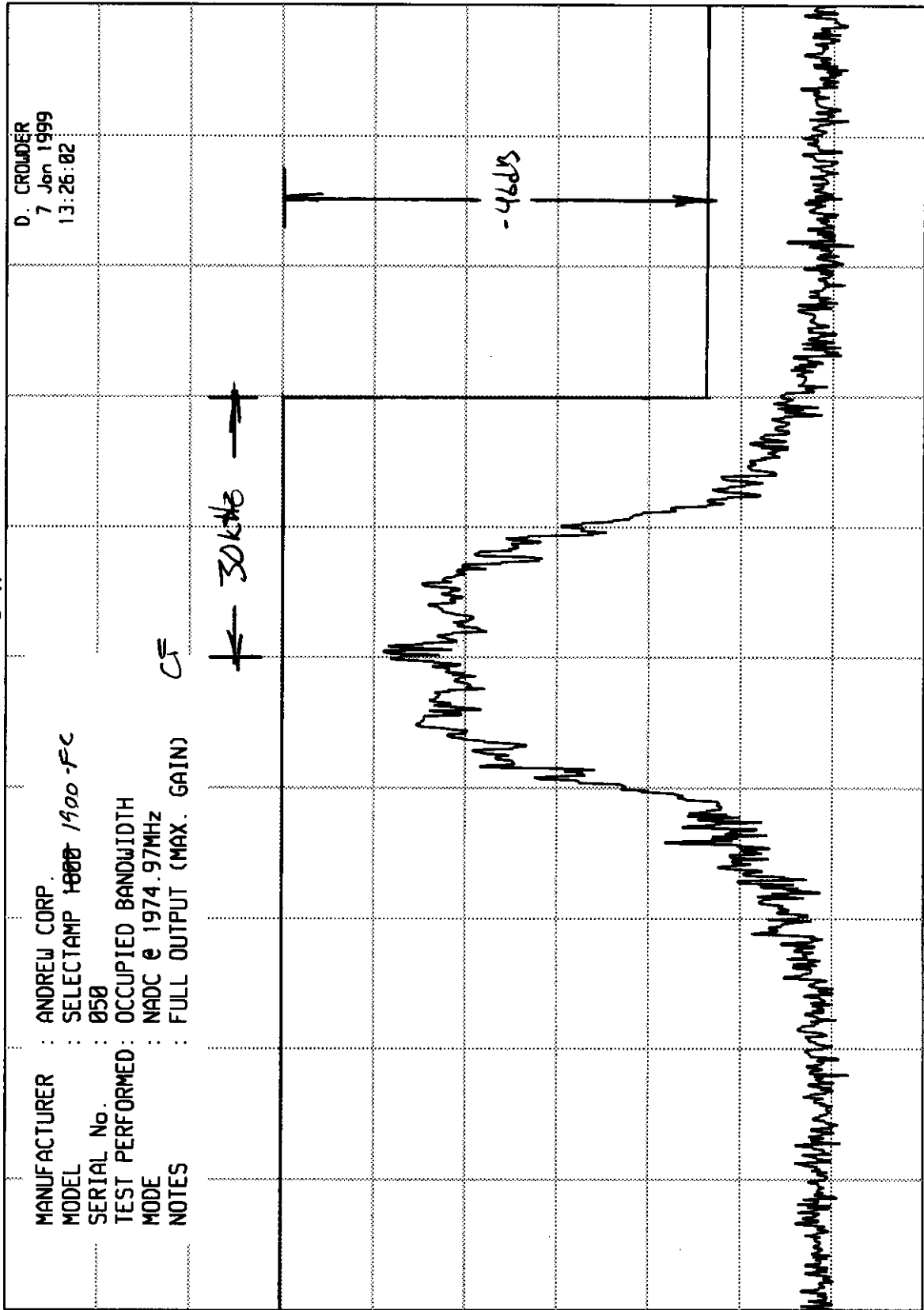
UBW 1 kHz

CENTER 1.974 970 GHz  
 RES BW 300 Hz(i)

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

REF 23.0 dBm  
 ATTN 40 dB + 40 dB GAT.



hp

10 dB/

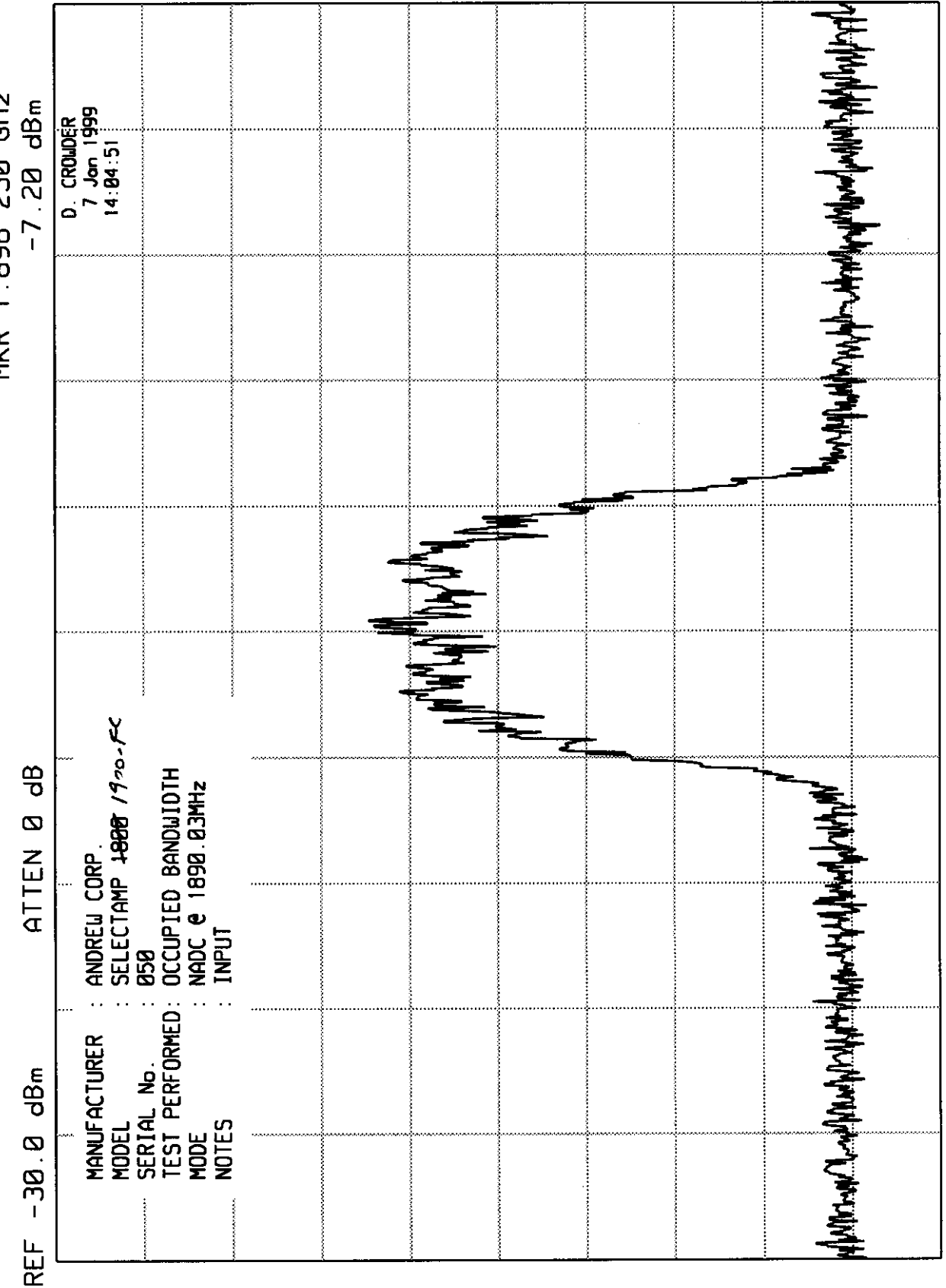
E(3/)

CENTER 1.974 970 GHz  
 RES BW 300 Hz(i)  
 UBW 1 kHz  
 SPAN 150 kHz  
 SWP 11.3 sec



ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm



hp

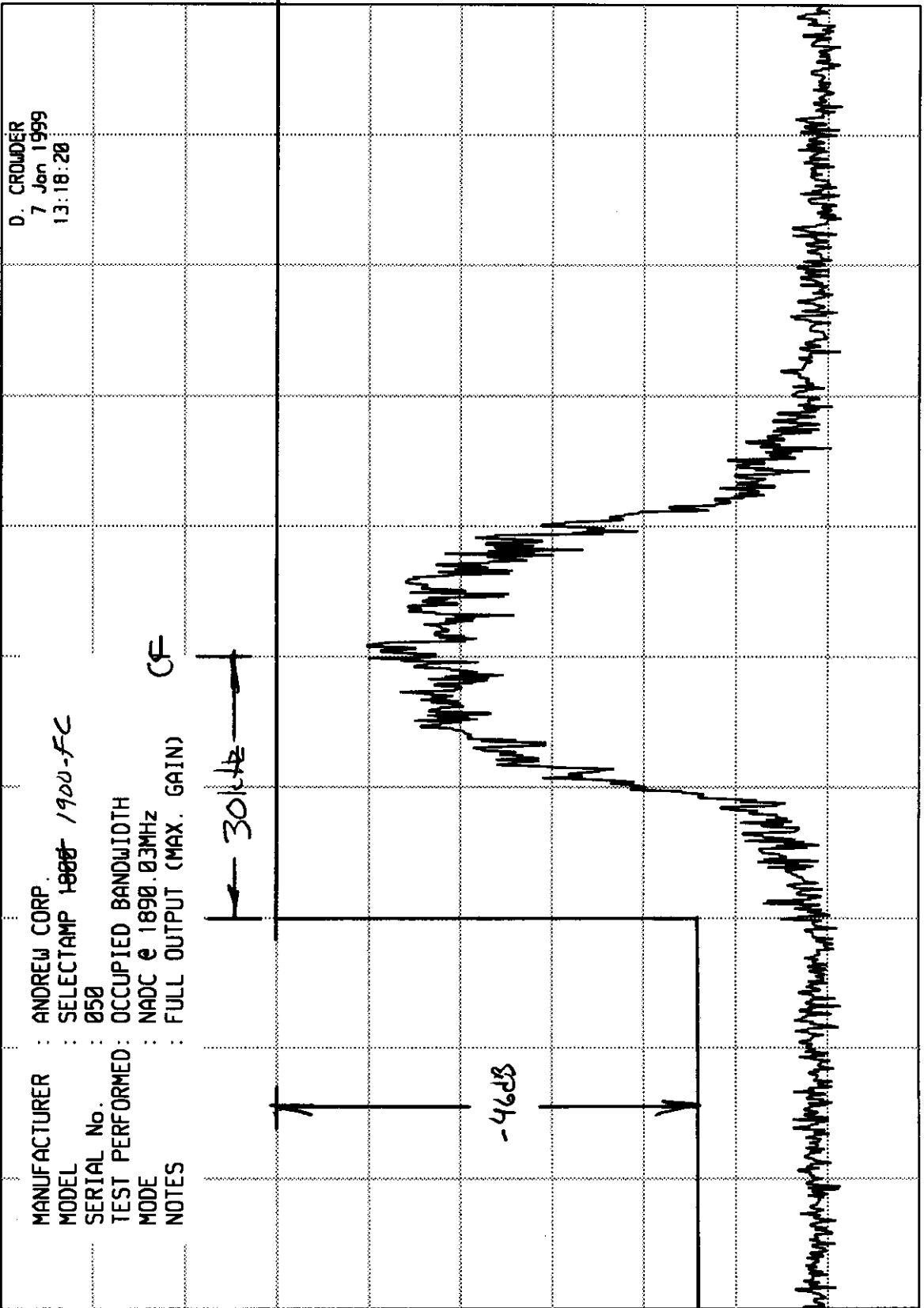
10 dB/

CENTER 1.890 030 GHz  
 RES BW 300 Hz(i)  
 UBW 1 kHz  
 SPAN 150 kHz  
 SWP 11.3 sec

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
-7.20 dBm

REF 23.0 dBm  
ATTEN 40 dB + 40dB Ext.



SPAN 150 kHz  
SWP 11.3 sec

VBW 1 kHz

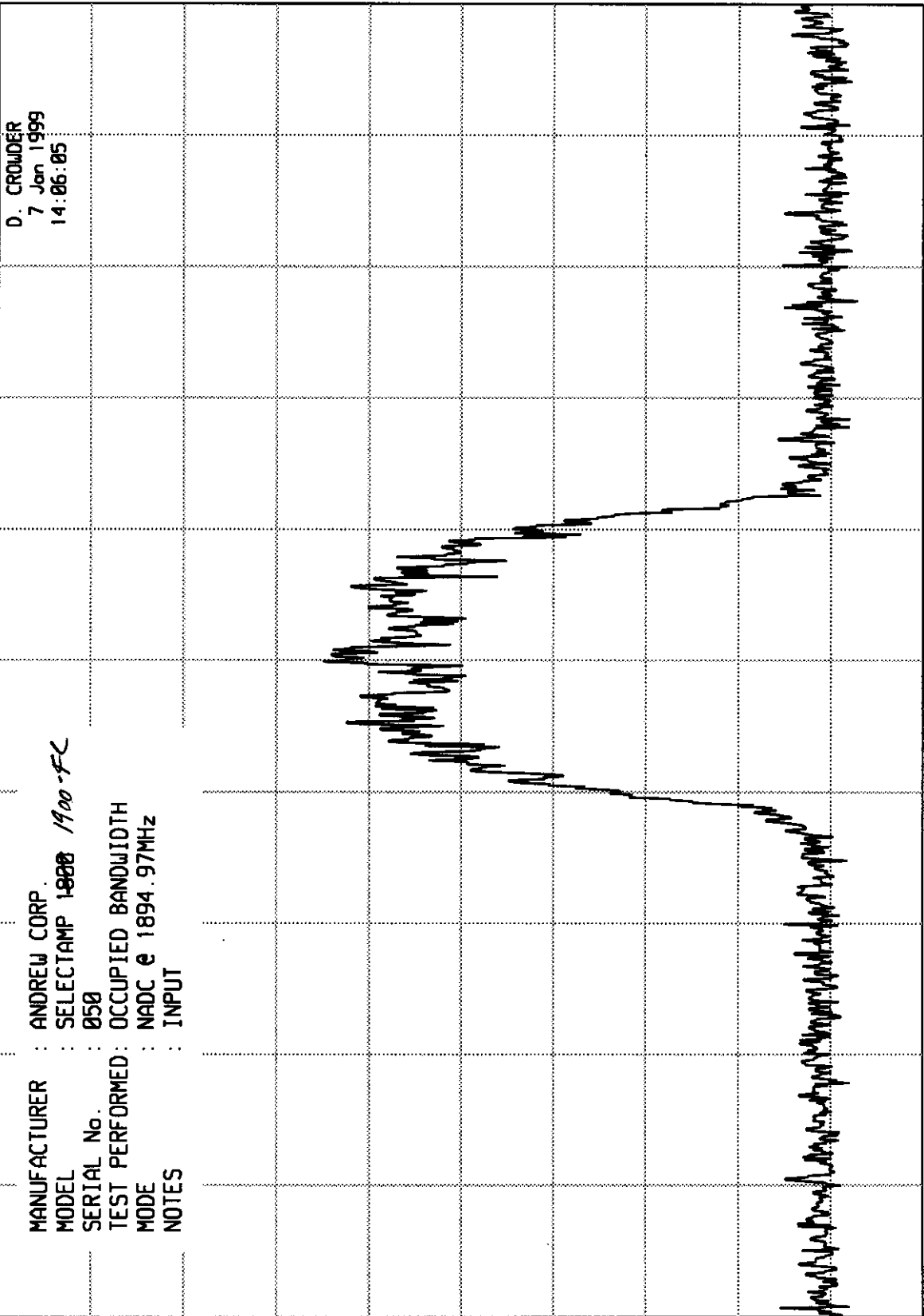
CENTER 1.890 030 GHz  
RES BW 300 Hz(i)

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp REF -30.0 dBm

ATTEN 0 dB



D. CROWDER  
 7 Jan 1999  
 14:06:05

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : NADC @ 1894.97MHz  
 NOTES : INPUT

10 dB/

CENTER 1.894 970 GHz  
 RES BW 300 Hz(i)      UBW 1 kHz      SPAN 150 kHz  
 SWP 11.3 sec

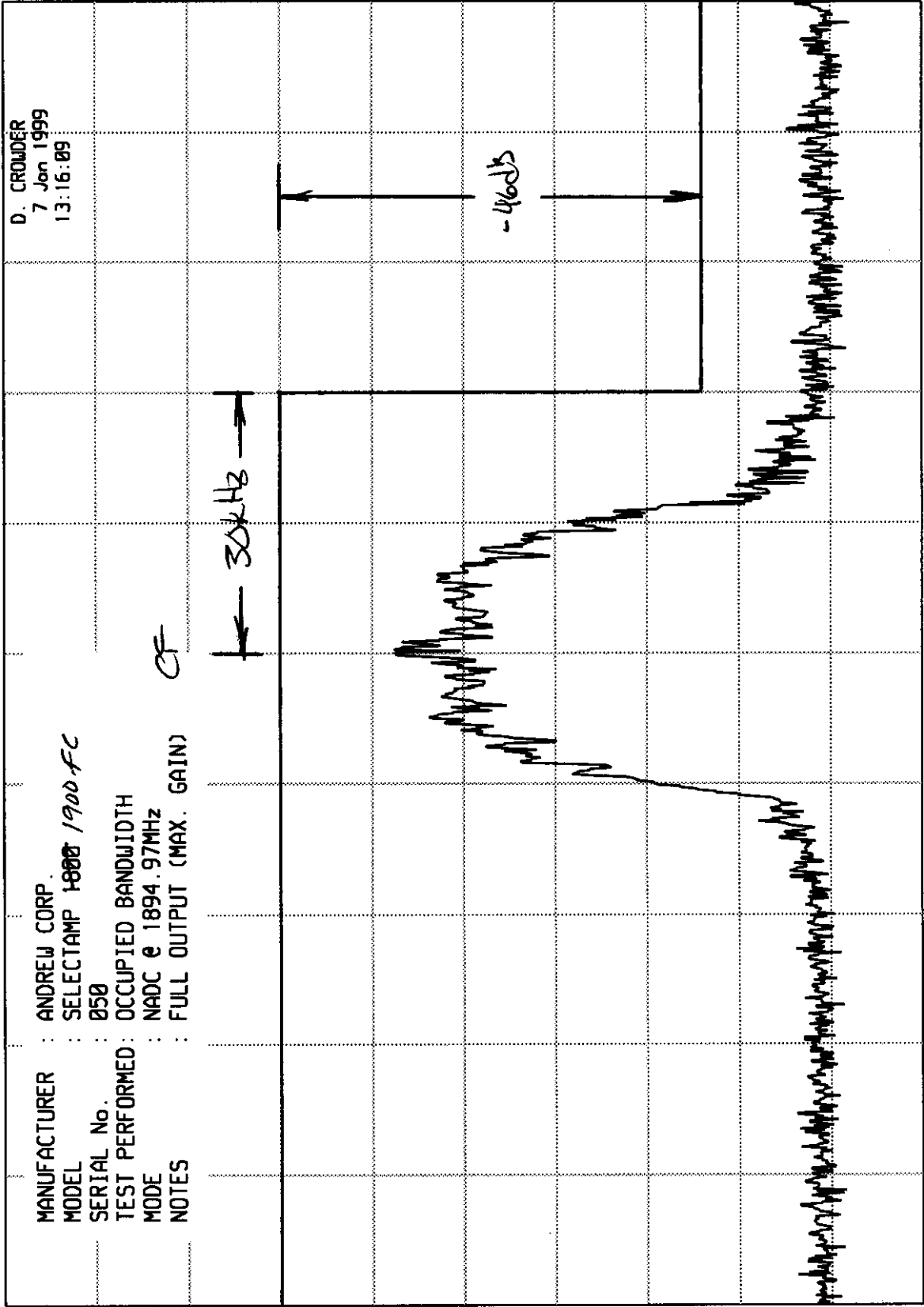
ENGINEERING TEST REPORT NO. 21337

DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
-7.20 dBm

REF 23.0 dBm  
ATTEN 40 dB + 40 dB EXT.



hp

10 dB/

E(35)

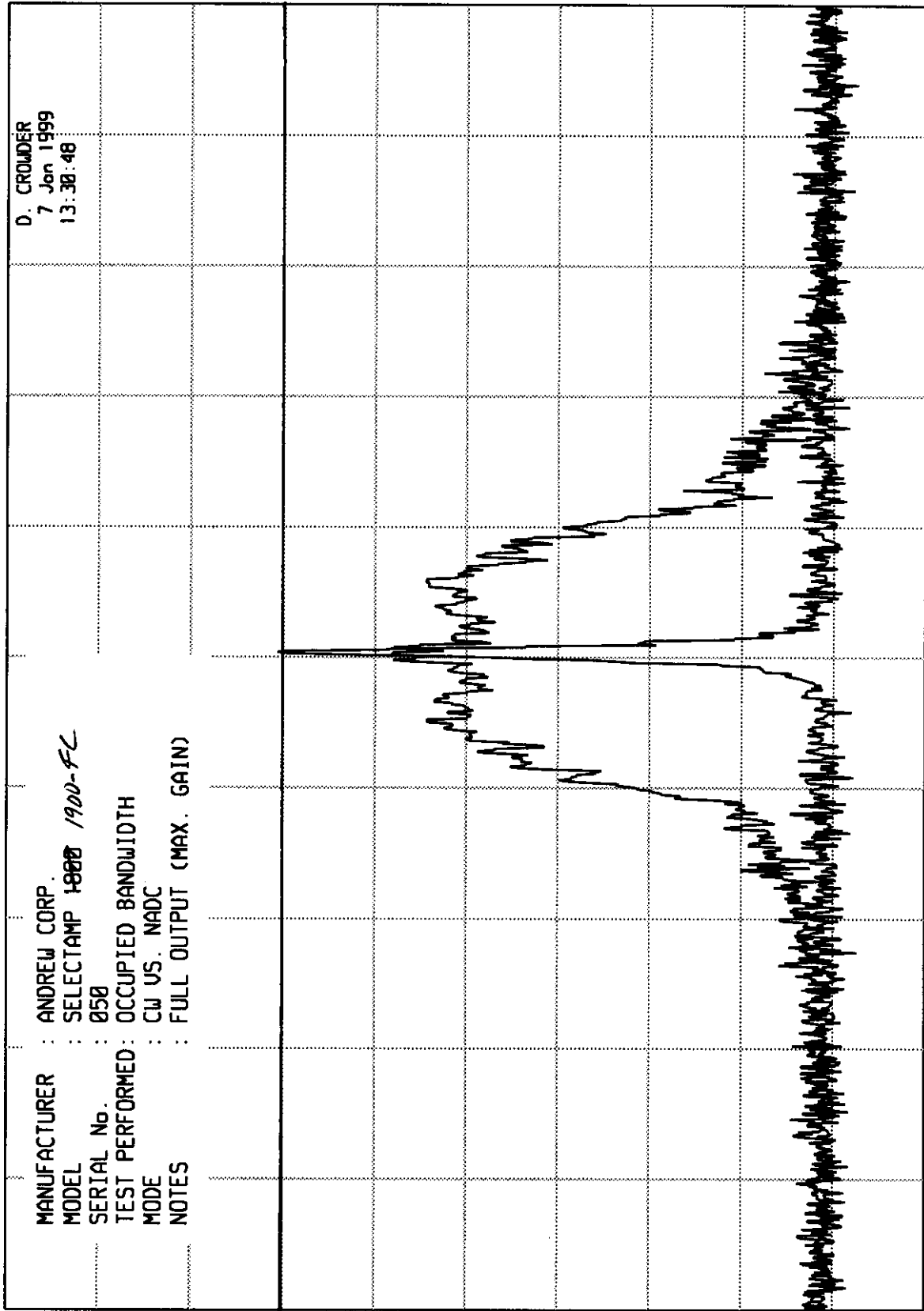
CENTER 1.894 970 GHz  
 RES BW 300 Hz (i)  
 VBW 1 kHz  
 SPAN 150 kHz  
 SWP 11.3 sec

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp

REF 23.0 dBm ATTEN 40 dB + 40 dB EXT.



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : CW US. NADC  
 NOTES : FULL OUTPUT (MAX. GAIN)

D. CROWDER  
 7 Jun 1999  
 13:30:48

10 dB/

CENTER 1.975 030 GHz  
 RES BW 300 Hz (i)  
 UBW 1 kHz  
 SPAN 150 kHz  
 SWP 11.3 sec

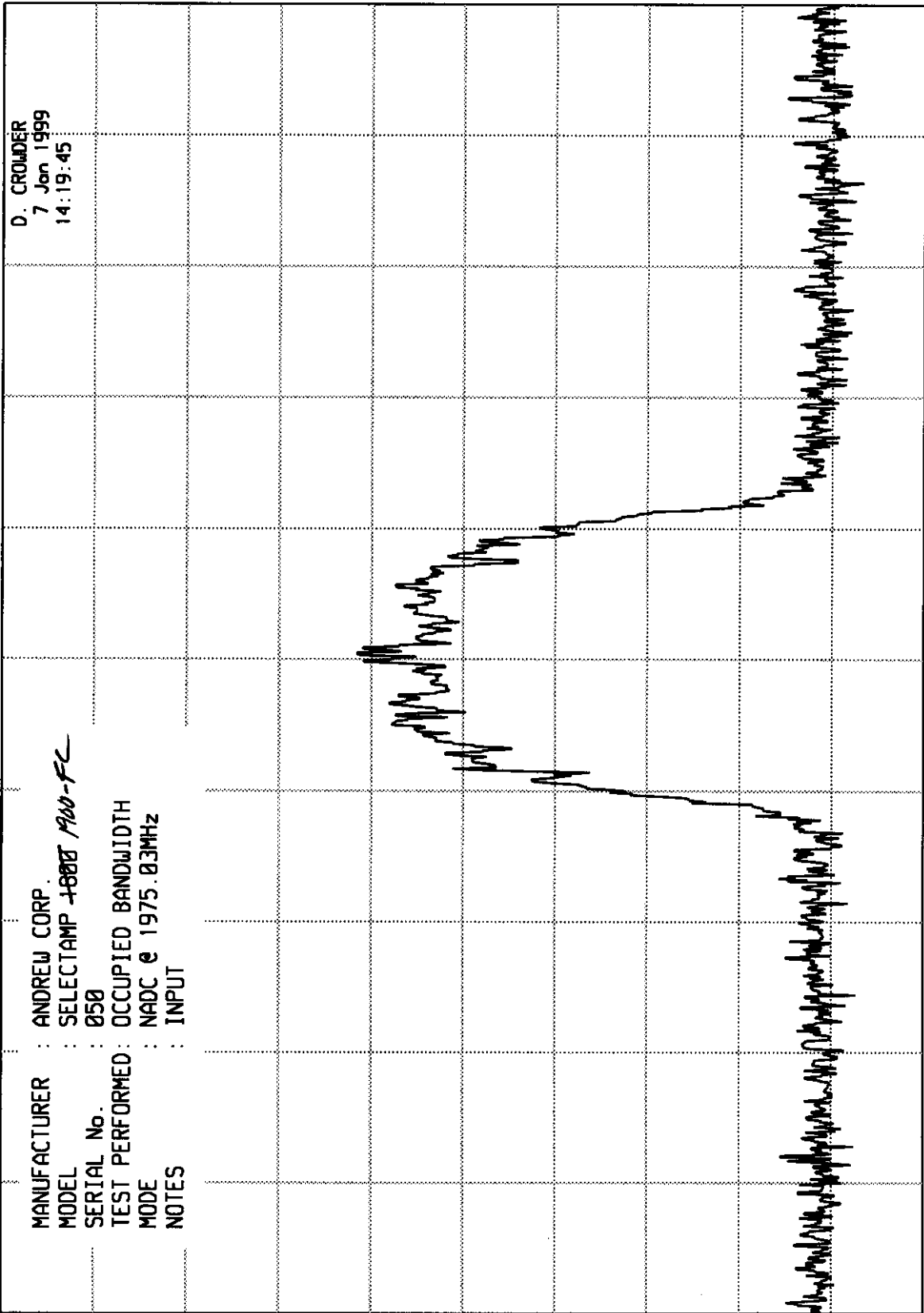
ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp

10 dB/

REF -30.0 dBm      ATTN 0 dB



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1000~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED: OCCUPIED BANDWIDTH  
 MODE : NADC @ 1975.03MHz  
 NOTES : INPUT

SPAN 150 kHz  
 SWP 11.3 sec

VBW 1 kHz

CENTER 1.975 030 GHz  
 RES BW 300 Hz(i)

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

ATTEN 40 dB + 40dB EXT

REF 23.0 dBm

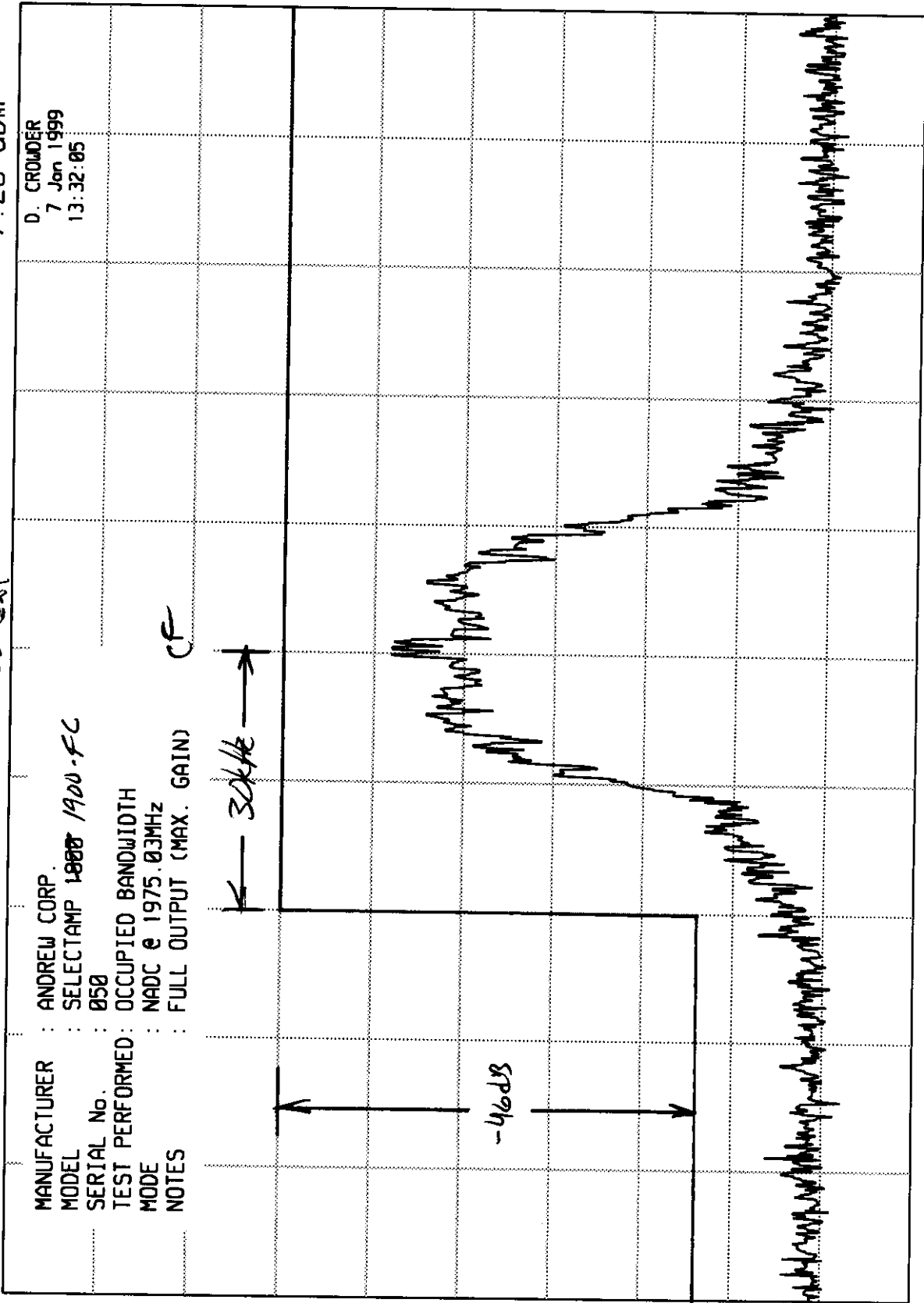
hp  
 10 dB/

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1800~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : NADC @ 1975.03MHz  
 NOTES : FULL OUTPUT (MAX. GAIN) CF

D. CROWDER  
 7 Jan 1999  
 13:32:05

← 30kHz →

-46dB



CENTER 1.975 030 GHz  
 RES BW 300 Hz(i)  
 UBW 1 kHz  
 SPAN 150 kHz  
 SWP 11.3 sec

ELITE ELECTRONIC ENGINEERING CO

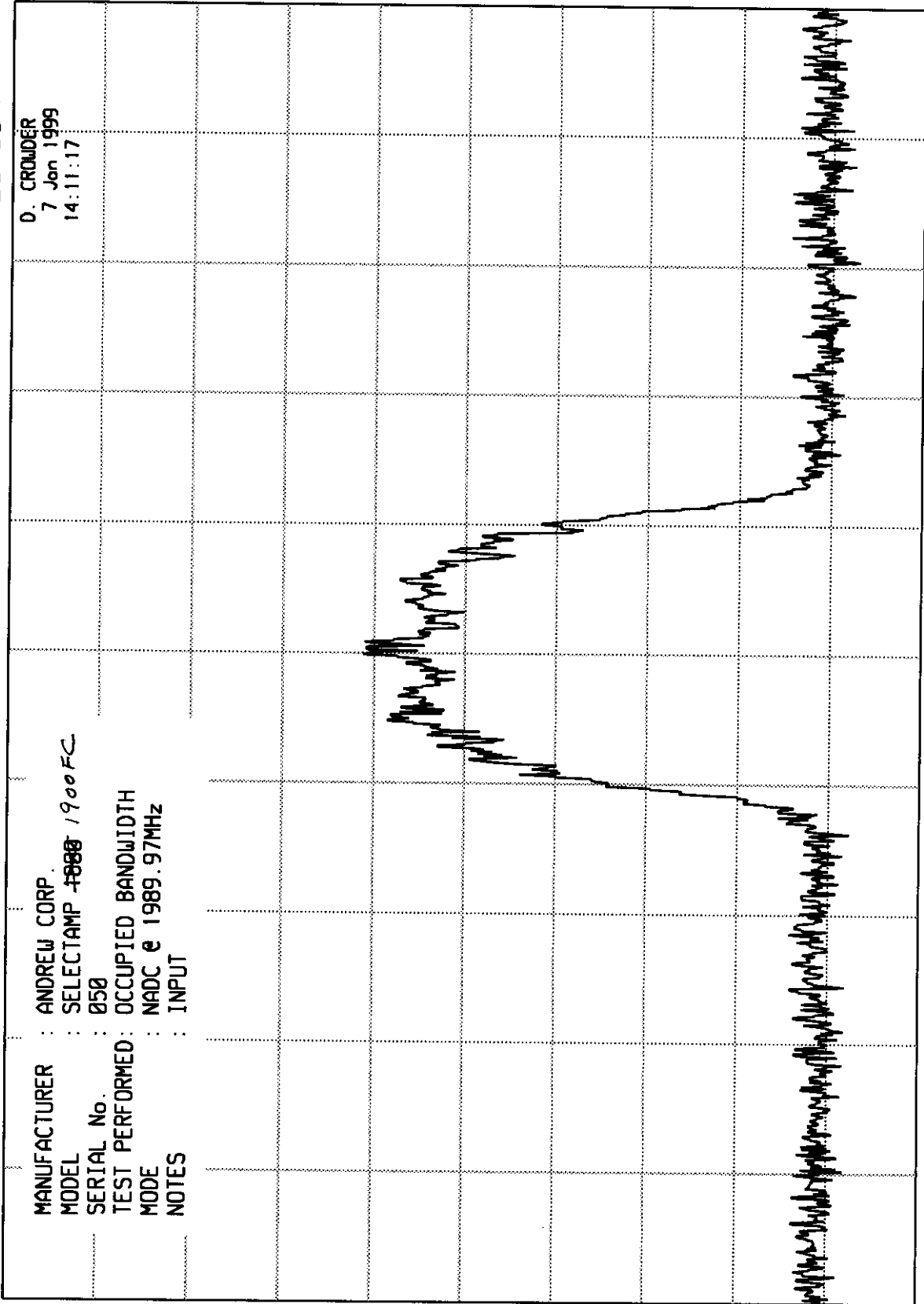
MKR 1.896 230 GHz  
 -7.20 dBm

hp REF -30.0 dBm

ATTEN 0 dB

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP #888 1900FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : NADC @ 1989.97MHz  
 NOTES : INPUT

D. CROWDER  
 7 Jan 1999  
 14:11:17



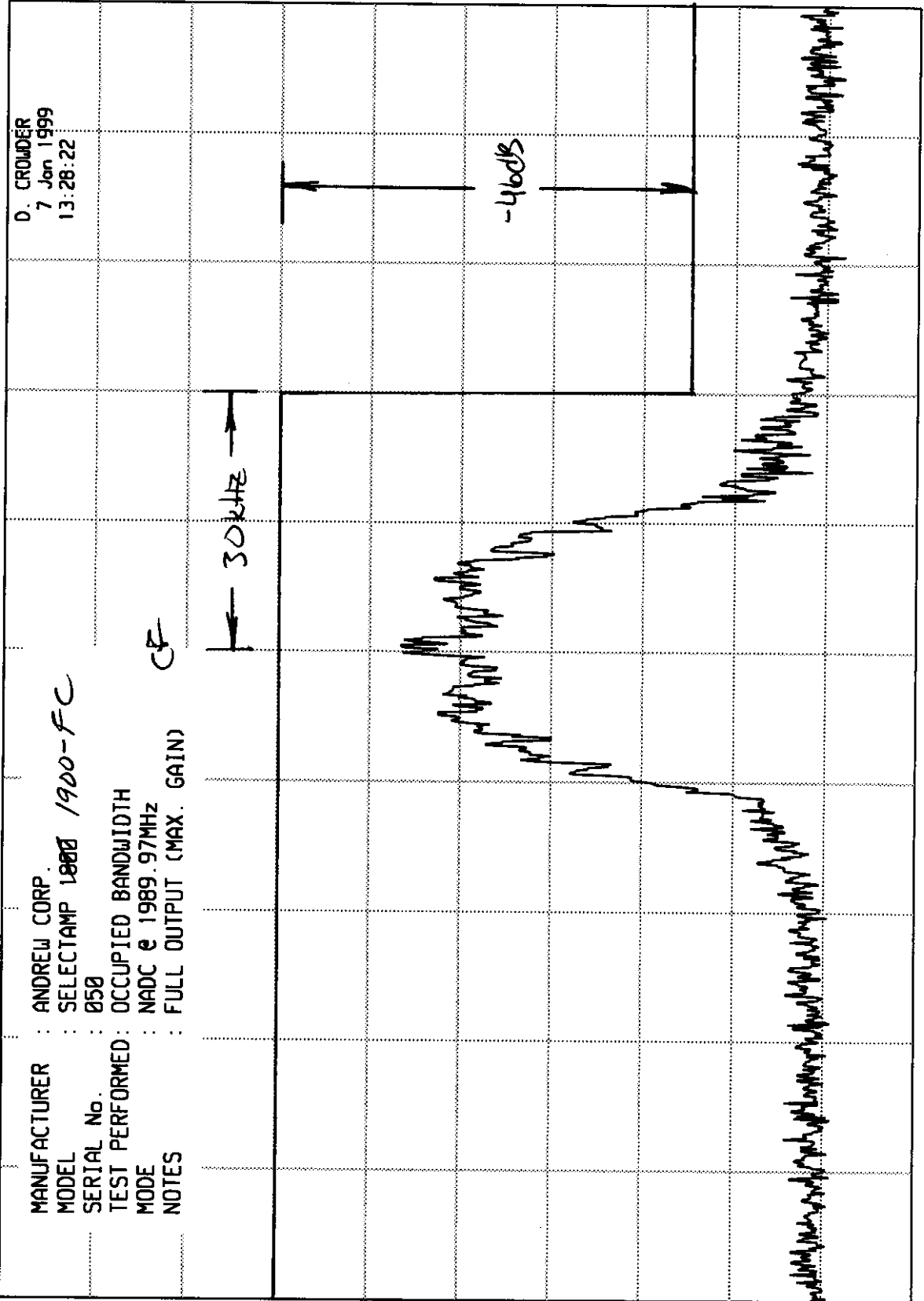
CENTER 1.989 970 GHz  
 RES BW 300 Hz (i)  
 UBW 1 kHz  
 SPAN 150 kHz  
 SWP 11.3 sec



ELITE ELECTRONIC ENGINEERING CO

hp  
 10 dB/  
 MKR 1.896 230 GHz  
 -7.20 dBm

REF 23.0 dBm  
 ATTEN 40 dB +40 dB Ext



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : NADC @ 1989.97MHz  
 NOTES : FULL OUTPUT (MAX. GAIN) CF

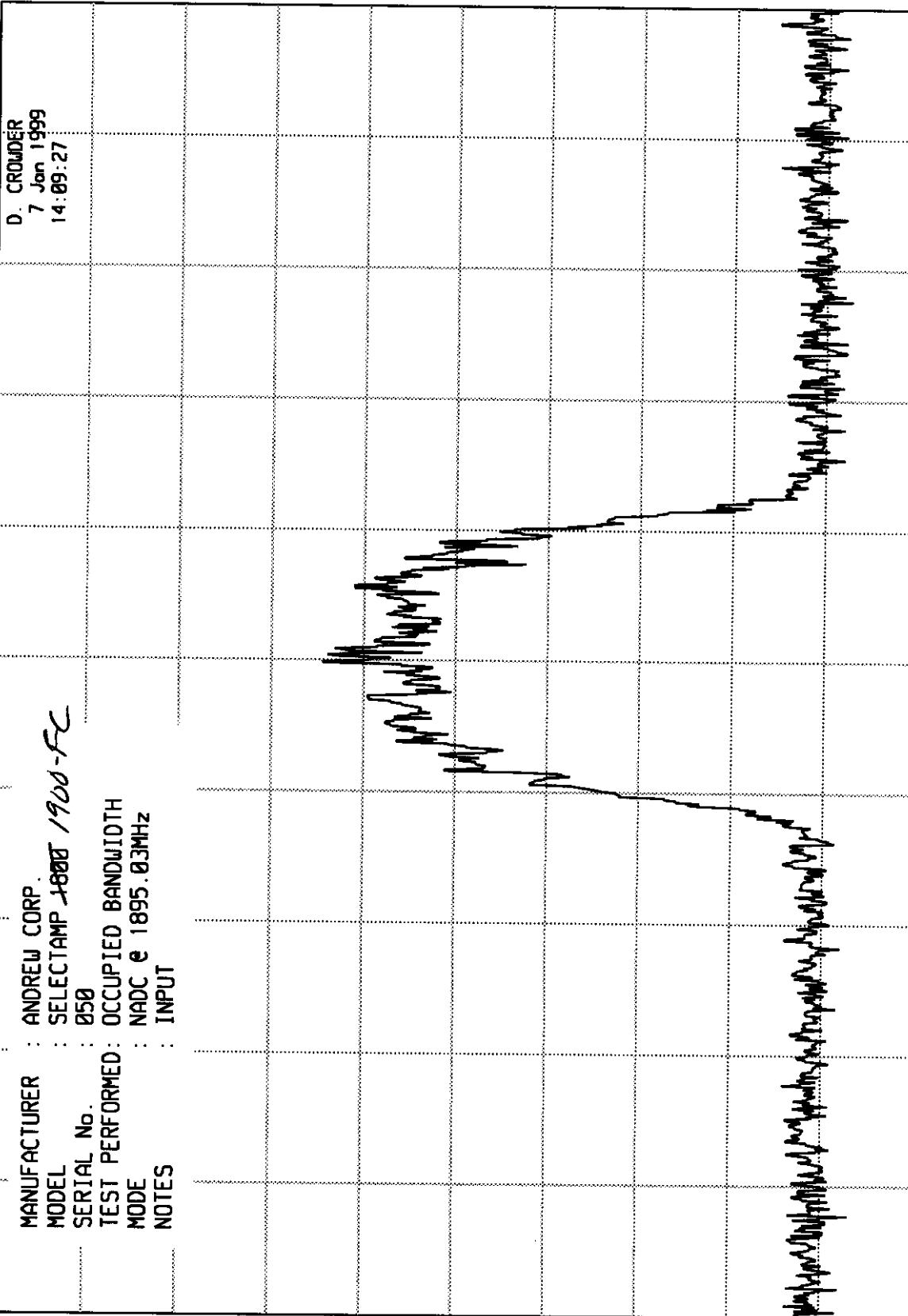
D. CROWDER  
 7 Jan 1999  
 13:28:22

CENTER 1.989 970 GHz  
 RES BW 300 Hz(i)  
 UBW 1 kHz  
 SPAN 150 kHz  
 SWP 11.3 sec

ELITE ELECTRONIC ENGINEERING CO

MRK 1.896 230 GHz  
 -7.20 dBm

REF -30.0 dBm  
 ATTN 0 dB



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1800~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : NADC e 1895.03MHz  
 NOTES : INPUT

D. CROWDER  
 7 Jan 1999  
 14:09:27

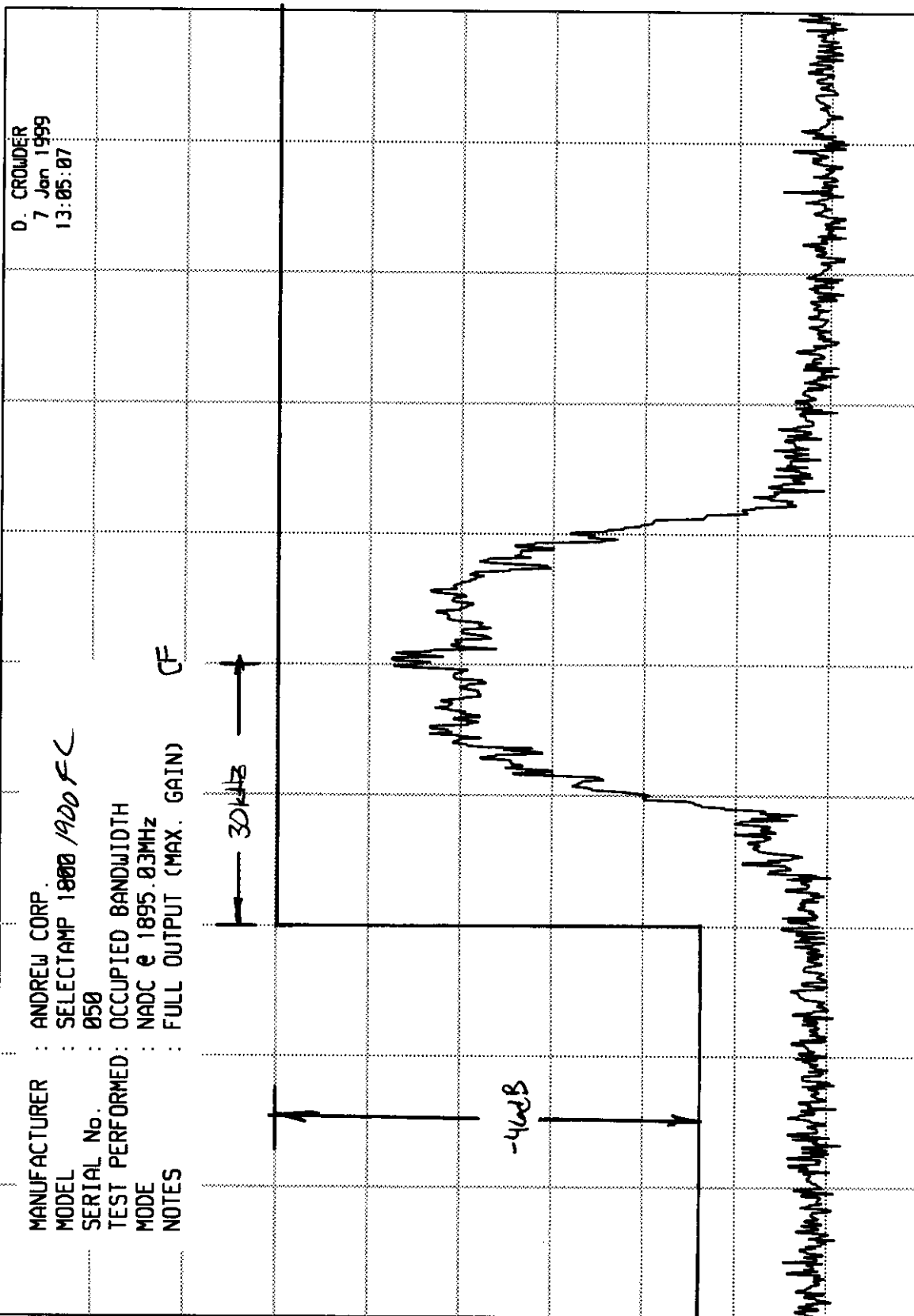
CENTER 1.895 030 GHz  
 RES BW 300 Hz(i)  
 VBW 1 kHz  
 SPAN 150 kHz  
 SWP 11.3 sec

hp  
 10 dB/

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

REF 23.0 dBm  
 ATTN 40 dB + 40 dB EXT



D. CROWDER  
 7 Jan 1999  
 13:05:07

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1000 / 1900 FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : NADC @ 1895.03MHz  
 NOTES : FULL OUTPUT (MAX. GAIN) CF

CENTER 1.895 030 GHz  
 RES BW 300 Hz (i)  
 UBW 1 kHz  
 SPAN 150 kHz  
 SWP 11.3 sec

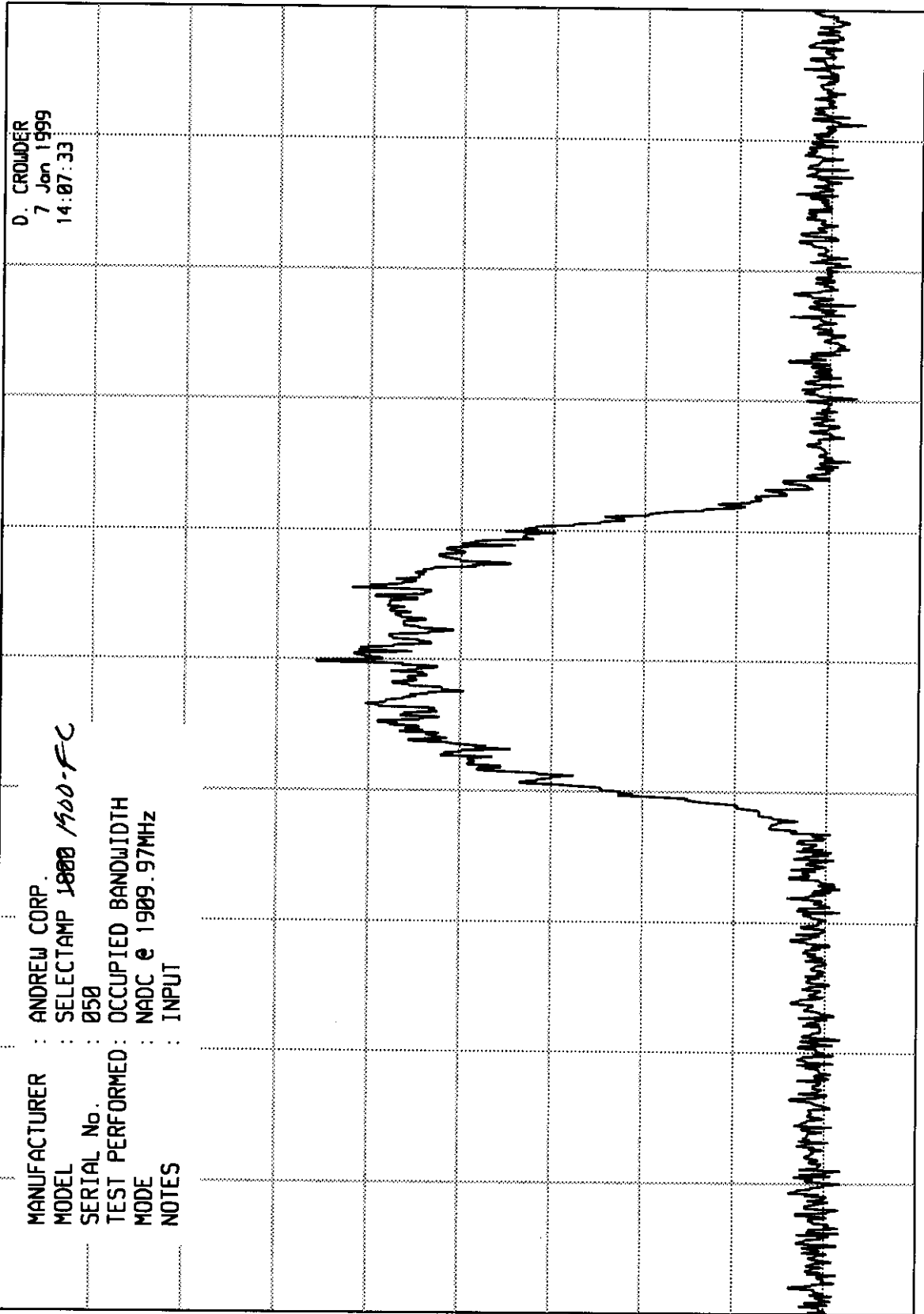
hp

10 dB/

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

REF -30.0 dBm  
 ATTN 0 dB



SPAN 150 kHz  
 SWP 11.3 sec

VBW 1 kHz

CENTER 1.909 970 GHz  
 RES BW 300 Hz (i)

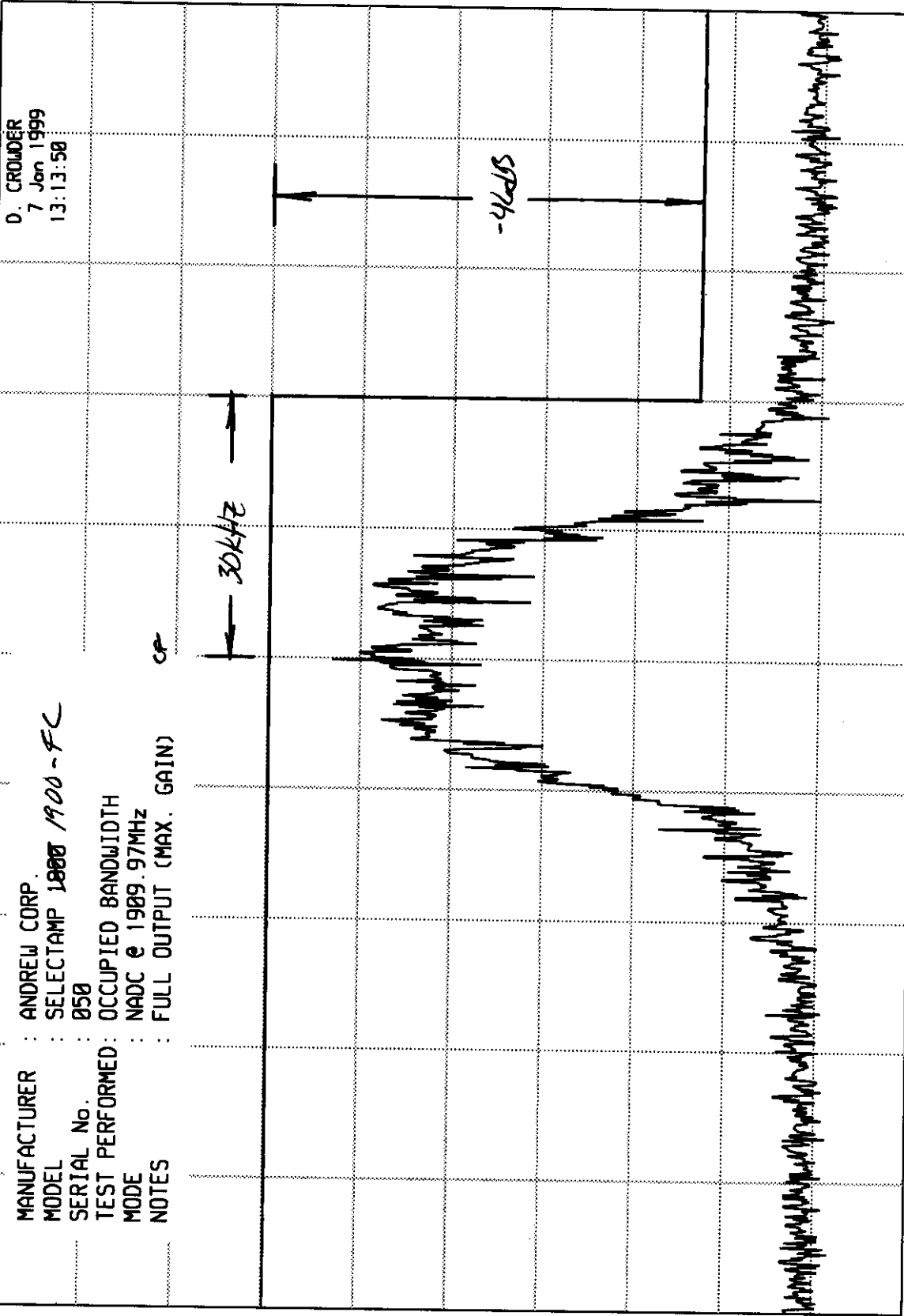
hp 10 dB/

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

REF 23.0 dBm  
 ATTN 40 dB + 40 dB EXT

hp  
 10 dB/



D. CROWDER  
 7 Jan 1999  
 13:13:58

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : NADC @ 1909.97MHz  
 NOTES : FULL OUTPUT (MAX. GAIN) CP

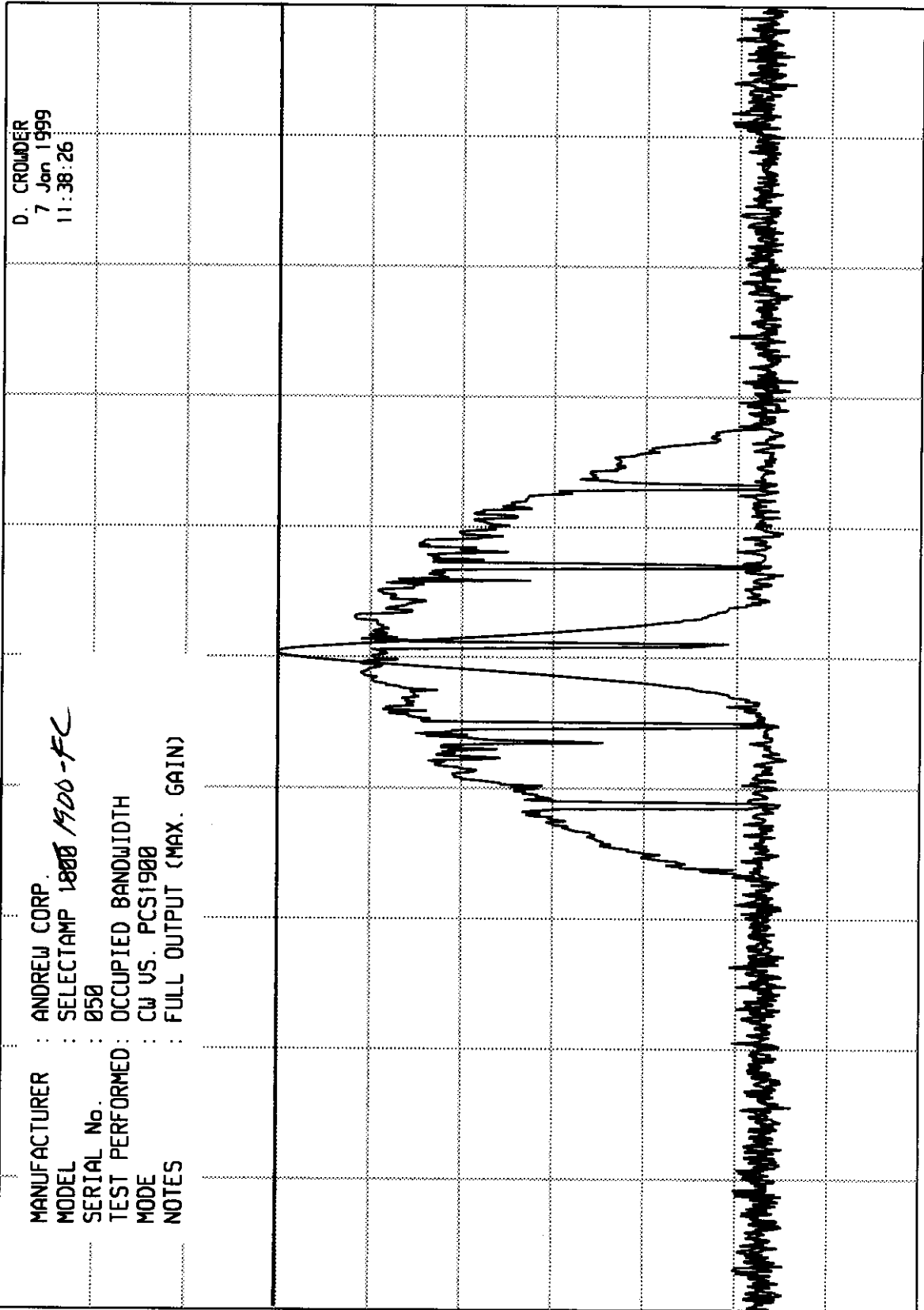
CENTER 1.909 970 GHz  
 RES BW 300 Hz (1)  
 UBW 1 kHz  
 SPAN 150 kHz  
 SWP 11.3 sec

ELITE ELECTRONIC ENGINEERING CO

MRK 1.896 230 GHz  
 -7.20 dBm

REF 23.0 dBm  
 ATTN 40 dB +40dB EXT

hp 10 dB/

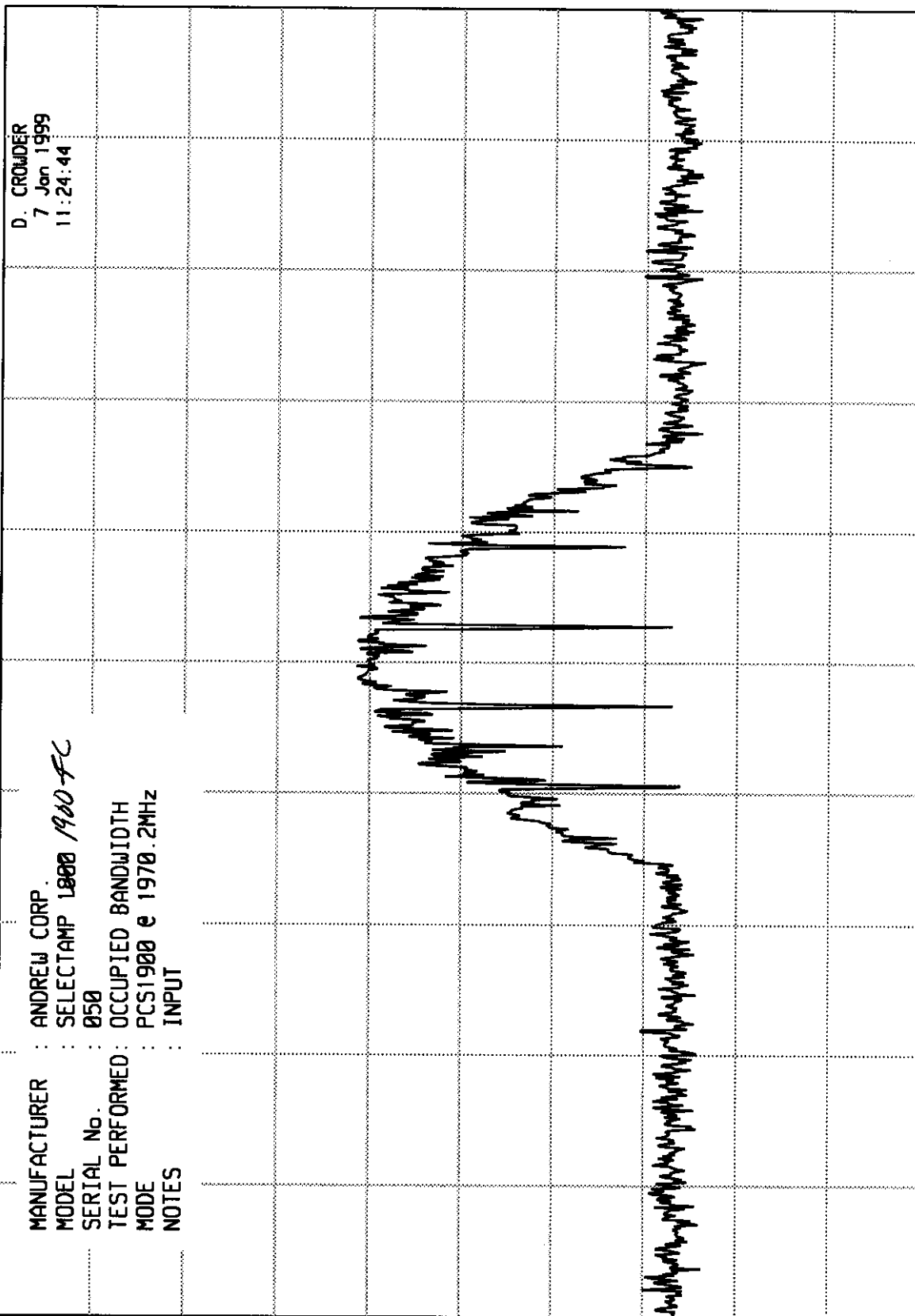


ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp REF -30.0 dBm

ATTEN 0 dB



D. CROWDER  
 7 Jan 1999  
 11:24:44

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900 FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : PCS1900 e 1970.2MHz  
 NOTES : INPUT

SPAN 1.00 MHz  
 SWP 75.0 msec

VBW 30 kHz

CENTER 1.970 20 GHz  
 RES BW 10 kHz(i)

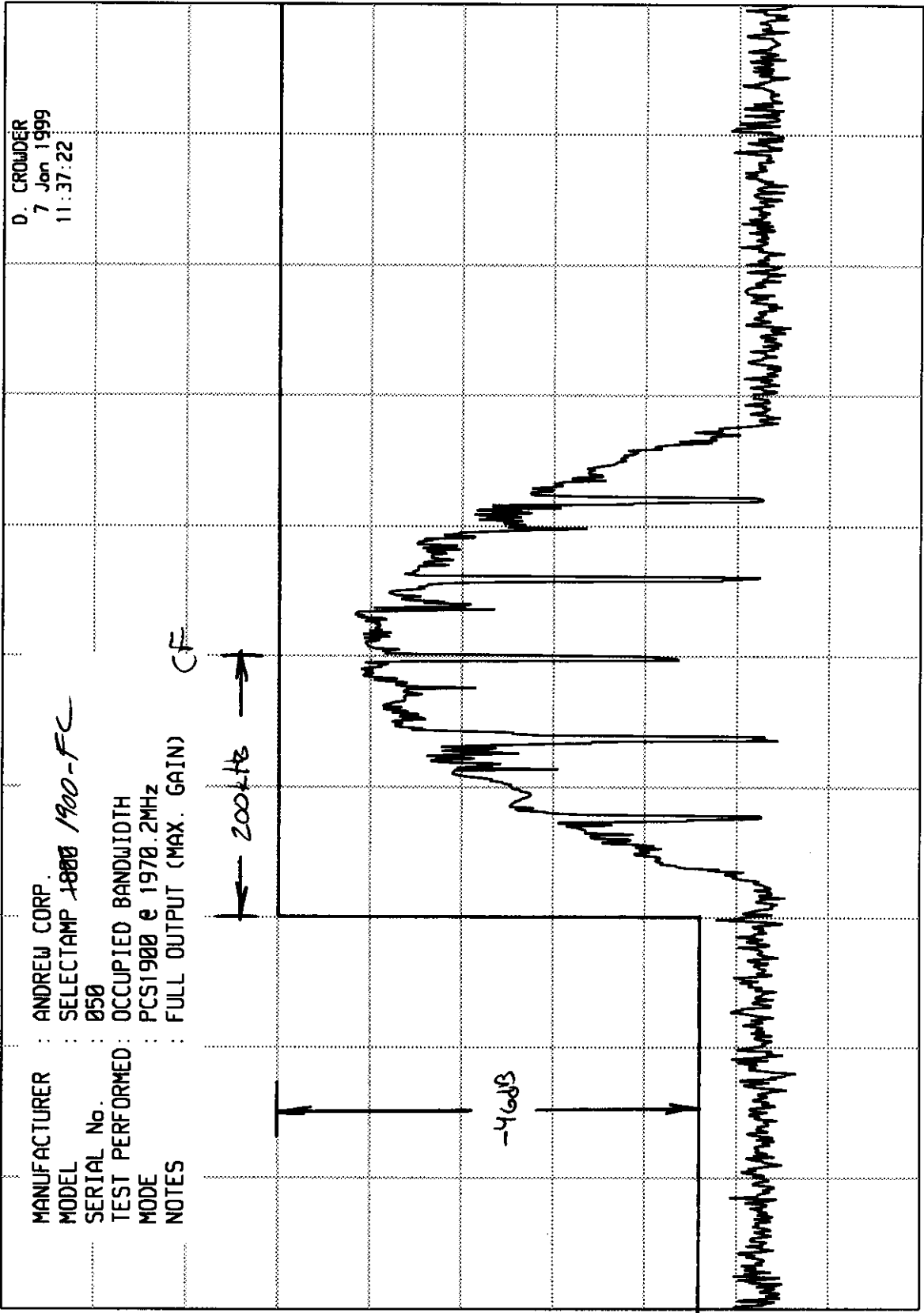
10 dB/

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

REF 23.0 dBm

ATTEN 40 dB + 40 dB S&T.



