TEST INSTRUMENTATION LIST

LISTING OF REQUIRED MEASUREMENTS

SECTION 2.1033 (c) (14)

MEASUREMENT PER SECTION 2.999 OF THE RULES

SECTION 2.1033 (c) (14)

The data required by Section 2.1046 through 2.1057, inclusive, measured in accordance with the procedures set out in Section 2.1041.

RESPONSE:

The following pages include the data required for the Certification of the FCC ID: **AS5FLX-02**, measured in accordance with the procedures set out in Section 2.999 of the Rules.

Each required measurement and its corresponding exhibit number are:

Measurement: 1	Section 2.1046	RF Power Output
Measurement: 2	Section 2.1047	Modulation Characteristics
Measurement: 3	Section 2.1049	Occupied Bandwidth
Measurement: 4	Section 2.1051	Spurious Emissions at Antenna Terminals
Measurement: 5	Section 2.1053	Field Strength of Spurious Radiation
Measurement: 6	Section 2.1055	Measurement of Frequency Stability
	Section 2.1057	Frequency Spectrum to be Investigated
	. . . . .	Test Instrumentation List

Test Instrumentation List

Manufacturer	Model Number	Serial Number	Description	Last Cal. mm/yy	Cal Cycle Month
R&S	FSEK	830846/008	Spectrum Analyzer	6/99	12
R&S	CMD57	827519-005	Radio Communication Tester	5/00	12
HP	772D	2839A01072	Dual Direction Coupler	07/00	12
HP	8595E	3723U00854	Spectrum Analyzer	12/00	12
HP	8563E	3517A03567	Spectrum Analyzer	09/00	24
R&S	NRTZ44	835374/045	Power Meter	05/00	12
HP	8482A	3318A26143	Power Sensor	08/99	12
HP	E4406A	US39030280	Transmitter Tester	02/99	12
Fluke	PM6685R	SM668747	Frequency Counter	02/00	12
R&S	HFH2-Z2	880458/47	Loop Antenna 9 kHz - 30 MHz	01/00	12
A.R.A.	MWH-1826	1041	Horn Antenna 18 – 26 GHz	05/00	12
A.R.A.	MWH-2640	1021	Horn Antenna 26 – 40 GHz	05/00	12
EMCO	3141	9803/1089	Bikonilog Antenna 30 MHz – 2 GHz	11/00	12
R&S	HL025	320891/013	Log-Per Antenna 1 – 18 GHz	06/00	12
R&S	ESI40	837808/003	Receiver 20 Hz – 40 GHz	11/00	12
R&S	ESH3	872317/025	Receiver 9 kHz – 30 MHz	11/00	12

TEST REPORT

MEASUREMENT OF DC POWER OF FINAL STAGE AMPLIFIER

SECTION 2.1033(c) (8)

TEST REPORT

MEASUREMENT OF DC POWER OF FINAL STAGE AMPLIFIER

SECTION 2.1033(c) (8)
The dc voltages applied to and dc currents into the several elements of the final radio frequency amplifying device for normal operation over the power range.

RESPONSE: The TRX19HP nominally uses the following voltages and maximum currents:

Stage	Voltage	Current
Pre Amp	8Volts	381mA
Amplifier	26 Volts	500mA
Power Amp	26 Volts	3.18A

MEASUREMENT OF MODULATION CHARACTERISTICS

SECTION 2.1047

MEASUREMENT: 2

SECTION 2.1047

MEASUREMENT OF MODULATION CHARACTERISTICS

The modulation methods used in "Flexent GSM 1900 Transceiver" is called GMSK Gaussian Minimum Shift Keying are completely different from those used in FM Analog system. An optional slow frequency hopping is used in which operating frequency within the band changes only once for every TDMA frame. The methods used in evaluating modulation characteristics of the TRX19HP are described in the Draft GSM 05.05 European Standard (Telecommunication Series): "Digital Cellular Telecommunications System (Phase 2+); Radio Transmission and reception (GSM 05.05 Version 8.0.0 Released 1999)".

1.0 Modulation Accuracy Section 4.6.1 of GSM 05.05

For any 148-bits subsequence of the 511-bits pseudo-random sequence, defined in CCITT Recommendation O.153 fascicle IV.4, the phase error trajectory on the useful part of the burst (including tail bits), shall be measured by computing the difference between the phase of the transmitted waveform and the phase of the expected one. The RMS phase error (difference between the phase error trajectory and its linear regression on the active part of the time slot) shall not be greater than 5° with a maximum peak deviation during the useful part of the burst less than 20°.

1.1 Required Results

TRX19HP was tested using CMD54/57/59 of Rohde and Schwarz a RF Test Instrument with Abis control. This equipment complies with test requirements indicated in prI-ETS 300 609-1 "Digital Cellular Telecommunications System (Phase 2); (Base Station (BSS) equipment specification, Part 1. Radio aspects (GSM 11.21 Version 4.13.0)" April 1999. The measured modulation phase error was less than 5 degrees.

2.0 Spectral Characteristics (Spectrum due to Modulation)

Figure A. 6a: PCS 1900 BTS Modulation and Noise Spectrum due to GMSK modulation.

2.1 Measured Results

The results are presented as plots for upper and lower edges and center channel for each Band in attachment Measurement 3: "Measurement of Occupied Bandwidth".

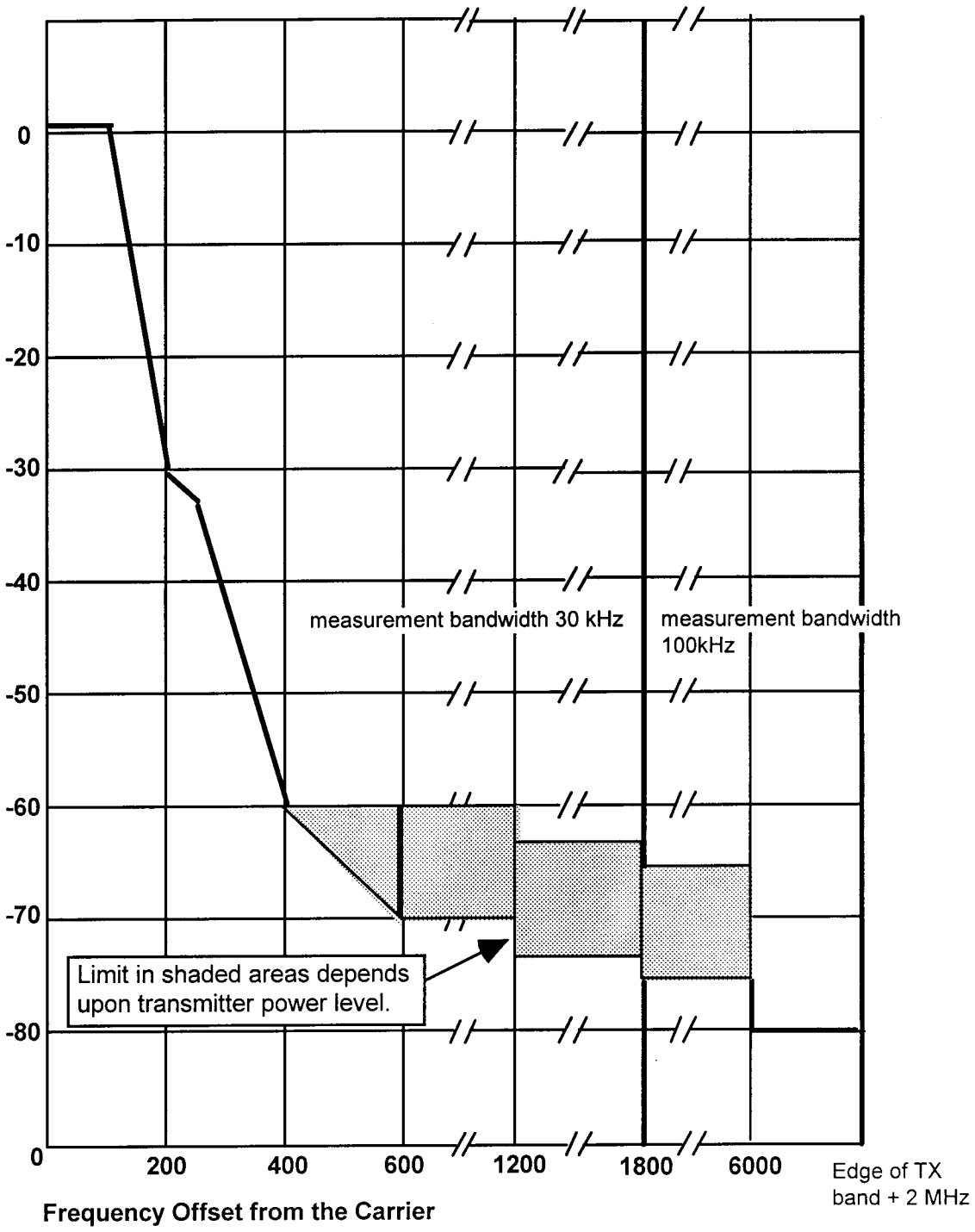


Figure A.6a: PCS 1 900 BTS Modulation & Noise Spectrum Mask due to GMSK modulation

FIELD STRENGTH OF SPURIOUS RADIATION

SECTION 2.1053

MEASUREMENT: 5

SECTION 2.1053

FIELD STRENGTH OF SPURIOUS RADIATION

Both preliminary and final field strength measurements were made at a 10 m Absorber Lined FCC approved Compliance Chamber at the European Compliance Laboratory of Lucent Technologies at Nuernberg, Germany. A complete description and full measurement data for the site is on file with the Commission.

The TRXHP19s were assembled in a Flexent GSM Macrocell Cabinet. Each TRXHP19's were operating on different frequency blocks. The TRXHP19's were operating at a RF output level of 80 watts. The following configurations were tested:

(a) 4x4x4, (b) 3x3x3, (c) 2x2x2 and (d) 1x1x1. The output terminals (J4) were terminated with 50 ohm load. The spectrum from 10 MHz to the 10th harmonic of the carrier was searched for spurious radiation. Measurements were made according to ANSI C63.4. All emissions more than 20 dB below the specification limit were considered not reportable (Section 2.1057(c)). The calculated emission levels were found by:

Measured level (dBμV) + Cable Loss(dB)+Antenna Factor(dB) = Field Strength (dBμV/m)

Section 24.238 and 2.1053 contains the requirements for the levels of spurious radiation as a function of the level of the unmodulated carrier. The reference level for the unmodulated carrier is calculated as the field produced by an ideal isotropic antenna excited by the transmitter output power of 80 W according to the following relation taken from Reference Data for Radio Engineers, page 27-7, 6th edition, IT&T Corp.

$$E= [(30*P)^{1/2}]/R$$

$$20 \log (E*10^{6}) – (43 + 10 \log P) = 82.2 \text{ dBμV/meter}$$

E = Field Intensity in Volts/meter
P = Transmitted Power in Watts
R = Distance in meters = 3 m

RESULTS:

For this particular test, the field strength of any spurious radiation is required to be less than 82.2 dBμV/meter. Reportable measurements are equal to or greater than 62.2 dBμV/meter. Over the spectrum investigated, 10 MHz to the 10th of the carrier, no reportable spurious emissions were detected. This demonstrates that the " Flexent GSM 1900 Transceiver (TRXHP19)", a single Radio Frequency Unit the subject of this application, complies with Sections 2.1053, 24.238 and 2.1057 of the Rules.

MEASUREMENT: 6

MEASUREMENT OF FREQUENCY STABILITY

MEASUREMENT: 6

SECTION 2.1055

MEASUREMENT OF FREQUENCY STABILITY

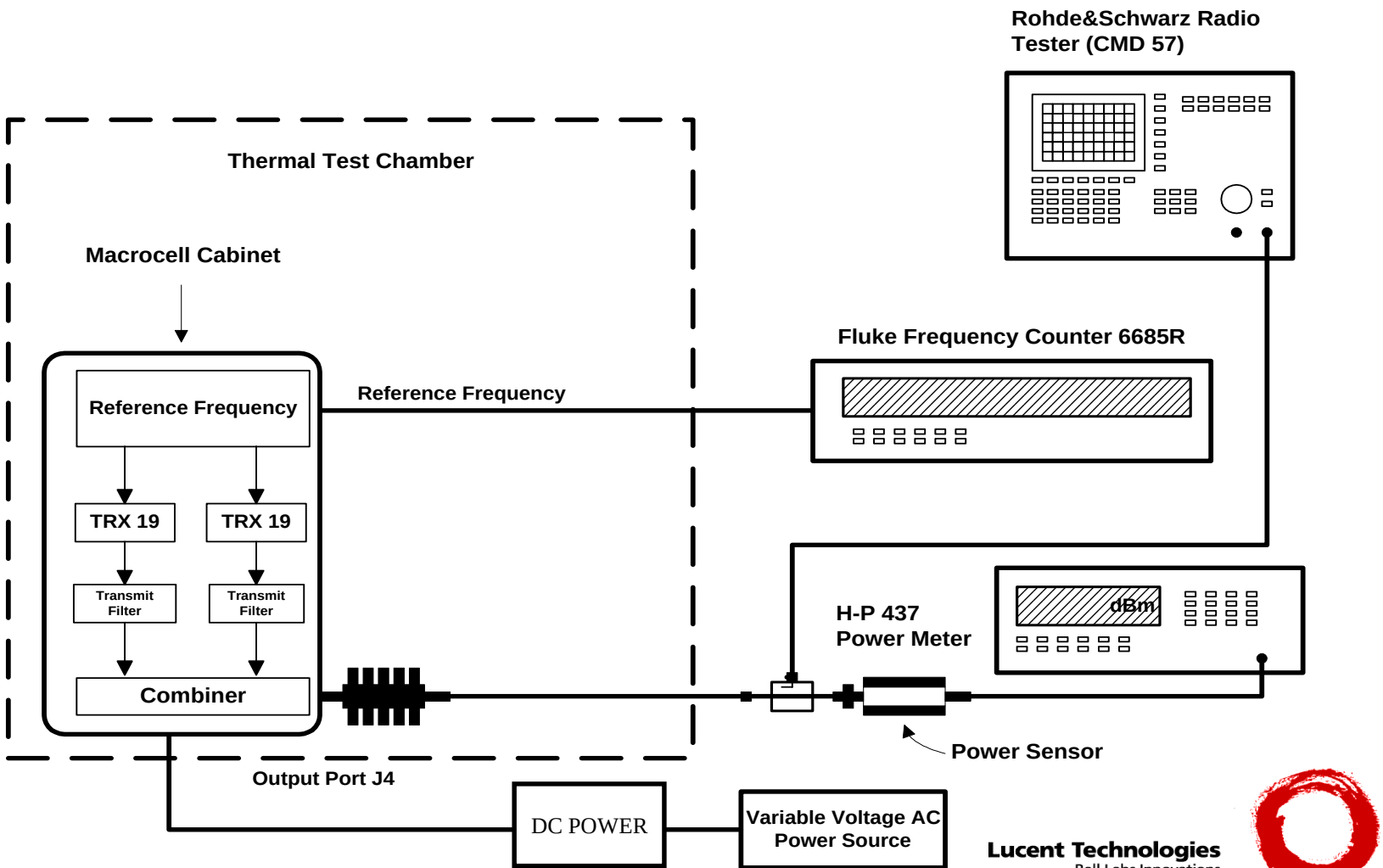
RESPONSE:

The frequency stabilization and accuracy of the GSM signal amplified by the TRXHP19 is a function of reference frequency generator used by the Voltage Controlled Oscillator (VCO). The reference frequency generator is highly accurate frequency unit which is phase-locked with VCO of the TRXHP19. Any change reference frequency generator will affect the output frequency of TRXHP19.

The frequency stability test data was measured TRXHPs installed and tested in a fully configured Flexent GSM indoor Macrocell Cabinet. The entire Macrocell Cabinet was subjected to the FCC specified environments while operating at full rated power. The 13 MHz reference oscillator deviations TRX19 output power frequency deviations were measured. The measurement setup is depicted in Figure 6 A. The TRXHP19 operates from 54V DC power supply and it is capable of operating in temperature range –15C to 55C. Below –15C, the TRXHPs shuts down by temperature sensors and software control. Therefore temperature stability characteristics are not measured below –15C. The low temperature shut down procedure is explained in following pages.

RESULTS:
The required frequency stability over temperature and voltage is 0.05 ppm. The attached measured data documents shows that the worse case frequency stability over temperature and voltage as 0.046 ppm.

TEST CONFIGURATION FOR FREQUENCY STABILITY



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LOW TEMPERATURE SHUT DOWN PROCEDURE

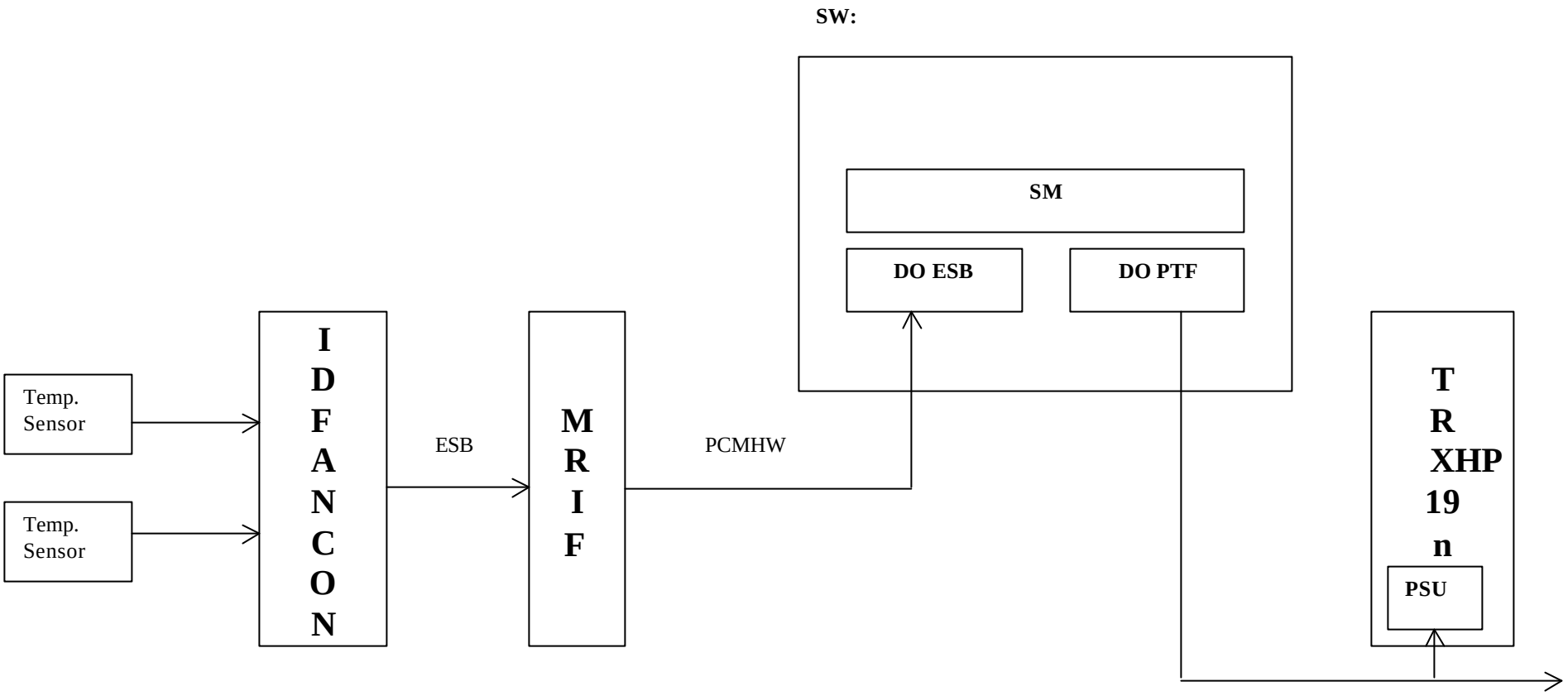
A signal flow diagram is attached to show the functionality with arrowheads.

In the indoor cabinet two temperature sensors are fitted in the door to measure the incoming air temperature. Both of these sensors are connected to the INDOOR FAN CONTROLLER unit fitted on top right corner of the cabinet. Temperature is measured by both IDFANCONs in parallel.

If one of these sensors senses a temperature of < -15 Degrees Celsius, an alarm, (IDFANCON_LOW_TEMP)under software control will be raised by the IDFANCON unit. This alarm signal is forwarded via MRIF to CC (Central Controller) which will interrupt the DO PTF and switch OFF the power to all TRx's. With power supply shut off, there is no transmission from any TRXHP19.

When 5 Degrees Celsius above the turn off temperature is reached then the alarm condition will be cleared. The SM (System Manager) will set power ON to all the TRXHP19' units.

All TRXHP19's will reboot and the unit will restore to normal functionality.



Block diagram for turning off the TRXs at low temperatures

ESB - External Signalling Bus
PCMHW - PCM Highway
SM - System Manager
Note: For other abbreviations see previous page.

MEASUREMENT OF FREQUENCY STABILITY
(FLEXENT GSM MACROCELL IN-DOOR CABINET)

Reference and Transmit Frequency Deviation at -15 Degrees C @ 54 Volts		
Time (Minutes)	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
0	13,000,000.56	47
0.5	13,000,000.58	41
1.0	13,000,000.55	36
1.5	13,000,000.59	39
2.0	13,000,000.57	44
2.5	13,000,000.55	42
3.0	13,000,000.56	43
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

Reference and Transmit Frequency Deviation at -15 degree C over voltage / frequency range		
Volts DC	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
45.9	13,000,000.56	47
48.0	13,000,000.58	41
50.0	13,000,000.55	36
52.0	13,000,000.60	39
54.0	13,000,000.57	44
56.0	13,000,000.55	42
58.0	13,000,000.56	43
60.0	13,000,000.55	43
62.1	13,000,000.56	45
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

J4 RF Tx Power Deviation = 0.3 dBm, Transmit Channel Monitored: 565 (1940.8MHz)

Reference and Transmit Frequency Deviation at -10 Degrees C @ 54 Volts		
Time (Minutes)	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
0	13,000,000.58	37
0.5	13,000,000.52	27
1.0	13,000,000.55	34
1.5	13,000,000.52	35
2.0	13,000,000.52	39
2.5	13,000,000.54	31
3.0	13,000,000.55	38
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

Reference and Transmit Frequency Deviation at -10 degree C over voltage / frequency range		
Volts DC	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
45.9	13,000,000.58	37
48.0	13,000,000.52	27
50.0	13,000,000.55	34
52.0	13,000,000.52	35
54.0	13,000,000.52	39
56.0	13,000,000.54	31
58.0	13,000,000.55	38
60.0	13,000,000.52	38
62.1	13,000,000.53	32
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

J4 RF Tx Power Deviation = 0.3 dBm, Transmit Channel Monitored: 565 (1940.8MHz)

Reference and Transmit Frequency Deviation at 0 Degrees C @ 54 Volts		
Time (Minutes)	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
0	13,000,000.26	-11
0.5	13,000,000.26	-8
1.0	13,000,000.27	-6
1.5	13,000,000.26	-10
2.0	13,000,000.27	-11
2.5	13,000,000.27	-8
3.0	13,000,000.26	-11
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

Reference and Transmit Frequency Deviation at 0 degree C over voltage / frequency range		
Volts DC	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
45.9	13,000,000.26	13
48.0	13,000,000.26	-6
50.0	13,000,000.27	-6
52.0	13,000,000.26	-10
54.0	13,000,000.27	-11
56.0	13,000,000.27	-11
58.0	13,000,000.26	-10
60.0	13,000,000.27	-11
62.1	13,000,000.27	-5
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

J4 RF Tx Power Deviation = 0.3 dBm, Transmit Channel Monitored: 565 (1940.8MHz)

Reference and Transmit Frequency Deviation at +10 Degrees C @ 54 Volts		
Time (Minutes)	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
0	13,000,000.18	-18
0.5	13,000,000.17	-17
1.0	13,000,000.19	-16
1.5	13,000,000.18	-20
2.0	13,000,000.19	-18
2.5	13,000,000.18	-21
3.0	13,000,000.18	-20
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

Reference and Transmit Frequency Deviation at +10 degree C over voltage / frequency range		
Volts DC	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
45.9	13,000,000.18	-18
48.0	13,000,000.20	-17
50.0	13,000,000.19	-16
52.0	13,000,000.19	-20
54.0	13,000,000.18	-18
56.0	13,000,000.19	-21
58.0	13,000,000.20	-20
60.0	13,000,000.20	-14
62.1	13,000,000.20	-15
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

J4 RF Tx Power Deviation = 0.3 dBm, Transmit Channel Monitored: 565 (1940.8MHz)

Reference and Transmit Frequency Deviation at +20 Degrees C @ 54 Volts		
Time (Minutes)	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
0	13,000,000.13	-36
0.5	13,000,000.12	-29
1.0	13,000,000.12	-39
1.5	13,000,000.12	-32
2.0	13,000,000.13	-36
2.5	13,000,000.13	-26
3.0	13,000,000.13	-33
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

Reference and Transmit Frequency Deviation at +20 degree C over voltage / frequency range		
Volts DC	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
45.9	13,000,000.13	-36
48.0	13,000,000.12	-29
50.0	13,000,000.12	-39
52.0	13,000,000.12	-32
54.0	13,000,000.13	-36
56.0	13,000,000.13	-26
58.0	13,000,000.13	-33
60.0	13,000,000.12	-36
62.1	13,000,000.12	-30
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

J4 RF Tx Power Deviation = 0.3 dBm, Transmit Channel Monitored: 565 (1940.8MHz)

Reference and Transmit Frequency Deviation at +30 Degrees C @ 54 Volts		
Time (Minutes)	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
0	13,000,000.06	-51
0.5	13,000,000.06	-45
1.0	13,000,000.05	-46
1.5	13,000,000.08	-47
2.0	13,000,000.07	-50
2.5	13,000,000.06	-51
3.0	13,000,000.07	-38
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

Reference and Transmit Frequency Deviation at +30 degree C over voltage / frequency range		
Volts DC	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
45.9	13,000,000.06	-51
48.0	13,000,000.06	-45
50.0	13,000,000.05	-46
52.0	13,000,000.08	-47
54.0	13,000,000.07	-50
56.0	13,000,000.06	-43
58.0	13,000,000.07	-51
60.0	13,000,000.06	-38
62.1	13,000,000.07	-52
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

J4 RF Tx Power Deviation = 0.3 dBm, Transmit Channel Monitored: 565 (1940.8MHz)

Reference and Transmit Frequency Deviation at +40 Degrees C @ 54 Volts		
Time (Minutes)	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
0	13,000,000.06	-54
0.5	13,000,000.05	-51
1.0	13,000,000.06	-45
1.5	13,000,000.05	-48
2.0	13,000,000.06	-47
2.5	13,000,000.05	-47
3.0	13,000,000.06	-48
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

Reference and Transmit Frequency Deviation at +40 degree C over voltage / frequency range		
Volts DC	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
45.9	13,000,000.06	-54
48.0	13,000,000.05	-51
50.0	13,000,000.06	-45
52.0	13,000,000.05	-48
54.0	13,000,000.06	-47
56.0	13,000,000.05	-47
58.0	13,000,000.06	-48
60.0	13,000,000.06	-43
62.1	13,000,000.06	-47
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

J4 RF Tx Power Deviation = 0.3 dBm, Transmit Channel Monitored: 565 (1940.8MHz)

Reference and Transmit Frequency Deviation at +50 Degrees C @ 54 Volts		
Time (Minutes)	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
0	12,999,999.98	-59
0.5	12,999,999.97	-57
1.0	12,999,999.96	-61
1.5	12,999,999.98	-61
2.0	12,999,999.97	-59
2.5	12,999,999.97	-62
3.0	12,999,999.98	-65
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

Reference and Transmit Frequency Deviation at +50 degree C over voltage / frequency range		
Volts DC	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
45.9	12,999,999.98	-61
48.0	12,999,999.97	-57
50.0	12,999,999.96	-61
52.0	12,999,999.98	-61
54.0	12,999,999.97	-59
56.0	12,999,999.97	-62
58.0	12,999,999.98	-69
60.0	12,999,999.97	-65
62.1	12,999,999.97	-60
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

J4 RF Tx Power Deviation = 0.3 dBm, Transmit Channel Monitored: 565 (1940.8MHz)

Reference and Transmit Frequency Deviation at +55 Degrees C @ 54 Volts		
Time (Minutes)	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
0	13,000,000.03	-63
0.5	13,000,000.03	-60
1.0	13,000,000.03	-65
1.5	13,000,000.03	-69
2.0	13,000,000.03	-68
2.5	13,000,000.03	-61
3.0	13,000,000.03	-64
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

Reference and Transmit Frequency Deviation at +55 degree C over voltage / frequency range		
Volts DC	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
45.9	12,999,999.96	-61
48.0	12,999,999.96	-60
50.0	12,999,999.96	-63
52.0	12,999,999.96	-63
54.0	12,999,999.98	-60
56.0	12,999,999.97	-62
58.0	12,999,999.97	-62
60.0	12,999,999.97	-60
62.1	12,999,999.97	-64
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

J4 RF Tx Power Deviation = 0.3 dBm, Transmit Channel Monitored: 565 (1940.8MHz)

Reference and Transmit Frequency Deviation at 40 Degrees C @ 54 Volts (From +55 Degree C down to +20 C)		
Time (Minutes)	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
0	13,000,000.06	-50
0.5	13,000,000.07	-44
1.0	13,000,000.07	-49
1.5	13,000,000.06	-43
2.0	13,000,000.06	-48
2.5	13,000,000.06	-45
3.0	13,000,000.07	-52
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

Reference and Transmit Frequency Deviation at 40 degree C over voltage / frequency range		
Volts DC	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
45.9	13,000,000.06	-50
48.0	13,000,000.05	-45
50.0	13,000,000.07	-47
52.0	13,000,000.07	-50
54.0	13,000,000.05	-50
56.0	13,000,000.06	-45
58.0	13,000,000.06	-48
60.0	13,000,000.06	-45
62.1	13,000,000.06	-51
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

J4 RF Tx Power Deviation = 0.3 dBm, Transmit Channel Monitored: 565 (1940.8MHz)

Reference and Transmit Frequency Deviation at 30 Degrees C @ 54 Volts (From +55 Degree C down to +20 C)		
Time (Minutes)	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
0	13,000,000.08	-44
0.5	13,000,000.07	-43
1.0	13,000,000.07	-52
1.5	13,000,000.06	-40
2.0	13,000,000.08	-49
2.5	13,000,000.05	-41
3.0	13,000,000.06	-53
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

Reference and Transmit Frequency Deviation at 30 degree C over voltage / frequency range		
Volts DC	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
45.9	13,000,000.08	-44
48.0	13,000,000.07	-41
50.0	13,000,000.07	-46
52.0	13,000,000.06	-47
54.0	13,000,000.07	-47
56.0	13,000,000.06	-45
58.0	13,000,000.05	-45
60.0	13,000,000.06	-44
62.1	13,000,000.07	-48
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

J4 RF Tx Power Deviation = 0.3 dBm, Transmit Channel Monitored: 565 (1940.8MHz)

Reference and Transmit Frequency Deviation at 20 Degrees C @ 54 Volts (From +55 Degree C down to +20 C)		
Time (Minutes)	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
0	13,000,000.12	-36
0.5	13,000,000.13	-34
1.0	13,000,000.13	-33
1.5	13,000,000.11	-40
2.0	13,000,000.14	-32
2.5	13,000,000.12	-30
3.0	13,000,000.13	-33
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

Reference and Transmit Frequency Deviation at 30 degree C over voltage / frequency range		
Volts DC	**Measurement Reference Frequency (Reference Frequency = 13MHz)**	**Tx Frequency Deviation (Hz)**
45.9	13,000,000.12	-37
48.0	13,000,000.12	-33
50.0	13,000,000.14	-28
52.0	13,000,000.12	-34
54.0	13,000,000.13	-36
56.0	13,000,000.12	-31
58.0	13,000,000.13	-29
60.0	13,000,000.13	-30
62.1	13,000,000.13	-34
SPECIFICATION	+ / - .000000650 MHz or 0.65 Hz (+ / - 0.05 ppm)	+ / - 97.04 Hz (+ / - 0.05 ppm)
RESULTS	**PASS**	**PASS**

J4 RF Tx Power Deviation = 0.3 dBm, Transmit Channel Monitored: 565 (1940.8MHz)

FREQUENCY SPECTRUM TO BE INVESTIGATED

SECTION 2.1057

SECTION 2.1057

FREQUENCY SPECTRUM TO BE INVESTIGATED

Frequency Spectrum to be investigated, Measurement Bandwidth and detector function used meet or exceed the Specification contained in Section 2.1057, 22.917, ANSI C63.4, IS95A, and IS97. All instrumentation used were calibrated according to our Quality Procedure, laid down by DATech.

MEASUREMENT OF RADIO FREQUENCY POWER OUTPUT

SECTION 2.1046

MEASUREMENT: 1

MEASUREMENT OF RADIO FREQUENCY POWER OUTPUT

SECTION 2.1046

The test arrangements used to measure the radio frequency power output of the FCC ID: AS5FLX-02 "Flexent GSM 1900 Transceiver" Model TRX19HP is shown on following pages. Measurements were made respectively at each frequency where occupied Bandwidth measurements were performed. The use of the TRX19HP is for a Single GSM Carrier. This requires that the power level at J4 connector be calibrated for the specific channel of use. The test configuration, Figure 1A and Figure 1B, allowed the measurement of RF output power for channels investigated for Occupied Bandwidth. The test set up for Figure 1A for two composite carriers and Figure 1B for single carrier. The measurements were made at upper lower band edges and at the center channel for each Band.

Measurements were made at J4 connector terminals for following configurations:

1. Single carrier with TRX19HP output directly connected to J4.
2. A composite power for two carrier combined.
3. Single carrier with TRX19HP output connected to a J4 through a passive combiner.

A single TRX19HP system has a maximum power output at the antenna terminals of 59 Watts (47.6 dBm) +1/-2 dB, it also has a minimum power output at the antenna terminals of 0.002 Watts (+1/-2 dB), across the PCS band (1930.4 –1989.6 MHz).

Two TRX19HPs combined system for two carriers have a maximum composite power output at the antenna terminals of 58 Watts (47.0 dBm) +1/-2 dB, it also has a minimum power output at the antenna terminals of 0.005 Watts (+0.5/-2 dB), across the PCS band (1930.4 –1989.6 MHz).

A single TRX19HP connected to a passive combiner with second input port terminated has a maximum composite power output at the antenna terminals of 22 Watts (43.5 dBm) +1/-2 dB, it also has a minimum power output at the antenna terminals of 0.005 Watts (+1/-2 dB), across the PCS band (1930.4 –1989.6 MHz).

Digitized pseudo-random traffic stored in an EROM in TRX19HP was used as input.

MEASUREMENT: 1

MEASUREMENT OF RADIO FREQUENCY POWER OUTPUT

EQUIPMENT:

BTS :	**Flexent GSM indoor Macrocell cabinet.**
TRX19HP:	**Flexent GSM 1900 Transceiver.**
ACU 19-4UV	**Combiner**
Transmit Filter:	**Cellular Band Transmit Filter**
Directional Coupler:	**HP 778D Dual Directional Coupler**
Power Meter:	**HP 437B with HP 8481A Power Head**
Plotter:	**HP Model Color Pro**
Spectrum Analyzer:	**HP 8595E**

RESULTS:

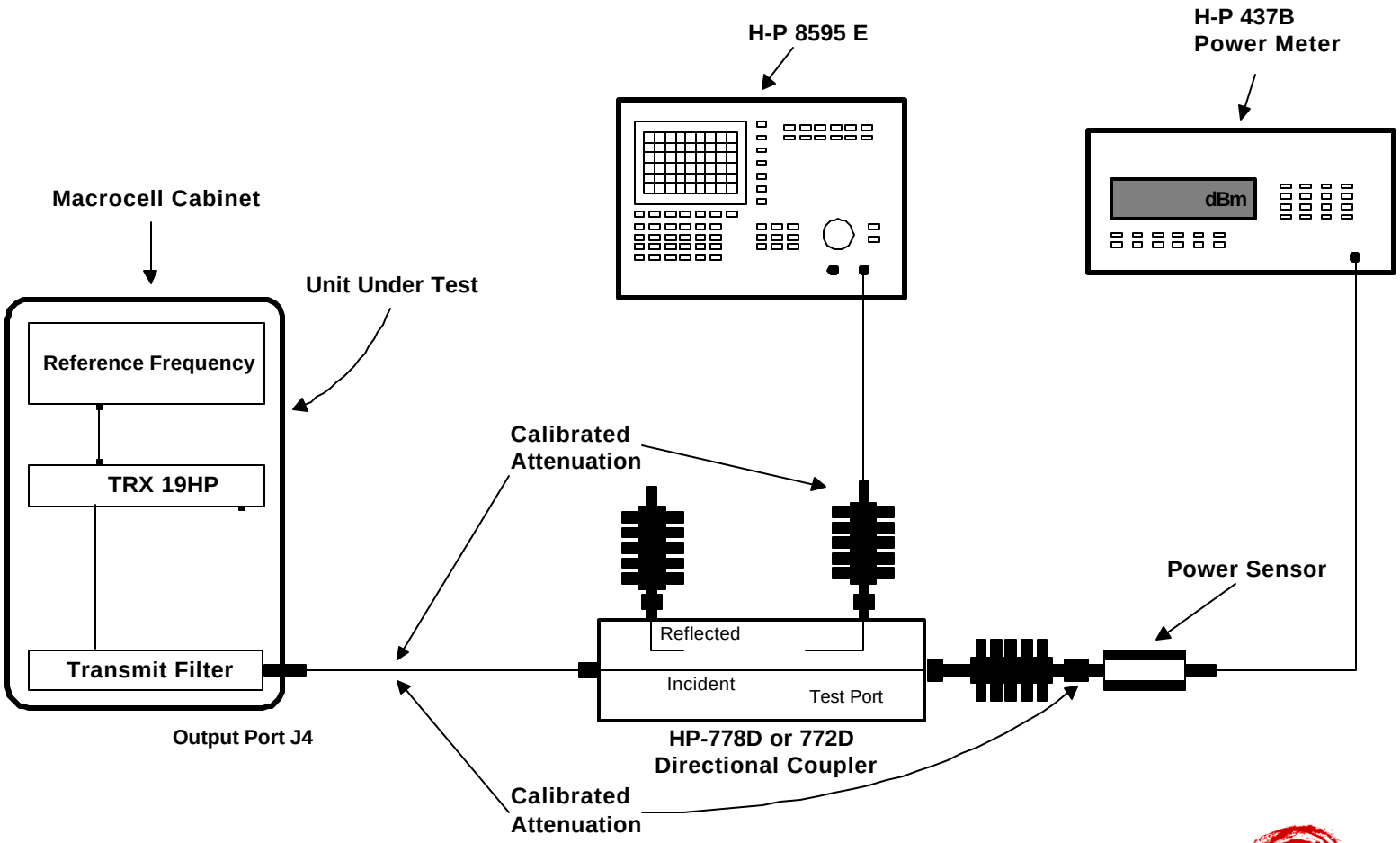
The TRX19HP was configured in the test setup shown in Figure 1A and Figure 1B.

1. Single carrier with TRX19HP output directly connected to J4. Maximum RF output power measured: 59W
2. A composite power for two carrier combined. Maximum RF output power measured: 58 W

3. Single carrier with TRX19HP output connected to a J4 through a passive combiner. Maximum RF output power measured: 22W

For (1) and (2) above, the data is recorded on the TRX19HP Occupied Bandwidth Data Sheets.

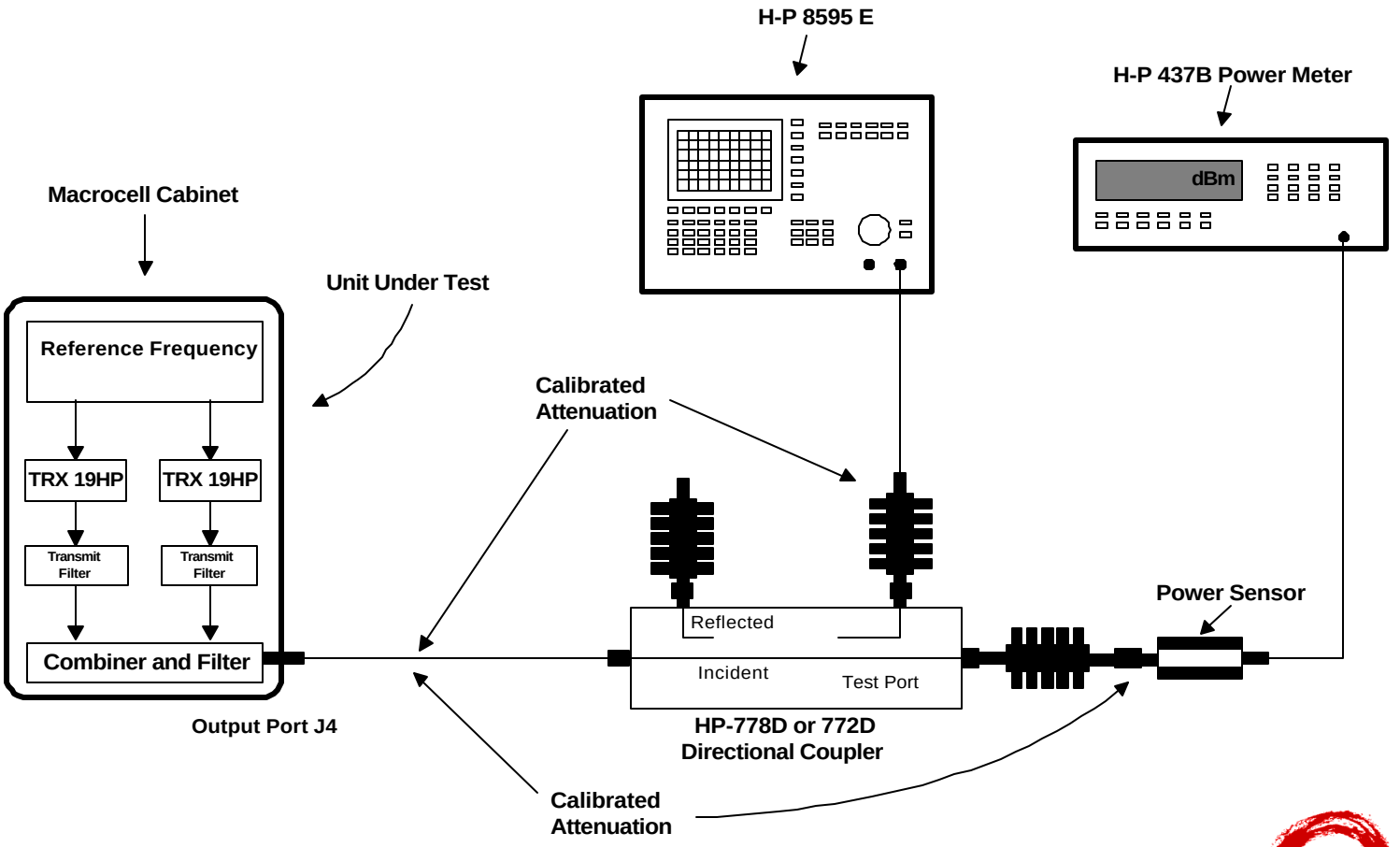
Figure 1A. TEST CONFIGURATION FOR RF POWER OUTPUT



All components are calibrated over the frequency range of interest

Lucent Technologies
Bell Labs Innovations

Figure 1B. TEST CONFIGURATION FOR RF POWER OUTPUT



All components are calibrated over the frequency range of interest

Lucent Technologies
Bell Labs Innovations

MEASUREMENT OF OCCUPIED BANDWIDTH

SECTION 24.238(b) – Measurement 3A

SECTION 2.1049 – Measurement 3B

MEASUREMENT: 3A

SECTION 24.238(b)

MEASUREMENT OF OCCUPIED BANDWIDTH

The occupied bandwidth of the FCC ID: AS5FLX-02 "Flexent GSM 1900 Transceiver" model TRX19HP was measured using a HP 8563E Spectrum Analyzer and an HP Model 7470A Plotter. The Hp 8563E is designed to measure 99% power bandwidth. The measurements were made for Left Edge, and Right Edge of each PCS band.

Section 24.238(b) requires that Resolution Bandwidth (RWB) of at least 1% of emission bandwidth be used to demonstrate RF antenna conducted out-of-band emission compliance at the frequency block edges. Therefore occupied Bandwidth measurements in this section are required to determine RBW at band edges for Measurement 4, Spurious emissions at Antenna Terminals Section (2.1051)

Results:
The plots are provided for Left and Right edges of each PCS band. The Measured 99% power bandwidth is 256 kHz. This determines:

(1) Emission type : 256KGXW
(2) Spectrum Analyzer RBW for measurement of antenna conducted emissions in the 1 MHz bands immediately outside and adjacent to the frequency block. A RBW of 10 kHz in 1 MHz band immediately outside and adjacent to frequency blocks was used for Measurement 4.

MEASUREMENT: 3B

SECTION 2.1049

MEASUREMENT OF OCCUPIED BANDWIDTH

The occupied bandwidth of the FCC ID: AS5FLX-01 "Flexent GSM 1900 Transceiver" model TRX19HP was measured using a Rohde & Schwarz FSEK Spectrum Analyzer and an HP Model Color Pro Plotter. The RF power level was measured using a RF power meter as shown in the test setup in Figure 3A and 3B. The Figure 3A shows occupied Bandwidth measurement without combiner and Figure 3B shows occupied Bandwidth with combiner. The RF output from the transmitter to spectrum analyzer was reduced (to an amplitude usable by the spectrum analyzer) by using a calibrated attenuator. The reference-line on the spectrum analyzer display corresponds to level measured by the RF power meter.

The channel allocations with corresponding frequencies are given in the next page. The channels are available on each authorized frequency blocks are also indicated. The frequencies and channels used are tabulated on the bottom of each plot. Output signal is plotted for a frequency span of 2.4 MHz with channel frequency as center. Plots are provided for Left Edge, Center and Right Edge of each PCS band. These frequencies were chosen to show the occupied bandwidth in the channels in each of the PCS in which this radio can be operated, in compliance with Section 24.229 and 24.238 (c) of the Commission code.

The measurement procedure and specification limits for Occupied Bandwidth are indicated in Section 4.2.1 "spectrum due to the modulation and wide band noise" and Figure A.6a: PCS 1900 BTS Modulation and Noise Spectrum Mask due to GMSK Modulation" of GSM 05.05 "European Standard (Telecommunication Series); Digital Cellular Telecommunication System (Phase 2+); Radio Transmission and Reception" (Release 1999). The measurements were made in accordance with GSM 05.05 using 30 kHz Spectrum Analyzer Resolution Bandwidth. The Resolution Bandwidth setting also meets commissions rule indicated in paragraph 24.238(b) "in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. For conducted spurious emission tests (See Measurement: 4) a resolution bandwidth of 1 MHz is used throughout."

Results:

The results presented as plots for single carrier:

1. For single carrier with TRX19HP output directly connected to J4.
2. For single carrier of two carrier combined system.

