

EMI TESTING REPORT

EUT : CORDLESS TELEPHONE

MODEL: 966LCD

FCCID: N98966LCD

PREPARED FOR:

CHINCOWELL INDUSTRIES CO., LTD.

NO. 123, NIU PU SOUTH RD.,

HSIN-CHU CITY,

TAIWAN, R.O.C.

PREPARED BY:

SPECTRUM RESEARCH & TESTING  
LABORATORY INC.

NO. 101-10, LING 8, SHAN-TONG LI  
CHUNG-LI CITY, TAOYUAN, TAIWAN, R.O.C.

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FAX: (03) 4986528

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## 1. TEST REPORT CERTIFICATION

APPLICANT : CHINCOWELL INDUSTRIES CO., LTD.ADDRESS : NO. 123, NIU PU SOUTH RD.,  
HSIN-CHU CITY,  
TAIWAN, R.O.C.EUT DESCRIPTION : CORDLESS TELEPHONE(A) POWER SUPPLY : 110V AC 9V DC(B) MODEL : 966LCD(C) FCCID : N98966LCDFINAL TEST DATE : 08/26/1998

## MEASUREMENT PROCEDURE USED :

PART 15 SUB PART B OF FCC RULES AND  
REGULATIONS ( 47 CFR PART 15 )  
FCC / ANSI C63.4 - 1992

## WE HEREBY SHOW THAT:

THE MEASUREMENTS SHOWN IN THE ATTACHMENT WERE  
MADE IN ACCORDANCE WITH THE PROCEDURES INDICATED,  
AND THE ENERGY EMITTED BY THE EQUIPMENT WAS  
FOUND TO BE WITHIN THE LIMITS APPLICABLE.TESTING ENGINEER : Carrie Pang DATE 08/26/1998  
Carrie PangSUPERVISOR : Jesse Ho DATE 8/26/98  
Jesse HoAPPROVED BY : Johnson Ho DATE 8/26/98  
Johnson Ho



## 2. TEST STATEMENT

## 2.2 DEPARTURE FROM DOCUMENT POLICIES, PROCEDURE OR SPECIFICATIONS

DID HAVE

ANY DEPARTURE FROM DOCUMENT POLICIES  
& PROCEDURES OR FROM SPECIFICATIONS.YES \_\_\_\_\_ , NO N/A .

IF YES, THE DESCRIPTION AS BELOW.

## 2.3 TEST STATEMENT

1. THE CERTIFICATE OR REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY.
2. THE REPORT MUST NOT BE USED BY THE CLIENT TO CLAIM PRODUCT ENDORSEMENT BY NVLAP OR ANY AGENCY OF THE U.S. GOVERNMENT.

3. EUT MODIFICATIONS

THE FOLLOWING ACCESSORIES WERE ADDED TO THE EUT DURING TESTING:

\* HANDSET

- 1). L6 CHANGED INDUCTOR (imp: 4.7uH).
- 2). C42 CHANGED FROM 100pF TO 36pF.
- 3). R41 CHANGED FROM 10Kohm TO 33Kohm.

\* BASE

- 1). L1 CHANGED INDUCTOR (imp: 2.2uH).
- 2). C60 CHANGED FROM 100pF TO 56pF.
- 3). R46 CHANGED FROM 10Kohm TO 33Kohm.

4. MODIFICATION LETTER

THIS SECTION CONTAINS THE FOLLOWING DOCUMENTS:

A. LETTER OF MODIFICATIONS

勤格實業股份有限公司  
**CHINCOWELL INDUSTRIES CO., LTD.**

NO. 123, NIU-PU SOUTH ROAD, SHIN-CHU CITY  
TAIWAN, R.O.C

TEL : 886-5-5307385(REP.)  
FAX : 886-3-5307370

Federal Communications Commission  
Authorization and Evaluation Division  
7436 Oakland Mills Road  
Columbia, MD 21046

To Whom it may concern

This is to serve as proper notice that our company agrees  
to make all modifications to FCC ID : N98966LCD  
as listed in section 3.0 of the test report submitted by Spectrum  
Research And Testing Laboratory, Inc.

Respectfully,

Effective Dates :

Yun-Ming Tu  
(Name, Surname)

From 1998.10.30 to 1999.10.30

R&D Dep. II.  
Manager  
(Position / Title)

Date : 1998.10.30



## 5. CONDUCTED POWER LINE TEST

## 5.1 TEST EQUIPMENT

THE FOLLOWING TEST EQUIPMENT WAS USED DURING THE  
CONDUCTED POWER LINE TEST :

