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Report 11654
08 March 2000

AEROJET

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Integrated Advanced Microwave Sounding Unit-A (AMSU-A)

Engineering Test Report

Radiated Emissions and SARR, SARP, DCS Receivers, Link Frequencies EMI Sensitive Band Test Results, AMSU-A2, S/N 108

Contract No. NAS 5-32314
CDRL 207

Submitted to:

National Aeronautics and Space Administration
Goddard Space Flight Center
Greenbelt, Maryland 20771

Submitted by:

Aerojet
1100 West Hollyvale Street
Azusa, California 91702

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1. INTRODUCTION

1.1 General

This document contains the procedures and test results of the radiated emissions tests performed on the AMSU-A2 instrument, part number 1331200-2, serial number 108. The test was performed as described in paragraph 3.4.6 of AE-26151/5E Test Procedure, Electromagnetic Interference (EMI)/Electromagnetic Radiation (EMR) and Electromagnetic Compatibility (EMC) for Advanced Microwave Sounding Unit-A (AMSU-A), dated 11 February 1999.

1.2 Purpose

The purpose of this report is to describe the tests performed and to present the backup data collected to verify that the AMSU-A2 instrument meets the specified requirements. The tests performed encompass the discrete frequencies of the DCS, SARR, and SARP sensitive bands described in paragraph 3.6.1.4.1 of the Interface Specification, IS-3267415. In addition, the METOP requirements for the Advanced Microwave Sounding Unit-A2, Instrument Interface Control Document, MO-IC-MMT-A2-0001, paragraph 4.3.1.3.3, were incorporated. The requirement consisted of the radiated emissions per test method RE02, 14 kHz to 18 GHz, and the discrete frequencies of Table 4.3.1.3-2 in the ICD. This requirement is presented in Figure 1 of this document.

1.3 Scope

This document describes the test performed by Aerojet, and it is presented in the following manner:

Section 1	Contains general introductory material and a summary of the test results.
Section 2	Contains a detailed description of the test plan, test procedure, and test results.
Section 3	Contains supplementary test information, pertinent test data, and the list of test equipment used.

1.4 Summary of Test Results

The AMSU-A2 instrument, serial number 108, meets the radiated emissions requirements of the Interface Specification, IS-327415, and the Interface Control Document, MO-IC-MMT-A2-0001, paragraph 4.3.1.3, without exception.

2. TEST PROGRAM

2.1 Test Article

The AMSU-A system passively monitors radiation from the earth's surface and atmosphere in the microwave portion of the spectrum. The instruments incorporate fifteen total-power super heterodyne type radiometers. The system is composed of two independent instruments. The module designated as AMSU-A2 contains the two lowest-frequency channels, i.e., Channel 1 has the 23.8 GHz frequency and Channel 2 has the 31.4 GHz frequency. The module designated as AMSU-A1 contains the thirteen remaining channels with frequencies from 50.3 GHz to 89 GHz.

Periodic on-board calibration is accomplished by using an in-flight blackbody calibration and cold space as energy reference sources. During each scan, the shrouded reflector observes 30 earth scene cells with one sample period each and two calibration target cells with two sample periods each. Complete end-to-end in-flight calibration from the antenna to the AMSU-A instrument output is provided for each channel. This will yield the maximum in-flight calibration accuracy that gives the radiometric data the required sensitivity and precision.

At each frequency, the half power antenna beamwidth is a constant 3.33°. Thirty contiguous scene resolution cells spaced 3.33° along the scan line are sampled in a stepped-scan fashion every eight seconds. The scan covers 50° on each side of the satellite path.

2.2 Test Starting and Completion Dates

The AMSU-A2 instrument, serial number 108, was tested between November 24 and December 2, 1999.

2.3 Instrumentation

All instrumentation were suitable for the purpose intended. Each instrument used was within its certification period. Instrumentation accuracy was verified by calibration in accordance with MIL-STD-45662 as implemented and controlled by Aerojet standard operating procedures. The attached Test Data Sheet 2, in Section 3, contains the list of the equipment with pertinent traceability information.

2.4 Test Frequencies

The test frequencies were selected from paragraph 3.6.1.4.1 of the interface specification, IS-3267415, and are listed in Tables I and II. The RE02 METOP requirements are presented in Figure 1 and the table within the figure.

Table I SARR, SARP, DCS Receiver Channel Guard Limits

Frequency (MHz)	Radiation Limit (dBm)	E-Field Limit * (dB μV/m)	Notes
118.00 – 120.00	-100	18.9	121.5 MHz
120.00 – 121.450	-125	-6	121.5 MHz
121.450 – 121.485	-145	-26	121.5 MHz
121.485 – 121.515	-150	-31	121.5 MHz
121.515 – 121.550	-145	-26	121.5 MHz
121.550 – 123.000	-125	-5.9	121.5 MHz
123.00 0 – 125.000	-100	19.2	121.5 MHz
236.000 – 240.000	-100	24.9	243.0 MHz
240.000 – 242.925	-125	0	243.0 MHz
242.925 – 242.975	-145	-20	243.0 MHz
242.975 – 243.025	-150	-25	243.0 MHz
243.025 – 243.075	-145	-20	243.0 MHz
243.075 – 246.000	-125	0.1	243.0 MHz
246.000 – 250.000	-100	25.3	243.0 MHz
385.100 – 401.100	-100	29.4	406.05 MHz
401.100 – 405.900	-125	4.5	406.05 MHz
405.900 – 406.000	-145	-15.5	406.05 MHz
406.000 – 406.100	-150	-20.5	406.05 MHz
406.100 – 406.200	-145	-15.5	406.05 MHz
406.200 – 411.000	-125	4.6	406.05 MHz
411.000 – 425.000	-100	29.9	406.05 MHz
396.000 – 401.500	-125	4.4	401.65 MHz
401.500 – 401.600	-145	-15.6	401.65 MHz
401.600 – 401.700	-150	-20.6	401.65 MHz
401.700 – 401.800	-145	-15.6	401.65 MHz
401.800 – 406.000	-125	4.5	401.65 MHz

* E-field limits have been calculated by METOP and are for reference only. The following formula has been applied for translating Power levels to Field strength levels.

$$E[dB\mu V/m] = P[dBm] - Gr[dBi] + 20\log(f[Hz]) - 42.7$$

where P is the received power, Gr is the gain of the receiving antenna and f is the frequency. Note that Gr has arbitrarily been set to 0 dB (isotropic) in calculating the above levels. E-field limits would have to be adjusted to reflect actual antenna characteristics.

Table II METSAT Special Frequencies

Frequency	Receiver/Ampl Sensitivity
59.458 MHz ±0.5 kHz	–60 dBm
60.10 MHz ±0.5 kHz	–60 dBm
141.360 MHz ±0.5 kHz	–60 dBm
142.9 MHz ±0.5 kHz	–60 dBm
282.733 MHz ±0.5 kHz	–60 dBm
285.813 MHz ±0.5 kHz	–60 dBm
371.921 MHz ±0.5 kHz	–60 dBm
375.972 MHz ±0.5 kHz	–60 dBm
624.925 MHz ±0.5 kHz	–60 dBm
631.730 MHz ±0.5 kHz	–60 dBm
743.841 MHz ±0.5 kHz	–60 dBm
751.944 MHz ±0.5 kHz	–60 dBm
121.5 MHz ±15 kHz *	–150 dBm (Bandwidth 100 Hz)
243 MHz ±25 kHz *	–150 dBm (Bandwidth 100 Hz)
401.650 MHz ±50 kHz *	–150 dBm (Bandwidth 100 Hz)
406.05 MHz ±50 kHz *	–150 dBm (Bandwidth 100 Hz)
2010-2040 MHz	–120 dBm

* METOP replaces these frequencies with the frequencies in Table I.

2.5 Operational Mode

The AMSU-A2 instrument was tested in the IN-ORBIT (full scan) mode of operation. In this mode, the antenna is rotating continuously and all the circuits are working. The maximum electric field radiated emissions are produced in this mode of operation.

2.6 Test Location

This test was conducted in the shielded enclosure located in Building 183 of the Aerojet test facility.

2.7 Test Procedure

This test procedure insures that the AMSU-A2 instrument can demonstrate compliance in meeting the radiated emissions limits presented in Figure 1, and Tables I and II. The test procedure that was followed during conduction of the test conforms with the Process Specification, Test Procedure, Electromagnetic Interference (EMI)/Electromagnetic Radiation (EMR) and Electromagnetic Compatibility (EMC) for Advanced Microwave Sounding Unit-A (AMSU-A), document number AE-26151/5E paragraph 3.4.6.
The steps that were followed during the conduct of the test are the following:

Step 1. Connect the antenna to the proper receiver/amplifier port. Verify that the AMSU-A is operating in the IN ORBIT mode.

Step 2. Allow the EMC test equipment to warm up for a minimum of 10 minutes.

Step 3. Program the spectrum analyzer system (HP 8566B) to automatically scan and plot all narrowband data from 14 kHz to 1 GHz, switching the appropriate antenna/amplifier throughout the frequency range.

Step 4. All data shall be below the limits shown in Figure 8 (AE-26151/5E). If any emissions are observed to exceed the limit line, command the computer to print the measured levels.

Step 5. If any narrowband signals exceed the limits, perform an ambient test and determine the source of the emanations. Reduce or eliminate the source, if external to the AMSU-A instrument, and repeat the test.

Step 6. Set up horn antenna (RGA-180) one meter from the point of maximum radiation.

Step 7. Self-calibrate the signal analyzer.

Step 8. Sweep throughout the frequency range of 1 to 18 GHz, in a minimum of two ranges, recording the observed narrowband emission levels.

Step 9. All data shall be below the limits shown on Figure 8 (AE-26151/5E); if not, perform step 5.

Step 10. Affix all plots, photos, calculations, and related information to TDS 2.

Step 11. After disconnecting the horn antenna, set the signal analyzer to one of the four frequencies listed in 3.4.6 (AE-26151/5E) with the appropriate frequency span.

Step 12. Activate the series preamplifier (HP 71210 of the spectrum analyzer (HP 71200)) and reduce the test equipment bandwidth to 10 kHz or less until the appropriate sensitivity is attained.

Step 13. Program the signal analyzer for noise averaging to a minimum of eight times. Verify that the sensitivity noise level is below the required level.

Step 14. Connect the antenna to the signal analyzer amplifier input.

Step 15. The measurement should be within the ambient level, and no narrowband frequencies should be detected at the specified frequency above the sensitivity level specified in 3.4.6 (AE-26151/5E). Plot the screen presentation.

Step 16. Repeat steps 11 through 15 while performing a measurement on the remaining frequencies.

Step 17. Record the information regarding the test on TDS 2 and attach all plots, photos, calculations, and other related information.

Step 18. Repeat steps 11 through 15 while performing measurements on the frequencies depicted on Table III (AE-26151/5E).

Step 19. Repeat step 17.

NOTE: Reference to "frequencies listed in 3.4.6 (AE-26151/5E)" means Table II of this document.
Reference to "Figure 8 (AE-26151/5E)" is the same as Figure 1 of this document.
Reference to "Table III" is the same as Table I of this document.

2.8 Test Results

No radiated emissions were recorded above the specified sensitivity levels. The emissions detected were ambient emissions produced by the Halon System. Some emissions were introduced into the shielded enclosure via the interconnect cables. In this case, the cables were moved to an area of minimum emissions, i.e., until the detected emissions were below the specified level.

The recorded data is presented in this order:

Plots 1 through 14	Cover the frequency range from 118.00 MHz to 125.00 MHz. The odd numbered plots represent the antenna in the horizontal position. The even numbered plots represent the antenna in the vertical position. The emission that approximated the limit was a signal at 121.496 MHz, 0.72 dBm below limit with the antenna in the vertical position. See plot 8.
Plots 15 through 21	Cover the frequency range from 236.00 MHz to 250 MHz. The test was conducted with a circularly polarized antenna, for this and all subsequent measurements above 200 MHz. The emission that approximated the limit, in this frequency range, was a signal at 243.041 MHz, 0.11 dB below the limit. See plot 19.
Plots 22 through 28	Cover the frequency range from 385.10 MHz to 425.00 MHz. The emission that neared the limit was detected at 406.079 MHz, 0.26 dB below the limit. See plot 25.
Plots 29 through 33	Cover the frequency range from 396.00 MHz to 406.00 MHz. The detected emission that approximated the limit was a signal at 401.590 MHz, 0.26 dB below the limit. See plot 30.
Plots 34 and 35	Represent the telemetry frequency of 2.010 to 2.040 GHz. All detected emissions in this frequency are a minimum of 7 dB below the limit. This test was performed in the horizontal and vertical polarization of the double-ridged guide antenna. See plot 34.
Plots 36 through 51	Contain the twelve special frequencies from 59.458 MHz to 751.944 MHz listed in Table II. The frequencies between 59.458 to 142.9 MHz were tested with the antenna in two polarities. All recorded emissions were detected over 33 dB below the limit.
Plots 52 through 57	These plots present the test method RE02, electric field emissions, throughout the frequency range of 14 kHz to 18 GHz. The frequency ranges of 30 MHz to 200 MHz and 1 to 18 GHz were performed with the antenna in two polarities. The emission that nears the specification, i.e., 18 dB below the limit, was detected at 1.25 MHz. See plot 52.
Plots 58 through 68	Cover the METOP special frequencies listed in Figure 1. The frequency range between 400 and 500 MHz was measured with a circularly polarized antenna. The levels were 18 dB below the limit. The other five frequencies between 1217 and 5852 MHz were tested with the double-ridged guide antenna in two polarities. The recorded emission that approximates the limit was recorded at 2.052 GHz where the level is 3.6 dB below the limit. See plot 64.

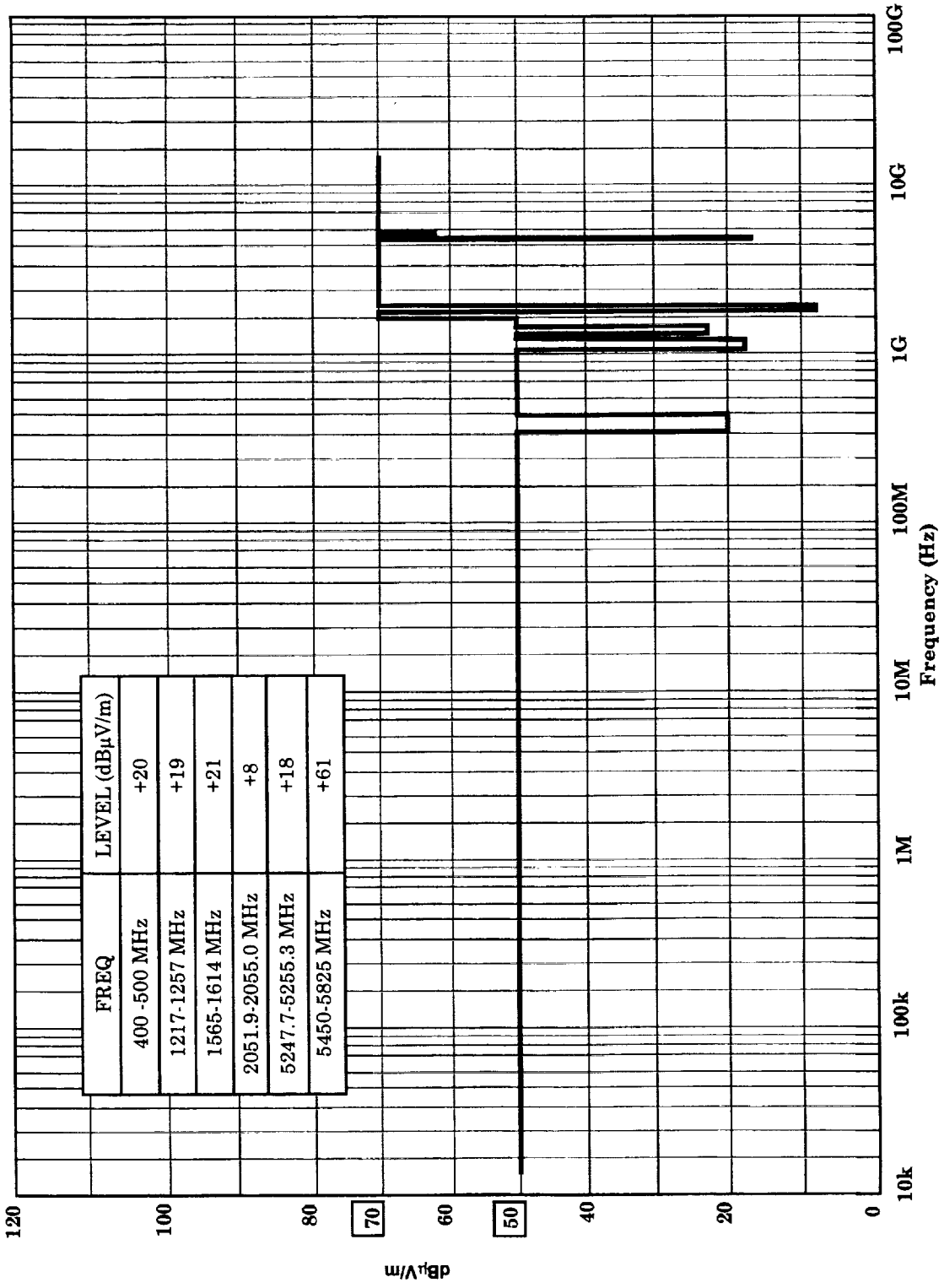


Figure 1 Radiated Narrowband Limits for Electric Field Emissions METOP Only

3. SUPPLEMENTARY INFORMATION

3.1. Supplementary Information

This section contains the Test Data Sheet, Plots, and the equipment list.

TEST DATA SHEET 2 (Sheet 1 of 3)
3.4.6: RE02 Test

Test Setup Verified: R. Hirl
Signature

3.4.6.3.1 Step 1: Test Equipment Log

Item	Manufacturer	Model/ Part No.	Aerojet Inventory No.	Calibration Date	Calibration Due Date
Signal Analyzer	HP	70004A	55447	10-19-99	5-19-00
Plotter	HP	7470A	57760	CNR	CNR
Spectrum Analyzer	HP	8566B	54861	11-20-99	6-20-00
Plotter	HP	7475A	47417	CNR	CNR
Biconical Antenna	EMCO	3110B	55361	11-11-99	11-11-00
Biconical Antenna	EMCO	93110	C200204	2-24-99	2-24-00
Double Ridged Guide Ant	Electro Metrics	RGA180	L508857	11-11-99	11-11-00
Log Spiral Ant	Electro Metrics	LCA25	L58958	2-25-99	2-25-00
Active Rod Antenna	EMCO	3301B	55363	1-7-99	1-7-00
Computer	HP	9836	46134-15	CNR	CNR
~~Plotter~~ 1/12/99 Printer	HP	2671G	07202	CNR	CNR
Microwave Amplifier	HP	8449B	C200203	8-9-99	7-16-00
Amplifier	HP	8447F Opt H64	C200280	9-15-99	1-15-01

TEST DATA SHEET 2 (Sheet 2 of 3)
3.4.6: RE02 Test (Cont)

Test Setup Verified: _____
Signature

3.4.6.3.2: Emission Measurements

Step	Antenna/Frequency	Band	Required	Emissions within limits?		Comments/ Observations
				Yes	No	Plot
4	All except Horn 14 kHz to 1 GHz	Narrow	See Figure 6	✓		52 & 53
~~6~~	~~All except Horn 14 kHz to 1 GHz~~	~~Broad~~	~~See Figure 7~~			
12	Horn, RGA-180 1 to 18 GHz	Narrow	See Figure 6	✓		54 & 55
15	Biconical, EMCO 3104 121.5 MHz with Ampl	Narrow	No narrow-band freq. > -150 dBm	✓		7 & 8
16	Log Conical, EMCO 3101 243 MHz, 401.65 MHz, & 406.05 MHz with Ampl	Narrow	No narrow-band freq. > -150 dBm	✓		18, 25, & 31
19	Horn, RGA-180 2010 to 2040 MHz with Ampl	Narrow	No narrow-band freq. > -120 dBm	✓		34 & 35
21	Biconical/Log Conical 59.458 to 751.944 MHz	Narrow	No narrow-band freq. > -60 dBm	✓		36 thru 51
21	400 to 500 MHz	Narrow	-107.1dBm	✓		58
21	10 to 18 GHz	Narrow	Figure 3	✓		56 & 57
21	1217 to 1227 MHz	Narrow	-111.8 dBm	✓		59
21	1565 to 1614 MHz	Narrow	-111.2 dBm	✓		61 & 62
21	2051.9 to 2055 MHz	Narrow	-126.7 dBm	✓		63 & 64
21	5254.7 to 5255.3 MHz	Narrow	-122.8 dBm	✓		65 & 66
21	5450 to 5825 MHz	Narrow	-80.7 dBm	✓		67 & 68

NOTE: Attach all backup data generated during the test (photos, printouts, plots, test logs, additional comments or observations, etc.) to this data sheet.

TEST DATA SHEET 2 (Sheet 3 of 3)
3.4.6: RE02 Test (Cont)

Test Setup Verified: _____
Signature

3.4.6.3.2: Emission Measurements

Step	Antenna*/Frequency Range (MHz)	Band	Radiation Limit (dBm)	Emissions within limits?		Comments/ Observations
				Yes	No	Plot
22	118.000 - 120.000	Narrow	-100 / Table IV	✓		1 & 2
22	120.000 -121.450	Narrow	-125 / Table IV	✓		3 & 4
22	121.450 - 121.485	Narrow	-145 / Table IV	✓		5 & 6
22	121.515 - 121.550	Narrow	-145 / Table IV	✓		9 & 10
22	121.550 - 123.000	Narrow	-125 / Table IV	✓		11 & 12
22	123.000 - 125.000	Narrow	-100 / Table IV	✓		13 & 14
23	236.000 - 240.000	Narrow	-100 / Table IV	✓		15
23	240.000 - 242.925	Narrow	-125 / Table IV	✓		16
23	242.925 - 242.975	Narrow	-145 / Table IV	✓		17
23	243.025 - 243.075	Narrow	-145 / Table IV	✓		19
23	243.075 - 246.000	Narrow	-125 / Table IV	✓		20
23	246.000 - 250.000	Narrow	-100 / Table IV	✓		21
23	385.100 - 401.100	Narrow	-100 / Table IV	✓		22
23	401.100 - 405.900	Narrow	-125 / Table IV	✓		23
23	405.900 - 406.000	Narrow	-145 / Table IV	✓		24
23	406.1 00 - 406.200	Narrow	-145 / Table IV	✓		26
23	406.200 - 411.00	Narrow	-125 / Table IV	✓		27
23	411.000 - 425.000	Narrow	-100 / Table IV	✓		28
23	396.000 - 401.500	Narrow	-125 / Table IV	✓		29
23	401.500 - 401.600	Narrow	-145 / Table IV	✓		30
23	401.700 - 401.800	Narrow	-145 / Table IV	✓		32
23	401.800 - 406.000	Narrow	-125 / Table IV	✓		33

* All frequency ranges are to be performed with antenna in both vertical and horizontal polarization.