D. CROWDER  
 7 Jan 1999  
 11:37:22

hp  
 10 dB/

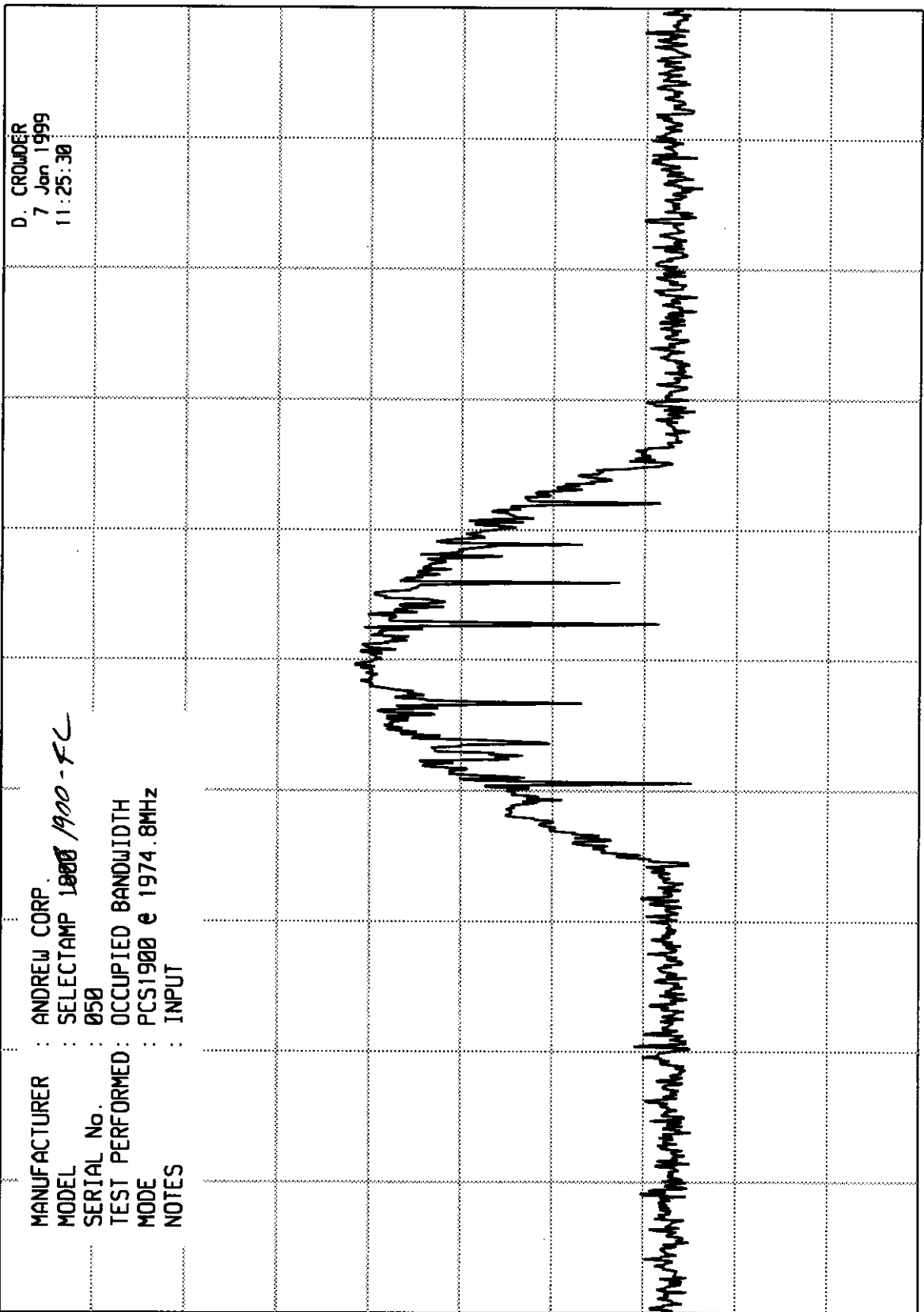
CENTER 1.970 20 GHz  
 RES BW 10 kHz(i)  
 VBW 30 kHz  
 SPAN 1.00 MHz  
 SWP 75.0 msec



ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

REF -30.0 dBm  
 ATTN 0 dB



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : PCS1900 e 1974.8MHz  
 NOTES : INPUT

D. CROWDER  
 7 Jan 1999  
 11:25:30

CENTER 1.974 80 GHz  
 RES BW 10 kHz (i)  
 VBW 30 kHz  
 SPAN 1.00 MHz  
 SWP 75.0 msec

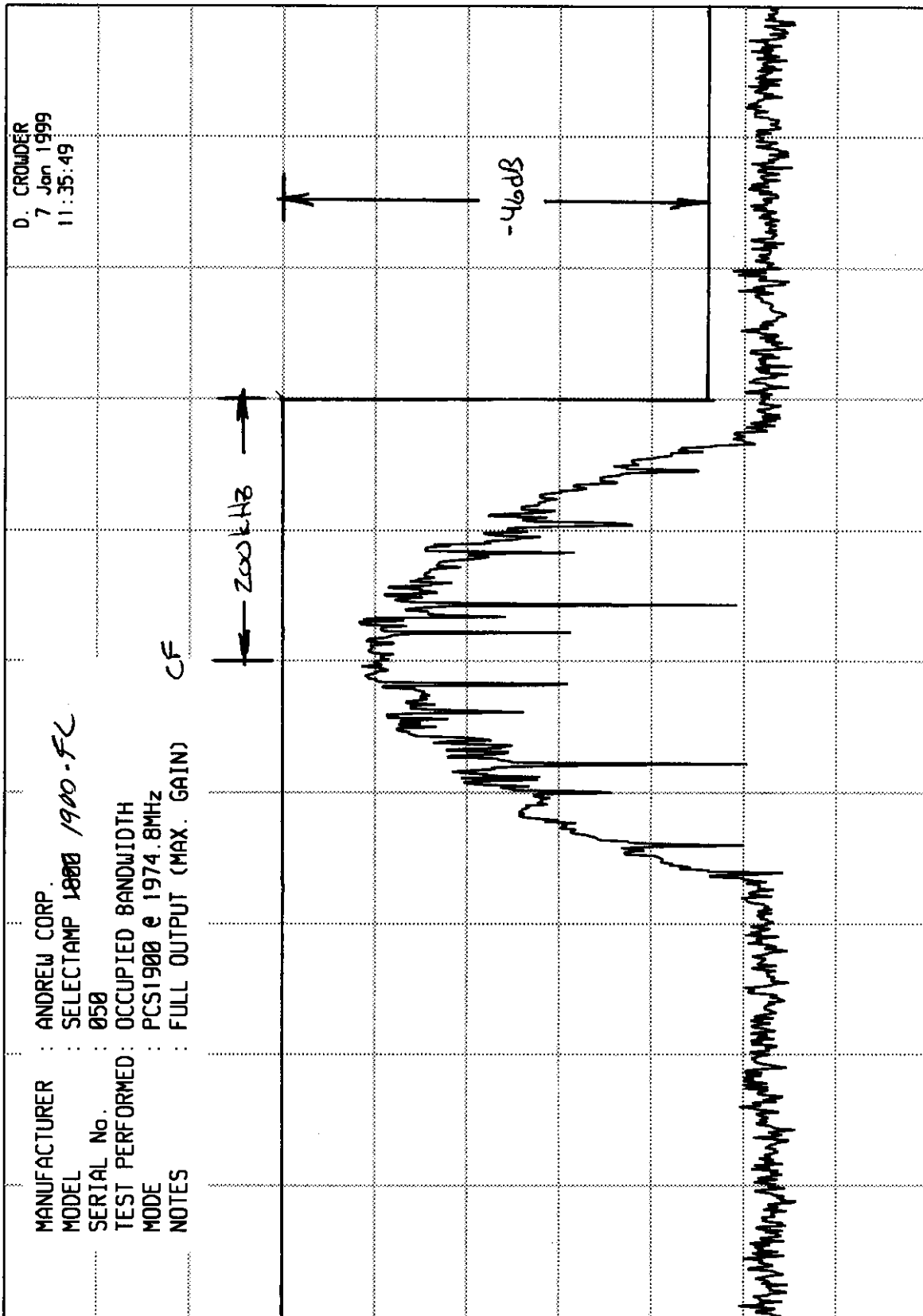
hp

10 dB/

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

REF 23.0 dBm  
 ATTEN 40 dB + 40 dB EXT.



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : PCS1900 e 1974.8MHz  
 NOTES : FULL OUTPUT (MAX. GAIN) CF

D. CROWDER  
 7 Jan 1999  
 11:35:49

hp  
 10 dB/

CENTER 1.974 80 GHz  
 RES BW 10 kHz(i)  
 UBW 30 kHz  
 SPAN 1.00 MHz  
 SWP 75.0 msec

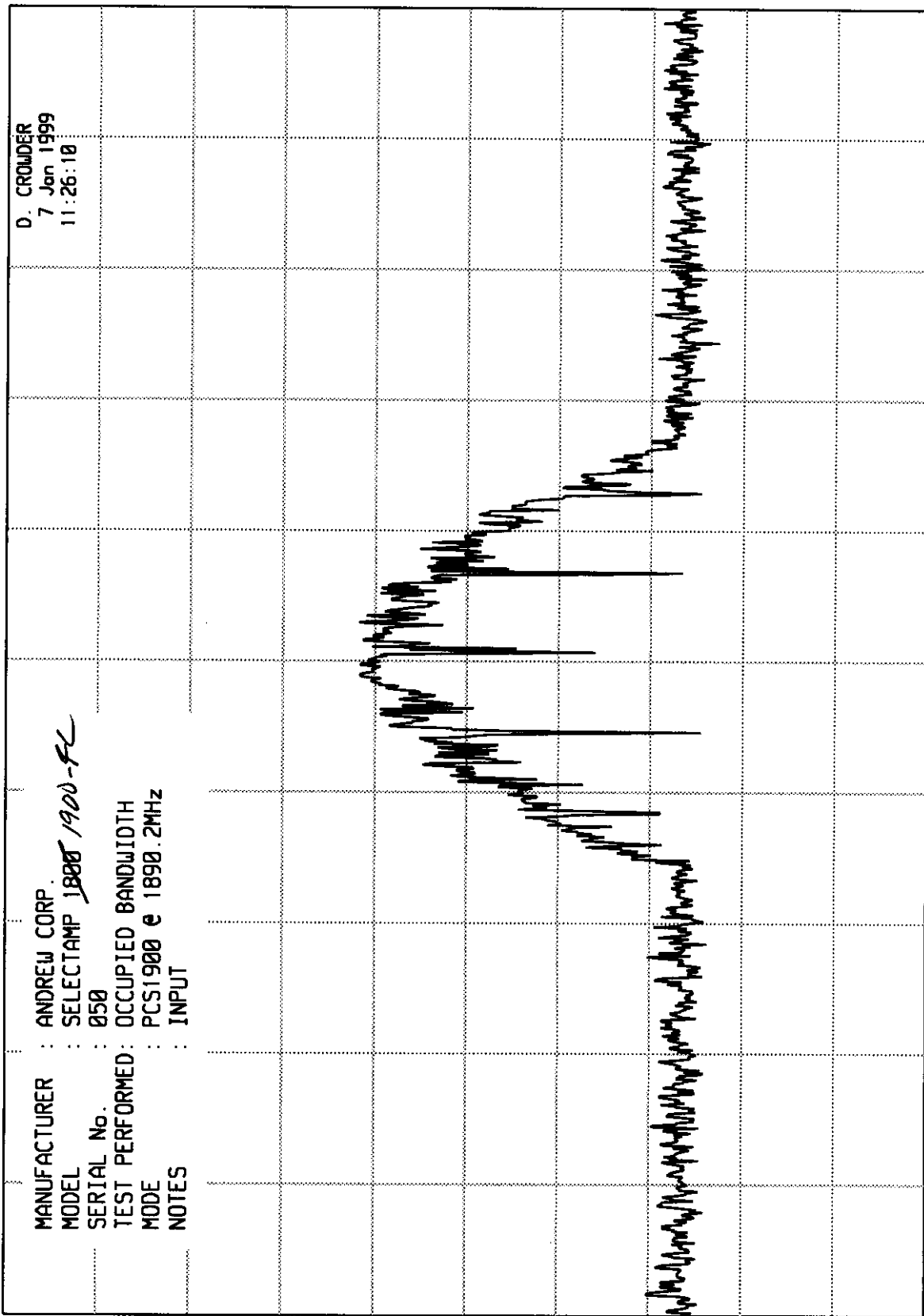
ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp REF -30.0 dBm

ATTEN 0 dB

10 dB/



SPAN 1.00 MHz  
 SWP 75.0 msec

VBW 30 kHz

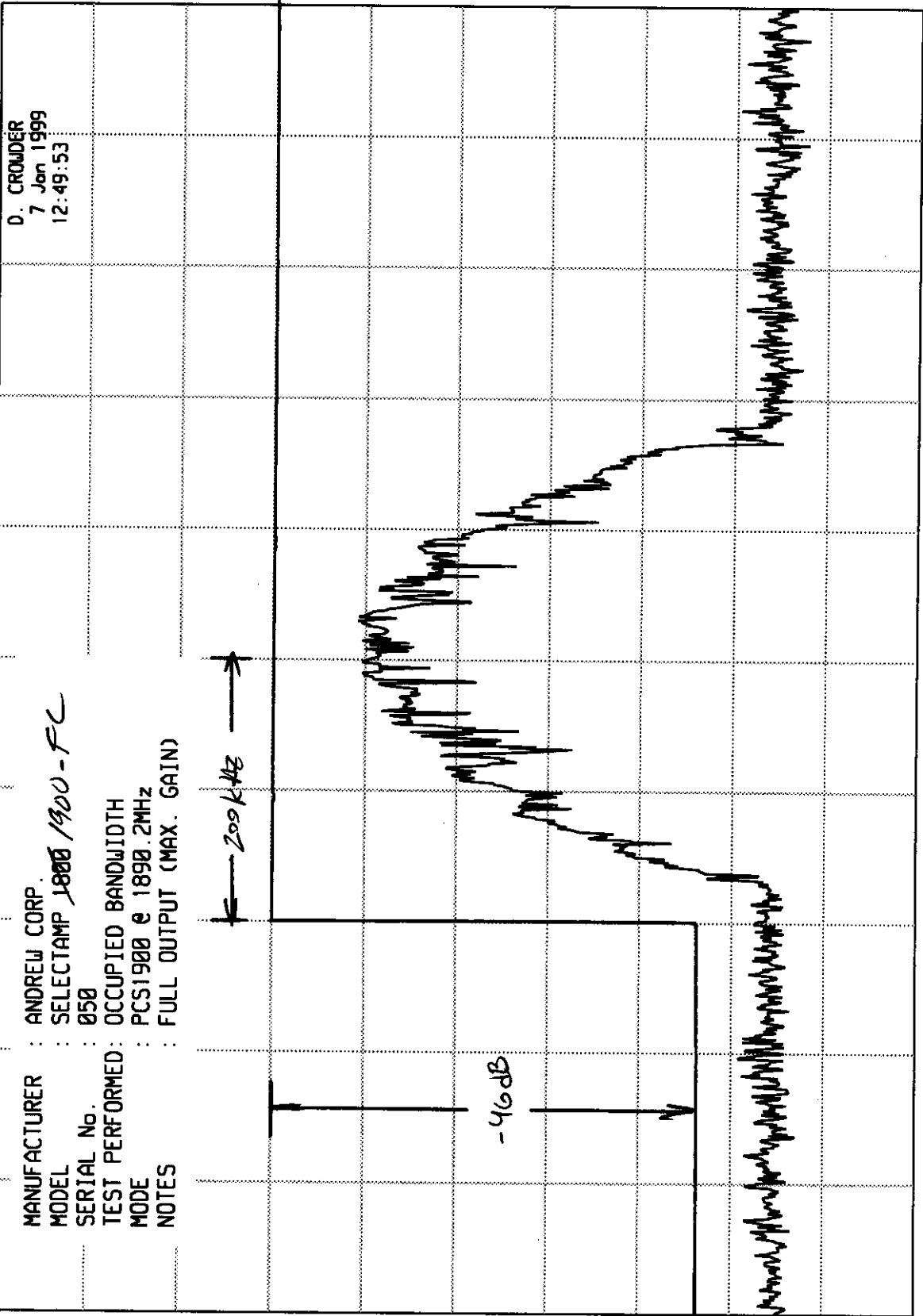
CENTER 1.890 20 GHz  
 RES BW 10 kHz(i)

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

ATTEN 40 dB +40 dB  $\times 7$

REF 23.0 dBm



D. CROWDER  
 7 Jan 1999  
 12:49:53

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 058  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : PCS1900 e 1890.2MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

SPAN 1.00 MHz  
 SWP 75.0 msec

VBW 30 kHz

CENTER 1.890 20 GHz  
 RES BW 10 kHz (i)

hp

10 dB/

ENGINEERING TEST REPORT NO. 21337

DATA SHEET

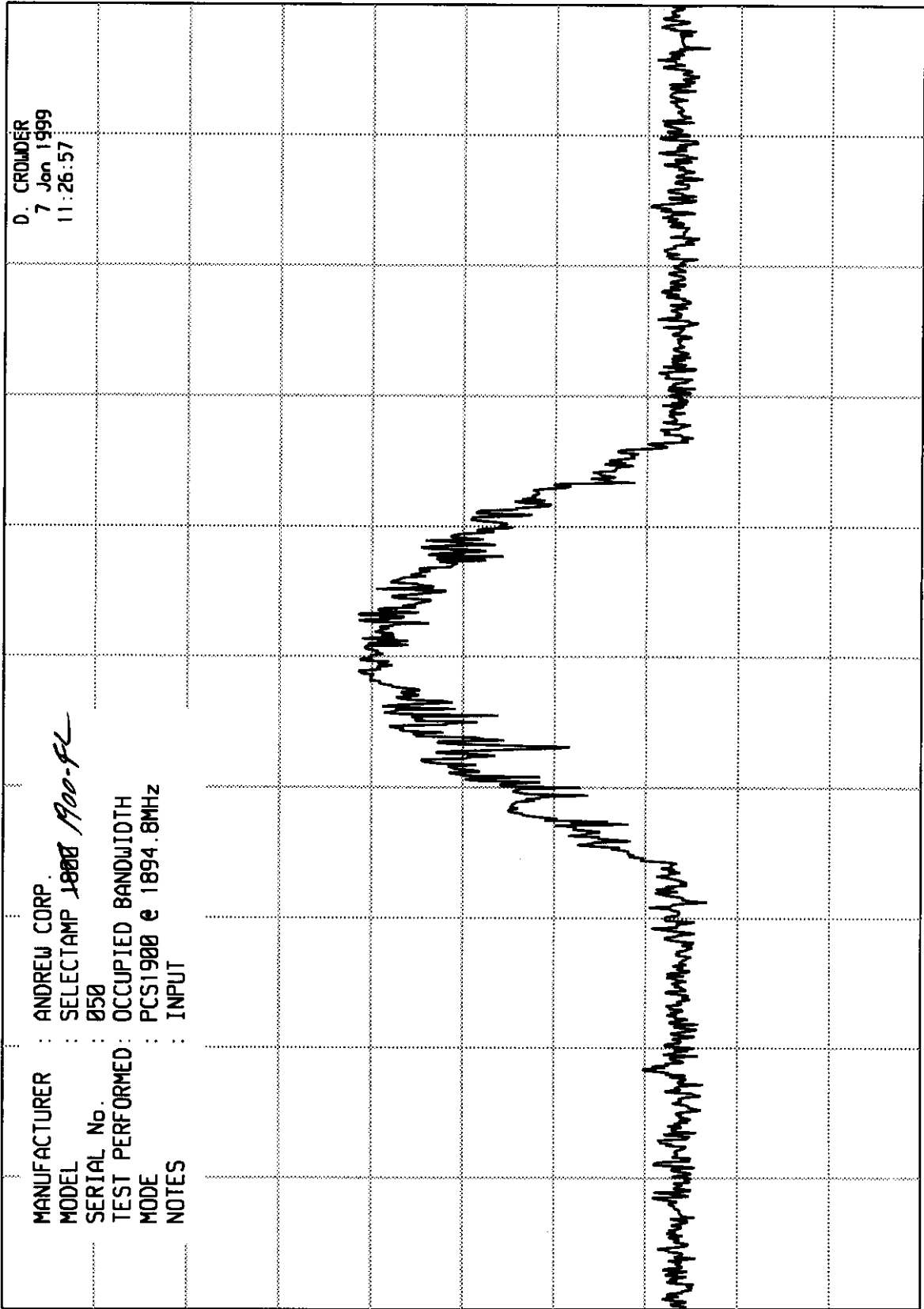
ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
-7.20 dBm

hp

10 dB/

REF -30.0 dBm      ATTN 0 dB



D. CROWDER  
7 Jan 1999  
11:26:57

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 *1900-FL*  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : PCS1900 e 1894.8MHz  
 NOTES : INPUT

SPAN 1.00 MHz  
SWP 75.0 msec

VBW 30 kHz

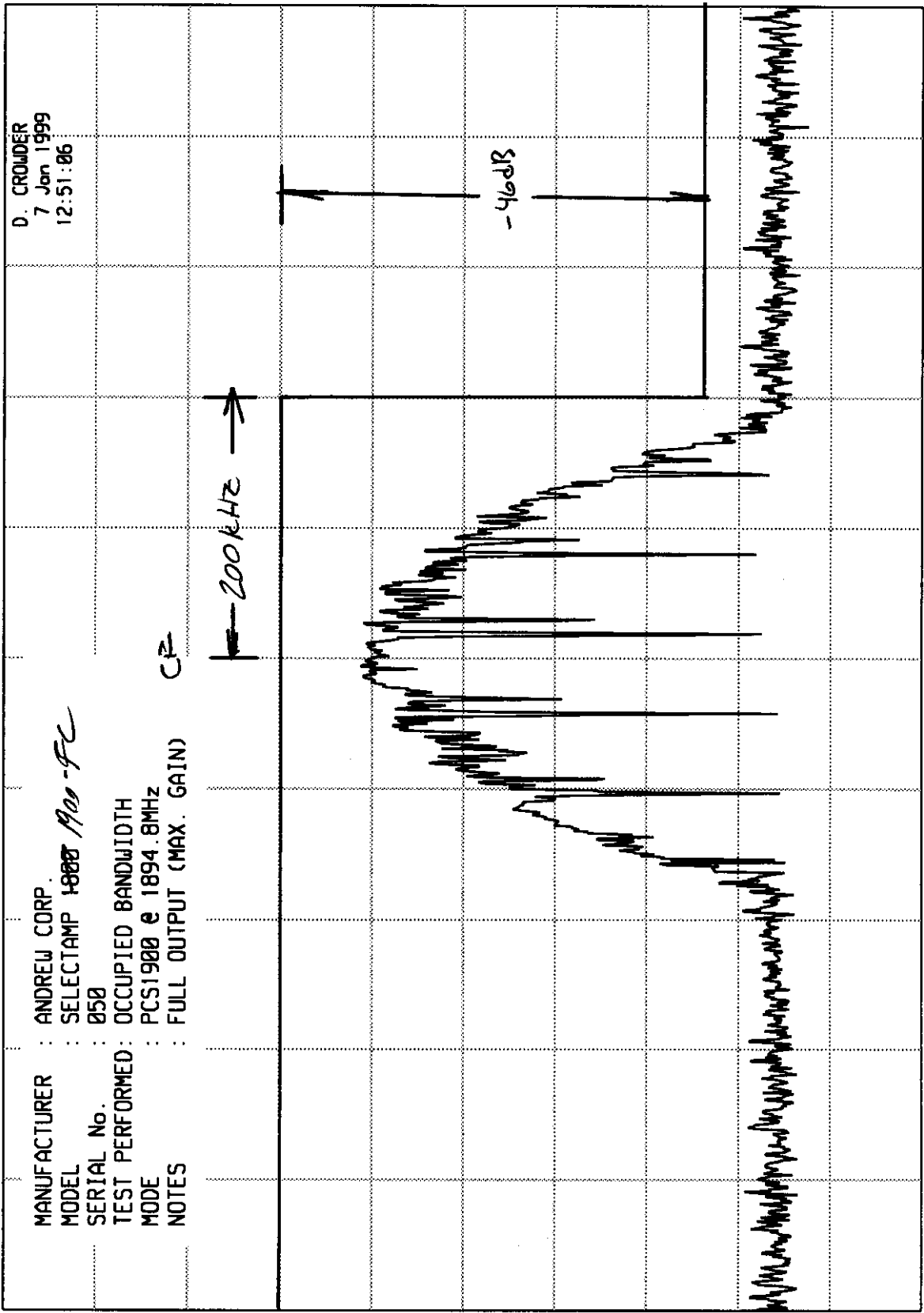
CENTER 1.894 80 GHz  
RES BW 10 kHz(i)

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp REF 23.0 dBm

ATTEN 40 dB + 40 dB EXT.



D. CROWDER  
 7 Jan 1999  
 12:51:06

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1800~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : PCS1900 e 1894.8MHz  
 NOTES : FULL OUTPUT (MAX. GAIN) CP

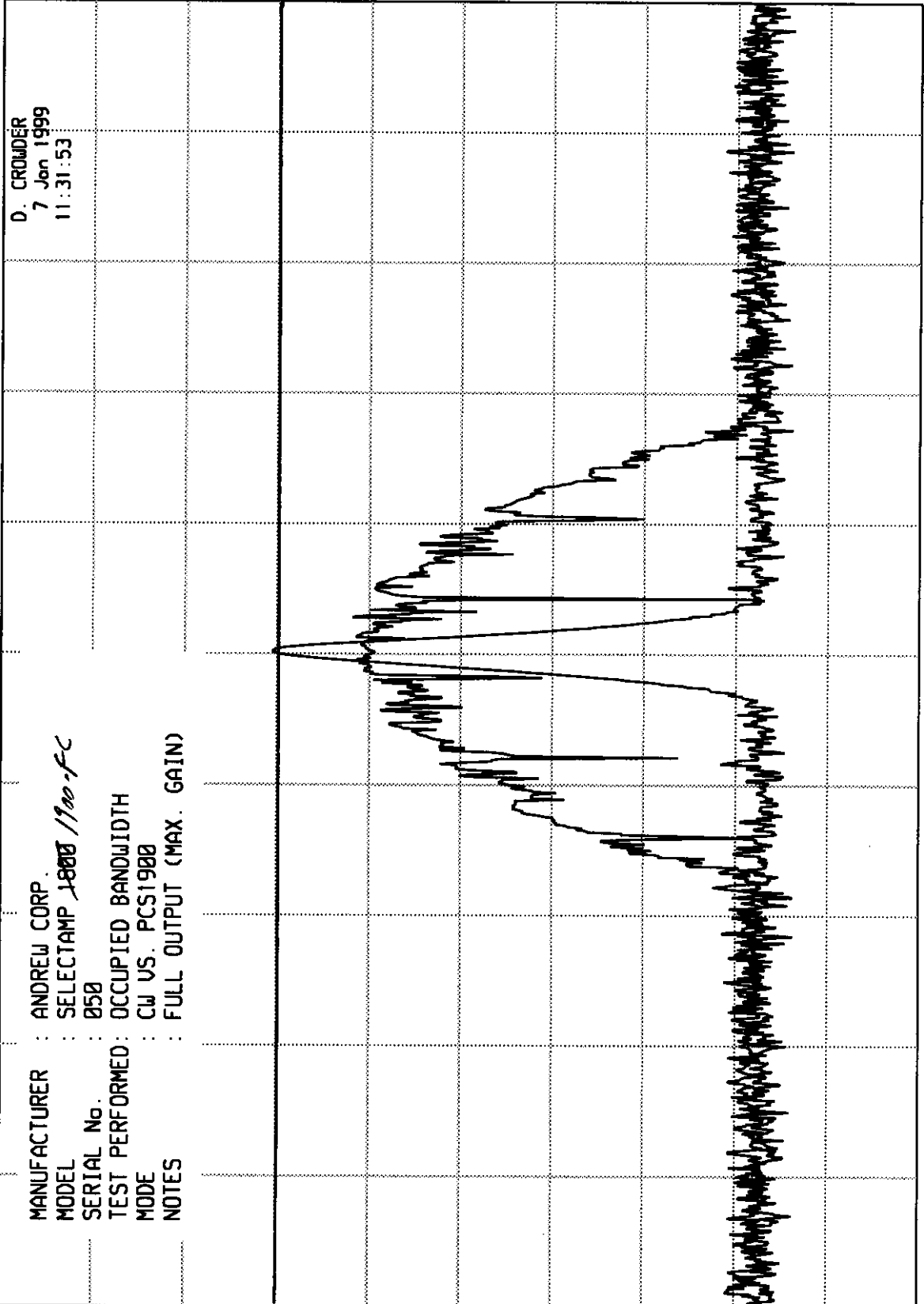
10 dB/

CENTER 1.894 80 GHz  
 RES BW 10 kHz(i)  
 UBW 30 kHz  
 SPAN 1.00 MHz  
 SWP 75.0 msec

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

REF 23.0 dBm  
 ATTN 40 dB 40 dB 60 dB



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 / 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : CW VS. PCS1900  
 NOTES : FULL OUTPUT (MAX. GAIN)

D. CROWDER  
 7 Jun 1999  
 11:31:53

SPAN 1.00 MHz  
 SWP 75.0 msec

VBW 30 kHz

CENTER 1.975 20 GHz  
 RES BW 10 kHz(i)

hp

10 dB/

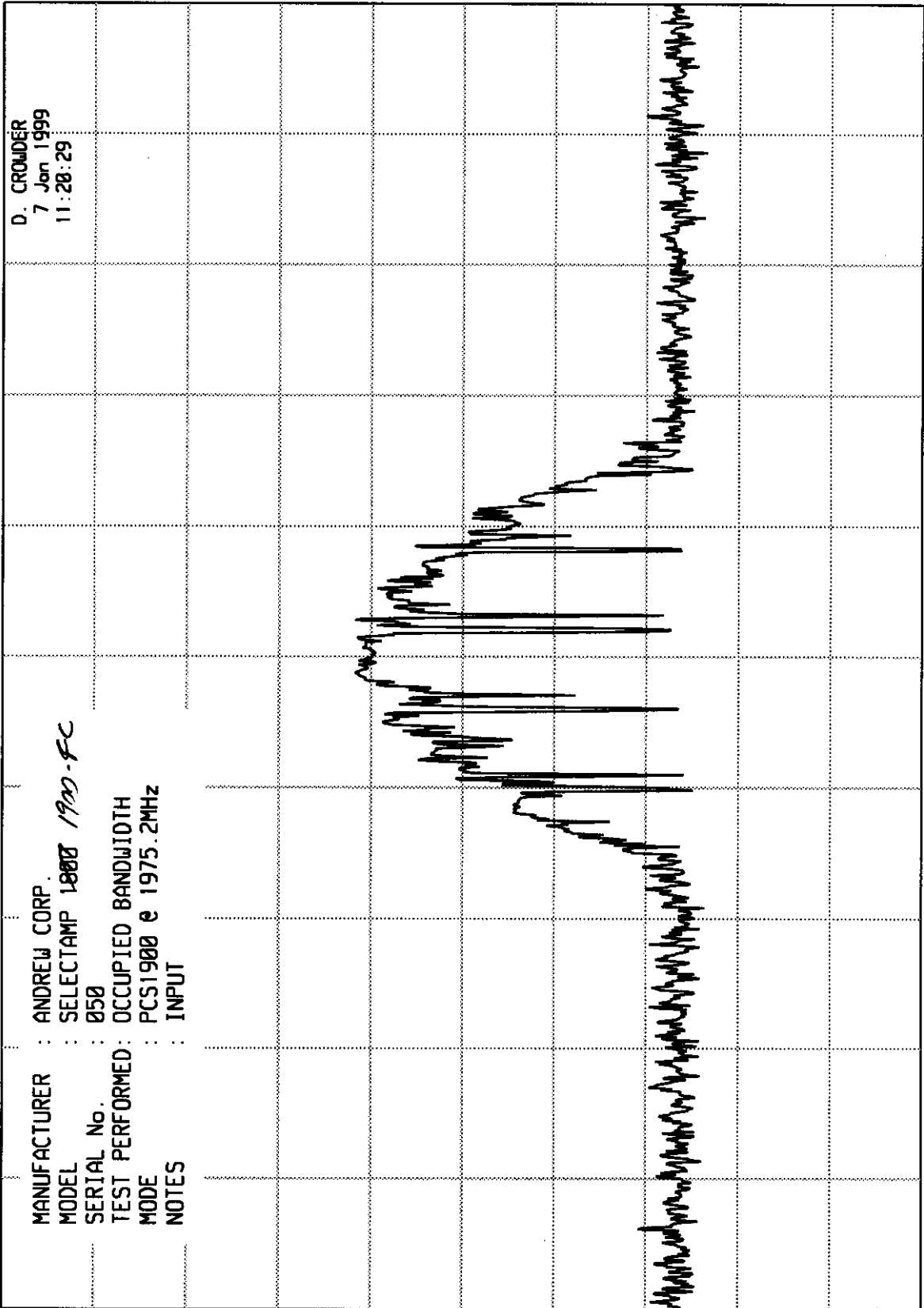
ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp

10 dB/

REF -30.0 dBm ATTN 0 dB



SPAN 1.00 MHz  
 SWP 75.0 msec

VBW 30 kHz

CENTER 1.975 20 GHz  
 RES BW 10 kHz(i)

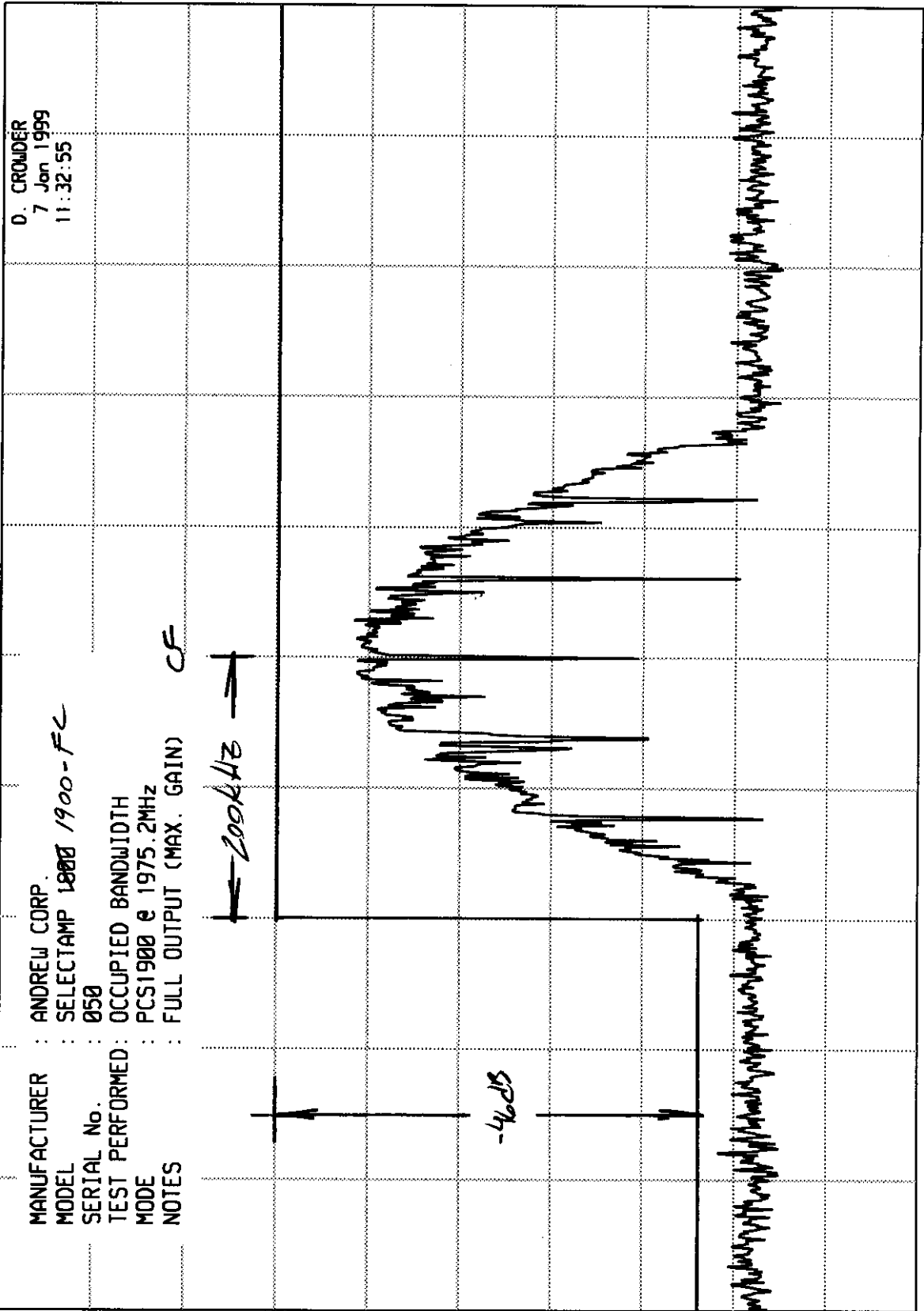


ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp REF 23.0 dBm

ATTEN 40 dB + 40 dB EXT



10 dB/

SPAN 1.00 MHz  
 SWP 75.0 msec

VBW 30 kHz

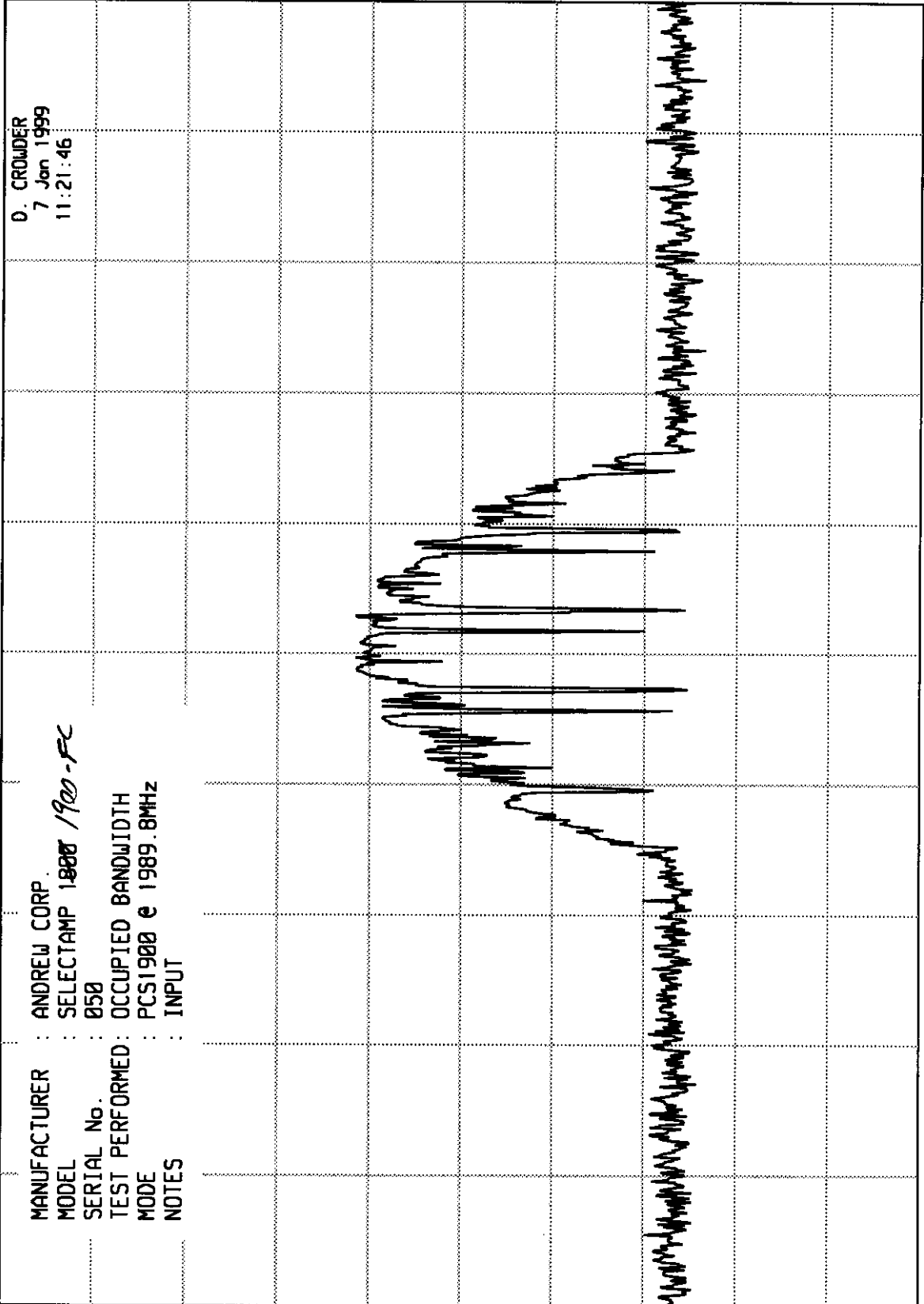
CENTER 1.975 20 GHz  
 RES BW 10 kHz(i)

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp REF -30.0 dBm

ATTEN 0 dB



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 / 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : PCS1900 e 1989.8MHz  
 NOTES : INPUT

D. CROWDER  
 7 Jan 1999  
 11:21:46

10 dB/

138

CENTER 1.989 80 GHz  
 RES BW 10 kHz(i)  
 SPAN 1.00 MHz  
 SWP 75.0 msec

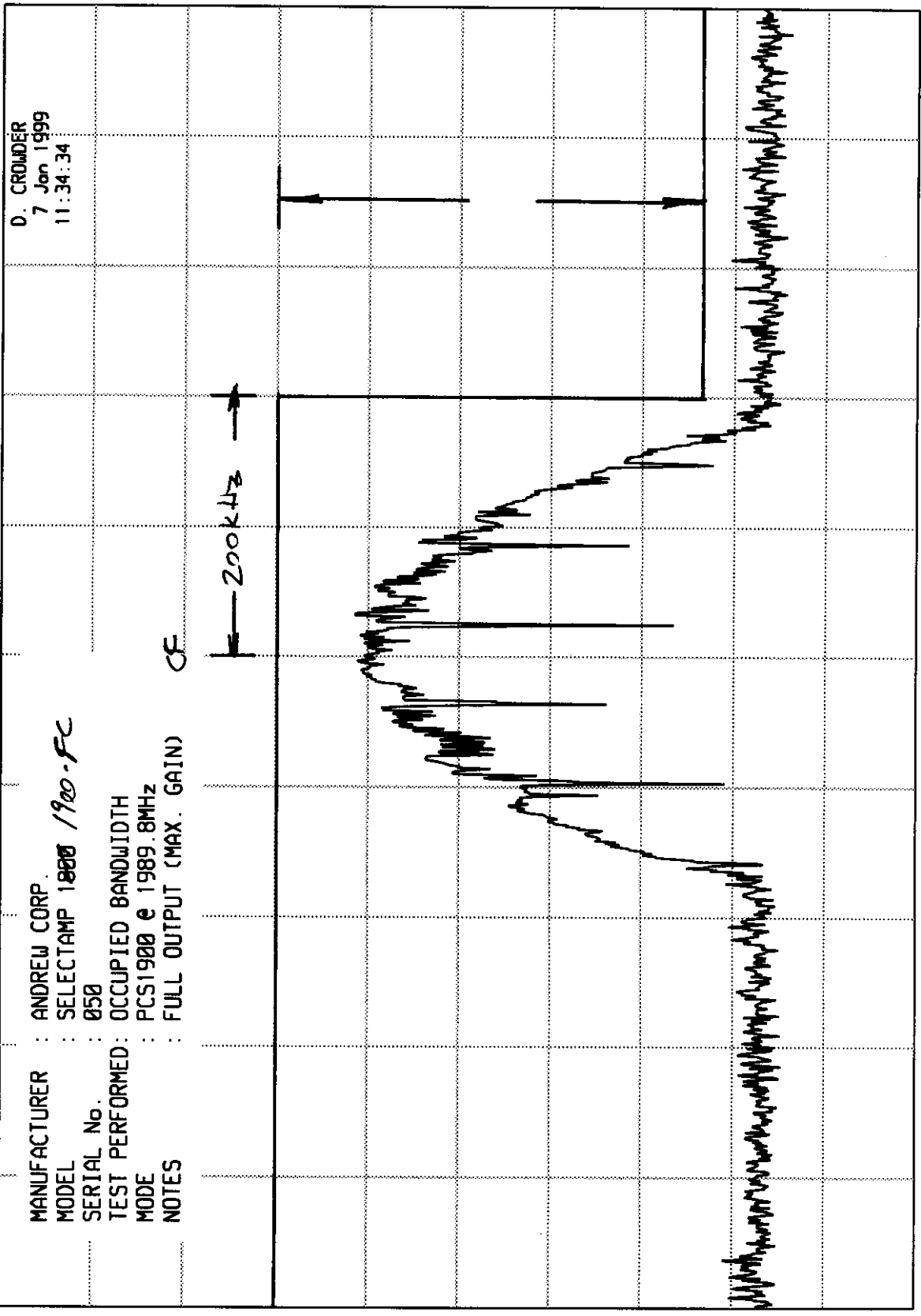
UBW 30 kHz

ATTEN 0 dB

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

REF 23.0 dBm  
 ATTEN 40 dB + 40 dB EXT.



D. CROWDER  
 7 Jan 1999  
 11:34:34

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 / 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED: OCCUPIED BANDWIDTH  
 MODE : PCS1900 e 1989.8MHz  
 NOTES : FULL OUTPUT (MAX. GAIN) CF

hp

10 dB/

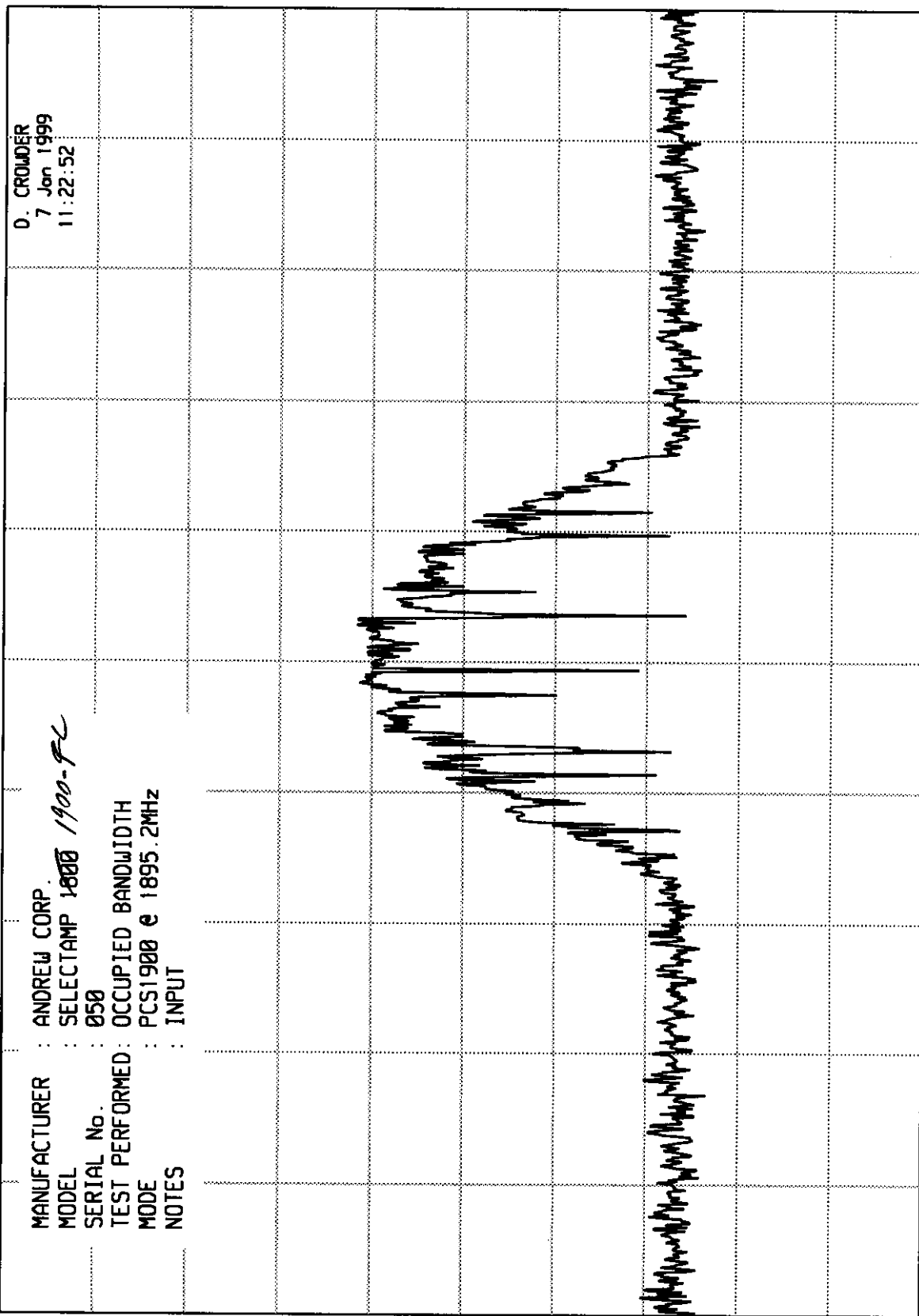
CENTER 1.989 80 GHz  
 RES BW 10 kHz (i)  
 UBW 30 kHz  
 SPAN 1.00 MHz  
 SWP 75.0 msec

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp REF -30.0 dBm

ATTEN 0 dB



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FL  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : PCS1900 e 1895.2MHz  
 NOTES : INPUT

D. CROWDER  
 7 Jan 1999  
 11:22:52

CENTER 1.895 20 GHz  
 RES BW 10 kHz(i)  
 SPAN 1.00 MHz  
 SWP 75.0 msec  
 UBW 30 kHz

hp

10 dB/

ENGINEERING TEST REPORT NO. 21337

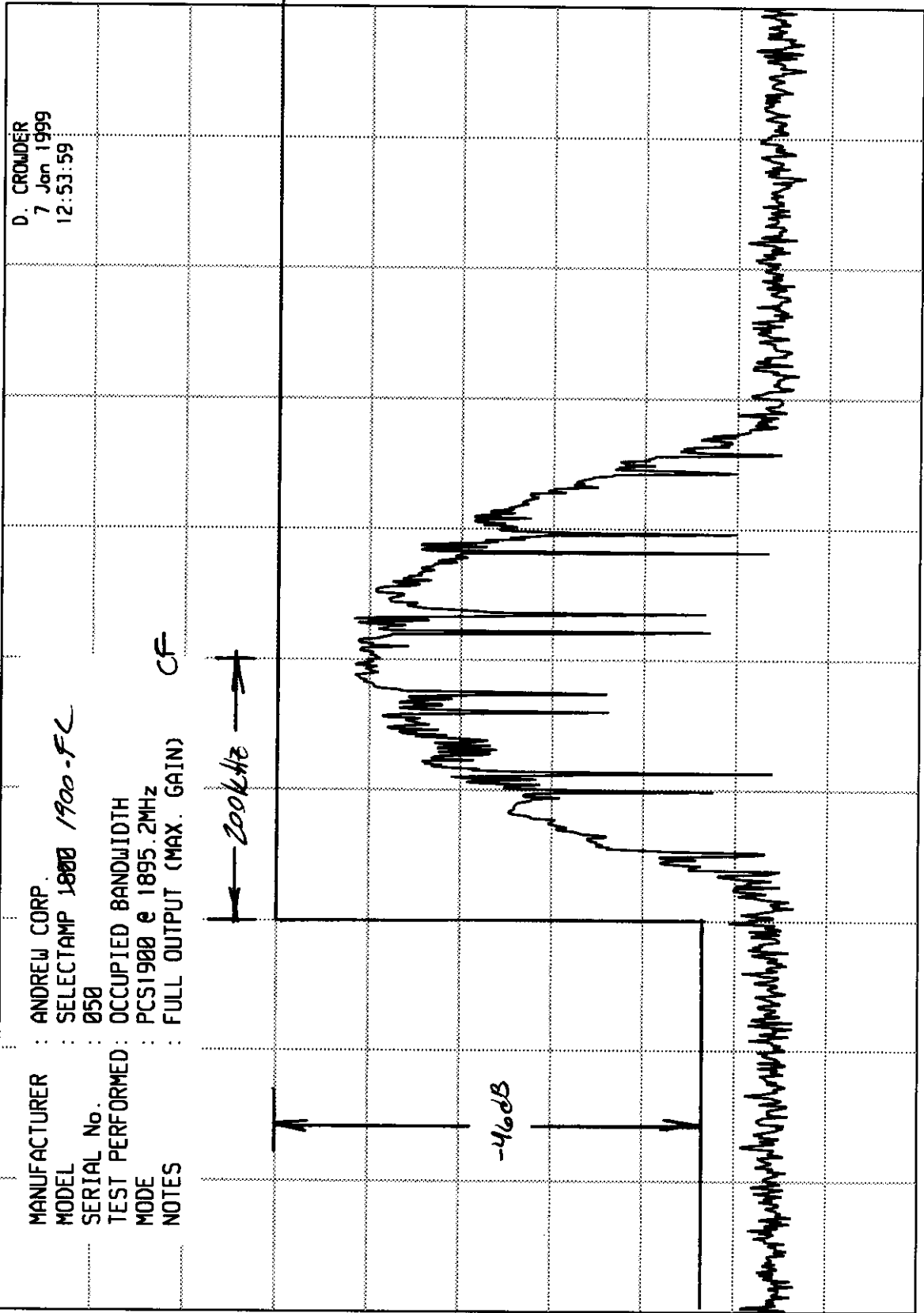
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
-7.20 dBm

ATTEN 40 dB +40 dB Ext

REF 23.0 dBm



D. CROWDER  
7 Jan 1999  
12:53:59

hp

10 dB/

E(60)

CENTER 1.895 20 GHz

RES BW 10 kHz(i)

VBW 30 kHz

SPAN 1.00 MHz

SWP 75.0 msec

ELITE ELECTRONIC ENGINEERING CO

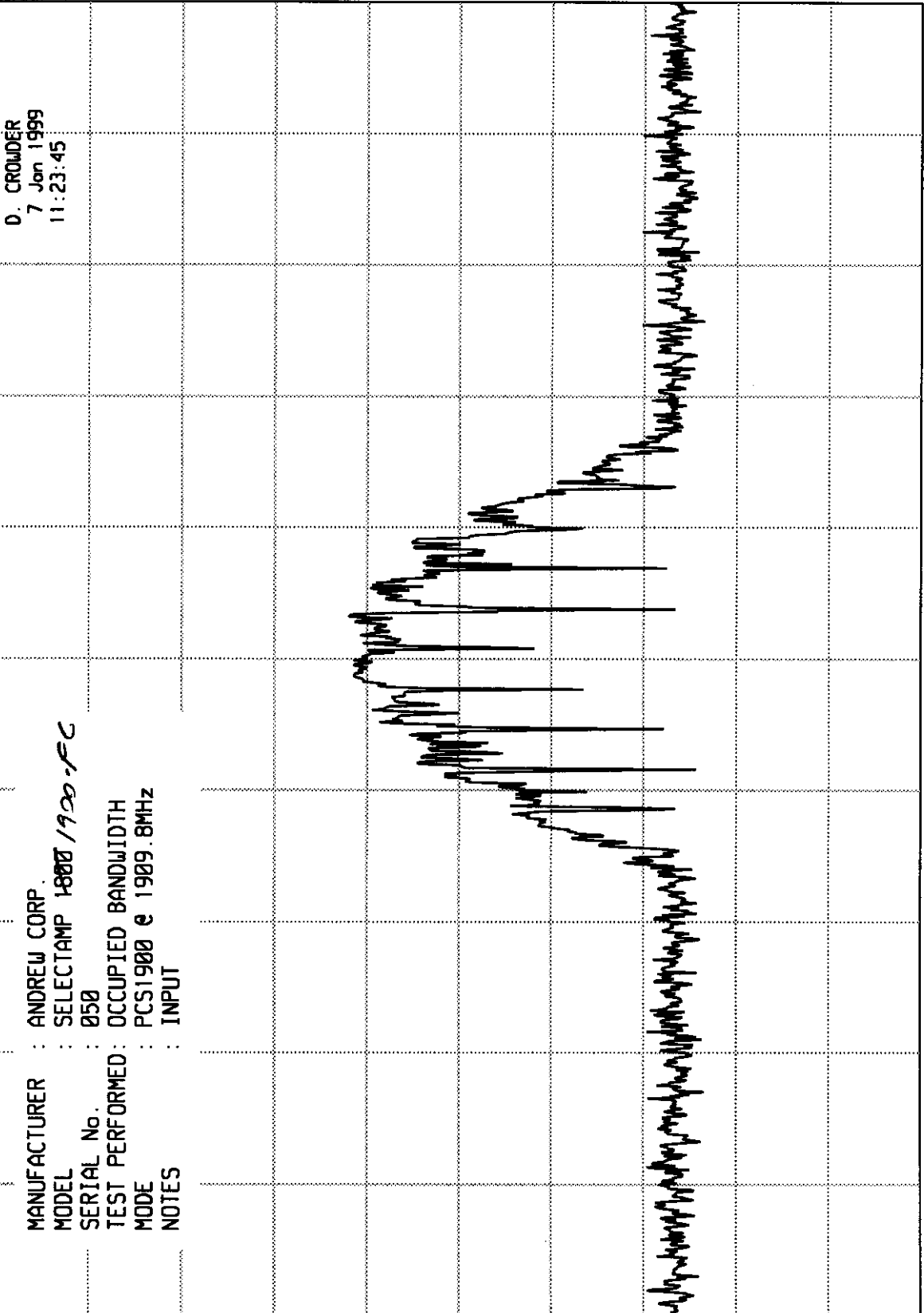
MKR 1.896 230 GHz  
 -7.20 dBm

hp

REF -30.0 dBm      ATTN 0 dB

10 dB/

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 / 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : PCS1900 e 1909.8MHz  
 NOTES : INPUT



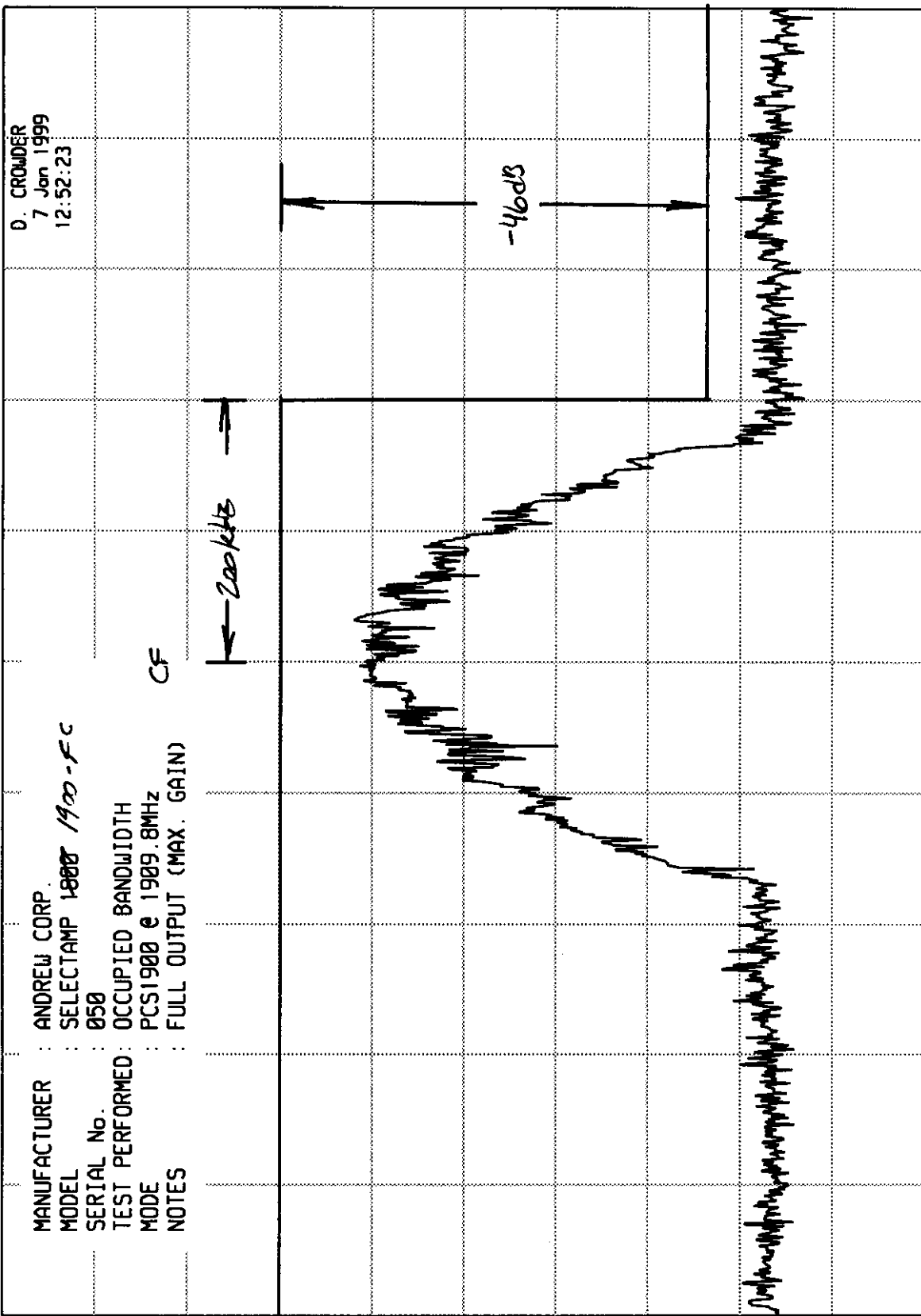
SPAN 1.00 MHz  
 SWP 75.0 msec

VBW 30 kHz

CENTER 1.909 80 GHz  
 RES BW 10 kHz(i)

ELITE ELECTRONIC ENGINEERING CO

hp 10 dB/ REF 23.0 dBm ATTN 40 dB + 40 dB EXT. MKR 1.896 230 GHz -7.20 dBm



D. CROWDER  
 7 Jan 1999  
 12:52:23

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : PCS1900 e 1909.8MHz  
 NOTES : FULL OUTPUT (MAX. GAIN) CF

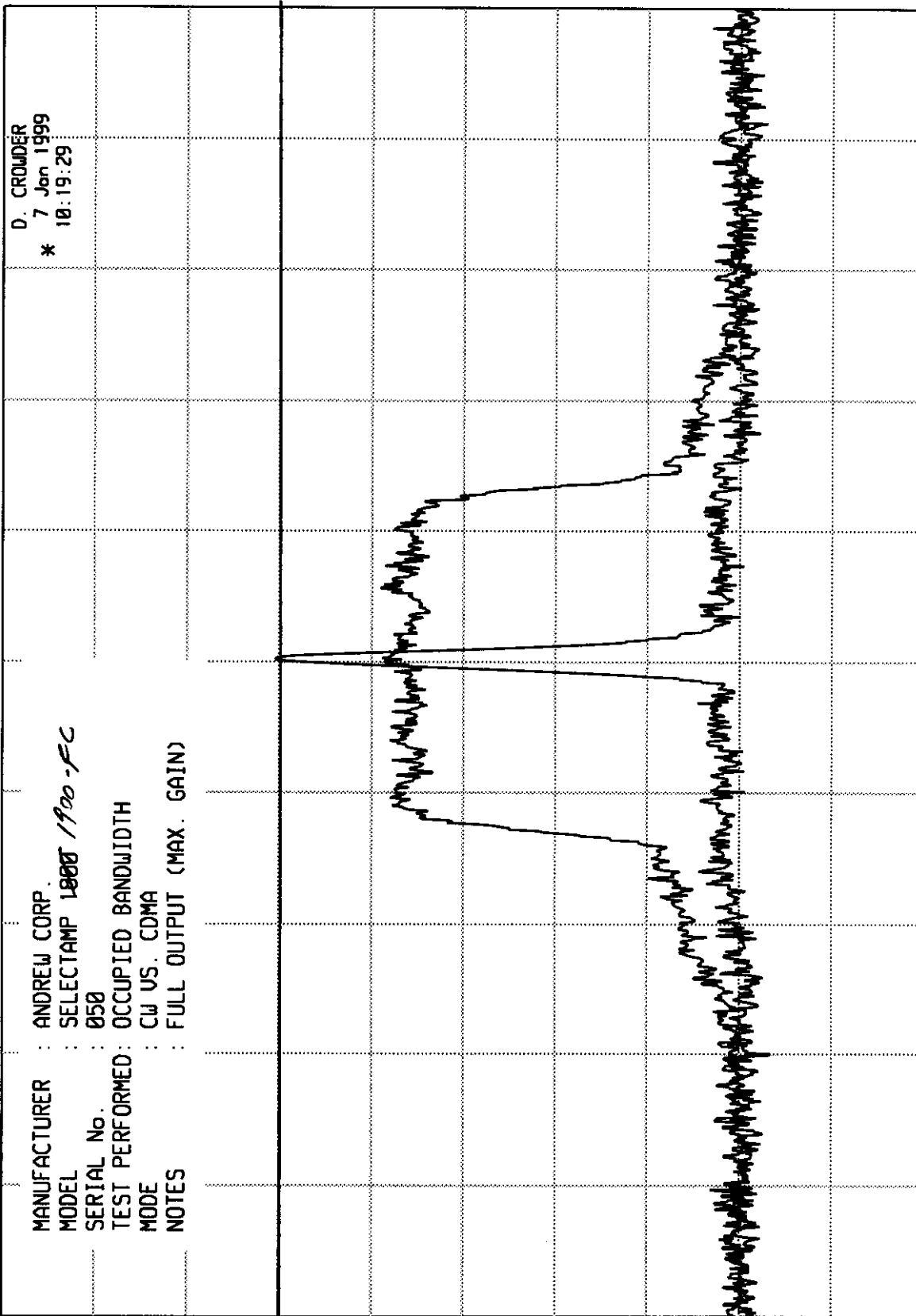
CENTER 1.909 80 GHz RES BW 10 kHz(i) SPAN 1.00 MHz SWP 75.0 msec  
 UBW 30 kHz

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp REF 23.0 dBm

ATTEN 40 dB + 40 dB EXT



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : CW US, CDMA  
 NOTES : FULL OUTPUT (MAX. GAIN)

D. CROWDER  
 7 Jan 1999  
 \* 10:19:29

CENTER 1.971 23 GHz  
 RES BW 30 kHz (i)  
 SPAN 5.00 MHz  
 SWP 37.5 msec  
 UBW 100 kHz