EQUIPMENT/ FACILITIES	SPECIFICAT -IONS	MANUFACTURER	MODEL#/ SERIAL#	DATE OF CAL. & CAL.CENTER	DUE DATE
SPECTRUM ANALZER	9 KHz TO 1 GHz	HP	8590L/ 3624A1317	AUGUST, 1998 ETC	1Y
EMI TEST RECEIVER	9 KHz TO 30 MHz	ROHDE & SCHWARZ	ESHS30/ 826003/008	AUGUST, 1998 ETC	1Y
LISN	50 uH, 50 ohm	SOLAR ELECTRONICS	9252-50- R24-BNC/ 951315	AUGUST, 1998 ETC	1Y
LISN	50 uH, 50 ohm	SOLAR ELECTRONICS	9252-50- R24-BNC/ 951318	AUGUST, 1998 ETC	1Y
SIGNAL GENERATOR	9 KHz TO 1080 MHz	ROHDE & SCHWARZ	SMY01/ 841104/019	APRIL, 1998 ITRI	1Y
POWER CONVERTER	0 TO 300 VAC 47 - 500 Hz	AFC	AFC-1KW/ 850510	APRIL, 1998 SRT	1Y

## 5.2 CONFIGURATION OF THE EUT

THE EUT WAS CONFIGURED ACCORDING TO ANSI C63.4 - 1992.  
ALL INTERFACE PORTS WERE CONNECTED TO THE APPROPRIATE  
PERIPHERALS. ALL PERIPHERALS AND CABLES ARE LISTED  
BELOW.

-EUT

DEVICE	MANUFACTURER	MODEL #	FCCID
CORDLESS TELEPHONE	CHINCOWELL INDUSTRIES CO., LTD.	966LCD	N98966LCD

-REMARK-INTERNAL DEVICES

<u>DEVICE</u>	<u>MANUFACTURER</u>	<u>MODEL #</u>	<u>DoC/FCCID</u>
CONTROL BOARD	CHINCOWELL	966 HAND	N/A
CONTROL BOARD	CHINCOWELL	MT-850BT1	N/A
RF BOARD	CHINCOWELL	RF UNIT V2	N/A
RF BOARD	CHINCOWELL	966BASE CPU2.0	N/A
TELEPHONE BOARD	CHINCOWELL	MC13109 DISNEY V5	N/A

-PERIPHERALS

DEVICE	MANUFACTURER	MODEL# / SERIAL#	FCCID	CABLE
ADAPTOR	HON KWANG	HKD-97804	N/A	POWER-UNS
BATTERY PACK	NI-CD	3KR3202/3AAH4P	N/A	POWER-UNS

-REMARK

- (1). CABLE - UNS : UNSHIELDED CABLE  
S : SHIELDED CABLE
- (2). CABLES - ALL 1m OR GREATER IN LENGTH-  
BUNDLED ACCORDING TO ANSI C63.4 - 1992.

### 5.3 EUT OPERATING CONDITION

OPERATING CONDITION IS ACCORDING TO ANSI C63.4 - 1992.

1. EUT POWER ON.

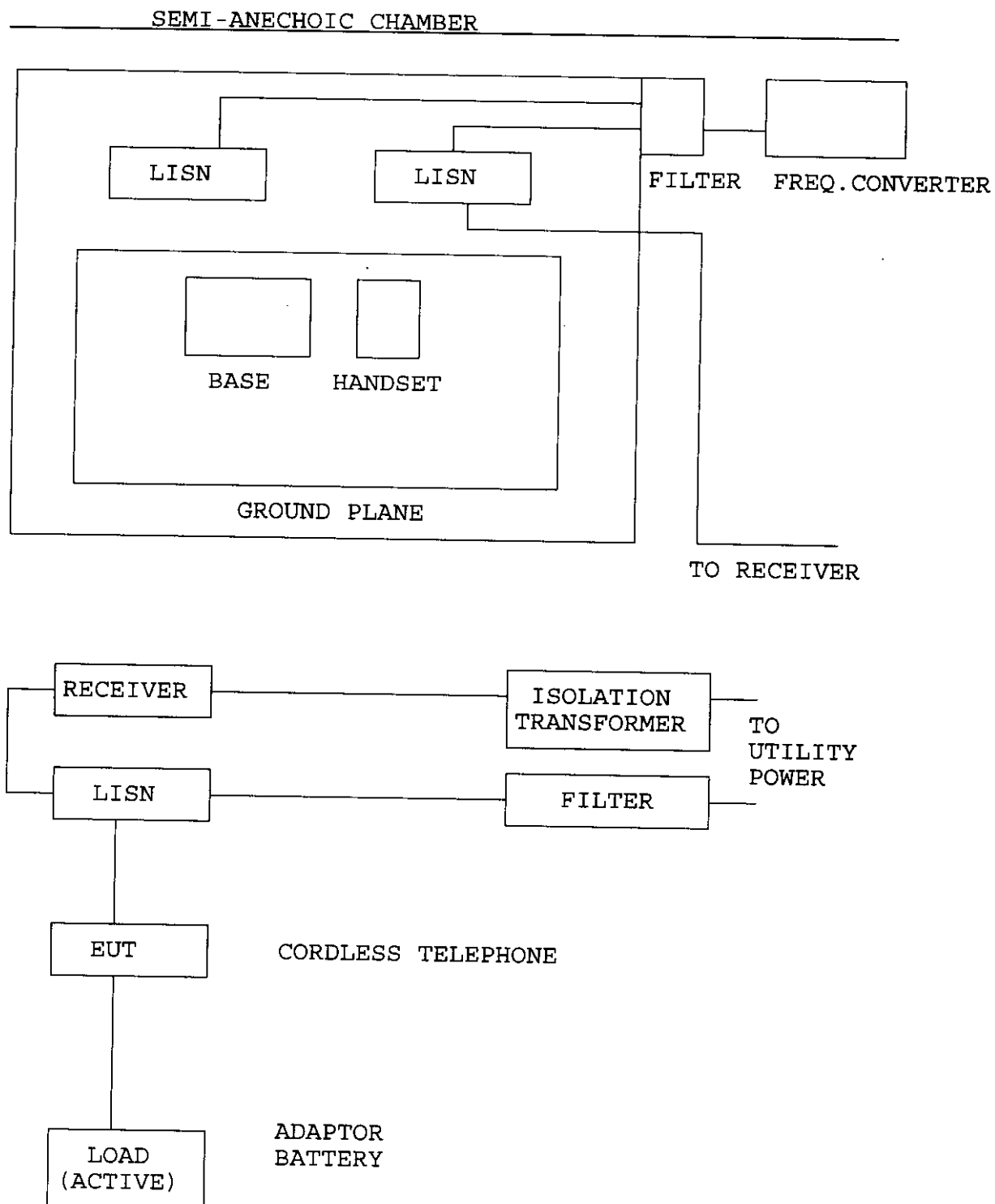
2. OSCILLATOR FREQUENCY : HANDSET - 10.24MHz, 4MHz  
BASE - 10.24MHz, 800KHz