Signature/Date

Unit AMSU-A2 1331200-2

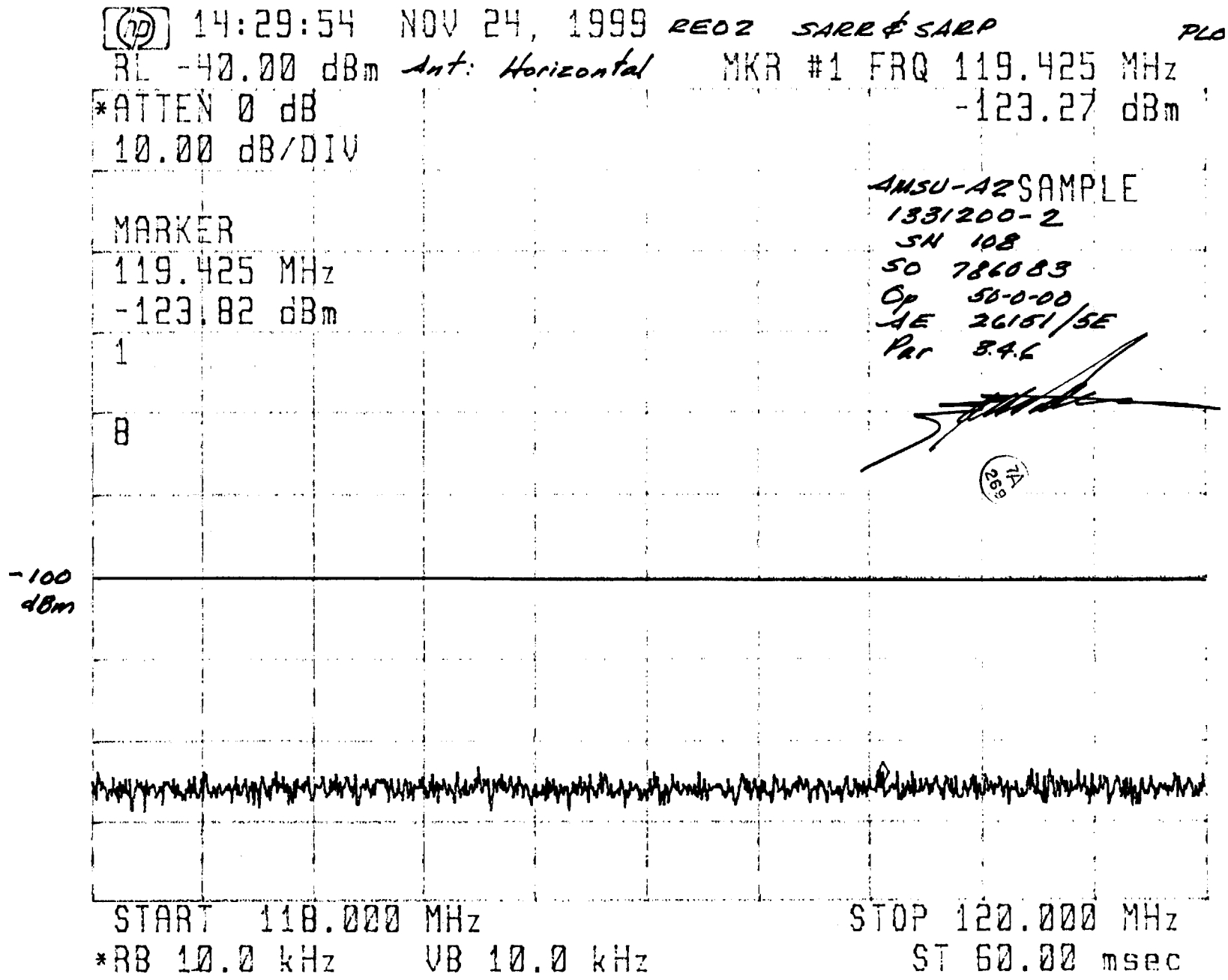
Serial No. 108

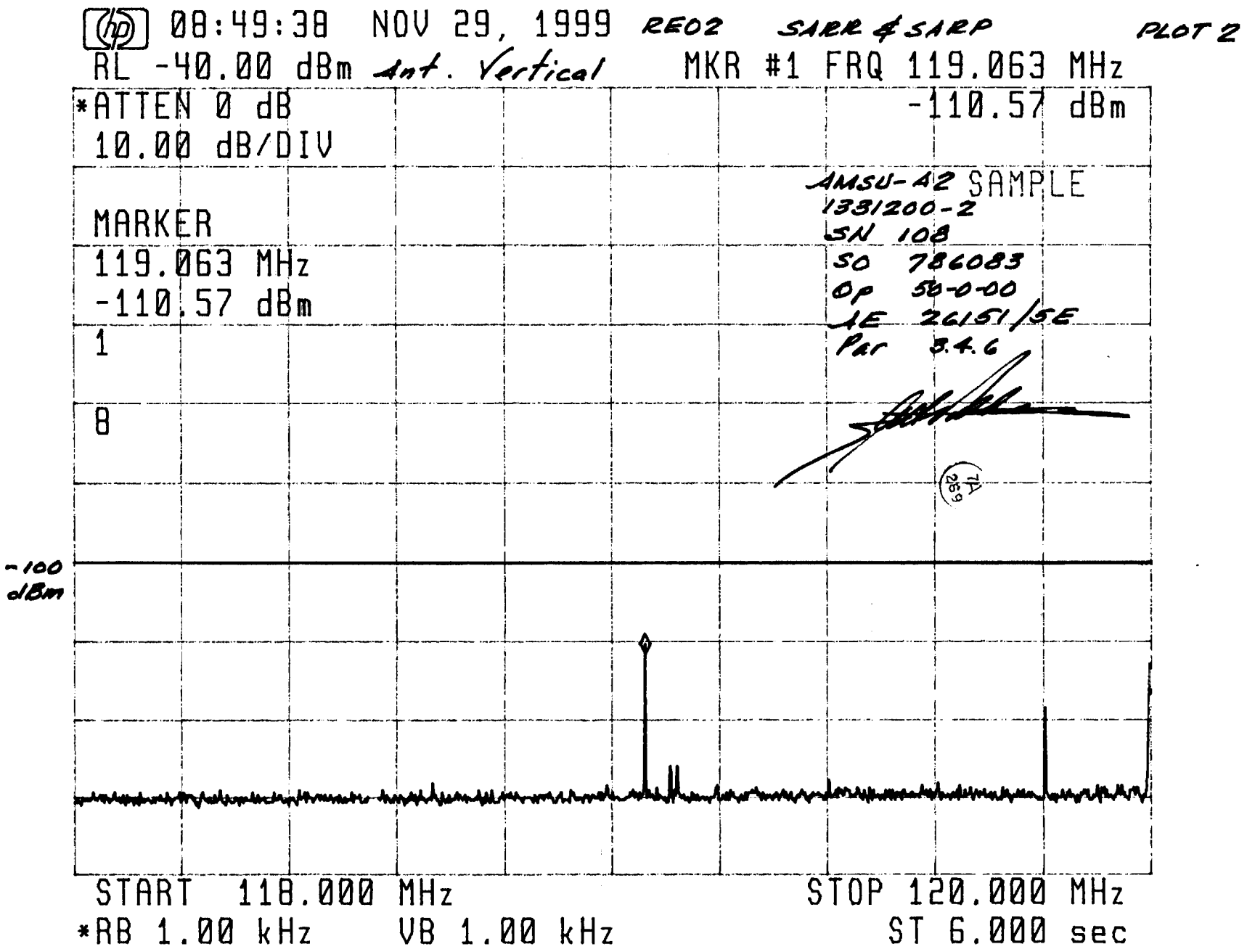
Shop Order 786083 Oper 500-00

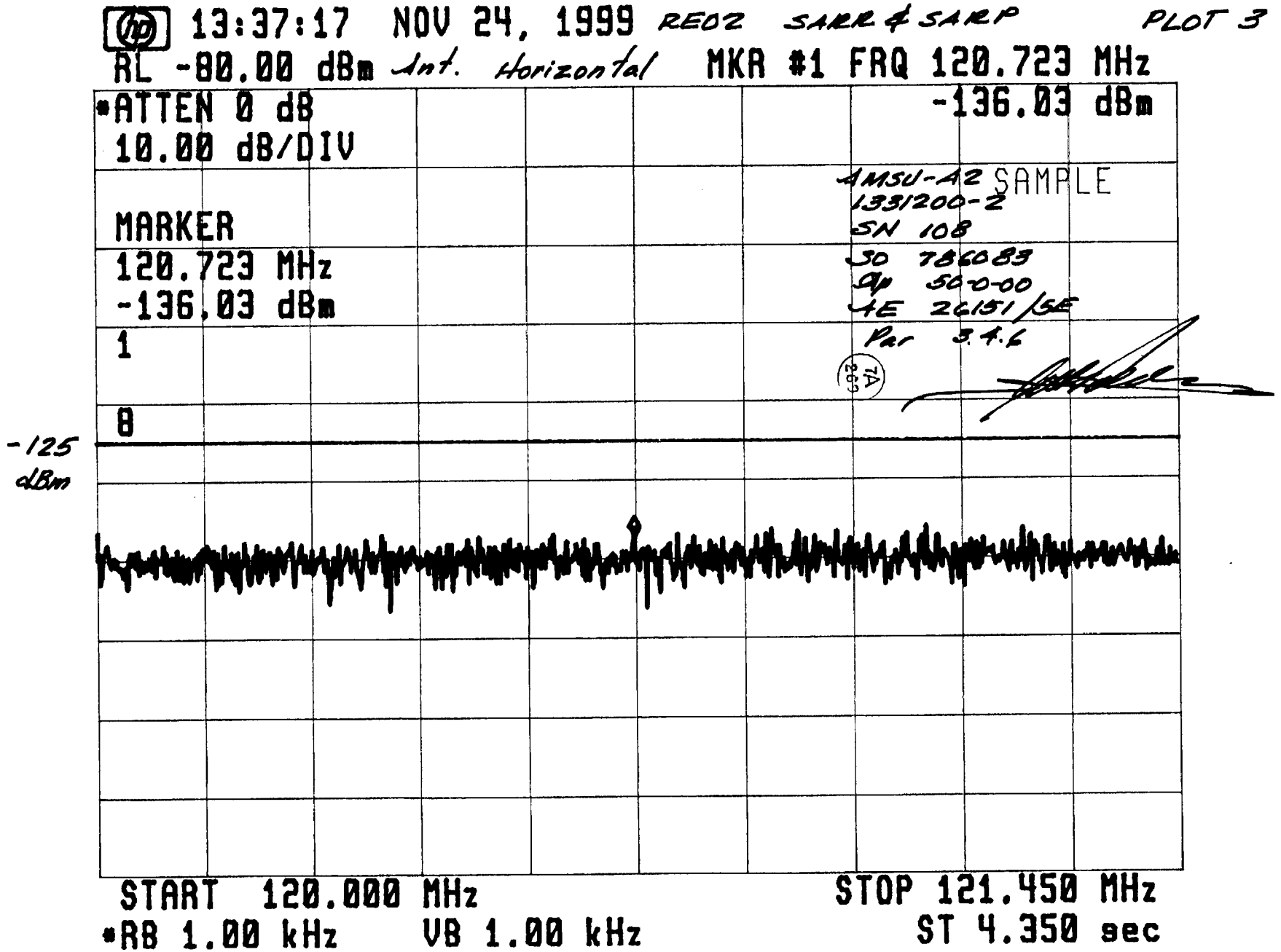
Engineer: _____ 12/1/99

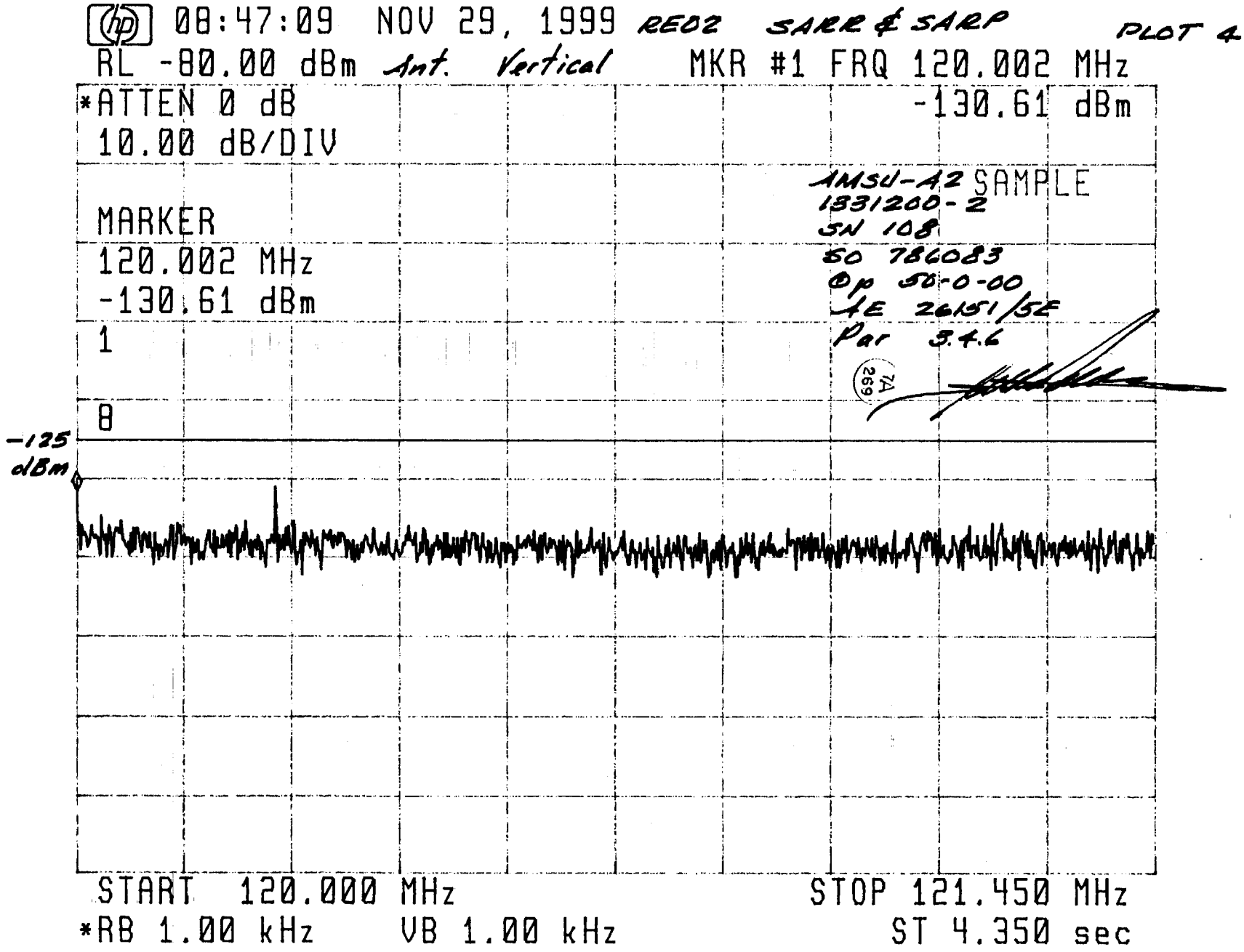
Quality Control: _____ 02 DEC 99

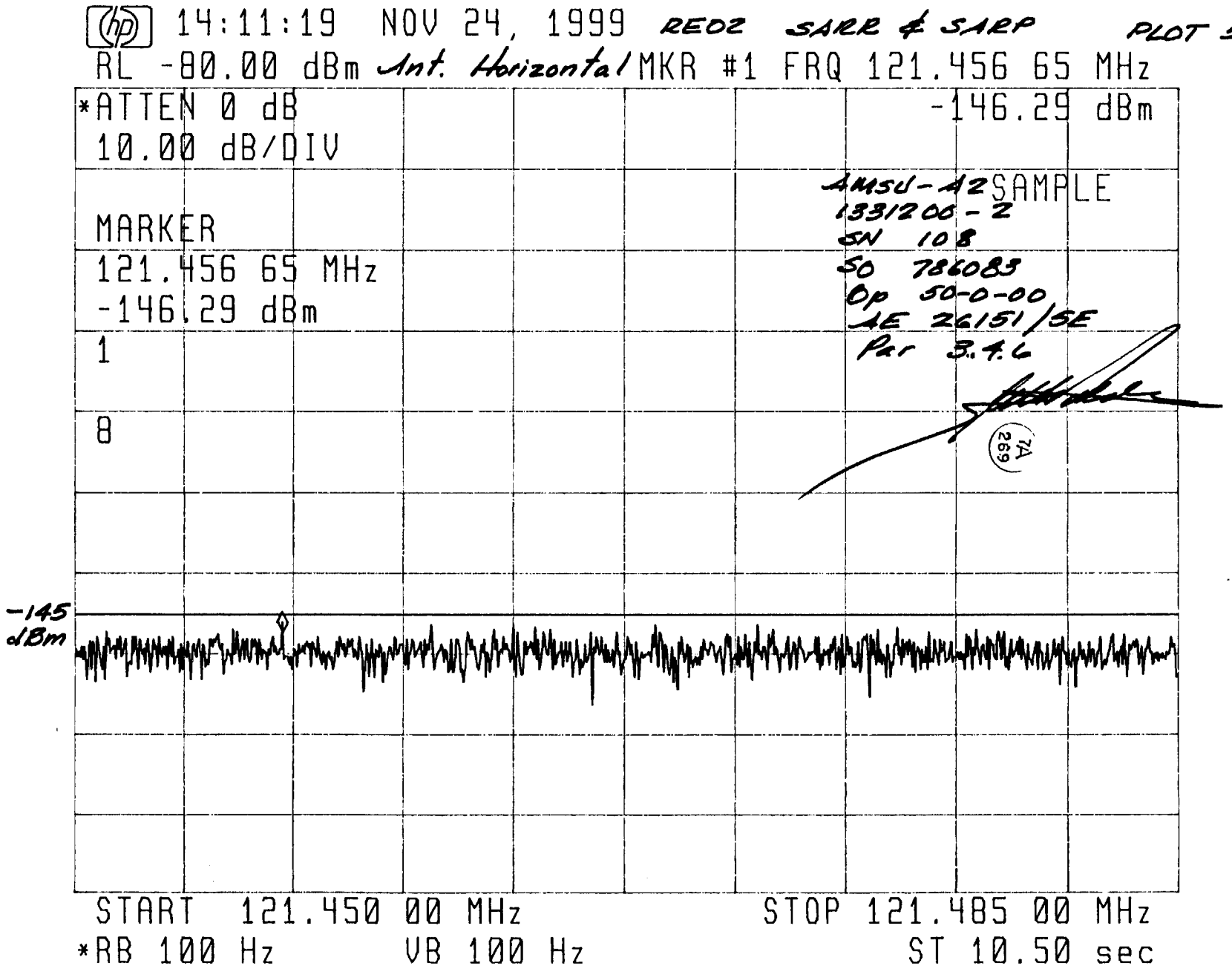
Customer Representative: _____ 12/2/99

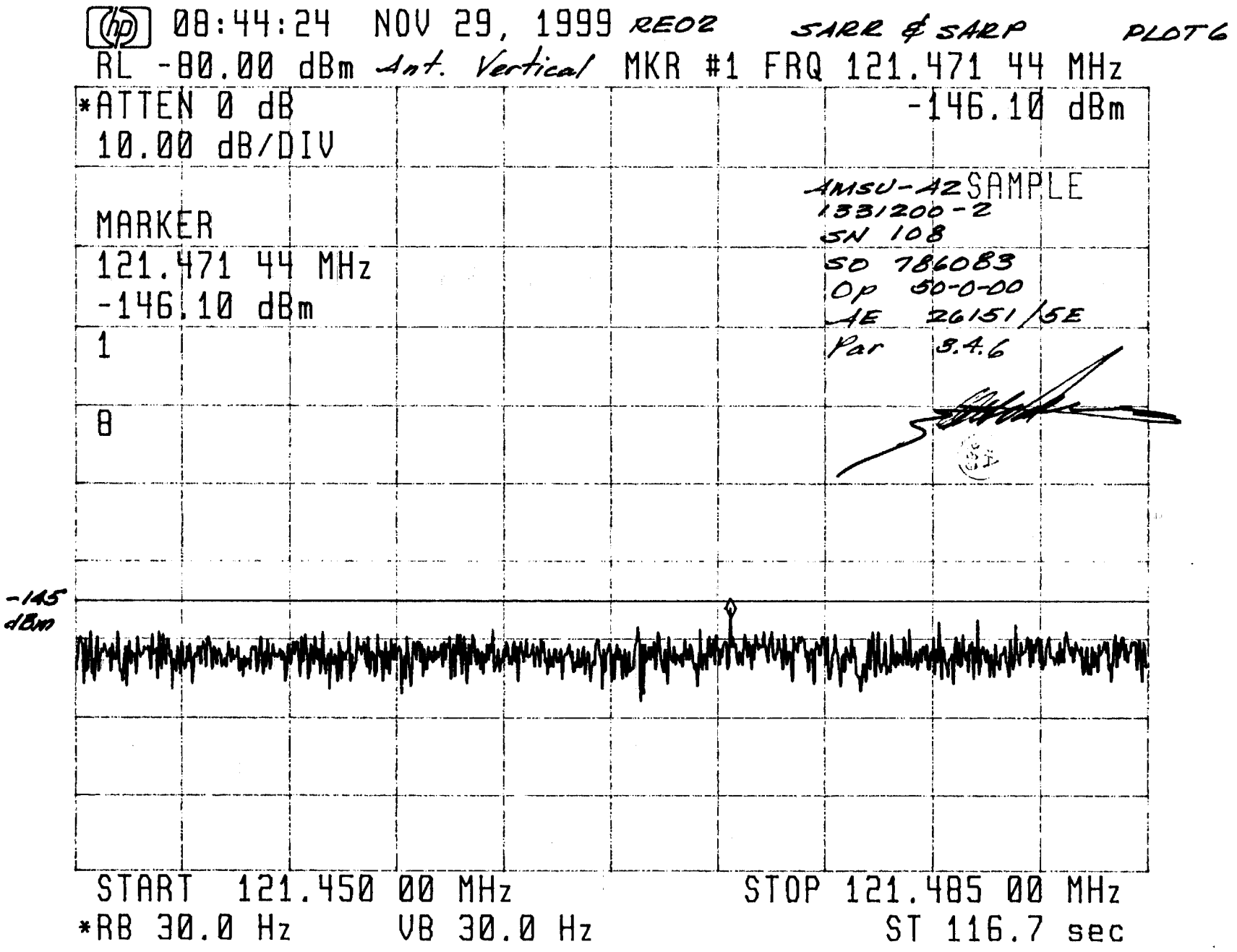

14:29:54 NOV 24, 1999 RE02 SARR & SARP PLOT 1
RL -40.00 dBm Ant: Horizontal MKR #1 FRQ 119.425 MHz
*ATTEN 0 dB -123.27 dBm
10.00 dB/DIV
AMSU-AZ SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5E
Par 3.4.6
MARKER
119.425 MHz
-123.82 dBm
1
B
-100 dBm
START 118.000 MHz
STOP 120.000 MHz
*RB 10.0 kHz
VB 10.0 kHz
ST 60.00 msec

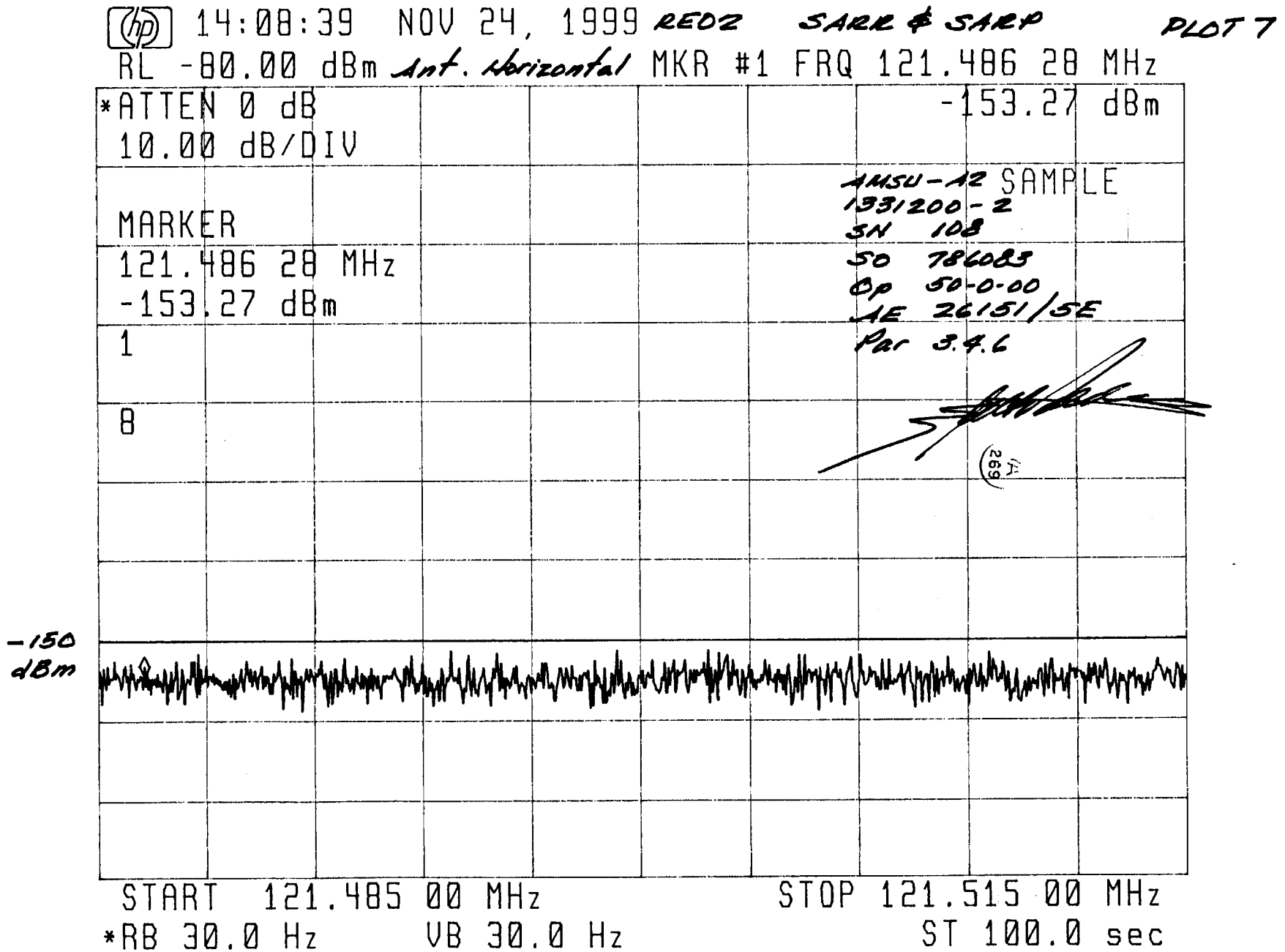

08:49:38 NOV 29, 1999 RE02 SARR & SARP PLOT 2
RL -40.00 dBm Ant. Vertical MKR #1 FRQ 119.063 MHz
*ATTEN 0 dB -110.57 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786083
Op 56-0-00
AE 26151/SE
Par 3.4.6
MARKER
119.063 MHz
-110.57 dBm
1
8
-100 dBm
START 118.000 MHz STOP 120.000 MHz
*RB 1.00 kHz VB 1.00 kHz ST 6.000 sec

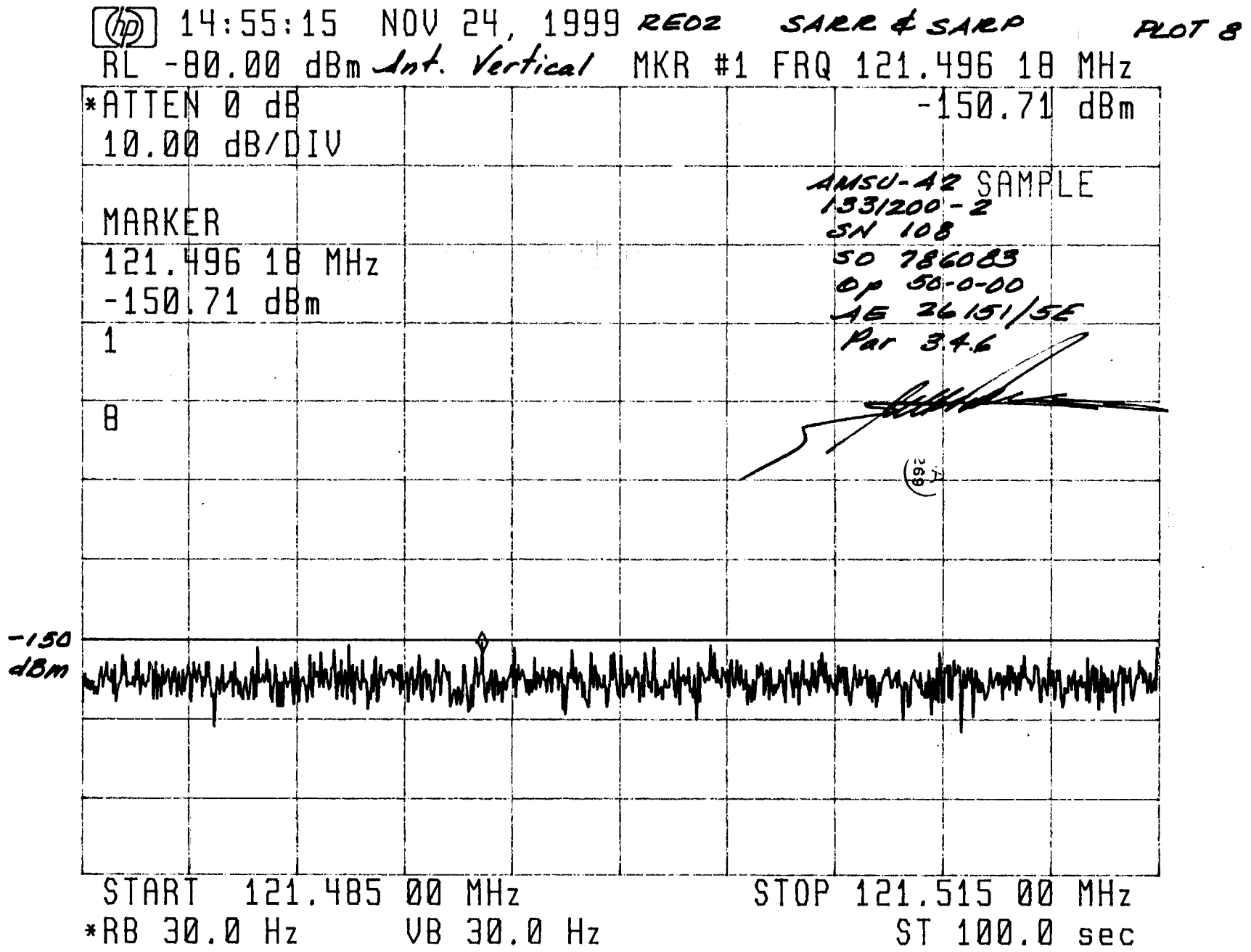

13:37:17 NOV 24, 1999 REO2 SARR & SARP PLOT 3
RL -80.00 dBm Int. Horizontal MKR #1 FRQ 120.723 MHz
*ATTEN 0 dB
10.00 dB/DIV
-136.03 dBm
AMSU-A2 SAMPLE
133120-2
SN 108
MARKER
120.723 MHz
-136.03 dBm
1
8
-125 dBm
START 120.000 MHz
STOP 121.450 MHz
*RB 1.00 kHz
VB 1.00 kHz
ST 4.350 sec


08:47:09 NOV 29, 1999 REO2 SARR & SARP PLOT 4
RL -80.00 dBm Ant. Vertical MKR #1 FRQ 120.002 MHz
*ATTEN 0 dB -130.61 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
1331200-2
SN 108
50 786083
Op 50-0-00
4E 26151/52
Par 3.4.6
MARKER
120.002 MHz
-130.61 dBm
1
8
-125 dBm
START 120.000 MHz
STOP 121.450 MHz
*RB 1.00 kHz VB 1.00 kHz
ST 4.350 sec


14:11:19 NOV 24, 1999 REO2 SARR & SARP PLOT 5
RL -80.00 dBm Ant. Horizontal/MKR #1 FRQ 121.456 65 MHz
*ATTEN 0 dB
10.00 dB/DIV
-146.29 dBm
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/SE
Par 3.4.6
MARKER
121.456 65 MHz
-146.29 dBm
1
8
-145 dBm
START 121.450 00 MHz
STOP 121.485 00 MHz
*RB 100 Hz
VB 100 Hz
ST 10.50 sec

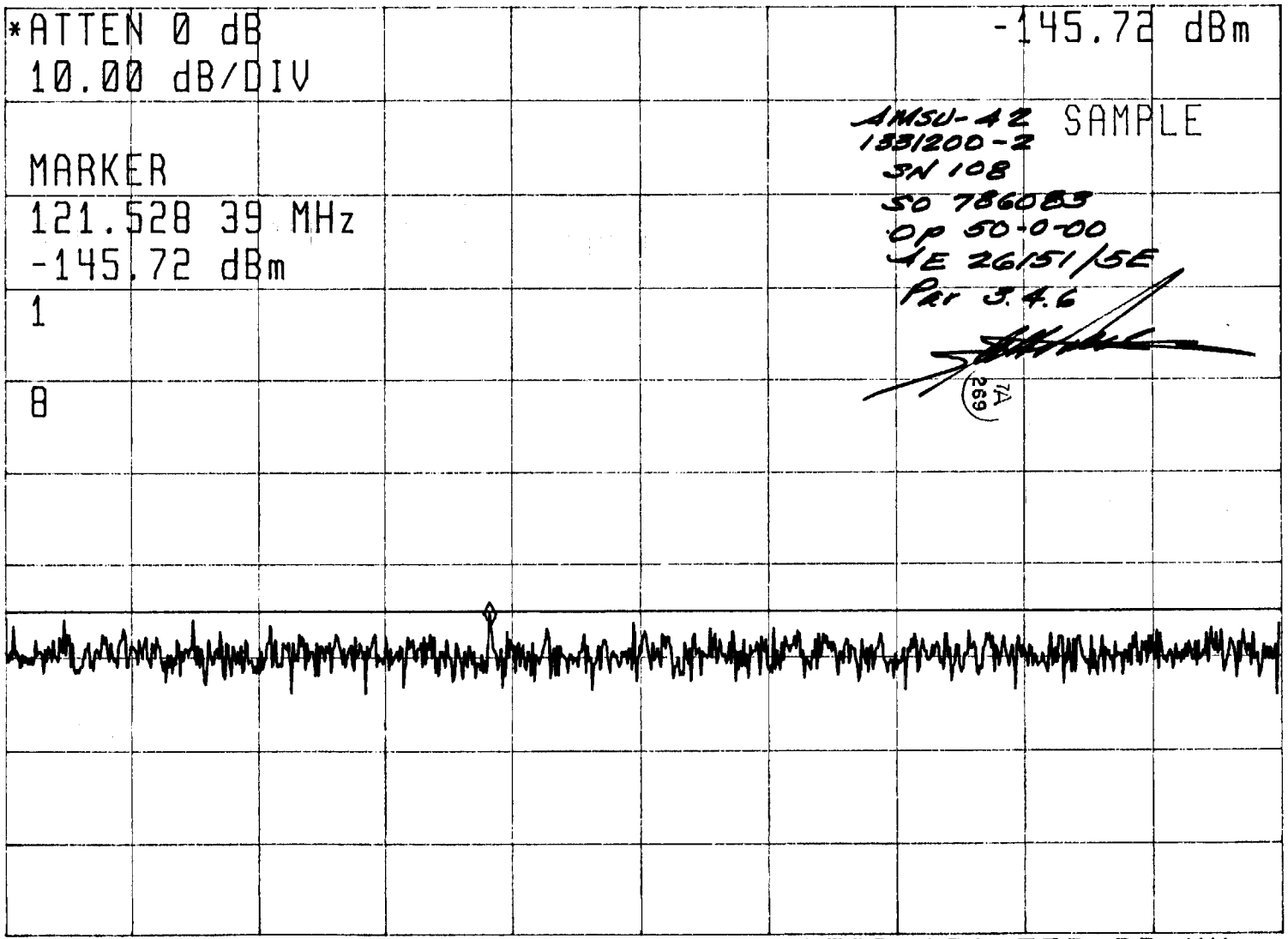

08:44:24 NOV 29, 1999 REO2
SARR & SARP
PLOT 6
RL -80.00 dBm Ant. Vertical MKR #1 FRQ 121.471 44 MHz
*ATTEN 0 dB
10.00 dB/DIV
-146.10 dBm
AMSU-A2 SAMPLE
133200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5E
Par 3.4.6
MARKER
121.471 44 MHz
-146.10 dBm
1
8
-145 dBm
START 121.450 00 MHz
STOP 121.485 00 MHz
*RB 30.0 Hz
VB 30.0 Hz
ST 116.7 sec

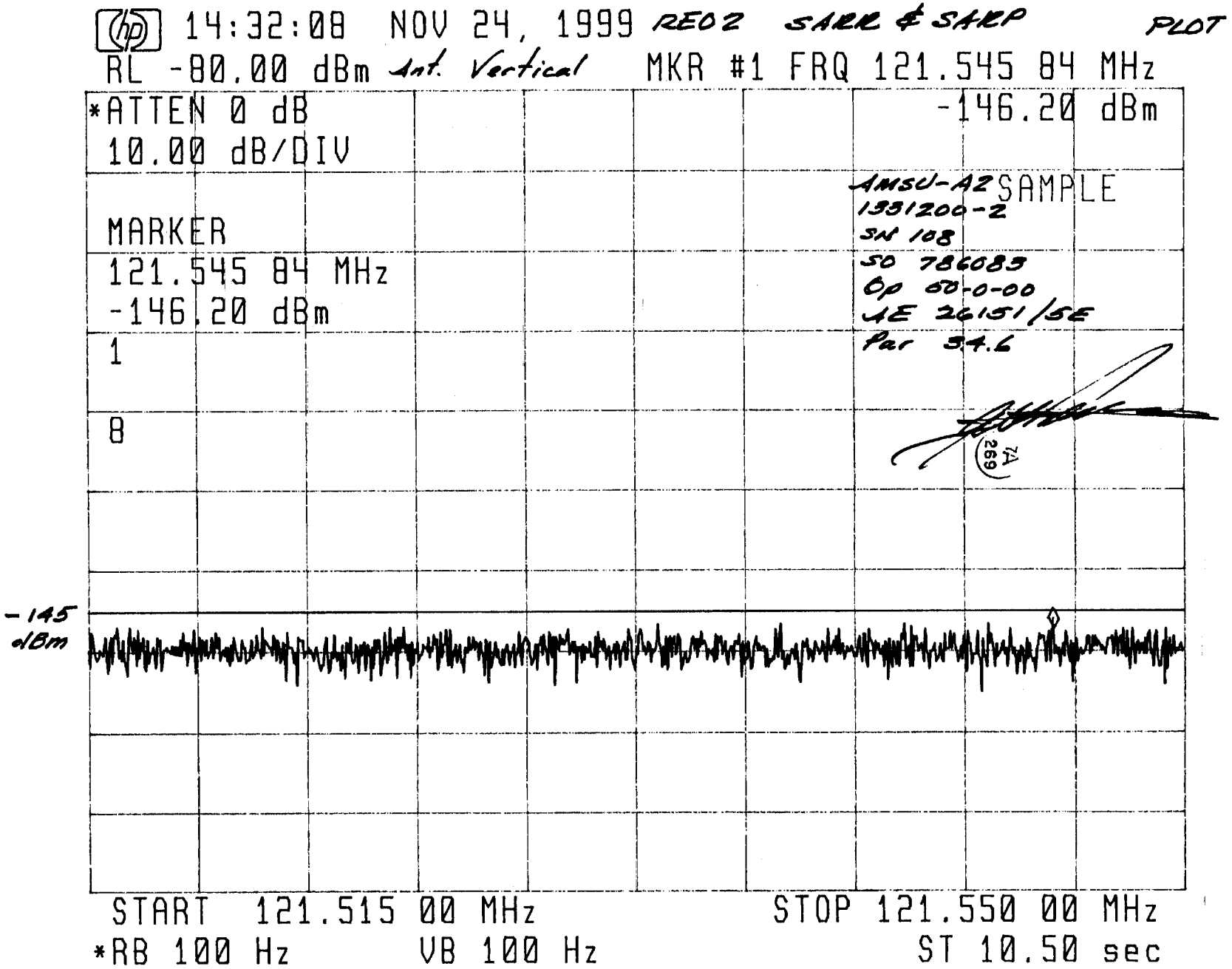

14:08:39 NOV 24, 1999 REDZ SARR & SARP PLOT 7
RL -80.00 dBm Ant. Horizontal MKR #1 FRQ 121.486 28 MHz
*ATTEN 0 dB
10.00 dB/DIV
-153.27 dBm
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5E
Par 3.4.6
MARKER
121.486 28 MHz
-153.27 dBm
1
8
-150 dBm
START 121.485 00 MHz
STOP 121.515 00 MHz
*RB 30.0 Hz
VB 30.0 Hz
ST 100.0 sec

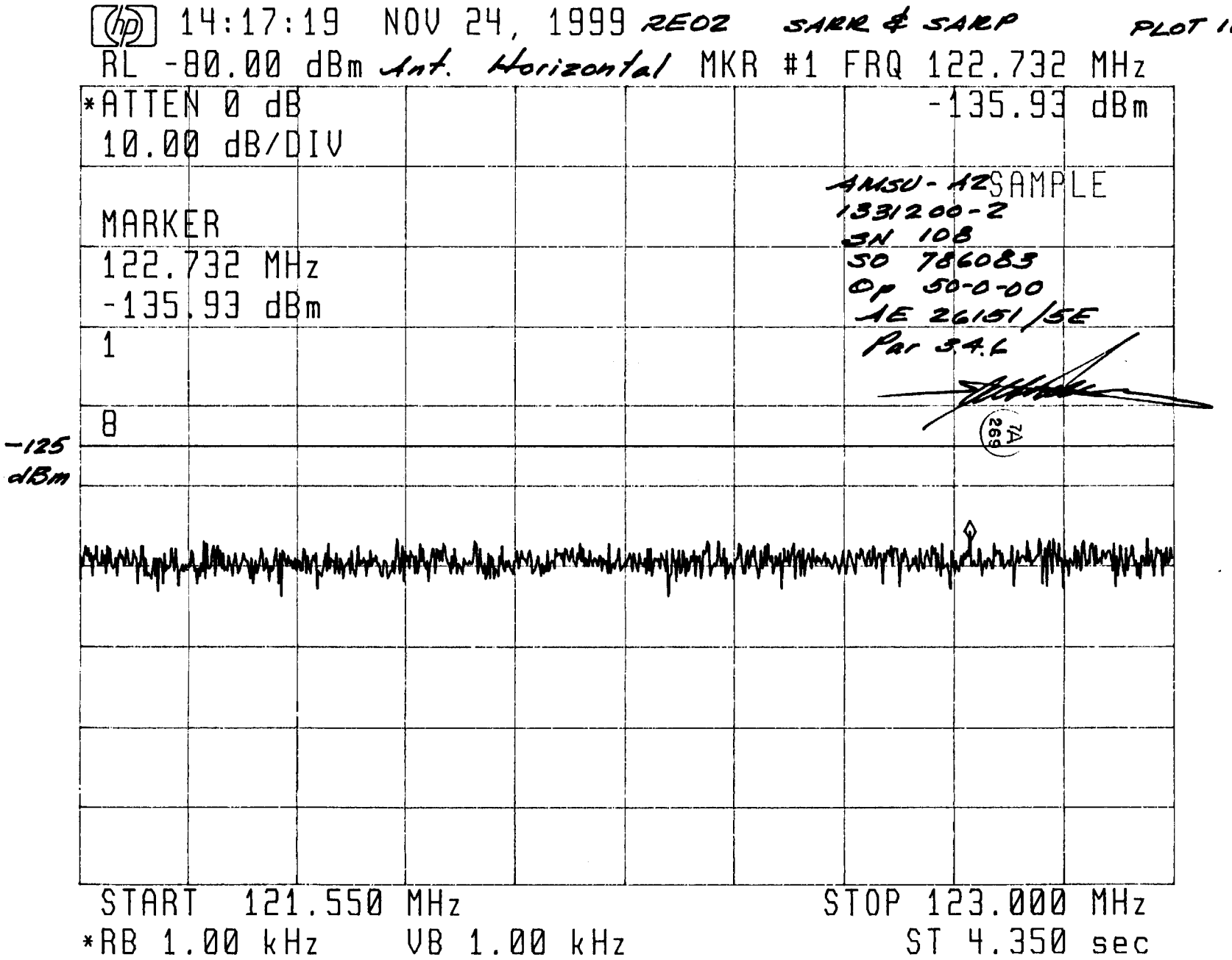

14:55:15 NOV 24, 1999 REO2 SARR & SARP PLOT 8
RL -80.00 dBm Int. Vertical MKR #1 FRQ 121.496 18 MHz
*ATTEN 0 dB
10.00 dB/DIV
-150.71 dBm
AMSU-A2 SAMPLE
133120-2
SN 108
SO 786083
OP 50-0-00
AE 26151/52
Par 3.4.6
MARKER
121.496 18 MHz
-150.71 dBm
1
8
-150 dBm
START 121.485 00 MHz
STOP 121.515 00 MHz
*RB 30.0 Hz
VB 30.0 Hz
ST 100.0 sec

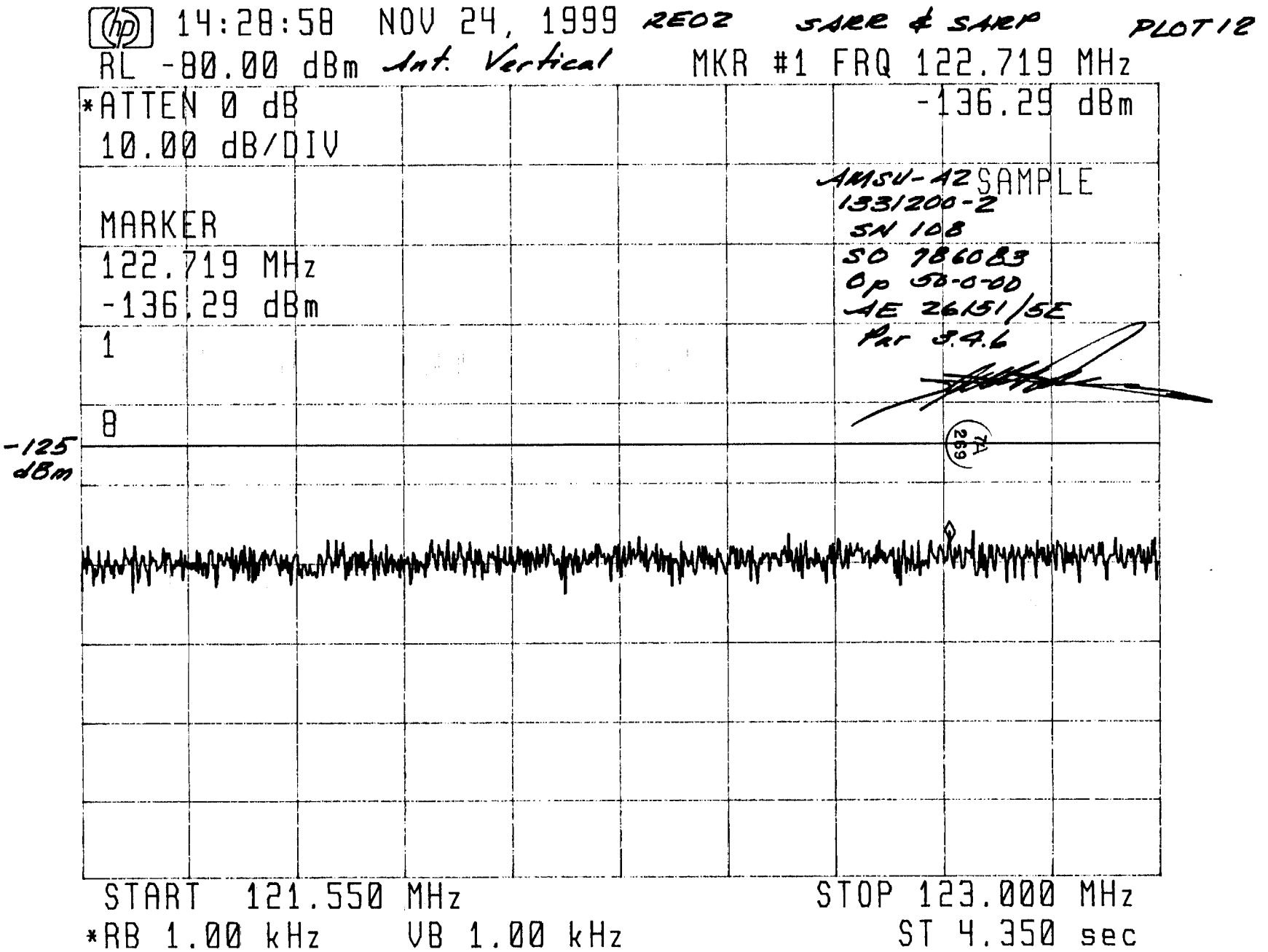
14:14:40 NOV 24, 1999 REO2 SARR & SARP PLOT 9

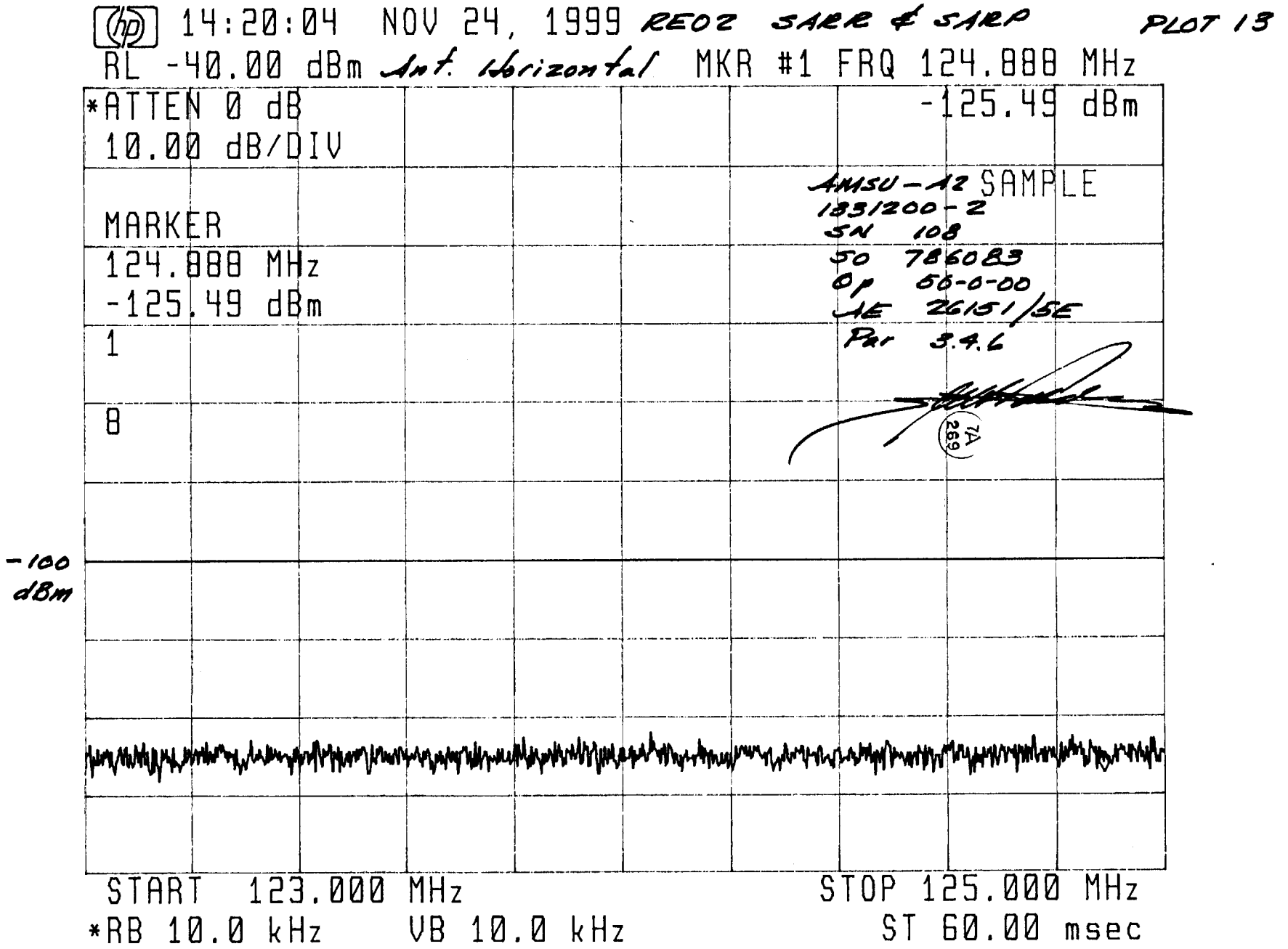
RL -80.00 dBm Ant. Horizontal MKR #1 FRQ 121.528 39 MHz

