



Test Report:

2W04710.1

Applicant:

VTECH Engineering Canada
200-7671 Alderbridge Way
Richmond, B.C.
V6X 1Z9

**Equipment Under Test:
(EUT)**

AT&T 1430MK2 Cordless Telephone

FCC ID:

Base: EW780-5125-B01
Handset: EW780-5125-H01

In Accordance With:

FCC Part 15, Subpart C, 15.249
For 900 MHz & 2400 MHz Cordless Telephones

Tested By:

Nemko Canada Inc.
3325 River Road, R.R. 5
Ottawa, Ontario K1V 1H2

Authorized By:

R. Grant, Wireless Group Manager

Date:

January 29, 2002

Total Number of Pages:

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EQUIPMENT: AT&T 1430MK2 Cordless Telephone

FCC ID: Base: EW780-5125-B01 & Handset: EW780-5125-H01

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EQUIPMENT: AT&T 1430MK2 Cordless Telephone

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Section 1. Summary Of Test Results

General

All measurements are traceable to national standards.

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 15.249. All tests were conducted using measurement procedure ANSI C63.4-1992. Radiated Emissions were made on an open area test site. A description of the test facility is on file with the FCC.

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

THE FOLLOWING DEVIATIONS FROM, ADDITIONS TO, OR EXCLUSIONS FROM THE TEST SPECIFICATIONS HAVE BEEN MADE.

See " Summary of Test Data".



TESTED BY:

Glen Westwell, Wireless Technologist

DATE: January 29, 2002

Nemko Canada Inc., a testing laboratory, is accredited by the Standards Council of Canada. The tests included in this report are within the scope of this accreditation. The results apply only to the samples tested.

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This report applies only to the items tested.

*EQUIPMENT: AT&T 1430MK2 Cordless Telephone**FCC ID: Base: EW780-5125-B01 & Handset: EW780-5125-H01*

Summary Of Test Data

Name Of Test	Para. No.	Result
Conducted Emissions	15.207	N/A
Radiated Emissions	15.249	Complies

Note: Class II Permissive Change**Test Conditions:**

Indoor Temperature: 23 °C
 Humidity: 36 %

Outdoor Temperature: 5 °C
 Humidity: 48 %

*EQUIPMENT: AT&T 1430MK2 Cordless Telephone**FCC ID: Base: EW780-5125-B01 & Handset: EW780-5125-H01***Description Difference Between AT&T1430 and AT&T1430MK2****1. Function**

	AT&T 1430	AT&T 1430MK2
Handset	Same	No "Extension In Use" Display No "No Line" Display
Base	Same	Same

2. Handset Block Diagram

	AT&T 1430	AT&T 1430MK2
RF Section		Base on MK1 details of modification: 1. Deleted the external frequency synthesizer (PLL) and RX VCO. 2. Cancelled 2.8V Regulator. 3. Used U3517B to replace U3515. 4. Discrete components BPF instead of 915 MHz LC Filter.
Audio Circuit		1. Cancel 5V LCD, use 6V LCD. 2. Added a control circuit for RF 2.8V supply (Q6, Q7).
MCU Circuit	Same	Same
Power Management		1. New DC voltage arrangement – use 3.0V regulator to replace 2.5V.

3. Base Block Diagram

	AT&T 1430	AT&T 1430MK2
RF Section	Same	Base on MK1, details of modification: 1. Discrete components BPF instead of 2.416 GHz LC filter. 2. TX doubler and TX PA changed to new design.
Line Interface	Same	Same
Power Management	Same	Same
MCU Circuit	Same	Same
Audio Circuit		1. New TX_DATA path circuits have been used. 2. The battery charging current change from 85 mA to 60mA.