OPERATING FREQUENCY : HANDSET - 49.670MHz ~ 49.970MHz  
BASE - 46.610MHz ~ 46.970MHz

## 5.4 TEST PROCEDURE

THE EUT WAS TESTED ACCORDING TO ANSI C63.4 - 1992. THE CONDUCTED TEST WAS PERFORMED IN AN ANECHOIC CHAMBER. THE FREQUENCY SPECTRUM FROM 0.45 MHz TO 30 MHz WAS INVESTIGATED. THE LISN USED WAS 50 ohm / 50 uHenry AS SPECIFIED BY SECTION 5.1 OF ANSI C63.4 - 1992. CABLES AND PERIPHERALS WERE MOVED TO FIND THE MAXIMUM EMISSION LEVELS FOR EACH FREQUENCY.

## 5.5 TEST SETUP



## 5.6 CONDUCTED POWER LINE EMISSION LIMIT

FREQUENCY RANGE (MHz)	CLASS A	CLASS B
0.045 - 1.705	1000 uV	250 uV
1.705 - 30	3000 uV	250 uV

NOTE : IN THE ABOVE TABLE, THE TIGHTER LIMIT  
APPLIES AT THE BAND EDGES.

## 5.7 CONDUCTED POWER LINE TEST RESULT

THE FREQUENCY SPECTRUM FROM 0.45 MHz TO 30 MHz WAS INVESTIGATED. ALL READINGS ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 9 KHz.

TEMPERATURE : 28 C

HUMIDITY : 78 %RH

FREQUENCY (MHz)	LINE 1 (uv)	LINE 2 (uv)	LIMIT (uv)
0.69	*	4.365	250
0.85	4.074	5.248	250
1.42	4.571	4.571	250
14.1	1.862	4.365	250
17.9	*	1.778	250

- REMARKS : (1) .\* = MEMENT DOES NOT APPLY FOR THIS FREQUENCY
- (2) .UNCERTAINTY IN CONDUCTED EMISSION MEASURED IS <+/-2dB
- (3) .BASE
- (4) .TEST CONFIGURATION PLEASE SEE 4.2
- (5) .TEST EQUIPMENT PLEASE SEE 4.1
- (6) .ANY DEPARTURE FROM SPECIFICATION: N/A

SIGNED BY TESTING ENGINEER :

Caris



## 5.7 CONDUCTED POWER LINE TEST RESULT

THE FREQUENCY SPECTRUM FROM 0.45 MHz TO 30 MHz WAS INVESTIGATED. ALL READINGS ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 9 KHz.

TEMPERATURE : 28 C

HUMIDITY : 78 %RH

FREQUENCY (MHz)	LINE 1 (uv)	LINE 2 (uv)	LIMIT (uv)
0.69	3.631	4.169	250
0.85	4.266	3.981	250
1.05	3.631	3.936	250
28.0	6.457	5.248	250

- REMARKS : (1) . \* = MEMENT DOES NOT APPLY FOR THIS FREQUENCY  
(2) . UNCERTAINTY IN CONDUCTED EMISSION MEASURED IS  
<+/-2dB  
(3) . HANDSET  
(4) . TEST CONFIGURATION PLEASE SEE 4.2  
(5) . TEST EQUIPMENT PLEASE SEE 4.1  
(6) . ANY DEPARTURE FROM SPECIFICATION: N/A

SIGNED BY TESTING ENGINEER : Carie

## 6. RADIATED EMISSION TEST

## 6.1 TEST EQUIPMENT

THE FOLLOWING TEST EQUIPMENT WAS USED DURING THE  
RADIATED EMISSION TEST :