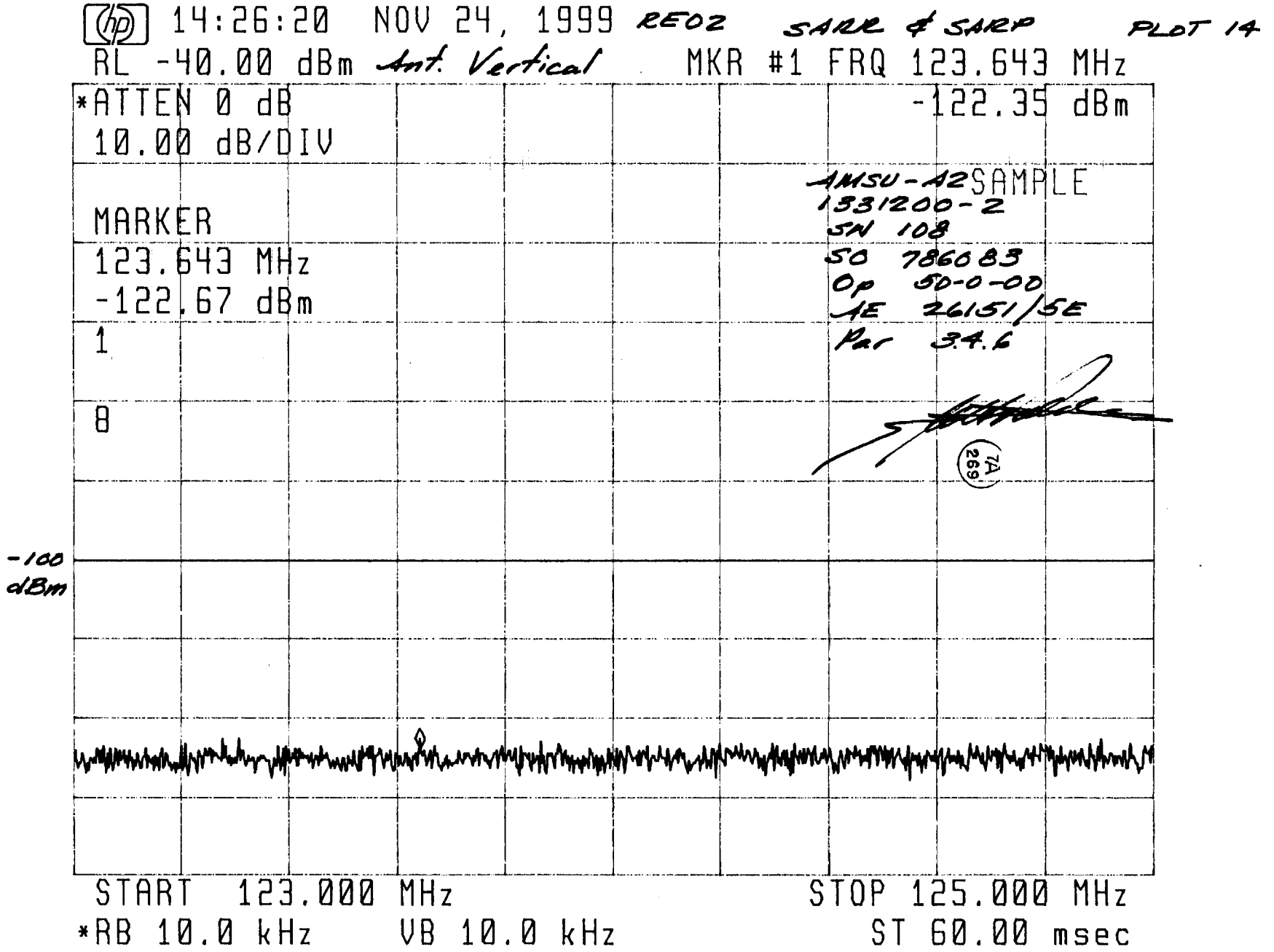


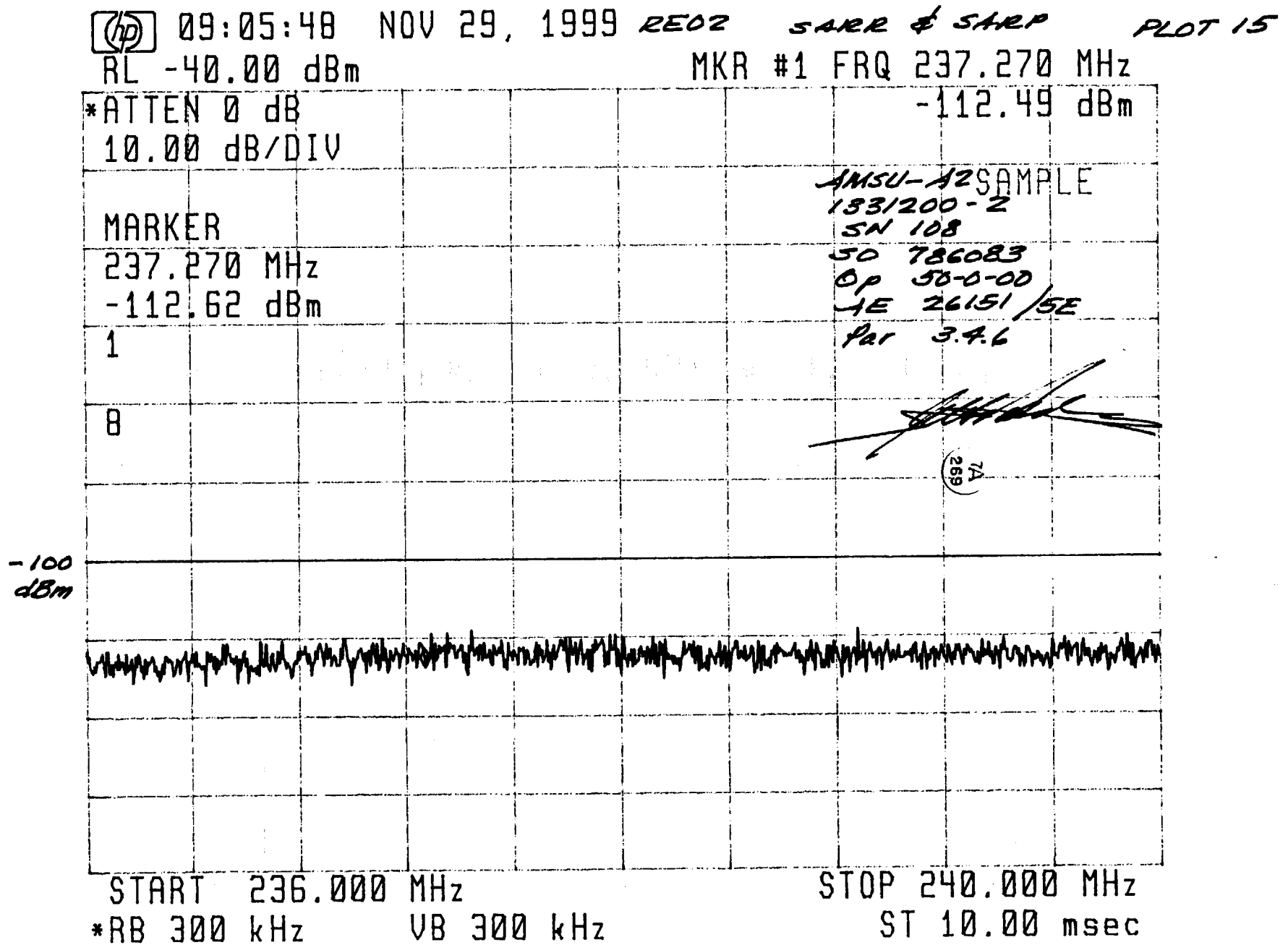

14:32:08 NOV 24, 1999 REO2 SARR & SARP PLOT 10
RL -80.00 dBm Ant. Vertical MKR #1 FRQ 121.545 84 MHz
*ATTEN 0 dB
10.00 dB/DIV
-146.20 dBm
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786083
Op 60-0-00
AE 26151/5E
Par 3.4.6
MARKER
121.545 84 MHz
-146.20 dBm
1
8
-145 dBm
START 121.515 00 MHz
STOP 121.550 00 MHz
*RB 100 Hz
VB 100 Hz
ST 10.50 sec

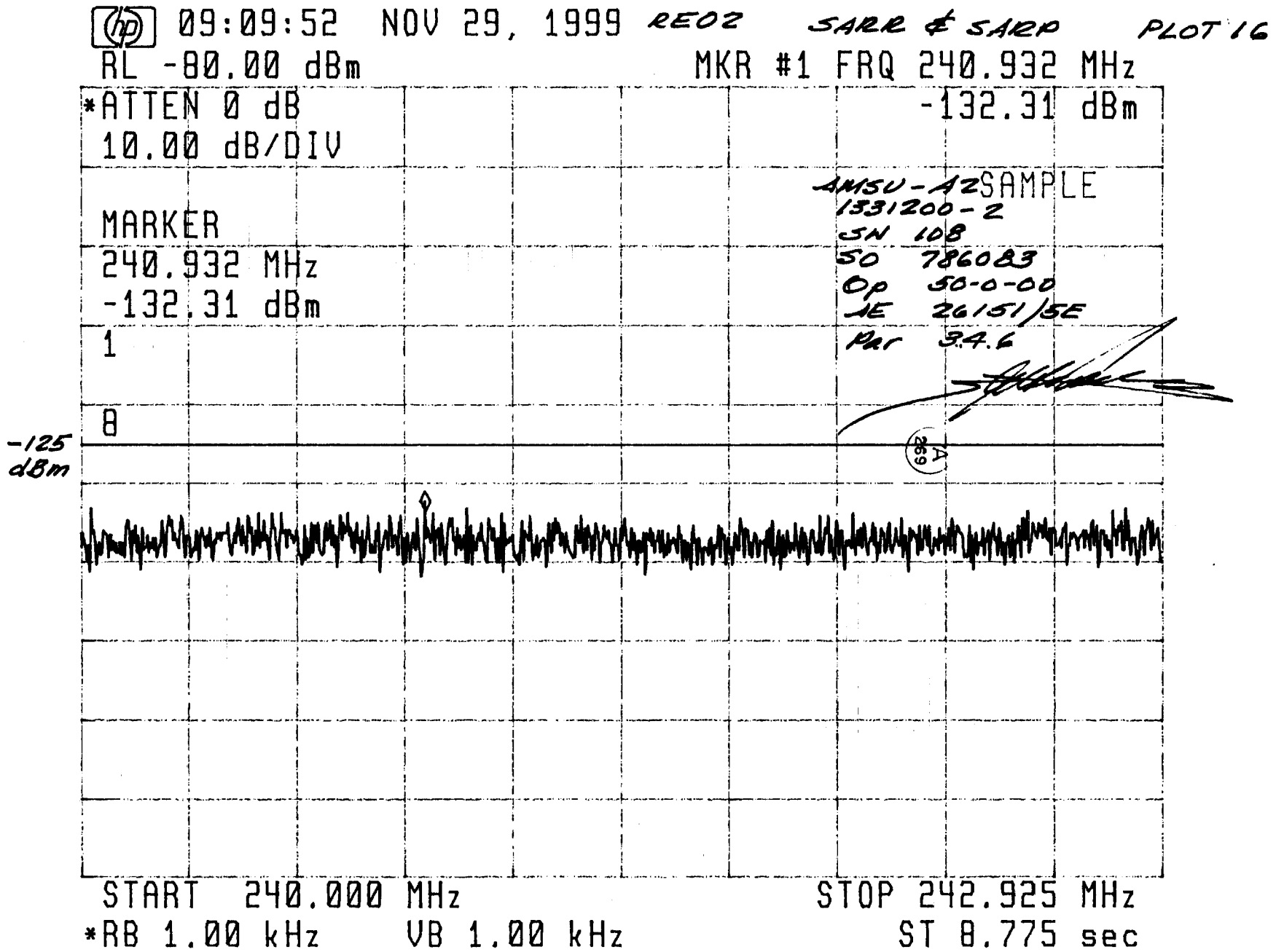

14:17:19 NOV 24, 1999 2E02 SARR & SARP PLOT 11
RL -80.00 dBm Ant. Horizontal MKR #1 FRQ 122.732 MHz
*ATTEN 0 dB
10.00 dB/DIV
-135.93 dBm
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5E
Par 34.L
MARKER
122.732 MHz
-135.93 dBm
1
8
-125 dBm
START 121.550 MHz
STOP 123.000 MHz
*RB 1.00 kHz
VB 1.00 kHz
ST 4.350 sec

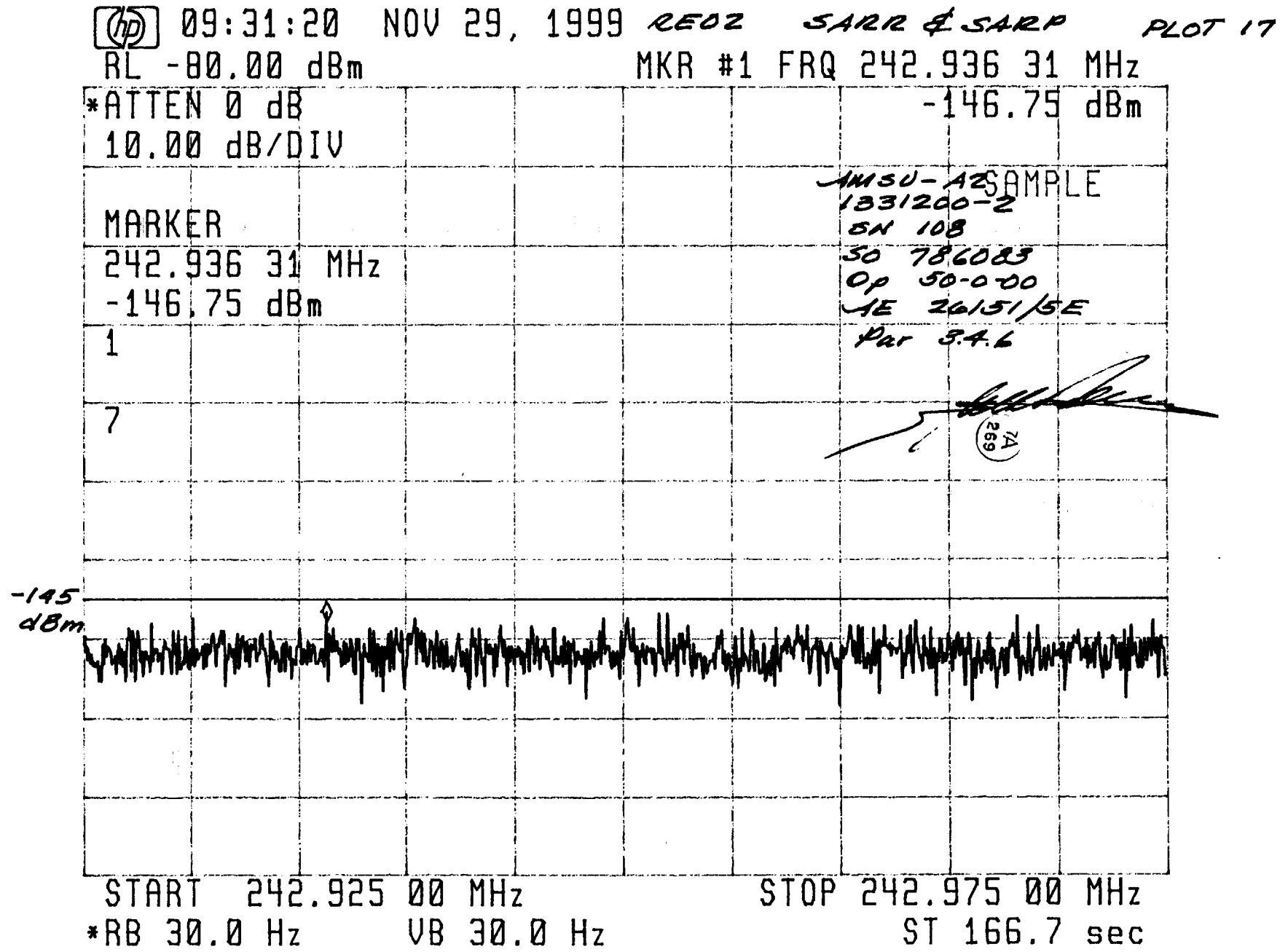

14:28:58 NOV 24, 1999 2E02 SARR & SARP PLOT 12
RL -80.00 dBm Ant. Vertical
MKR #1 FRQ 122.719 MHz
*ATTEN 0 dB
10.00 dB/DIV
-136.29 dBm
AMSU-A2 SAMPLE
133200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5E
Par 3.4.6
MARKER
122.719 MHz
-136.29 dBm
1
8
-125 dBm
START 121.550 MHz
STOP 123.000 MHz
*RB 1.00 kHz
VB 1.00 kHz
ST 4.350 sec

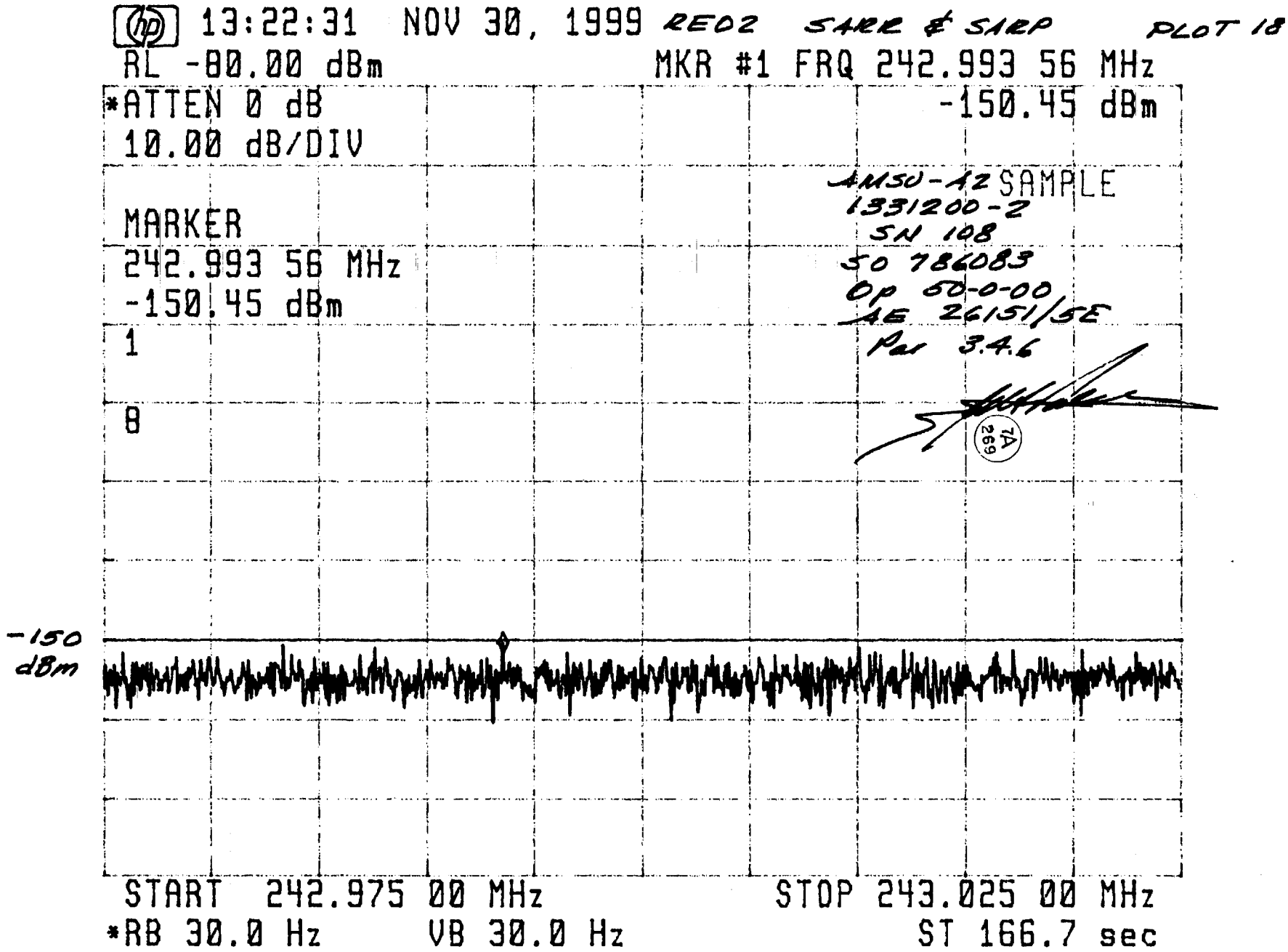

14:20:04 NOV 24, 1999 REOZ SARR & SARP PLOT 13
RL -40.00 dBm Ant. Horizontal MKR #1 FRQ 124.888 MHz
*ATTEN 0 dB
10.00 dB/DIV
-125.49 dBm
AMSU-A2 SAMPLE
133200-2
SN 108
SO 786083
Op 56-0-00
AE 26151/5E
Par 3.4.6
7A 269
MARKER
124.888 MHz
-125.49 dBm
1
8
-100 dBm
START 123.000 MHz
STOP 125.000 MHz
*RB 10.0 kHz
VB 10.0 kHz
ST 60.00 msec

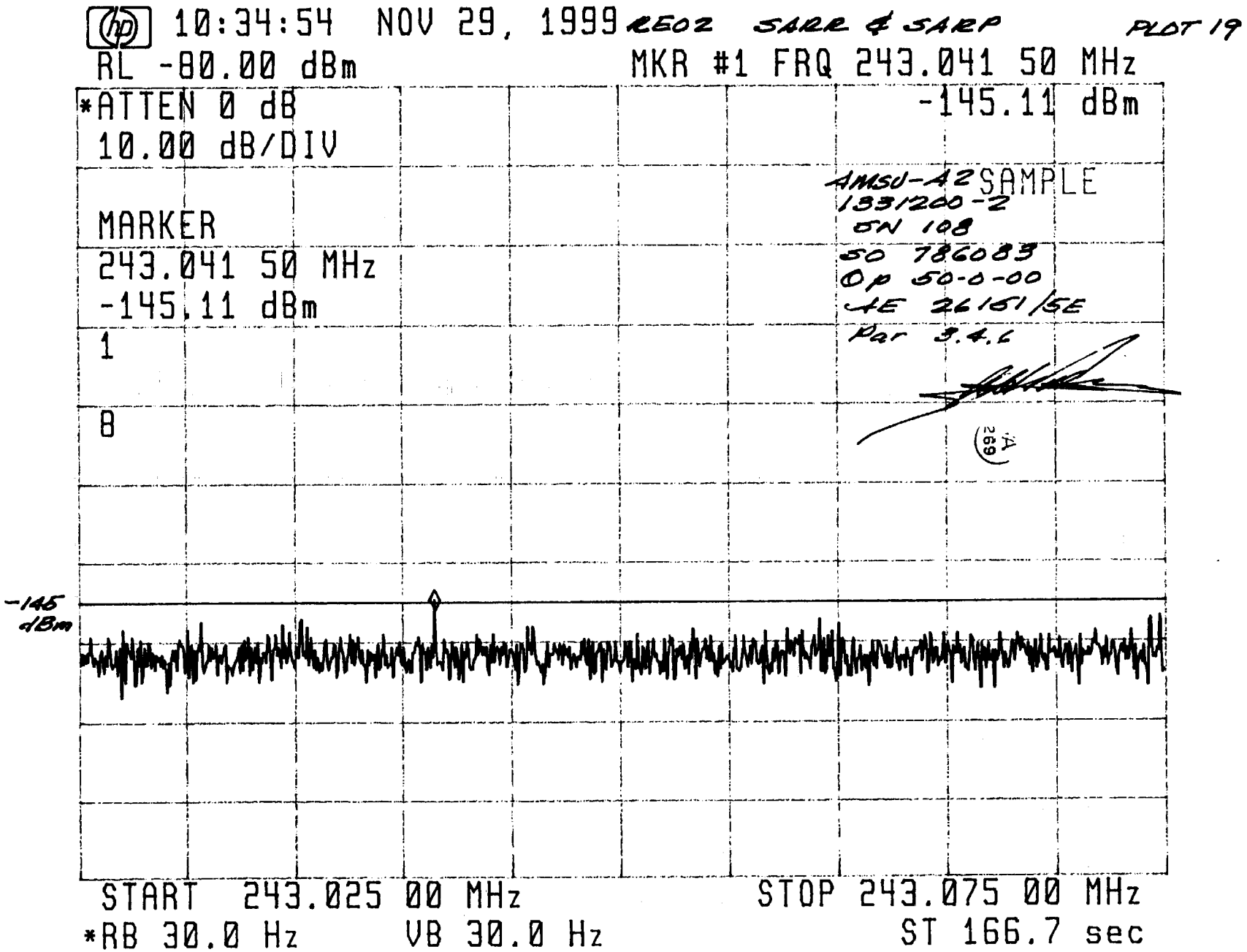

14:26:20 NOV 24, 1999 RE02 SARR & SARP PLOT 14
RL -40.00 dBm Ant. Vertical MKR #1 FRQ 123.643 MHz
*ATTEN 0 dB
10.00 dB/DIV
-122.35 dBm
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
IE 26151/SE
Par 3.4.6
MARKER
123.643 MHz
-122.67 dBm
1
8
7A 269
-100 dBm
START 123.000 MHz
STOP 125.000 MHz
*RB 10.0 kHz
VB 10.0 kHz
ST 60.00 msec

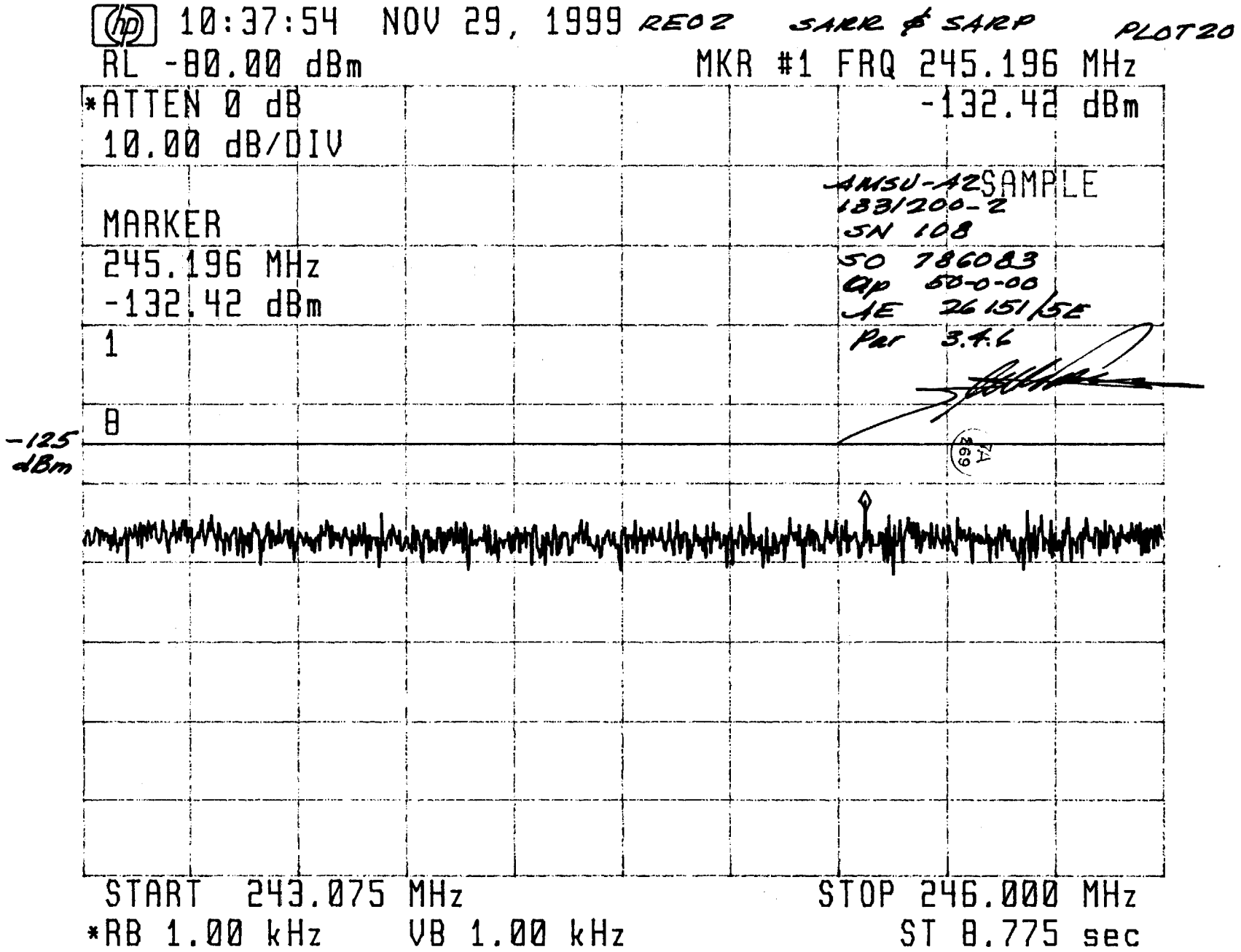

09:05:48 NOV 29, 1999 REO2 SARR & SARP PLOT 15
RL -40.00 dBm
MKR #1 FRQ 237.270 MHz
-112.49 dBm
*ATTEN 0 dB
10.00 dB/DIV
AMSU-A2 SAMPLE
133/200-2
SN 108
SO 786083
Op 50-0-00
4E 26151/5E
Par 3.4.6
MARKER
237.270 MHz
-112.62 dBm
1
8
7A 269
-100 dBm
START 236.000 MHz
STOP 240.000 MHz
*RB 300 kHz
VB 300 kHz
ST 10.00 msec

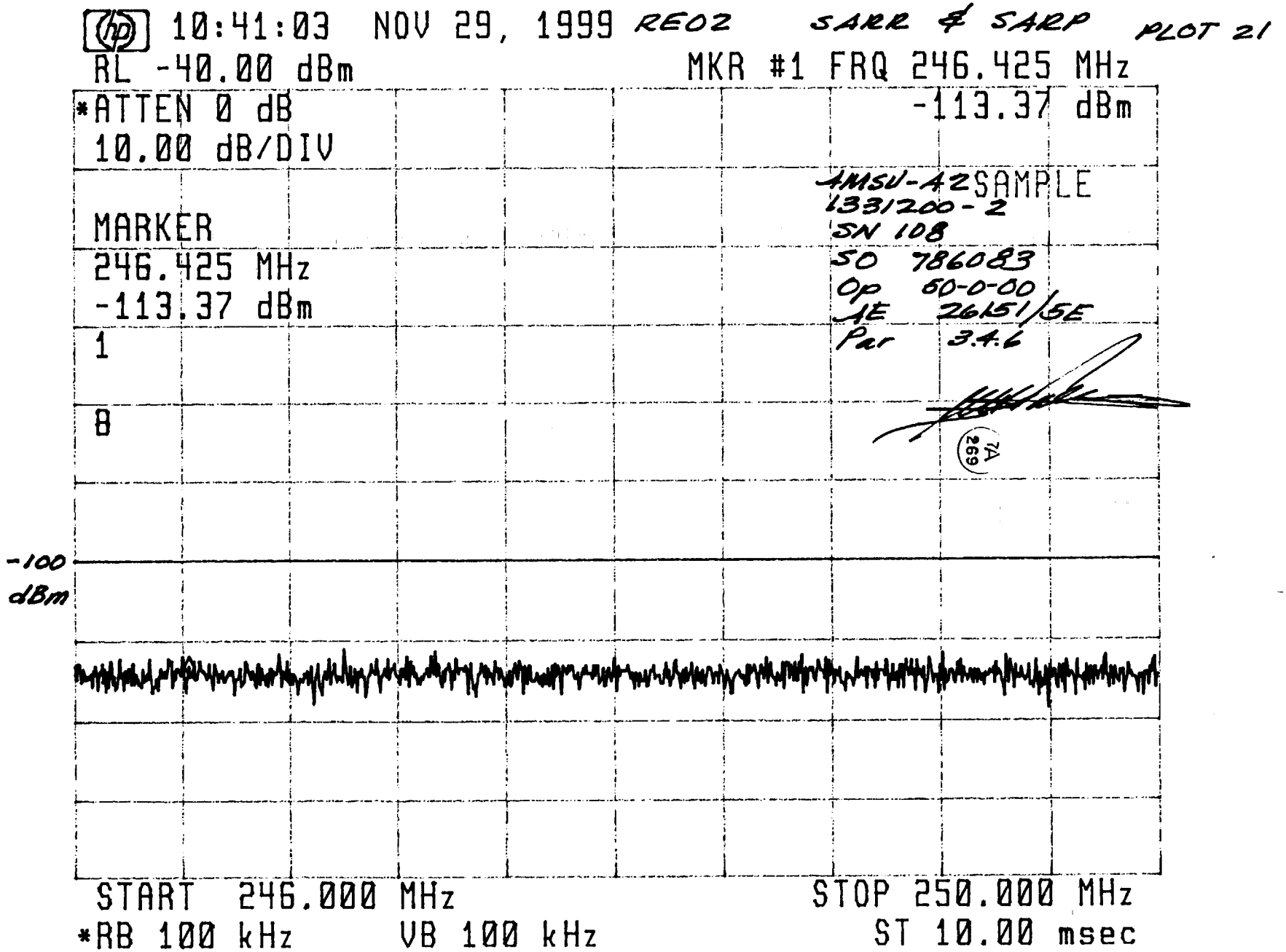

09:09:52 NOV 29, 1999 REO2 SARR & SARP PLOT 16
RL -80.00 dBm
MKR #1 FRQ 240.932 MHz
*ATTEN 0 dB
-132.31 dBm
10.00 dB/DIV
AMSU-AZ SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
JE 26151/5E
Par 3.4.6
MARKER
240.932 MHz
-132.31 dBm
1
8
-125 dBm
START 240.000 MHz
STOP 242.925 MHz
*RB 1.00 kHz
VB 1.00 kHz
ST 8.775 sec

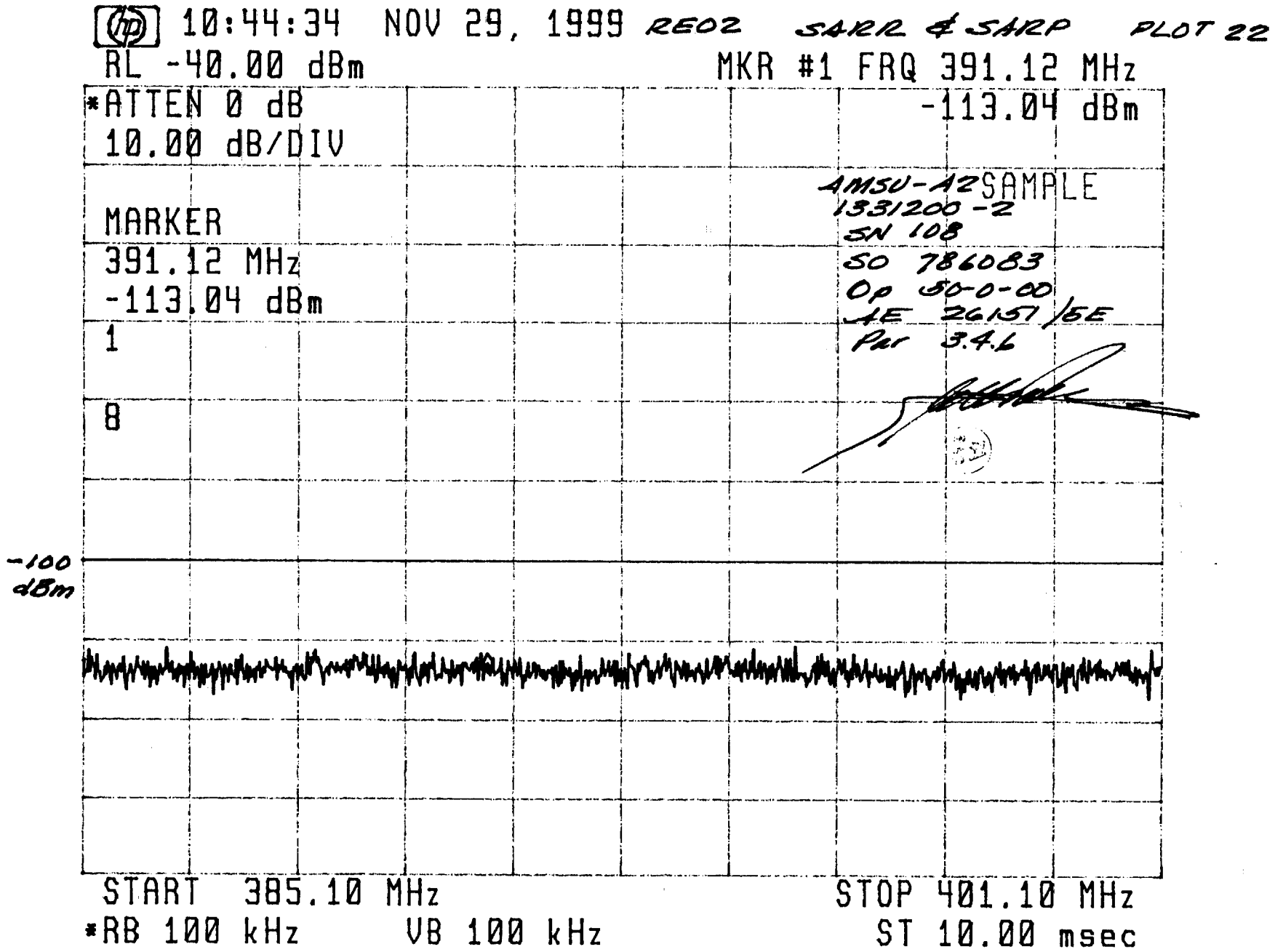

09:31:20 NOV 29, 1999 REOZ SARR & SARP PLOT 17
RL -80.00 dBm
MKR #1 FRQ 242.936 31 MHz
*ATTEN 0 dB
-146.75 dBm
10.00 dB/DIV
AN/SU-AZ SAMPLE
1331200-2
SN 108
SO 786083
Op 50-000
TE 26151/SE
Par 3.4.6
MARKER
242.936 31 MHz
-146.75 dBm
1
7
-145 dBm
START 242.925 00 MHz
STOP 242.975 00 MHz
*RB 30.0 Hz
VB 30.0 Hz
ST 166.7 sec

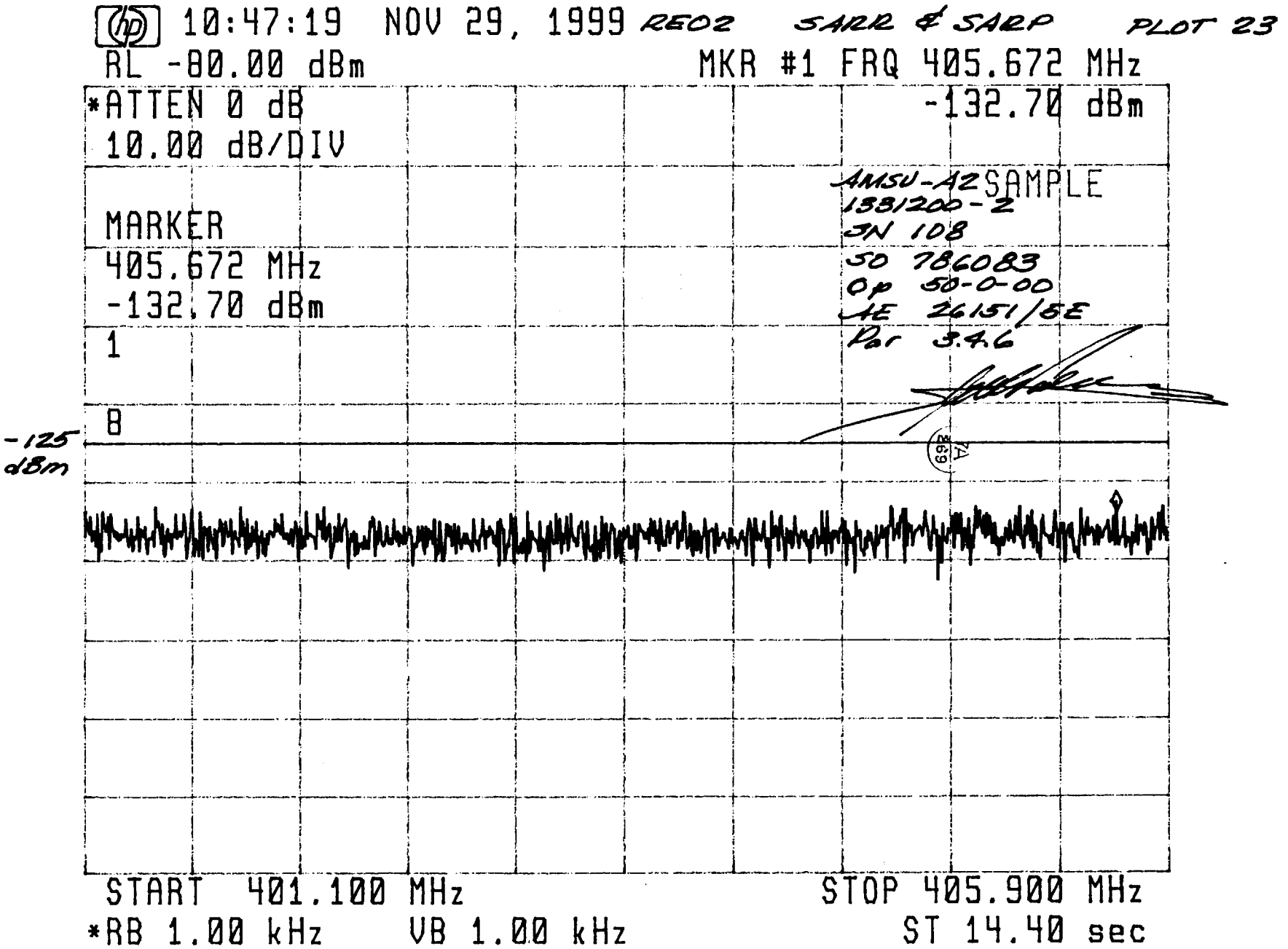

13:22:31 NOV 30, 1999 RE02 SARE & SARP PLOT 18
RL -80.00 dBm
MKR #1 FRQ 242.993 56 MHz
*ATTEN 0 dB
-150.45 dBm
10.00 dB/DIV
AM50-A2 SAMPLE
1331200-2
SN 108
SO 786083
OP 50-0-00
AE 26151/5E
Par 3.4.6
MARKER
242.993 56 MHz
-150.45 dBm
1
8
7A 269
-150 dBm
START 242.975 00 MHz
STOP 243.025 00 MHz
*RB 30.0 Hz
VB 30.0 Hz
ST 166.7 sec

