Exhibit 6: Test Report

TEST REPORT FROM:

COMMUNICATION CERTIFICATION LABORATORY
1940 W. Alexander Street
Salt Lake City, Utah
84119-2039

Type of Report: Class II Permissive Change

TEST OF: 9631A

FCC ID: AS5LTWT

To Part 15 Subpart D
of the FCC Rules and Regulations

Test Report Serial No: 73-6690

Applicant:

Lucent Technologies, Inc.
600 Mountain Avenue
Murray Hill, NJ 07974

Date(s) of Test: November 7 - 17, 1998

Issue Date: November 30, 1998

Equipment Receipt Date: November 6, 1998

CERTIFICATION OF ENGINEERING REPORT

This report has been prepared by Communication Certification Laboratory to evaluate the device described below with the requirements of FCC Part 15, Subpart D. Specific identifying information for the device tested is given below.

- Applicant: Lucent Technologies, Inc.
  600 Mountain Avenue
  Murray Hill, NJ 07974

- Manufacturer: Lucent Technologies, Inc.
  2929 Baird Road
  Shreveport, LA 71118

- Trade Name: LUCENT

- Model Number: 9631A

- FCC ID Number: AS5LTWT

On this 30th day of November 1998, I, individually, and for Communication Certification Laboratory, certify that the statements made in this engineering report are true, complete, and correct to the best of my knowledge, and are made in good faith.

COMMUNICATION CERTIFICATION LABORATORY

____
Checked by: William S. Hurst, PE
Vice President

____
Tested by: Roger J. Midgley
EMC Engineering Manager

SECTION 1 GENERAL INFORMATION

1.1 Theory of Operation

See Exhibit 12.

This application is for a class II Permissive Change of the WT and is identified by FCC ID: AS5LTWT, (original grant date October 16, 1996).

1.2 Test Specification

The 9631A is an Isochronous device that operates in the 1920-1930 MHz sub-band; therefore the 9631A is subject to the provisions of FCC Part 15, Subpart D. Unlicensed Personal Communications Service Devices.

1.3 Test Methods & Procedures

The 9631A was tested in accordance with ANSI C63.17-1998.

1.4 Changes to Previously Certified Equipment

The original WT tested in May 1996, a Class II Permissive Change report was filed in February 1998. Listed below are the differences between the existing handset (Model 9601 referenced above) and this new handset (Model 9631A).

1. The 9631A is a single board design compared to the two board design of the 9601.
2. A vibrator has been added.
3. The serial/headset jack has been revised.
4. The discrete PA, LNA, and SPDT switches have been replaced by RFICs.
5. The filtering scheme in the RF front end has been reconfigured. This includes use of a directional coupler following the PA with an integrated lowpass filter and a common band pass filter for the transmit and receive chain immediately following the diversity switch.
6. The 9631A has dual F antennas compared to the 9601B flip antenna or 9601N with a stub antenna and chip antenna. Since the antenna placement was changed the SAR testing according to ANSI/IEEE C95.1 (1991) was performed, see Exhibit 11 for the SAR compliance report.

SECTION 2. SUMMARY OF TEST RESULTS:

2.1 Summary of Tests:

FCC Section	Description	Report Section	ANSI C63.17 Section	Result
15.309	Cross Reference to Subpart B	3.2.1	6.1.6.3	Complies
15.315	AC power line conducted limits	3.2.2	N/A	Complies
15.317	Antenna requirement	3.2.3	N/A	Complies
15.319 (a)	Frequency of operation	3.2.4	N/A	Complies
15.319 (b)	Modulation technique	3.2.5	6.1.4	Complies
15.319 (c)	Peak transmit power and emission bandwidth	3.2.6	6.1.2	Complies
15.319 (d)	Power spectral density	3.2.7	6.1.5	Complies
15.319 (e)	Directional gain of antenna	3.2.8	N/A	Complies
15.323 (d)	Spurious emissions	3.2.9	6.1.6	Complies
15.323 (e)	Frame repetition stability / frame period and jitter	3.2.10	6.2.3 and 6.2.4	Complies
15.323 (f)	Frequency stability	3.2.11	6.2.2	Complies

SECTION 3. MEASUREMENTS, EXAMINATIONS AND DERIVED RESULTS:

3.1 General Comments

This section contains the test results only. Details of the test methods used, etc., can be found in Appendix A of this report.

