Exhibit 6: Test Report

TEST REPORT FROM:

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

Type of Report: Certification

TEST OF: S42

FCC ID: NRR-S4X

To Part 24 Subpart E and Part 2 Subpart J
of the FCC Rules and Regulations

Test Report Serial No: 73-7306

Applicant:

Siemens Mobile Phones A/S
Industrivej 30
DK-9490 Pandrup
Denmark

Date(s) of Test: June 5 - 7, 2000

Issue Date: September 14, 2000

Equipment Receipt Date: June 5, 2000

CERTIFICATION OF ENGINEERING REPORT

This report has been prepared by Communication Certification Laboratory to determine compliance of the device described below with the notification requirements of FCC Part 24, Subpart E. This report may be reproduced in full, partial reproduction may only be made with the written consent of the laboratory. The results in this report apply only to the sample tested.

- Applicant: Siemens Mobile Phones A/S
- Manufacturer: Flextronics A/S
- Brand Name: SIEMENS
- Model Number: S42
- FCC ID: NRR-S4X

On this 14th day of September 2000, 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.

Although NVLAP has recognized that the Communication Certification Laboratory EMC testing facilities are in good standing, NVLAP does not endorse the product described in this report.

COMMUNICATION CERTIFICATION LABORATORY

Checked by: William S. Hurst, P.E.
Vice President

Tested by: Roger J. Midgley
EMC Engineering Manager

SECTION 1.0 CLIENT INFORMATION

1.1 Client Information:

Company Name: Siemens Mobile Phones A/S
Industrivej 30
DK-9490 Pandrup
Denmark

Contact Name: Ole Rasmussen
Title: Team leader, Product Verification

1.2 Manufacturer:

Company Name: Flextronics A/S
Industrivej 30
DK-9490 Pandrup
Denmark

SECTION 2.0 EQUIPMENT UNDER TEST (EUT)

2.1 Identification of EUT:

Trade Name:	SIEMENS
Model Name or Number:	S42
Serial Number:	N/A
Options Fitted:	N/A
Country of Manufacture:	Denmark

2.2 Description of EUT:

The SIEMENS Series S42 is a triple-band mobile phone that is designed for use in both GSM 900/1800(Europe) and the PCS/GSM 1900 mode (USA). The mobile phone is marketed under the model numbers S40 and S42, the only difference is that the S42 is equipped with a flip up key guard, the internal electronics are identical; therefore, the S42 was tested as representative of both models.

The S42 was tested with the following accessories:

Description	Part Number
Handsfree Car Kit	02504.039
Cigarette Lighter Adapter	02504.023
Mains Adapter	02504.068
Head-set	02504.031
PC-Editor	02504.037

2.3 Modification Incorporated/Special Accessories on EUT:

There were no modifications or special accessories required to comply with the specification.

SECTION 3.0 TEST SPECIFICATION, METHODS & PROCEDURES

3.1 Test Specification:

Title: FCC PART 24, Subpart E (47 CFR 24).

Broadband Personal Communications Services (PCS)

Purpose of Test: The tests were performed to demonstrate Initial compliance.

3.2 Methods & Procedures (Applicable to the S42):

§ 24.51 (d) RF Hazard - (SAR)

Applicants for type acceptance of transmitters that operate in this service must determine that the equipment complies with IEEE C95.1-1991 (ANSI/IEEE C95.1-1992), “Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 200 GHz.” (SAR) Measurement methods are specified in IEEE C95.3-1991, “Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave.”

§ 2.1046 RF Power Output - § 24.232

§ 2.1046

(a) For transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in § 2.983 (d)(5).

§ 24.232

(a) Base Stations are limited to 1640 watts peak equivalent isotropically radiated power (e.i.r.p.) with an antenna height up to 300 meters HAAT. In no case may the peak output power of a base station transmitter exceed 100 watts.
(b) Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.

§ 2.1047 Modulation Characteristics

The S42 uses digital modulation; therefore, this section does not apply.

§ 2.1049 Occupied Bandwidth

§ 2.1049

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the following conditions:

(h) Transmitters employing digital modulation techniques - when modulated by an input signal such that its amplitude and symbol rate represent the maximum rated conditions under which the equipment will be operated. The signal shall be applied through an filter networks, pseudo-random generators or other devices required in normal service. Additionally, the occupied bandwidth shall be shown for operation with any devices used for modifying the spectrum when such devices are optional at the discretion of the user.

(i) Transmitters designed for other types of modulation - when modulated by an appropriate signal of sufficient amplitude to be representative of the type of service in which used. A description of the input signal should be supplied.

§ 2.1051 Spurious Emissions at Antenna Terminals - § 24.238

§ 2.1051

The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminal when properly loaded with a suitable artificial antenna.

§ 24.238 (a)

(a) On any frequency outside a licensee’s frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 plus 10 log (P) dB.

Criteria

The reference level for spurious emissions at the antenna terminals was taken from the measured output power 28.8 dBm (0.759 Watts); therefore, the spurious must be attenuated at least 43 + 10 $\log_{10}$ (0.759) = 41.8 dB. The measured output power was 28.0 dBm therefore, the criteria is 28.8 - 41.8 = -13.0 dBm.

§ 2.1053 Field Strength of Spurious Radiation - § 24.238

§ 2.1053

Measurements shall be made to detect spurious emission that may be radiated directly from the cabinet, control circuits, power leads, or intermediate circuit elements under normal conditions of installation and operation.

§ 24.238 (a)

(a) On any frequency outside a licensee’s frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 plus 10 log (P) dB.