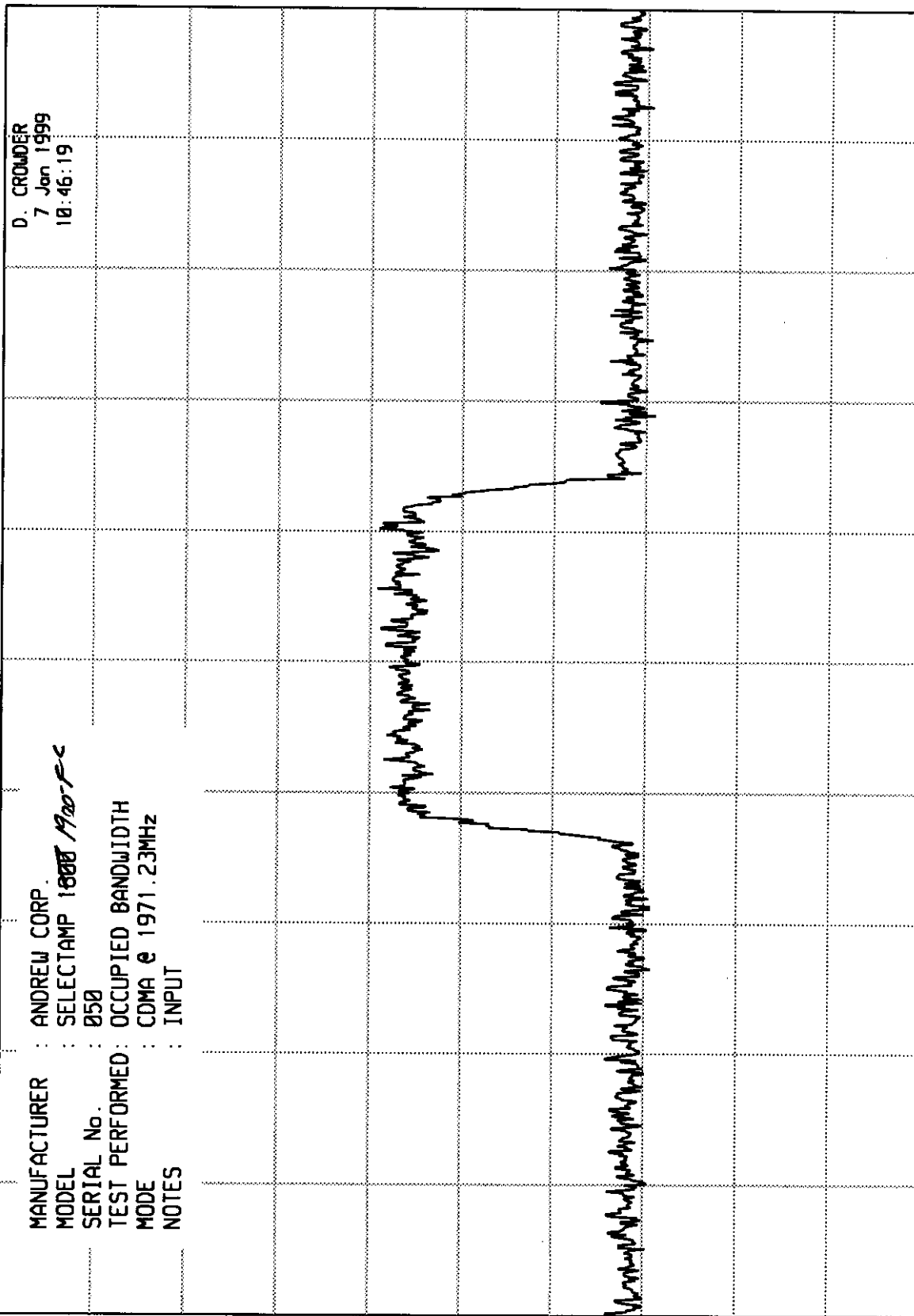
ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp

10 dB/

REF -30.0 dBm      ATTEN 0 dB



D. CROWDER  
 7 Jan 1999  
 10:46:19

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 *1900-FC*  
 SERIAL No. : 050  
 TEST PERFORMED: OCCUPIED BANDWIDTH  
 MODE : CDMA @ 1971.23MHz  
 NOTES : INPUT

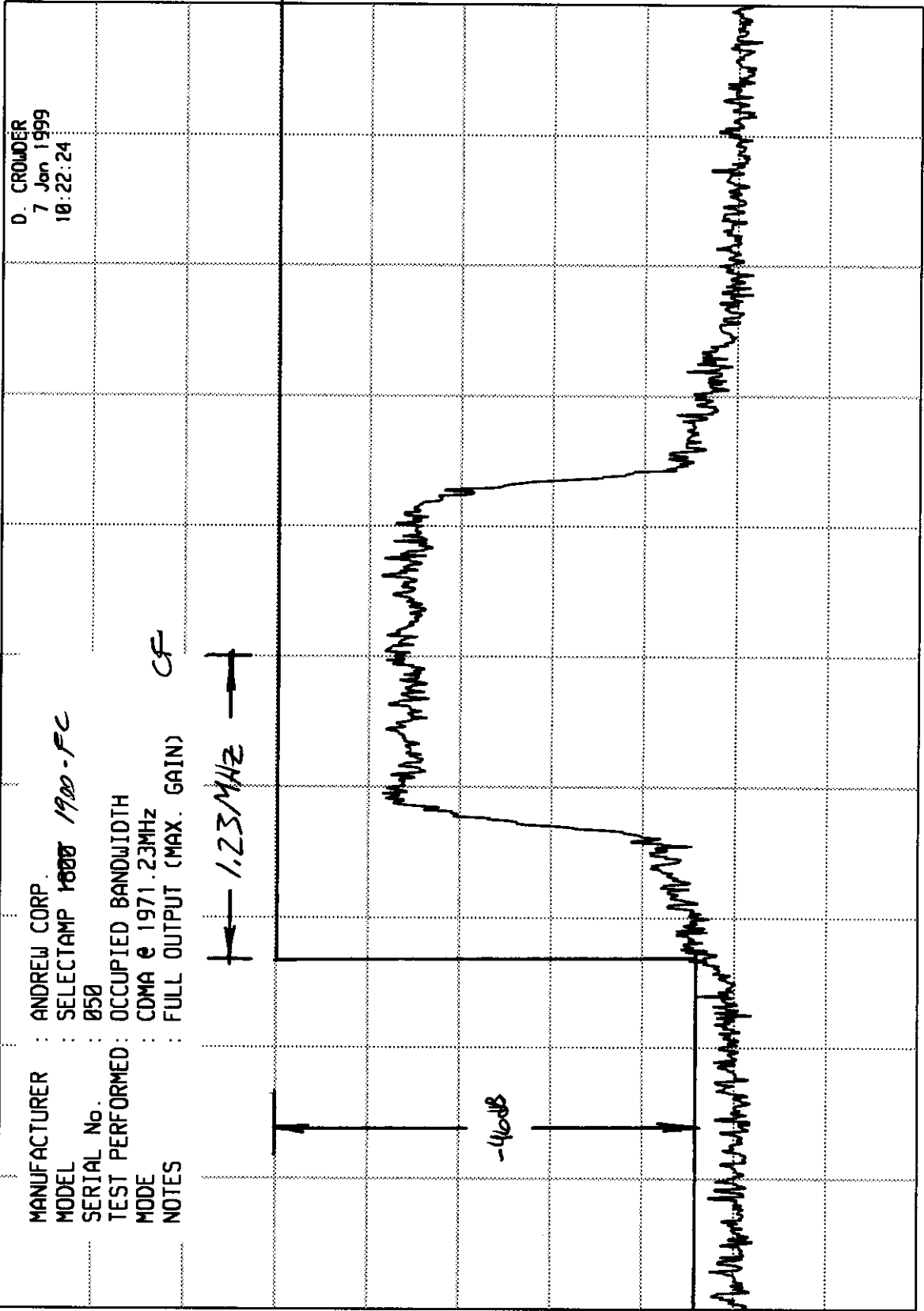
CENTER 1.971 23 GHz      RES BW 30 kHz(i)      UBW 100 kHz      SPAN 5.00 MHz  
 SWP 37.5 msec

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp  
 10 dB/

ATTEN 40 dB + 40 dB  $\otimes \times +$



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1000 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : CDMA e 1971.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN) CF

D. CROWDER  
 7 Jan 1999  
 10:22:24

SPAN 5.00 MHz  
 SWP 37.5 msec

VBW 100 kHz

CENTER 1.971 23 GHz  
 RES BW 30 kHz(i)

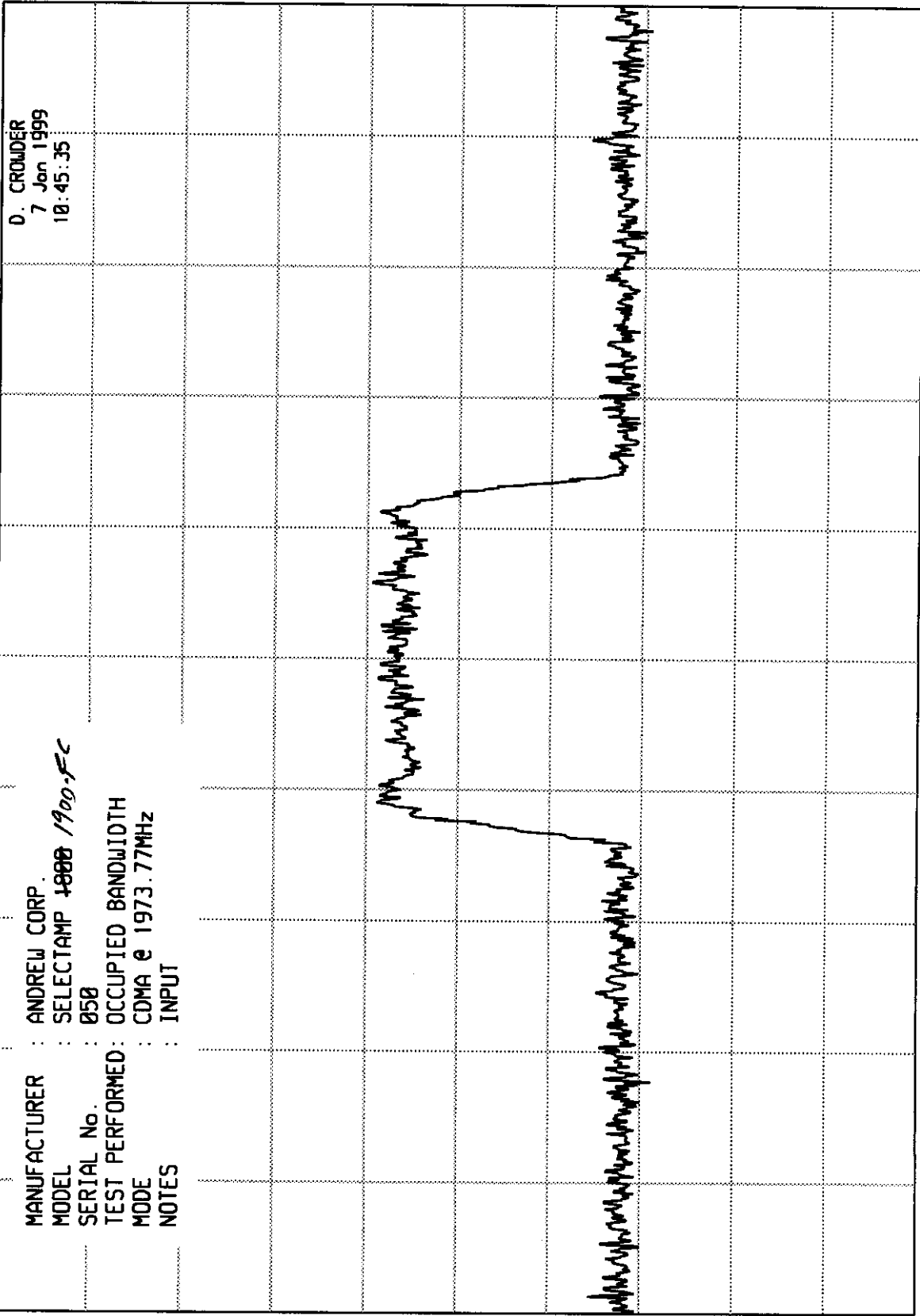
ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp

10 dB/

REF -30.0 dBm      ATTN 0 dB



D. CROWDER  
 7 Jan 1999  
 10:45:35

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1800~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : CDMA e 1973.77MHz  
 NOTES : INPUT

SPAN 5.00 MHz  
 SWP 37.5 msec

UBW 100 kHz

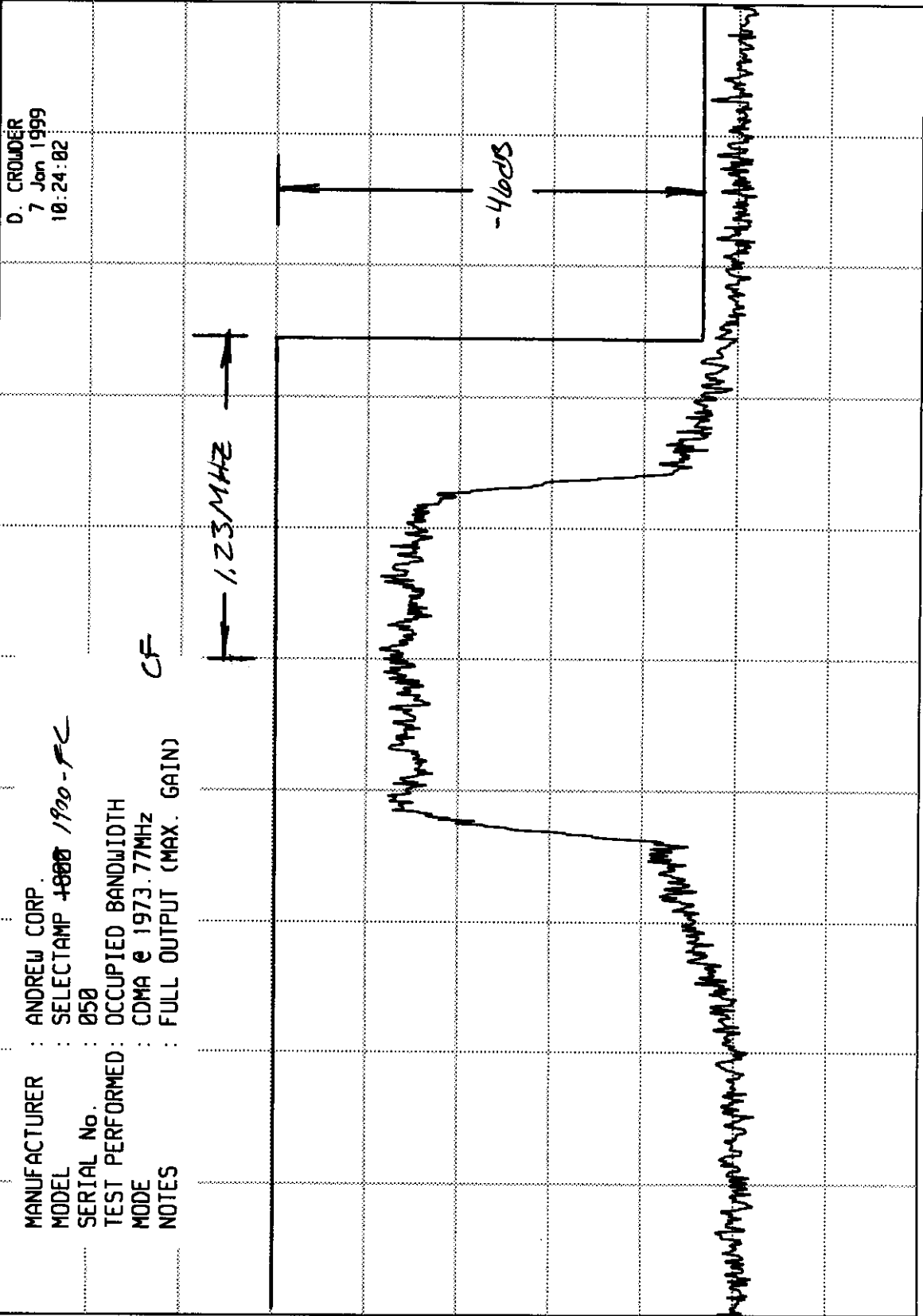
CENTER 1.973 77 GHz  
 RES BW 30 kHz(i)

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp REF 23.0 dBm

ATTEN 40 dB + 40 dB EXT.



D. CROWDER  
 7 Jan 1999  
 10:24:02

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP +800 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : CDMA @ 1973.77MHz  
 NOTES : FULL OUTPUT (MAX. GAIN) CF

hp

10 dB/

CENTER 1.973 77 GHz  
 RES 8W 30 kHz (i)  
 UBW 100 kHz  
 SPAN 5.00 MHz  
 SWP 37.5 msec

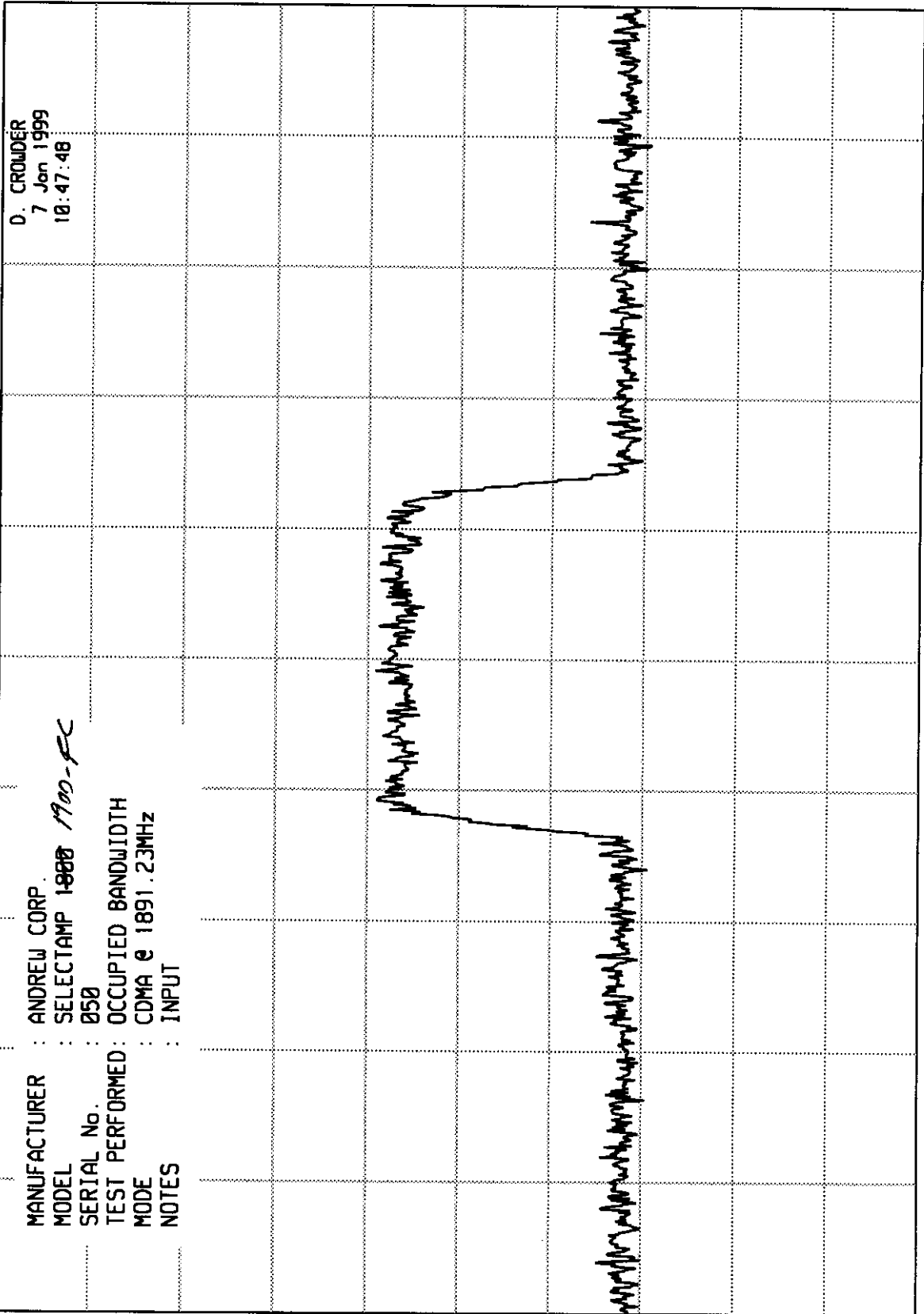
ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp

10 dB/

REF -30.0 dBm      ATTN 0 dB



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1900  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : CDMA e 1891.23MHz  
 NOTES : INPUT

D. CROWDER  
 7 Jan 1999  
 10:47:48

SPAN 5.00 MHz  
 SWP 37.5 msec

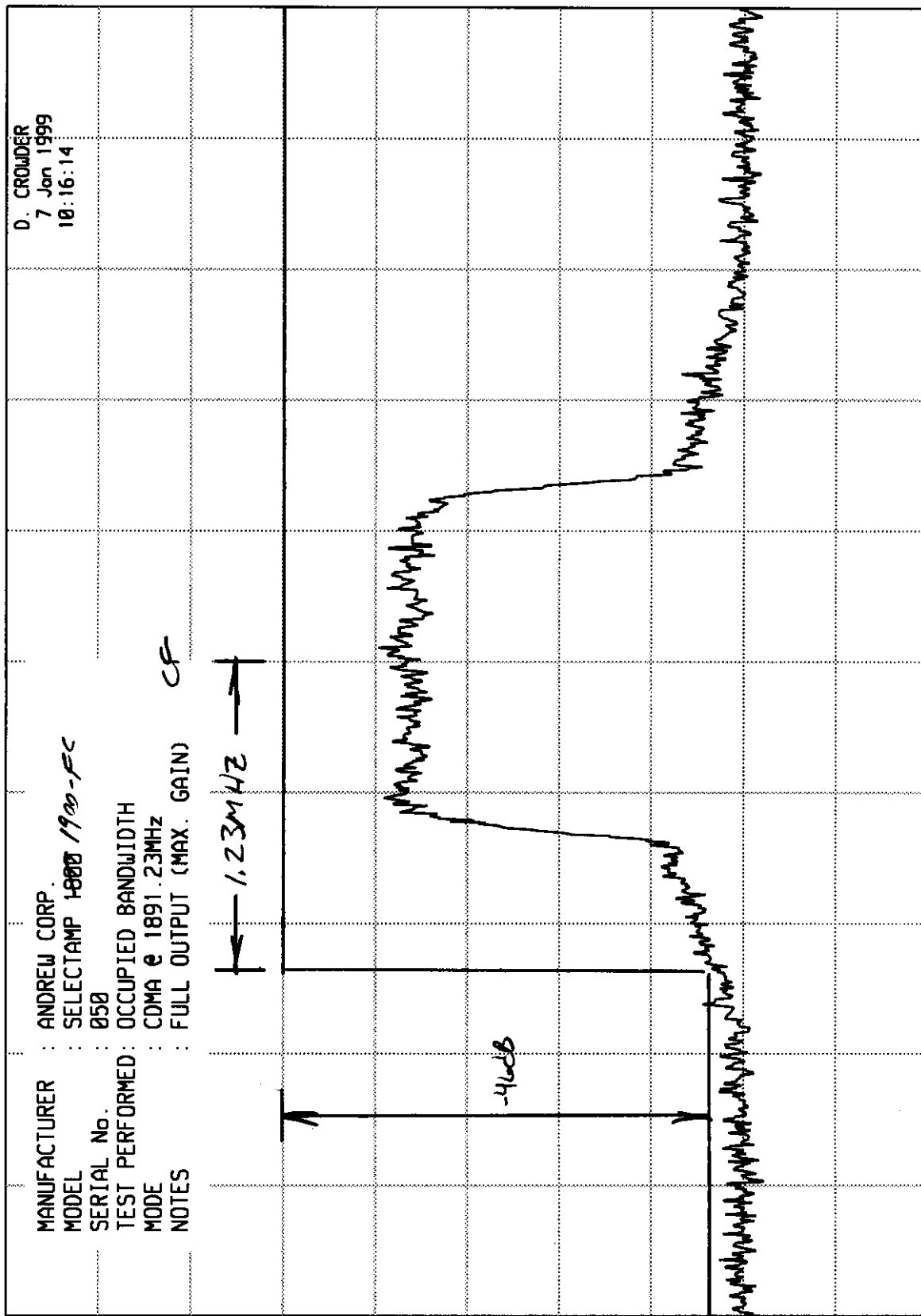
VBW 100 kHz

CENTER 1.891 23 GHz  
 RES BW 30 kHz (i)

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

REF 23.0 dBm  
 ATTN 40 dB + 40 dB EXT.



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800  
 SERIAL No. : 1900-FC  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : CDMA e 1891.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN) CF

D. CROWDER  
 7 Jan 1999  
 10:16:14

hp

10 dB/

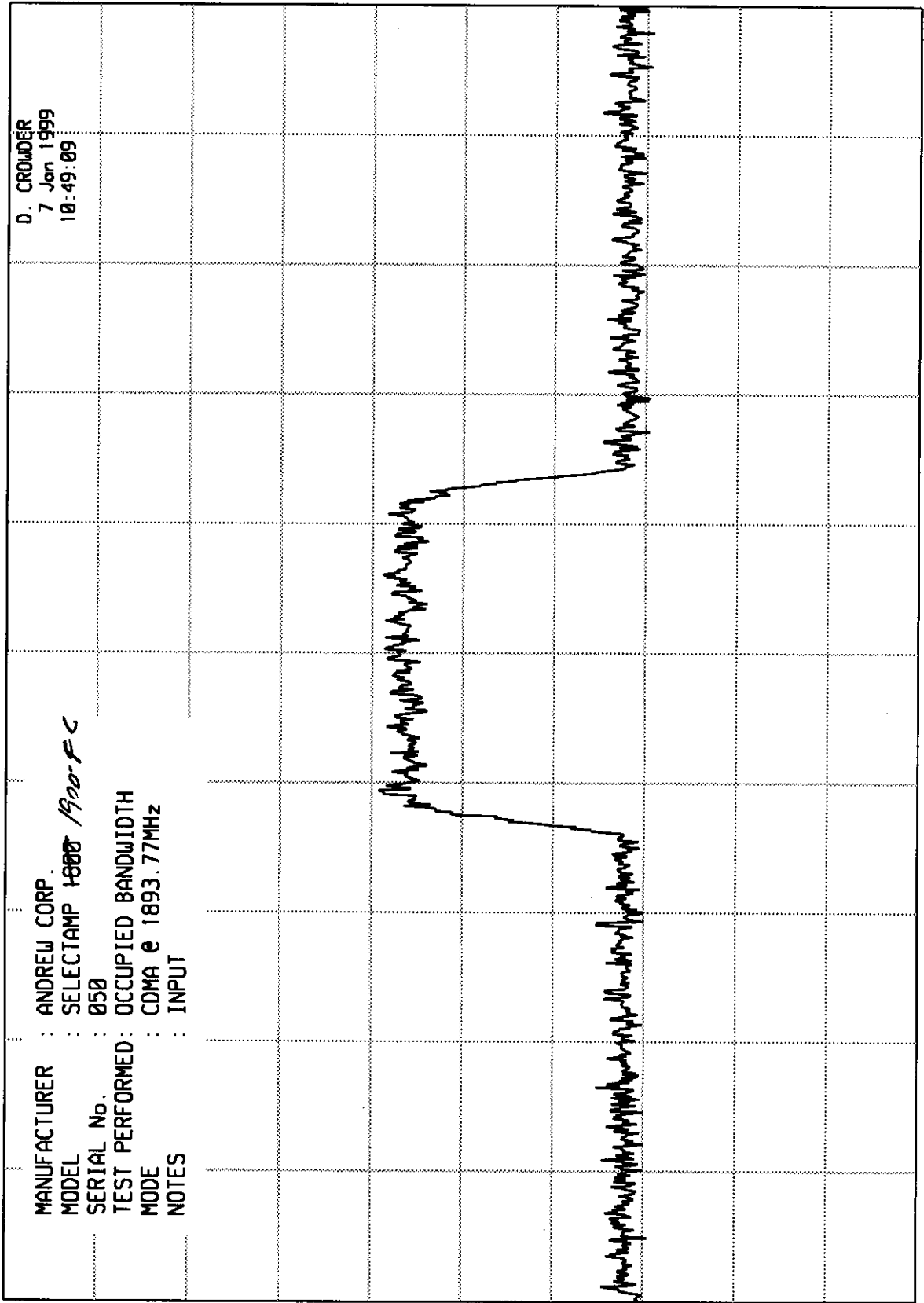
CENTER 1.891 23 GHz  
 RES BW 30 kHz(i)  
 UBW 100 kHz  
 SPAN 5.00 MHz  
 SWP 37.5 msec

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp  
 REF -30.0 dBm

ATTEN 0 dB



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1888 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : CDMA e 1893.77MHz  
 NOTES : INPUT

D. CROWDER  
 7 Jan 1999  
 10:49:09

SPAN 5.00 MHz  
 SWP 37.5 msec

UBW 100 kHz

CENTER 1.893 77 GHz  
 RES BW 30 kHz(i)

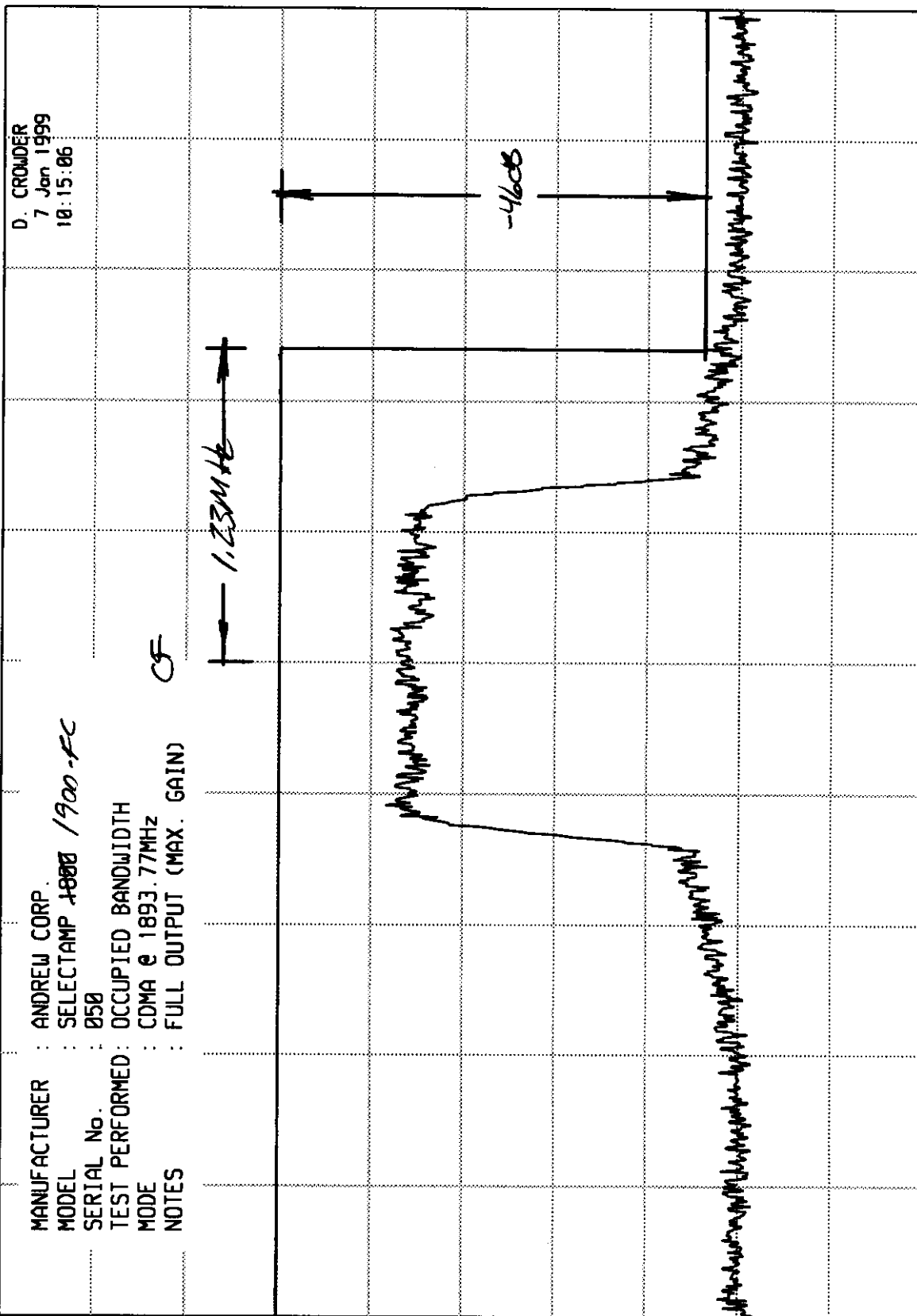
10 dB/

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

REF 23.0 dBm

ATTEN 40 dB + 40 dB & lot



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1800~~ / 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : CDMA @ 1893.77MHz  
 NOTES : FULL OUTPUT (MAX. GAIN) CF

D. CROWDER  
 7 Jan 1999  
 10:15:06

hp  
 10 dB/

CENTER 1.893 77 GHz  
 RES BW 30 kHz (i)  
 VBW 100 kHz  
 SPAN 5.00 MHz  
 SWP 37.5 msec

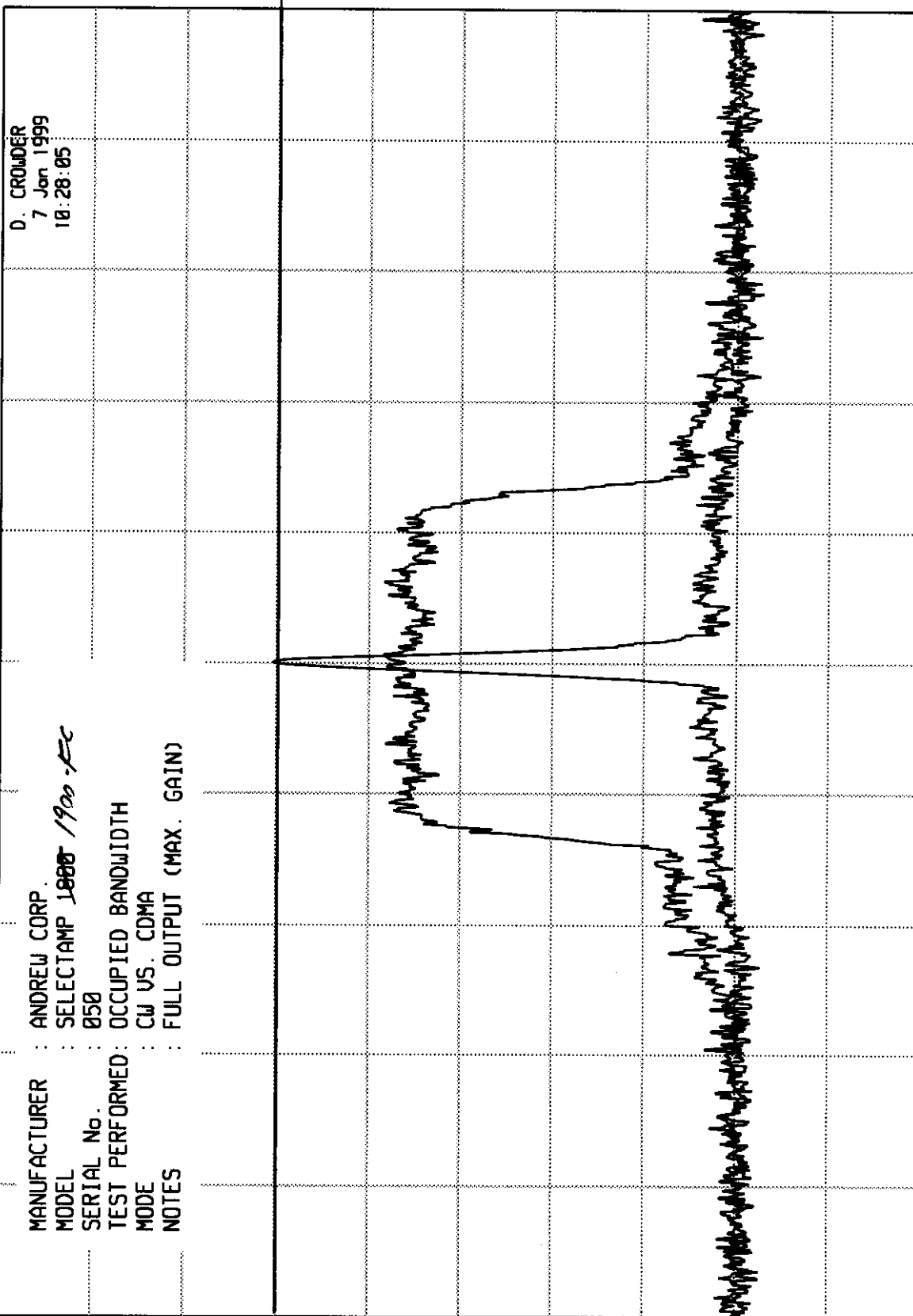


ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp REF 23.0 dBm

ATTEN 40 dB + 40 dB  $\leq 107$



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1800~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : CW VS. CDMA  
 NOTES : FULL OUTPUT (MAX. GAIN)

D. CROWDER  
 7 Jan 1999  
 10:28:05

hp 10 dB/

CENTER 1.976 23 GHz  
 RES BW 30 kHz(i)  
 UBW 100 kHz  
 SPAN 5.00 MHz  
 SWP 37.5 msec

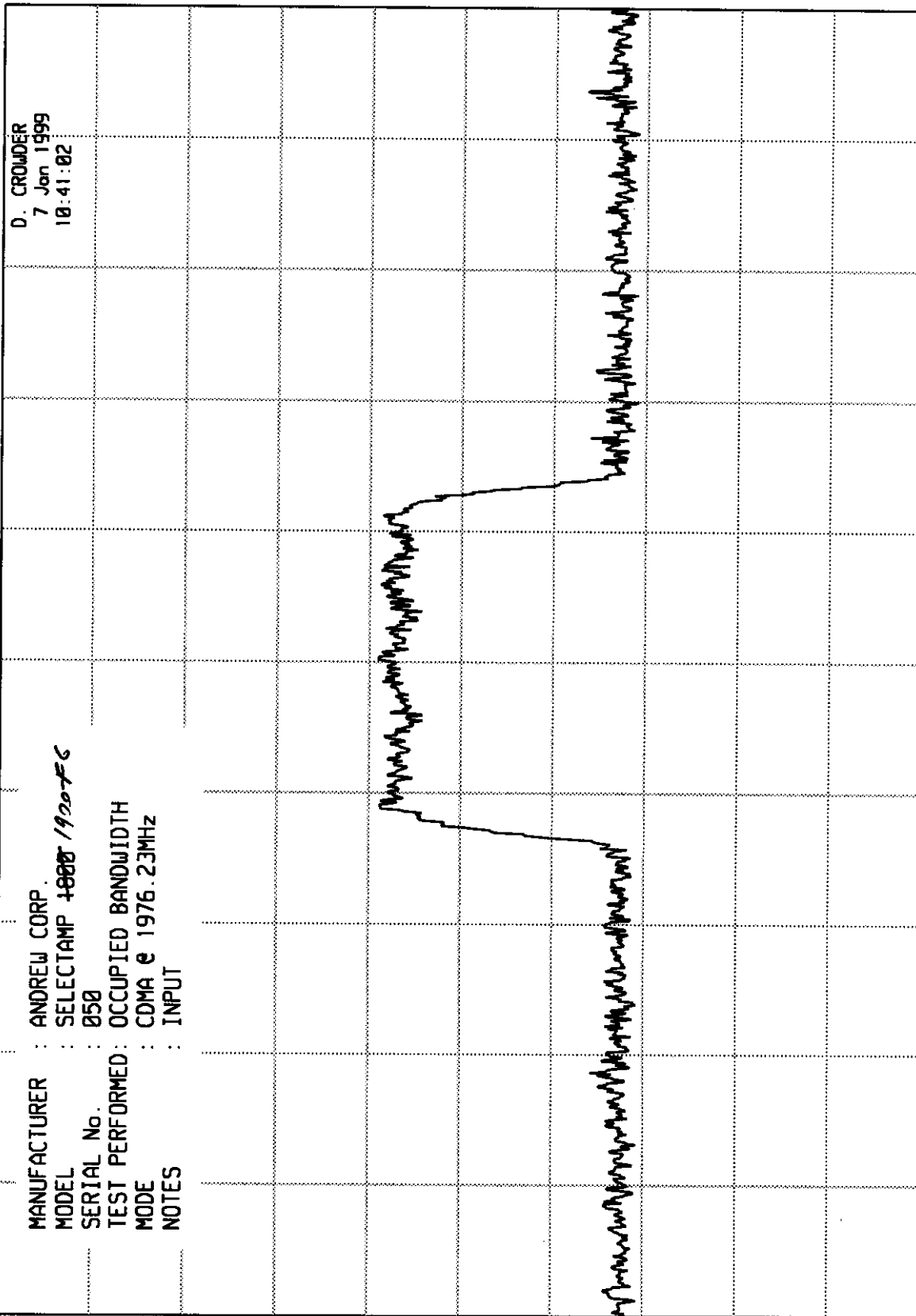
ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp

10 dB/

REF -30.0 dBm      ATTN 0 dB



D. CROWDER  
 7 Jan 1999  
 10:41:02

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~4800~~ 1920-FC  
 SERIAL No. : 050  
 TEST PERFORMED: OCCUPIED BANDWIDTH  
 MODE : CDMA e 1976.23MHz  
 NOTES : INPUT

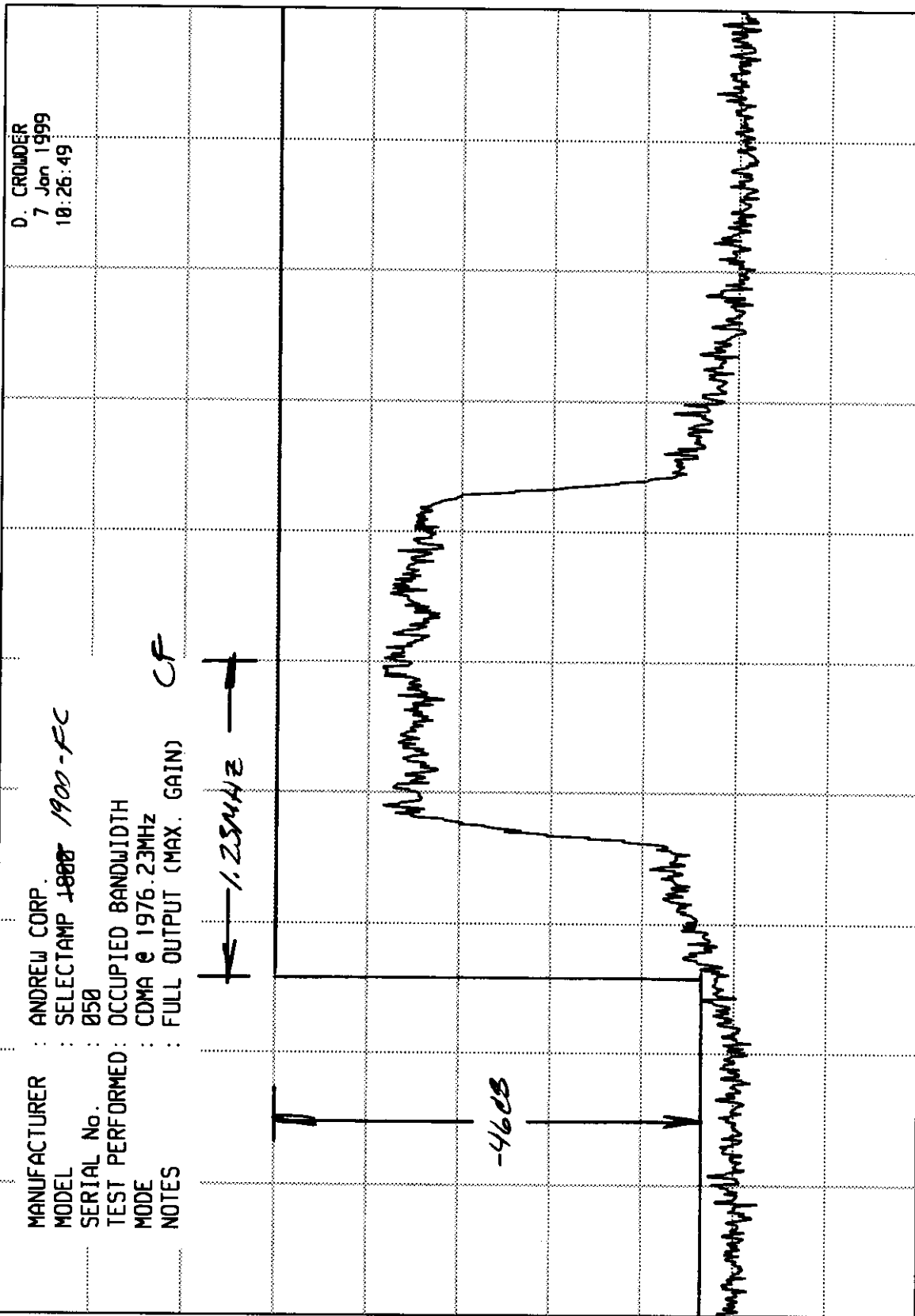
CENTER 1.976 23 GHz      SPAN 5.00 MHz  
 RES BW 30 kHz(i)      SWP 37.5 msec  
 VBW 100 kHz

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHZ  
 -7.20 dBm

REF 23.0 dBm  
 ATTEN 40 dB + 40dB EXT

hp 10 dB/



10 dB/

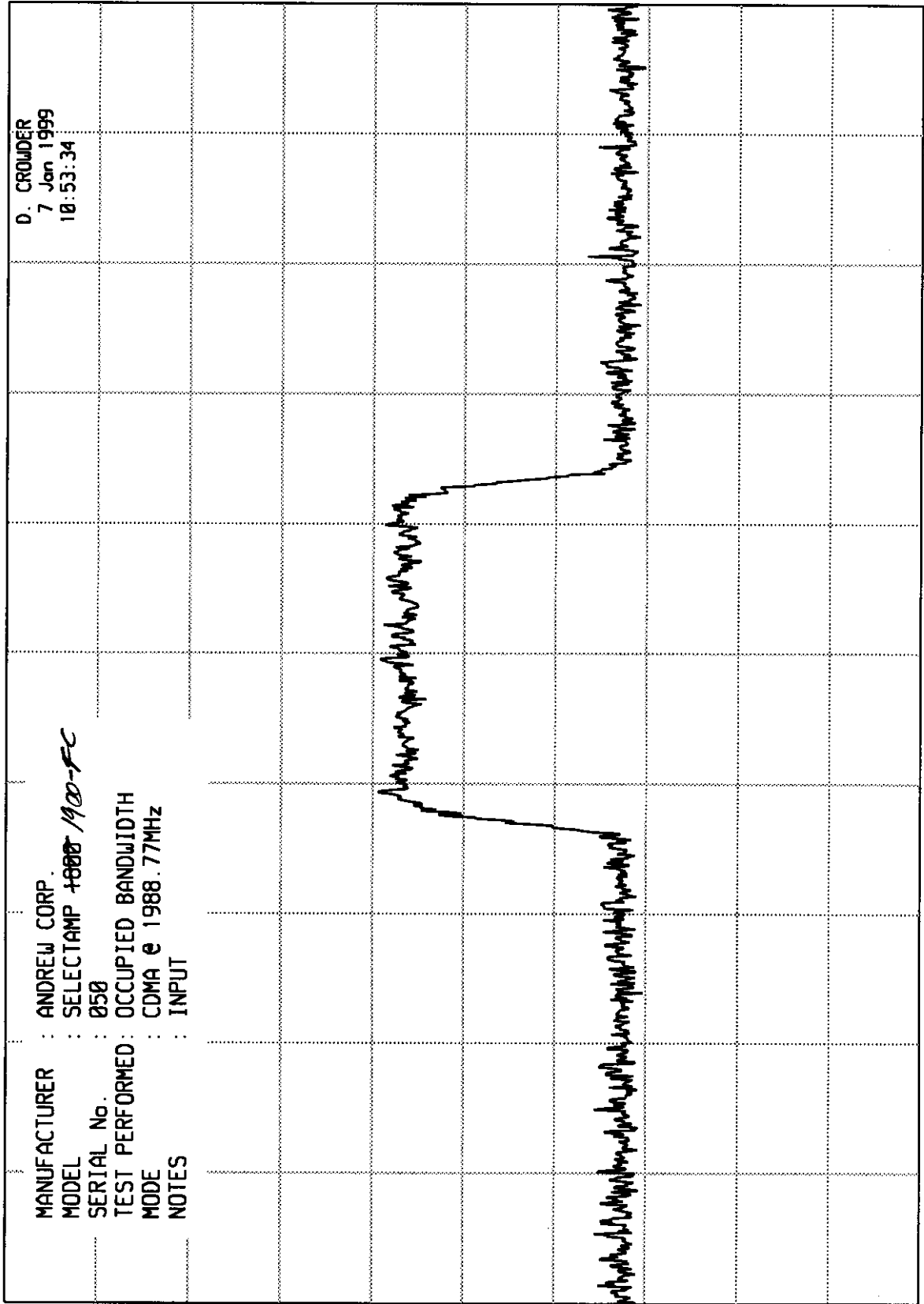
CENTER 1.976 23 GHz  
 RES BW 30 kHz(i)  
 SPAN 5.00 MHz  
 SWP 37.5 msec  
 UBW 100 kHz

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp  
 10 dB/

REF -30.0 dBm  
 ATTN 0 dB



SPAN 5.00 MHz  
 SWP 37.5 msec

VBW 100 kHz

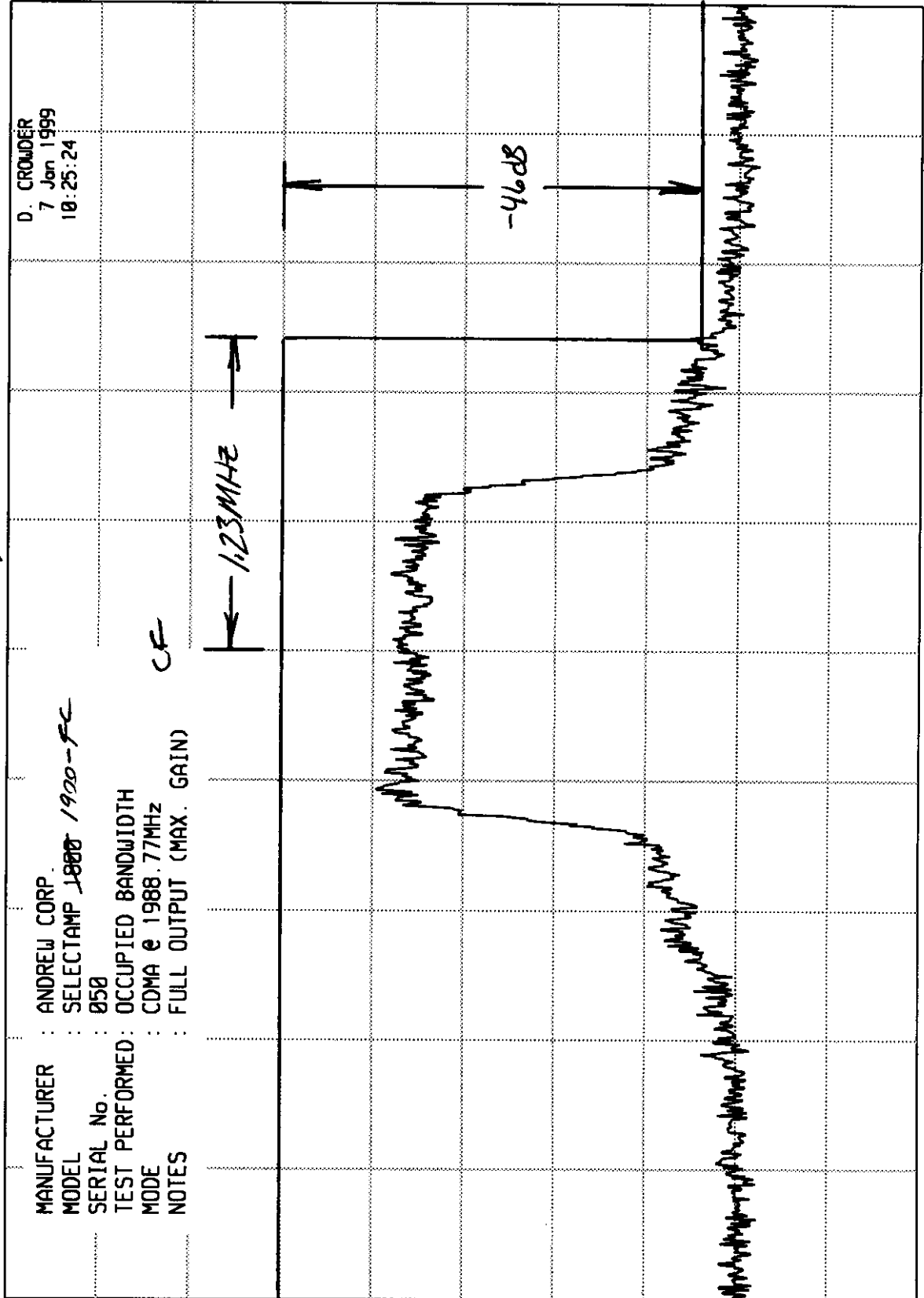
CENTER 1.988 77 GHz  
 RES BW 30 kHz(i)

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

REF 23.0 dBm

ATTEN 40 dB + 40 dB EXT



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1888 1920-FC  
 SERIAL No. : 058  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : CDMA e 1988.77MHz  
 NOTES : FULL OUTPUT (MAX. GAIN) CF

D. CROWDER  
 7 Jan 1999  
 10:25:24

hp

10 dB/

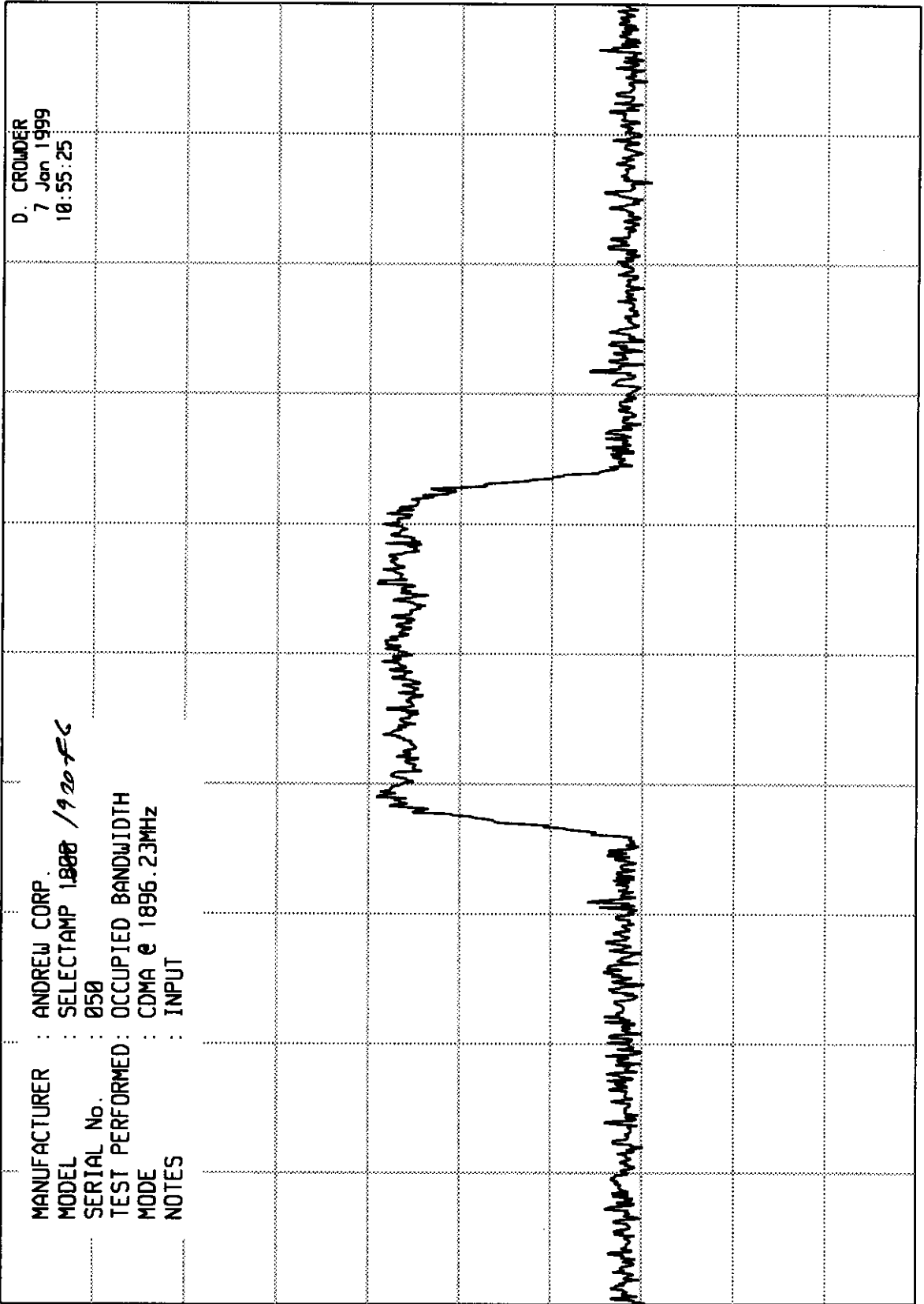
CENTER 1.988 77 GHz  
 RES BW 30 kHz(i)  
 UBW 100 kHz  
 SPAN 5.00 MHz  
 SWP 37.5 msec

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp REF -30.0 dBm

ATTEN 0 dB



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 / 920 FC  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : CDMA e 1896.23MHz  
 NOTES : INPUT

D. CROWDER  
 7 Jan 1999  
 10:55:25

10 dB/

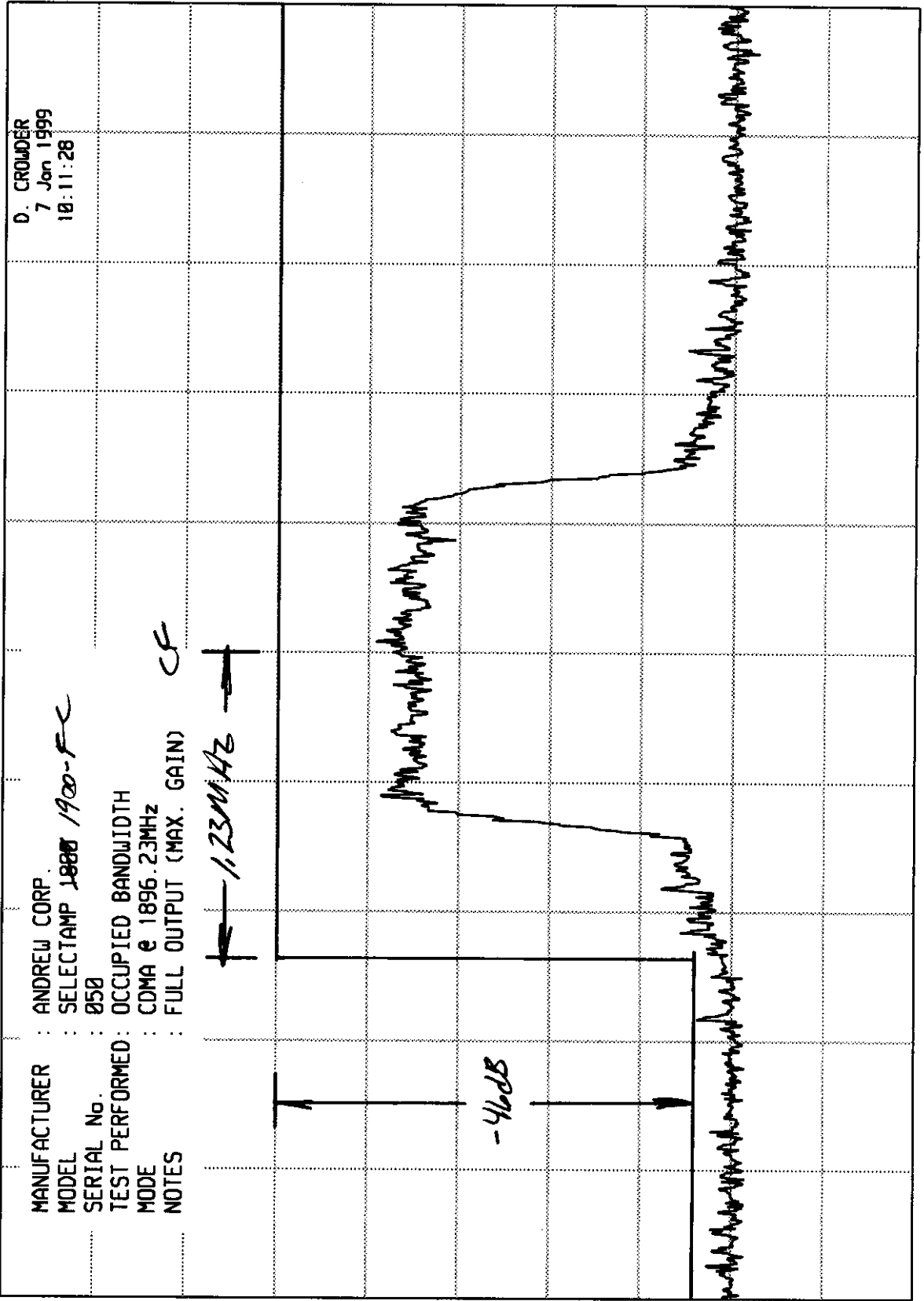
CENTER 1.896 23 GHz  
 RES BW 30 kHz(i)  
 UBW 100 kHz  
 SPAN 5.00 MHz  
 SWP 37.5 msec

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm

hp REF 23.0 dBm

ATTEN 40 dB + 40 dB EXT



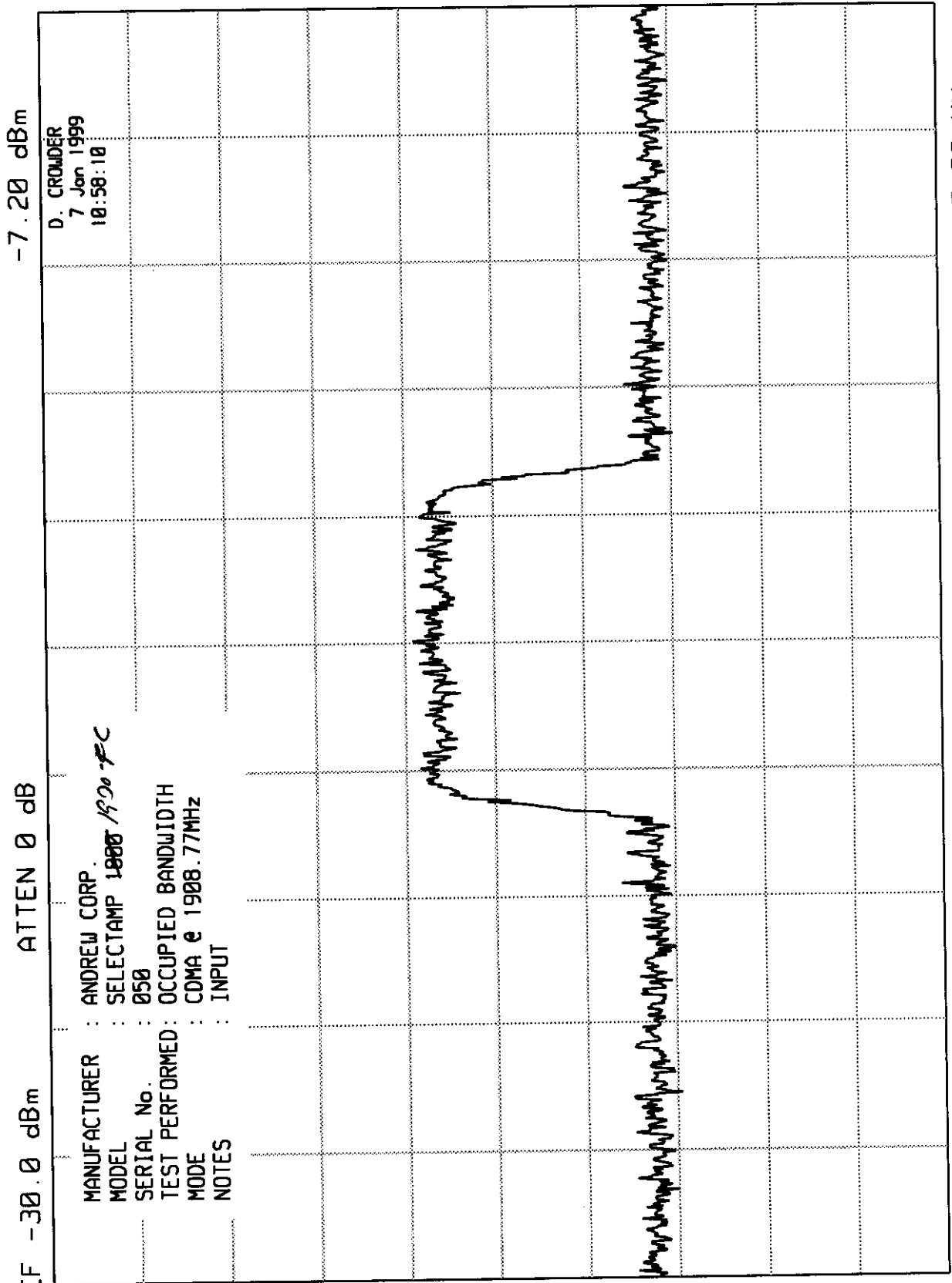
SPAN 5.00 MHz  
 SWP 37.5 msec

VBW 100 kHz

CENTER 1.896 23 GHz  
 RES BW 30 kHz(i)

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
 -7.20 dBm



D. CROWDER  
 7 Jan 1999  
 10:58:10

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800  
 SERIAL No. : 050  
 TEST PERFORMED : OCCUPIED BANDWIDTH  
 MODE : CDMA e 1908.77MHz  
 NOTES : INPUT

REF -30.0 dBm ATTN 0 dB

SPAN 5.00 MHz  
 SWP 37.5 msec

VBW 100 kHz

CENTER 1.908 77 GHz  
 RES BW 30 kHz(i)

hp

10 dB/



ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.896 230 GHz  
-7.20 dBm

hp REF 23.0 dBm

ATTEN 40 dB +40 dB & 60

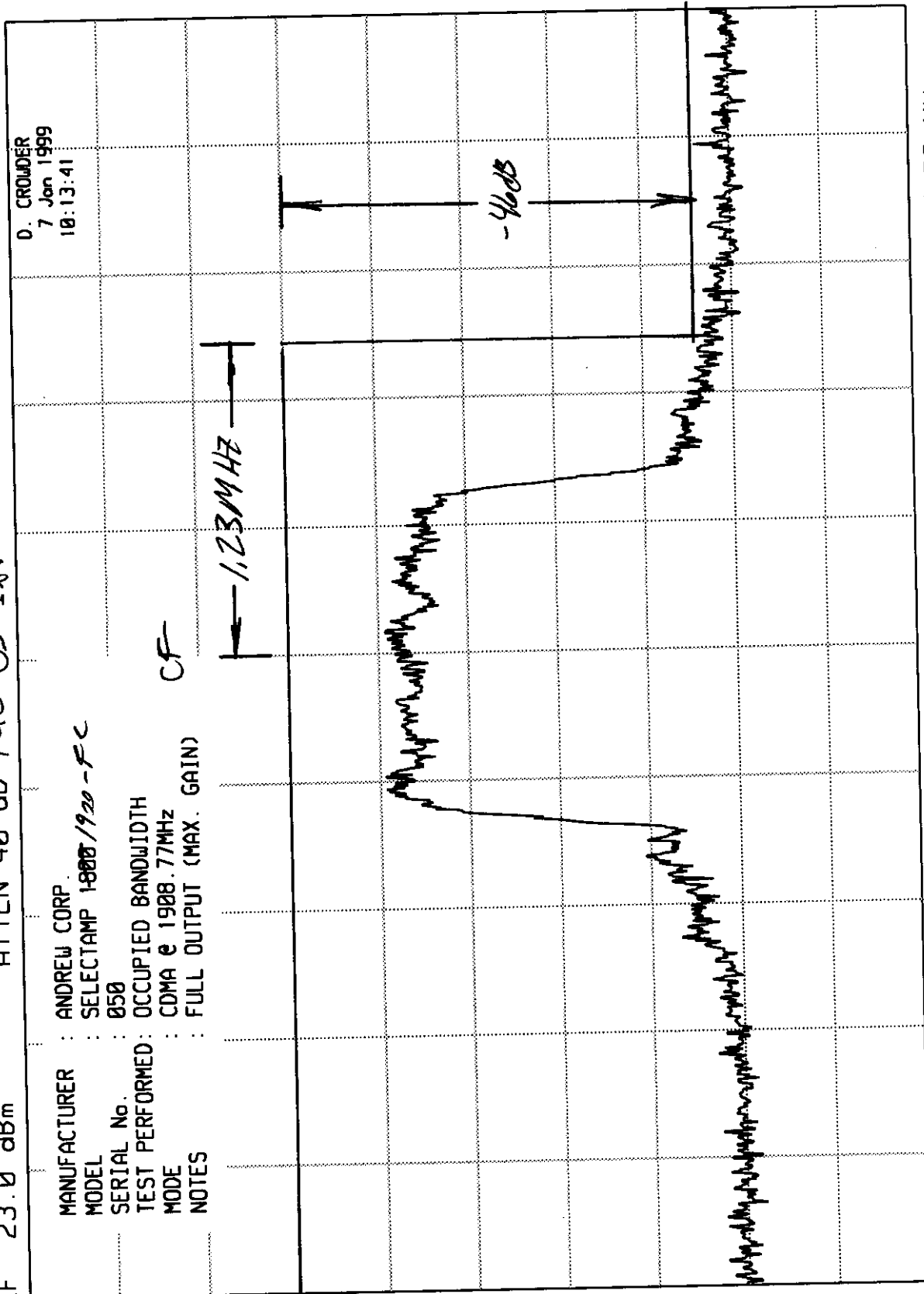
D. CROWDER  
7 Jan 1999  
10:13:41

MANUFACTURER : ANDREW CORP.  
MODEL : SELECTAMP 1800/1920-FC  
SERIAL No. : 050  
TEST PERFORMED : OCCUPIED BANDWIDTH  
MODE : CDMA @ 1908.77MHz  
NOTES : FULL OUTPUT (MAX. GAIN) CF

