

EQUIPMENT: *The Electra Enterprises "T-900 Video Transmitter"*
FCC ID: NIMT900

EQUIPMENT DESCRIPTION:

Manufacturer: Electra Enterprises

Model No.: T-900

Serial No.: None

Production Unit

Pre-Production Unit

GENERAL:

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 15 Subpart C, Paragraph 15.249.

ABSTRACT:

NAME OF TEST	PARA. NO.	RESULTS
Radiated Emissions	15.249	Complies
Powerline Conducted Emissions	15.207	Not Applicable

THIS TEST REPORT RELATES ONLY TO THE ITEM(S) TESTED.

THE FOLLOWING DEVIATIONS FROM, ADDITIONS TO, OR EXCLUSIONS FROM THE TEST SPECIFICATIONS HAVE BEEN MADE. None

It is recommended that the margin of compliance be improved to allow for manufacturing tolerances.

TESTED BY: *Tom Tidwell*
Tom Tidwell, Technologist

DATE: 24 MAR. 1998

APPROVED BY: *W. Waterhouse*
W. Waterhouse, RF Engineering Lab Manager

DATE: 24th March 1998

EQUIPMENT: The Electra Enterprises "T-900 Video Transmitter"
FCC ID: NIMT900

GENERAL EQUIPMENT INFORMATION

TRANSMITTER

Frequency Range:	916.5 MHz
Frequency of Sample Tested:	916.5 MHz
Tunable Bands:	Not Applicable
Number of Channels:	Not Applicable
Channel Spacing:	Not Applicable
Emission Designator:	A3E
Crystal Frequencies:	SAW Resonator
User Frequency Adjustment:	Not Applicable

RECEIVER

Type of Receiver:
Intermediate Frequencies:
Primary Power Requirement:
Frequency Range:
Tunable Bands:
Designated Reception Mode:
Operating Frequency of Sample Tested:
User Frequency Adjustment:

NOT APPLICABLE

EQUIPMENT: The Electra Enterprises "T-900 Video Transmitter"

FCC ID: N1MT900

NAME OF TEST: Radiated Emissions	PARA. NO.: 15.249(a) & (c)
TESTED BY: Tom Tidwell	DATE: March 19, 1998

TEST CONDITIONS: Standard Temperature and Humidity
Standard Test Voltage

MINIMUM STANDARD:

Fundamental Frequency (MHz)	Field Strength of Fundamental (mV/m @ 3m)	Field Strength of Fundamental (dB μ V/m @ 3m)	Field Strength of Spurious (μ V/m @ 3m)	Field Strength of Spurious (dB μ V/m @ 3m)
902 - 928	50	94	500	54

The fundamental was searched up to the 10th harmonic with all relevant emissions being noted.

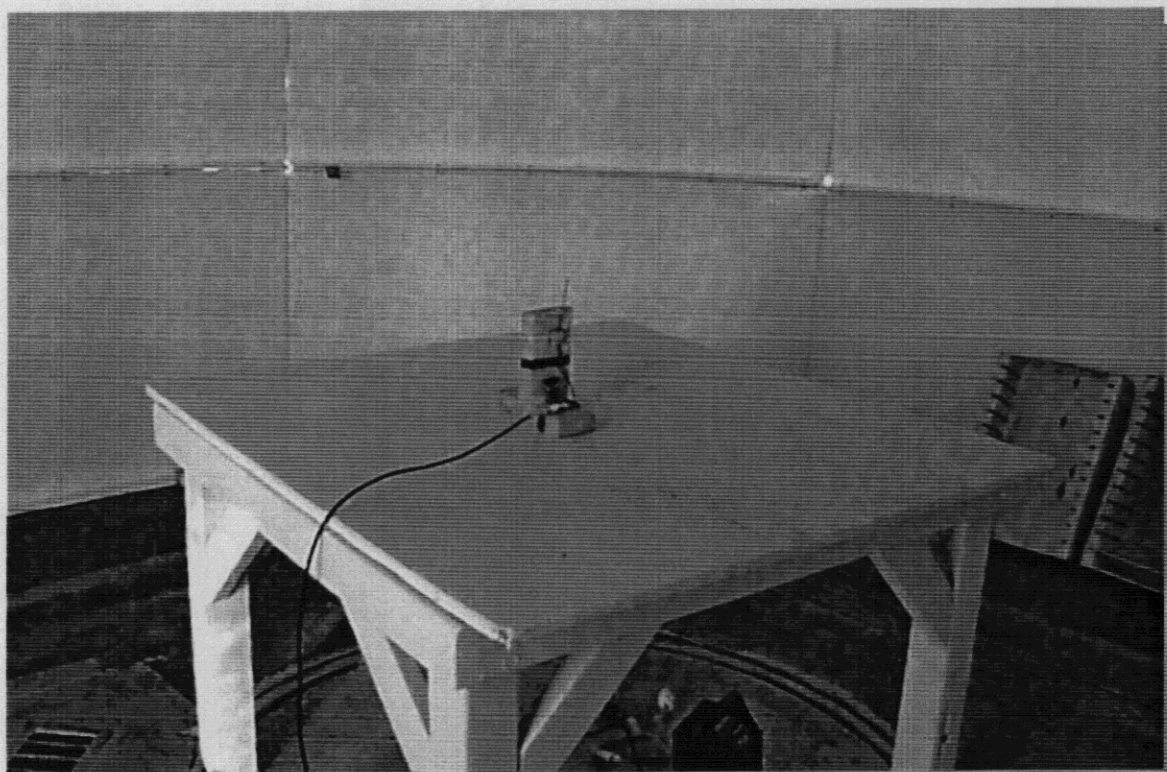
Any emissions radiated outside the specified frequency band, except for harmonics shall be attenuated by at least 50 dB below the level of the fundamental emission or meet the following limits, whichever is the lesser attenuation.