Criteria

Field strength measurements of radiated spurious emission that may be radiated directly from the cabinet, control circuits, power leads, or intermediate circuit elements must not exceed 43 + 10 $\log_{10}$ (mean output power in watts).

The reference level for spurious radiation was taken at an ideal dipole excited by the rated output power according to the following relationship:

$$E = \frac{\sqrt{(49.2)(Pt)}}{R}$$

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Note: Reference Data for Radio Engineers, Pg. 676. International Telephone and Telephone Corporation, Fourth Edition.

Where E = electric Field Intensity in Volts/Meter
Pt = Transmitter Power in Watts
R = Measurements distance in Meters

Field Strength Limit (0.759 Watts)

$$E = \frac{\sqrt{(49.2)(0.759)}}{3} = 2.04\ Volts/Meter = 126.2\ dBuV/m$$

In this case, the rated power of 0.759 watts requires a minimum attenuation of 43 + 10 log 0.759 = 41.8 dB below the reference level of 126.2 $dB\mu V/m$ calculated above; therefore, the criteria is 84.4 $db\mu V/m$ (126.2 - 41.8).

§ 2.1055 Frequency Stability - § 24.235

§ 2.1055

(a) The frequency stability shall be measured with variation of ambient temperature as follows:

(1) From -30^0 to $+50^0$ centigrade for all equipment except that specified in paragraphs (a)(2) and (3) of this section.

(b) Frequency measurements shall be made at the extremes of the specified temperature range and at intervals of not more than 10^0 centigrade through the range. A period of time sufficient to stabilize all of the components of the oscillator circuit at each temperature level shall be allowed prior to frequency measurement. The short-term transient effects on the frequency of the transmitter due to keying (except for broadcast transmitters) and any heating element cycling normally occurring at each ambient temperature level also shall be shown. Only the portion or portions of the transmitter containing the frequency determining and stabilizing circuitry need be subjected to the temperature variation test.

(d) The frequency stability shall be measured with variation of primary supply voltage as follows:

(2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery operation end point which

shall be specified by the manufacturer.

§ 24.235

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

3.2.3 Test Procedure

The testing was performed according to the procedures in ANSI C63.4 (1992). Line conducted and radiated emissions' testing was performed at CCL's anechoic chamber located in Salt Lake City, Utah. This site has been fully described in a report submitted to the FCC, and was accepted in a letter dated March 6, 1999 (31040/SIT).

CCL participates in the National Voluntary Laboratory Accreditation Program (NVLAP) and has been accepted under NVLAP Lab Code:100272-0, which is effective until September 30, 2001.

For radiated emissions testing that are performed at distances closer than the specified distance, an inverse proportionality factor of 20 dB per decade is used to normalize the measured data for determining compliance.

SECTION 4.0 OPERATION OF EUT DURING TESTING

4.1 Operating Environment:

Power Supply: 3.7 VDC from battery
AC Mains Frequency: N/A
Current Rating: 650 mAh

4.2 Operating Modes:

Each mode of operation was exercised to produce worst case emissions. The S42 was tested as representative of both the models listed in section 2.2. The worst case emissions were with the S42 powered up in the transmit mode.

4.3 EUT Exercise Software:

The S42 used internal firmware to produce the worst case emissions.

SECTION 5.0 SUMMARY OF TEST RESULTS

5.1 FCC PART 24, Subpart E

5.1.1 Summary of Tests:

Section	Test Performed	Frequency Range (MHz)	Result
24.232 / 2.1046	Maximum Transmitter Power	1850 - 1910	Complied
2.1047	Modulation Characteristics	1850 - 1910	Complied
2.1049	Emission Bandwidth	1850 - 1910	Complied
24.238 / 2.1051	Unwanted Radiation (Antenna Conducted Spurious)	30 – 20,000	Complied
24.238 / 2.1053	Unwanted Radiation (Radiated Spurious)	30 – 20,000	Complied
24.235 / 2.1055	Frequency Stability	1850 - 1910	Complied

5.2 Result

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

SECTION 6.0 MEASUREMENTS, EXAMINATIONS AND DERIVED RESUTLS

6.1 General Comments:

This section contains the test results only. Details of the test methods used and a list of the test equipment used during the measurements can be found in Appendix 1 of this report.

6.2 Test Results:

The S42 operates in Blocks A through F from 1850 MHz to 1910 MHz; therefore, testing was performed with the S42 tuned to 1850.2 MHz, 1877.6 MHz and 1909.8 MHz. Complete test procedures are contained in Appendix 2 of this report.

6.3 RF Power Output

Transmitting at 1850.2 MHz Channel 512			
Power Level	Nominal (dBm)	Measured (dBm)	Difference (dB)
0	30.0	28.8	-1.2
1	28.0	27.1	-0.9
2	26.0	25.4	-0.6
3	24.0	23.5	-0.5
4	22.0	21.6	-0.4
5	20.0	19.7	-0.3
6	18.0	17.9	-0.1
7	16.0	15.9	-0.1
8	14.0	14.2	0.2
9	12.0	12.0	0.0
10	10.0	10.0	0.0
11	8.0	8.0	0.0
12	6.0	7.7	1.7
13	4.0	6.3	2.3
14	2.0	5.1	3.1
15	0.0	3.6	3.6

Transmitting at 1877.6 MHz Channel 649			
Power Level	Nominal (dBm)	Measured (dBm)	Difference (dB)
0	30.0	28.5	-1.5
1	28.0	26.9	-1.1
2	26.0	25.1	-0.9
3	24.0	23.2	-0.8
4	22.0	21.3	-0.7
5	20.0	19.4	-0.6
6	18.0	17.6	-0.4
7	16.0	15.7	-0.3
8	14.0	13.8	-0.2
9	12.0	11.7	-0.3
10	10.0	9.7	-0.3
11	8.0	7.8	-0.2
12	6.0	7.3	1.3
13	4.0	6.0	2.0
14	2.0	4.8	2.8
15	0.0	3.3	3.3