10 dB/

1.23 MHz

-46dB



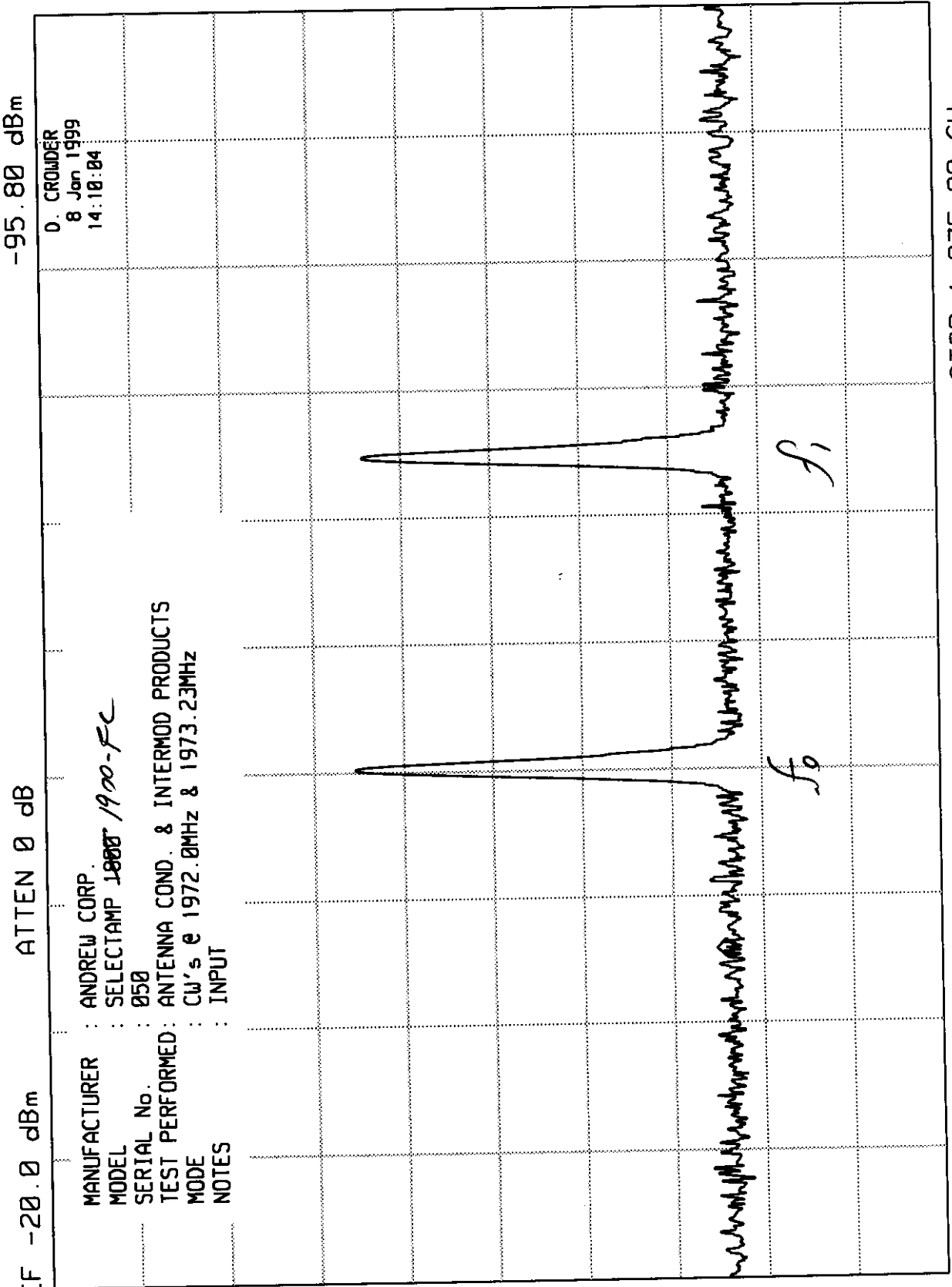
SPAN 5.00 MHz  
SWP 37.5 msec

VBW 100 kHz

CENTER 1.908 77 GHz  
RES BW 30 kHz (i)

ELITE ELECTRONIC ENGINEERING CO

MKR 1.971 290 GHz  
 -95.80 dBm



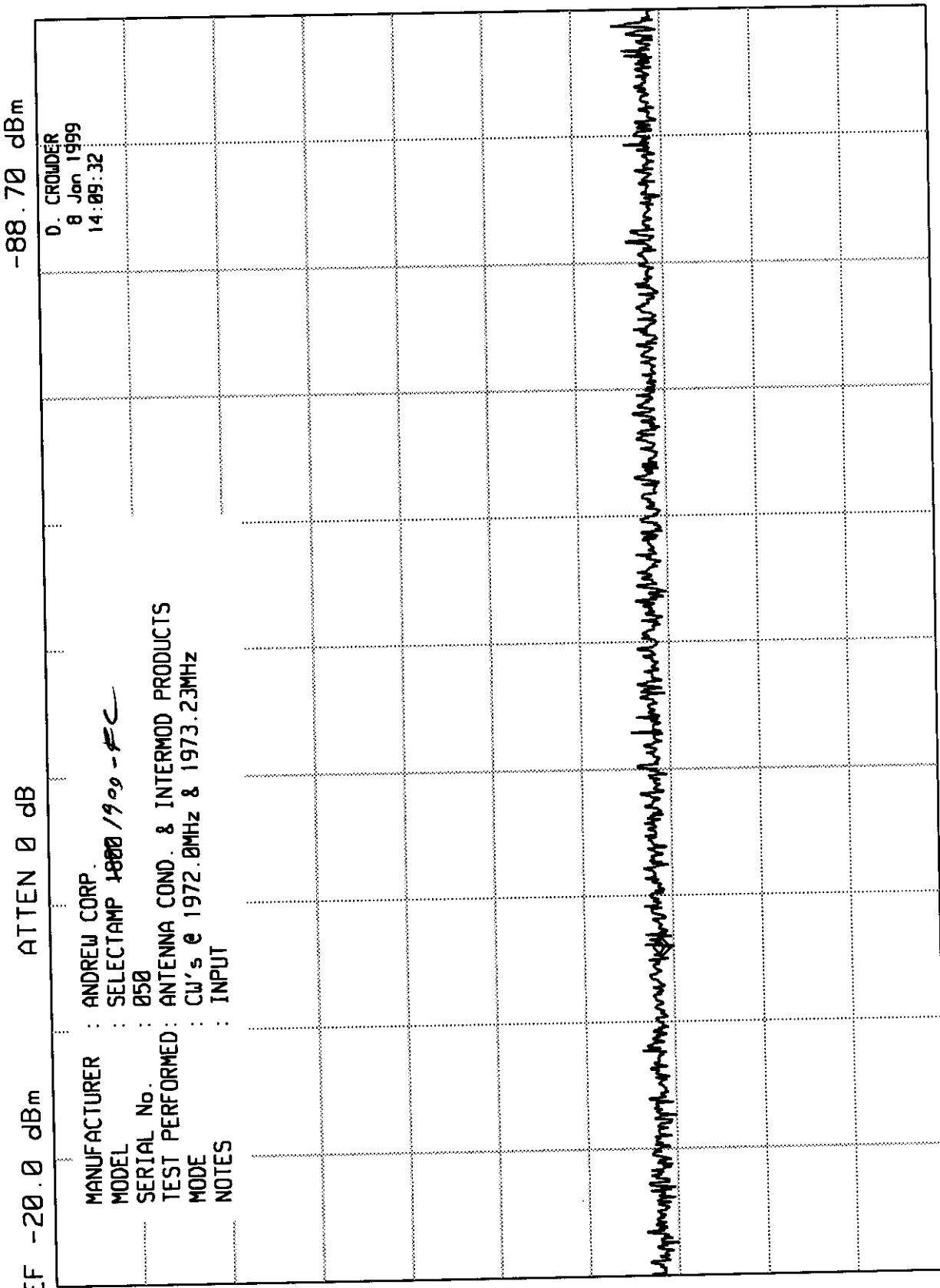
REF -20.0 dBm

DL -53.0 dBm

START 1.970 00 GHz  
 RES BW 30 kHz(i)  
 STOP 1.975 00 GHz  
 SWP 37.5 msec  
 VBW 300 kHz

ELITE ELECTRONIC ENGINEERING CO

MKR 280.3 MHz  
 -88.70 dBm



REF -20.0 dBm

ATTEN 0 dB

D. CROWDER  
 8 Jan 1999  
 14:09:32

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800/1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED: ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CW's @ 1972.0MHz & 1973.23MHz  
 NOTES : INPUT

hp

10 dB/

DL -53.0 dBm

STOP 1.000 GHz  
 SWP 728 msec

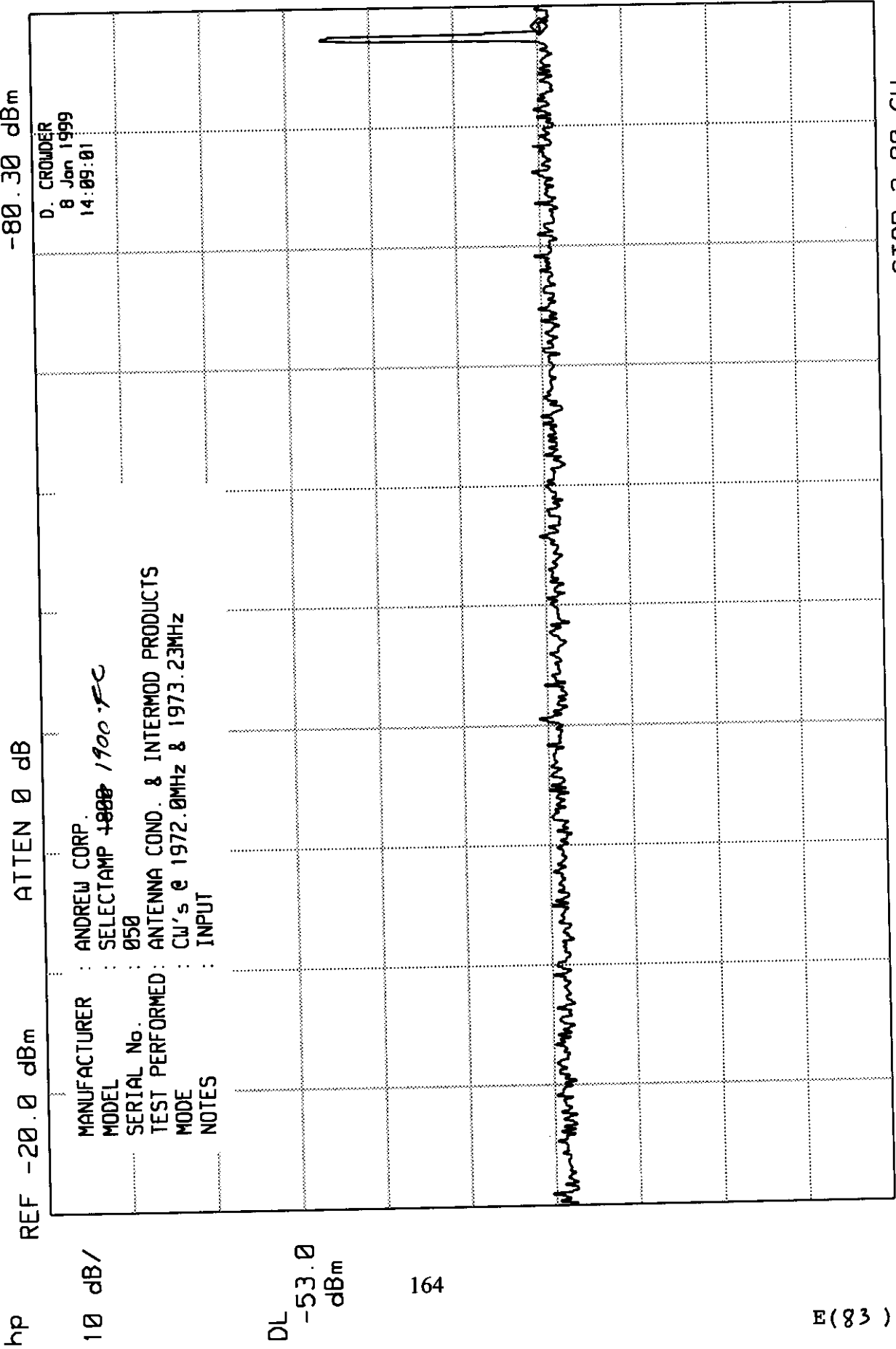
VBW 1 MHz

START 30 MHz  
 RES BW 100 kHz(i)

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.982 GHz  
-80.30 dBm



hp

10 dB/

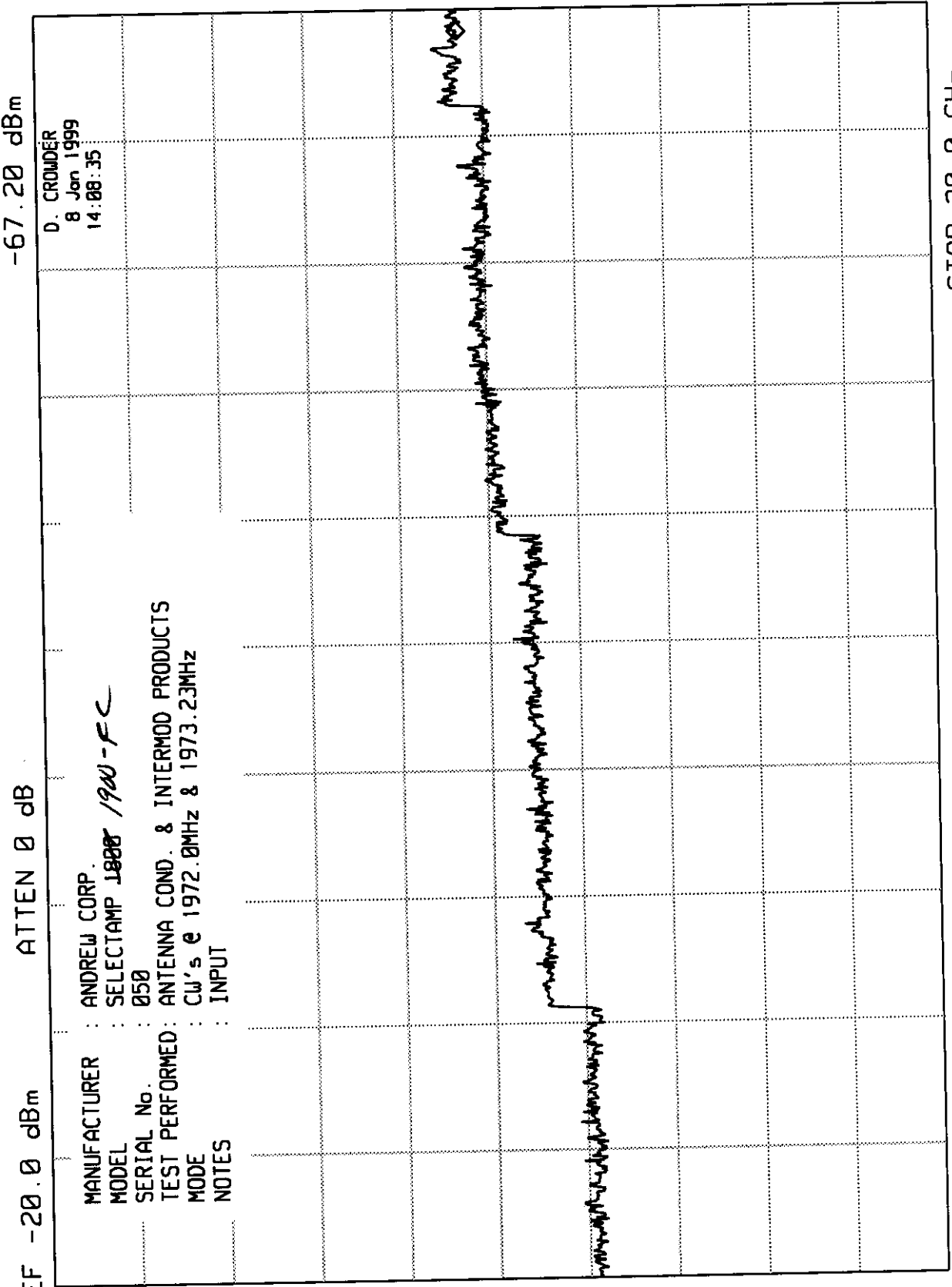
DL -53.0 dBm

E(83)

START 1.00 GHz RES BW 1 MHz(i) STOP 2.00 GHz  
UBW 3 MHz SWP 25.0 msec

ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz  
 -67.20 dBm



hp

10 dB/

DL -53.0 dBm

E(84)

START 2.0 GHz  
 RES BW 1 MHz (i)

UBW 3 MHz

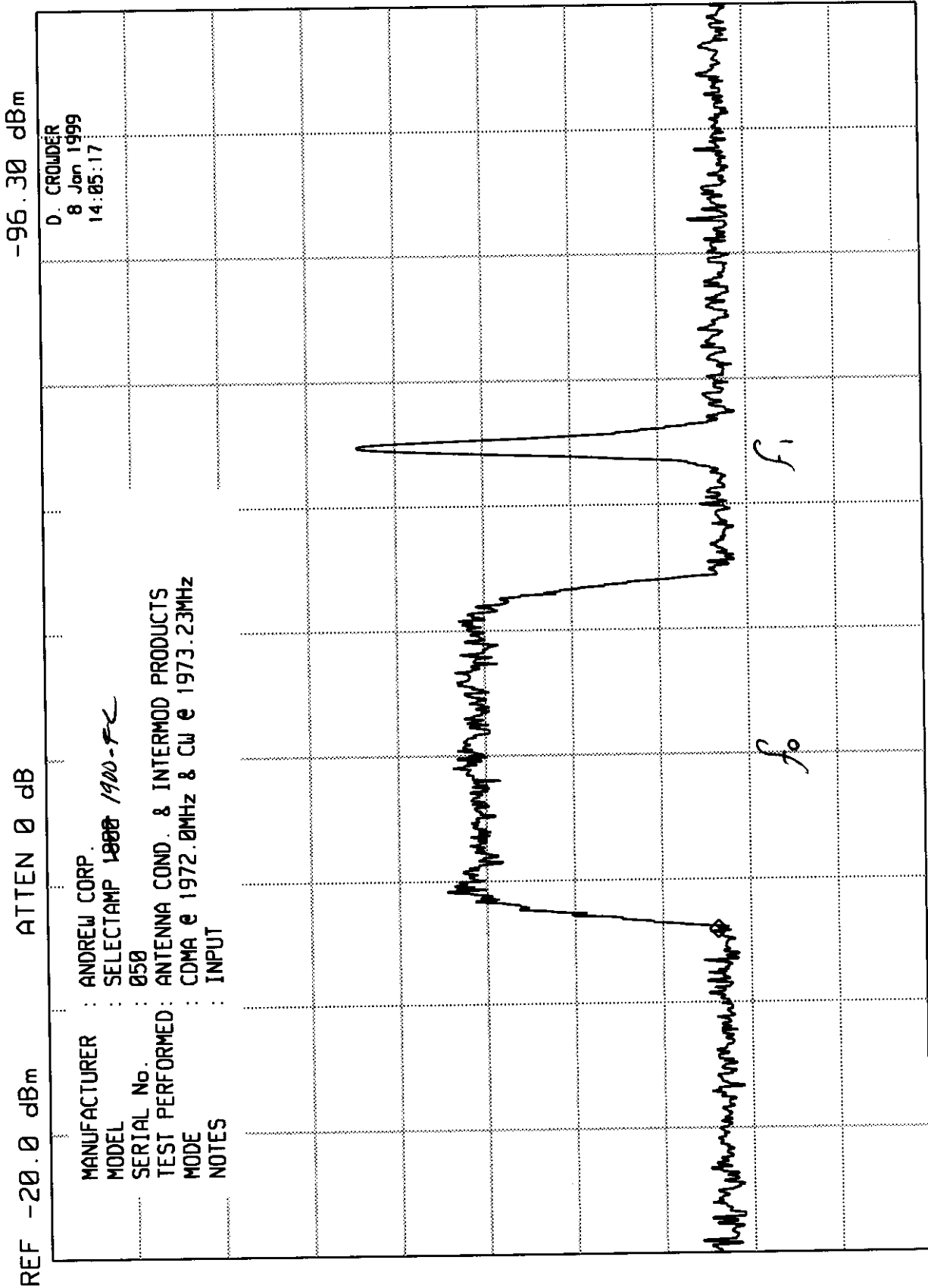
STOP 20.0 GHz  
 SWP 450 msec

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1888 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CW's @ 1972.0MHz & 1973.23MHz  
 NOTES : INPUT

D. CROWDER  
 8 Jan 1999  
 14:08:35

ELITE ELECTRONIC ENGINEERING CO

MKR 1.971 290 GHz  
 -96.30 dBm



D. CROWDER  
 8 Jan 1999  
 14:05:17

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 058  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA e 1972.0MHz & CW e 1973.23MHz  
 NOTES : INPUT

hp

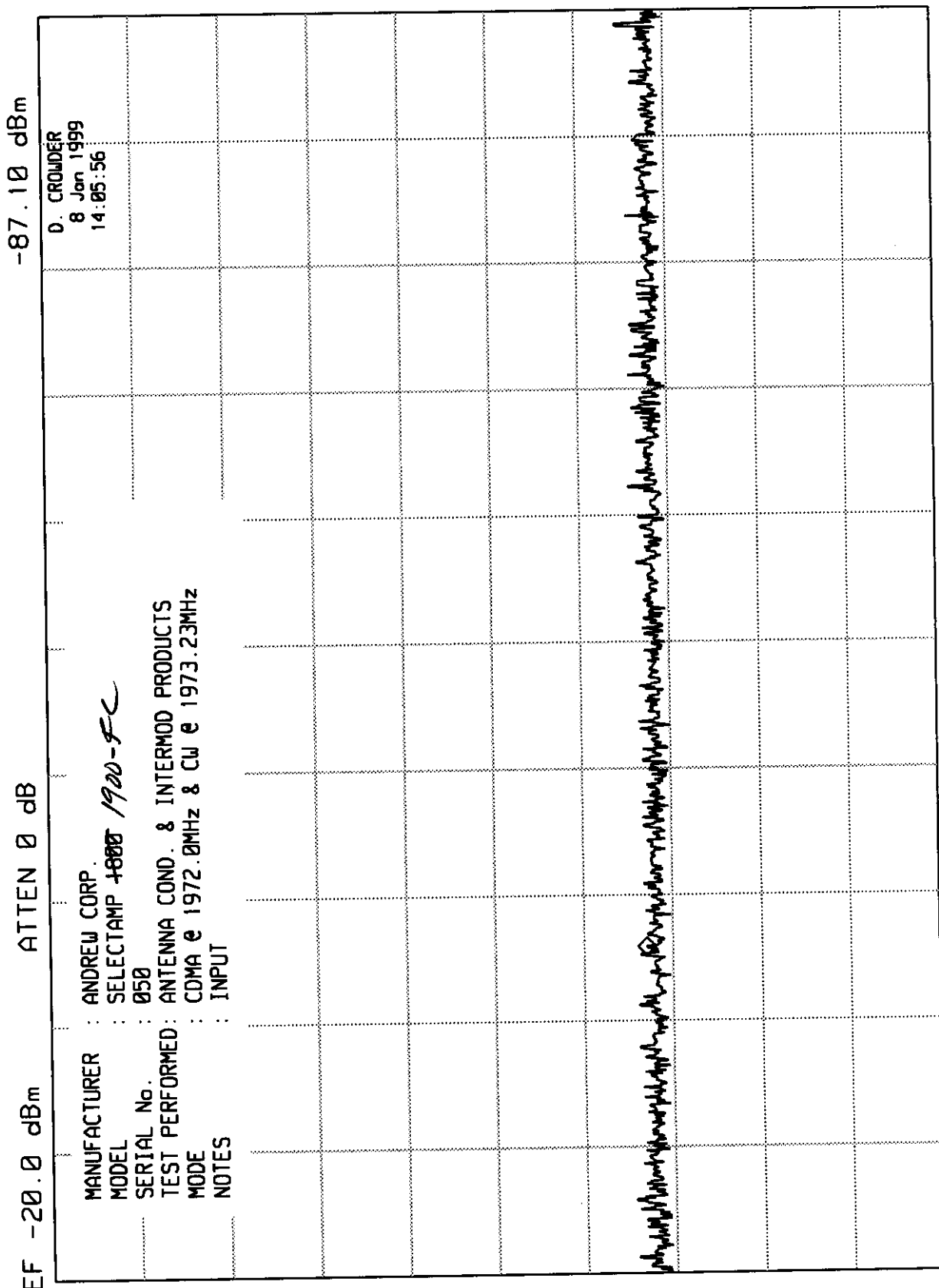
10 dB/

DL -53.0 dBm

START 1.970 00 GHz  
 RES BW 30 kHz(i)  
 STOP 1.975 00 GHz  
 SWP 37.5 msec  
 VBW 300 kHz

ELITE ELECTRONIC ENGINEERING CO

MKR 280.3 MHz  
 -87.10 dBm



hp

10 dB/

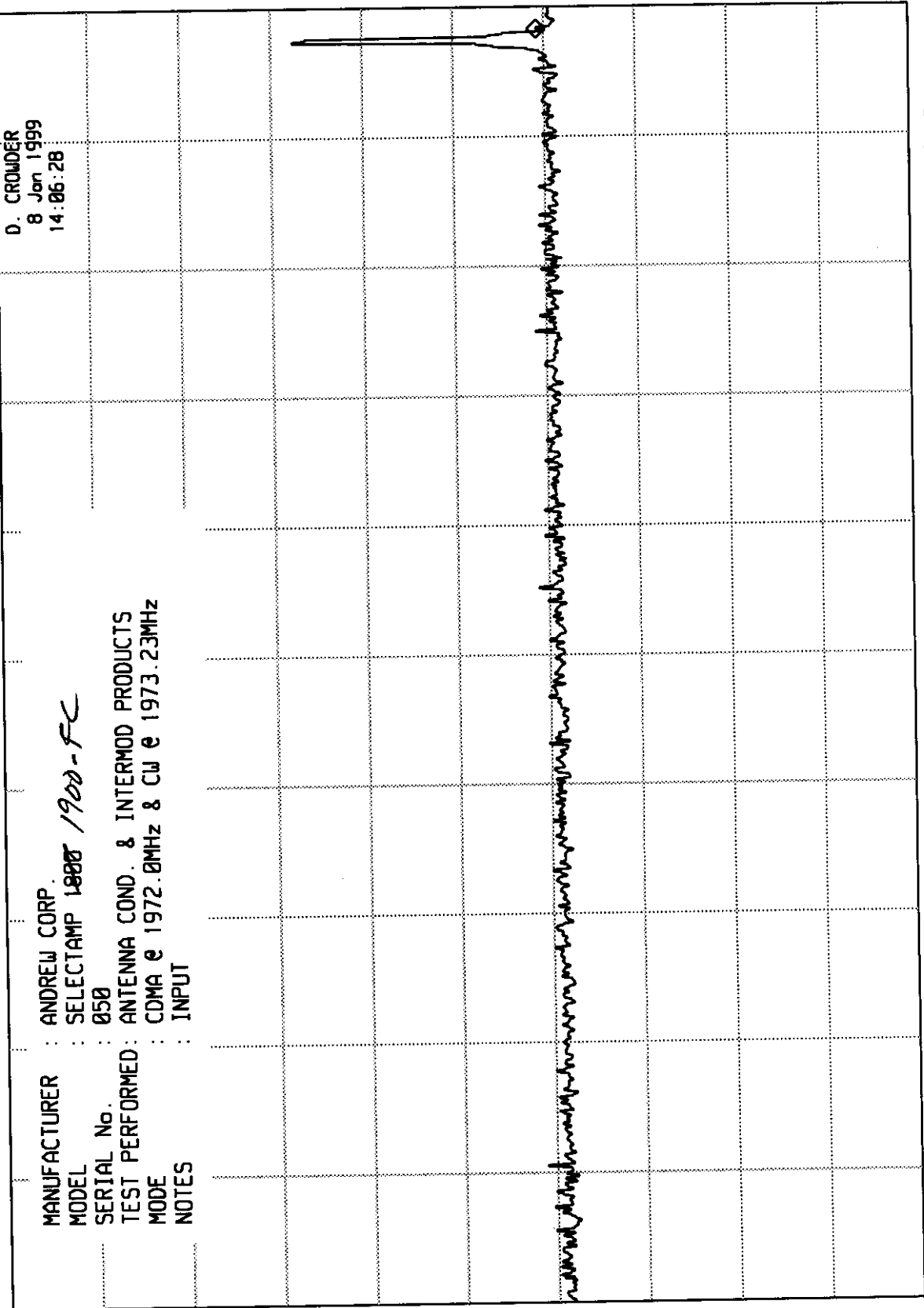
DL -53.0 dBm

START 30 MHz  
 RES BW 100 kHz(i)  
 UBW 1 MHz  
 STOP 1.000 GHz  
 SWP 728 msec

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.982 GHz  
-79.20 dBm



REF -20.0 dBm

ATTEN 0 dB

MANUFACTURER : ANDREW CORP.

MODEL : SELECTAMP 1800 / 1900-FC

SERIAL No. : 050

TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS

MODE : CDMA e 1972.0MHz & CW e 1973.23MHz

NOTES : INPUT

D. CROWDER

8 Jan 1999

14:06:28

hp

10 dB/

DL -53.0 dBm

E(87)

START 1.00 GHz

RES BW 1 MHz(i)

UBW 3 MHz

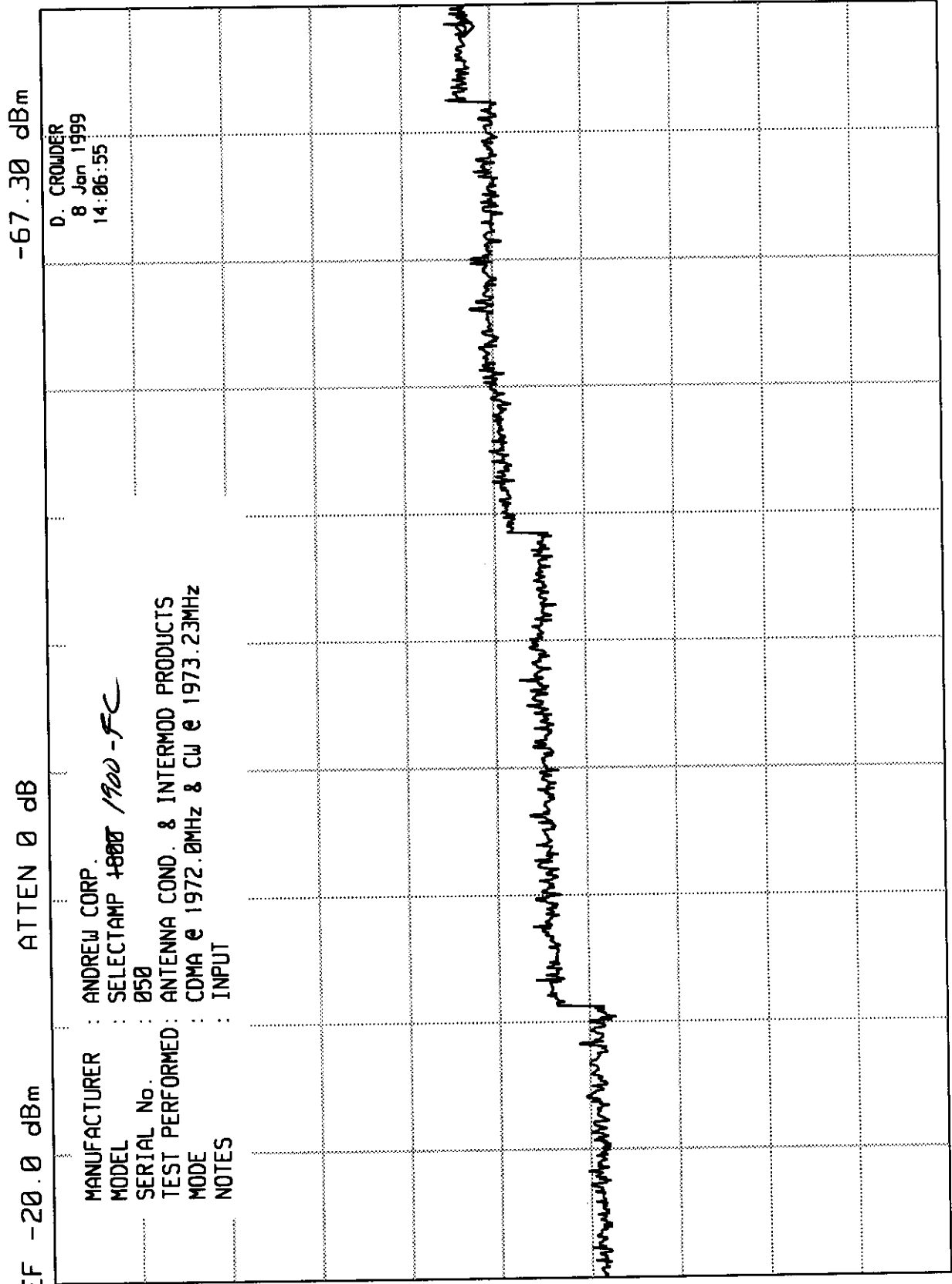
STOP 2.00 GHz

SWP 25.0 msec



ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz  
 -67.30 dBm



hp

10 dB/

DL -53.0 dBm

E(88)

REF -20.0 dBm      ATTEN 0 dB

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 4800 / 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA e 1972.0MHz & CW e 1973.23MHz  
 NOTES : INPUT

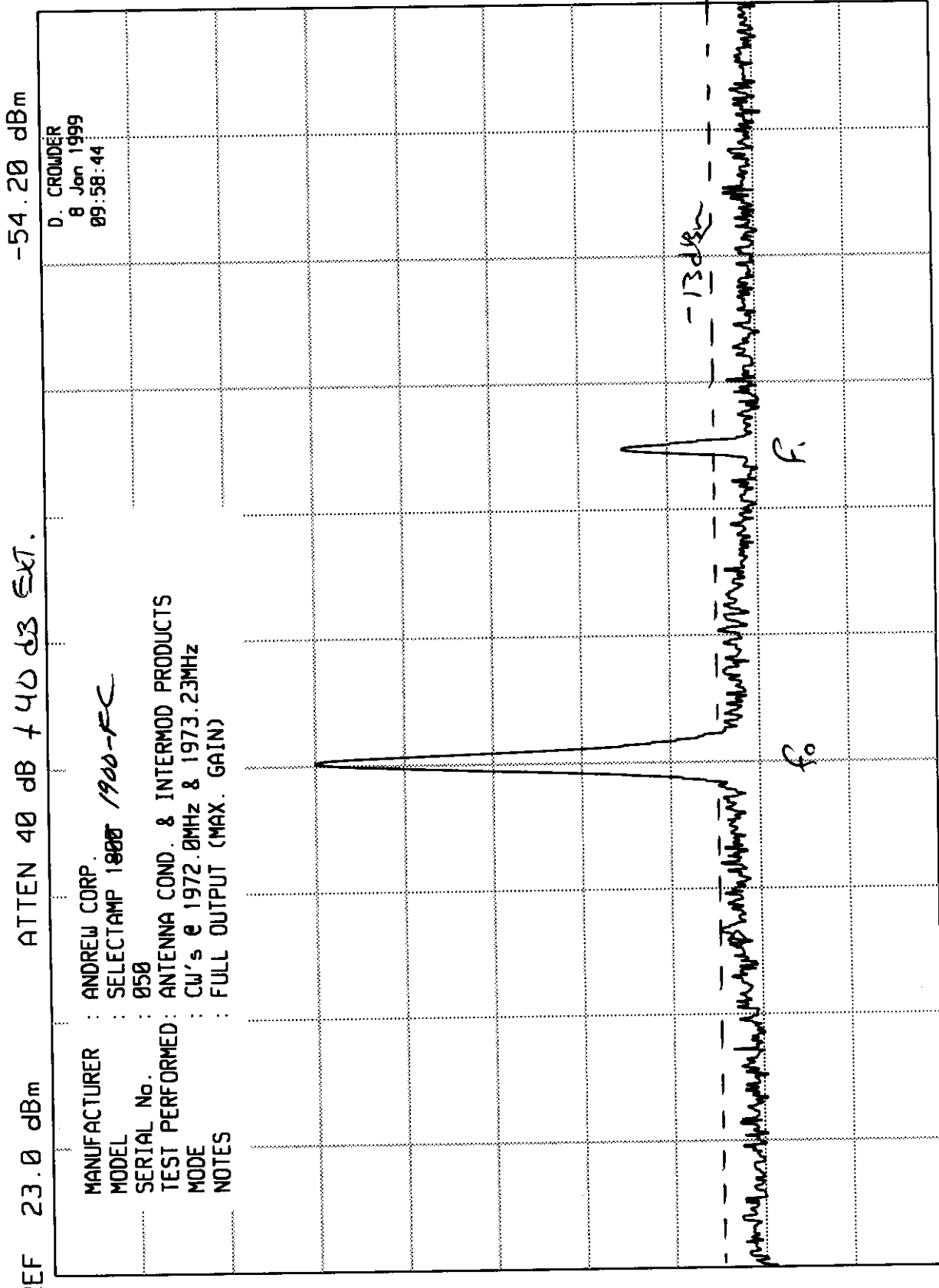
D. CROWDER  
 8 Jan 1999  
 14:06:55

START 2.0 GHz      RES BW 1 MHz(i)      UBW 3 MHz      STOP 20.0 GHz  
 SWP 450 msec

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.971 290 GHz  
-54.20 dBm



hp 10 dB/

DL -23.0 dBm

170

E(89)

START 1.970 00 GHz  
RES BW 30 kHz(i)  
STOP 1.975 00 GHz  
SWP 37.5 msec  
VBW 300 kHz

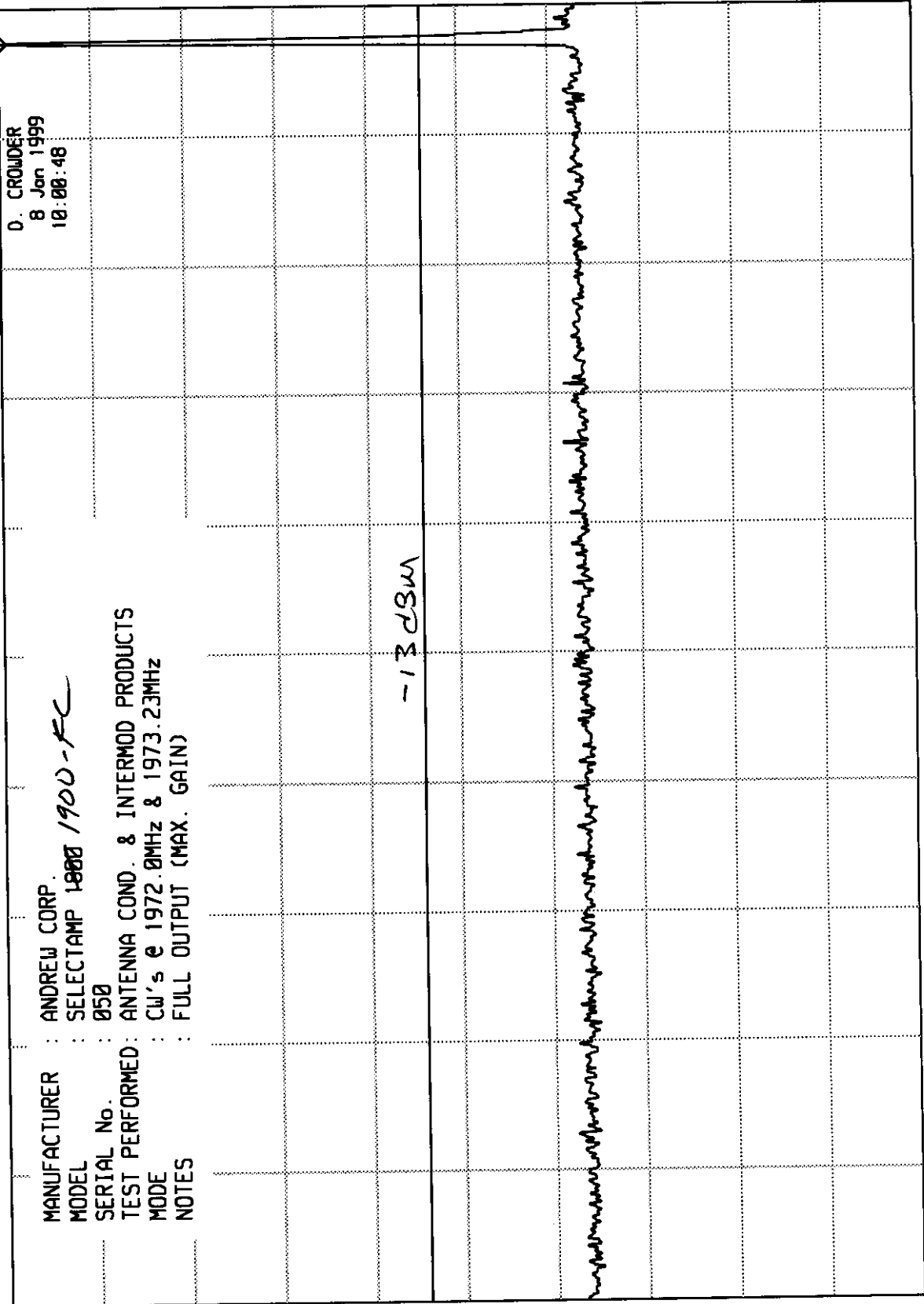


ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.972 GHz  
-6.80 dBm

REF -7.0 dBm  
ATTEN 10 dB + 40dB EXT.



STOP 2.00 GHz  
SWP 25.0 msec

UBW 3 MHz

RES BW 1 MHz(i)

START 1.00 GHz

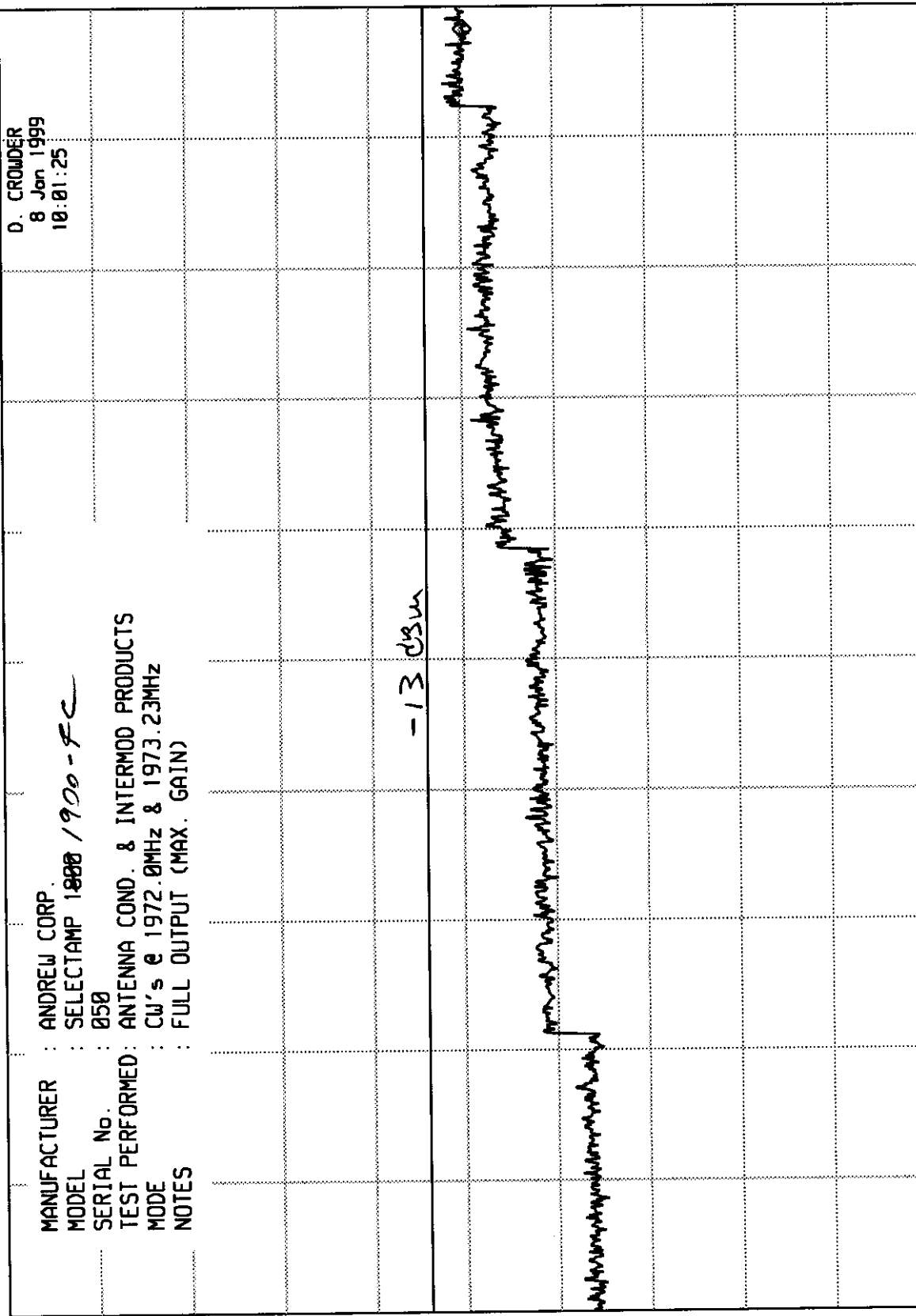
E(91)

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz  
-57.30 dBm

REF -7.0 dBm  
ATTEN 10 dB + 40 dB EXT.



hp

10 dB/

DL -53.0 dBm

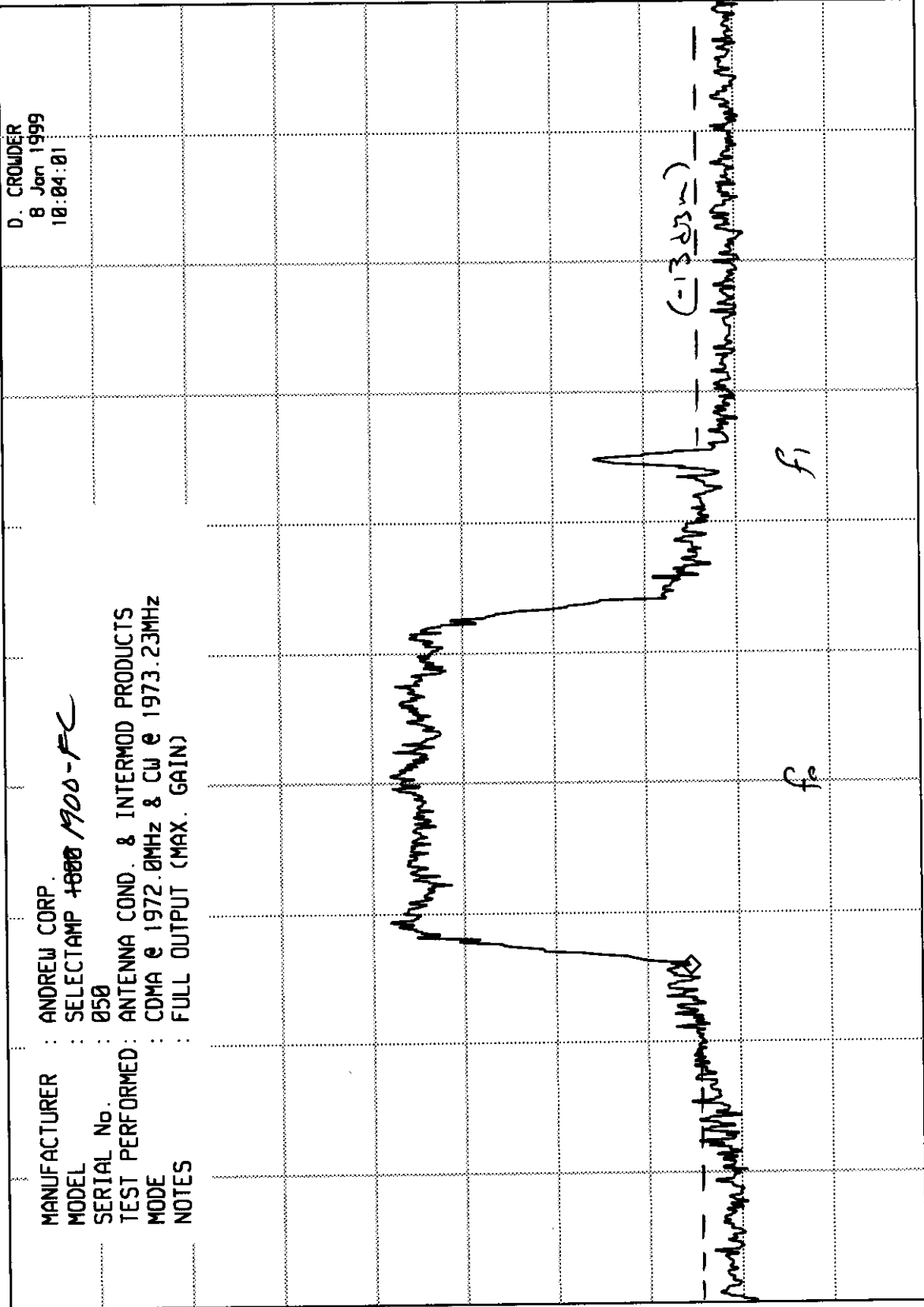
START 2.0 GHz  
RES BW 1 MHz(i)  
UBW 3 MHz  
STOP 20.0 GHz  
SWP 450 msec

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.971 290 GHz  
-51.70 dBm

REF 23.0 dBm      ATTN 40 dB + 40 dB Ext



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1800~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA @ 1972.0MHz & CW @ 1973.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

D. CROWDER  
 8 Jan 1999  
 10:04:01

hp

10 dB/

DL -53.0 dBm

START 1.970 00 GHz      STOP 1.975 00 GHz  
 RES BW 30 kHz(i)      VBW 300 kHz      SWP 37.5 msec



ELITE ELECTRONIC ENGINEERING CO

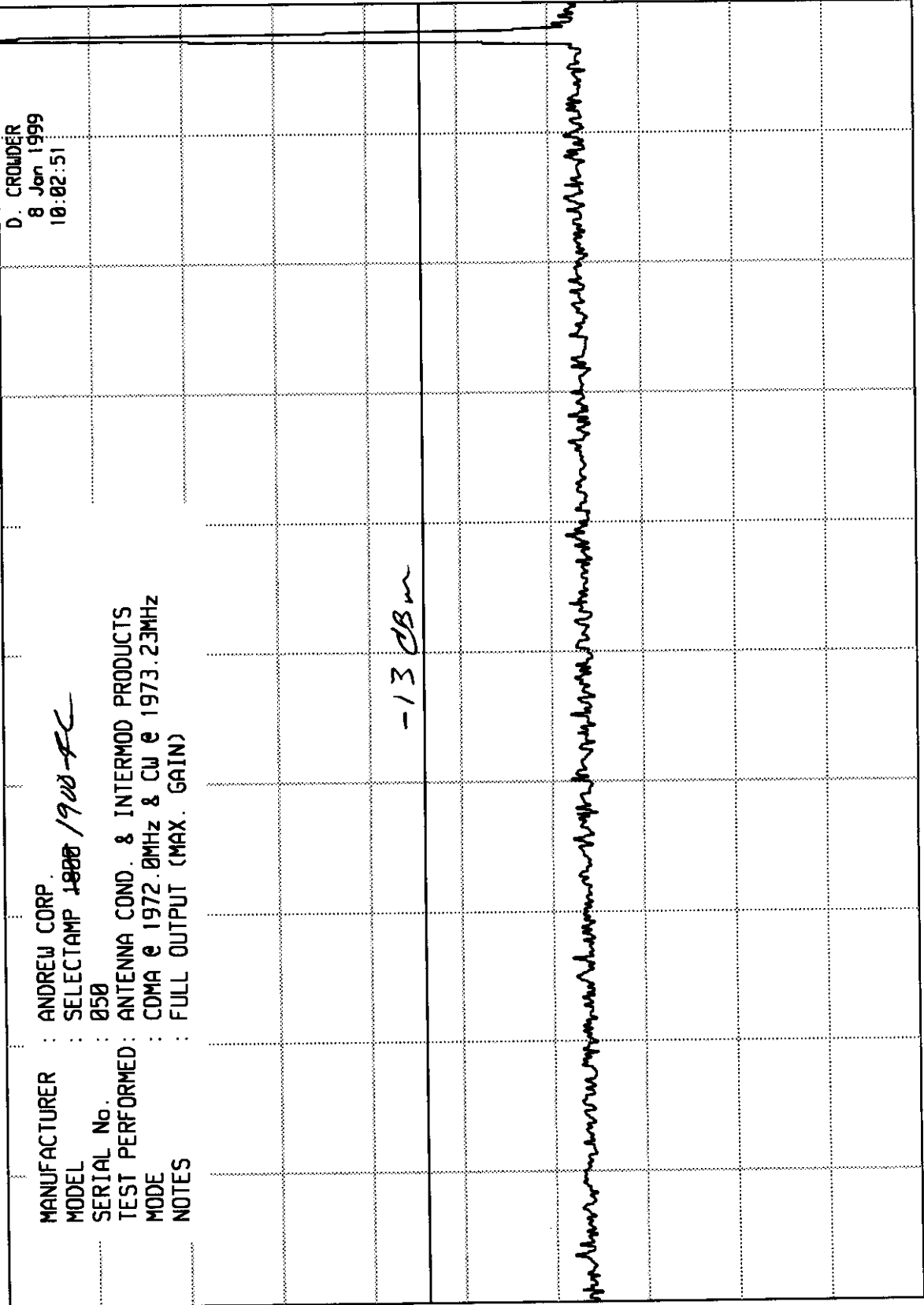
MKR 1.972 GHz  
 -6.10 dBm

hp

10 dB/

DL -53.0  
 dBm

ATTEN 10 dB + 40 dBm EXT.



START 1.00 GHz RES BW 1 MHz(i) STOP 2.00 GHz  
 UBW 3 MHz SWP 25.0 msec



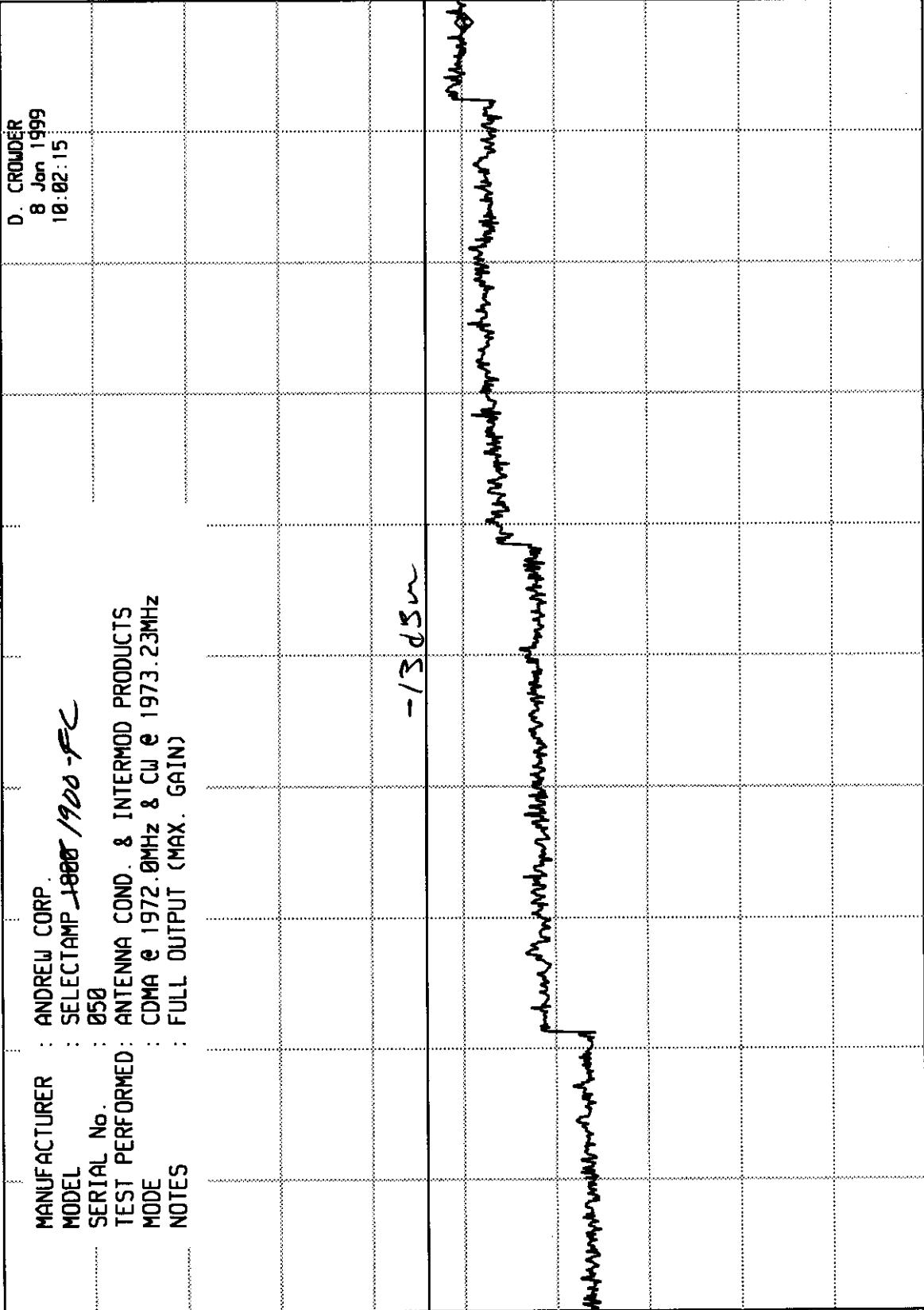
ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz  
-57.30 dBm

hp REF -7.0 dBm

ATTEN 10 dB + 40 dB EXT.



hp 10 dB/

DL -53.0 dBm

START 2.0 GHz RES BW 1 MHz(i) STOP 20.0 GHz  
UBW 3 MHz SWP 450 msec

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

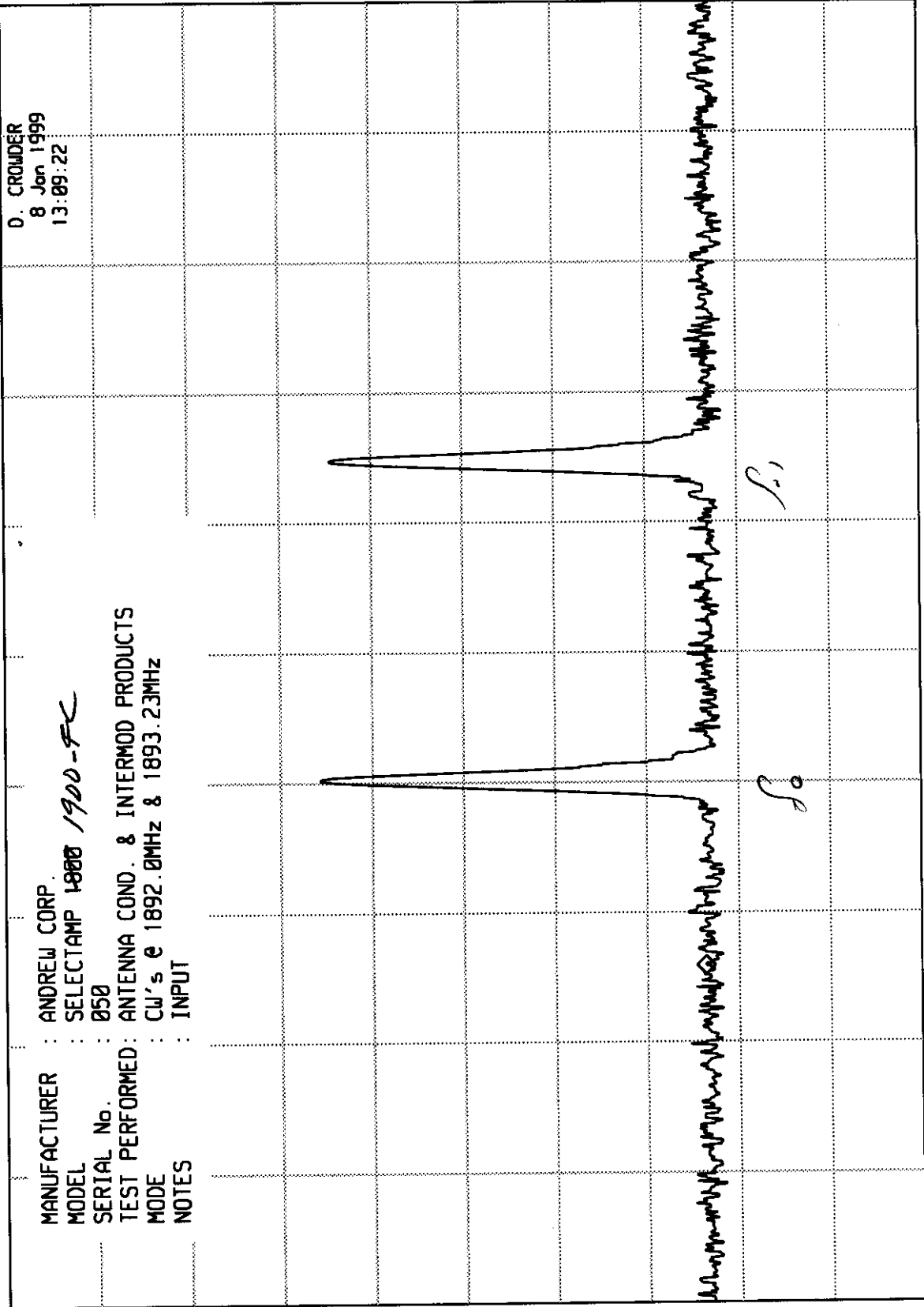
MKR 1.891 290 GHz  
-96.40 dBm

hp

10 dB/

DL -53.0  
dBm

REF -20.0 dBm ATTN 0 dB



D. CROWDER  
8 Jan 1999  
13:09:22

MANUFACTURER : ANDREW CORP.  
MODEL : SELECTAMP 1800 1900-FC  
SERIAL No. : 050  
TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
MODE : CW's @ 1892.0MHz & 1893.23MHz  
NOTES : INPUT

STOP 1.895 00 GHz  
SWP 37.5 msec

VBW 300 kHz

RES BW 30 kHz(i)

START 1.890 00 GHz

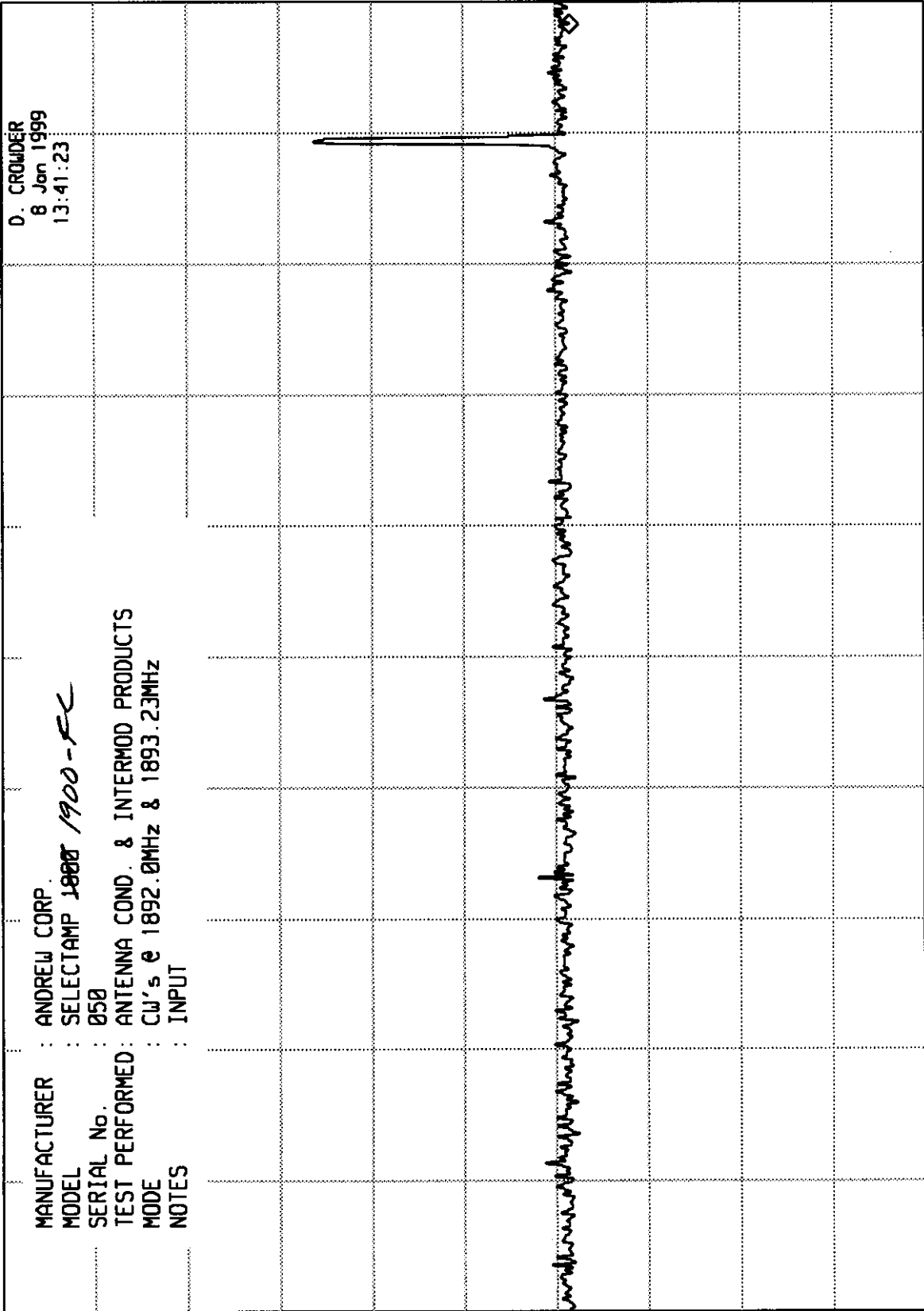
E(97)



ELITE ELECTRONIC ENGINEERING CO

MKR 1.982 GHz  
 -81.60 dBm

REF -20.0 dBm      ATTN 0 dB



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 058  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CW's @ 1892.0MHz & 1893.23MHz  
 NOTES : INPUT