EQUIPMENT / FACILITIES	SPECIFICAT -IONS	MANUFACTUR -ER	MODEL#/ SERIAL#	DATE OF CAL. & CAL. CENTER	DUE DATE
RECEIVER	20 MHz TO 1000 MHz	R & S	ESVS 30/ 841977/003	APRIL, 1998 ITRI	1Y
SPECTRUM ANALYZER	100 Hz TO 1500 MHz	HP	8568B/ 3019A05294	OCT, 1997 ETC	1Y
SPECTRUM ANALYZER	9 KHz TO 22 GHz	HP	8593E/ 3322A00670	APRIL, 1998 ITRI	1Y
SPECTRUM ANALYZER	100 Hz TO 1000 MHz	IFR	A-7550/ 2684/1248	JULY, 1998 ETC	1Y
SIGNAL GENERATOR	9 KHz TO 1080 MHz	ROHDE & SCHWARZ	SMY01/ 841104/019	APRIL, 1998 ITRI	1Y
DIPOLE ANTENNA	28 MHz TO 1000 MHz	EMCO	3121C/ 9003-535	DEC, 1997 SRT	1Y
DIPOLE ANTENNA	28 MHz TO 1000 MHz	EMCO	3121C/ 9611-1239	DEC, 1997 SRT	1Y
BI-LOG ANTENNA	26 MHz TO 2000 MHz	EMCO	3142/ 9509-1152	DEC, 1997 SRT	1Y
BI-LOG ANTENNA	26 MHz TO 1100 MHz	EMCO	3143/ 9509-1152	DEC, 1997 SRT	1Y
PRE-AMPLIFIER	0.1 MHz TO 1300 MHz	HP	8447D/ 2944A08402	APRIL, 1998 ITRI	1Y
PRE-AMPLIFIER	0.1 MHz TO 1300 MHz	HP	8447D/ 2944A06412	AUGUST, 1998 ETC	1Y
HORN ANTENNA	1 GHz TO 18 GHz	EMCO	3115/ 9012-3619	DEC, 1997 SRT	1Y

## 6.2 CONFIGURATION OF THE EUT

SAME AS SECTION 5.4 OF THIS REPORT.

## 6.3 EUT OPERATING CONDITION

SAME AS SECTION 5.3 OF THIS REPORT.

## 6.4 TEST PROCEDURE

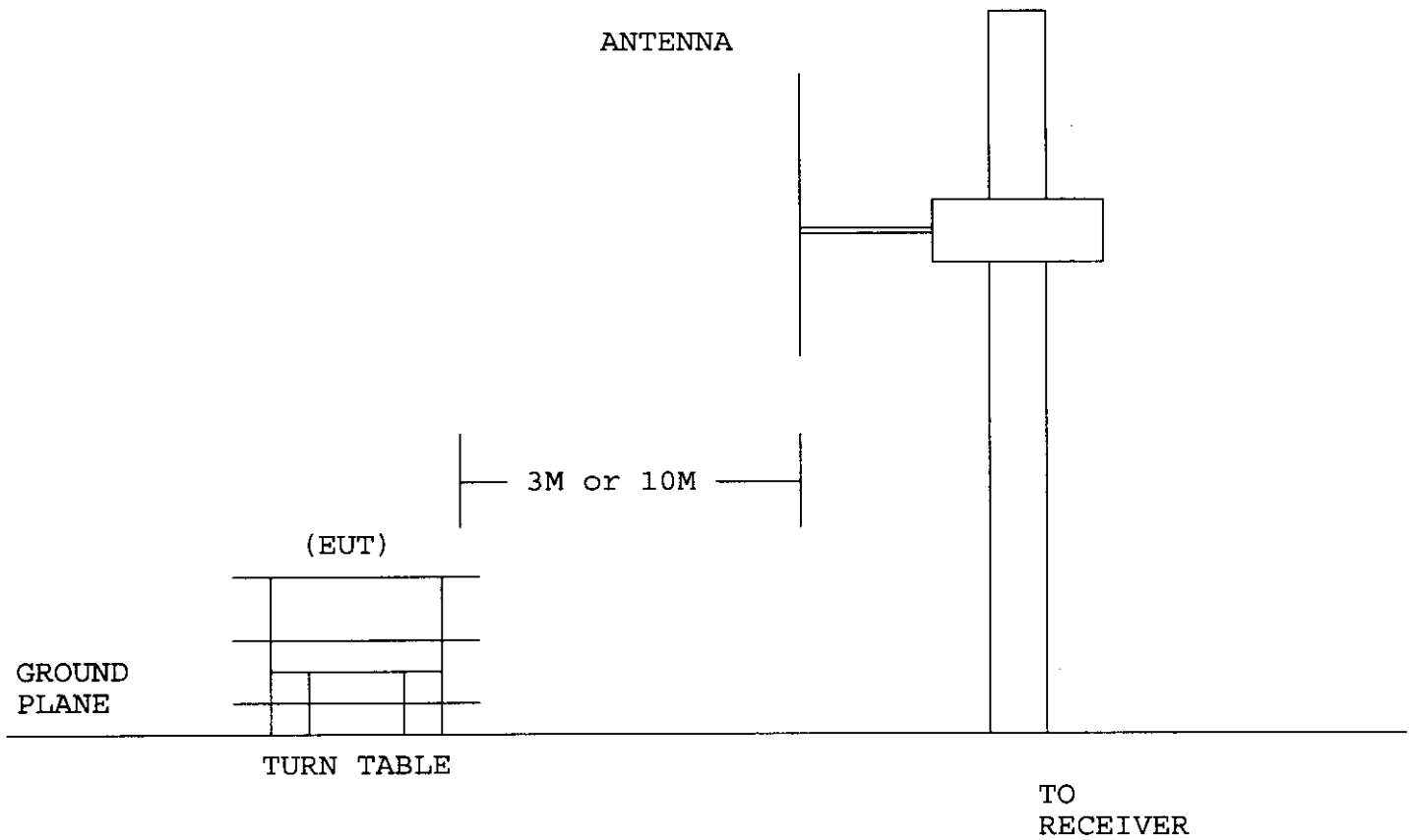
THE EUT WAS TESTED ACCORDING TO ANSI C63.4 - 1992. THE RADIATED TEST WAS PERFORMED AT SRT LAB'S OPEN SITE. THIS SITE IS ON FILE WITH THE FCC LABORATORY DIVISION, REFERENCE 31040/SIT.