Frequency (MHz)	Field Strength (μ V/m @ 3m)	Field Strength (dB @ 3m)
30 - 88	100	40.0
88 - 216	150	43.5
216 - 960	200	46.0
Above 960	500	54.0

TEST RESULTS: Complies. The worst-case emission level is 92.9 dB μ V/m @ 3m at 916.5 MHz. This is 1.1 dB below the specification limit.

MEASUREMENT DATA: See attached table.

RADIATED PHOTOGRAPHS (Worst Case)



EQUIPMENT: The Electra Enterprises "T-900 Video Transmitter"
 FCC ID: N1MT900

TESTED BY: Tom Tidwell											
DETECTOR: PEAK											
TEST DISTANCE(metres): 3											
TEST RECEIVER: ESVP or 8566 B											
RECEIVER BW: 120 kHz or 1 MHz											
FREQ. (MHz)	ANT. *	POL. (V/H)	ANTENNA HEIGHT (m)	TABLE AZIMUTH (Degrees)	RECEIVED SIGNAL (dBuV)	ANTENNA FACTOR (dB)**	AMP GAIN (dB)***	DUTY CYCLE (dB)	FIELD STRENGTH (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)
916.50	D/P	V			58.2	34.7	N/A	N/A	92.9	94.0	1.1
916.50	D/P	H			57.8	34.7	N/A	N/A	92.5	94.0	1.5
1833.00	H	V			59.9	28.0	-43.0	N/A	44.9	54.0	9.1
1833.00	H	H			63.3	28.0	-43.0	N/A	48.3	54.0	5.7
2749.50	H	V			61.1	30.5	-42.5	N/A	49.1	54.0	4.9
2749.50	H	H			63.4	30.5	-42.5	N/A	51.4	54.0	2.6
3666.00	H	V			52.6	33.0	-38.2	N/A	47.4	54.0	6.6
3666.00	H	H			53.7	33.0	-38.2	N/A	48.5	54.0	5.5
4582.50	H	V			<39.0	35.0	-40.0	N/A	34.0	54.0	20.0
4582.50	H	H			<39.0	35.0	-40.0	N/A	34.0	54.0	20.0
5499.00	H	V			39.9	36.1	-39.1	N/A	36.9	54.0	17.1
5499.00	H	H			44.5	36.1	-39.1	N/A	41.5	54.0	12.5
		V									
		H									

NOTES:
 (1) The unit was tested in three orthogonal axis.
 (2) The spectrum was searched to the 10th harmonic (9.165 GHz)

B/C = Biconical, B/L = Biconilog, L/P = Log-Periodic, H = Horn, D/P = Dipole
 ** Includes cable loss when amplifier is not used.
 *** Includes cable loss.
 () Denotes failing emission level.