D. CROWDER  
 8 Jan 1999  
 13:41:23

hp  
 10 dB/

DL  
 -53.0  
 dBm

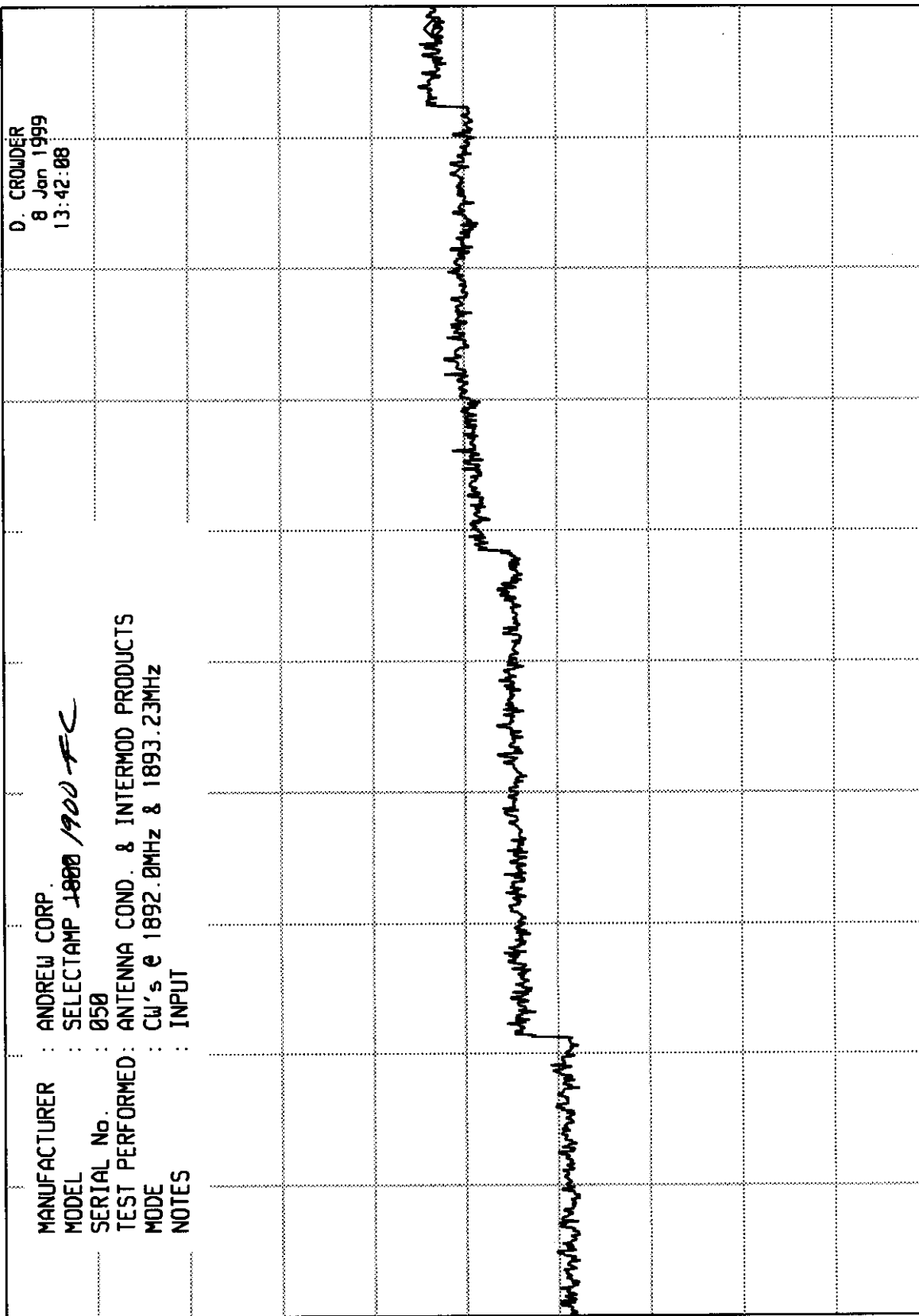
START 1.00 GHz      RES BW 1 MHz(i)      UBW 3 MHz      STOP 2.00 GHz  
 SWP 25.0 msec

ENGINEERING TEST REPORT NO. 21337

DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz  
-66.80 dBm



hp

10 dB/

DL -53.0  
dBm

181

E(/08)

START 2.0 GHz RES BW 1 MHz(i) STOP 20.0 GHz  
UBW 3 MHz SWP 450 msec

ELITE ELECTRONIC ENGINEERING CO

MKR 1.891 290 GHz  
 -97.30 dBm

REF -20.0 dBm      ATTN 0 dB

hp

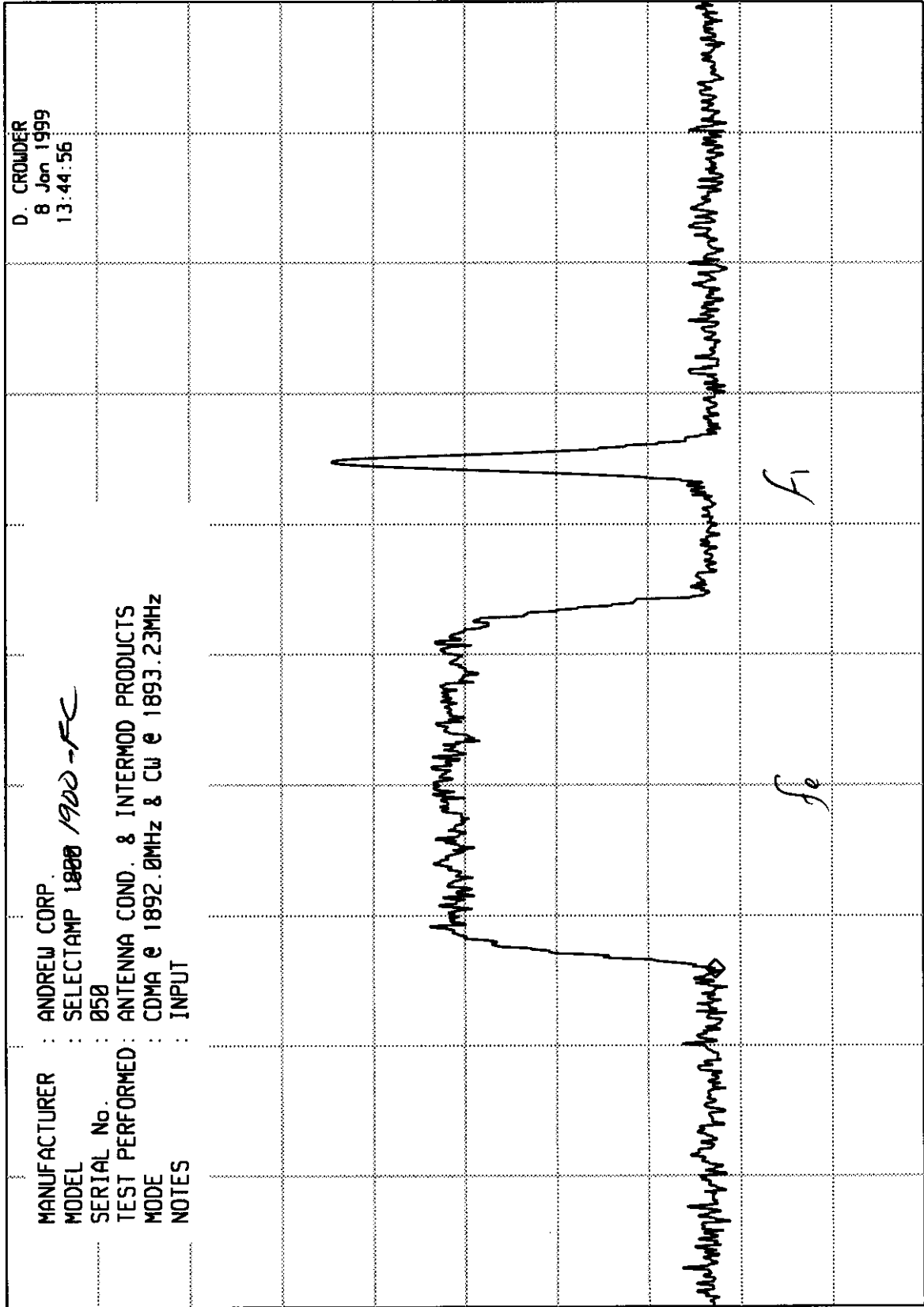
10 dB/

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA @ 1892.0MHz & CW @ 1893.23MHz  
 NOTES : INPUT

D. CROWDER  
 8 Jan 1999  
 13:44:56

DL -53.0  
 dBm

182



START 1.890 00 GHz      RES BW 30 kHz(i)      STOP 1.895 00 GHz  
 UBW 300 kHz      SWP 37.5 msec

E(101)

ENGINEERING TEST REPORT NO. 21337

DATA SHEET

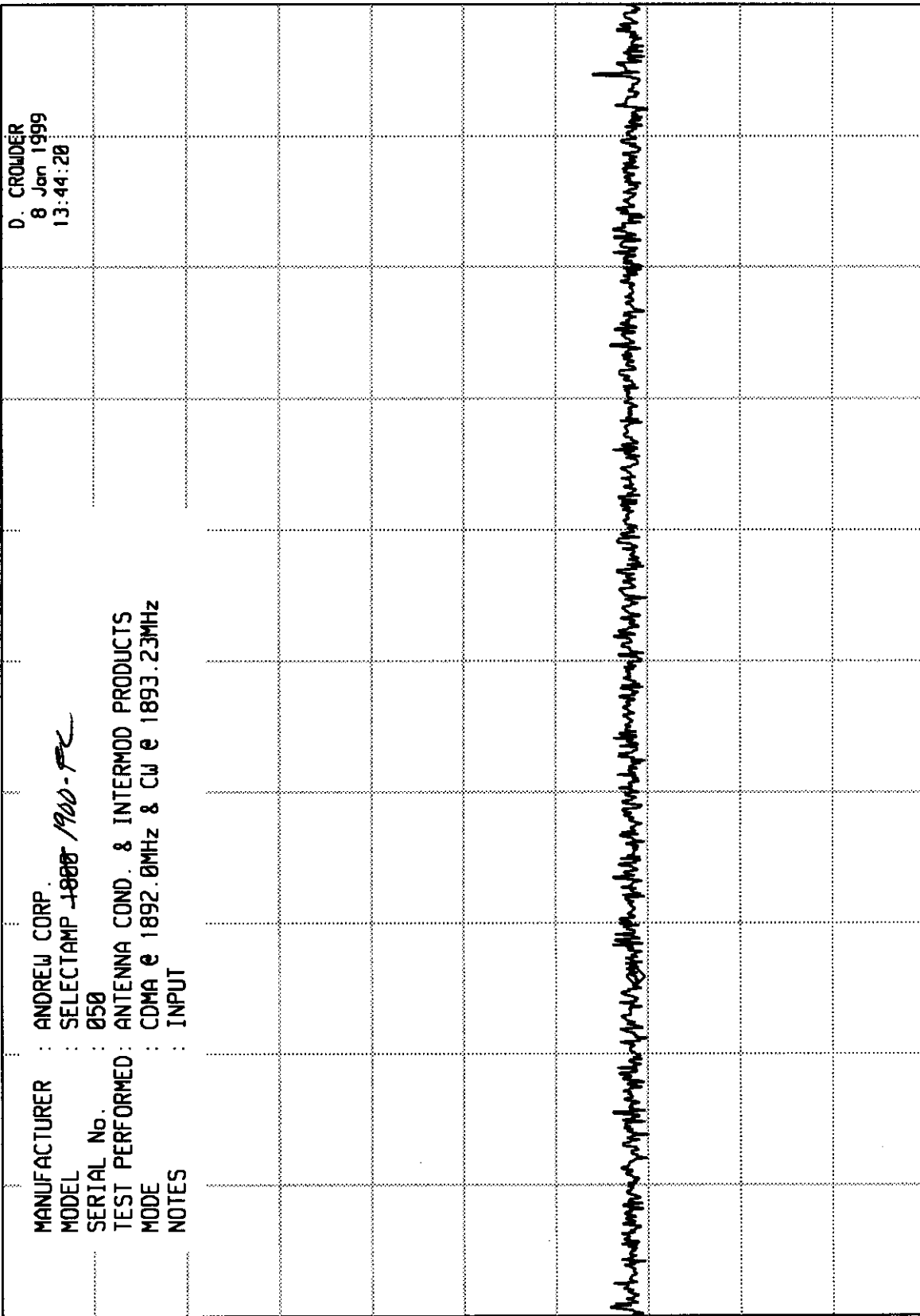
ELITE ELECTRONIC ENGINEERING CO

MKR 280.3 MHz  
-88.70 dBm

hp REF -20.0 dBm

ATTEN 0 dB

10 dB/



D. CROWDER  
8 Jan 1999  
13:44:20

DL -53.0 dBm

START 30 MHz RES BW 100 kHz (i) STOP 1.000 GHz  
UBW 1 MHz SWP 728 msec

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

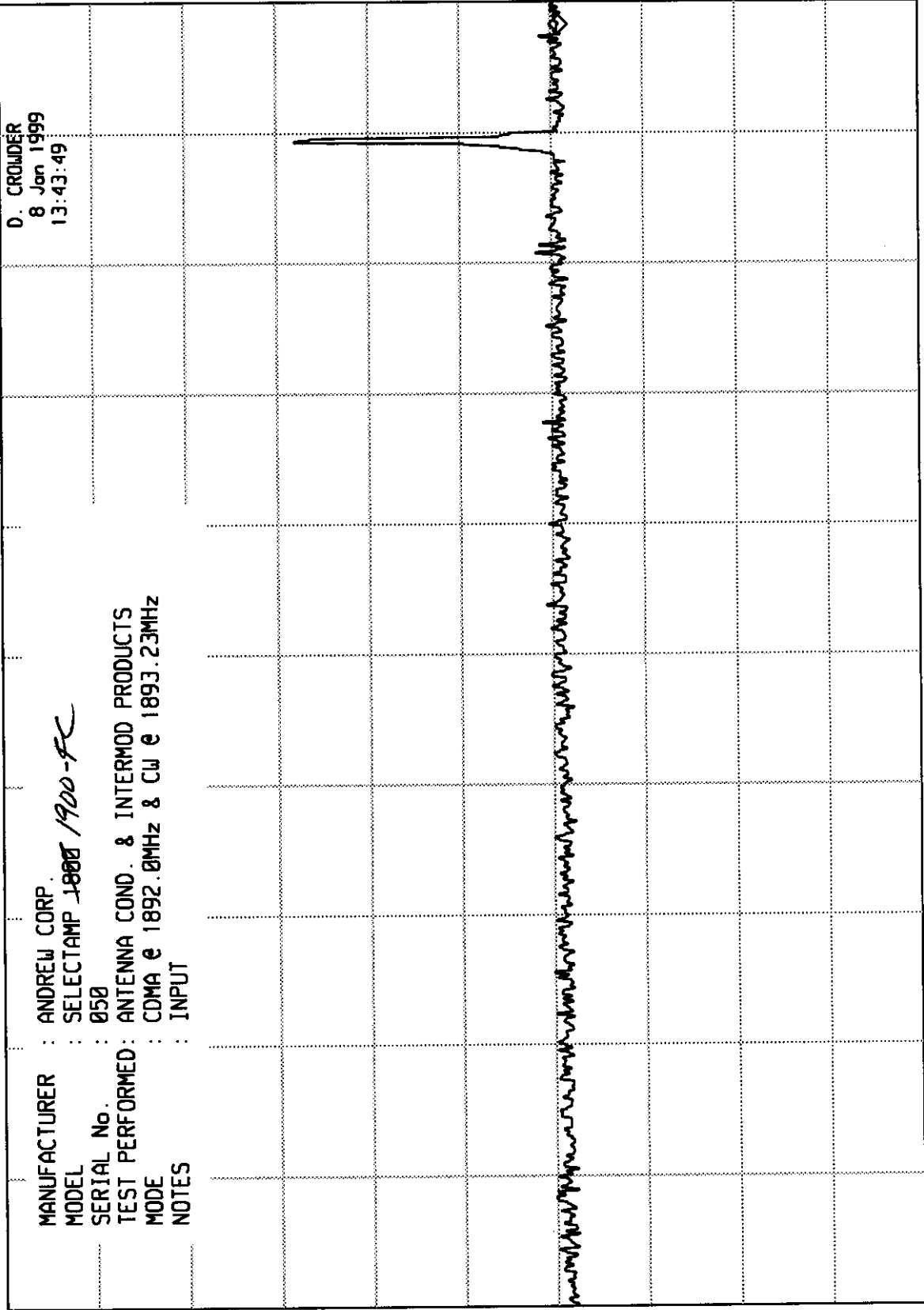
MKR 1.982 GHz  
-80.90 dBm

hp

10 dB/

DL -53.0  
dBm

REF -20.0 dBm      ATTN 0 dB



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1800~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED: ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA e 1892.0MHz & Cw e 1893.23MHz  
 NOTES : INPUT

STOP 2.00 GHz  
SWP 25.0 msec

VBW 3 MHz

START 1.00 GHz  
RES BW 1 MHz(i)



ENGINEERING TEST REPORT NO. 21337

DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

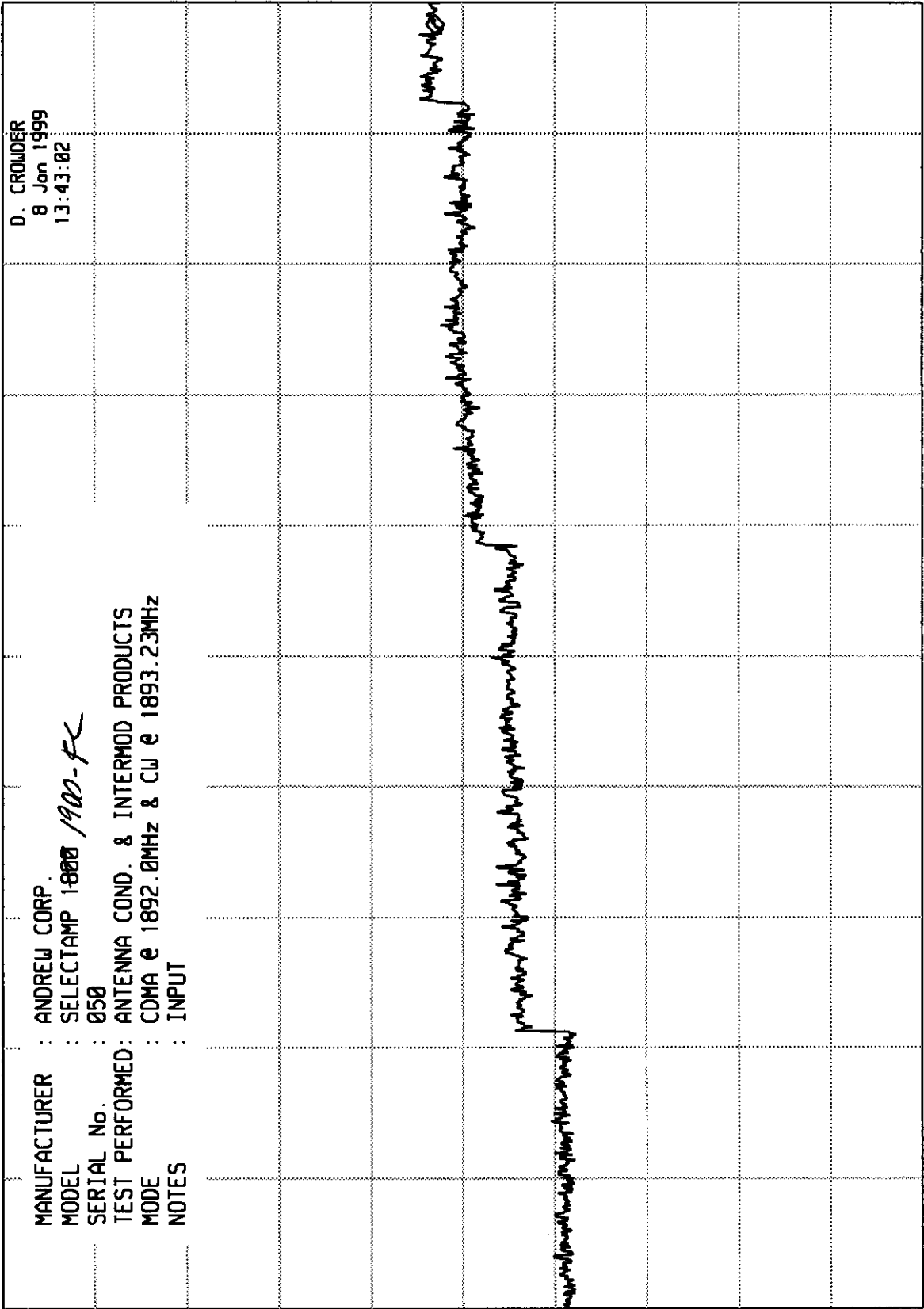
MKR 19.68 GHz  
-67.00 dBm

hp

10 dB/

DL -53.0  
dBm

REF -20.0 dBm ATTEN 0 dB



STOP 20.0 GHz  
SWP 450 msec

VBW 3 MHz

RES BW 1 MHz (i)

START 2.0 GHz

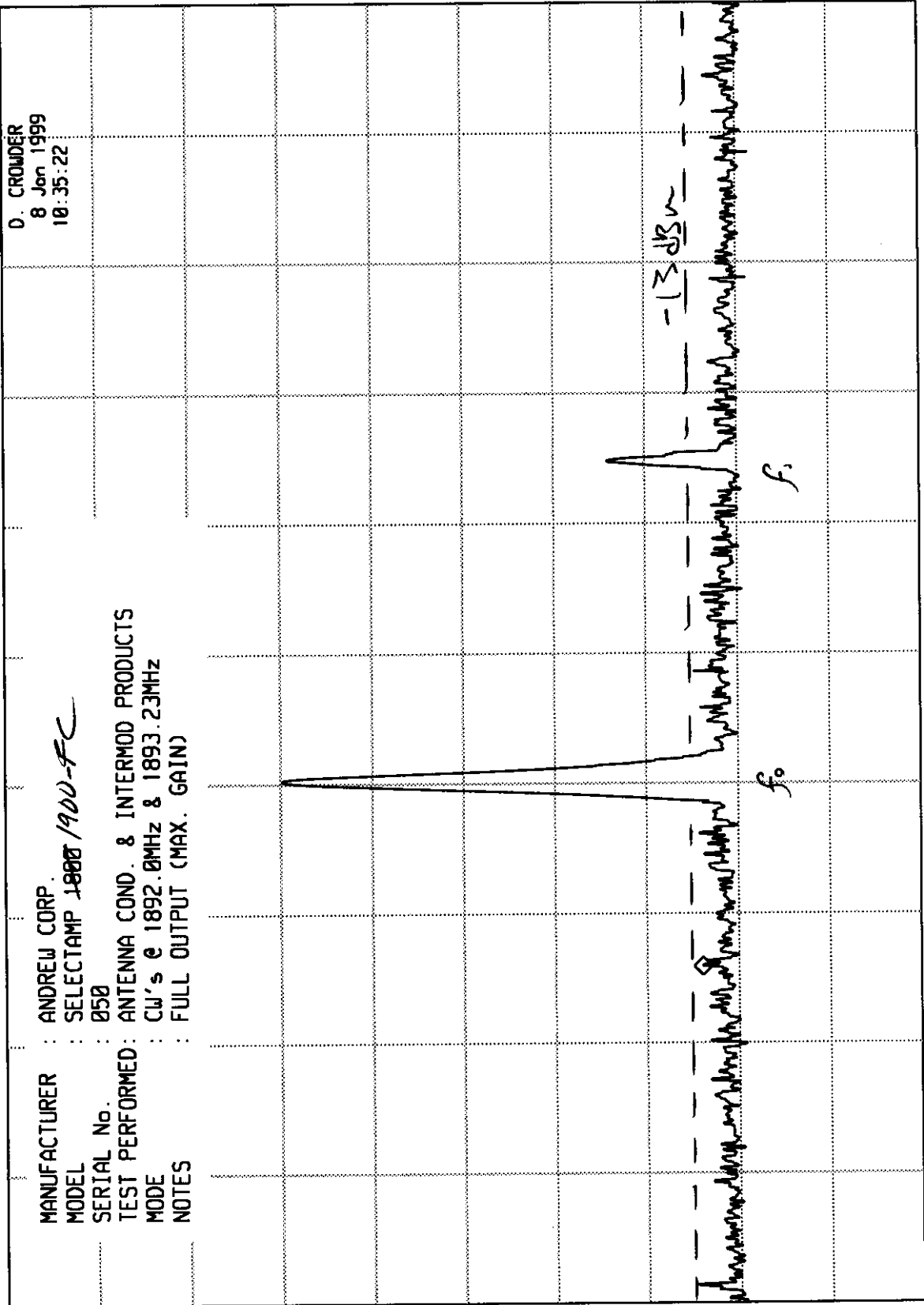
E(104)

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.891 290 GHz  
-53.10 dBm

REF 23.0 dBm      ATTEN 40 dB + 40 dB EXT.



D. CROWDER  
8 Jan 1999  
10:35:22

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CW's @ 1892.0MHz & 1893.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

hp

10 dB/

DL -53.0 dBm

START 1.890 00 GHz      RES BW 30 kHz(i)      VBW 300 kHz      STOP 1.895 00 GHz  
 SWP 37.5 msec



ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.892 GHz  
-6.80 dBm

hp

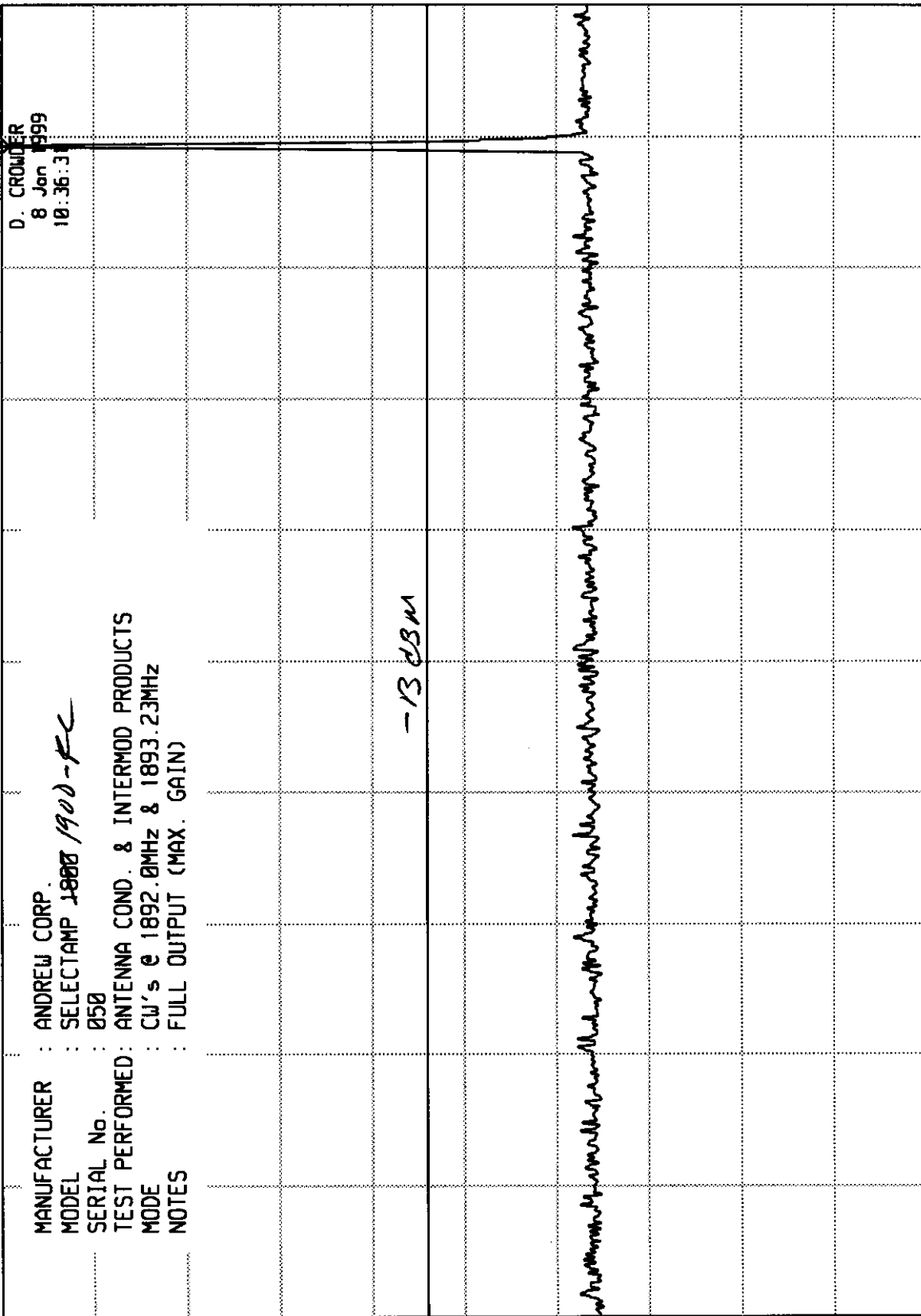
10 dB/

DL -53.0  
dBm

188

E(109)

REF -7.0 dBm      ATTEN 10 dB + 40 dB Ext



STOP 2.00 GHz  
SWP 25.0 msec

UBW 3 MHz

START 1.00 GHz  
RES BW 1 MHz (i)

DATA SHEET

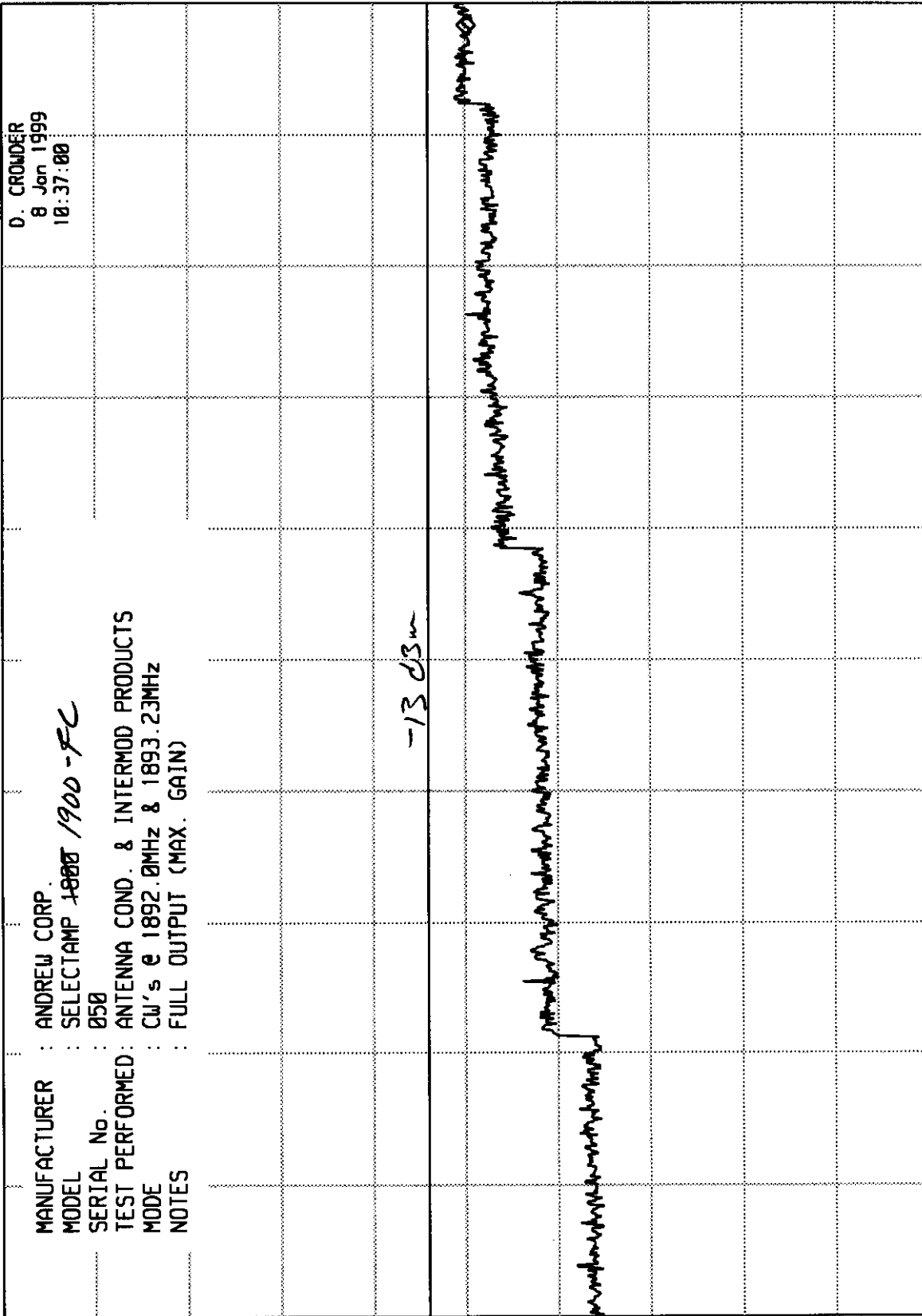
ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz  
-57.20 dBm

REF -7.0 dBm      ATTEN 10 dB + 40 dB EXT

hp

10 dB/



DL -53.0 dBm

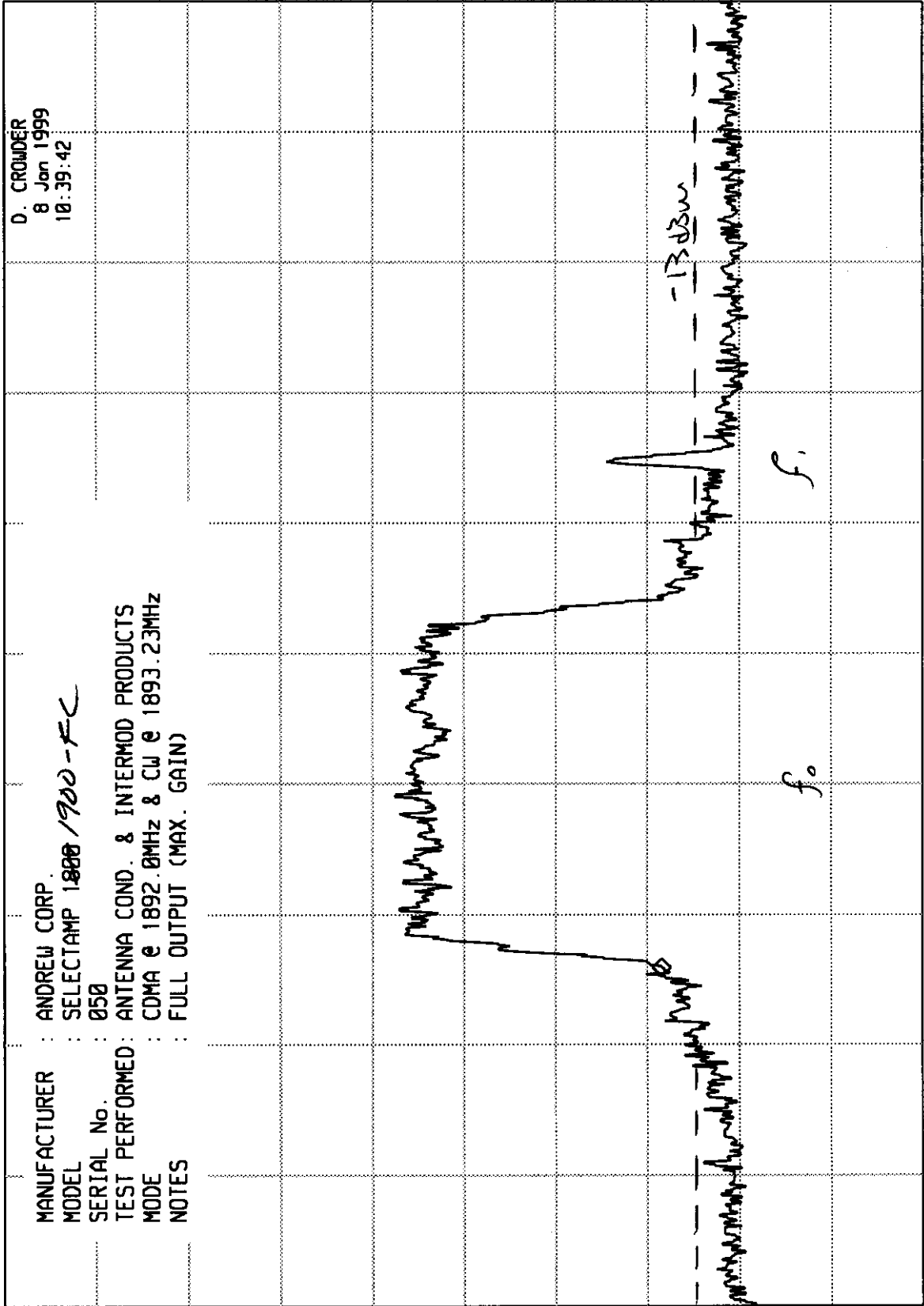
START 2.0 GHz      RES BW 1 MHz(i)      VBW 3 MHz      STOP 20.0 GHz  
SWP 450 msec

ENGINEERING TEST REPORT NO. 21337

DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.891 290 GHZ  
-48.60 dBm



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 / 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA @ 1892.0MHz & CW @ 1893.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

D. CROMBER  
 8 Jan 1999  
 10:39:42

REF 23.0 dBm

ATTEN 40 dB + 40 dB EXT

hp 10 dB/

DL -53.0 dBm

START 1.890 00 GHZ  
 RES BW 30 kHz(i)  
 STOP 1.895 00 GHZ  
 SWP 37.5 msec  
 VBW 300 kHz

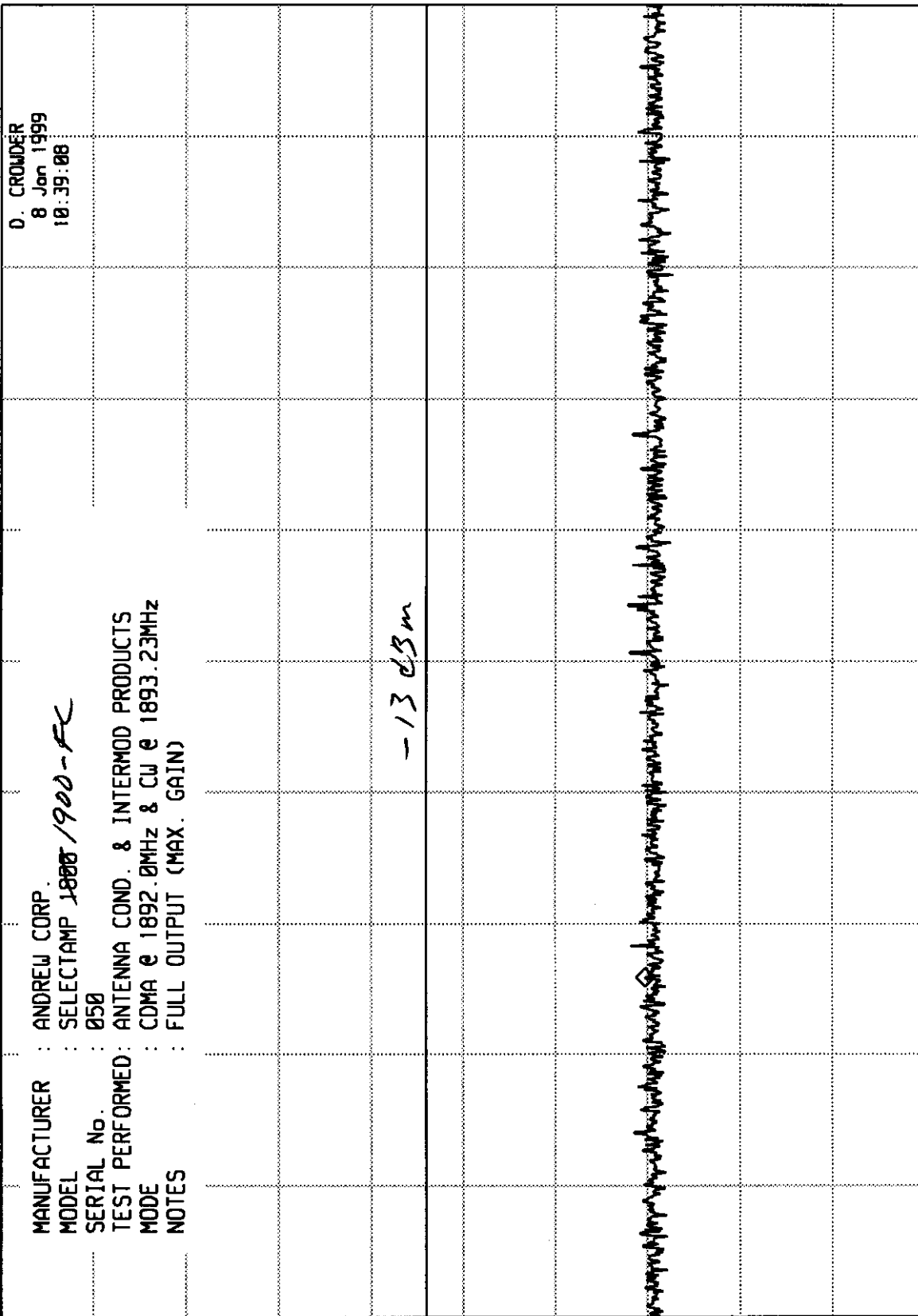
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 280.3 MHz  
-76.80 dBm

hp REF -7.0 dBm

ATTEN 10 dB + 40 dB EXT



D. CROWDER  
8 Jan 1999  
10:39:08

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 / 900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA @ 1892.0MHz & CW @ 1893.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

DL -53.0 dBm

10 dB/

E(110)

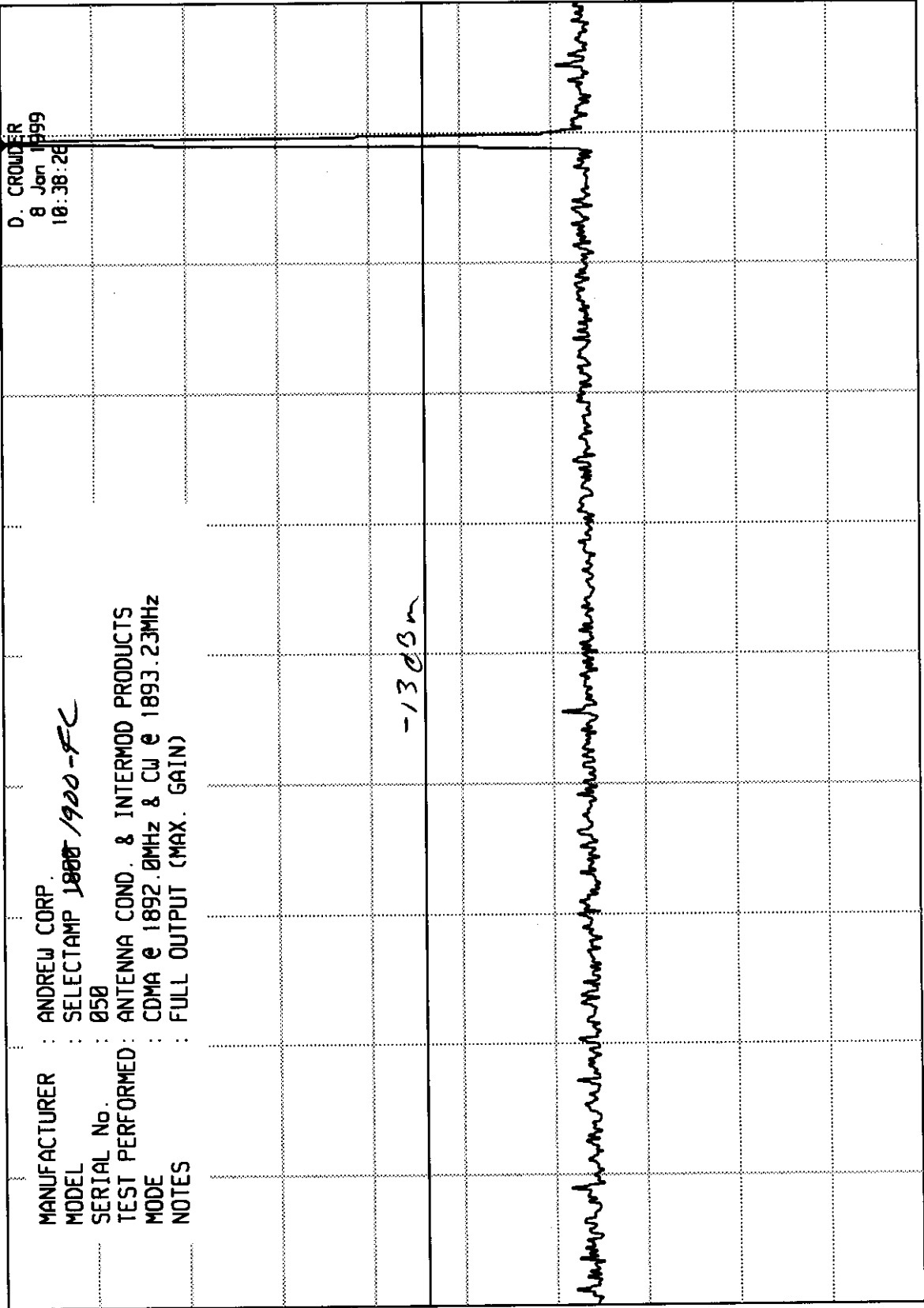
START 30 MHz      RES BW 100 kHz (i)      VBW 1 MHz      STOP 1.000 GHz  
 SWP 728 msec

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.892 GHz  
-6.60 dBm

REF -7.0 dBm  
ATTEN 10 dB + 40 dB EXT



hp

10 dB/

DL -53.0 dBm

E(111)

START 1.00 GHz  
RES BW 1 MHz(i)  
UBW 3 MHz  
STOP 2.00 GHz  
SWP 25.0 msec

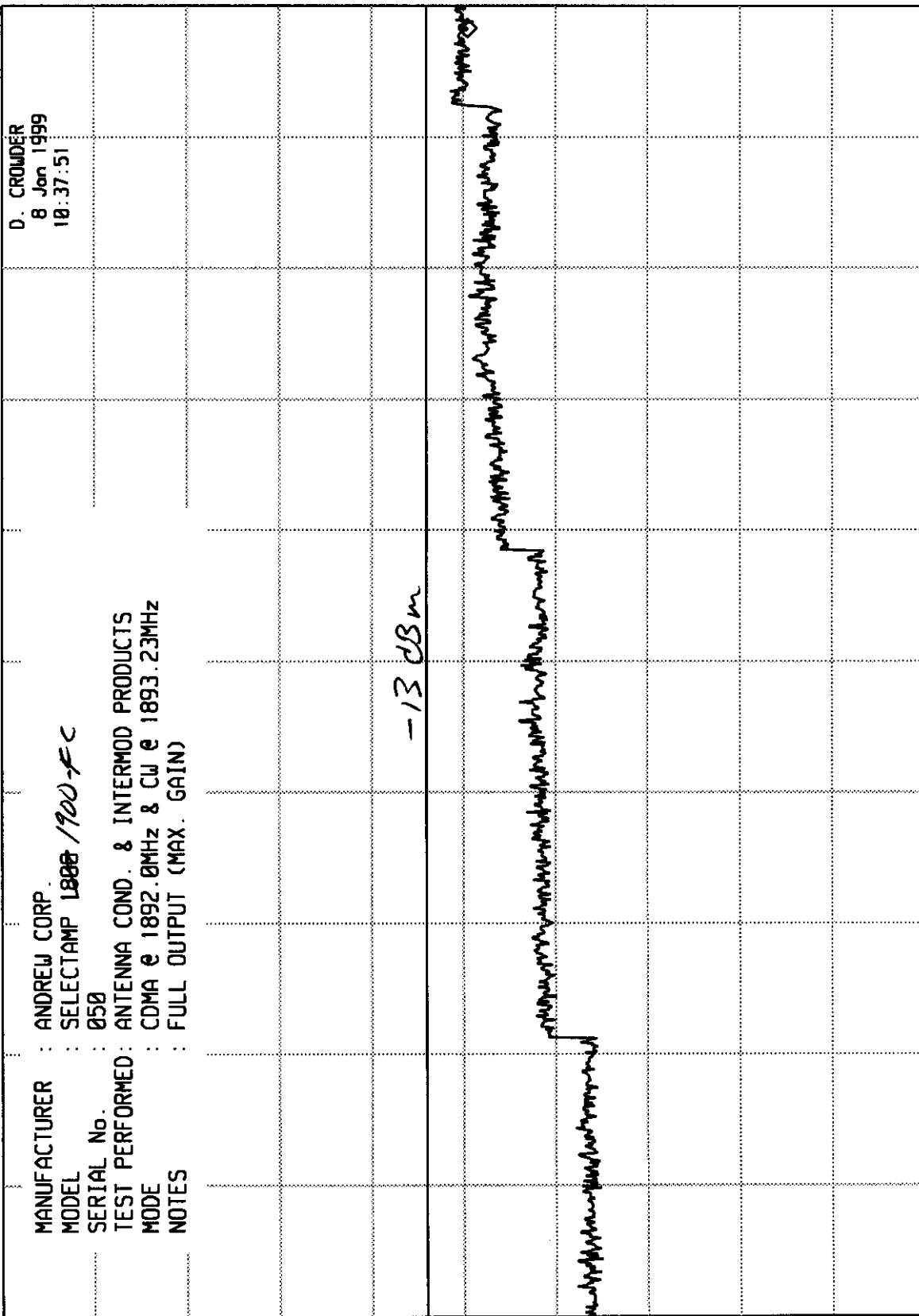


DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz  
-57.50 dBm

hp REF -7.0 dBm ATTN 10 dB + 40 dB EXT



10 dB/

DL -53.0 dBm

START 2.0 GHz RES BW 1 MHz (i) UBW 3 MHz STOP 20.0 GHz SWP 450 msec

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

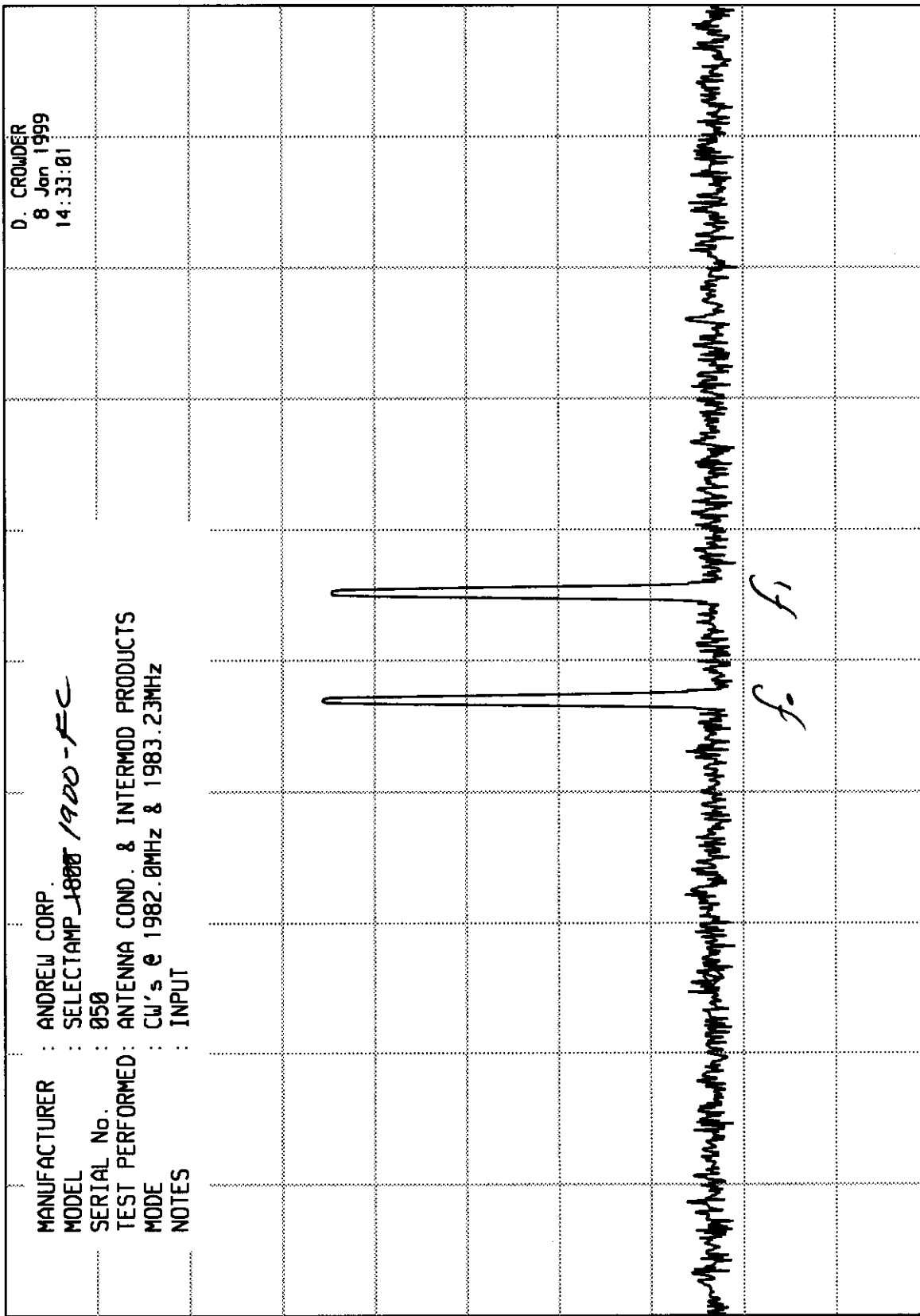
MKR 1.978 87 GHz  
-96.70 dBm

hp

10 dB/

DL -53.0  
dBm

194



E(113)

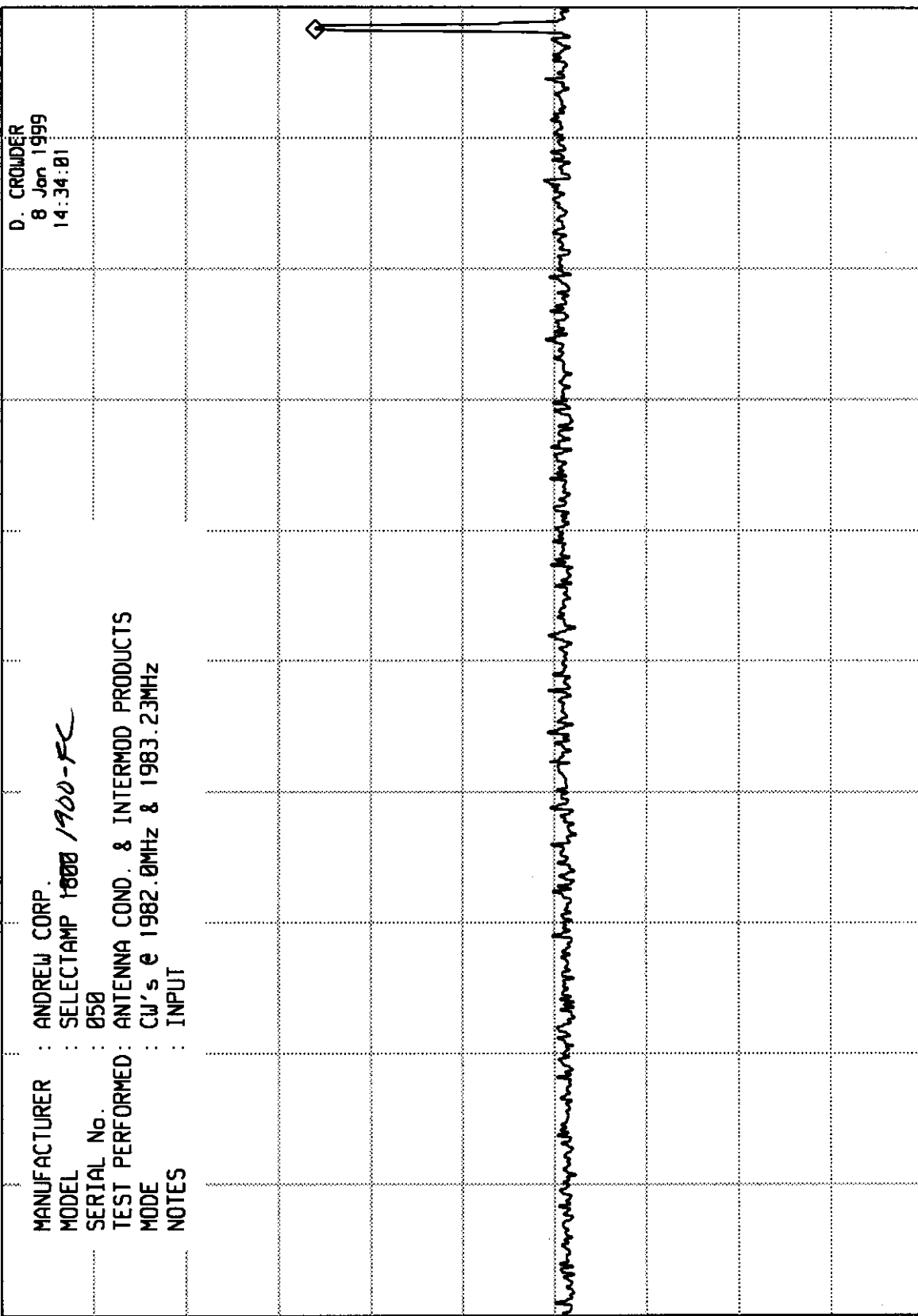


ENGINEERING TEST REPORT NO. 21337

DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.982 GHz  
-54.00 dBm



hp

10 dB/

DL -53.0 dBm

START 1.00 GHz

RES BW 1 MHz (i)

VBW 3 MHz

STOP 2.00 GHz

SWP 25.0 msec

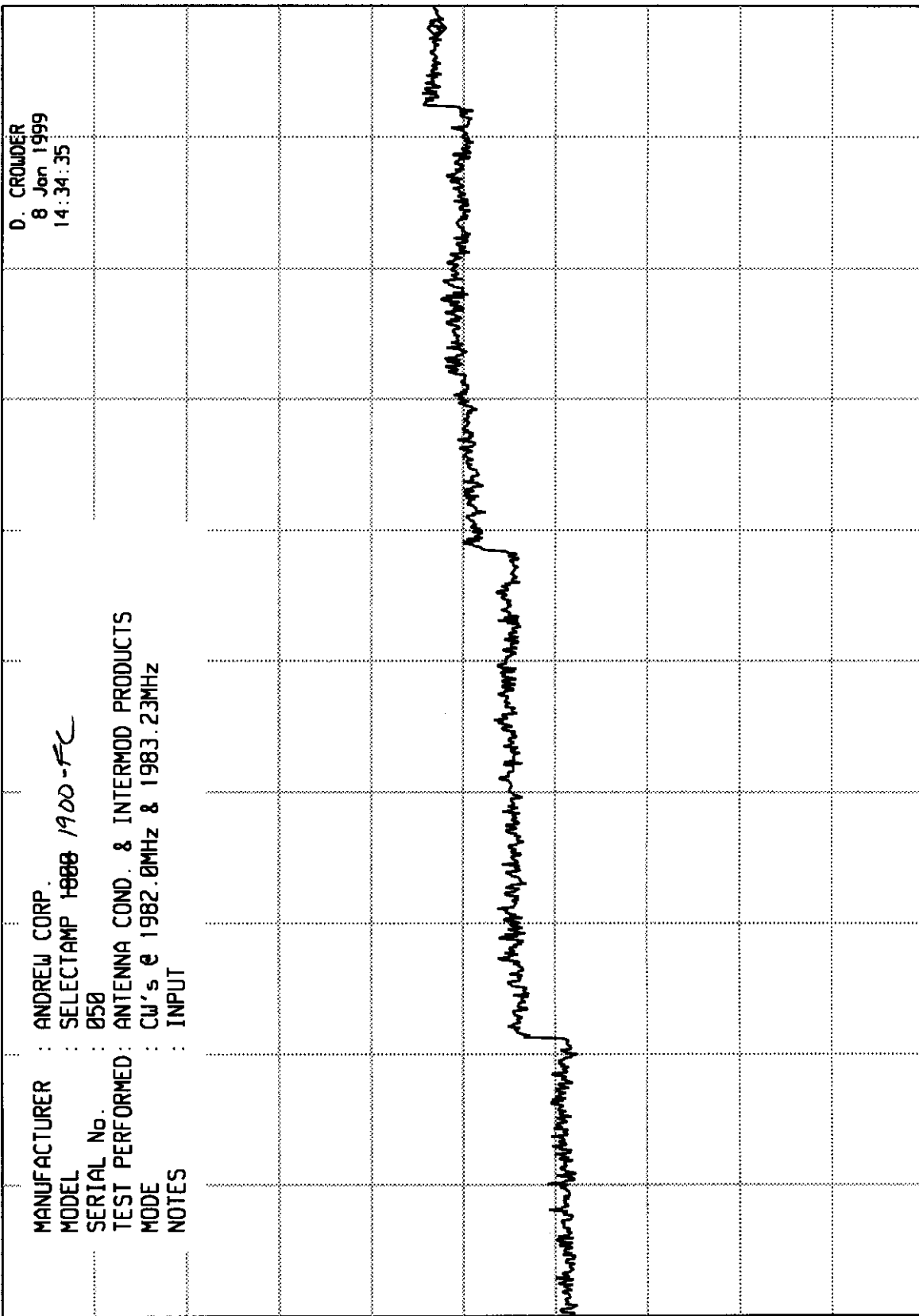
ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz  
-67.10 dBm

hp REF -20.0 dBm

ATTEN 0 dB



D. CROWDER  
8 Jan 1999  
14:34:35

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1988 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED: ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CW's @ 1982.0MHz & 1983.23MHz  
 NOTES : INPUT

hp

10 dB/

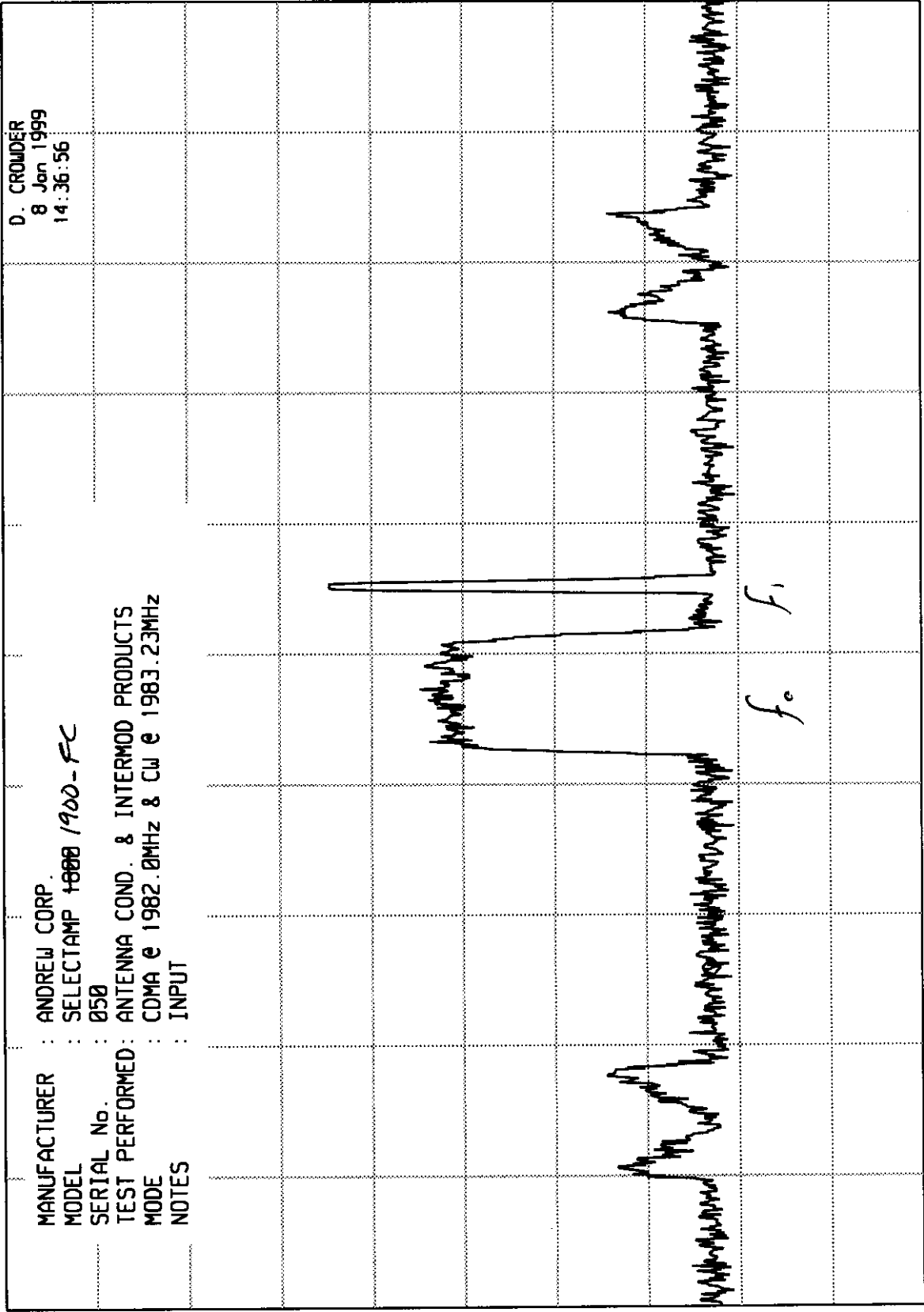
DL -53.0  
dBm

START 2.0 GHz  
 RES BW 1 MHz(i)  
 UBW 3 MHz  
 STOP 20.0 GHz  
 SWP 450 msec

DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.978 87 GHz  
-97.00 dBm



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1800~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA e 1982.0MHz & Cw e 1983.23MHz  
 NOTES : INPUT

D. CROWDER  
 8 Jan 1999  
 14:36:56

hp

10 dB/

DL -53.0 dBm

START 1.975 0 GHz  
 RES BW 30 kHz(i)  
 UBW 300 kHz  
 STOP 1.990 0 GHz  
 SWP 113 msec