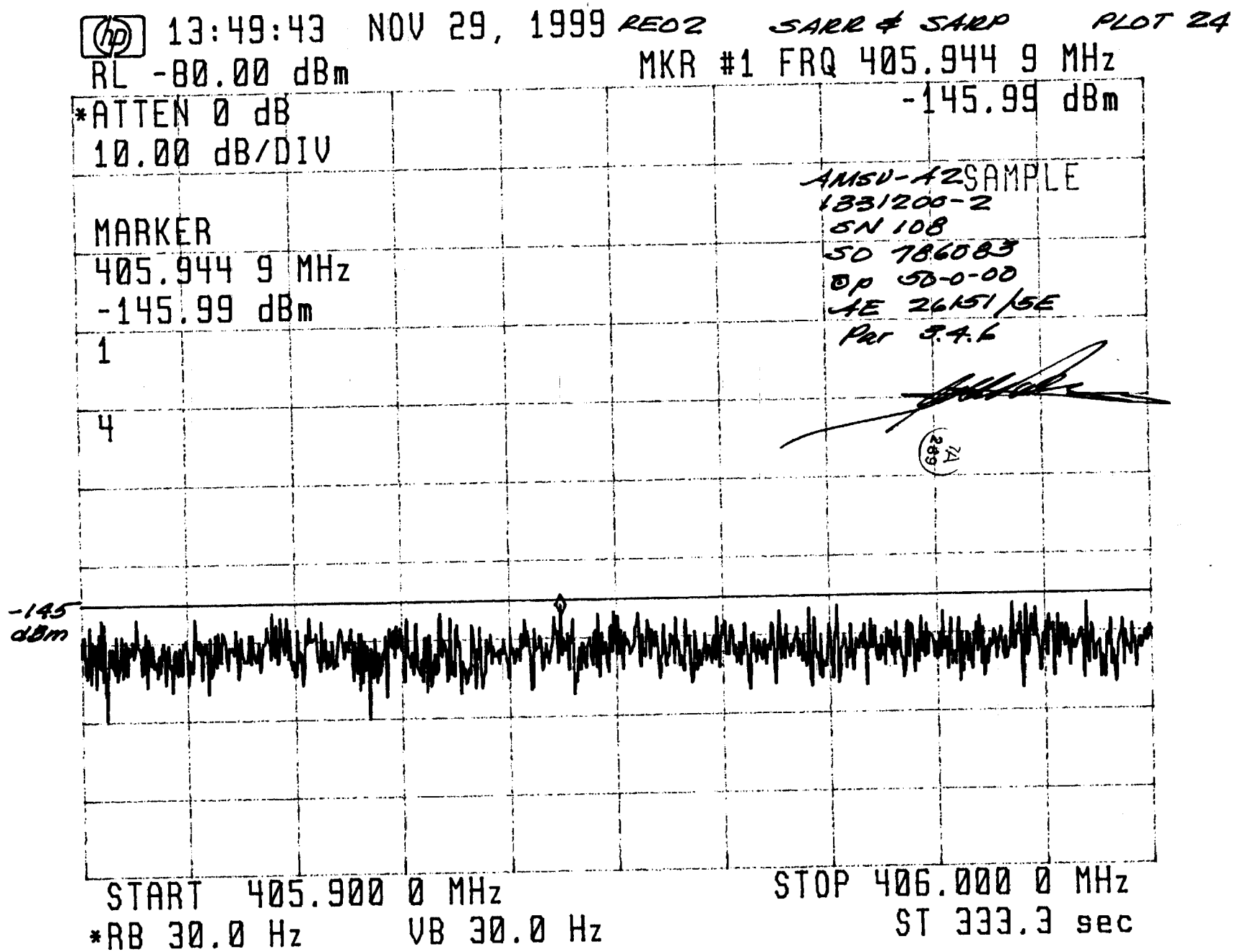

10:34:54 NOV 29, 1999 RE02 SARR & SARP PLOT 19
RL -80.00 dBm
MKR #1 FRQ 243.041 50 MHz
*ATTEN 0 dB
-145.11 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
133120-2
SN 108
SO 786083
Op 50-0-00
AE 26151/GE
Par 3.4.6
MARKER
243.041 50 MHz
-145.11 dBm
1
B
-145 dBm
START 243.025 00 MHz
STOP 243.075 00 MHz
*RB 30.0 Hz
VB 30.0 Hz
ST 166.7 sec

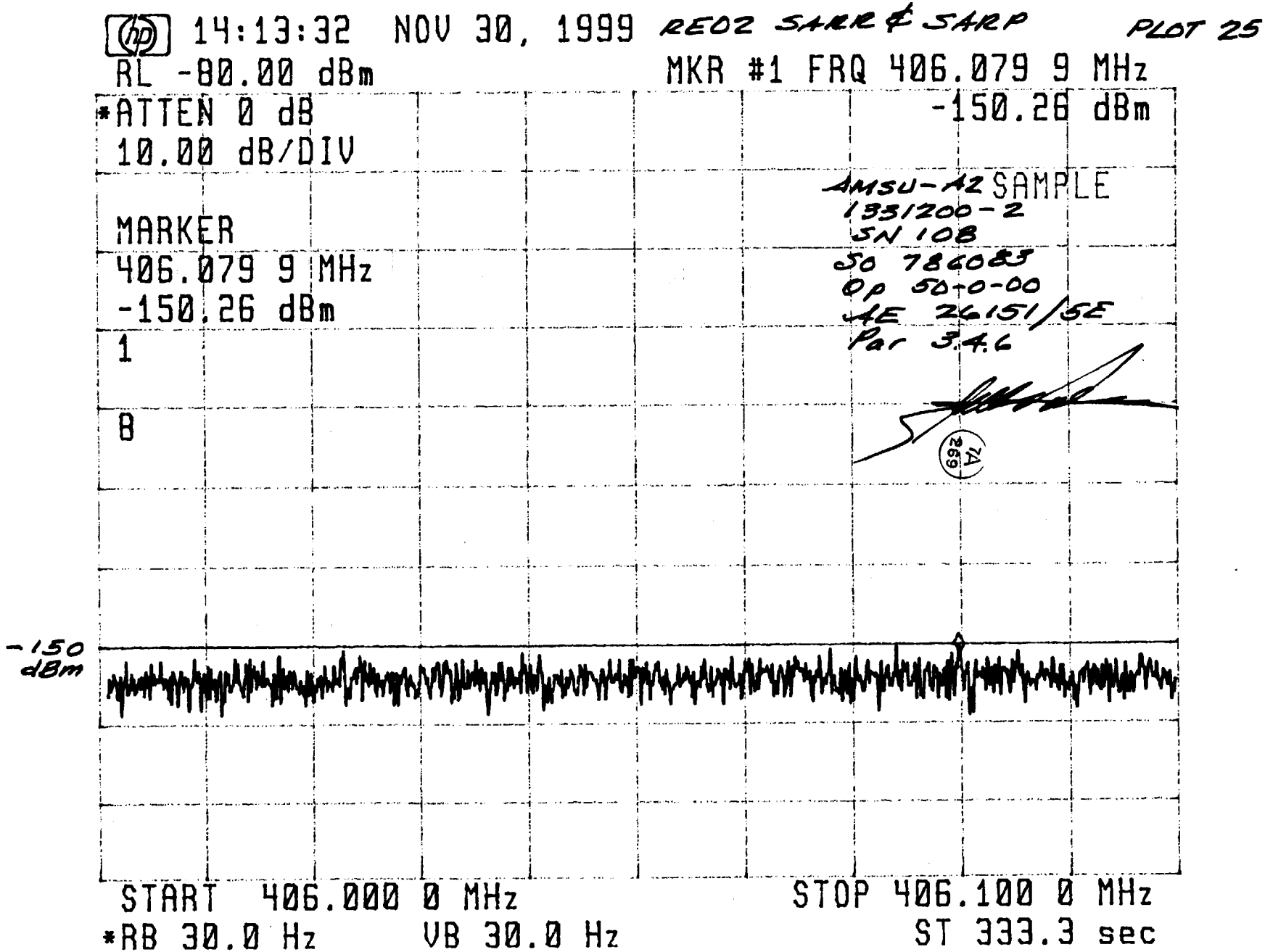

10:37:54 NOV 29, 1999 REO2 SARR & SARP PLOT20
RL -80.00 dBm
MKR #1 FRQ 245.196 MHz
*ATTEN 0 dB
-132.42 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
183/200-2
SN 108
SO 786083
QP 60-0-00
AE 26151/52
Par 3.4.6
MARKER
245.196 MHz
-132.42 dBm
1
B
-125 dBm
START 243.075 MHz
STOP 246.000 MHz
*RB 1.00 kHz
VB 1.00 kHz
ST 8.775 sec

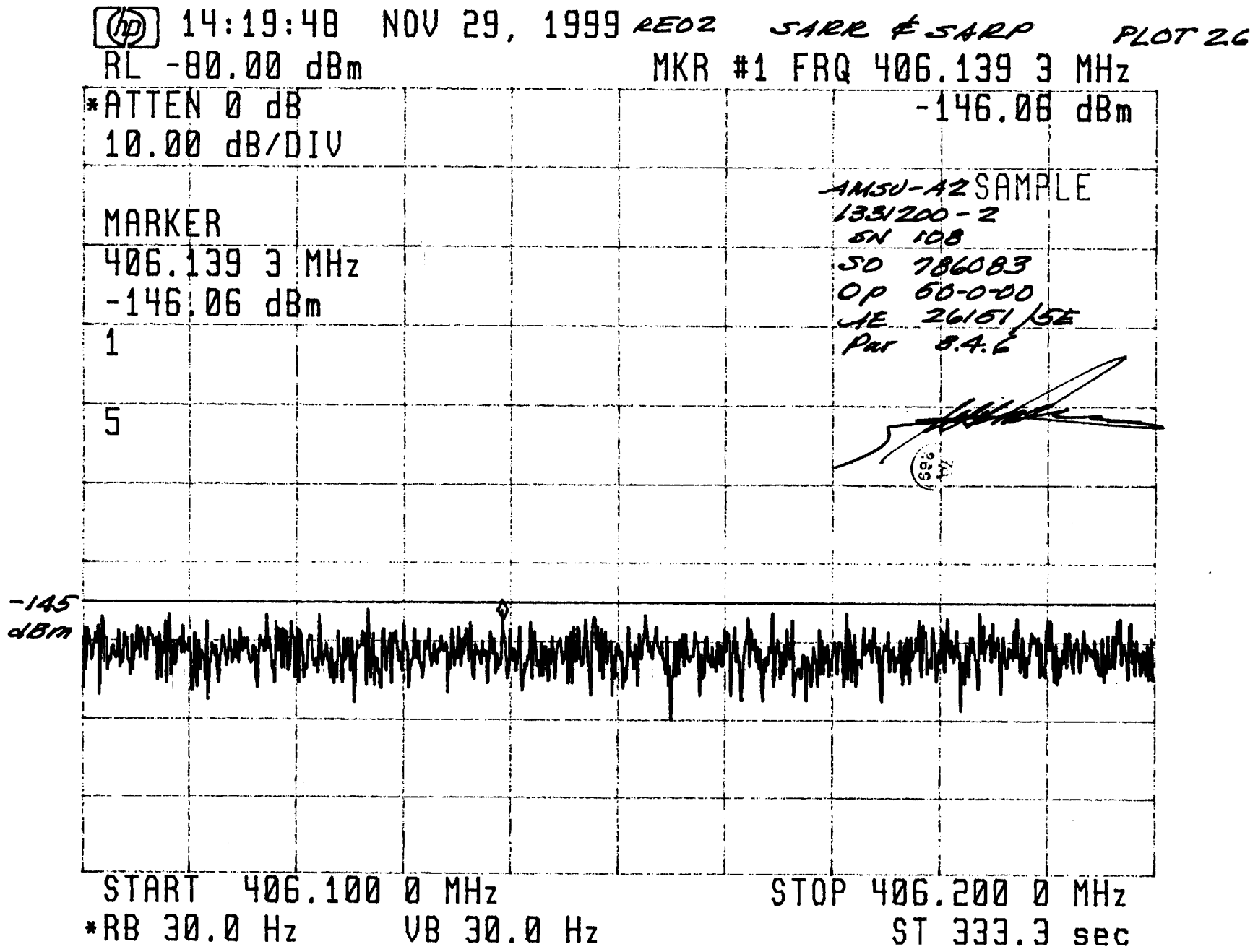

10:41:03 NOV 29, 1999 RE02 SARR & SARP PLOT 21
RL -40.00 dBm
MKR #1 FRQ 246.425 MHz
*ATTEN 0 dB
-113.37 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786083
Op 60-0-00
AE 26151/5E
Par 3.4.6
MARKER
246.425 MHz
-113.37 dBm
1
8
-100 dBm
START 246.000 MHz
STOP 250.000 MHz
*RB 100 kHz
VB 100 kHz
ST 10.00 msec

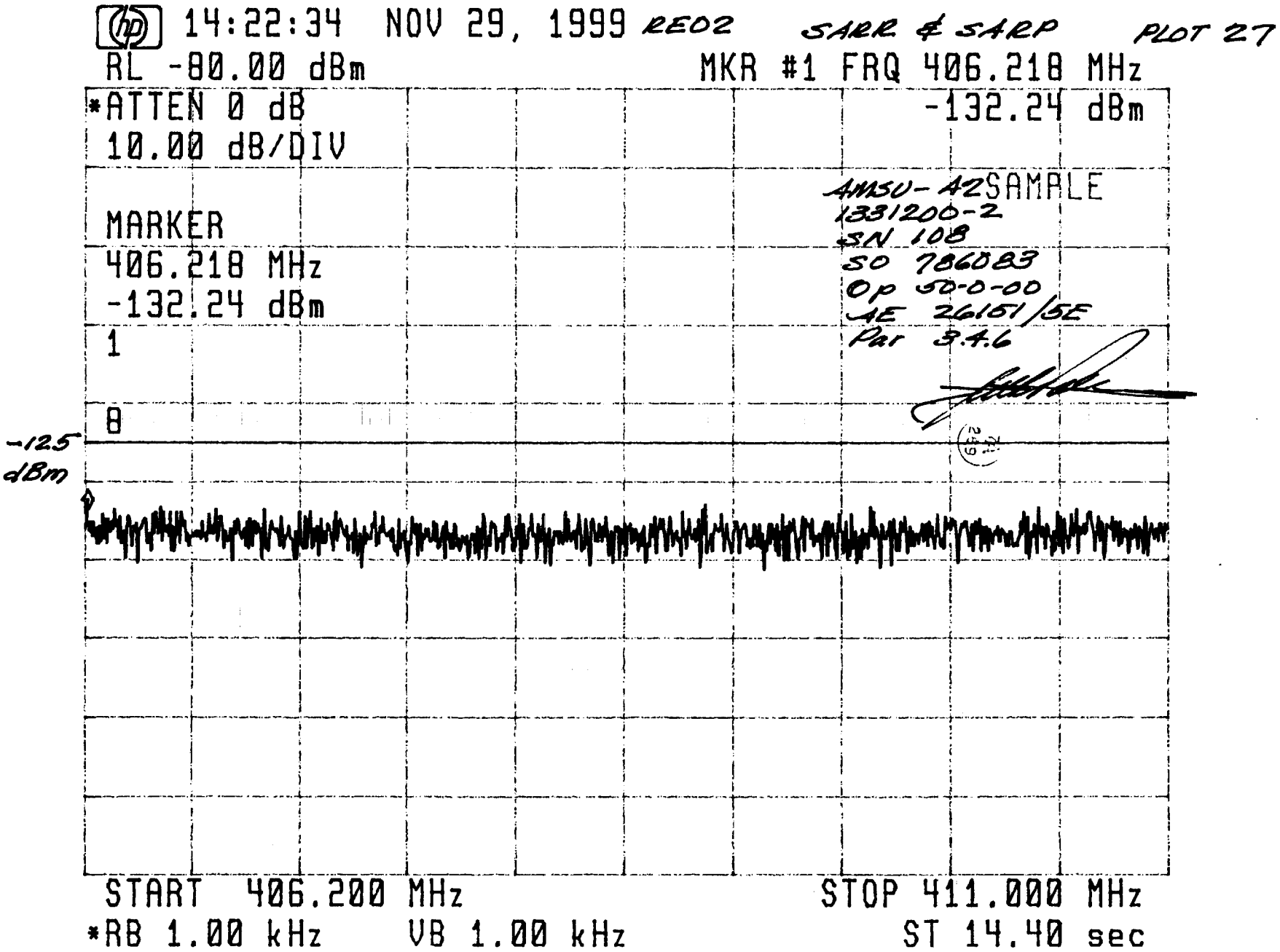

10:44:34 NOV 29, 1999 REO2 SARR & SARP PLOT 22
RL -40.00 dBm
MKR #1 FRQ 391.12 MHz
*ATTEN 0 dB
-113.04 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26157/5E
Par 3.4.6
MARKER
391.12 MHz
-113.04 dBm
1
8
-100 dBm
START 385.10 MHz
STOP 401.10 MHz
*RB 100 kHz
VB 100 kHz
ST 10.00 msec

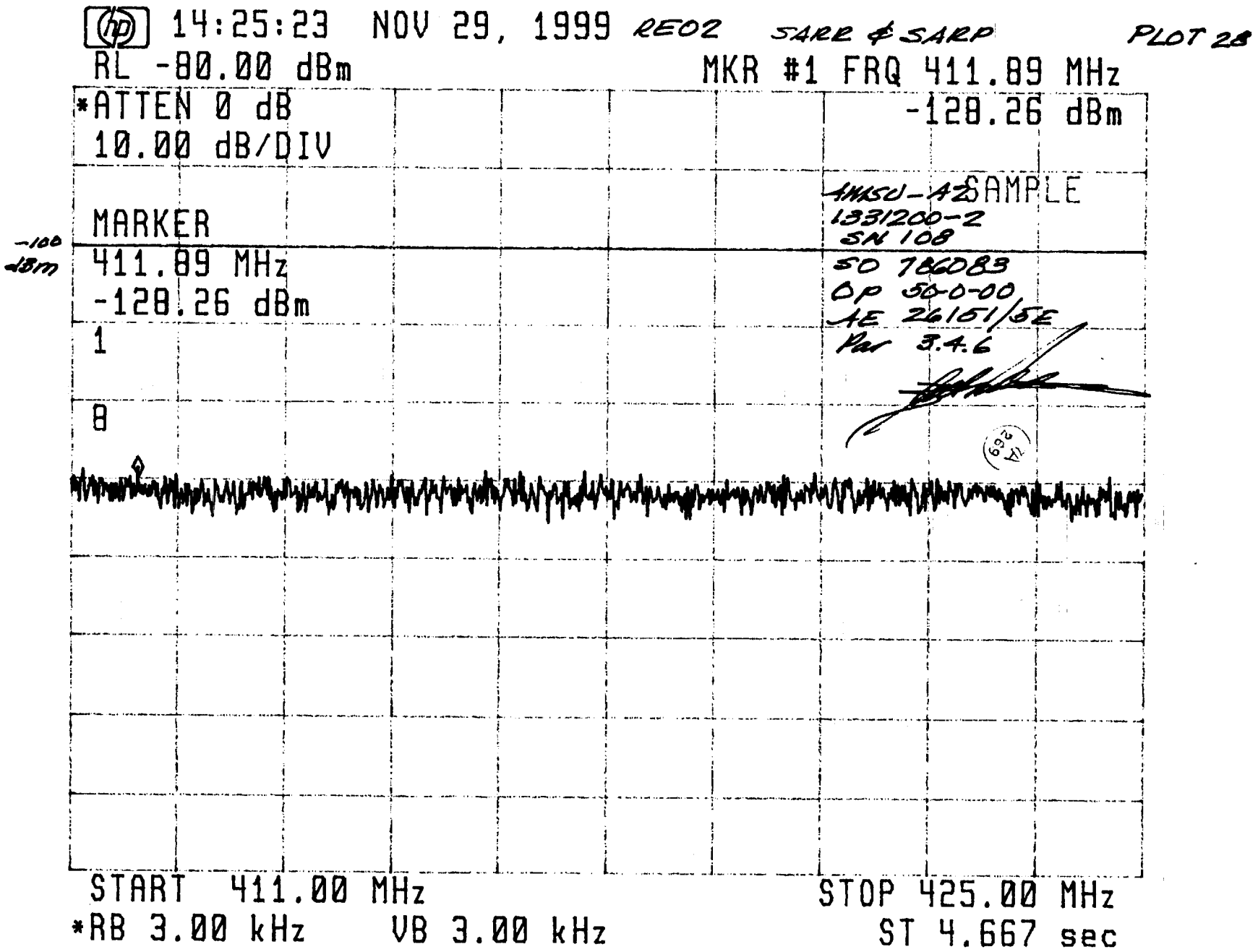

10:47:19 NOV 29, 1999 REO2 SARR & SARP PLOT 23
RL -80.00 dBm
MKR #1 FRQ 405.672 MHz
*ATTEN 0 dB
-132.70 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
1331200-2
JN 108
SO 786083
Op 50-0-00
AE 26151/5E
Par 3.4.6
MARKER
405.672 MHz
-132.70 dBm
1
B
-125 dBm
START 401.100 MHz
STOP 405.900 MHz
*RB 1.00 kHz
VB 1.00 kHz
ST 14.40 sec

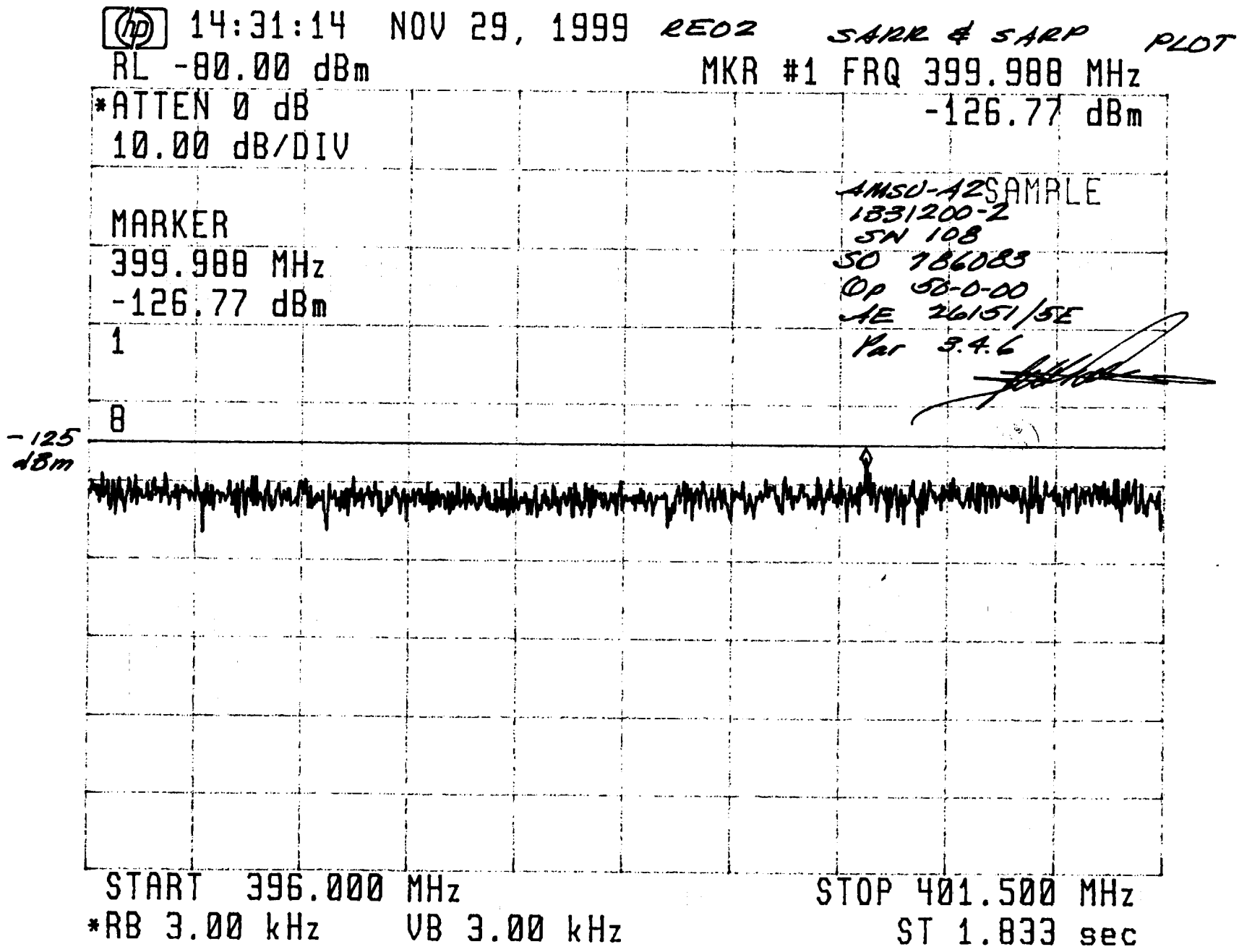

13:49:43 NOV 29, 1999 REO2 SARR & SARP PLOT 24
RL -80.00 dBm
MKR #1 FRQ 405.944 9 MHz
-145.99 dBm
*ATTEN 0 dB
10.00 dB/DIV
AM5V-42 SAMPLE
133120-2
SN 108
SO 786083
Op 50-0-00
4E 26151/5E
Par 5.4.6
MARKER
405.944 9 MHz
-145.99 dBm
1
4
-145 dBm
START 405.900 0 MHz
STOP 406.000 0 MHz
*RB 30.0 Hz
VB 30.0 Hz
ST 333.3 sec

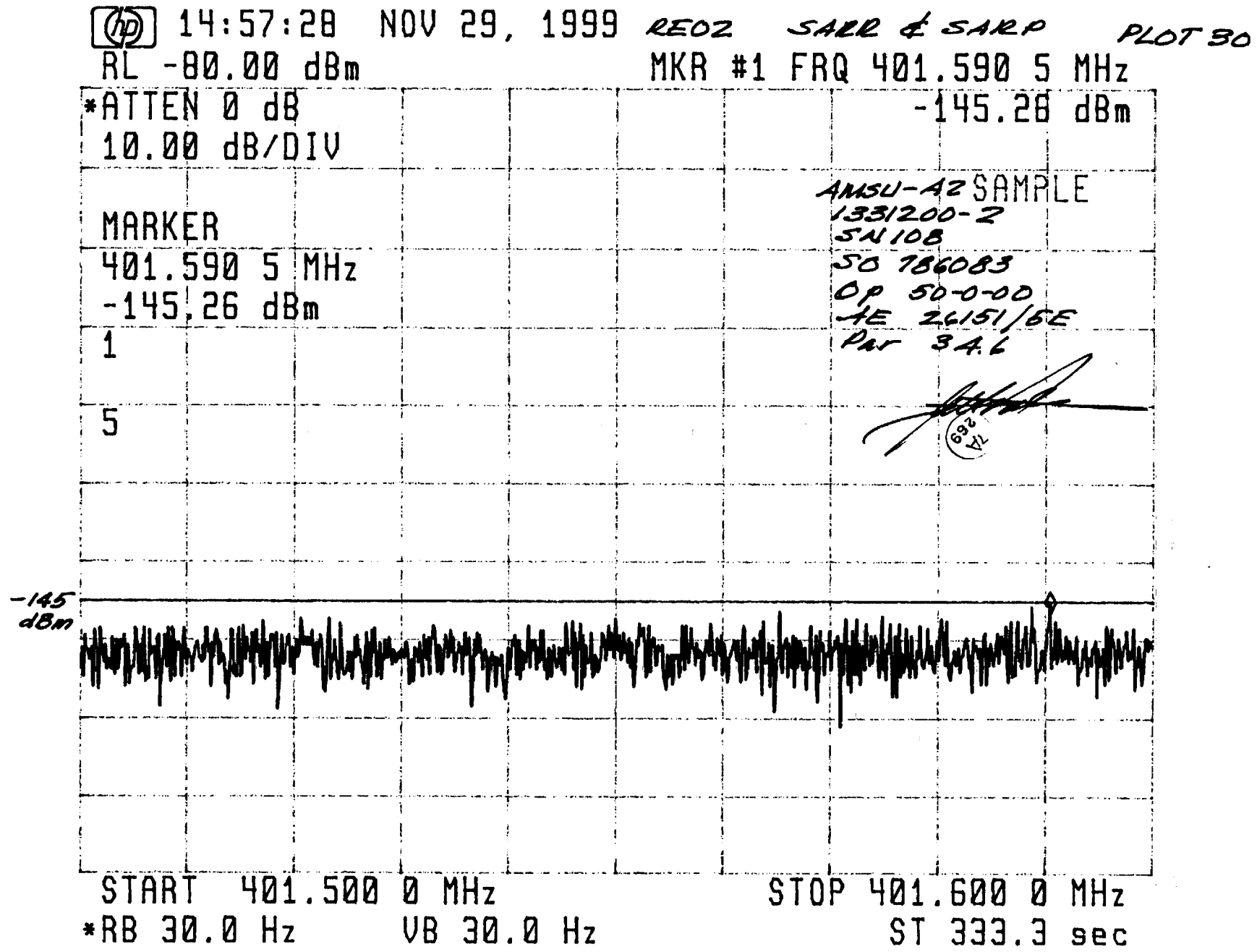

14:13:32 NOV 30, 1999 REQ2 SARR & SARP
PLOT 25
RL -80.00 dBm
MKR #1 FRQ 406.079 9 MHz
*ATTEN 0 dB
-150.26 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
133200-2
SN 108
SO 7860B3
OP 50-0-00
4E 26151/5E
Par 3.4.6
MARKER
406.079 9 MHz
-150.26 dBm
1
B
-150 dBm
START 406.000 0 MHz
STOP 406.100 0 MHz
*RB 30.0 Hz
VB 30.0 Hz
ST 333.3 sec

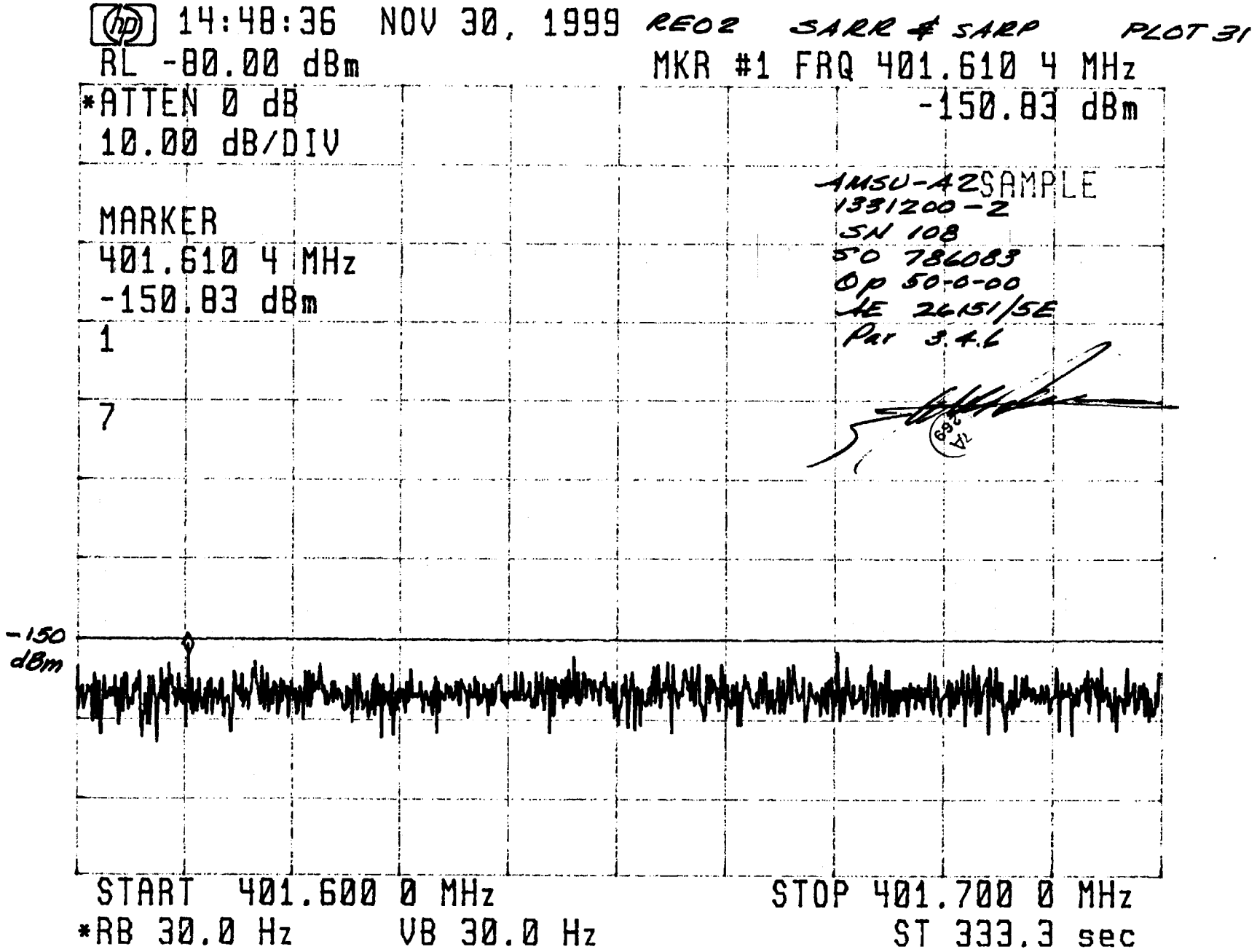

14:19:48 NOV 29, 1999 RE02 SARR & SARP PLOT 26
RL -80.00 dBm
MKR #1 FRQ 406.139 3 MHz
*ATTEN 0 dB
-146.06 dBm
10.00 dB/DIV
AM50-A2 SAMPLE
133200-2
SN 108
SO 786083
Op 60-000
AE 26151 SE
Par 3.4.6
MARKER
406.139 3 MHz
-146.06 dBm
1
5
-145 dBm
START 406.100 0 MHz
STOP 406.200 0 MHz
*RB 30.0 Hz
VB 30.0 Hz
ST 333.3 sec

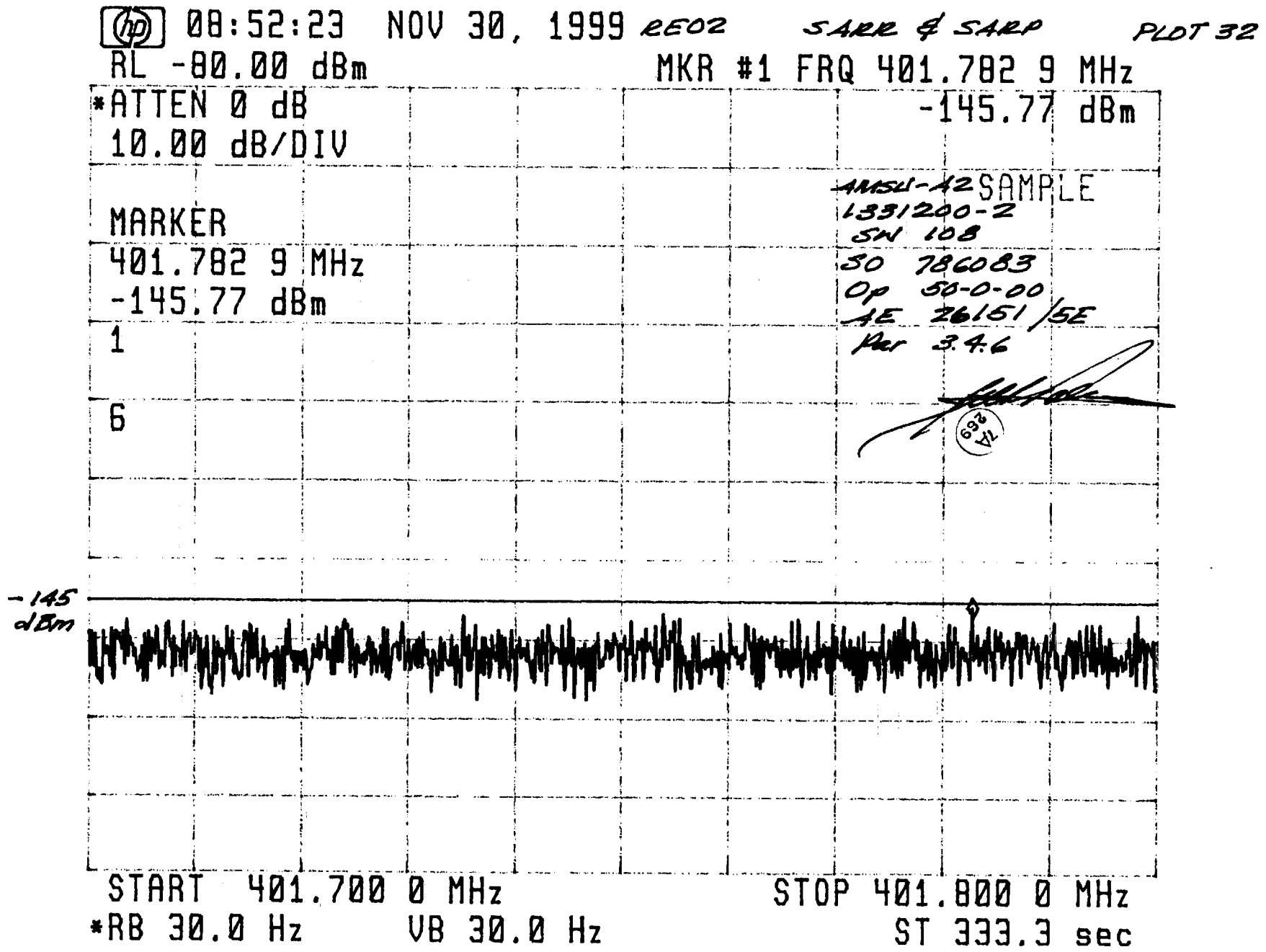

14:22:34 NOV 29, 1999 REO2
SAR & SARP
PLOT 27
RL -80.00 dBm
MKR #1 FRQ 406.218 MHz
*ATTEN 0 dB
-132.24 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5E
Par 3.4.6
MARKER
406.218 MHz
-132.24 dBm
1
8
-125 dBm
START 406.200 MHz
STOP 411.000 MHz
*RB 1.00 kHz
VB 1.00 kHz
ST 14.40 sec