EQUIPMENT: AT&T 1430MK2 Cordless Telephone

FCC ID: Base: EW780-5125-B01 & Handset: EW780-5125-H01

Section 2. General Equipment Specification

Manufacturer: VTECH Engineering Canada

Model No.: AT&T 1430MK2

Serial No.: None

Date Received In Laboratory: January 21, 2002

Nemko Identification No.: Item #1&2

Base (Tx)

Frequency Range: 2411.15 to 2418.40 MHz

Number of Channels: 30

Channel Spacing: 250 kHz

Emission Designator: 260KF3E

Handset (Tx)

Frequency Range: 912.75 to 917.10 MHz

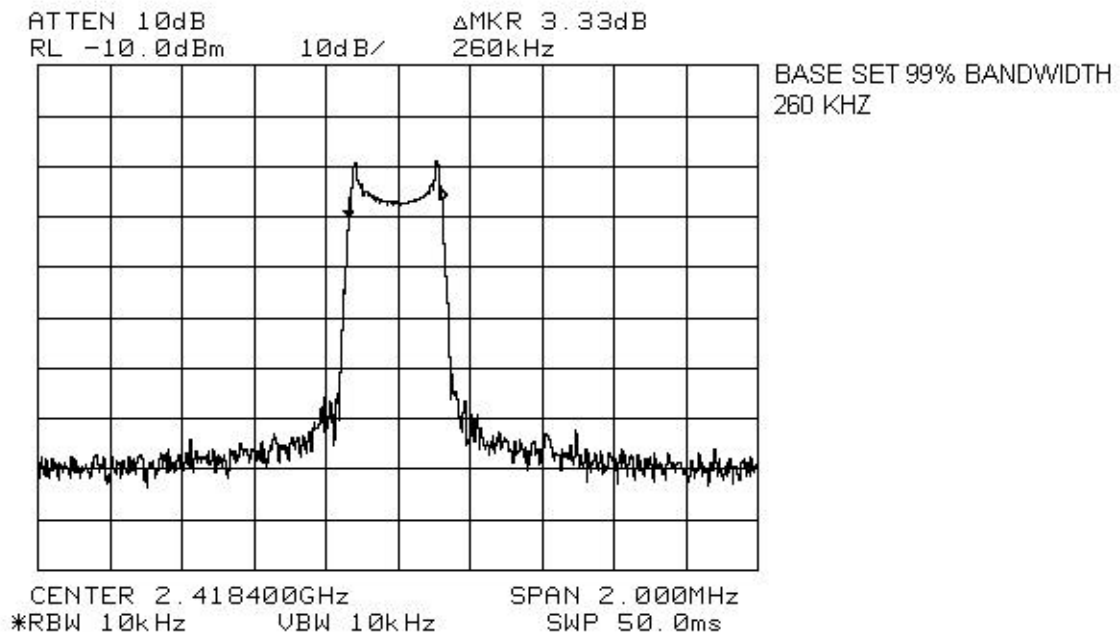
Number of Channels: 30

Channel Spacing: 150 kHz

Emission Designator: 102KF3E

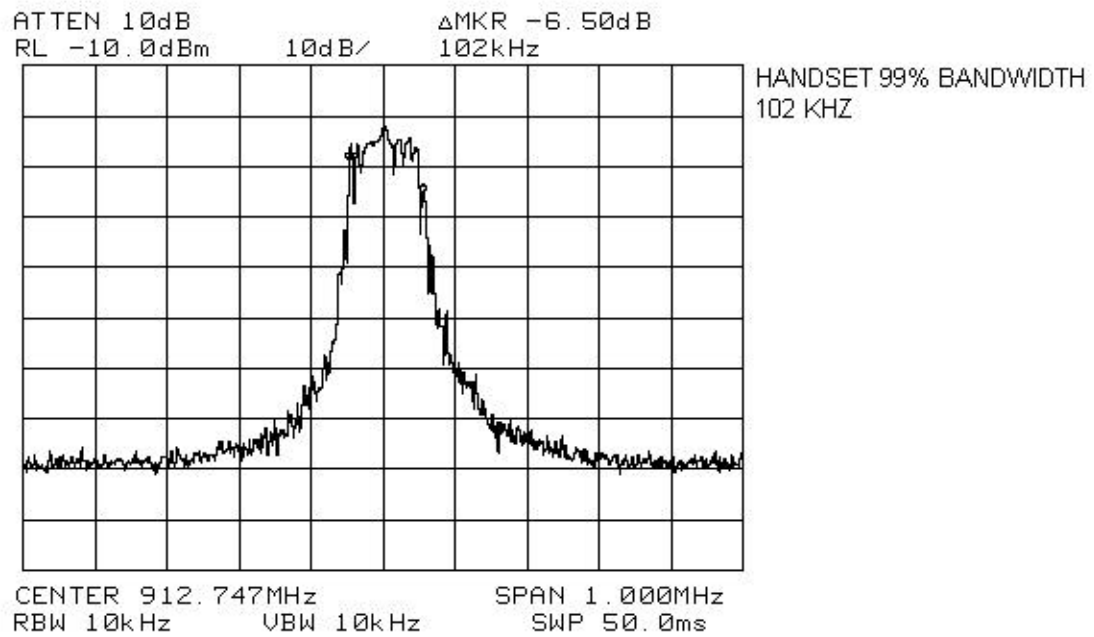
EQUIPMENT: AT&T 1430MK2 Cordless Telephone