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

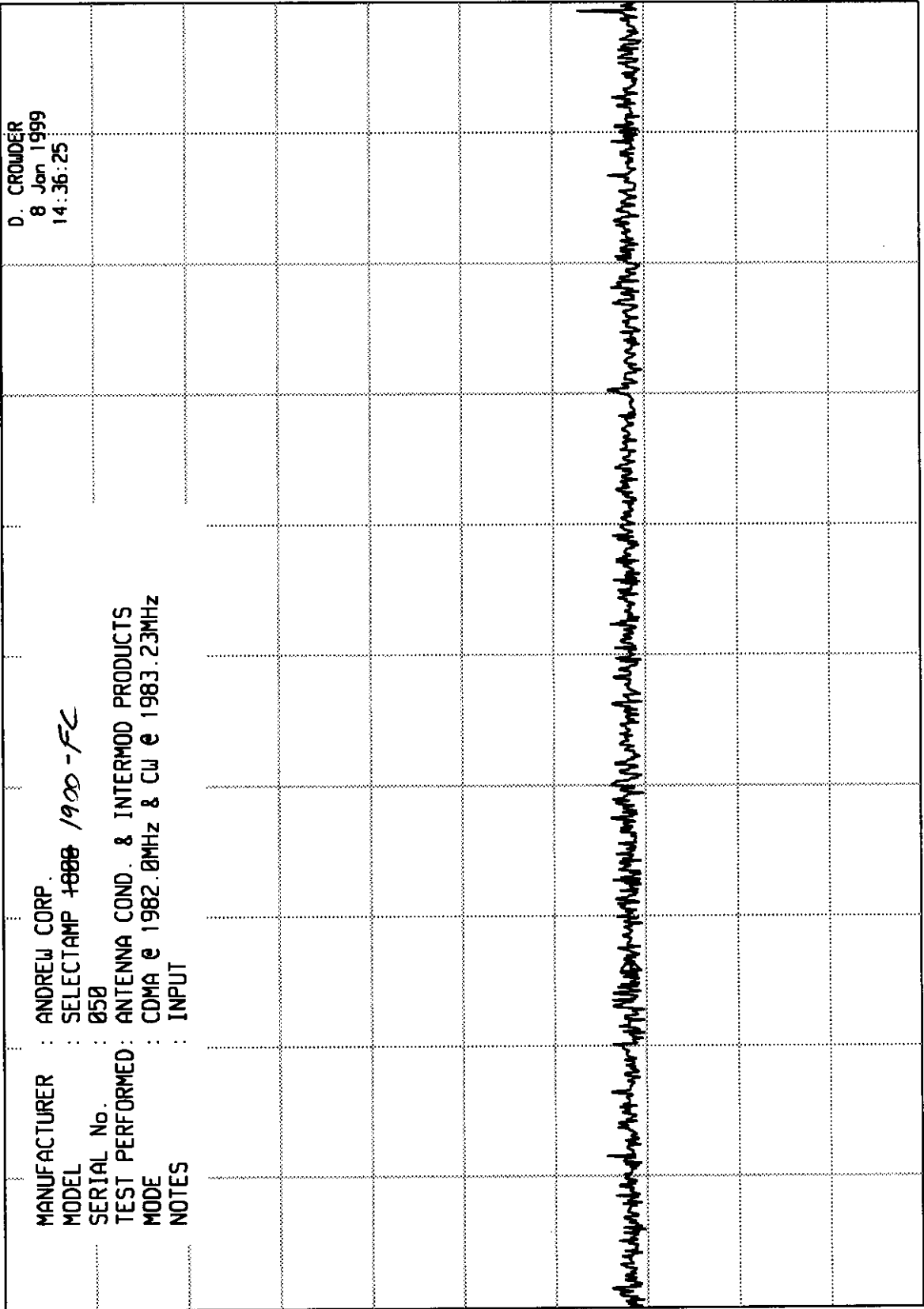
MKR 280.3 MHz  
-88.30 dBm

hp

10 dB/

DL -53.0  
dBm

REF -20.0 dBm ATTN 0 dB



START 30 MHz RES BW 100 kHz (i) STOP 1.000 GHz  
UBW 1 MHz SWP 728 msec

ENGINEERING TEST REPORT NO. 21337

DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.982 GHz  
-52.60 dBm

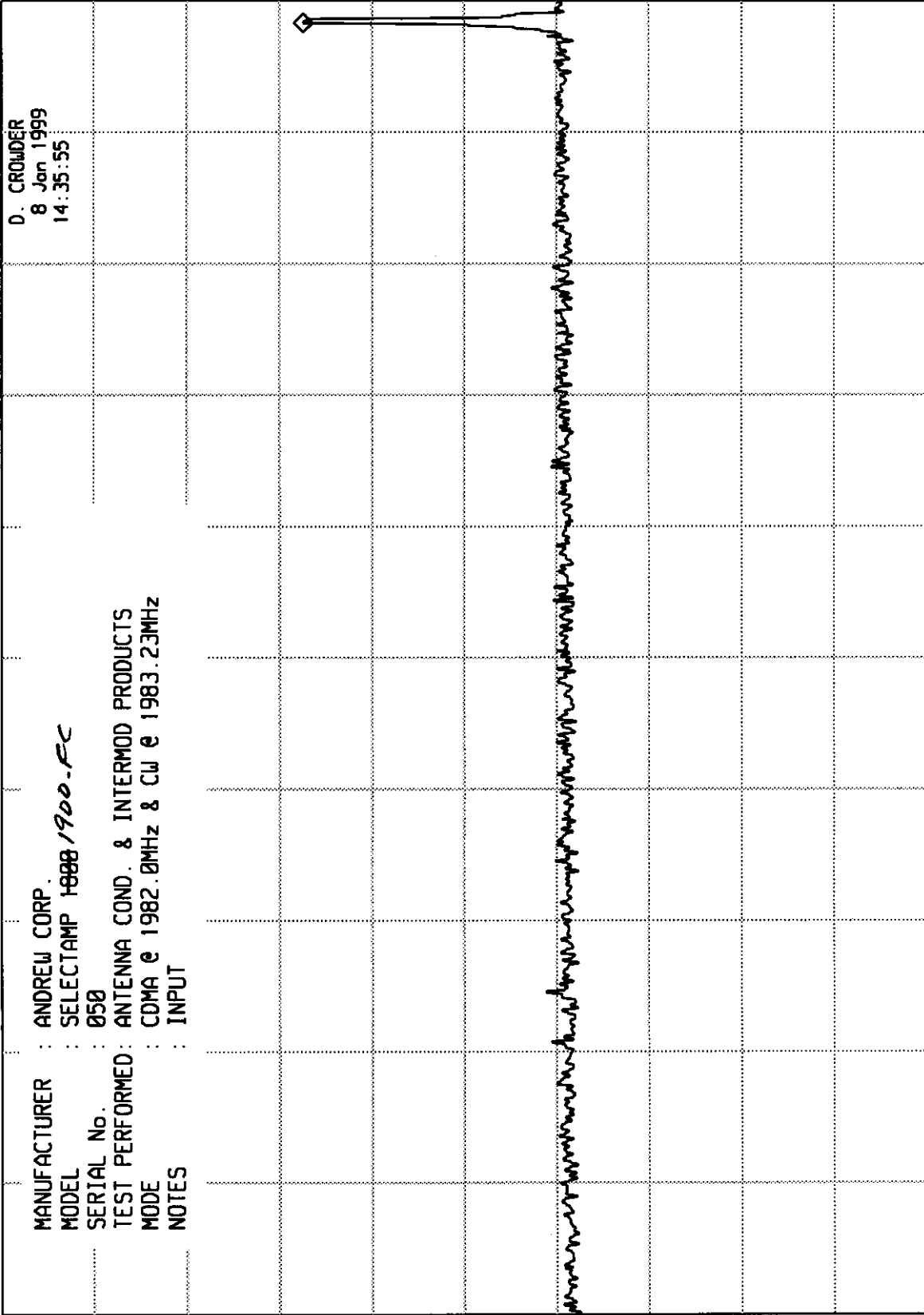
hp

10 dB/

DL -53.0  
dBm

200

REF -20.0 dBm ATTEN 0 dB



D. CROWDER  
8 Jan 1999  
14:35:55

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1000/1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA @ 1982.0MHz & CW @ 1983.23MHz  
 NOTES : INPUT

STOP 2.00 GHz  
SWP 25.0 msec

VBW 3 MHz

RES BW 1 MHz(i)

START 1.00 GHz

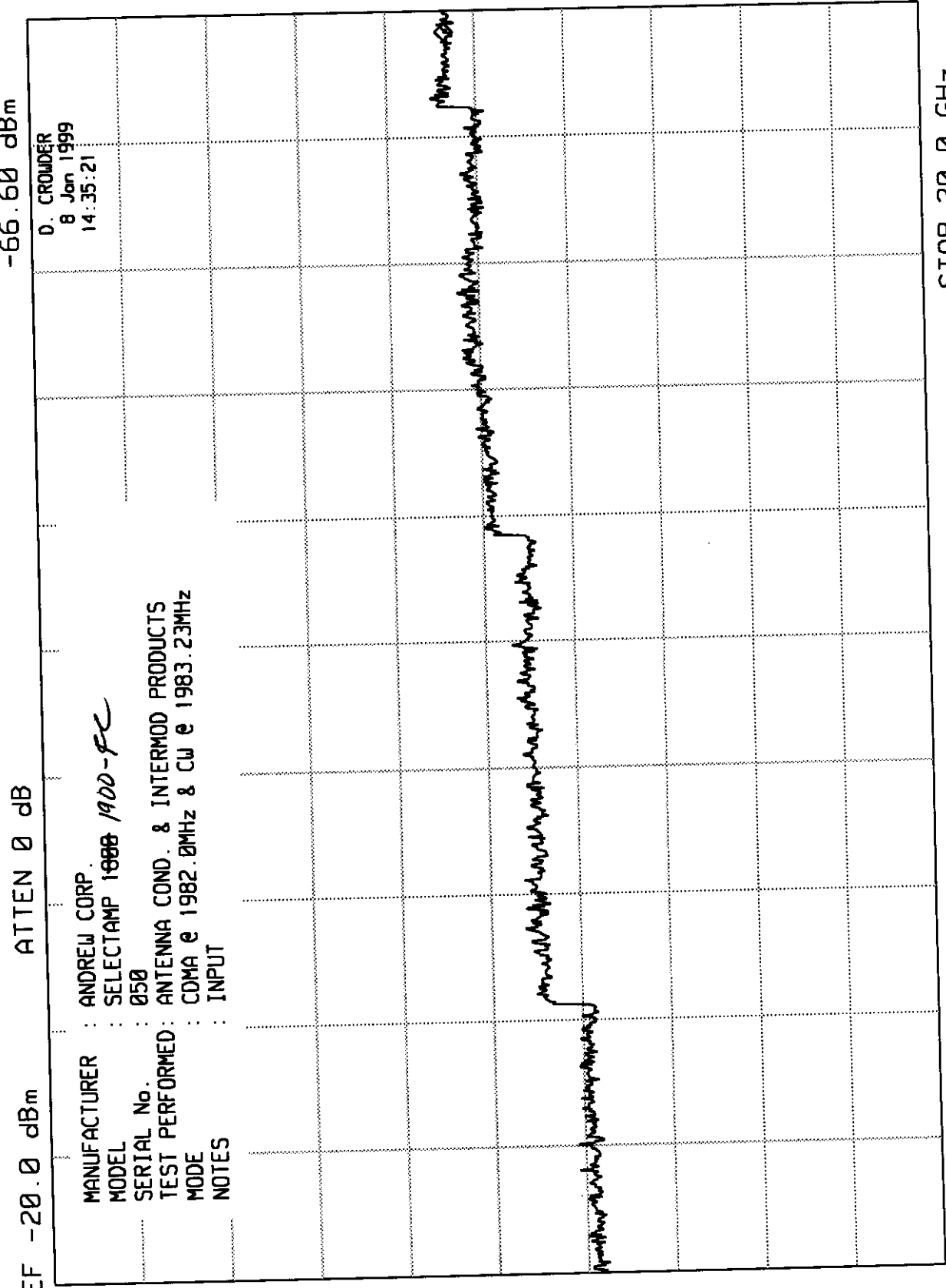
E(119)



ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz  
-66.60 dBm



D. CROWDER  
8 Jan 1999  
14:35:21

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1000 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA @ 1982.0MHz & CW @ 1983.23MHz  
 NOTES : INPUT

REF -20.0 dBm

hp

10 dB/

DL -53.0 dBm

STOP 20.0 GHz  
SWP 450 msec

UBW 3 MHz

START 2.0 GHz  
RES BW 1 MHz(i)

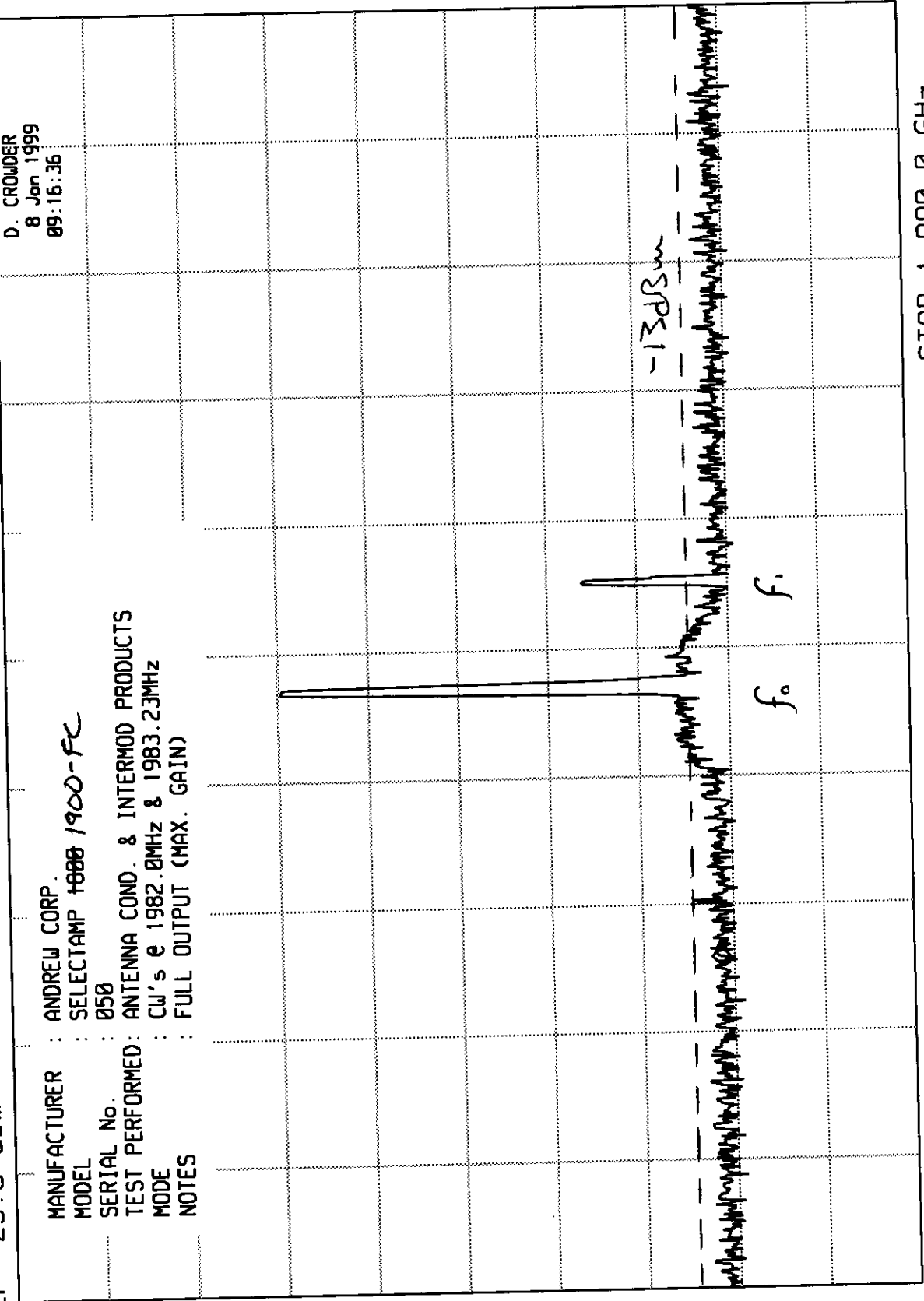
ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.978 87 GHz  
-55.60 dBm

ATTEN 40 dB + 40 dB EXT.

REF 23.0 dBm



D. CROWDER  
8 Jan 1999  
09:16:36

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~F888~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED: ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CW's @ 1982.0MHz & 1983.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

STOP 1.990 0 GHz  
SWP 113 msec

VBW 300 kHz

START 1.975 0 GHz  
RES BW 30 kHz (i)

hp

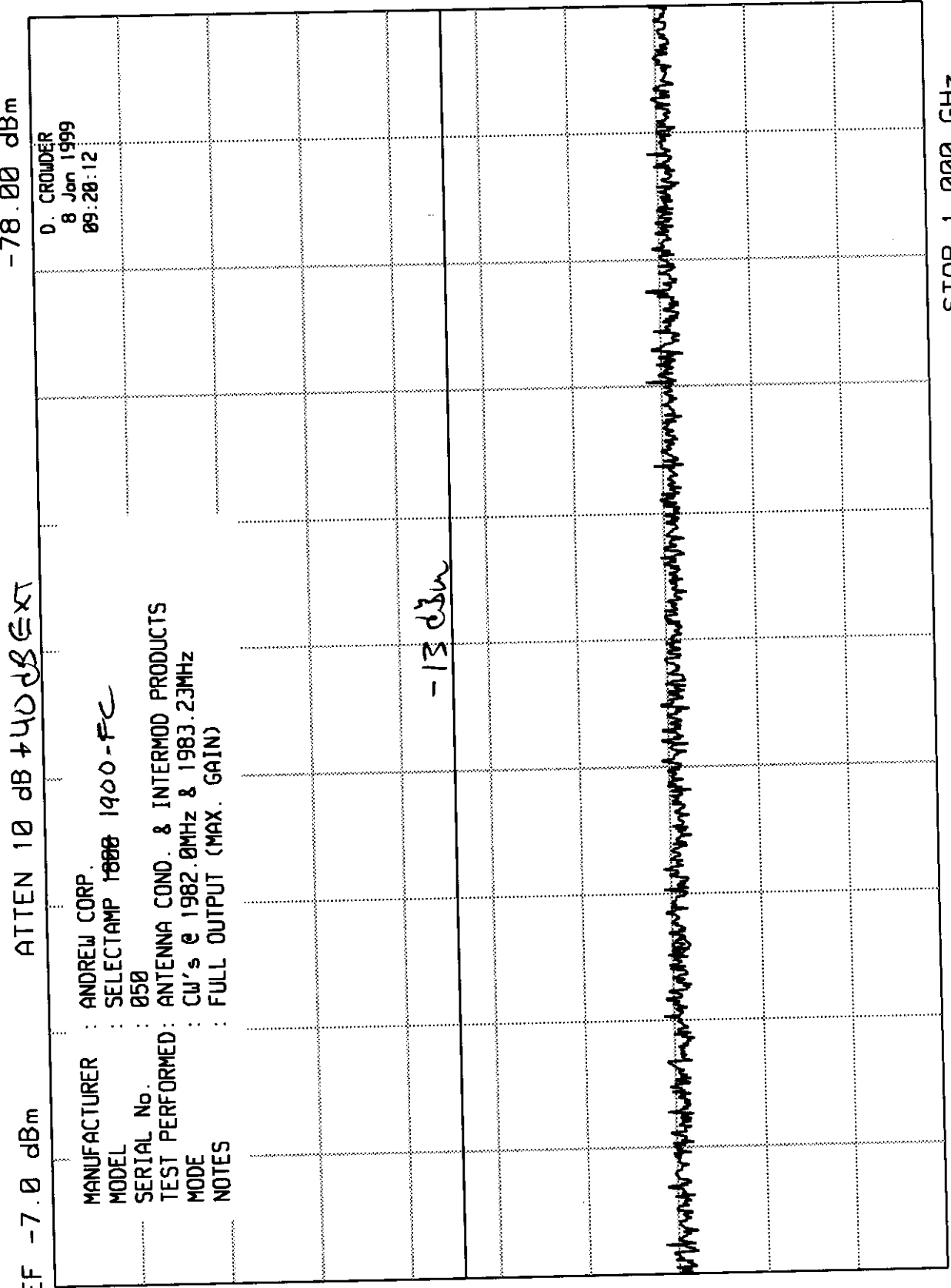
10 dB/

E(121)

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 280.3 MHz  
-78.00 dBm



hp REF -7.0 dBm

ATTEN 10 dB + 40 dB EXT

10 dB/

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1888 1400-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CW's @ 1982.0MHz & 1983.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

D. CROWDER  
8 Jan 1999  
09:20:12

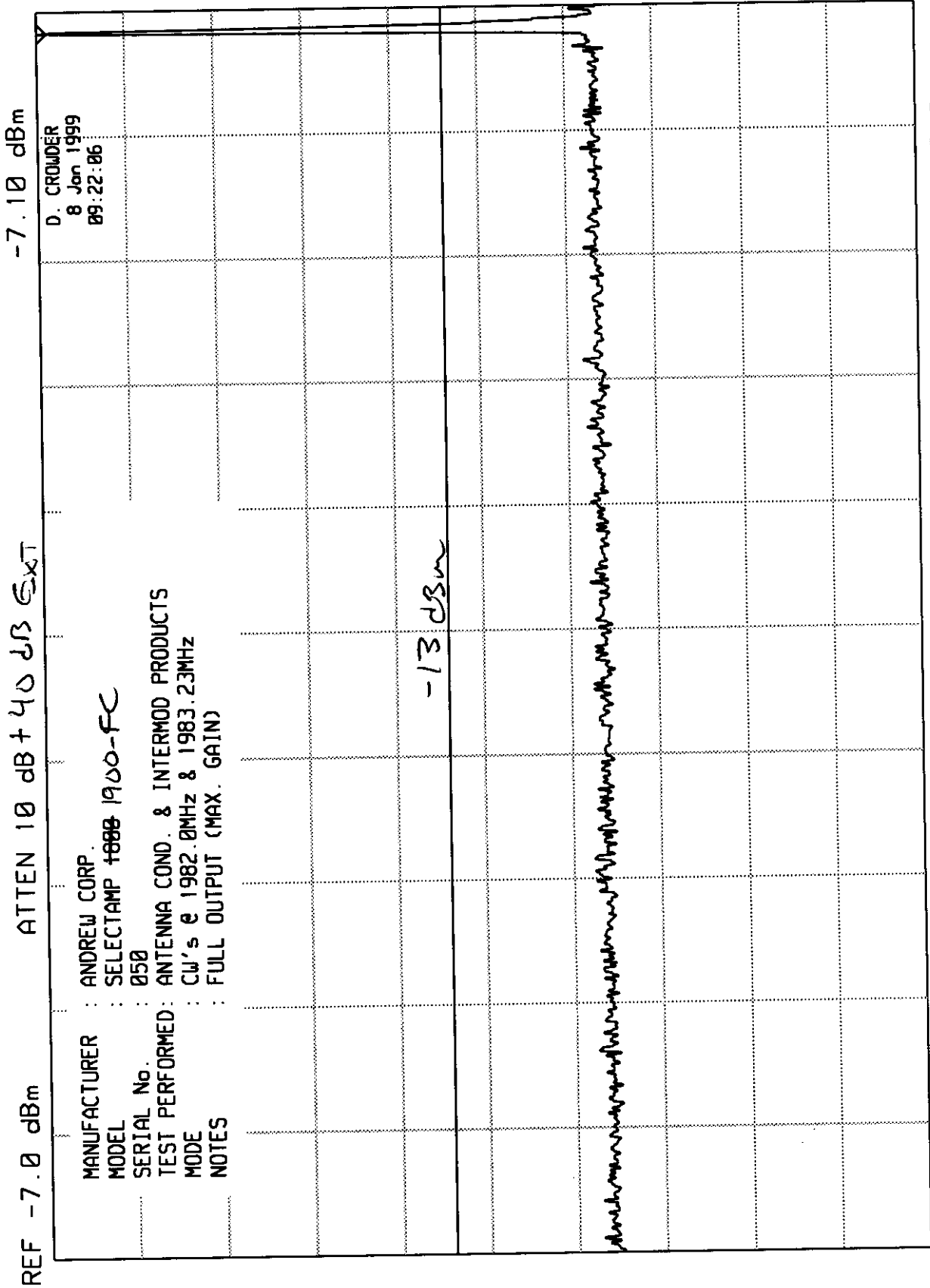
DL -53.0 dBm

START 30 MHz RES BW 100 kHz (i) UBW 1 MHz STOP 1.000 GHz  
 SWP 728 msec

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.982 GHz  
-7.10 dBm



D. CROWDER  
8 Jan 1999  
09:22:06

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1888~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CW's @ 1982.0MHz & 1983.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

hp

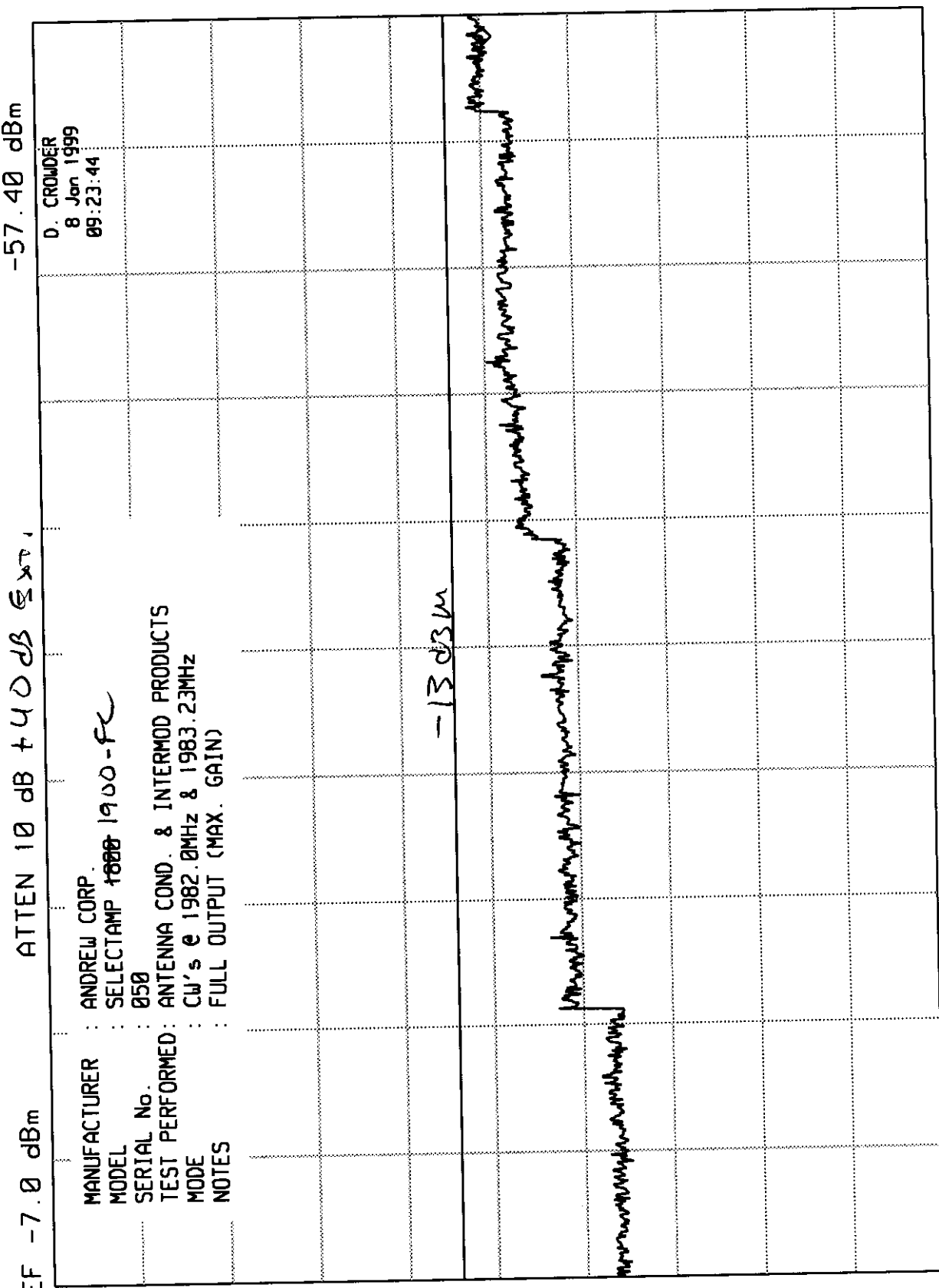
10 dB/

DL -53.0  
dBm

START 1.00 GHz  
 RES BW 1 MHz(i)  
 STOP 2.00 GHz  
 SWP 25.0 msec  
 VBW 3 MHz

ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz  
 -57.40 dBm



REF -7.0 dBm

ATTEN 10 dB + 40 dB

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1000~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CW's @ 1982.0MHz & 1983.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

hp

10 dB/

DL -53.0 dBm

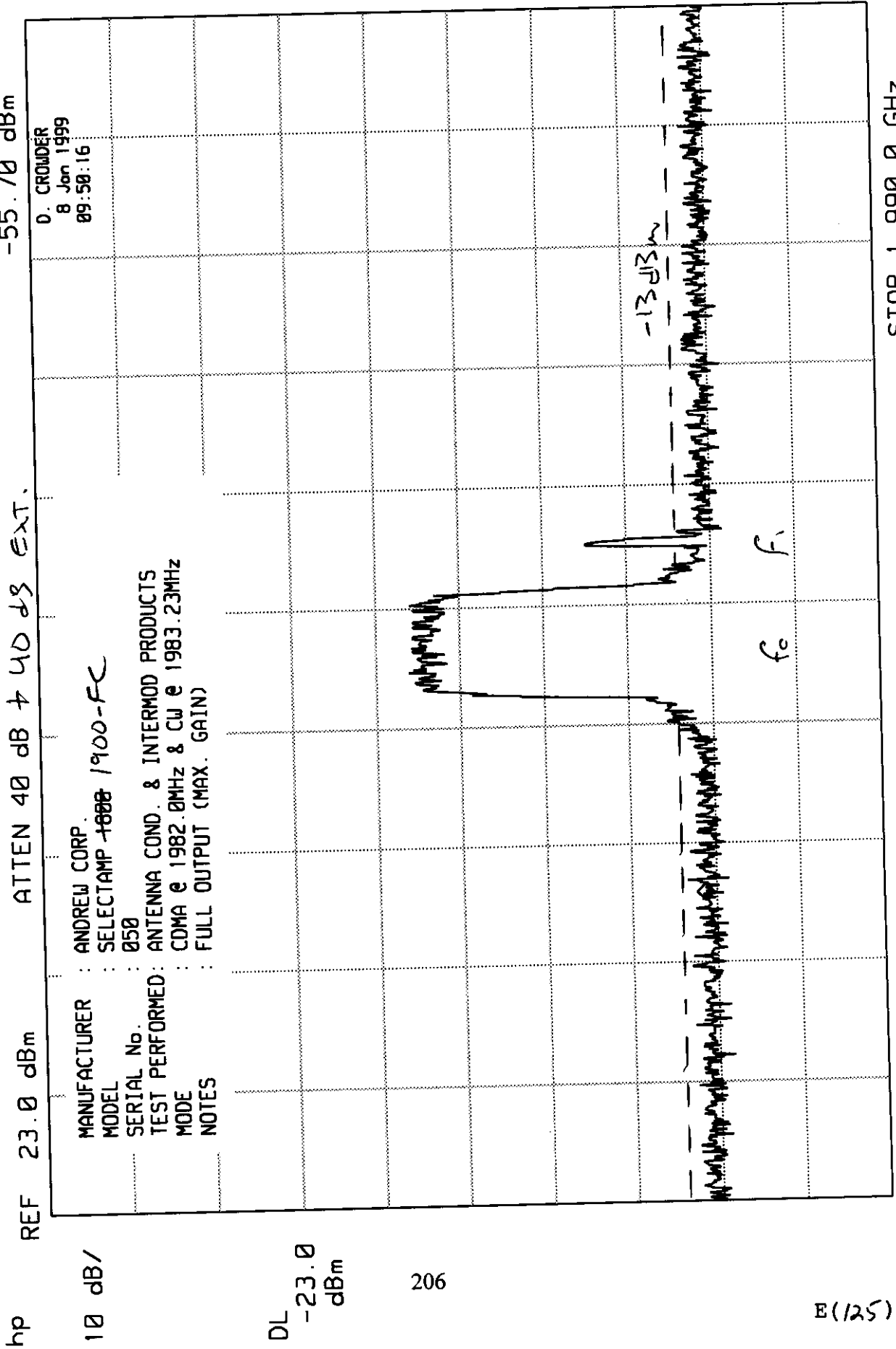
E(124)

START 2.0 GHz  
 RES BW 1 MHz(i)  
 UBW 3 MHz  
 STOP 20.0 GHz  
 SWP 450 msec

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.978 87 GHz  
-55.70 dBm



D. CROWDER  
8 Jan 1999  
09:50:16

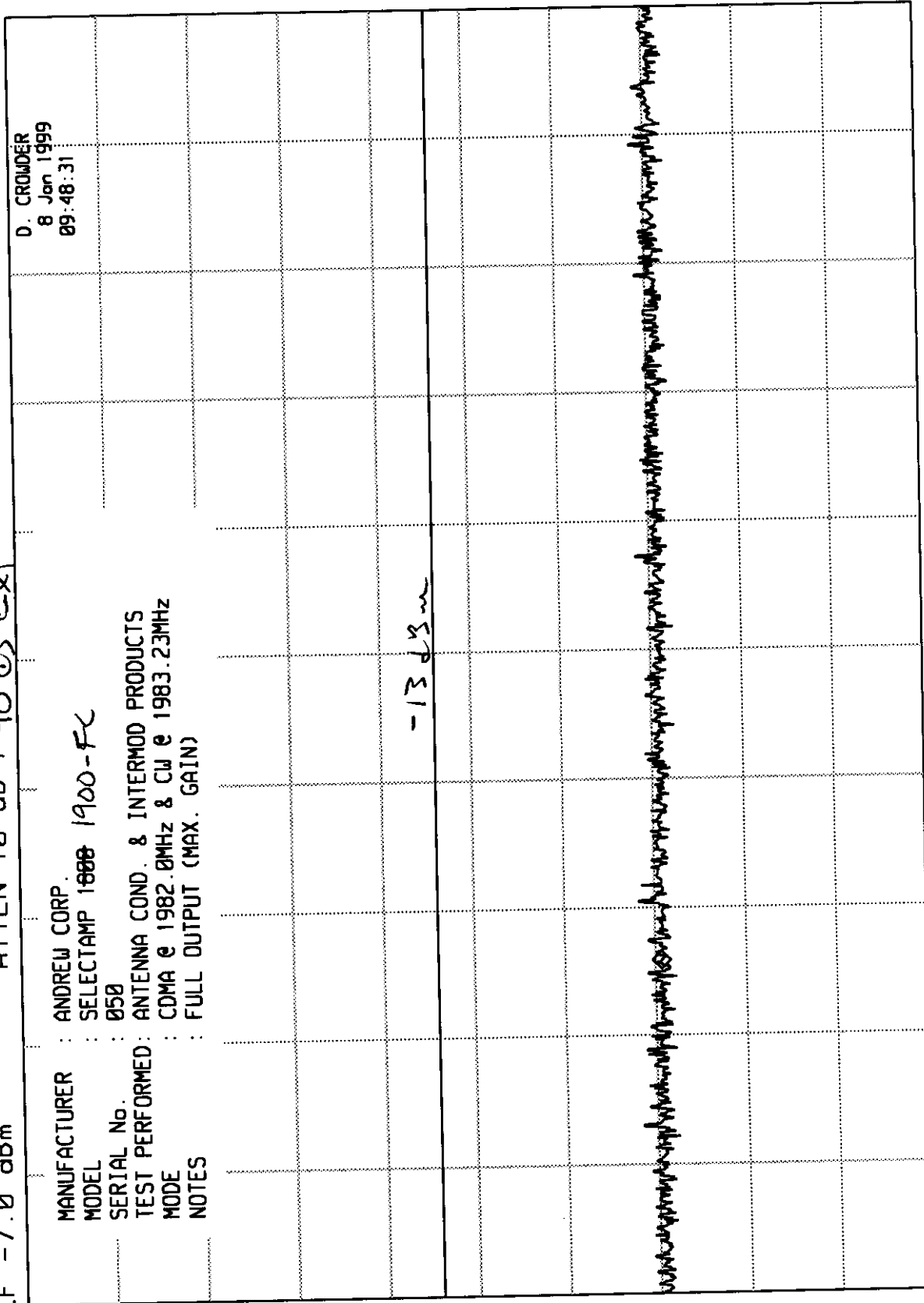
ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 280.3 MHz  
-77.70 dBm

ATTEN 10 dB + 40 dB EXT

REF -7.0 dBm



hp

10 dB/

DL -53.0 dBm

207

E(126)

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1888 1900-FC  
 SERIAL No. : 058  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA @ 1982.0MHz & CW @ 1983.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

D. CROWDER  
8 Jan 1999  
09:48:31

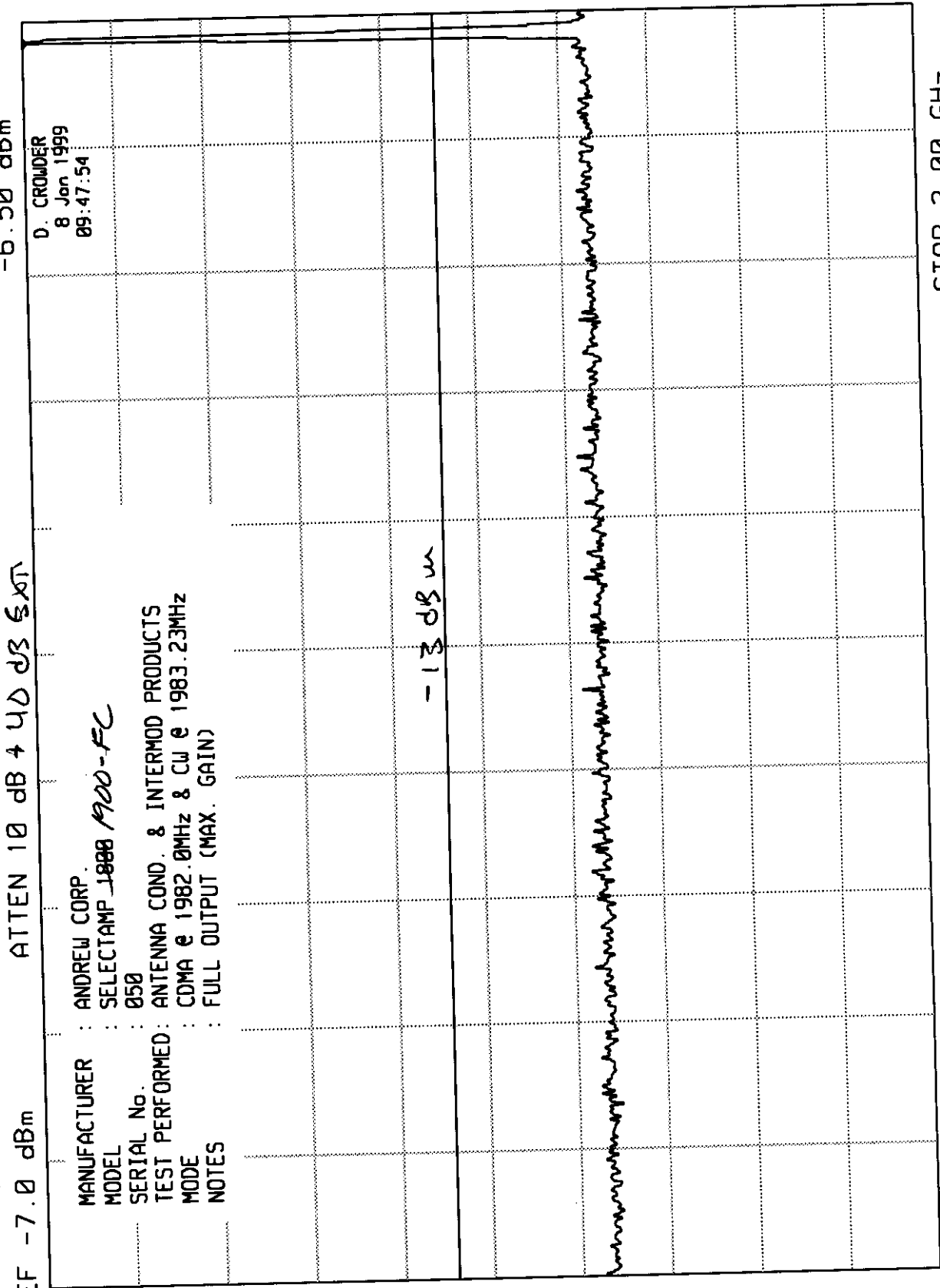
START 30 MHz  
RES BW 100 kHz (i)

UBW 1 MHz

STOP 1.000 GHz  
SWP 728 msec

ELITE ELECTRONIC ENGINEERING CO

MKR 1.982 GHz  
 -6.50 dBm



hp REF -7.0 dBm

ATTEN 10 dB + 40 dB & AT

D. CROWDER  
 8 Jan 1999  
 09:47:54

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1888 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA @ 1982.0MHz & CW @ 1983.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

hp 10 dB/

DL -53.0 dBm

STOP 2.00 GHz  
 SWP 25.0 msec

START 1.00 GHz  
 RES BW 1 MHz(i)

VBW 3 MHz

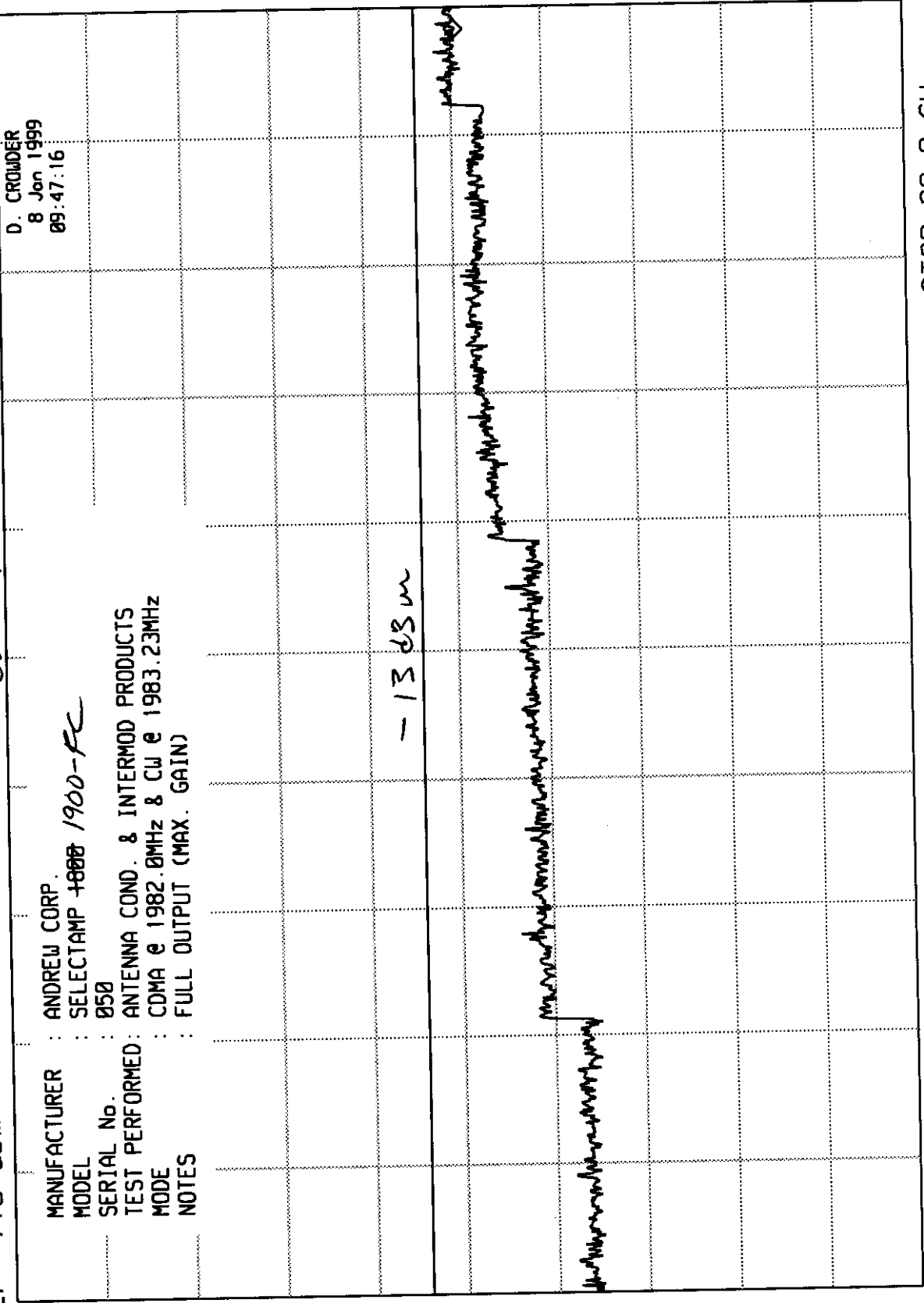


ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz  
 -57.40 dBm

ATTEN 10 dB + 40 dB SWR

REF -7.0 dBm



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1800~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA @ 1982.0MHz & CW @ 1983.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

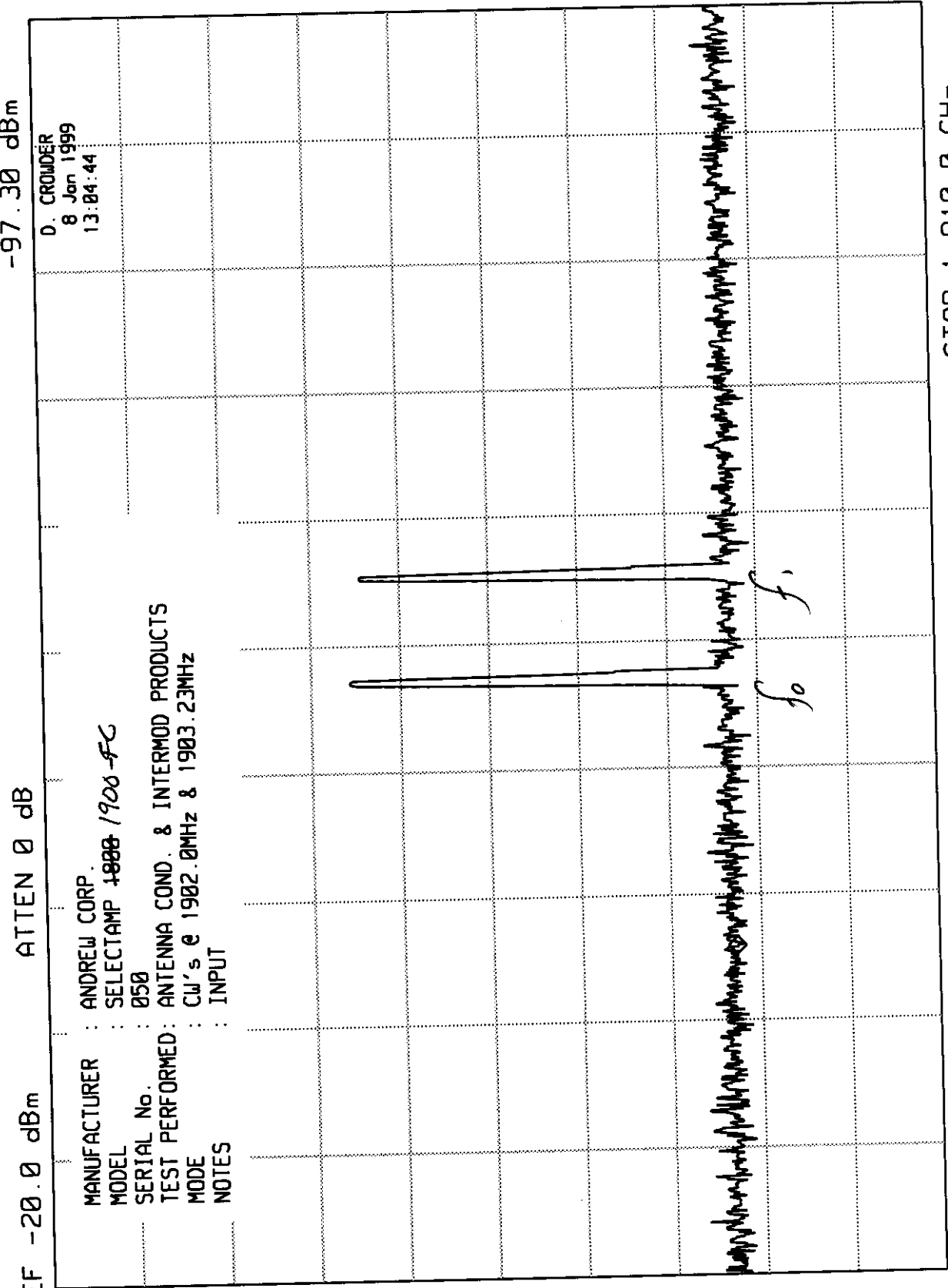
D. CROWDER  
 8 Jan 1999  
 09:47:16

hp  
 10 dB/  
 DL -53.0  
 dBm

START 2.0 GHz  
 RES BW 1 MHz (i)  
 STOP 20.0 GHz  
 SWP 450 msec  
 VBW 3 MHz

ELITE ELECTRONIC ENGINEERING CO

MKR 1.898 87 GHz  
 -97.30 dBm



hp

10 dB/

DL -53.0 dBm

210

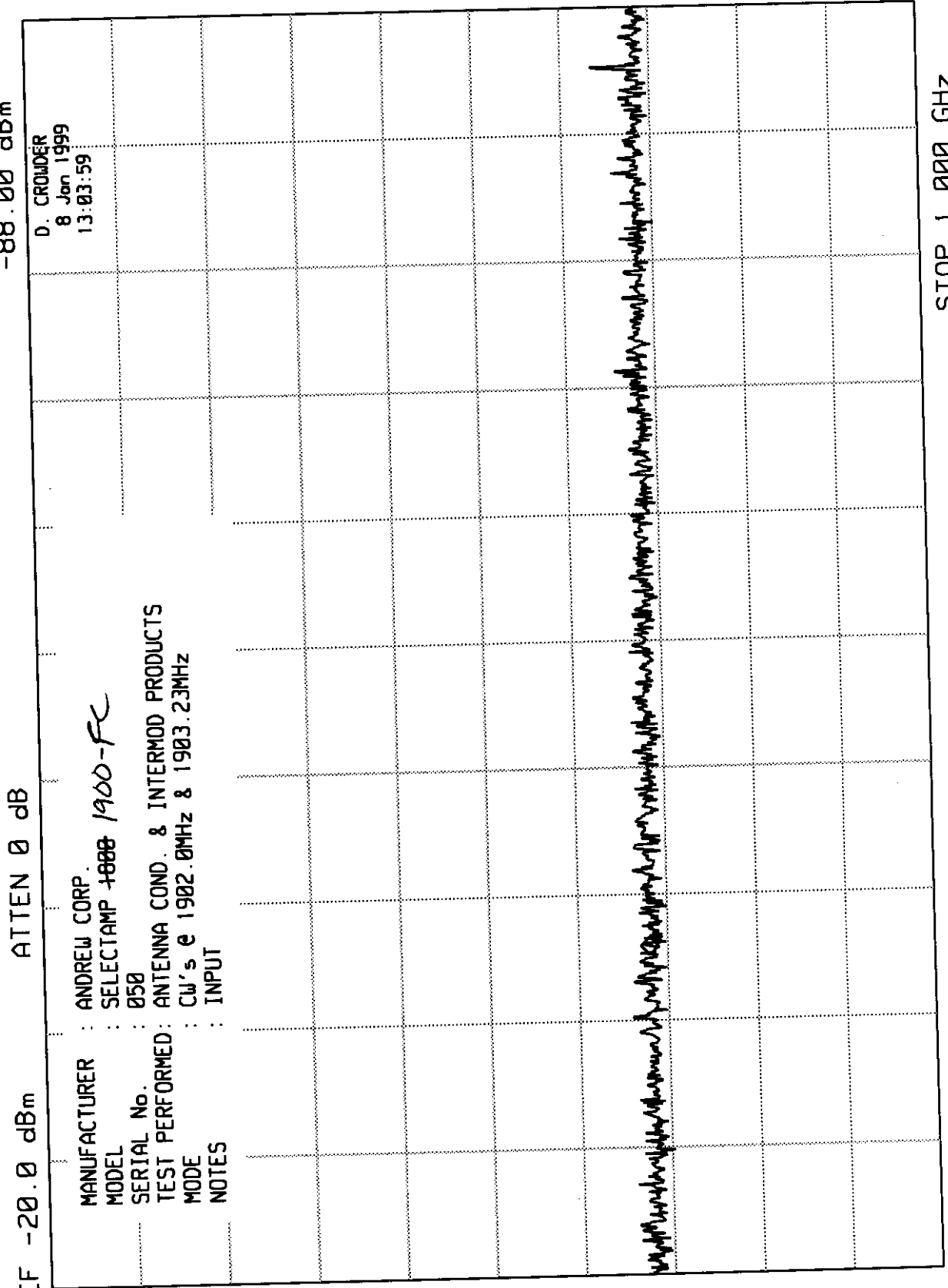
E(129)

START 1.895 0 GHz  
 RES BW 30 kHz(i)  
 UBW 300 kHz  
 STOP 1.910 0 GHz  
 SWP 113 msec

FCC ID: KUWSA1900-FC  
 ENGINEERING TEST REPORT NO. 21337  
 DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 280.3 MHz  
 -88.00 dBm



hp REF -20.0 dBm

ATTEN 0 dB

D. CROWDER  
 8 Jan 1999  
 13:03:59

10 dB/

DL -53.0 dBm

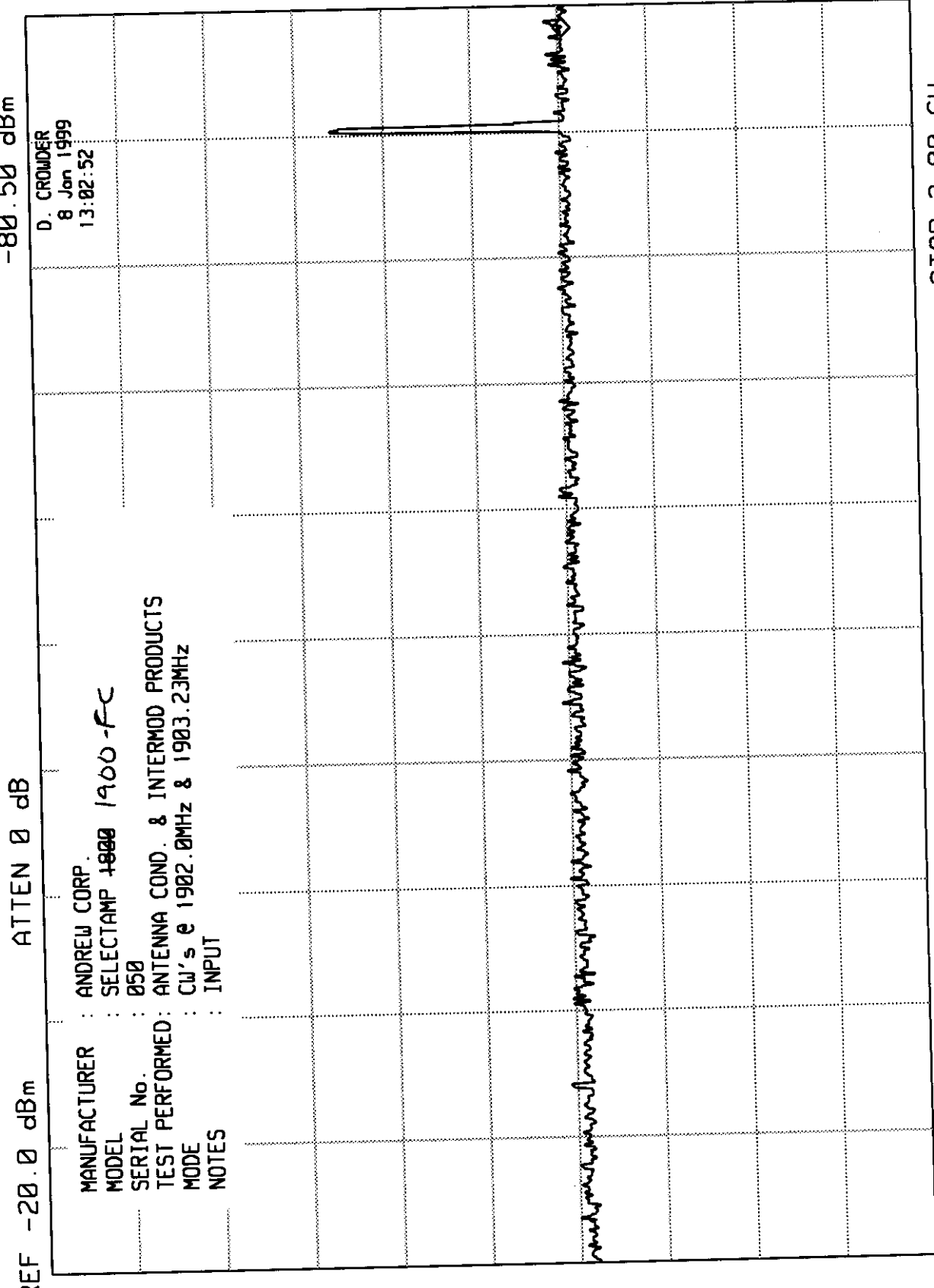
E(130)

START 30 MHz RES BW 100 kHz(i) STOP 1.000 GHz  
 UBW 1 MHz SWP 728 msec

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.982 GHz  
-80.50 dBm



hp

10 dB/

DL -53.0  
dBm

212

E(131)

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1800~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED: ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CW's @ 1902.0MHz & 1903.23MHz  
 NOTES : INPUT

ATTEN 0 dB

REF -20.0 dBm

STOP 2.00 GHz  
SWP 25.0 msec

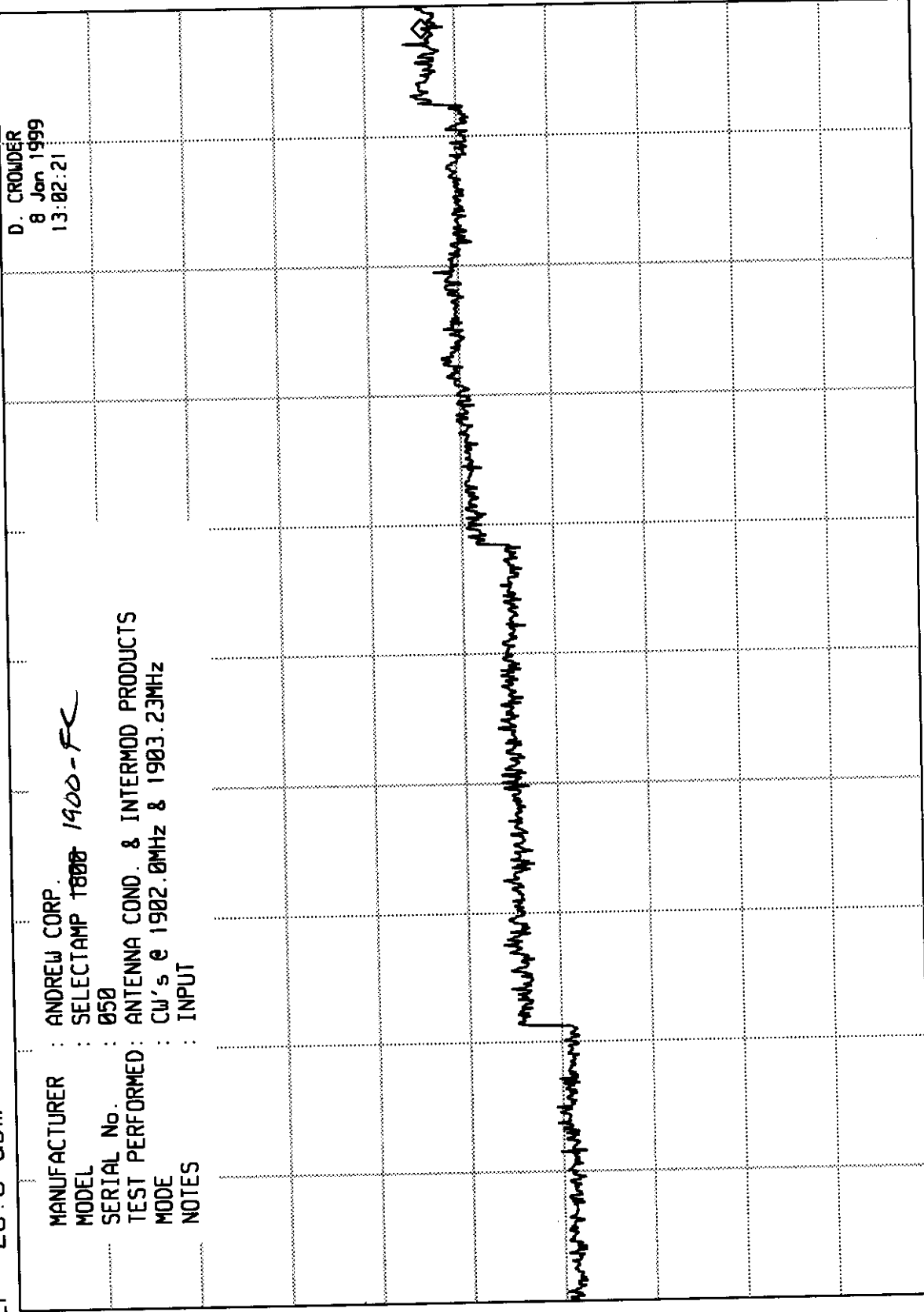
VBW 3 MHz

START 1.00 GHz  
RES BW 1 MHz (i)

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz  
-66.40 dBm



MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~T800~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CW's @ 1902.0MHz & 1903.23MHz  
 NOTES : INPUT

D. CROWDER  
 8 Jan 1999  
 13:02:21

hp

10 dB/

DL -53.0  
dBm

E(132)

START 2.0 GHz  
RES BW 1 MHz(i)

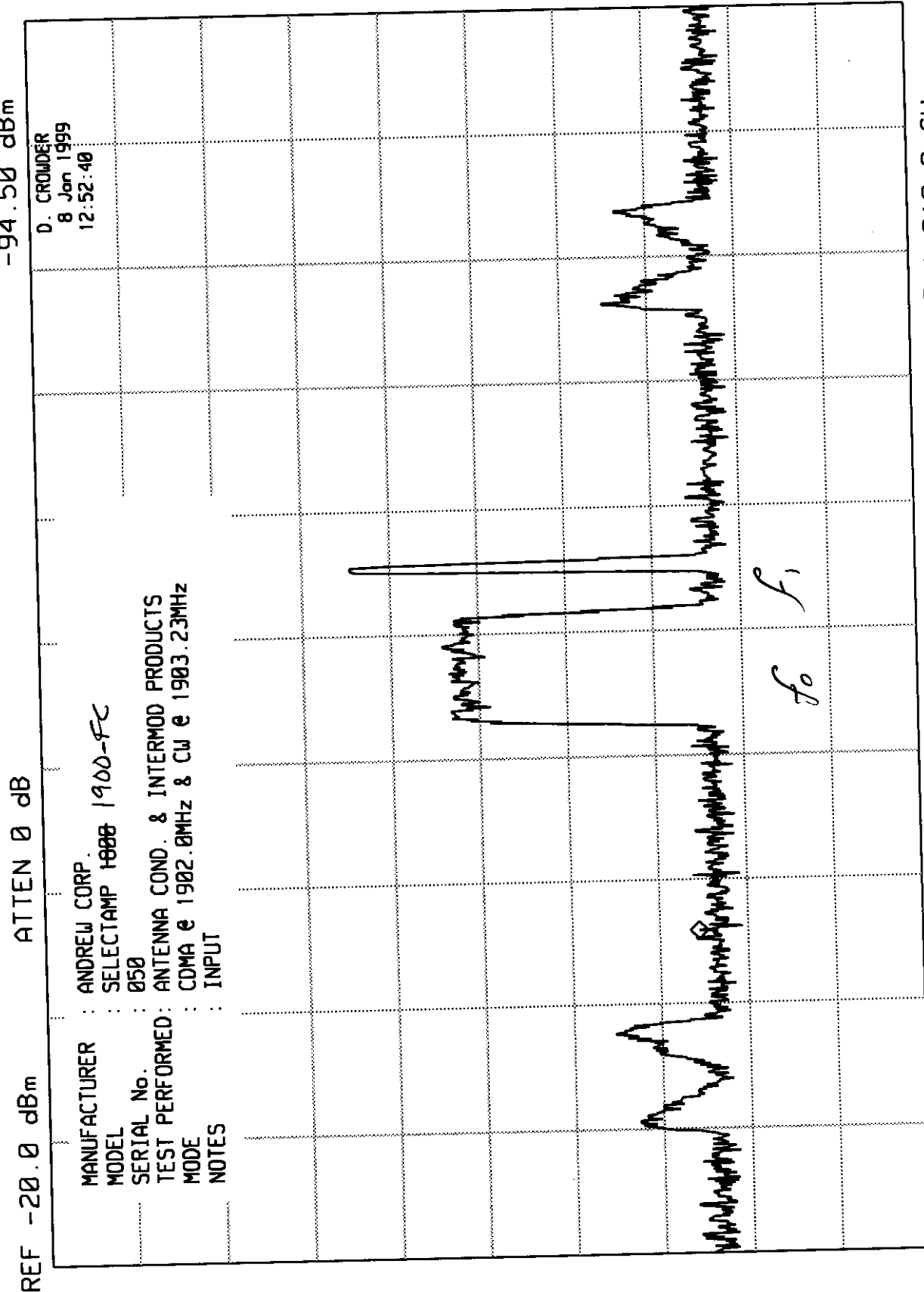
UBW 3 MHz

STOP 20.0 GHz  
SWP 450 msec

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.898 87 GHz  
-94.50 dBm



D. CROWDER  
8 Jan 1999  
12:52:40

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1000~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : COMA e 1902.0MHz & Cw e 1903.23MHz  
 NOTES : INPUT

hp

10 dB/

DL -53.0  
dBm

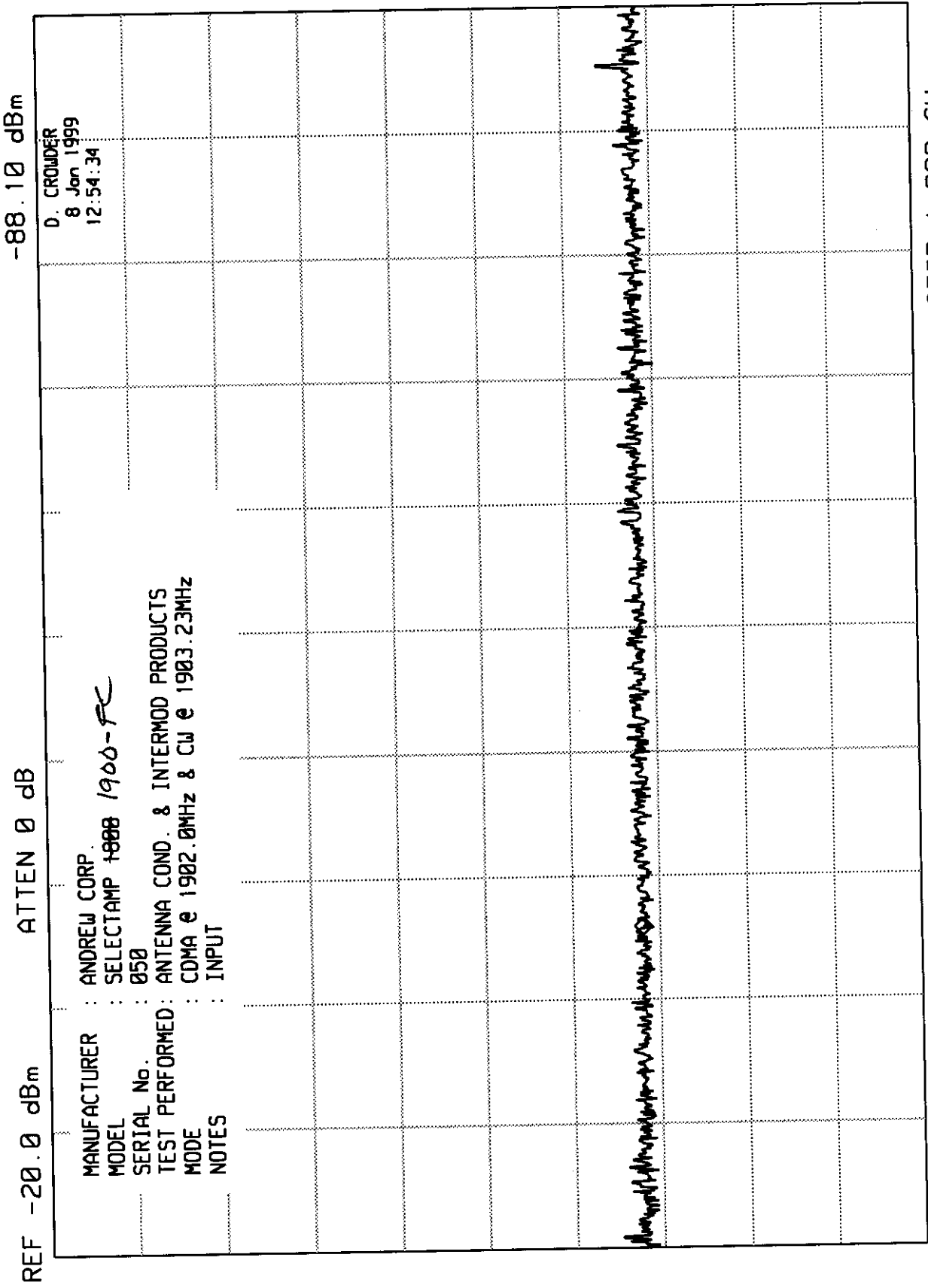
STOP 1.910 0 GHz  
SWP 113 msec

START 1.895 0 GHz  
RES BW 30 kHz(i)      VBW 300 kHz

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 280.3 MHz  
-88.10 dBm



hp

10 dB/

DL -53.0  
dBm

215

E(134)

REF -20.0 dBm      ATTN 0 dB

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1808 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED: ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA e 1902.0MHz & Cw e 1903.23MHz  
 NOTES : INPUT

D. CROWDER  
8 Jan 1999  
12:54:34

START 30 MHz  
RES BW 100 kHz(i)