THE FREQUENCY SPECTRUM FROM 30 MHz TO 1 GHz WAS INVESTIGATED. MEASUREMENTS WERE MADE AT THREE METERS WITH AN ADJUSTABLE DIPOLE ANTENNA. PERIPHERALS, CABLES, EUT ORIENTATION, AND ANTENNA HEIGHT WERE VARIED TO FIND THE MAXIMUM EMISSION FOR EACH FREQUENCY.

THE FREQUENCY SPECTRUM FROM 30 MHz TO 2 GHz WAS INVESTIGATED. THE MEASUREMENTS UNDER 1 GHz WITH RESOLUTION BANDWIDTH OF 120 KHz ARE QUASI-PEAK READING MADE AT THREE METERS USING AN ADJUSTABLE DIPOLE ANTENNA. PERIPHERALS, CABLES, EUT ORIENTATION, AND ANTENNA HEIGHT WERE VARIED TO FIND THE MAXIMUM EMISSION FOR EACH FREQUENCY.

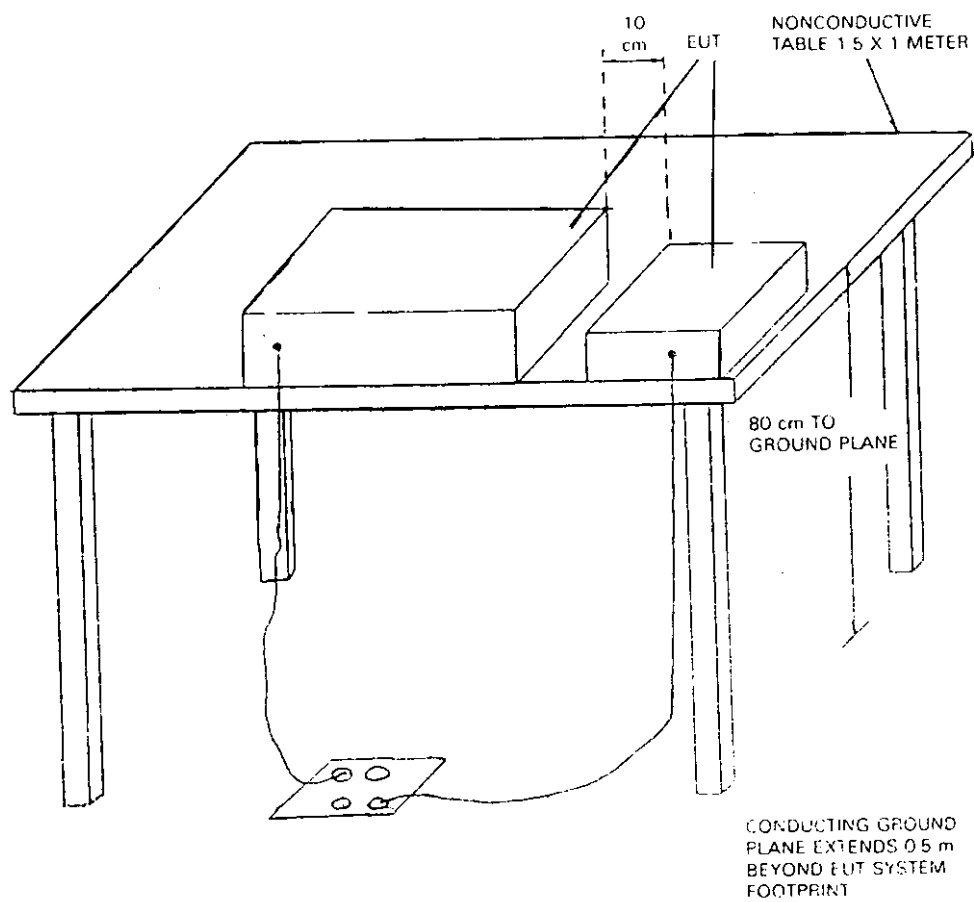
THE MEASUREMENTS ABOVE 1 GHz WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF THREE METERS WITH A HORN ANTENNA.