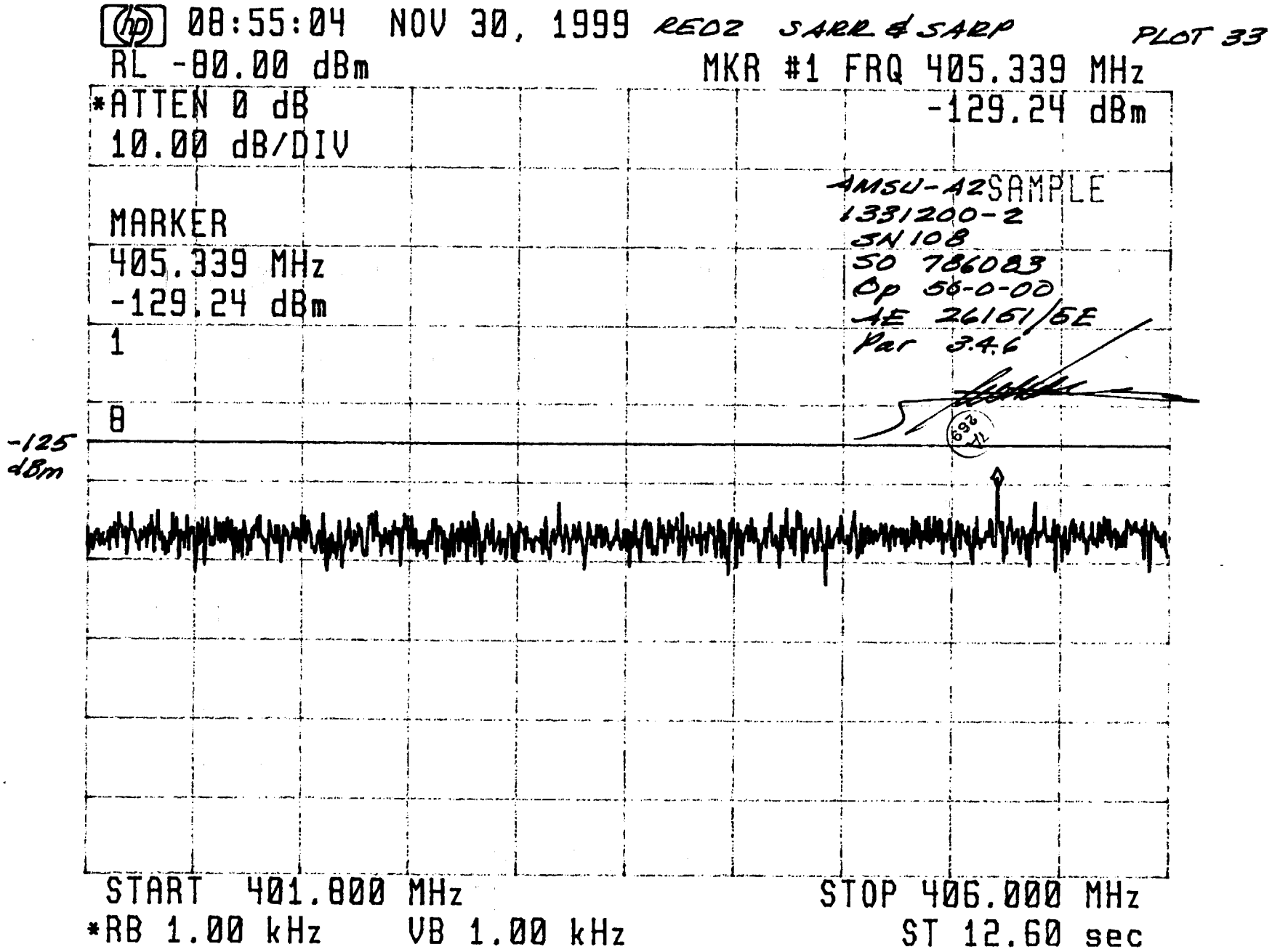

14:25:23 NOV 29, 1999 RE02 SARR & SARP PLOT 28
RL -80.00 dBm
MKR #1 FRQ 411.89 MHz
*ATTEN 0 dB
-128.26 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
1331200-2
SN 108
MARKER
-100 dBm
411.89 MHz
-128.26 dBm
SO 780083
OP 50-0-00
AE 26151/5E
Par 3.4.6
1
8
START 411.00 MHz
STOP 425.00 MHz
*RB 3.00 kHz
VB 3.00 kHz
ST 4.667 sec

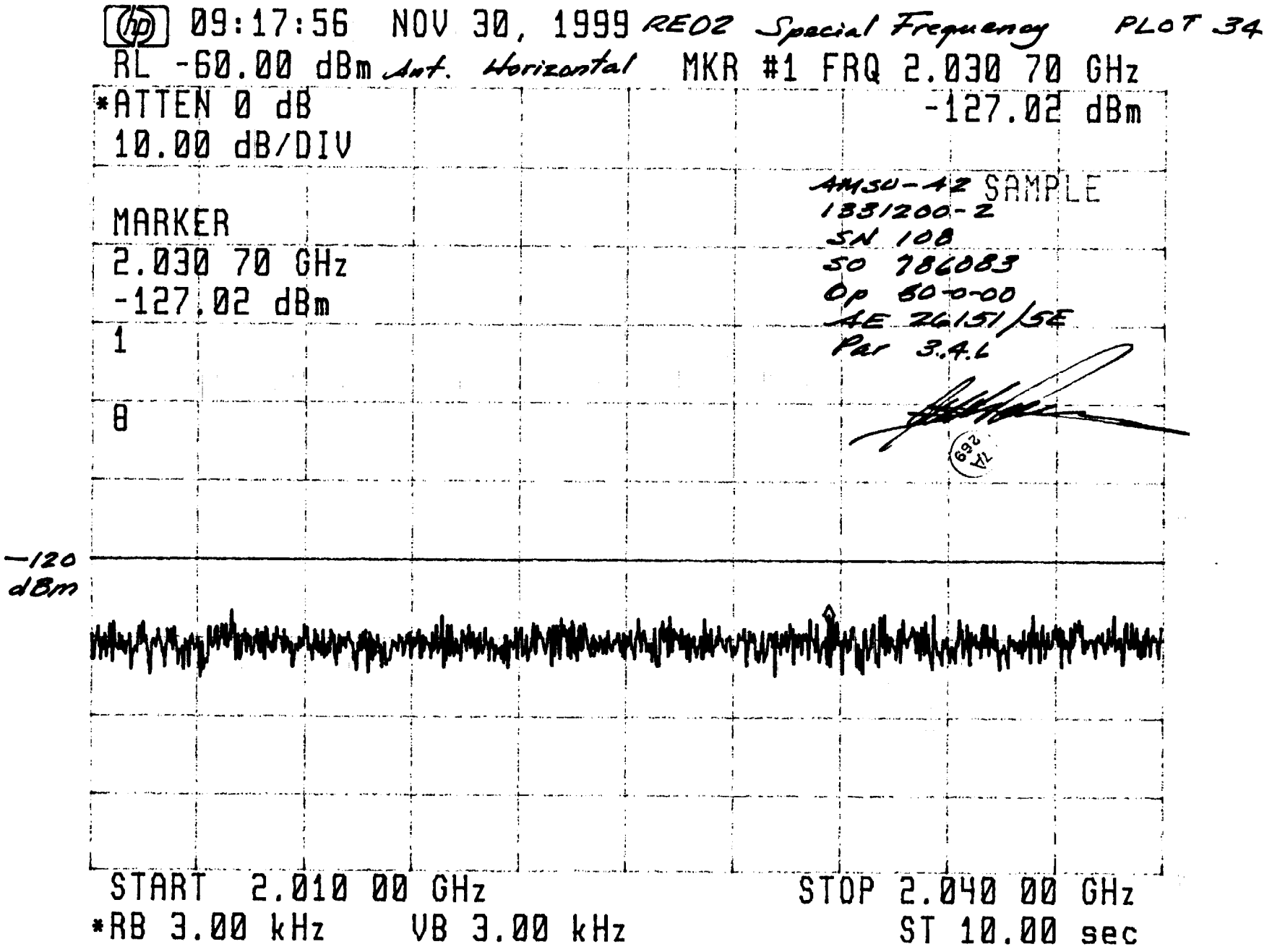

14:31:14 NOV 29, 1999 REO2 SARR & SARP PLOT 29
RL -80.00 dBm
MKR #1 FRQ 399.988 MHz
*ATTEN 0 dB
-126.77 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5E
Par 3.4.6
MARKER
399.988 MHz
-126.77 dBm
1
8
-125 dBm
START 396.000 MHz
STOP 401.500 MHz
*RB 3.00 kHz
VB 3.00 kHz
ST 1.833 sec

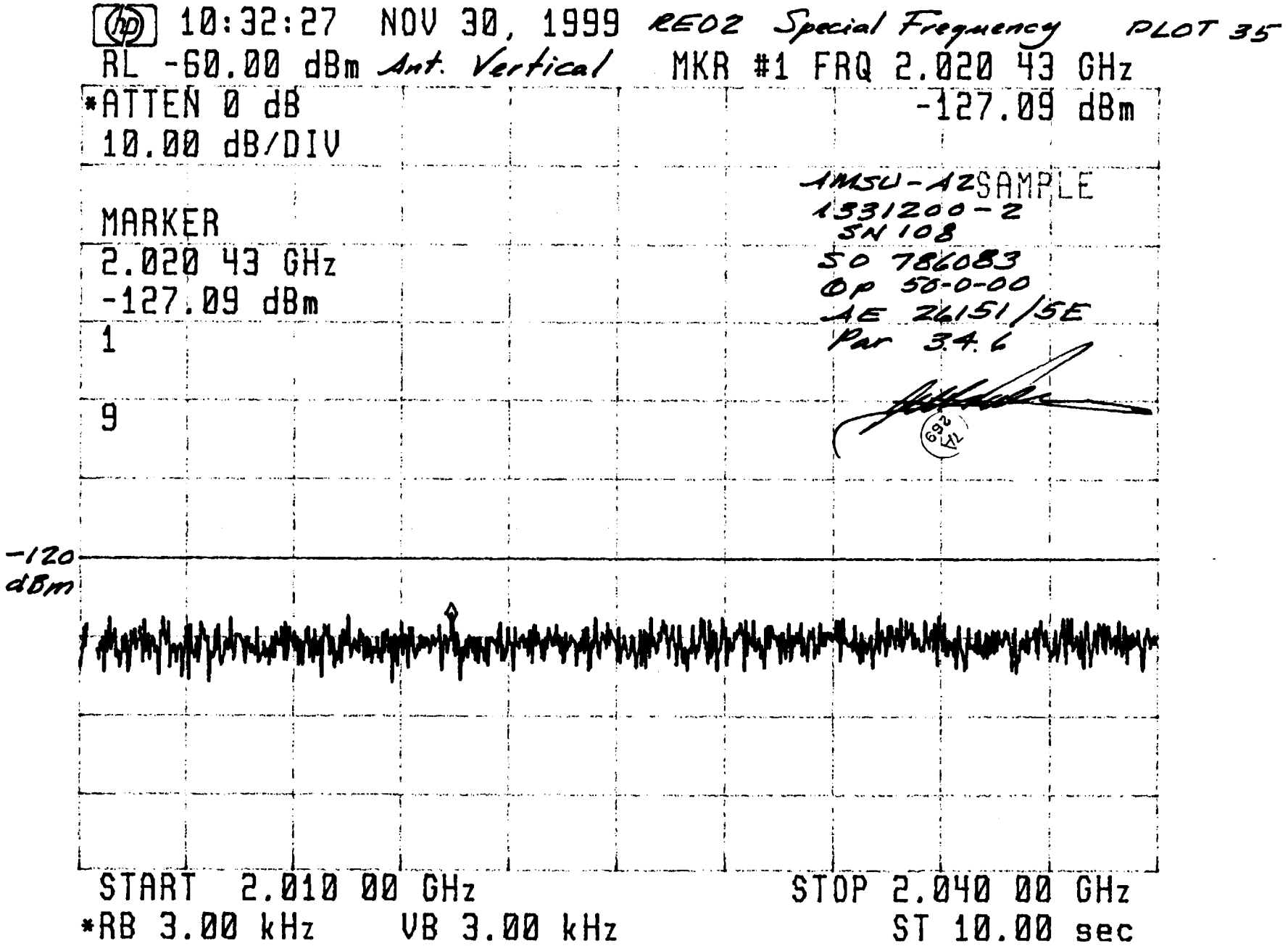

14:57:28 NOV 29, 1999 REOZ SARR & SARP PLOT 30
RL -80.00 dBm
MKR #1 FRQ 401.590 5 MHz
*ATTEN 0 dB
-145.26 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
1331200-2
SN108
SO 786083
OP 50-0-00
4E 26151/6E
Par 34.6
MARKER
401.590 5 MHz
-145.26 dBm
1
5
-145 dBm
START 401.500 0 MHz
STOP 401.600 0 MHz
*RB 30.0 Hz
VB 30.0 Hz
ST 333.3 sec

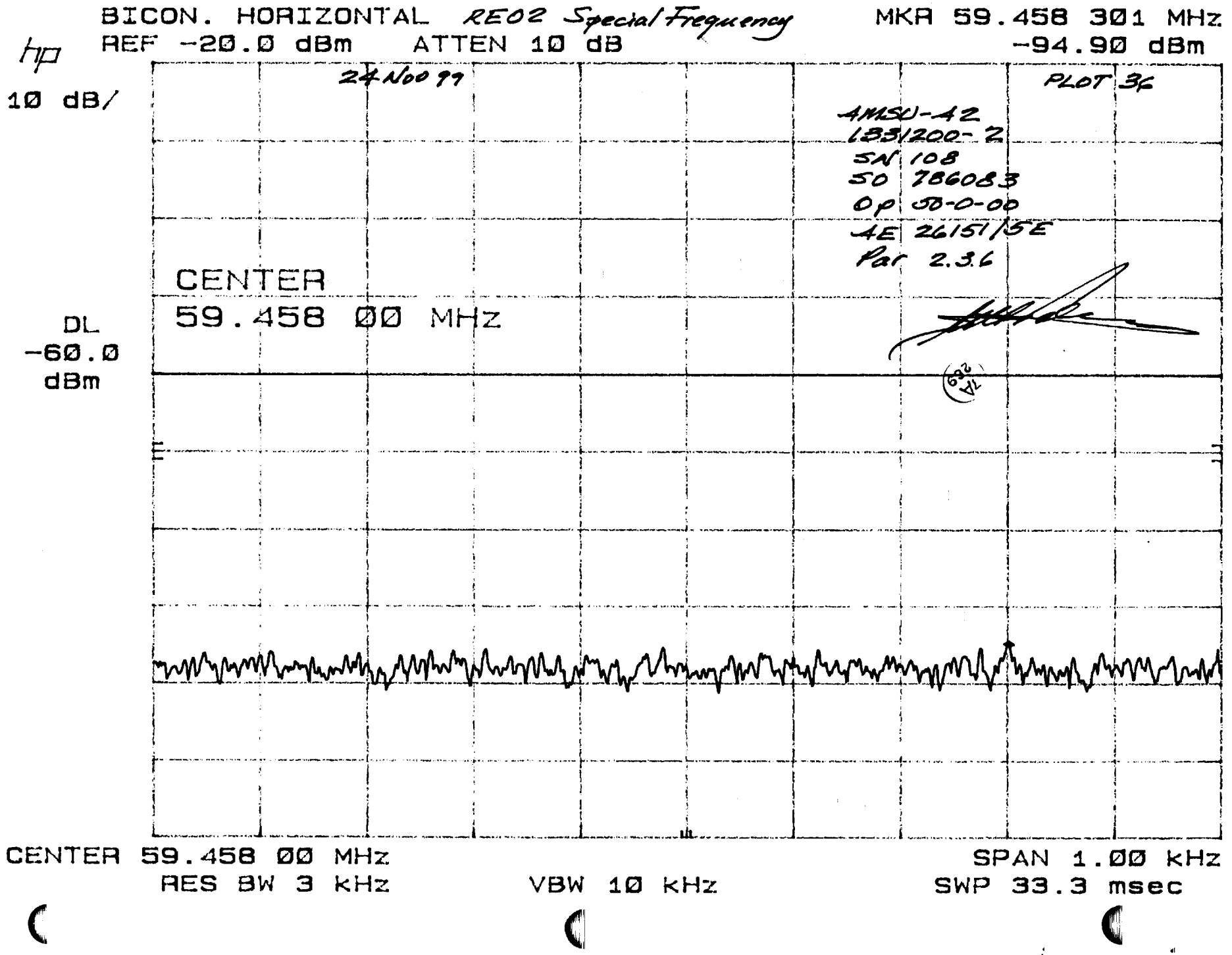

14:48:36 NOV 30, 1999 REO2 SARR & SARP PLOT 31
RL -80.00 dBm
MKR #1 FRQ 401.610 4 MHz
*ATTEN 0 dB
-150.83 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
HE 26151/5E
Par 3.4.6
MARKER
401.610 4 MHz
-150.83 dBm
1
7
-150 dBm
START 401.600 0 MHz
STOP 401.700 0 MHz
*RB 30.0 Hz
VB 30.0 Hz
ST 333.3 sec


08:52:23 NOV 30, 1999 EE02 SARR & SARP PLOT 32
RL -80.00 dBm
MKR #1 FRQ 401.782 9 MHz
*ATTEN 0 dB
-145.77 dBm
10.00 dB/DIV
ANSU-42 SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/52E
Per 3.4.6
MARKER
401.782 9 MHz
-145.77 dBm
1
6
-145 dBm
START 401.700 0 MHz
STOP 401.800 0 MHz
*RB 30.0 Hz
VB 30.0 Hz
ST 333.3 sec


08:55:04 NOV 30, 1999 REO2 SARR & SARP
PLOT 33
RL -80.00 dBm
MKR #1 FRQ 405.339 MHz
*ATTEN 0 dB
-129.24 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786083
Op 56-0-00
AE 26161/6E
Par 3.4.6
MARKER
405.339 MHz
-129.24 dBm
1
8
-125 dBm
START 401.800 MHz
STOP 406.000 MHz
*RB 1.00 kHz
VB 1.00 kHz
ST 12.60 sec


09:17:56 NOV 30, 1999 REO2 Special Frequency PLOT 34
RL -60.00 dBm Ant. Horizontal MKR #1 FRQ 2.030 70 GHz
*ATTEN 0 dB
-127.02 dBm
10.00 dB/DIV
AM30-42 SAMPLE
1331200-2
SN 108
SO 786083
Op 60-0-00
AE 26151/SE
Par 3.4.6
MARKER
2.030 70 GHz
-127.02 dBm
1
8
-120 dBm
START 2.010 00 GHz
STOP 2.040 00 GHz
*RB 3.00 kHz
VB 3.00 kHz
ST 10.00 sec


10:32:27 NOV 30, 1999 REO2 Special Frequency PLOT 35
RL -60.00 dBm Ant. Vertical MKR #1 FRQ 2.020 43 GHz
*ATTEN 0 dB -127.09 dBm
10.00 dB/DIV
AMSU-AZ SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 24151/5E
Par 3.4.6
MARKER
2.020 43 GHz
-127.09 dBm
1
9
-120 dBm
START 2.010 00 GHz
STOP 2.040 00 GHz
*RB 3.00 kHz VB 3.00 kHz
ST 10.00 sec


BICON. HORIZONTAL RE02 Special Frequency
MKR 59.458 301 MHz
REF -20.0 dBm ATTEN 10 dB
-94.90 dBm
hp
24 Nov 99
PLOT 36
10 dB/
AMSU-42
183/200-2
SN 108
SO 786083
Op 30-0-00
4E 26151/5E
Par 2.3.6
CENTER
59.458 00 MHz
DL
-60.0
dBm
CENTER 59.458 00 MHz
RES BW 3 kHz
VBW 10 kHz
SPAN 1.00 kHz
SWP 33.3 msec

BICON. VERTICAL ZE02 Special Frequency MKR 59.457 786 MHz
REF -20.0 dBm ATTEN 10 dB -94.10 dBm

hp

24 Nov99 PLOT 87

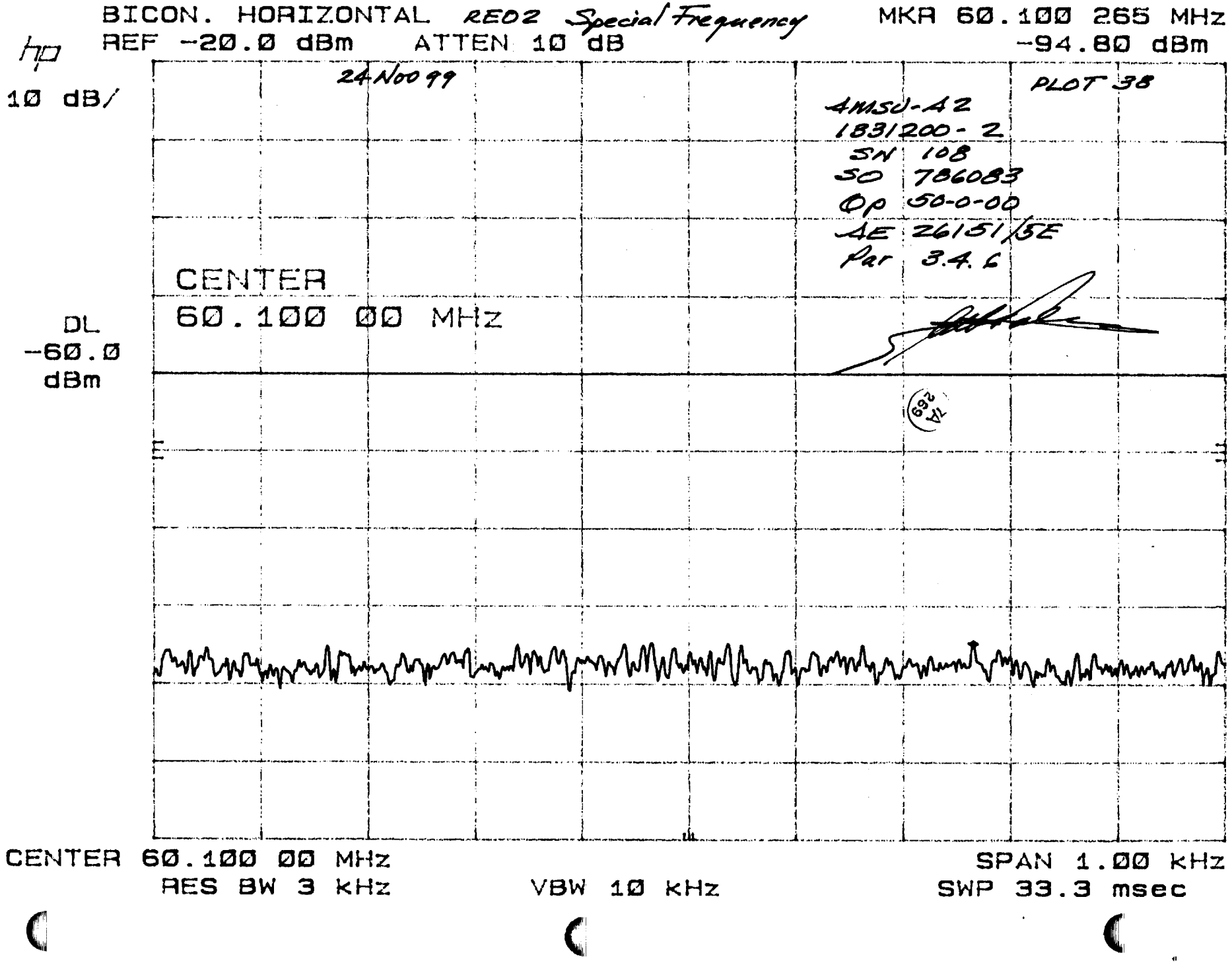
AMSU-A2
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/SE
Par 3.4.6

10 dB/

CENTER
59.458 00 MHz

DL
-60.0
dBm

CENTER 59.458 00 MHz SPAN 1.00 kHz
RES BW 3 kHz VBW 10 kHz SWP 33.3 msec


BICON. HORIZONTAL REO2 Special Frequency
MKR 60.100 265 MHz
REF -20.0 dBm
ATTEN 10 dB
-94.80 dBm
hp
24 Nov 99
PLOT 38
10 dB/
AMSU-A2
1831200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/52
Par 3.4.6
CENTER
60.100 00 MHz
DL
-60.0
dBm
CENTER 60.100 00 MHz
SPAN 1.00 kHz
RES BW 3 kHz
VBW 10 kHz
SWP 33.3 msec

BICON. VERTICAL REF02 Special Frequency
hp
REF -20.0 dBm ATTEN 10 dB
MKR 60.099 928 MHz
-92.50 dBm

24 NOV 99
PLOT 39

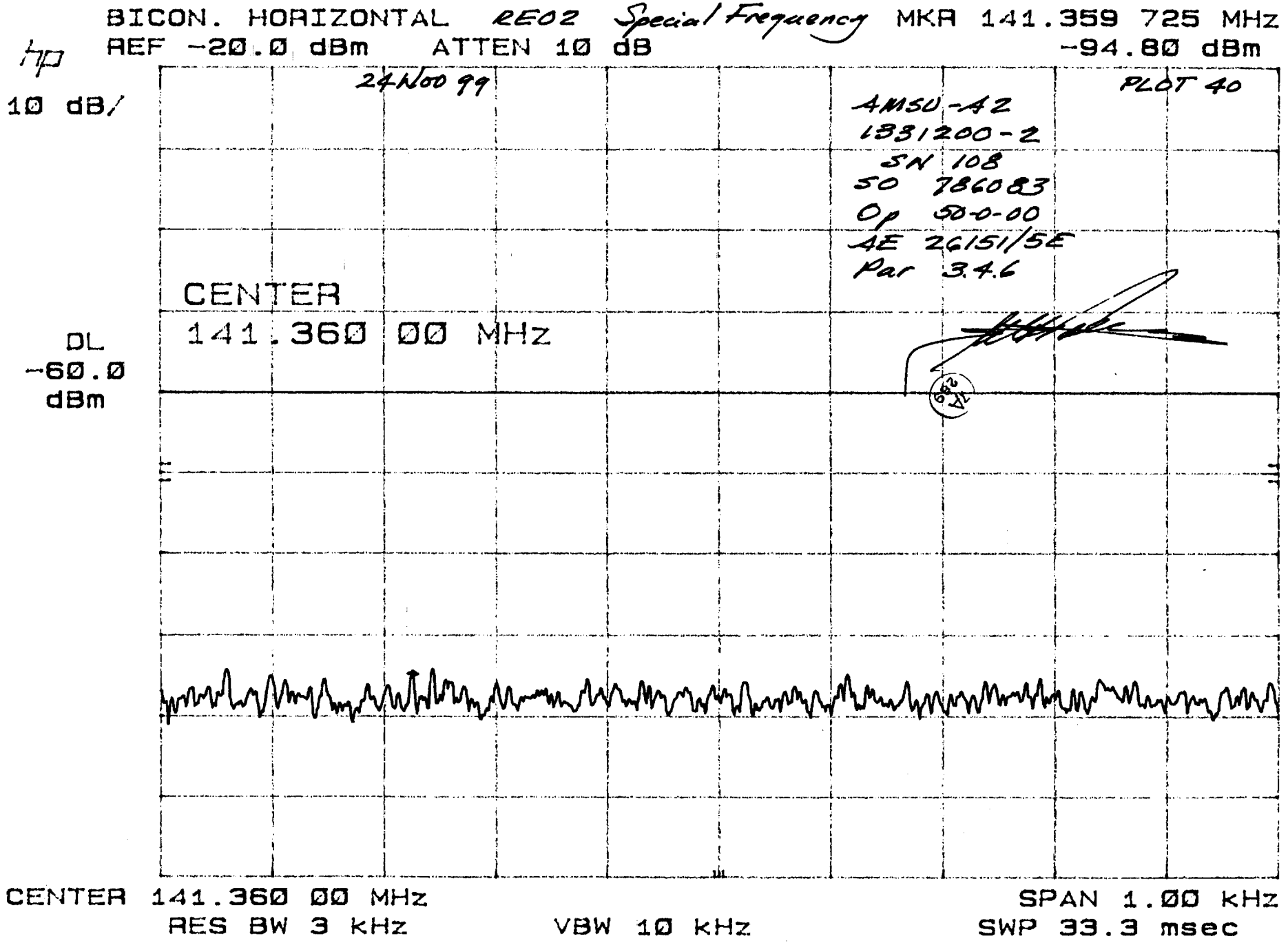
AMSU-AZ
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5E
Par 3.4.6

10 dB/

CENTER
60.100 00 MHz

DL
-60.0
dBm

CENTER 60.100 00 MHz
RES BW 3 kHz
VBW 10 kHz
SPAN 1.00 kHz
SWP 33.3 msec


BICON. HORIZONTAL RE02 Special Frequency MKR 141.359 725 MHz
REF -20.0 dBm ATTEN 10 dB -94.80 dBm
24Nov 99
PLOT 40
10 dB/
AMSU-A2
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5E
Par 3.4.6
CENTER
141.360 00 MHz
DL
-60.0
dBm
CENTER 141.360 00 MHz
SPAN 1.00 kHz
RES BW 3 kHz
VBW 10 kHz
SWP 33.3 msec

BICON. VERTICAL REO2 Special Frequency MKR 141.359 578 MHz
REF -20.0 dBm ATTEN 10 dB -94.20 dBm

hp

PLOT 41

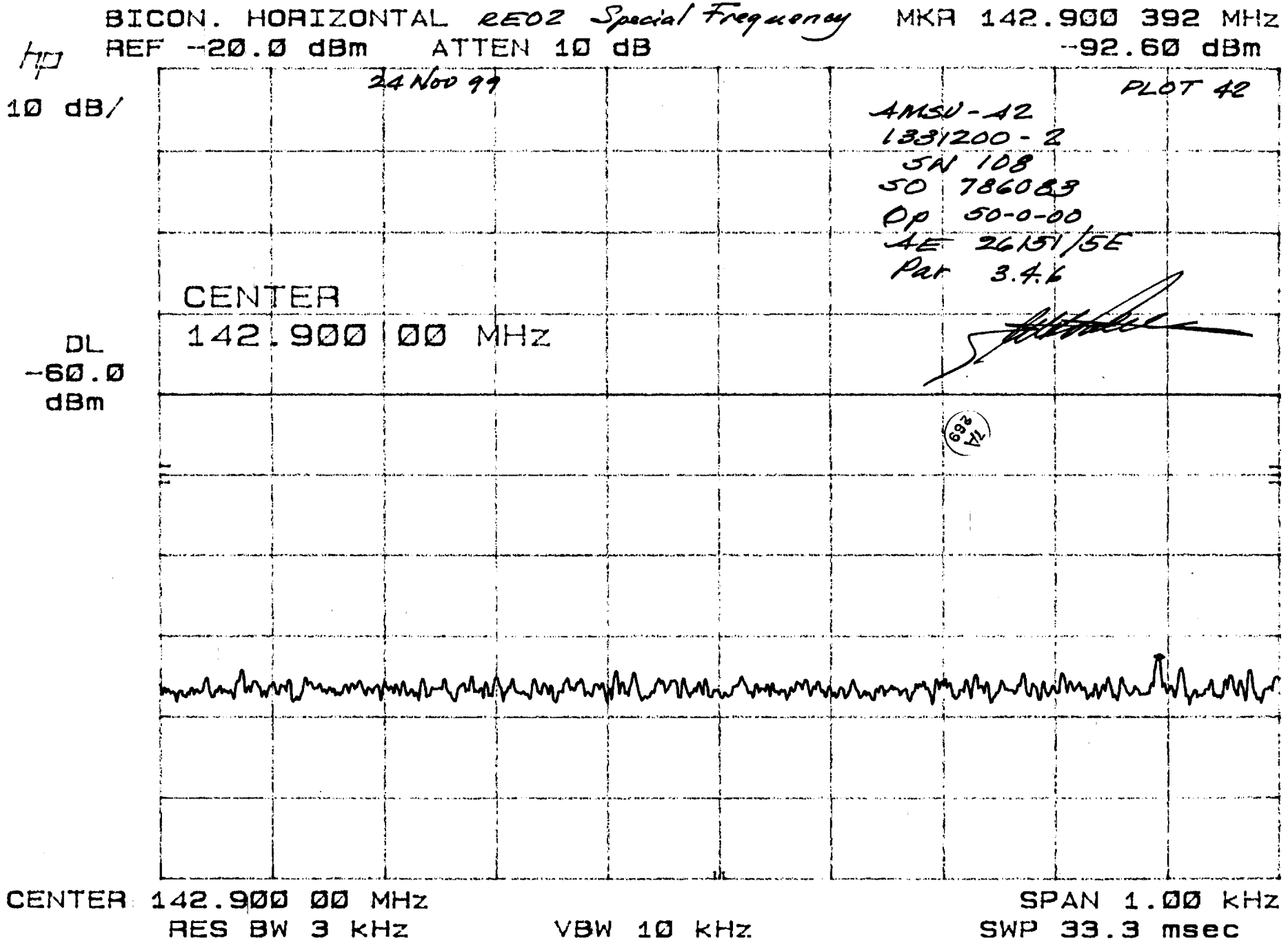
AMSU-42
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5E
Par 3.4.6

10 dB/

CENTER
141.360 00 MHz

DL
-60.0
dBm

CENTER 141.360 00 MHz SPAN 1.00 kHz
RES BW 3 kHz VBW 10 kHz SWP 33.3 msec


BICON. HORIZONTAL EE02 Special Frequency
MKR 142.900 392 MHz
REF -20.0 dBm
ATTEN 10 dB
-92.60 dBm
24 Nov 99
PLOT 42
10 dB/
AMSU-42
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 2651/5E
Par 3.4.6
CENTER
142.900 00 MHz
DL
-60.0
dBm
CENTER 142.900 00 MHz
SPAN 1.00 kHz
RES BW 3 kHz
VBW 10 kHz
SWP 33.3 msec