Frequency range of PCS 1900 (n =512...810)

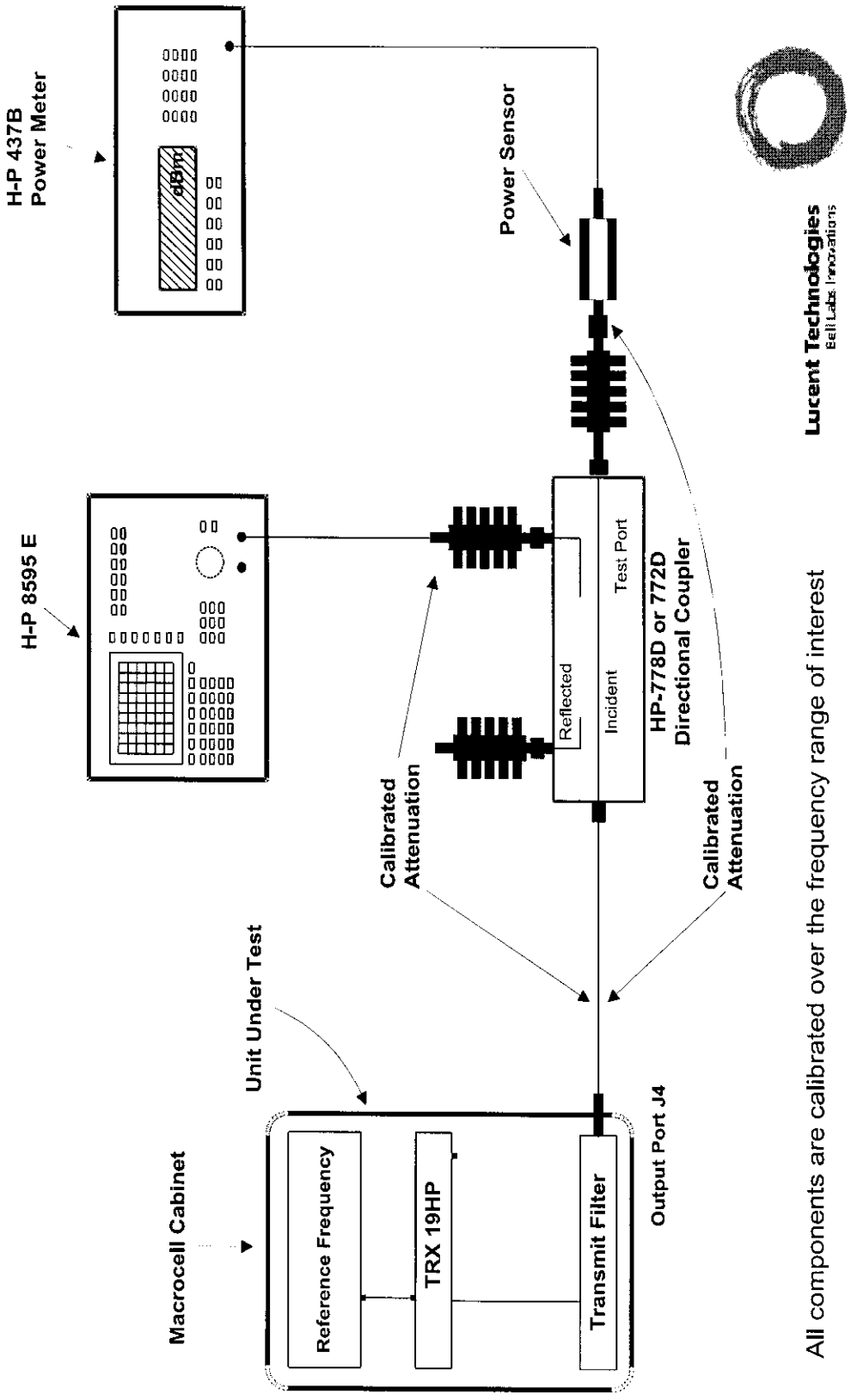
dl(n) = 1930.2 + 0.2*(n - 512)/MHz

ul(n) = 1850.2 + 0.2*(n - 512)/MHz

n	uplink	bl	downlink	n	uplink	bl	downlink	n	uplink	bl	downlink	n	uplink	bl	downlink	n	uplink	bl	downlink	n	uplink	bl	downlink	n	uplink	bl	downlink	n	uplink	bl	downlink
512	1850,2	x	1930,2	550	1857,8	A	1937,8	588	1865,4	D	1945,4	626	1873,0	B	1953,0	664	1880,6	B	1960,6	702	1888,2	E	1968,2	740	1895,8	C	1975,8	778	1903,4	C	1983,4
513	1850,4	A	1930,4	551	1858,0	A	1938,0	589	1865,6	D	1945,6	627	1873,2	B	1953,2	665	1880,8	B	1960,8	703	1888,4	E	1968,4	741	1896,0	C	1976,0	779	1903,6	C	1983,6
514	1850,6	A	1930,6	552	1858,2	A	1938,2	590	1865,8	D	1945,8	628	1873,4	B	1953,4	666	1881,0	B	1961,0	704	1888,6	E	1968,6	742	1896,2	C	1976,2	780	1903,8	C	1983,8
515	1850,8	A	1930,8	553	1858,4	A	1938,4	591	1866,0	D	1946,0	629	1873,6	B	1953,6	667	1881,2	B	1961,2	705	1888,8	E	1968,8	743	1896,4	C	1976,4	781	1904,0	C	1984,0
516	1851,0	A	1931,0	554	1858,6	A	1938,6	592	1866,2	D	1946,2	630	1873,8	B	1953,8	668	1881,4	B	1961,4	706	1889,0	E	1969,0	744	1896,6	C	1976,6	782	1904,2	C	1984,2
517	1851,2	A	1931,2	555	1858,8	A	1938,8	593	1866,4	D	1946,4	631	1874,0	B	1954,0	669	1881,6	B	1961,6	707	1889,2	E	1969,2	745	1896,8	C	1976,8	783	1904,4	C	1984,4
518	1851,4	A	1931,4	556	1859,0	A	1939,0	594	1866,6	D	1946,6	632	1874,2	B	1954,2	670	1881,8	B	1961,8	708	1889,4	E	1969,4	746	1897,0	C	1977,0	784	1904,6	C	1984,6
519	1851,6	A	1931,6	557	1859,2	A	1939,2	595	1866,8	D	1946,8	633	1874,4	B	1954,4	671	1882,0	B	1962,0	709	1889,6	E	1969,6	747	1897,2	C	1977,2	785	1904,8	C	1984,8
520	1851,8	A	1931,8	558	1859,4	A	1939,4	596	1867,0	D	1947,0	634	1874,6	B	1954,6	672	1882,2	B	1962,2	710	1889,8	x	1969,8	748	1897,4	C	1977,4	786	1905,0	C	1985,0
521	1852,0	A	1932,0	559	1859,6	A	1939,6	597	1867,2	D	1947,2	635	1874,8	B	1954,8	673	1882,4	B	1962,4	711	1890,0	x	1970,0	749	1897,6	C	1977,6	787	1905,2	C	1985,2
522	1852,2	A	1932,2	560	1859,8	A	1939,8	598	1867,4	D	1947,4	636	1875,0	B	1955,0	674	1882,6	B	1962,6	712	1890,2	x	1970,2	750	1897,8	C	1977,8	788	1905,4	C	1985,4
523	1852,4	A	1932,4	561	1860,0	A	1940,0	599	1867,6	D	1947,6	637	1875,2	B	1955,2	675	1882,8	B	1962,8	713	1890,4	F	1970,4	751	1898,0	C	1978,0	789	1905,6	C	1985,6
524	1852,6	A	1932,6	562	1860,2	A	1940,2	600	1867,8	D	1947,8	638	1875,4	B	1955,4	676	1883,0	B	1963,0	714	1890,6	F	1970,6	752	1898,2	C	1978,2	790	1905,8	C	1985,8
525	1852,8	A	1932,8	563	1860,4	A	1940,4	601	1868,0	D	1948,0	639	1875,6	B	1955,6	677	1883,2	B	1963,2	715	1890,8	F	1970,8	753	1898,4	C	1978,4	791	1906,0	C	1986,0
526	1853,0	A	1933,0	564	1860,6	A	1940,6	602	1868,2	D	1948,2	640	1875,8	B	1955,8	678	1883,4	B	1963,4	716	1891,0	F	1971,0	754	1898,6	C	1978,6	792	1906,2	C	1986,2
527	1853,2	A	1933,2	565	1860,8	A	1940,8	603	1868,4	D	1948,4	641	1876,0	B	1956,0	679	1883,6	B	1963,6	717	1891,2	F	1971,2	755	1898,8	C	1978,8	793	1906,4	C	1986,4
528	1853,4	A	1933,4	566	1861,0	A	1941,0	604	1868,6	D	1948,6	642	1876,2	B	1956,2	680	1883,8	B	1963,8	718	1891,4	F	1971,4	756	1899,0	C	1979,0	794	1906,6	C	1986,6
529	1853,6	A	1933,6	567	1861,2	A	1941,2	605	1868,8	D	1948,8	643	1876,4	B	1956,4	681	1884,0	B	1964,0	719	1891,6	F	1971,6	757	1899,2	C	1979,2	795	1906,8	C	1986,8
530	1853,8	A	1933,8	568	1861,4	A	1941,4	606	1869,0	D	1949,0	644	1876,6	B	1956,6	682	1884,2	B	1964,2	720	1891,8	F	1971,8	758	1899,4	C	1979,4	796	1907,0	C	1987,0
531	1854,0	A	1934,0	569	1861,6	A	1941,6	607	1869,2	D	1949,2	645	1876,8	B	1956,8	683	1884,4	B	1964,4	721	1892,0	F	1972,0	759	1899,6	C	1979,6	797	1907,2	C	1987,2
532	1854,2	A	1934,2	570	1861,8	A	1941,8	608	1869,4	D	1949,4	646	1877,0	B	1957,0	684	1884,6	B	1964,6	722	1892,2	F	1972,2	760	1899,8	C	1979,8	798	1907,4	C	1987,4
533	1854,4	A	1934,4	571	1862,0	A	1942,0	609	1869,6	D	1949,6	647	1877,2	B	1957,2	685	1884,8	x	1964,8	723	1892,4	F	1972,4	761	1900,0	C	1980,0	799	1907,6	C	1987,6
534	1854,6	A	1934,6	572	1862,2	A	1942,2	610	1869,8	x	1949,8	648	1877,4	B	1957,4	686	1885,0	x	1965,0	724	1892,6	F	1972,6	762	1900,2	C	1980,2	800	1907,8	C	1987,8
535	1854,8	A	1934,8	573	1862,4	A	1942,4	611	1870,0	x	1950,0	649	1877,6	B	1957,6	687	1885,2	x	1965,2	725	1892,8	F	1972,8	763	1900,4	C	1980,4	801	1908,0	C	1988,0
536	1855,0	A	1935,0	574	1862,6	A	1942,6	612	1870,2	x	1950,2	650	1877,8	B	1957,8	688	1885,4	E	1965,4	726	1893,0	F	1973,0	764	1900,6	C	1980,6	802	1908,2	C	1988,2
537	1855,2	A	1935,2	575	1862,8	A	1942,8	613	1870,4	B	1950,4	651	1878,0	B	1958,0	689	1885,6	E	1965,6	727	1893,2	F	1973,2	765	1900,8	C	1980,8	803	1908,4	C	1988,4
538	1855,4	A	1935,4	576	1863,0	A	1943,0	614	1870,6	B	1950,6	652	1878,2	B	1958,2	690	1885,8	E	1965,8	728	1893,4	F	1973,4	766	1901,0	C	1981,0	804	1908,6	C	1988,6
539	1855,6	A	1935,6	577	1863,2	A	1943,2	615	1870,8	B	1950,8	653	1878,4	B	1958,4	691	1886,0	E	1966,0	729	1893,6	F	1973,6	767	1901,2	C	1981,2	805	1908,8	C	1988,8
540	1855,8	A	1935,8	578	1863,4	A	1943,4	616	1871,0	B	1951,0	654	1878,6	B	1958,6	692	1886,2	E	1966,2	730	1893,8	F	1973,8	768	1901,4	C	1981,4	806	1909,0	C	1989,0
541	1856,0	A	1936,0	579	1863,6	A	1943,6	617	1871,2	B	1951,2	655	1878,8	B	1958,8	693	1886,4	E	1966,4	731	1894,0	F	1974,0	769	1901,6	C	1981,6	807	1909,2	C	1989,2
542	1856,2	A	1936,2	580	1863,8	A	1943,8	618	1871,4	B	1951,4	656	1879,0	B	1959,0	694	1886,6	E	1966,6	732	1894,2	F	1974,2	770	1901,8	C	1981,8	808	1909,4	C	1989,4
543	1856,4	A	1936,4	581	1864,0	A	1944,0	619	1871,6	B	1951,6	657	1879,2	B	1959,2	695	1886,8	E	1966,8	733	1894,4	F	1974,4	771	1902,0	C	1982,0	809	1909,6	C	1989,6
544	1856,6	A	1936,6	582	1864,2	A	1944,2	620	1871,8	B	1951,8	658	1879,4	B	1959,4	696	1887,0	E	1967,0	734	1894,6	F	1974,6	772	1902,2	C	1982,2	810	1909,8	x	1989,8
545	1856,8	A	1936,8	583	1864,4	A	1944,4	621	1872,0	B	1952,0	659	1879,6	B	1959,6	697	1887,2	E	1967,2	735	1894,8	x	1974,8	773	1902,4	C	1982,4				
546	1857,0	A	1937,0	584	1864,6	A	1944,6	622	1872,2	B	1952,2	660	1879,8	B	1959,8	698	1887,4	E	1967,4	736	1895,0	x	1975,0	774	1902,6	C	1982,6				
547	1857,2	A	1937,2	585	1864,8	x	1944,8	623	1872,4	B	1952,4	661	1880,0	B	1960,0	699	1887,6	E	1967,6	737	1895,2	x	1975,2	775	1902,8	C	1982,8				
548	1857,4	A	1937,4	586	1865,0	x	1945,0	624	1872,6	B	1952,6	662	1880,2	B	1960,2	700	1887,8	E	1967,8	738	1895,4	C	1975,4	776	1903,0	C	1983,0				
549	1857,6	A	1937,6	587	1865,2	x	1945,2	625	1872,8	B	1952,8	663	1880,4	B	1960,4	701	1888,0	E	1968,0	739	1895,6	C	1975,6	777	1903,2	C	1983,2				

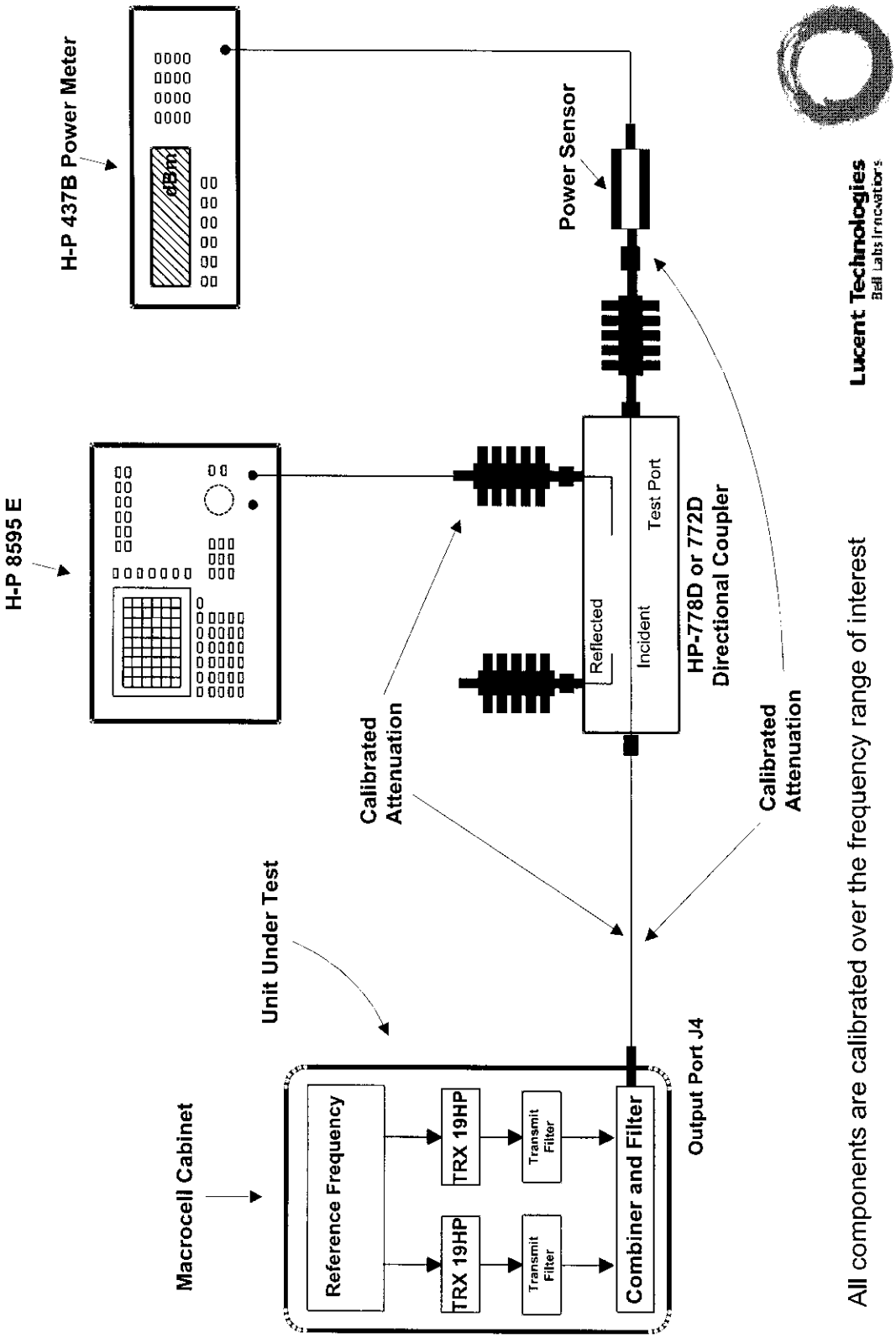
Note:. Channels high lighted are **not available for GSM1900**, in accordance with **FCC Part 24**

Figure 3A. TEST CONFIGURATION FOR OCCUPIED BANDWIDTH



All components are calibrated over the frequency range of interest

Figure 3B. TEST CONFIGURATION FOR OCCUPIED BANDWIDTH



All components are calibrated over the frequency range of interest

MEASUREMENT OF OCCUPIED BANDWIDTH

SECTION 24.238(b) – Measurement 3A

MEASUREMENT: 3

MEASUREMENT

OF

OCCUPIED BANDWIDTH

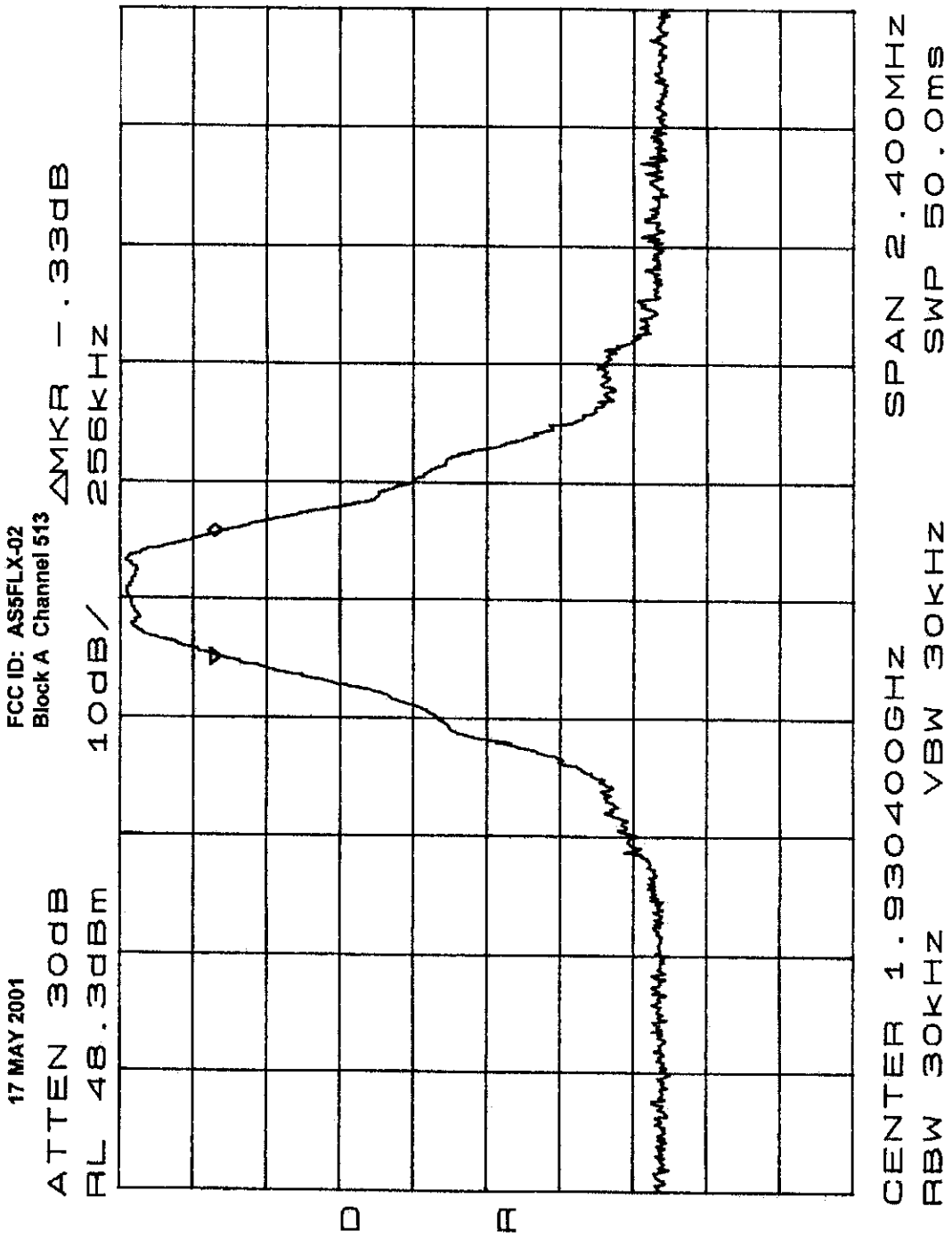
99% OF POWER

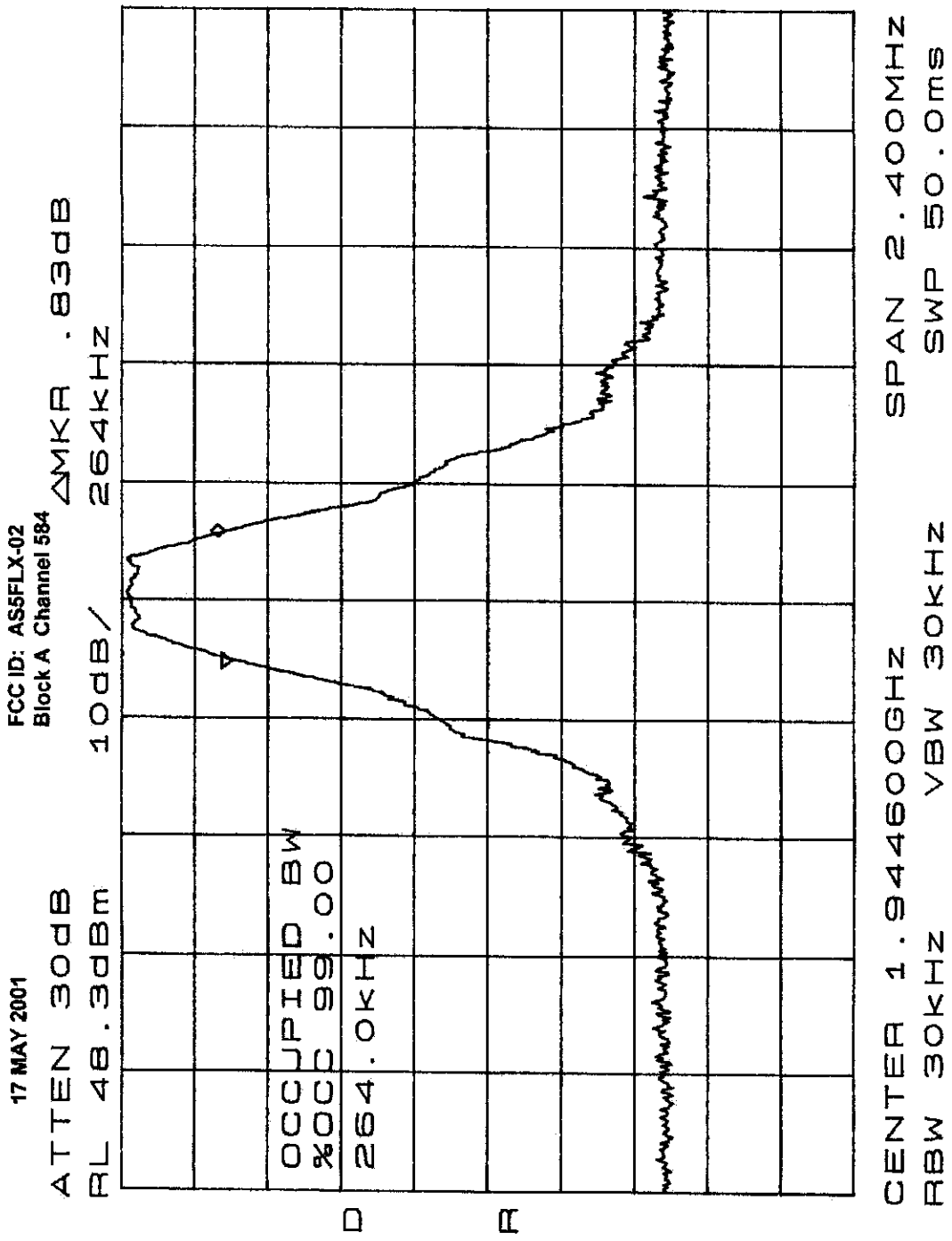
1 TRX WITHOUT COMBINER

BLOCK A

(1930 – 1945 MHz)

Left Edge:	1930.4 MHz (Channel 513)
Right Edge:	1944.6 MHz (Channel 584)


FCC ID: AS5FLX-02
Block A Channel 513
17 MAY 2001
ATTEN 30dB
RL 48.3dBm
10dB/
ΔMKR -.33dB
256kHz
CENTER 1.930400GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms


FCC ID: AS5FLX-02
Block A Channel 584
17 MAY 2001
ATTEN 30dB
RL 48.3dBm
10dB/
ΔMKR .83dB
264kHz
OCCUPIED BW
%OCC 99.00
264.0kHz
D
R
CENTER 1.944600GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms

MEASUREMENT: 3

MEASUREMENT

OF

OCCUPIED BANDWIDTH

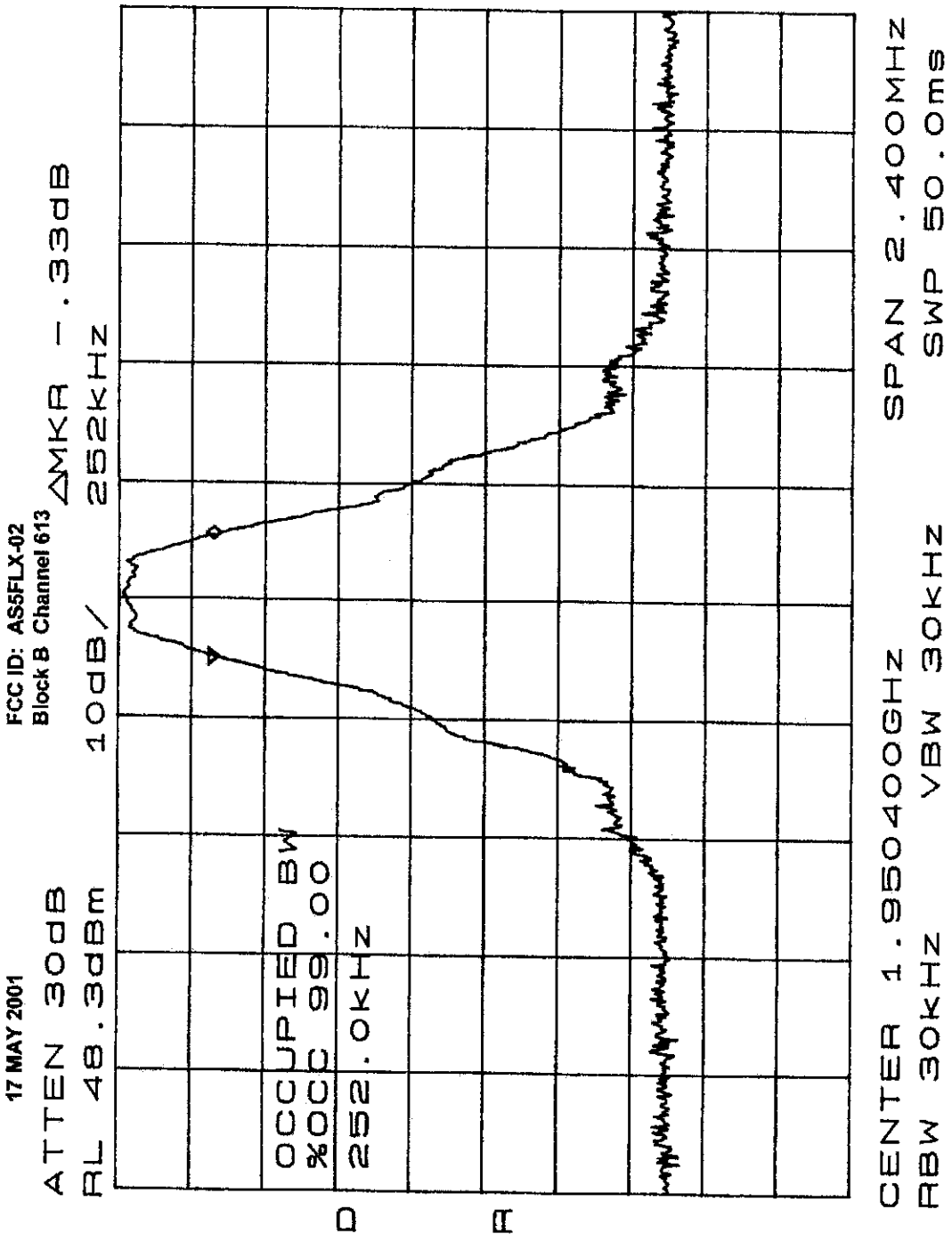
99% OF POWER

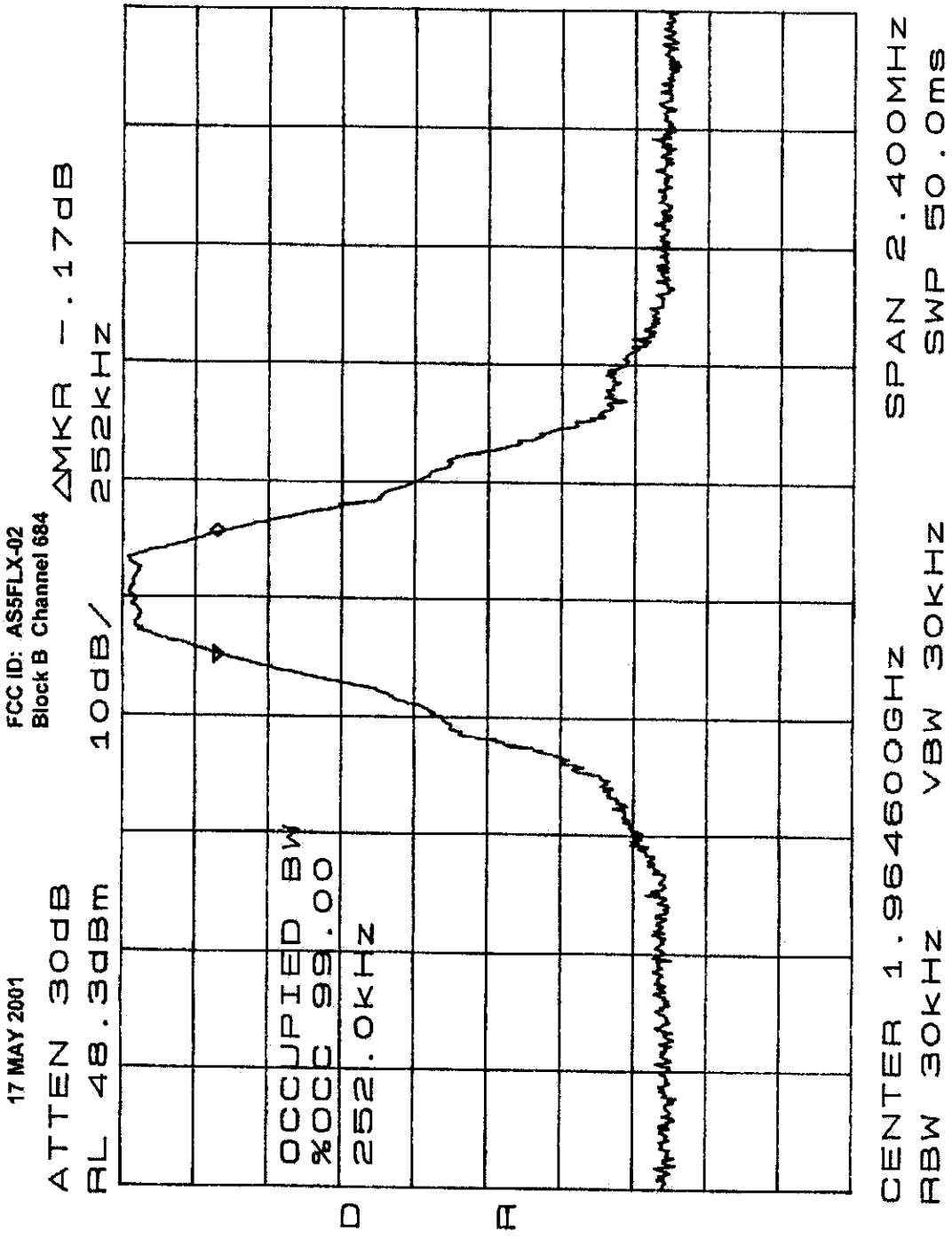
1 TRX WITHOUT COMBINER

BLOCK B

(1950 – 1965 MHz)

Left Edge:	1950.4 MHz (Channel 613)
Right Edge:	1964.6 MHz (Channel 684)


FCC ID: AS5FLX-02
Block B Channel 613
17 MAY 2001
ATTEN 30dB
RL 48.3dBm
10dB/
ΔMKR -.33dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.950400GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms


FCC ID: AS5FLX-02
Block B Channel 684
17 MAY 2001
ATTEN 30dB
RL 48.3dBm
10dB/
ΔMKR -.17dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.964600GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms

MEASUREMENT: 3

MEASUREMENT

OF

OCCUPIED BANDWIDTH

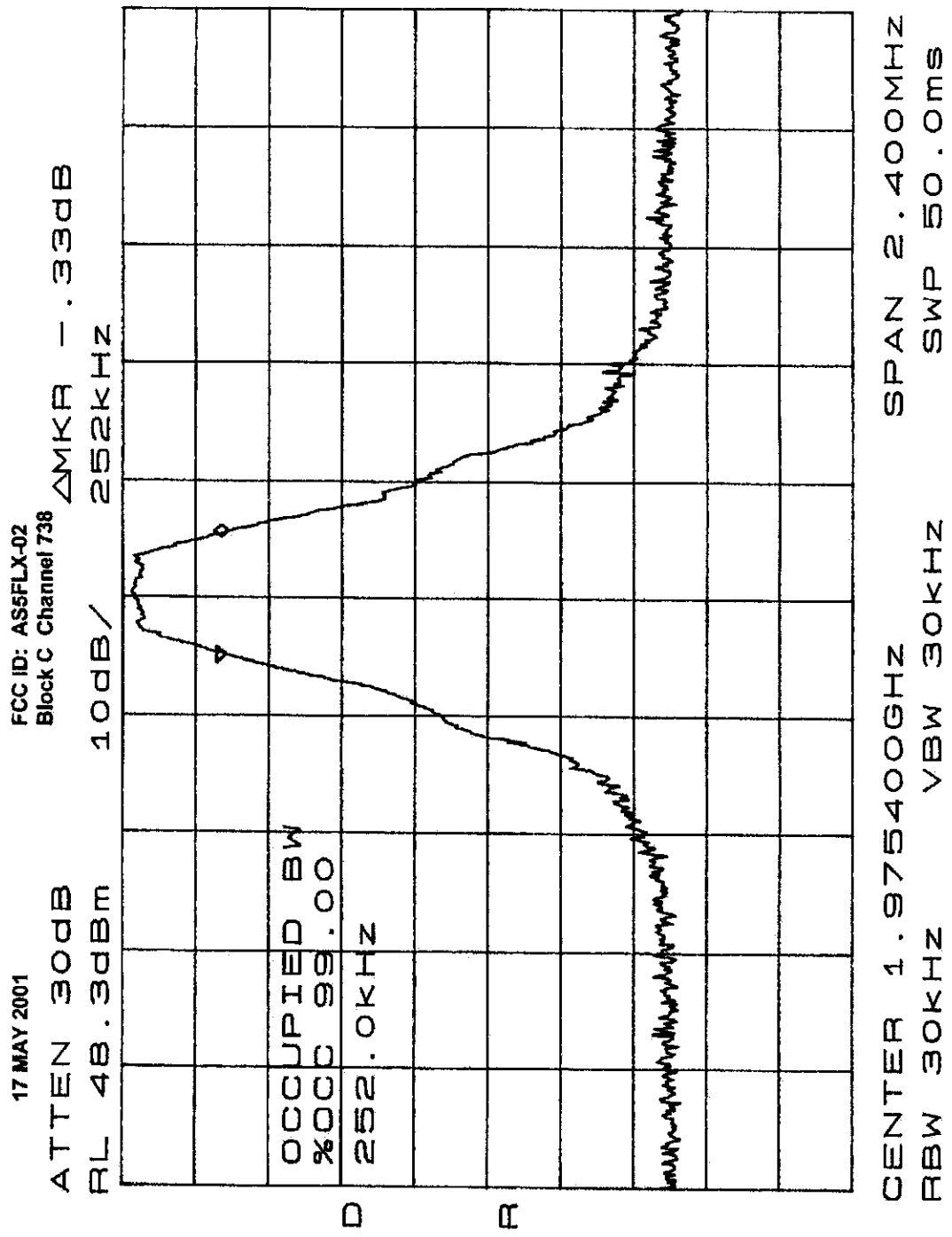
99% OF POWER

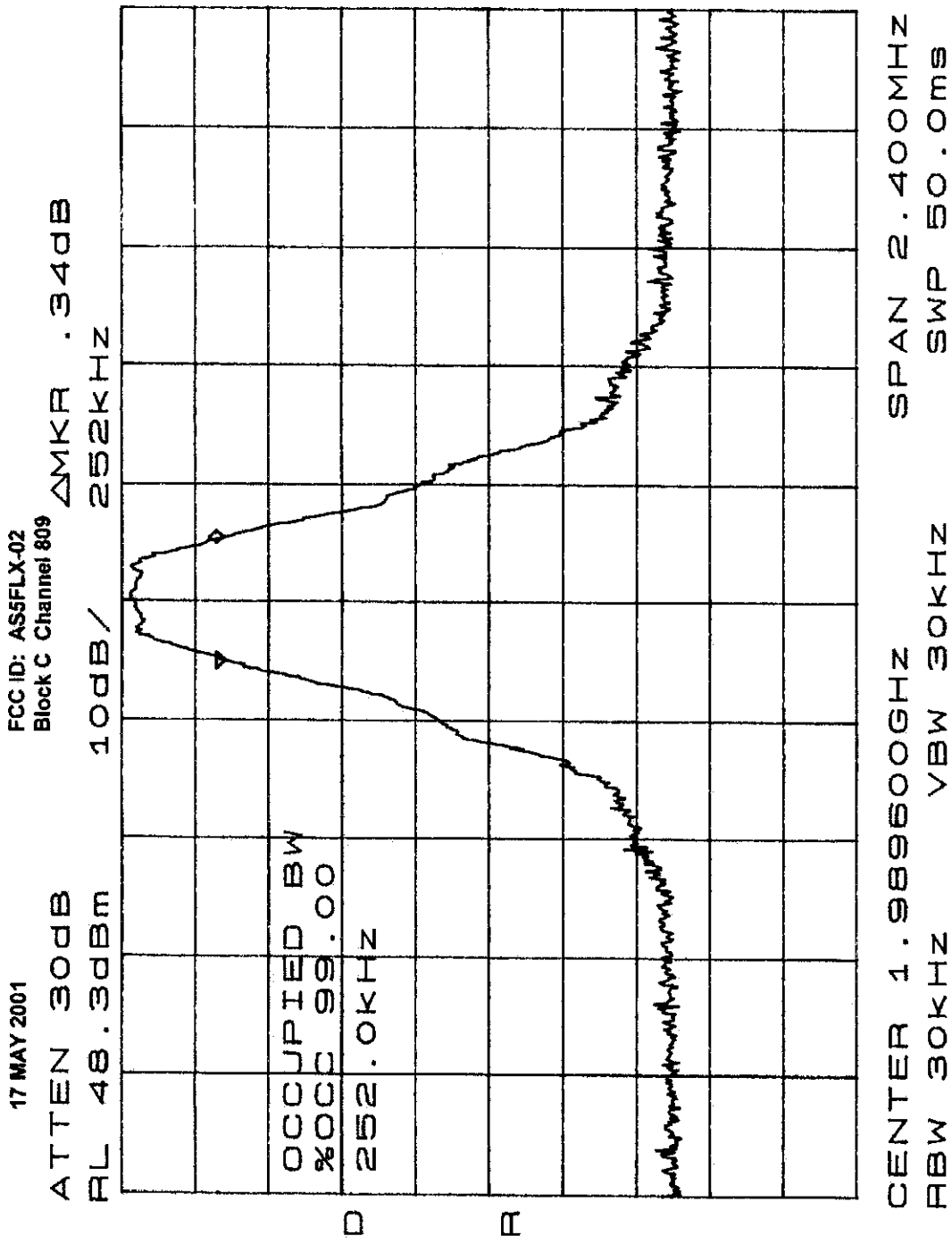
1 TRX WITHOUT COMBINER

BLOCK C

(1975 – 1990 MHz)

Left Edge:	1975.4 MHz (Channel 738)
Right Edge:	1989.6 MHz (Channel 809)


FCC ID: AS5FLX-02
Block C Channel 738
17 MAY 2001
ATTEN 30dB
RL 48.3dBm
10dB/
ΔMKR -.33dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.975400GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms


FCC ID: AS5FLX-02
Block C Channel 809
17 MAY 2001
ATTEN 30dB
RL 48.3dBm
10dB/
ΔMKR .34dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.998600GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms

MEASUREMENT: 3

MEASUREMENT

OF

OCCUPIED BANDWIDTH

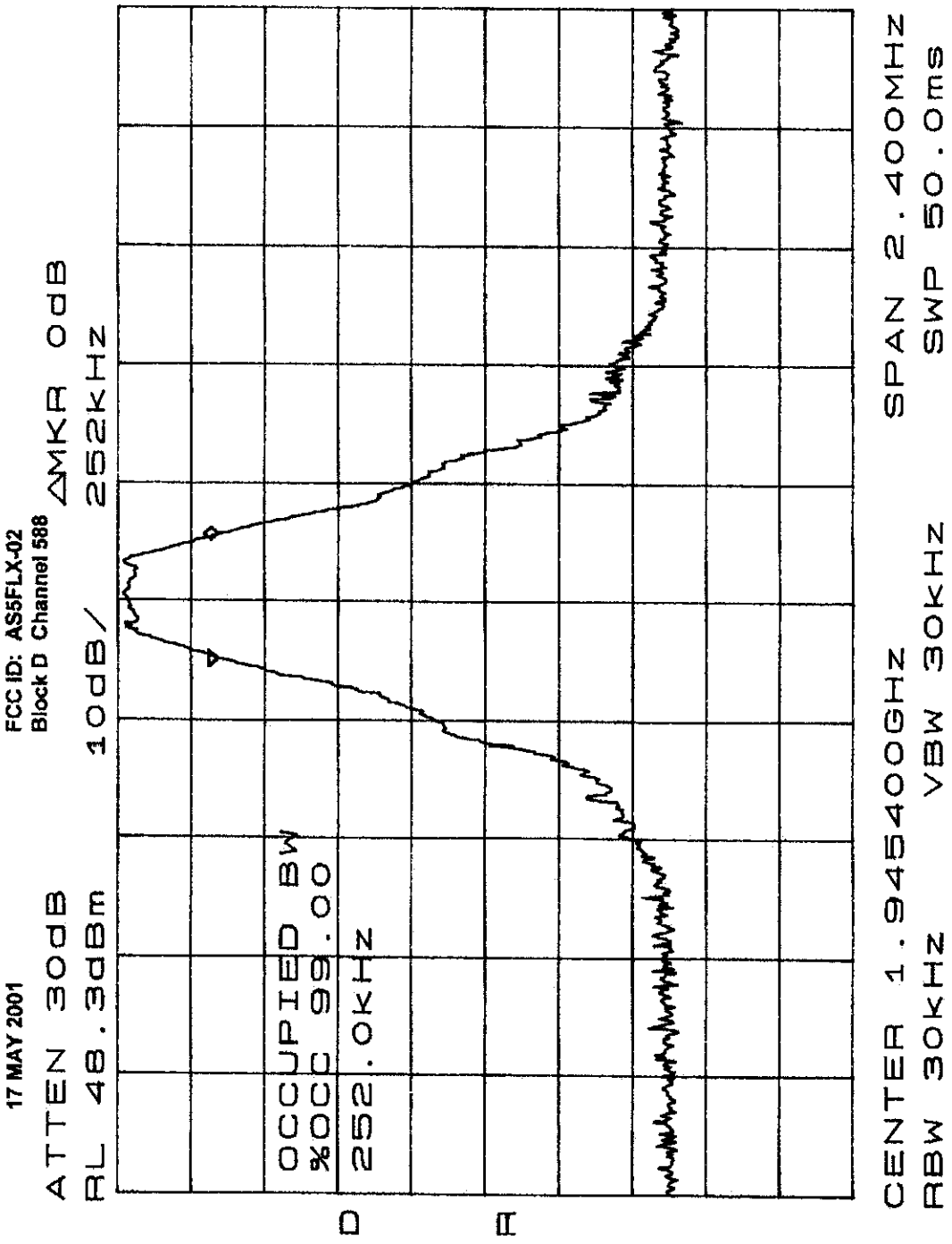
99% OF POWER

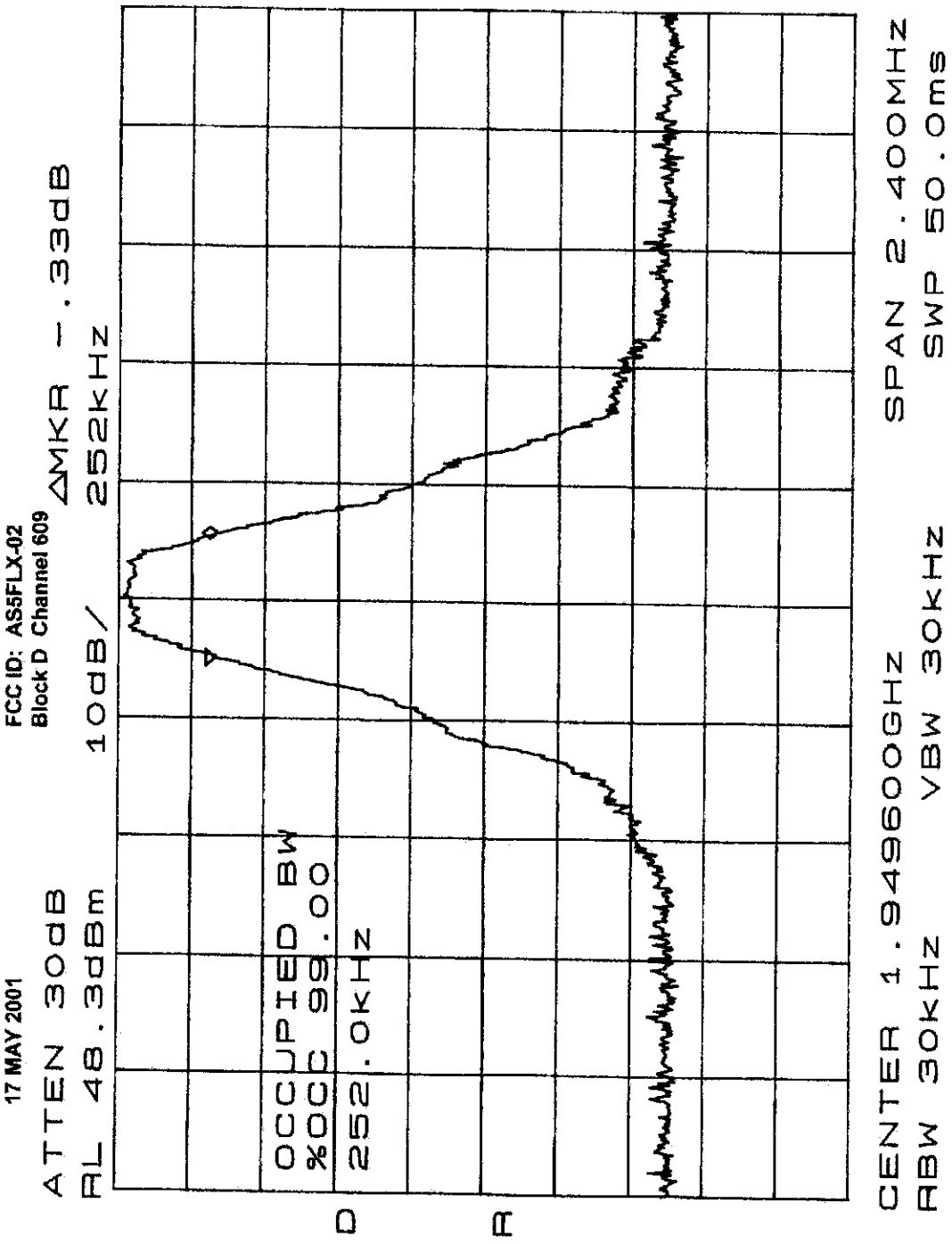
1 TRX WITHOUT COMBINER

BLOCK D

(1945 – 1950 MHz)

Left Edge:	1945.4 MHz (Channel 588)
Right Edge:	1949.6 MHz (Channel 609)


FCC ID: AS5FLX-02
Block D Channel 588
17 MAY 2001
ATTEN 30dB
RL 48.3dBm
10dB/
ΔMKR 0dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.945400GHz
SPAN 2.400MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms


FCC ID: AS5FLX-02
Block D Channel 609
17 MAY 2001
ATTEN 30dB
RL 48.3dBm
10dB/
ΔMKR -.33dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.949600GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms

MEASUREMENT: 3

MEASUREMENT

OF

OCCUPIED BANDWIDTH

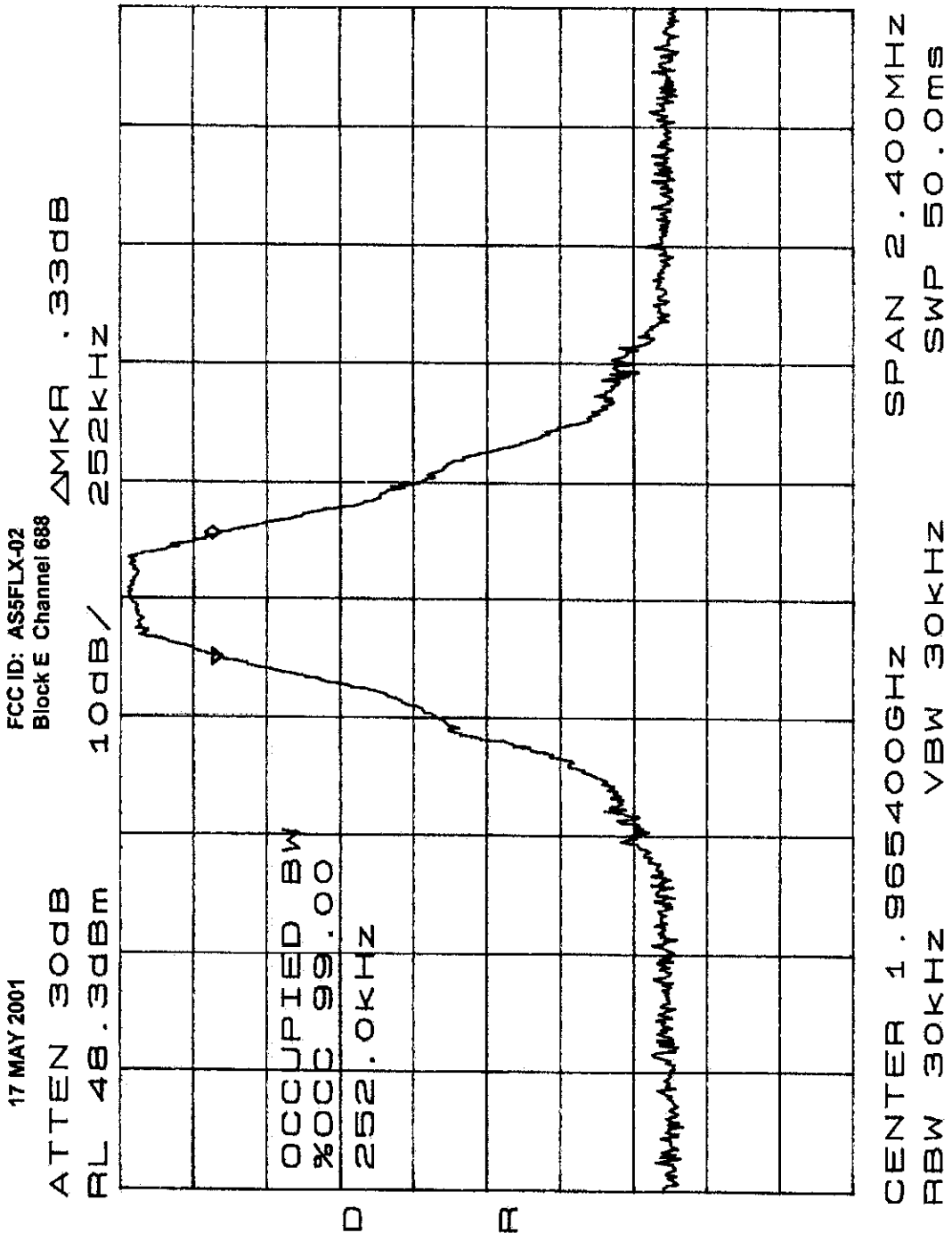
99% OF POWER

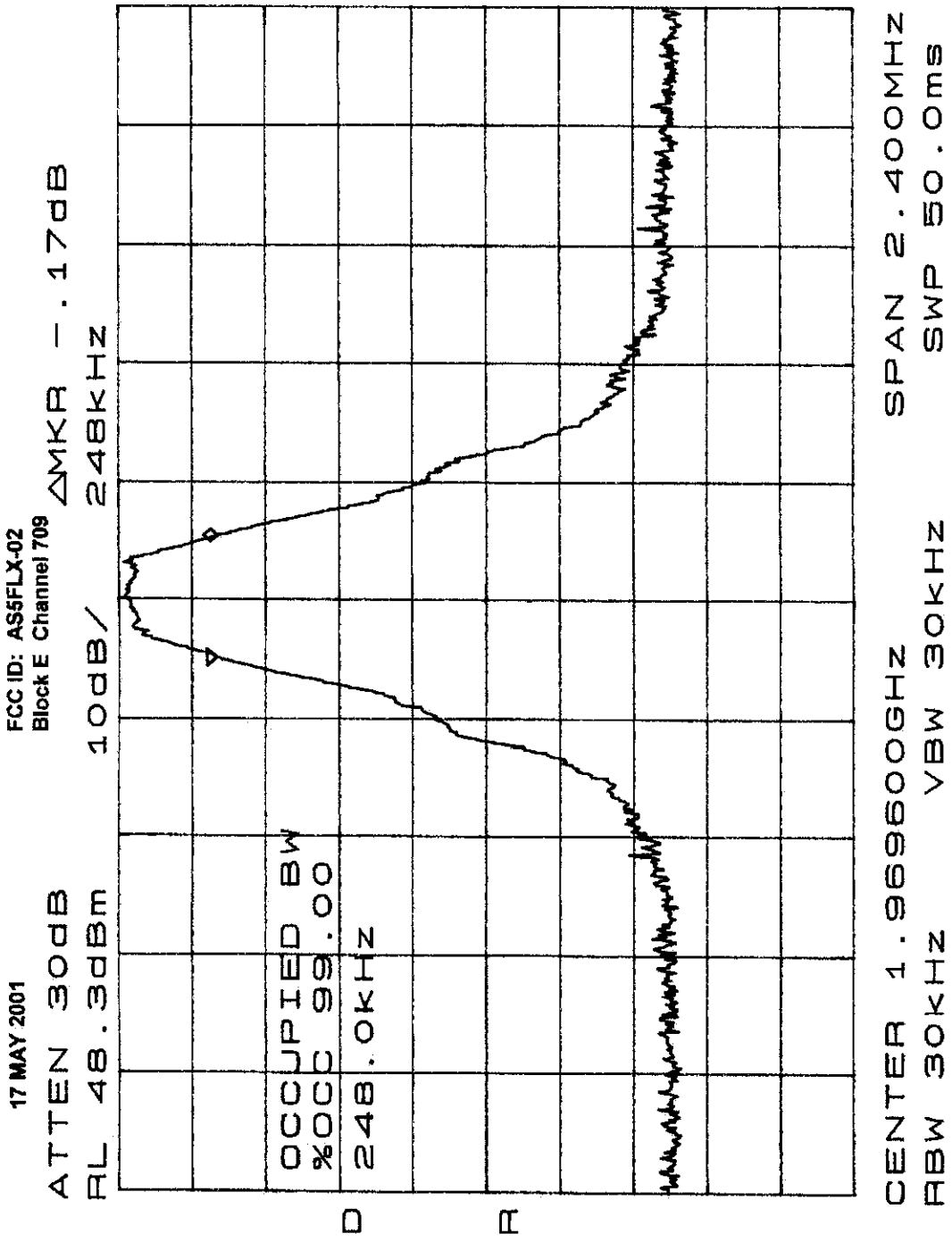
1 TRX WITHOUT COMBINER

BLOCK E

(1965 – 1970 MHz)

Left Edge:	1965.4 MHz (Channel 688)
Right Edge:	1969.6 MHz (Channel 709)


FCC ID: AS5FLX-02
Block E Channel 688
17 MAY 2001
ATTEN 30dB
RL 48.3dBm
10dB/
ΔMKR .33dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
D
R
CENTER 1.965400GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms


FCC ID: AS5FLX-02
Block E Channel 709
17 MAY 2001
ATTEN 30dB
RL 48.3dBm
10dB/
ΔMKR -.17dB
248kHz
OCCUPIED BW
%OCC 99.00
248.0kHz
D
R
CENTER 1.9696OOGHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms

MEASUREMENT: 3

MEASUREMENT

OF

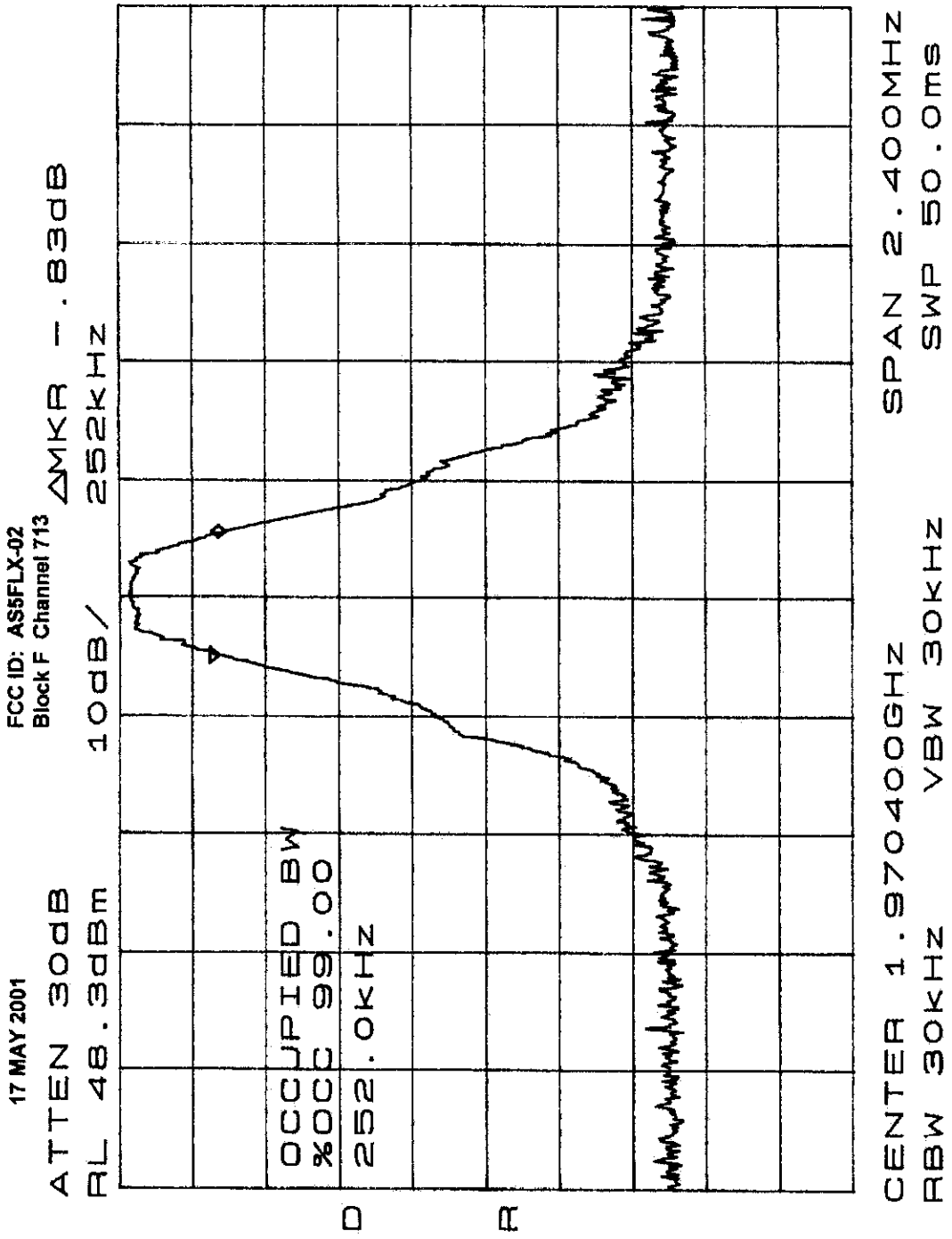
OCCUPIED BANDWIDTH

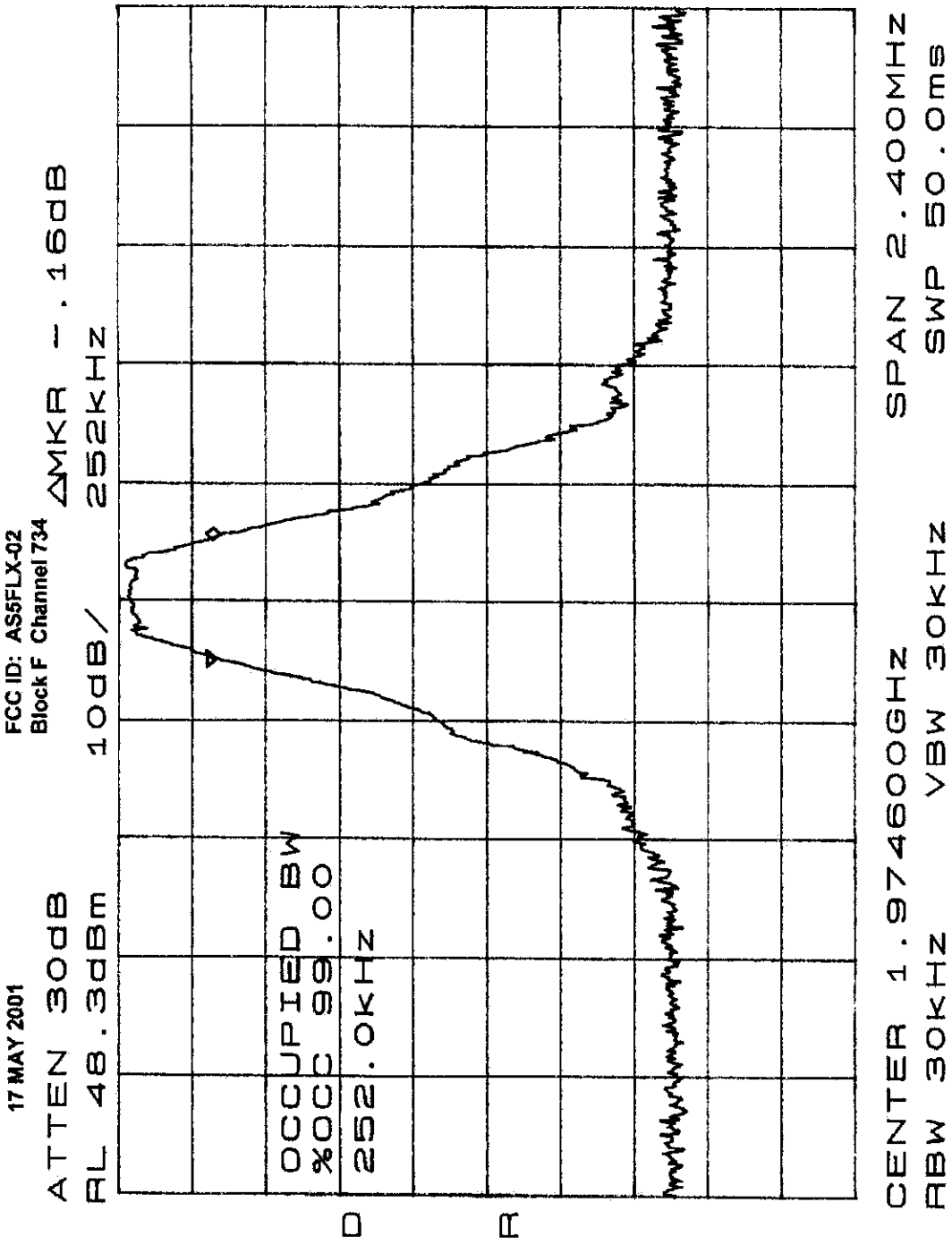
1 TRX WITHOUT COMBINER

BLOCK F

(1970 – 1975 MHz)

Left Edge:	1970.4 MHz (Channel 713)
Right Edge:	1974.6 MHz (Channel 734)


FCC ID: AS5FLX-02
Block F Channel 713
17 MAY 2001
ATTEN 30dB
RL 48.3dBm
10dB/
ΔMKR -.83dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.970400GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms


FCC ID: AS5FLX-02
Block F Channel 734
17 MAY 2001
ATTEN 30dB
RL 48.3dBm
10dB/
ΔMKR -.16dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.974600GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms
D
R

MEASUREMENT: 3

MEASUREMENT

OF

OCCUPIED BANDWIDTH

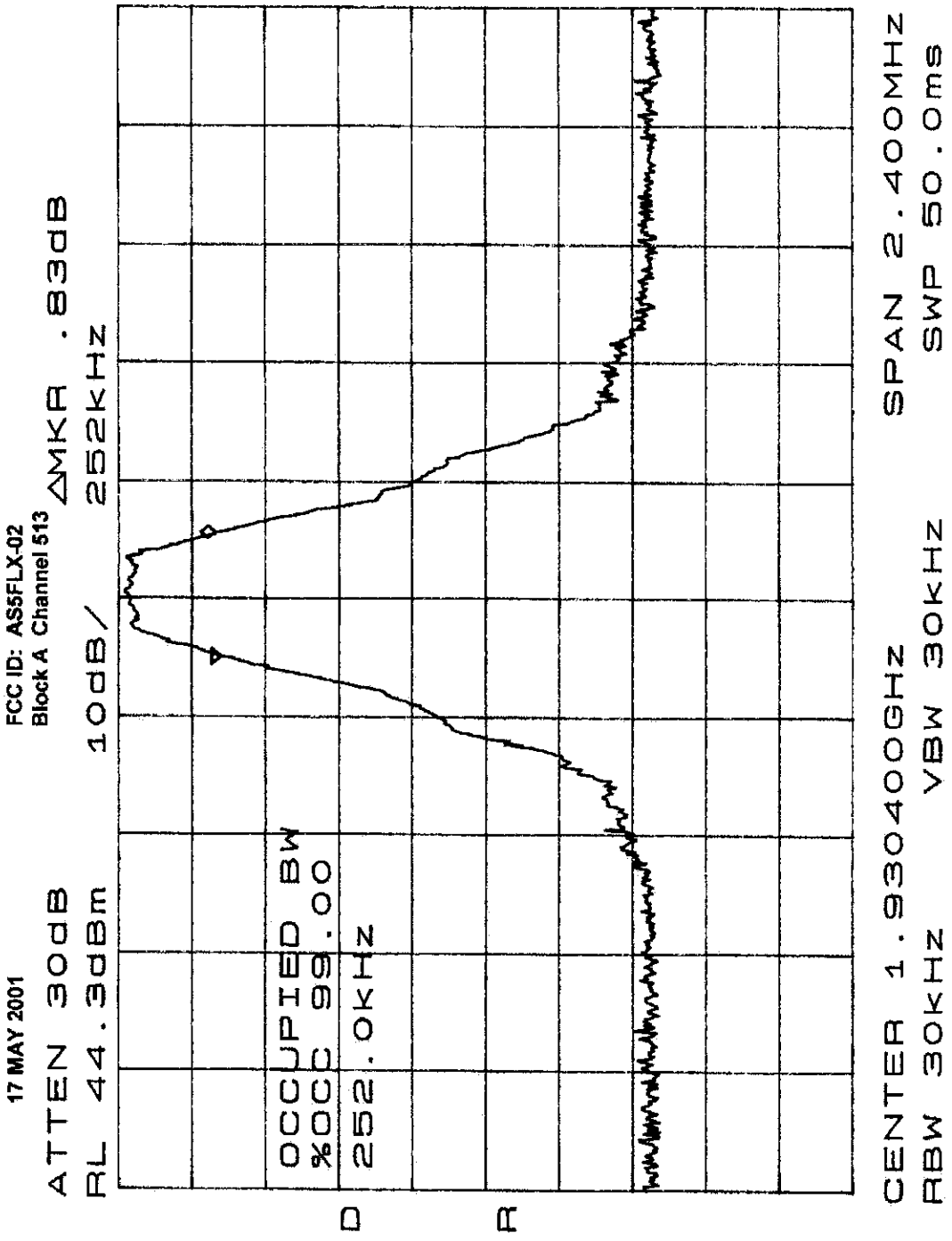
99% OF POWER

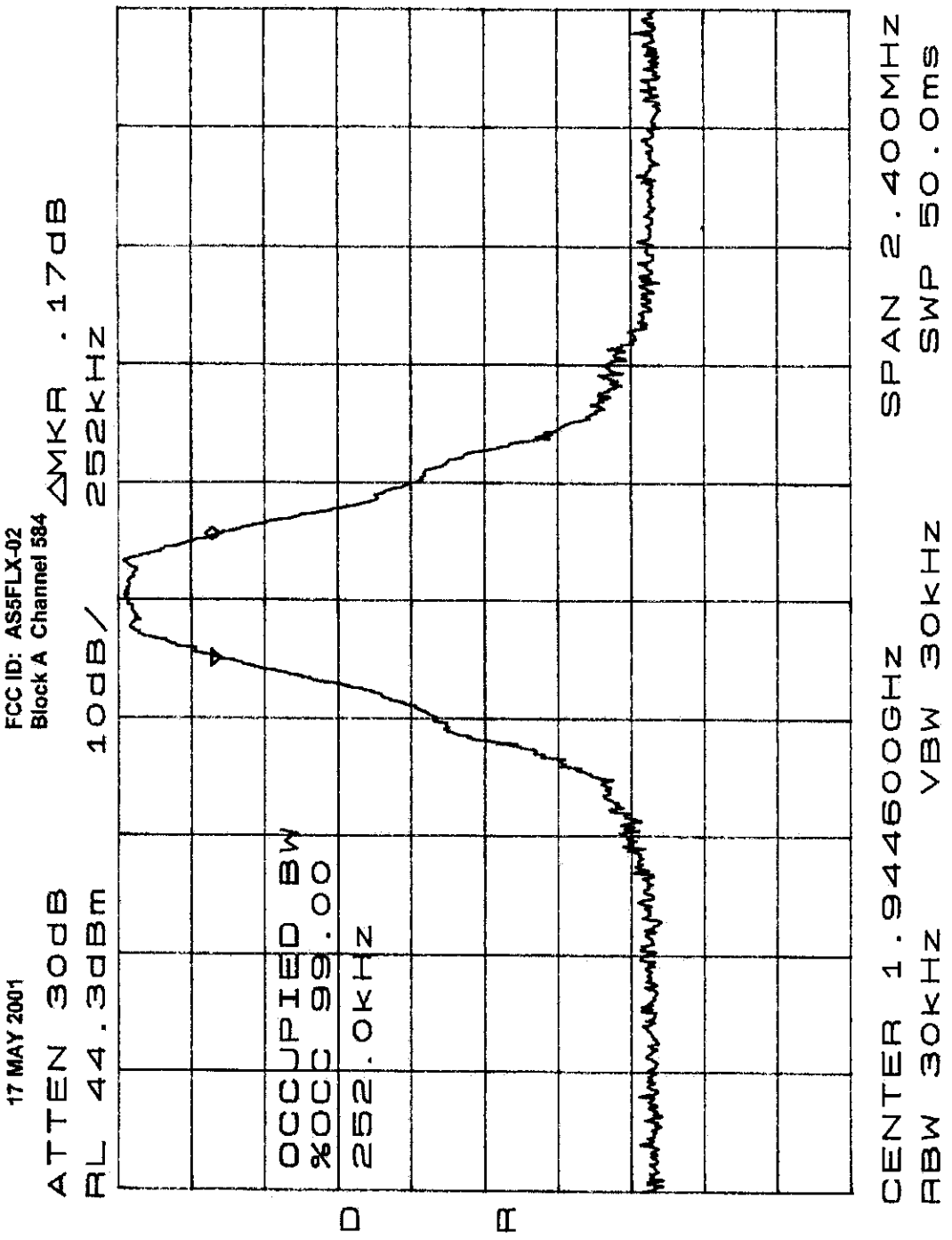
2 TRX WITH COMBINER

BLOCK A

(1930 – 1945 MHz)

Left Edge:	1930.4 MHz (Channel 513)
Right Edge:	1944.6 MHz (Channel 584)


FCC ID: AS5FLX-02
Block A Channel 513
17 MAY 2001
ATTEN 30dB
RL 44.3dBm
10dB/
ΔMKR .83dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.930400GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms


FCC ID: AS5FLX-02
Block A Channel 584
17 MAY 2001
ATTEN 30dB
RL 44.3dBm
10dB/
ΔMKR .17dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
D
R
CENTER 1.944600GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms

MEASUREMENT: 3

MEASUREMENT

OF

OCCUPIED BANDWIDTH

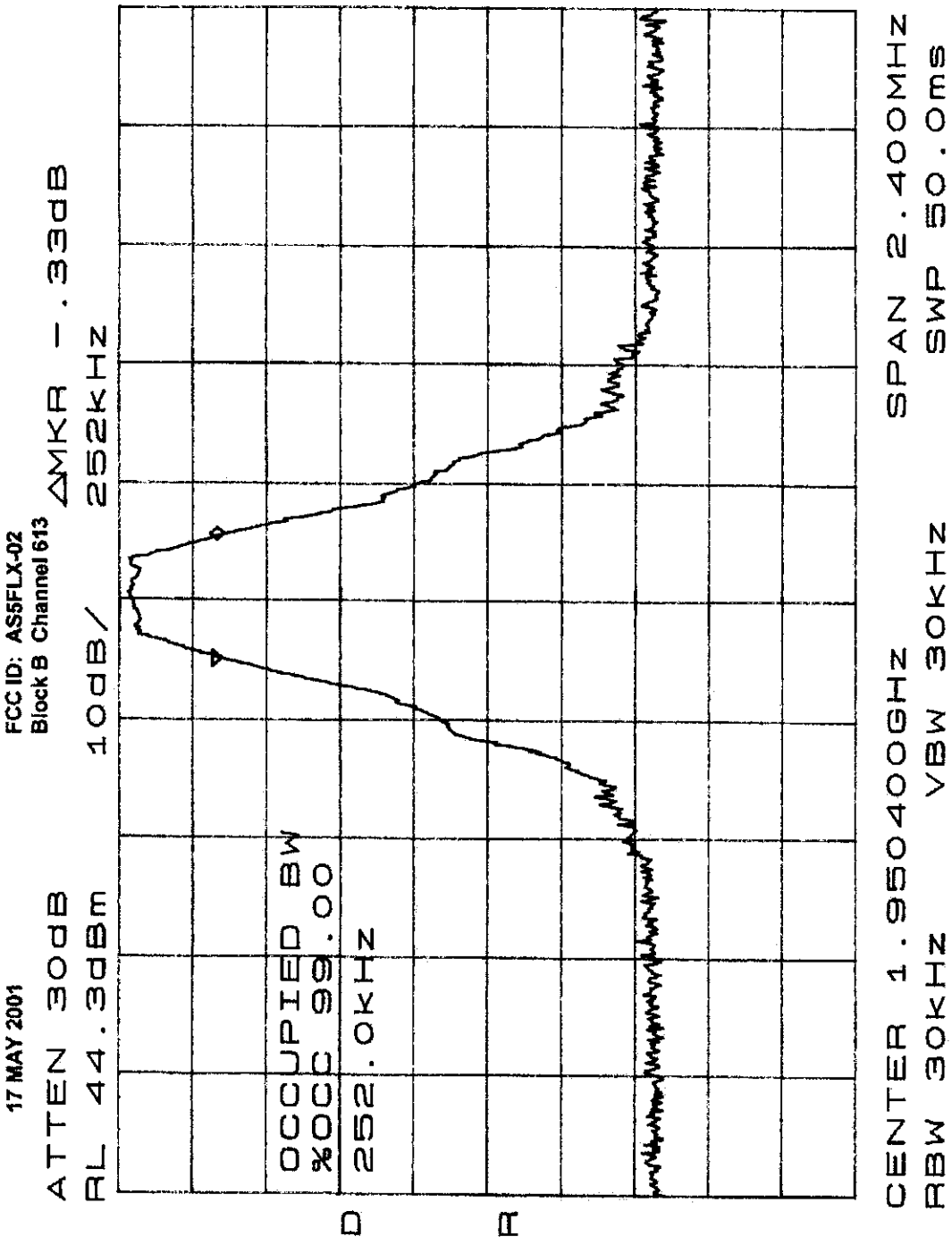
99% OF POWER

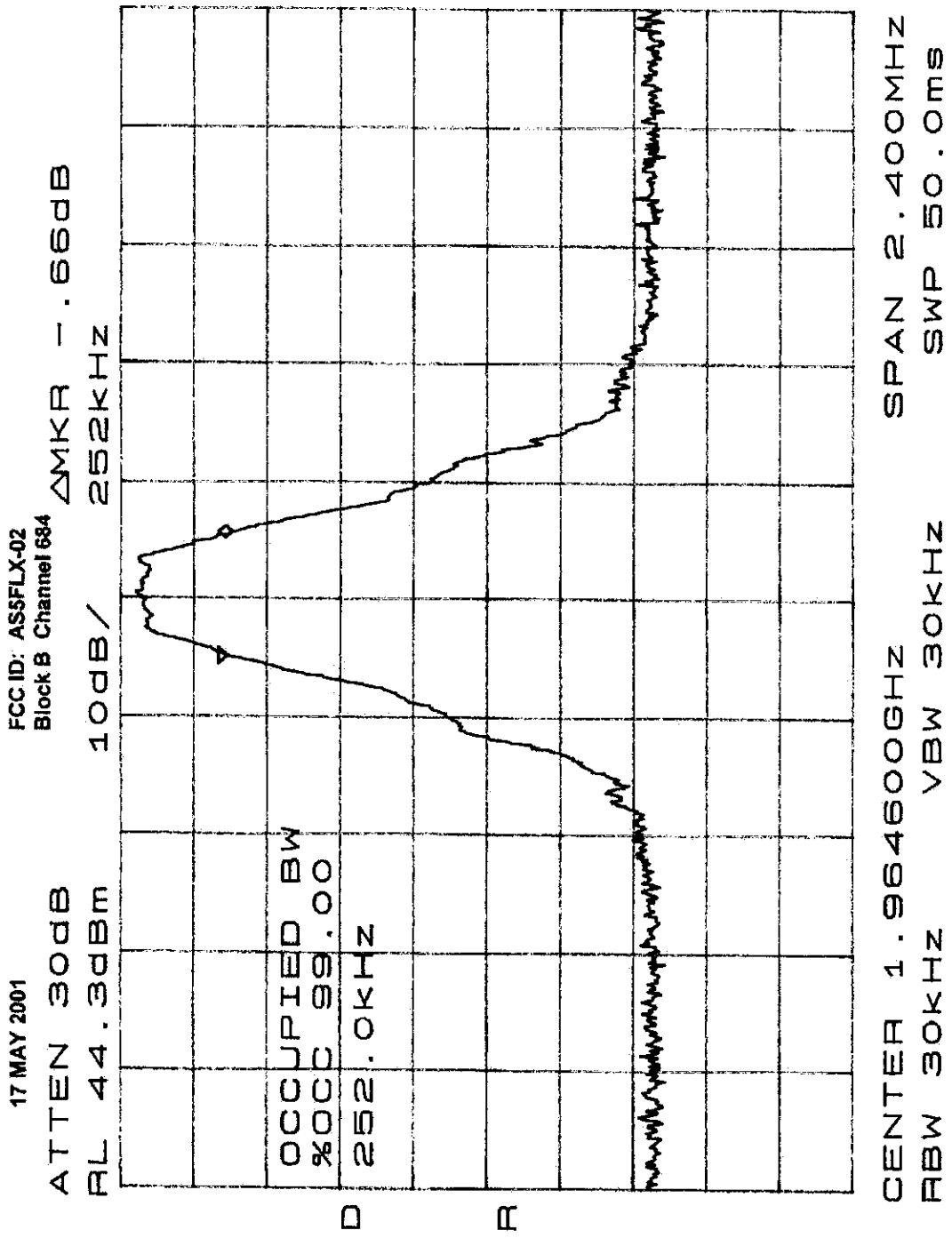
2 TRX WITH COMBINER

BLOCK B

(1950 – 1965 MHz)

Left Edge:	1950.4 MHz (Channel 613)
Right Edge:	1964.6 MHz (Channel 684)


FCC ID: AS5FLX-02
Block B Channel 613
17 MAY 2001
ATTEN 30dB
RL 44.3dBm
10dB/
ΔMKR -.33dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.950400GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms


FCC ID: ASSFLX-02
Block B Channel 684
17 MAY 2001
ATTEN 30dB
RL 44.3dBm
10dB/
ΔMKR -.66dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
D
R
CENTER 1.964600GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms

MEASUREMENT: 3

MEASUREMENT

OF

OCCUPIED BANDWIDTH

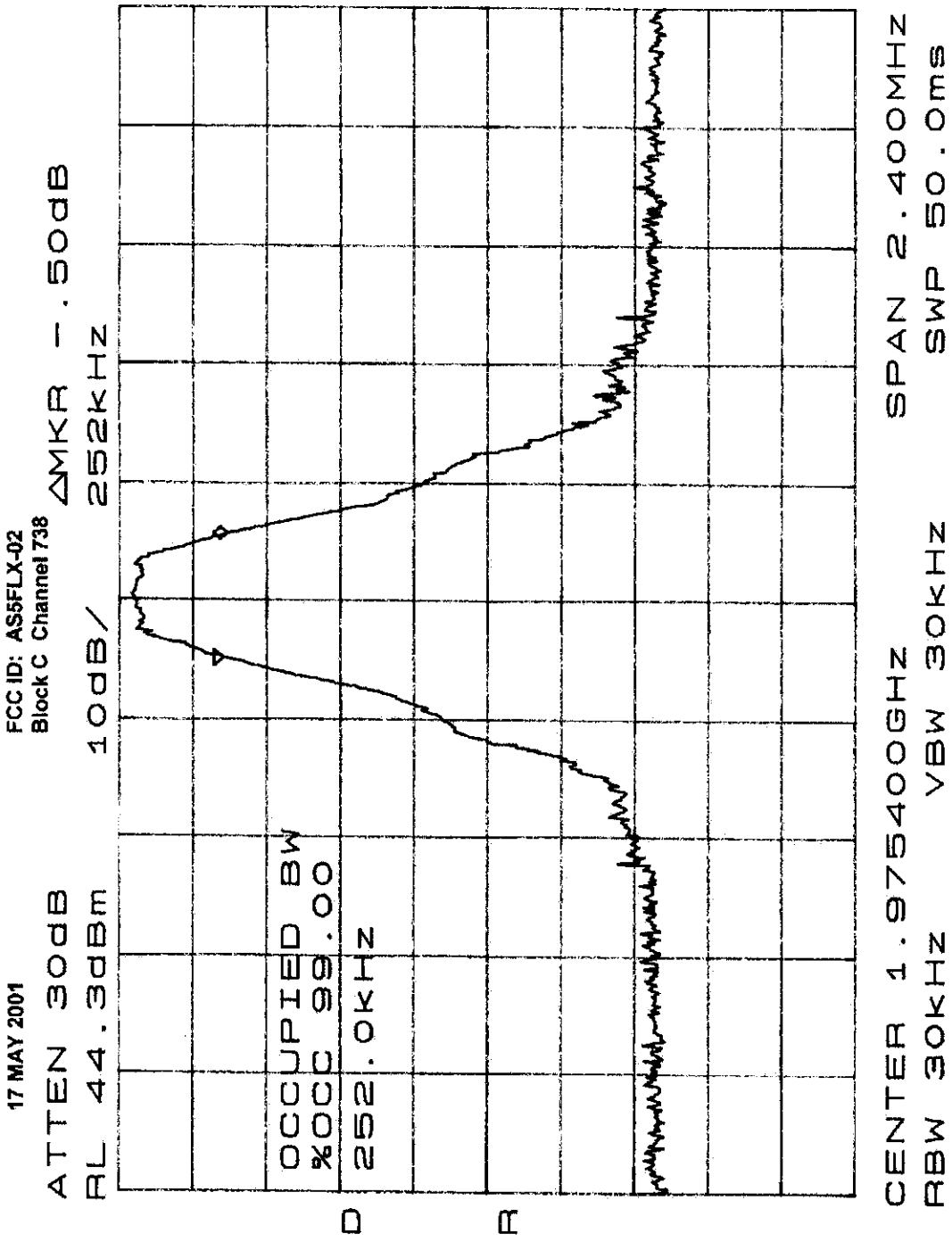
99% OF POWER

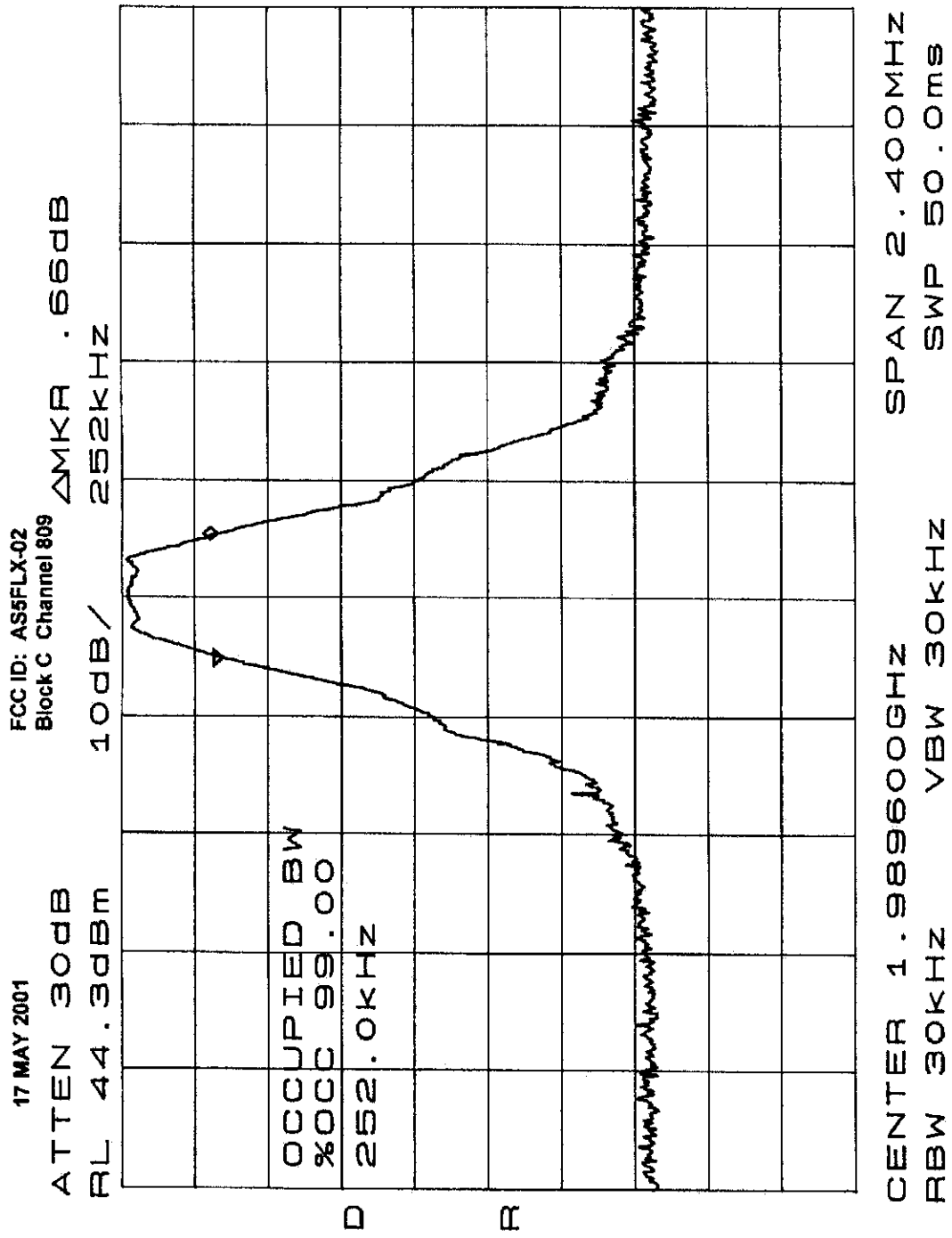
2 TRX WITH COMBINER

BLOCK C

(1975 – 1990 MHz)

Left Edge:	1975.4 MHz (Channel 738)
Right Edge:	1989.6 MHz (Channel 809)


FCC ID: AS5FLX-02
Block C Channel 738
17 MAY 2001
ATTEN 30dB
RL 44.3dBm
10dB/
ΔMKR -.50dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.975400GHz
SPAN 2.400MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms


FCC ID: AS5FLX-02
Block C Channel 809
17 MAY 2001
ATTEN 30dB
RL 44.3dBm
10dB/
ΔMKR .66dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.989600GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms

MEASUREMENT: 3

MEASUREMENT

OF

OCCUPIED BANDWIDTH

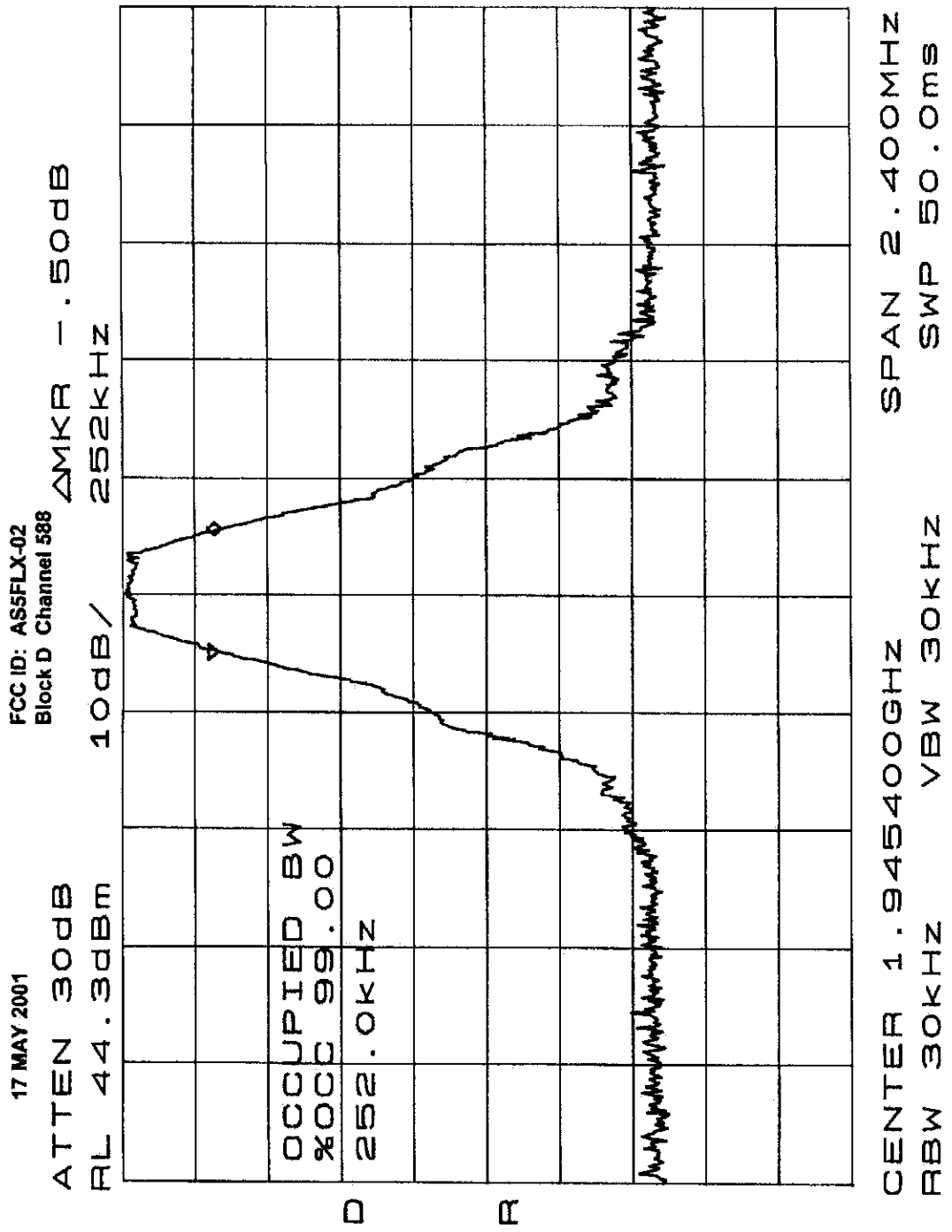
99% OF POWER

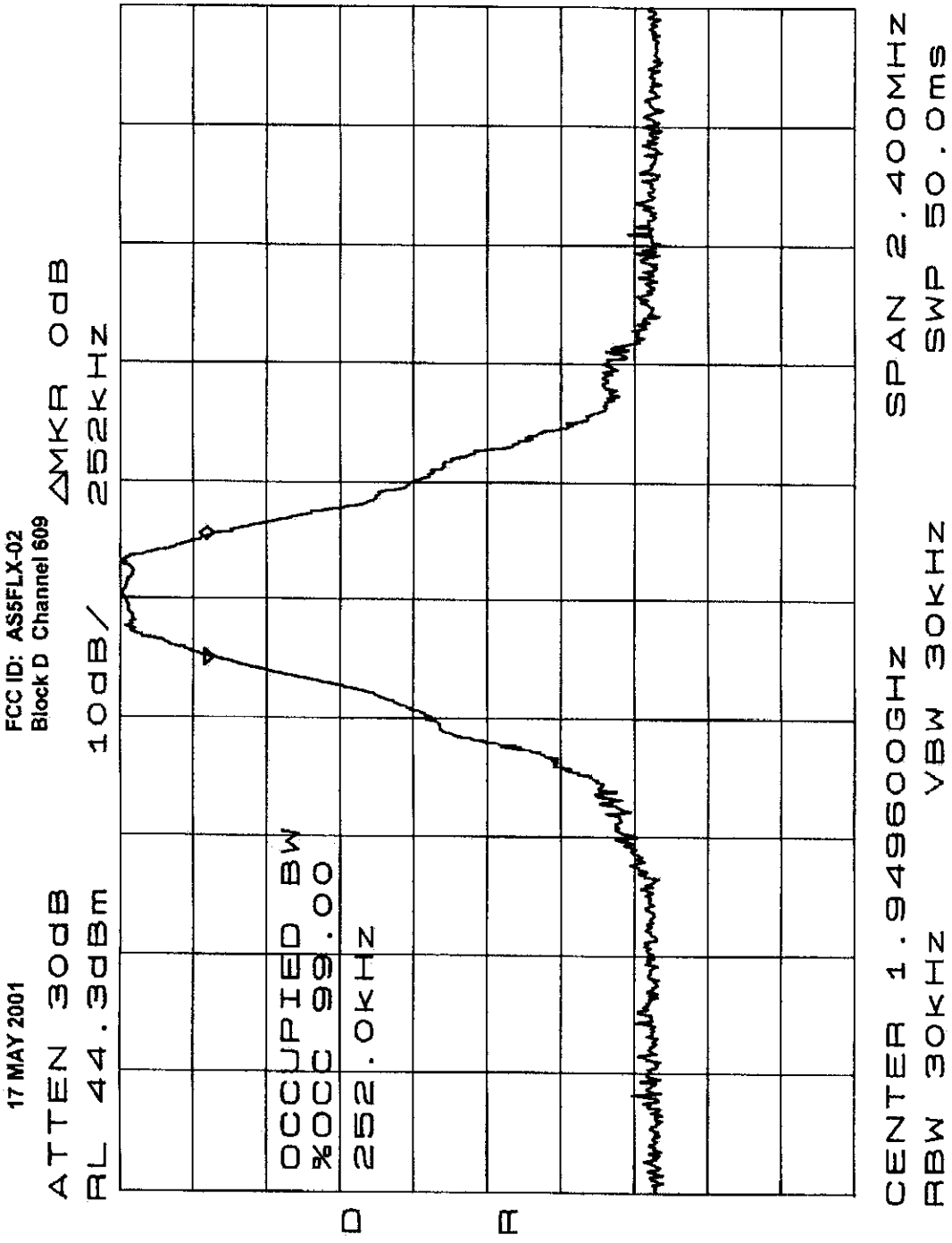
2 TRX WITH COMBINER

BLOCK D

(1945 – 1950 MHz)

Left Edge:	1945.4 MHz (Channel 588)
Right Edge:	1949.6 MHz (Channel 609)


FCC ID: AS5FLX-02
Block D Channel 588
17 MAY 2001
ATTEN 30dB
RL 44.3dBm
10dB/
ΔMKR -.50dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
D
R
CENTER 1.945400GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms


FCC ID: AS5FLX-02
Block D Channel 609
17 MAY 2001
ATTEN 30dB
RL 44.3dBm
10dB/
ΔMKR 0dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.949600GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms

MEASUREMENT: 3

MEASUREMENT

OF

OCCUPIED BANDWIDTH

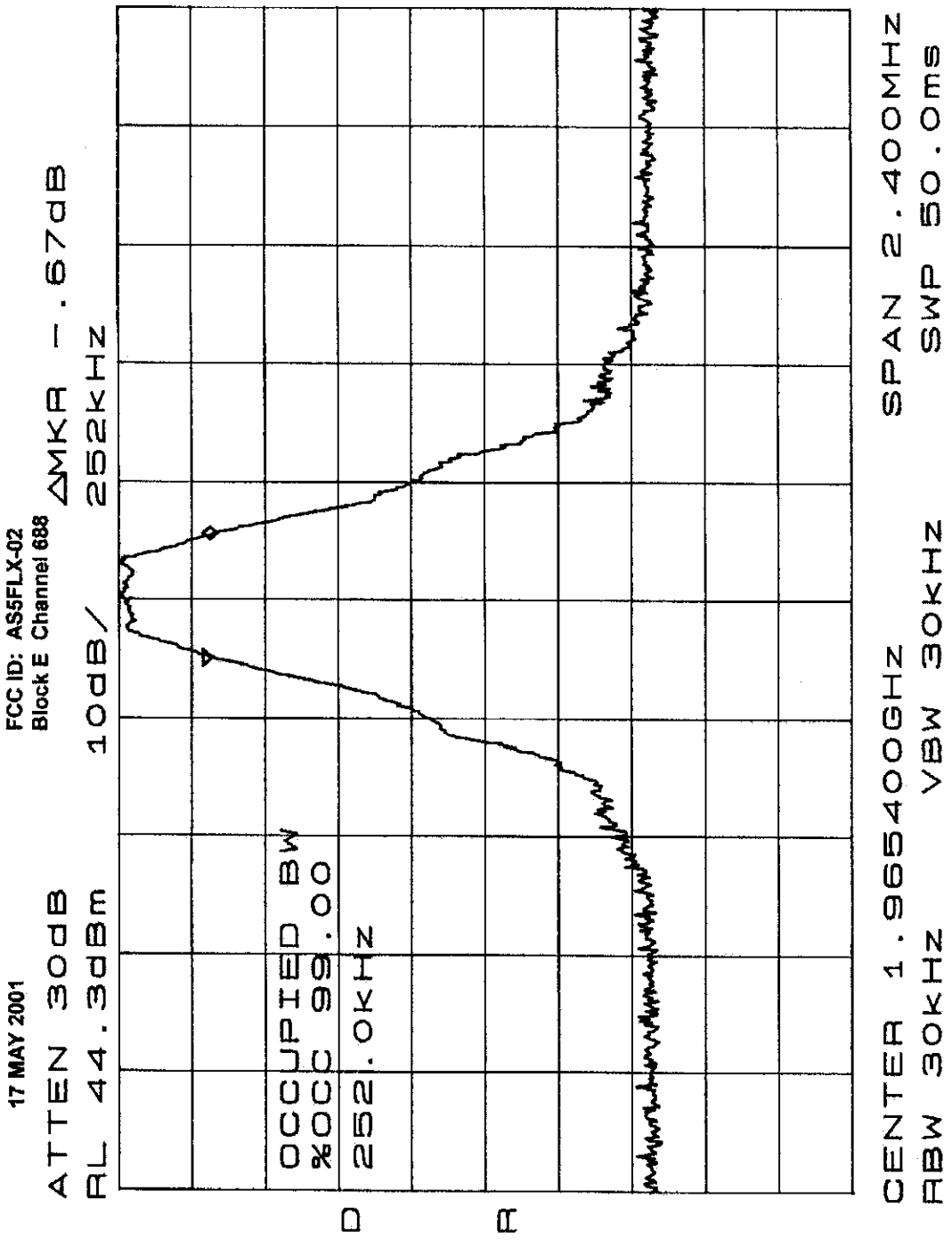
99% OF POWER

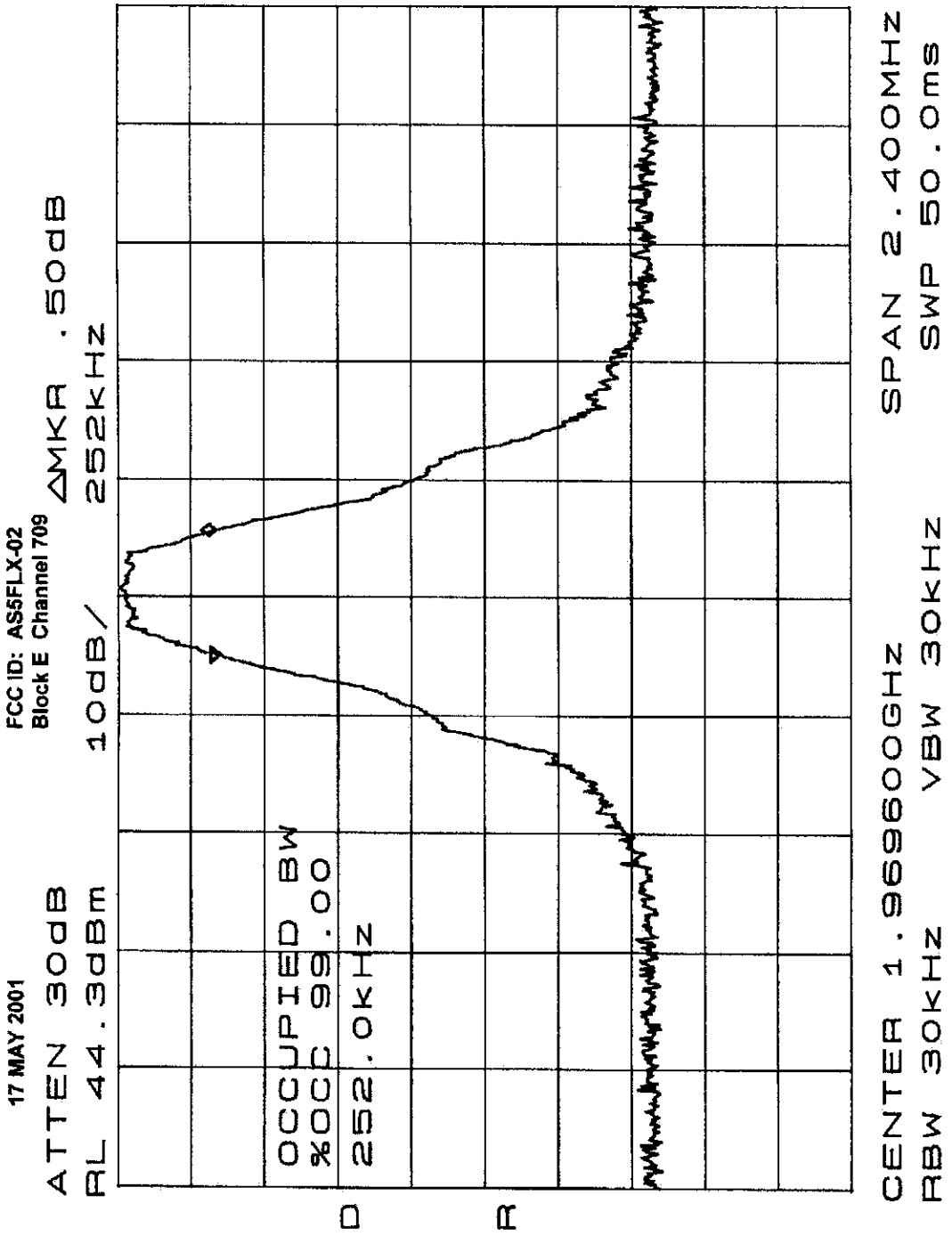
2 TRX WITH COMBINER

BLOCK E

(1965 – 1970 MHz)

Left Edge:	1965.4 MHz (Channel 688)
Right Edge:	1969.6 MHz (Channel 709)


FCC ID: AS5FLX-02
Block E Channel 688
17 MAY 2001
ATTEN 30dB
RL 44.3dBm
10dB/
ΔMKR -.67dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.965400GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms


FCC ID: AS5FLX-02
Block E Channel 709
17 MAY 2001
ATTEN 30dB
RL 44.3dBm
10dB/
ΔMKR .50dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
CENTER 1.9696GHz
SPAN 2.400MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms

MEASUREMENT: 3

MEASUREMENT

OF

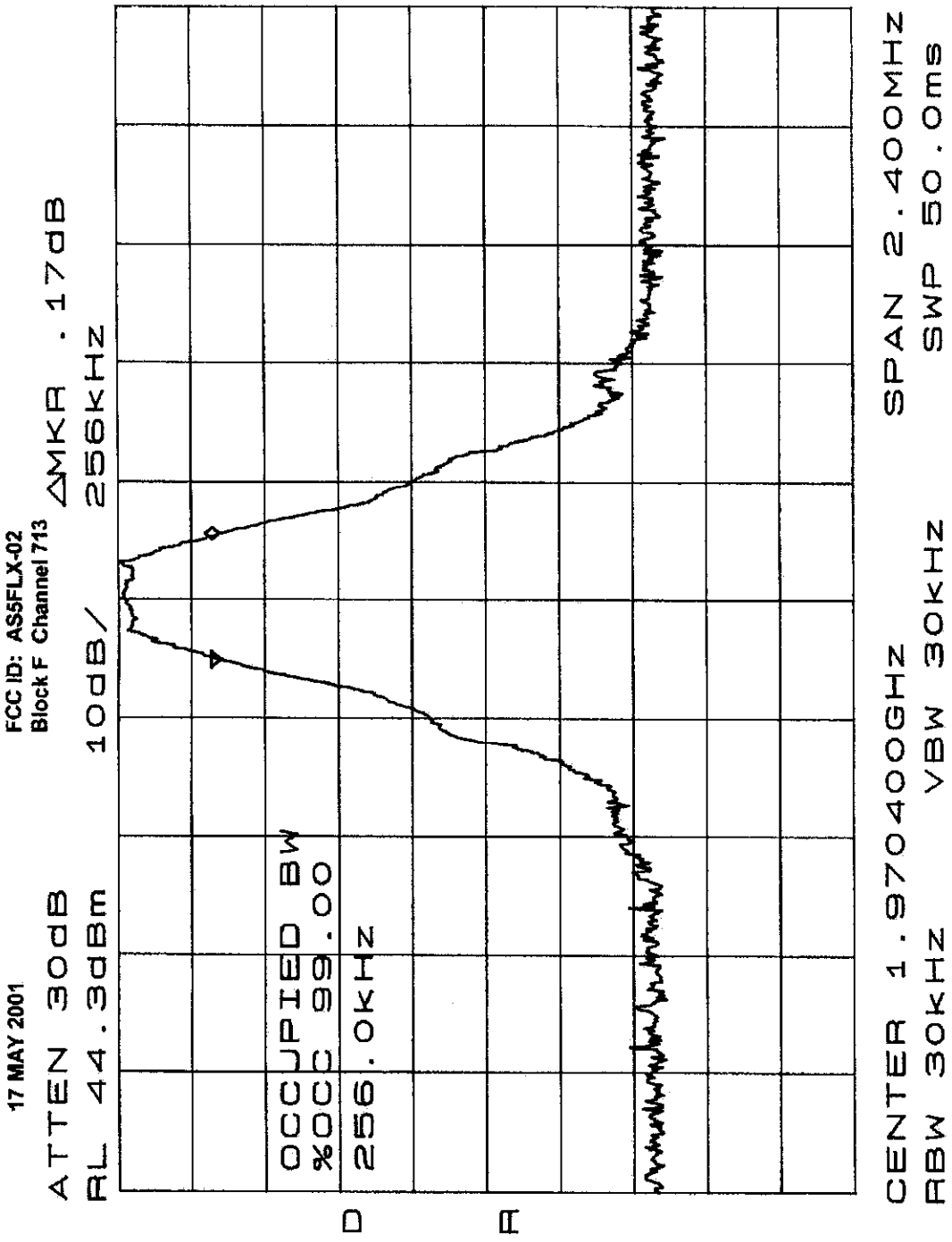
OCCUPIED BANDWIDTH

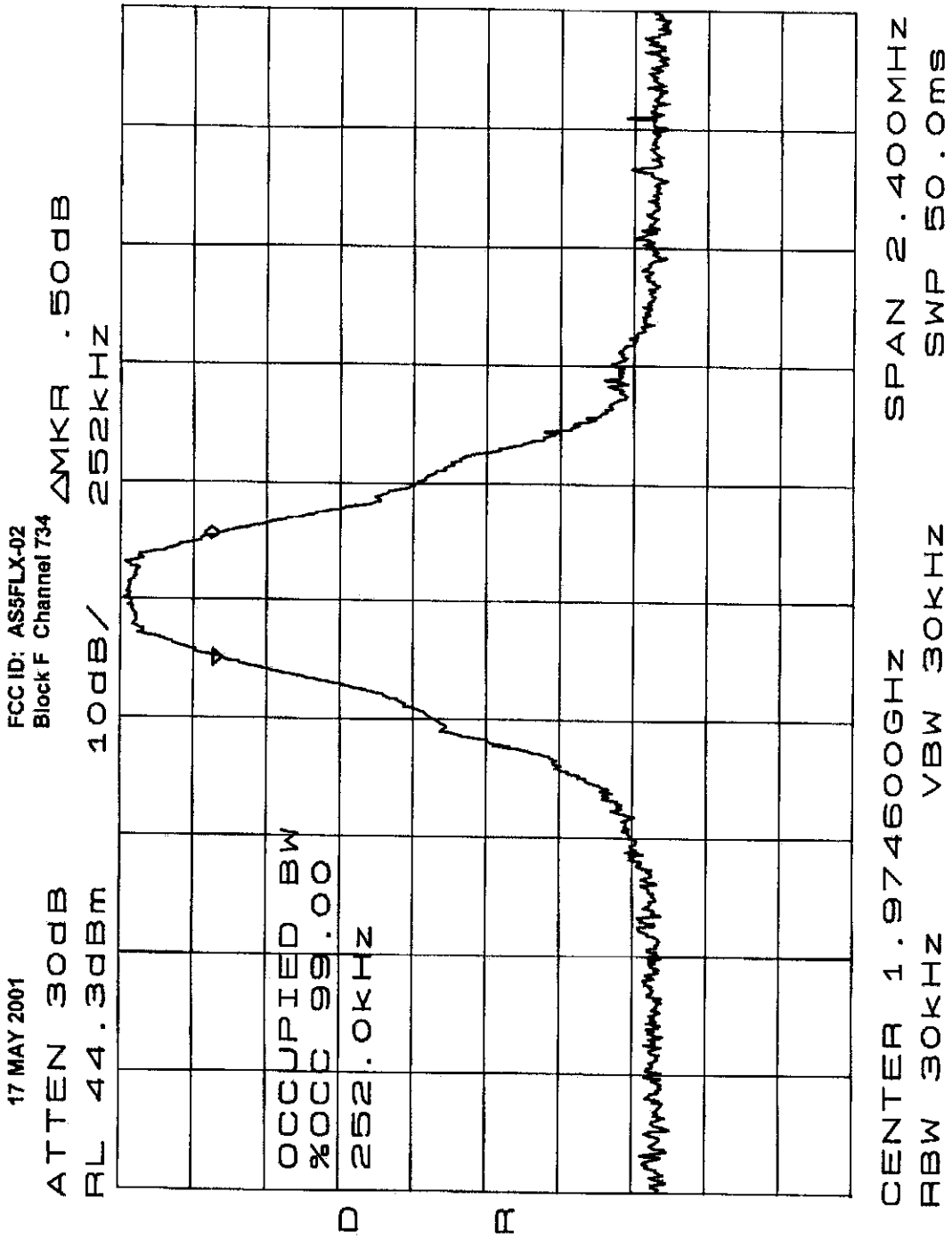
2 TRX WITH COMBINER

BLOCK F

(1970 – 1975 MHz)

Left Edge:	1970.4 MHz (Channel 713)
Right Edge:	1974.6 MHz (Channel 734)


FCC ID: AS5FLX-02
Block F Channel 713
17 MAY 2001
ATTEN 30dB
RL 44.3dBm
10dB/
ΔMKR .17dB
256kHz
OCCUPIED BW
%OCC 99.00
256.0kHz
CENTER 1.970400GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms


FCC ID: AS5FLX-02
Block F Channel 734
17 MAY 2001
ATTEN 30dB
RL 44.3dBm
10dB/
ΔMKR .50dB
252kHz
OCCUPIED BW
%OCC 99.00
252.0kHz
D
R
CENTER 1.974600GHz
RBW 30kHz
VBW 30kHz
SPAN 2.400MHz
SWP 50.0ms