## 6.5 RADIATED TEST SETUP



## 6.5 RADIATED TEST SETUP

ELECTRICAL AND ELECTRONIC EQUIPMENT IN THE RANGE OF 9 kHz TO 40 GHz

ANSI  
C63.4-1992

## 6.6 RADIATED EMISSION LIMIT

ALL EMISSION FROM A DIGITAL DEVICE, INCLUDING ANY NETWORK OF CONDUCTORS AND APPARATUS CONNECTED THERETO, SHALL NOT EXCEED THE LEVEL OF FIELD STRENGTH SPECIFIED BELOW :

## CLASS B

FREQUENCY (MHz)	DISTANCE (m)	FIELD STRENGTH (uV/m)
30 - 88	3	100
88 - 216	3	150
216 - 960	3	200
ABOVE 960	3	500

## CLASS B ( OPEN CASE )

FREQUENCY (MHz)	DISTANCE (m)	FIELD STRENGTH (uV/m)
30 - 88	3	199.5
88 - 216	3	298.5
216 - 960	3	398.1

## CLASS A

FREQUENCY (MHz)	DISTANCE (m)	FIELD STRENGTH (uV/m)
30 - 88	3	316.3
88 - 216	3	473.2
216 - 960	3	613.0
ABOVE 960	3	1000.0

NOTE : 1. IN THE EMISSION TABLES ABOVE, THE TIGHTER LIMIT APPLIES AT THE BAND EDGES.

2. DISTANCE REFERS TO THE DISTANCE BETWEEN MEASURING INSTRUMENT, ANTENNA, AND THE CLOSEST POINT OF ANY PART OF THE DEVICE OR SYSTEM.

## 6.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM 30 MHz TO 1 GHz WAS INVESTIGATED. ALL READINGS UNDER 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHz. MEASUREMENTS WERE MADE AT 3 METERS. THE MEASUREMENTS ABOVE 1 GHz WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF 3 METERS.

TEMPERATURE : 28 CHUMIDITY : 78 %RH

FREQ. (MHz)	CABLE LOSS (dB)	ANT. FACTOR (dB)	READING (dBuV)		EMISSION (uV)		LMTS (uV)
			HORIZ	VERT	HORIZ	VERT	
46.6100	0.8	6.60	61.47	66.52	2776.5	4965.9	10000
123.1	1.4	7.20	17.35	*	19.84	*	150
186.2	1.7	9.10	14.49	19.89	18.39	34.24	150
233.7	1.8	10.7	*	17.38	*	31.19	200
542.2	2.9	18.6	11.27	*	43.50	*	200
704.2	3.4	20.2	11.75	13.41	58.55	70.88	200
751.7	3.4	21.1	*	12.71	*	72.53	200

REMARKS : (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.

(2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.

(3). SAMPLE CALCULATION  
 $20 \text{ LOG (EMISSION) uV/m} = \text{CABLE LOSS (dB)} + \text{FACTOR (dB)} + \text{READING (dBuV/m)}$

(4). BASE

(5). TEST EQUIPMENT PLEASE SEE 5.1

(6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS  $\pm 4\text{dB}$

(7). ANY DEPARTURE FROM SPECIFICATION: N/A

(8). CHANNEL 0

(9). 46.6100MHz : CHANNEL 16

SIGNED BY TESTING ENGINEER : Cario

## 6.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM 30 MHz TO 1 GHz WAS INVESTIGATED. ALL READINGS UNDER 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHz. MEASUREMENTS WERE MADE AT 3 METERS. THE MEASUREMENTS ABOVE 1 GHz WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF 3 METERS.

TEMPERATURE : 28 CHUMIDITY : 78 %RH

FREQ. (MHz)	CABLE LOSS (dB)	ANT. FACTOR (dB)	READING (dBuV)		EMISSION (uV)		LMTS (uV)
			HORIZ	VERT	HORIZ	VERT	
46.7300	0.8	6.60	62.47	68.12	3115.3	5970.4	10000
185.2	1.7	9.10	17.73	20.77	26.70	37.89	100
476.1	3.0	18.8	11.29	*	45.13	*	200
644.0	3.1	19.9	12.29	*	58.14	*	200
699.3	3.4	20.2	*	12.99	*	67.53	200
745.9	3.4	21.1	*	13.10	*	75.86	200

REMARKS : (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.

(2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.