Transmitting at 1909.8 MHz Channel 810			
Power Level	Nominal (dBm)	Measured (dBm)	Difference (dB)
0	30.0	28.4	-1.6
1	28.0	26.7	-1.3
2	26.0	25.0	-1.0
3	24.0	23.0	-1.0
4	22.0	21.0	-1.0
5	20.0	19.2	-0.8
6	18.0	17.4	-0.6
7	16.0	15.5	-0.5
8	14.0	13.6	-0.4
9	12.0	11.4	-0.6
10	10.0	9.4	-0.6
11	8.0	7.5	-0.5
12	6.0	7.1	1.1
13	4.0	5.7	1.7
14	2.0	4.5	2.5
15	0.0	2.9	2.9

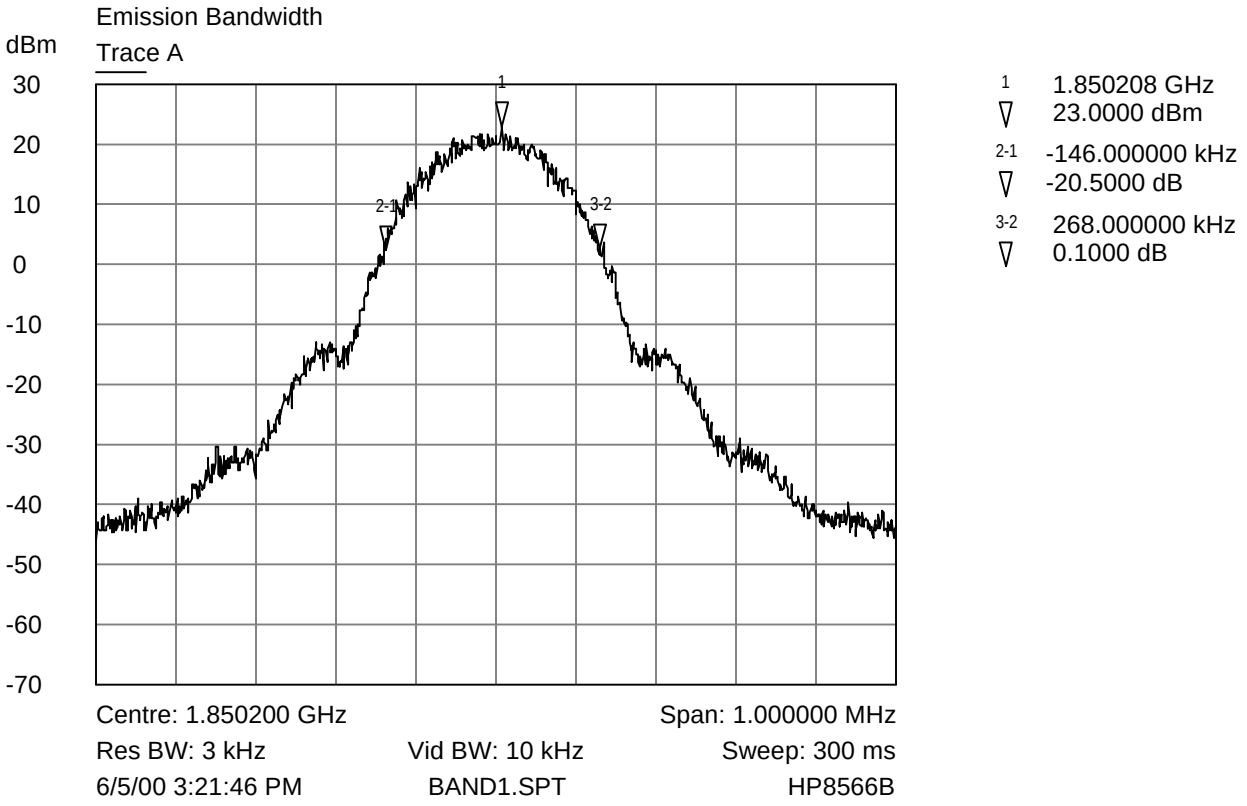
6.4 Modulation Characteristics

The S42 uses digital modulation; therefore, this section does not apply.

6.5 Occupied Bandwidth

Enclosed below are the bandwidth measurements and the plots for the S42.