3.2 Test Results

3.2.1 Cross Reference to Subpart B § 15.309

The requirements of Subpart D apply only to the radio transmitter contained in the PCS device. Other aspects of the operation of a PCS device may be subject to requirements contained elsewhere in this Chapter. In particular, a PCS device that includes digital circuitry not directly associated with the radio transmitter also is subject to the requirements for unintentional radiators in Subpart B. The 9631A tunes up to 1930 MHz; therefore, in accordance with § 15.33 (b)(1), the EUT was tested from 30 MHz to 10 GHz.

The 9631A complies with the limits shown below for a class A unintentional radiator:

§ 15.109 Radiated Emission Limits Class A

Frequency (MHz)	Field Strength at 10 m(μV/m)	Field Strength at 3 m (dBμV/m)
30 - 88	90	49.5
88 - 216	150	54.0
216 - 960	210	56.4
960 - 10,000	300	59.5

Measurement Data:

The 9631A was tested in the receive and transmit modes on channels 0 and 7 and on both antenna 0 and 1. The worst case emission was with the 9631A in the receive mode on channel 7 and antenna 0. Shown below are the radiated emissions in the worst case configuration.

Vertical Polarity

Frequency MHz	Detector	Receiver Reading dBμV	Correction Factor dB	Corrected Reading dBμV/m	3 m Class A limit dBμV/m
36.1	Peak	15.2	12.0	27.2	49.1
97.5	Peak	6.9	17.2	24.1	53.5
162.3	Peak	7.0	18.5	25.5	53.5
193.0	Peak	7.9	18.1	26.0	53.5
308.8	Peak	7.4	23.1	30.5	56.4
356.0	Peak	7.2	24.5	31.7	56.4
622.4	Peak	7.1	30.3	37.4	56.4
734.4	Peak	7.7	32.0	39.7	56.4
819.2	Peak	7.1	33.2	40.3	56.4

Horizontal Polarity

Frequency MHz	Detector	Receiver Reading dBμV	Correction Factor dB	Corrected Reading dBμV/m	3 m Class A limit dBμV/m
30.0	Peak	5.2	15.5	20.7	49.1
100.4	Peak	7.1	16.9	24.0	53.5
162.3	Peak	6.6	18.5	25.1	53.5
189.1	Peak	7.3	18.0	25.3	53.5
248.0	Peak	8.5	20.7	29.2	56.4
366.4	Peak	7.1	24.8	31.9	56.4
478.4	Peak	7.0	27.5	34.5	56.4
604.8	Peak	7.3	30.2	37.5	56.4
876.0	Peak	7.3	34.2	41.5	56.4

EUT Configuration

The WT was located inside of the anechoic chamber. The WT and was tested in the, transmit, receive, and idle modes to determine which configuration produced the worst case emissions.

Sample Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CF - AG

where FS = Field Strength
RA = Receiver Amplitude
AF = Antenna Factor
CF = Cable Attenuation Factor
AG = Amplifier Gain

Assume a receiver reading of 52.5 dBμV is obtained. The Antenna Factor of 7.4 and a Cable Factor of 1.1 is added. The Amplifier Gain of 29 dB is subtracted, giving field strength of 32 dBμV/m.

RESULT

In the configuration tested, the EUT complied with the requirements of the specification.

3.2.2 Conducted Emissions § 15.315

An unlicensed PCS device that: is designed to be connected to the public utility (AC) power line must meet the limits specified in § 15.207.

§ 15.207 Conducted Emission Limits

Frequency	Conducted Limit (μV)	Conducted Limit (dBμV)
450 kHz to 30 MHz	250	48.0

Measurement Data:

The WT operates using rechargeable batteries that are recharged by a desktop charger. This desktop charger connects to the AC mains; therefore, conducted emissions testing was performed on the charger while the WT was charging.

Test Point	Frequency MHz	Detector	Measured Level dBμV	Limit dBμV
Hot Lead	0.48	Quasi-Peak	39.9	48.0
	0.52	Peak	37.2	48.0
	0.71	Peak	37.2	48.0
	0.83	Peak	30.7	48.0
	1.38	Peak	24.2	48.0
	9.85	Peak	37.0	48.0
	12.05	Peak	31.3	48.0
	17.67	Peak	25.4	48.0
	18.47	Peak	27.0	48.0
	19.20	Peak	26.5	48.0
Neutral Lead	0.49	Quasi-Peak	40.9	48.0
	0.64	Peak	38.2	48.0
	0.89	Peak	30.6	48.0
	1.38	Peak	26.1	48.0
	9.89	Peak	36.4	48.0
	12.06	Peak	27.4	48.0
	18.48	Peak	25.5	48.0
	19.59	Peak	23.6	48.0
	20.07	Peak	22.7	48.0

EUT Configuration

The AC power of the desktop charger was connected to a LISN that was located inside of the anechoic chamber.