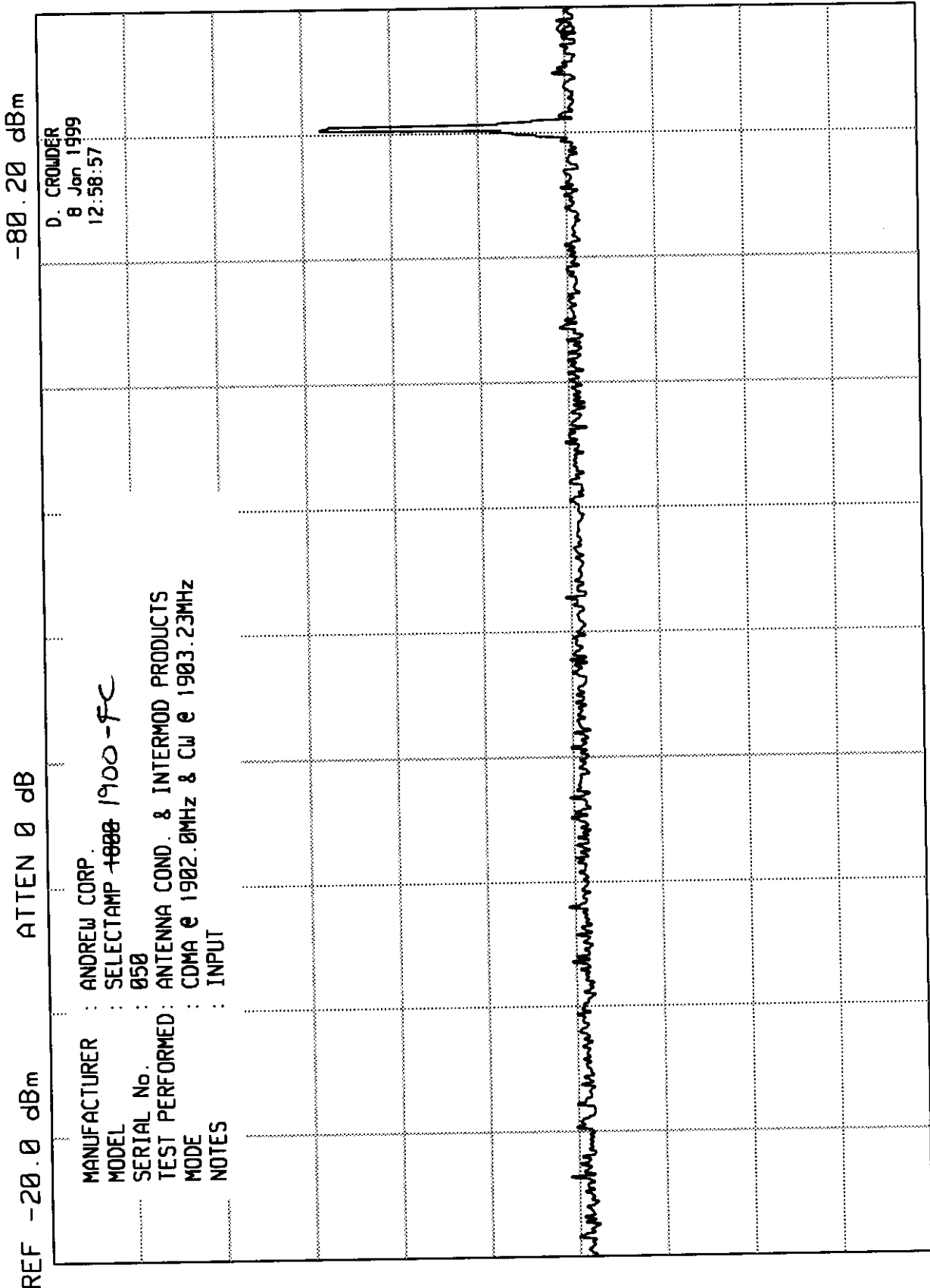
VBW 1 MHz

STOP 1.000 GHz  
SWP 728 msec

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.982 GHz  
-80.20 dBm



hp

10 dB/

DL -53.0 dBm

E(135)

STOP 2.00 GHz  
SWP 25.0 msec

VBW 3 MHz

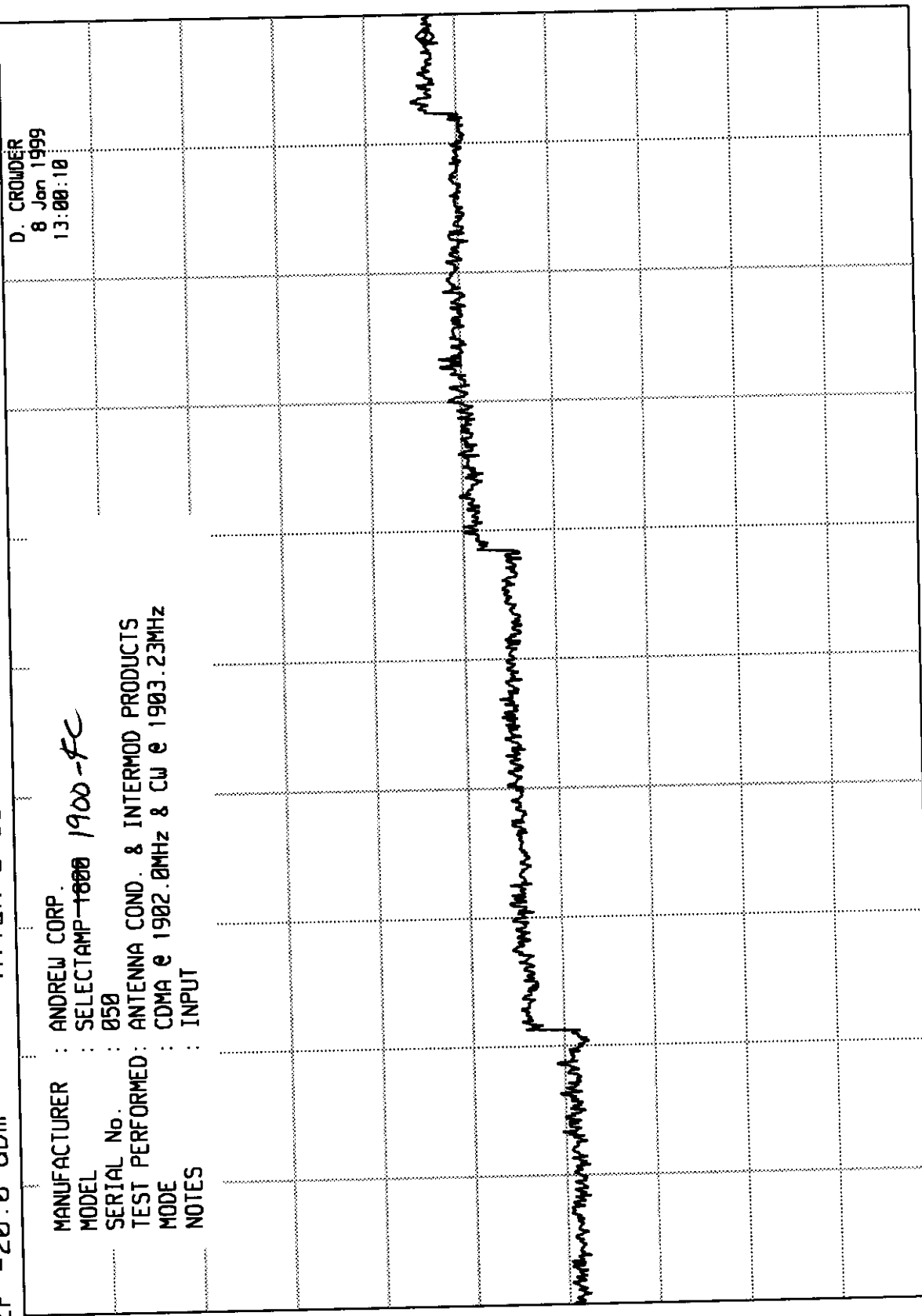
START 1.00 GHz  
RES BW 1 MHz(i)



ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz  
-66.80 dBm



D. CROWDER  
8 Jan 1999  
13:00:10

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP-1000  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA e 1902.0MHz & CW e 1903.23MHz  
 NOTES : INPUT

hp REF -20.0 dBm ATTN 0 dB

10 dB/

DL -53.0 dBm

STOP 20.0 GHz  
SWP 450 msec

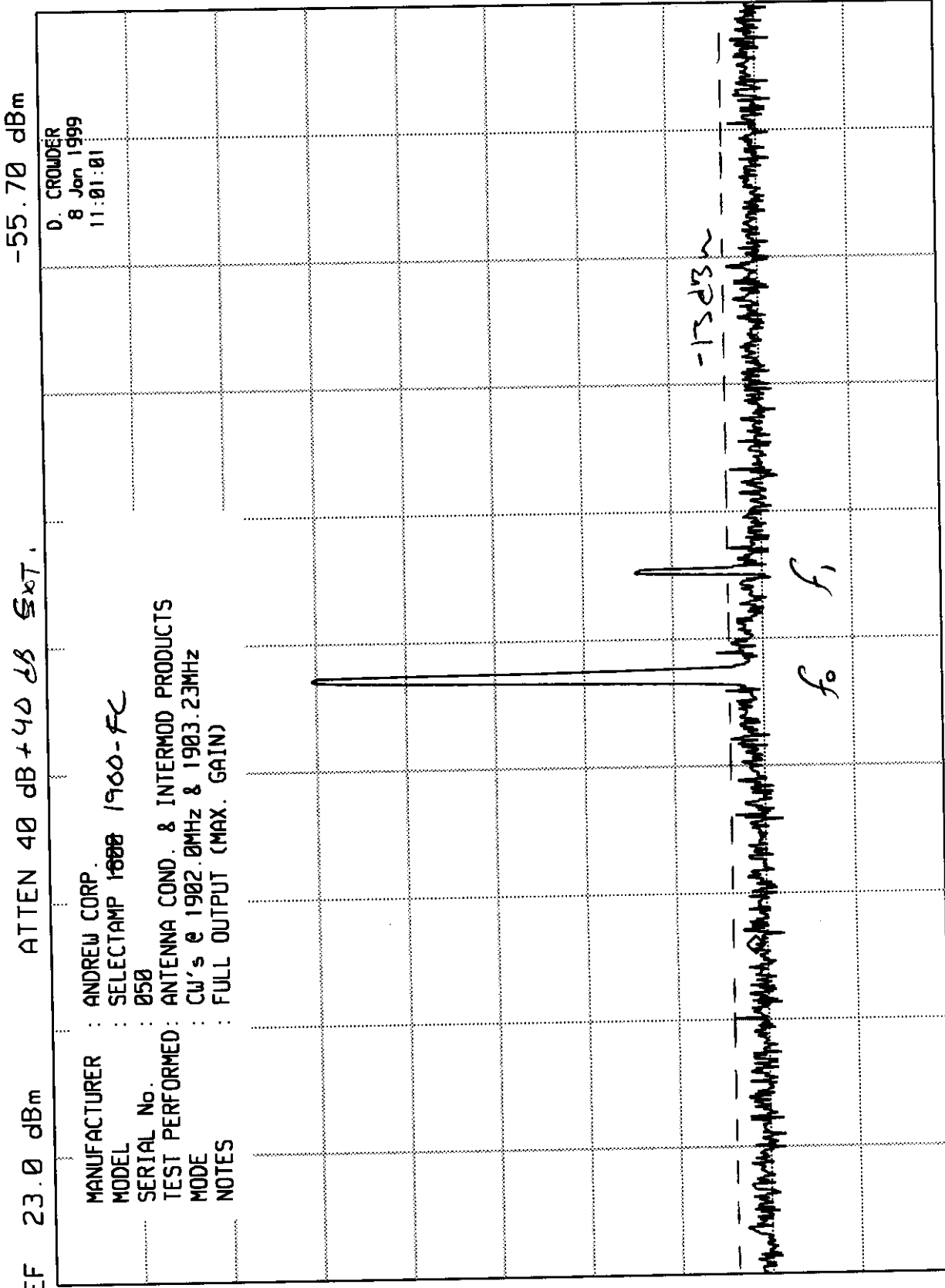
VBW 3 MHz

RES BW 1 MHz (i)

START 2.0 GHz

ELITE ELECTRONIC ENGINEERING CO

MKR 1.898 87 GHz  
 -55.70 dBm



D. CROWDER  
 8 Jan 1999  
 11:01:01

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1000 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CW's @ 1902.0MHz & 1903.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

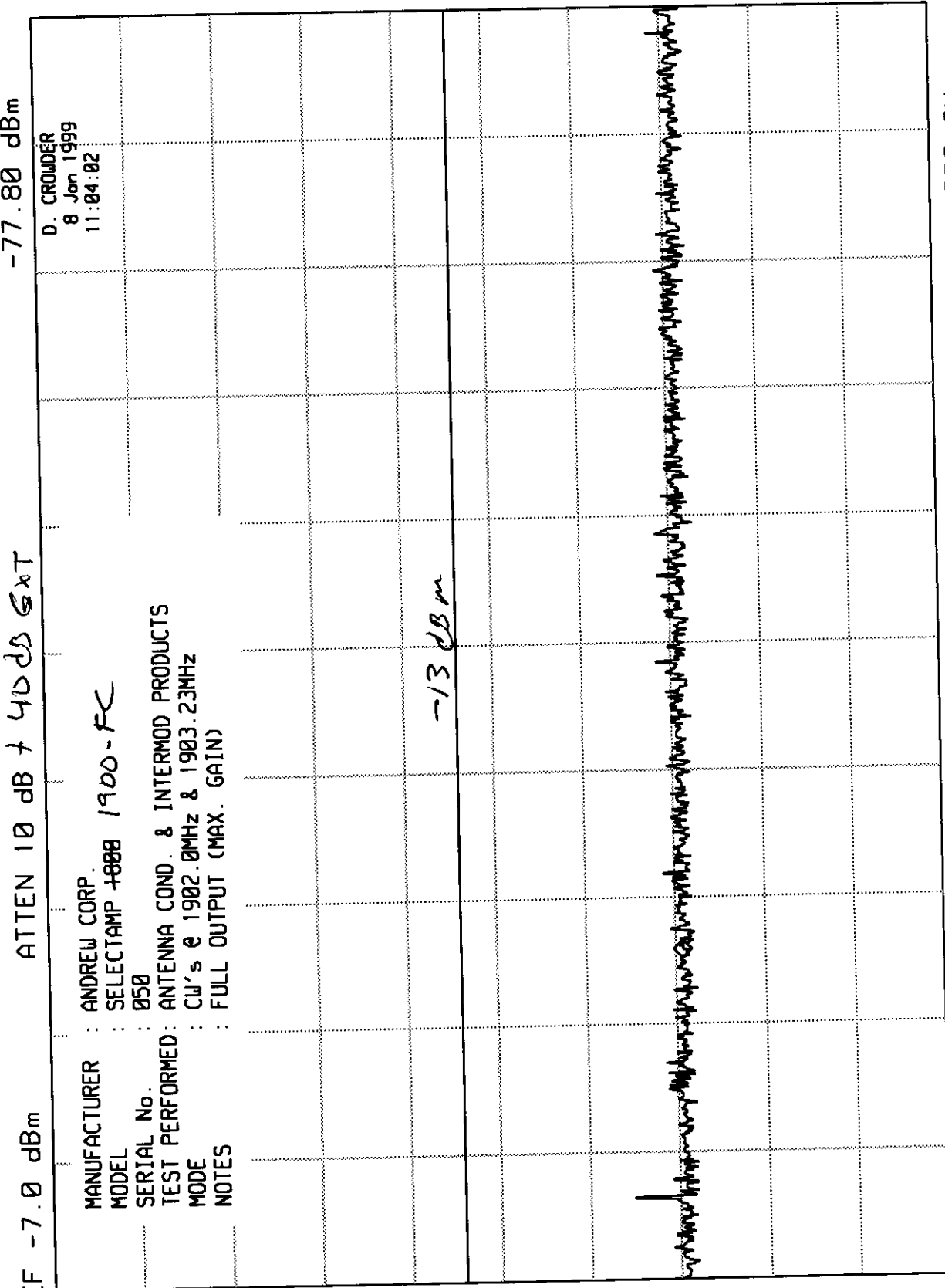
hp 10 dB/  
 DL -53.0 dBm

START 1.895 0 GHz  
 RES BW 30 kHz(i)  
 STOP 1.910 0 GHz  
 SWP 113 msec  
 UBW 300 kHz

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 280.3 MHz  
-77.80 dBm



hp

10 dB/

DL -53.0 dBm

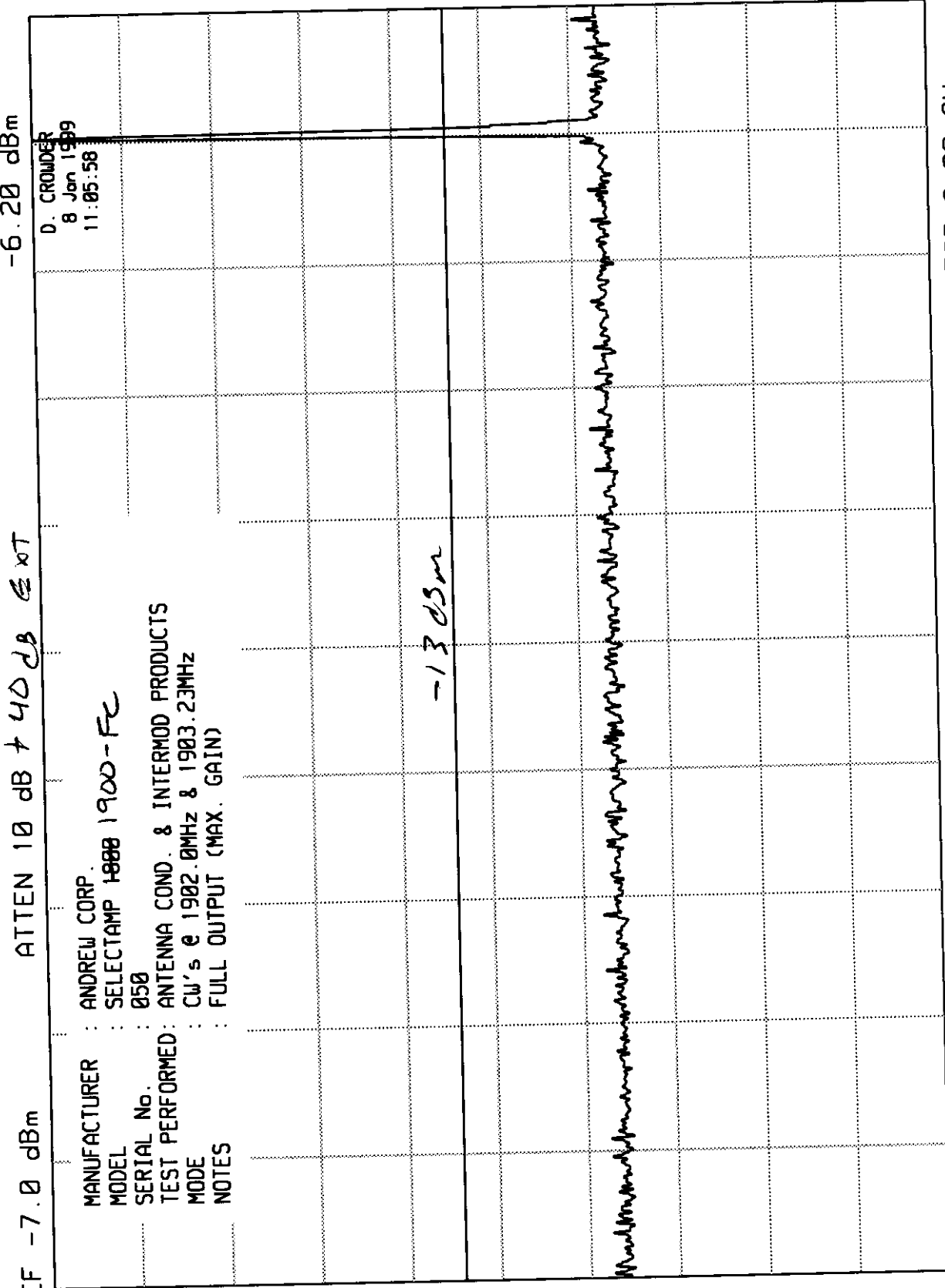
E(138)

START 30 MHz RES BW 100 kHz (i) STOP 1.000 GHz UBW 1 MHz SWP 728 msec

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.902 GHz  
-6.20 dBm



D. CROWDER  
8 Jan 1999  
11:05:58

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1000~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CW's @ 1902.0MHz & 1903.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

-13 dBm

hp

10 dB/

DL -53.0  
dBm

220

E(139)

START 1.00 GHz RES BW 1 MHz (i) UBW 3 MHz STOP 2.00 GHz  
 SWP 25.0 msec

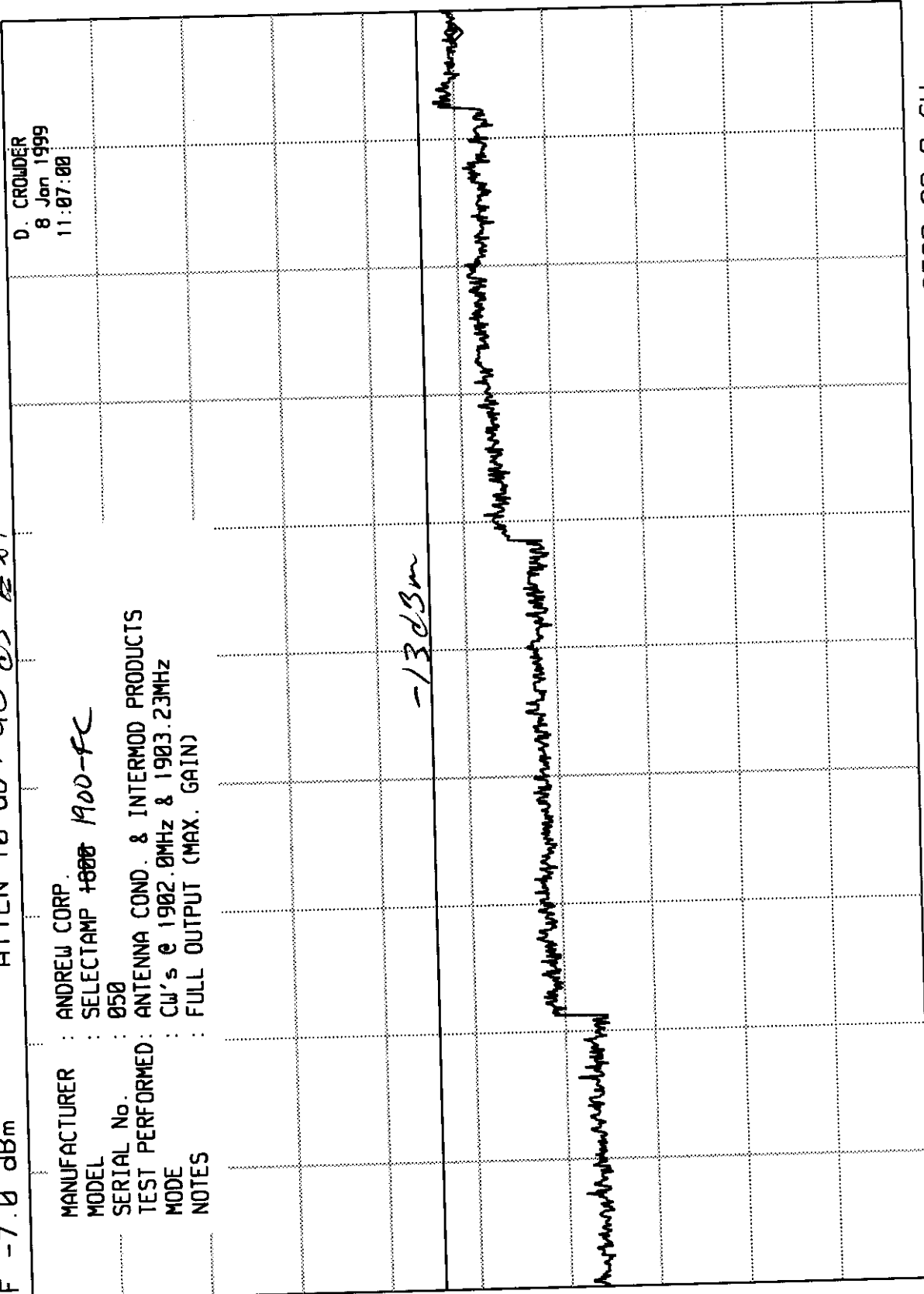
ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz

-57.20 dBm

ATTEN 10 dB + 40 dB EXT

REF -7.0 dBm



hp

10 dB/

DL -53.0 dBm

221

E(140)

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1000~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CW's @ 1902.0MHz & 1903.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

STOP 20.0 GHz  
 SWP 450 msec

VBW 3 MHz

RES BW 1 MHz (i)

START 2.0 GHz

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.898 87 GHz  
-55.30 dBm

D. CROWDER  
8 Jan 1999  
11:11:23

ATTEN 40 dB + 40 dB EXT

REF 23.0 dBm

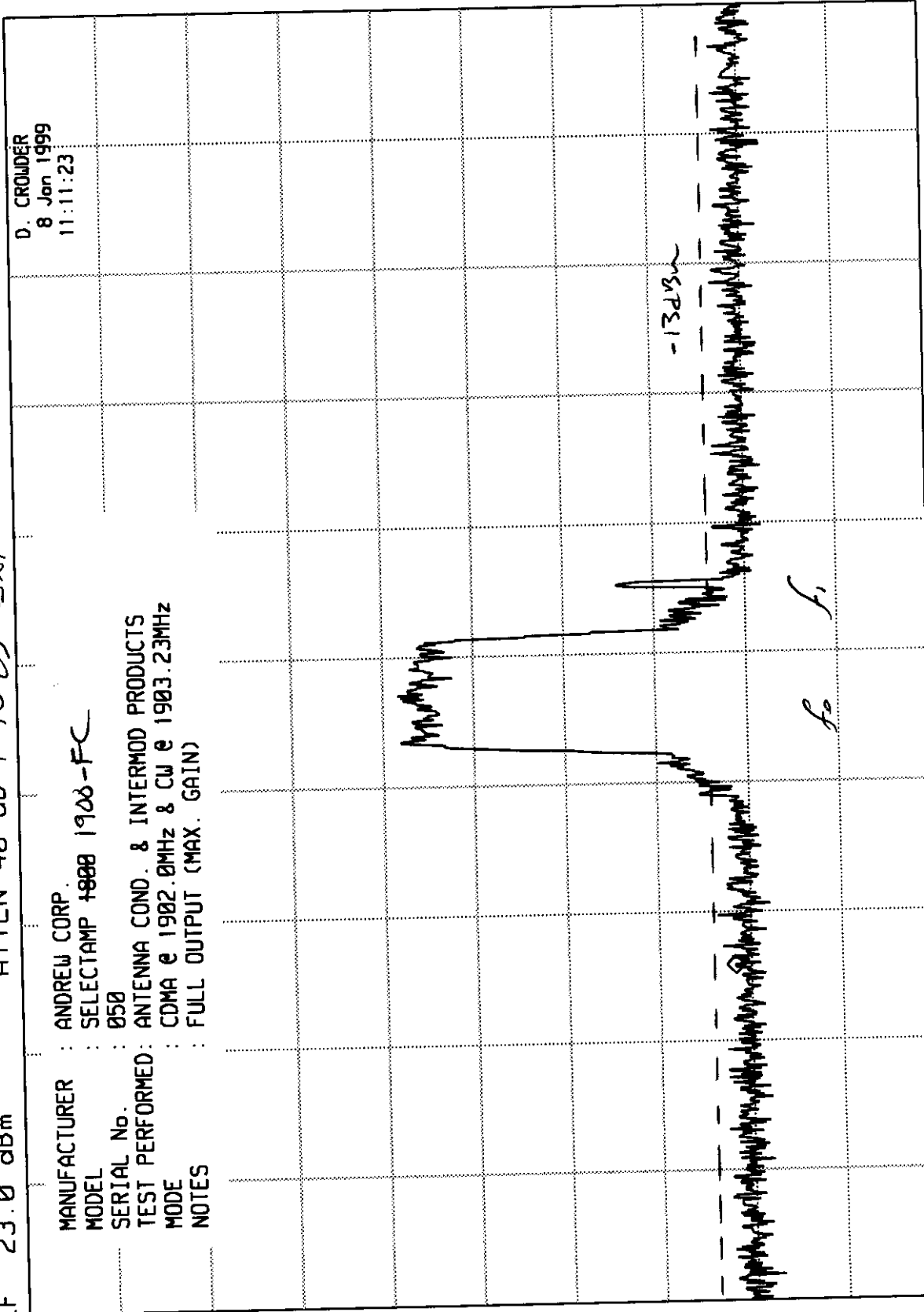
hp

10 dB/

MANUFACTURER : ANDREW CORP.  
MODEL : SELECTAMP 1900 1900-FC  
SERIAL No. : 050  
TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
MODE : CDMA @ 1902.0MHz & CW @ 1903.23MHz  
NOTES : FULL OUTPUT (MAX. GAIN)

DL -53.0  
dBm

222



STOP 1.910 0 GHz  
SWP 113 msec

UBW 300 kHz

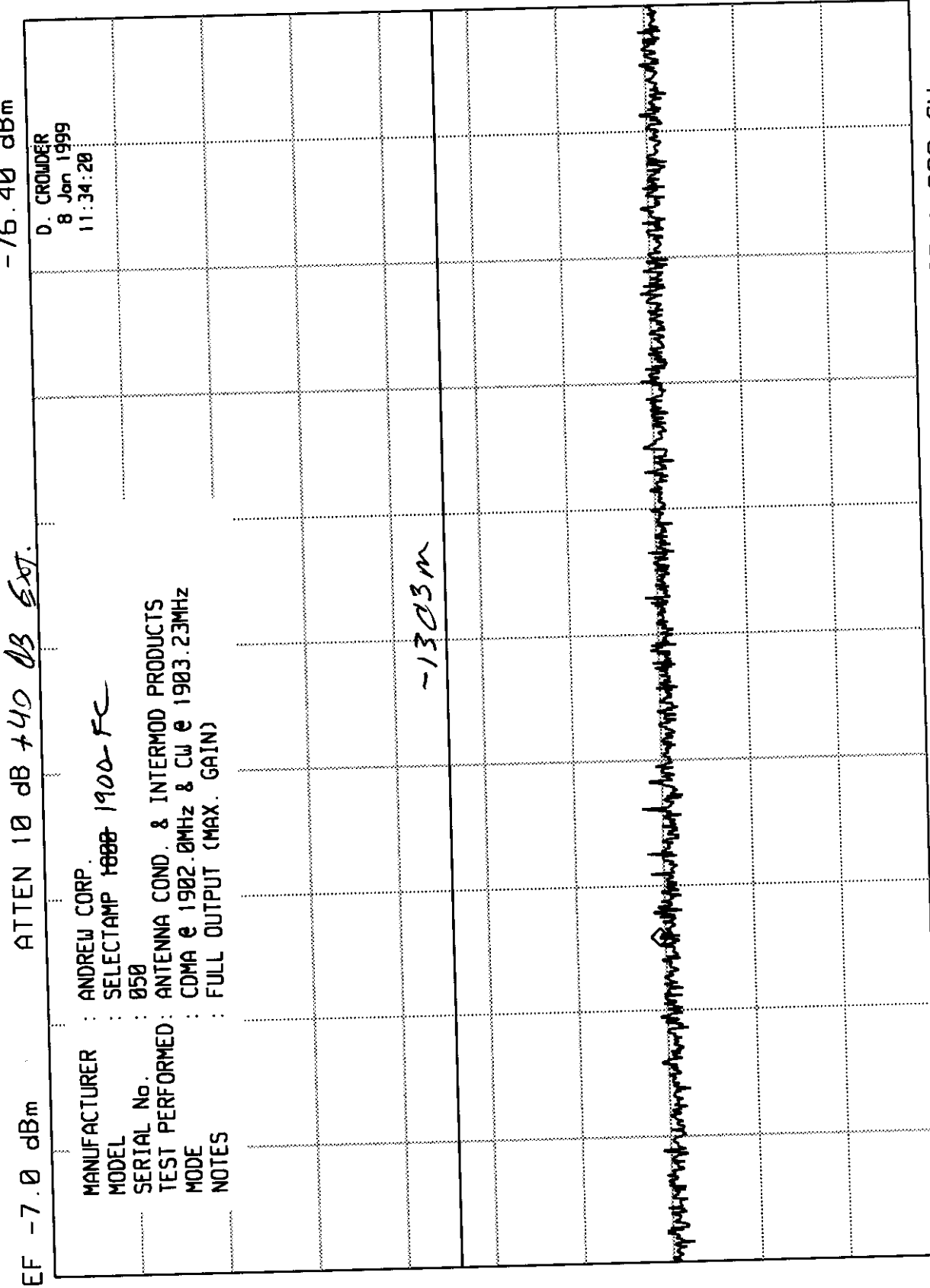
START 1.895 0 GHz  
RES BW 30 kHz(i)

E(14)

ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 280.3 MHz  
-76.40 dBm



D. CROWDER  
8 Jan 1999  
11:34:20

ATTEN 10 dB +40 dB Ext.

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1000~~ 1900-FC  
 SERIAL No. : 050  
 TEST PERFORMED : ANTENNA COND. & INTERMOD PRODUCTS  
 MODE : CDMA @ 1902.0MHz & CW @ 1903.23MHz  
 NOTES : FULL OUTPUT (MAX. GAIN)

-1303m

REF -7.0 dBm

hp

10 dB/

DL -53.0 dBm

E(142)

START 30 MHz RES BW 100 kHz(i) STOP 1.000 GHz  
 VBW 1 MHz SWP 728 msec

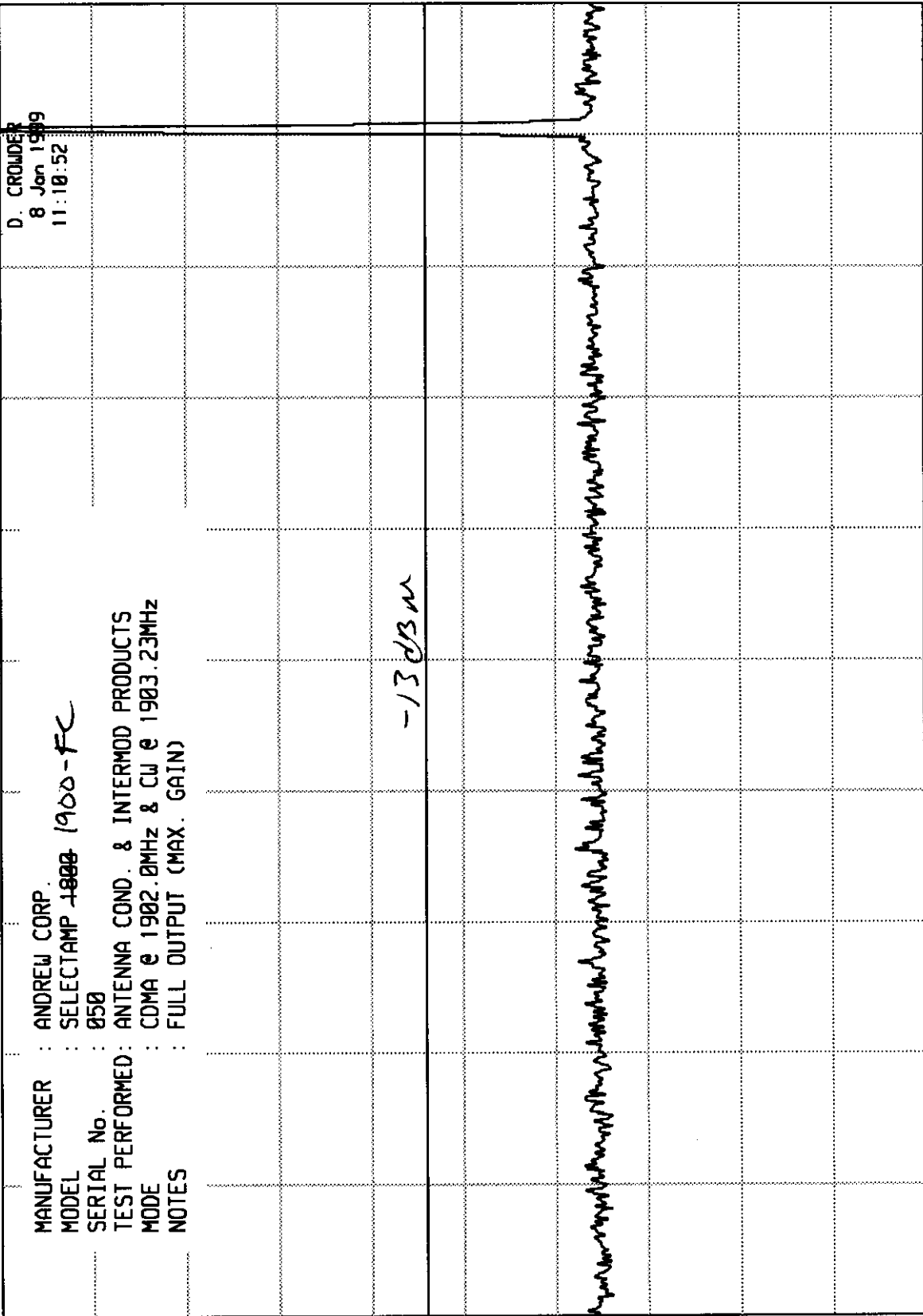
ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 1.902 GHz  
-5.40 dBm

ATTEN 10 dB + 40 dB EXT.

REF -7.0 dBm



hp 10 dB/

DL -53.0 dBm

START 1.00 GHz RES BW 1 MHz (i) STOP 2.00 GHz  
UBW 3 MHz SWP 25.0 msec



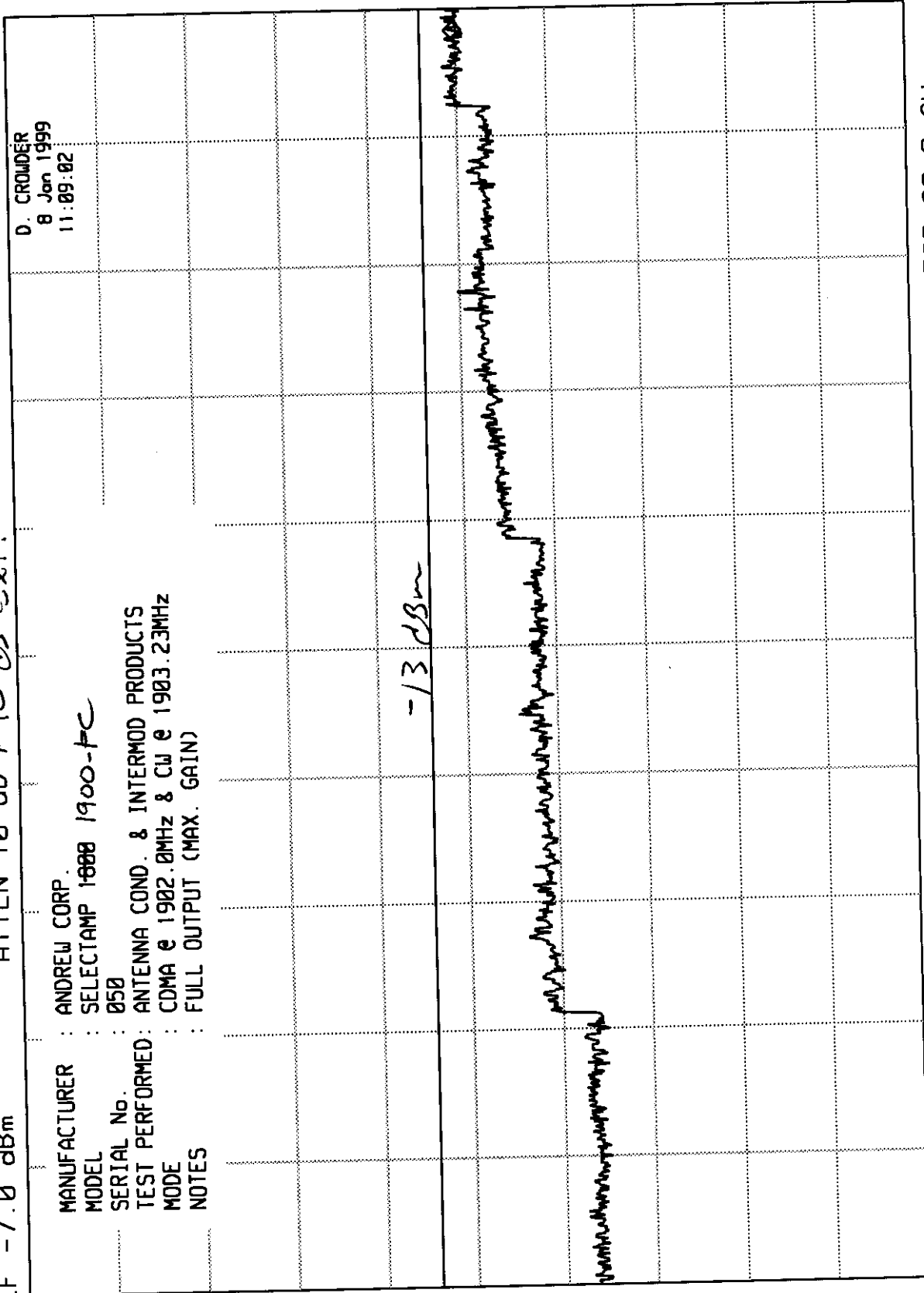
ENGINEERING TEST REPORT NO. 21337  
DATA SHEET

ELITE ELECTRONIC ENGINEERING CO

MKR 19.68 GHz  
-56.70 dBm

ATTEN 10 dB + 40 dB EXT.

REF -7.0 dBm



hp

10 dB/

DL -53.0 dBm

E(144)

START 2.0 GHz RES BW 1 MHz (i) STOP 20.0 GHz SWP 450 msec VBW 3 MHz

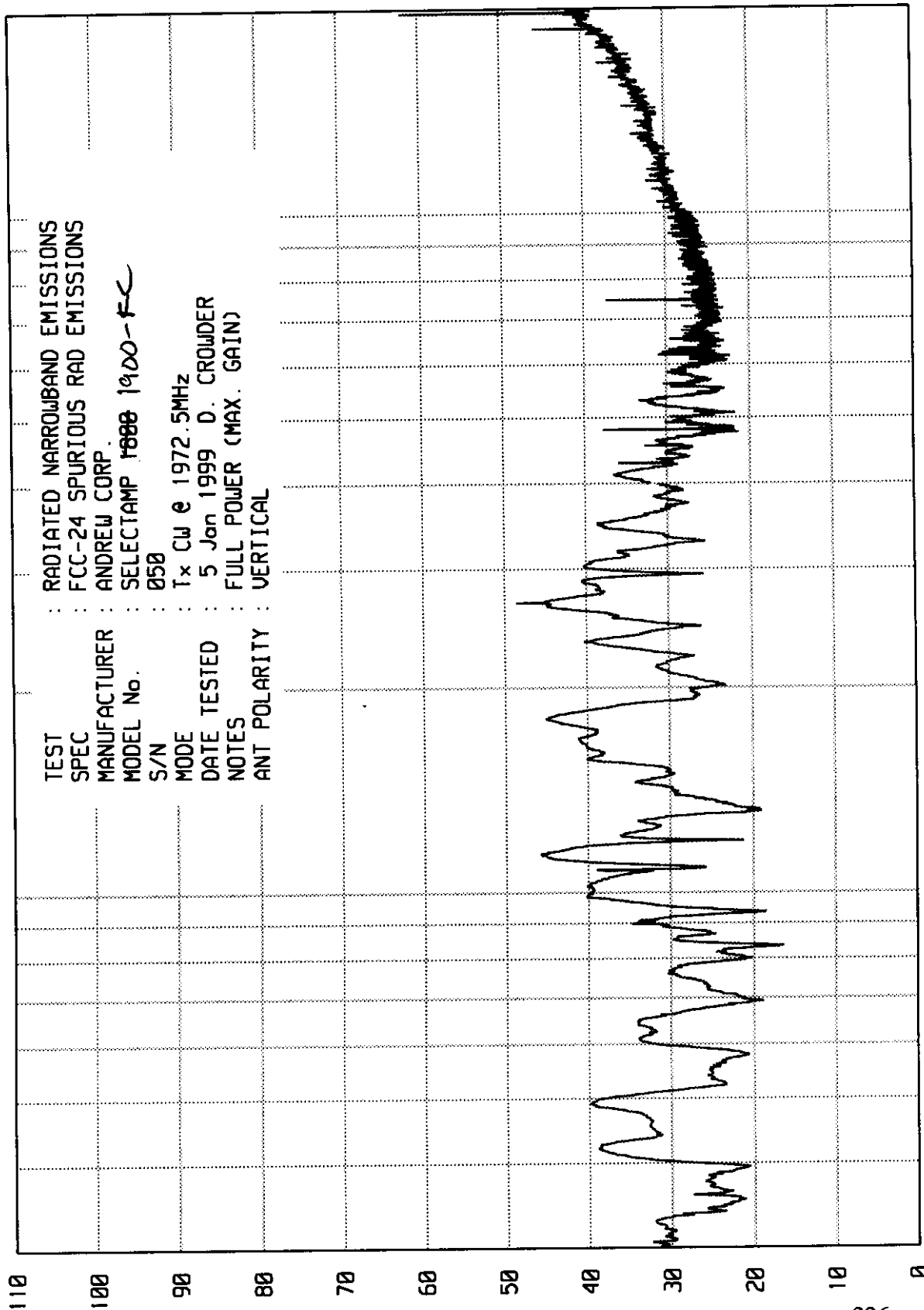
DATA SHEET

ELITE ELECTRONIC ENGINEERING Co.  
Downers Grove, Ill. 60515

UNIV\_EH RUN RUN 1

UKAB 02/24/98

EEE



TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP 1888 1900-FC  
 S/N : 050  
 MODE : Tx CW e 1972.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL

226

(541)E

STOP = 2000

1800

FREQUENCY - MHz

100

START = 30

RADIATED NARROWBAND EMISSIONS - dBu/m

ENGINEERING TEST REPORT NO. 21337

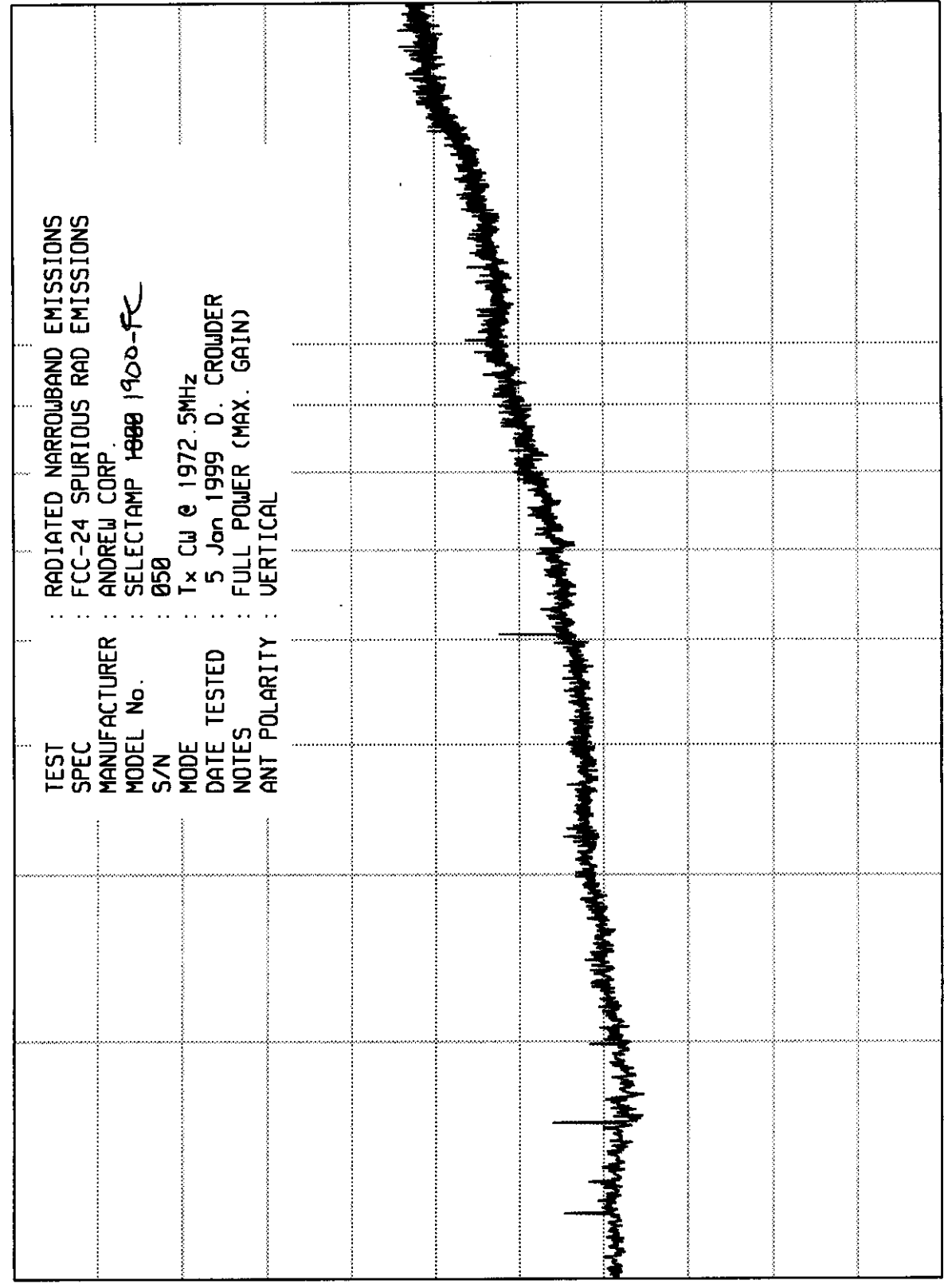
DATA SHEET

ELITE ELECTRONIC ENGINEERING Co.  
Downers Grove, Ill. 60515

UNIU\_EH RUN RUN 2

EEE

WKAB 02/24/98



TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP 1800 1900-FC  
 S/N : 050  
 MODE : Tx CW @ 1972.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL

110  
100  
90  
80  
70  
60  
50  
40  
30  
20  
10  
0

RADIATED NARROWBAND EMISSIONS - dBu/m

227

(94)E

START = 2000

FREQUENCY - MHZ

10000

STOP = 18000

ENGINEERING TEST REPORT NO. 21337

DATA SHEET

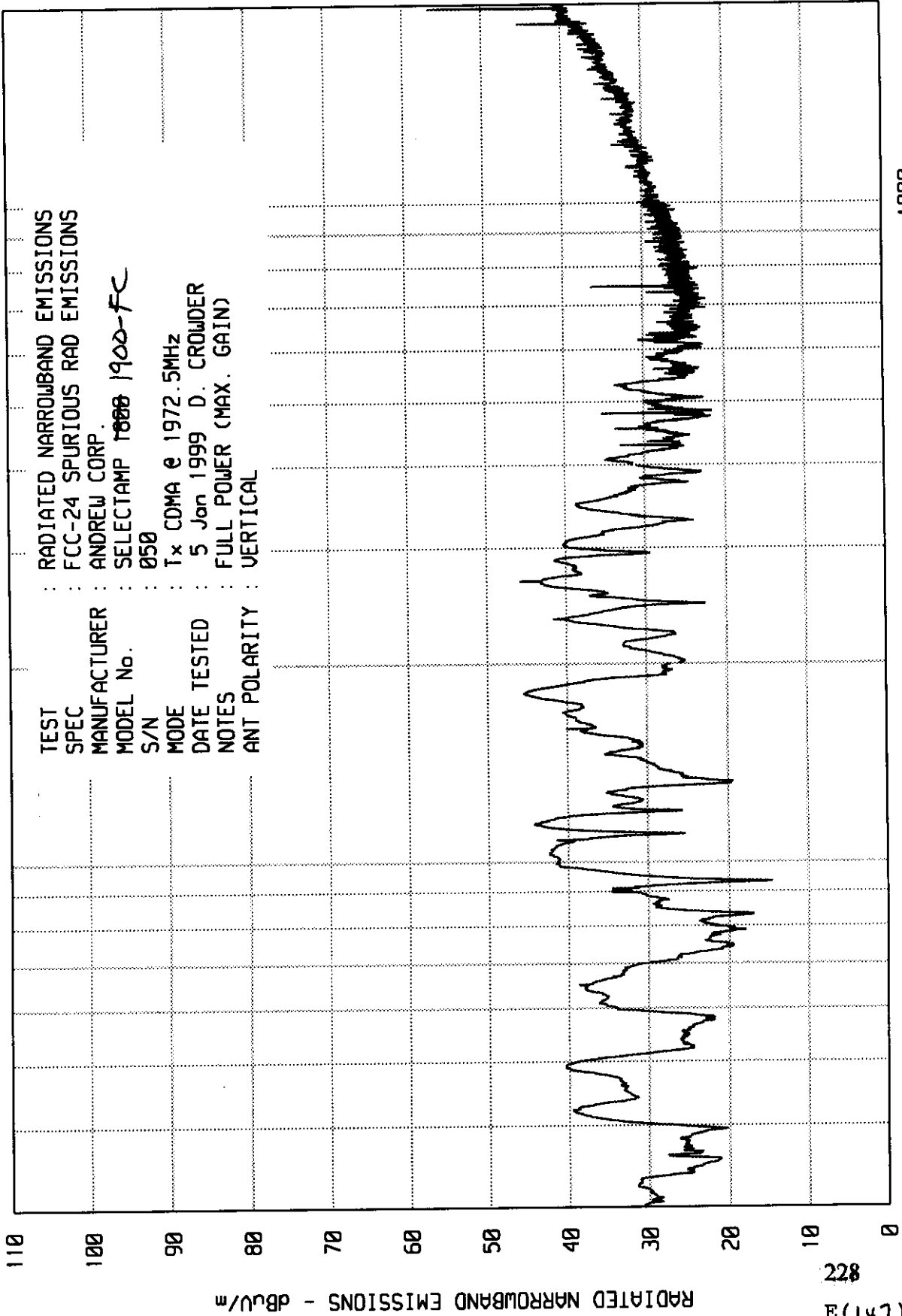
ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNIU\_EM RUN RUN 1

UKA08 02/24/98

EE



TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP ~~1000~~ 1900-FC  
 S/N : 050  
 MODE : T x CDMA e 1972.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL

228

E(147)

START = 30

FREQUENCY - MHz

100

1000

STOP = 2000

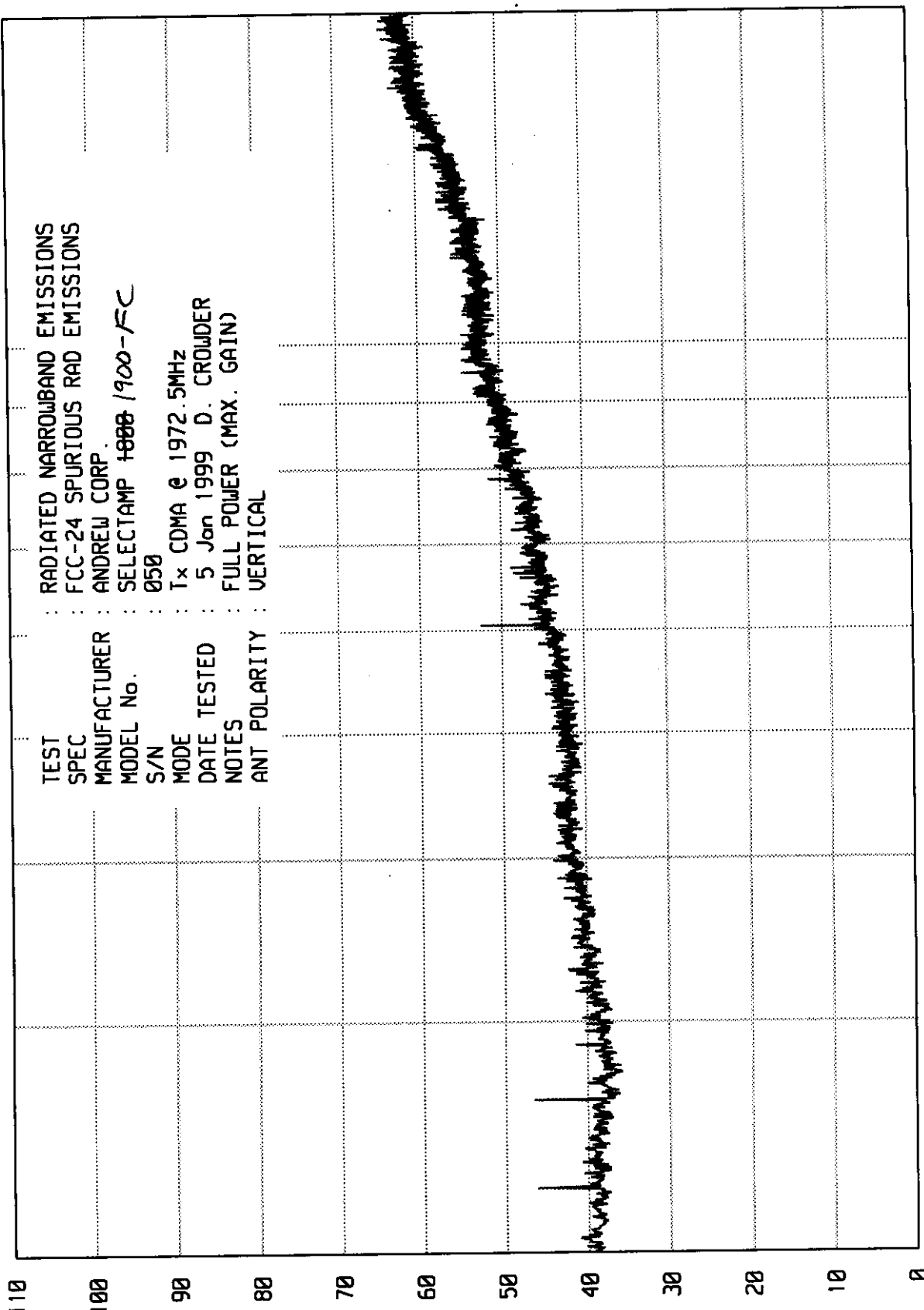
DATA SHEET

ELITE ELECTRONIC ENGINEERING Co.  
Downers Grove, Ill. 60515

UNIU\_EM RUN RUN 2

EEC

UKA08 02/24/98



TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPOURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP 1888 1900-FC  
 S/N : 058  
 MODE : Tx CDMA e 1972.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL

(841)E  
229

STOP = 18000

FREQUENCY - MHz

START = 2000

DATA SHEET

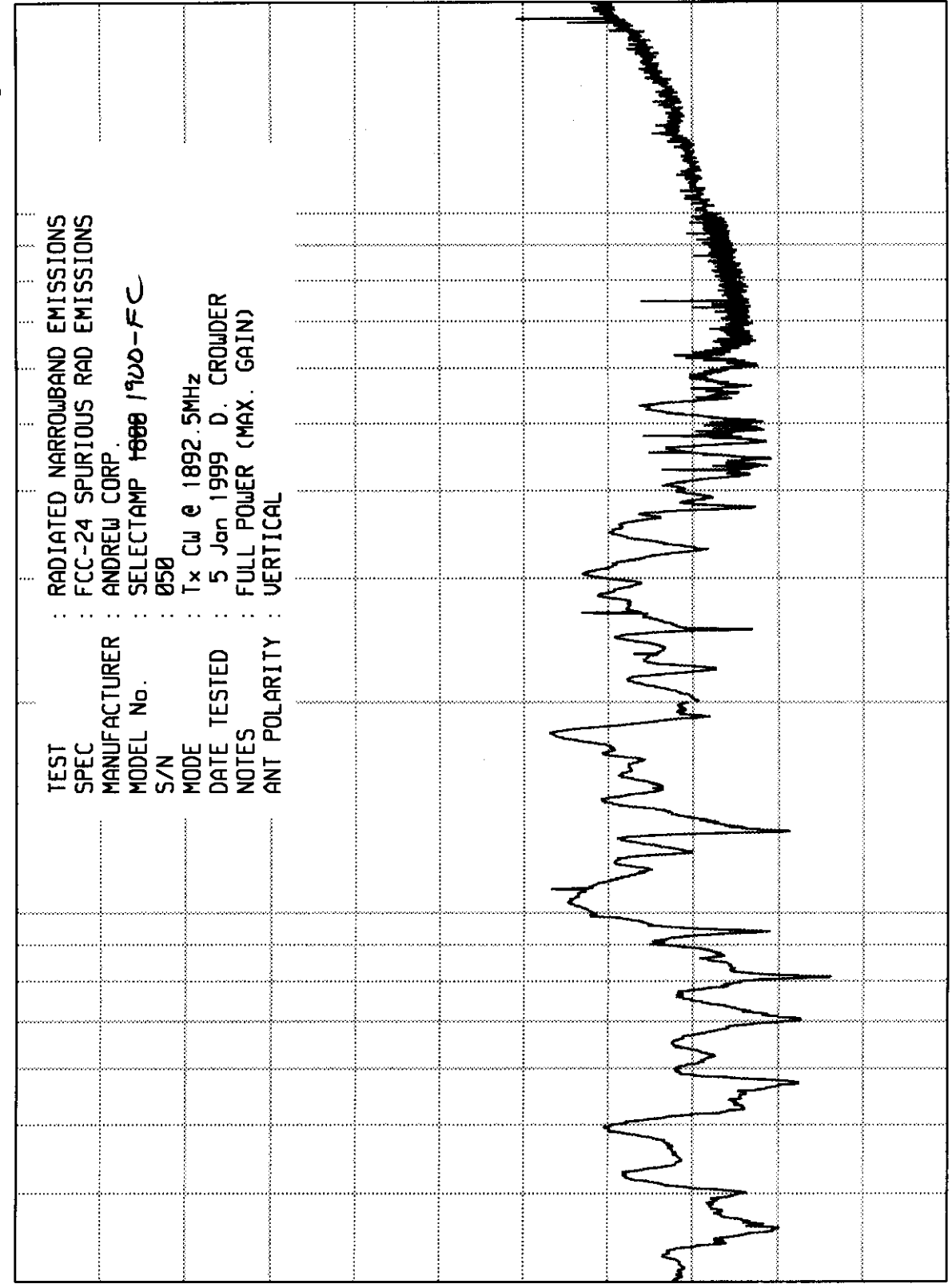
ELITE ELECTRONIC ENGINEERING Co.  
Downers Grove, Ill. 60515

UNIV\_EM RUN RUN 1

UKAB 02/24/98

EEE

TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP 1888 1900-FC  
 S/N : 050  
 MODE : Tx CW @ 1892.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL



230

(149)E

START = 30

FREQUENCY - MHz

100

1000

STOP = 2000

ENGINEERING TEST REPORT NO. 21337

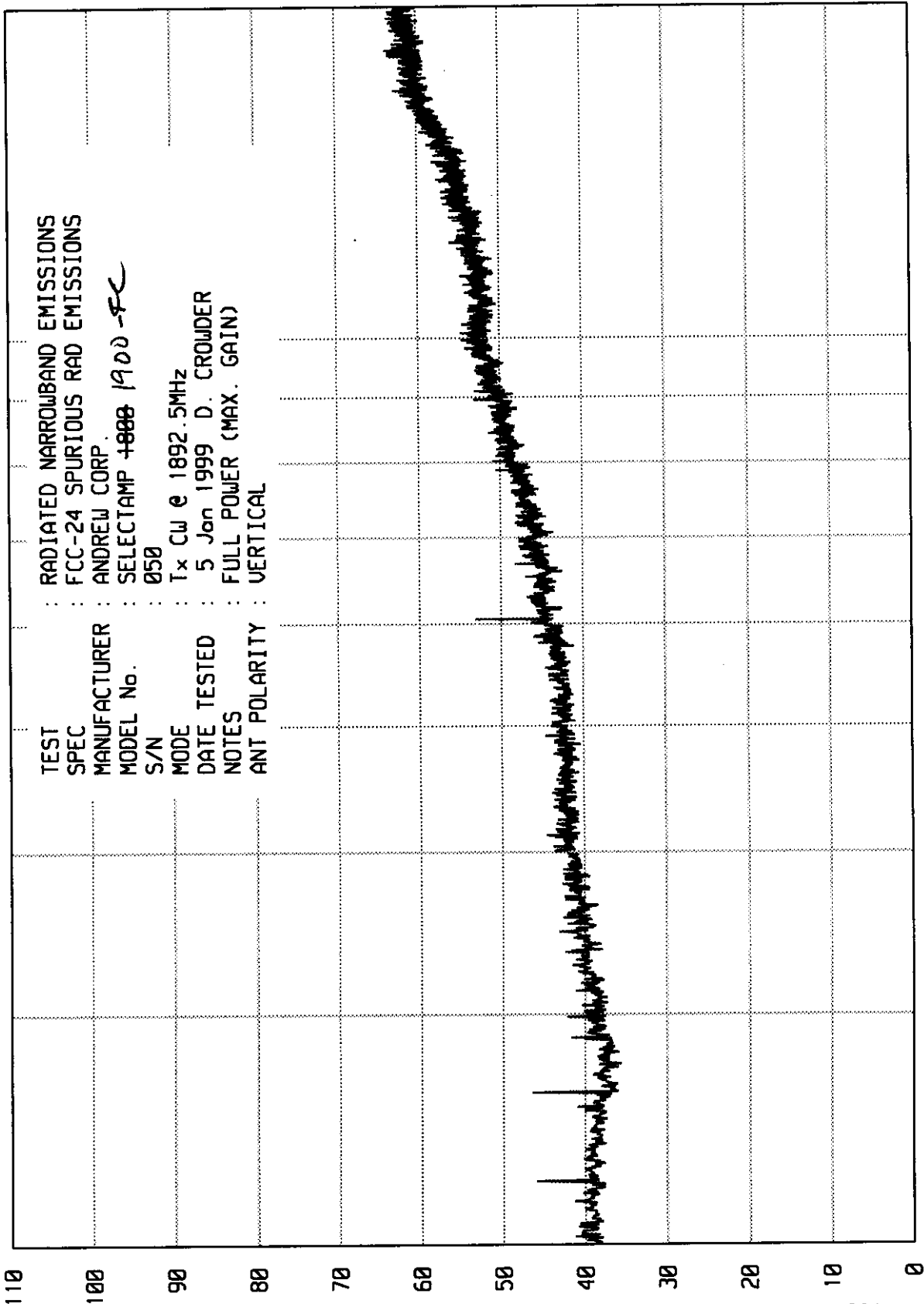
DATA SHEET

ELITE ELECTRONIC ENGINEERING Co.  
Downers Grove, Ill. 60515

UNIU\_EM RUN RUN 2

EEE

UKA0 02/24/98



TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP +888 1900-FC  
 S/N : 050  
 MODE : Tx CW @ 1892.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL

231  
(051E)

STOP = 18000

10000

FREQUENCY - MHz

START = 2000

RADIATED NARROWBAND EMISSIONS - dBu/m

DATA SHEET

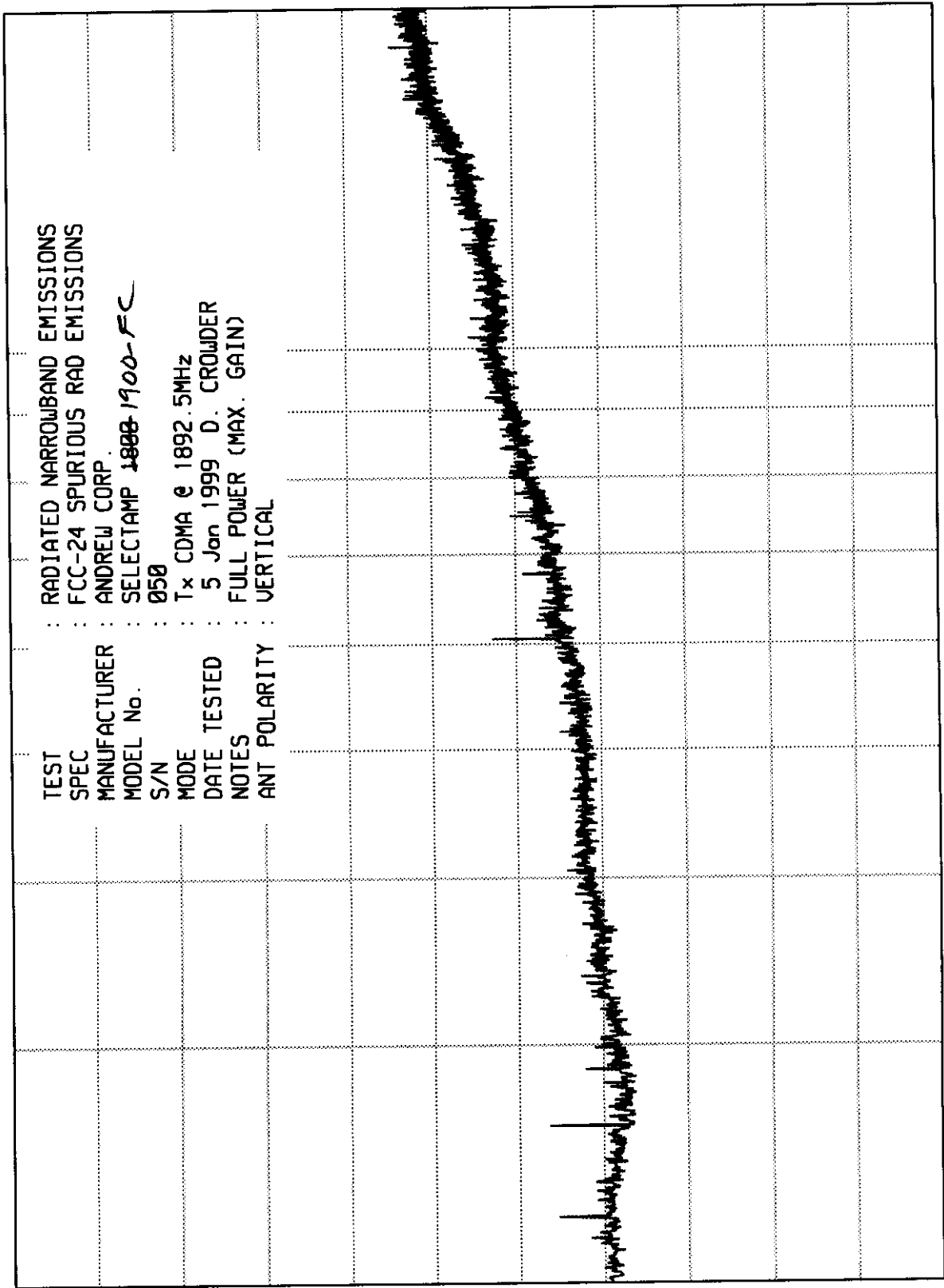
ELITE ELECTRONIC ENGINEERING Co.  
Downers Grove, Ill. 60515