Frequency (MHz)	Bandwidth (kHz)
1850.2	268.0
1877.6	270.0
1909.8	274.0

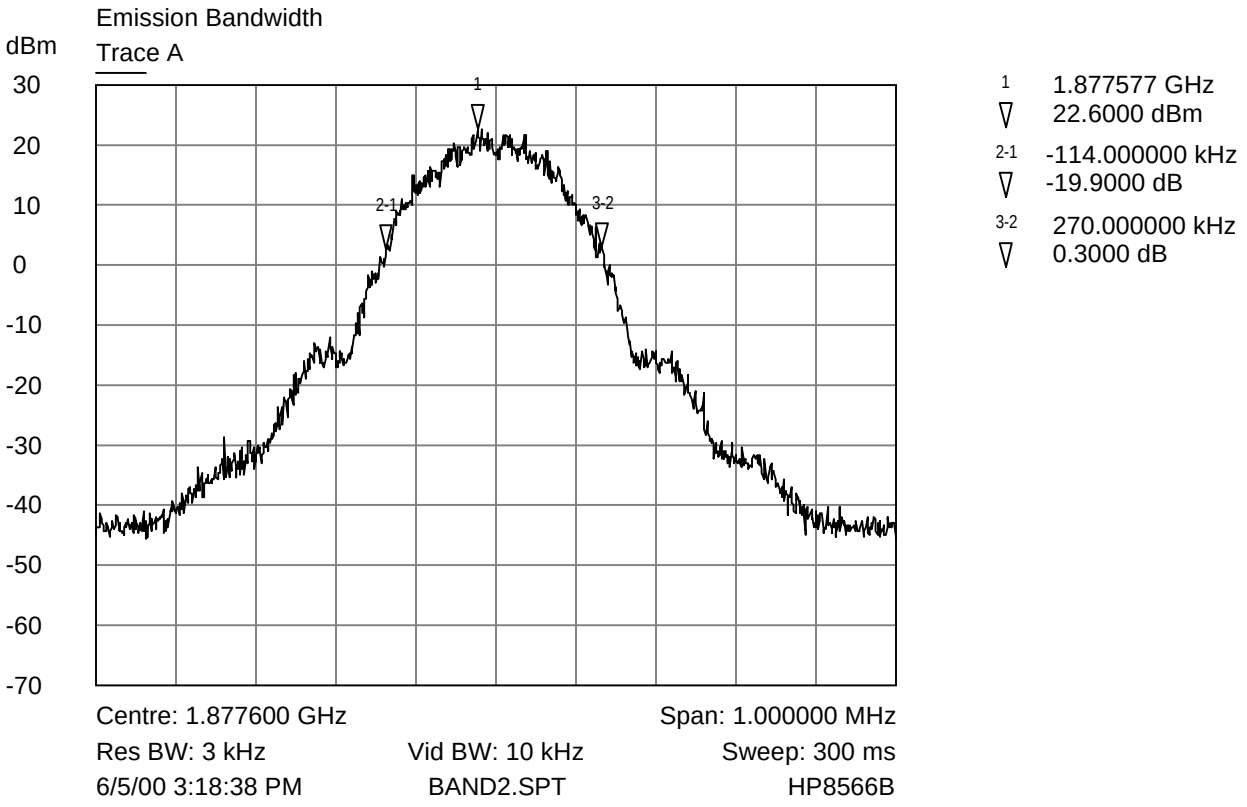


RF Output Power (Low End of Band)

Trace A 30.5 dB Offset (30 dB Attenuator and Cable)

Bandwidth Plot – Low end of band

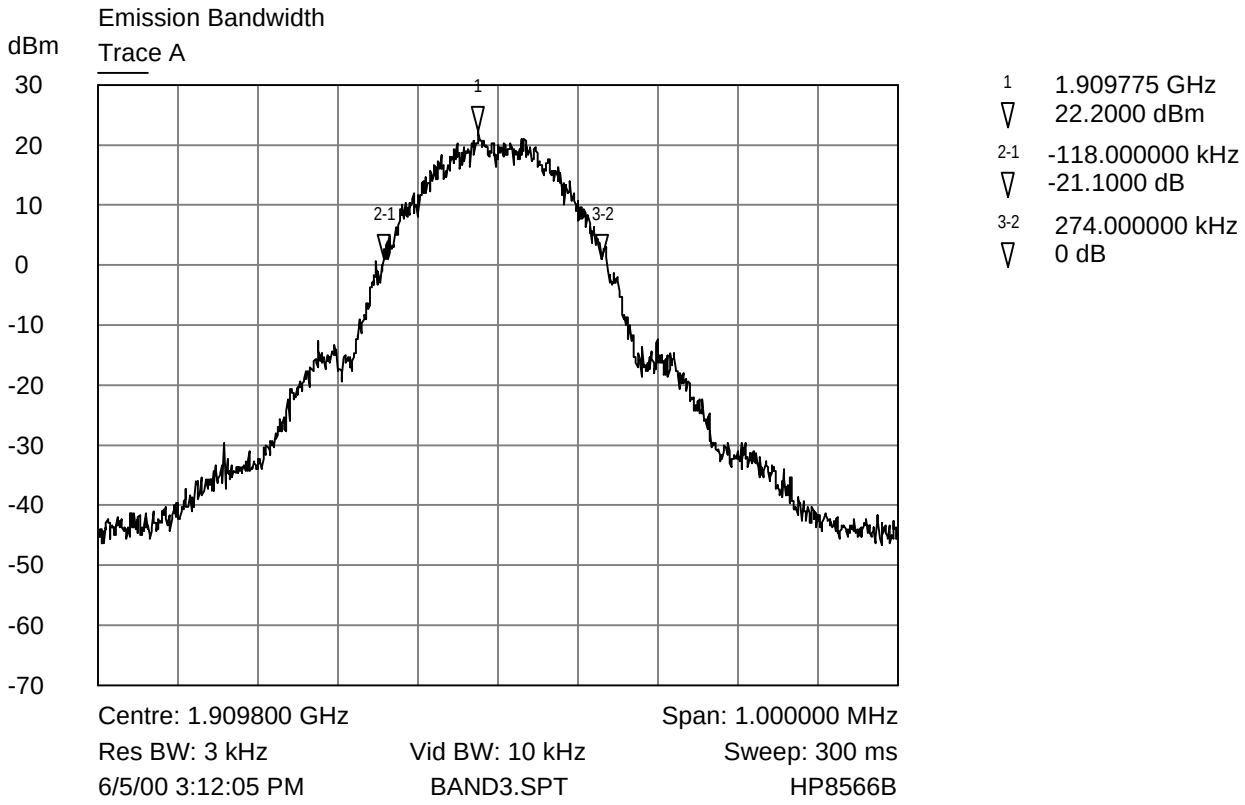
Exhibit 6



RF Output Power (Middle of Band)

Trace A 30.5 dB Offset (30 dB Attenuator and Cable)

Bandwidth Plot – Middle of band



RF Output Power (High End of Band)

Trace A 30.5 dB Offset (30 dB Attenuator and Cable)

Bandwidth Plot – High end of band

6.6 Conducted Spurious Emissions

Conducted spurious emissions testing was performed with the device tuned to the channel closest to the lower and upper band edge.