EQUIPMENT: *The Electra Enterprises "T-900 Video Transmitter"*
FCC ID: NIMT900

NAME OF TEST: Powerline Conducted Emissions	PARA. NO.: 15.207(a)
TESTED BY:	DATE:

TEST CONDITIONS: Standard Temperature and Humidity
Standard Test Voltage

MINIMUM STANDARD: The R.F. that is conducted back onto the AC power line on any frequency within the band 0.45 to 30 MHz shall not exceed 250µV (48 dBµV) across 50 ohms

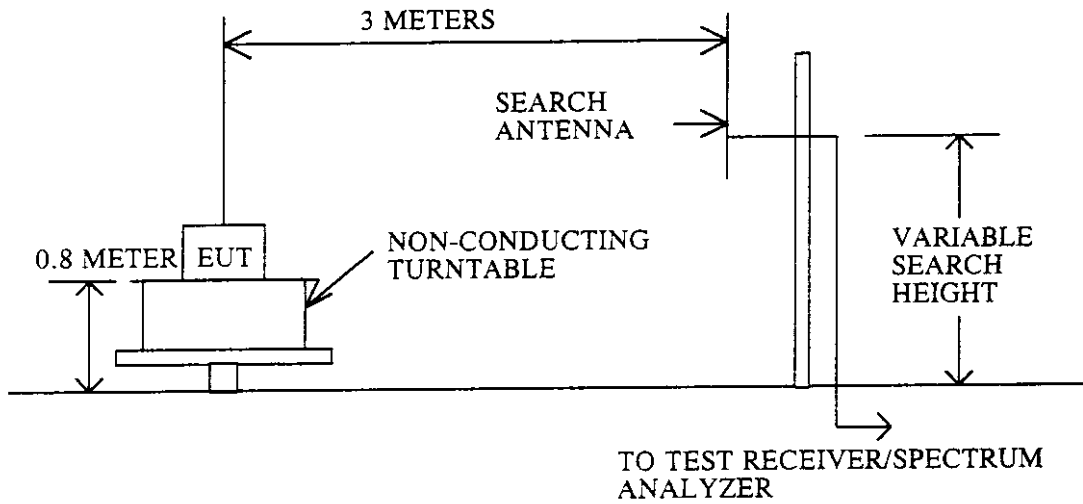
TEST RESULTS: Complies/Does Not Comply. See attached graphs.

MEASUREMENT DATA: See attached graphs.

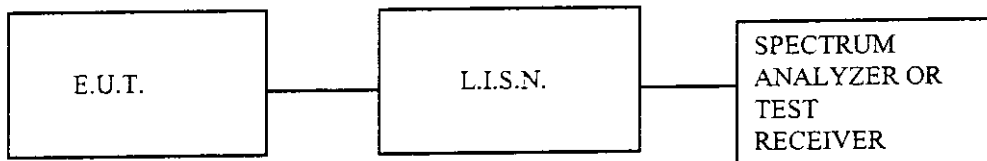
NOT APPLICABLE

EQUIPMENT: *The Electra Enterprises "T-900 Video Transmitter"*
FCC ID: NIMT900

TEST SITE FOR RADIATED EMISSIONS



CONDUCTED EMISSIONS



SHIELDED ROOM

EQUIPMENT: The Electra Enterprises "T-900 Video Transmitter"

FCC ID: NIMT900

RADIO TEST EQUIPMENT LIST

CAL CYCLE	EQUIPMENT	MANUFACTURER	MODEL	SERIAL	LAST CAL.	NEXT CAL.	
1 Year	Spectrum Analyzer-2	Hewlett Packard	8566B	1950A00400	Oct. 3/97	April 3/98	
1 Year	Spectrum Analyzer Display-2	Hewlett Packard	85662A	1950A01177	Oct. 3/97	April 3/98	
1 Year	Quasi Peak Adaptor-2	Hewlett Packard	85650A	2251A00620	Oct. 3/98	April. 3/98	
1 Year	Multimeter	Fluke	29	67902059	June 1/97	Jun 1/98	
1 Year	Receiver	Rohde & Schwarz	ESVP	892661/014	Mar. 25/97	Mar. 25/98	
2 Year	Horn Antenna	EMCO #2	3115	4336	Oct. 30/97	Oct. 30/99	
1 Year	Dipole Antenna Set	EMCO	3121C	1029	Oct. 28/97	Oct. 28/98	
1 Year	Low Noise Amplifier	Avantek	AWT-8035	1005	Oct. 24/97	Oct. 24/98	
1 Year	Low Noise Amplifier	DBS Microwave	DWT-13035	9623	Oct. 24/97	Oct. 24/98	

NA: Not Applicable

NCR: No Cal Required

KTL - Certelem Laboratories Inc.