(3). SAMPLE CALCULATION

$$20 \text{ LOG}(\text{EMISSION}) \text{ uV/m} = \text{CABLE LOSS (dB)} + \text{FACTOR (dB)} + \text{READING (dBuV/m)}$$

(4). BASE

(5). TEST EQUIPMENT PLEASE SEE 5.1

(6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS  $\pm 4\text{dB}$ (7). ANY DEPARTURE FROM SPECIFICATION: N/A

(8). CHANNEL 1

(9). 46.7300MHz : CHANNEL 20

SIGNED BY TESTING ENGINEER : Carie



## 6.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM 30 MHz TO 1 GHz WAS INVESTIGATED. ALL READINGS UNDER 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHz. MEASUREMENTS WERE MADE AT 3 METERS. THE MEASUREMENTS ABOVE 1 GHz WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF 3 METERS.

TEMPERATURE : 28 CHUMIDITY : 78 %RH

FREQ. (MHz)	CABLE LOSS (dB)	ANT. FACTOR (dB)	READING (dBuV)		EMISSION (uV)		LMTS (uV)
			HORIZ	VERT	HORIZ	VERT	
46.9695	0.8	6.60	62.37	67.82	3079.6	5767.7	10000
185.2	1.7	9.10	16.93	18.97	24.35	30.80	150
558.7	2.9	18.6	11.81	*	46.29	*	200
673.1	3.3	20.1	11.82	*	57.68	*	200
701.2	3.4	20.2	*	12.05	*	60.60	200
747.8	3.4	21.1	*	12.82	*	73.45	200

REMARKS : (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.

(2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.

(3). SAMPLE CALCULATION  
 $20 \text{ LOG(EMISSION) uV/m} = \text{CABLE LOSS (dB)} + \text{FACTOR (dB)} + \text{READING (dBuV/m)}$

(4). BASE

(5). TEST EQUIPMENT PLEASE SEE 5.1

(6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS  $\pm 4\text{dB}$

(7). ANY DEPARTURE FROM SPECIFICATION: N/A

(8). CHANNEL 5

(9). 46.9695MHz : CHANNEL 25

SIGNED BY TESTING ENGINEER : Carrie

## 6.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM 30 MHz TO 1 GHz WAS INVESTIGATED. ALL READINGS UNDER 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHz. MEASUREMENTS WERE MADE AT 3 METERS. THE MEASUREMENTS ABOVE 1 GHz WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF 3 METERS.

TEMPERATURE : 28 CHUMIDITY : 78 %RH

FREQ. (MHz)	CABLE LOSS (dB)	ANT. FACTOR (dB)	READING (dBuV)		EMISSION (uV)		LMTS (uV)
			HORIZ	VERT	HORIZ	VERT	
49.6700	0.8	6.60	44.0	54.15	371.54	1195.4	10000
97.90	1.2	7.40	12.11	16.25	10.85	17.48	150
198.8	1.7	9.90	13.49	17.57	17.97	28.74	150
649.8	3.1	19.9	*	14.94	*	78.89	200
677.0	3.3	20.1	12.26	*	60.67	*	200

REMARKS : (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.

(2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.

(3). SAMPLE CALCULATION

$$20 \text{ LOG (EMISSION) uV/m} = \text{CABLE LOSS (dB)} + \text{FACTOR (dB)} + \text{READING (dBuV/m)}$$

(4). HANDSET

(5). TEST EQUIPMENT PLEASE SEE 5.1

(6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS  $\pm 4\text{dB}$ (7). ANY DEPARTURE FROM SPECIFICATION: N/A

(8). CHANNEL 0

(9). 49.6700MHz : CHANNEL 16

SIGNED BY TESTING ENGINEER : Carrie

## 6.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM 30 MHz TO 1 GHz WAS INVESTIGATED. ALL READINGS UNDER 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHz. MEASUREMENTS WERE MADE AT 3 METERS. THE MEASUREMENTS ABOVE 1 GHz WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF 3 METERS.

TEMPERATURE : 28 CHUMIDITY : 78 %RH

FREQ. (MHz)	CABLE LOSS (dB)	ANT. FACTOR (dB)	READING (dBuV)		EMISSION (uV)		LMTS (uV)
			HORIZ	VERT	HORIZ	VERT	
49.8750	0.8	6.60	47.20	56.85	537.03	1631.2	10000
97.90	1.2	7.40	11.51	16.85	10.13	18.73	150
197.8	1.7	9.90	*	17.81	*	29.55	150
491.7	2.7	17.2	12.19	*	40.23	*	200
646.0	3.1	19.9	*	13.63	*	67.84	200
661.5	3.1	19.9	11.58	*	53.58	*	200

REMARKS : (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.

(2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.

(3). SAMPLE CALCULATION  
 $20 \text{ LOG(EMISSION) uV/m} = \text{CABLE LOSS (dB)} + \text{FACTOR (dB)} + \text{READING (dBuV/m)}$

(4). HANDSET

(5). TEST EQUIPMENT PLEASE SEE 5.1

(6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS  $\pm 4\text{dB}$

(7). ANY DEPARTURE FROM SPECIFICATION: N/A

(8). CHANNEL 1

(9). 49.8750MHz : CHANNEL 20

SIGNED BY TESTING ENGINEER : Carle

## 6.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM 30 MHz TO 1 GHz WAS INVESTIGATED. ALL READINGS UNDER 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHz. MEASUREMENTS WERE MADE AT 3 METERS. THE MEASUREMENTS ABOVE 1 GHz WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF 3 METERS.