RESULT

In the configuration tested, the EUT complied with the requirements of the specification.

3.2.3 Antenna Requirement § 15.317

Demonstration of Compliance:

The WT uses a printed antenna that connects to the main board using special connectors. The WT will support up to two antennas for diversity purpose. Only one of the antennas is used at a given time. The same type as specified by the manufacturer can only replace these antennas.

§ 15.319 General Technical Requirements

3.2.4 Frequency of Operation § 15.319 (a)

Demonstration of Compliance:

The 9631A is an isochronous device that transmits from 1920 - 1930 MHz. The spectrum has been split into eight 1.25 MHz sub-bands starting with 1920-1921.25 MHz and ending with 1928.75-1930 MHz. The 9631A operates on the following channels:

Channel Number	Lower Edge (MHz)	Center Frequency (MHz)	Upper Edge (MHz)
0	1928.75	1929.375	1930.00
1	1927.50	1928.125	1928.75
2	1926.25	1926.875	1927.50
3	1925.00	1925.625	1926.25
4	1923.75	1924.375	1925.00
5	1922.50	1923.125	1923.75
6	1921.25	1921.875	1922.50
7	1920.00	1920.625	1921.25

The 9631A uses Time Division Multiple Access (TDMA) technology. Each channel is divided into 10 msec frame periods, this is further divided into twenty-four time-slots of 416 μsec. The frame is divided in half. The first twelve slots of the frame are downlink slots; (WFB to WT) and the second twelve slots are up-link slots (WT to WFB). Shown below is a diagram showing how the 10-msec frame is subdivided:

Slot 1	Slot 2		Slot 12	Slot 1	Slot 2		Slot 12
Downlink				Uplink			
10 msec							
416 μsec							

3.2.5 Digital Modulation Technique § 15.319 (b)

Demonstration of Compliance:

The 9631A uses a Differential Pi/4 QPSK digital modulation.

3.2.6 Peak Transmit Power and Emission Bandwidth § 15.319 (c)

Demonstration of Compliance:

The peak transmit power is determined by the following formula:

$$Peak\ Transmit\ Power\ =\ 100\ mW\ x\ \sqrt{BW}$$

BW = Emission Bandwidth in Hz.

The peak transmit power is required to be less than 19.7 dBm (as determined by the formula shown below).

$$Peak\ Transmit\ Power\ =\ 100\ mW\ x\ \sqrt{872000}\ =\ 93.38\ mW\ =\ 19.7\ dBM$$

Measurement Data:

The WT was tested as per ANSI C63.17-1998 Sections 6.1.2 and 6.1.3.

Handset (Antenna 0)

Frequency (MHz)	Maximum Peak Transmit Power (dBm)	Measured Emission Bandwidth (kHz)
1920.625	17.4	872.0
1925.625	17.4	876.0
1929.375	17.3	874.0

Handset (Antenna 1)

Frequency (MHz)	Maximum Peak Transmit Power (dBm)	Measured Emission Bandwidth (kHz)
1920.625	17.5	880.0
1925.625	17.5	882.0
1929.375	17.4	882.0

RESULT

In the configuration tested, the EUT complied with the requirements of the specification.

3.2.7 Power Spectral Density § 15.319 (d)

Requirement:

Power spectral density. Shall not exceed 3 milliwatts in any 3 kHz bandwidth as measured with a spectrum analyzer having a resolution bandwidth of 3 kHz.

3 mW = 4.7 dBm

Measurement Data:

The WT was tested as per ANSI C63.17-1998 Section 6.1.5

Handset (Antenna 0)

Frequency (MHz)	Maximum Power Spectral Density - Peak Detection (dBm)	Maximum Power Spectral Density - Sample Detection (dBm)
1920.625	3.5	-2.1
1925.625	3.4	-3.1
1929.375	3.5	-3.3

Handset (Antenna 1)

Frequency (MHz)	Maximum Power Spectral Density - Peak Detection (dBm)	Maximum Power Spectral Density - Sample Detection (dBm)
1920.625	3.7	-1.3
1925.625	3.6	-3.2
1929.375	3.7	-3.4

RESULT

In the configuration tested, the EUT complied with the requirements of the specification.

3.2.8 Directional Gain of Antenna § 15.319 (e)

Requirement:

The peak transmit power shall be reduced by the amount in decibels that the maximum directional gain of the antenna exceeds 3 dBi.

Demonstration of Compliance:

The maximum directional antenna gain for the WT is 2.0 dBi.