Measurements within the 1 MHz band immediately outside and adjacent to the frequency block were determined to not be applicable to this type of wideband modulation; therefore, the measurements were performed using a 10 kHz RBW and 30 kHz VBW. A 20 dB correction factor was added to the reading obtained using the 10 kHz RBW to compensate for the difference between the specified 1 MHz and the 10 kHz RBW used during measurements.

Transmitting at 1850.2 MHz			
Frequency Range (MHz)	Frequency (MHz)	Corrected Level (dBm)	Criteria (dBm)
30 - 200	39.5	-23.7	-13.0
200 - 500	435.2	-42.8	-13.0
500 - 1000	964.7	-33.6	-13.0
1000 - 1840	1819.8	-36.3	-13.0
1840 - 1849 **	1848.6	-21.1 See Note 1	-13.0
1849 - 1850 **	1849.9	-17.1	-13.0
1910 - 1911 **	1922.7	-35.0	-13.0
1911 - 2000	1954.7	-35.7	-13.0
2000 - 4000	2828.0	-25.1	-13.0
4000 - 6000	5812.0	-29.4	-13.0
6000 - 8000	7660.0	-26.6	-13.0
8000 - 20,000	19,270.0	-42.1 *	-13.0

* Noise Floor

** RBW 10 kHz, VBW 30 kHz

Note 1: A 20 dB correction was added to compensate for the difference between the specified 1 MHz and measured 10 kHz RBW.

Exhibit 6

Transmitting at 1909.8 MHz			
Frequency Range (MHz)	Frequency (MHz)	Corrected Level (dBm)	Criteria (dBm)
30 - 200	99.1	-25.2	-13.0
200 - 500	426.5	-34.1	-13.0
500 - 1000	858.0	-35.4	-13.0
1000 - 1849	1052.6	-35.0	-13.0
1849 - 1850 **	1849.6	-55.2	-13.0
1910 - 1911 **	1910.1	-18.3	-13.0
1911 - 1920 **	1911.2	-22.3 See Note 1	-13.0
1920 - 2000	1995.4	-35.8	-13.0
2000 - 4000	3819.6	-31.0	-13.0
4000 - 6000	5848.0	-31.3	-13.0
6000 - 8000	6404.0	-28.8	-13.0
8000 - 20,000	18,960.0	-42.8 *	-13.0

* Noise Floor

** RBW 10 kHz, VBW 30 kHz

Note 1: A 20 dB correction was added to compensate for the difference between the specified 1 MHz and measured 10 kHz RBW.

6.7 Radiated Spurious Emissions

The radiated spurious emissions was tested with all the accessories listed in Section 2.2 (Description of EUT). The worst case emissions were with the S42 connected to the headset. The data below represents worst case emissions.

Transmitting at 1850.2 MHz					
Frequency MHz	Polarity H/V	Uncorr Level $dB\mu V$	Correction Factor dB	Corrected Level $dB\mu V/m$	Criteria $dB\mu V/m$
3700.4	V	35.1	41.4	76.5	84.4
5550.6	V	17.2	47.4	64.6	84.4
7400.8 *	V	18.1	45.2	63.3	84.4
9251.0 *	V	14.4	54.2	68.6	84.4
3700.4	H	36.7	41.4	78.1	84.4
5550.6	H	17.9	47.4	66.5	84.4
7400.8	H	19.3	45.2	64.5	84.4
9251.0 *	H	14.4	54.2	68.6	84.4

* Noise Floor

Note 1: There were no emissions detected above 10,000 MHz.

Note 2: All the radiated emissions detected between 30 MHz and 1000 MHz were greater than 20 dB below the criteria.

Transmitting at 1877.6 MHz					
Frequency MHz	Polarity H/V	Uncorr Level $dB\mu V$	Correction Factor dB	Corrected Level $dB\mu V/m$	Criteria $dB\mu V/m$
3755.2	V	35.7	41.5	77.2	84.4
5632.8	V	15.1	47.8	62.9	84.4
7510.4	V	19.5	45.4	64.9	84.4
9388.0 *	V	14.6	54.9	69.5	84.4
3755.2	H	34.0	41.5	75.5	84.4
5632.8	H	18.6	47.8	66.4	84.4
7510.4	H	20.2	45.4	65.4	84.4
9388.0 *	H	14.6	54.9	69.5	84.4

* Noise Floor

Note 1: There were no emissions detected above 10,000 MHz.

Note 2: All the radiated emissions detected between 30 MHz and 1000 MHz were greater than 20 dB below the criteria.

Transmitting at 1909.8 MHz					
Frequency MHz	Polarity H/V	Uncorr Level $dB\mu V$	Correction Factor dB	Corrected Level $dB\mu V/m$	Criteria $dB\mu V/m$
3819.6	V	26.0	41.7	67.7	84.4
5729.4	V	15.4	48.2	63.6	84.4
7639.2	V	17.1	45.8	62.9	84.4
9549.0 *	V	15.3	55.9	71.2	84.4
3819.6	H	28.8	41.7	70.5	84.4
5729.4	H	17.5	48.2	65.7	84.4
7639.2	H	20.4	45.8	66.2	84.4
9549.0 *	H	15.3	55.9	71.2	84.4

* Noise Floor

Note 1: There were no emissions detected above 10,000 MHz.