MEASUREMENT OF OCCUPIED BANDWIDTH

CONTINUES AFTER MEASUREMENT 3A DATA

SECTION 2.1049 – Measurement 3B

MEASUREMENT: 3

MEASUREMENT

OF

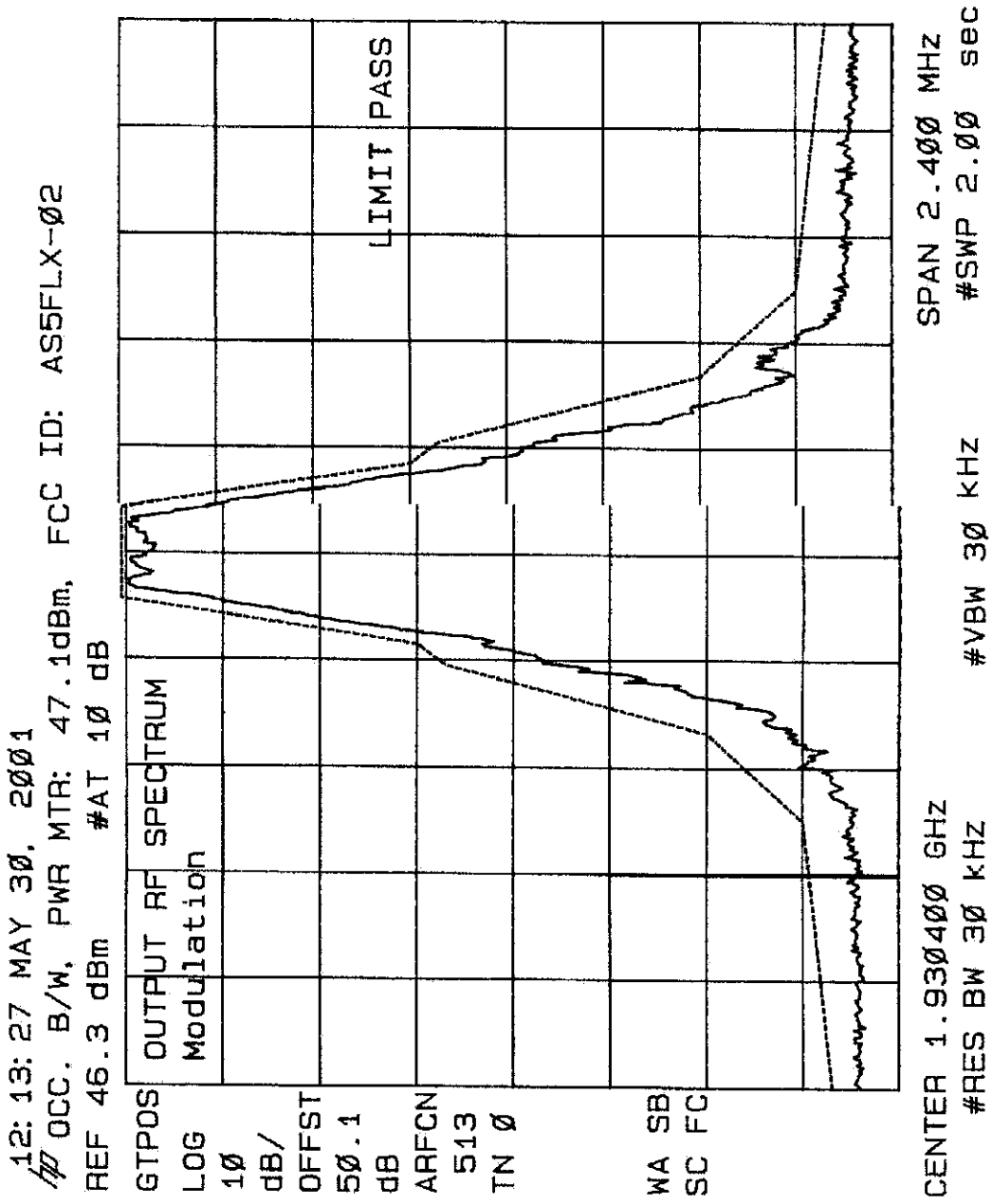
OCCUPIED BANDWIDTH

1 TRX WITHOUT COMBINER

BLOCK A

(1930 – 1945 MHz)

Left Edge:	1930.4 MHz (Channel 513)
Center:	1937.6 MHz (Channel 547)
Right Edge:	1944.6 MHz (Channel 584)


12: 13: 27 MAY 3Ø, 2ØØ1
OCC. B/W, PWR MTR: 47.1dBm, FCC ID: AS5FLX-Ø2
REF 46.3 dBm #AT 1Ø dB
GTPOS OUTPUT RF SPECTRUM
Modulation
LOG
1Ø
dB/
OFFST
5Ø.1
dB
ARFCN
513
TN Ø
LIMIT PASS
WA SB
SC FC
CENTER 1.93Ø4ØØ GHz
#RES BW 3Ø kHz
#VBW 3Ø kHz
SPAN 2.4ØØ MHz
#SWP 2.ØØ sec

12: 24: 1Ø MAY 3Ø, 2ØØ1
OCC. B/W, PWR MTR: 47.1dBm, FCC ID: AS5FLX-Ø2
REF 44.4 dBm #AT 1Ø dB

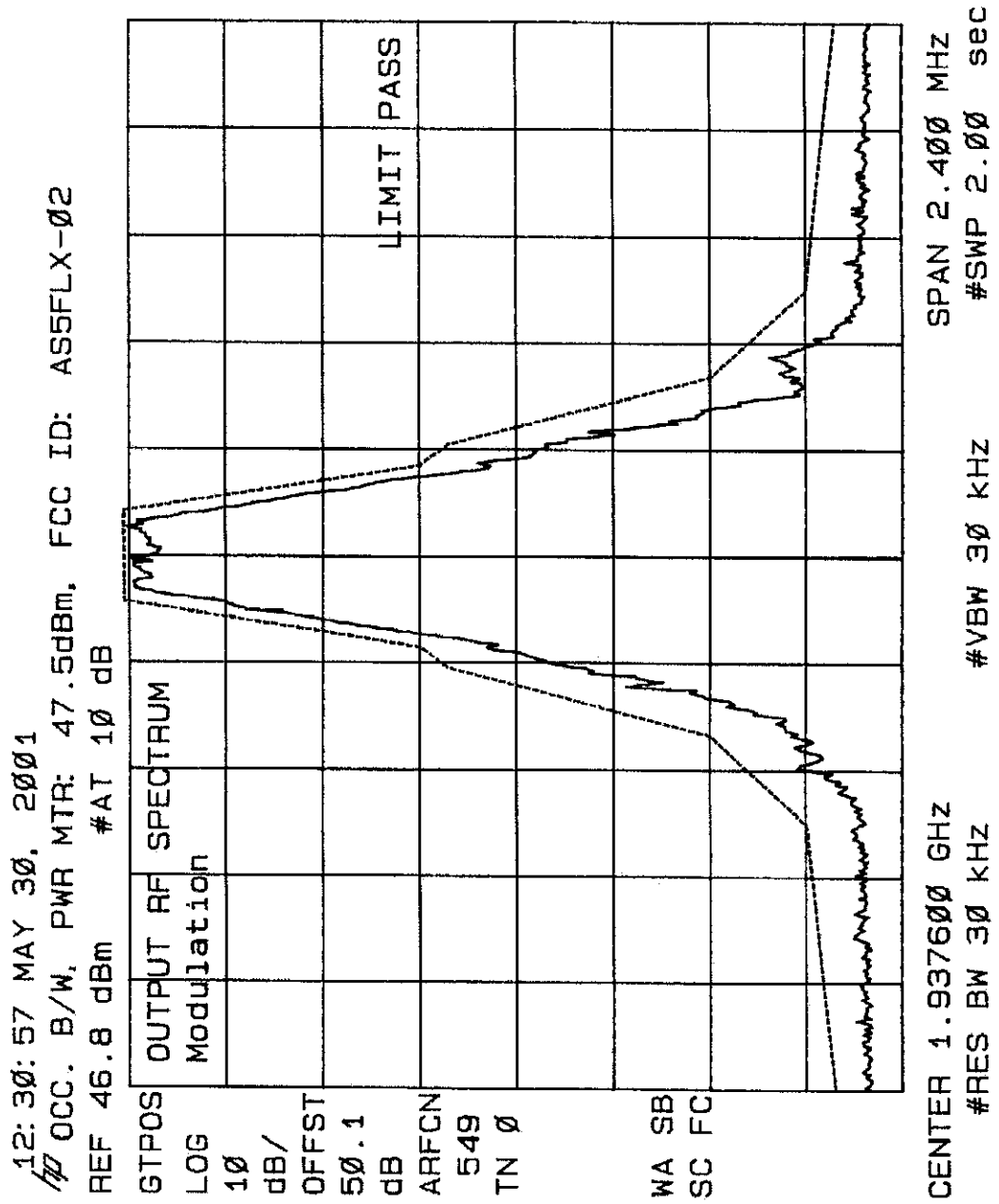
GTSMP
LOG
1Ø
dB/
OFFST
5Ø.1
dB
ARFCN
513
TN Ø
BURST
1

SA SB
SC EC

OUTPUT RF SPECTRUM
Modulation

Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
Ø kHz	Ø.Ø	36.Ø	Ø.Ø	36.Ø
1ØØ kHz	-6.9	29.1	-3.9	32.1
2ØØ kHz	-33.7	2.3	-33.4	2.6
25Ø kHz	-44.2	-8.2	-46.2	-1Ø.2
4ØØ kHz	-7Ø.9	-34.8	-69.5	-33.5
6ØØ kHz	-76.8	-4Ø.8	-78.Ø	-42.Ø
8ØØ kHz	-8Ø.3	-44.2	-79.9	-43.9
1ØØØ kHz	-77.7	-41.6	-79.5	-43.5
12ØØ kHz	-78.4	-42.4	-81.5	-45.5
14ØØ kHz	-81.1	-45.1	-8Ø.2	-44.2
16ØØ kHz	-8Ø.7	-44.7	-79.Ø	-43.Ø
18ØØ kHz	-73.9	-37.9	-74.1	-38.1

CENTER 1.93Ø4ØØØ GHz SPAN Ø Hz
#RES BW 3Ø kHz #VBW 3Ø kHz #SWP 32Ø µsec


12: 30: 57 MAY 30, 2001
OCC. B/W, PWR MTR: 47.5dBm, FCC ID: AS5FLX-02
REF 46.8 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 50.1 dB
ARFCN 549
TN 0
LIMIT PASS
WA SB
SC FC
CENTER 1.937600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec

12: 41: 25 MAY 3Ø, 2ØØ1
OCC. B/W, PWR MTR: 47.5dBm, FCC ID: AS5FLX-Ø2
REF 44.7 dBm #AT 1Ø dB

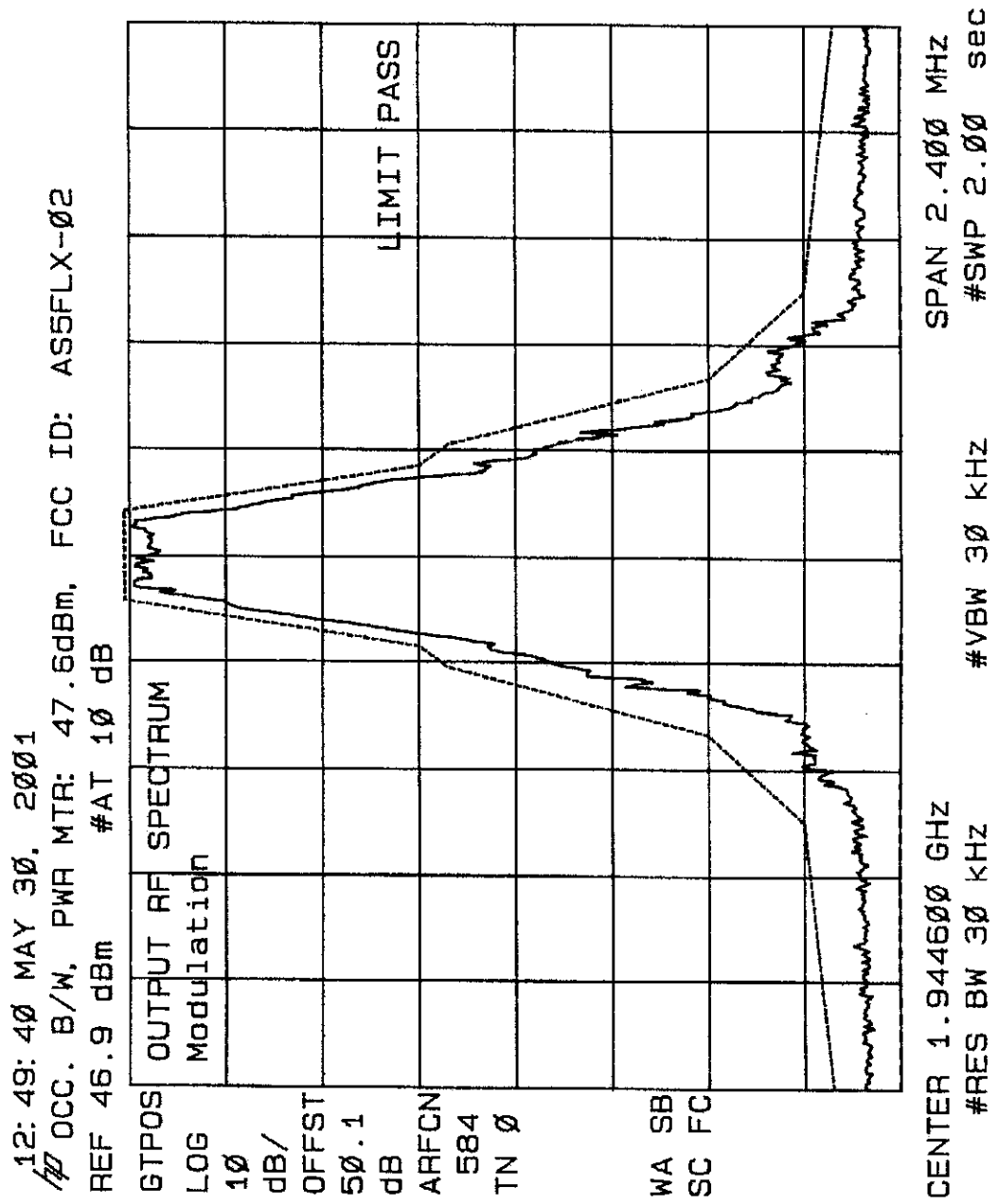
GTSMP
LOG
1Ø
dB/
OFFST
5Ø.1
dB
ARFCN
549
TN Ø
BURST
1

SA SB
SC EC

OUTPUT RF SPECTRUM
Modulation

Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
Ø kHz	Ø.Ø	36.3	Ø.Ø	36.3
1ØØ kHz	-7.Ø	29.3	-4.Ø	32.3
2ØØ kHz	-33.7	2.6	-33.4	2.9
25Ø kHz	-44.1	-7.8	-46.Ø	-9.7
4ØØ kHz	-68.6	-32.3	-74.5	-38.1
6ØØ kHz	-78.1	-41.8	-77.3	-4Ø.9
8ØØ kHz	-78.8	-42.5	-77.9	-41.6
1ØØØ kHz	-79.7	-43.4	-78.9	-42.6
12ØØ kHz	-81.5	-45.2	-8Ø.3	-44.Ø
14ØØ kHz	-8Ø.8	-44.5	-77.6	-41.3
16ØØ kHz	-79.3	-42.9	-79.4	-43.1
18ØØ kHz	-74.5	-38.2	-74.3	-38.Ø

CENTER 1.9376ØØØ GHz SPAN Ø Hz
#RES BW 3Ø kHz #VBW 3Ø kHz #SWP 32Ø µsec


12: 49: 40 MAY 30, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 46.9 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 50.1 dB
ARFCN 584
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.944600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec

13:01:11 MAY 30, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 44.9 dBm #AT 10 dB
GTSMP
LOG
10
dB/
OFFST
50.1
dB
ARFCN
584
TN 0
BURST
1
SA SB
SC EC
OUTPUT RF SPECTRUM
Modulation
- Offset + Offset
Offset Freq dB dBm dB dBm
0 kHz 0.0 36.4 0.0 36.4
100 kHz -6.8 29.6 -3.8 32.6
200 kHz -33.6 2.8 -33.5 2.9
250 kHz -43.6 -7.2 -46.0 -9.7
400 kHz -71.0 -34.6 -70.6 -34.2
600 kHz -76.5 -40.1 -77.6 -41.2
800 kHz -78.3 -42.0 -78.2 -41.9
1000 kHz -78.9 -42.6 -79.8 -43.4
1200 kHz -81.2 -44.8 -80.4 -44.0
1400 kHz -78.7 -42.3 -81.7 -45.3
1600 kHz -78.3 -42.0 -81.6 -45.2
1800 kHz -75.0 -38.6 -74.2 -37.8
CENTER 1.9446000 GHz
SPAN 0 Hz
#RES BW 30 kHz
#VBW 30 kHz
#SWP 320 µsec

MEASUREMENT: 3

MEASUREMENT

OF

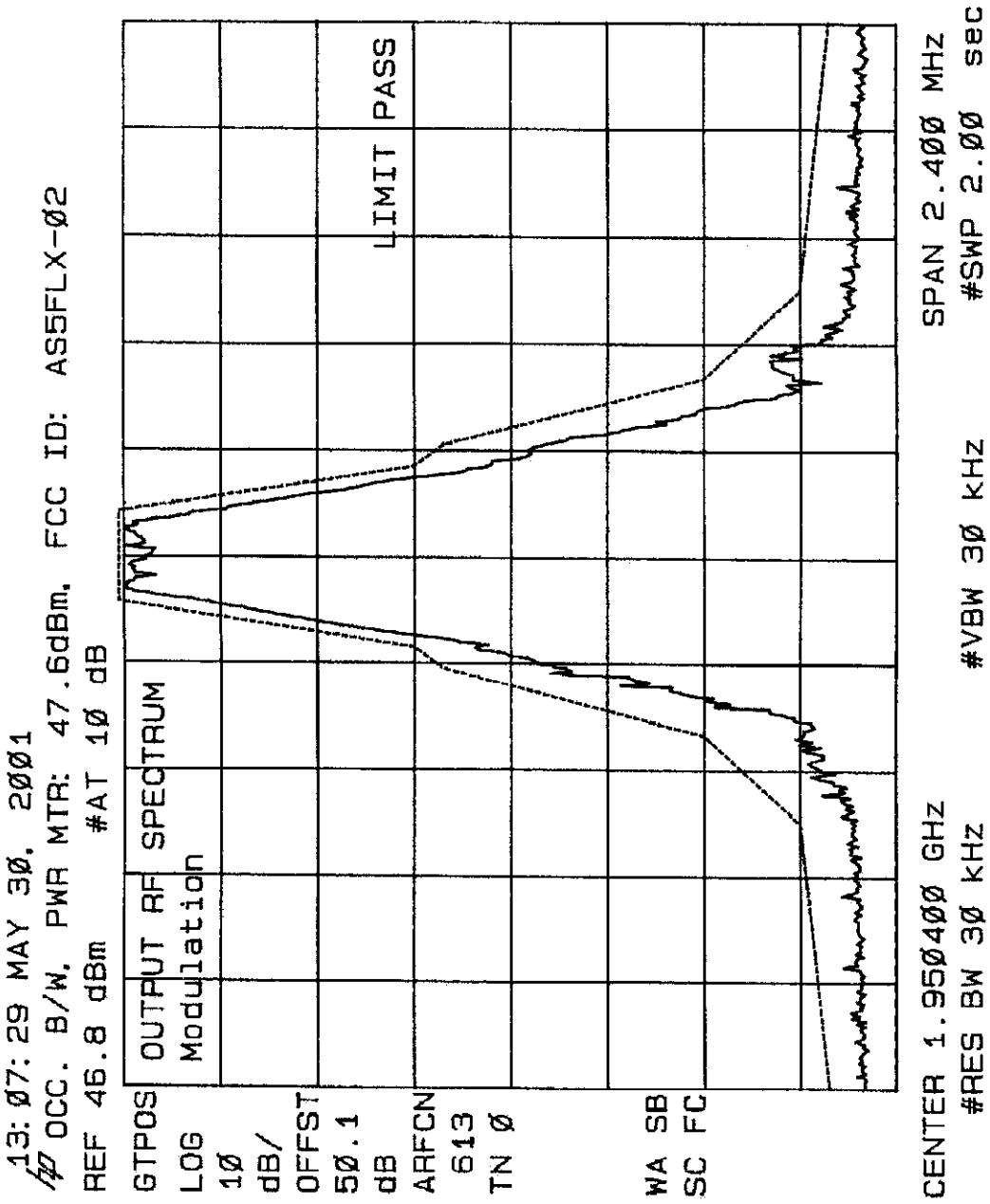
OCCUPIED BANDWIDTH

1 TRX WITHOUT COMBINER

BLOCK B

(1950 – 1965 MHz)

Left Edge:	1950.4 MHz (Channel 613)
Center:	1957.6 MHz (Channel 649)
Right Edge:	1964.6 MHz (Channel 684)


13: 07: 29 MAY 30, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 46.8 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 50.1 dB
ARFCN 613
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.950400 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec

13: 18: 22 MAY 3Ø, 2ØØ1
OCC. B/W. PWR MTR: 47.6dBm, FCC ID: AS5FLX-Ø2
REF 44.9 dBm #AT 1Ø dB

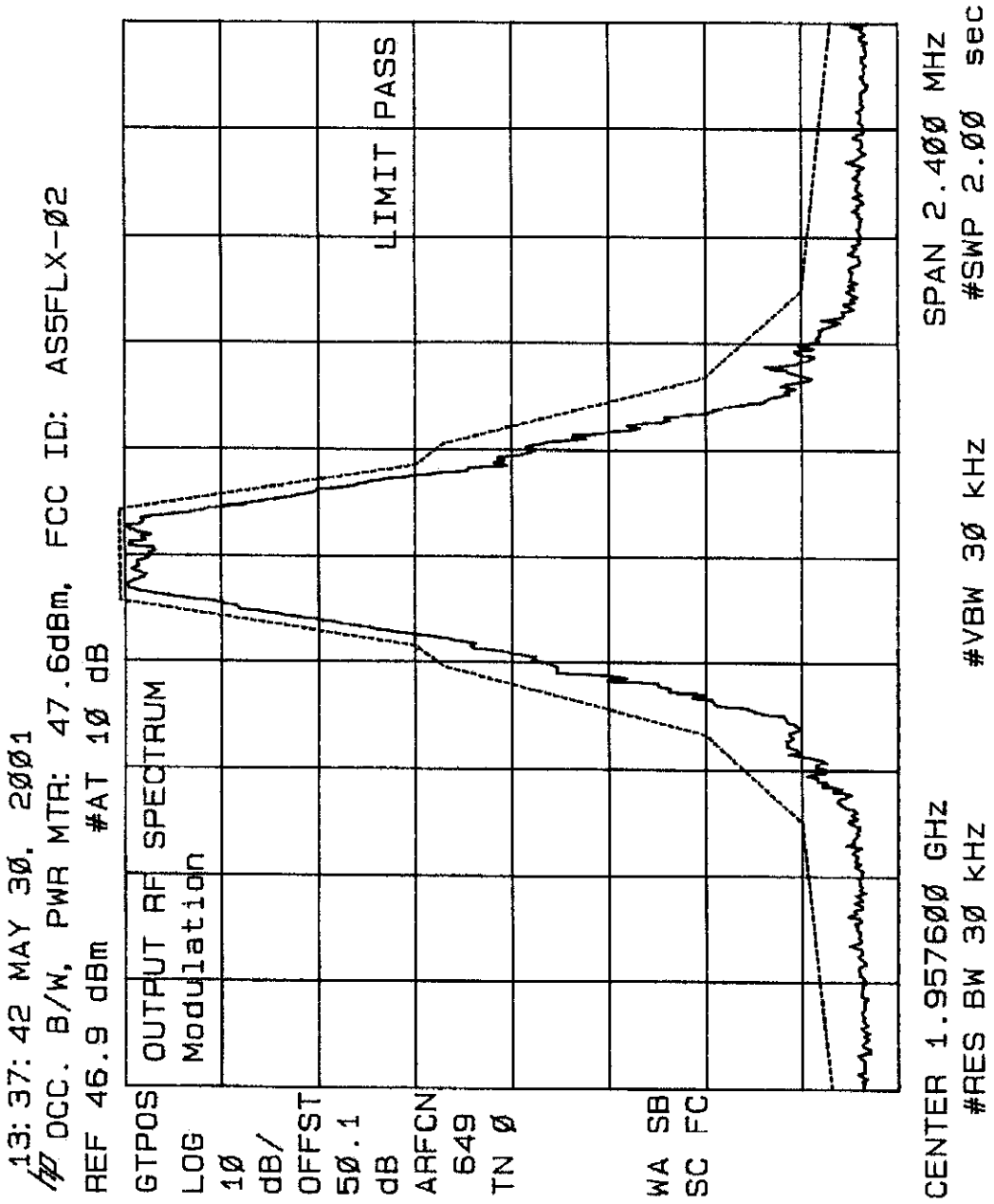
GTSMP
LOG
1Ø
dB/
OFFST
5Ø.1
dB
ARFCN
613
TN Ø
BURST
1

SA SB
SC EC

OUTPUT RF SPECTRUM
Modulation

	− Offset		+ Offset	
Offset Freq	dB	dBm	dB	dBm
Ø kHz	Ø.Ø	36.5	Ø.Ø	36.5
1ØØ kHz	-6.8	29.7	-4.2	32.3
2ØØ kHz	-33.8	2.6	-33.5	3.Ø
25Ø kHz	-44.3	-7.9	-46.5	-1Ø.1
4ØØ kHz	-72.1	-35.6	-71.5	-35.Ø
6ØØ kHz	-75.9	-39.5	-77.7	-41.2
8ØØ kHz	-76.2	-39.7	-79.2	-42.8
1ØØØ kHz	-82.2	-45.7	-77.2	-4Ø.8
12ØØ kHz	-81.4	-44.9	-81.8	-45.3
14ØØ kHz	-8Ø.5	-44.Ø	-78.9	-42.4
16ØØ kHz	-79.5	-43.Ø	-81.3	-44.8
18ØØ kHz	-74.3	-37.8	-73.9	-37.4

CENTER 1.95Ø4ØØØ GHz SPAN Ø Hz
#RES BW 3Ø kHz #VBW 3Ø kHz #SWP 32Ø µsec


13: 37: 42 MAY 30, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 46.9 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 50.1 dB
ARFCN 649
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.957600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec

13: 49: 17 MAY 3Ø, 2ØØ1
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-Ø2
REF 44.9 dBm #AT 1Ø dB

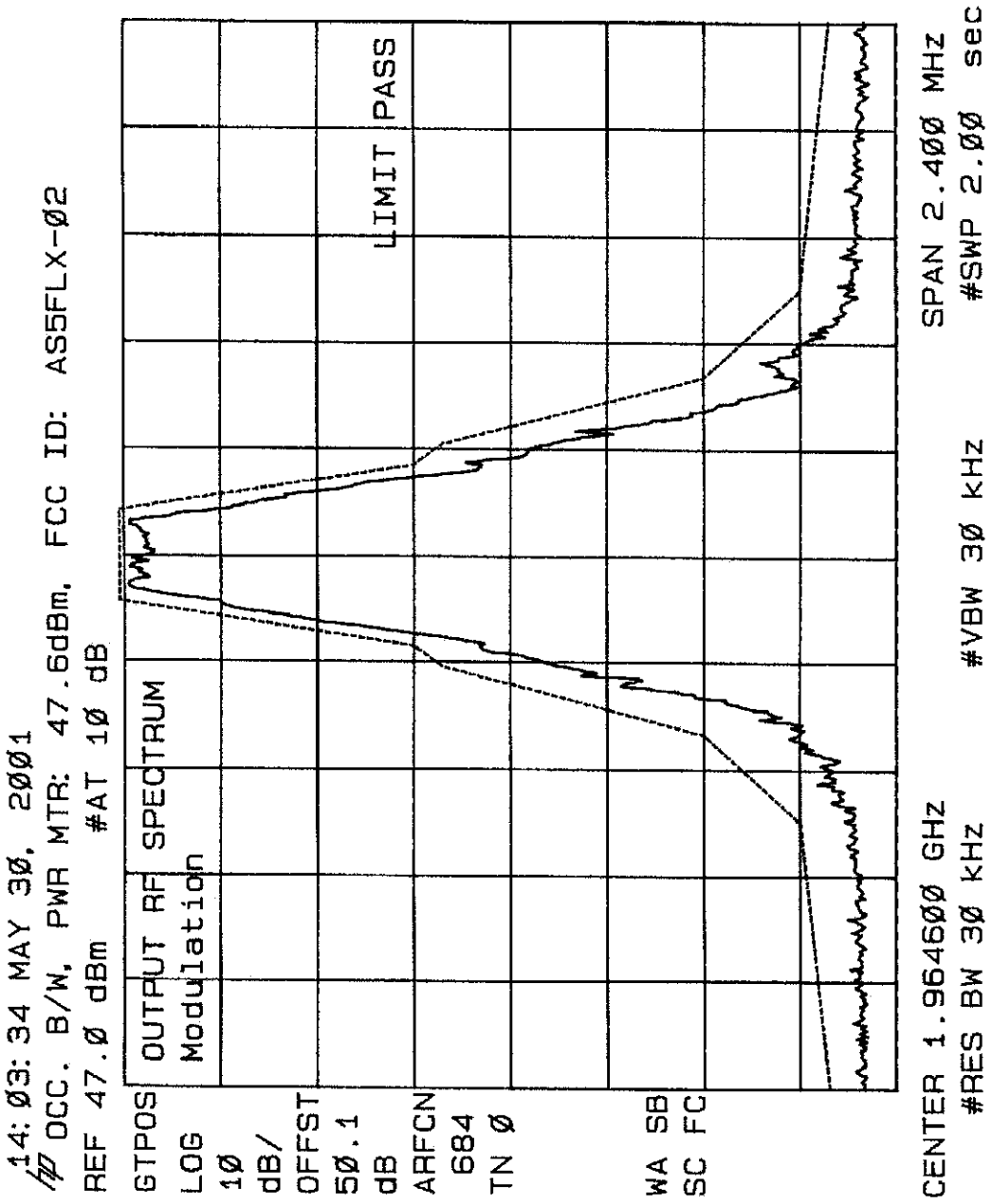
GTSMP
LOG
1Ø
dB/
OFFST
5Ø.1
dB
ARFCN
649
TN Ø
BURST
1

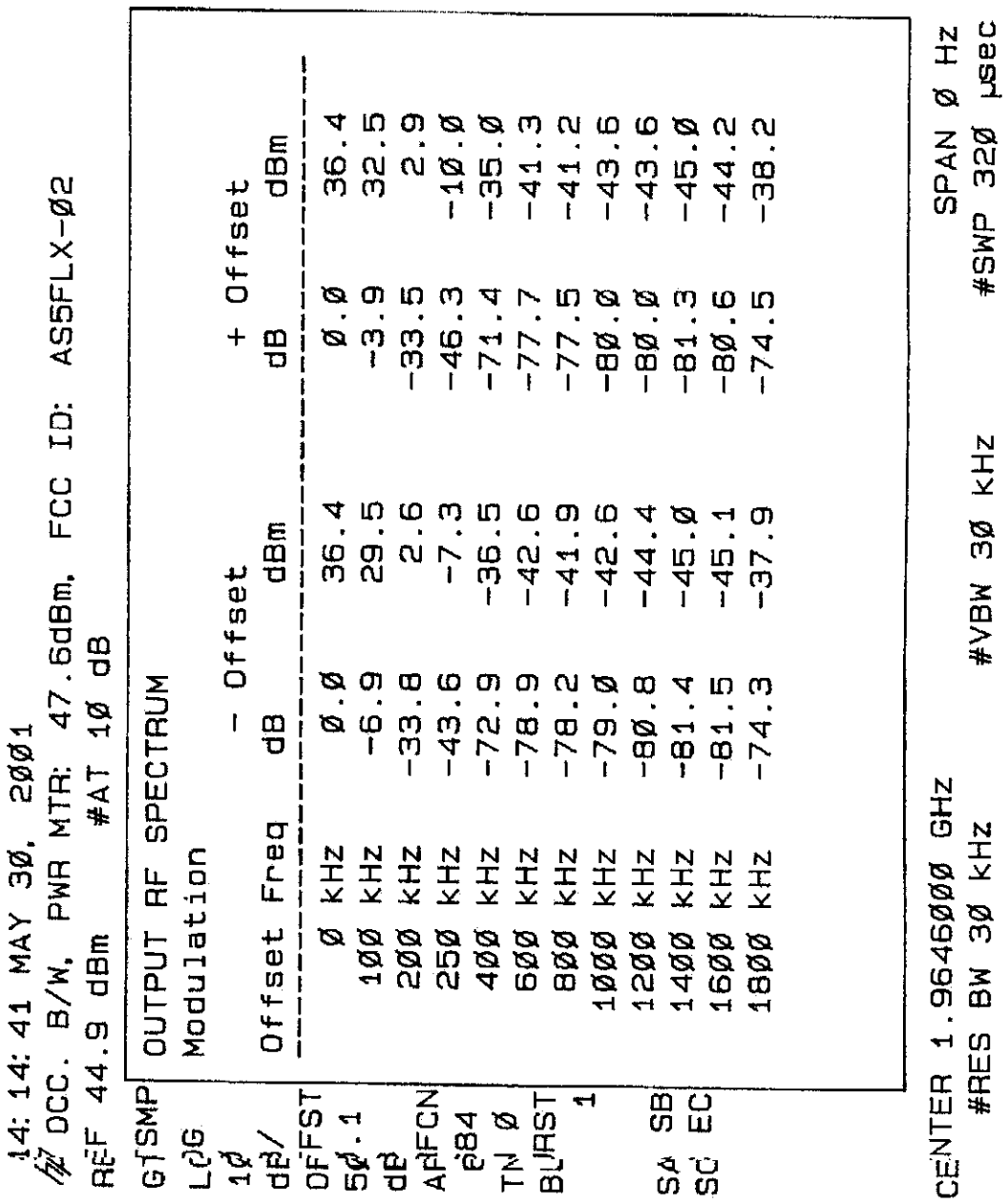
SA SB
SC EC

OUTPUT RF SPECTRUM
Modulation

Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
Ø kHz	Ø.Ø	36.4	Ø.Ø	36.4
1ØØ kHz	-6.8	29.6	-4.1	32.3
2ØØ kHz	-33.8	2.6	-33.5	2.9
25Ø kHz	-43.9	-7.5	-46.Ø	-9.6
4ØØ kHz	-71.7	-35.3	-68.8	-32.4
6ØØ kHz	-79.7	-43.3	-78.9	-42.5
8ØØ kHz	-78.5	-42.1	-79.6	-43.2
1ØØØ kHz	-8Ø.7	-44.3	-79.9	-43.5
12ØØ kHz	-79.7	-43.3	-8Ø.2	-43.8
14ØØ kHz	-79.3	-42.9	-81.8	-45.4
16ØØ kHz	-8Ø.2	-43.8	-81.Ø	-44.6
18ØØ kHz	-75.3	-38.9	-76.4	-4Ø.Ø

CENTER 1.9576ØØØ GHz SPAN Ø Hz
#RES BW 3Ø kHz #VBW 3Ø kHz #SWP 32Ø µsec


14: 03: 34 MAY 30, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 47.0 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 50.1 dB
ARFCN 684
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.964600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec


14: 14: 41 MAY 30, 2001
DCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 44.9 dBm #AT 10 dB
OUTPUT RF SPECTRUM
Modulation
- Offset + Offset
Offset Freq dB dBm dB dBm
0 kHz 0.0 36.4 0.0 36.4
100 kHz -6.9 29.5 -3.9 32.5
200 kHz -33.8 2.6 -33.5 2.9
250 kHz -43.6 -7.3 -46.3 -10.0
400 kHz -72.9 -36.5 -71.4 -35.0
600 kHz -78.9 -42.6 -77.7 -41.3
800 kHz -78.2 -41.9 -77.5 -41.2
1000 kHz -79.0 -42.6 -80.0 -43.6
1200 kHz -80.8 -44.4 -80.0 -43.6
1400 kHz -81.4 -45.0 -81.3 -45.0
1600 kHz -81.5 -45.1 -80.6 -44.2
1800 kHz -74.3 -37.9 -74.5 -38.2
CENTER 1.964600000 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 0 Hz
#SWP 320 µsec

MEASUREMENT: 3

MEASUREMENT

OF

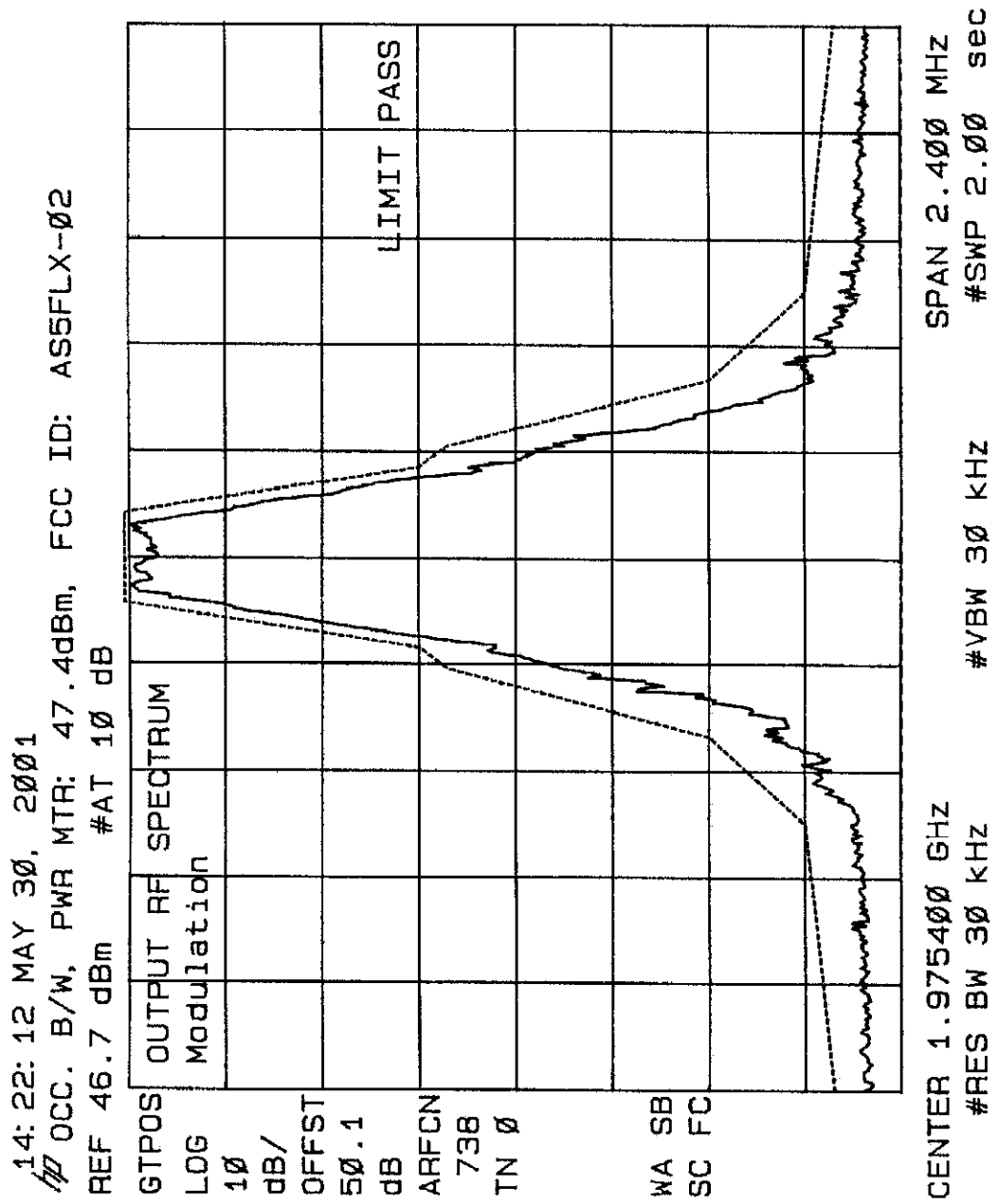
OCCUPIED BANDWIDTH

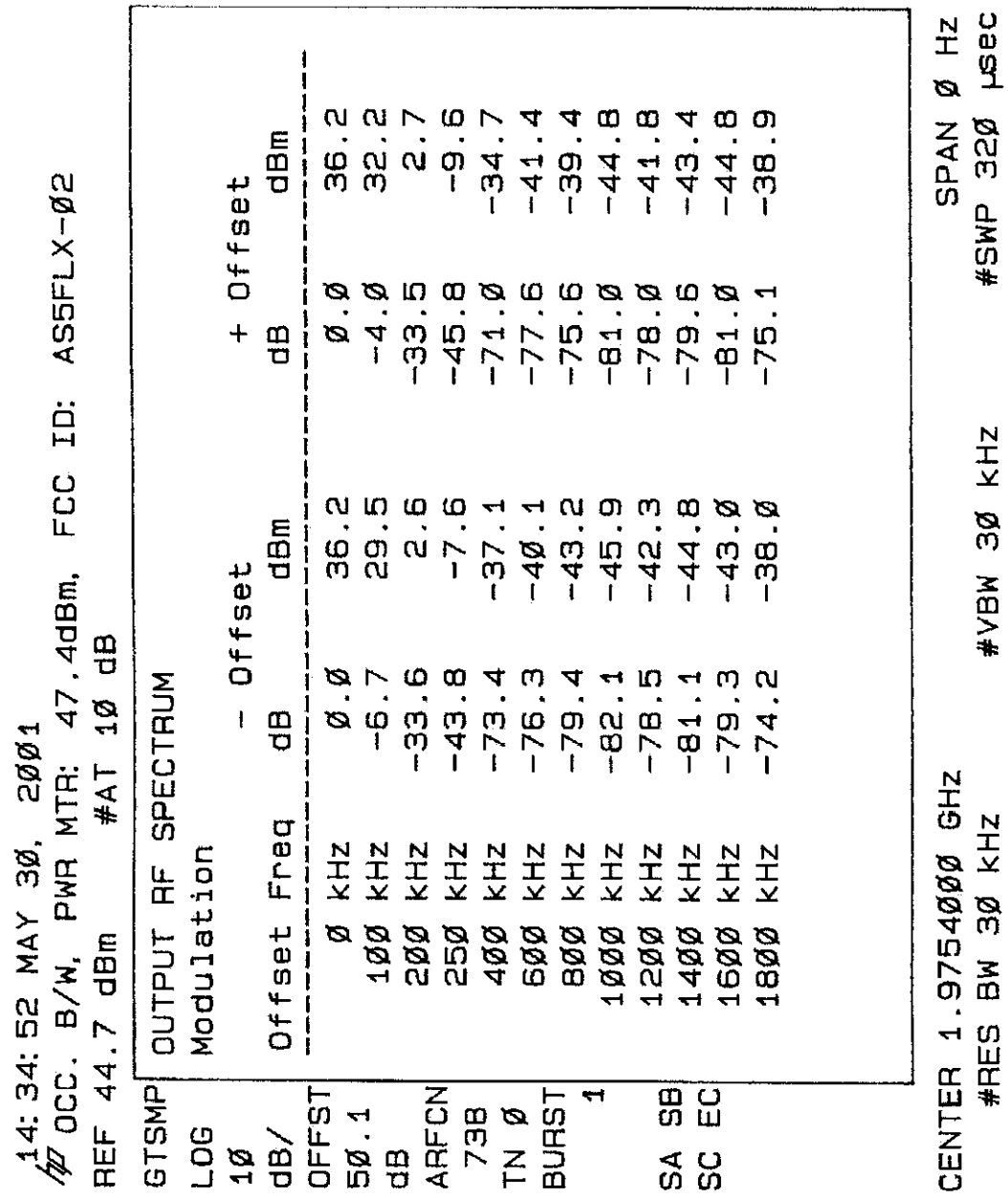
1 TRX WITHOUT COMBINER

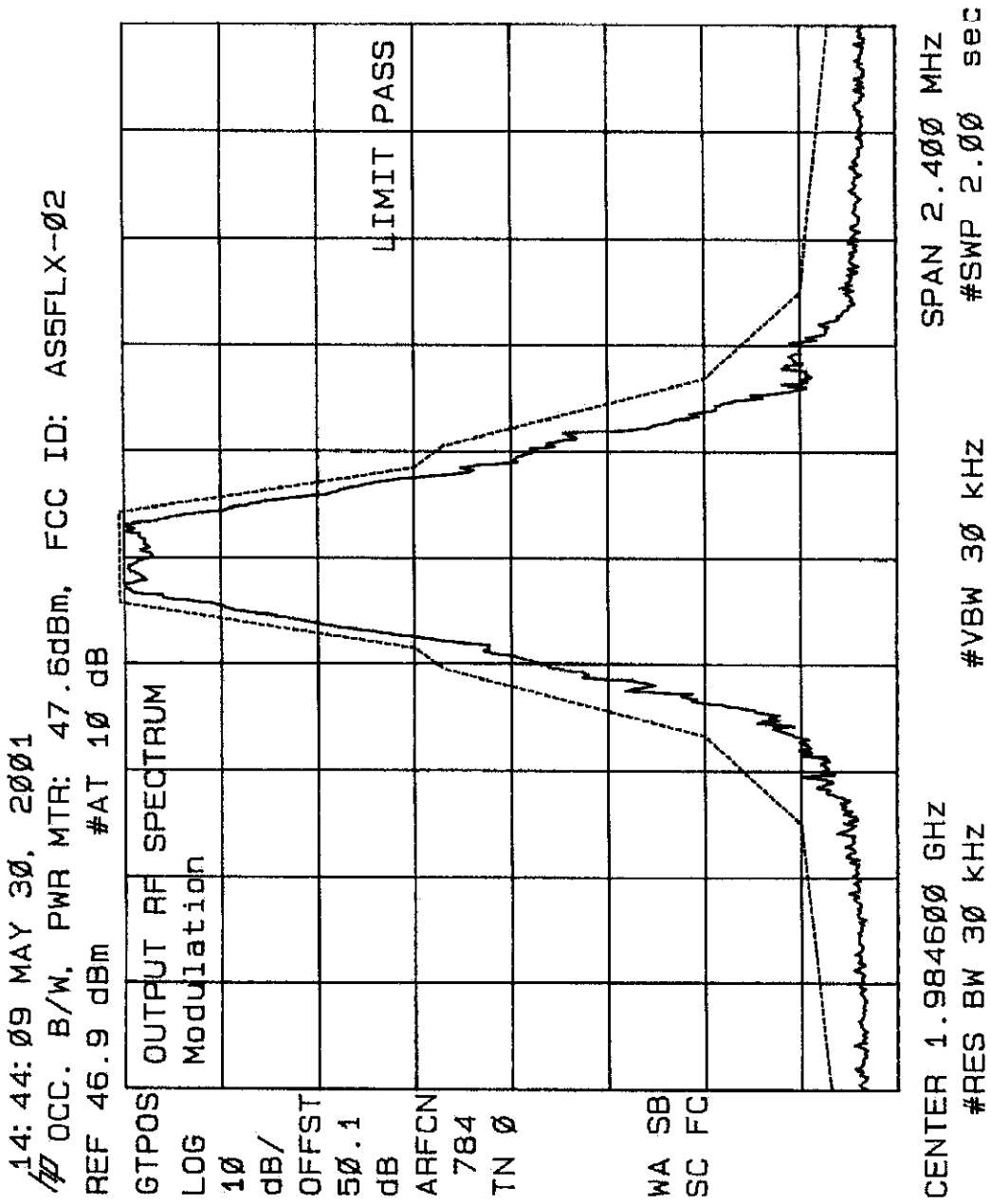
BLOCK C

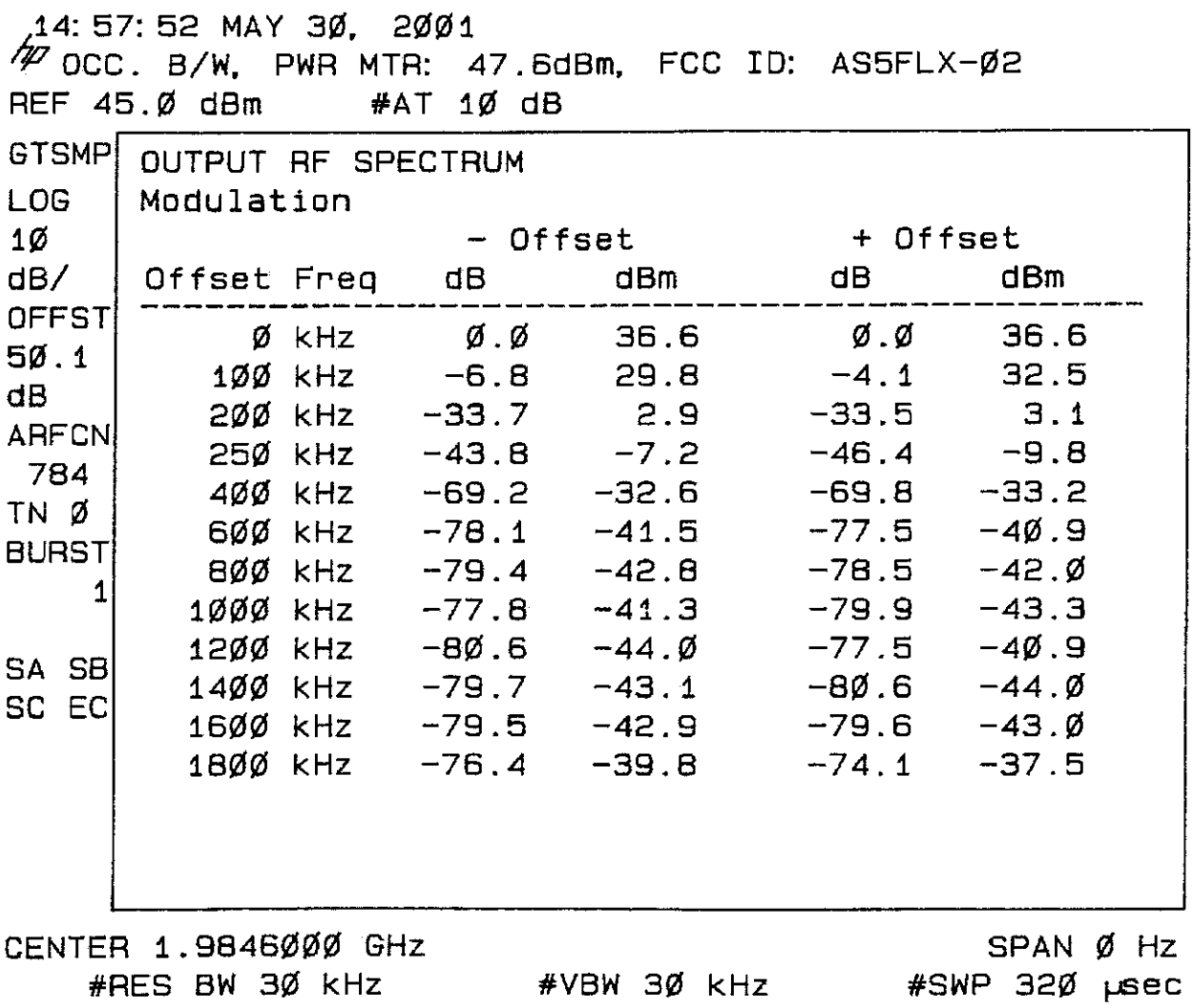
(1975 – 1990 MHz)

Left Edge:	1975.4 MHz (Channel 738)
Center:	1984.6 MHz (Channel 784)
Right Edge:	1989.6 MHz (Channel 809)

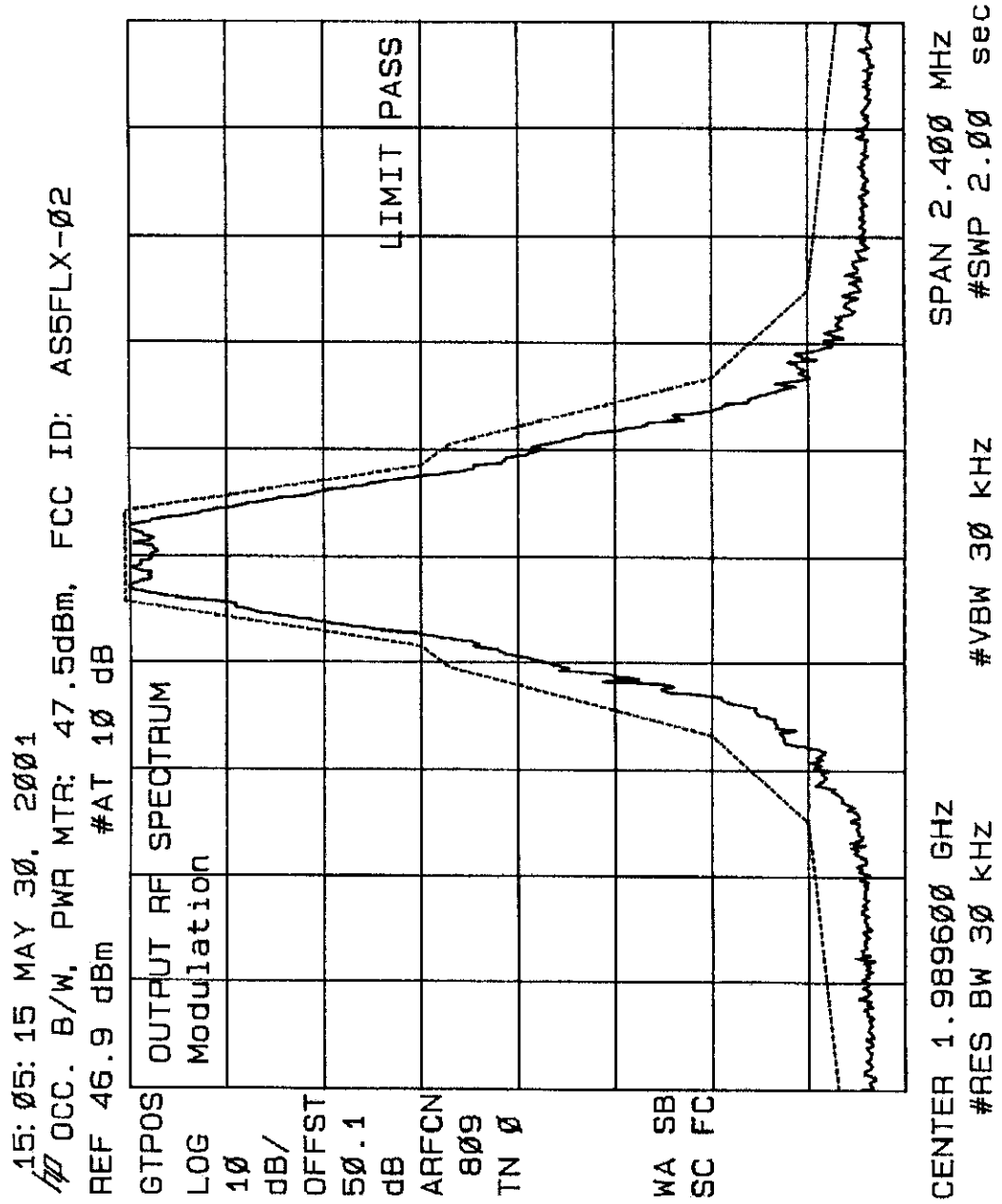

14: 22: 12 MAY 30, 2001
OCC. B/W, PWR MTR: 47.4dBm, FCC ID: AS5FLX-02
REF 46.7 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 50.1 dB
ARFCN 738
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.975400 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec


14:34:52 MAY 30, 2001
OCC. B/W, PWR MTR: 47.4dBm, FCC ID: AS5FLX-02
REF 44.7 dBm #AT 10 dB
GTSMP
LOG
10
dB/
OFFST
50.1
dB
ARFCN
738
TN 0
BURST
1
SA SB
SC EC
OUTPUT RF SPECTRUM
Modulation
- Offset + Offset
Offset Freq dB dBm dB dBm
0 kHz 0.0 36.2 0.0 36.2
100 kHz -6.7 29.5 -4.0 32.2
200 kHz -33.6 2.6 -33.5 2.7
250 kHz -43.8 -7.6 -45.8 -9.6
400 kHz -73.4 -37.1 -71.0 -34.7
600 kHz -76.3 -40.1 -77.6 -41.4
800 kHz -79.4 -43.2 -75.6 -39.4
1000 kHz -82.1 -45.9 -81.0 -44.8
1200 kHz -78.5 -42.3 -78.0 -41.8
1400 kHz -81.1 -44.8 -79.6 -43.4
1600 kHz -79.3 -43.0 -81.0 -44.8
1800 kHz -74.2 -38.0 -75.1 -38.9
CENTER 1.975400 GHz
SPAN 0 Hz
#RES BW 30 kHz
#VBW 30 kHz
#SWP 320 µsec


14:44:09 MAY 30, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 46.9 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 50.1 dB
ARFCN 784
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.984600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec



Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
0 kHz	0.0	36.6	0.0	36.6
100 kHz	-6.8	29.8	-4.1	32.5
200 kHz	-33.7	2.9	-33.5	3.1
250 kHz	-43.8	-7.2	-46.4	-9.8
400 kHz	-69.2	-32.6	-69.8	-33.2
600 kHz	-78.1	-41.5	-77.5	-40.9
800 kHz	-79.4	-42.8	-78.5	-42.0
1000 kHz	-77.8	-41.3	-79.9	-43.3
1200 kHz	-80.6	-44.0	-77.5	-40.9
1400 kHz	-79.7	-43.1	-80.6	-44.0
1600 kHz	-79.5	-42.9	-79.6	-43.0
1800 kHz	-76.4	-39.8	-74.1	-37.5


15: 05: 15 MAY 30, 2001
OCC. B/W, PWR MTR: 47.5dBm, FCC ID: AS5FLX-02
REF 46.9 dBm #AT 10 dB
GTPOS
OUTPUT RF SPECTRUM
Modulation
LOG
10
dB/
OFFST
50.1
dB
ARFCN
809
TN 0
LIMIT PASS
WA SB
SC FC
CENTER 1.989600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec

15: 16: Ø2 MAY 3Ø, 2ØØ1
OCC. B/W, PWR MTR: 47.5dBm, FCC ID: AS5FLX-Ø2
REF 45.Ø dBm #AT 1Ø dB

GTSMP
LOG
1Ø
dB/
OFFST
5Ø.1
dB
ARFCN
8Ø9
TN Ø
BURST
1

SA SB
SC EC

OUTPUT RF SPECTRUM
Modulation

	− Offset		+ Offset	
Offset Freq	dB	dBm	dB	dBm
Ø kHz	Ø.Ø	36.6	Ø.Ø	36.6
1ØØ kHz	-6.7	29.8	-4.Ø	32.6
2ØØ kHz	-33.7	2.9	-33.5	3.Ø
25Ø kHz	-43.8	-7.2	-45.9	-9.3
4ØØ kHz	-73.Ø	-36.4	-69.Ø	-32.4
6ØØ kHz	-78.3	-41.7	-78.Ø	-41.4
8ØØ kHz	-81.1	-44.5	-77.5	-4Ø.9
1ØØØ kHz	-8Ø.Ø	-43.4	-8Ø.6	-44.Ø
12ØØ kHz	-79.7	-43.1	-8Ø.5	-43.9
14ØØ kHz	-79.3	-42.7	-81.3	-44.8
16ØØ kHz	-8Ø.3	-43.7	-79.3	-42.8
18ØØ kHz	-76.3	-39.8	-75.5	-38.9

CENTER 1.9896ØØØ GHz SPAN Ø Hz
#RES BW 3Ø kHz #VBW 3Ø kHz #SWP 32Ø µsec

MEASUREMENT: 3

MEASUREMENT

OF

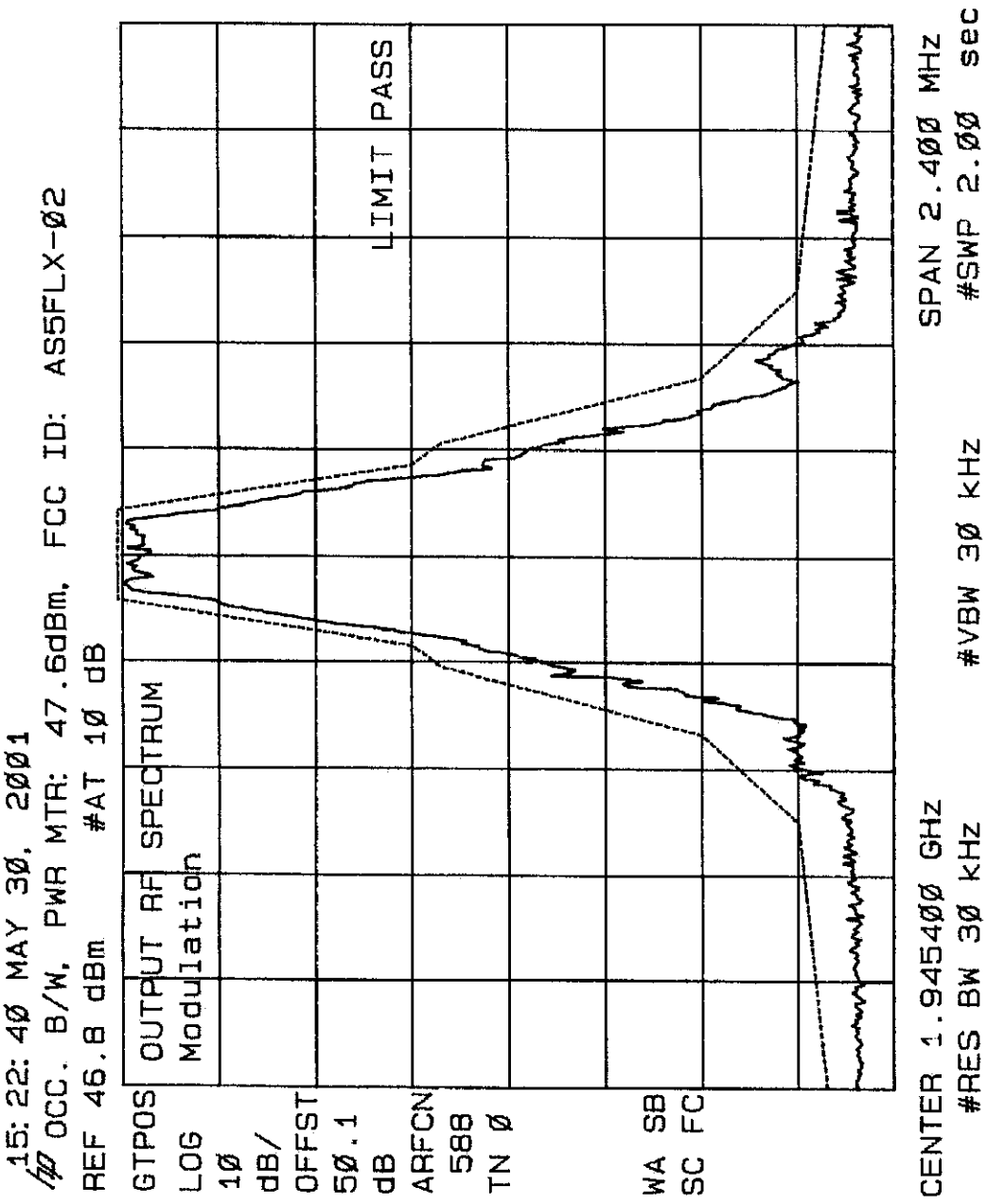
OCCUPIED BANDWIDTH

1 TRX WITHOUT COMBINER

BLOCK D

(1945 – 1950 MHz)

Left Edge:	1945.4 MHz (Channel 588)
Center:	1947.6 MHz (Channel 599)
Right Edge:	1949.6 MHz (Channel 609)


15: 22: 40 MAY 30, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 46.8 dBm #AT 10 dB
GTPOS
LOG
10
dB/
OFFST
50.1
dB
ARFCN
588
TN 0
OUTPUT RF SPECTRUM
Modulation
LIMIT PASS
WA SB
SC FC
CENTER 1.945400 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec

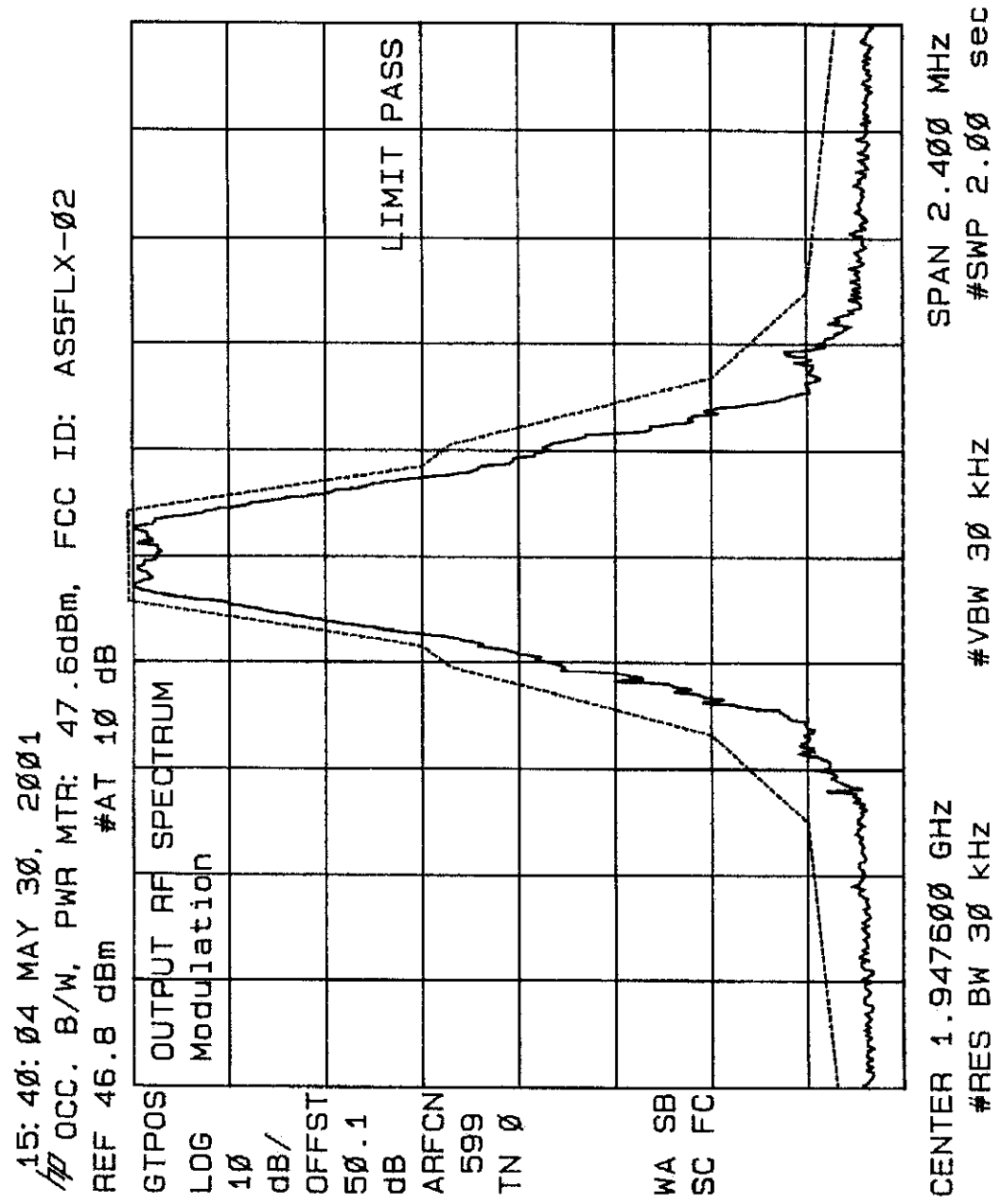
15:34:05 MAY 30, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 44.9 dBm #AT 10 dB

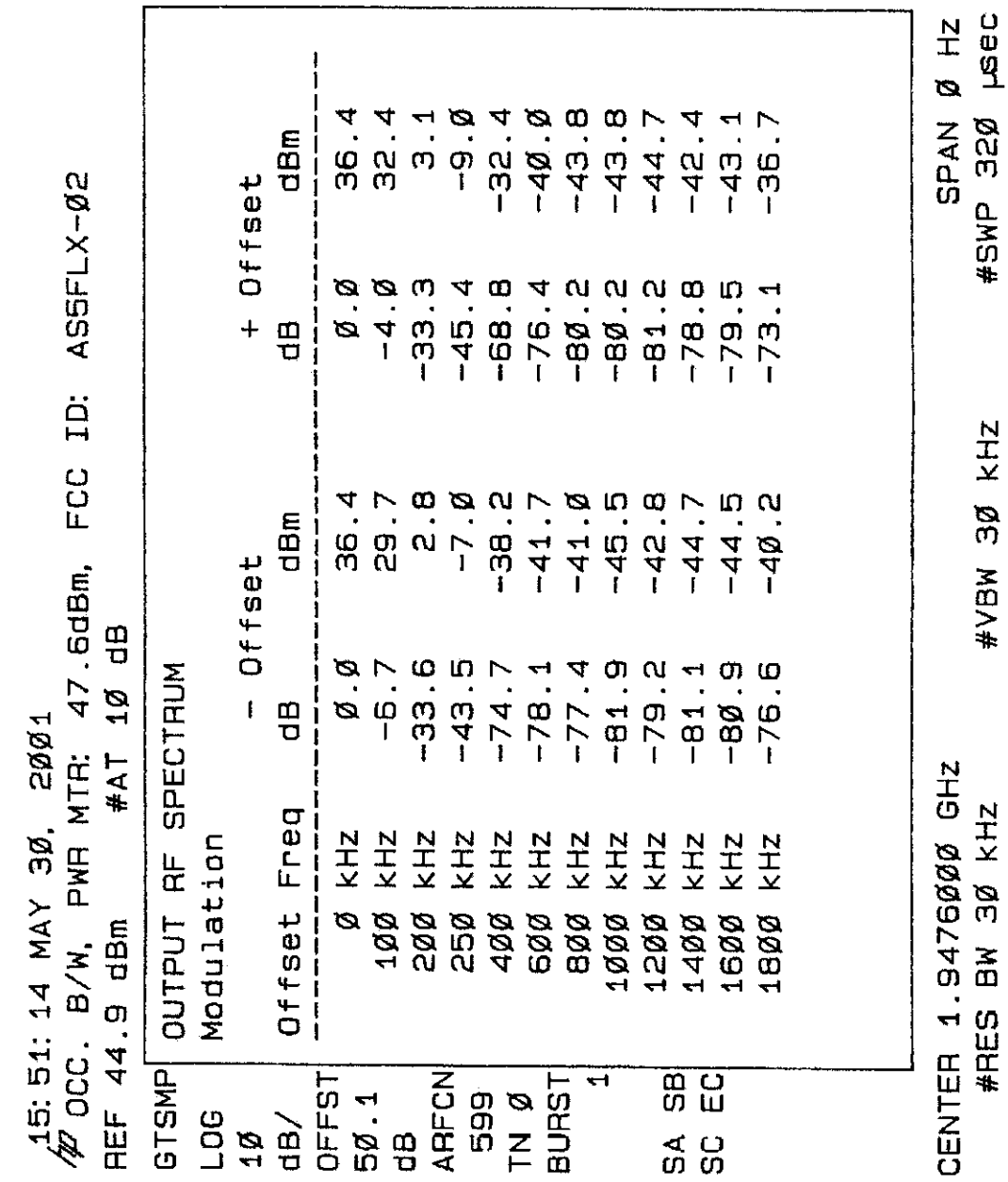
GTSMP
LOG
10
dB/
OFFST
50.1
dB
ARFCN
588
TN 0
BURST
1
SA SB
SC EC

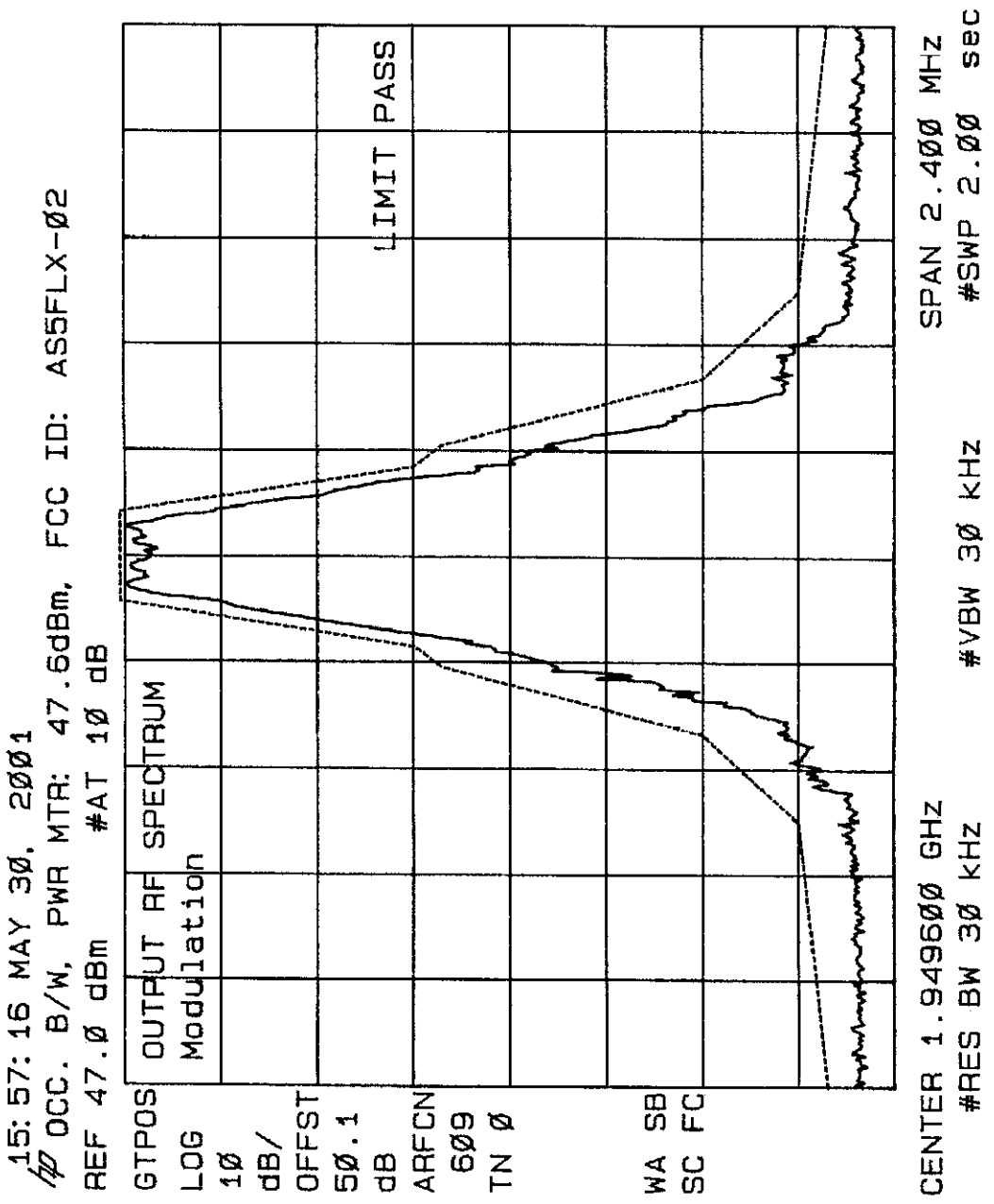
OUTPUT RF SPECTRUM
Modulation

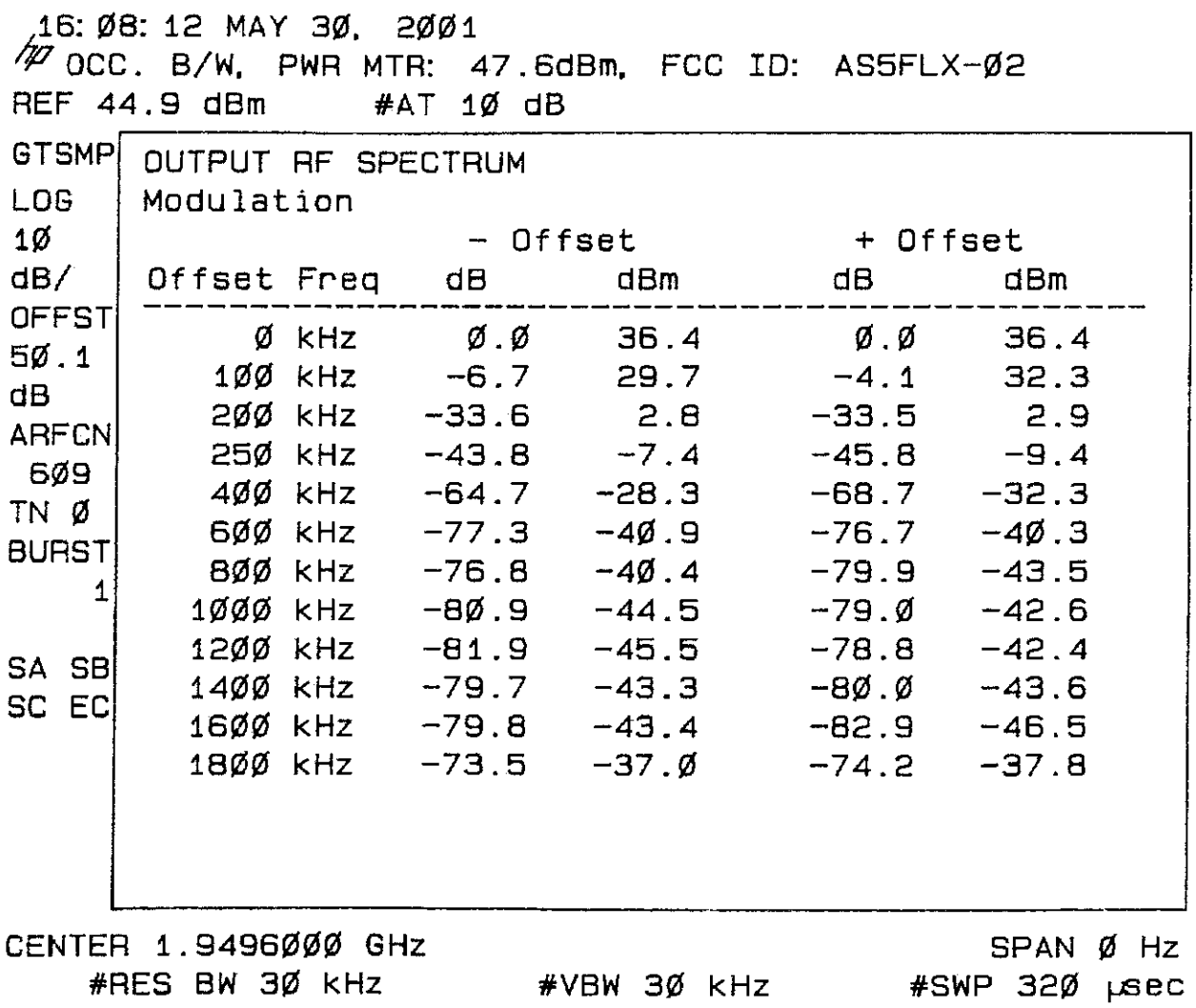
Offset Freq	- Offset dB	dBm	+ Offset dB	dBm
0 kHz	0.0	36.4	0.0	36.4
100 kHz	-6.6	29.8	-4.0	32.4
200 kHz	-33.9	2.5	-33.5	2.9
250 kHz	-43.8	-7.4	-46.0	-9.6
400 kHz	-73.7	-37.3	-72.0	-35.6
600 kHz	-77.8	-41.4	-77.7	-41.3
800 kHz	-79.6	-43.2	-78.0	-41.6
1000 kHz	-79.6	-43.2	-75.6	-39.3
1200 kHz	-79.7	-43.3	-79.2	-42.8
1400 kHz	-80.3	-43.9	-79.2	-42.8
1600 kHz	-78.9	-42.5	-80.3	-43.9
1800 kHz	-74.5	-38.1	-75.3	-38.9

CENTER 1.945400 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 0 Hz
#SWP 320 µsec


15: 40: 04 MAY 30, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 46.8 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 50.1 dB
ARFCN 599
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.947500 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec


15:51:14 MAY 30, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 44.9 dBm #AT 10 dB
GTSMP
LOG
10
dB/
OFFST
50.1
dB
ARFCN
599
TN 0
BURST
1
SA SB
SC EC
OUTPUT RF SPECTRUM
Modulation
- Offset + Offset
Offset Freq dB dBm dB dBm
0 kHz 0.0 36.4 0.0 36.4
100 kHz -6.7 29.7 -4.0 32.4
200 kHz -33.6 2.8 -33.3 3.1
250 kHz -43.5 -7.0 -45.4 -9.0
400 kHz -74.7 -38.2 -68.8 -32.4
600 kHz -78.1 -41.7 -76.4 -40.0
800 kHz -77.4 -41.0 -80.2 -43.8
1000 kHz -81.9 -45.5 -80.2 -43.8
1200 kHz -79.2 -42.8 -81.2 -44.7
1400 kHz -81.1 -44.7 -78.8 -42.4
1600 kHz -80.9 -44.5 -79.5 -43.1
1800 kHz -76.6 -40.2 -73.1 -36.7
CENTER 1.947600 GHz
SPAN 0 Hz
#RES BW 30 kHz
#VBW 30 kHz
#SWP 320 µsec


15:57:16 MAY 30, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 47.0 dBm #AT 10 dB
GTPOS
OUTPUT RF SPECTRUM
Modulation
LOG
10
dB/
OFFST
50.1
dB
ARFCN
609
TN 0
LIMIT PASS
WA SB
SC FC
CENTER 1.949600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec



MEASUREMENT: 3

MEASUREMENT

OF

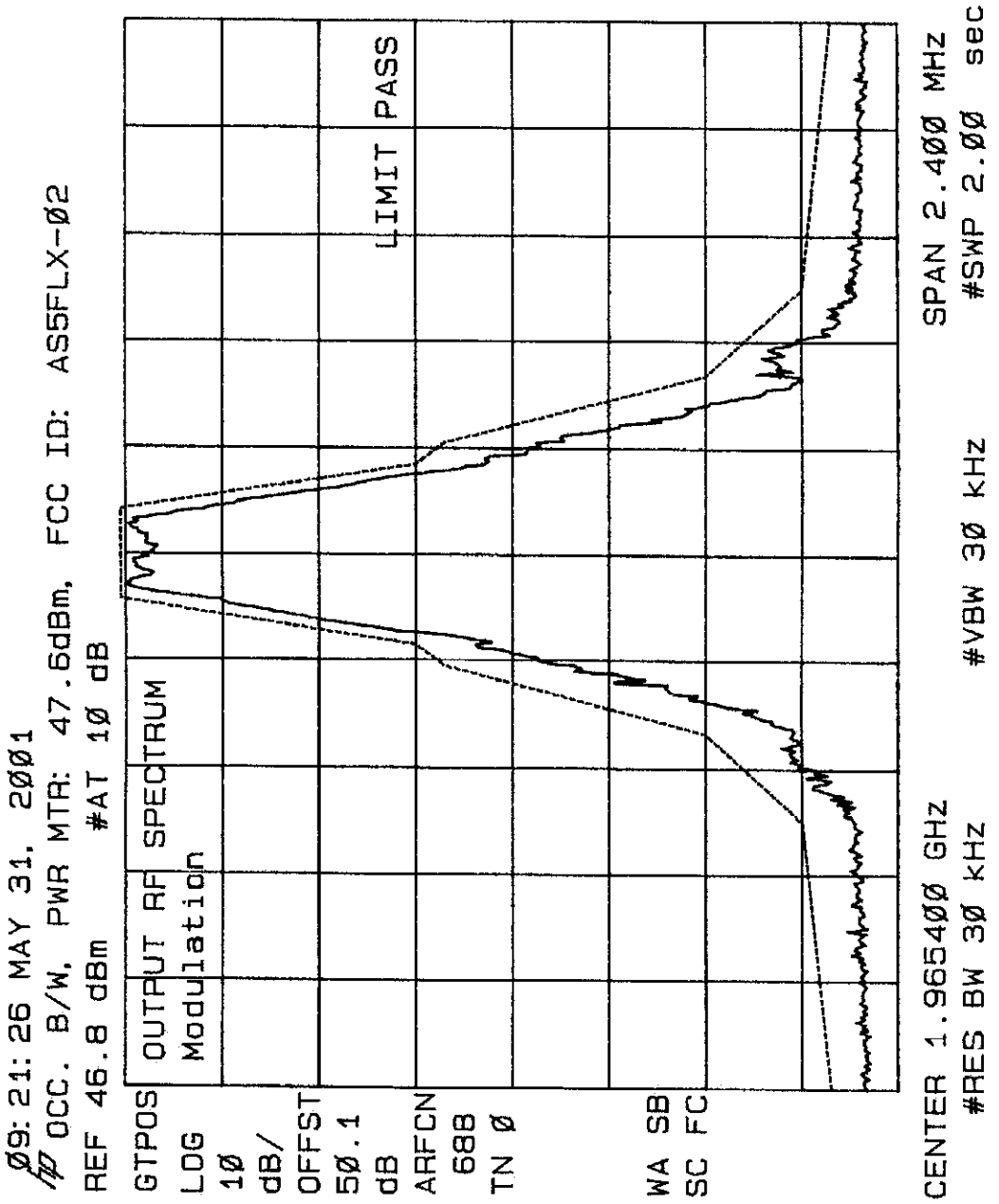
OCCUPIED BANDWIDTH

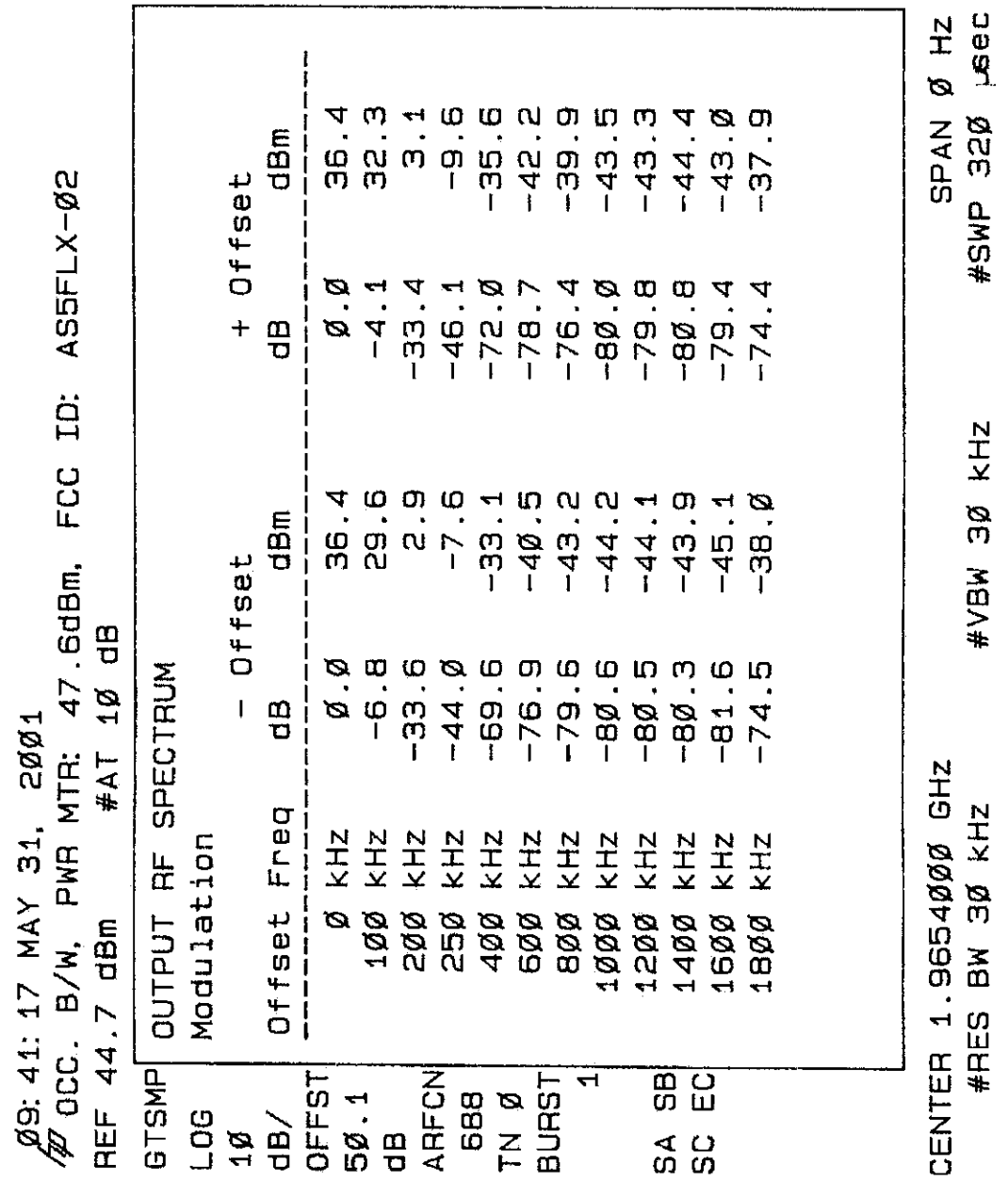
1 TRX WITHOUT COMBINER

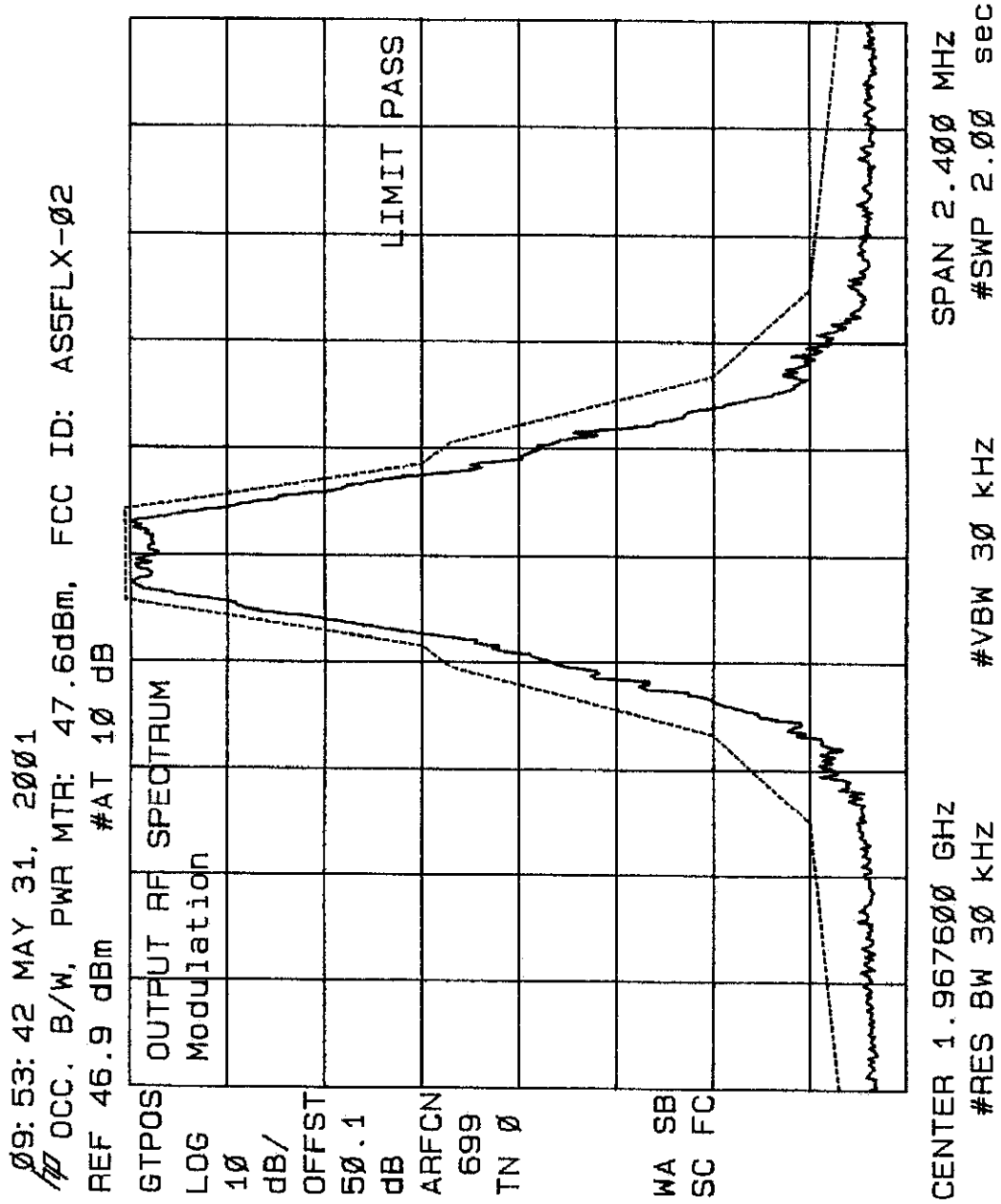
BLOCK E

(1965 – 1970 MHz)

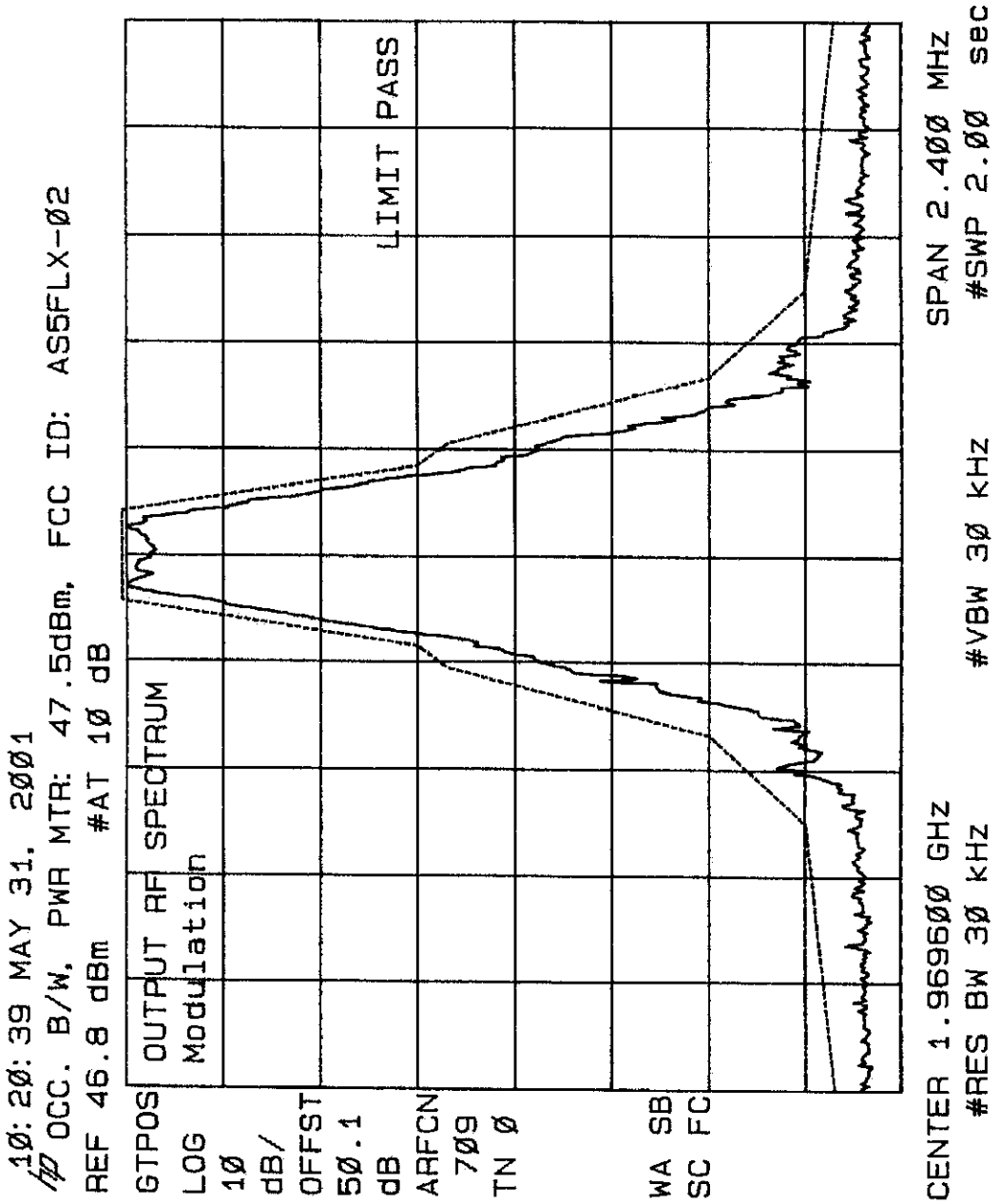
Left Edge:	1965.4 MHz (Channel 688)
Center:	1967.6 MHz (Channel 699)
Right Edge:	1969.6 MHz (Channel 709)

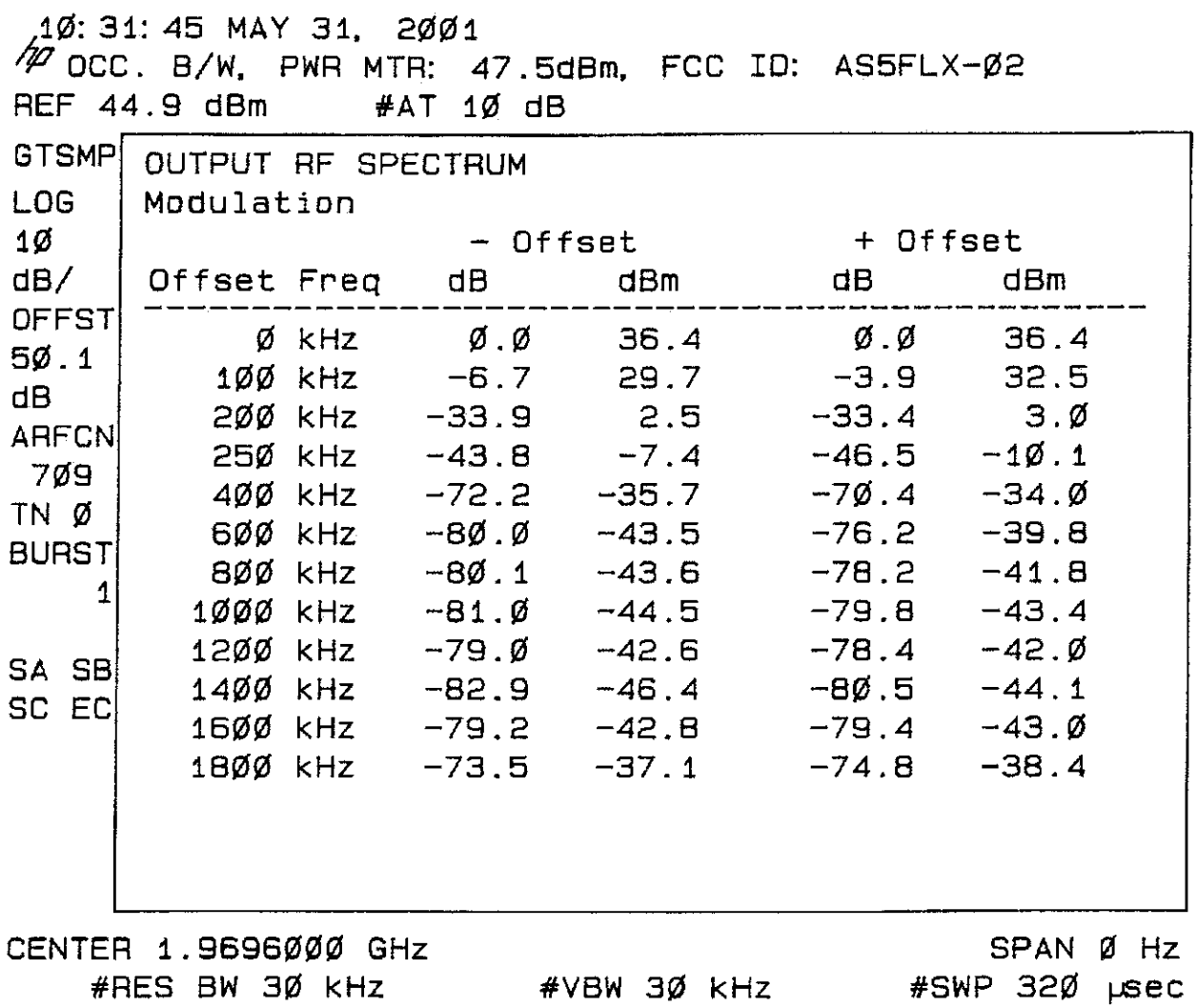

09:21:26 MAY 31, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 46.8 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST
50.1 dB
ARFCN 688
TN 0
LIMIT PASS
WA SB
SC FC
CENTER 1.965400 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec


09: 41: 17 MAY 31, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 44.7 dBm #AT 10 dB
GTSMP
LOG
10
dB/
OFFST
50.1
dB
ARFCN
688
TN 0
BURST
1
SA SB
SC EC
OUTPUT RF SPECTRUM
Modulation
- Offset + Offset
Offset Freq dB dBm dB dBm
0 kHz 0.0 36.4 0.0 36.4
100 kHz -6.8 29.6 -4.1 32.3
200 kHz -33.6 2.9 -33.4 3.1
250 kHz -44.0 -7.6 -46.1 -9.6
400 kHz -69.6 -33.1 -72.0 -35.6
600 kHz -76.9 -40.5 -78.7 -42.2
800 kHz -79.6 -43.2 -76.4 -39.9
1000 kHz -80.6 -44.2 -80.0 -43.5
1200 kHz -80.5 -44.1 -79.8 -43.3
1400 kHz -80.3 -43.9 -80.8 -44.4
1600 kHz -81.6 -45.1 -79.4 -43.0
1800 kHz -74.5 -38.0 -74.4 -37.9
CENTER 1.965400 GHz
SPAN 0 Hz
#RES BW 30 kHz
#VBW 30 kHz
#SWP 320 sec


09:53:42 MAY 31, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 46.9 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST
50.1 dB
ARFCN 699
TN 0
LIMIT PASS
WA SB
SC FC
CENTER 1.967600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec

10: 11: 52 MAY 31, 2001
OCC. B/W, PWR MTR: 47.6dBm, FCC ID: AS5FLX-02
REF 44.7 dBm #AT 10 dB
GTSMP
LOG
10
dB/
OFFST
50.1
dB
ARFCN
699
TN 0
BURST
1
SA SB
SC EC
OUTPUT RF SPECTRUM
Modulation
- Offset + Offset
Offset Freq dB dBm dB dBm
0 kHz 0.0 36.5 0.0 36.5
100 kHz -6.7 29.8 -4.1 32.4
200 kHz -34.0 2.5 -33.5 2.9
250 kHz -43.4 -7.0 -46.4 -9.9
400 kHz -69.9 -33.4 -71.0 -34.5
600 kHz -75.1 -38.6 -76.0 -39.6
800 kHz -78.9 -42.4 -77.6 -41.1
1000 kHz -78.4 -41.9 -80.1 -43.6
1200 kHz -79.8 -43.3 -78.6 -42.4
1400 kHz -81.3 -44.8 -81.7 -45.2
1600 kHz -80.5 -44.0 -78.4 -41.9
1800 kHz -75.2 -38.7 -74.8 -38.4
CENTER 1.967000 GHz
SPAN 0 Hz
#RES BW 30 kHz
#VBW 30 kHz
#SWP 320 µsec


10: 20: 39 MAY 31, 2001
OCC. B/W, PWR MTR: 47.5dBm, FCC ID: AS5FLX-02
REF 46.8 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 50.1 dB
ARFCN 709
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.969000 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec



Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
0 kHz	0.0	36.4	0.0	36.4
100 kHz	-6.7	29.7	-3.9	32.5
200 kHz	-33.9	2.5	-33.4	3.0
250 kHz	-43.8	-7.4	-46.5	-10.1
400 kHz	-72.2	-35.7	-70.4	-34.0
600 kHz	-80.0	-43.5	-76.2	-39.8
800 kHz	-80.1	-43.6	-78.2	-41.8
1000 kHz	-81.0	-44.5	-79.8	-43.4
1200 kHz	-79.0	-42.6	-78.4	-42.0
1400 kHz	-82.9	-46.4	-80.5	-44.1
1600 kHz	-79.2	-42.8	-79.4	-43.0
1800 kHz	-73.5	-37.1	-74.8	-38.4

MEASUREMENT: 3

MEASUREMENT

OF

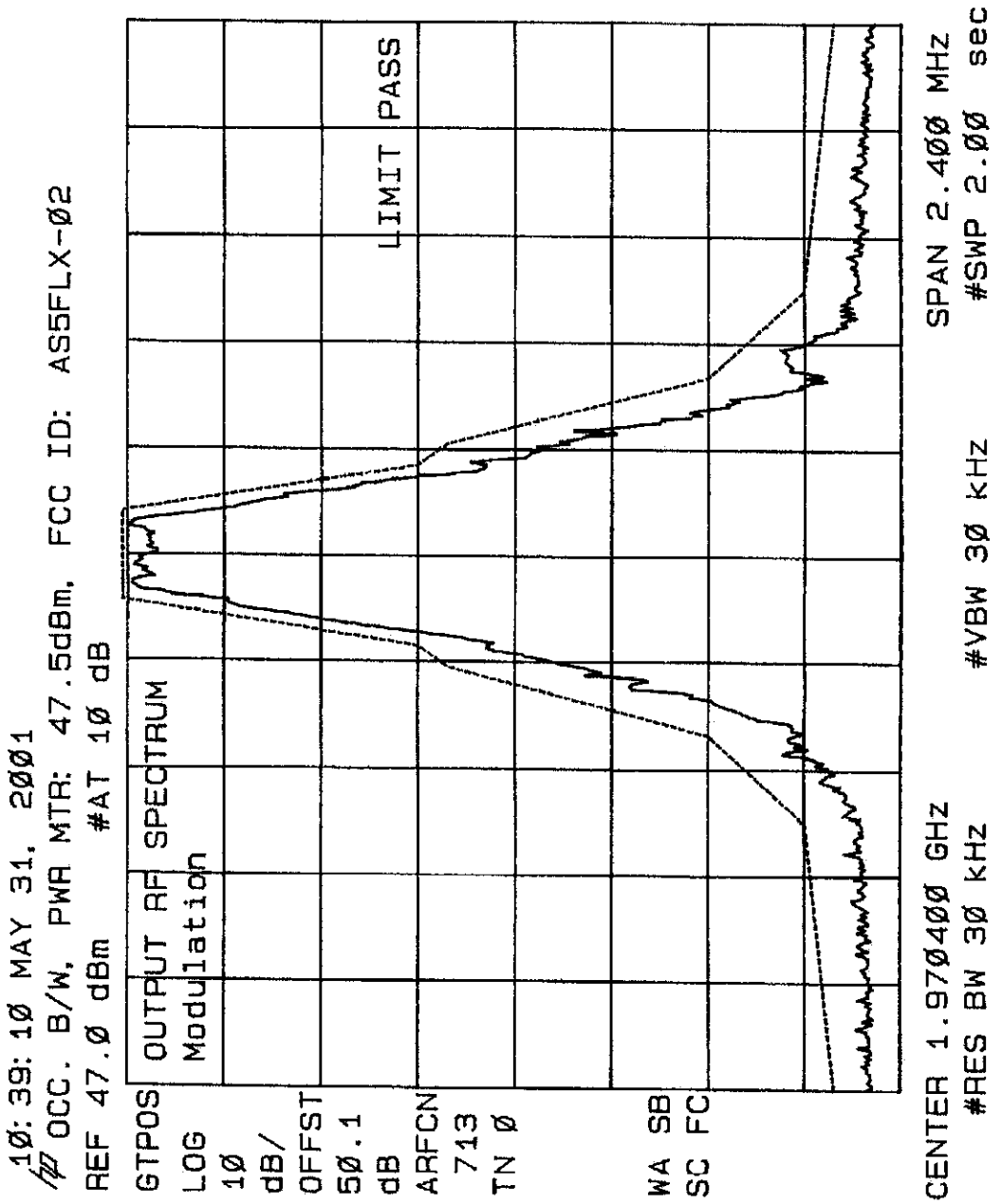
OCCUPIED BANDWIDTH

1 TRX WITHOUT COMBINER

BLOCK F

(1970 – 1975 MHz)

Left Edge:	1970.4 MHz (Channel 713)
Center:	1972.6 MHz (Channel 724)
Right Edge:	1974.6 MHz (Channel 734)


10:39:10 MAY 31, 2001
OCC. B/W, PWR MTR: 47.5dBm, FCC ID: AS5FLX-02
REF 47.0 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
Modulation
LOG
10
dB/
OFFST
50.1
dB
ARFCN
713
TN 0
LIMIT PASS
WA SB
SC FC
CENTER 1.970400 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec

12: Ø5: 1Ø MAY 31, 2ØØ1
OCC. B/W, PWR MTR: 47.5dBm, FCC ID: AS5FLX-Ø2
REF 44.9 dBm #AT 1Ø dB

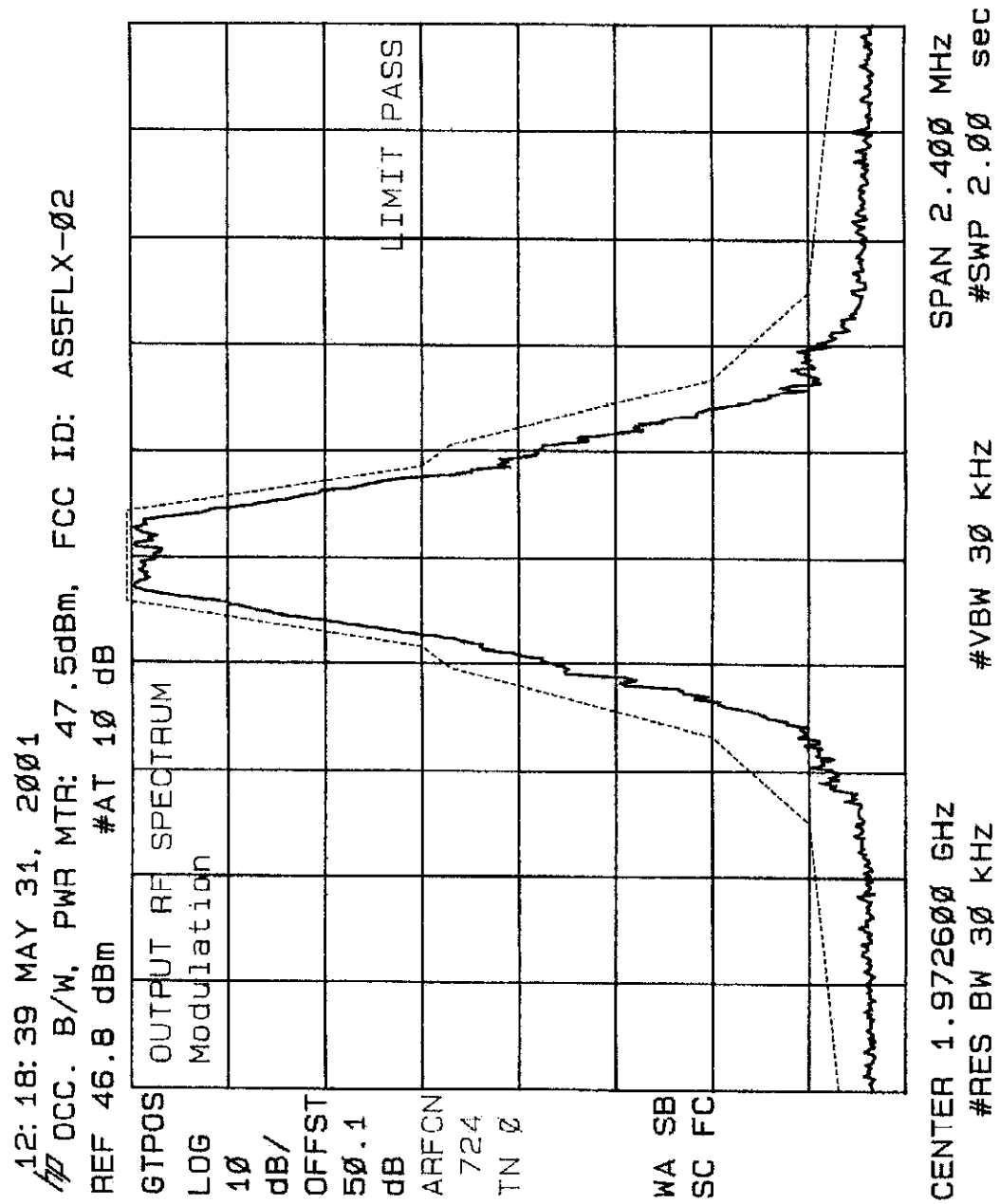
GTSMP
LOG
1Ø
dB/
OFFST
5Ø.1
dB
ARFCN
713
TN Ø
BURST
1

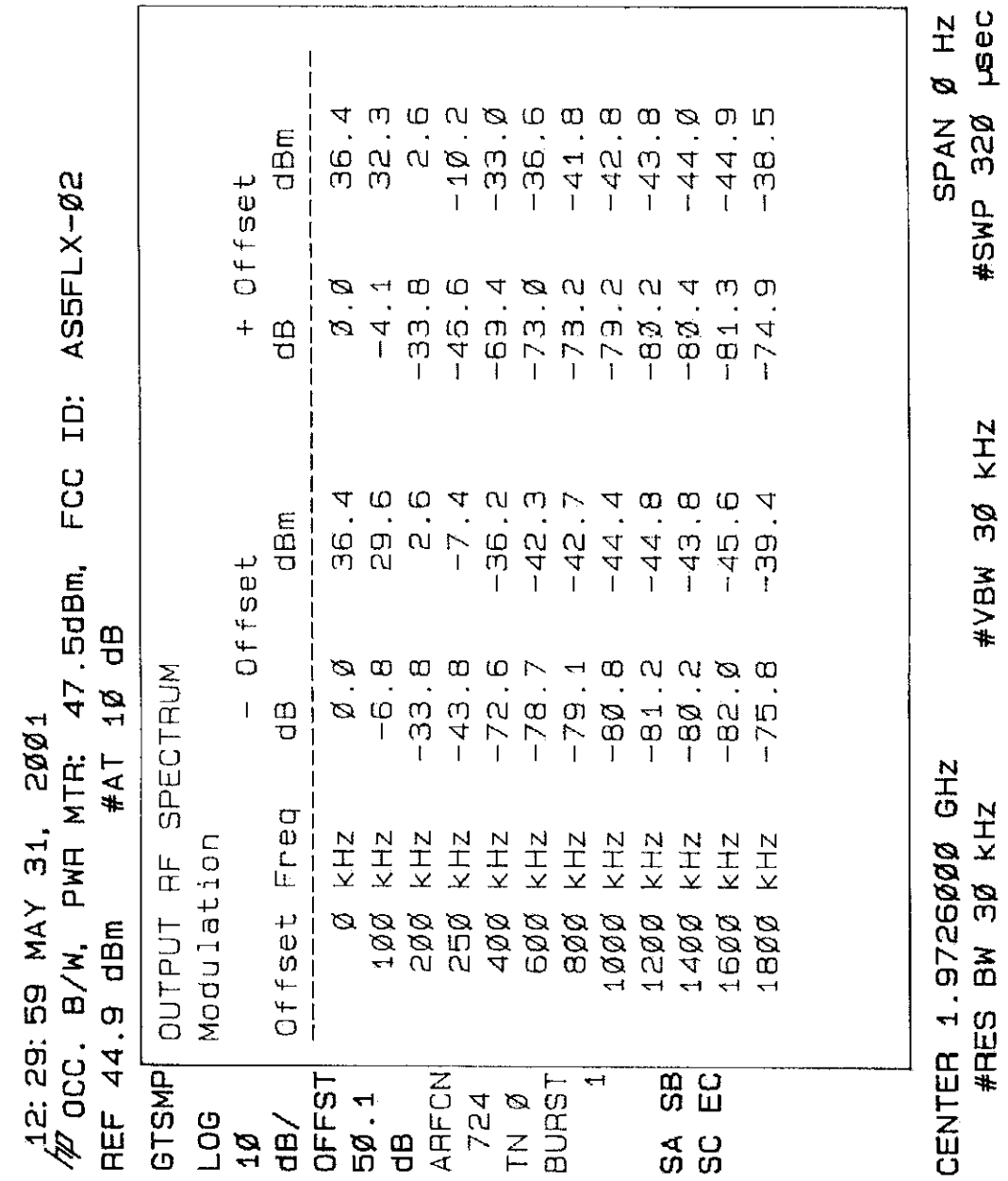
SA SB
SC EC

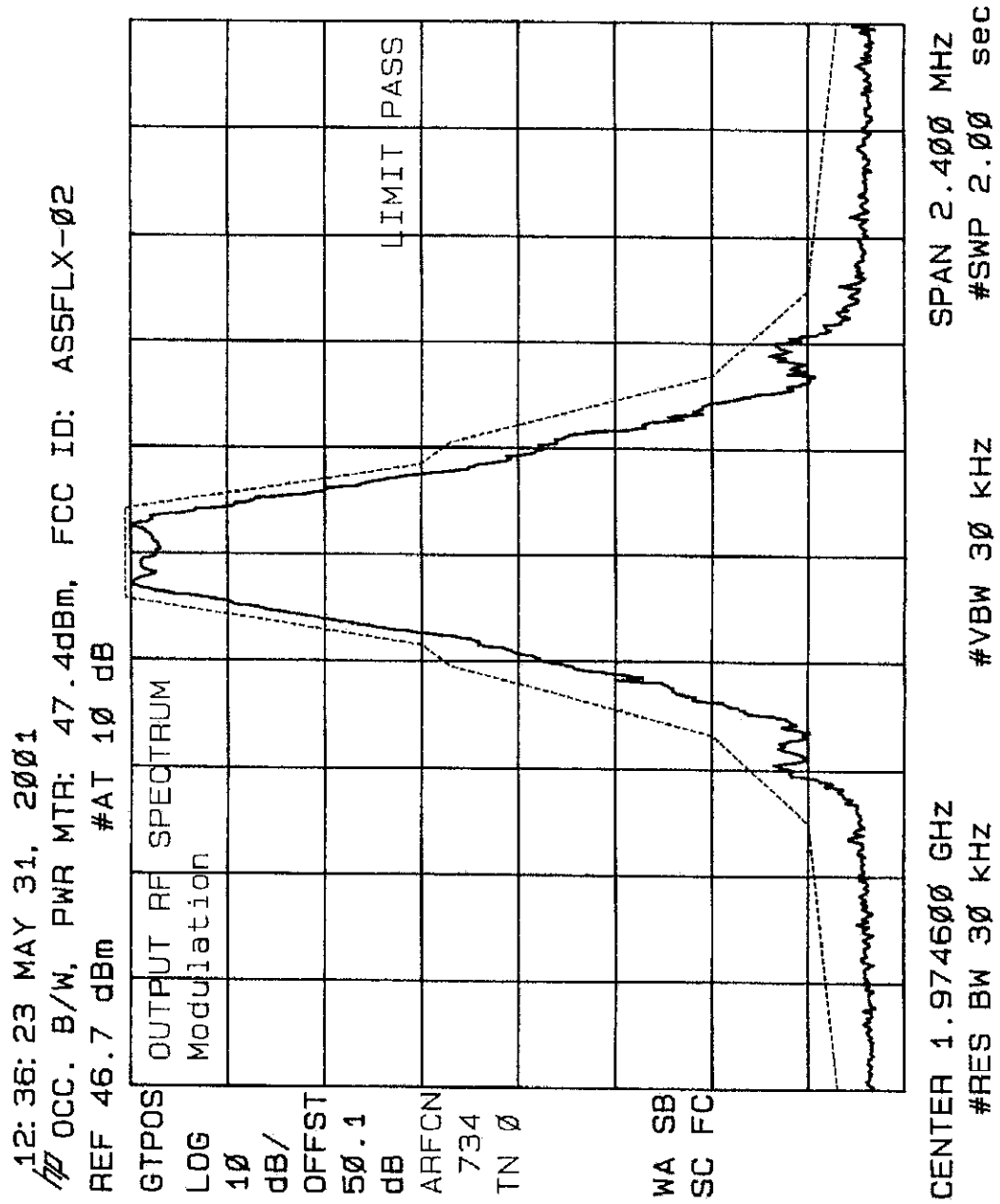
OUTPUT RF SPECTRUM
Modulation

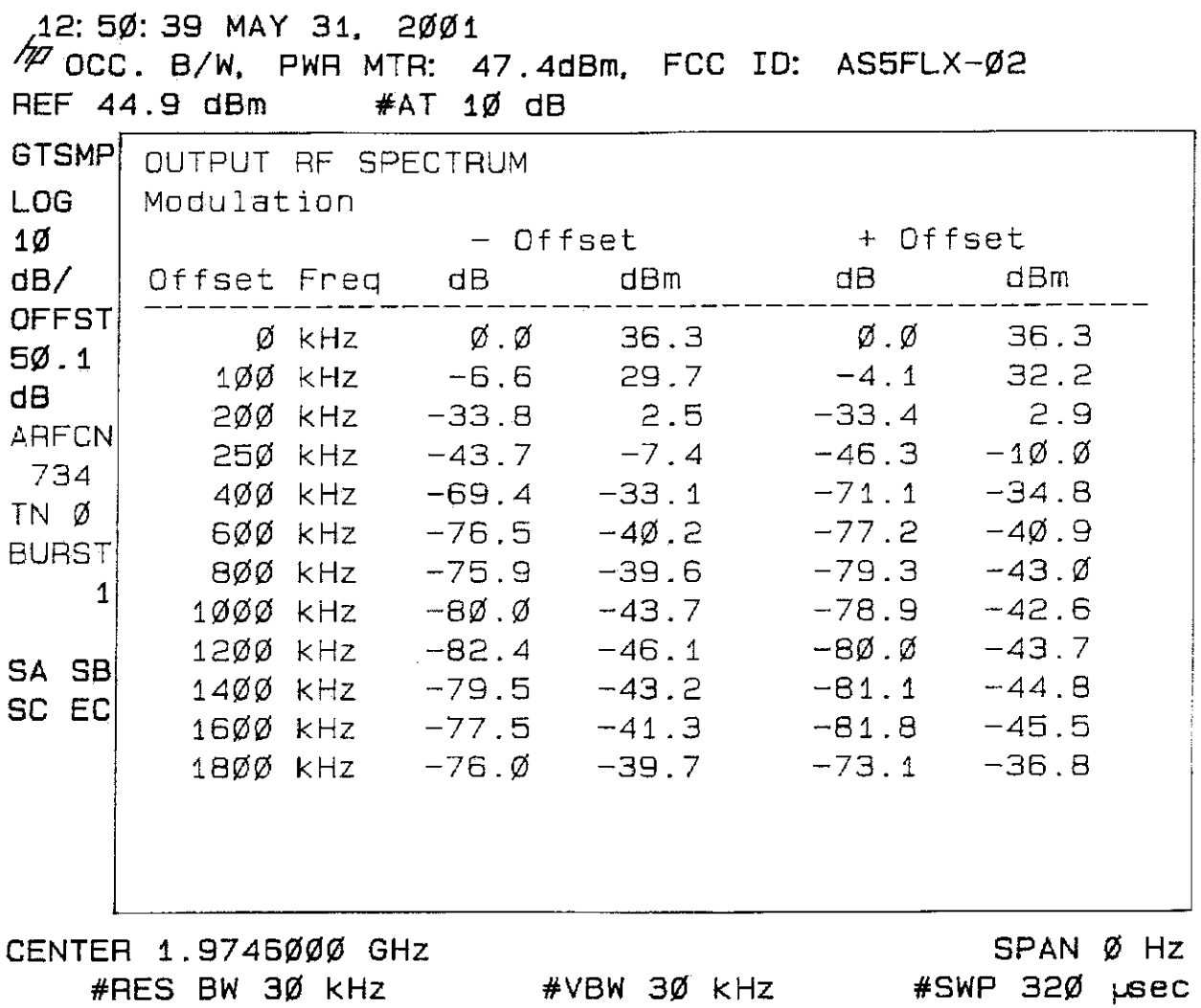
Offset Freq	- Offset dB	- Offset dBm	+ Offset dB	+ Offset dBm
Ø kHz	Ø.Ø	36.4	Ø.Ø	36.4
1ØØ kHz	-6.8	29.6	-4.3	32.1
2ØØ kHz	-33.7	2.7	-33.3	3.1
25Ø kHz	-43.7	-7.3	-46.Ø	-9.5
4ØØ kHz	-72.5	-36.1	-75.6	-39.2
6ØØ kHz	-79.5	-43.1	-75.8	-39.4
8ØØ kHz	-8Ø.2	-43.8	-77.4	-41.Ø
1ØØØ kHz	-77.7	-41.3	-78.9	-42.5
12ØØ kHz	-8Ø.6	-44.2	-8Ø.8	-44.4
14ØØ kHz	-8Ø.9	-44.5	-79.9	-43.4
16ØØ kHz	-81.1	-44.7	-81.4	-45.Ø
18ØØ kHz	-72.7	-36.3	-75.1	-38.6

CENTER 1.97Ø4ØØØ GHz SPAN Ø Hz
#RES BW 3Ø kHz #VBW 3Ø kHz #SWP 32Ø µsec


12: 18: 39 MAY 31, 2001
OCC. B/W, PWR MTR: 47.5dBm, FCC ID: AS5FLX-02
REF 46.8 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 50.1 dB
ARFCN 724
TN 0
LIMIT PASS
WA SB
SC FC
CENTER 1.972600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec


12:29:59 MAY 31, 2001
OCC. B/W, PWR MTR: 47.5dBm, FCC ID: AS5FLX-02
REF 44.9 dBm #AT 10 dB
GTSMP
LOG
10
dB/
OFFST
50.1
dB
ARFCN
724
TN 0
BURST
1
SA SB
SC EC
OUTPUT RF SPECTRUM
Modulation
- Offset
+ Offset
Offset Freq dB dBm dB dBm
0 kHz 0.0 36.4 0.0 36.4
100 kHz -6.8 29.6 -4.1 32.3
200 kHz -33.8 2.6 -33.8 2.6
250 kHz -43.8 -7.4 -45.6 -10.2
400 kHz -72.6 -36.2 -69.4 -33.0
600 kHz -78.7 -42.3 -73.0 -36.6
800 kHz -79.1 -42.7 -73.2 -41.8
1000 kHz -80.8 -44.4 -79.2 -42.8
1200 kHz -81.2 -44.8 -80.2 -43.8
1400 kHz -80.2 -43.8 -80.4 -44.0
1600 kHz -82.0 -45.6 -81.3 -44.9
1800 kHz -75.8 -39.4 -74.9 -38.5
CENTER 1.972600 GHz
SPAN 0 Hz
#RES BW 30 kHz
#VBW 30 kHz
#SWP 320 µsec


12: 36: 23 MAY 31, 2001
OCC. B/W, PWR MTR: 47.4dBm, FCC ID: AS5FLX-02
REF 46.7 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 50.1 dB
ARFCN 734
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.974600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec



Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
0 kHz	0.0	36.3	0.0	36.3
100 kHz	-6.6	29.7	-4.1	32.2
200 kHz	-33.8	2.5	-33.4	2.9
250 kHz	-43.7	-7.4	-46.3	-10.0
400 kHz	-69.4	-33.1	-71.1	-34.8
600 kHz	-76.5	-40.2	-77.2	-40.9
800 kHz	-75.9	-39.6	-79.3	-43.0
1000 kHz	-80.0	-43.7	-78.9	-42.6
1200 kHz	-82.4	-46.1	-80.0	-43.7
1400 kHz	-79.5	-43.2	-81.1	-44.8
1600 kHz	-77.5	-41.3	-81.8	-45.5
1800 kHz	-76.0	-39.7	-73.1	-36.8

MEASUREMENT: 3

MEASUREMENT

OF

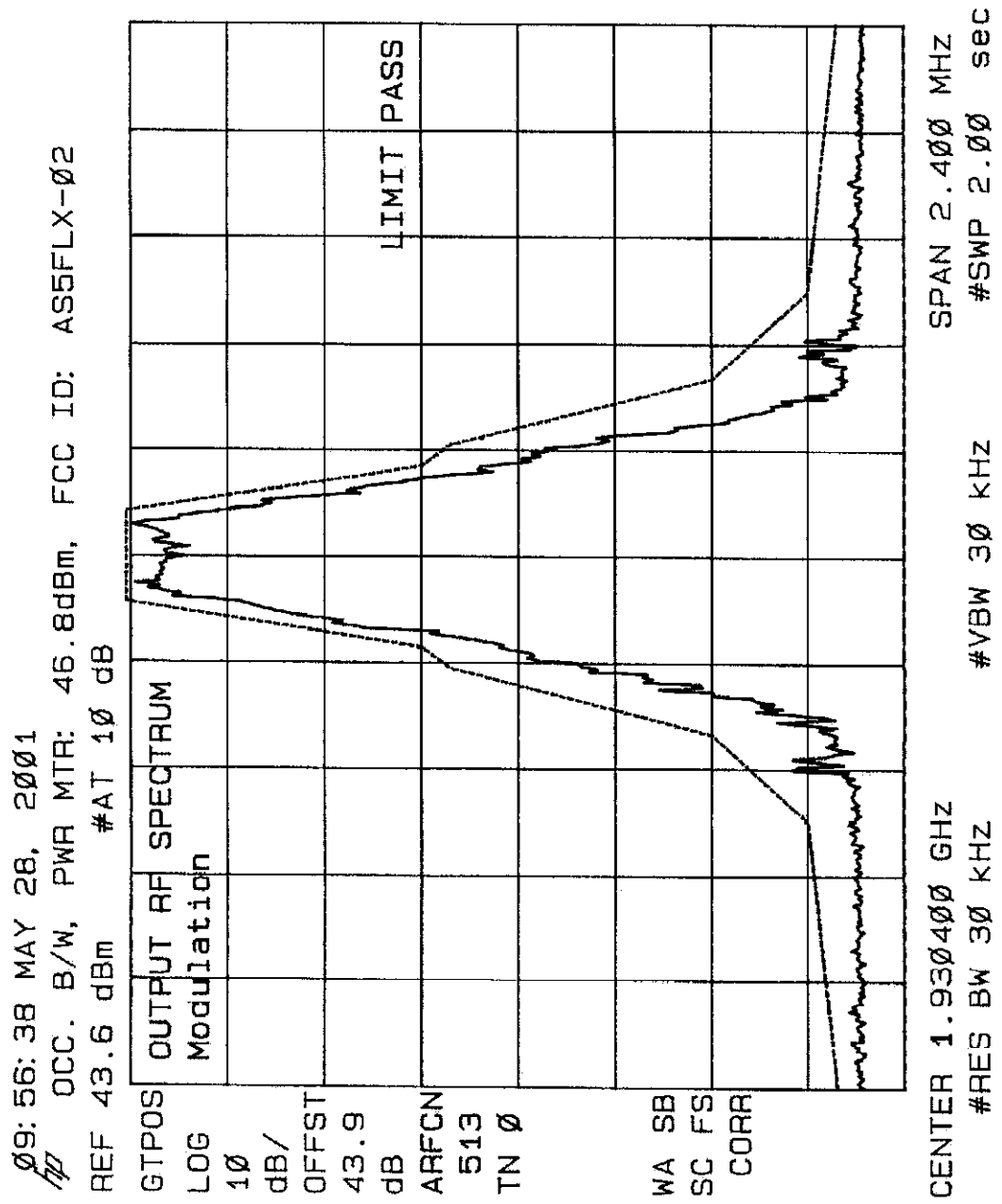
OCCUPIED BANDWIDTH

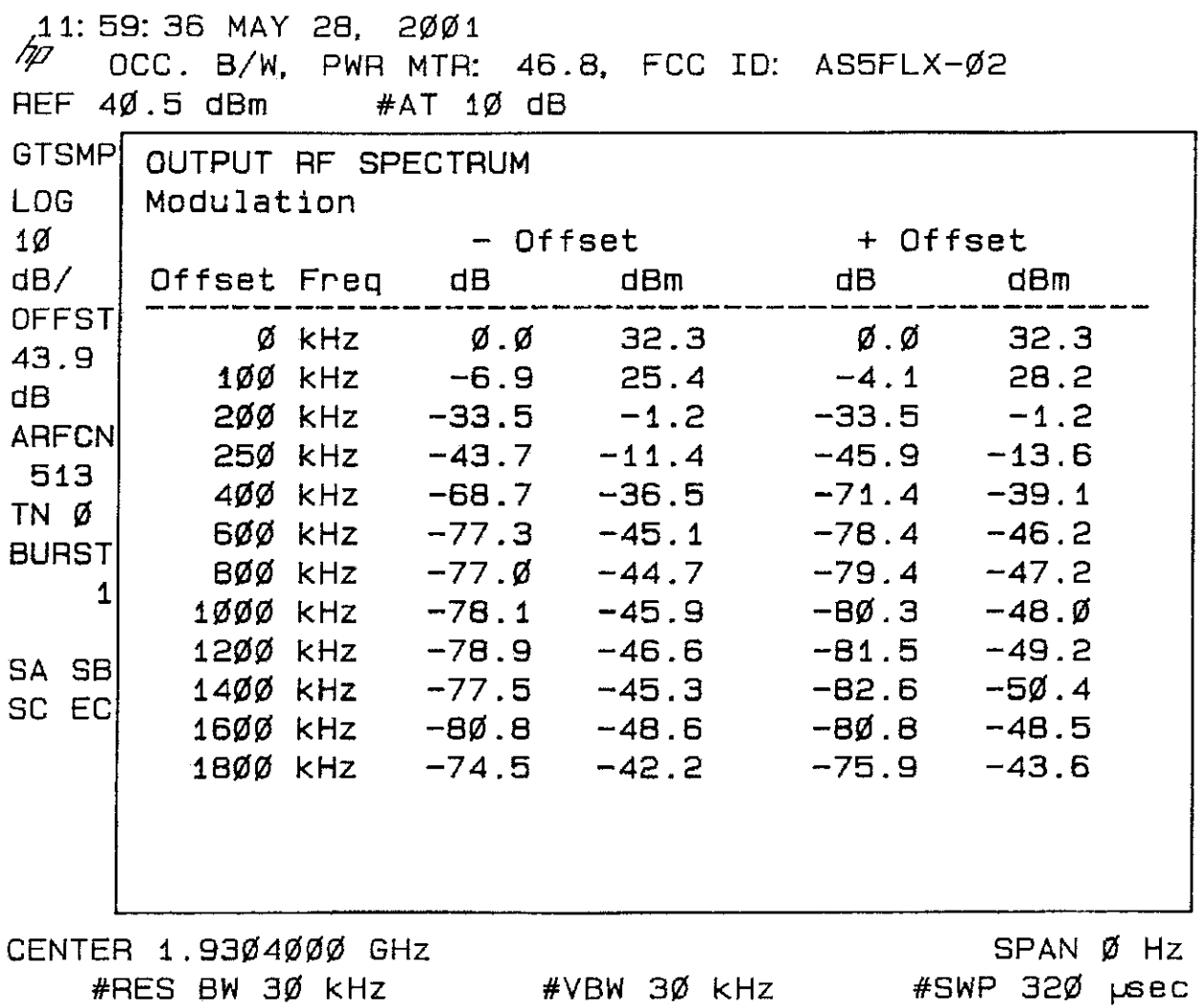
2 TRX WITH COMBINER

BLOCK A

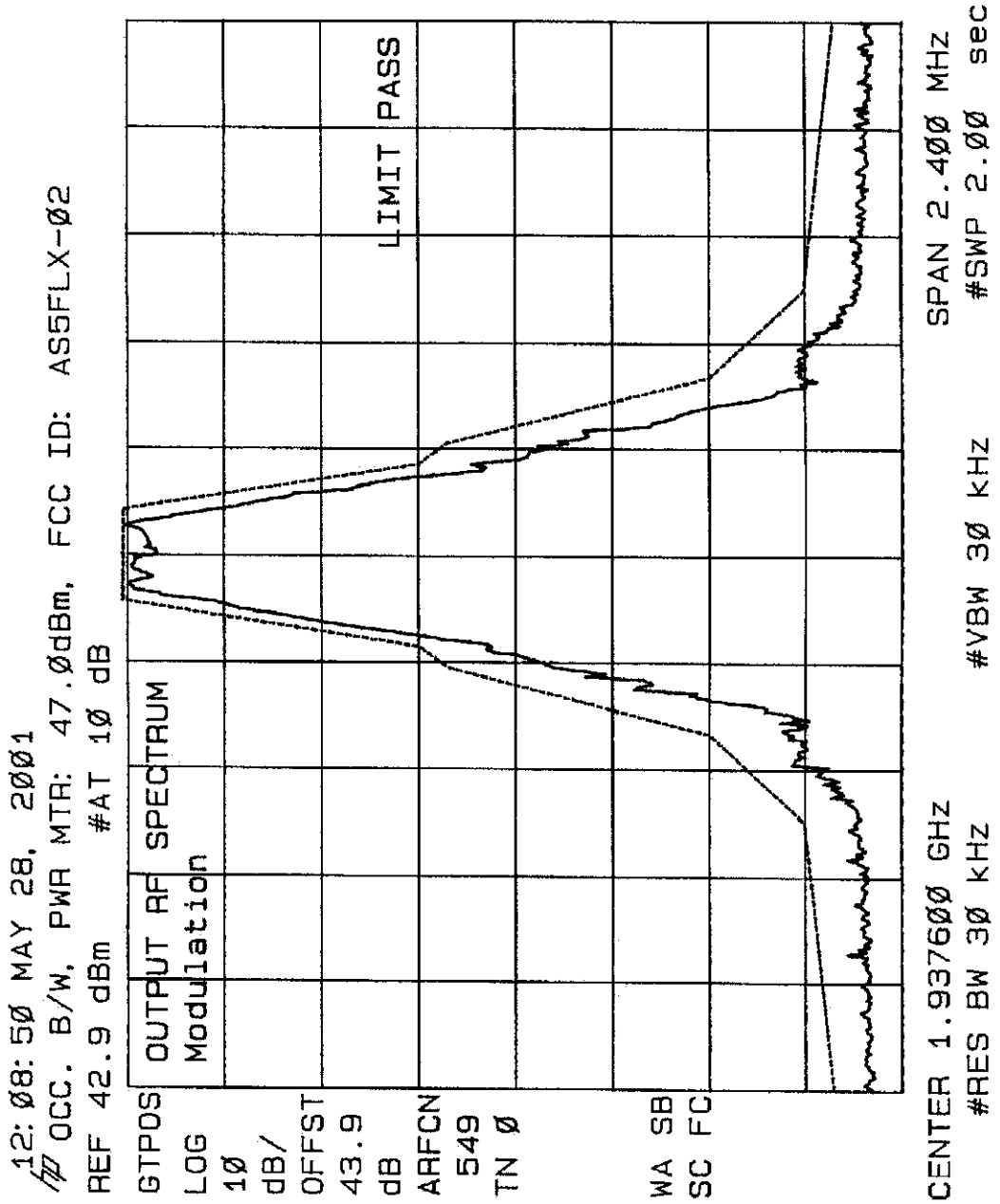
(1930 – 1945 MHz)

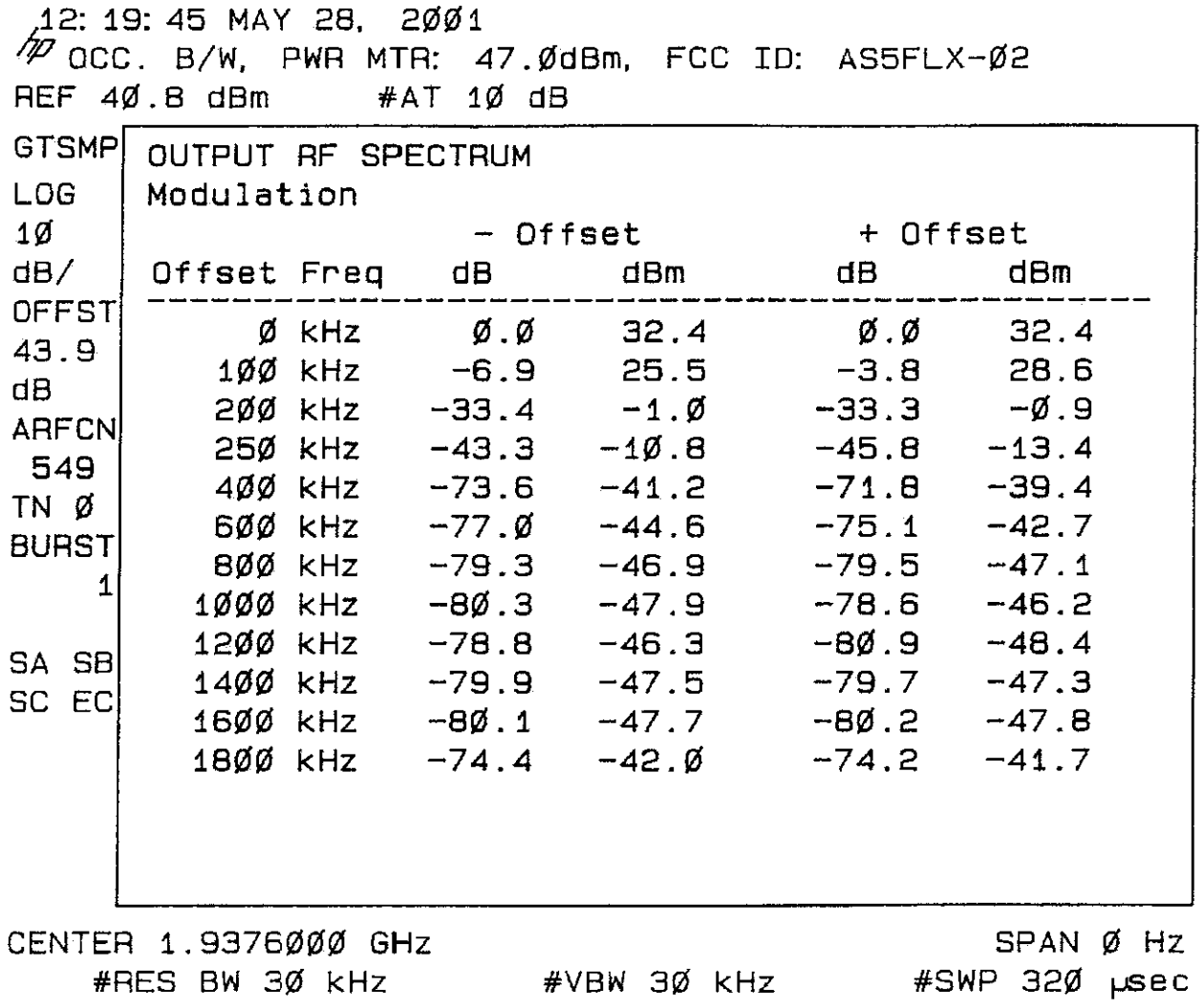
Left Edge:	1930.4 MHz (Channel 513)
Center:	1937.6 MHz (Channel 547)
Right Edge:	1944.6 MHz (Channel 584)


09:56:38 MAY 28, 2001
OCC. B/W, PWR MTR: 46.8dBm, FCC ID: AS5FLX-02
REF 43.6 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 43.9 dB
ARFCN 513
TN 0
WA SB
SC FS
CORR
LIMIT PASS
CENTER 1.930400 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec

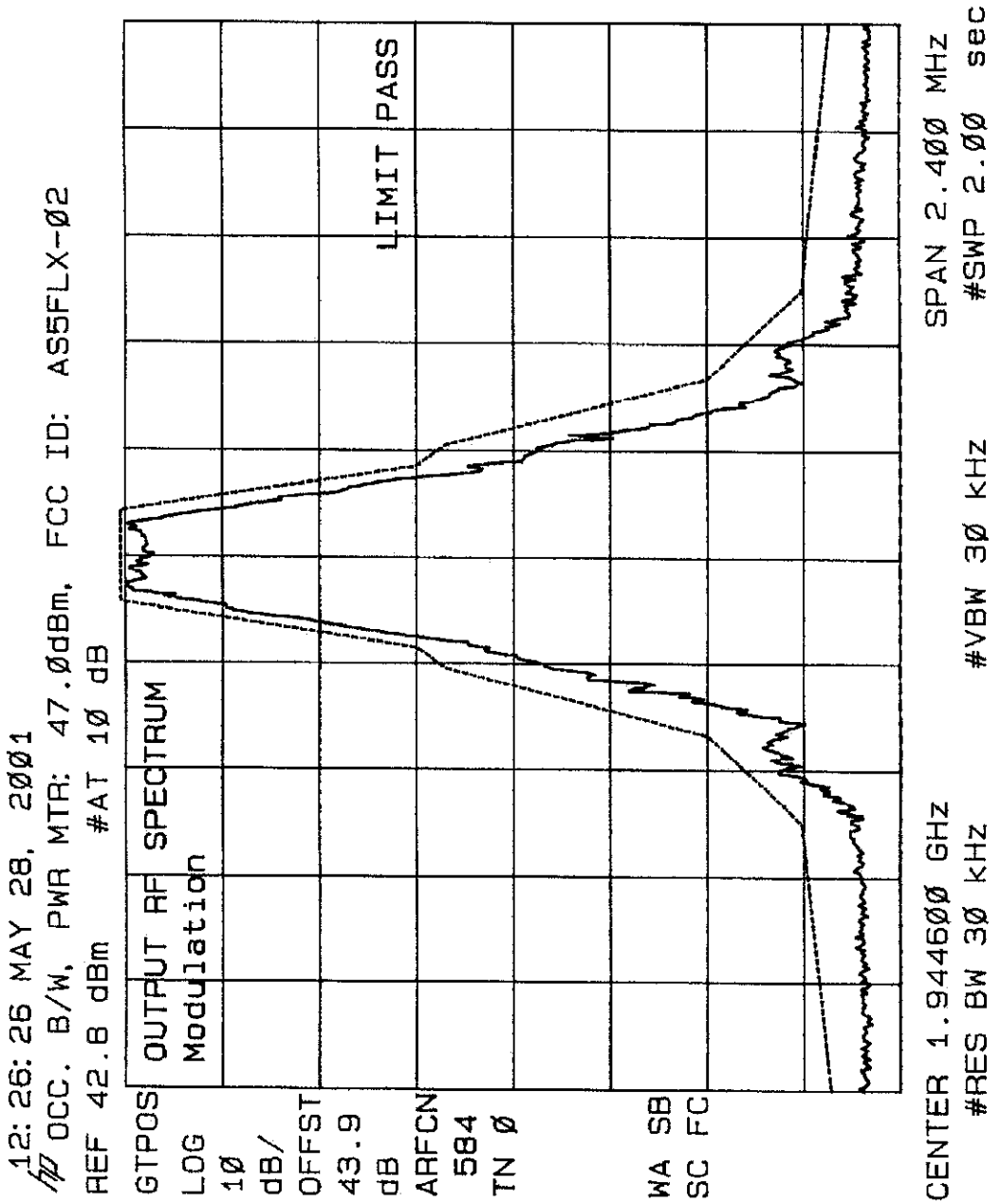


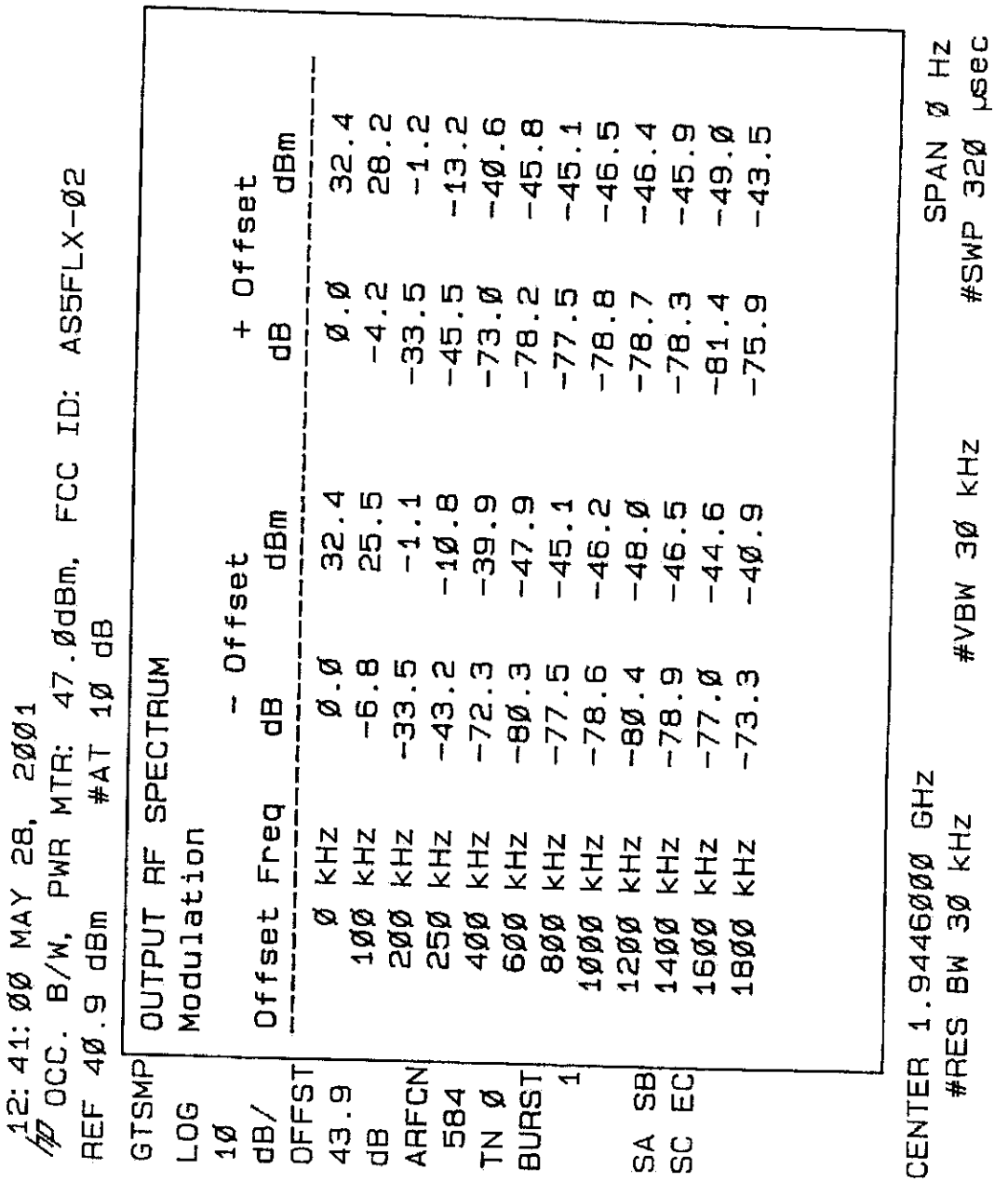
	- Offset		+ Offset	
Offset Freq	dB	dBm	dB	dBm
0 kHz	0.0	32.3	0.0	32.3
100 kHz	-6.9	25.4	-4.1	28.2
200 kHz	-33.5	-1.2	-33.5	-1.2
250 kHz	-43.7	-11.4	-45.9	-13.6
400 kHz	-68.7	-36.5	-71.4	-39.1
600 kHz	-77.3	-45.1	-78.4	-46.2
800 kHz	-77.0	-44.7	-79.4	-47.2
1000 kHz	-78.1	-45.9	-80.3	-48.0
1200 kHz	-78.9	-46.6	-81.5	-49.2
1400 kHz	-77.5	-45.3	-82.6	-50.4
1600 kHz	-80.8	-48.6	-80.8	-48.5
1800 kHz	-74.5	-42.2	-75.9	-43.6


12: 08: 50 MAY 28, 2001
OCC. B/W, PWR MTR: 47.0dBm, FCC ID: AS5FLX-02
REF 42.9 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 43.9 dB
ARFCN 549
TN 0
LIMIT PASS
WA SB
SC FC
CENTER 1.937600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec



Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
Ø kHz	Ø.Ø	32.4	Ø.Ø	32.4
1ØØ kHz	-6.9	25.5	-3.8	28.6
2ØØ kHz	-33.4	-1.Ø	-33.3	-Ø.9
25Ø kHz	-43.3	-1Ø.8	-45.8	-13.4
4ØØ kHz	-73.6	-41.2	-71.8	-39.4
6ØØ kHz	-77.Ø	-44.6	-75.1	-42.7
8ØØ kHz	-79.3	-46.9	-79.5	-47.1
1ØØØ kHz	-8Ø.3	-47.9	-78.6	-46.2
12ØØ kHz	-78.8	-46.3	-8Ø.9	-48.4
14ØØ kHz	-79.9	-47.5	-79.7	-47.3
16ØØ kHz	-8Ø.1	-47.7	-8Ø.2	-47.8
18ØØ kHz	-74.4	-42.Ø	-74.2	-41.7


12: 26: 26 MAY 28, 2001
OCC. B/W, PWR MTR: 47.0dBm, FCC ID: AS5FLX-02
REF 42.8 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
Modulation
LOG
10
dB/
OFFST
43.9
dB
ARFCN
584
TN 0
LIMIT PASS
WA SB
SC FC
CENTER 1.946000 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec


12: 41: ØØ MAY 28, 2ØØ1
OCC. B/W, PWR MTR: 47.ØdBm, FCC ID: AS5FLX-Ø2
REF 4Ø.9 dBm #AT 1Ø dB
GTSMP
LOG
1Ø
dB/
OFFST
43.9
dB
ARFCN
584
TN Ø
BURST
1
SA SB
SC EC
OUTPUT RF SPECTRUM
Modulation
- Offset + Offset
Offset Freq dB dBm dB dBm
Ø kHz Ø.Ø 32.4 Ø.Ø 32.4
1ØØ kHz -6.8 25.5 -4.2 28.2
2ØØ kHz -33.5 -1.1 -33.5 -1.2
25Ø kHz -43.2 -1Ø.8 -45.5 -13.2
4ØØ kHz -72.3 -39.9 -73.Ø -4Ø.6
6ØØ kHz -8Ø.3 -47.9 -78.2 -45.8
8ØØ kHz -77.5 -45.1 -77.5 -45.1
1ØØØ kHz -78.6 -46.2 -78.8 -46.5
12ØØ kHz -8Ø.4 -48.Ø -78.7 -46.4
14ØØ kHz -78.9 -46.5 -78.3 -45.9
16ØØ kHz -77.Ø -44.6 -81.4 -49.Ø
18ØØ kHz -73.3 -4Ø.9 -75.9 -43.5
CENTER 1.9446ØØØ GHz
SPAN Ø Hz
#RES BW 3Ø kHz
#VBW 3Ø kHz
#SWP 32Ø µsec

MEASUREMENT: 3

MEASUREMENT

OF

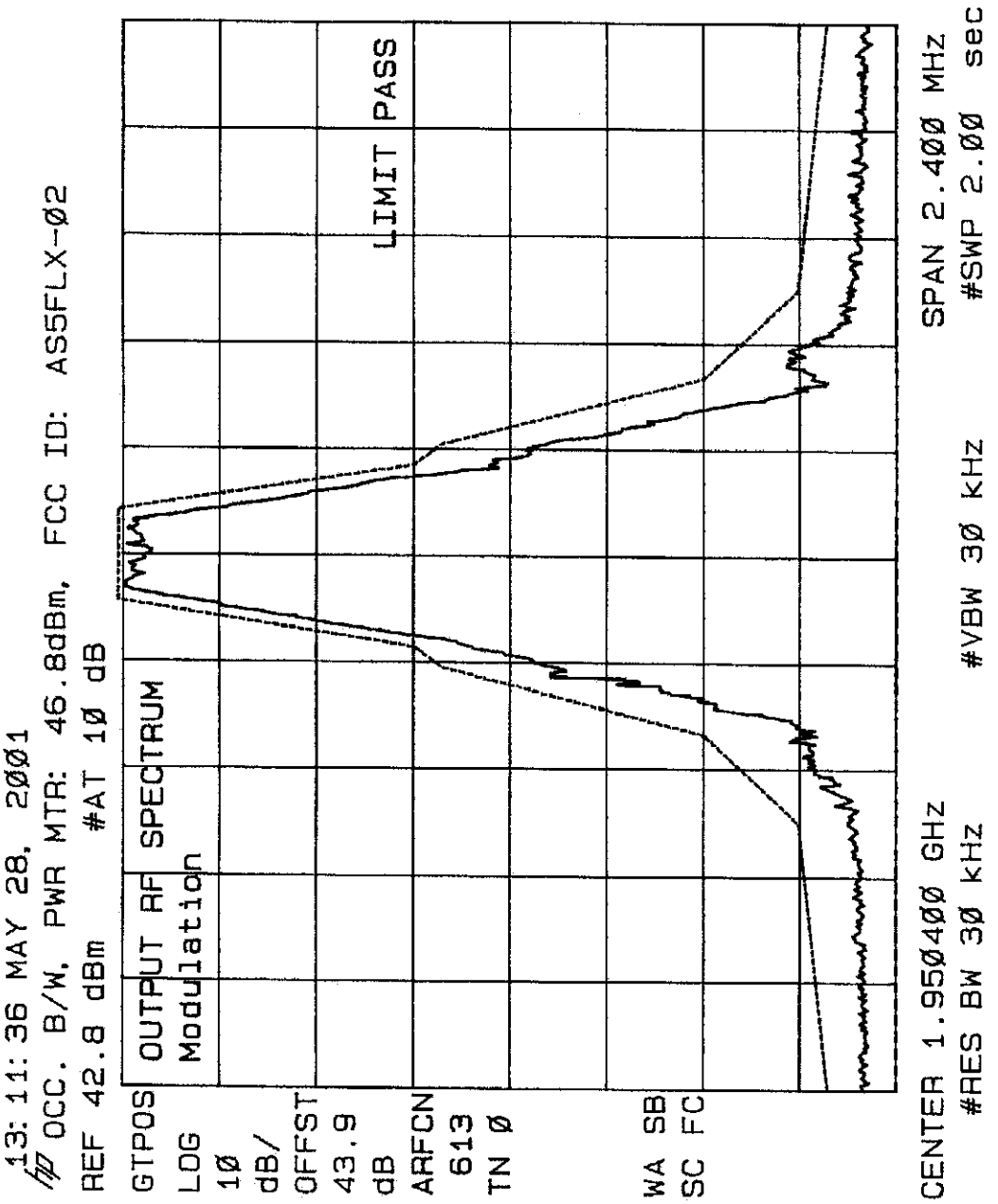
OCCUPIED BANDWIDTH

2 TRX WITH COMBINER

BLOCK B

(1950 – 1965 MHz)

Left Edge:	1950.4 MHz (Channel 613)
Center:	1957.6 MHz (Channel 649)
Right Edge:	1964.6 MHz (Channel 684)


13: 11: 36 MAY 28, 2001
OCC. B/W, PWR MTR: 46.8dBm, FCC ID: AS5FLX-02
REF 42.8 dBm #AT 10 dB
GTPOS
OUTPUT RF SPECTRUM
Modulation
LOG
10
dB/
OFFST
43.9
dB
ARFCN
613
TN 0
LIMIT PASS
WA SB
SC FC
CENTER 1.950400 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec

13: Ø5: 24 MAY 28, 2ØØ1
OCC. B/W, PWR MTR: 46.8dBm, FCC ID: AS5FLX-Ø2
REF 4Ø.9 dBm #AT 1Ø dB

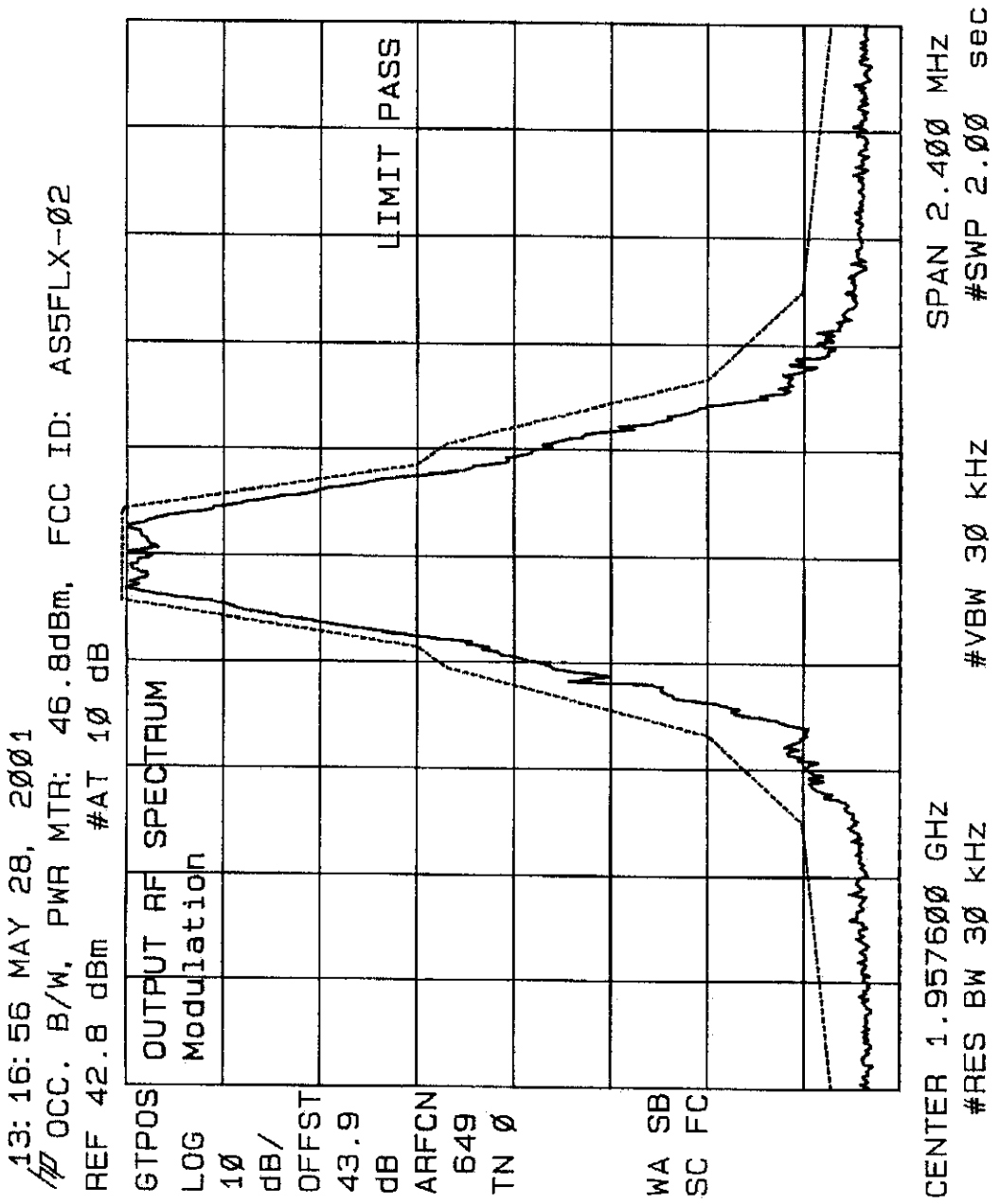
GTSMP
LOG
1Ø
dB/
OFFST
43.9
dB
ARFCN
613
TN Ø
BURST
1