FCC PART 15, SUBPART C

PARAGRAPH 15.249

PROJECT NO.: 7R00152

EQUIPMENT: The Electra Enterprises "T-900 Video Transmitter"

FCC ID: NIMT900

ADDENDUM

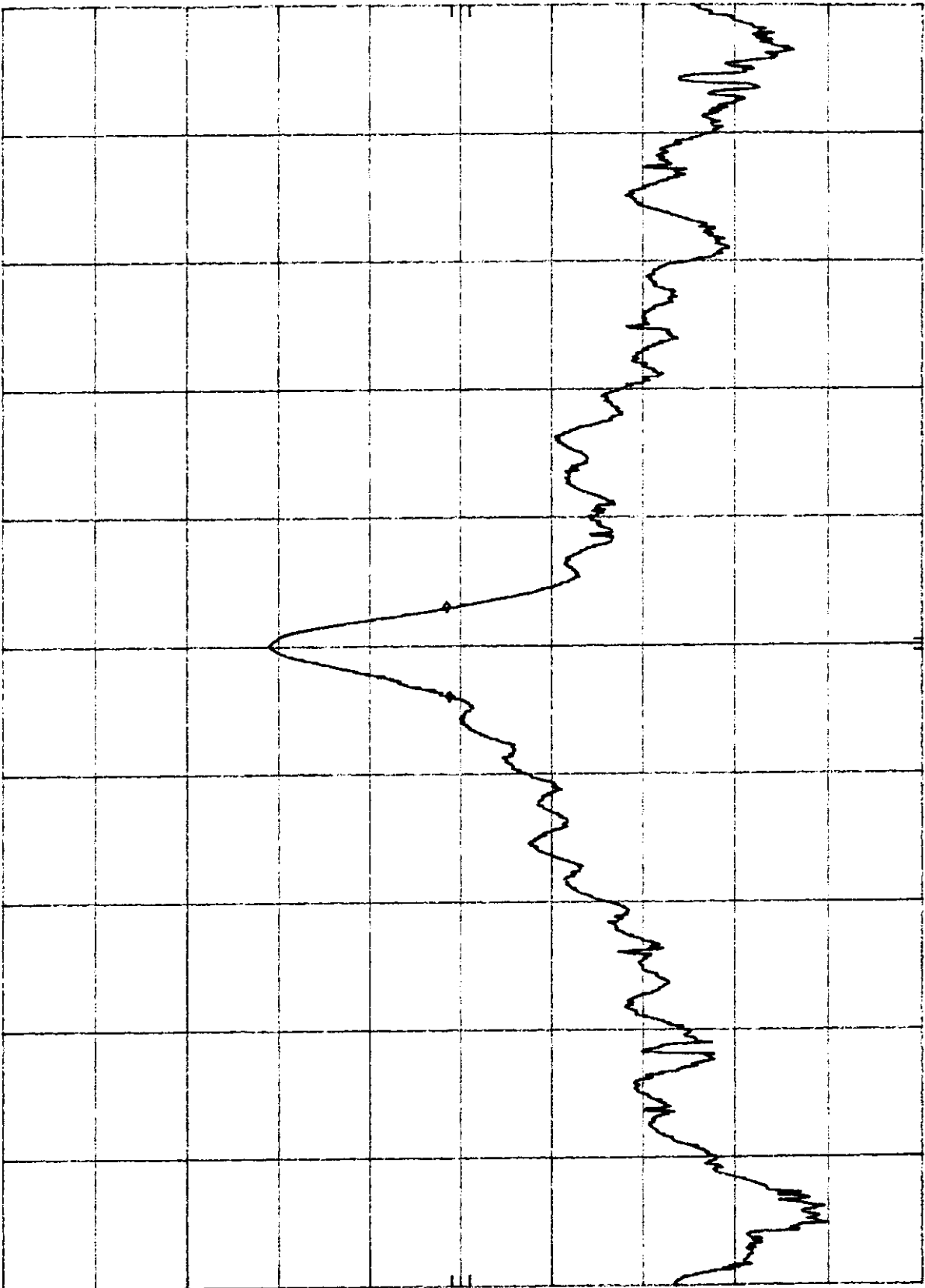
OCCUPIED BANDWIDTH GRAPHS

MKR Δ 35.0 KHZ
0.30 dB