Note 2: All the radiated emissions detected between 30 MHz and 1000 MHz were greater than 20 dB below the criteria.

Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor from the measured reading. The basic equation with a sample calculation is as follows:

Calculation: Corr. Level ($dB\mu V$) = Uncorr Level ($dB\mu V$) + Correction Factor (dB)
Correction Factor = Antenna Factor (dB) + Cable Factor (dB)

Assume a receiver reading of 32.5 $dB\mu V$ is obtained. The Antenna Factor of 14.4 and a Cable Factor of 1.1 is added, giving field strength of 48.0 $dB\mu V$.

6.8 Frequency Stability

The S42 operates in Blocks A through F from 1850 MHz to 1910 MHz; therefore, testing was performed with the S42 tuned to 1850.5 MHz.

Transmitting at 1850.2 MHz				
Temp (C^0)	Transmit Frequency (MHz)	Measured Frequency Mean (MHz)	Deviation (ppm)	Criteria (ppm)
-30.0	1850.2	1850.204160	2.25	N/A
-20.0	1850.2	1850.202253	1.22	N/A
-10.0	1850.2	1850.203913	2.11	N/A
0.0	1850.2	1850.203118	1.69	N/A
10.0	1850.2	1850.203633	1.96	N/A
20.0 (3.3 VDC 85% of Rated)	1850.2	1850.200154	0.08	N/A
20.0 (3.7 VDC Rated Voltage)	1850.2	1850.199579	-0.23	N/A
20.0 (4.3 VDC 115% of Rated)	1850.2	1850.1996241	-0.20	N/A
30.0	1850.2	1850.195557	-2.40	N/A
40.0	1850.2	1850.203845	2.08	N/A
50.0	1850.2	1850.204691	2.54	N/A

Sample Calculation

$$\text{Deviation (percent)} = \frac{FM - TF}{TF} \times 10^6$$

FM = Frequency Measured
TF = Intended Transmit Frequency

Exhibit 6

APPENDIX 1 TEST PROCEDURES AND TEST EQUIPMENT

Radiated Interference Emissions:

The radiated emission from the intentional radiator was measured using a spectrum analyzer with a quasi-peak adapter for peak and quasi-peak readings. A preamplifier with a fixed gain of 26 dB and a power amplifier with a fixed gain of 22 dB were used to increase the sensitivity of the measuring instrumentation. The quasi-peak adapter uses a bandwidth of 120 kHz, with the spectrum analyzer's resolution bandwidth set at 1 MHz, for readings in the 30 to 1000 MHz frequency range. For peak emissions above 1000 MHz the spectrum analyzer’s resolution bandwidth was set to 1 MHz and the video bandwidth was set to 3 MHz. For average emissions above 1000 MHz the spectrum analyzer’s resolution bandwidth was set to 1 MHz and the video bandwidth was set to 1 Hz.

A biconilog antenna was used to measure the frequency range of 30 to 1000 MHz and a Double Ridge Guide Horn antenna was used to measure the frequency range 1 GHz to 10 GHz, at a distance of 3 meters from the EUT. The readings obtained by these antennas are correlated to the levels obtained with a tuned dipole antenna by adding antenna factors.

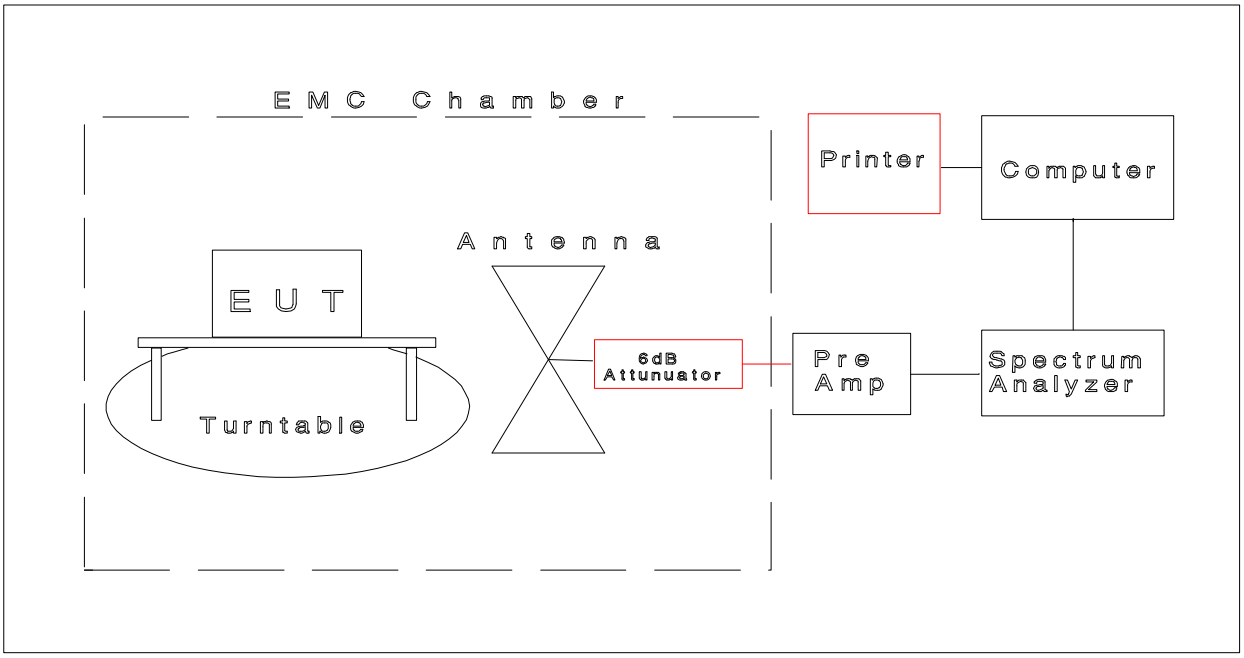
The configuration of the intentional radiator was varied to find the maximum radiated emission. The EUT was connected to the peripherals listed in Section 2.4 via the interconnecting cables listed in Section 2.5. These interconnecting cable were manipulated manually by a technician to obtain worst case radiated emissions. The intentional radiator was rotated 360 degrees, and the antenna height was varied from 1 to 4 meters to find the maximum radiated emission. Where there was multiple interface ports all of the same type, cables are either placed on all of the ports or cables added to these ports until the emissions do not increase by more than 2 dB.