3.2.9 Spurious Emissions § 15.323 (d)

Requirement:

Emissions shall be attenuated below a reference power of 112 milliwatts as follows: 30 dB between the channel edges and 1.25 MHz above or below the channel. 50 dB between 1.25 and 2.5 MHz above or below the channel. And 60 dB at 2.5 MHz or greater above or below the channel. Systems that further sub-divide a 1.25 MHz channel into X sub-channels must comply with the following emission mask. In the bands between 1B and 2B measured from the center of the emission bandwidth the total power emitted by the device shall be at least 30 dB below the transmit power permitted for that device. In the bands between 2B and 3B measured from the center of the emission bandwidth the total power emitted by an intentional radiator shall be at least 50 dB below the transmit power permitted for that radiator. In the bands between 3B and 1.25 MHz channel edge the total power emitted by an intentional radiator in the measurement bandwidth shall be at least 60 dB below the transmit power permitted for that radiator. "B" is defined as the emission bandwidth of the device in hertz. Compliance with the emission limits is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

Measurement Data:

The WT was tested as per ANSI C63.17-1998 Section 6.1.6.

A diagram of the test configuration is enclosed in Appendix A and a list of reference codes for test equipment used is enclosed in Appendix B.

Test equipment used: 1.

The 9631A tunes up to 1930 MHz; therefore, in accordance with § 15.33 (b)(1), the EUT was tested from 30 MHz to 19.3 GHz, and in accordance with: § 15.31 (m) the EUT was tested with the transmitter tuned near the bottom of the spectrum and tuned near the top of the spectrum.

Out-of-Channel Emission (Conducted)
Handset (Antenna 0)

Transmitting on Channel 7 (1920.625 MHz)			
Frequency Range MHz	Frequency MHz	Corrected Level dBm	Criteria dBm
30 - 200	118.5	-50.6	-39.5
200 - 500	474.4	-61.8	-39.5
500 - 1000	801.2	-54.5	-39.5
1000 - 1800	1083.1	-63.7	-39.5
1800 - 1900	1896.7	-52.9	-39.5
1900 - 1917.50	1908.6	-58.8	-39.5
1917.50 - 1918.75	1918.4	-43.9	-29.5
1918.75 - 1920	1919.8	-27.1	-9.5
1921.25 - 1922.5	1921.3	-31.1	-9.5
1922.5 - 1923.75	1922.5	-54.5	-29.5
1923.75 - 1930	1924.1	-52.6	-39.5
1930 - 2000	1930.9	-59.1	-39.5
2000 - 4000	3842.0	-52.3	-39.5
4000 - 6000	4308.0	-71.6	-39.5
6000 - 8000	6572.0	-77.6*	-39.5
8000 – 10,000	9603.1	-77.8*	-39.5
10,000 – 12,000	11,523.7	-77.4*	-39.5
12,000 – 14,000	13,444.3	-72.4*	-39.5
14,000 – 16,000	15,365.0	-71.2	-39.5
16,000 – 18,000	17,285.6	-72.1*	-39.5
18,000 – 20,000	19,206.2	-67.5*	-39.5
* Noise Floor			

Transmitting on Channel 0 (1929.375MHz)			
Frequency Range MHz	Frequency MHz	Corrected Level dBm	Criteria dBm
30 - 200	118.7	-43.3	-39.5
200 - 500	474.2	-66.6	-39.5
500 - 1000	800.0	-48.6	-39.5
1000 - 1800	1083.1	-44.6	-39.5
1800 - 1900	1898.2	-62.5	-39.5
1900 - 1920	1918.5	-58.6	-39.5
1920 - 1926.25	1922.1	-54.5	-39.5
1926.25 - 1927.5	1927.4	-44.8	-29.5
1927.5 - 1928.75	1928.5	-22.8	-9.5
1930 - 1931.25	1930.0	-26.4	-9.5
1931.25 - 1932.5	1931.3	-55.2	-29.5
1932.5 - 2000	1932.5	-58.7	-39.5
2000 - 4000	3858.0	-60.0	-39.5
4000 - 6000	5788.0	-57.3	-39.5
6000 - 8000	7720.0	-65.1	-39.5
8000 – 10,000	9646.8	-77.8 *	-39.5
10,000 – 12,000	11,576.2	-77.4 *	-39.5
12,000 – 14,000	13,505.6	-72.4 *	-39.5
14,000 – 16,000	15,435.0	-71.2 *	-39.5
16,000 – 18,000	17,364.3	-72.1 *	-39.5
18,000 – 20,000	19,293.7	-67.5 *	-39.5
* Noise Floor			

Out-of-Channel Emission (Conducted)
Handset (Antenna 1)