UNTU\_EM RUN RUN 2

MKA0 02/24/98

EE

TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP ~~1800~~ 1900-FC  
 S/N : 050  
 MODE : Tx CDMA @ 1892.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL



(15/232)

START = 2000

FREQUENCY - MHz

10000

STOP = 18000



DATA SHEET

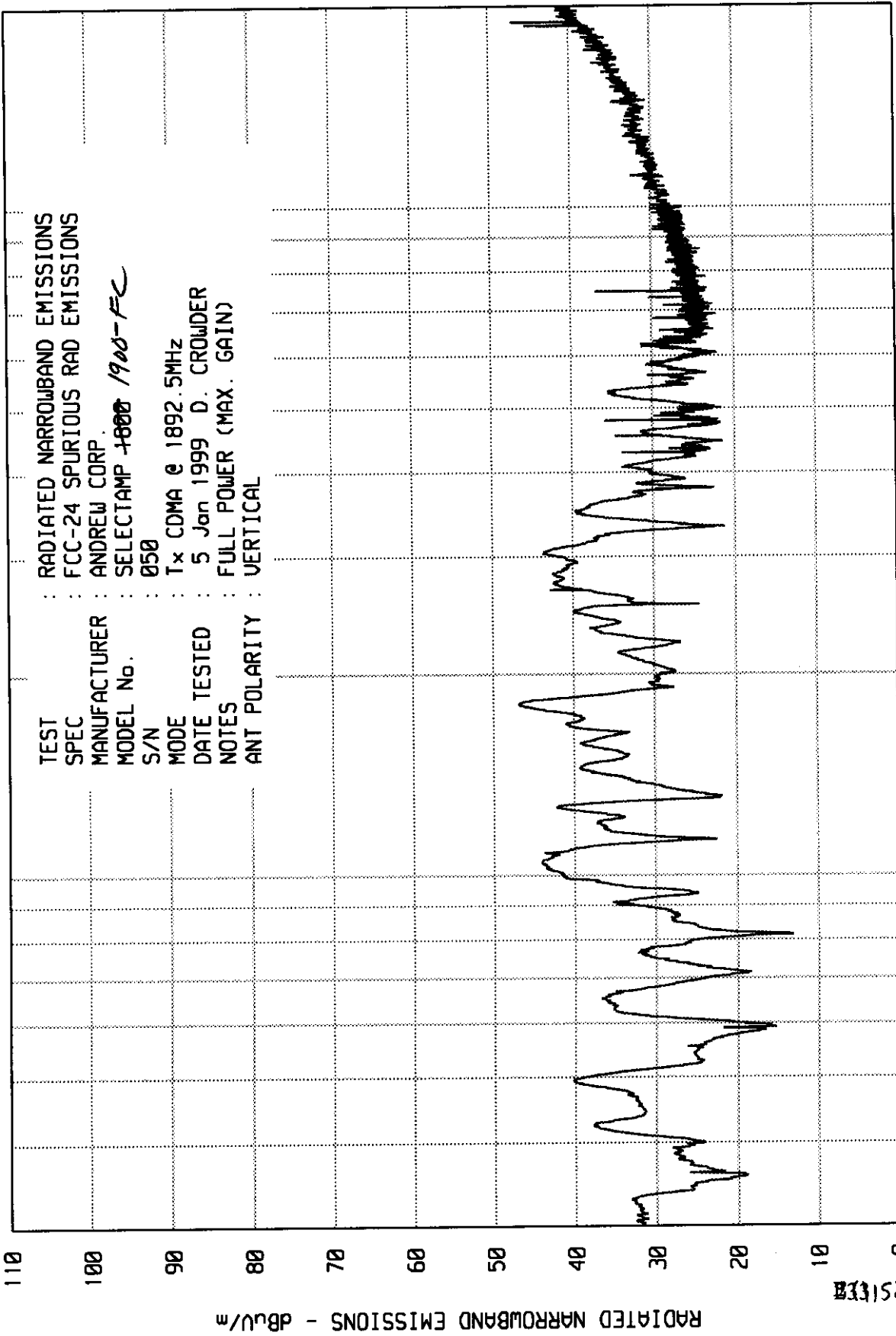
ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNIV\_EH RUN RUN 1

WKA0 02/24/98

EE



TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPIRIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP ~~1800~~ 1900-FC  
 S/N : 050  
 MODE : Tx CDMA @ 1892.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL

START = 30

FREQUENCY - MHz

100

1000

STOP = 2000

DATA SHEET

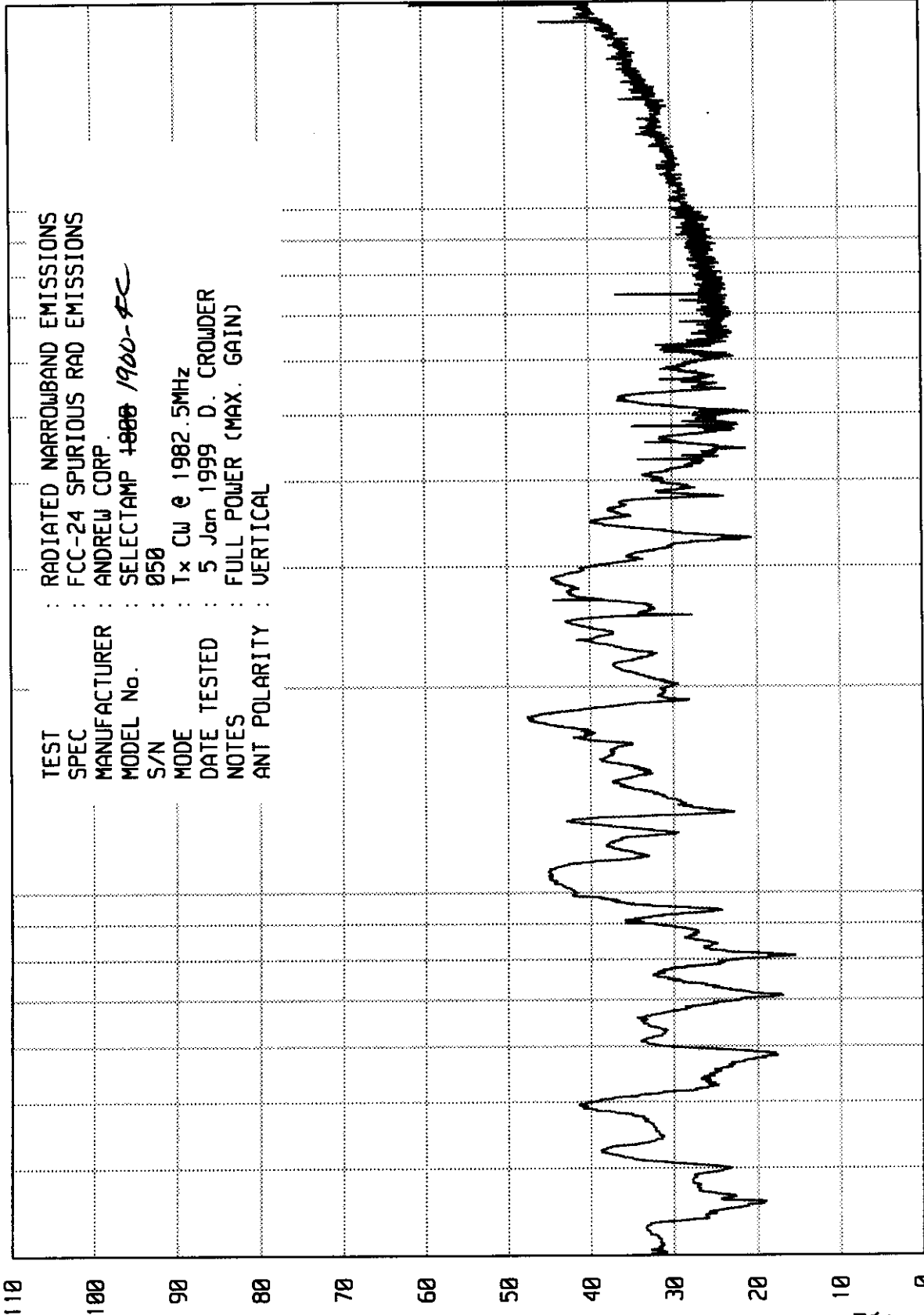
ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNIV\_EM RUN RUN 1

UKAB 02/24/98

EEE



TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP 4888 / 1900-FC  
 S/N : 050  
 MODE : Tx CW @ 1982.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL

(51418)

START = 30

FREQUENCY - MHz

STOP = 2000

DATA SHEET

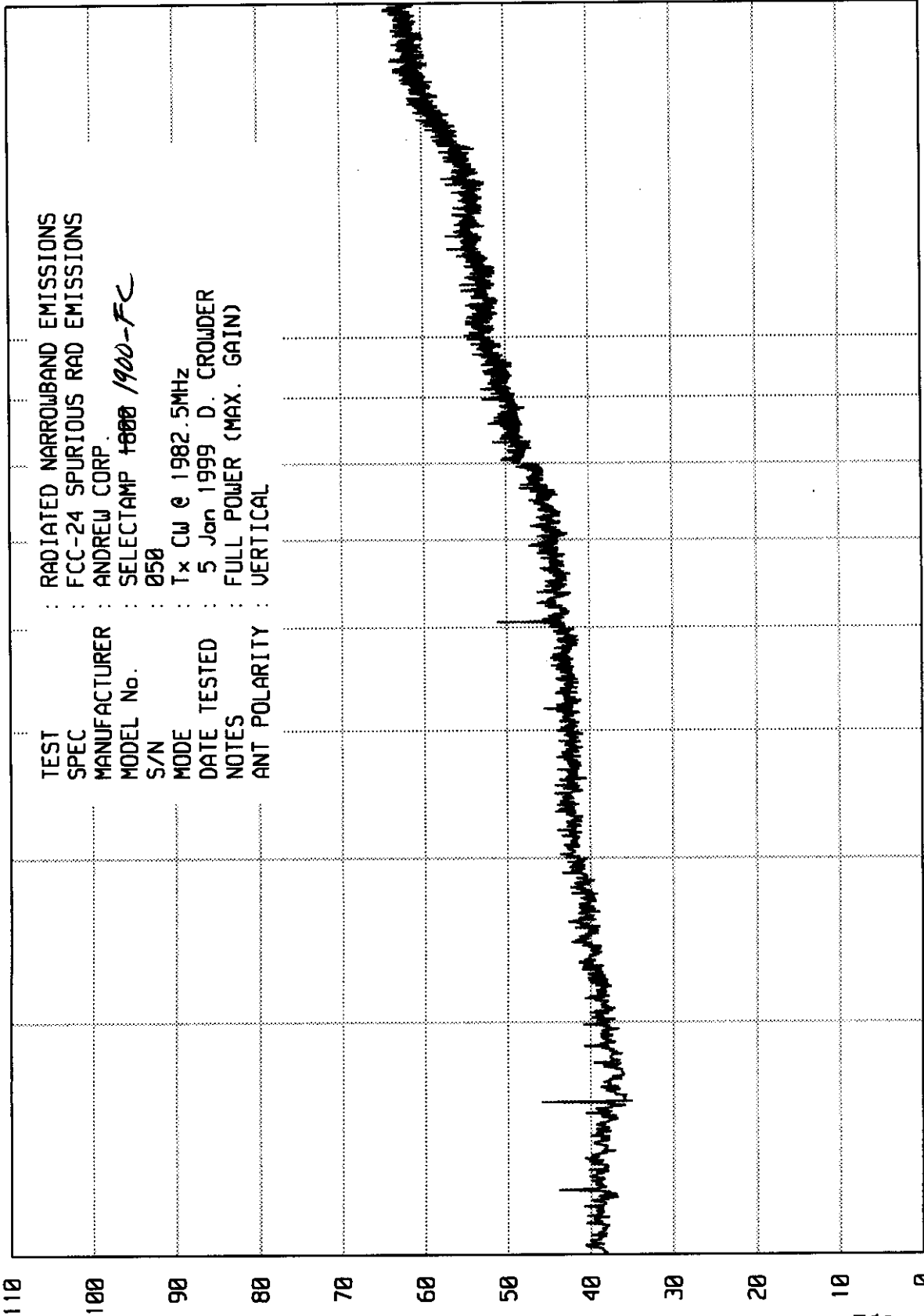
ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNIU\_EM RUN RUN 2

UKAB 02/24/98

EEC



TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP 1800 1900-FC  
 S/N : 058  
 MODE : Tx CW @ 1982.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL

10000

STOP = 18000

FREQUENCY - MHz

START = 2000

RADIATED NARROWBAND EMISSIONS - dBu/m

B35

154

DATA SHEET

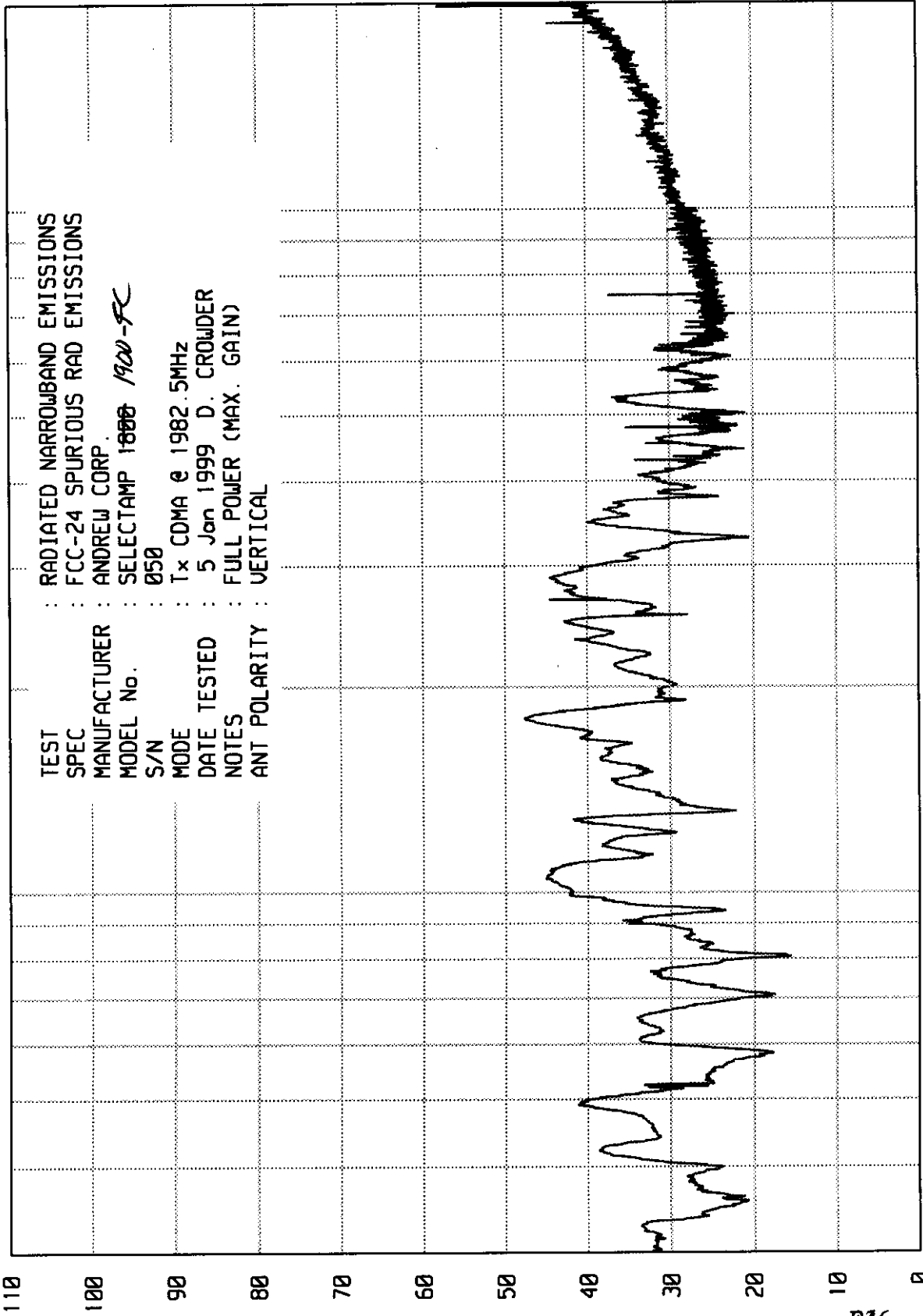
ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNTU\_EM\_RUN RUN 1

EE

LKAB 02/24/98



TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP 1800 *1900-FC*  
 S/N : 050  
 MODE : Tx CDMA @ 1982.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL

(551) 916

STOP = 2000

FREQUENCY - MHz

START = 30

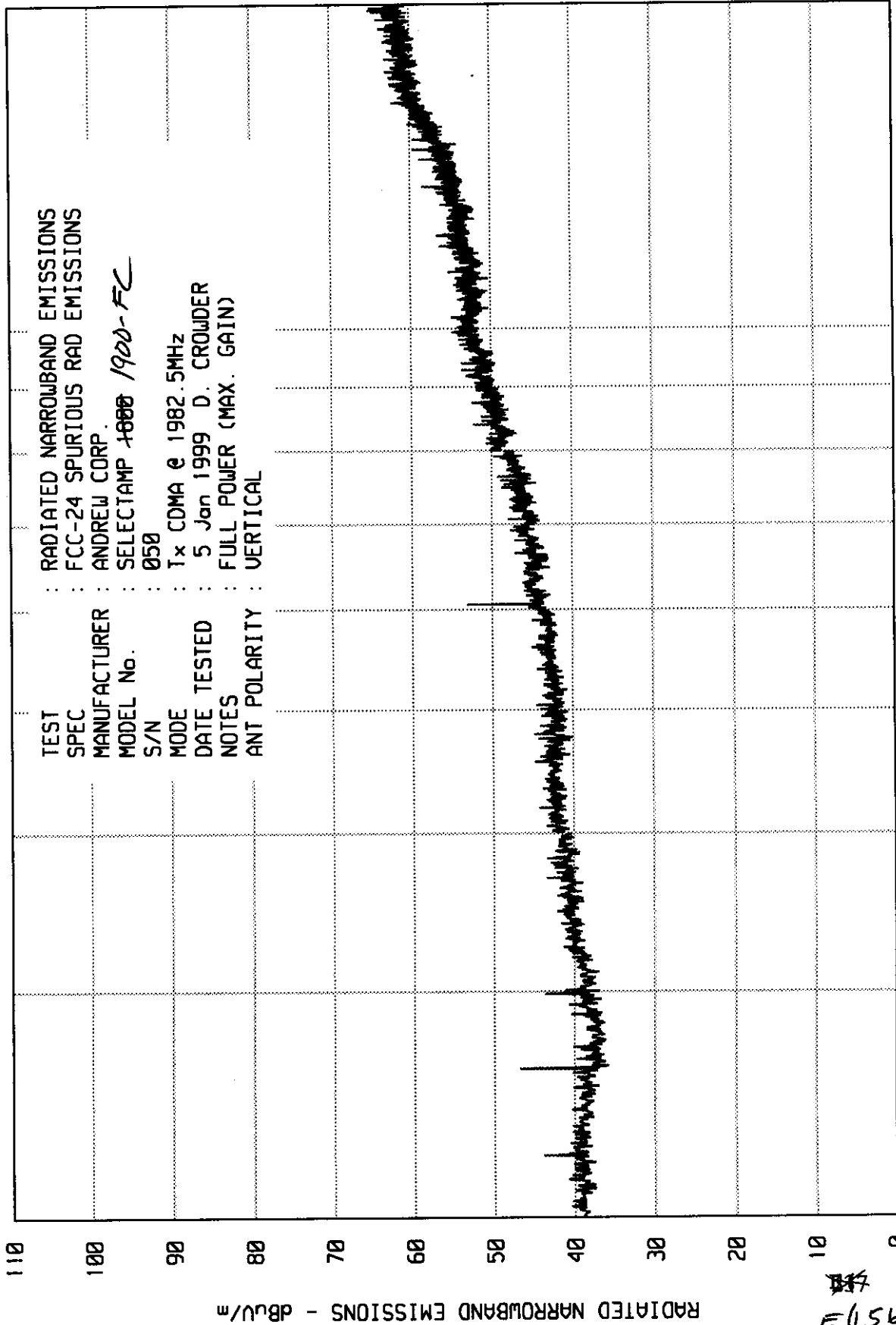
DATA SHEET

ELITE ELECTRONIC ENGINEERING Co.  
 Downers Grove, Ill. 60515

UNIU\_EM RUN RUN 2

UKAB 02/24/98

TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP ~~1800~~ 1900-FC  
 S/N : 050  
 MODE : Tx CDMA @ 1982.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL



10000

FREQUENCY - MHz

STOP = 18000

START = 2000

EE

(951) 5

DATA SHEET

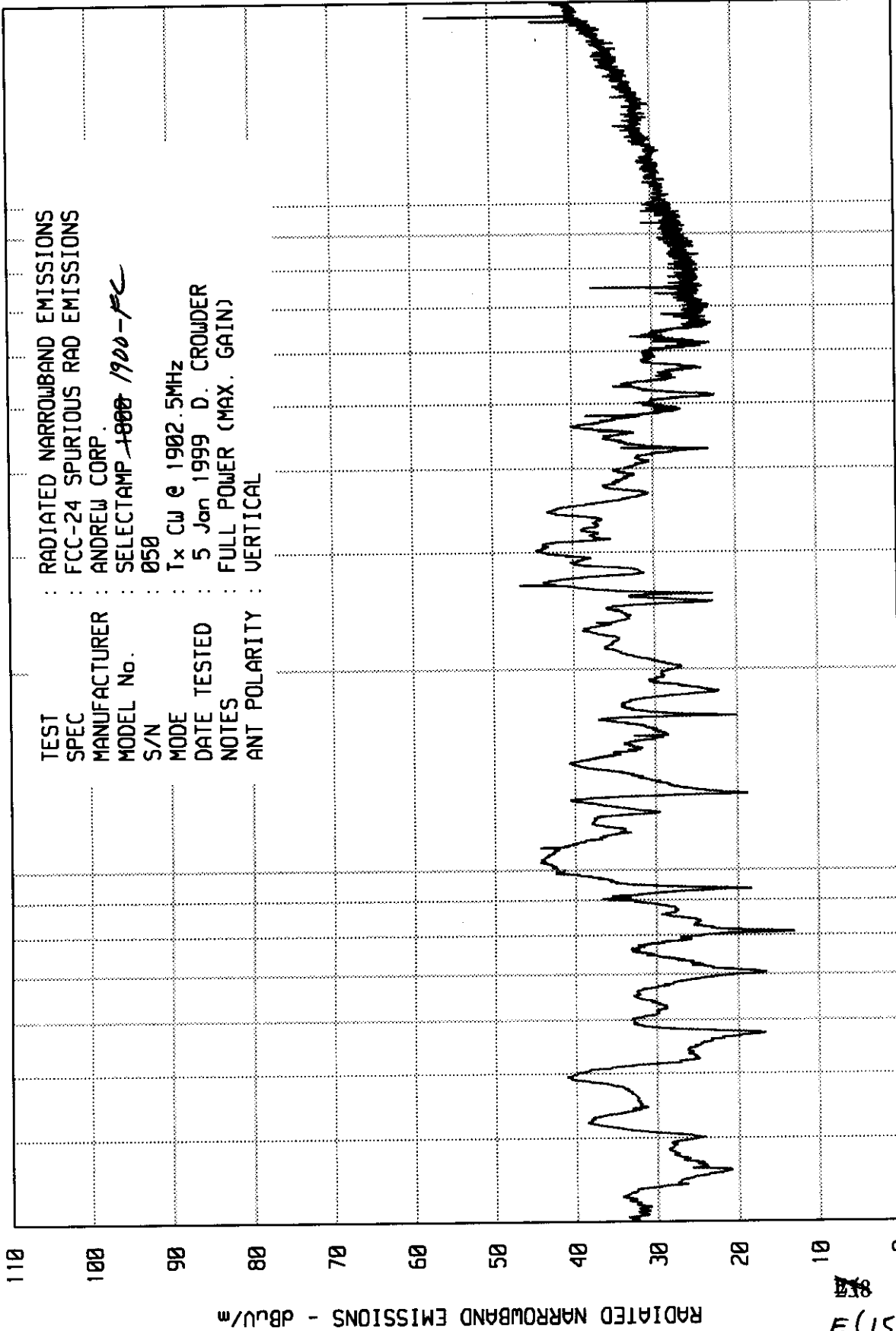
ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNTU\_EM RUN RUN 1

UKA00 02/24/98

EEE



TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP ~~1800~~ 1900-FC  
 S/N : 050  
 MODE : Tx CW @ 1902.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL

(151) E

START = 30

FREQUENCY - MHz

STOP = 2000

DATA SHEET

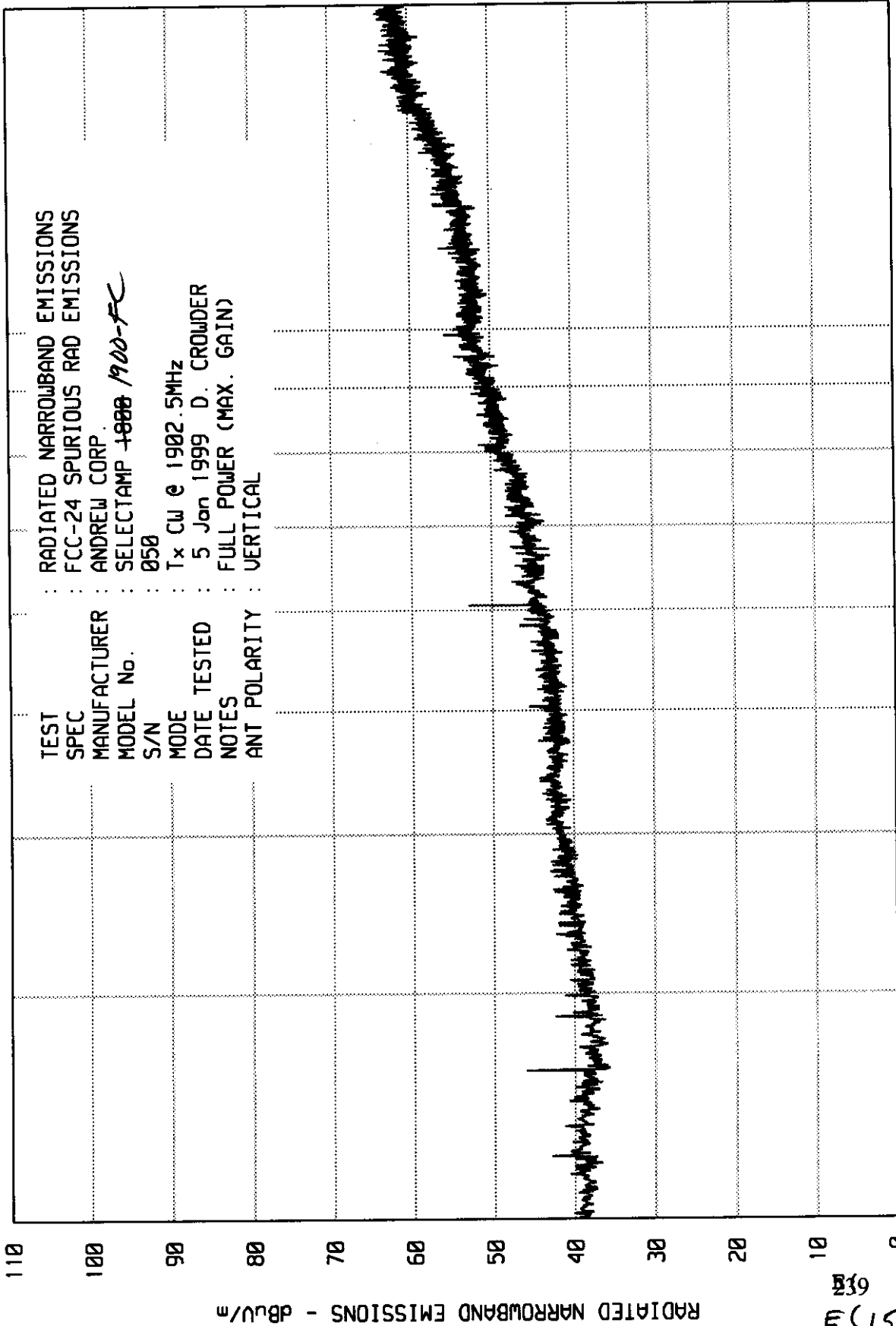
ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNIU\_EM RUN RUN 2

UKAB 02/24/98

TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP ~~1800~~ 1900-FC  
 S/N : 050  
 MODE : Tx CW @ 1902.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL



10000

STOP = 18000

FREQUENCY - MHz

START = 2000

EE

(851)E  
 (632)

DATA SHEET

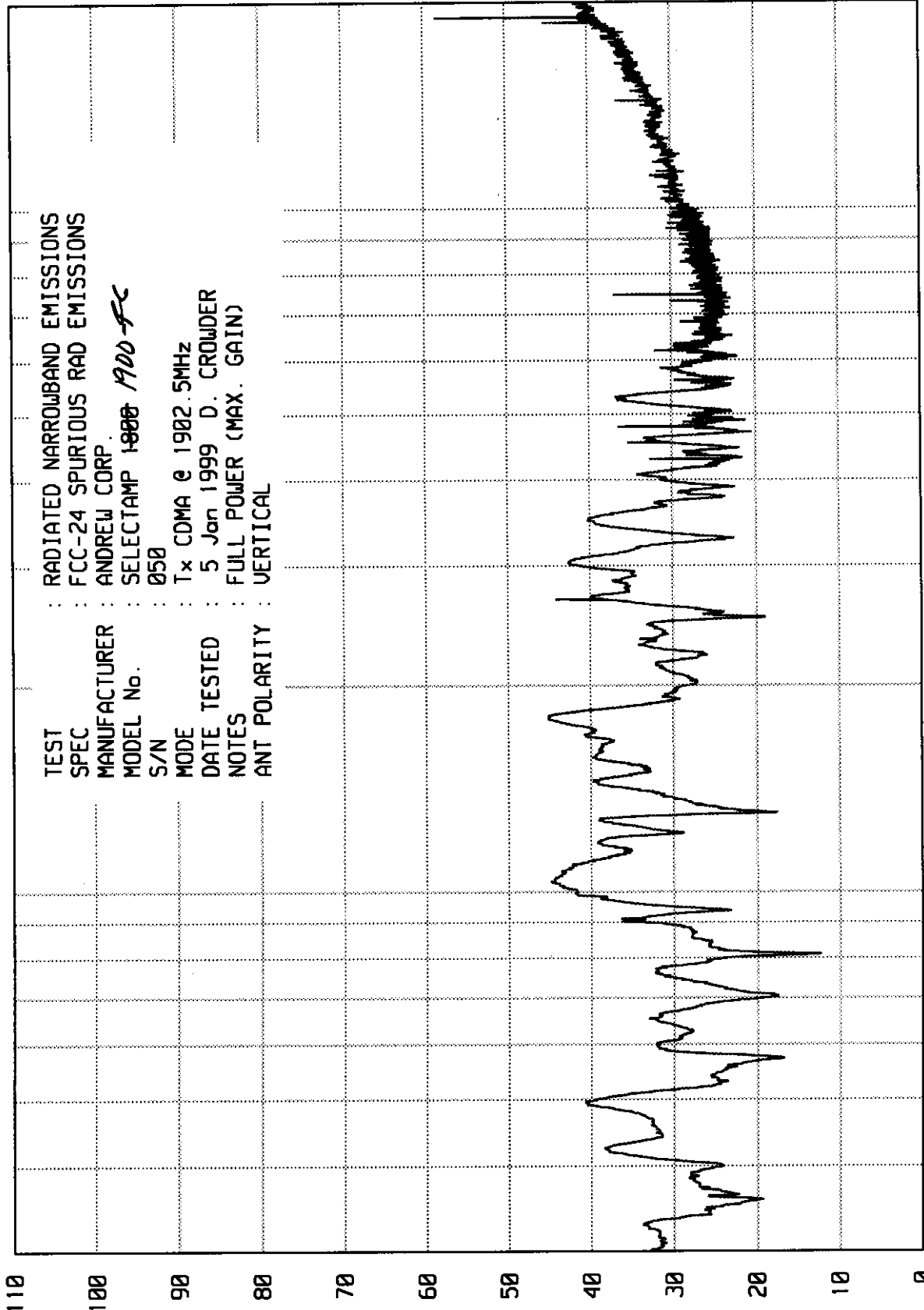
ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNIV\_EM RUN RUN 1

EEE

UKAB 02/24/98



TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP 1800 *ADD FC*  
 S/N : 050  
 MODE : Tx CDMA @ 1902.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL

RADIATED NARROWBAND EMISSIONS - dBu/m

(651) 3 (40)

START = 30

FREQUENCY - MHz

STOP = 2000



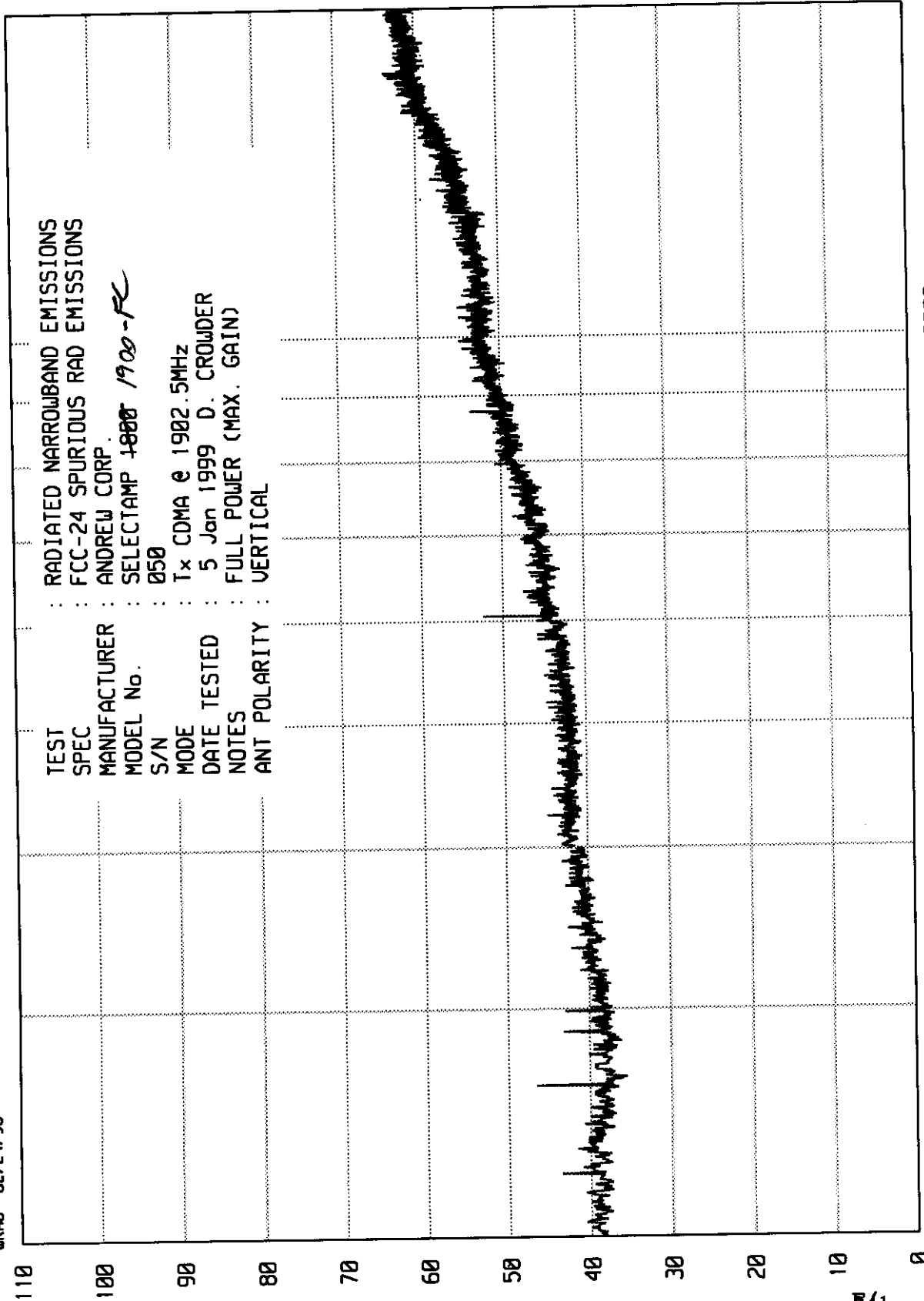
DATA SHEET

ELITE ELECTRONIC ENGINEERING Co.  
Downers Grove, Ill. 60515

UNIU\_EH RUN RUN 2

UKA0 02/24/98

TEST : RADIATED NARROWBAND EMISSIONS  
 SPEC : FCC-24 SPURIOUS RAD EMISSIONS  
 MANUFACTURER : ANDREW CORP.  
 MODEL No. : SELECTAMP 4800 1900-FC  
 S/N : 050  
 MODE : Tx CDMA @ 1902.5MHz  
 DATE TESTED : 5 Jan 1999 D. CROWDER  
 NOTES : FULL POWER (MAX. GAIN)  
 ANT POLARITY : VERTICAL



RADIATED NARROWBAND EMISSIONS - dBu/m

(091) 5  
(141)

START = 2000

FREQUENCY - MHz

10000

STOP = 18000

ENGINEERING TEST REPORT NO. 21337  
ELITE ELECTRONIC ENGINEERING COMPANY

MANUFACTURER : ANDREW CORP.  
MODEL : SELECTAMP ~~1800~~ 1900-FC  
S/N : 050  
SPECIFICATION : FCC-24 OPEN FIELD SPURIOUS RADIATED EMISSIONS  
DATE : JANUARY 7, 1999  
NOTES : TRANSMIT CW AT 1972.5MHz, FULL POWER  
: F BAND DOWNLINK

| FREQ.<br>(MHz) | ANT<br>POL | MTR<br>RDG<br>(dBuV) | ANT<br>FAC<br>dB | CABLE<br>FAC<br>dB | PRE-AMP<br>GAIN<br>dB | F.I.<br>CORR<br>dB | TOTAL<br>dBm | LIMIT<br>dBm |
|----------------|------------|----------------------|------------------|--------------------|-----------------------|--------------------|--------------|--------------|
| 3945.0         | H          | 44.8                 | 34.8             | 6.5                | 35.5                  | -97.2              | -46.6        | -13          |
|                | V          | 46.2                 | 34.8             | 6.5                | 35.5                  | -97.2              | -45.2        | -13          |
| 5917.5         | H          | 39.9 AMB             | 36.4             | 9.0                | 35.2                  | -97.2              | -47.1        | -13          |
|                | V          | 41.3 AMB             | 36.4             | 9.0                | 35.2                  | -97.2              | -45.7        | -13          |
| 7890.0         | H          | 41.0 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -43.3        | -13          |
|                | V          | 42.3 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -42.0        | -13          |
| 9862.5         | H          | 41.8 AMB             | 39.8             | 11.5               | 36.0                  | -97.2              | -40.1        | -13          |
|                | V          | 41.1 AMB             | 39.8             | 11.5               | 36.0                  | -97.2              | -40.8        | -13          |
| 11835.0        | H          | 40.9 AMB             | 40.8             | 12.2               | 34.7                  | -97.2              | -38.0        | -13          |
|                | V          | 41.1 AMB             | 40.8             | 12.2               | 34.7                  | -97.2              | -37.8        | -13          |
| 13807.5        | H          | 41.9 AMB             | 41.5             | 13.0               | 32.9                  | -97.2              | -33.7        | -13          |
|                | V          | 43.1 AMB             | 41.5             | 13.0               | 32.9                  | -97.2              | -32.5        | -13          |
| 15780.0        | H          | 41.9 AMB             | 42.2             | 13.7               | 34.2                  | -97.2              | -33.6        | -13          |
|                | V          | 42.2 AMB             | 42.2             | 13.7               | 34.2                  | -97.2              | -33.3        | -13          |
| 17752.5        | H          | 45.1 AMB             | 44.5             | 14.4               | 33.2                  | -97.2              | -26.4        | -13          |
|                | V          | 43.2 AMB             | 44.5             | 14.4               | 33.2                  | -97.2              | -28.3        | -13          |
| 19725.0        | H          | 44.7 AMB             | 46.3             | 15.1               | 32.9                  | -97.2              | -24.0        | -13          |
|                | V          | 44.6 AMB             | 46.3             | 15.1               | 32.9                  | -97.2              | -24.1        | -13          |

CHECKED BY: *RJK*

ENGINEERING TEST REPORT NO. 21337  
 ELITE ELECTRONIC ENGINEERING COMPANY

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~4800~~ 1900-FC  
 S/N : 050  
 SPECIFICATION : FCC-24 OPEN FIELD SPURIOUS RADIATED EMISSIONS  
 DATE : JANUARY 7, 1999  
 NOTES : TRANSMIT CDMA AT 1972.5MHZ, FULL POWER  
 : F BAND DOWNLINK

| FREQ.<br>(MHz) | ANT<br>POL | MTR<br>RDG<br>(dBuV) | ANT<br>FAC<br>dB | CABLE<br>FAC<br>dB | PRE-AMP<br>GAIN<br>dB | F.I.<br>CORR<br>dB | TOTAL<br>dBm | LIMIT<br>dBm |
|----------------|------------|----------------------|------------------|--------------------|-----------------------|--------------------|--------------|--------------|
| 3945.0         | H          | 42.9                 | 34.8             | 6.5                | 35.5                  | -97.2              | -48.5        | -13          |
|                | V          | 44.6                 | 34.8             | 6.5                | 35.5                  | -97.2              | -46.8        | -13          |
| 5917.5         | H          | 42.3 AMB             | 36.4             | 9.0                | 35.2                  | -97.2              | -44.7        | -13          |
|                | V          | 42.0 AMB             | 36.4             | 9.0                | 35.2                  | -97.2              | -45.0        | -13          |
| 7890.0         | H          | 42.6 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -41.7        | -13          |
|                | V          | 41.6 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -42.7        | -13          |
| 9862.5         | H          | 42.0 AMB             | 39.8             | 11.5               | 36.0                  | -97.2              | -39.9        | -13          |
|                | V          | 41.6 AMB             | 39.8             | 11.5               | 36.0                  | -97.2              | -40.3        | -13          |
| 11835.0        | H          | 41.1 AMB             | 40.8             | 12.2               | 34.7                  | -97.2              | -37.8        | -13          |
|                | V          | 42.1 AMB             | 40.8             | 12.2               | 34.7                  | -97.2              | -36.8        | -13          |
| 13807.5        | H          | 41.4 AMB             | 41.5             | 13.0               | 32.9                  | -97.2              | -34.2        | -13          |
|                | V          | 40.4 AMB             | 41.5             | 13.0               | 32.9                  | -97.2              | -35.2        | -13          |
| 15780.0        | H          | 39.6 AMB             | 42.2             | 13.7               | 34.2                  | -97.2              | -35.9        | -13          |
|                | V          | 40.6 AMB             | 42.2             | 13.7               | 34.2                  | -97.2              | -34.9        | -13          |
| 17752.5        | H          | 42.3 AMB             | 44.5             | 14.4               | 33.2                  | -97.2              | -29.2        | -13          |
|                | V          | 43.3 AMB             | 44.5             | 14.4               | 33.2                  | -97.2              | -28.2        | -13          |
| 19725.0        | H          | 43.6 AMB             | 46.3             | 15.1               | 32.9                  | -97.2              | -25.1        | -13          |
|                | V          | 43.8 AMB             | 46.3             | 15.1               | 32.9                  | -97.2              | -24.9        | -13          |

CHECKED BY: *RJK*

ENGINEERING TEST REPORT NO. 21337  
 ELITE ELECTRONIC ENGINEERING COMPANY

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1800~~ *1900-FC*  
 S/N : 050  
 SPECIFICATION : FCC-24 OPEN FIELD SPURIOUS RADIATED EMISSIONS  
 DATE : JANUARY 7, 1999  
 NOTES : TRANSMIT CW AT 1892.5MHZ, FULL POWER  
 : F BAND UPLINK

| FREQ.<br>(MHz) | ANT<br>POL | MTR<br>RDG<br>(dBuV) | ANT<br>FAC<br>dB | CABLE<br>FAC<br>dB | PRE-AMP<br>GAIN<br>dB | F.I.<br>CORR<br>dB | TOTAL<br>dBm | LIMIT<br>dBm |
|----------------|------------|----------------------|------------------|--------------------|-----------------------|--------------------|--------------|--------------|
| 3785.0         | H          | 42.6                 | 34.8             | 6.5                | 35.8                  | -97.2              | -49.1        | -13          |
|                | V          | 44.9                 | 34.8             | 6.5                | 35.8                  | -97.2              | -46.8        | -13          |
| 5677.5         | H          | 39.7 AMB             | 36.4             | 9.0                | 35.1                  | -97.2              | -47.2        | -13          |
|                | V          | 39.6 AMB             | 36.4             | 9.0                | 35.1                  | -97.2              | -47.3        | -13          |
| 7570.0         | H          | 41.1 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -43.2        | -13          |
|                | V          | 41.2 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -43.1        | -13          |
| 9462.5         | H          | 41.9 AMB             | 39.8             | 11.5               | 35.9                  | -97.2              | -39.9        | -13          |
|                | V          | 42.9 AMB             | 39.8             | 11.5               | 35.9                  | -97.2              | -38.9        | -13          |
| 11355.0        | H          | 41.2 AMB             | 40.8             | 12.2               | 34.8                  | -97.2              | -37.8        | -13          |
|                | V          | 41.6 AMB             | 40.8             | 12.2               | 34.8                  | -97.2              | -37.4        | -13          |
| 13247.5        | H          | 42.6 AMB             | 41.5             | 13.0               | 33.4                  | -97.2              | -33.5        | -13          |
|                | V          | 42.5 AMB             | 41.5             | 13.0               | 33.4                  | -97.2              | -33.6        | -13          |
| 15140.0        | H          | 42.3 AMB             | 42.2             | 13.7               | 33.5                  | -97.2              | -32.5        | -13          |
|                | V          | 42.9 AMB             | 42.2             | 13.7               | 33.5                  | -97.2              | -31.9        | -13          |
| 17032.5        | H          | 41.9 AMB             | 44.5             | 14.4               | 34.0                  | -97.2              | -30.4        | -13          |
|                | V          | 43.6 AMB             | 44.5             | 14.4               | 34.0                  | -97.2              | -28.7        | -13          |
| 18925.0        | H          | 44.5 AMB             | 46.3             | 15.1               | 32.8                  | -97.2              | -24.1        | -13          |
|                | V          | 44.1 AMB             | 46.3             | 15.1               | 32.8                  | -97.2              | -24.5        | -13          |

CHECKED BY: *RJK*

ENGINEERING TEST REPORT NO. 21337  
 ELITE ELECTRONIC ENGINEERING COMPANY

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1800~~ / 900-FC  
 S/N : 050  
 SPECIFICATION : FCC-24 OPEN FIELD SPURIOUS RADIATED EMISSIONS  
 DATE : JANUARY 7, 1999  
 NOTES : TRANSMIT CDMA AT 1892.5MHz, FULL POWER  
 : F BAND UPLINK

| FREQ.<br>(MHz) | ANT<br>POL | MTR<br>RDG<br>(dBuV) | ANT<br>FAC<br>dB | CABLE<br>FAC<br>dB | PRE-AMP<br>GAIN<br>dB | F.I.<br>CORR<br>dB | TOTAL<br>dBm | LIMIT<br>dBm |
|----------------|------------|----------------------|------------------|--------------------|-----------------------|--------------------|--------------|--------------|
| 3785.0         | H          | 44.6                 | 34.8             | 6.5                | 35.8                  | -97.2              | -47.1        | -13          |
|                | V          | 45.2                 | 34.8             | 6.5                | 35.8                  | -97.2              | -46.5        | -13          |
| 5677.5         | H          | 39.5 AMB             | 36.4             | 9.0                | 35.1                  | -97.2              | -47.4        | -13          |
|                | V          | 40.2 AMB             | 36.4             | 9.0                | 35.1                  | -97.2              | -46.7        | -13          |
| 7570.0         | H          | 41.5 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -42.8        | -13          |
|                | V          | 40.6 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -43.7        | -13          |
| 9462.5         | H          | 42.5 AMB             | 39.8             | 11.5               | 35.9                  | -97.2              | -39.3        | -13          |
|                | V          | 42.6 AMB             | 39.8             | 11.5               | 35.9                  | -97.2              | -39.2        | -13          |
| 11355.0        | H          | 40.9 AMB             | 40.8             | 12.2               | 34.8                  | -97.2              | -38.1        | -13          |
|                | V          | 41.5 AMB             | 40.8             | 12.2               | 34.8                  | -97.2              | -37.5        | -13          |
| 13247.5        | H          | 42.6 AMB             | 41.5             | 13.0               | 33.4                  | -97.2              | -33.5        | -13          |
|                | V          | 43.1 AMB             | 41.5             | 13.0               | 33.4                  | -97.2              | -33.0        | -13          |
| 15140.0        | H          | 41.5 AMB             | 42.2             | 13.7               | 33.5                  | -97.2              | -33.3        | -13          |
|                | V          | 42.3 AMB             | 42.2             | 13.7               | 33.5                  | -97.2              | -32.5        | -13          |
| 17032.5        | H          | 42.8 AMB             | 44.5             | 14.4               | 34.0                  | -97.2              | -29.5        | -13          |
|                | V          | 41.9 AMB             | 44.5             | 14.4               | 34.0                  | -97.2              | -30.4        | -13          |
| 18925.0        | H          | 44.5 AMB             | 46.3             | 15.1               | 32.8                  | -97.2              | -24.1        | -13          |
|                | V          | 45.1 AMB             | 46.3             | 15.1               | 32.8                  | -97.2              | -23.5        | -13          |

CHECKED BY: *RJK*

ENGINEERING TEST REPORT NO. 21337  
 ELITE ELECTRONIC ENGINEERING COMPANY

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP 1800 1900-FC  
 S/N : 050  
 SPECIFICATION : FCC-24 OPEN FIELD SPURIOUS RADIATED EMISSIONS  
 DATE : JANUARY 7, 1999  
 NOTES : TRANSMIT CW AT 1982.5MHZ, FULL POWER  
 : C BAND DOWNLINK

| FREQ.<br>(MHz) | ANT<br>POL | MTR<br>RDG<br>(dBuV) | ANT<br>FAC<br>dB | CABLE<br>FAC<br>dB | PRE-AMP<br>GAIN<br>dB | F.I.<br>CORR<br>dB | TOTAL<br>dBm | LIMIT<br>dBm |
|----------------|------------|----------------------|------------------|--------------------|-----------------------|--------------------|--------------|--------------|
| 3965.0         | H          | 44.3                 | 34.8             | 6.5                | 35.5                  | -97.2              | -47.1        | -13          |
|                | V          | 44.6                 | 34.8             | 6.5                | 35.5                  | -97.2              | -46.8        | -13          |
| 5947.5         | H          | 41.5 AMB             | 36.4             | 9.0                | 35.2                  | -97.2              | -45.5        | -13          |
|                | V          | 40.9 AMB             | 36.4             | 9.0                | 35.2                  | -97.2              | -46.1        | -13          |
| 7930.0         | H          | 41.5 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -42.8        | -13          |
|                | V          | 42.1 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -42.2        | -13          |
| 9912.5         | H          | 42.6 AMB             | 39.8             | 11.5               | 36.0                  | -97.2              | -39.3        | -13          |
|                | V          | 42.4 AMB             | 39.8             | 11.5               | 36.0                  | -97.2              | -39.5        | -13          |
| 11895.0        | H          | 40.9 AMB             | 40.8             | 12.2               | 34.7                  | -97.2              | -38.0        | -13          |
|                | V          | 41.5 AMB             | 40.8             | 12.2               | 34.7                  | -97.2              | -37.4        | -13          |
| 13877.5        | H          | 42.6 AMB             | 41.5             | 13.0               | 32.9                  | -97.2              | -33.0        | -13          |
|                | V          | 42.1 AMB             | 41.5             | 13.0               | 32.9                  | -97.2              | -33.5        | -13          |
| 15860.0        | H          | 42.2 AMB             | 42.2             | 13.7               | 34.2                  | -97.2              | -33.3        | -13          |
|                | V          | 42.2 AMB             | 42.2             | 13.7               | 34.2                  | -97.2              | -33.3        | -13          |
| 17842.5        | H          | 43.1 AMB             | 44.5             | 14.4               | 33.2                  | -97.2              | -28.4        | -13          |
|                | V          | 42.8 AMB             | 44.5             | 14.4               | 33.2                  | -97.2              | -28.7        | -13          |
| 19825.0        | H          | 44.0 AMB             | 46.3             | 15.1               | 32.9                  | -97.2              | -24.7        | -13          |
|                | V          | 44.5 AMB             | 46.3             | 15.1               | 32.9                  | -97.2              | -24.2        | -13          |

CHECKED BY: RJK

ENGINEERING TEST REPORT NO. 21337  
 ELITE ELECTRONIC ENGINEERING COMPANY

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~4800~~ 1900-FC  
 S/N : 050  
 SPECIFICATION : FCC-24 OPEN FIELD SPURIOUS RADIATED EMISSIONS  
 DATE : JANUARY 7, 1999  
 NOTES : TRANSMIT CDMA AT 1982.5MHz, FULL POWER  
 : C BAND DOWNLINK

| FREQ.<br>(MHz) | ANT<br>POL | MTR<br>RDG<br>(dBuV) | ANT<br>FAC<br>dB | CABLE<br>FAC<br>dB | PRE-AMP<br>GAIN<br>dB | F.I.<br>CORR<br>dB | TOTAL<br>dBm | LIMIT<br>dBm |
|----------------|------------|----------------------|------------------|--------------------|-----------------------|--------------------|--------------|--------------|
| 3965.0         | H          | 42.9                 | 34.8             | 6.5                | 35.5                  | -97.2              | -48.5        | -13          |
|                | V          | 43.6                 | 34.8             | 6.5                | 35.5                  | -97.2              | -47.8        | -13          |
| 5947.5         | H          | 39.9 AMB             | 36.4             | 9.0                | 35.2                  | -97.2              | -47.1        | -13          |
|                | V          | 40.5 AMB             | 36.4             | 9.0                | 35.2                  | -97.2              | -46.5        | -13          |
| 7930.0         | H          | 41.6 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -42.7        | -13          |
|                | V          | 42.0 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -42.3        | -13          |
| 9912.5         | H          | 41.2 AMB             | 39.8             | 11.5               | 36.0                  | -97.2              | -40.7        | -13          |
|                | V          | 41.5 AMB             | 39.8             | 11.5               | 36.0                  | -97.2              | -40.4        | -13          |
| 11895.0        | H          | 42.5 AMB             | 40.8             | 12.2               | 34.7                  | -97.2              | -36.4        | -13          |
|                | V          | 41.5 AMB             | 40.8             | 12.2               | 34.7                  | -97.2              | -37.4        | -13          |
| 13877.5        | H          | 42.3 AMB             | 41.5             | 13.0               | 32.9                  | -97.2              | -33.3        | -13          |
|                | V          | 42.8 AMB             | 41.5             | 13.0               | 32.9                  | -97.2              | -32.8        | -13          |
| 15860.0        | H          | 41.8 AMB             | 42.2             | 13.7               | 34.2                  | -97.2              | -33.7        | -13          |
|                | V          | 42.0 AMB             | 42.2             | 13.7               | 34.2                  | -97.2              | -33.5        | -13          |
| 17842.5        | H          | 42.6 AMB             | 44.5             | 14.4               | 33.2                  | -97.2              | -28.9        | -13          |
|                | V          | 42.5 AMB             | 44.5             | 14.4               | 33.2                  | -97.2              | -29.0        | -13          |
| 19825.0        | H          | 45.0 AMB             | 46.3             | 15.1               | 32.9                  | -97.2              | -23.7        | -13          |
|                | V          | 44.3 AMB             | 46.3             | 15.1               | 32.9                  | -97.2              | -24.4        | -13          |

CHECKED BY: *RJK*

ENGINEERING TEST REPORT NO. 21337  
 ELITE ELECTRONIC ENGINEERING COMPANY

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~4800~~ 1900-FC  
 S/N : 050  
 SPECIFICATION : FCC-24 OPEN FIELD SPURIOUS RADIATED EMISSIONS  
 DATE : JANUARY 7, 1999  
 NOTES : TRANSMIT CW AT 1902.5MHz, FULL POWER  
 : C BAND UPLINK

| FREQ.<br>(MHz) | ANT<br>POL | MTR<br>RDG<br>(dBuV) | ANT<br>FAC<br>dB | CABLE<br>FAC<br>dB | PRE-AMP<br>GAIN<br>dB | F.I.<br>CORR<br>dB | TOTAL<br>dBm | LIMIT<br>dBm |
|----------------|------------|----------------------|------------------|--------------------|-----------------------|--------------------|--------------|--------------|
| 3805.0         | H          | 44.6                 | 34.8             | 6.5                | 35.8                  | -97.2              | -47.1        | -13          |
|                | V          | 44.6                 | 34.8             | 6.5                | 35.8                  | -97.2              | -47.1        | -13          |
| 5707.5         | H          | 39.6 AMB             | 36.4             | 9.0                | 35.1                  | -97.2              | -47.3        | -13          |
|                | V          | 38.6 AMB             | 36.4             | 9.0                | 35.1                  | -97.2              | -48.3        | -13          |
| 7610.0         | H          | 41.1 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -43.2        | -13          |
|                | V          | 41.8 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -42.5        | -13          |
| 9512.5         | H          | 43.1 AMB             | 39.8             | 11.5               | 35.9                  | -97.2              | -38.7        | -13          |
|                | V          | 42.0 AMB             | 39.8             | 11.5               | 35.9                  | -97.2              | -39.8        | -13          |
| 11415.0        | H          | 39.9 AMB             | 40.8             | 12.2               | 34.8                  | -97.2              | -39.1        | -13          |
|                | V          | 39.2 AMB             | 40.8             | 12.2               | 34.8                  | -97.2              | -39.8        | -13          |
| 13317.5        | H          | 42.3 AMB             | 41.5             | 13.0               | 33.4                  | -97.2              | -33.8        | -13          |
|                | V          | 43.2 AMB             | 41.5             | 13.0               | 33.4                  | -97.2              | -32.9        | -13          |
| 15220.0        | H          | 44.3 AMB             | 42.2             | 13.7               | 33.5                  | -97.2              | -30.5        | -13          |
|                | V          | 43.0 AMB             | 42.2             | 13.7               | 33.5                  | -97.2              | -31.8        | -13          |
| 17122.5        | H          | 42.5 AMB             | 44.5             | 14.4               | 34.0                  | -97.2              | -29.8        | -13          |
|                | V          | 42.7 AMB             | 44.5             | 14.4               | 34.0                  | -97.2              | -29.6        | -13          |
| 19025.0        | H          | 45.0 AMB             | 46.3             | 15.1               | 32.8                  | -97.2              | -23.6        | -13          |
|                | V          | 46.1 AMB             | 46.3             | 15.1               | 32.8                  | -97.2              | -22.5        | -13          |

CHECKED BY: *RJK*



ENGINEERING TEST REPORT NO. 21337  
 ELITE ELECTRONIC ENGINEERING COMPANY

MANUFACTURER : ANDREW CORP.  
 MODEL : SELECTAMP ~~1800~~ 1900-FC  
 S/N : 050  
 SPECIFICATION : FCC-24 OPEN FIELD SPURIOUS RADIATED EMISSIONS  
 DATE : JANUARY 7, 1999  
 NOTES : TRANSMIT CDMA AT 1902.5MHz, FULL POWER  
 : C BAND UPLINK

| FREQ.<br>(MHz) | ANT<br>POL | MTR<br>RDG<br>(dBuV) | ANT<br>FAC<br>dB | CABLE<br>FAC<br>dB | PRE-AMP<br>GAIN<br>dB | F.I.<br>CORR<br>dB | TOTAL<br>dBm | LIMIT<br>dBm |
|----------------|------------|----------------------|------------------|--------------------|-----------------------|--------------------|--------------|--------------|
| 3805.0         | H          | 43.6                 | 34.8             | 6.5                | 35.8                  | -97.2              | -48.1        | -13          |
|                | V          | 45.1                 | 34.8             | 6.5                | 35.8                  | -97.2              | -46.6        | -13          |
| 5707.5         | H          | 39.6 AMB             | 36.4             | 9.0                | 35.1                  | -97.2              | -47.3        | -13          |
|                | V          | 40.2 AMB             | 36.4             | 9.0                | 35.1                  | -97.2              | -46.7        | -13          |
| 7610.0         | H          | 40.3 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -44.0        | -13          |
|                | V          | 40.9 AMB             | 38.6             | 9.9                | 35.6                  | -97.2              | -43.4        | -13          |
| 9512.5         | H          | 43.1 AMB             | 39.8             | 11.5               | 35.9                  | -97.2              | -38.7        | -13          |
|                | V          | 42.6 AMB             | 39.8             | 11.5               | 35.9                  | -97.2              | -39.2        | -13          |
| 11415.0        | H          | 41.6 AMB             | 40.8             | 12.2               | 34.8                  | -97.2              | -37.4        | -13          |
|                | V          | 39.6 AMB             | 40.8             | 12.2               | 34.8                  | -97.2              | -39.4        | -13          |
| 13317.5        | H          | 42.1 AMB             | 41.5             | 13.0               | 33.4                  | -97.2              | -34.0        | -13          |
|                | V          | 41.9 AMB             | 41.5             | 13.0               | 33.4                  | -97.2              | -34.2        | -13          |
| 15220.0        | H          | 42.6 AMB             | 42.2             | 13.7               | 33.5                  | -97.2              | -32.2        | -13          |
|                | V          | 42.5 AMB             | 42.2             | 13.7               | 33.5                  | -97.2              | -32.3        | -13          |
| 17122.5        | H          | 42.6 AMB             | 44.5             | 14.4               | 34.0                  | -97.2              | -29.7        | -13          |
|                | V          | 42.7 AMB             | 44.5             | 14.4               | 34.0                  | -97.2              | -29.6        | -13          |
| 19025.0        | H          | 44.5 AMB             | 46.3             | 15.1               | 32.8                  | -97.2              | -24.1        | -13          |
|                | V          | 44.9 AMB             | 46.3             | 15.1               | 32.8                  | -97.2              | -23.7        | -13          |

CHECKED BY: *RJK*

ENGINEERING TEST REPORT NO. 21337

DATA SHEET

MANUFACTURER : ANDREW CORP.  
 TEST ITEM : PCS CHANNELIZED BIDIRECTIONAL AMPLIFIER  
 MODEL NO. : SELECTAMP 1900-FC  
 SERIAL NUMBER : 050  
 SPECIFICATION : FCC-24 PARA. 24.235; IC RSS-131 PARA. 6.8  
 TEST DESC : FREQUENCY STABILITY VS. TEMPERATURE  
 TEST EQUIPMENT : See Table I  
 DATE TESTED : January 11, 1999  
 NOTES : C Block

| Temperature<br>Degrees<br>Centigrade | Frequency<br>MHZ | Duration<br>Minute | Frequency<br>Stability<br>ppm |
|--------------------------------------|------------------|--------------------|-------------------------------|
| UPLINK                               |                  |                    |                               |
| -30                                  | 1902.500483      | 45                 | >0.1                          |
| -20                                  | 1902.500484      | 30                 | >0.1                          |
| -10                                  | 1902.500485      | 30                 | >0.1                          |
| 0                                    | 1902.500485      | 30                 | >0.1                          |
| 10                                   | 1902.500485      | 30                 | >0.1                          |
| 20                                   | 1902.500484      | 30                 | >0.1                          |
| 24                                   | 1902.500483      | REF                | ---                           |
| 30                                   | 1902.500485      | 30                 | >0.1                          |
| 40                                   | 1902.500485      | 30                 | >0.1                          |
| 50                                   | 1902.500485      | 30                 | >0.1                          |
| DOWNLINK                             |                  |                    |                               |
| -30                                  | 1982.500504      | 45                 | >0.1                          |
| -20                                  | 1982.500505      | 30                 | >0.1                          |
| -10                                  | 1982.500506      | 30                 | >0.1                          |
| 0                                    | 1982.500506      | 30                 | >0.1                          |
| 10                                   | 1982.500505      | 30                 | >0.1                          |
| 20                                   | 1982.500505      | 30                 | >0.1                          |
| 24                                   | 1982.500504      | REF                | ---                           |
| 30                                   | 1982.500506      | 30                 | >0.1                          |
| 40                                   | 1982.500506      | 30                 | >0.1                          |
| 50                                   | 1982.500506      | 30                 | >0.1                          |

CHECKED BY: RJK

## ENGINEERING TEST REPORT NO. 21337

## DATA SHEET

MANUFACTURER : ANDREW CORP.  
 TEST ITEM : PCS CHANNELIZED BIDIRECTIONAL AMPLIFIER  
 MODEL NO. : SELECTAMP 1900-FC  
 SERIAL NUMBER : 050  
 SPECIFICATION : FCC-24 PARA. 24.235; IC RSS-131 PARA. 6.8  
 TEST DESC : FREQUENCY STABILITY VS. TEMPERATURE  
 TEST EQUIPMENT : See Table I  
 DATE TESTED : January 11, 1999  
 NOTES : F Block

| Temperature<br>Degrees<br>Centigrade | Frequency<br>MHz | Duration<br>Minute | Frequency<br>Stability<br>ppm |
|--------------------------------------|------------------|--------------------|-------------------------------|
| UPLINK                               |                  |                    |                               |
| -30                                  | 1892.500481      | 45                 | >0.1                          |
| -20                                  | 1892.500482      | 30                 | >0.1                          |
| -10                                  | 1892.500482      | 30                 | >0.1                          |
| 0                                    | 1892.500483      | 30                 | >0.1                          |
| 10                                   | 1892.500483      | 30                 | >0.1                          |
| 20                                   | 1892.500482      | 30                 | >0.1                          |
| 24                                   | 1892.500480      | REF                | ---                           |
| 30                                   | 1892.500482      | 30                 | >0.1                          |
| 40                                   | 1892.500482      | 30                 | >0.1                          |
| 50                                   | 1892.500483      | 30                 | >0.1                          |
| DOWNLINK                             |                  |                    |                               |
| -30                                  | 1972.500501      | 45                 | >0.1                          |
| -20                                  | 1672.500502      | 30                 | >0.1                          |
| -10                                  | 1972.500503      | 30                 | >0.1                          |
| 0                                    | 1972.500503      | 30                 | >0.1                          |
| 10                                   | 1972.500502      | 30                 | >0.1                          |
| 20                                   | 1972.500502      | 30                 | >0.1                          |
| 24                                   | 1972.500500      | REF                | ---                           |
| 30                                   | 1972.500503      | 30                 | >0.1                          |
| 40                                   | 1972.500503      | 30                 | >0.1                          |
| 50                                   | 1972.500503      | 30                 | >0.1                          |

CHECKED BY: RJK

ENGINEERING TEST REPORT NO. 21337

DATA SHEET

MANUFACTURER : ANDREW CORP.  
 TEST ITEM : PCS CHANNELIZED BIDIRECTIONAL AMPLIFIER  
 MODEL NO. : SELECTAMP 1900-FC  
 SERIAL NUMBER : 050  
 SPECIFICATION : FCC-24 PARA. 24.235; IC RSS-131 PARA. 6.8  
 TEST DESC : FREQUENCY STABILITY VS. VOLTAGE  
 TEST EQUIPMENT : See Table I  
 DATE TESTED : January 8, 1999  
 NOTES : C diplexer (C-F Block)

| Voltage<br>VDC  | % of<br>Nominal<br>Voltage | Frequency<br>MHz | Frequency<br>Stability<br>ppm |
|-----------------|----------------------------|------------------|-------------------------------|
| <b>UPLINK</b>   |                            |                  |                               |
| 97.75           | 85                         | 1902.500484      | >0.1                          |
| 115.0           | Nominal                    | 1902.500484      | ---                           |
| 132.25          | 115                        | 1902.500485      | >0.1                          |
| <b>DOWNLINK</b> |                            |                  |                               |
| 97.75           | 85                         | 1987.500504      | >0.1                          |
| 115.0           | Nominal                    | 1987.500506      | ---                           |
| 132.25          | 115                        | 1987.500506      | >0.1                          |

CHECKED BY: RJK