Desktop intentional radiator is measured on a non-conducting table one meter above the ground plane. The table is placed on a turntable, which is level with the ground plane. The turntable has slip rings, which supply AC power to the intentional radiator. For equipment normally placed on floors, the equipment shall be placed directly on the turntable.

Type of Equipment	Manufacturer	Model Number	Serial Number
Anechoic Chamber	CCL	N/A	N/A
Test Software	CCL	Radiated Emissions	Revision 1.3
Spectrum Analyzer	Hewlett Packard	8566B	2230A01711
Quasi-Peak Detector	Hewlett Packard	8565A	3107A01582
Biconilog Antenna	EMCO	3141	1045
Double Ridged Guide Antenna	EMCO	3115	9409-4355
Radiated Emissions Cable Anechoic Chamber	CCL	Cable B	N/A
Pre-Amplifier	Hewlett Packard	8447D	1937A03151
Power-Amplifier	Hewlett Packard	8447E	2434A01975
6 dB Attenuator	Hewlett Packard	8491A	32835

All the equipment listed above is calibrated every 12 months by an independent calibration laboratory or by CCL personal following outlined calibration procedures.

Radiated Emissions Test



Line Conducted Emissions:

The line-conducted emission from the digital apparatus was measured using a spectrum analyzer with a quasi-peak adapter for peak, quasi-peak and average readings. The quasi-peak adapter uses a bandwidth of 9 kHz, with the spectrum analyzer's resolution bandwidth set at 100 kHz, for readings in the 450 kHz to 30 MHz frequency range.

The line conducted emissions measurements are performed in a screen room using a (50 Ω/50 μH) Line Impedance Stabilization Network (LISN).

Where mains flexible power cords are longer than 1 m, the excess cable is folded back and forth as far as possible so as to form a bundle not exceeding 0.4 m in length.

Where the EUT is a collection of digital apparatus with each digital apparatus having its own power cord, the point of connection for the LISN is determined from the following rules:

a) Each power cord, which is terminated in a mains supply plug,

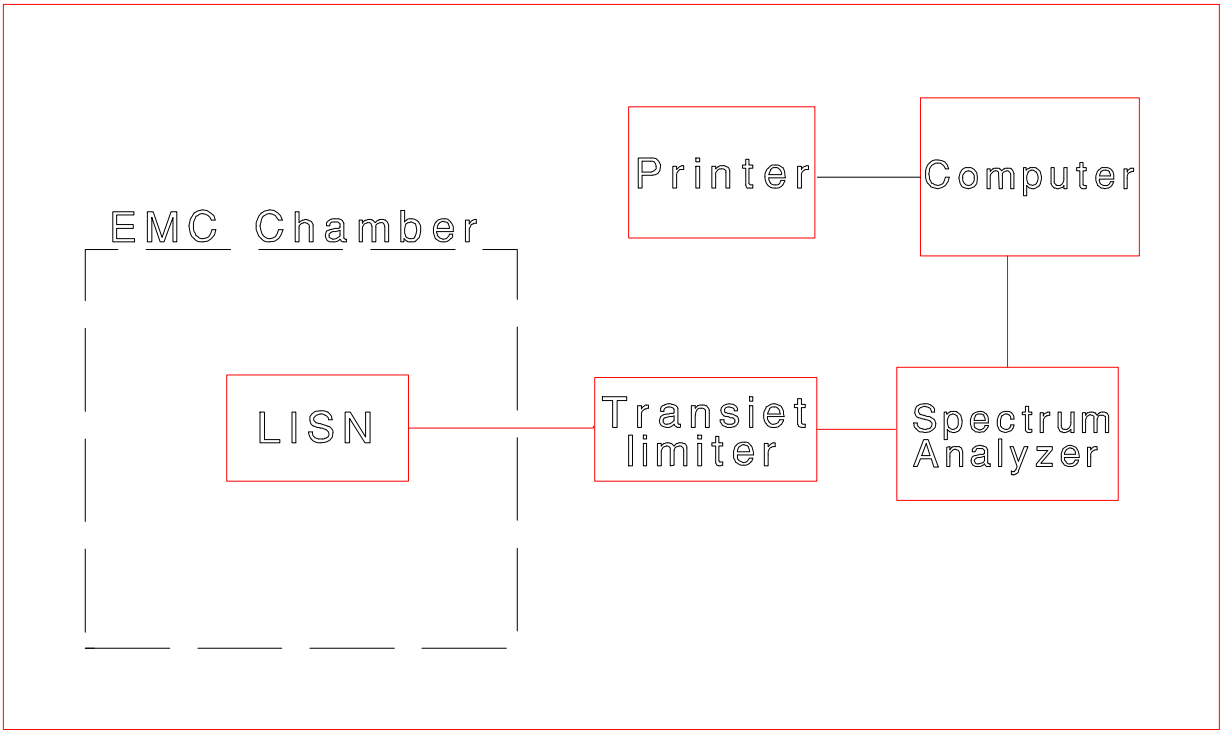
shall be tested separately.
b) Power cords, which are not specified by the manufacturer to be connected via a host unit, shall be tested separately.
c) Power cords which are specified by the manufacturer to be connected via a host unit or other power supplying equipment shall be connected to that host unit and the power cords of that host unit connected to the LISN and tested.