Transmitting on Channel 7 (1920.625 MHz)			
Frequency Range MHz	Frequency MHz	Corrected Level dBm	Criteria dBm
30 - 200	110.2	-42.0	-39.5
200 - 500	329.3	-66.2	-39.5
500 - 1000	786.0	-52.4	-39.5
1000 - 1800	1069.9	-58.3	-39.5
1800 - 1900	1895.2	-56.2	-39.5
1900 - 1917.50	1917.2	-53.7	-39.5
1917.50 - 1918.75	1918.6	-44.1	-29.5
1918.75 - 1920	1919.8	-26.8	-9.5
1921.25 - 1922.5	1921.3	-31.5	-9.5
1922.5 - 1923.75	1923.0	-55.4	-29.5
1923.75 - 1930	1923.7	-56.5	-39.5
1930 - 2000	1940.9	-60.0	-39.5
2000 - 4000	2040.0	-68.1	-39.5
4000 - 6000	5760.0	-77.4*	-39.5
6000 - 8000	7684.0	-76.6*	-39.5
8000 – 10,000	9603.1	-77.8*	-39.5
10,000 – 12,000	11,523.7	-77.4*	-39.5
12,000 – 14,000	13,444.3	-72.4*	-39.5
14,000 – 16,000	15,365.0	-71.2	-39.5
16,000 – 18,000	17,285.6	-72.1*	-39.5
18,000 – 20,000	19,206.2	-67.5*	-39.5
* Noise Floor			

Transmitting on Channel 0 (1929.375MHz)			
Frequency Range MHz	Frequency MHz	Corrected Level dBm	Criteria dBm
30 - 200	118.6	-42.6	-39.5
200 - 500	475.7	-65.9	-39.5
500 - 1000	800.5	-52.0	-39.5
1000 - 1800	1083.1	-43.4	-39.5
1800 - 1900	1893.6	-63.4	-39.5
1900 - 1920	1908.5	-59.5	-39.5
1920 - 1926.25	1926.2	-55.3	-39.5
1926.25 - 1927.5	1927.4	-45.2	-29.5
1927.5 - 1928.75	1928.5	-23.2	-9.5
1930 - 1931.25	1930.0	-26.6	-9.5
1931.25 - 1932.5	1931.2	-54.1	-29.5
1932.5 - 2000	1932.9	-57.2	-39.5
2000 - 4000	3858.6	-51.6	-39.5
4000 - 6000	5787.6	-66.8	-39.5
6000 - 8000	7717.5	-79.2 *	-39.5
8000 – 10,000	9646.8	-77.8 *	-39.5
10,000 – 12,000	11,576.2	-77.4 *	-39.5
12,000 – 14,000	13,505.6	-72.4 *	-39.5
14,000 – 16,000	15,435.0	-71.2 *	-39.5
16,000 – 18,000	17,364.3	-72.1 *	-39.5
18,000 – 20,000	19,293.7	-67.5 *	-39.5
* Noise Floor			

Out-of-UPCS Band Emissions (Radiated)

See section 5.2.2 of this report for the radiated emissions data.

RESULT

In the configuration tested, the EUT complied with the requirements of the specification.

3.2.10 Frame Repetition Stability/Frame Period and Jitter § 15.323 (e)

Requirement:

The frame period (a set of consecutive time slots in which the position of each time slot can be identified by reference to a synchronizing source) of an intentional radiator operating in these sub-bands shall be 20 milliseconds or 10 milliseconds/X where X is a positive whole number. Each device that implements time division for the purposes of maintaining a duplex connection on a given frequency carrier shall maintain a frame repetition rate with a frequency stability of at least 50 parts per million (PPM). Each device which further divides access in time in order to support multiple communication links on a given frequency carrier shall maintain a frame repetition rate with a frequency stability of at least 10 PPM. The jitter (time-related, abrupt, spurious variations in the duration of the frame interval) introduced at the two ends of such a communication link shall not exceed 25 microseconds for any two consecutive transmissions. Transmissions shall be continuous in every time and spectrum window during the frame period defined for the device.

Measurement Data:

The 9631A was tested in accordance with ANSI C63.17-1998 Sections 6.2.3 and 6.2.4.

Test Performed	Criteria
Frame period	10 msec
Frame repetition stability	10 ppm
Jitter	12.5 μsec

Section 6.2.3

The 9631A was configured as specified in section 6.2.3. Both the mean values of the frame repetition rate and the standard deviation were recorded to determine the frame repetition stability. The data is shown below.