BICON. VERTICAL EE02 Special Frequency MKR 142.899 649 MHz

REF -20.0 dBm ATTEN 10 dB -92.70 dBm

hp

10 dB/

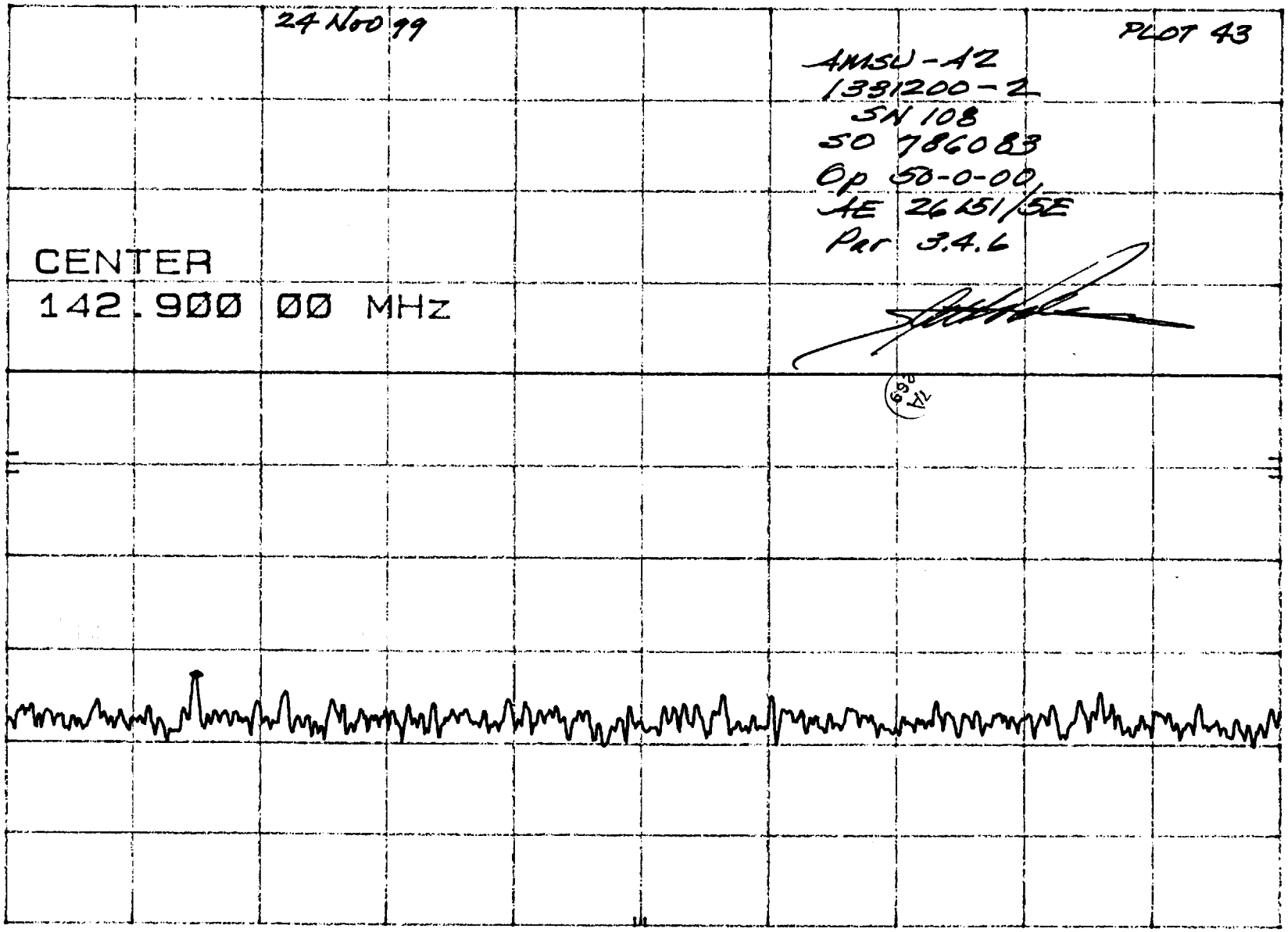
24 Nov 99

PLOT 43

AN/SU-42
1331200-2
SN 108
50 786083
Op 50-0-00
AE 2651/5E
Par 3.4.6

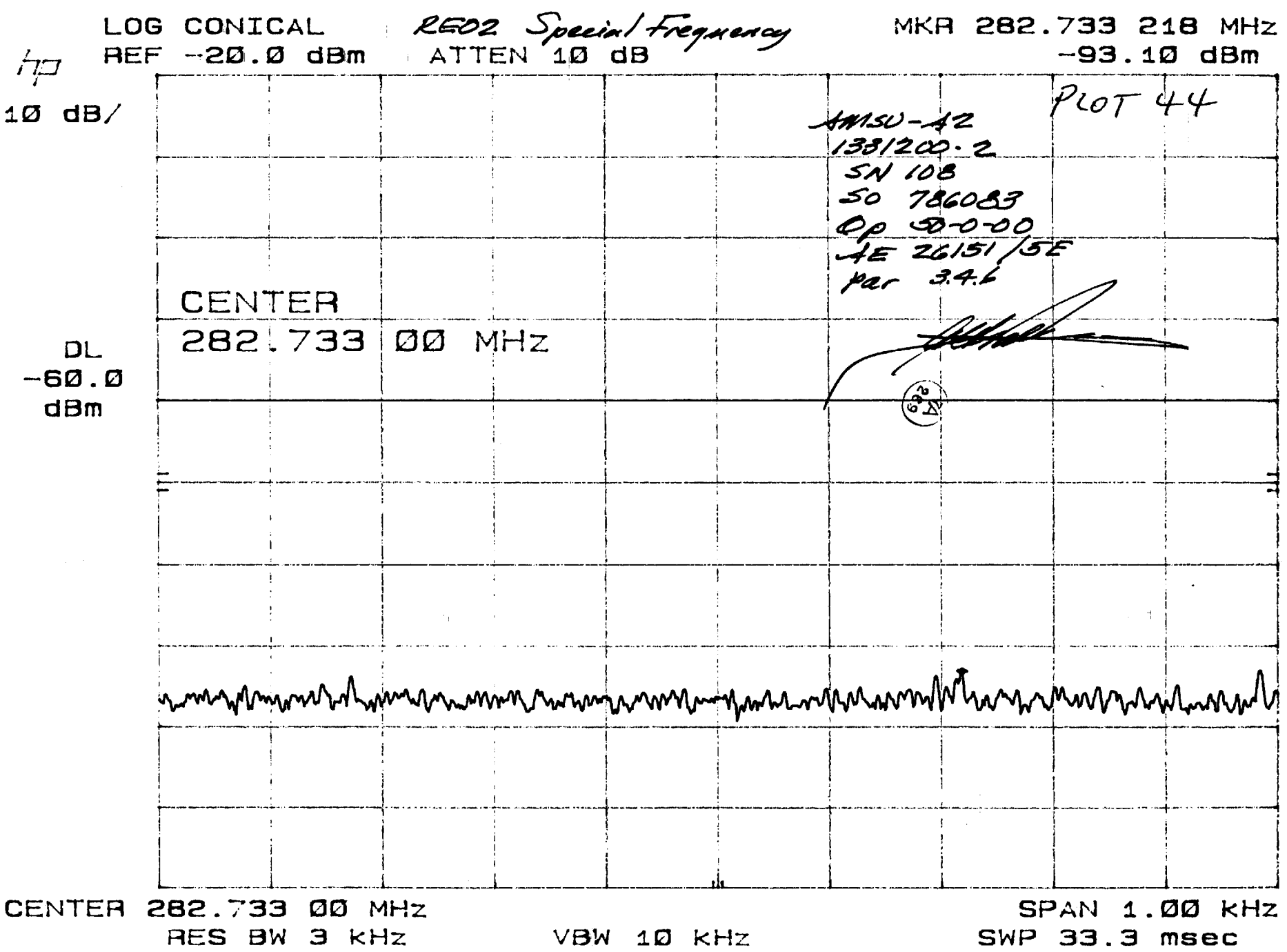
CENTER
142.900 00 MHz

DL
-60.0
dBm



CENTER 142.900 00 MHz SPAN 1.00 kHz

RES BW 3 kHz VBW 10 kHz SWP 33.3 msec


LOG CONICAL
REG2 Special Frequency
MKR 282.733 218 MHz
REF -20.0 dBm
ATTEN 10 dB
-93.10 dBm
10 dB/
PLOT 44
AM1SU-42
133120D-2
SN 108
SO 786083
Op 50-0-00
4E 26151/5E
par 3.4.6
CENTER
282.733 00 MHz
DL
-60.0
dBm
CENTER 282.733 00 MHz
SPAN 1.00 kHz
RES BW 3 kHz
VBW 10 kHz
SWP 33.3 msec

LOG CONICAL
REF -20.0 dBm

REO2 Special Frequency
ATTEN 10 dB

MKR 285.813 242 MHz
-94.50 dBm

hp

24 Nov 99

PLOT 45

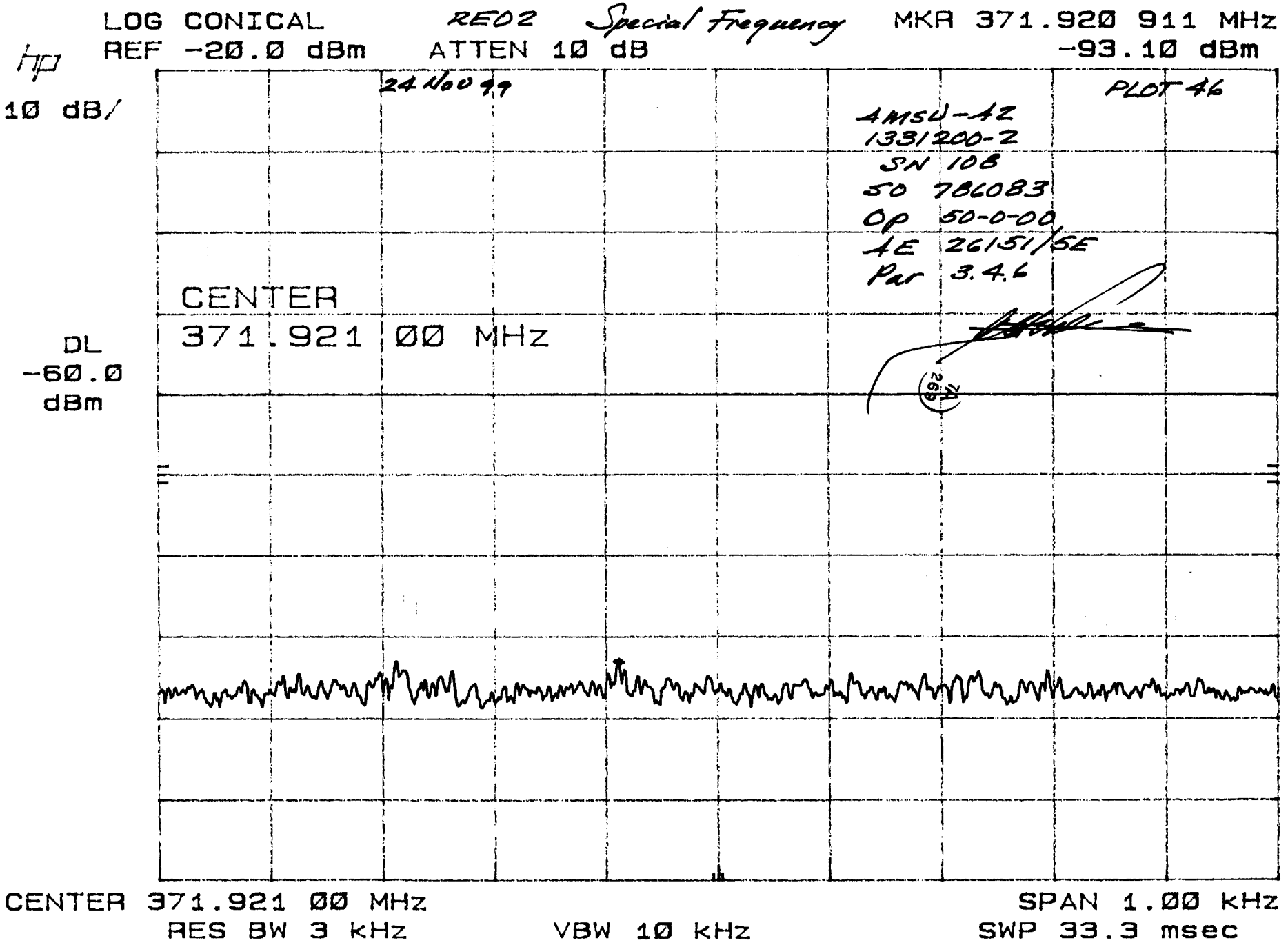
AMSU-A2
1331200-2
SN 108
SO 786083
Op 50-0-00
TE 26151/5E
Par 3.4.4

10 dB/

CENTER
285.813 00 MHz

DL
-60.0
dBm

CENTER 285.813 00 MHz
RES BW 3 kHz
VBW 10 kHz
SPAN 1.00 kHz
SWP 33.3 msec


LOG CONICAL
REO2 Special Frequency
MKR 371.920 911 MHz
REF -20.0 dBm
ATTEN 10 dB
-93.10 dBm
10 dB/
24 Nov 99
PLOT 46
AMSU-1Z
1331200-2
SN 108
SO 786083
Op 50-0-00
4E 26151/5E
Par 3.4.6
CENTER
371.921 00 MHz
DL
-60.0
dBm
CENTER 371.921 00 MHz
SPAN 1.00 kHz
RES BW 3 kHz
VBW 10 kHz
SWP 33.3 msec

LOG CONICAL RE02 Special Frequency MKR 375.972 303 MHz
REF -20.0 dBm ATTEN 10 dB -94.70 dBm

hp

24 Nov 99 PLOT 47

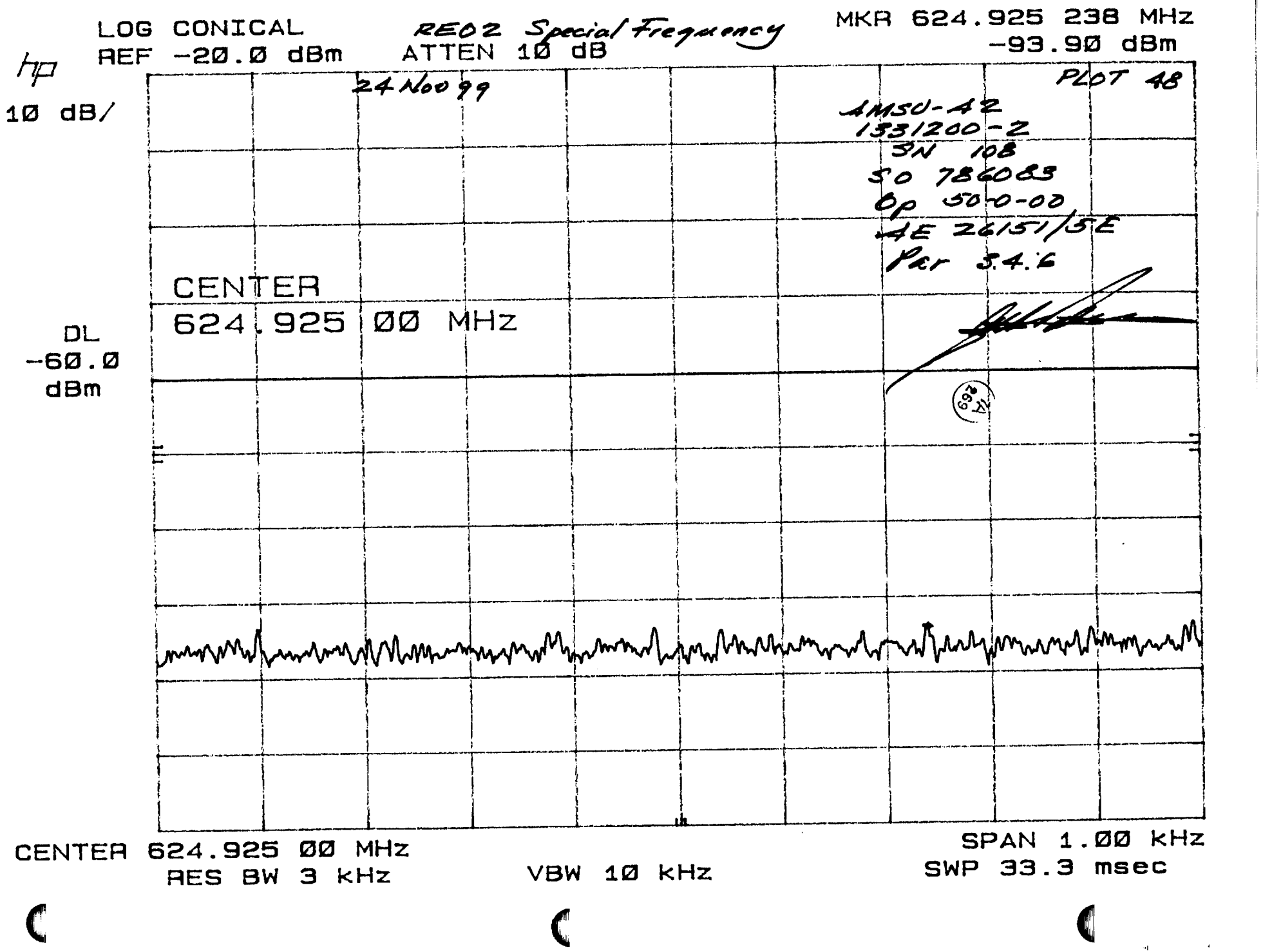
ANSO-42
1881200-2
SN 109
SO 786083
Op 50-0-00
AE 2GHz/5E
Par 3.4.6

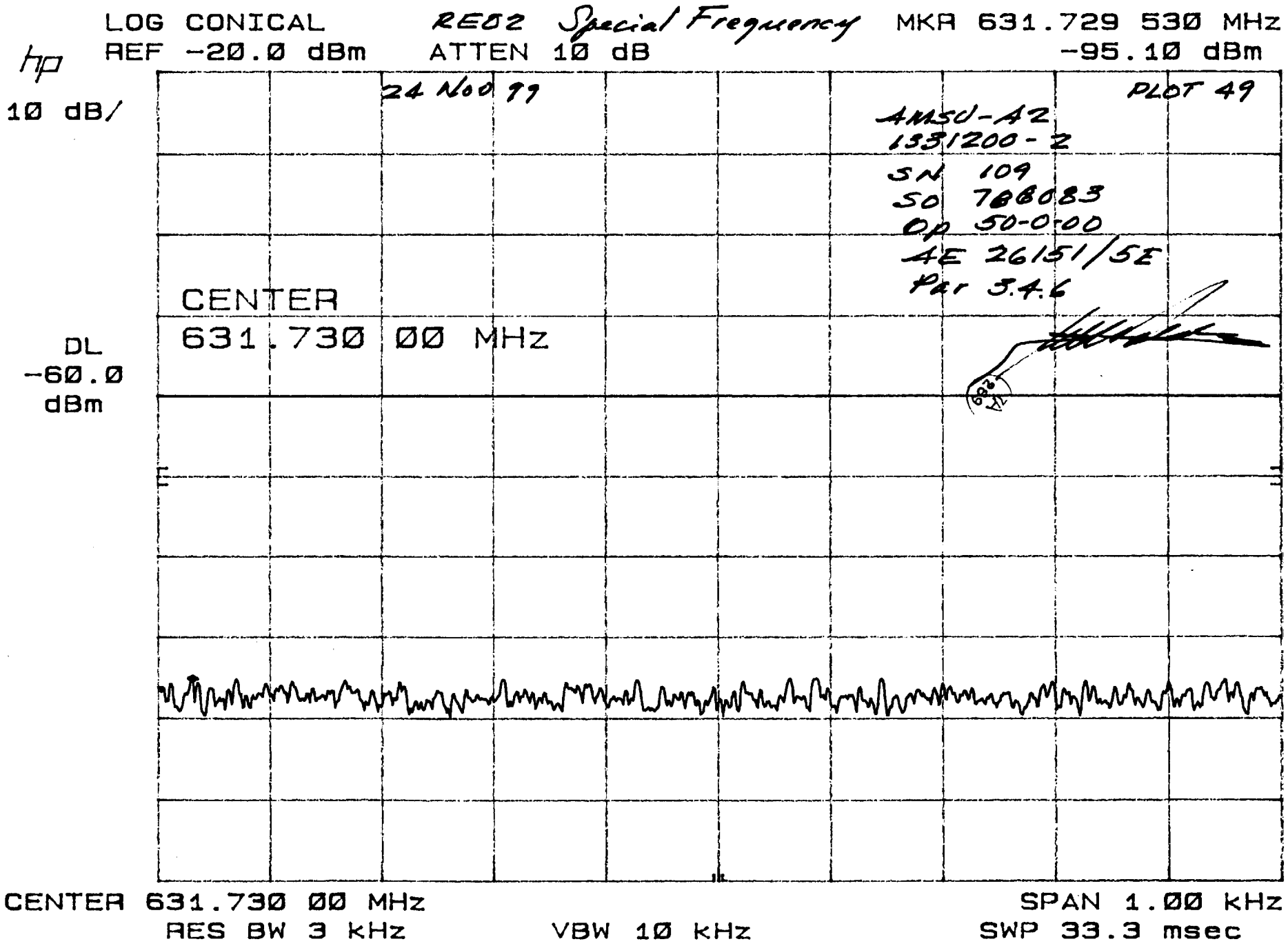
10 dB/

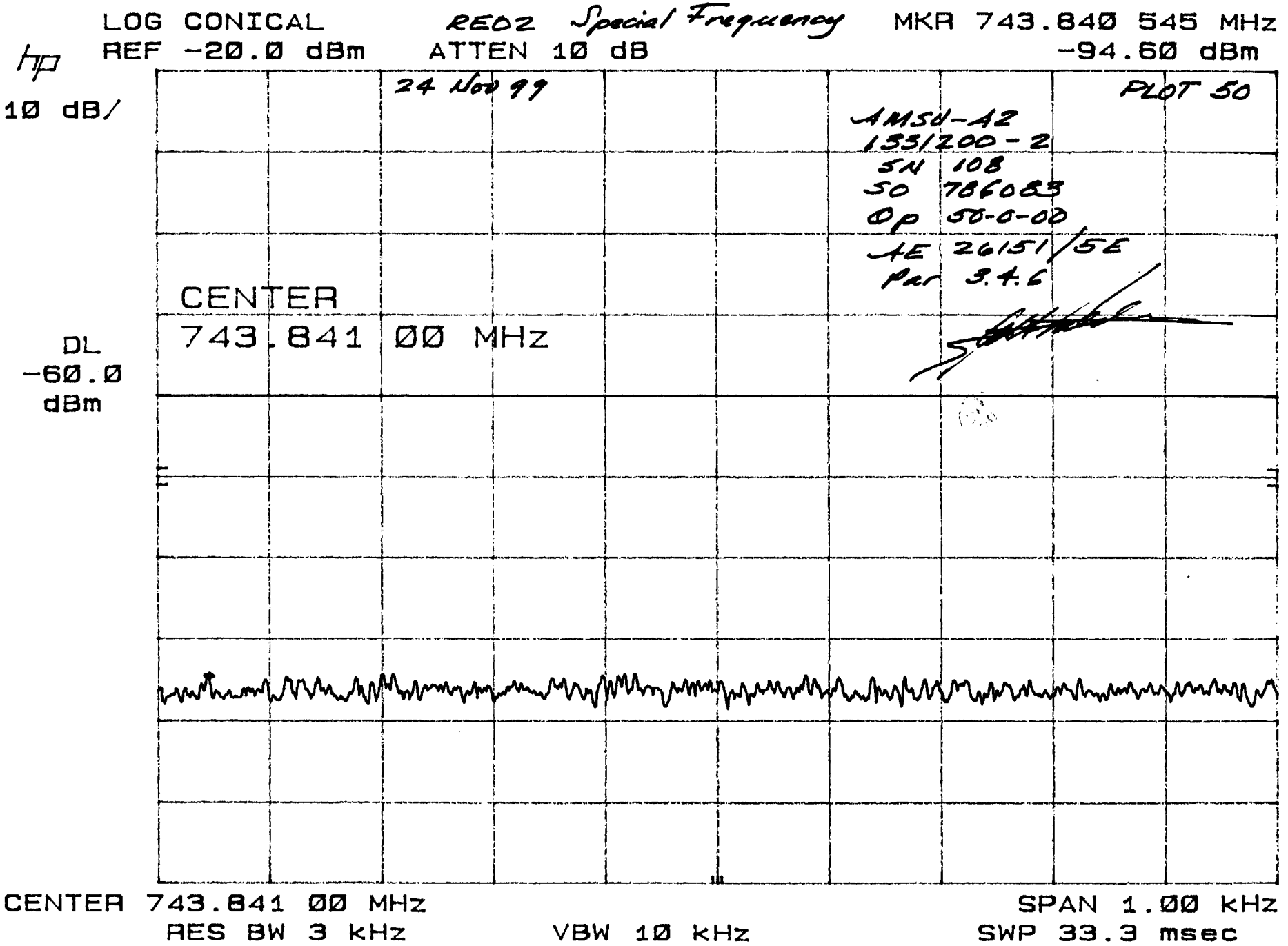
CENTER
375.972 00 MHz

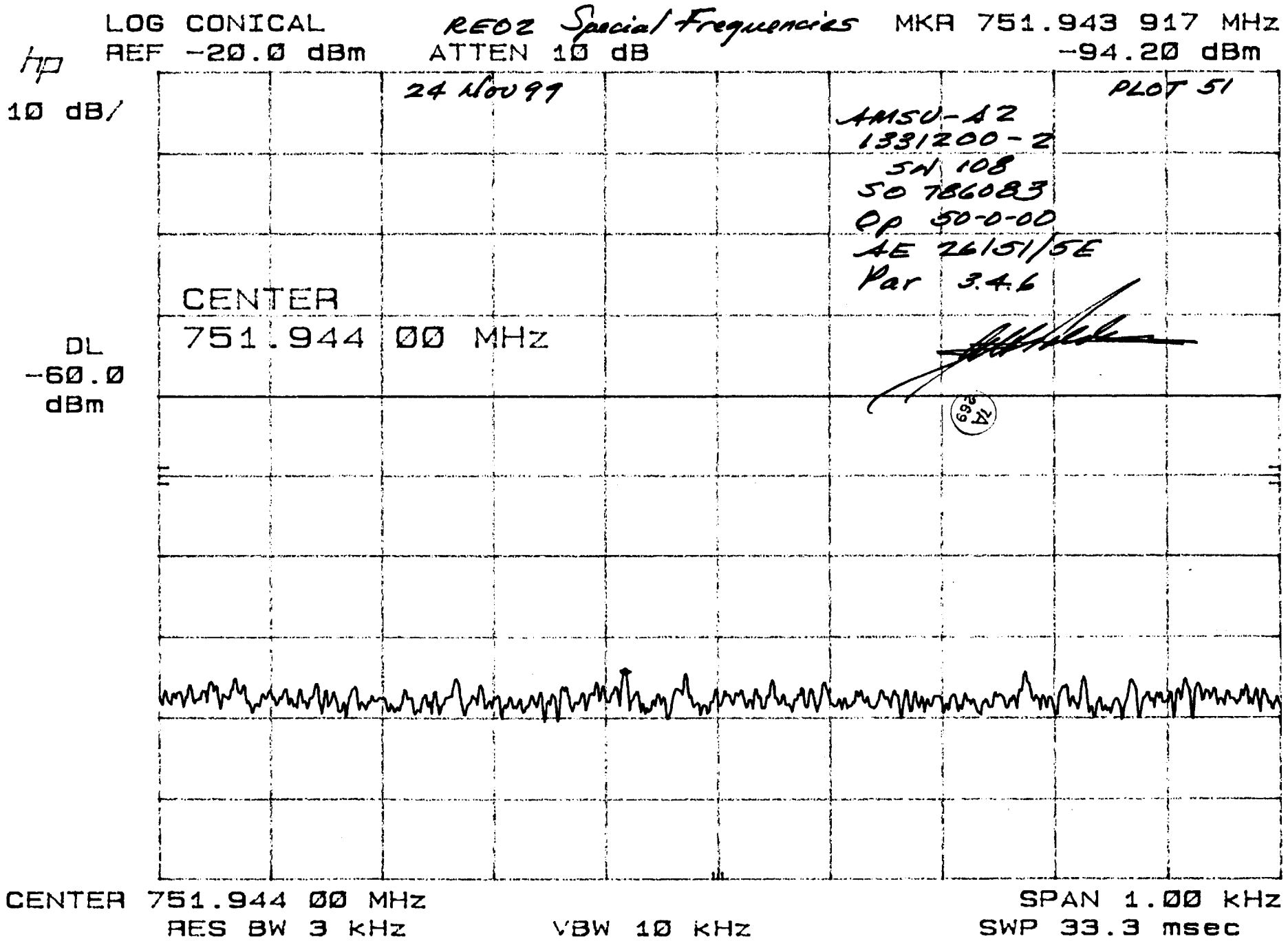
DL
-60.0
dBm

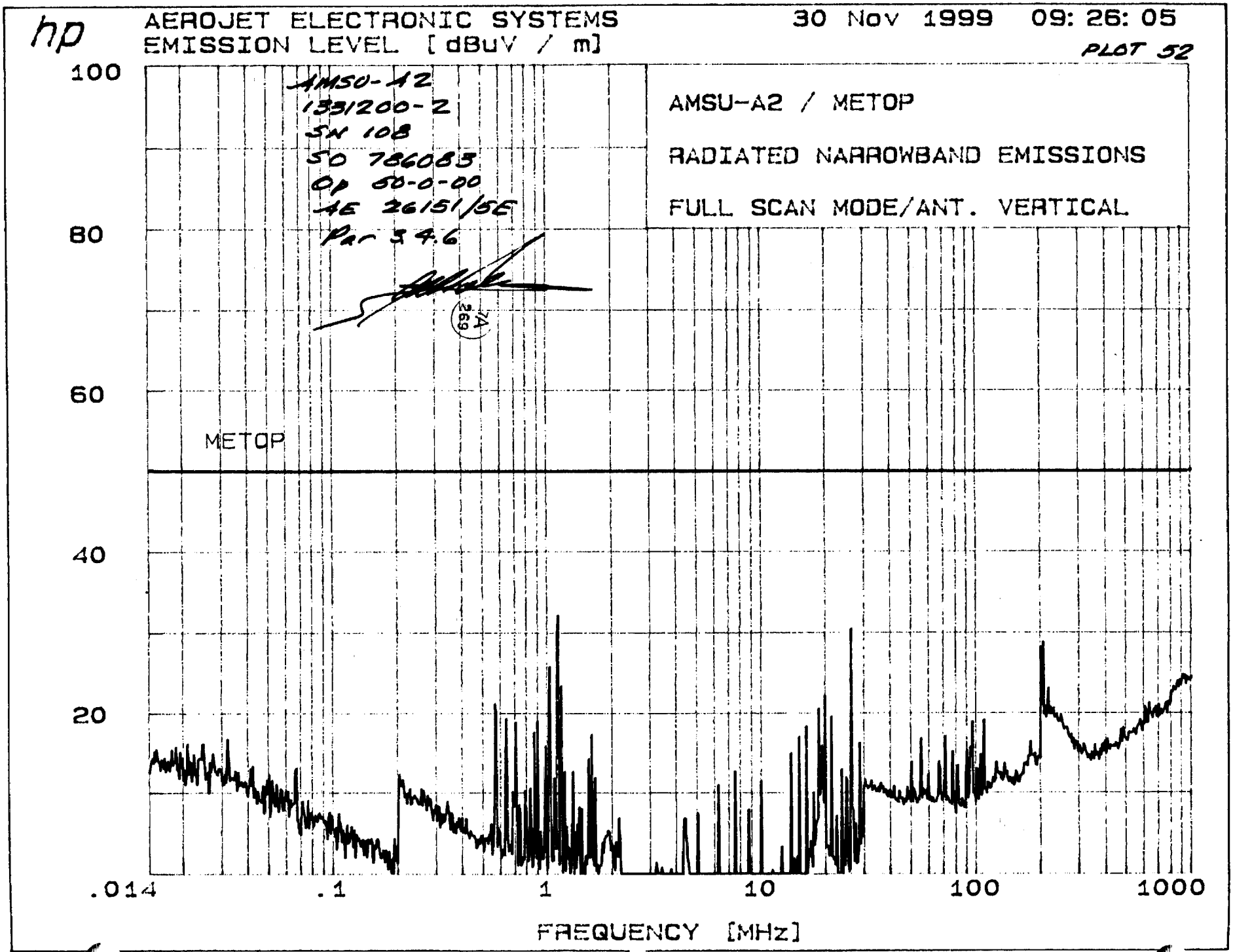
CENTER 375.972 00 MHz SPAN 1.00 kHz
RES BW 3 kHz VBW 10 kHz SWP 33.3 msec

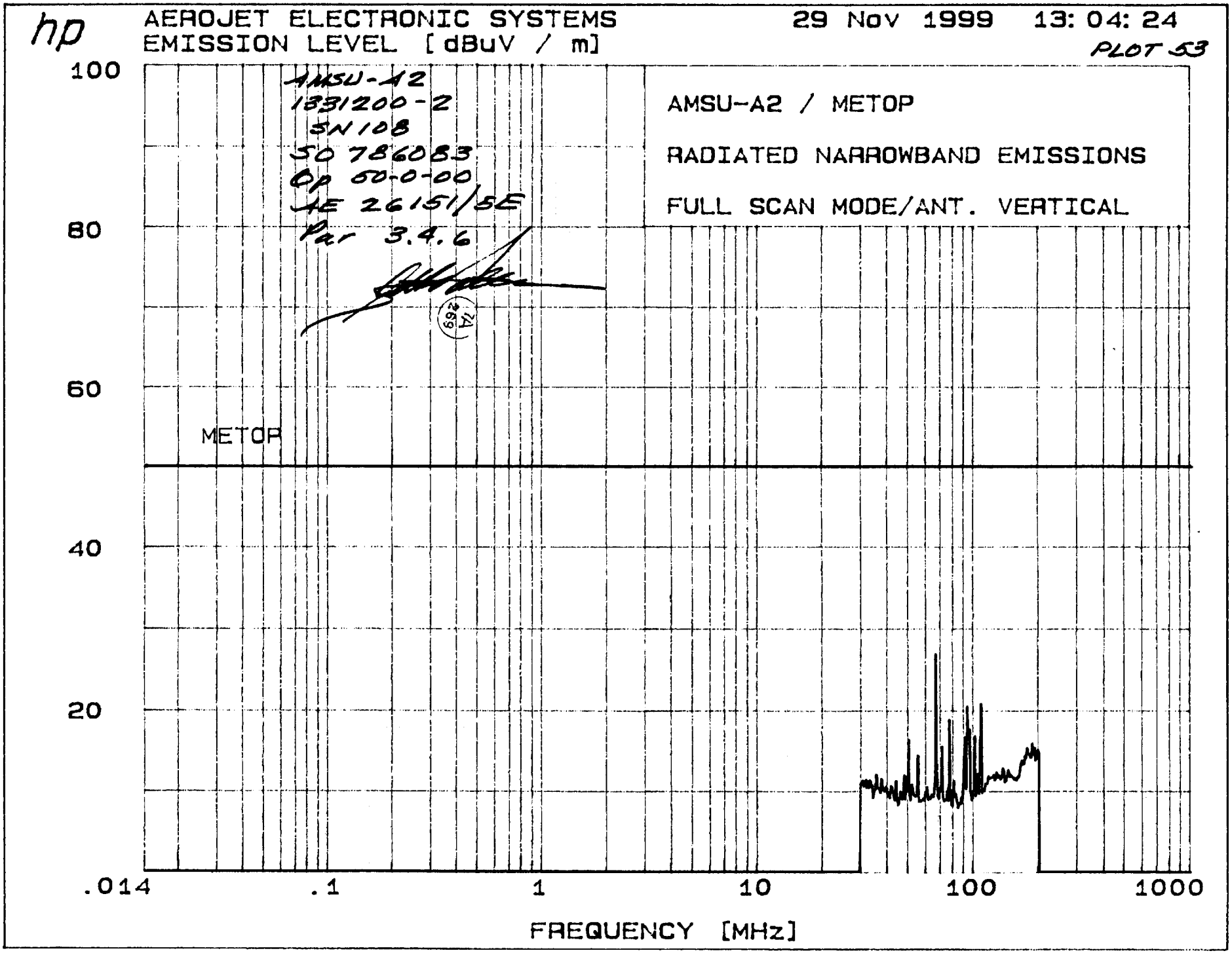

LOG CONICAL
REF -20.0 dBm
RE02 Special Frequency
ATTEN 10 dB
MKR 624.925 238 MHz
-93.90 dBm
hp
10 dB/
24 Nov 99
PLOT 48
AMSU-A2
1331200-2
SN 108
SO 786083
Op 50-0-00
4E 26151/5E
Par 3.4.6
CENTER
624.925 00 MHz
DL
-60.0
dBm
CENTER 624.925 00 MHz
RES BW 3 kHz
VBW 10 kHz
SPAN 1.00 kHz
SWP 33.3 msec

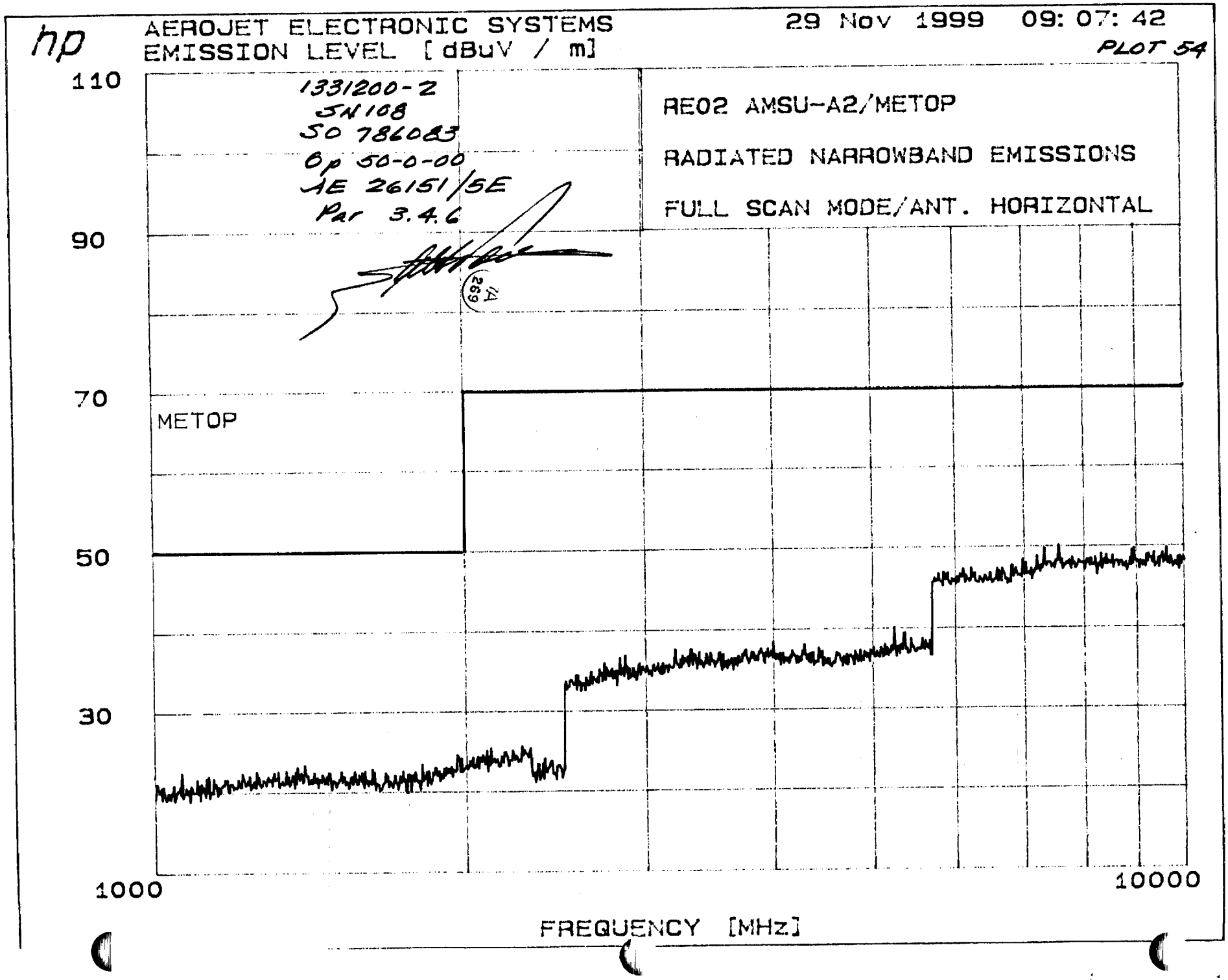

LOG CONICAL
REF -20.0 dBm
RE02 Special Frequency
ATTEN 10 dB
MKR 631.729 530 MHz
-95.10 dBm
24 Nov 99
PLOT 49
AMSD-AZ
1331200-Z
SN 109
SO 786083
Op 50-0-00
4E 26151/5E
Par 3.4.6
10 dB/
CENTER
631.730 00 MHz
DL
-60.0
dBm
CENTER 631.730 00 MHz
SPAN 1.00 kHz
RES BW 3 kHz
VBW 10 kHz
SWP 33.3 msec