Desktop digital apparatus are placed on a non-conducting table at least 80 cm from the metallic floor. The equipment is placed a minimum of 40 cm from all walls. Floor standing equipment is placed directly on the earth grounded floor.

Type of Equipment	Manufacturer	Model Number	Serial Number
Anechoic Chamber	CCL	N/A	N/A
Test Software	CCL	Conducted Emissions	Revision 1.2
Spectrum Analyzer	Hewlett Packard	8566B	2230A01711
Quasi-Peak Detector	Hewlett Packard	8565A	3107A01582
LISN	EMCO	3825/2	9507-1893
Conductance Cable Anechoic Chamber	CCL	Cable A	N/A
Transient Limiter	Hewlett Packard	11947A	3107A00895

All the equipment listed above is calibrated every 12 months by an independent calibration laboratory or by CCL personal following outlined calibration procedures.

Line Conducted Emissions Test



FCC Sections 24.232 and 24.238 Peak Transmit Power, Bandwidth and Antenna Conducted Spurious Emissions

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 antenna conducted spurious emissions were measured as per sections 2.985, 2.989 and 2.991. The measurements were performed on three channels, as per 47 CFR 15.31(m), one near the bottom of the spectrum, one near the middle of the spectrum and one near the top of the spectrum. The S42 was tested with one time slot active, this represents a typical configuration.

Testing for these sections were performed as per ANSI-C63.4 1992, Methods of Measurement of radio-noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz.

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

Exhibit 6

Peak Transmit Power

RBW = 1 MHz
VBW = 3 MHz

Emission Bandwidth

RBW = 3 kHz
VBW = 10 kHz

Antenna Conducted Spurious Emissions

RBW = 1 MHz
VBW = 3 MHz

Type of Equipment	Manufacturer	Model Number	Serial Number
Spectrum Analyzer	Hewlett Packard	8566B	2230A01711
Quasi-Peak Detector	Hewlett Packard	8565A	3107A01582
Low Loss Cable (1 dB)	N/A	N/A	N/A

All the equipment listed above is calibrated every 12 months by an independent calibration laboratory or by CCL personal following outlined calibration procedures.

Test Configuration Block Diagram

Exhibit 6

FCC Section 24.235 Carrier Frequency Stability

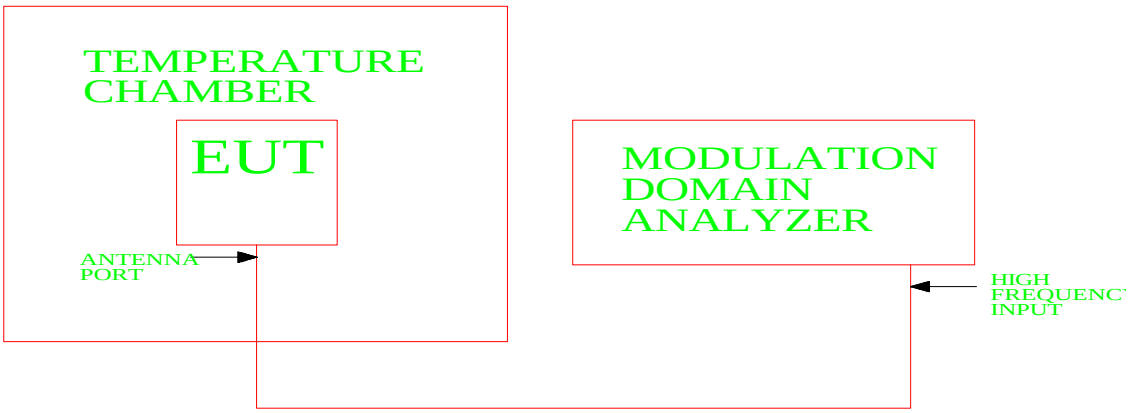
The EUT was placed inside of a temperature chamber and directly connected to the modulation domain analyzer via the antenna output port as shown in the block diagram below. The handset was connected to a computer that was used to control the handset to permit it to transmit on predetermined channels. The carrier frequency stability was measured as per section 6.2.2 of ANSI C63.17-1997 Editor's Draft 2.A (January 24, 1997).

The EUT was placed inside of the temperature chamber at 20^0C 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 other temperatures and the battery voltage extremes using the modulation domain analyzer.

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

Carrier Frequency Stability

Mode:	Frequency Measurement
Y Axis:	Frequency
Center Frequency:	nominal carrier center frequency
X Axis:	Time
Time Setting:	625 μs
Measurement Interval:	10 μs
No. of Measurements:	1000
Trigger:	RF Envelope



Type of Equipment	Manufacturer	Model Number	Serial Number
Modulation Domain Analyzer	Hewlett Packard	53310A	3121A00765
Low Loss Cable (1 dB)	N/A	N/A	N/A
Temperature Chamber	Tenney Engineering, Inc.	Tenney Jr.	11184-83

All the equipment listed above is calibrated every 12 months by an independent calibration laboratory or by CCL personal following outlined calibration procedures.