Frequency MHz	Standard Deviation Hz	Mean Hz	Frame Repetition Stability PPM
1929.375	0.00008866	200.00091875	1.33

Sample Calculation:

Frame Repetition Stability (PPM) = ((3 * Standard Deviation) / Frame Rate) * 10^6

Frame Rate Hz = 1 / 5 ms = 200 Hz

Section 6.2.4

The 9631A was configured as specified in section 6.2.4. The peak to peak, mean and standard deviation values of the frame period distribution were recorded to determine the frame period and jitter.

The mean value shall be the frame period and three times the standard deviation value of the jitter shall not be greater than 12.5 μsec. The data is shown below.

Frequency MHz	Standard Deviation μsec	Mean ms	Jitter μsec
1929.375	0.02180317	9.99995555826	0.07

Sample Calculation:

Jitter μsec = 3 * Standard Deviation

RESULT

In the configuration tested, the EUT complied with the requirements of the specification.

1.2.8 Frequency Stability § 15.323 (f)

Requirement:

The frequency stability of the carrier frequency of the intentional radiator shall be maintained within ±10 PPM over 1 hour or the interval between channel access monitoring, whichever is shorter. The frequency stability shall be maintained over a temperature variation of -20^0 to $+50^0$ C at normal supply voltage. And over a variation in the primary supply voltage of 85 percent, to 115 percent of the rated supply voltage at a temperature of

20^{0} C. For equipment that is capable only of operating from a battery, the frequency stability tests shall be performed using a new battery without any further requirement to vary supply voltage.

Measurement Data:

The 9631A was tested in accordance with ANSI C63.17-1998 Section 6.2.2.

The carrier frequency measurement at 20^{0} C (nominal voltage) was used as the reference for the measurements at the two extreme temperatures.

Temp C^{o}	Supply Voltage	Frequency of Carrier MHz	Measured Frequency MHz	Deviation PPM
-20	Nominal	1929.375	1929.32319575	1.15
20	Nominal	1929.375	1929.3254186	Reference
50	Nominal	1929.375	1929.31788056	3.91

SAMPLE CALCULATION

$$\text{Deviation ppm} = \frac{FR - FM}{FR} \times 10^{6}$$

FR = Reference frequency of the carrier at 20^{0} C
FM = Measured frequency of the carrier

RESULT

In the configuration tested, the EUT complied with the requirements of the specification.

Appendix A - Test Procedures

FCC Sections 15.319 (c) Peak Transmit Power, 15.319 (d) Power Spectral Density

The EUT was directly connected to the spectrum analyzer via the antenna output port as shown in the block diagram below. The peak transmit power, emission bandwidth and power spectral density were measured as per sections 6.1.2, 6.1.3 and 6.1.5 of ANSI C63.17-1998, while the base station and handset had a voice link established. The measurements were performed on two channels, as per 47 CFR 15.31(m), one near the bottom of the spectrum and one near the top of the spectrum.

The spectrum analyzer's resolution bandwidth and video bandwidth were set as follows:

Peak Transmit Power (Section 6.1.2)

RBW = 300 kHz
VBW = 1 MHz

Emission Bandwidth (Section 6.1.3)

RBW = 3 kHz
VBW = 10 kHz

Power Spectral Density (Section 6.1.5)

RBW = 3 kHz
VBW = 10 kHz

Test Configuration Block Diagram
(Sections 6.1.2, 6.1.3 and 6.1.5)