TEMPERATURE : 28 CHUMIDITY : 78 %RH

FREQ. (MHz)	CABLE LOSS (dB)	ANT. FACTOR (dB)	READING (dBuV)		EMISSION (uV)		LMTS (uV)
			HORIZ	VERT	HORIZ	VERT	
49.9700	0.8	6.60	45.10	54.95	421.70	1310.7	10000
197.8	1.7	9.90	*	17.71	*	29.21	150
216.2	1.8	10.7	*	22.96	*	59.29	200
647.9	3.1	19.9	*	14.28	*	73.11	200
651.8	3.1	19.9	12.49	*	59.50	*	200
744.9	3.4	21.1	10.50	*	56.23	*	200
851.6	3.5	21.5	12.75	*	77.18	*	200

REMARKS : (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.

(2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.

(3). SAMPLE CALCULATION  
 $20 \text{ LOG (EMISSION) uV/m} = \text{CABLE LOSS (dB)} + \text{FACTOR (dB)} + \text{READING (dBuV/m)}$

(4). HANDSET

(5). TEST EQUIPMENT PLEASE SEE 5.1

(6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS  $<+/-4\text{dB}$ (7). ANY DEPARTURE FROM SPECIFICATION: N/A

(8). CHANNEL 5

(9). 49.9700MHz : CHANNEL 25

SIGNED BY TESTING ENGINEER : Caris

7. BANDWIDTH

A. TEST STATEMENT:

- a. OPERATING BETWEEN  $-20^{\circ}\text{C}$  ~  $+50^{\circ}\text{C}$
- b. OPERATING BETWEEN 85% POWER ~ 115% POWER

ALL MEET FCC REQUIREMENT: UNDER  $\pm 0.01\%$  TO LEARNANCE

B. TEST RESULT:

ALL MEET FCC REQUIREMENT, PLEASE SEE ATTACHED PLOTTERS.

\* BASE - CHANNEL 0

MKR  $\Delta$  16.8 KHZ  
--.85 dBREF 78.0 dB $\mu$ V ATTEN 10 dBPEAK  
LOG  
10  
dB/MARKER  $\Delta$   
16.8 KHZ  
--.85 dBVA SB  
SC FC  
ACORR

CENTER 46.9695 MHZ

#RES BW 3.0 KHZ

VBW 3 KHZ

SPAN 100.0 KHZ  
SWP 100 msec

\* BASE - CHANNEL 1

MKR  $\Delta$  15.8 KHZ  
--.86 dBREF 78.0 dB $\mu$ V ATTEN 10 dBPEAK  
LOG  
10  
dB/MARKER  $\Delta$   
15.8 KHZ  
--.86 dBVA SB  
SC FC  
ACORRCENTER 46.6100 MHZ  
#RES BW 3.0 KHZ

VBW 3 KHZ

SPAN 100.0 KHZ  
SWP 100 msec

\* BASE - CHANNEL 5

MKR  $\Delta$  16.8 KHZ  
--.86 dB

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REF 78.0 dB $\mu$ V ATTN 10 dB

PEAK

LOG

10

dB/

MARKER  $\Delta$   
16.8 KHZ  
--.86 dBVA SB  
SC FC  
ACORR

CENTER 46.7300 MHZ

#RES BW 3.0 KHZ

VBW 3 KHZ

SPAN 100.0 KHZ

SWP 100 msec



\* HANDSET - CHANNEL 0

MKR  $\Delta$  16.0 KHZ  
- .08 dBREF 78.0 dB $\mu$ V ATTEN 10 dBPEAK  
LOG  
10  
dB/MARKER  $\Delta$   
16.0 KHZ  
- .08 dBVA SB  
SC FC  
ACORRCENTER 49.9700 MHZ  
#RES BW 3.0 KHZ  
SPAN 100.0 KHZ  
VBW 3 KHZ  
SWP 100 msec

\* HANDSET - CHANNEL 1

MKR  $\Delta$  15.8 KHz  
.26 dBREF 78.0 dB $\mu$ V ATTN 10 dBPEAK  
LOG  
10  
dB/MARKER  $\Delta$   
15.8 KHz  
.26 dBVA SB  
SC FC  
ACORRCENTER 49.6700 MHz  
#RES BW 3.0 KHz

VBW 3 KHz

SPAN 100.0 KHz  
SWP 100 msec

\* HANDSET - CHANNEL 5

MKR  $\Delta$  16.3 KHZ  
.84 dB

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REF 78.0 dB $\mu$ V ATTN 10 dBPEAK  
LOG  
10  
dB/MARKER  $\Delta$   
16.3 KHZ  
.84 dBVA SB  
SC FC  
ACORRCENTER 49.8750 MHZ  
#RES BW 3.0 KHZ

VBW 3 KHZ

SPAN 100.0 KHZ  
SWP 100 msec