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FCC ID: Base: EW780-5125-B01 & Handset: EW780-5125-H01

Section 3. Radiated Emissions

Para. No.: 15.249

Test Performed By: Glen Westwell	Date of Test: January 23, 2002
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Minimum Standard:

Fundamental (MHz)	Field Strength (mV/m)	Field Strength (dBµV)	Harmonic (mV/m)	Harmonic (dBµV)
902-928	50	94	0.5	54
2400-2483.5	50	94	0.5	54

Test Results: Complies.

Measurement Data: See attached tabulated data.

*EQUIPMENT: AT&T 1430MK2 Cordless Telephone**FCC ID: Base: EW780-5125-B01 & Handset: EW780-5125-H01***Test Data - Radiated Emissions - Base**

Test Distance (meters) : 3		Range: A Tower		Receiver: ESVP/8565E		RBW(kHz): 120/1000		Detector: CISPR/PEAK	
Freq. (MHz)	Ant. *	Pol. (V/H)	RCVD Signal (dBµV/m)	Ant. Factor (dB)**	Amp. Gain (dB)***	Dist. Corr. (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Channel 0									
2411.15	Hrn2	V	55.8	34.6			90.4	94.0	3.6
2411.15	Hrn2	H	56.3	34.6			90.9	94.0	3.1
923.45	E/D4	V	8.4	33.4			41.8	54.0	12.2
923.45	E/D4	H	4.4	33.4			37.8	54.0	16.12
Channel 14									
2414.65	Hrn2	V	56.0	34.6			90.6	94.0	3.4
2414.65	Hrn2	H	56.2	34.6			90.8	94.0	3.2
925.55	E/D4	V	8.3	33.6			41.9	54.0	12.1
925.55	E/D4	H	4.2	33.6			37.8	54.0	16.2
Channel 29									
2418.4	Hrn2	V	56.7	34.7			91.4	94.0	2.6
2418.4	Hrn2	H	56.5	34.7			91.2	94.0	2.8
927.80	E/D4	V	8.7	33.6			42.3	54.0	11.7
927.80	E/D4	H	4.3	33.6			37.9	54.0	16.1
Notes: B/C = Biconical, B/L = Biconilog, L/P = Log-Periodic, H = Horn, D/P = Dipole * Re-measured using dipole antenna. ** Includes cable loss when amplifier is not used. *** Includes cable loss. () Denotes failing emission level. N.D. = Not Detected									

All emissions and harmonics were searched up to the 10th harmonic.