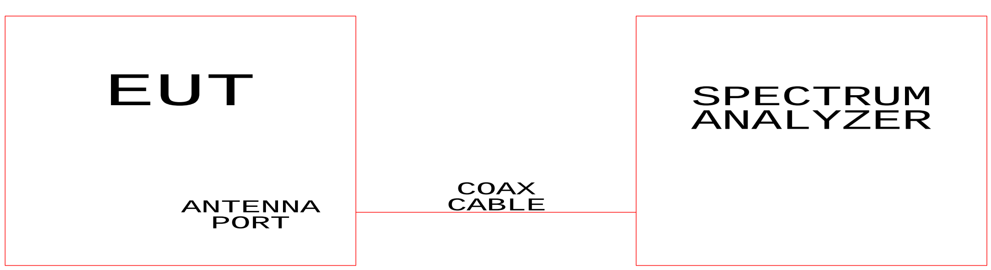


Exhibit 6

FCC Section 15.323 (d) Spurious Emissions

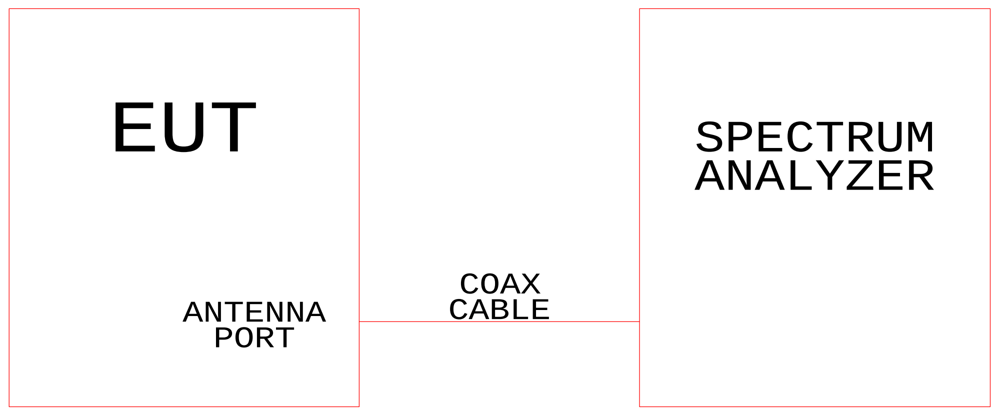
The EUT was directly connected to the spectrum analyzer via the antenna output port as shown in the block diagram below. The base station was connected to a computer that was used to control the base station to permit the base station and handset to transmit on predetermined channels. The spurious emissions were measured as per section 6.1.6 of ANSI C63.17-1998, while the base station and handset had a voice link established. The out-of-channel measurements were performed on two channels, as per 47 CFR 15.31(m), one near the bottom of the spectrum and one near the top of the spectrum. The out-of-sub-channel measurements were performed on two sub-channels, one near the bottom of the sub-channel and one near the top of the sub-channel.

The spectrum analyzer's resolution bandwidth and video bandwidth were set as follows:

Spurious Emissions (Section 6.1.6)

RBW = 3 kHz
VBW = 10 kHz

Test Configuration Block Diagram
(Section 6.1.6)



FCC Section 15.323 (e) Frame Period

The EUT was directly connected to the modulation domain analyzer via the antenna output port as shown in the block diagram below. The base station was connected to a computer that was used to control the base station to permit the base station and handset to transmit on predetermined channels. The frame period, frame repetition stability and jitter were measured as per sections 6.2.3 and 6.2.of ANSI C63.17-1998, while the base station and handset had a voice link established. The computer was used to log the results of the measurements.

Frame related measurements were allowed by the utilization of the modulation domain analyzer's "Envelope Trigger Output" port, which generates a TTL compatible signal that represents the envelope of the transmission bursts.

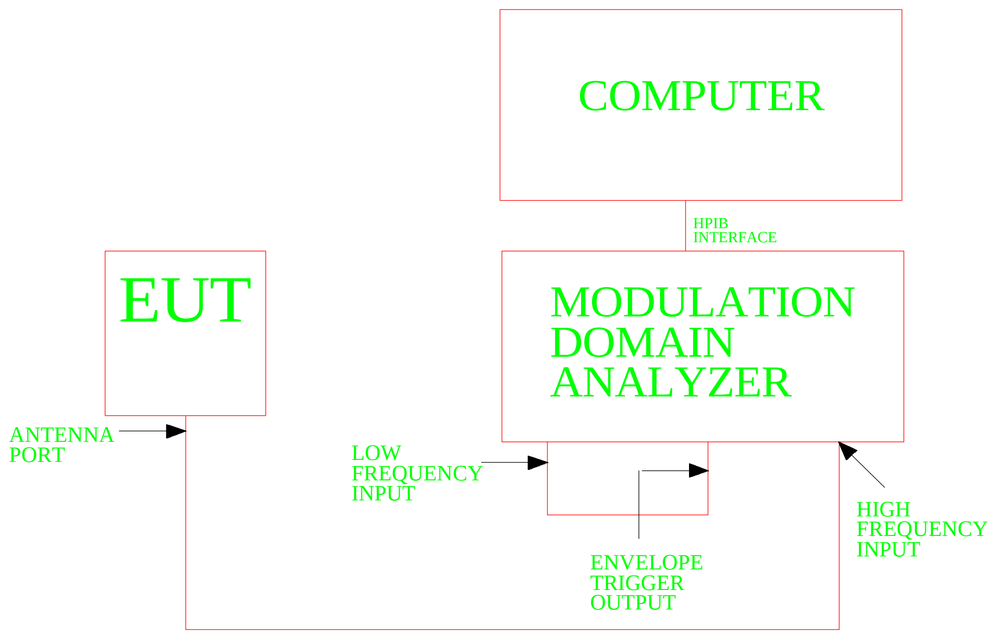
The modulation domain analyzer's settings were set as follows:

Frame Repetition Stability

Mode:	Frequency Measurement
x-axis:	Time
Time Setting:	500 ms
y-axis:	Frequency
Center Frequency:	200 Hz
Measurement Interval:	5 ms
No. of Measurements:	1000

Frame Period and Jitter

Mode:	Time Measurement
Y Axis:	Time
Center Time:	5 ms
X Axis:	Time
Time Setting:	500 ms
Measurement Interval:	1 ms
No. of Measurements:	1,000,000



FCC Section 15.323 (f) Carrier Frequency Stability

The EUT was placed inside of a temperature chamber and directly connected to the modulation domain analyzer via the antenna output port as shown in the block diagram below. The base station was connected to a computer that was used to control the base station to permit the base station and handset to transmit on predetermined channels. The carrier frequency stability was measured as per section 6.2.2 of ANSI C63.17-1998, while the base station and handset had a voice link established. The computer was used to log the results of the measurements.

The EUT was placed inside of the temperature chamber at 20^{0}C for one hour in order to stabilize the temperature of the chamber and the EUT. This measurement was recorded as a reference for the measurements at the two extreme temperatures and at the two extreme supply voltages using the modulation domain analyzer.

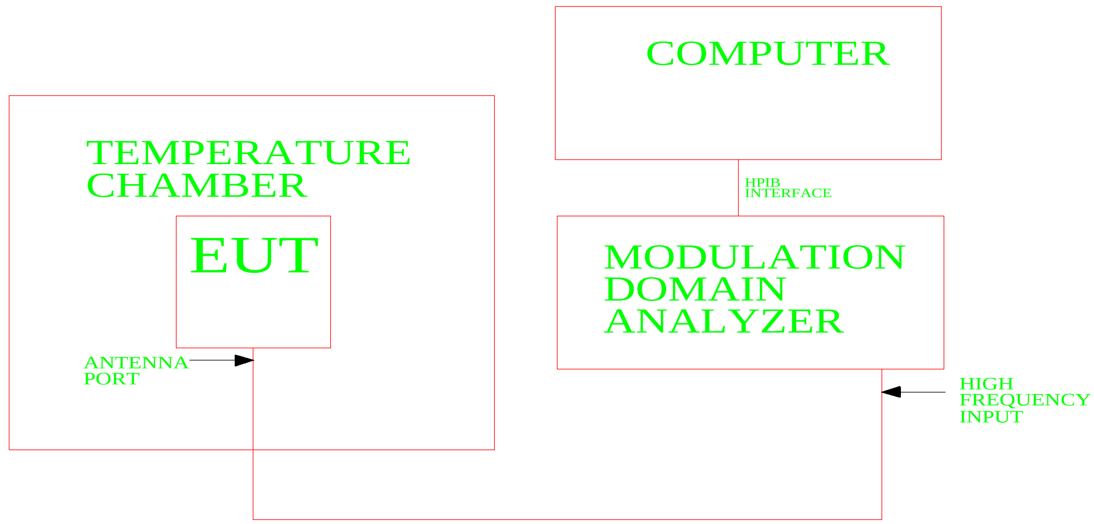
The modulation domain analyzer settings were set as follows:

Carrier Frequency Stability

Mode:	Frequency Measurement
Y Axis:	Frequency
Center Frequency:	1929.325 MHz

X Axis: Time
Time Setting: 625 ms
Measurement Interval: 10 ms
No. of Measurements: 5000

Test Configuration Block Diagram
(Section 6.2.2)



Appendix B - List of Test Equipment

Ref. No.	Instrument	Mfgt.	Model
1	Spectrum Analyzer	Hewlett Packard	8566B
2	Pre Amplifier	Hewlett Packard	8447D
3	Pre Amplifier	Hewlett Packard	8449B
4	Biconilog Antenna	EMCO	3142
5	Double Ridge Guide Antenna	EMCO	3115
6	Power Divider/Combiner	Hewlett Packard	11636A
7	Power Divider/Combiner	Hewlett Packard	87303C
8	Signal Generator	Hewlett Packard	8648C
9	Signal Generator	Hewlett Packard	8648C
10	Modulation Domain Analyzer	Hewlett Packard	53310A
11	Pulse Generator	Hewlett Packard	8012B
12	LISN	EMCO	3825/2
13	Transient Limiter	Hewlett Packard	11947A
14	Temperature Chamber	Tenney Inc.	Tenney Jr.
15	Oscilloscope	Tektronix	7603

An independent calibration laboratory following outlined calibration procedures calibrates all the equipment listed above every 12 months.