ATTEN 10 dB

REF 0.0 dBm

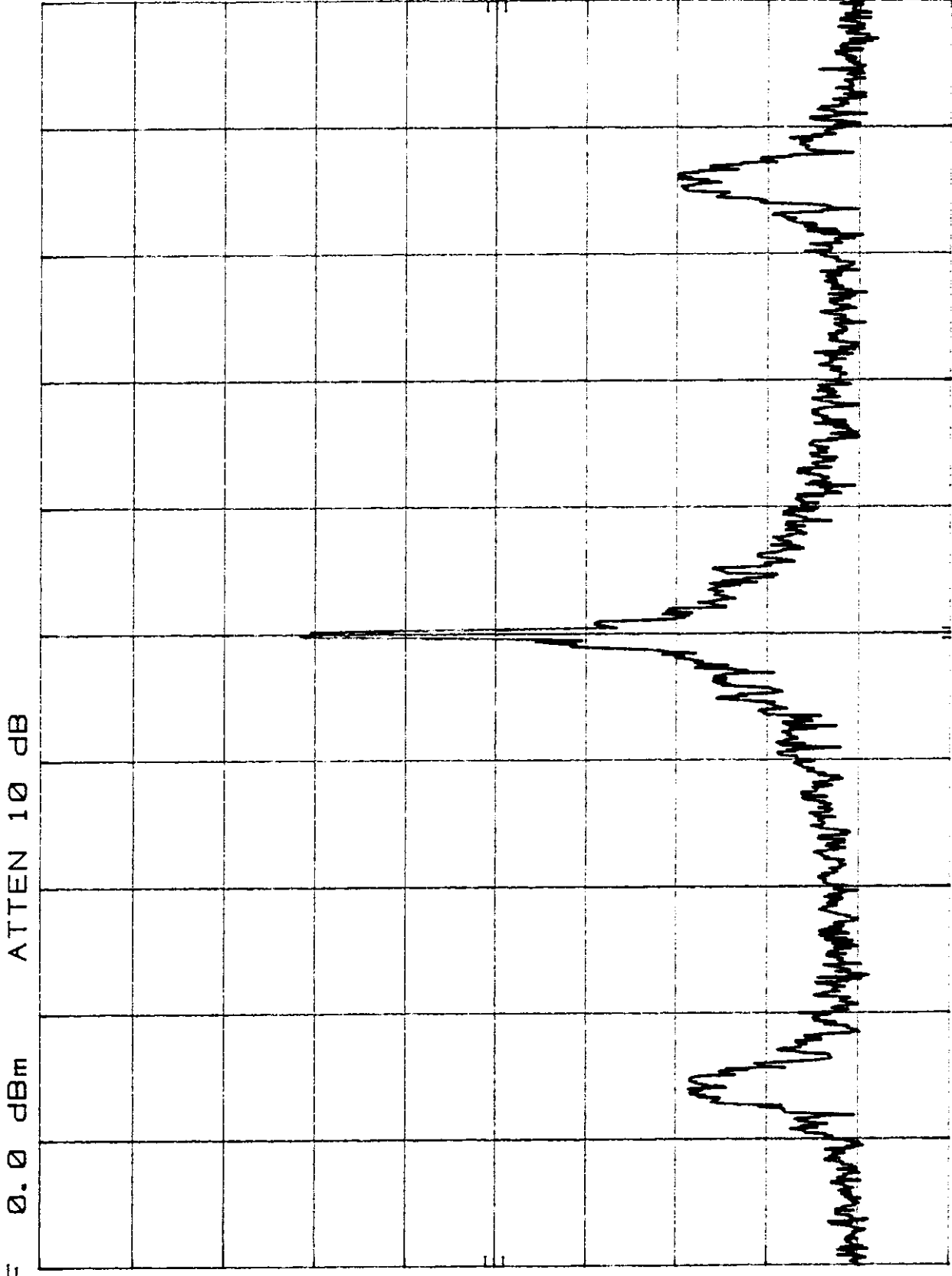
hp
10 dB/



SPAN 500 KHZ
SWP 30.0 msec

VBW 30 KHZ

CENTER 916.613 MHZ
RES BW 10 KHZ



hp
10 dB/

CENTER 916.6 MHz
 RES BW 10 kHz
 VBW 30 kHz
 SPAN 10.0 MHz
 SWP 300 msec