EQUIPMENT: AT&T 1430MK2 Cordless Telephone

FCC ID: Base: EW780-5125-B01 & Handset: EW780-5125-H01

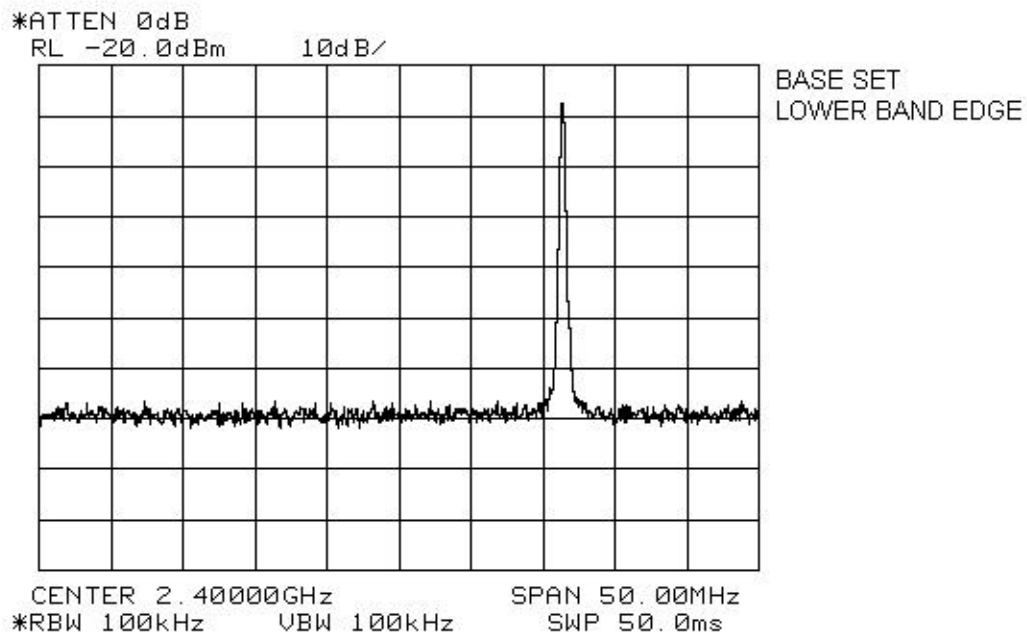
Test Data - Radiated Emissions - Handset

Test Distance (meters) : 3		Range: A Tower		Receiver: ESVP/8565E		RBW(kHz): 120/1000		Detector: CISPR/PEAK	
Freq. (MHz)	Ant. *	Pol. (V/H)	RCVD Signal (dBµV/m)	Ant. Factor (dB)**	Amp. Gain (dB)***	Dist. Corr. (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Channel 0									
912.75	E/D4	V	56.6	33.3			89.9	94.0	4.1
912.75	E/D4	H	56.7	33.3			90.0	94.0	4.0
1825.5	Hrn2	V	63.5	32.1	-48.5		47.1	54.0	6.9
1825.5	Hrn2	H	56.1	32.1	-48.5		48.7	54.0	5.3
2738.25	Hrn2	V	69.8	35.8	-49.7		45.9	54.0	8.1
2738.25	Hrn2	H	71.4	35.8	-49.7		47.5	54.0	6.5
3651.0	Hrn2	V	58.8	39.3	-59.6		38.5	54.0	15.5
3651.0	Hrn2	H	60.2	39.3	-59.6		39.9	54.0	14.1
4563.75	Hrn2	V	61.5	40.8	-56.4		45.9	54.0	8.1
4563.75	Hrn2	H	63.3	40.8	-56.4		47.7	54.0	6.3
Channel 14									
914.85	E/D4	V	56.0	33.3			89.3	94.0	4.7
914.85	E/D4	H	56.1	33.3			89.4	94.0	4.6
1829.7	Hrn2	V	64.1	32.1	-48.5		47.7	54.0	6.3
1829.7	Hrn2	H	65.5	32.1	-48.5		49.1	54.0	4.9
2744.55	Hrn2	V	71.2	35.8	-59.7		47.3	54.0	6.7
2744.55	Hrn2	H	73.5	35.8	-59.7		49.6	54.0	4.4
3659.4	Hrn2	V	59.7	39.3	-59.5		39.5	54.0	14.5
3659.4	Hrn2	H	61.2	39.3	-59.5		41.0	54.0	13.0
4574.25	Hrn2	V	60.3	40.9	-56.4		44.8	54.0	9.2
4574.25	Hrn2	H	62.2	40.9	-56.4		46.7	54.0	7.3
Channel 29									
917.1	E/D4	V	57.1	33.4			90.5	94.0	3.5
917.1	E/D4	H	56.8	33.4			90.2	94.0	3.8
1834.2	Hrn2	V	63.0	32.1	-48.6		46.5	54.0	7.5
1834.2	Hrn2	H	66.2	32.1	-48.6		49.7	54.0	4.3
2751.3	Hrn2	V	70.2	35.8	-59.8		46.2	54.0	7.8
2751.3	Hrn2	H	73.7	35.8	-59.8		49.7	54.0	4.3
3668.4	Hrn2	V	57.4	39.2	-59.5		37.2	54.0	16.8
3668.4	Hrn2	H	59.8	39.2	-59.5		39.6	54.0	14.4
4585.5	Hrn2	V	58.6	40.9	-56.4		43.1	54.0	10.9
4585.5	Hrn2	H	60.0	40.9	-56.4		44.5	54.0	9.5
Notes: B/C = Biconical, B/L = Biconilog, L/P = Log-Periodic, H = Horn, D/P = Dipole * Re-measured using dipole antenna. ** Includes cable loss when amplifier is not used. *** Includes cable loss. () Denotes failing emission level., N.D. = Not Detected									