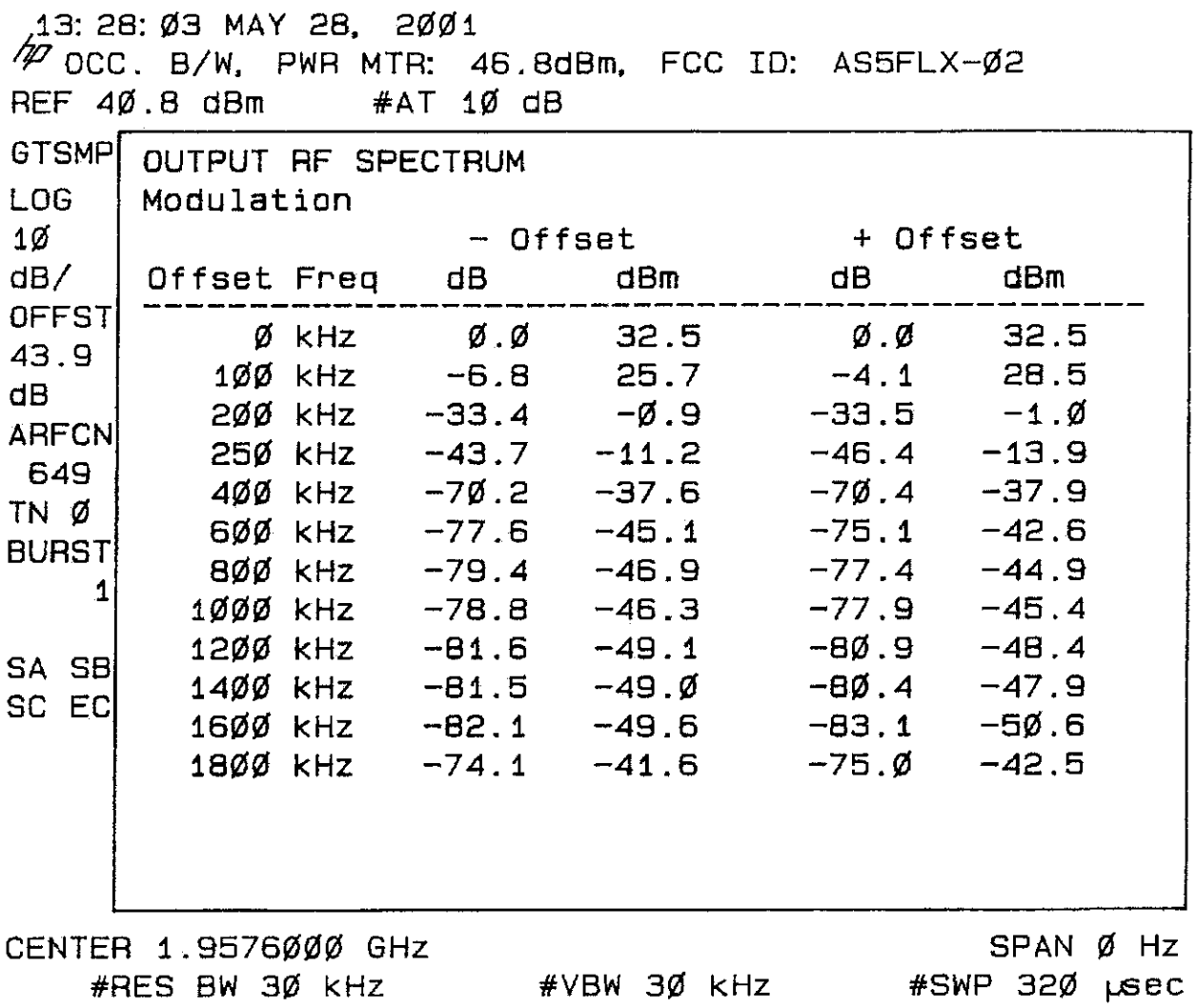
SA SB
SC EC

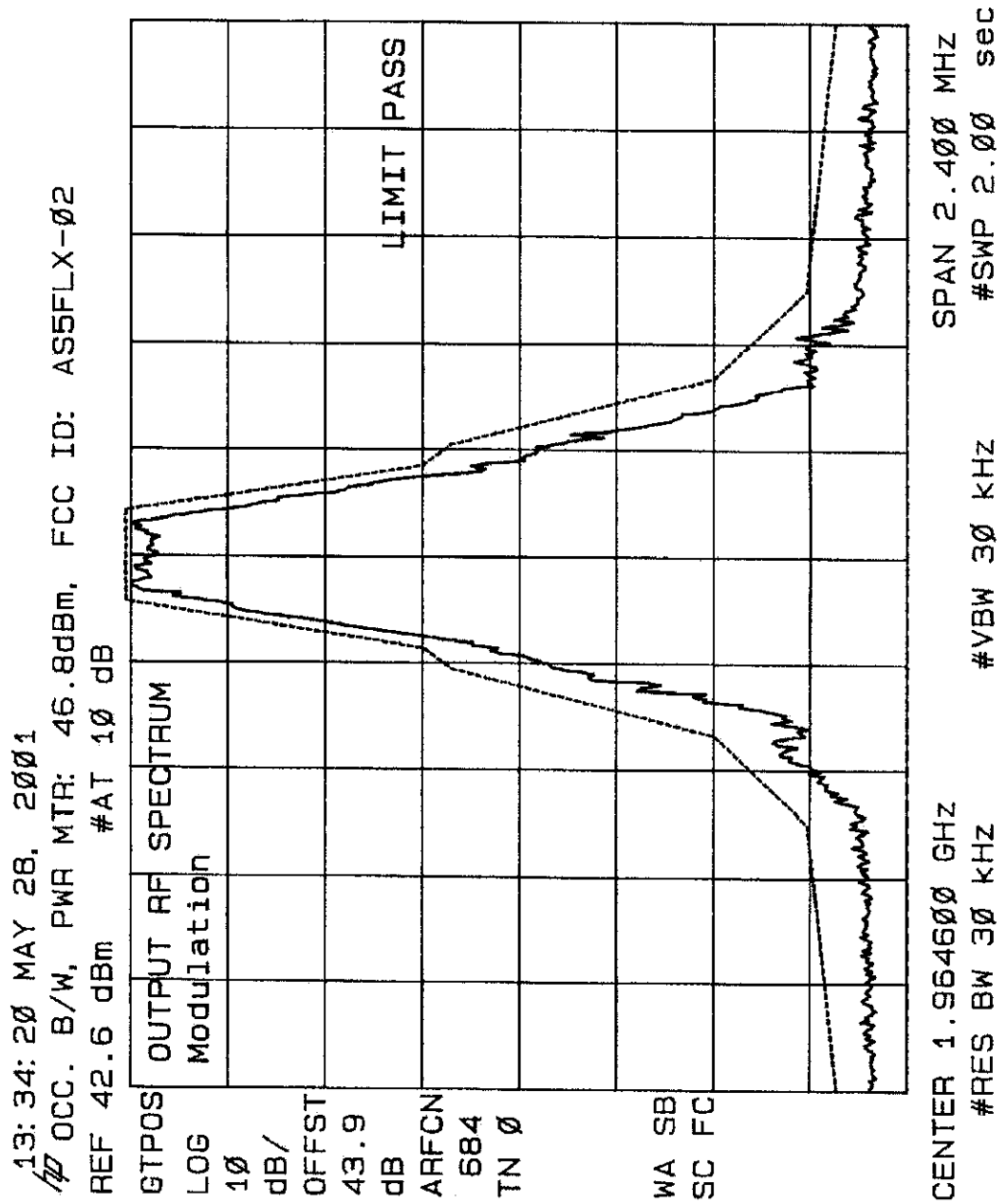
OUTPUT RF SPECTRUM
Modulation

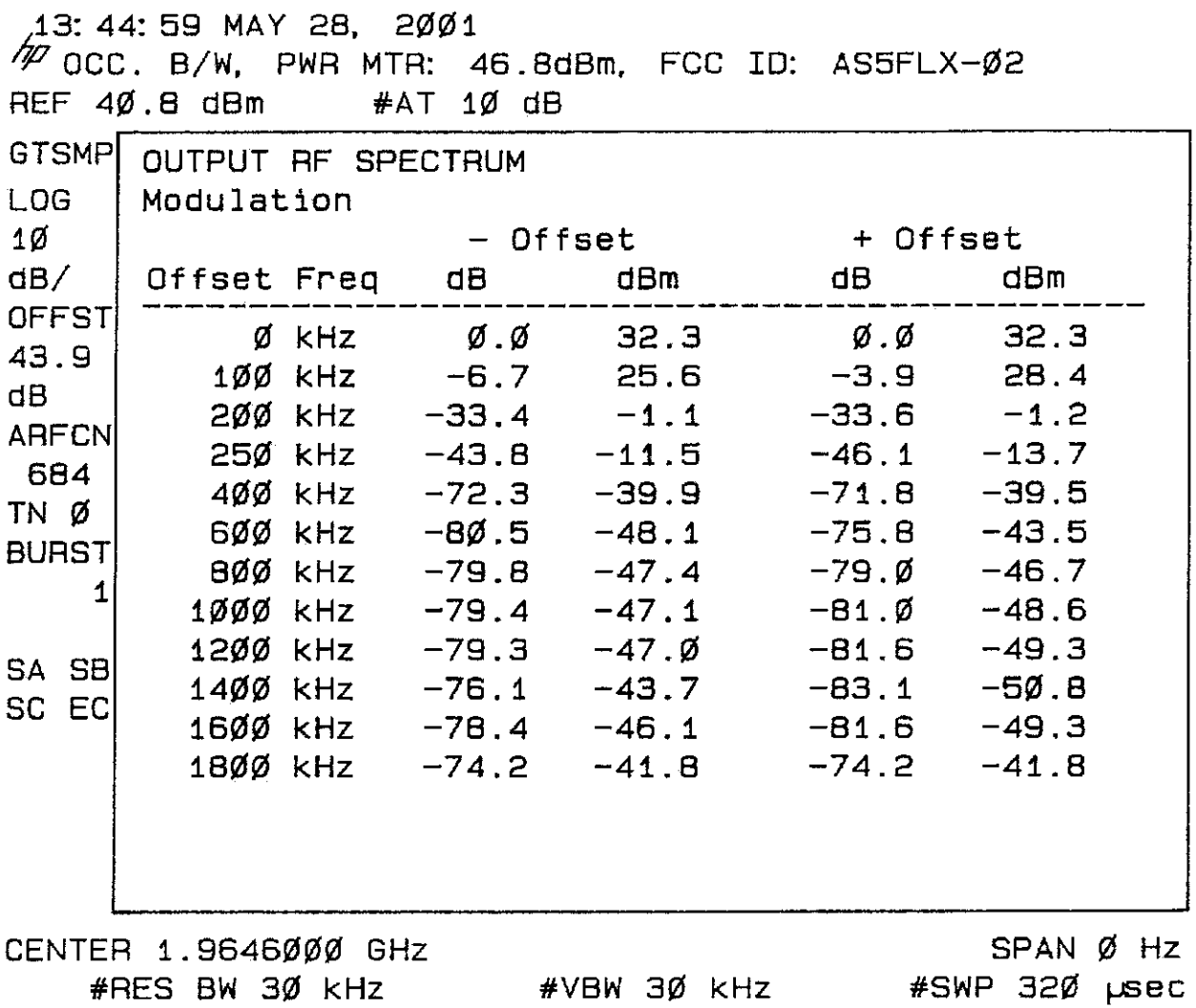
Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
Ø kHz	Ø.Ø	32.5	Ø.Ø	32.5
1ØØ kHz	−6.8	25.7	−4.Ø	28.5
2ØØ kHz	−33.5	−1.1	−33.3	−Ø.8
25Ø kHz	−43.4	−1Ø.9	−46.5	−14.Ø
4ØØ kHz	−72.5	−4Ø.Ø	−74.4	−41.9
6ØØ kHz	−8Ø.1	−47.7	−78.3	−45.8
8ØØ kHz	−78.9	−46.4	−79.7	−47.2
1ØØØ kHz	−78.3	−45.9	−8Ø.5	−48.Ø
12ØØ kHz	−8Ø.9	−48.4	−83.3	−5Ø.9
14ØØ kHz	−82.4	−5Ø.Ø	−8Ø.8	−48.3
16ØØ kHz	−79.7	−47.2	−8Ø.8	−48.3
18ØØ kHz	−74.1	−41.6	−74.5	−42.Ø

CENTER 1.95Ø4ØØØ GHz SPAN Ø Hz
#RES BW 3Ø kHz #VBW 3Ø kHz #SWP 32Ø µsec


13: 16: 56 MAY 28, 2001
OCC. B/W, PWR MTR: 46.8dBm, FCC ID: AS5FLX-02
REF 42.8 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 43.9 dB
ARFCN 649
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.957600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec




13: 34: 2Ø MAY 28, 2ØØ1
OCC. B/W, PWR MTR: 46.8dBm, FCC ID: AS5FLX-Ø2
REF 42.6 dBm #AT 1Ø dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
1Ø
dB/
OFFST
43.9
dB
ARFCN
684
TN Ø
LIMIT PASS
WA SB
SC FC
CENTER 1.964ØØ GHz
#RES BW 3Ø kHz
#VBW 3Ø kHz
SPAN 2.4ØØ MHz
#SWP 2.ØØ sec



Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
Ø kHz	Ø.Ø	32.3	Ø.Ø	32.3
1ØØ kHz	-6.7	25.6	-3.9	28.4
2ØØ kHz	-33.4	-1.1	-33.6	-1.2
25Ø kHz	-43.8	-11.5	-46.1	-13.7
4ØØ kHz	-72.3	-39.9	-71.8	-39.5
6ØØ kHz	-8Ø.5	-48.1	-75.8	-43.5
8ØØ kHz	-79.8	-47.4	-79.Ø	-46.7
1ØØØ kHz	-79.4	-47.1	-81.Ø	-48.6
12ØØ kHz	-79.3	-47.Ø	-81.6	-49.3
14ØØ kHz	-76.1	-43.7	-83.1	-5Ø.8
16ØØ kHz	-78.4	-46.1	-81.6	-49.3
18ØØ kHz	-74.2	-41.8	-74.2	-41.8

MEASUREMENT: 3

MEASUREMENT

OF

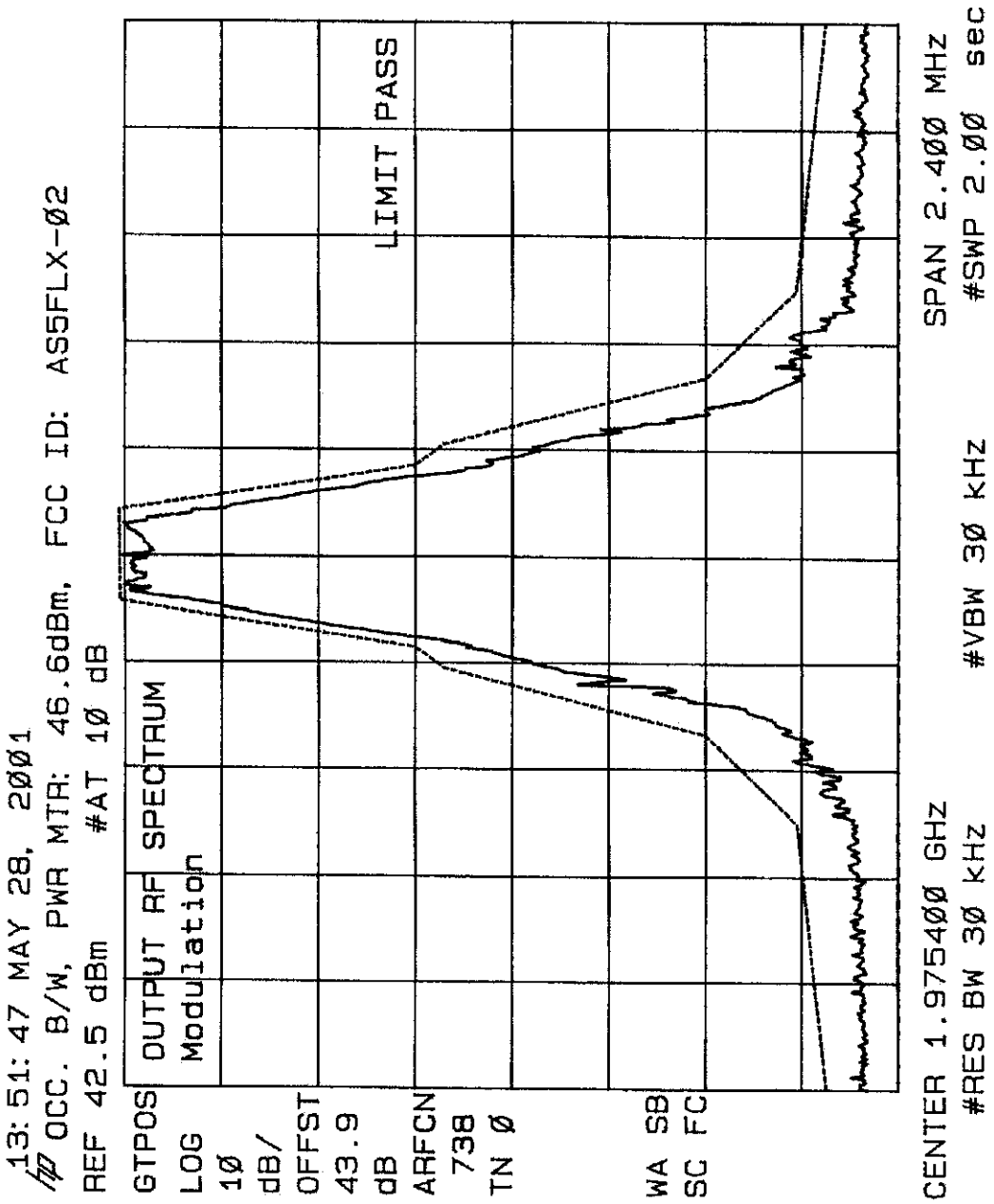
OCCUPIED BANDWIDTH

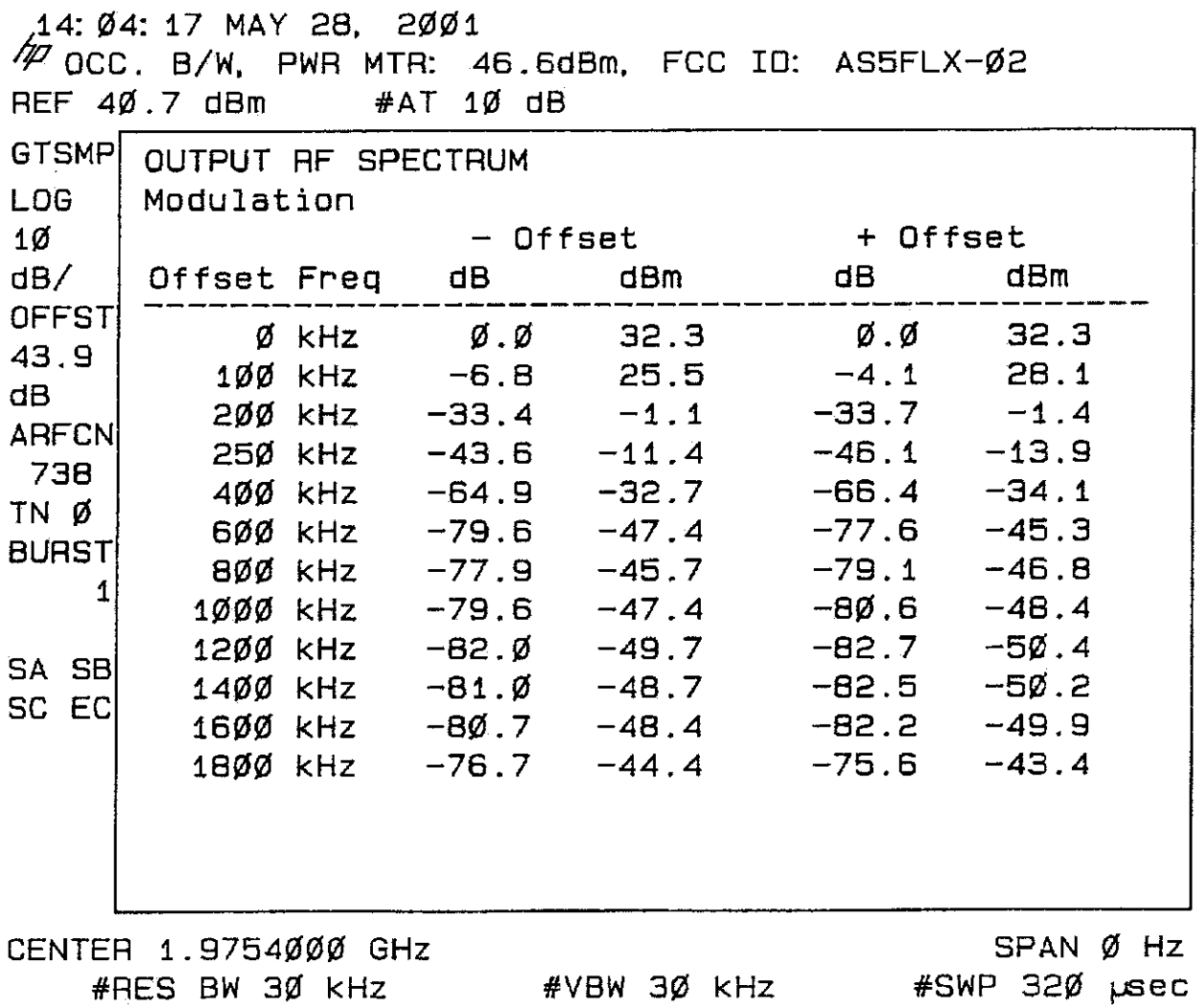
2 TRX WITH COMBINER

BLOCK C

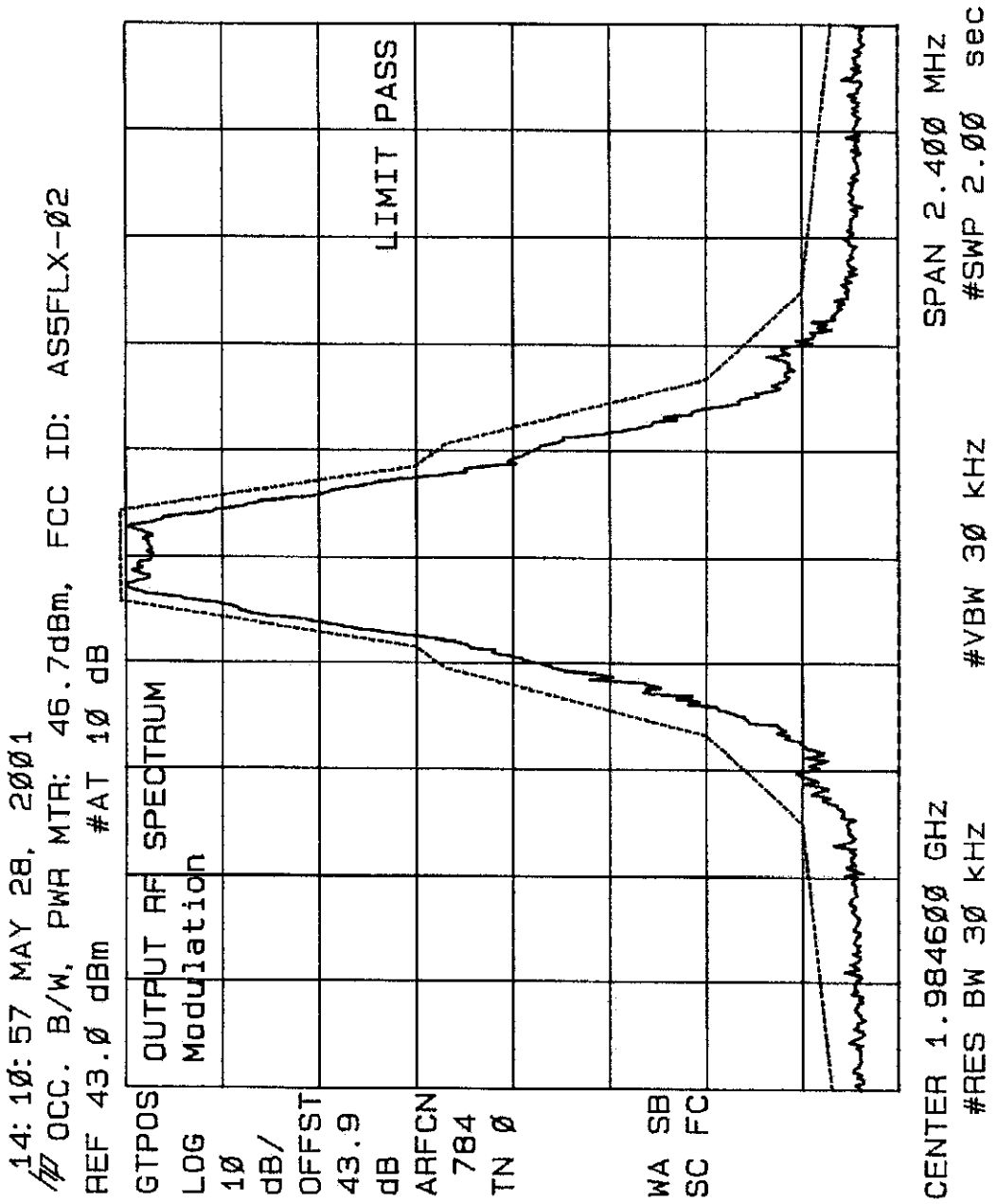
(1975 – 1990 MHz)

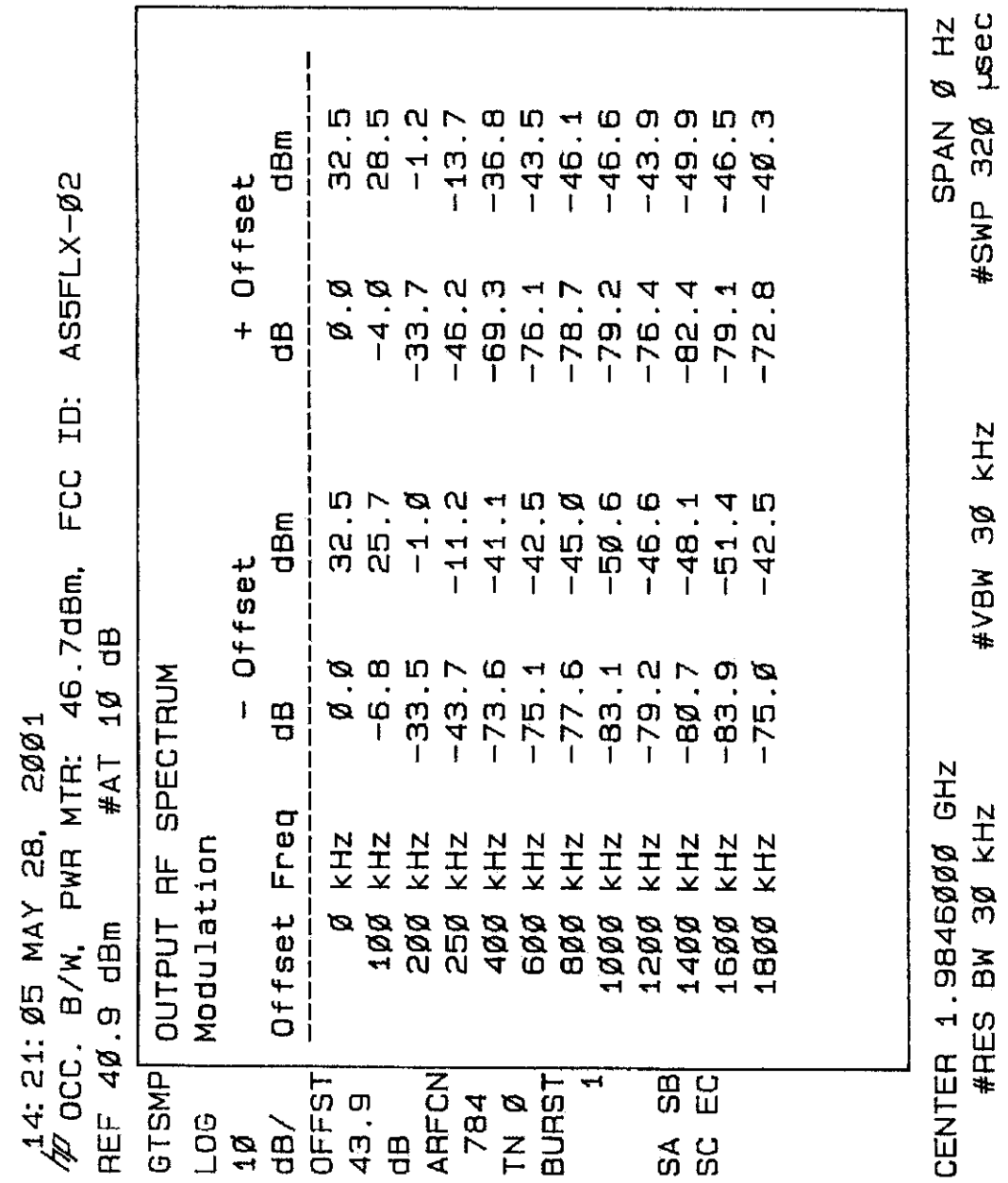
Left Edge:	1975.4 MHz (Channel 738)
Center:	1984.6 MHz (Channel 784)
Right Edge:	1989.6 MHz (Channel 809)

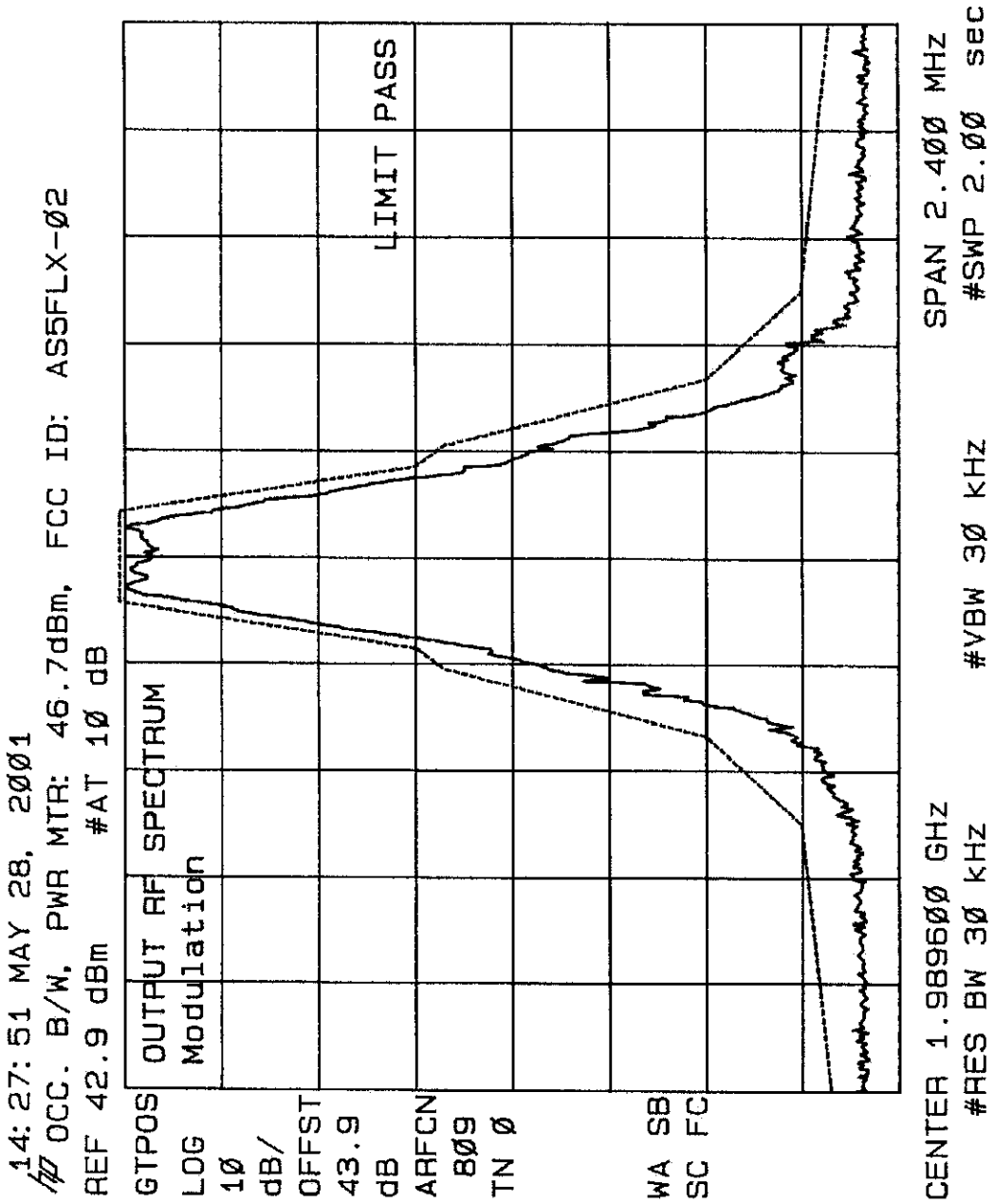

13: 51: 47 MAY 28, 2001
OCC. B/W, PWR MTR: 46.6dBm, FCC ID: AS5FLX-02
REF 42.5 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 43.9 dB
ARFCN 738
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.975400 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec



Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
Ø kHz	Ø.Ø	32.3	Ø.Ø	32.3
1ØØ kHz	-6.8	25.5	-4.1	28.1
2ØØ kHz	-33.4	-1.1	-33.7	-1.4
25Ø kHz	-43.6	-11.4	-46.1	-13.9
4ØØ kHz	-64.9	-32.7	-66.4	-34.1
6ØØ kHz	-79.6	-47.4	-77.6	-45.3
8ØØ kHz	-77.9	-45.7	-79.1	-46.8
1ØØØ kHz	-79.6	-47.4	-8Ø.6	-48.4
12ØØ kHz	-82.Ø	-49.7	-82.7	-5Ø.4
14ØØ kHz	-81.Ø	-48.7	-82.5	-5Ø.2
16ØØ kHz	-8Ø.7	-48.4	-82.2	-49.9
18ØØ kHz	-76.7	-44.4	-75.6	-43.4


14: 10: 57 MAY 28, 2001
OCC. B/W, PWR MTR: 46.7dBm, FCC ID: AS5FLX-02
REF 43.0 dBm #AT 10 dB
GTPOS
OUTPUT RF SPECTRUM
Modulation
LOG
10
dB/
OFFST
43.9
dB
ARFCN
784
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.984600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec


14:21:05 MAY 28, 2001
OCC. B/W, PWR MTR: 46.7dBm, FCC ID: AS5FLX-02
REF 40.9 dBm #AT 10 dB
GTSMP
LOG
10
dB/
OFFST
43.9
dB
ARFCN
784
TN 0
BURST
1
SA SB
SC EC
OUTPUT RF SPECTRUM
Modulation
- Offset + Offset
Offset Freq dB dBm dB dBm
0 kHz 0.0 32.5 0.0 32.5
100 kHz -6.8 25.7 -4.0 28.5
200 kHz -33.5 -1.0 -33.7 -1.2
250 kHz -43.7 -11.2 -46.2 -13.7
400 kHz -73.6 -41.1 -69.3 -36.8
600 kHz -75.1 -42.5 -76.1 -43.5
800 kHz -77.6 -45.0 -78.7 -46.1
1000 kHz -83.1 -50.6 -79.2 -46.6
1200 kHz -79.2 -46.6 -76.4 -43.9
1400 kHz -80.7 -48.1 -82.4 -49.9
1600 kHz -83.9 -51.4 -79.1 -46.5
1800 kHz -75.0 -42.5 -72.8 -40.3
CENTER 1.9846000 GHz
SPAN 0 Hz
#RES BW 30 kHz
#VBW 30 kHz
#SWP 320 µsec


14:27:51 MAY 28, 2001
OCC. B/W, PWR MTR: 46.7dBm, FCC ID: AS5FLX-02
REF 42.9 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 43.9 dB
ARFCN 809
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.989000 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec

14:38:31 MAY 28, 2001
OCC. B/W, PWR MTR: 46.7dBm, FCC ID: AS5FLX-02
REF 40.8 dBm #AT 10 dB

GTSMP
LOG
10
dB/
OFFST
43.9
dB
ARFCN
809
TN 0
BURST
1

SA SB
SC EC

OUTPUT RF SPECTRUM
Modulation

Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
0 kHz	0.0	32.3	0.0	32.3
100 kHz	-6.8	25.6	-4.0	28.3
200 kHz	-33.4	-1.1	-33.4	-1.0
250 kHz	-43.6	-11.2	-46.4	-14.0
400 kHz	-70.0	-37.7	-72.7	-40.4
600 kHz	-78.0	-45.6	-79.1	-46.7
800 kHz	-78.5	-46.1	-80.3	-48.0
1000 kHz	-79.0	-46.7	-77.1	-44.7
1200 kHz	-80.0	-47.6	-79.5	-47.2
1400 kHz	-80.7	-48.3	-78.8	-46.4
1600 kHz	-77.5	-45.2	-84.5	-52.2
1800 kHz	-75.1	-42.8	-74.7	-42.4

CENTER 1.9896000 GHz SPAN 0 Hz
#RES BW 30 kHz #VBW 30 kHz #SWP 320 µsec

MEASUREMENT: 3

MEASUREMENT

OF

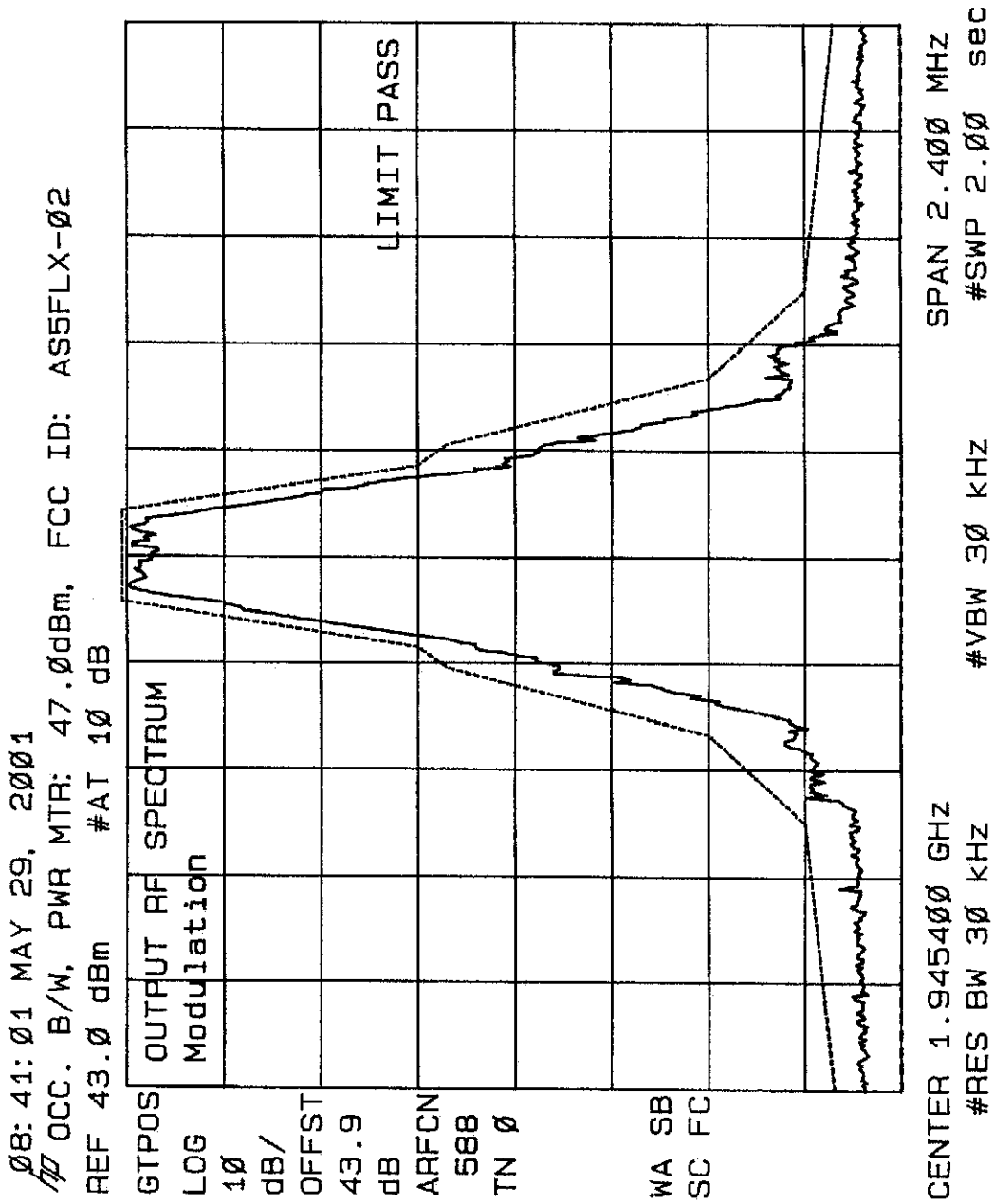
OCCUPIED BANDWIDTH

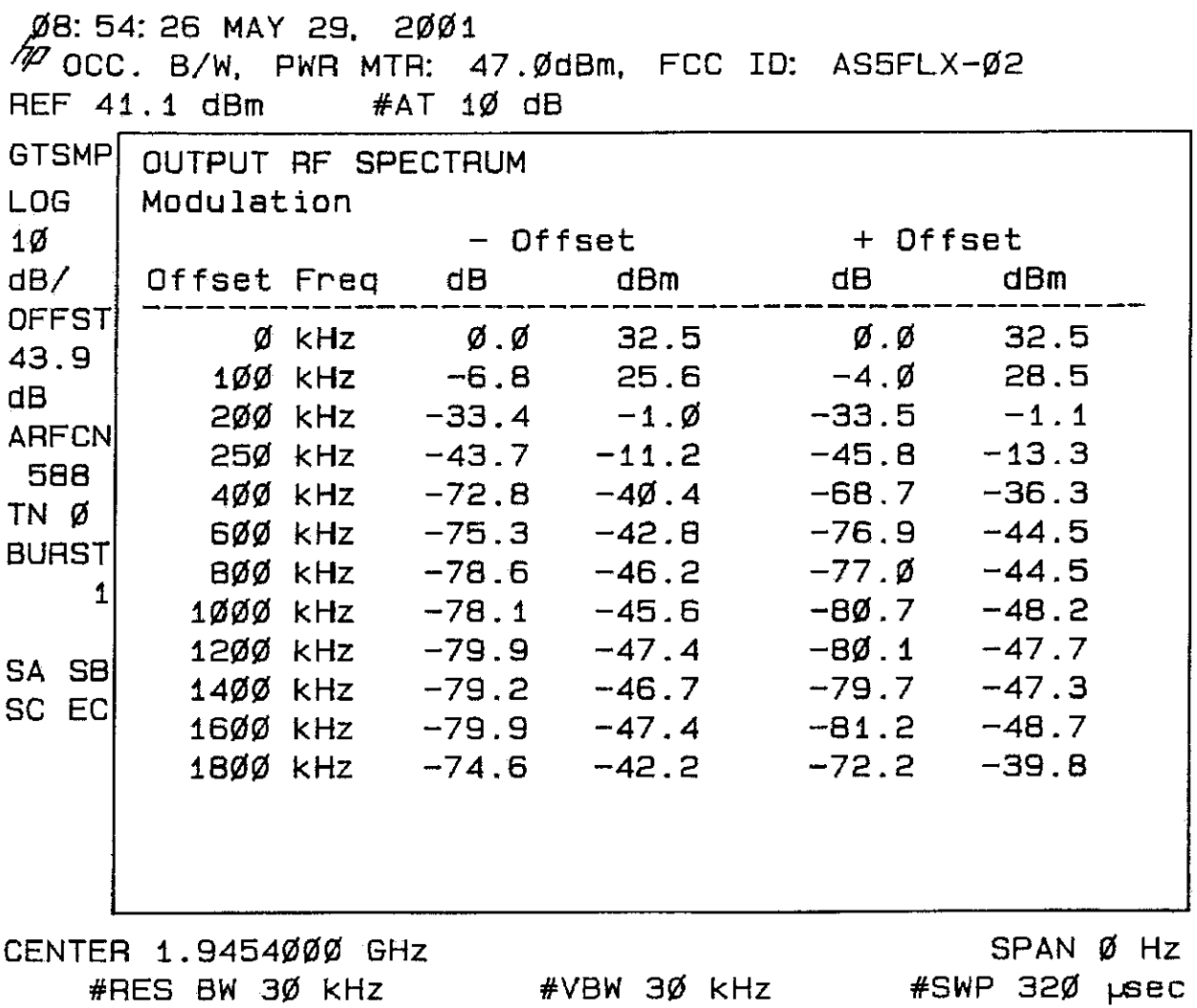
2 TRX WITH COMBINER

BLOCK D

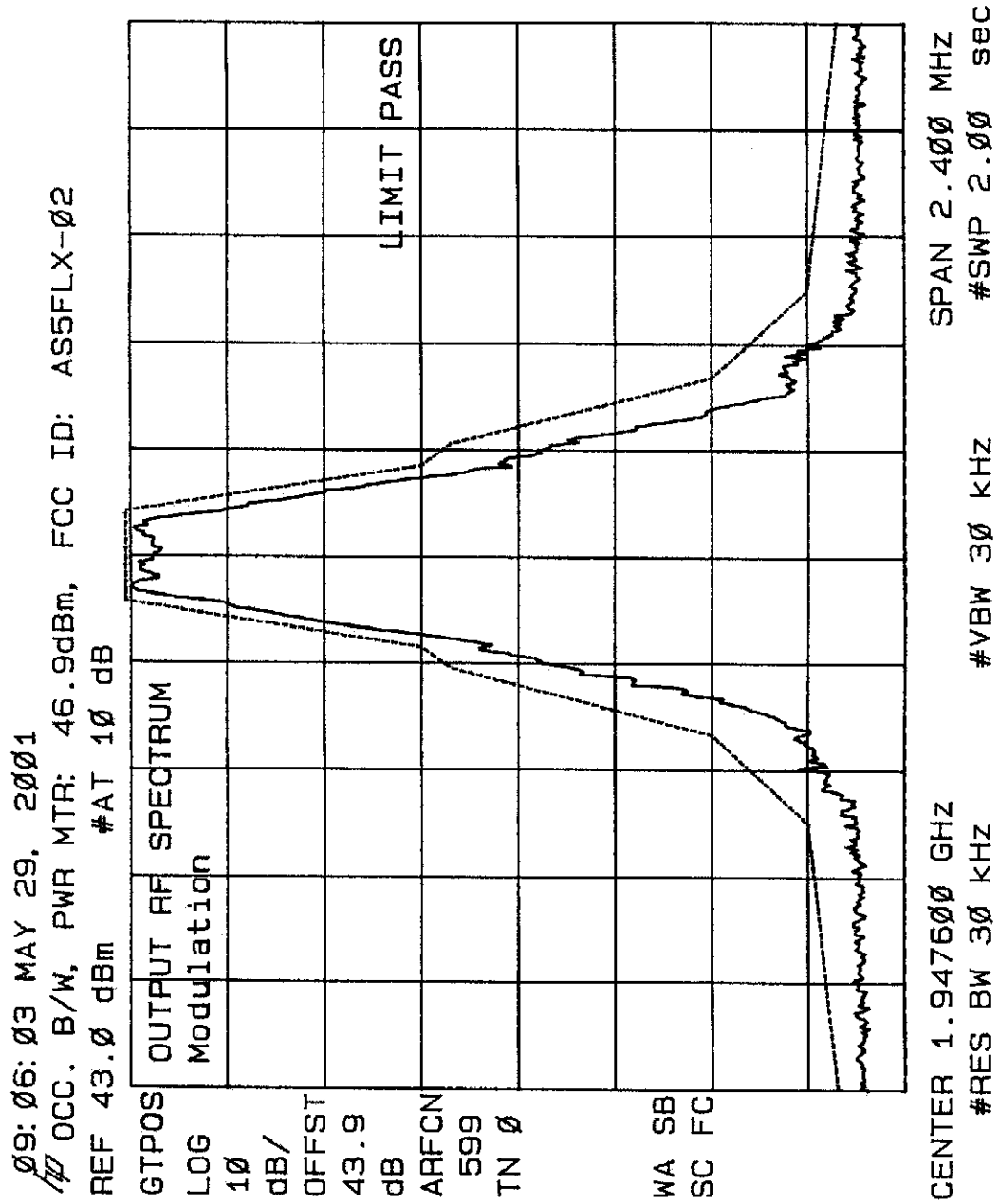
(1945 – 1950 MHz)

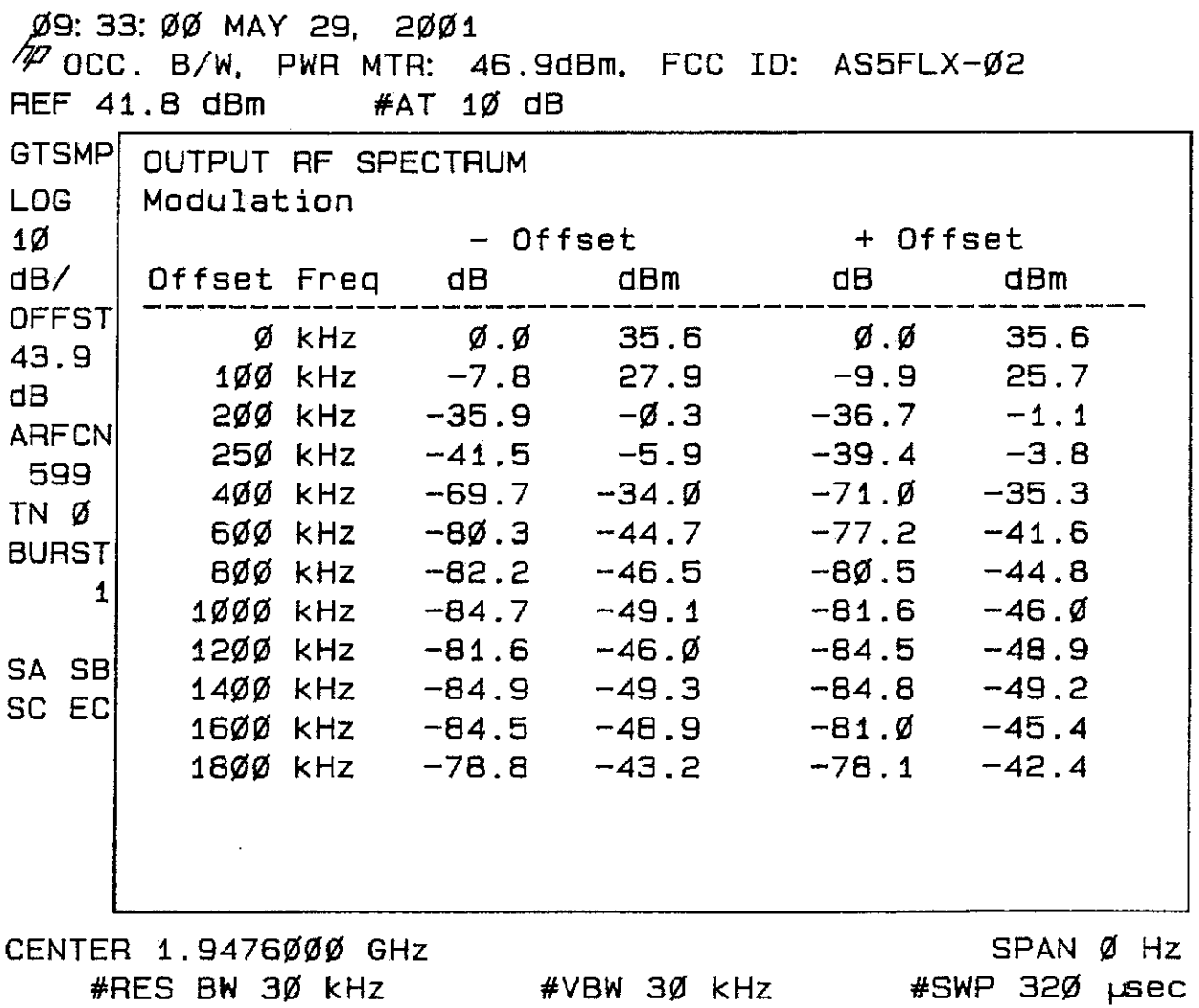
Left Edge:	1945.4 MHz (Channel 588)
Center:	1947.6 MHz (Channel 599)
Right Edge:	1949.6 MHz (Channel 609)


ØB: 41: Ø1 MAY 29, 2ØØ1
OCC. B/W, PWR MTR: 47.ØdBm, FCC ID: AS5FLX-Ø2
REF 43.Ø dBm #AT 1Ø dB
GTPOS
OUTPUT RF SPECTRUM
Modulation
LOG
1Ø
dB/
OFFST
43.9
dB
ARFCN
588
TN Ø
LIMIT PASS
WA SB
SC FC
CENTER 1.945ØØ GHz
#RES BW 3Ø kHz
#VBW 3Ø kHz
SPAN 2.4ØØ MHz
#SWP 2.ØØ sec