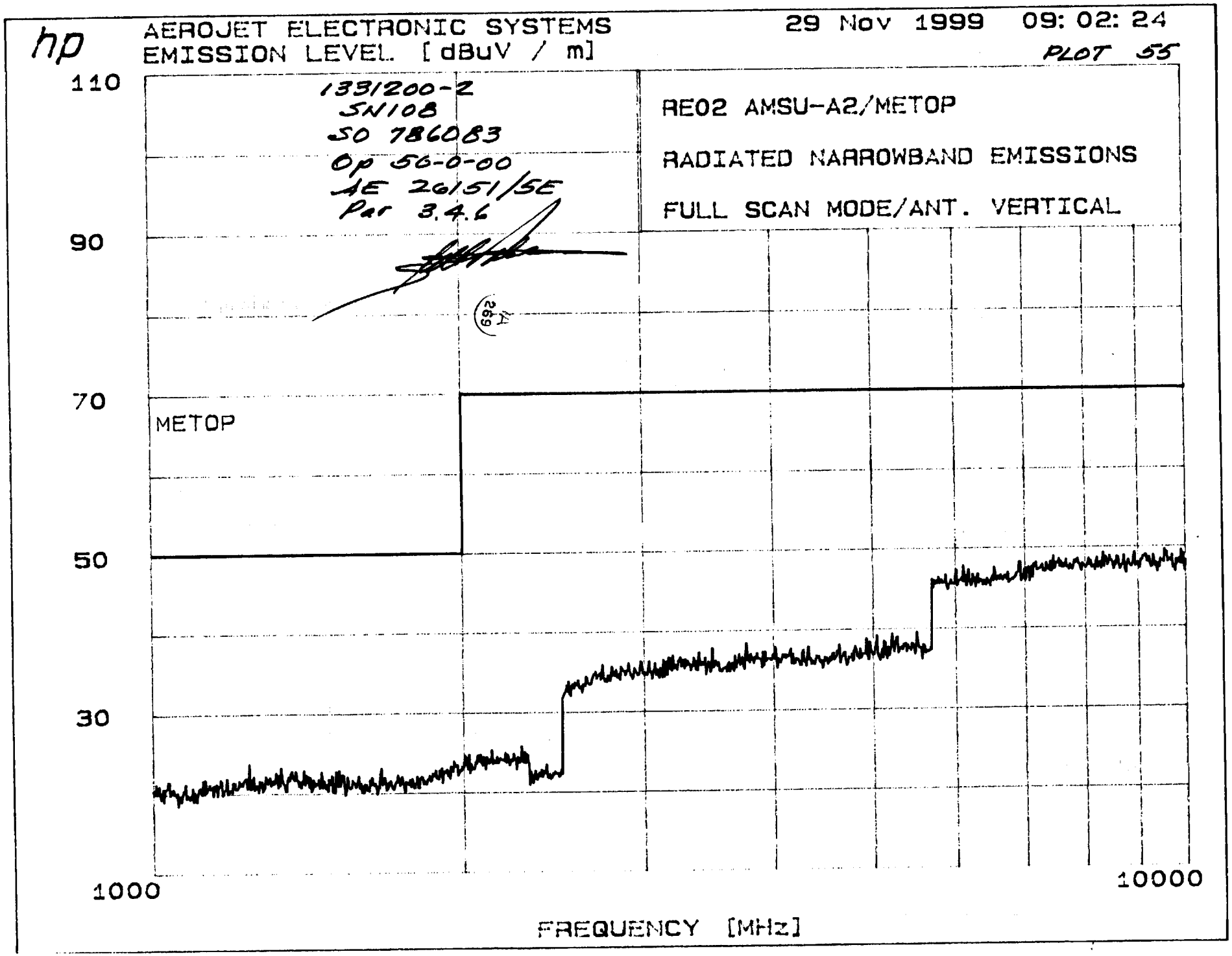

LOG CONICAL
REF -20.0 dBm
RE02 Special Frequency
ATTEN 10 dB
MKR 743.840 545 MHz
-94.60 dBm
hp
10 dB/
24 Nov 99
PLOT 50
AMSU-A2
133/200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5E
Par 3.4.6
CENTER
743.841 00 MHz
DL
-60.0
dBm
CENTER 743.841 00 MHz
SPAN 1.00 kHz
RES BW 3 kHz
VBW 10 kHz
SWP 33.3 msec

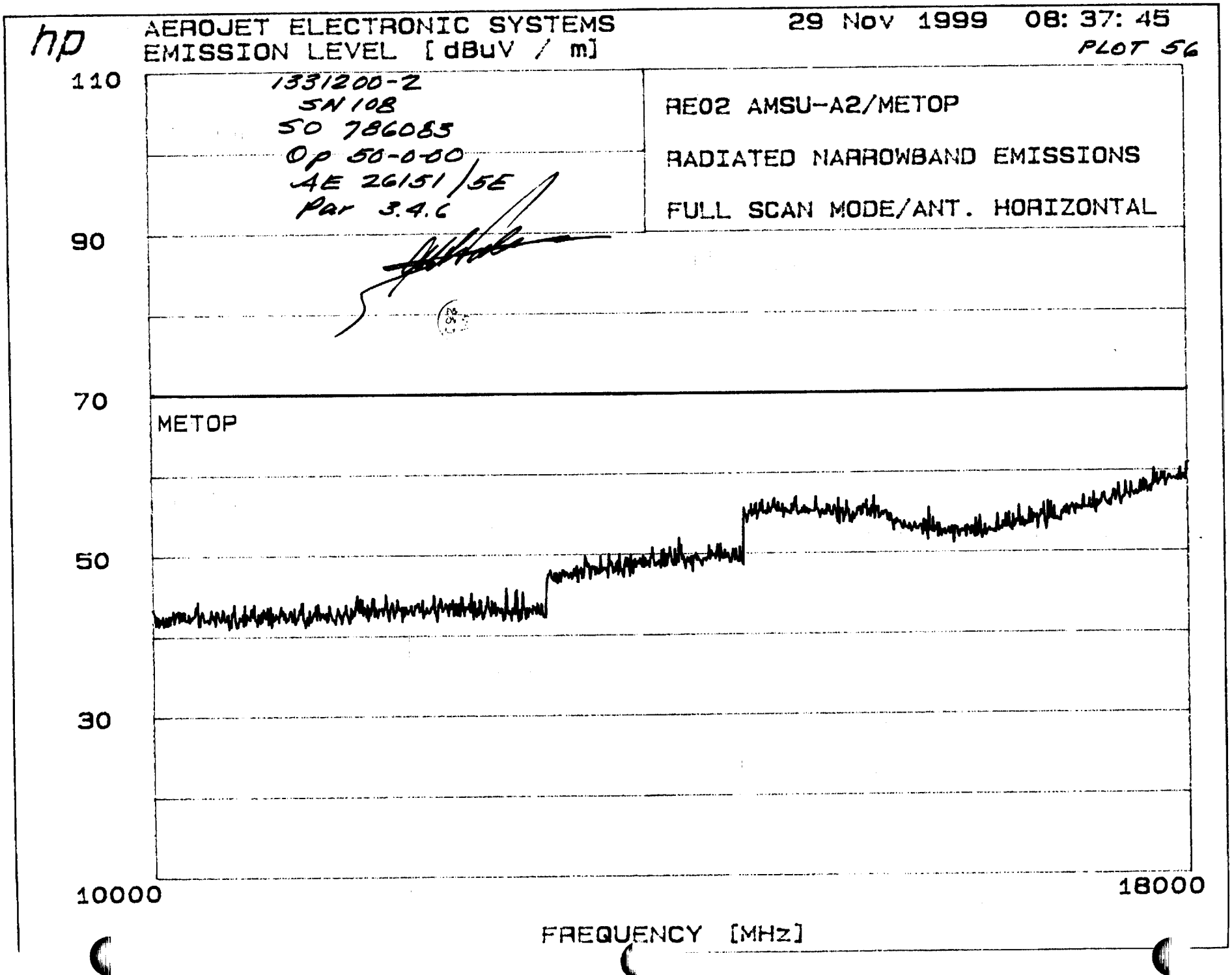

LOG CONICAL
REF -20.0 dBm
ATTEN 10 dB
REOZ Special Frequencies
MKR 751.943 917 MHz
-94.20 dBm
hp
10 dB/
24 Nov 99
PLOT 51
AMSU-A2
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5E
Par 3.4.6
CENTER
751.944 00 MHz
DL
-60.0
dBm
CENTER 751.944 00 MHz
RES BW 3 kHz
VBW 10 kHz
SPAN 1.00 kHz
SWP 33.3 msec

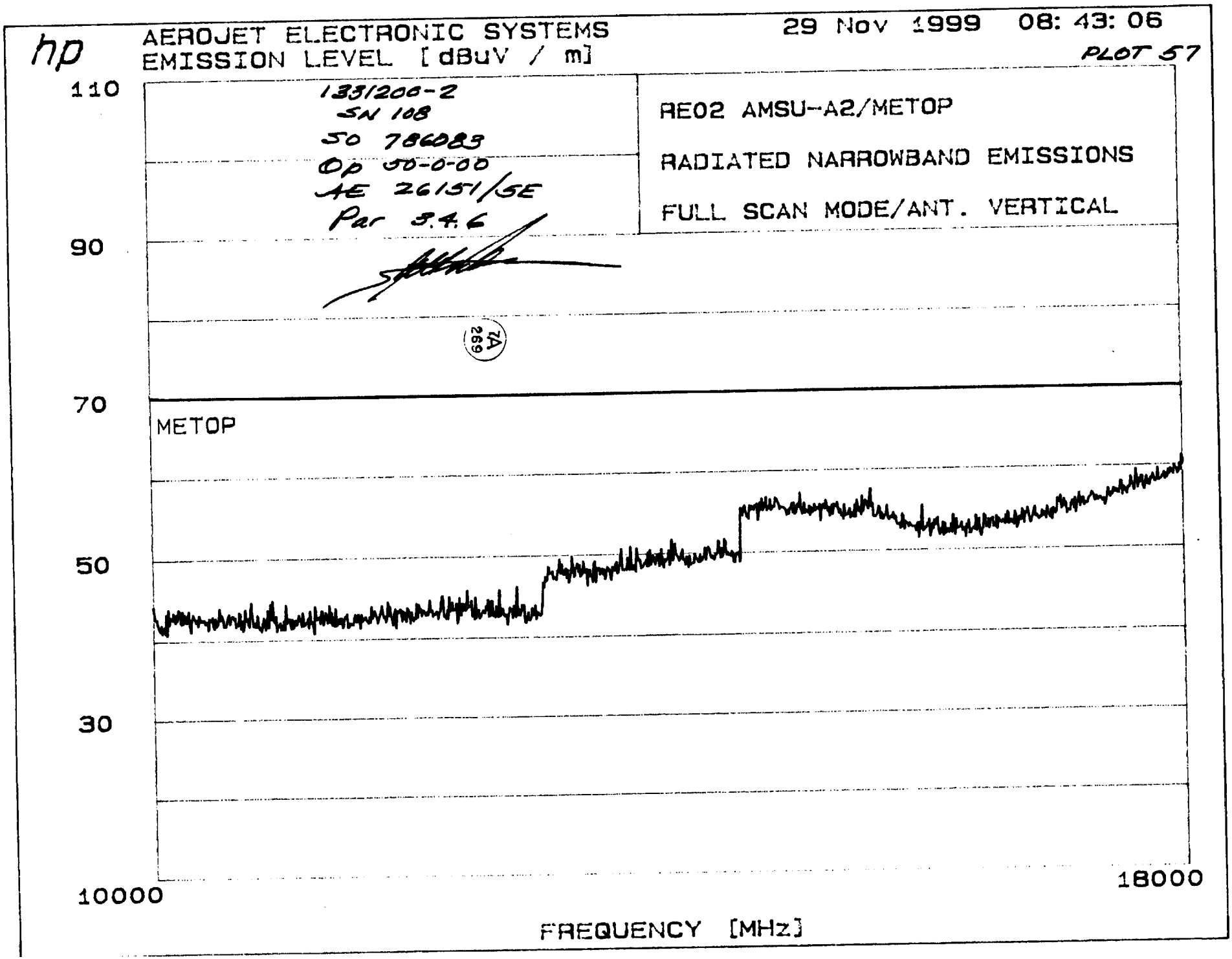

hp
AEROJET ELECTRONIC SYSTEMS
EMISSION LEVEL [dBuV / m]
30 Nov 1999 09: 26: 05
PLOT 52
AMSU-A2
133200-2
SN 108
SO 786083
OP 50-0-00
AE 26151/5E
Par 3 4.6
74
369
AMSU-A2 / METOP
RADIATED NARROWBAND EMISSIONS
FULL SCAN MODE/ANT. VERTICAL
METOP
100
80
60
40
20
.014
.1
1
10
100
1000
FREQUENCY [MHz]


hp
AEROJET ELECTRONIC SYSTEMS
EMISSION LEVEL [dBuV / m]
29 Nov 1999 13:04:24
PLOT 53
AMSU-A2
1331200-2
SN 108
SO 786083
Op 60-0-00
AE 26151/5E
Par 3.4.6
AMSU-A2 / METOP
RADIATED NARROWBAND EMISSIONS
FULL SCAN MODE/ANT. VERTICAL
METOP
100
80
60
40
20
.014
.1
1
10
100
1000
FREQUENCY [MHz]


hp
AEROJET ELECTRONIC SYSTEMS
EMISSION LEVEL [dBuV / m]
29 Nov 1999 09: 07: 42
PLOT 54
1331200-2
SN108
SO 786083
Op 50-0-00
AE 26151/SE
Par 3.4.6
RE02 AMSU-A2/METOP
RADIATED NARROWBAND EMISSIONS
FULL SCAN MODE/ANT. HORIZONTAL
METOP
110
90
70
50
30
1000
10000
FREQUENCY [MHz]


hp
AEROJET ELECTRONIC SYSTEMS
EMISSION LEVEL [dBuV / m]
29 Nov 1999 09:02:24
PLOT 55
133200-2
SN108
SO 786083
Op 56-0-00
AE 26151/5E
Par 3.4.6
RE02 AMSU-A2/METOP
RADIATED NARROWBAND EMISSIONS
FULL SCAN MODE/ANT. VERTICAL
METOP
110
90
70
50
30
1000
10000
FREQUENCY [MHz]


hp
AEROJET ELECTRONIC SYSTEMS
EMISSION LEVEL [dBuV / m]
29 Nov 1999 08:37:45
PLOT 56
1331200-2
SN 108
SO 786085
Op 50-000
AE 26151/5E
Par 3.4.6
RE02 AMSU-A2/METOP
RADIATED NARROWBAND EMISSIONS
FULL SCAN MODE/ANT. HORIZONTAL
METOP
110
90
70
50
30
10000
18000
FREQUENCY [MHz]


hp
AEROJET ELECTRONIC SYSTEMS
EMISSION LEVEL [dBuV / m]
29 Nov 1999 08: 43: 06
PLOT 57
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/GE
Par 3.4.6
RE02 AMSU-A2/METOP
RADIATED NARROWBAND EMISSIONS
FULL SCAN MODE/ANT. VERTICAL
74A 269
METOP
110
90
70
50
30
10000
18000
FREQUENCY [MHz]

AEROJET ELECTRONIC SYSTEMS

30 No099
138200-2
SN 108
SO 786083
Op 50-0-00
AE 26167/6E

TEST SETUP TABLE PG 1 OF 6

LIBRARY TEST FILE: SETUP NOT STORED

DISPLAY TITLE 1: AMSU-A2 / METOP

CONTROL PARAMETERS

Test Type	PEAK
Freq Uncert (%)	1
Min Sweep Time/Oct (sec)	3
NUMBER PAGES NOTES	0
NUMBER RANGES	4
START FREQUENCY (MHz)	.014

RNG	STOP FREQ(MHz)	TRANSDUCER
1	.2	EMCO 3301 - ACTIVE MONOPOLE
2	30.0	EMCO 3301 - ACTIVE MONOPOLE
3	200.0	EMCO 3110 - BICONICAL (1 meter)
4	1000.0	E-M LCA-25 - LOG SPIRAL @ 1m

DISPLAY INFORMATION PG 2 OF 6

AMPLITUDE INFO

Units Label	dBuV / m
Disp Ref Level	100

TEST LIMITS

Number Limits	1
Limit 1	NARROWBAND

AEROJET ELECTRONIC SYSTEMS

30 Nov 99
1331200-1
SN 108
SO 786083
Op 50-0-00
AE 26151/5

```
==================================================
RANGE 1: .014 TO .2 MHz                  PG 3 OF 6
==================================================
AMPLIFIER
  Name                    HP8447A-H64
  Gain (dB)                    28
INPUT PORT                   LEFT
MSMT STATES
  QP Bandwidth (Hz)        BYPASS
  SA Res Bandw (Hz)           300
  Video Bandw. (Hz)          3000
  Ref. Level (dBuV)           100
  Int. Atten. (dB)             10
  Ext. Atten. (dB)              0
NO. OF SETUPS                   1
NO. SWEEPS/SETUP                1
FIRST SETUP
  Msg,Sub,Continue       MESSAGE
  Msg:   CONNECT EMCO 3301 & HP8447F - 28dB INPUT


==================================================
RANGE 2: .2 TO 30.0 MHz                  PG 4 OF 6
==================================================
AMPLIFIER
  Name                    HP8447F-H64
  Gain (dB)                    28
INPUT PORT                   LEFT
MSMT STATES
  QP Bandwidth (Hz)        BYPASS
  SA Res Bandw (Hz)           3E3
  Video Bandw. (Hz)          30000
  Ref. Level (dBuV)           100
  Int. Atten. (dB)             10
  Ext. Atten. (dB)              0
NO. OF SETUPS                   1
NO. SWEEPS/SETUP                1
FIRST SETUP
  Msg,Sub,Continue       CONTINUE
```

AEROJET ELECTRONIC SYSTEMS

30 Nov 99
1351200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5.

```
==================================================
RANGE 3: 30.0 TO 200.0 MHz              PG 5 OF 6
==================================================
AMPLIFIER
  Name                  HP8447F - H64
  Gain (dB)                   25
INPUT PORT                  RIGHT
MSMT STATES
  QP Bandwidth (Hz)        BYPASS
  SA Res Bandw (Hz)         30E3
  Video Bandw. (Hz)         300E3
  Ref. Level (dBuV)          100
  Int. Atten. (dB)            10
  Ext. Atten. (dB)             0
NO. OF SETUPS                  1
NO. SWEEPS/SETUP               1
FIRST SETUP
  Msg,Sub,Continue       MESSAGE
  Msg:    CONNECT BICON ANT & HP8447F 25 dB INPUT


==================================================
RANGE 4: 200.0 TO 1000.0 MHz            PG 6 OF 6
==================================================
AMPLIFIER
  Name                  HP8447F - H64
  Gain (dB)                   25
INPUT PORT                  RIGHT
MSMT STATES
  QP Bandwidth (Hz)        BYPASS
  SA Res Bandw (Hz)         30E3
  Video Bandw. (Hz)         300000
  Ref. Level (dBuV)          80
  Int. Atten. (dB)            10
  Ext. Atten. (dB)             0
NO. OF SETUPS                  1
NO. SWEEPS/SETUP               1
FIRST SETUP
  Msg,Sub,Continue       MESSAGE
  Msg:    CONNECT LOG SPIRAL & HP8447D TO RIGHT IN
```

AEROJET ELECTRONIC SYSTEMS

30 Nov 99
1881200-2
SN 106
SO 786083
Op 60-0-00
AE 2615/le

TRANSDUCER TABLE

TRANSDUCER TITLE EMCO 3301 - ACTIVE MONOPOLE
SIGN OF TRANSDUCER PLUS
NUMBER OF POINTS 21

POINT	FREQUENCY(MHz)	TRANSDUCER FACTOR
1	.014	13.1
2	.020	12.4
3	.040	12.3
4	.060	12.1
5	.100	12.1
6	.150	11.8
7	.200	11.7
8	.400	11.4
9	.600	11.6
10	.850	11.2
11	1.000	11.3
12	1.600	10.4
13	2.000	10.9
14	4.000	10.4
15	6.000	10.6
16	8.000	10.1
17	10.000	9.7
18	15.000	10.2
19	20.000	11.9
20	25.000	12.3
21	30.000	12.7

AEROJET ELECTRONIC SYSTEMS

TRANSDUCER TABLE

30 Nov 99
1331200-2
SN 108
SO 786083
Op 50-0-00
4E 2C151/52

TRANSDUCER TITLE EMCO 3110 - BICONICAL (1 meter)
SIGN OF TRANSDUCER PLUS
NUMBER OF POINTS 28

POINT	FREQUENCY(MHz)	TRANSDUCER FACTOR
1	30	12.7
2	40	11.4
3	50	10.6
4	60	11.0
5	70	10.9
6	80	10.2
7	90	10.2
8	100	10.7
9	110	11.8
10	120	13.3
11	130	13.6
12	140	13.4
13	150	13.2
14	160	13.3
15	170	15.0
16	180	16.2
17	190	15.6
18	200	15.9
19	210	15.9
20	220	16.5
21	230	18.3
22	240	19.8
23	250	19.9
24	260	19.1
25	270	19.3
26	280	20.8
27	290	23.0
28	300	24.7

AEROJET ELECTRONIC SYSTEMS

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1381200-2
SN 108
SO 786083
Op 50-0-00
AE 2615/15

TRANSDUCER TABLE

TRANSDUCER TITLE E-M LCA-25 - LOG SPIRAL @ 1m
SIGN OF TRANSDUCER PLUS
NUMBER OF POINTS 33

POINT	FREQUENCY(MHz)	TRANSDUCER FACTOR
1	200	23.3
2	225	23.0
3	250	21.7
4	275	19.4
5	300	17.8
6	325	17.5
7	350	17.0
8	375	17.5
9	400	17.9
10	425	18.2
11	450	18.6
12	475	19.1
13	500	19.8
14	525	20.1
15	550	20.3
16	575	20.8
17	600	21.2
18	625	21.5
19	650	21.9
20	675	22.3
21	700	22.7
22	725	22.8
23	750	23.3
24	775	22.7
25	800	24.3
26	825	24.9
27	850	25.5
28	875	25.7
29	900	26.2
30	925	26.4
31	950	26.6
32	975	26.6
33	1000	26.8

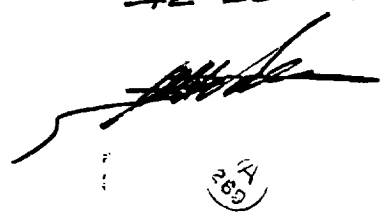
AEROJET ELECTRONIC SYSTEMS

LIMIT TABLE

LIMIT TITLE NARROWBAND
NUMBER OF POINTS 2

POINT	FREQUENCY(MHz)	AMPLITUDE
1	.010	50
2	1000.000	50

30 Nov 99
133200-2
SN 108
SO 786083
Op 50-0-00
4E 26151



AEROJET ELECTRONIC SYSTEMS

29 Nov 99
133/200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5E

TEST SETUP TABLE PG 1 OF 5

LIBRARY TEST FILE: SETUP NOT STORED

DISPLAY TITLE 1: RE02 AMSU-A2/METOP

CONTROL PARAMETERS

Test Type	PEAK
Freq Uncert (%)	.5
Min Sweep Time/Oct (sec)	3
NUMBER PAGES NOTES	0
NUMBER RANGES	3
START FREQUENCY (MHz)	1000

RNG	STOP FREQ(MHz)	TRANSDUCER
1	2500	RGA 180 HORN ANTENNA
2	5700	RGA 180 HORN ANTENNA
3	10000	RGA 180 HORN ANTENNA

DISPLAY INFORMATION PG 2 OF 5

AMPLITUDE INFO

Units Label	dBuV / m
Disp Ref Level	110

TEST LIMITS

Number Limits	1
Limit 1	METOP

AEROJET ELECTRONIC SYSTEMS

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1331200-2
SN 108
SO 786083
Op 50-0-00
4E 26151/5E

RANGE 1: 1000 TO 2500 MHz	PG 3 OF 5
AMPLIFIER	
Name	HP8449B
Gain (dB)	30
INPUT PORT	RIGHT
MSMT STATES	
QP Bandwidth (Hz)	BYPASS
SA Res Bandw (Hz)	10E3
Video Bandw. (Hz)	100000
Ref. Level (dBuV)	80
Int. Atten. (dB)	10
Ext. Atten. (dB)	0
NO. OF SETUPS	1
NO. SWEEPS/SETUP	1
FIRST SETUP	
Msg,Sub,Continue	MESSAGE
Msg:	CONNECT DBL RIDGE ANT TO AMPL INPUT

RANGE 2: 2500 TO 5700 MHz	PG 4 OF 5
AMPLIFIER	
Name	HP8449B
Gain (dB)	30
INPUT PORT	RIGHT
MSMT STATES	
QP Bandwidth (Hz)	BYPASS
SA Res Bandw (Hz)	100E3
Video Bandw. (Hz)	1.E+6
Ref. Level (dBuV)	80
Int. Atten. (dB)	10
Ext. Atten. (dB)	0
NO. OF SETUPS	1
NO. SWEEPS/SETUP	1
FIRST SETUP	
Msg,Sub,Continue	CONTINUE

AEROJET ELECTRONIC SYSTEMS

RANGE 3: 5700 TO 10000 MHz PG 5 OF 5

AMPLIFIER	
Name	HP 8448B
Gain (dB)	30
INPUT PORT	RIGHT
MSMT STATES	
QP Bandwidth (Hz)	BYPASS
SA Res Bandw (Hz)	300E3
Video Bandw. (Hz)	3.E+6
Ref. Level (dBuV)	80
Int. Atten. (dB)	10
Ext. Atten. (dB)	0
NO. OF SETUPS	1
NO. SWEEPS/SETUP	1
FIRST SETUP	
Msg,Sub,Continue	CONTINUE

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1331200-2
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SO 786083
Op 50-0-00
4E 26151/5E

AEROJET ELECTRONIC SYSTEMS

29 Nov 89
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SN 108
50186083
Op 50-0-00
4E26151/5E

TEST SETUP TABLE PG 1 OF 6

LIBRARY TEST FILE: SETUP NOT STORED

DISPLAY TITLE 1:	AMSU-A METOP
CONTROL PARAMETERS	
Test Type	PEAK
Freq Uncert (%)	.5
Min Sweep Time/Oct (sec)	3
NUMBER PAGES NOTES	0
NUMBER RANGES	4
START FREQUENCY (MHz)	10000

RNG	STOP FREQ(MHz)	TRANSDUCER
1	12000	RGA 180 HORN ANTENNA
2	14000	RGA 180 HORN ANTENNA
3	16000	RGA 180 HORN ANTENNA
4	18000	RGA 180 HORN ANTENNA

DISPLAY INFORMATION PG 2 OF 6

AMPLITUDE INFO	
Units Label	dBuV / m
Disp Ref Level	110
TEST LIMITS	
Number Limits	1
Limit 1	METOP

AEROJET ELECTRONIC SYSTEMS

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SO 786083
Op 50-0-00
AE 26151/52

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==================================================
RANGE 1: 10000 TO 12000 MHz              PG 3 OF 6
==================================================
AMPLIFIER
  Name
  Gain (dB)                  0
INPUT PORT                 RIGHT
MSMT STATES
  QP Bandwidth (Hz)       BYPASS
  SA Res Bandw (Hz)        30E3
  Video Bandw. (Hz)       300000
  Ref. Level (dBuV)          80
  Int. Atten. (dB)            0
  Ext. Atten. (dB)            0
NO. OF SETUPS                 1
NO. SWEEPS/SETUP              1
FIRST SETUP
  Msg,Sub,Continue       MESSAGE
  Msg:    CONNECT HORN ANTENNA TO INPUT