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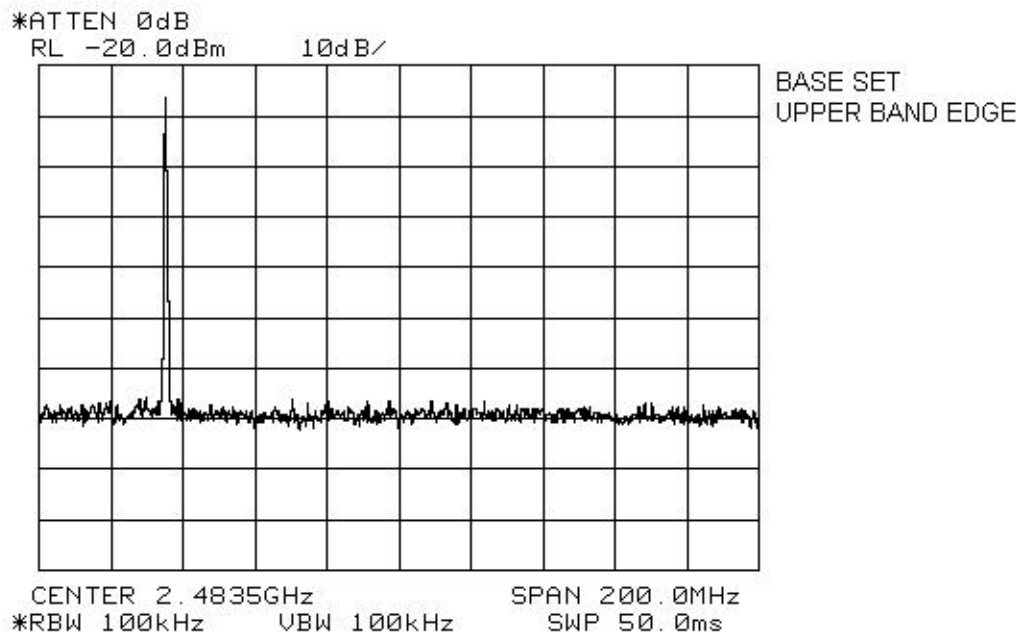
EQUIPMENT: AT&T 1430MK2 Cordless Telephone