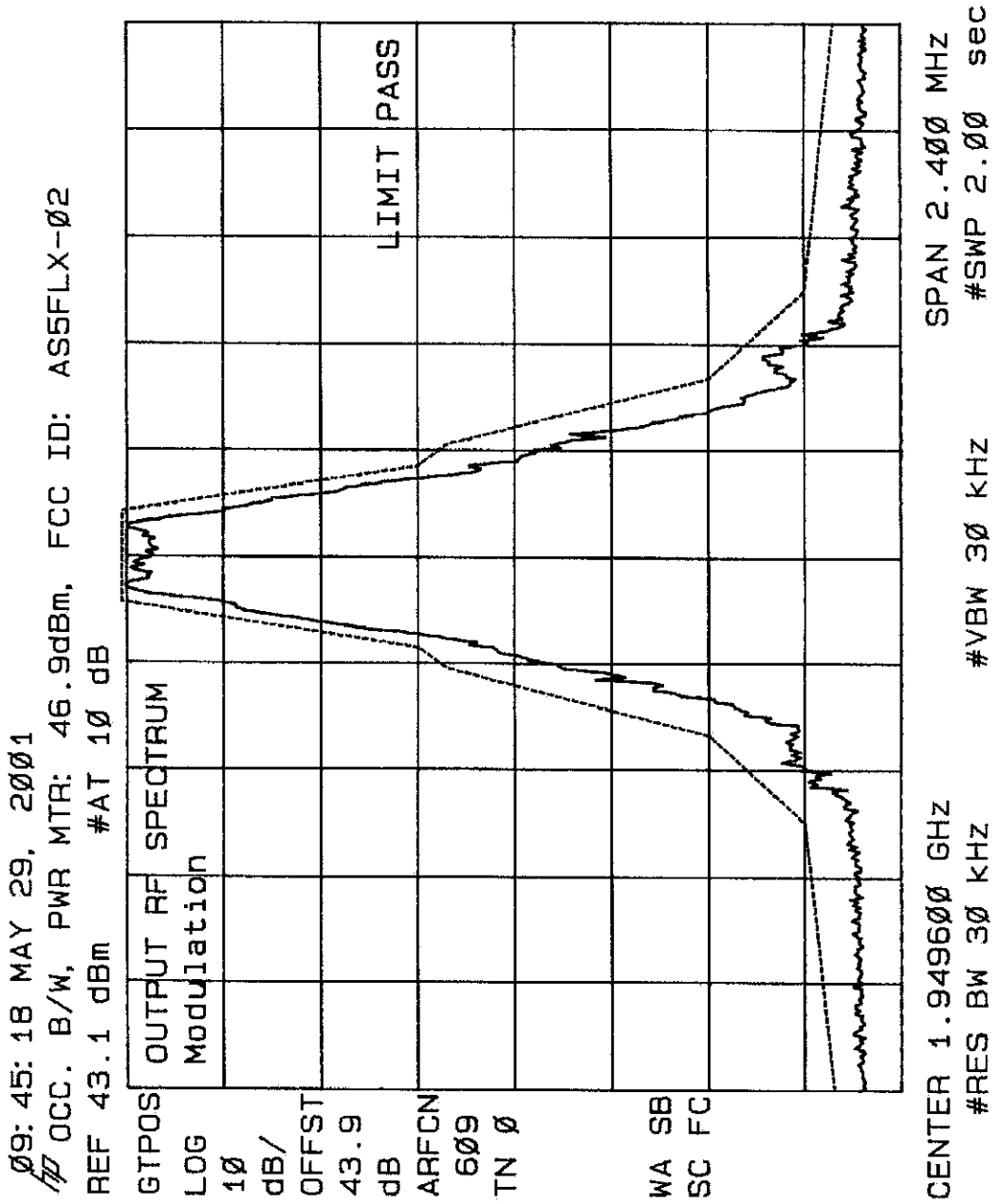


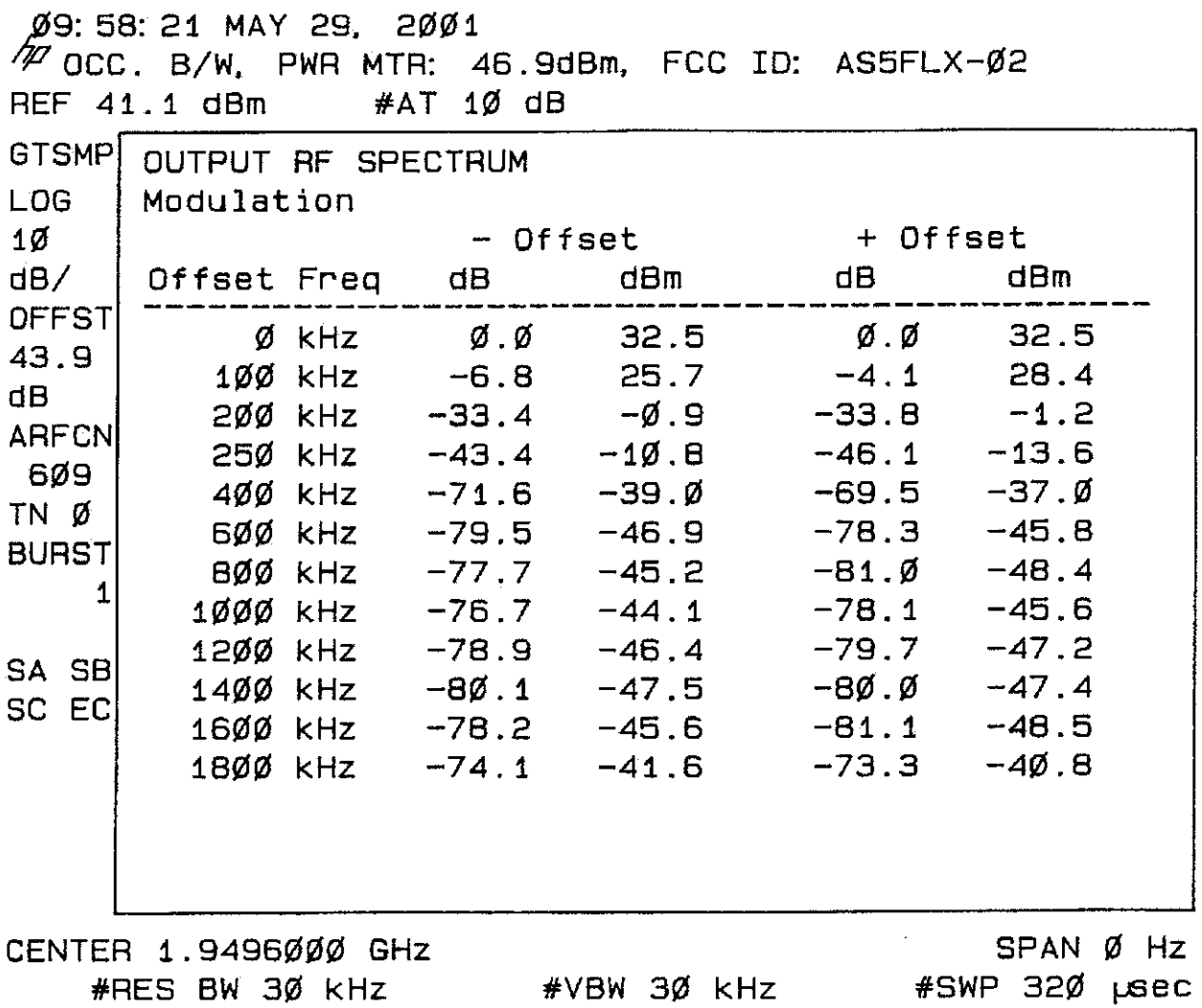
Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
0 kHz	0.0	32.5	0.0	32.5
100 kHz	-6.8	25.6	-4.0	28.5
200 kHz	-33.4	-1.0	-33.5	-1.1
250 kHz	-43.7	-11.2	-45.8	-13.3
400 kHz	-72.8	-40.4	-68.7	-36.3
600 kHz	-75.3	-42.8	-76.9	-44.5
800 kHz	-78.6	-46.2	-77.0	-44.5
1000 kHz	-78.1	-45.6	-80.7	-48.2
1200 kHz	-79.9	-47.4	-80.1	-47.7
1400 kHz	-79.2	-46.7	-79.7	-47.3
1600 kHz	-79.9	-47.4	-81.2	-48.7
1800 kHz	-74.6	-42.2	-72.2	-39.8


09:06:03 MAY 29, 2001
OCC. B/W, PWR MTR: 46.9dBm, FCC ID: AS5FLX-02
REF 43.0 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 43.9 dB
ARFCN 599
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.947600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.4000 MHz
#SWP 2.00 sec



Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
0 kHz	0.0	35.6	0.0	35.6
100 kHz	-7.8	27.9	-9.9	25.7
200 kHz	-35.9	-0.3	-36.7	-1.1
250 kHz	-41.5	-5.9	-39.4	-3.8
400 kHz	-69.7	-34.0	-71.0	-35.3
600 kHz	-80.3	-44.7	-77.2	-41.6
800 kHz	-82.2	-46.5	-80.5	-44.8
1000 kHz	-84.7	-49.1	-81.6	-46.0
1200 kHz	-81.6	-46.0	-84.5	-48.9
1400 kHz	-84.9	-49.3	-84.8	-49.2
1600 kHz	-84.5	-48.9	-81.0	-45.4
1800 kHz	-78.8	-43.2	-78.1	-42.4


09: 45: 18 MAY 29, 2001
OCC. B/W, PWR MTR: 46.9dBm, FCC ID: AS5FLX-02
REF 43.1 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 43.9 dB
ARFCN 609
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.949600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec



Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
Ø kHz	Ø.Ø	32.5	Ø.Ø	32.5
1ØØ kHz	-6.8	25.7	-4.1	28.4
2ØØ kHz	-33.4	-Ø.9	-33.8	-1.2
25Ø kHz	-43.4	-1Ø.8	-46.1	-13.6
4ØØ kHz	-71.6	-39.Ø	-69.5	-37.Ø
6ØØ kHz	-79.5	-46.9	-78.3	-45.8
8ØØ kHz	-77.7	-45.2	-81.Ø	-48.4
1ØØØ kHz	-76.7	-44.1	-78.1	-45.6
12ØØ kHz	-78.9	-46.4	-79.7	-47.2
14ØØ kHz	-8Ø.1	-47.5	-8Ø.Ø	-47.4
16ØØ kHz	-78.2	-45.6	-81.1	-48.5
18ØØ kHz	-74.1	-41.6	-73.3	-4Ø.8

MEASUREMENT: 3

MEASUREMENT

OF

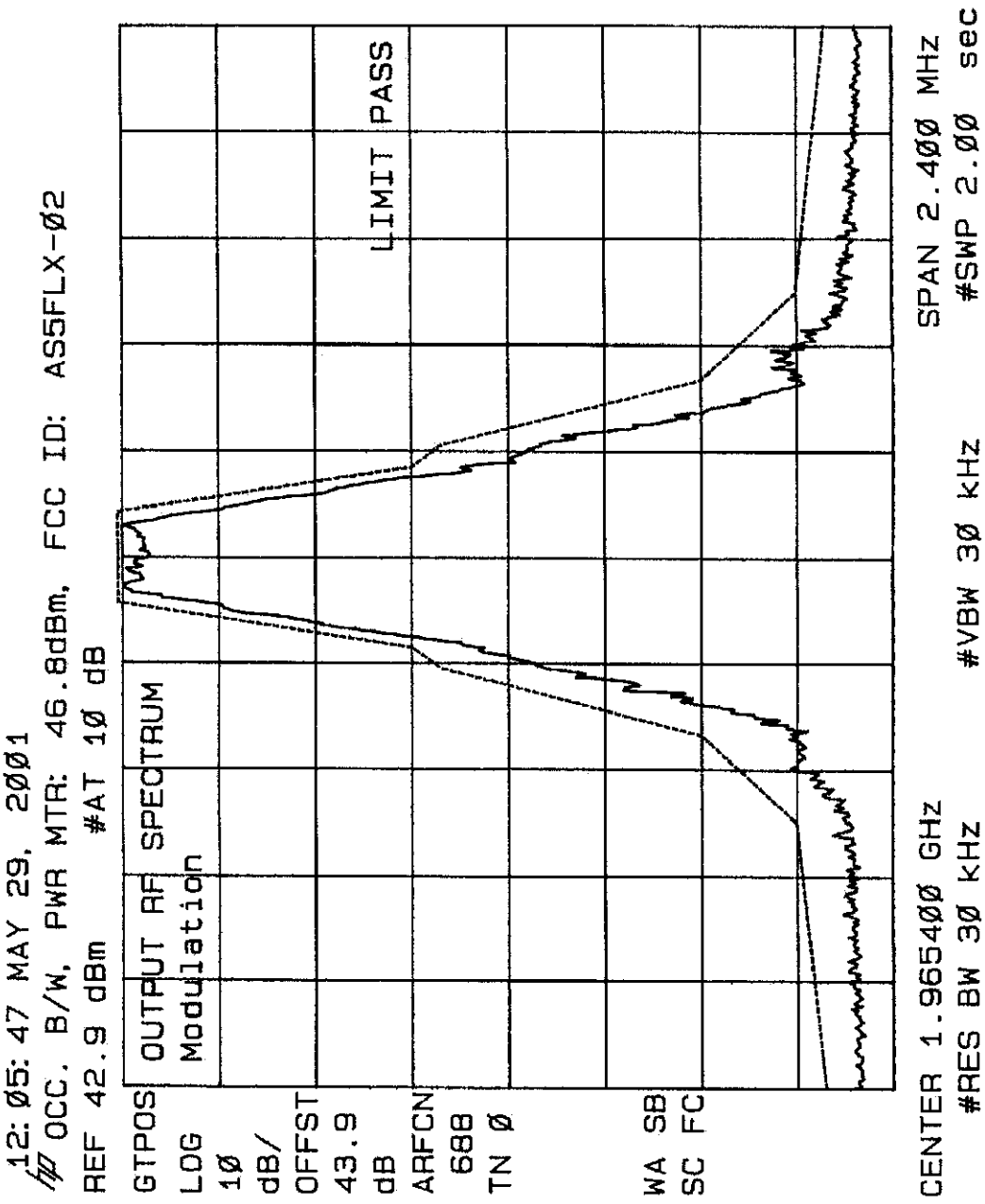
OCCUPIED BANDWIDTH

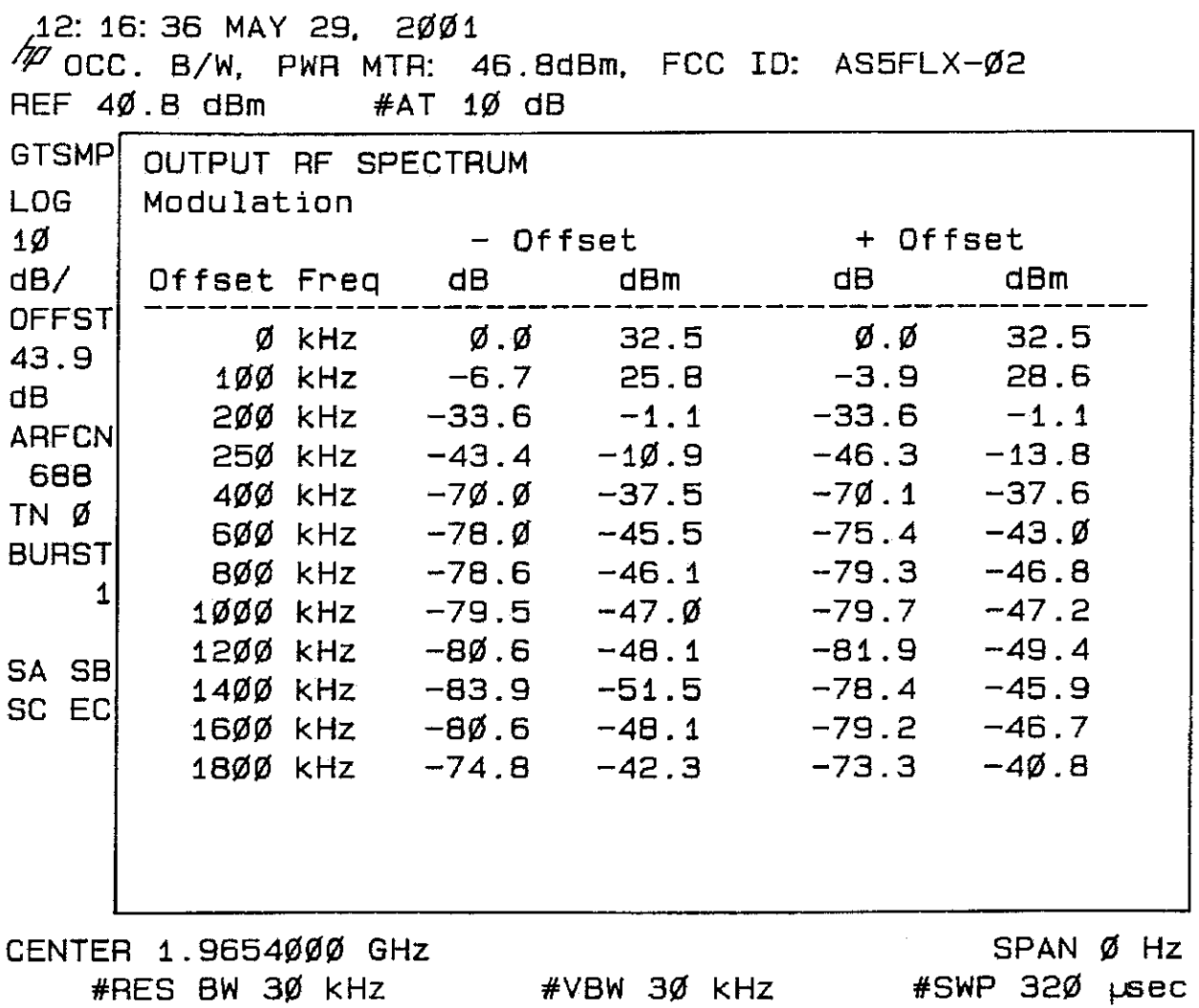
2 TRX WITH COMBINER

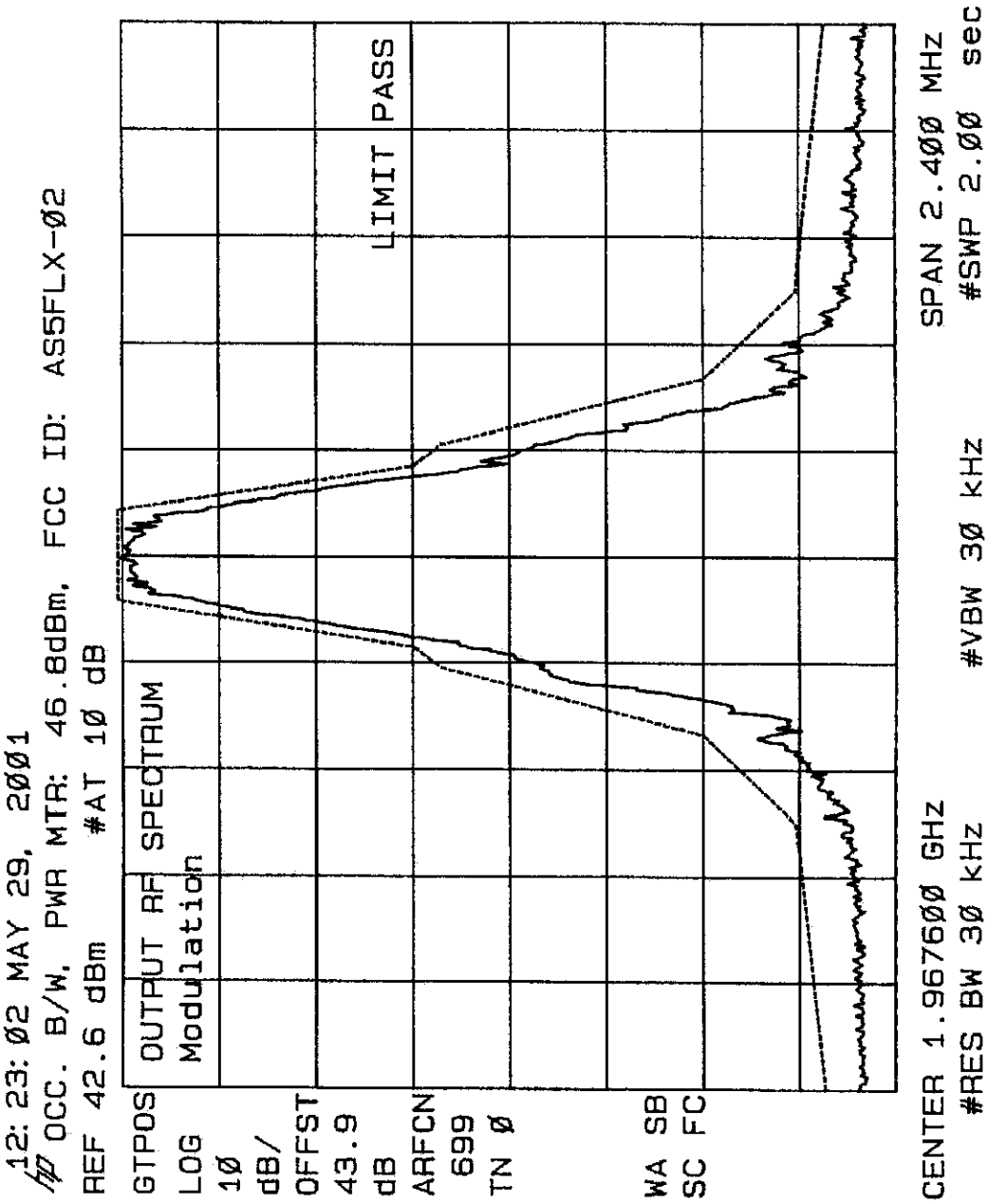
BLOCK E

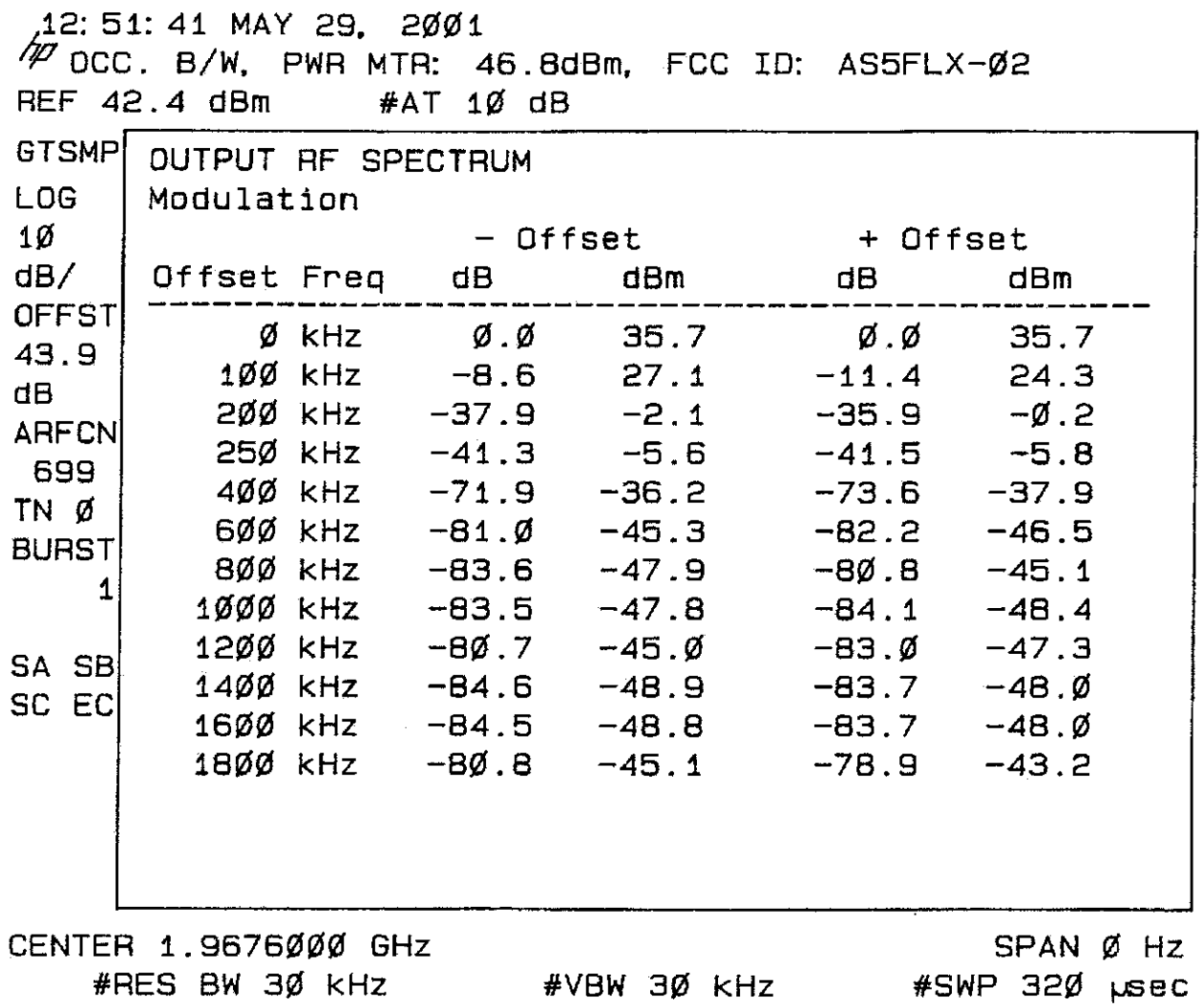
(1965 – 1970 MHz)

Left Edge:	1965.4 MHz (Channel 688)
Center:	1967.6 MHz (Channel 699)
Right Edge:	1969.6 MHz (Channel 709)

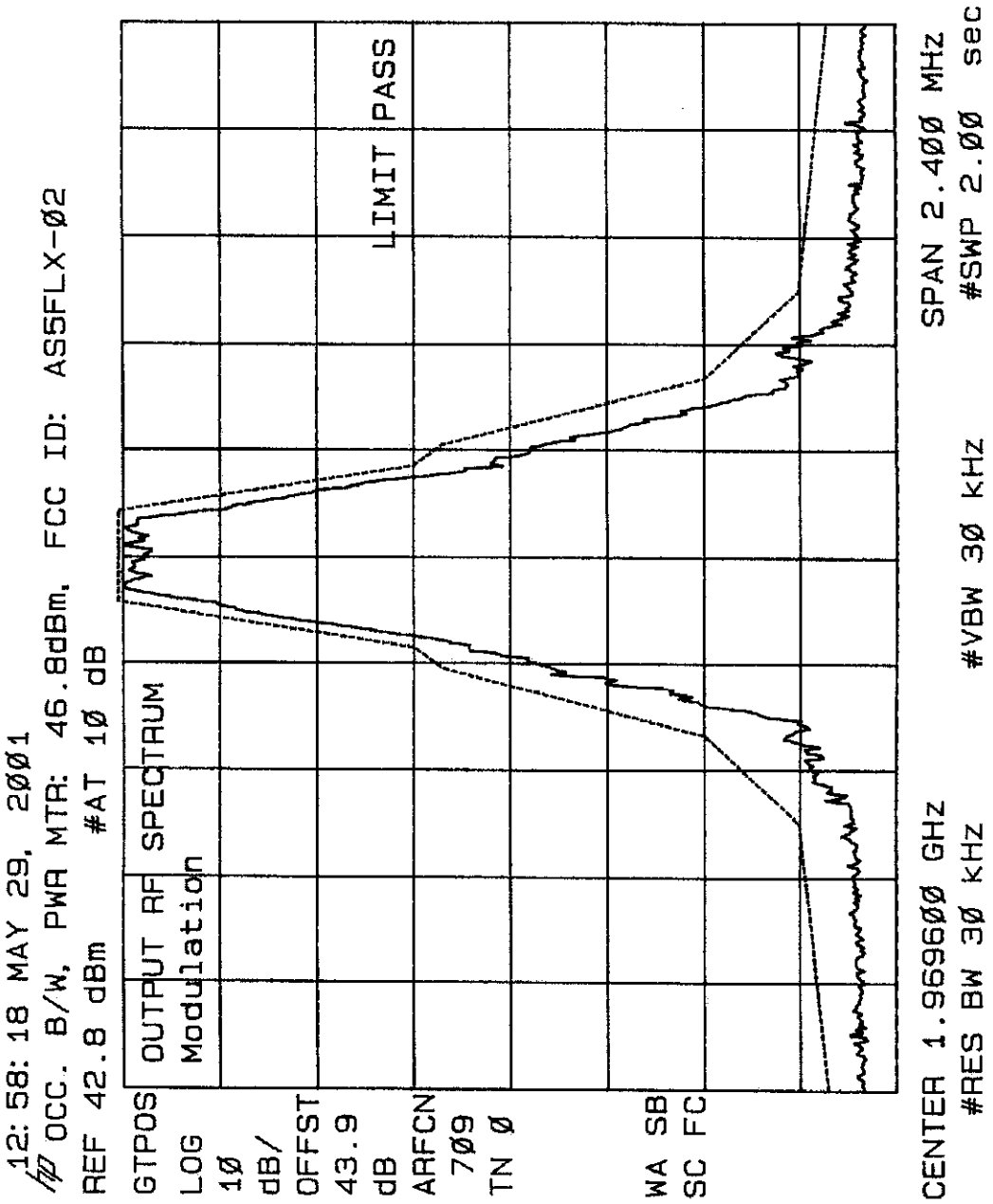

12: Ø5: 47 MAY 29, 2ØØ1
OCC. B/W, PWR MTR: 46.8dBm, FCC ID: AS5FLX-Ø2
REF 42.9 dBm #AT 1Ø dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
1Ø
dB/
OFFST
43.9
dB
ARFCN
688
TN Ø
LIMIT PASS
WA SB
SC FC
CENTER 1.965400 GHz
#RES BW 3Ø kHz
#VBW 3Ø kHz
SPAN 2.4ØØ MHz
#SWP 2.ØØ sec




12: 23: Ø2 MAY 29, 2ØØ1
OCC. B/W, PWR MTR: 46.8dBm, FCC ID: AS5FLX-Ø2
REF 42.6 dBm #AT 1Ø dB
GTPOS
LOG
1Ø
dB/
OFFST
43.9
dB
ARFCN
699
TN Ø
OUTPUT RF SPECTRUM
Modulation
LIMIT PASS
WA SB
SC FC
CENTER 1.9676ØØ GHz
#RES BW 3Ø kHz
#VBW 3Ø kHz
SPAN 2.4ØØ MHz
#SWP 2.ØØ sec



Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
0 kHz	0.0	35.7	0.0	35.7
100 kHz	-8.6	27.1	-11.4	24.3
200 kHz	-37.9	-2.1	-35.9	-0.2
250 kHz	-41.3	-5.6	-41.5	-5.8
400 kHz	-71.9	-36.2	-73.6	-37.9
600 kHz	-81.0	-45.3	-82.2	-46.5
800 kHz	-83.6	-47.9	-80.8	-45.1
1000 kHz	-83.5	-47.8	-84.1	-48.4
1200 kHz	-80.7	-45.0	-83.0	-47.3
1400 kHz	-84.6	-48.9	-83.7	-48.0
1600 kHz	-84.5	-48.8	-83.7	-48.0
1800 kHz	-80.8	-45.1	-78.9	-43.2


12: 58: 18 MAY 29, 2001
OCC. B/W, PWR MTR: 46.8dBm, FCC ID: AS5FLX-02
REF 42.8 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 43.9 dB
ARFCN 709
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.969600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec

13: Ø9: 49 MAY 29, 2ØØ1
OCC. B/W, PWR MTR: 46.8dBm, FCC ID: AS5FLX-Ø2
REF 41.Ø dBm #AT 1Ø dB

GTSMP
LOG
1Ø
dB/
OFFST
43.9
dB
ARFCN
7Ø9
TN Ø
BURST
1

SA SB
SC EC

OUTPUT RF SPECTRUM
Modulation

Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
Ø kHz	Ø.Ø	32.5	Ø.Ø	32.5
1ØØ kHz	-6.9	25.6	-4.1	28.4
2ØØ kHz	-33.5	-1.Ø	-33.3	-Ø.9
25Ø kHz	-43.7	-11.2	-46.1	-13.6
4ØØ kHz	-72.9	-4Ø.4	-7Ø.1	-37.7
6ØØ kHz	-8Ø.1	-47.6	-77.7	-45.3
8ØØ kHz	-77.7	-45.2	-78.6	-46.1
1ØØØ kHz	-81.Ø	-48.5	-76.8	-44.3
12ØØ kHz	-79.4	-46.9	-8Ø.5	-48.1
14ØØ kHz	-81.1	-48.6	-8Ø.6	-48.1
16ØØ kHz	-78.Ø	-45.6	-81.4	-48.9
18ØØ kHz	-72.9	-4Ø.4	-74.2	-41.7

CENTER 1.9696ØØØ GHz SPAN Ø Hz
#RES BW 3Ø kHz #VBW 3Ø kHz #SWP 32Ø µsec

MEASUREMENT: 3

MEASUREMENT

OF

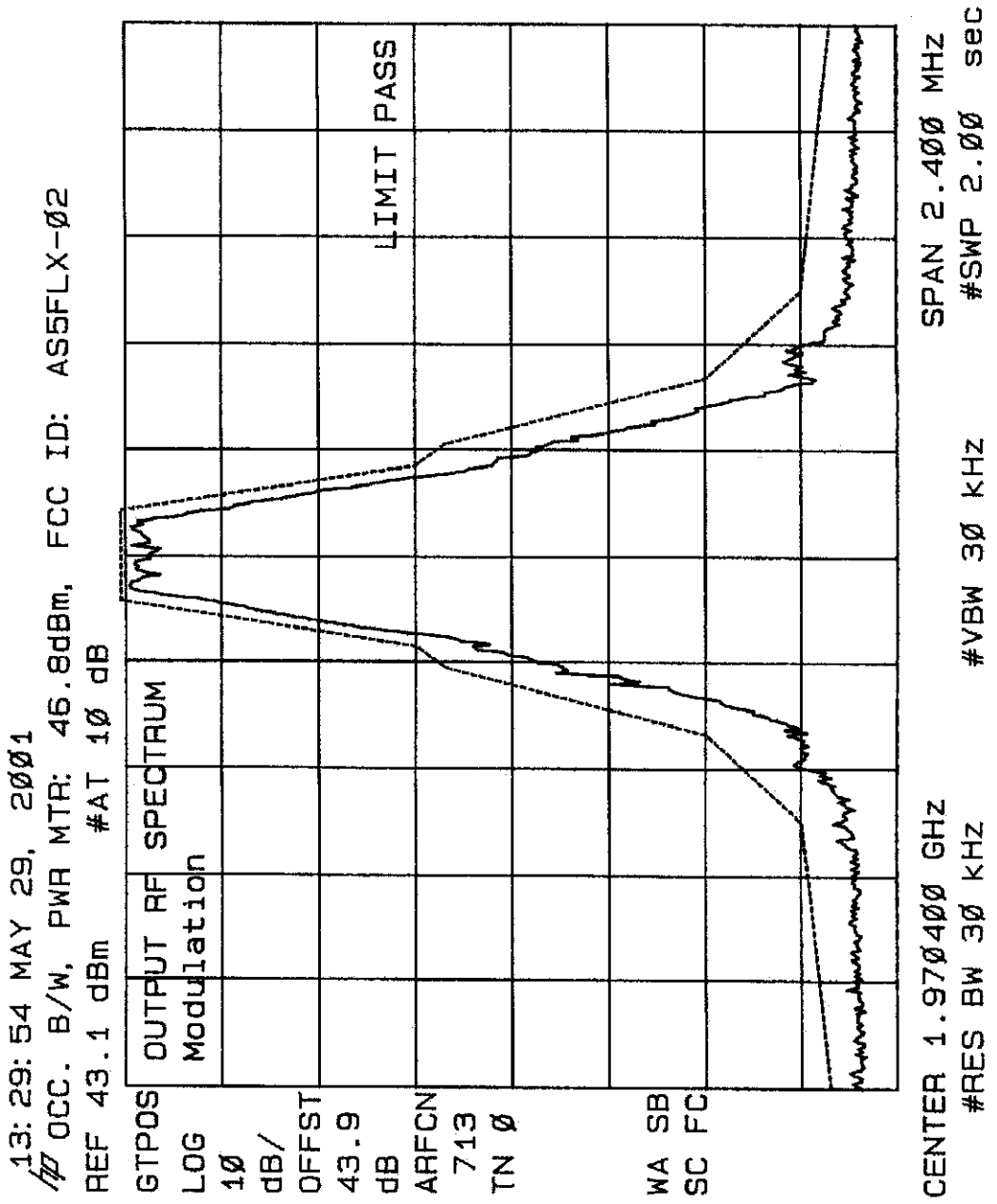
OCCUPIED BANDWIDTH

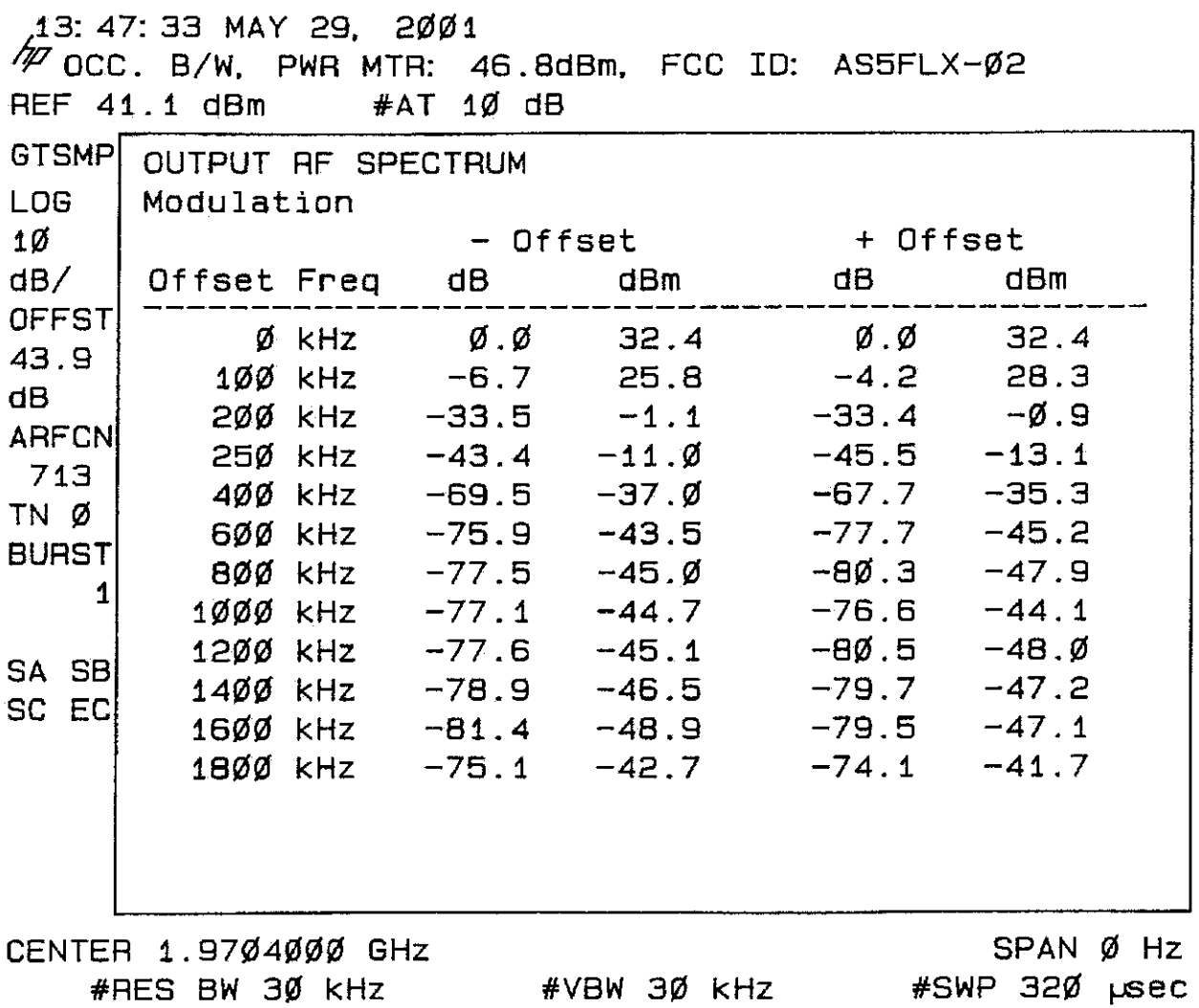
2 TRX WITH COMBINER

BLOCK F

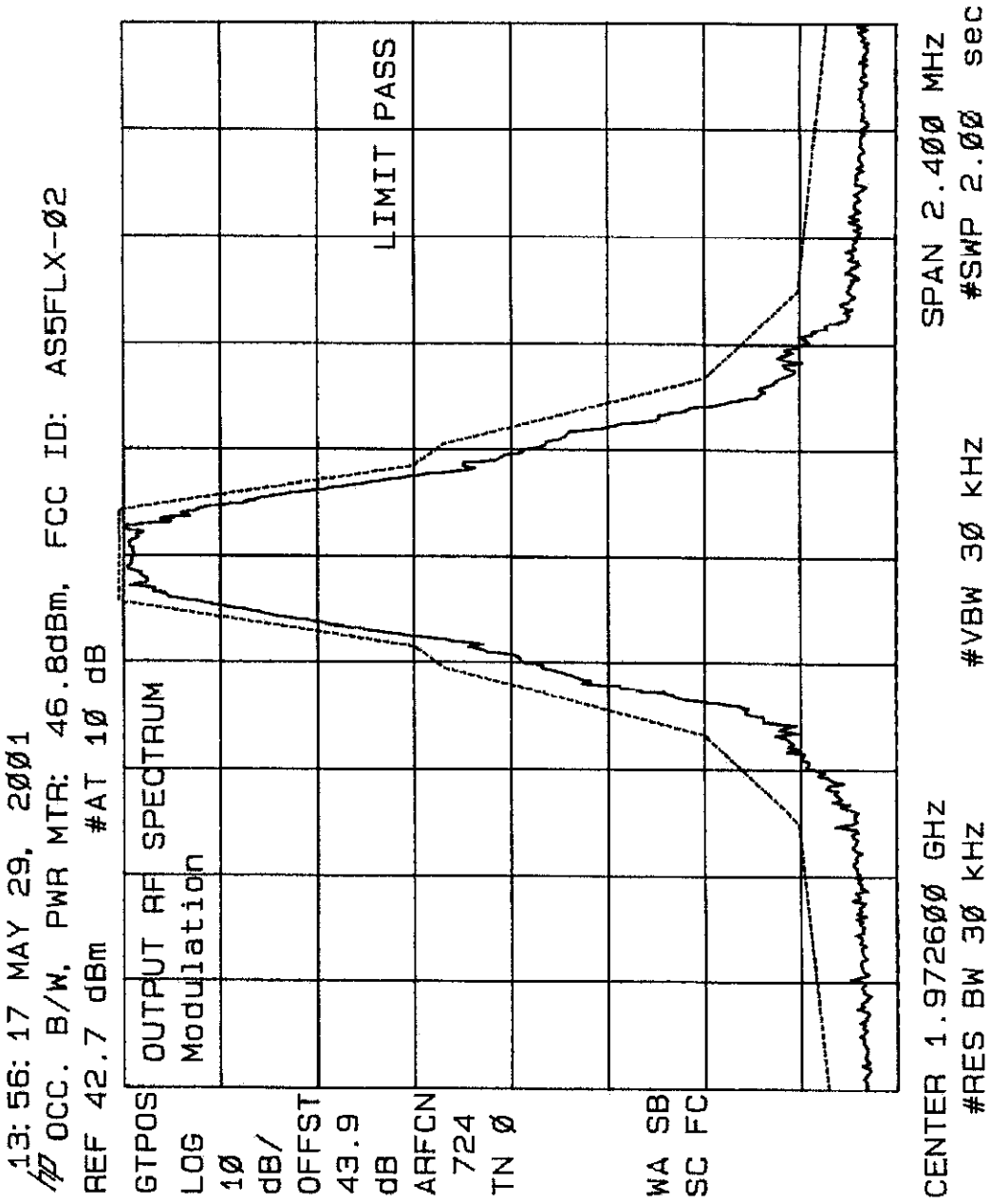
(1970 – 1975 MHz)

Left Edge:	1970.4 MHz (Channel 713)
Center:	1972.6 MHz (Channel 724)
Right Edge:	1974.6 MHz (Channel 734)


13: 29: 54 MAY 29, 2001
OCC. B/W, PWR MTR: 46.8dBm, FCC ID: AS5FLX-02
REF 43.1 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 43.9 dB
ARFCN 713
TN 0
LIMIT PASS
WA SB
SC FC
CENTER 1.970400 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.4000 MHz
#SWP 2.00 sec



Offset Freq	− Offset dB	− Offset dBm	+ Offset dB	+ Offset dBm
0 kHz	0.0	32.4	0.0	32.4
100 kHz	-6.7	25.8	-4.2	28.3
200 kHz	-33.5	-1.1	-33.4	-0.9
250 kHz	-43.4	-11.0	-45.5	-13.1
400 kHz	-69.5	-37.0	-67.7	-35.3
600 kHz	-75.9	-43.5	-77.7	-45.2
800 kHz	-77.5	-45.0	-80.3	-47.9
1000 kHz	-77.1	-44.7	-76.6	-44.1
1200 kHz	-77.6	-45.1	-80.5	-48.0
1400 kHz	-78.9	-46.5	-79.7	-47.2
1600 kHz	-81.4	-48.9	-79.5	-47.1
1800 kHz	-75.1	-42.7	-74.1	-41.7


13: 56: 17 MAY 29, 2001
OCC. B/W, PWR MTR: 46.8dBm, FCC ID: AS5FLX-02
REF 42.7 dBm #AT 10 dB
GTPOS OUTPUT RF SPECTRUM
LOG Modulation
10 dB/
OFFST 43.9 dB
ARFCN 724
TN 0
WA SB
SC FC
LIMIT PASS
CENTER 1.972600 GHz
#RES BW 30 kHz
#VBW 30 kHz
SPAN 2.400 MHz
#SWP 2.00 sec

14:44:45 MAY 29, 2001
OCC. B/W, PWR MTR: 46.8dBm, FCC ID: AS5FLX-02
REF 43.1 dBm #AT 10 dB

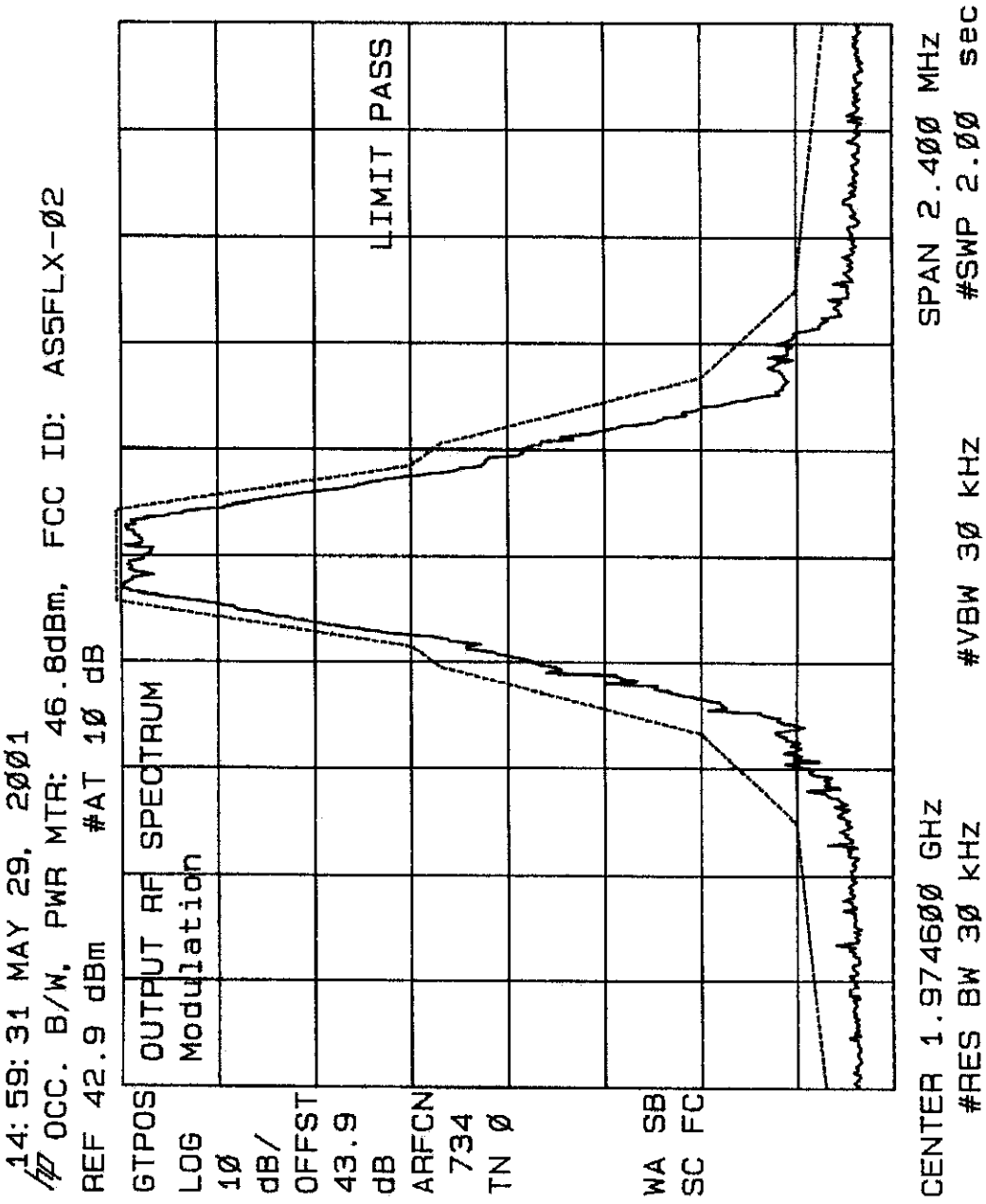
GTSMP
LOG
10
dB/
OFFST
43.9
dB
ARFCN
724
TN 0
BURST
1

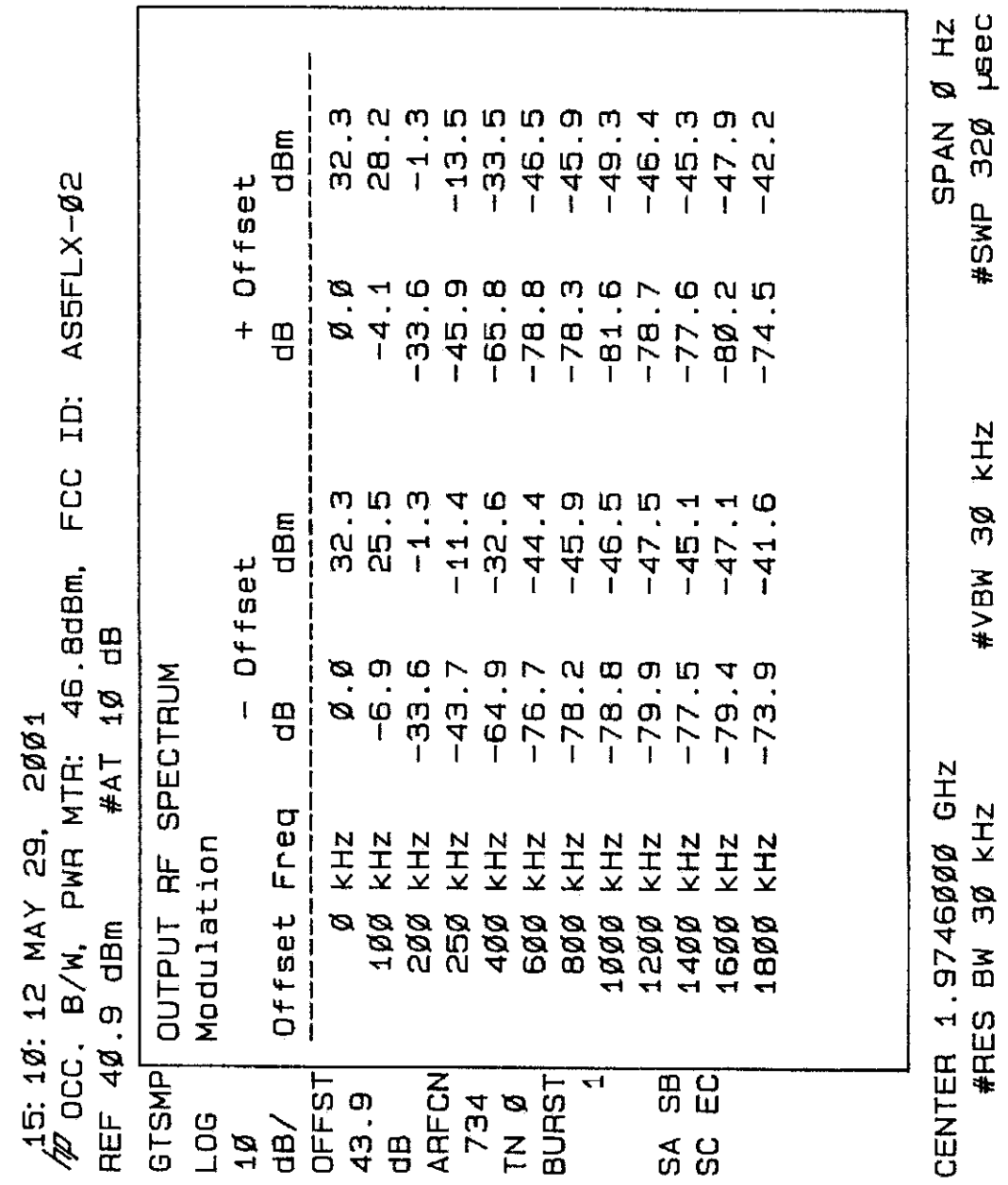
SA SB
SC EC

OUTPUT RF SPECTRUM
Modulation

Offset Freq	- Offset dB	- Offset dBm	+ Offset dB	+ Offset dBm
0 kHz	0.0	35.5	0.0	35.5
100 kHz	-11.9	23.7	-9.0	26.6
200 kHz	-36.1	-0.6	-38.1	-2.6
250 kHz	-40.3	-4.7	-41.8	-6.3
400 kHz	-69.7	-34.1	-76.4	-40.8
600 kHz	-79.4	-43.9	-81.3	-45.8
800 kHz	-80.1	-44.5	-82.0	-46.5
1000 kHz	-82.4	-46.9	-81.3	-45.8
1200 kHz	-82.1	-46.5	-86.5	-50.9
1400 kHz	-82.0	-46.4	-82.4	-46.9
1600 kHz	-81.3	-45.7	-83.5	-48.0
1800 kHz	-78.1	-42.5	-78.4	-42.8

CENTER 1.9726000 GHz SPAN 0 Hz
#RES BW 30 kHz #VBW 30 kHz #SWP 320 µsec


14: 59: 31 MAY 29, 2001
OCC. B/W, PWR MTR: 46.8dBm, FCC ID: AS5FLX-02
REF 42.9 dBm #AT 1Ø dB
GTPOS
OUTPUT RF SPECTRUM
Modulation
LOG
1Ø
dB/
OFFST
43.9
dB
ARFCN
734
TN Ø
LIMIT PASS
WA SB
SC FC
CENTER 1.974ØØ GHz
#RES BW 3Ø kHz
#VBW 3Ø kHz
SPAN 2.4ØØ MHz
#SWP 2.ØØ sec


15: 10: 12 MAY 29, 2001
OCC. B/W, PWR MTR: 46.8dBm, FCC ID: AS5FLX-02
REF 40.9 dBm #AT 10 dB
GTSMP
LOG
10
dB/
OFFST
43.9
dB
ARFCN
734
TN 0
BURST
1
SA SB
SC EC
OUTPUT RF SPECTRUM
Modulation
- Offset
+ Offset
Offset Freq dB dBm dB dBm
0 kHz 0.0 32.3 0.0 32.3
100 kHz -6.9 25.5 -4.1 28.2
200 kHz -33.6 -1.3 -33.6 -1.3
250 kHz -43.7 -11.4 -45.9 -13.5
400 kHz -64.9 -32.6 -65.8 -33.5
600 kHz -76.7 -44.4 -78.8 -46.5
800 kHz -78.2 -45.9 -78.3 -45.9
1000 kHz -78.8 -46.5 -81.6 -49.3
1200 kHz -79.9 -47.5 -78.7 -46.4
1400 kHz -77.5 -45.1 -77.6 -45.3
1600 kHz -79.4 -47.1 -80.2 -47.9
1800 kHz -73.9 -41.6 -74.5 -42.2
CENTER 1.974600 GHz
SPAN 0 Hz
#RES BW 30 kHz
#VBW 30 kHz
#SWP 320 µsec