==================================================
RANGE 2: 12000 TO 14000 MHz              PG 4 OF 6
==================================================
AMPLIFIER
  Name
  Gain (dB)                  0
INPUT PORT                 RIGHT
MSMT STATES
  QP Bandwidth (Hz)       BYPASS
  SA Res Bandw (Hz)        30E3
  Video Bandw. (Hz)       300000
  Ref. Level (dBuV)          80
  Int. Atten. (dB)            0
  Ext. Atten. (dB)            0
NO. OF SETUPS                 1
NO. SWEEPS/SETUP              1
FIRST SETUP
  Msg,Sub,Continue       CONTINUE
```

AEROJET ELECTRONIC SYSTEMS

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1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5

RANGE 3: 14000 TO 16000 MHz	PG 5 OF 6
AMPLIFIER	
Name	
Gain (dB)	0
INPUT PORT	RIGHT
MSMT STATES	
QP Bandwidth (Hz)	BYPASS
SA Res Bandw (Hz)	10E3
Video Bandw. (Hz)	100000
Ref. Level (dBuV)	80
Int. Atten. (dB)	0
Ext. Atten. (dB)	0
NO. OF SETUPS	1
NO. SWEEPS/SETUP	1
FIRST SETUP	
Msg,Sub,Continue	CONTINUE

RANGE 4: 16000 TO 18000 MHz	PG 6 OF 6
AMPLIFIER	
Name	
Gain (dB)	0
INPUT PORT	RIGHT
MSMT STATES	
QP Bandwidth (Hz)	BYPASS
SA Res Bandw (Hz)	10E3
Video Bandw. (Hz)	100000
Ref. Level (dBuV)	80
Int. Atten. (dB)	0
Ext. Atten. (dB)	0
NO. OF SETUPS	1
NO. SWEEPS/SETUP	1
FIRST SETUP	
Msg,Sub,Continue	CONTINUE

AEROJET ELECTRONIC SYSTEMS

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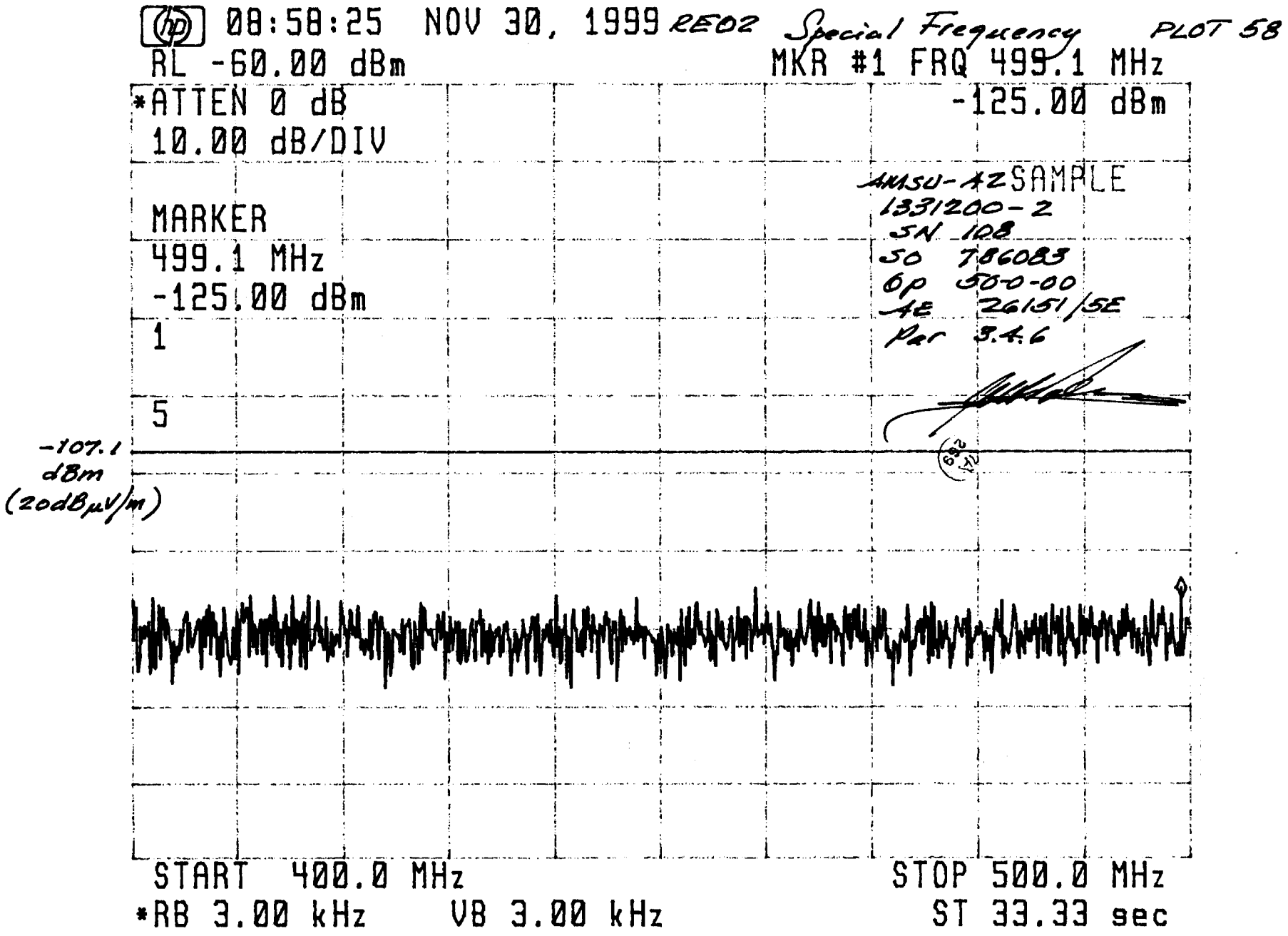
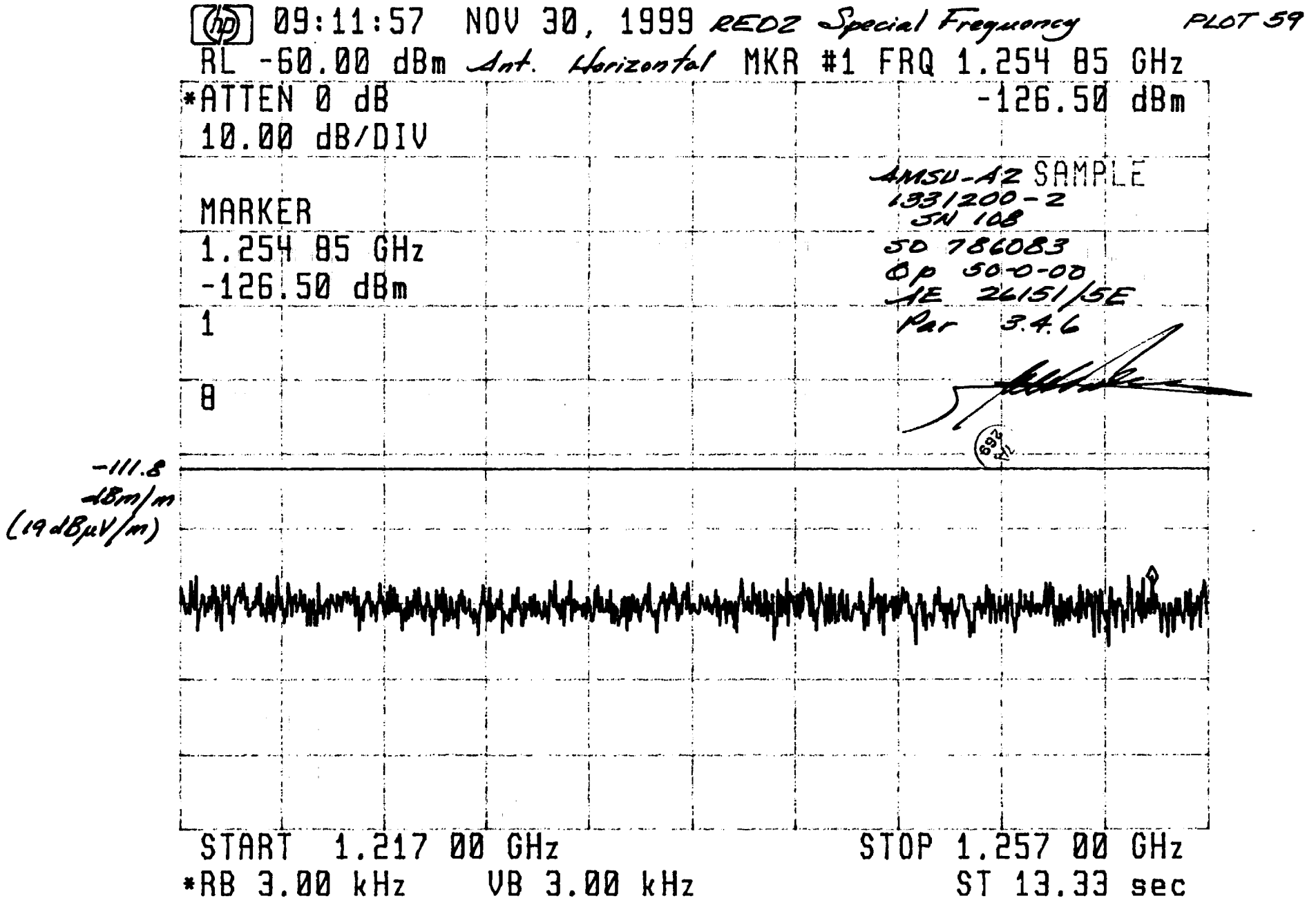
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26151/5

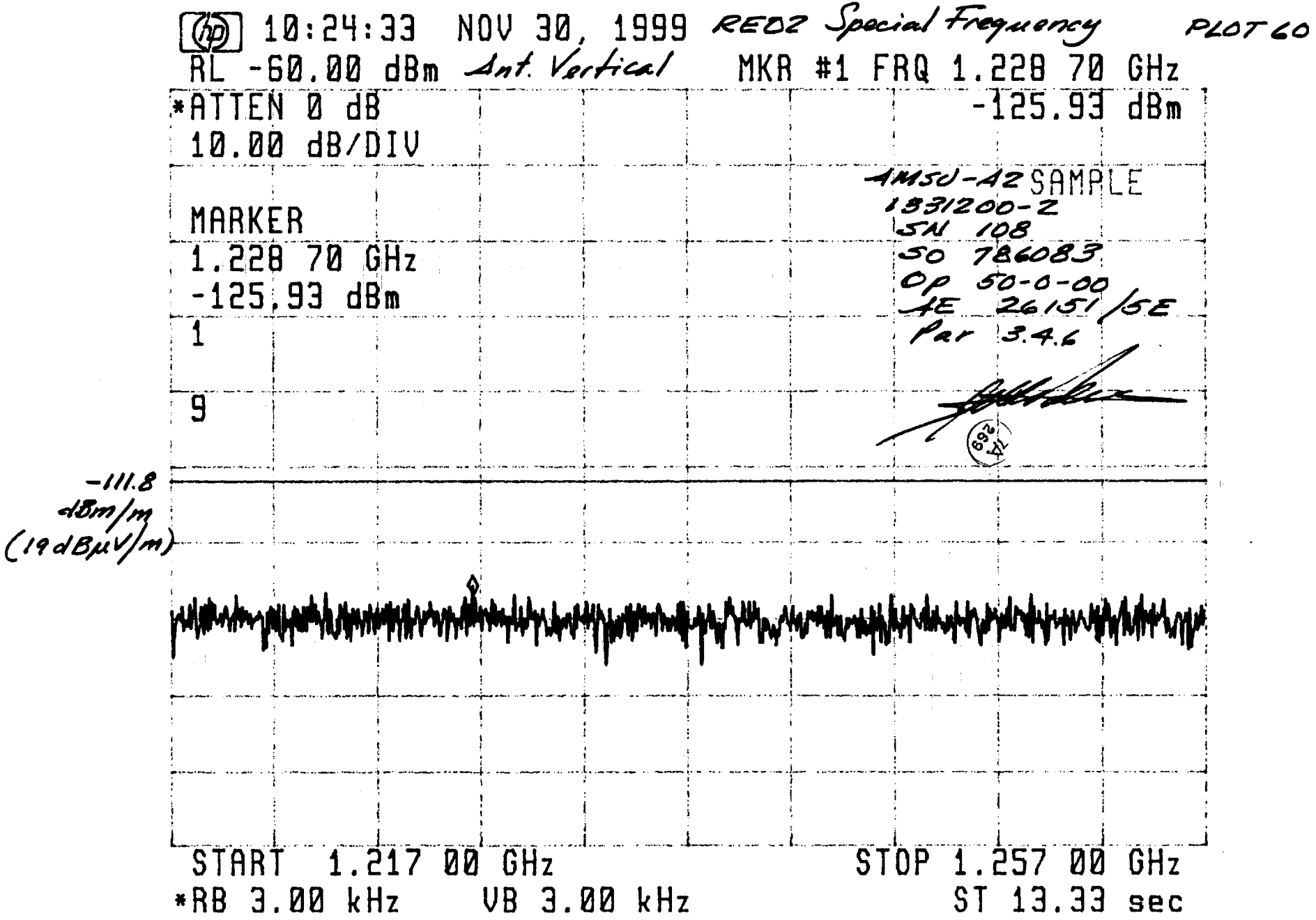
TRANSDUCER TABLE

TRANSDUCER TITLE RGA 180 HORN ANTENNA
SIGN OF TRANSDUCER PLUS
NUMBER OF POINTS 35

POINT	FREQUENCY(MHz)	TRANSDUCER FACTOR
1	1000	24.6
2	1500	24.9
3	2000	27.5
4	2500	29.2
5	3000	30.9
6	3500	33.1
7	4000	32.9
8	4500	32.4
9	5000	33.8
10	5500	35.1
11	6000	35.9
12	6500	35.7
13	7000	36.3
14	7500	37.3
15	8000	36.6
16	8500	37.9
17	9000	38.8
18	9500	38.6
19	10000	38.2
20	10500	38.4
21	11000	38.9
22	11500	39.2
23	12000	39.4
24	12500	39.3
25	13000	40.5
26	13500	42.3
27	14000	41.5
28	14500	41.3
29	15000	39.8
30	15500	38.1
31	16000	38.4
32	16500	40.4
33	17000	41.9
34	17500	42.5
35	18000	45.4

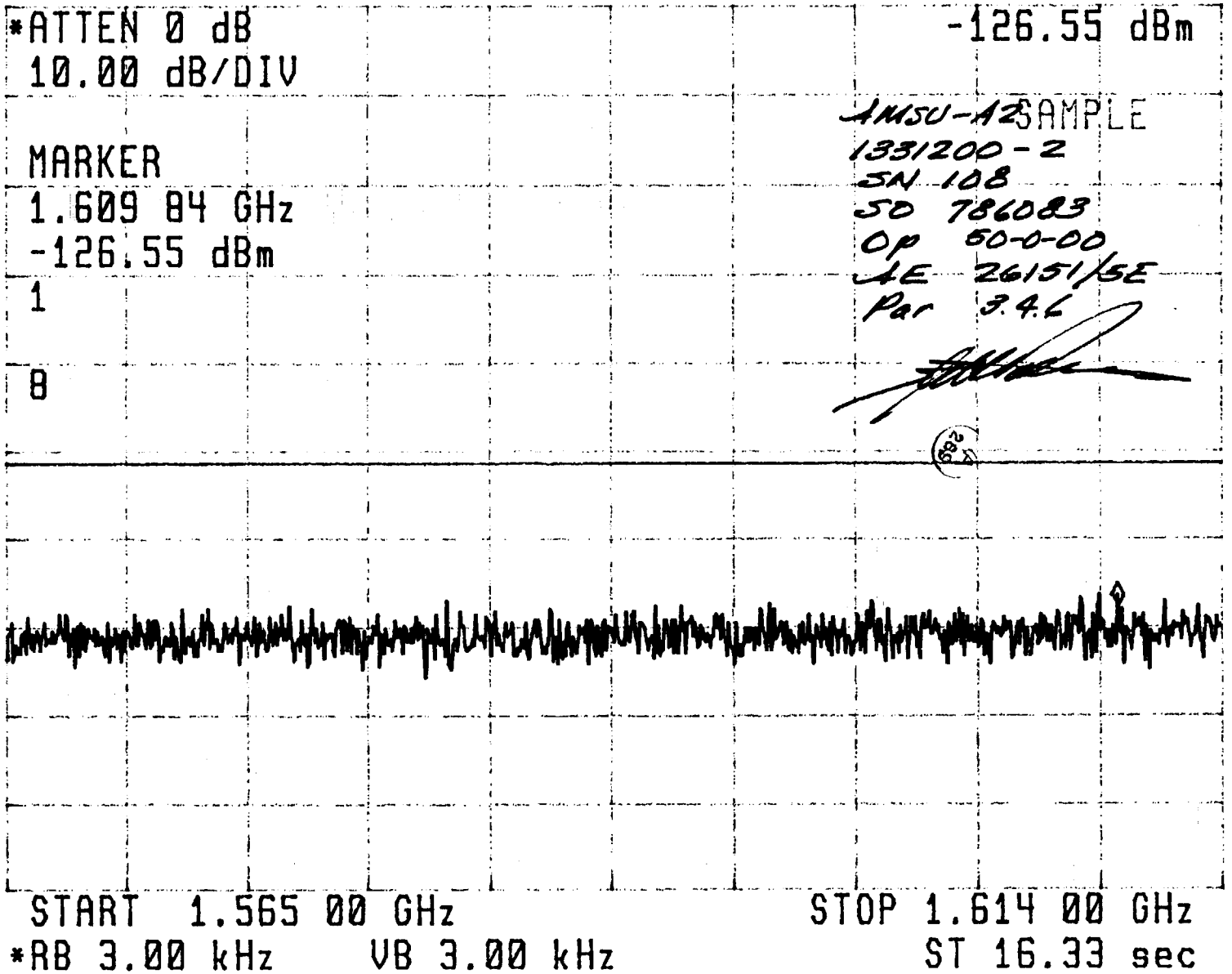

08:58:25 NOV 30, 1999 REO2 Special Frequency PLOT 58
RL -60.00 dBm
MKR #1 FRQ 499.1 MHz
*ATTEN 0 dB
-125.00 dBm
10.00 dB/DIV
AN/SU-42 SAMPLE
1331200-2
SN 108
SO 786083
6P 500-00
4E 26151/5E
Par 5.4.6
MARKER
499.1 MHz
-125.00 dBm
1
5
-107.1 dBm (20dBμV/m)
START 400.0 MHz
STOP 500.0 MHz
*RB 3.00 kHz
VB 3.00 kHz
ST 33.33 sec

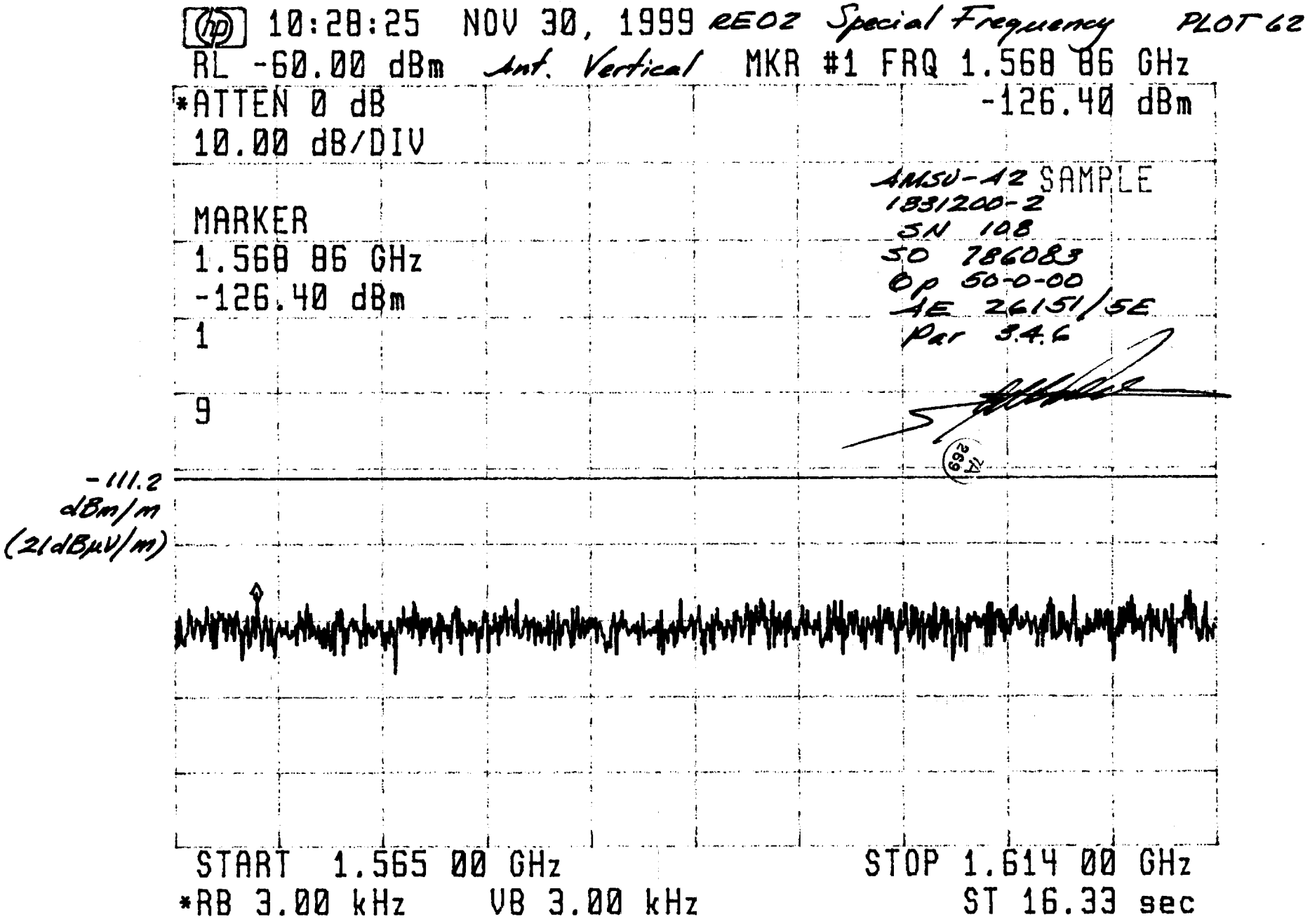

09:11:57 NOV 30, 1999 REDZ Special Frequency
PLOT 59
RL -60.00 dBm Ant. Horizontal MKR #1 FRQ 1.254 85 GHz
*ATTEN 0 dB
-126.50 dBm
10.00 dB/DIV
AMSU-AZ SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
IE 26151/SE
Par 3.4.6
MARKER
1.254 85 GHz
-126.50 dBm
1
8
-111.8 dBm/m (19 dBμV/m)
START 1.217 00 GHz
STOP 1.257 00 GHz
*RB 3.00 kHz
VB 3.00 kHz
ST 13.33 sec

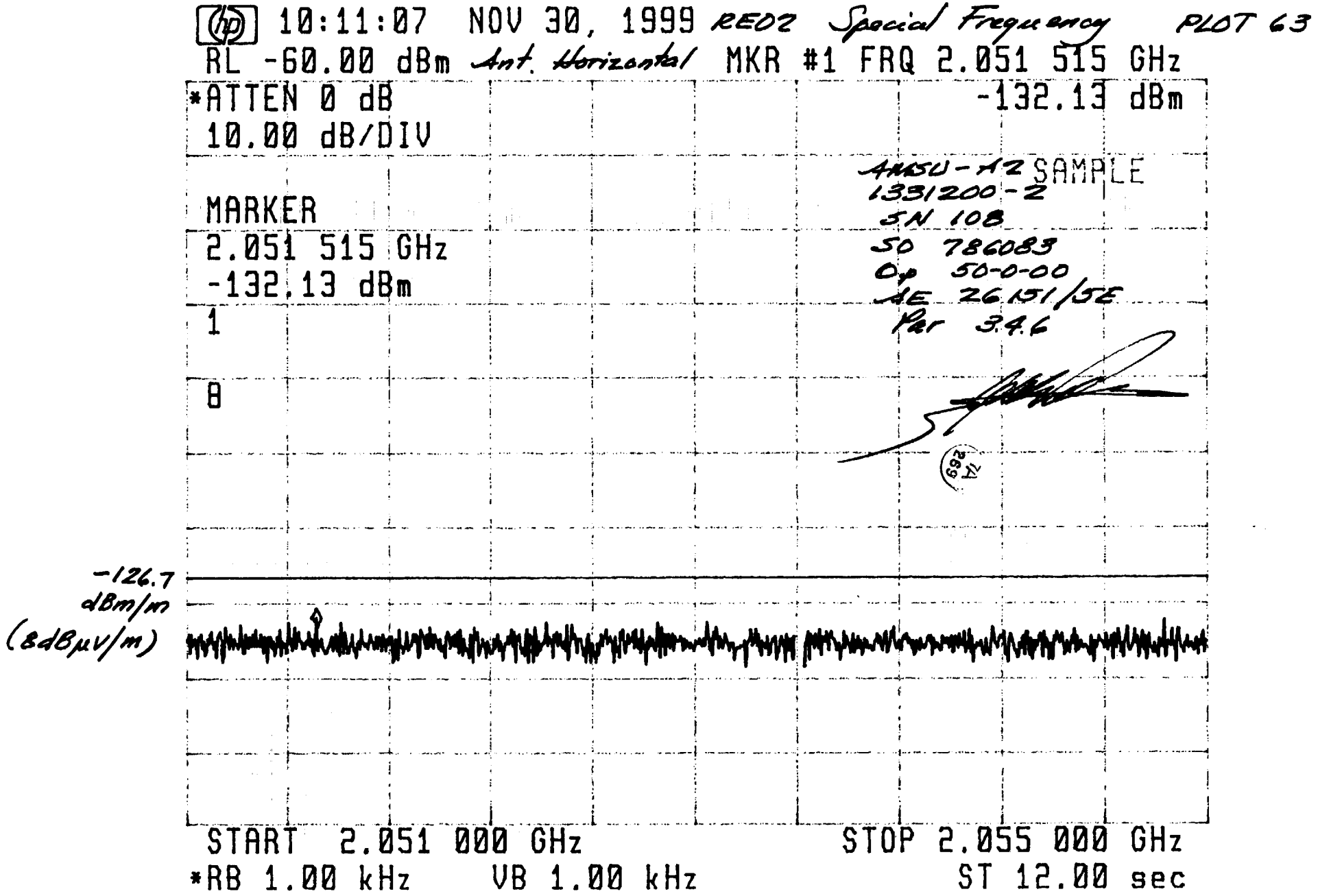

10:24:33 NOV 30, 1999 RE02 Special Frequency PLOT 60
RL -60.00 dBm Ant. Vertical MKR #1 FRQ 1.228 70 GHz
*ATTEN 0 dB -125.93 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786083
OP 50-0-00
AE 26151/5E
Par 3.4.6
MARKER
1.228 70 GHz
-125.93 dBm
1
9
-111.8 dBm/m (19 dBμV/m)
START 1.217 00 GHz
STOP 1.257 00 GHz
*RB 3.00 kHz VB 3.00 kHz
ST 13.33 sec

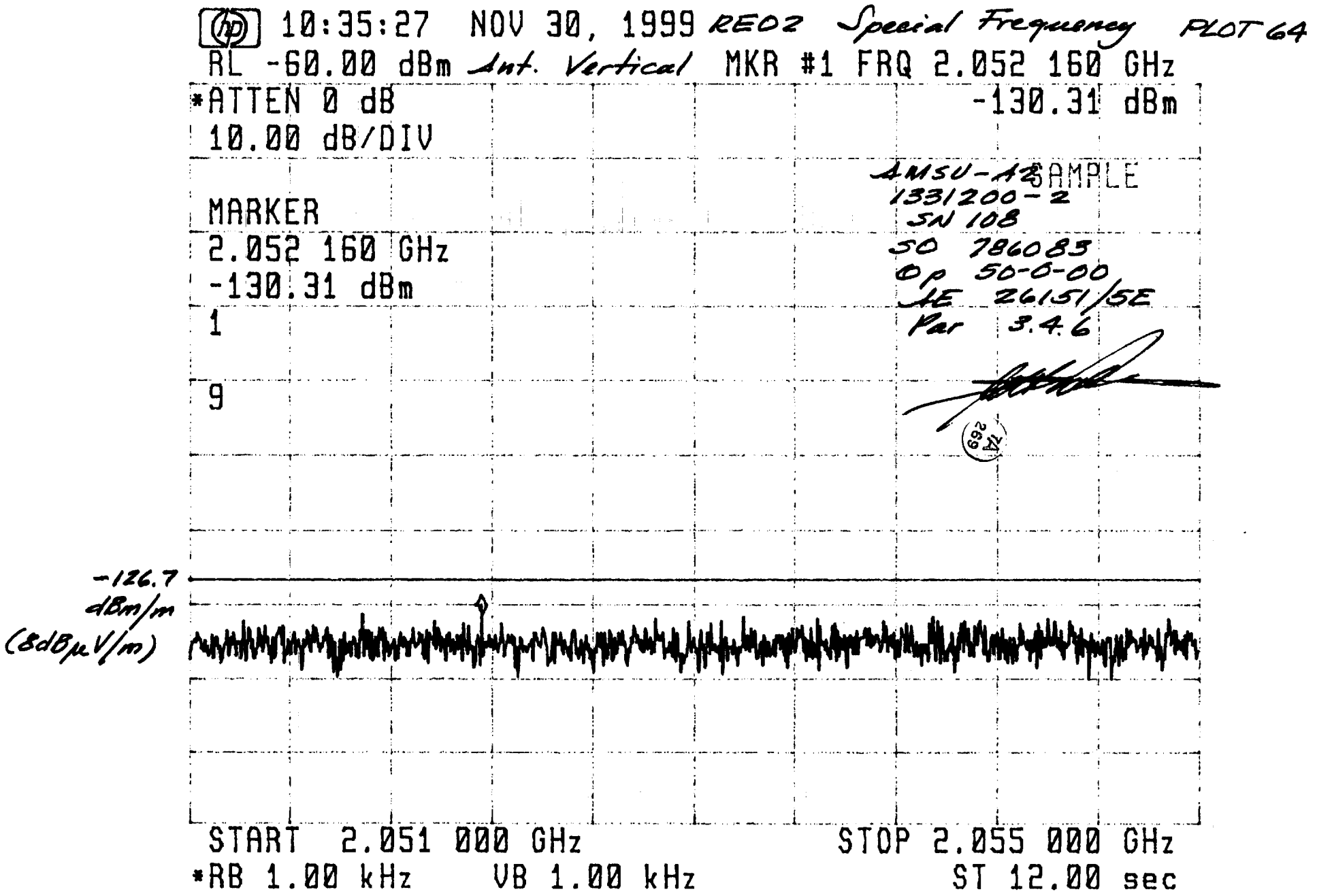
09:15:21 NOV 30, 1999 RE02 Special Frequency PLOT 61

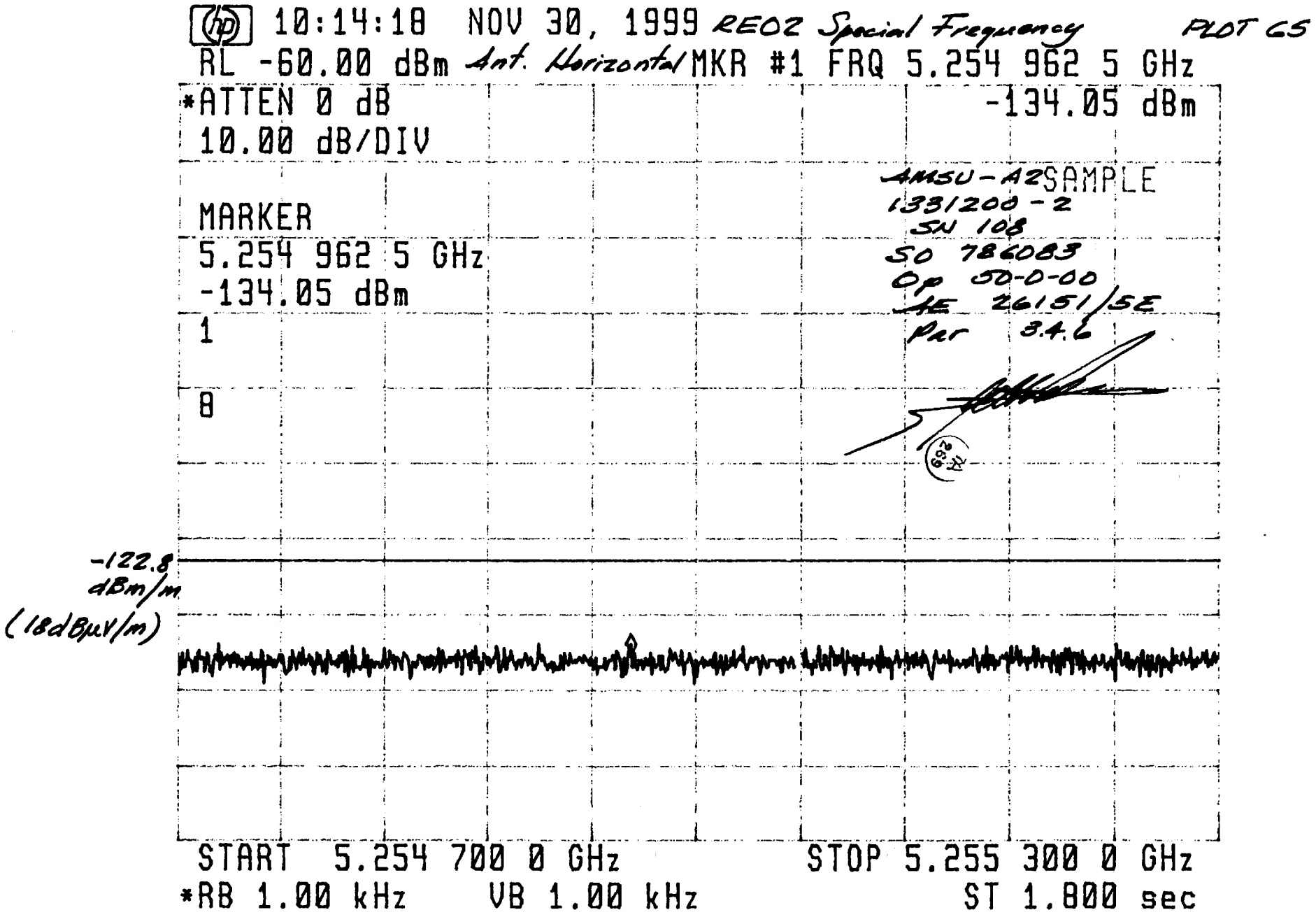
RL -60.00 dBm Ant. Horizontal MKR #1 FRQ 1.609 84 GHz

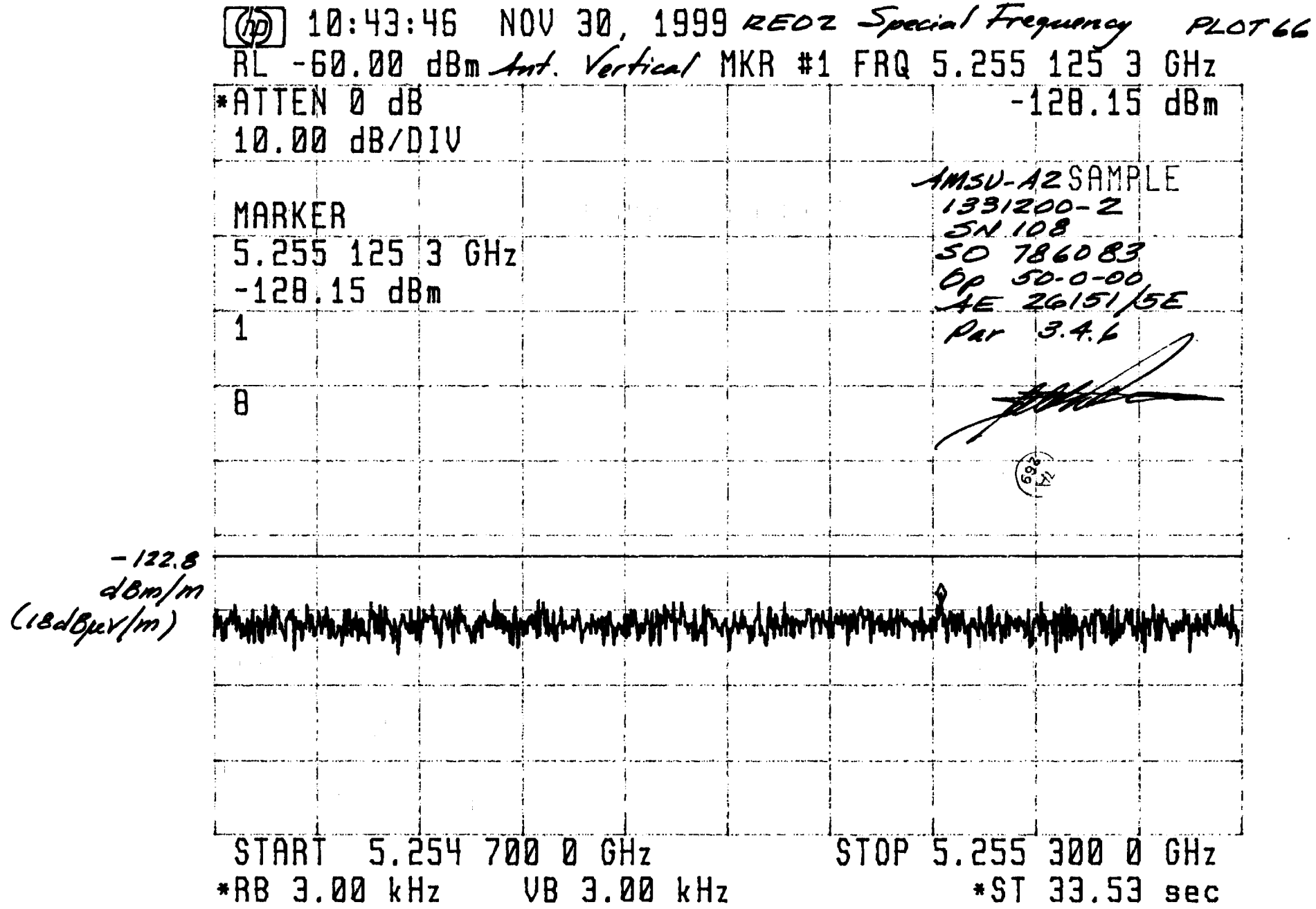


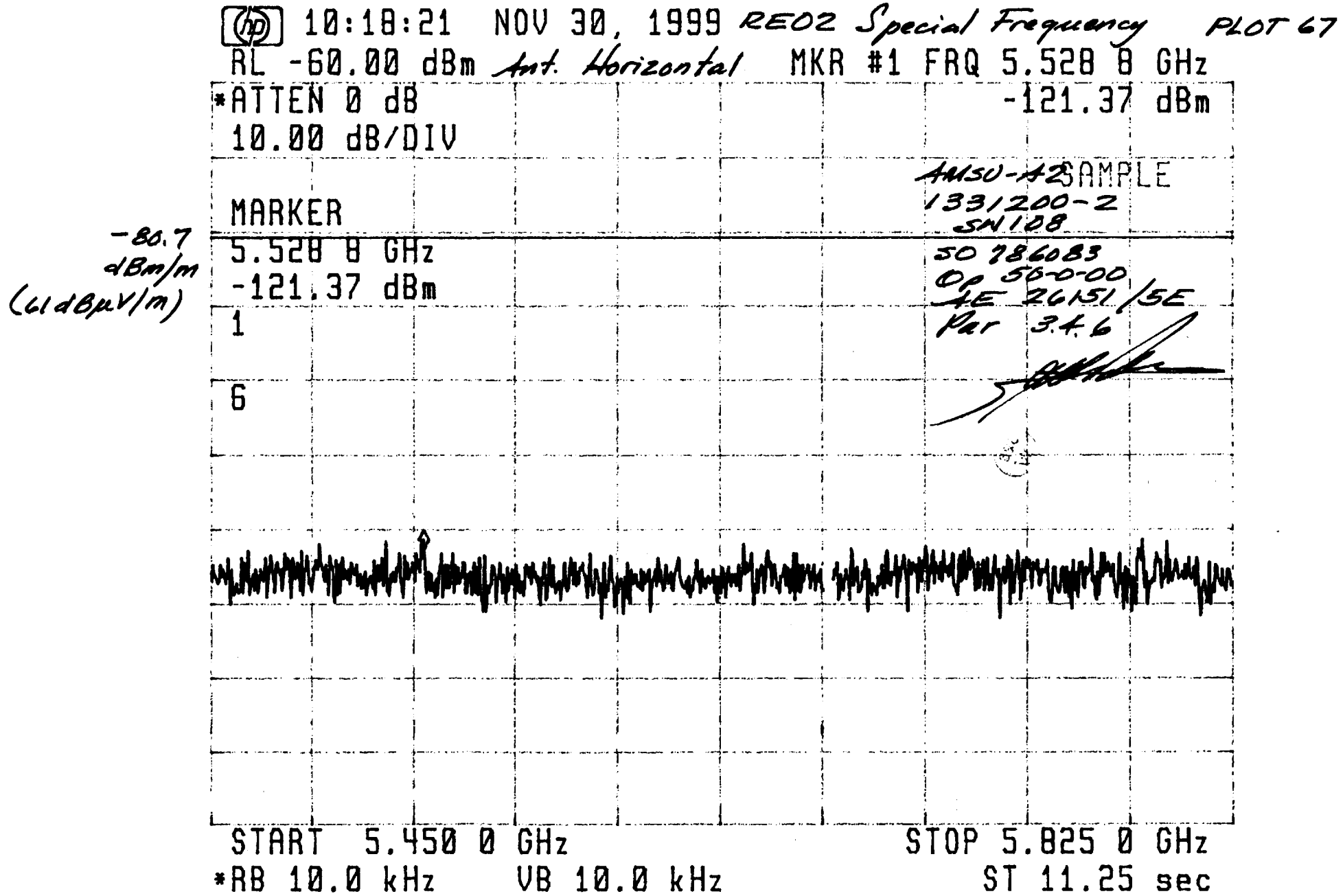

10:28:25 NOV 30, 1999 RE02 Special Frequency PLOT 62
RL -60.00 dBm Ant. Vertical MKR #1 FRQ 1.568 86 GHz
*ATTEN 0 dB -126.40 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
1831200-2
SN 108
SO 186083
Op 50-0-00
AE 26151/5E
Par 3.4.6
MARKER
1.568 86 GHz
-126.40 dBm
1
9
-111.2 dBm/m (21dBµV/m)
START 1.565 00 GHz
STOP 1.614 00 GHz
*RB 3.00 kHz VB 3.00 kHz
ST 16.33 sec

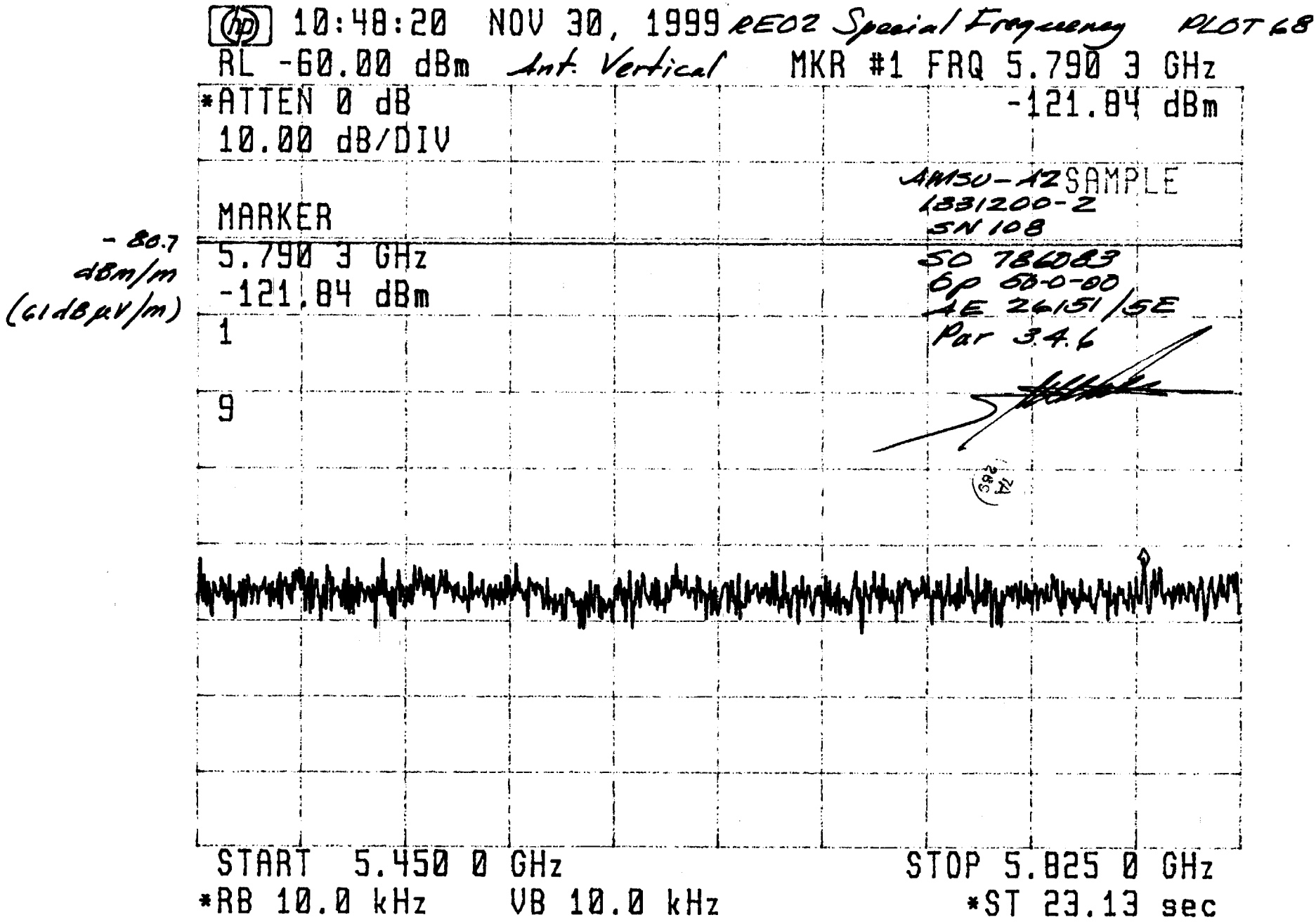

10:11:07 NOV 30, 1999 REO2 Special Frequency PLOT 63
RL -60.00 dBm Ant. Horizontal MKR #1 FRQ 2.051 515 GHz
*ATTEN 0 dB
10.00 dB/DIV
-132.13 dBm
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
AE 26 N51/52E
Par 3.4.6
MARKER
2.051 515 GHz
-132.13 dBm
1
8
-126.7 dBm/m (8dBμV/m)
START 2.051 000 GHz
STOP 2.055 000 GHz
*RB 1.00 kHz
VB 1.00 kHz
ST 12.00 sec


10:35:27 NOV 30, 1999 RE02 Special Frequency PLOT 64
RL -60.00 dBm Ant. Vertical MKR #1 FRQ 2.052 160 GHz
*ATTEN 0 dB
-130.31 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
1331200-2
SN 108
SO 786085
Op 50-0-00
LE 26151/5E
Par 3.4.6
MARKER
2.052 160 GHz
-130.31 dBm
1
9
-126.7 dBm/m (8dBμV/m)
START 2.051 000 GHz
STOP 2.055 000 GHz
*RB 1.00 kHz
VB 1.00 kHz
ST 12.00 sec


10:14:18 NOV 30, 1999 REO2 Special Frequency
PLOT 65
RL -60.00 dBm Ant. Horizontal MKR #1 FRQ 5.254 962 5 GHz
*ATTEN 0 dB
-134.05 dBm
10.00 dB/DIV
AMSU-A2 SAMPLE
133200-2
SN 108
SO 786083
Op 50-0-00
HE 26151/5E
Par 3.4.6
MARKER
5.254 962 5 GHz
-134.05 dBm
1
8
-122.8 dBm/m
(18dBµV/m)
START 5.254 700 0 GHz
STOP 5.255 300 0 GHz
*RB 1.00 kHz
VB 1.00 kHz
ST 1.800 sec


10:43:46 NOV 30, 1999 REOZ Special Frequency PLOT 66
RL -60.00 dBm Ant. Vertical MKR #1 FRQ 5.255 125 3 GHz
*ATTEN 0 dB
10.00 dB/DIV
-128.15 dBm
AMSU-AZ SAMPLE
1331200-2
SN 108
SO 786083
Op 50-0-00
4E 26151/5E
Par 3.4.6
MARKER
5.255 125 3 GHz
-128.15 dBm
1
8
-122.8 dBm/m
(18dBµV/m)
START 5.254 700 0 GHz
STOP 5.255 300 0 GHz
*RB 3.00 kHz
VB 3.00 kHz
*ST 33.53 sec


10:18:21 NOV 30, 1999 RE02 Special Frequency PLOT 67
RL -60.00 dBm Ant. Horizontal MKR #1 FRQ 5.528 0 GHz
*ATTEN 0 dB
-121.37 dBm
10.00 dB/DIV
AM50-A2 SAMPLE
133200-2
SN108
MARKER
-80.7 dBm/m (61 dBµV/m)
5.528 0 GHz
-121.37 dBm
50 786083
OP 50-0-00
4E 26151/5E
Par 3.4.6
1
6
START 5.450 0 GHz
STOP 5.825 0 GHz
*RB 10.0 kHz
VB 10.0 kHz
ST 11.25 sec


10:48:20 NOV 30, 1999 RE02 Special Frequency PLOT 68
RL -60.00 dBm Ant. Vertical MKR #1 FRQ 5.790 3 GHz
*ATTEN 0 dB
10.00 dB/DIV
-121.84 dBm
AM50-12 SAMPLE
1331200-2
SN 108
SO 786083
GP 50-0-00
AE 26151/SE
Par 3.4.6
MARKER
5.790 3 GHz
-121.84 dBm
-80.7 dBm/m (61dBµV/m)
1
9
START 5.450 0 GHz
STOP 5.825 0 GHz
*RB 10.0 kHz
VB 10.0 kHz
*ST 23.13 sec

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Report Documentation Page

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16. ABSTRACT (*Maximum 200 words*)

This is the Engineering Test Report, Radiated Emissions and SARR, SARP, DCS Receivers, Link Frequencies EMI Sensitive Band Test Results, AMSU-A2, S/N 108, for the Integrated Advanced Microwave Sounding Unit-A (AMSU-A).

17. Key Words (Suggested by Author(s))	18. Distribution Statement
EOS Microwave System	Unclassified --- Unlimited

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of pages	22. Price
Unclassified	Unclassified		---

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Block 11. Contract or Grant No. Provide when applicable.

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11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION/AVAILABILITY STATEMENT

12b. DISTRIBUTION CODE
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13. ABSTRACT (*Maximum 200 words*)

This is the Engineering Test Report, Radiated Emissions and SARR, SARP, DCS Receivers, Link Frequencies EMI Sensitive Band Test Results, AMSU-A2, S/N 108, for the Integrated Advanced Microwave Sounding Unit-A (AMSU-A).

14. SUBJECT TERMS
EOS
Microwave System

15. NUMBER OF PAGES

16. PRICE CODE
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17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	SAR

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