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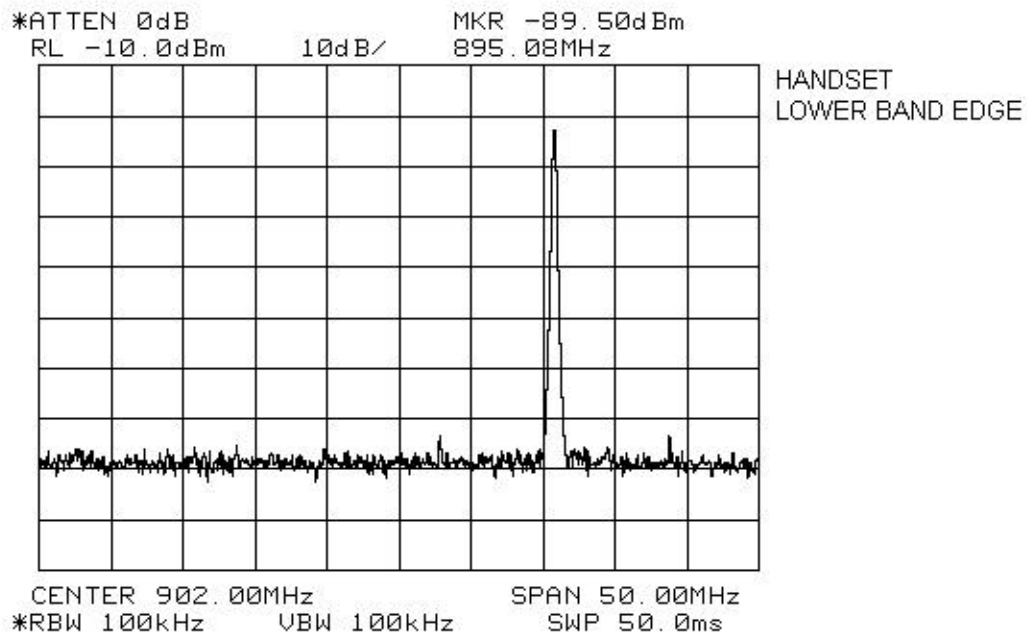
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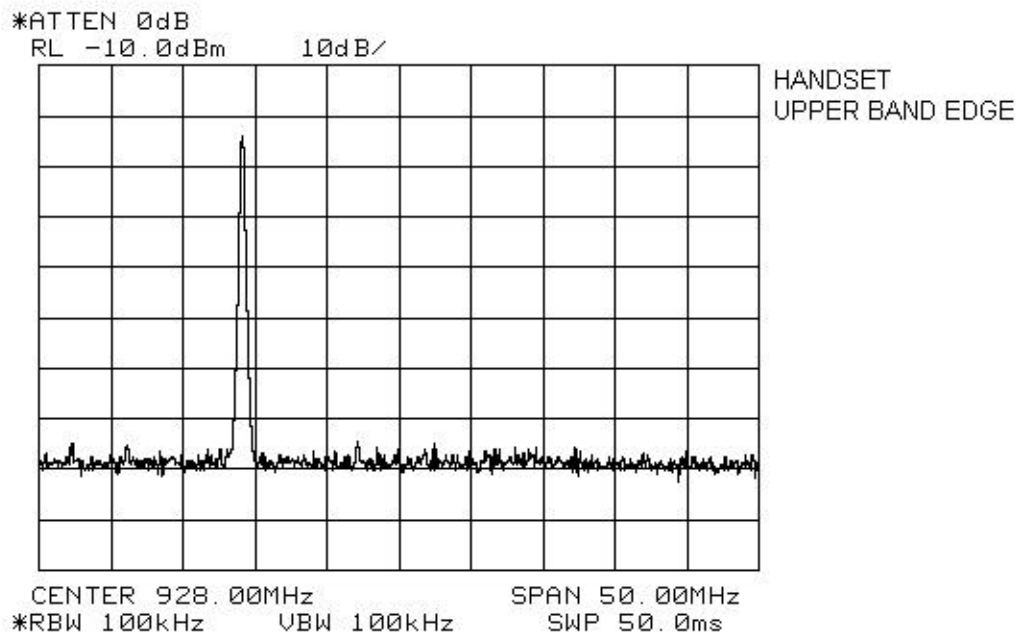
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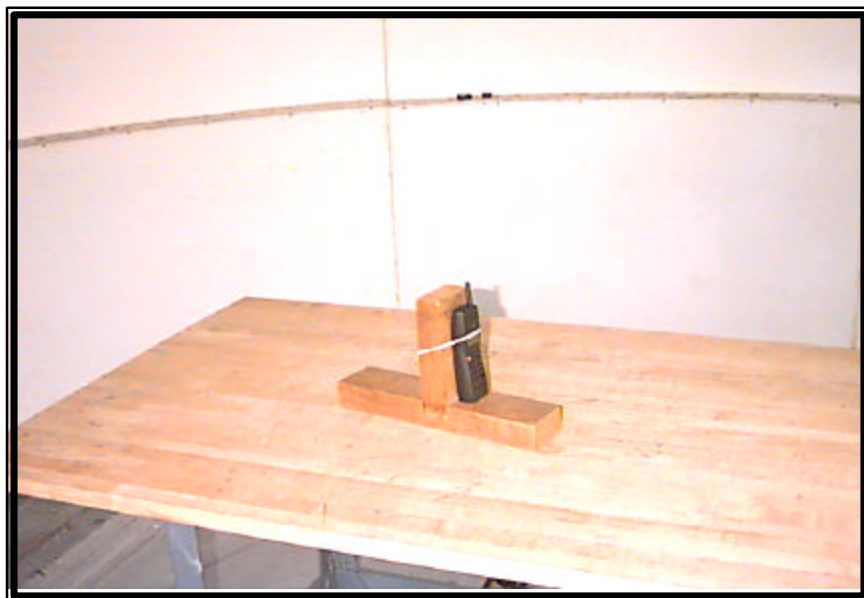


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Radiated Emissions Photographs

Handset – Side View:



Base – Front View:

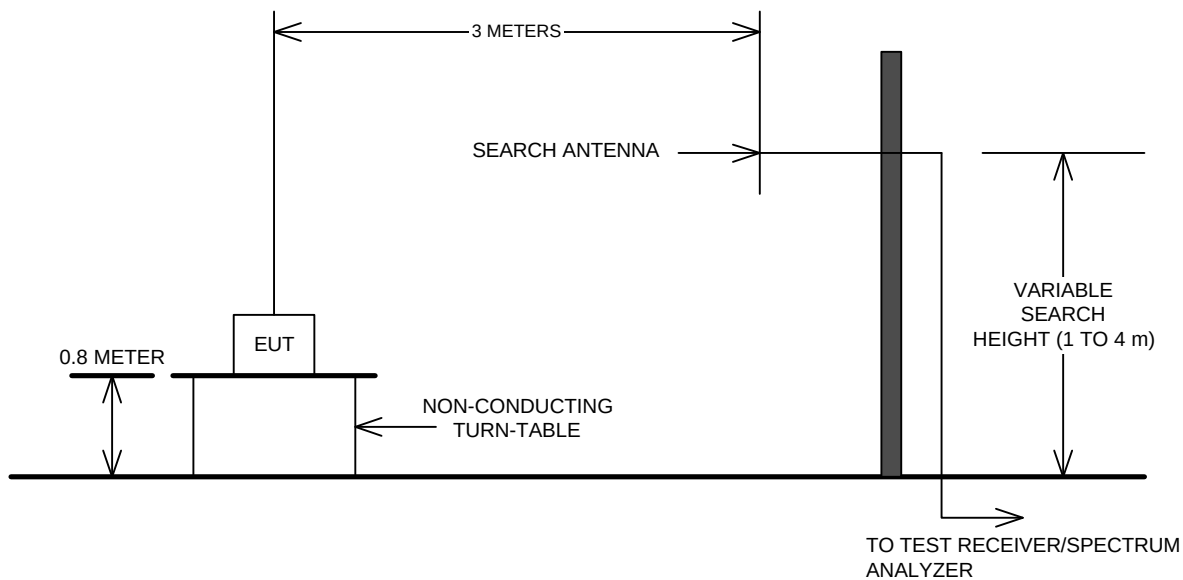


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Section 4. Block Diagrams

Test Site For Radiated Emissions



The spectrum was search up to the 10th harmonic of the fundamental frequency of operation.

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Section 5. Test Equipment List

CAL CYCLE	EQUIPMENT	MANUFACTURER	MODEL	SERIAL	LAST CAL.	NEXT CAL.
1 Year	Spectrum Analyzer	Hewlett Packard	8564E	3846A01407	Mar. 2/01	Mar. 2/02
1 Year	Spectrum Analyzer	Hewlett Packard	8565E	FA000981	June 08/01	June 08/02
1 Year	Spectrum Analyzer-1	Hewlett Packard	8566B	2311A02238	Nov. 27/01	Nov. 27/02
1 Year	Spectrum Analyzer Display-1	Hewlett Packard	8566B	2314A04759	Nov. 27/01	Nov. 27/02
1 Year	Quasi-peak adapter-1	Hewlett-Packard	85650A	2043A00302	Mar. 21/01	Mar. 21/02
1 Year	Receiver	Rohde & Schwarz	ESVP	892661/014	Apr. 3/01	Apr. 3/02
1 Year	Horn Antenna	EMCO #2	3115	4336	Dec. 1/01	Dec. 1/02
1 Year	Dipole Antenna Set	EMCO #2	3121C	FA001349	Apr. 3/01	Apr. 3/02
1 Year	RF AMP	JCA	2-4 GHz	FA001496	COU	COU
1 Year	RF AMP	JCA	1-2 GHz	FA001498	COU	COU
1 Year	RF AMP	JCA	4-8 GHz	FA001497	COU	COU

NA: Not Applicable

NCR: No Cal Required

COU: CAL On Use